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Applied to Life.™

# Electrical Solutions you can rely on.

Electrical Products Catalog

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# 3M™ Electrical Tape, Mastics & Special Use Tapes

Plastic vinyl emerged on the mass market in the early 1940s. The flexible, highly versatile material greatly improved a variety of products, ranging from shower curtains and raincoats to wire and cable insulation.

However, a pressure-sensitive plastic vinyl tape remained elusive. The substance TCP (tricresyl phosphate) used as a plasticizer in vinyl film stymied early efforts to create a tape. The TCP would migrate into the adhesive and degrade it.



After much work, 3M discovered a solution. In 1946, three 3M researchers—Esther Eastwold with R. Snell and R. Oace—invented a plasticizer system that would remain stable and not ruin the adhesive. That same year, 3M released the first known successful pressure-sensitive vinyl electrical tape, then named Scotch® No. 33 Tape. Lion Manufacturing Company purchased the first roll and used it for harness wrapping.

Vinyl electrical tape marked a leap forward in electrical tape technology. Previously, electricians generally used tape made of tar-coated cotton and vulcanized rubber adhesive. The tape was prone to rotting, lacked strength and flexibility, and had to be applied over a layer of rubber tape to insulate a conductor. Moreover, the tape's rubber adhesive, vulcanized with sulfur, could cause corrosion.

3M vinyl electrical tape was stretchy, strong and did not contain corrosive sulfur. It was better than most tar-coated cloth tape because it was much easier and faster to apply and required less space.

In 1966, 3M introduced Super 33 Tape. More flexible than its predecessor, it could be used at temperatures down to 10°F (-12°C) and up to 176°F (80°C).

Never satisfied, 3M researchers began working on the next generation of electrical tape to further improve performance in extreme temperatures. In 1969, 3M introduced Scotch 33+ Tape, featuring the industry's first known 221°F (105°C) rating for plastic vinyl electrical tape.

Next, 3M scientists sought to upgrade the tape's handling characteristics and holding power without

jeopardizing its adhesion properties. That work resulted in Scotch® Super 33+™ Professional Grade Vinyl Electrical Tape, launched in 1985. It stretches easily at temperatures down to 0°F (-18°C) and is rated for continuous operation up to 221°F (105°C). The stretchier backing and more aggressive adhesive system ensure ease of application and provide excellent mechanical protection, sealing capability and electrical insulation integrity.

Over the past 70 years, 3M has developed long standing expertise in tape technology. Since the invention of vinyl electrical tape in 1946, the 3M Electrical Markets Division research group has never stopped experimenting and inventing so that we can provide better solutions to meet our customers' challenges.

## Potential Tape Applications

	Vinyl Tapes	Rubber Tapes	Mastic & Filler Putty Tapes	Varnish Cambric	Arc Proofing Tapes	Silicone Tapes	Glass Cloth Tapes	Mining & Jacket Repair Tapes
Protective jacketing	X				X			X
Electrical insulation	X	X	X		X	X	X	X
Moisture sealing		X	X			X		X
ID and color-coding	X							
Harness and bundling	X							
Mechanical padding		X	X			X		X
Shaping		X	X			X		
Arc proofing					X			
Connection re-entry				X		X		

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# 3M™ Vinyl Tape Performance Comparison Chart

	Thickness	Temperature Range	Adhesion to Steel (72°F)	Adhesion to Backing (72°F)	Adhesion to Steel (0°F)	Adhesion to Backing (0°F)	Elongation	Breaking Strength	Country of Manufacture	UL Listed	CSA Certified	Color
<b>Professional Grade</b>												
Scotch® Super 33+™ Vinyl Electrical Tape  Best Seller	7 mils	0°F to 221°F (-18°C to 105°C)	28 oz./in.	28 oz./in.	60 oz./in.	60 oz./in.	250%	15 lbs./in.	USA	UL 510	C22.2	Black
Scotch® Vinyl Electrical Tape Super 88 	8.5 mils	0°F to 221°F (-18°C to 105°C)	28 oz./in.	28 oz./in.	60 oz./in.	60 oz./in.	250%	20 lbs./in.	USA	UL 510	C22.2	Black
Scotch® Vinyl Color Coding Electrical Tape 35 	7 mils	32°F to 221°F (0°C to 105°C)	20 oz./in.	20 oz./in.	N/A	N/A	225%	17 lbs./in.	USA	UL 510	C22.2	Blue, Brown, Gray, Green, Orange, Red, Violet, Yellow, White
Scotch® Vinyl Insulation Tape 22 	10 mils	14°F to 176°F (-10°C to 80°C)	20 oz./in.	20 oz./in.	N/A	N/A	200%	20 lbs./in.	USA	UL 510	C22.2	Black
<b>General Use</b>												
3M™ Highland™ Vinyl Electrical Tape 	7 mil	176°F (80°C)	25 oz./in.	25 oz./in.	N/A	N/A	175%	15 lbs./in.	USA	UL 510	C22.2	Black
3M™ Temflex™ Vinyl Electrical Tape 1700 	7 mils	32°F to 176°F (0°C to 80°C)	22 oz./in.	22 oz./in.	N/A	N/A	200%	17 lbs./in.	Mexico	UL 510	C22.2	Black
3M™ Temflex™ Vinyl Electrical Tape 1700P 	7 mils	32°F to 176°F (0°C to 80°C)	22 oz./in.	22 oz./in.	N/A	N/A	200%	17 lbs./in.	Mexico	UL 510	C22.2	Black Printed: MSHA
3M™ Temflex™ Vinyl Electrical Tape 1776 	7 mils	32°F to 176°F (0°C to 80°C)	22 oz./in.	22 oz./in.	N/A	N/A	200%	17 lbs./in.	USA	UL 510	C22.2	Black
<b>Economy</b>												
3M™ Economy Vinyl Electrical Tape 1400 	7 mils	Up to 176°F (Up to 80°C)	16 oz./in.	16 oz./in.	N/A	N/A	150%	14 lbs./in.	Taiwan	UL 510	N/A	Black
<b>Corrosion Protection For Non Electrical Applications</b>												
3M™ Scotchrap™ Corrosion Protection Tape 50 	10 mils	32°F to 176°F (0°C to 80°C)	20 oz./in.	20 oz./in.	30 oz./in. <sup>1</sup>	30 oz./in. <sup>1</sup>	200%	20 lbs./in.	USA	N/A	N/A	Black
3M™ Scotchrap™ Corrosion Protection Tape 51 	20 mils	32°F to 176°F (0°C to 80°C)	20 oz./in.	20 oz./in.	30 oz./in. <sup>1</sup>	30 oz./in. <sup>1</sup>	150%	40 lbs./in.	USA	N/A	N/A	Black

Data results from tests performed at room temperature unless otherwise noted. Values listed are typical properties and should not be used for specification purposes.

<sup>1</sup>Test results at -12°C

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# 3M™ Rubber Insulating and Splicing Tape Comparison Chart

	Liner/Linerless or Material	Thickness	Operating Temperature	Emergency Overload Temperature	Adhesion to Steel (72°F)	Adhesion to Backing (72°F)	Elongation	Breaking Strength	Country of Manufacture	Color
<b>Professional Grade</b>										
 Scotch® Linerless Rubber Splicing Tape 130C	Linerless, self-fusing Ethylene Propylene Rubber (EPR)	30 mils	Up to 194°F (90°C)	Up to 266°F (130°C)	N/A	N/A	850%	7.5 lbs./in.	USA	Black
 Scotch® Rubber Splicing Tape 23	EPR with Liner	30 mils	Up to 194°F (90°C)	Up to 266°F (130°C)	N/A	N/A	1,000%	8 lbs./in.	Brazil	Black
 Scotch® Linerless Rubber Splicing Compound 2242	Linerless, self-fusing Ethylene Propylene Rubber (EPR)	30 mils	Up to 194°F (90°C)	Up to 266°F (130°C)	N/A	N/A	1,000%	7.5 lbs/in	USA	Black
<b>General Use</b>										
 3M™ Temflex™ Rubber Splicing Tape 2155	EPR with Liner	30 mils	Up to 176°F (80°C)	N/A	N/A	N/A	700%	9 lbs./in.	Brazil	Black
<b>Other Splicing and Terminating Tapes</b>										
<b>Electrical Semi-Conducting</b>										
 Scotch® Electrical Semi-Conducting Tape 13	Semi-Conducting Ethylene Propylene Rubber with Liner	30 mils	Up to 194°F (90°C)	Up to 266°F (130°C)	N/A	N/A	800%	6 lbs./in.	Brazil	Black
<b>Self-Fusing Silicone</b>										
 Scotch® Self-Fusing Silicone Rubber Electrical Tape 70	Inorganic Silicone Rubber	12 mils	Up to 356°F (180°C)	N/A	N/A	N/A	450%	12 lbs./in.	Canada	Sky Blue Gray
 Scotch® Self-Fusing Silicone Rubber Electrical Tape 70HDT	Inorganic Silicone Rubber	Center: 20 mils Edges: 8 mils	Up to 356°F (180°C)	N/A	N/A	N/A	300%	14 lbs./in.	Canada	Sky Blue Gray with Guideline
<b>Varnish Cambric</b>										
 Scotch® Varnished Cambric Tape 2510	Straight Cut Woven Cotton Cambric Fabric with Electrical Insulating Varnish	7 mils	Up to 220°F (105°C)	N/A	N/A	N/A	N/A	50 lbs./in.	Pakistan*/USA	Yellow
 Scotch® Varnished Cambric Tape 2520	Straight Cut Woven Cotton Cambric Fabric with Electrical Insulating Varnish and Coated with Adhesive	8 mils	Up to 220°F (105°C)	N/A	13 oz./in.	8 oz./in.	N/A	50 lbs./in.	Pakistan*/USA	Yellow
<b>Arc Protection</b>										
 Scotch® Fire-Retardant and Electric Arc Proofing Tape 77 Black & 77 White	Intumescent Elastomer	30 mils	N/A	N/A	N/A	N/A	N/A	36 lbs./in.	USA	77: Black, 77W: Light Gray
<b>Grounding Braid</b>										
 Scotch® Electrical Grounding Braid 25	All-Metal Woven Grounding Braid	93.75 mils	32–266°F (0–130°C)	N/A	N/A	N/A	N/A	N/A	USA	Copper
<b>Electrical Shielding</b>										
 Scotch® Electrical Shielding Tape 24	All-Metal, Open-Weave	16 mils	32°F to 220°F (0°C to 105°C)	N/A	N/A	N/A	70%	22 lbs./in.	Mexico	Silver

Data results from tests performed at room temperature unless otherwise noted.

Values listed are typical properties and should not be used for specification purposes.

NOTE: \*Cloth made in Pakistan - coated and packaged in USA.







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## 3M™ Sealing and Insulating Mastic Tape Comparison Chart

	Material	Thickness	Operating Temperature	Emergency Overload Temperature	Adhesion to Steel (72°F)	Adhesion to Backing (72°F)	Elongation	Breaking Strength	Country of Manufacture	Color
<b>Mastics</b>										
Scotch® Vinyl Mastic Tape 2200 	Mastic with PVC Backing	125 mils	0°F to 100°F (-18°C to 38°C)	N/A	200 oz./in.	200 oz./in. (to polyethylene)	200%	20 lbs./in.	USA	Black
Scotch® Vinyl Mastic Tape 2210 	Mastic with PVC Backing	90 mils	0°F to 100°F (-18°C to 38°C)	N/A	200 oz./in.	200 oz./in. (to polyethylene)	200%	20 lbs./in.	USA	Black
Scotch® Rubber Mastic Tape 2228 	Mastic with Ethylene Propylene Rubber (EPR) Backing	65 mils	Up to 194°F (90°C)	Up to 266°F (130°C)	240 oz./in.	160 oz./in. (to polyethylene)	1,000%	10 lbs./in.	USA	Black
3M™ Scotch-Seal™ Mastic Tape Compound 2229 	Mastic	125 mils	32°F to 100°F (0°C to 38°C)	N/A	N/A	N/A	N/A	N/A	USA	Black
Scotch® Electrical Moisture Sealant 06147 	Mastic with PVC Backing	45 mils	32°F to 100°F (0°C to 38°C)	N/A	65 oz./in.	60 oz./in.	200%	20 lbs./in.	USA	Black
<b>Electrical Insulation</b>										
3M™ Scotchfil™ Electrical Insulation Putty 	Electrical Grade Putty	125 mils	32°F to 176°F (0°C to 80°C)	N/A	N/A	N/A	1,000%	N/A	USA	Black
<b>Repair Tape</b>										
Scotch® Cable Jacket Repair Tape 2234 	Flame Retardant Mastic with CSM Rubber Backing	60 mils	Up to 220°F (105°C)	N/A	160 oz./in.	107 oz./in.	500%	156 lbs./in.	USA	Black

Data results from tests performed at room temperature unless otherwise noted. Values listed are typical properties and should not be used for specification purposes.

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# Vinyl Electrical Tape

Since inventing the first vinyl electrical tape, 3M has continued to improve tape technology and offers an electrical tape for nearly every application.



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## Scotch® Super 33+™ Vinyl Electrical Tape

Scotch® Super 33+™ Vinyl Electrical Tape is a premium grade, 7 mil thick, all-weather vinyl-insulating tape. It is designed to perform continuously between a temperature range of 0–220°F (-18–105°C). It has an excellent resistance to abrasion, moisture, alkalies, acids, corrosion and varying weather conditions (including ultraviolet exposure). The combination of elastic backing and aggressive adhesive provides moisture-tight electrical and mechanical protection with minimum bulk. Scotch Super 33+ Vinyl Electrical Tape is an Underwriters' Laboratories Listed and Canadian Standards Association Certified "Insulating Tape."



Adhesive Material	Rubber Resin
Backing Material	Polyvinyl Chloride
Tape Grade	Premium
Tape Type	Vinyl
Operating Temperature	0–220°F (-18–105°C)
RoHS 2011/65/EU	Yes
Specifications	ASTM D 3005 type 1
Agency Approvals	
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Dielectric Strength	Rolls per Carton	Rolls per Case
33+SUPER-3/4X36YD	054007-00053	Black	36 yd	0.75"	7 mil	1150 mV	12	48
33+SUPER-3/4X20FT	054007-06130	Black	20'	0.75"	7 mil	1150 mV	10	100
33+SUPER-3/4X66FT	054007-06132	Black	66'	0.75"	7 mil	1150 mV	1	20
33+SUPER-3/4X52FT	054007-06133	Black	52'	0.75"	7 mil	1150 mV	10	100
33+SUPER-3/4X44FT	054007-10075	Black	44'	0.75"	7 mil	1150 mV	10	100
33+SUPER-1X36YD	054007-08949	Black	36 yd	1.00"	7 mil	1150 mV	12	48
33+SUPER-1-1/2X36YD	054007-50236	Black	36 yd	1.50"	7 mil	1150 mV	-	50

## Scotch® Vinyl Electrical Tape Super 88

Scotch® Vinyl Electrical Tape Super 88 is a premium grade, 8.5-mil thick, all-weather vinyl insulating tape. It is designed to perform continuously between a temperature range of 0–220°F (-18–105°C). It has an excellent resistance to abrasion, moisture, alkalies, acids, corrosion and varying weather conditions. The combination of elastic backing and aggressive adhesive provides moisture-tight electrical and mechanical protection with minimum bulk. Scotch Tape Super 88 is an Underwriters' Laboratories Listed and Canadian Standards Association Certified "Insulating Tape."

Adhesive Material	Rubber Resin
Backing Material	Polyvinyl Chloride
Tape Grade	Premium
Tape Type	Vinyl
Operating Temperature	0–220°F (-18–105°C)
RoHS 2011/65/EU	Yes
Specifications	ASTM D 3005 type 2, Mil-I- 24391C, VDE 0340 TEIL 3-1, SS 404 09 75
Agency Approvals	
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
88-SUPER-3/4X66FT	054007-06143	Black	66'	0.75"	8.5 mil	20 lbs/in	10	100
88-SUPER-3/4X44FT	054007-10307	Black	44'	0.75"	8.5 mil	20 lbs/in	10	100
88-SUPER-3/4X36YD	054007-10323	Black	36 yd	0.75"	8.5 mil	20 lbs/in	12	48
88-SUPER-1X36YD	054007-10331	Black	36 yd	1.00"	8.5 mil	20 lbs/in	12	48
88-SUPER-1-1/2X36YD	054007-10349	Black	36 yd	1.50"	8.5 mil	20 lbs/in	-	12
88-SUPER-2X36YD	054007-10356	Black	36 yd	2.00"	8.5 mil	20 lbs/in	-	12
88-SUPER-1-1/2X44FT	054007-10364	Black	44'	1.50"	8.5 mil	20 lbs/in	10	100

## Scotch® Vinyl Color Coding Electrical Tape 35

Scotch® Vinyl Electrical Tape 35 is a 7-mil (0.178 mm) thick polyvinyl chloride (PVC) color-coding tape. Outstanding electrical and mechanical properties make this tape excellent for use in phase identification, color coding of motor leads and piping systems, and for marking safety areas. Scotch Tape 35 operates over a wide range of temperatures – between 32–220°F (0–105°C). This tape is available in nine fade-resistant colors.

Adhesive Material	Rubber Resin
Backing Material	Polyvinyl Chloride
Tape Grade	Premium
Tape Type	Vinyl
Operating Temperature	32–220°F (0–105°C)
RoHS 2011/65/EU	Yes
Specifications	VDE 0340- TEIL1
Agency Approvals	
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
35-BLUE-1/2X20FT	054007-10240	Blue	20'	0.50"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-BLUE-3/4X66FT	054007-10836	Blue	66'	0.75"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-BROWN-1/2X20FT	054007-10299	Brown	20'	0.50"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-BROWN-3/4X66FT	054007-10885	Brown	66'	0.75"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-GRAY-1/2X20FT	054007-10281	Gray	20'	0.50"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-GRAY-3/4X66FT	054007-00072	Gray	66'	0.75"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-GREEN-1/2X20FT	054007-10265	Green	20'	0.50"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-GREEN-3/4X66FT	054007-10851	Green	66'	0.75"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-ORANGE-1/2X20FT	054007-10273	Orange	20'	0.50"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-ORANGE-3/4X66FT	054007-10869	Orange	66'	0.75"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-RED-1/2X20FT	054007-10224	Red	20'	0.50"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-RED-3/4X66FT	054007-10810	Red	66'	0.75"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-VIOLET-1/2X20FT	054007-49923	Violet	20'	0.50"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-VIOLET-3/4X66FT	054007-11271	Violet	66'	0.75"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-WHITE-1/2X20FT	054007-10232	White	20'	0.50"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-WHITE-3/4X66FT	054007-10828	White	66'	0.75"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-YELLOW-1/2X20FT	054007-10257	Yellow	20'	0.50"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-YELLOW-3/4X66FT	054007-10844	Yellow	66'	0.75"	7 mil	17 lb/in (3.04 kN/m)	10	100
35-MULTI-COLOR	051131-59073	Multi-pack	20'	0.50"	7 mil	17 lb/in (3.04 kN/m)	4	48



## Scotch® Vinyl Electrical Tape 33

Scotch® Vinyl Electrical Tape 33 is a quality, general-purpose vinyl insulating tape. It has excellent resistance to: abrasion, moisture, alkalis, acid, copper corrosion and varying weather conditions. It is a polyvinyl chloride (PVC) tape that has a high dielectric strength, is flame-retardant and conformable, and provides excellent mechanical protection with minimum bulk. It is a UL Listed "Insulating Tape".

Adhesive Material	Rubber Resin
Backing Material	Polyvinyl Chloride
Tape Grade	Premium
Tape Type	Vinyl
Operating Temperature	32–176°F (0–80°C)
RoHS 2011/65/EU	Yes
Specifications	ASTM D1000
Agency Approvals	
Country of Origin	

Order No.	UPC	Color	Length	Width	Thickness	Dielectric Strength	Rolls per Carton	Rolls per Case
33-3/4x36YD	054007-10133	Black	36 yd	0.75"	7 mil	1000 mV	12	48
33-1-1/2X44FT	054007-10174	Black	44'	1.50"	7 mil	1000 mV	10	100

## Scotch® Vinyl Insulation Tape 22

Scotch® Vinyl Insulation Tape 22 is one of 3M's thickest (10-mil) vinyl electrical tapes. It is designed for insulation applications that require greater mechanical strength and abrasion resistance. Scotch Tape 22 provides moisture-resistant electrical and mechanical protection with fewer wraps than thinner tapes.

Adhesive Material	Rubber Resin
Backing Material	Polyvinyl Chloride
Tape Grade	Premium
Tape Type	Vinyl
Operating Temperature	15–176°F (-10–80°C)
RoHS 2011/65/EU	Yes
Specifications	ASTM D 2301 Type 2, VDE 0340 TEIL 3-1, SS 404 09 75
Agency Approvals	 
Country of Origin	





Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
22-1/2X36YD	054007-10026	Black	36 yd	0.50"	10 mil	20 lbs/in	12	48
22-3/4X36YD	054007-10034	Black	36 yd	0.75"	10 mil	20 lbs/in	12	48
22-1X36YD	054007-10042	Black	36 yd	1.00"	10 mil	20 lbs/in	12	48
22-1-1/2X36YD	054007-10059	Black	36 yd	1.50"	10 mil	20 lbs/in	-	12
22-2X36YD	054007-10067	Black	36 yd	2.00"	10 mil	20 lbs/in	-	12

## Vinyl Electrical Tapes

### 3M™ Highland™ Vinyl Electrical Tape

3M™ Highland™ Vinyl Electrical Tape is a flame-retardant, conformable, general purpose, 7-mil thick vinyl insulation tape. This tape has excellent resistance to abrasion, moisture, alkalis, acid, copper corrosion and varying weather conditions. It is a polyvinyl chloride (PVC) tape that has a high dielectric strength and provides excellent mechanical protection with minimum bulk.



Tape Grade	General Use
Tape Type	Vinyl
Maximum Operating Temperature	176°F (80°C)
RoHS 2011/65/EU	Yes
Agency Approvals	
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Carton	Rolls per Case
16720	054007-16720	Black	60'	0.75"	7 mil	175%	15 lbs/in	25 oz/in	10	100

### 3M™ Temflex™ Vinyl Electrical Tape 1700

3M™ Temflex™ Vinyl Electrical Tape 1700 is a good quality, economical general purpose vinyl insulating tape. It has excellent resistance to abrasion, moisture, alkalis, acid, copper corrosion and varying weather conditions. It is a polyvinyl chloride (PVC) tape that is flame-retardant and conformable. Temflex Tape 1700 provides excellent mechanical protection with minimum bulk. It is a UL Listed and CSA Certified "Insulating Tape."



Adhesive Material	Rubber Resin
Backing Material	Polyvinyl Chloride
Tape Grade	General Use
Tape Type	Vinyl
Operating Temperature	32–176°F (0–80°C)
RoHS 2011/65/EU	Yes
Specifications	ASTM D 2301 type 1, MSHA (1700P only)
Agency Approvals	 



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Country of Origin	Rolls per Case
1700-1X66FT	054007-43962	Black	66'	1.00"	7 mil	17 lbs/in	USA	99
1700-3/4X36YD-1.5CORE	054007-49700	Black	36 yd	0.75"	7 mil	17 lbs/in	USA	100
1700P-PRINTED-3/4X66FT	051128-60051	Black	67'	0.75"	7 mil	17 lbs/in	USA	100
1700P-PRINTED-1-1/2X44FT	051128-60050	Black	44'	1.50"	7 mil	17 lbs/in	USA	90
1700P-PRINTED-1-1/2X66FT	051128-60049	Black	66'	1.50"	7 mil	17 lbs/in	USA	50
1700-3/4X60FT	054007-69764	Black	60'	0.75"	7 mil	17 lbs/in	Mexico	100

## 3M™ Temflex™ Vinyl Electrical Tape 1776

3M™ Temflex™ Vinyl Electrical Tape 1776 is a good quality, economical general-purpose vinyl insulating tape, manufactured in the U.S.A. It has excellent resistance to abrasion, moisture, alkalis, acid, copper, corrosion and varying weather conditions. It is a polyvinyl chloride (PVC) tape that is flame-retardant and conformable. Temflex Tape 1776 provides excellent mechanical protection with minimum bulk. It is a UL Listed and CSA Certified “Insulating Tape.”

Tape Grade	General Use
Tape Type	Vinyl
Maximum Operating Temperature	176°F (80°C)
RoHS 2011/65/EU	Yes
Agency Approvals	
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Carton	Rolls per Case
1776-3/4"x60FT	051128-58442	Black	60'	0.75"	7 mil	200%	17 lbs/in	24 oz/in	10	100

## 3M™ Economy Vinyl Electrical Tape 1400

3M™ Economy Vinyl Electrical Tape 1400 is a 7-mil thick, general use vinyl-insulating tape, and comes in black and a variety of colors. It is designed to perform continuously in temperatures up to 176°F (80°C). This tape has a polyvinyl chloride (PVC) backing with pressure-sensitive rubber based adhesive. It inhibits corrosion of electrical conductors.

Adhesive Material	Rubber Resin
Backing Material	Polyvinyl Chloride
Tape Grade	Economy
Tape Type	Vinyl
Maximum Operating Temperature	176°F (80°C)
RoHS 2011/65/EU	Yes
Agency Approvals	
Country of Origin	Taiwan



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
1400-3/4X60FT	051128-58297	Black	60'	3/4"	7 mil	150%	14 lbs/in	16 oz/in	100

## Sealing and Insulating – Mastic Tape


Need to apply an insulating barrier or moisture-seal to an odd shape? 3M Mastics are made of a self-fusing, rubber-based insulating compound. Mastics are available with a vinyl (PVC) backing, a rubber backing, or no backing at all, and enable you to pad, seal and insulate connections up to 600 volts.



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## Scotch® Vinyl Mastic Tapes 2200 and 2210

Scotch® Pads 2200 and Rolls 2210 are self-fusing, rubber based insulating compounds laminated to a flexible, all-weather grade vinyl (PVC) backing. These tape rolls and pre-cut pads are designed to insulate, moisture-seal and pad connections up to 600 volts, and have excellent resistance to abrasion, moisture, alkalies, acid, copper corrosion and varying weather conditions.


Adhesive Material	Mastic
Backing Material	Polyvinyl Chloride
Tape Grade	Premium
Tape Type	Sealing and Mastic
Operating Temperature Range	0–100°F (-18–38°C)
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Dielectric Strength	Rolls per Carton	Rolls per Case
2200-3-1/4X4-1/2	054007-11008	Black	4.50"	3.25"	125 mil	200%	20 lbs/in	300 v/mil	10 Pads	50 Pads
2200-6-1/2X4-1/2	054007-21296	Black	6.50"	4.50"	125 mil	200%	20 lbs/in	300 v/mil	10 Pads	50 Pads
2210-4X10FT	054007-11222	Black	10'	4.00"	90 mil	200%	20 lbs/in	300 v/mil	-	10 Rolls

## Scotch® Electrical Moisture Sealant 06147

Scotch® Electrical Moisture Sealant 06147 is a self-fusing, rubber-based thin insulating mastic compound laminated to a flexible, all-weather grade PVC backing and are designed for moisture sealing of electrical connections up to 600 volts.

Adhesive Material	Rubber Mastic
Backing Material	Polyvinyl Chloride (PVC)
Tape Grade	Premium
Tape Type	Sealing and Masting
Operating Temperature Range	32–100°F (0–38°C)
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Rolls per Carton	Rolls per Case
06147	054007-06147	Black	10'	2.50"	45 mil	200%	20 lbs/in	-	10



## Scotch® Rubber Mastic Tape 2228

Scotch® Rubber Mastic Tape 2228 is a conformable self-fusing rubber electrical insulating and sealing tape. Scotch® Rubber Mastic 2228 consists of Ethylene Propylene Rubber (EPR) backing coated with a strong, temperature-stable mastic adhesive.

Adhesive Material	Mastic
Backing Material	Ethylene Propylene Rubber (EPR)
Tape Grade	Premium
Tape Type	Sealing and Mastic
Maximum Operating Temperature	Up to 194°F (90°C)
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Rolls per Case
2228-1X10FT	054007-50727	Black	10'	1.00"	65 mil	1000%	10 lbs/in	12
2228-2X10FT	054007-09656	Black	10'	2.00"	65 mil	1000%	10 lbs/in	10
2228-2X3FT	054007-43478	Black	3'	2.00"	65 mil	1000%	10 lbs/in	48

## 3M™ Scotch-Seal™ Mastic Tape Compound 2229

3M™ Scotch-Seal™ Mastic Tape Compound 2229 is designed for quick and easy insulating, padding and sealing of electrical connections. It is a conformable, durable, tacky mastic with an easy release liner for easy applications over irregular surfaces and provides excellent moisture resistance. It features excellent self-healing characteristics after being punctured or cut.


Adhesive Material	Mastic
Backing Material	Rubber
Tape Grade	Premium
Tape Type	Sealing and Mastic
Maximum Operating Temperature	194°F (90°C)
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Dielectric Strength	Rolls per Carton	Rolls per Case
2229-1X10FT	054007-50335	Black	10'	1.00"	125 mil	379 v/mil (14.9 kV/mm)	-	12
2229-1.5X30FT	051128-58596	Black	30'	1.50"	125 mil	379 v/mil (14.9 kV/mm)	-	5
2229-3-3/4X10FT	054007-49702	Black	10'	3.75"	125 mil	379 v/mil (14.9 kV/mm)	-	8
2229-P-2-1/2X3-3/4	054007-41303	Black	10'	0.75"	125 mil	379 v/mil (14.9 kV/mm)	-	40
2229-P-3-3/4X3-3/4	054007-50336	Black	10'	3.75"	125 mil	379 v/mil (14.9 kV/mm)	10	40
2229-P-3-3/4X6-1/2	054007-50337	Black	54'	3.75"	125 mil	379 v/mil (14.9 kV/mm)	-	40

## 3M™ Scotchfil™ Electrical Insulation Putty

Use as a build-up compound on highly irregular surfaces such as fittings and valves, providing a smooth, waterproof taping surface. 3M™ Scotchfil™ Electrical Insulation Putty is soft and pliable—simply press putty into place on irregular surfaces, mold with finger pressure and overtape using standard methods.



Adhesive Material	Mastic
Backing Material	Putty
Tape Grade	Premium
Tape Type	Sealing and Mastic
Operating Temperature Range	32–176°F (0–80°C)
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Dielectric Strength	Rolls per Case
SCOTCHFIL	054007-41750	Black	60" (1,53 m)	1.5" (38,1 mm)	125 mil	1000%	575 v/mil (22.6 kV/mm)	12

## Scotch® Cable Jacket Repair Tape 2234

Scotch® Cable Jacket Repair Tape 2234 has a tough abrasion-resistant backing for jacket repair on industrial cables, such as flexible portable power cables, draglines, diesel locomotive cable, welding and shipboard cables. Due to abrasive dragging and reeling of these flexible cables, the original jacketing gets damaged often and needs to be repaired. Scotch® Cable Jacket Repair Tape 2234 is flexible and the self-healing property of the mastic helps keep out moisture.

Adhesive Material	Flame Retardant Mastic
Backing Material	CSM Rubber
Tape Grade	Professional
Tape Type	Sealing and Mastic
Operating Temperature Range	-22–220°F (-30–105°C)
RoHS 2011/65/EU	Yes
Agency Approval	
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Rolls per Carton	Rolls per Case
2234	051128-57493	Black	6'	2.00"	60 mil	500%	156 lbs/in	1 each	10

## Scotch® Heavy Duty Mining Tape 31

Scotch® Heavy Duty Mining Tape 31 has a tough, abrasion-resistant backing for jacket repair on mining cables. Due to the extreme mining environment, the original jacket on mining cable gets damaged and needs repair. Scotch® Heavy Duty Mining Tape 31 offers an innovative solution for cable repair. With its CSM Rubber backing, abrasion-resistant properties and flame retardant mastic, the tape applies easily and remains flexible while maintaining a strong moisture seal. MSHA-approved.


Adhesive Material	Flame Retardant Mastic
Backing Material	CSM Rubber
Tape Grade	Premium
Tape Type	Mining Tape
Operating Temperature Range	32–221°F (0–105°C)
RoHS 2011/65/EU	Yes



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Case
31-2"X10FT	051128-57150	Black	10'	2.00"	60 mil	156 lbs/in	10
31-2"X6FT	051128-57149	Black	6'	2.00"	60 mil	156 lbs/in	10
31-2"X8.5FT	051128-56812	Black	8.5'	2.00"	60 mil	156 lbs/in	10

## Scotch® Mastic Strip 2230

Scotch® Mastic Strip 2230 are short lengths of thin mastic with a removable liner on each side. It can be used in small sealing applications.

Adhesive Material	Mastic
Backing Material	Mastic
Tape Grade	Premium
Tape Type	Sealing and Mastic
Operating Temperature Range	32–100°F (0–38°C)
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Strips per Case
2230	054007-41813	Gray	6.0"	0.624"	90 mil	40

## Insulating and Splicing – Rubber Tapes

Best used to provide primary electrical insulation, 3M Rubber Tapes are highly conformable. Use on bus bar connections, general splice insulation and moisture sealing for low- to high-voltage electrical connections.



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## Scotch® Linerless Rubber Splicing Tape 130C

Scotch® Linerless Rubber Splicing Tape 130C is a highly conformable, linerless Ethylene Propylene Rubber (EPR), high-voltage insulating tape that provides excellent thermal dissipation of splice heat. Scotch® Splicing Tape 130C meets industry specifications and has excellent physical and electrical properties, which help provide immediate moisture seal and void-free buildups. Scotch® Splicing Tape 130C is rated up to 194°F (90°C) continuous operating temperatures and short-term 266°F (130°C) overload service. This product can be used for low and high voltage (through 69 kV) applications. This tape should be applied like any rubber tape—that is, the side of the tape wrapped inside the roll should be applied outside on the splice (tacky side up). This will help prevent the roll from getting progressively further away from the work area.

Liner/Linerless	Linerless
Material	Self-fusing Ethylene Propylene Rubber (EPR)
Tape Grade	Premium
Tape Type	Insulating and Splicing
Operating Temperature	Up to 194°F (90°C)
Short Term Overload Service	266°F (130°C)
RoHS 2011/65/EU	Yes
Specifications	ASTM D-4388 type 1, 2 & 3; HH-I-553C
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Rolls per Carton	Rolls per Case
130C-3/4X30FT	054007-41717	Black	30'	0.75"	30 mil	850%	7.5 lbs/in	1	24
130C-1X10FT	054007-41751	Black	10'	1.00"	30 mil	850%	7.5 lbs/in	1	24
130C-1X15FT	054007-41752	Black	15'	1.00"	30 mil	850%	7.5 lbs/in	1	24
130C-1X30FT	054007-41753	Black	30'	1.00"	30 mil	850%	7.5 lbs/in	1	24
130C-1-1/2X30FT	054007-41718	Black	30'	1.50"	30 mil	850%	7.5 lbs/in	1	12
130C-2X30FT	054007-41754	Black	30'	2.00"	30 mil	850%	7.5 lbs/in	1	12



## Scotch® Rubber Splicing Tape 23

Scotch® Rubber Splicing Tape 23 is a highly conformable, self-fusing Ethylene Propylene Rubber (EPR), high-insulating voltage tape. Scotch Tape 23 has a “snakeskin” liner that is easily removed as the tape is applied. This product can be used for low and high voltage (through 69 kV) applications.


Liner/Linerless	Liner
Material	Ethylene Propylene Rubber (EPR)
Tape Grade	Premium
Tape Type	Insulating and Splicing
Operating Temperature	Up to 194°F (90°C)
Short Term Overload Service	266°F (130°C)
RoHS 2011/65/EU	Yes
Specifications	ASTM D-4388 type 1, 2 & 3 ; HH-I-3825B
Country of Origin	Brazil



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Rolls per Carton	Rolls per Case
23-3/4X30FT	054007-15025	Black	20'	0.75"	30 mil	1000%	8 lbs/in	1	20
23-1"X20FT(40RLS)	054007-13061	Black	20'	1.00"	30 mil	1000%	8 lbs/in	1	40
23-1"X30FT	054007-00059	Black	30'	1.00"	30 mil	1000%	8 lbs/in	1	32
23-1.5"X30FT	054007-11214	Black	30'	1.50"	30 mil	1000%	8 lbs/in	1	20
23-2"X30FT	054007-15033	Black	30'	2.00"	30 mil	1000%	8 lbs/in	1	16

## Scotch® Linerless Rubber Splicing Compound 2242

Scotch® Linerless Rubber Splicing Compound 2242 is a multi-purpose rubber insulating tape designed for use in splicing and terminating wires and cables rated up to 194°F (90°C). 3M™ Linerless Splicing Compound 2242 is a highly conformable, linerless Ethylene Propylene Rubber-based tape.


Liner/Linerless	Linerless
Material	Self-fusing Ethylene Propylene Rubber (EPR)
Tape Grade	Premium
Tape Type	Insulating and Splicing
Operating Temperature	0–194°F (-18–90°C)
RoHS 2011/65/EU	Yes
Specifications	ASTM D-4388 type 1, 2 & 3; HH-I-553C
Country of Origin	 MADE IN USA



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
2242-3/4X15FT	054007-06165	Black	15'	0.75"	30 mil	7.5 lbs/in	1	24
2242-1-1/2X15FT	054007-41323	Black	15'	1.50"	30 mil	7.5 lbs/in	1	12
2242-2X15FT	054007-43251	Black	15'	2.00"	30 mil	7.5 lbs/in	1	8

## 3M™ Temflex™ Rubber Splicing Tape 2155

3M™ Temflex™ Rubber Splicing Tape 2155 is a conformable self-fusing rubber electrical insulating tape. It is designed for low voltage electrical insulating and moisture sealing applications. Compatible with solid dielectric cable insulations, Temflex Tape 2155 is a self-fusing tape. Flexible over a wide temperature range, it is Underwriters Laboratories (UL) Listed for use up to 600 volts.

Liner/Linerless	Liner
Material	Ethylene Propylene Rubber (EPR)
Tape Grade	General Use
Tape Type	Insulating and Splicing
Operating Temperature	Up to 176°F (80°C)
RoHS 2011/65/EU	Yes
Agency Approvals	
Country of Origin	Brazil



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
2155-3/4X22FT	054007-50348	Black	22'	0.75"	30 mil	9 lbs/in	1	10
2155-3/4X22FT-20RLS	051138-97905	Black	22'	0.75"	30 mil	9 lbs/in	1	20
2155-1-1/2X22FT	054007-50349	Black	22'	1.50"	30 mil	9 lbs/in	1	45

## Scotch® Self-Fusing Silicone Rubber Electrical Tape 70

Scotch® Self-Fusing Silicone Rubber Electrical Tape 70 is a high-temperature, arc- and track-resistant tape composed of self-fusing, inorganic silicone rubber with an easy-tear and easy-strip liner. Scotch® Self-Fusing Silicone Rubber Electrical Tape 70 can be used as base tape layer to cleanly reenter connections.

Material	Inorganic Silicone Rubber
Tape Grade	Premium
Tape Type	Insulating and Splicing
Operating Temperature	Up to 356°F (180°C)
RoHS 2011/65/EU	Yes
Specifications	AA-59163 Class-I Type I; ASTM D-1000-76; ASTM D-495-71
Country of Origin	Canada



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Rolls per Carton	Rolls per Case
70-1x30FT	051128-57261	Sky Blue Gray	30'	1.00"	12 mil	450%	12 lbs/in	1	24

## Scotch® Self-Fusing Silicone Rubber Electrical Tape 70HDT

Scotch® Self-Fusing Silicone Rubber Electrical Tape 70HDT is the heavy duty version of Scotch® Self-Fusing Silicone Rubber Electrical Tape 70, a high-temperature, arc- and track-resistant tape composed of self-fusing, inorganic silicone rubber with an easy-tear and easy-strip liner. Scotch® Rubber Tape 70HDT also has a triangular tapered edge profile (thicker in the middle) and a blue guideline to make half-lapping application easier.

<b>Material</b>	Inorganic Silicone Rubber
<b>Tape Grade</b>	Premium
<b>Tape Type</b>	Insulating and Splicing
<b>Operating Temperature</b>	Up to 356°F (180°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	AA-59163 Class-I Type I; ASTM D-1000-76; ASTM D-495-71
<b>Country of Origin</b>	Canada



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Rolls per Carton	Rolls per Case
70HDT-1x30FT	051128-57262	Sky Blue Gray with Guideline	30'	1.00"	Center: 20 mil Edges: 8 mil	300%	14 lbs/in	1	24

## Scotch® Fire-Retardant and Electric Arc Proofing Tape 77 Series

Scotch® Fire and Electric Arc Proofing Tape 77 Black and 77 White is designed to protect most types of electrical cables when exposed to potential failures in an adjacent cable. Its specially formulated adhesive expands in fire to form a thick char buildup between the flame and the cable. The resulting firewall acts as a heat shield and flame barrier, thus protecting the nearby cables and accessories.

<b>Adhesive Material</b>	Non-adhesive
<b>Backing Material</b>	Intumescent Elastomer
<b>Tape Grade</b>	Premium
<b>Tape Type</b>	Insulating and Splicing
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	ASTM D-2863; ASTM C-518; Consolidated Edison Co. Test EO-5343-14
<b>Country of Origin</b>	



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
77 White-1-1/2x20FT	051128-60334	White-Gray	20'	1.50"	30 mil	36 lbs/in	1	10
77 White-3x20FT	051128-60335	White-Gray	20'	3.00"	30 mil	36 lbs/in	1	10
77 Black-1-1/2x20FT	051128-60332	Black	20'	1.50"	30 mil	36 lbs/in	1	10
77 Black-3x20FT	051128-60333	Black	20'	3.00"	30 mil	36 lbs/in	1	10

## Scotch® Electrical Semi-Conducting Tape 13

Scotch® Electrical Semi-Conducting Tape 13 is a highly conformable, semi-conducting Ethylene Propylene Rubber (EPR)-based, high-voltage splicing tape. Scotch Electrical Tape 13 elongates easily to conform to irregular shapes and retains its conductivity when stretched.

Liner/Linerless	Liner
Material	Semi-Conducting Ethylene Propylene Rubber
Tape Grade	Premium
Tape Type	Insulating and Splicing
Operating Temperature	Up to 194°F (90°C)
Emergency Overload Temperature	266°F (130°C)
RoHS 2011/65/EU	Yes
Country of Origin	Brazil



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Rolls per Case
13-3/4X10FT	051128-53115	Black	10'	0.75"	30 mil	800%	6 lbs/in	250
13-3/4X15FT	054007-15017	Black	15'	0.75"	30 mil	800%	6 lbs/in	50
13-1-1/2X15FT	054007-95885	Black	15'	1.5"	30 mil	800%	6 lbs/in	45

## Scotch® Varnished Cambric Tape 2510

Scotch® Varnished Cambric Tape 2510 is made from straight-cut woven cotton cambric fabric. The fabric is oil primed and coated with a high-grade yellow electrical insulating varnish. Varnished cambric tapes are flexible, electrically insulating and moisture resistant with a smooth finish. Scotch Tape 2510 tape is yellow, non-adhesive coated and 7 mils thick, providing an excellent dielectric strength with high puncture and cut-through resistance. Its electrical properties are stable up to 105°C.

Material	Straight cut woven cotton cambric fabric with electrical insulating varnish
Tape Grade	Premium
Tape Type	Insulating and Splicing
Operating Temperature	Up to 220°F (105°C)
RoHS 2011/65/EU	Yes
Specifications	ASTM D-374; ASTM D-1000; ASTM D-295
Country of Origin	 With U.S. and Global Content



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
2510-3/4X60FT	054007-41720	Yellow	60'	0.75"	7 mil	50 lbs/in	1	20
2510-3/4X36YD	054007-10661	Yellow	36 yd	0.75"	7 mil	50 lbs/in	1	48
2510-1X36YD	054007-10687	Yellow	36 yd	1.00"	7 mil	50 lbs/in	1	36
2510-1-1/2X36YD	054007-10703	Yellow	36 yd	1.50"	7 mil	50 lbs/in	1	24
2510-2X36YD	054007-10711	Yellow	36 yd	2.00"	7 mil	50 lbs/in	1	16
2510-36X25YD	054007-15751	Yellow	25 yd	3.00"	7 mil	50 lbs/in	1	1

## Scotch® Varnished Cambric Tape 2520

Scotch® Varnished Cambric Tape 2520 is made from straight-cut woven cotton cambric fabric. The fabric is oil primed and coated with a high-grade yellow electrical insulating varnish. Varnished cambric tapes are flexible, electrically insulating and moisture resistant with a smooth finish. Scotch Tape 2520 tape is yellow with a pressure-sensitive adhesive and 8 mils thick, and contains an adhesive that holds the tape in position after application. It is designed to perform continuously in temperatures up to 105°C (220°F) with excellent resistance to abrasion, puncture and cut-through.

<b>Material</b>	Straight cut woven cotton cambric with electrical insulating varnish
<b>Tape Grade</b>	Premium
<b>Tape Type</b>	Insulating and Splicing
<b>Operating Temperature</b>	Up to 220°F (105°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	ASTM D-374; ASTM D-1000; ASTM D-295
<b>Country of Origin</b>	 MADE IN USA With U.S. and Global Content



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
2520-3/4X60FT	054007-04836	Yellow	60'	0.75"	8 mil	50 lbs/in	1	20
2520-3/4X36YD	054007-04835	Yellow	36 yd	0.75"	8 mil	50 lbs/in	1	48
2520-1X36YD	054007-04833	Yellow	36 yd	1.00"	8 mil	50 lbs/in	1	36
2520-1-1/2X36YD	054007-04832	Yellow	36 yd	1.50"	8 mil	50 lbs/in	1	24
2520-2X36YD	054007-04834	Yellow	36 yd	2.00"	8 mil	50 lbs/in	1	16



## Scotch® Electrical Shielding Tape 24

Scotch® Electrical Shielding Tape 24 is an all-metal, flat, open-weave shielding mesh that is compatible with power cable insulations and all high-voltage splicing and terminating materials. Scotch® Electrical Shielding Tape 24 elongates easily to conform and is temperature stable.

NOTE: Scotch® Electrical Shielding Tape 24 should not be used as a ground strap or jumper wire. Its ampacity is not great enough to carry large fault currents. For ground strap applications please refer to Scotch® Electrical Grounding Braid 25.


<b>Material</b>	Tinned Copper Open Weave Mesh
<b>Tape Grade</b>	Premium
<b>Tape Type</b>	Shielding
<b>RoHS 2011/65/EU</b>	Yes
<b>Country of Origin</b>	Mexico



Order No.	UPC	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
24-1X100FT	054007-15058	100'	1.00"	16 mil	22 lbs/in	10	10
24-1X15FT	054007-15041	15'	1.00"	16 mil	22 lbs/in	10	50
24-2X10FT	051128-57289	10'	2.00"	16 mil	22 lbs/in	20	20

## Scotch® Electrical Grounding Braid 25

Scotch® Electrical Grounding Braid 25 is a flat, all-metal woven electrical grounding braid that is compatible with power cable insulations and high-voltage splicing and terminating materials. The Scotch® Electrical Grounding Braid 25 is conformable and temperature stable, and has a current carrying capacity approximately that of #6 AWG wire.

<b>Material</b>	Tinned Copper Woven Braid
<b>Backing Material</b>	Copper Wire
<b>Tape Grade</b>	Premium
<b>Tape Type</b>	Grounding
<b>RoHS 2011/65/EU</b>	Yes
<b>Country of Origin</b>	 MADE IN USA



Order No.	UPC	Length	Width	Thickness	Rolls per Carton	Rolls per Case
25	054007-11602	15'	0.50"	80 mil	1	1



## Special Use Tapes

From electrically insulating glass cloth tapes to gaffers tape, and even duct tape, 3M Special Use Tapes provide a wide range of tapes for special applications.



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## Special Use Tapes

### 3M™ Temflex™ Cotton Friction Tape 1755

3M™ Temflex™ Cotton Friction Tape 1755 is a high-grade, black friction tape designed to provide mechanical protection against abrasion and cut-through for cable, wire splices and connections insulated with rubber electrical tape. The 13-mil thick tape is composed of a high-quality cotton fabric, coated on both sides with an electrical-grade, solvent-free, rubber adhesive. 1755 Tape has high break strength and low stretch, making it ideal as a heavy-duty binding and harnessing tape.

Adhesive Material	Thermosettable Rubber Resin
Backing Material	Cotton Cloth
Tape Grade	General Use
Tape Type	Special Use
Maximum Operating Temperature	176°F (80°C)
RoHS 2011/65/EU	Yes



Country of Origin



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Case
1755-3/4X82-1/2FT	054007-50216	Black	82.5'	0.75"	13 mil	48 lbs/in	60
1755-3/4X60FT	051128-57173	Black	60'	0.75"	13 mil	48 lbs/in	20
1755-1X60FT	051128-57211	Black	60'	1"	13 mil	48 lbs/in	60
1755-1-1/2X82-1/2FT	054007-50217	Black	82.5'	1.50"	13 mil	48 lbs/in	30
1755-2X60FT	051128-57267	Black	60'	2"	13 mil	48 lbs/in	30

### Scotch® Electricians Bundling Tape 2000

Scotch® Electrician's Duct Tape 2000 is a water resistant duct tape with a polyvinyl chloride (PVC) backing and a rubber adhesive. Scotch® Tape 2000 is designed to be an electrician's utility tape for holding and bundling applications. The tape is easy tear and removes with minimal residue. It is not made with cloth, so the tape does not absorb water. Scotch® Electrician's Duct Tape 2000 is not recommended for sealing air ducts.

Adhesive Material	Rubber Resin
Backing Material	Polyvinyl Chloride (PVC)
Tape Grade	Premium
Tape Type	Special Use
Maximum Operating Temperature	220°F (105°C)
RoHS 2011/65/EU	Yes





Order No.	UPC	Color	Length	Width	Thickness	Rolls per Case
2000-DUCT-TAPE-DISPLAY	054007-43403	Gray	50 yd	2.0"	6 mil	12

## Special Use Tapes

### Scotch® Glass Cloth Electrical Tapes 27

3M™ Glass Cloth Electrical Tape 27 is a 7-mil woven insulating glass cloth tape with pressure-sensitive rubber thermosetting adhesive. This tape is designed to operate in 600 volt dry applications requiring high mechanical strength and resistance to high temperatures. The adhesive is specially designed and prepared to provide corrosion protection.


Adhesive Material	Thermosettable Rubber Resin
Backing Material	Glass Cloth
Tape Grade	Premium
Tape Type	Special Use
Maximum Operating Temperature	302°F (150°C)
RoHS 2011/65/EU	Yes
Agency Approvals	
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
27-1/2"X66'	054007-15066	White	66'	0.50"	7 mil	150 lbs/in (252 N/10 mm)	1	50
27-3/4"X66'	054007-15074	White	66'	0.75"	7 mil	150 lbs/in (252 N/10 mm)	1	50
27-3/4"X60YD	054007-27477	White	60 yd	0.75"	7 mil	150 lbs/in (252 N/10 mm)	1	12
27-1"X60YD	054007-10570	White	60 yd	1.00"	7 mil	150 lbs/in (252 N/10 mm)	1	9
27-1.5"X60YD	054007-27478	White	60 yd	1.50"	7 mil	150 lbs/in (252 N/10 mm)	1	24

### Scotch® Glass Cloth Electrical Tape 69

Scotch® Glass Cloth Electrical Tape 69 is a white glass cloth tape with a high-temperature thermosetting silicone adhesive. The thermosetting adhesive provides an increased bond once applied in areas of high ambient temperatures. Scotch® Tape 69 is UL recognized for continuous use up to 200°C. It conforms to Military Specification No. MIL-I-19166C.

Adhesive Material	Thermosettable Silicone
Backing Material	Glass Cloth
Tape Grade	Premium
Tape Type	Special Use
Maximum Operating Temperature	392°F (200°C)
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Carton	Rolls per Case
69-1/2"X66'	054007-10083	White	66'	0.50"	7 mil	180 lbs/in (314 N/10 mm)	1	50
69-1/2"X36YD	054007-27548	White	36 yd	0.50"	7 mil	180 lbs/in (314 N/10 mm)	1	18
69-3/4"X66'	054007-09910	White	66'	0.75"	7 mil	180 lbs/in (314 N/10 mm)	1	50
69-3/4"X36YD	054007-27493	White	36 yd	0.75"	7 mil	180 lbs/in (314 N/10 mm)	1	12
69-1"X36YD	054007-27494	White	36 yd	1.00"	7 mil	180 lbs/in (314 N/10 mm)	1	24

## Scotch® Thread Sealant and Lubricant 48

Scotch® Thread Sealant Tape 48 is a high temperature stable (PTFE) pipe thread sealant that provides a leakproof seal.

Adhesive Material	None
Backing Material	PTFE Fluorocarbon Resin
Tape Grade	Premium
Tape Type	Special Use
Operating Temperature Range	-450–500°F (-268–260°C)
RoHS 2011/65/EU	Yes
Country of Origin	 MADE IN USA With U.S. and Global Content



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Case
48-1/2"X1296"	054007-27571	White	32.9 m	0.50"	3 mil	5.9 lbs/in	12
48-1/2"X260"	054007-06195	White	6.6 m	0.50"	3 mil	5.9 lbs/in	12
48-1/2"X520"	054007-06196	White	13.2 m	0.50"	3 mil	5.9 lbs/in	12
48-1/4"X260"	054007-06192	White	6.6 m	0.25"	3 mil	5.9 lbs/in	12

## Scotch® Transparent Duct Tape 2120

Scotch® Transparent Duct Tape 2120-A offers clear advantages to ordinary duct tape. It is transparent when applied to make repairs less obvious, tears easily by hand, and is resistant to water and UV rays. Scotch Transparent Duct Tape is extremely versatile and can be used on plastic, wood, glass, metal, vinyl and rubber.

Adhesive Material	Acrylic Resin
Backing Material	Water resistant, transparent polyethylene coated, multi filament scrim
Tape Grade	Premium
Tape Type	Special Use
Maximum Operating Temperature	173°F (78°C)
RoHS 2011/65/EU	Yes



Order No.	UPC	Color	Length	Width	Thickness	Rolls per Case
2120-A	051131-83260	Clear	20 yd	1.88"	9 mil	12

## Special Use Tapes

### 3M™ Value Masking Tape 101+

3M™ Value Masking Tape 101+ is a cost effective masking tape for indoor light-duty applications

- Cost effective for indoor light-duty applications
- Rubber-based adhesive
- Tan crepe paper backing

Adhesive Material	Rubber
Backing Material	Crepe Paper
Tape Type	Special Use
Maximum Operating Temperature	175°F (79°C)



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
XG700011750	051115-68707	Tan	55 m	18 mm	5.1 mil	9%	22 lbs/in (385 N/100 mm)	34 oz/in (37 N/100 mm)	48
XG700011768	051115-68708	Tan	55 m	24 mm	5.1 mil	9%	22 lbs/in (385 N/100 mm)	34 oz/in (37 N/100 mm)	72
XG700011776	051115-68709	Tan	55 m	36 mm	5.1 mil	9%	22 lbs/in (385 N/100 mm)	34 oz/in (37 N/100 mm)	24
XG700011784	051115-68710	Tan	55 m	48 mm	5.1 mil	9%	22 lbs/in (385 N/100 mm)	34 oz/in (37 N/100 mm)	24
XG700011792	051115-68711	Tan	55 m	72 mm	5.1 mil	9%	22 lbs/in (385 N/100 mm)	34 oz/in (37 N/100 mm)	12
XG700011800	051115-68712	Tan	55 m	96 mm	5.1 mil	9%	22 lbs/in (385 N/100 mm)	34 oz/in (37 N/100 mm)	8

## Special Use Tapes

### 3M™ General Use Masking Tape 201+

3M™ General Use Masking Tape 201+ sticks and holds to a variety of surfaces such as paper, fiberboard, glass, rubber, plastic, metal, and removes cleanly with no residue. This tape is the second in our Masking Made Simple line of tapes.

- Sticks to a variety of surfaces including paper, fiberboard, glass, rubber, plastic, and metal
- Crepe paper backing is hand tearable
- Unwinds smoothly for easy to control, application, and removal
- Dependable for use in temperatures up to 200° F/ 93° C for 30 minutes
- Tough masking tape seals, holds, bundles, labels, wraps, splices, and protects
- Medium conformability



Adhesive Material	Rubber
Backing Material	Crepe Paper
Tape Type	Special Use
Maximum Operating Temperature	200°F (93°C)

Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
70006745486	051115-64739	Tan	55 m	18 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	48
70006745494	051115-64740	Tan	55 m	24 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	36
70006745502	051115-64741	Tan	55 m	36 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	24
70006745510	051115-64742	Tan	55 m	96 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	24
70006745528	051115-64743	Tan	55 m	72 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	12
70006745536	051115-64744	Tan	55 m	18 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	8
70006745544	051115-64745	Tan	55 m	72 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	12
70006745551	051115-64746	Tan	55 m	24 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	36 individually wrapped rolls
70006745569	051115-64747	Tan	55 m	36 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	24 individually wrapped rolls
70006745577	051115-64748	Tan	55 m	48 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	24 individually wrapped rolls



## Special Use Tapes

### 3M™ Performance Yellow Masking Tape 301+

3M™ Performance Yellow Masking Tape 301+ is an industrial strength masking tape that sticks instantly to most surfaces including metal, rubber, glass, plastic and removes easily to create sharp paint lines. The third in our Masking Made Simple line of tapes, this distinctive tape remains in place when formed around corners, through contours, and over irregular surfaces without lifting or curling.

- Easily identifiable, industrial-strength tape for paint masking, bundling, holding, and identifying
- Proprietary, solvent-free adhesive sticks to most surfaces and removes cleanly in one piece
- Thick backing resists bleed through
- Yellow color improves visibility during masking process
- Crepe-paper backing conforms over irregular surfaces, contours, and around corners
- Medium-high conformability

Adhesive Material	Solvent-Free
Backing Material	Crepe Paper
Tape Type	Special Use
Maximum Operating Temperature	225°F (107°C)



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
70006745593	051115-64750	Yellow	55 m	18 mm	6.3 mil	12%	22 lbs/in (385 N/100 mm)	30 oz/in (33 N/100 mm)	48
70006745601	051115-64751	Yellow	55 m	24 mm	6.3 mil	12%	22 lbs/in (385 N/100 mm)	30 oz/in (33 N/100 mm)	36
70006745619	051115-64752	Yellow	55 m	36 mm	6.3 mil	12%	22 lbs/in (385 N/100 mm)	30 oz/in (33 N/100 mm)	24
70006745627	051115-64753	Yellow	55 m	48 mm	6.3 mil	12%	22 lbs/in (385 N/100 mm)	30 oz/in (33 N/100 mm)	24
70006745635	051115-64754	Yellow	55 m	72 mm	6.3 mil	12%	22 lbs/in (385 N/100 mm)	30 oz/in (33 N/100 mm)	12
70006745643	051115-64755	Yellow	55 m	96 mm	6.3 mil	12%	22 lbs/in (385 N/100 mm)	30 oz/in (33 N/100 mm)	8
70006745650	051115-64756	Yellow	55 m	24 mm	6.3 mil	12%	22 lbs/in (385 N/100 mm)	30 oz/in (33 N/100 mm)	36 individually wrapped rolls
70006745668	051115-64757	Yellow	55 m	36 mm	6.3 mil	12%	22 lbs/in (385 N/100 mm)	30 oz/in (33 N/100 mm)	24 individually wrapped rolls
70006745676	051115-64758	Yellow	55 m	48 mm	6.3 mil	12%	22 lbs/in (385 N/100 mm)	30 oz/in (33 N/100 mm)	24 individually wrapped rolls

## Special Use Tapes

### 3M™ High Performance Green Masking Tape 401+

3M™ High Performance Green Masking Tape 401+ is designed to deliver super-sharp paint lines in applications where surface temperatures can reach up to 250°F/ 121° C.

- Adhesive formula removes cleanly in one piece with no adhesive residue
- Remains in place around corners, over contours and irregular surfaces
- Resists paint bleed-through to help create super-sharp paint lines
- Green backing improves visibility and accuracy during paint masking
- Withstands surface temperatures up to 250° F/ 121° C for 30 minutes for paint bake operations
- High conformability

Adhesive Material	Solvent-Free
Backing Material	Crepe Paper
Tape Type	Special Use
Maximum Operating Temperature	225°F (107°C)



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
70006745692	051115-64760	Green	55 m	18 mm	6.7 mil	10%	25 lbs/in (438 N/100 mm)	36 oz/in (39 N/100 mm)	48
70006745700	051115-64761	Green	55 m	24 mm	6.7 mil	10%	25 lbs/in (438 N/100 mm)	36 oz/in (39 N/100 mm)	24
70006745718	051115-64762	Green	55 m	36 mm	6.7 mil	10%	25 lbs/in (438 N/100 mm)	36 oz/in (39 N/100 mm)	16
70006745726	051115-64763	Green	55 m	48 mm	6.7 mil	10%	25 lbs/in (438 N/100 mm)	36 oz/in (39 N/100 mm)	12
70006745734	051115-64764	Green	55 m	72 mm	6.7 mil	10%	25 lbs/in (438 N/100 mm)	36 oz/in (39 N/100 mm)	8
70006745742	051115-64765	Green	55 m	96 mm	6.7 mil	10%	25 lbs/in (438 N/100 mm)	36 oz/in (39 N/100 mm)	8
70006745767	051115-64767	Green	55 m	24 mm	6.7 mil	10%	25 lbs/in (438 N/100 mm)	36 oz/in (39 N/100 mm)	24 individually wrapped rolls
70006745775	051115-64768	Green	55 m	36 mm	6.7 mil	10%	25 lbs/in (438 N/100 mm)	36 oz/in (39 N/100 mm)	16 individually wrapped rolls
70006745783	051115-64769	Green	55 m	48mm	6.7 mil	10%	25 lbs/in (438 N/100 mm)	36 oz/in (39 N/100 mm)	12 individually wrapped rolls

## Special Use Tapes

### 3M™ Specialty High Temperature Masking Tape 501+

3M™ Specialty High Temperature Masking Tape 501+ stands up to the heat and your high standards. Built on a foundation of innovation, 501+ masking tape is specifically designed for industrial paint applications where surface temperatures can reach up to 300°F. With the perfect blend of strength, flexibility and adhesion, 501+ masking tape delivers the consistently excellent results you've come to expect from 3M.

<b>Adhesive Material</b>	High Temperature
<b>Backing Material</b>	Crepe Paper
<b>Tape Type</b>	Special Use
<b>Maximum Operating Temperature</b>	300°F (149°C)



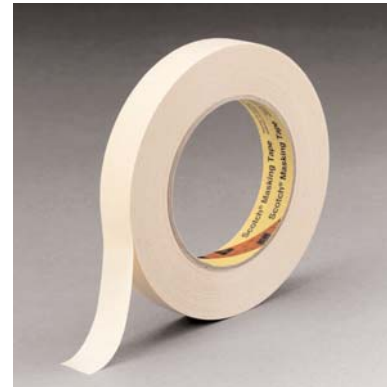
Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
GT500080251	051115-64773	Tan	55 m	18 mm	7.3 mil	10%	26 lbs/in (455 N/100 mm)	36 oz/in (39 N/100 mm)	48
GT500080269	051115-64774	Tan	55 m	24 mm	7.3 mil	10%	26 lbs/in (455 N/100 mm)	36 oz/in (39 N/100 mm)	36
GT500080277	051115-64775	Tan	55 m	36 mm	7.3 mil	10%	26 lbs/in (455 N/100 mm)	36 oz/in (39 N/100 mm)	24
GT500080285	051115-64776	Tan	55 m	48 mm	7.3 mil	10%	26 lbs/in (455 N/100 mm)	36 oz/in (39 N/100 mm)	24
GT500080293	051115-64777	Tan	55 m	72 mm	7.3 mil	10%	26 lbs/in (455 N/100 mm)	36 oz/in (39 N/100 mm)	12
GT500080301	051115-64778	Tan	55 m	100 mm	7.3 mil	10%	26 lbs/in (455 N/100 mm)	36 oz/in (39 N/100 mm)	8
70006749918	051115-69105	Tan	55 m	24 mm	7.3 mil	10%	26 lbs/in (455 N/100 mm)	36 oz/in (39 N/100 mm)	36 individually wrapped rolls
70006749926	051115-69106	Tan	55 m	36 mm	7.3 mil	10%	26 lbs/in (455 N/100 mm)	36 oz/in (39 N/100 mm)	24 individually wrapped rolls
70006749934	051115-68107	Tan	55 m	48 mm	7.3 mil	10%	26 lbs/in (455 N/100 mm)	36 oz/in (39 N/100 mm)	24 individually wrapped rolls

## Special Use Tapes

### Scotch® High Performance Masking Tape 232

Scotch® Performance Masking Tape 232 is a tough and extremely smooth, natural-colored, 6.3 mil (0.14 mm) thick, high performance, crepe paper tape. It is excellent for paint masking as well as many industrial applications. Scotch® Masking Tape 232 will generally function well during bake cycles of up to 250°F (121°C) for periods up to one hour. It should not be exposed to outdoor elements. It may be qualified to meet Fed. Spec. PPP-T-42C, Type I and CID A-A-883B. Check with your 3M representative for details.

Adhesive Material	Rubber
Backing Material	Crepe Paper
Tape Grade	Premium
Tape Type	Special Use
Maximum Operating Temperature	250°F (121°C)
RoHS 2011/65/EU	Yes
Suggested Alternative	3M™ High Performance Green Masking Tape 401+



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
232-18MM-55M	021200-02853	Tan	55 m	18 mm	6.3 mil	8%	27 lbs/in (472 N/100 mm)	41 oz/in (44 N/100 mm)	48
232-24MM-55M	021200-02854	Tan	55 m	24 mm	6.3 mil	8%	27 lbs/in (472 N/100 mm)	41 oz/in (44 N/100 mm)	36
232-48MM-55M	021200-04240	Tan	55 m	48 mm	6.3 mil	8%	27 lbs/in (472 N/100 mm)	41 oz/in (44 N/100 mm)	24

### Scotch® General Purpose Masking Tape 234

Scotch® General Purpose Masking Tape 234 is a natural-colored, 6.0 mil (0.14 mm) thick, paper tape. It is excellent for general industrial applications. It will generally function well during bake cycles of up to 250°F (121°C) for periods up to one hour. It should not be exposed to outdoor elements. It may be qualified to meet Fed. Spec. PPP-T-42C, Type I and CID A-A-883B. Check with your 3M representative for details.

Adhesive Material	Rubber
Backing Material	Crepe Paper
Tape Grade	Premium
Tape Type	Special Use
Maximum Operating Temperature	250°F (121°C)
RoHS 2011/65/EU	Yes
Suggested Alternative	3M™ Performance Yellow Masking Tape 301+



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
234-18MMX55M	021200-02981	Tan	55 m	18 mm	6 mil	8%	27 lbs/in (472 N/100 mm)	34 oz/in (37 N/100 mm)	48
234-24MMX55M	021200-02982	Tan	55 m	24 mm	6 mil	8%	27 lbs/in (472 N/100 mm)	34 oz/in (37 N/100 mm)	36
234-48MMX55M	021200-04244	Tan	55 m	48 mm	6 mil	8%	27 lbs/in (472 N/100 mm)	34 oz/in (37 N/100 mm)	24

## Special Use Tapes

### 3M™ Paper Tape 200

3M™ Paper Tape 200 is a utility purpose paper tape for holding, bundling, sealing, non-critical masking and a vast number of other jobs where a pressure-sensitive tape is needed.

<b>Adhesive Material</b>	Rubber
<b>Backing Material</b>	Crepe Paper
<b>Tape Type</b>	Special Use
<b>Maximum Operating Temperature</b>	200°F (93°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Suggested Alternative</b>	3M™ General Use Masking Tape 201+




Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
200-18MM	048011-53464	Tan	55 m	18 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	48
200-24MM	048011-53465	Tan	55 m	24 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	36
200-36MM	048011-53470	Tan	55 m	36 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	24
200-48MM	048011-53466	Tan	55 m	48 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	24
200-72MM	048011-53467	Tan	55 m	72 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	12
200-96MM	048011-53468	Tan	55 m	96 mm	4.4 mil	8%	19 lbs/in (333 N/100 mm)	25 oz/in (27 N/100 mm)	8

## Special Use Tapes

### 3M™ Performance Plus Duct Tape 8979

3M™ Performance Plus Duct Tape 8979 has a unique tape construction that allows for both permanent and temporary applications whether indoors or outdoors. It is removable with little or no adhesive residue from most opaque surfaces up to 6 months after application. The tape is conformable, abrasion resistant, and water resistant. The polyethylene film and cloth scrim construction provides straight, easy tear with high tensile strength for some of the most demanding applications.

Adhesive Material	Rubber
Backing Material	Polyethylene Film Over Cloth Scrim
Tape Type	Special Use
Maximum Operating Temperature	200°F (93°C)
RoHS 2011/65/EU	Yes
Flame Spread Index	0
Smoke Development Index	5
	
Agency Approval	Tested in accordance with UL723/ASTM E84




Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
8979-BLACK-48MM	048011-53918	Black	54.8 m	48 mm	12.6 mil	21%	36 lbs/in (643 N/100 mm)	52 oz/in (57 N/100 mm)	24 individually wrapped rolls
8979-OLIVE-48MM	048011-53916	Olive	54.8 m	48 mm	12.6 mil	21%	36 lbs/in (643 N/100 mm)	52 oz/in (57 N/100 mm)	24 individually wrapped rolls
8979-SLATEBLUE-48MMX22.8M	048011-53851	Slate Blue	22.8 m	48 mm	12.6 mil	21%	36 lbs/in (643 N/100 mm)	52 oz/in (57 N/100 mm)	12 individually wrapped rolls
8979-SLATEBLUE-48MM	021200-56468	Slate Blue	54.8 m	48 mm	12.6 mil	21%	36 lbs/in (643 N/100 mm)	52 oz/in (57 N/100 mm)	24 individually wrapped rolls
8979-SLATEBLUE-72MM	021200-56469	Slate Blue	54.8 m	72 mm	12.6 mil	21%	36 lbs/in (643 N/100 mm)	52 oz/in (57 N/100 mm)	12
8979-SLATEBLUE-96MM	021200-56470	Slate Blue	54.8 m	96 mm	12.6 mil	21%	36 lbs/in (643 N/100 mm)	52 oz/in (57 N/100 mm)	12



## 3M™ Performance Plus Duct Tape Nuclear Grade 8979N

3M™ Performance Plus Duct Tape 8979N has a unique product construction for indoor and outdoor applications. This tape is removable with little or no adhesive residue from most opaque surfaces up to six months after application. 3M Performance Plus Duct Tape 8979N is also resistant to delamination and deterioration when exposed to UV outdoors for up to one year.


Adhesive Material	Rubber
Backing Material	Polyethylene Film Over Cloth Scrim
Tape Type	Special Use
Maximum Temperature Use	200°F (93°C)
RoHS 2011/65/EU	Yes
Agency Approval	
	Complies with MIL-STD-2041D(SH), Notice 2 for leachable halides and sulfur. A certificate of analysis is included in each carton. Complies with ASME NQA-1 [superseeds ANSI N45.2.2 and NRC 1.38 Paragraph 2C Div A3.5(1)(A)].



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
8979N-RED-48MMX54.8M	048011-53914	Red	54.8 m	48 mm	12.1 mil	19%	36 lbs/in (643 N/100 mm)	48 oz/in (53 N/100 mm)	24
8979N-RED-72MMX54.8M	048011-53915	Red	54.8 m	72 mm	12.1 mil	19%	36 lbs/in (643 N/100 mm)	48 oz/in (53 N/100 mm)	12

## 3M™ Extra Heavy Duty Duct Tape 6969

3M™ Extra Heavy Duty Duct Tape 6969 is an industrial strength duct tape composed of an abrasion resistant, polyethylene film over a dense cloth scrim water proof backing with an aggressive rubber adhesive used for demanding duct tape applications.

Adhesive Material	Rubber
Backing Material	Polyethylene Film Over Cloth Scrim
Tape Type	Special Use
Maximum Operating Temperature	200°F (93°C)
RoHS 2011/65/EU	Yes
Flame Spread Index	0
Smoke Development Index	5
Agency Approval	
	Tested in accordance with UL723/ASTM E84



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
6969-48MMX54.8M	051131-06969	Silver	54.8 m	48 mm	10.7 mil	16%	32 lbs/in (560 N/100 mm)	61 oz/in (66 N/100 mm)	24 individually wrapped rolls
6969-72MMX54.8M	021200-85635	Silver	54.8 m	72 mm	10.7 mil	16%	32 lbs/in (560 N/100 mm)	61 oz/in (66 N/100 mm)	12

## Special Use Tapes

### 3M™ Outdoor Masking and Stucco Tape 5959

3M™ Outdoor Masking and Stucco Tape 5959 is built strong, holds strong, and removes clean, even up to 90 days after application. Its unique, polyethylene backing, laid over a dense cloth scrim, is strong enough to pull through spatter from stucco, Exterior Insulation and Finishing Systems (EIFS) and other heavy coatings.

Adhesive Material	Rubber
Backing Material	Polyethylene over cloth scrim/rubber
Tape Type	Special Use
Maximum Operating Temperature	200°F (93°C)



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
5959	051115-25491	Red	41.1 m	48 mm	12.0 mil	21%	35 lbs/in (613 N/100 mm)	53 oz/in (58 N/100 mm)	12 individually wrapped rolls

### 3M™ Heavy Duty Duct Tape 3939

3M™ Heavy Duty Duct Tape 3939 is composed of waterproof polyethylene film over cloth scrim backing with a rubber adhesive used for demanding duct tape applications.

Adhesive Material	Rubber
Backing Material	Polyethylene Film Over Cloth Scrim
Tape Type	Special Use
Maximum Operating Temperature	200°F (93°C)
RoHS 2011/65/EU	Yes
Flame Spread Index	0
Smoke Development Index	30



Agency Approval  
Tested in accordance with  
UL723/ASTM E84



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
3939-24MMX54.8M	021200-85561	Silver	54.8 m	24 mm	9 mil	17%	25 lbs/in (438 N/100 mm)	55 oz/in (60 N/100 mm)	36
3939-48MMX54.8M	051131-06975	Silver	54.8 m	48 mm	9 mil	17%	25 lbs/in (438 N/100 mm)	55 oz/in (60 N/100 mm)	24 individually wrapped rolls
3939-72MMX54.8M	021200-85562	Silver	54.8 m	72 mm	9 mil	17%	25 lbs/in (438 N/100 mm)	55 oz/in (60 N/100 mm)	12
3939-96MMX54.8M	021200-85563	Silver	54.8 m	96 mm	9 mil	17%	25 lbs/in (438 N/100 mm)	55 oz/in (60 N/100 mm)	12

## Special Use Tapes

### 3M™ Multi-Purpose Duct Tape 3900

3M™ Multi-Purpose Duct Tape 3900 is our industrial-strength tape that gives you a variety of colors for identification, contrast, decoration, bundling, sealing, holding, protecting, and other tough jobs. It is also used to color code bundles of pipes and conduit, call attention to temporary repairs, secure carpet and wiring to floors, and provide attractive seals on colored surfaces.

<b>Adhesive Material</b>	Synthetic Rubber
<b>Backing Material</b>	Polyethylene film over cloth scrim, Polyethylene
<b>Tape Type</b>	Special Use
<b>Maximum Operating Temperature</b>	200°F (93°C)



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
3900-SILVER	021200-85561	Silver	54.8 m	48 mm	8.1 mil	24%	32 lbs/in (560 N/100 mm)	72 oz/in (79 N/100 mm)	24 individually wrapped rolls
3900-YELLOW	021200-49828	Yellow	54.8 m	48 mm	8.1 mil	24%	32 lbs/in (560 N/100 mm)	72 oz/in (79 N/100 mm)	24 individually wrapped rolls
3900-WHITE	021200-49829	White	54.8 m	48 mm	8.1 mil	24%	32 lbs/in (560 N/100 mm)	72 oz/in (79 N/100 mm)	24 individually wrapped rolls
3900-RED	021200-49830	Red	54.8 m	48 mm	8.1 mil	24%	32 lbs/in (560 N/100 mm)	72 oz/in (79 N/100 mm)	24 individually wrapped rolls
3900-OLIVE	021200-49831	Olive	54.8 m	48 mm	8.1 mil	24%	32 lbs/in (560 N/100 mm)	72 oz/in (79 N/100 mm)	24 individually wrapped rolls
3900-BLUE	021200-49832	Blue	54.8 m	48 mm	8.1 mil	24%	32 lbs/in (560 N/100 mm)	72 oz/in (79 N/100 mm)	24 individually wrapped rolls
3900-BLACK	021200-49833	Black	54.8 m	48 mm	8.1 mil	24%	32 lbs/in (560 N/100 mm)	72 oz/in (79 N/100 mm)	24 individually wrapped rolls

## Special Use Tapes

### 3M™ Utility Duct Tape 2929

3M™ Utility Duct Tape 2929 is a utility grade, conformable cloth duct tape made with polyethylene film over cloth scrim and rubber adhesive. It is a good choice for temporary repairs, sealing, holding and marking.

Adhesive Material	Rubber
Backing Material	Polyethylene Film Over Cloth Scrim
Tape Type	Special Use
Maximum Operating Temperature	200°F (93°C)
RoHS 2011/65/EU	Yes



Order No.	UPC	Tape Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
2929-SILVER-48MM	051115-24883	Silver	45.7 m	48 mm	6 mil	14%	19 lbs/in (333.4 N/100 mm)	45 oz/in (49.2 N/100 mm)	24 individually wrapped rolls
2929-SILVER-72MM	051115-24885	Silver	45.7 m	72 mm	6 mil	14%	19 lbs/in (333.4 N/100 mm)	45 oz/in (49.2 N/100 mm)	12

### 3M™ Value Duct Tape 1900

3M™ Value Duct Tape 1900 is a conformable cloth duct tape made with polyethylene film over cloth scrim and synthetic rubber adhesive. It is a good choice for non-critical applications.

Adhesive Material	Synthetic Rubber
Backing Material	Polyethylene Film Over Cloth Scrim
Tape Type	Special Use
Maximum Operating Temperature	200°F (93°C)
RoHS 2011/65/EU	Yes



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
1900-48MM	051115-23421	Silver	45.7 m	48 mm	5.8 mil	12%	16 lbs/in (280.2 N/100 mm)	58 oz/in (63.5 N/100 mm)	24 individually wrapped rolls
1900-72MM	051115-23422	Silver	45.7 m	72 mm	5.8 mil	12%	16 lbs/in (280.2 N/100 mm)	58 oz/in (63.5 N/100 mm)	12 individually wrapped rolls

## Special Use Tapes

### 3M™ Cloth Gaffers Tape 6910

3M™ Cloth Gaffers Tape 6910 is coated with a rubber adhesive for use in the entertainment industry as “gaffers” tape where light reflection is a concern.

<b>Adhesive Material</b>	Rubber
<b>Backing Material</b>	Vinyl Coated Cloth
<b>Tape Type</b>	Special Use
<b>Maximum Operating Temperature</b>	200°F (93°C)
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
6910-BLACK	051131-06843	Black	54.8 m	48 mm	12 mil	5%	45 lbs/in (788 N/100 mm)	45 oz/in (49 N/100 mm)	24 individually wrapped rolls
6910-SILVER	021200-22782	Silver	54.8 m	48 mm	12 mil	5%	45 lbs/in (788 N/100 mm)	45 oz/in (49 N/100 mm)	24 individually wrapped rolls

### 3M™ Vinyl Duct Tape 3903

3M™ Vinyl Duct Tape 3903 is a general purpose duct tape made from a hand tearable embossed vinyl backing coated with a rubber adhesive.

<b>Adhesive Material</b>	Rubber
<b>Backing Material</b>	Embossed Vinyl
<b>Tape Type</b>	Special Use
<b>Maximum Operating Temperature</b>	200°F (93°C)



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
70006711694	051131-06984	Gray	50 Linear Yard	2"	6.5 mil	134%	12.6 lbs/in (220 N/100 mm)	15.4 oz/in (16.8 N/100 mm)	24 individually wrapped rolls
70006711728	051131-06981	White	50 Linear Yard	2"	6.5 mil	134%	12.6 lbs/in (220 N/100 mm)	15.4 oz/in (16.8 N/100 mm)	24 individually wrapped rolls
70006711678	051131-06995	Black	50 Linear Yard	2"	6.5 mil	134%	12.6 lbs/in (220 N/100 mm)	15.4 oz/in (16.8 N/100 mm)	24 individually wrapped rolls
70006711686	051131-06978	Blue	50 Linear Yard	2"	6.5 mil	134%	12.6 lbs/in (220 N/100 mm)	15.4 oz/in (16.8 N/100 mm)	24 individually wrapped rolls
70006711702	051131-06986	Green	50 Linear Yard	2"	6.5 mil	134%	12.6 lbs/in (220 N/100 mm)	15.4 oz/in (16.8 N/100 mm)	24 individually wrapped rolls
70006711710	051131-06992	Red	50 Linear Yard	2"	6.5 mil	134%	12.6 lbs/in (220 N/100 mm)	15.4 oz/in (16.8 N/100 mm)	24 individually wrapped rolls
70006711736	051131-06982	Yellow	50 Linear Yard	2"	6.5 mil	134%	12.6 lbs/in (220 N/100 mm)	15.4 oz/in (16.8 N/100 mm)	24 individually wrapped rolls

## Special Use Tapes


### 3M™ Vinyl Duct Tape 3903 (continued)

Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
70006711751	021200-44989	Gray	50 Linear Yard	3"	6.5 mil	134%	12.6 lbs/in (220 N/100 mm)	15.4 oz/in (16.8 N/100 mm)	18
70006711595	051111-92575	White	50 Linear Yard	3"	6.5 mil	134%	12.6 lbs/in (220 N/100 mm)	15.4 oz/in (16.8 N/100 mm)	18
70006706959	051111-92057	Yellow	50 Linear Yard	3"	6.5 mil	134%	12.6 lbs/in (220 N/100 mm)	15.4 oz/in (16.8 N/100 mm)	18

### 3M™ Metalized Flexible Duct Tape 3350

3M™ Metalized Flexible Duct Tape 3350, is a 3.1 mil thick polypropylene tape with an acrylic adhesive. It is self-wound. For use with flexible ducts.

- High tack rubber adhesive, 1.9 mil backing thickness
- A UV resistant, bi-axially oriented polypropylene (BOPP) coated with a cold weather acrylic adhesive.
- Resists flame, resists moisture, resists weather, resists UV degradation, chemical resistant tape, thermally conductive tape for heating and cooling efficiency, heat reflective tape, light reflective tape, conformable tape

Adhesive Material	Acrylic
Backing Material	Polypropylene Film
Tape Type	Special Use
Maximum Operating Temperature	230°F (110°C)
Agency Approval	 UL-181B-FX Listed



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Adhesion to Steel	Rolls per Case
70006658549	051111-07817	Silver	109.6 m	48 mm	3.1 mil	36 lbs/in (631 N/100 mm)	33 oz/in (36 N/100 mm)	12 individually wrapped rolls



## Special Use Tapes

### 3M™ Foil Tape 3340

3M™ Foil Tape 3340 is ideal for sealing rigid fiberglass duct boards and flexible (non-metallic) air duct and connector systems. Our tape meets requirements for UL 181 A-P and UL 181 B-FX Listings as a measure of reliability and quality standards.

- Conformable tape resists flame, moisture, weather, UV degradation, and many chemicals
- 2.0 aluminum foil backing is ideal as a vapor seal tape for duct closure
- Thermally conductive backing helps heating and cooling efficiency
- Heat and light reflective tape protects insulates and enhances lighting efficiency
- Permanent acrylic adhesive combined with the durable 2.0 mil backing provides long service life

Adhesive Material Acrylic  
 Backing Material Aluminum Foil  
 Tape Type Special Use  
 Maximum Operating Temperature 250°F (121°C)  
 RoHS 2011/65/EU Yes

Agency Approval



UL-181A-P and UL 181B-FX Listed



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Adhesion to Steel	Rolls per Case
70006658481	051111-07811	Silver	50 Linear Yard	2.5"	4.0 mil	20 lbs/in (350 N/100 mm)	30 oz/in (33 N/100 mm)	9 individually wrapped rolls

### 3M™ FSK Facing Tape 3320

3M™ FSK Facing Tape 3320 is a high performance reinforced insulation tape of Foil/Scrim/Kraft. UL Listed and Mold Resistant. FSK tape has a special acrylic adhesive which excels in very cold and hot temps. Use for a vapor barrier on fibrous duct board for sheet metal ducts.

- FSK HVAC aluminum foil tape/scrim/laminate. 6.0 mil thick foil backing. UL 723 Classified.
- Engineered specifically as a vapor retardant tape to seal mineral wool foil-faced insulation, bare sheet metal ducts, and blanket style fiberglass duct insulation.
- Long lasting acrylic adhesive

Adhesive Material Acrylic  
 Backing Material Aluminum Foil  
 Tape Type Special Use  
 Maximum Operating Temperature 175°F (79°C)

Agency Approval



UL 723 Classified




Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Adhesion to Steel	Rolls per Case
70006435427	051115-31530	Silver	45.7 m	48 mm	6.7 mil	40 lbs/in (712 N/100 mm)	81 oz/in (89 N/100 mm)	24
70006435435	051115-31531	Silver	45.7 m	72 mm	6.7 mil	40 lbs/in (712 N/100 mm)	81 oz/in (89 N/100 mm)	16
70006435443	051115-31532	Silver	45.7 m	99 mm	6.7 mil	40 lbs/in (712 N/100 mm)	81 oz/in (89 N/100 mm)	12

## Special Use Tapes

### 3M™ Aluminum Foil Tape 3381

3M™ Aluminum Foil Tape 3381, annealed aluminum foil, acrylic pressure sensitive adhesive. The foil also serves as an excellent barrier against moisture, dust, flame, and certain chemicals. Acrylic adhesive supplies superior temperature, U.V. and solvent resistance.

- 1.4 mil general purpose aluminum foil backing with acrylic adhesive. UL 723 classified.
- Conforms to irregular surfaces. Excels in demanding temperature and humidity applications.
- Long lasting acrylic adhesive

Adhesive Material	Acrylic
Backing Material	Aluminum Foil
Tape Type	Special Use
Maximum Operating Temperature	250°F (121°C)
RoHS 2011/65/EU	Yes
Agency Approval	 UL 723 Classified



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
70006447968	051115-31850	Silver	10 m	48 mm	2.7 mil	12%	10 lbs/in (180 N/100 mm)	40 oz/in (43.8 N/100 mm)	24
70006448123	051115-31871	Silver	45 m	72 mm	2.7 mil	12%	10 lbs/in (180 N/100 mm)	40 oz/in (43.8 N/100 mm)	16
70006658499	051111-07812	Silver	50 Linear Yard	1.88"	2.7 mil	12%	10 lbs/in (180 N/100 mm)	40 oz/in (43.8 N/100 mm)	12 individually wrapped rolls

### 3M™ Roof and Gutter Repair Tape 3382

3M™ Roof and Gutter Repair Tape 3382 is a general purpose Aluminum Foil Tape offering two outer layers of aluminum foil surrounding a polyester film core combined with an acrylic pressure sensitive having an easy release PE coated Kraft liner.

- 2.5 mil aluminum foil backing with PET laminate. Puncture and tear resistant
- Roof and gutter repair. Works in extreme weather conditions.
- Performs in below freezing conditions

Adhesive Material	Acrylic
Backing Material	Aluminum Foil
Tape Type	Special Use
Maximum Operating Temperature	300°F (149°C)



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Breaking Strength	Adhesion to Steel	Rolls per Case
70006658556	051111-07818	Silver	10.9 Linear Yard	1.88"	4.2 mil	25%	30 lbs/in (525 N/100 mm)	50 oz/in (55 N/100 mm)	12 individually wrapped rolls

## Scotch® Barricade Tapes

Scotch® Barricade Tapes are a fast, effective way to help deter entry to hazardous areas. Whether you need buried or non-buried, detectable or non-detectable, 3M has a barricade tape to meet your marking needs.



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## Scotch® Barricade Tapes

### Scotch® Barricade Tape 300 Series

Scotch® Barricade Tapes 300 Series are effective and economical. One roll has sufficient length to mark a large area. Constructed of durable polyethylene plastic that prevents accidental tearing, the tapes have bold 2" black characters on bright background and are sure to attract attention and provide a clearly visible warning message. Different sizes and messages available.



Adhesive Material	None
Backing Material	Polyethylene Film
RoHS 2011/65/EU	Yes

Order No.	UPC	Text	Color	Length	Width	Thickness	Rolls per Case
300	051128-53042	CAUTION	Yellow	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
301	051128-53460	CAUTION	Yellow	300' (91,44 m)	3" (76,2 mm)	2 mil	16
330	051128-58371	CAUTION	Yellow	1000' (304,8 m)	3" (76,2 mm)	3 mil	8
331	051128-58372	DANGER	Red	1000' (304,8 m)	3" (76,2 mm)	3 mil	8
332	051128-58373	CAUTION HIGH VOLTAGE AREA	Yellow	1000' (304,8 m)	3" (76,2 mm)	3 mil	8
333	051128-58374	CAUTION DO NOT ENTER	Yellow	1000' (304,8 m)	3" (76,2 mm)	3 mil	8
334	051128-58375	CAUTION DO NOT ENTER	Red	1000' (304,8 m)	3" (76,2 mm)	3 mil	8
356	051128-57767	DANGER	Red	300' (91,44 m)	3" (76,2 mm)	2 mil	16
357	051128-57764	DANGER	Red	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
358	051128-57761	CAUTION HIGH VOLTAGE	Yellow	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
360	051128-57763	CAUTION OPEN TRENCH	Yellow	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
361	051128-57765	CAUTION DO NOT ENTER	Yellow	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
362	051128-57766	DANGER DO NOT ENTER	Red	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
374	051128-57961	CAUTION DO NOT ENTER	Yellow	300' (91,44 m)	3" (76,2 mm)	2 mil	16
381	051128-59234	DANGER / PELIGRO	Red	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
382	051128-59235	CAUTION / CUIDADO	Yellow	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
383	051128-59236	CAUTION / CUIDADO	Yellow	300' (91,44 m)	3" (76,2 mm)	2 mil	16
384	051128-59237	CAUTION DO NOT ENTER / CUIDADO NO ENTRE	Yellow	300' (91,44 m)	3" (76,2 mm)	2 mil	16

## Scotch® Buried Barricade Tape 300 Series

Scotch® Barricade Tapes 300 Series are effective and economical. One roll has sufficient length to mark a large area. Constructed of durable polyethylene plastic that prevents accidental tearing, the tapes have bold 2" black characters on bright background and are sure to attract attention and provide a clearly visible warning message. Different sizes and messages available.



Adhesive Material None  
 Backing Material Polyethylene Film  
 RoHS 2011/65/EU Yes

Order No.	UPC	Text	Color	Length	Width	Thickness	Rolls per Case
302	051128-53461	CAUTION BURIED ELECTRIC LINE BELOW	Red	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
303	051128-53462	CAUTION BURIED ELECTRIC LINE BELOW	Red	300' (91,44 m)	3" (76,2 mm)	4 mil	16
363	051128-57768	CAUTION HIGH VOLTAGE CABLE BURIED BELOW	Red	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
364	051128-57769	CAUTION BURIED ELECTRIC LINE BELOW	Yellow	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
365	051128-57770	CAUTION BURIED FIBER OPTIC LINE BELOW	Orange	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
366	051128-57771	CAUTION BURIED CABLE TV LINE BELOW	Orange	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
367	051128-57772	CAUTION BURIED TELEPHONE LINE BELOW	Orange	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
368	051128-57773	CAUTION BURIED ELECTRIC LINE BELOW	Red	1000' (304,8 m)	6" (15,24 cm)	4 mil	4
369	051128-57774	CAUTION HIGH VOLTAGE CABLE BURIED BELOW	Red	1000' (304,8 m)	6" (15,24 cm)	4 mil	4
370	051128-57775	CAUTION BURIED ELECTRIC LINE BELOW	Yellow	1000' (304,8 m)	6" (15,24 cm)	4 mil	4
371	051128-57776	CAUTION BURIED FIBER OPTIC LINE BELOW	Orange	1000' (304,8 m)	6" (15,24 cm)	4 mil	4

## Scotch® Detectable Buried Barricade Tapes 400 Series

Scotch® Detectable Buried Barricade Tapes 400 Series are designed for accurately locating and helping prevent damage to valuable underground utility installations. The tapes have an aluminum backing, which helps make underground assets easier to find when using a non-ferrous locator. Properly installed, these tapes may help avoid catastrophically inaccurate digging when locating utilities such as electrical lines and communication cables.



Adhesive Material None  
 Backing Material Aluminum Foil  
 RoHS 2011/65/EU Yes

Order No.	UPC	Text	Color	Length	Width	Thickness	Rolls per Case
406	051128-57779	CAUTION BURIED ELECTRIC LINE BELOW	Red	1000' (304,8 m)	3" (76,2 mm)	5 mil	8
407	051128-57780	CAUTION BURIED FIBER OPTIC LINE BELOW	Orange	1000' (304,8 m)	3" (76,2 mm)	5 mil	8
408	051128-57781	CAUTION BURIED ELECTRIC LINE BELOW	Red	1000' (304,8 m)	6" (15,24 cm)	5 mil	4
409	051128-57782	CAUTION BURIED FIBER OPTIC LINE BELOW	Orange	1000' (304,8 m)	6" (15,24 cm)	5 mil	4
410	051128-57880	CAUTION BURIED TELEPHONE LINE BELOW	Orange	1000' (304,8 m)	3" (76,2 mm)	5 mil	8
411	051128-57881	CAUTION BURIED TELEPHONE LINE BELOW	Orange	1000' (304,8 m)	6" (15,24 cm)	5 mil	4
412	051128-57962	CAUTION BURIED HIGH VOLTAGE CABLE BELOW	Red	1000' (304,8 m)	3" (76,2 mm)	5 mil	8
413	051128-57964	CAUTION BURIED HIGH VOLTAGE CABLE BELOW	Red	1000' (304,8 m)	6" (15,24 cm)	5 mil	4

## Scotch® Repulpable Barricade Tapes 500 Series

Made of tightly woven cotton fibers, these reusable tapes are an excellent alternative to standard barricade tapes for areas where plastics are prohibited. Also appropriate for clean rooms and recycling areas, these non-conductive tapes measure 3" wide x 150' long and are supplied on rolls.



Adhesive Material None  
 Backing Material Cotton Fabric  
 RoHS 2011/65/EU Yes

Order No.	UPC	Text	Color	Length	Width	Thickness	Rolls per Case
515	051128-57788	DANGER	Red	150' (45,72 m)	3" (76,2 mm)	10 mil	8
516	051128-57787	CAUTION	Yellow	150' (45,72 m)	3" (76,2 mm)	10 mil	8



# Packaging and Palletizing Tapes

For high strength and excellent performance, 3M™ Packaging and Palletizing Tapes are a preferred choice for sealing boxes, bundling, and protecting labels.



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## Scotch® Stretchable Tape 8884 and 8886

Scotch® Stretchable Tape 8884 and 8886 are high-performance transparent stretchable tapes, designed to contain A- and B-type pallets for internal and external shipping purposes. (A-type pallets have less than 1" overhang while B-type pallets have between 1-3" overhang.)

Adhesive Material	Synthetic Rubber Resin
Backing Material	Polyethylene
Tape Grade	Premium
Tape Type	Filament
RoHS 2011/65/EU	Yes



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Tensile Strength	Adhesion Strength	Rolls per Case
8884	021200-69313	Clear	55 m	36 mm	5 mil	710%	20 lbs/in (350 N/100 mm)	70 oz/in (77 N/100 mm)	24
8886	021200-69314	Clear	55 m	36 mm	6.6 mil	720%	28 lbs/in (490 N/100 mm)	65 oz/in (71 N/100 mm)	24

## Scotch® Stretchable Tape Dispenser H38

Scotch® Stretchable Tape Dispenser H38 is a lightweight, economical, high-impact plastic hand dispenser.

Tape Type	Packaging
Dispenser Type	Hand Held
Dispenser Material	Plastic and Metal
Dispenser	Used with Scotch® Stretchable Tape 8884 and 8886



Order No.	UPC	Color	Width	Items per Case
H38	021200-73217	Gray	36 mm	6 Dispensers

## Scotch® Box Sealing Tape 371

Scotch® Box Sealing Tape 371 is an industrial packaging tape used for box sealing, splicing, recoupage and other packaging applications. This product has a conformable backing and a consistent pressure sensitive hot melt synthetic rubber adhesive system.

Adhesive Material	Rubber Resin
Backing Material	Acrylic
Tape Grade	Premium
Tape Type	Box
RoHS 2011/65/EU	Yes



Order No.	UPC	Color	Length	Width	Thickness	Elongation	Tensile Strength	Adhesion to Steel	Rolls per Case
371-CLEAR-48MMx50M	021200-13679	Clear	50 m	48 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	45 oz/in (44 N/100 mm)	24
371-CLEAR-48MMx100M	021200-15873	Clear	100 m	48 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	45 oz/in (44 N/100 mm)	24
371-CLEAR-72MMx50M	021200-19279	Clear	50 m	72 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	45 oz/in (44 N/100 mm)	24
371-CLEAR-72MMx100M	021200-19280	Clear	100 m	72 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	45 oz/in (44 N/100 mm)	24
371-TAN-48MMx50M	021200-14105	Tan	50 m	48 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	45 oz/in (44 N/100 mm)	24
371-TAN-48MMx100M	021200-15872	Tan	100 m	48 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	45 oz/in (44 N/100 mm)	24
371-TAN-72MMx50M	021200-18197	Tan	50 m	72 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	45 oz/in (44 N/100 mm)	24
371-TAN-72MMx100M	021200-61525	Tan	100 m	72 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	45 oz/in (44 N/100 mm)	24

## Scotch® Recycled Corrugate Box Sealing Tape 3071, 3072 & 3073

Scotch® Recycled Corrugate Tapes are made with a proprietary adhesive that is designed specifically for recycled corrugate cartons. With environmental standards changing rapidly and companies constantly seeking new ways to reduce costs and improve their environmental footprint, Scotch® Recycled Corrugate Tapes are designed to help you stay on top of these changes.

Backing Material	Polypropylene Film
Tape Grade	Premium
Tape Type	Box Sealing Tape
RoHS 2011/65/EU	Yes



Order No.	UPC	Adhesive	Color	Length	Width	Thickness	Elongation	Tensile Strength	Adhesion to Steel	Rolls per Case
3071-CLEAR-48MMx100M	051115-64569	Synthetic Rubber	Clear	100 m	48 mm	2.1 mil	160%	22 lbs/in (385 N/100 mm)	45 oz/in (44 N/100 mm)	36
3071-CLEAR-72MMx100M	051115-64571	Synthetic Rubber	Clear	100 m	72 mm	2.1 mil	160%	22 lbs/in (385 N/100 mm)	45 oz/in (44 N/100 mm)	24
3072-CLEAR-48MMx100M	051115-64805	Synthetic Rubber	Clear	100 m	48 mm	2.3 mil	160%	22 lbs/in (385 N/100 mm)	65 oz/in (44 N/100 mm)	36
3072-CLEAR-72MMx100M	051115-64807	Synthetic Rubber	Clear	100 m	72 mm	2.3 mil	160%	22 lbs/in (385 N/100 mm)	65 oz/in (44 N/100 mm)	24
3073-CLEAR-48MMx100M	051111-92900	Synthetic Rubber Hot Melt with 10% bio-based content	Clear	100 m	48 mm	2.6 mil	160%	30 lbs/in (525 N/100 mm)	46 oz/in (60 N/100 mm)	36
3073-CLEAR-72MMx100M	051111-92901	Synthetic Rubber Hot Melt with 10% bio-based content	Clear	100 m	72 mm	2.6 mil	160%	30 lbs/in (525 N/100 mm)	46 oz/in (50 N/100 mm)	24

Packaging and Palletizing Tapes: Box Sealing Tapes

## Scotch® Cold Temperature Box Sealing Tape 3721 & 3723



For box packing, sealing and storage below 40°F, Scotch® Cold Temperature Box Sealing Tapes 3721 and 3723 seal with a rubber adhesive modified for reliability in the cold.

Adhesive Material Hot Melt Synthetic Rubber Resin  
 Backing Material Polypropylene Film  
 Tape Grade Premium  
 Tape Type Box Sealing Tape  
 RoHS 2011/65/EU Yes



3721-CLEAR-48MMx100M

3723-CLEAR-48MMx50M

		
UPC	021200-61536	021200-72412
Color	Clear	Clear
Length	100 m	50 m
Width	48 mm	48 mm
Thickness	2.1 mil	3.0 mil
Elongation	160%	160%
Tensile Strength	22 lbs/in (386 N/100 mm)	30 lbs/in (525 N/100 mm)
Adhesion to Steel	52 oz/in (57 N/100 mm)	45 oz/in (49 N/100 mm)
Rolls per Case	36	36

## Scotch® Security Message Printed Box Sealing Tape

Scotch® Security Message Printed Box Sealing Tapes are standard message packaging tapes used for box sealing, splicing, recoupage and other packaging applications. This product has a conformable backing and a consistent pressure sensitive hot melt synthetic rubber adhesive system.

Adhesive Material	Hot Melt Rubber Resin
Backing Material	Biaxially Orientated Polypropylene
Tape Grade	Premium
Tape Type	Box Sealing Tape
RoHS 2011/65/EU	Yes



Order No.	UPC	Printed Message	Color	Length	Width	Thickness	Elongation	Tensile Strength	Adhesion to Steel	Rolls per Case
3732	021200-72415	If Seal Is Broken Check Contents Before Accepting	Tan (with Red print)	50 m	48 mm	2.5 mil	160%	30 lbs/in (525 N/100 mm)	50 oz/in (55 N/100 mm)	36
3734	021200-72417	Fragile Handle With Care	Tan (with Red Print)	50 m	48 mm	2.5 mil	160%	30 lbs/in (525 N/100 mm)	50 oz/in (55 N/100 mm)	36
3771	021200-72301	If Seal Is Broken, Check Contents Before Accepting	White (with Red print)	100 m	48 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	40 oz/in (44 N/100 mm)	36
3772	021200-72304	Fragile Handle With Care	White (with Red print)	100 m	48 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	40 oz/in (44 N/100 mm)	36
3775	021200-72458	Mixed Merchandise Enclosed	White (with Red print)	100 m	48 mm	1.9 mil	160%	22 lbs/in (385 N/100 mm)	40 oz/in (44 N/100 mm)	36



## Scotch® Premium Heavy Duty Packaging Tape 3750

Strong conformable film backing and hot melt synthetic rubber-resin adhesive system provides a consistent uniform seal. Resists center seam splitting, provides reliable closures. Resistant to moisture, dust and dirt. Its aggressive packaging adhesive allows tape to stick instantly and hold tightly.

<b>Adhesive Material</b>	Hot Melt Rubber Resin
<b>Backing Material</b>	Polypropylene Film
<b>Tape Grade</b>	Premium
<b>Tape Type</b>	Packaging Tape
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Color	Length	Width	Thickness	Rolls per Case
3750	021200-72441	Clear	164' (50 m)	1.89" (48 mm)	3.1 mil	36
3750T	021200-72439	Tan	164' (50 m)	1.89" (48 mm)	3.1 mil	12

## Scotch® Box Sealing Tape Dispenser H122

Scotch® Box Sealing Tape Dispenser H122 is a lightweight, compact, durable plastic hand-held dispenser with built-in brake for tighter more precise seals for box sealing.

<b>Tape Type</b>	Packaging
<b>Dispenser Type</b>	Hand Held
<b>Dispenser Material</b>	Plastic and Metal



Order No.	UPC	Color	Width	Items per Case
H122	021200-06925	Gray	48 mm	6 Dispensers

## Packaging and Palletizing Tapes: Box Sealing Tapes

### Scotch® Box Sealing Tape Dispenser H180

Scotch® Box Sealing Tape Dispenser H180 is a portable, lightweight, easy-to-operate, pistol grip dispenser.



Tape Type	Packaging
Dispenser Type	Hand Held
Dispenser Material	Plastic and Metal

Order No.	UPC	Color	Width	Items per Case
H180-6PERCASE	021200-19008	Tan and Gray	48 mm	6 Dispensers

### Scotch® Box Sealing Tape Dispenser H183

Scotch® Box Sealing Tape Dispenser H183 is a portable, lightweight, easy-to-operate, pistol grip dispenser.



Dispenser Type	Hand Held
Tape Type	Packaging

Order No.	UPC	Color	Width	Items per Case
H183	021200-61850	Tan and Gray	72 mm	5 Dispensers

## Scotch® Filament Tape 893

Scotch® Filament Tape 893 is a general-purpose packaging tape reinforced with continuous glass-yarn filaments that give the tape high tensile strength and low stretch. The clear 3M™ Scotchpro™ Backing provides excellent abrasion and moisture resistance. The aggressive packaging-grade adhesive is specifically formulated to provide an excellent balance of high initial adhesion and long-term holding power to most fiberboard surfaces. When used in bundling, reinforcing, or coil tabbing applications, where high temperatures and/or oily surfaces are involved, tests should be conducted per the individual application before extensive use to determine the tape's suitability.

Adhesive Material	Synthetic Rubber Resin
Backing Material	Polypropylene Film
Tape Grade	Premium
Tape Type	Filament
RoHS 2011/65/EU	Yes



Order No.	UPC	Color	Length	Width	Thickness	Tensile Strength	Adhesion Strength	Rolls per Case
893-12MMX55M	051131-06937	Clear	55 m	12 mm	6 mil	300 lbs/in (5250 N/100 mm)	55 oz/in (60 N/100 mm)	72
893-18MMX55M	051131-06938	Clear	55 m	18 mm	6 mil	300 lbs/in (5250 N/100 mm)	55 oz/in (60 N/100 mm)	48
893-24MMX55M	051131-06939	Clear	55 m	24 mm	6 mil	300 lbs/in (5250 N/100 mm)	55 oz/in (60 N/100 mm)	36

## Scotch® Filament Tape 897

Scotch® Filament Tape 897 is a fiberglass-reinforced tape suitable for light-to-medium duty strapping, bundling, and reinforcing applications. Scotch® Tape 897 has a synthetic rubber resin adhesive with good adhesion to most fiberboard surfaces and to a variety of plastic and metal surfaces.

Adhesive Material	Synthetic Rubber Resin
Backing Material	Polypropylene Film
Tape Grade	Premium
Tape Type	Filament
RoHS 2011/65/EU	Yes



Order No.	UPC	Color	Length	Width	Thickness	Tensile Strength	Adhesion Strength	Rolls per Case
897-12MMX55M	021200-86523	Clear	55 m	12 mm	6 mil	170 lbs/in (2980 N/100 mm)	60 oz/in (65 N/100 mm)	72
897-18MMX55M	021200-86524	Clear	55 m	18 mm	6 mil	170 lbs/in (2980 N/100 mm)	60 oz/in (65 N/100 mm)	48
897-24MMX55M	021200-86525	Clear	55 m	24 mm	6 mil	170 lbs/in (2980 N/100 mm)	60 oz/in (65 N/100 mm)	36

Packaging and Palletizing Tapes: Filament Tapes

## Scotch® Filament Tape Hand Dispenser H10

Scotch® Filament Tape Hand Dispenser H10 is a portable, high impact durable hand-held unit that dispenses 12 mm to 24 mm for sealing boxes.



Tape Type	Filament
Dispenser Type	Hand Held

Order No.	UPC	Color	Width	Items per Case
H10	021200-06910	Gray	24 mm	6 Dispensers

Packaging and Palletizing Tapes: Label Protection Tapes

## Scotch® Label Protection Tape 821

Scotch® Label Protection Tape 821 is a lightly tinted pink acetate backing featuring a matte writable surface with an acrylic adhesive.



Adhesive Material	Acrylic
Backing Material	Acetate
Tape Grade	Premium
Tape Type	Packaging
RoHS 2011/65/EU	Yes

Order No.	UPC	Color	Length	Width	Thickness	Rolls per Case
821-3"x72yd-Bulk	021200-04132	Pink	72 yd	3"	2.5 mil	8
821-4"x72yd-Bulk	021200-04133	Pink	72 yd	4"	2.5 mil	8
821-5"x72yd-Bulk	021200-04134	Pink	72 yd	5"	2.5 mil	8
821-6"x72yd-Bulk	021200-04135	Pink	72 yd	6"	2.5 mil	8

## Scotch® Pouch Tape Sheets 8240

Scotch® Pouch Tape Sheets 8240 is a clear polypropylene backing with a rubber resin adhesive. Backing is printed with a bright orange border and a printed message **DOCUMENTS ENCLOSED** creating a non-tacky, see through, central rectangle for placing shipping documents.

Adhesive Material	Synthetic Rubber
Backing Material	Polypropylene Film
Tape Grade	Premium
Tape Type	Packaging
RoHS 2011/65/EU	Yes



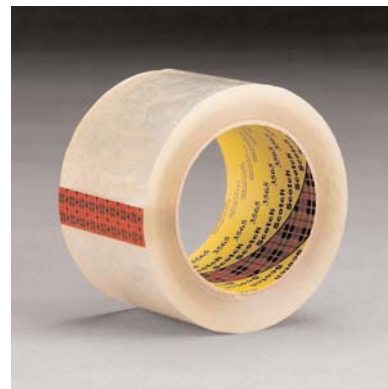
Order No.	UPC	Color	Length	Width	Thickness	Tensile Strength	Adhesion Strength	Pouches per Roll	Rolls per Case
8240-5"X6"	021200-06947	Clear	6"	5"	2.5 mil	30 lbs/in (525 N/100mm)	50 oz/in (55 N/100mm)	500	8

## Scotch® Label Protection Tape 3565

Scotch® Label Protection Tape 3565 is a clear polypropylene backing with a rubber resin adhesive.

- Film is tough and resistant to edge tear, splitting, moisture, abrasion and smudges.
- Excellent transparency makes labels easy to read.
- Adheres to wide variety of surfaces.
- General industrial, commercial.
- Protecting, label protection, holding, attaching, labeling and shipping.

Adhesive Material	Synthetic Rubber Resin
Backing Material	Polypropylene Film
Tape Type	Packaging
RoHS 2011/65/EU	Yes



Order No.	UPC	Color	Length	Width	Thickness	Tensile Strength	Adhesion Strength	Rolls per Case
3565-96mm x 100m	021200-73154	Clear	100 m	96 mm	1.9 mil	22 lbs/in (385 N/100 mm)	40 oz/in (44 N/100 mm)	18

## Scotch® Label Protection Dispenser M707

Scotch® Label Protection Dispenser M707 is a tabletop label protection dispenser. Commonly used with Scotch® Label Protection Tape 821 and 823.

Dispenser Type	Tabletop
Dispenser Material	Metal
Tape Type	Packaging

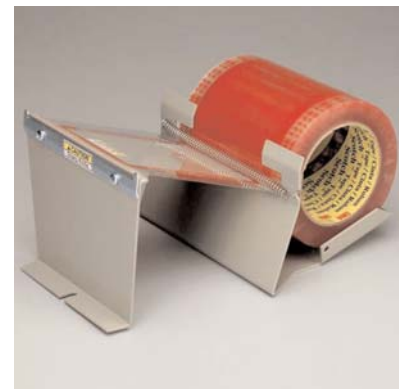


Order No.	UPC	Color	Width	Items per Case
M707	021200-06923	Gray	4.0"	6 Dispensers

## Scotch® Pouch Tape Dispenser M727

Scotch® Pouch Tape Dispenser M727 is a pouch tape dispenser with metal construction. Commonly used with Scotch® Pouch Tape 824, 827, 829 and 8240.

Dispenser Type	Tabletop
Dispenser Material	Metal
Tape Type	Packaging



Order No.	UPC	Color	Width	Items per Case
M727	021200-06944	Gray	5.0"	6 Dispensers



# Corrosion Protection Tapes and Primer


3M™ Corrosion Protection products can help provide protection on pipes, conduits, fittings and joints, etc.



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## 3M™ Scotchrap™ Corrosion Protection Tapes 50 and 51

3M™ Scotchrap™ Corrosion Protection Tapes 50 and 51 are tough, polyvinyl chloride (PVC) tapes with high-tack adhesives that resist corrosion of metal piping systems above and below ground. Both tapes apply over a wide temperature range and are resistant to impact, abrasion and punctures. Coat the pipe or other metal surfaces with 3M Scotchrap Pipe Primer before wrapping with Scotchrap Tapes 50 or 51.

Adhesive Material	Pressure Sensitive Rubber Adhesive
Backing Material	Polyvinyl Chloride
Tape Grade	Premium
Tape Type	Corrosion Protection
Installation Temperature Range	10–150°F (-12–65°C)
Service Temperature Range	-55–176°F (-48–80°C)
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Case
50-UNPRINTED-1X100FT-BOX	054007-11149	Black	100'	1.00"	10 mil	20 lbs/in	10
50-UNPRINTED-1X100FT-BULK	054007-00014	Black	100'	1.00"	10 mil	20 lbs/in	48
50-UNPRINTED-2X100FT-BOX	054007-11156	Black	100'	2.00"	10 mil	20 lbs/in	10
50-UNPRINTED-2X100FT-BULK	054007-10638	Black	100'	2.00"	10 mil	20 lbs/in	24
50-UNPRINTED-3X100FT	054007-09468	Black	100'	3.00"	10 mil	20 lbs/in	16
50-UNPRINTED-4X100FT	054007-10646	Black	100'	4.00"	10 mil	20 lbs/in	12
50-UNPRINTED-6X100FT	054007-15785	Black	100'	6.00"	10 mil	20 lbs/in	8
50-PRINTED-1X100FT	054007-00012	Black	100'	1.00"	10 mil	20 lbs/in	48
50-PRINTED-2X100FT	054007-00013	Black	100'	2.00"	10 mil	20 lbs/in	24
50-PRINTED-4X100FT	054007-00018	Black	100'	4.00"	10 mil	20 lbs/in	12
51-UNPRINTED-1X100FT	054007-42806	Black	100'	1.00"	20 mil	40 lbs/in	24
51-UNPRINTED-2X100FT	054007-42807	Black	100'	2.00"	20 mil	40 lbs/in	12
51-UNPRINTED-4X100FT	054007-42808	Black	100'	4.00"	20 mil	40 lbs/in	4
51-UNPRINTED-6x100FT	054007-42809	Black	100'	6.00"	20 mil	40 lbs/in	4
51-PRINTED-1X100FT	054007-42802	Black	100'	1.00"	20 mil	40 lbs/in	24
51-PRINTED-2X100FT	054007-42803	Black	100'	2.00"	20 mil	40 lbs/in	12
51-PRINTED-4X100FT	054007-42804	Black	100'	4.00"	20 mil	40 lbs/in	4
51-PRINTED-6X100FT	054007-42805	Black	100'	6.00"	20 mil	40 lbs/in	4

## Corrosion Protection Tapes and Primer

### 3M™ Scotchrap™ Pipe Primer

A quick-drying, non-sag rubber base primer that permeates metal surface pits and irregularities, preparing the surface for tape application. Compatible with the special adhesive on 3M Scotchrap Tapes, it enhances adhesion. To be used with 3M Scotchrap Corrosion Protection Tapes 50 and 51.

Tape Grade Premium  
RoHS 2011/65/EU Yes

Country of Origin  MADE IN USA



Order No.	UPC	Product Name	Size	Min. Order Qty.	Case Qty.
SCOTCHRAP-PRIMER	054007-42768	3M™ Scotchrap™ Pipe Primer	1 gal	4	4

### 3M™ Temflex™ Tape 1100

3M™ Temflex™ Tapes 1100 and 1100P are made of tough, polyvinyl chloride (PVC), especially formulated for corrosion protection of pipes, conduits and metallic cable jackets. They are easy to apply and provide excellent protection against abrasion, puncture, corrosion and electrolytic action both above and below ground. These tapes resist corrosion caused by acids (e.g. sulfuric, hydrochloric, phosphoric), alkalies and other corrosive materials, including compounds of chlorine, bromine, sodium and lithium. They also resist salt water and sunlight.

Adhesive Material Rubber Resin  
Backing Material Polyvinyl Chloride  
Tape Grade General Use  
Tape Type Corrosion Protection  
Application Temperature Range 10–120°F (-12–49°C)  
RoHS 2011/65/EU Yes



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Case
1100-UNPRINTED-2X100FT	054007-09061	Black	100'	2.00"	10 mil	25 lbs/in	24
1100-PRINTED-2X100FT	054007-09065	Black	100'	2.00"	10 mil	25 lbs/in	24

## 3M™ Temflex™ Tape 1200

General purpose corrosion resistant tape. Good abrasion resistance.

Adhesive Material	Rubber Resin
Backing Material	Polyvinyl Chloride
Tape Grade	General Use
Tape Type	Corrosion Protection
Application Temperature Range	10–120°F (-12–49°C)
RoHS 2011/65/EU	Yes



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Case
1200-PRINTED-2X100FT	051128-56330	Black	100'	2.00"	20 mil	50 lbs/in	12

## Wireless Weatherproofing Kits

3M™ Wireless Weatherproofing Kits WK-100 and WK-101 create a reliable weatherproof seal for cable-to-cable and cable-to-device connections. 3M Wireless Weatherproofing Kit WK-100 may be used for general use applications, while 3M Wireless Weatherproofing Kit WK-101 may be used for cold weather applications.



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## Wireless Weatherproofing Kits

### Wireless Weatherproofing Kit WK-99 for Economy Purposes

3M™ Wireless Weatherproofing Kit WK-99 can be used to create an environmental seal, (e.g. moisture and debris), for connections found at wireless infrastructure sites. The tapes also help prevent the loosening of connections caused by vibrations.

Order No.	UPC	Contents	Temperature Range (Fahrenheit)	Temperature Range (Celsius)	Kits per Case
WK-99	051128-59423	(4) rolls of 3M™ Butyl Mastic Tape 2212 (2.5"x24", Black) (2) rolls of 3M™ Economy Vinyl Electrical Tape 1400 (3/4"x60', Black) (1) roll of Scotch® Vinyl Electrical Tape 700 (2"x20', Black)	Up to 176°F	Up to 80°C	10

### Wireless Weatherproofing Kit WK-100 for General Use

3M™ Wireless Weatherproofing Kit WK-100 creates a reliable weatherproof seal for cable-to-cable and cable-to-device connections. For general use applications.



Order No.	UPC	Contents	Temperature Range (Fahrenheit)	Temperature Range (Celsius)	Kits per Case
WK-100	051128-58566	(6) rolls of 3M™ Butyl Mastic Tape 2212 (2.5"x24", Black) (2) rolls of 3M™ Temflex™ Vinyl Electrical Tape 1700 (3/4"x60', Black) (1) roll of Scotch® Vinyl Electrical Tape 700 (2"x20', Black)	32°F to 176°F	0°C to 80°C	10

### Wireless Weatherproofing Kit WK-101 for Cold Weather

3M™ Wireless Weatherproofing Kit WK-101 creates a reliable weatherproof seal for cable-to-cable and cable-to-device connections. For cold weather applications.



Order No.	UPC	Contents	Temperature Range (Fahrenheit)	Temperature Range (Celsius)	Kits per Case
WK-101	051128-58567	(6) rolls of 3M™ Butyl Mastic Tape 2212 (2.5"x24", Black) (2) rolls of Scotch® Super 33+™ Vinyl Electrical Tape (3/4"x66', Black) (1) roll of Scotch® Super 33+™ Vinyl Electrical Tape (2"x20', Black)	0°F to 221°F	-18°C to 105°C	10





# Electrical Wire Connectors and Tools

The best 3M connectors do more than fit your application; they also fit your hand, and they feel good to use. At 3M, we design connectors that are as comfortable and easy to use as they are dependable. Our complete line provides a wide range of connector choices. Simply choose the connector that fits your personal preference, as well as the application. We give you plenty of choices.

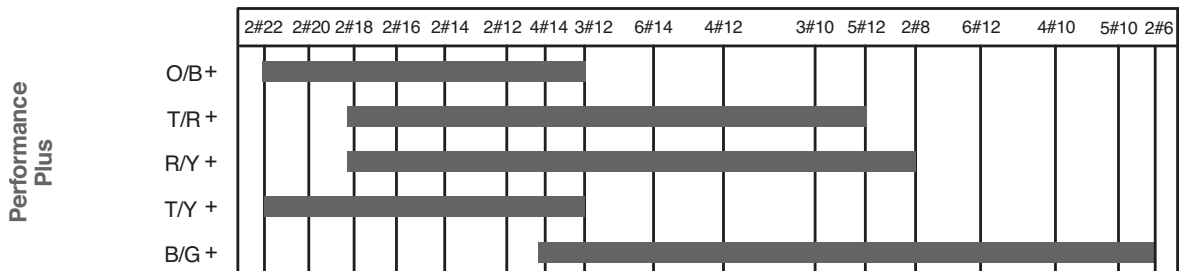


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# WIRE CONNECTORS

FEATURES	ADVANTAGES	BENEFITS
<b>3M™ PERFORMANCE PLUS WIRE CONNECTORS (T/R+, T/Y+, O/B+, R/Y+, B/G+)</b>		
Wires feed deeper	Increases level of pull-out	Security
Wide wire ranges	Three connectors replace seven	Saves time and cost effective
Flexible skirt	Covers overstripped wires	Safety
New internal design	Smoother and faster installation	Improves quality and saves time
<b>3M WIRE CONNECTORS (312, 412, 512, 512G)</b>		
Hard shell	Easy to grip	Easy to use
Wings	Easy to turn	Easy to use
<b>3M HIGHLAND™ WIRE CONNECTORS (H-29, H-30, H-31, H-33, H-35)</b>		
Low price	Economical	Cost effective

## Wire Range for 3M Performance Plus Wire Connectors





## 3M™ Performance Plus Wire Connectors




Because of their increased wire range, just three 3M™ Performance Plus Wire Connectors handle the work of eight standard connectors. O/B+ replaces the orange, blue and gray wire connector style connectors, as well as 70% of the yellow wire connector and wing style connectors. R/Y+ replaces both red and yellow wing style connectors. B/G+ covers both the large blue and gray connectors.

This simplifies selection of the right connector for a wide range of wiring jobs. There's also less inventory to manage, and a better chance you'll have the connector you need to do every job.

- **A Better Bite for a Better Connection.** 3M™ Performance Plus Wire Connectors O/B+, R/Y+ and B/G+ now have a better bite. Wires feed into the connector more easily, improving the security of the connection and increasing the level of pull out.
- **New Design Allows Easier Installation.** We have modified the internal design of the O/B+, R/Y+ and B/G+ wire connectors. Installation is smooth, fast and easy on the hands.
- **Flexible Skirts Provide Safety.** The flexible skirts on the O/B+, R/Y+ and B/G+ wire connectors make the workplace a safer environment. The flexible skirt provides protection against potential flashovers.


Connection Type	Wire
Connector Style	Twist On
Flame Retardant	Yes
Maximum Voltage Rating	600 V (1000 V in signs, lighting fixtures and luminaries)
Operating Temperature	221°F (105°C)
RoHS 2011/65/EU	No
Agency Approval	 



	B/G+BOX	B/G+JUG	O/B+BOX	O/B+JUG
				
UPC	054007-43150	054007-43151	054007-43152	054007-43153
Color	Blue/Gray	Blue/Gray	Orange/Blue	Orange/Blue
Conductor Size	14–6 AWG	14–6 AWG	22–12 AWG	22–12 AWG
Connectors per Carton	50	250	100	500
Connectors per Case	500	2000	1000	10,000
	R/Y+BOX	R/Y+JUG	R/Y+KEG	
				
UPC	054007-43154	054007-43155	051128-57943	
Color	Red/Yellow	Red/Yellow	Red/Yellow	
Conductor Size	22–8 AWG	22–8 AWG	22–8 AWG	
Connectors per Carton	100	500	-	
Connectors per Case	1000	4000	17,000	

## 3M™ Wire Connectors for Residential

Specifically created for the residential markets, the T/R+ replaces the yellow, tan and red connectors in the majority of field applications. T/Y+ replaces the yellow, orange, blue and gray wire nuts in most applications. Use the 412 (tan) connector for wire combinations from 2 #20 to 3 #10 AWG. This simplifies selection of the right connector for a wide range of wiring jobs. There's also less inventory to manage, and a better chance you'll have the connector you need to do every job.




Connection Type	Wire
Connector Style	Twist On
Flame Retardant	Yes
Maximum Voltage Rating	600 V (1000 V in signs, lighting fixtures and luminaries)
Operating Temperature	221°F (105°C)
RoHS 2011/65/EU	Yes
Agency Approval	



	T/R+BOX	T/R+JUG	T/R+KEG
			
UPC	051128-54454	051128-54455	051128-54456
Color	Tan/Red	Tan/Red	Tan/Red
Conductor Size	22–8 AWG	22–8 AWG	22–8 AWG
Connectors per Carton	100	750	-
Connectors per Case	1,000	6,000	25,000
	T/Y+BOX	T/Y+JUG	T/Y+KEG
			
UPC	051128-55218	051128-55219	051128-58623
Color	Tan/Yellow	Tan/Yellow	Tan/Yellow
Conductor Size	22–12 AWG	22–12 AWG	22–12 AWG
Connectors per Carton	100	500	-
Connectors per Case	1,000	10,000	40,000
	412-BOX	412-BAG	412-KEG
			
UPC	051128-54451	051128-55695	051128-54453
Color	Tan	Tan	Tan
Conductor Size	22–10 AWG	22–10 AWG	22–10 AWG
Connectors per Carton	100	500	-
Connectors per Case	1,000	4,000	20,000

## 3M™ Wire Connectors 312, 512 and 512G

The quick-spin, wing-torque design of 3M™ Wire Connector 312 and 512 is easy on your fingers. The day's last connection will feel almost as good as the first. Generous expansion room accommodates a wide range of solid or stranded wire. Use the 312 (yellow) connector for wire combinations from 3 #20 to 3 #12 AWG, and the 512 (red) connector for 2 #18 to 5 #12 AWG. The 512G (green) connector is used for grounding connections.



Connection Type	Wire
Connector Style	Twist On
Maximum Voltage Rating	600 V (1000 V in signs, lighting fixtures and luminaries)
Operating Temperature	221°F (105°C)
RoHS 2011/65/EU	Yes
Agency Approval	 
Country of Origin	

	312-POUCH	312-BAG	312-KEG	512-POUCH
				
UPC	054007-08159	054007-08160	051128-56280	054007-08161
Color	Yellow	Yellow	Yellow	Red
Conductor Size	22–10 AWG	22–10 AWG	22–10 AWG	22–8 AWG
Flame Retardant	Yes	Yes	Yes	Yes
Connectors per Carton	100	500	-	100
Connectors per Case	1000	10,000	25,000	1000
	512-BAG	512-KEG	512G-BAG	512G-POUCH
				
UPC	054007-08162	051128-56281	054007-50232	051128-59098
Color	Red	Red	Green	Green
Conductor Size	22–8 AWG	22–8 AWG	14–10 AWG	14–10 AWG
Flame Retardant	Yes	Yes	Yes	Yes
Connectors per Carton	500	-	500	100
Connectors per Case	10,000	25,000	10,000	1,000



## 3M™ Highland™ Wire Connectors









3M™ Highland™ Wire Connectors make it quick and easy to match the right connector to the size of the wire. The shells are designed to withstand temperatures up to 221°F (105°C). Highland color-coded wire connectors are UL Listed, CSA Certified, and work equally well with either solid or stranded wire.

Connection Type	Wire
Connector Style	Twist On
Flame Retardant	No
Operating Temperature	221°F (105°C)
RoHS 2011/65/EU	Yes
Agency Approval	 
Country of Origin	China





	H-29-BIN	H-29-BOX	H-30-BIN	H-30-BOX
				
UPC	054007-43134	054007-43133	054007-43123	054007-43122
Color	Gray	Gray	Blue	Blue
Conductor Size	22–16 AWG	22–16 AWG	22–16 AWG	22–16 AWG
Maximum Voltage Rating	300 V	300 V	300 V	300 V
Connectors per Carton	-	100	-	100
Connectors per Case	1000	1000	1000	1000
	H-30-KEG	H-31-BIN	H-31-BOX	H-31-BAG
				
UPC	054007-43124	054007-43119	054007-43117	054007-43118
Color	Blue	Orange	Orange	Orange
Conductor Size	22–16 AWG	18–14 AWG	18–14 AWG	18–14 AWG
Maximum Voltage Rating	300 V	600 V (1000 V in signs, lighting fixtures and luminaries)	600 V (1000 V in signs, lighting fixtures and luminaries)	600 V (1000 V in signs, lighting fixtures and luminaries)
Connectors per Carton	-	-	100	500
Connectors per Case	10,000	1000	1000	10,000

### 3M™ Highland™ Wire Connectors (continued)

	H-31-KEG	H-33-BIN	H-33-BOX	H-33-BAG
				
UPC	054007-43120	054007-43137	054007-43136	054007-43138
Color	Orange	Yellow	Yellow	Yellow
Conductor Size	18–14 AWG	18–12 AWG	18–12 AWG	18–12 AWG
Maximum Voltage Rating	600 V (1000 V in signs, lighting fixtures and luminaries)	600 V (1000 V in signs, lighting fixtures and luminaries)	600 V (1000 V in signs, lighting fixtures and luminaries)	600 V (1000 V in signs, lighting fixtures and luminaries)
Connectors per Carton	-	-	100	500
Connectors per Case	10,000	1000	1000	5000
	H-33-KEG	H-35-BIN	H-35-BOX	H-35-BAG
				
UPC	054007-43139	054007-43141	054007-43140	054007-43142
Color	Yellow	Red	Red	Red
Conductor Size	18–12 AWG	18–10 AWG	18–10 AWG	18–10 AWG
Maximum Voltage Rating	600 V (1000 V in signs, lighting fixtures and luminaries)	600 V (1000 V in signs, lighting fixtures and luminaries)	600 V (1000 V in signs, lighting fixtures and luminaries)	600 V (1000 V in signs, lighting fixtures and luminaries)
Connectors per Carton	-	-	100	250
Connectors per Case	5000	1000	1000	2500

### 3M™ Wire Connector Drivers WCD

These application tools for 3M™ Performance Plus Wire Connectors O/B+, R/Y+, T/R+ and T/Y+, 3M™ Electrical Spring Connectors 312 and 512, and 3M™ Scotchlok™ Wire Connectors Y, R, and G quickly spin on the connector and position the wire bundle in the box. The WCD-H driver is a hand driver and the WCD-P driver is a power driver that fits a standard chuck.

	WCD-H	WCD-P
		
UPC	054007-49948	054007-49919
Product Name	3M™ Hand Wire Connector Driver WCD-H	3M™ Power Wire Connector Driver WCD-P
Description	Hand driver for 3M™ Performance Plus Wire Connectors O/B+, R/Y+, 3M™ Scotchlok™ Wire Connectors Y, R, G, and 3M™ Electrical Spring Connectors 312 and 512.	Power driver using a standard chuck, drill or screw driver for 3M™ Performance Plus Wire Connectors O/B+, R/Y+, 3M™ Scotchlok™ Wire Connectors Y, R, G, and 3M™ Electrical Spring Connectors 312 and 512.
Case Qty.	10	10

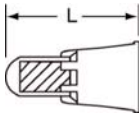
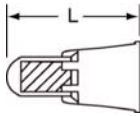


## Crimp Sleeve Connectors

### 3M™ Scotchlok™ Insulated Electrical Crimp Sleeve Connectors S-11-A and S-31-A

3M™ Scotchlok™ Insulated Electrical Crimp Sleeve Connectors S-11-A and S-31-A make fast work of splicing 22 to 10 AWG copper conductors. Smooth flared entry makes wire insertion fast — simply twist conductors together and crimp. The S-11-A and S-31-A are insulated, closed-end crimp sleeve connectors with a copper insert. The rugged and resilient nylon insulator allows these connectors to be used in light fixtures, appliances and other electrical OEM applications.

Connector Style	Crimp Sleeve
Insulation Material	Nylon
Barrel Style	Insulation Grip
Terminal Type	Closed End
Terminal Style	Copper
Flame Retardant	No
Maximum Voltage	600 V
Operating Temperature	221°F (105°C)
RoHS 2011/65/EU	Yes



	S-11-A(BOXED)	S-11-A(BULK)	S-31-A(BOXED)	S-31-A(BULK)
				
UPC	051128-58997	051138-98052	051128-58996	051138-98044
Conductor Size	22–16 AWG	22–16 AWG	18–10 AWG	18–10 AWG
Length	0.83" (21,1 mm)	0.83" (21,1 mm)	1.00" (25,4 mm)	1.00" (25,4 mm)
Cu Solid/Stranded Wire Combinations	2–5 #22; 1–4 #22 with 1–2 #20; 1–3 #22 with 1 #18; 1 #22 with 1 #16; 2–3 #20	2–5 #22; 1–4 #22 with 1–2 #20; 1–3 #22 with 1 #18; 1 #22 with 1 #16; 2–3 #20	1 #22 with 1 #12 or #10; 1 #22 with 2 #14 or #16; 1 #22 with 1 #20 with 1 #12 or #14; 1 #22 with 1 #18 with 1 #12 or #14; 1 #22 with 1 #16 with 1 #12 or #14; 1 #22 with 1 #14 with 1 #12; 1–2 #20 with 1–2 #14; 1–2 #20 with 1 #12; 1 #20 with 1 #10; 1 #20 with 1 #16 with 1 #12; 1 #18 with 1 #14; 1 #18 with 1 #12; 1 #18 with 2 #16; 1 #18 with 1 #16 with 1 #12 or #14; 1 #16 with 1 #12 or #14; 3 #16; 1 #14 with 1 #12; 2 #14	1 #22 with 1 #12 or #10; 1 #22 with 2 #14 or #16; 1 #22 with 1 #20 with 1 #12 or #14; 1 #22 with 1 #18 with 1 #12 or #14; 1 #22 with 1 #16 with 1 #12 or #14; 1 #22 with 1 #14 with 1 #12; 1–2 #20 with 1–2 #14; 1–2 #20 with 1 #12; 1 #20 with 1 #10; 1 #20 with 1 #16 with 1 #12; 1 #18 with 1 #14; 1 #18 with 1 #12; 1 #18 with 2 #16; 1 #18 with 1 #16 with 1 #12 or #14; 1 #16 with 1 #12 or #14; 3 #16; 1 #14 with 1 #12; 2 #14
Connectors per Carton	100	-	50	-
Connectors per Case	500	10,000	500	5000

## 3M™ Scotchlok™ IDC Pigtail Connectors

3M™ Scotchlok™ Self-Stripping, Moisture Resistant Electrical Pigtail Connector 314 provides a moisture-resistant seal. The 3M™ Scotchlok™ Electrical Connector IDC 314U is a self-stripping, flame retardant, electrical pigtail connector for dry environment applications. The 3M™ Scotchlok™ Electrical Connector IDC 316-IR provides a moisture-resistant seal and are recommended for use with low energy underground circuit wires, sprinkler systems, landscape lighting or other moisture-resistance wires for applications of less than 30 V. Its sealant is a mineral oil-based grease.



Connection Type	Pigtail
Connector Style	Insulation Displacement
Flame Retardant	Yes
Operating Temperature	221°F (105°C)
Recommended Crimping Tool	3M™ Crimping Tool No. E-9BM
RoHS 2011/65/EU	Yes








	314-BIN	314-BOX	314U-BOX	314U-BIN
UPC	054007-09231	054007-09230	054007-09232	054007-09233
Color	Blue	Blue	White	White
Conductor Size	22–14 AWG	22–14 AWG	22–14 AWG	22–14 AWG
Max. Insulation O.D.	0.150" (3,8 mm)	0.150" (3,8 mm)	0.150" (3,8 mm)	0.150" (3,8 mm)
Agency Approval				
Connectors per Carton	-	50	50	-
Connectors per Case	1000	500	500	1000
	316-IR BAG	557-BOX	557-BULK	
UPC	054007-50419	054007-21494	054007-21502	
Color	Black/White	Red	Red	
Conductor Size	22–16 AWG	22–16 AWG	22–16 AWG	
Max. Insulation O.D.	0.155" (3,9 mm)	0.120" (3,05 mm)	0.120" (3,05 mm)	
Agency Approval				
Connectors per Carton	30	100	500	
Connectors per Case	300	1000	5000	

## 3M™ Scotchlok™ IDC Double Run or Tap Connectors









The 3M™ Scotchlok™ Electrical Connector IDC 560 and 560N electrically connect a (tap) wire end to a through (run) wire and insulate the connection. They are used for tap and parallel splicing. The 3M™ Scotchlok™ Electrical Connector IDC 564 electrically connects two through (run) wires and insulates the connection. It is used for parallel splicing. The 3M™ Scotchlok™ Electrical Connector IDC 560B electrically connects a (tap) wire end to a through (run) wire and insulates the connection. For general-purpose electrical connections on auto, boat, van or trailer. Used for tap and parallel splicing. The 3M™ Scotchlok™ Electrical Connector IDC 905 and 905N electrically connect a (tap) wire end to a through (run) wire and insulate the connection. Suitable for low-voltage accessories such as radios, stereo speakers, tape decks and CB radios. Used for tap, in-line parallel and pigtail splicing.



Connection Type Double Run or Tap  
 Connector Style Insulation Displacement  
 RoHS 2011/65/EU Yes

	560-BOX	560-BULK	560B-BOX	560B-BULK
				
UPC	054007-00839	054007-00840	054007-20090	054007-20181
Color	Light Blue	Light Blue	Blue	Blue
Conductor Size	18–16 AWG / 14 AWG Str	18–16 AWG / 14 AWG Str	18–16 AWG / 14 AWG Str	18–16 AWG / 14 AWG Str
Maximum Insulation Outside Diameter	0.145" (3,68 mm)	0.145" (3,68 mm)	0.145" (3,68 mm)	0.145" (3,68 mm)
Operating Temperature	221°F (105°C)	221°F (105°C)	194°F (90°C)	194 °F (90 °C)
Flame Retardant	Yes	Yes	Yes	Yes
Agency Approval				
Connectors per Carton	100	500	100	500
Connectors per Case	1000	5000	1000	5000

### 3M™ Scotchlok™ IDC Double Run or Tap Connectors (continued)

	560N-BULK	562-BOX	562-BIN	564-BULK
				
UPC	054007-09513	054007-11032	054007-11040	054007-06118
Color	Brown	Yellow	Yellow	White
Conductor Size	18–16 AWG / 14 AWG Str	12 AWG / 10 AWG Str	12 AWG / 10 AWG Str	18–14 AWG
Maximum Insulation Outside Diameter	0.145" (3,68 mm)	0.190" (4,82 mm)	0.190" (4,82 mm)	0.145" (3,68 mm)
Operating Temperature	221°F (105°C)	194°F (90°C)	194°F (90°C)	194°F (90°C)
Flame Retardant	Yes	Yes	Yes	No
Agency Approval				
Connectors per Carton	500	100	-	500
Connectors per Case	5000	1000	1000	5000
	905-BOX	905-BULK		
				
UPC	054007-06128	054007-06129		
Color	Red	Red		
Conductor Size	Tap: 22–18 AWG Run: 18–14 AWG	Tap: 22–18 AWG Run: 18–14 AWG		
Maximum Insulation Outside Diameter	Tap: 0.110" (2,79 mm) Run: 0.145" (3,68 mm)	Tap: 0.110" (2,79 mm) Run: 0.145" (3,68 mm)		
Operating Temperature	194°F (90°C)	194°F (90°C)		
Flame Retardant	No	No		
Agency Approval				
Connectors per Carton	50	500		
Connectors per Case	500	5000		









## 3M™ Scotchlok™ IDC Run and Tap Connector











Electrically connects a (tap) wire end to a through (run) wire and insulates the connection. Designed for control circuit wiring, fixture wiring, appliance wiring, signal and PA systems, and automotive/boat/RV wiring.

**Connection Type** Run and Tap  
**Connector Style** Insulation Displacement  
**Recommended 3M™ E-9BM or**  
**Crimping Tool** 9" Linemans Pliers  
**RoHS 2011/65/EU** Yes



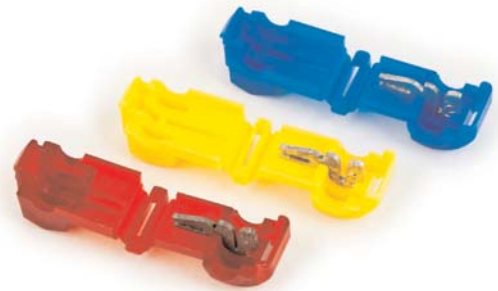
	558-BOX	558-BULK	567-BOX
			
UPC	054007-14861	054007-14879	054007-14887
Color	Red	Red	Brown
Max. Recommended Voltage Rating	600 V	600 V	600 V
Conductor Size (Tap)	22–16 AWG	22–16 AWG	Tap: 18–14 AWG Run: 12–10 AWG
Maximum Insulation Outside Diameter	0.120" (3,1 mm)	0.120" (3,1 mm)	Tap: 0.145" (3,7 mm) Run: 0.190" (4,8 mm)
Operating Temperature	221°F (105°C)	221°F (105°C)	221°F (105°C)
Flame Retardant	Yes	Yes	Yes
Agency Approval			
Connectors per Carton	100	-	100
Connectors per Case	1000	5000	1000

### 3M™ Scotchlok™ IDC Run and Tap Connector (continued)

	567-BIN	804-BAG	804-BOX
			
UPC	054007-14895	054007-50188	054007-06134
Color	Brown	Blue	Blue
Max. Recommended Voltage Rating	600 V	600 V	600 V
Conductor Size (Tap)	Tap: 18–14 AWG Run: 12–10 AWG	18–16 AWG / 14 AWG Str	18–16 AWG / 14 AWG Str
Maximum Insulation Outside Diameter	Tap: 0.145" (3,7 mm) Run: 0.190" (4,8 mm)	0.145" (3,7 mm)	0.145" (3,7 mm)
Operating Temperature	221°F (105 °C)	194°F (90°C)	194°F (90°C)
Flame Retardant	Yes	Yes	Yes
Agency Approval			
Connectors per Carton	-	100	25
Connectors per Case	1000	1000	250
	804-BULK	901-BOX	901-BULK
			
UPC	054007-06135	054007-06106	054007-06107
Color	Blue	Black	Black
Max. Recommended Voltage Rating	600 V	32 V	32 V
Conductor Size (Tap)	18–16 AWG / 14 AWG Str	18–14 AWG	18–14 AWG
Maximum Insulation Outside Diameter	0.145" (3,7 mm)	0.145" (3,7 mm)	0.145" (3,7 mm)
Operating Temperature	194°F (90°C)	194°F (90°C)	194°F (90°C)
Flame Retardant	Yes	No	No
Agency Approval		-	-
Connectors per Carton	500	50	500
Connectors per Case	5000	500	5000

## 3M™ Scotchlok™ T-Tap Connector

Use 3M™ Scotchlok™ Self-Stripping Electrical Tap Connectors 951, 952 and 953 to electrically tap into a wire in mid-span without cutting or stripping the wire. Connector then mates with a .250" (6,35 mm) male tab, making a reusable quick-connect wiring termination.



Connection Type T-tap

Connector Style Insulation Displacement

RoHS 2011/65/EU Yes

Agency Approvals

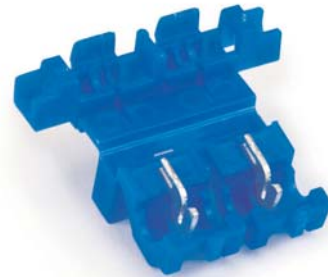


	951X-BOTTLE	951K-BULK	952X-BOTTLE
UPC	054007-12312	054007-12313	054007-08427
Conductor Size	22-18 AWG	22-18 AWG	18-14 AWG
Flame Retardant	Yes	Yes	Yes
Maximum Insulation Outside Diameter	0.150" (3,8 mm)	0.150" (3,8 mm)	0.150" (3,8 mm)
Operating Temperature	221°F (105°C)	221°F (105°C)	221°F (105°C)
Connectors per Carton	50	-	50
Connectors per Case	500	1000	500
	952K-BULK	953X-BOTTLE	953K-BULK
UPC	054007-08428	054007-12314	054007-12315
Conductor Size	18-14 AWG	12 AWG	12 AWG
Flame Retardant	Yes	Yes	Yes
Maximum Insulation Outside Diameter	0.150" (3,8 mm)	0.150" (3,8 mm)	0.150" (3,8 mm)
Operating Temperature	221°F (105°C)	221°F (105°C)	221°F (105°C)
Connectors per Carton	-	50	-
Connectors per Case	1000	500	1000

## 3M™ Scotchlok™ Fuse Holder

The 3M™ Scotchlok™ Fuse Holder 972-A is used to install a blade-type automotive fuse between power source and device.

Terminal Type	Fuse
Connection Type	Wire
Connector/Connector Tool	Connector
Connector Style	Insulation Displacement
Insulation Material	Polypropylene
Flame Retardant	No
RoHS 2011/65/EU	Yes







Order No.	UPC	Color	Conductor Size	Maximum Insulation Outside Diameter	Operating Temperature	Connectors per Carton	Connectors per Case
972X-A-BOX	051128-57558	Blue	18–14 AWG (0,75 - 1,5 mm <sup>2</sup> )	0.150" (3,8 mm)	194°F (90°C)	25	250
972-A-BULK	051128-57557	Blue	18–14 AWG (0,75 - 1,5 mm <sup>2</sup> )	0.150" (3,8 mm)	194°F (90°C)	-	1000













## 3M™ Scotchlok™ IDC Butt Connectors

Over 30 years ago, 3M introduced the industry's original U element connector, the 3M™ Scotchlok™ Connector UR. The latest series of connectors—the 3M Scotchlok Connectors UR2, UY2 and UB2A—features that same originality in technological advantages, building on the successful Scotchlok connector's design, shape, color-coded cap concepts and element technology. The Series 2 connectors additionally offer full wire range capability, increased port size to accommodate up to 0.082" (2,1 mm) insulation sizes, double elements in all products and a solvent-resistant plastic construction.













RoHS 2011/65/EU Yes

	UAL(BX)	UAL(CART)	UCC(CART)	UCC-JAR500
				
UPC	051115-26188	051115-26187	051115-26195	051115-26196
Connector Type	Butt	Butt	Butt/ 2 Conductor	Butt/ 2 Conductor
Application	Filled	Filled	Filled	Filled
Cable Type	PIC	PIC	PIC	PIC
Conductor Size (Min.)	24 AWG	24 AWG	26 AWG	26 AWG
Conductor Size (Max.)	17 AWG	17 AWG	22 AWG	22 AWG
Maximum Insulation Outside Diameter	0.082" (2,1 mm)	0.082" (2,1 mm)	0.060" (1,5 mm)	0.060" (1,5 mm)
Flame Retardant	No	No	No	No
Connectors per Carton	-	-	-	-
Connectors per Case	1000	10	10	500

### 3M™ Scotchlok™ IDC Butt Connectors (continued)









	UCC(BULK)	UG(BX)	UP2(BULK)	UP2(CART)
				
UPC	051115-26194	051115-26197	054007-33420	054007-32698
Connector Type	Butt/ 2 Conductor	Bridge Tap/ 2 Conductor	Butt/ 2 Conductor	Butt/ 2 Conductor
Application	Filled	Filled	Dry	Dry
Cable Type	PIC	PIC	PIC, PULP, PAPER	PIC, PULP, PAPER
Conductor Size (Min.)	26 AWG	26 AWG	26 AWG	26 AWG
Conductor Size (Max.)	22 AWG	19 AWG	22 AWG	22 AWG
Maximum Insulation Outside Diameter	0.060" (1,5 mm)	0.044" (Tap); 0.066" (Run)	0.060" (1,5 mm)	0.060" (1,5 mm)
Flame Retardant	No	No	Yes	Yes
Connectors per Carton	-	-	1000	16
Connectors per Case	5000	1000	5000	160
	UP3(BX)	UP3(BULK)	UP3(CART)	UR2(BX)
				
UPC	051115-16230	054007-33419	054007-32700	051115-26201
Connector Type	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor
Application	Dry	Dry	Dry	Filled
Cable Type	PIC, PULP, PAPER	PIC, PULP, PAPER	PIC, PULP, PAPER	PIC
Conductor Size (Min.)	26 AWG	26 AWG	26 AWG	26 AWG
Conductor Size (Max.)	19 AWG	19 AWG	19 AWG	19 AWG
Maximum Insulation Outside Diameter	0.060" (1,5 mm)	0.060" (1,5 mm)	0.060" (1,5 mm)	0.082" (2,1 mm)
Flame Retardant	Yes	Yes	Yes	No
Connectors per Carton	-	500	10	-
Connectors per Case	1000	5000	100	1000
	UR2(CART)	UR2(BULK)	UR2-25/PACK	UR2-JAR500
				
UPC	051115-26202	051115-26200	051115-26117	051115-26207
Connector Type	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor
Application	Filled	Filled	Filled	Filled
Cable Type	PIC	PIC	PIC	PIC
Conductor Size (Min.)	26 AWG	26 AWG	26 AWG	26 AWG
Conductor Size (Max.)	19 AWG	19 AWG	19 AWG	19 AWG
Maximum Insulation Outside Diameter	0.082" (2,1 mm)	0.082" (2,1 mm)	0.082" (2,1 mm)	0.082" (2,1 mm)
Flame Retardant	No	No	No	No
Connectors per Carton	-	-	-	-
Connectors per Case	10	5000	40	5000

### 3M™ Scotchlok™ IDC Butt Connectors (continued)

	UR2-500/BTL	UR2-PK50	UR2-D(CART)	UR2-D-JAR500
				
UPC	051115-26116	051115-26212	054007-71475	051115-30060
Connector Type	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor
Application	Filled	Filled	Dry	Dry
Cable Type	PIC	PIC	PIC, PULP, PAPER	PIC, PULP, PAPER
Conductor Size (Min.)	26 AWG	26 AWG	26 AWG	26 AWG
Conductor Size (Max.)	19 AWG	19 AWG	19 AWG	19 AWG
Maximum Insulation Outside Diameter	0.082" (2,1 mm)	0.082" (2,1 mm)	0.082" (2,1 mm)	0.082" (2,1 mm)
Flame Retardant	No	No	No	No
Connectors per Carton	-	50	10	-
Connectors per Case	500	1000	100	5000
	UR(CART)	UR(BX)	UR-25/PACK	UY2(BX)
				
UPC	051115-26232	051115-26230	051115-26238	051115-26121
Connector Type	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor	Butt/ 2 or 3 Conductor	Butt/ 2 Conductor
Application	Filled	Filled	Filled	Filled
Cable Type	PIC	PIC	PIC	PIC
Conductor Size (Min.)	26 AWG	26 AWG	26 AWG	26 AWG
Conductor Size (Max.)	19 AWG	19 AWG	19 AWG	19 AWG
Maximum Insulation Outside Diameter	0.060" (1,5 mm)	0.060" (1,5 mm)	0.060" (1,5 mm)	0.082" (2,1 mm)
Flame Retardant	No	No	No	No
Connectors per Carton	-	-	25	-
Connectors per Case	10	1000	250	1000
	UY2(BULK)	UY2(CART)	UY2-JAR500	UY2-25/PACK
				
UPC	051115-26224	051115-26225	051115-26228	051115-26119
Connector Type	Butt/ 2 Conductor	Butt/ 2 Conductor	Butt/ 2 Conductor	Butt/ 2 Conductor
Application	Filled	Filled	Filled	Filled
Cable Type	PIC	PIC	PIC	PIC
Conductor Size (Min.)	26 AWG	26 AWG	26 AWG	26 AWG
Conductor Size (Max.)	19 AWG	19 AWG	19 AWG	19 AWG
Maximum Insulation Outside Diameter	0.082" (2,1 mm)	0.082" (2,1 mm)	0.082" (2,1 mm)	0.082" (2,1 mm)
Flame Retardant	No	No	No	No
Connectors per Carton	-	-	-	-
Connectors per Case	5000	10	5000	40



## 3M™ Scotchlok™ IDC Butt Connectors (continued)





	UY2-500/BTL	UY2-D(CART)	UY(BULK)	UY(BX)
				
UPC	051115-26118	054007-71478	051115-26221	051115-26214
Connector Type	Butt/ 2 Conductor	Butt/ 2 Conductor	Butt/ 2 Conductor	Butt/ 2 Conductor
Application	Filled	Dry	Filled	Filled
Cable Type	PIC	PIC, PULP, PAPER	PIC	PIC
Conductor Size (Min.)	26 AWG	26 AWG	26 AWG	26 AWG
Conductor Size (Max.)	19 AWG	19 AWG	22 AWG	22 AWG
Maximum Insulation Outside Diameter	0.082" (2,1 mm)	0.082" (2,1 mm)	0.060" (1,5 mm)	0.060" (1,5 mm)
Flame Retardant	No	No	No	No
Connectors per Carton	-	12	-	-
Connectors per Case	500	120	5000	1000
	UY(CART)	UY-25/PACK	UPB(BULK)	211(BX)
				
UPC	051115-26223	051115-26237	054007-33416	051115-26185
Connector Type	Butt/ 2 Conductor	Butt/ 2 Conductor	Tap/ 2 Conductor	Butt Trim-out/ 2 Conductor
Application	Filled	Filled	Dry	Filled
Cable Type	PIC	PIC	PIC, PULP, PAPER	PIC
Conductor Size (Min.)	26 AWG	26 AWG	26 AWG	26 AWG
Conductor Size (Max.)	22 AWG	22 AWG	22 AWG	19 AWG
Maximum Insulation Outside Diameter	0.060" (1,5 mm)	0.060" (1,5 mm)	0.050" (1,3 mm)	0.082" (2,1 mm)
Flame Retardant	No	No	Yes	No
Connectors per Carton	-	25	-	-
Connectors per Case	10	250	5000	1000

## 3M™ Scotchlok™ IDC Tap Connector

By positioning the 3M™ Scotchlok™ IDC Tap Connector UB2A on the conductor and pre-crimping, the conductor is prevented from slipping out of the connector before the crimp is completed. A thin membrane molded into the tap wire entry port also assists the craftsman by securing the tap wire until the crimp is completed. Like the 3M™ Scotchlok™ Connector UR2, a factory-installed sealant insulates against corrosion, and seals out moisture. The UB2A-D, a dry version, is available as well.

The UB2A connector permits tapping directly onto an existing conductor without interrupting service. In ready access closures, the UB2A eliminates cutting cable pairs, opening pairs, and piecing out wires. Fast and easy to work with the UB2A accepts 19–26 AWG (0,9–0,4 mm) plastic-, paper-, or pulp-insulated solid copper wire with a maximum O.D. of .082" (2,08 mm). The wires joined can be of different wire gauges.








Connection Style	Insulation Displacement
Connector Type	Bridge Tap/2 Conductor
Flame Retardant	No
RoHS 2011/65/EU	Yes
Agency Approval	

	UB2A-25/PACK	UB2A(BX)	UB2A-JAR500	UB2A-D(BX)
				
UPC	051115-26120	051115-26189	051115-26193	054007-92694
Application	Filled	Filled	Filled	Dry
Cable Type	PIC	PIC	PIC	PIC, PULP, PAPER
Conductor Size Range	26–19 AWG	26–19 AWG	26–19 AWG	26–19 AWG
Insulation Outside Diameter	0.082" (2,08 mm)	0.082" (2,08 mm)	0.082" (2,08 mm)	0.082" (2,08 mm)
Connectors per Carton	25	-	500	100
Connectors per Case	1000	1000	5000	1000

## 3M™ Crimping Tools

The 3M™ Scotchlok™ Crimping Tool E-9BM is used with most 3M™ Scotchlok™ Connectors, and has parallel closing action with adjustable jaws and a high mechanical advantage. The 3M™ Scotchlok™ Cartridge Tool E-9C with case holds connectors (in cartridges) firmly in place, allowing the craftsperson use of the other hand for guiding wires. A time-saving tool, the E-9C tool holds cartridges of UR2, UR, UY2, UY, or UAL connectors. The 3M™ Scotchlok™ Hand Crimping Tool E-9E is a parallel closing action tool for use with Scotchlok butt and tap connectors. The E-9Y tool's stepped jaws and long nose provide parallel crimping action. Its features include a side wire cutter, cushioned handles and a return spring. The E-9R tool features single-stroke, parallel crimping action with a work-saving 10:1 mechanical advantage over applied hand force. The tool's innovative ratchet-release design indicates a positive crimp by automatically releasing after each successful connection. The E-9R tool is compatible with all 3M™ Scotchlok™ Connectors including UY, UR, UY2, UR2, UP2, UAL, UP3, UB, 211 and UB2A units across the entire range of applicable wire sizes.



RoHS 2011/65/EU Yes

	E-9BM	E-9C	E-9E	E-9J
				
UPC	054007-33482	054007-34211	054007-10577	051115-19004
Product Name	3M™ Scotchlok™ Hand Crimping Tool E-9BM	3M™ Scotchlok™ Cartridge Crimping Tool E-9C	3M™ Scotchlok™ Hand Crimping Tool E-9E	3M™ Scotchlok™ Hand Crimping Tool E-9J
Description	This heavy-duty tool is capable of crimping all Scotchlok connectors. Its closing action and adjustable jaws provide a 10-to-1 mechanical advantage, allowing it to handle most wire gauges.	With an automatic cartridge feed, 7-to-1 mechanical advantage and ratchet action, the E-9C tool allows the craftsperson to complete a crimp with one hand, freeing the other hand for wire handling. The tool is designed for cartridges with Scotchlok communication butt connectors.	A completely parallel closing action and a 4-to-1 mechanical advantage make the lightweight E-9E crimping tool a versatile addition to any craftsperson's pouch. With these features, the E-9E tool will crimp all Scotchlok communication butt and tap connectors in all wire gauges.	The E-9J tool is a lightweight, hand-held tool featuring a single stroke, with a work-saving 10-to-1 mechanical advantage over applied hand force. For use with Scotchlok communication butt and tap connectors.
Tools per Case	6	1	10	10
	E-9R	E-9Y	E-9Y-P	
				
UPC	051138-87649	054007-15625	051115-22987	
Product Name	3M™ Scotchlok™ Hand Crimping Tool E-9R	3M™ Scotchlok™ Hand Crimping Tool E-9Y	3M™ Scotchlok™ Hand Crimping Tool E-9Y-P	
Description	This tool features a 10-to-1 mechanical advantage. Its ratchet-release and integrated wire cutter save time by not having to change tools. The E-9R tool is compatible with all Scotchlok communication connectors (except inline and drop connectors) across the entire range of applicable wire sizes.	The E-9Y tool has stepped jaws and a long nose and side wire cutter which provide crimping action for two- or three-conductor splicing. The E-9Y tool is not recommended for 19 AWG (0.9 mm) and larger conductors.	In package. It is not recommended for 19 AWG (.9 mm) and larger conductors. Mechanical advantage of 3-to-1. Includes integrated wire cutter.	
Tools per Case	10	10	10	

## Moisture Resistant Connectors

### 3M™ Scotchlok™ Moisture Resistant Connectors

The 3M™ Scotchlok™ Moisture Guard Connector MGC provides a convenient way to connect wires for landscape irrigation and lighting applications. Just press the MGC cap and a metal element inside pushes through the wire insulation to make a secure, reliable connection. The grease in the MGC protects against moisture while the MGC housing is UV resistant for above-ground applications.

Connection Type	Moisture Resistant
Connector Style	Insulation Displacement
Flame Retardant	No
Maximum Voltage Rating	600 V (1000 V in signs, lighting fixtures and luminaries)
Operating Temperature	221°F (105 °C)
RoHS 2011/65/EU	Yes
Agency Approval	
Country of Origin	



Order No.	UPC	Conductor Size	Wire Range: Outside Port	Wire Range: Inside Port	Outside Port Maximum Insulation Diameter	Inside Port Maximum Insulation Diameter	Connectors per Carton	Connectors per Case
MGC-BAG	051128-56827	14 AWG	12 AWG, Stranded 14–16 AWG, Solid/Stranded	20 AWG, Stranded 18 AWG, Solid/Stranded	0.21" (5,3 mm)	0.15" (3,8 mm)	25	250
MGC-JUG	051128-56828	14 AWG	12 AWG, Stranded 14–16 AWG, Solid/Stranded	20 AWG, Stranded 18 AWG, Solid/Stranded	0.21" (5,3 mm)	0.150" (3,8 mm)	100	400

### 3M™ Scotchlok™ IDC Butt/Trim Out Connector 211

The 3M™ Scotchlok™ IDC Butt/Trim Out Connector 211 is a moisture-resistant, self-stripping insulation displacement connector with a built-in cut-off blade and a test port. Wires are positioned in the connector from the sides, allowing the 211 connector to be used without interrupting service. The 211 connector may also be used for standard two-wire butt type splicing operations.

For interruption free butt splice replacement.

Choose any one of the 3M™ Scotchlok™ Crimping Tools E-9 to use with the 211 connector.


Connector Type	Butt Trim-out/ 2 Conductor
Application	Filled
Cable Type	PIC
Flame Retardant	No



Order No.	UPC	Conductor Size (Min.)	Conductor Size (Max.)	Insulation Outside Diameter	Min. Order Qty.	Case Qty.
211(BX)	051115-26185	26 AWG	19 AWG	0.082 inches	100 each per Box, 10 Boxes per Case	1000 each

## 3M™ Direct Bury Splice Kit DBO/B-6

The 3M™ Direct Bury Splice Kit DBO/B-6 is used to electrically connect two or more pre-stripped copper wires and moisture seal the connection for direct burial. The kit includes a 3M™ Performance Plus Wire Connector O/B+ and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant grease.


Voltage	600 V
Splice Type	Direct Bury
Application Temperature Range	32–120°F (0–49°C)
Operating Temperature Range	221°F (105°C)
Flame Retardant	Yes
RoHS 2011/65/EU	Yes
Agency Approval	

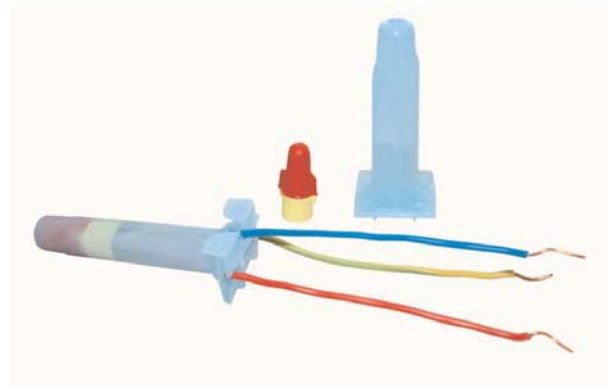


Order No.	UPC	Conductor Size	Common AWG Wire Combinations (CU only)	Case Qty.
DBO/B-6 KIT	051128-59075	18–10 AWG	2–3#16 sol/str; 2–3#14 sol/str; 2#12 sol/str; 1#14 to 1#12 sol/str; 1#18 to 1–2#14 sol/str; 1#18 to 1–2#12 sol/str; 1#16 to 1–2#14 sol/str; 1#16 to 1–2#12 sol/str	25 Kits
DBO/B-6 BULK	051128-59076	18–10 AWG	2–3#16 sol/str; 2–3#14 sol/str; 2#12 sol/str; 1#14 to 1#12 sol/str; 1#18 to 1–2#14 sol/str; 1#18 to 1–2#12 sol/str; 1#16 to 1–2#14 sol/str; 1#16 to 1–2#12 sol/str	100 Kits

## 3M™ Direct Bury Splice Kit DBR/Y-6

The 3M™ Direct Bury Splice Kit DBR/Y-6 is used to electrically connect two or more pre-stripped copper wires and moisture seal the connection for direct burial. The kit includes a 3M™ Performance Plus Wire Connector R/Y+ and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant grease.

Voltage	600 V
Splice Type	Direct Bury
Application Temperature Range	32–120°F (0–49°C)
Operating Temperature Range	-40–221°F (-40–105°C)
Flame Retardant	Yes
RoHS 2011/65/EU	Yes
Agency Approval	



Order No.	UPC	Conductor Size	Common AWG Wire Combinations (CU only)	Case Qty.
DBR/Y-6 KIT	051128-58573	18–10 AWG	2–7#18; 2–6#16; 2–4#14; 2–4#12; 2–3#10; 1–3#12 w/ 1#18; 1–2#10 w/1#18; 1–2#10 w/1#12; 1–2#14 w/ 1#18	25 Kits
DBR/Y-6 BULK	051128-58574	18–10 AWG	2–7#18; 2–6#16; 2–4#14; 2–4#12; 2–3#10; 1–3#12 w/ 1#18; 1–2#10 w/1#18; 1–2#10 w/1#12; 1–2#14 w/ 1#18	100 Kits

# Lugs and Connectors

3M™ Scotchlok™ Lugs and Connectors include crimp and shearbolt connectors for power cable conductors. These connectors are used when splicing and terminating power cable.

## **3M Scotchlok Connectors 10000 and 11000 Series and Lugs 30000 and 31000 Series**

The 3M Scotchlok Connectors 10000 and 11000 Series, and the Lugs 30000 and 31000 Series are used on copper conductors only. They are available in standard or long barrel designs and are constructed of one-piece, seamless high-conductivity copper. (UL 486A Listed)



## **3M Scotchlok Connectors 20000 Series and Lugs 40000 Series**

The 3M Scotchlok Connectors 20000 Series and Lugs 40000 Series are for use with either copper or aluminum conductors. The aluminum connectors and lugs feature color coded end caps for identification. Contact aid provided in connector and lug barrels is compatible with poly/EPR insulations. (UL 486B Listed).

## **3M Connectors CI Series**

3M Connectors CI Series are for splicing applications on aluminum or copper cable conductors. The CI Series aluminum connectors are specially designed for use with 3M QS, QS-II and pre-molded Power Cable Splice Bodies. These connectors meet the requirements of ANSI C119.4.

## **3M Stem Connectors SC Series**

3M Stem Connectors SC Series feature an aluminum barrel for installations on either copper or aluminum cable conductors and are used when connecting a riser cable to an overhead line. The SC series connectors are also used when terminating an insulated power cable with 3M terminations. The SC series connectors are provided with a factory crimped and sealed copper stem for aerial line connection. The aluminum barrel and copper stem are tin plated to resist electrolytic corrosion.



### **3M Lugs OS Series**

3M Lugs OS Series are copper lugs that feature a solid oil stop. These lugs are for copper conductors only and are used with 3M Terminations 5800-Pb Series on paper-insulated lead covered (PILC) cables.

### **3M Connectors CIR Series**

3M Connectors CIR Series are specially designed for use with 3M QS-II Repair Splice Kits. They are aluminum connectors for use on aluminum or copper cable conductors. When used with the appropriate splice kit, these connectors allow up to 6 inches (152 mm) of damaged cable conductor to be removed, eliminating the need to splice in a new section of cable. CIR series connectors meet the requirements of ANSI C119.4.

### **3M Scotchlok Connectors 2000T Series**

The 3M Scotchlok Connectors 2000T Series offers two solutions for your copper and/or aluminum connecting needs for PILC power cable. The 3M Scotchlok Connectors 2000T-CU Series are copper inline sleeves that are for use with copper conductor cables of the same size when connecting copper cable to copper cable only. The 3M Scotchlok Reducer Series Connector 2000T is for connecting cables of different sizes and types. They are aluminum inline sleeves that are applicable for both aluminum and copper conductors, and because the barrel diameters at the connector ends are different, it allows connecting conductors of different sizes. All connectors in the 2000T series feature a solid center oil stop.

### **3M Shearbolt Lugs**

3M Mechanical Shearbolt T-Body Lugs QLS Series: They are designed to cover a wide range of conductor sizes from 2 AWG to 1250 kcmil. This shearbolt lug design provides excellent performance and features not found in many other shearbolt lugs. No dies are needed for installation: following cable preparation, simply slide the lug over the conductor and tighten the bolts until they shear. The QLS Series lugs are designed to terminate either aluminum and/or copper conductors. The lugs are tin plated to resist corrosion.

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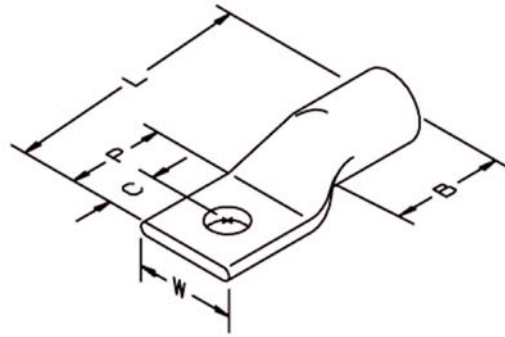
Lugs: One Hole Lugs

## 3M™ Scotchlok™ Copper Lugs 30000 Series, One Hole, Standard Barrel, up to 35 kV

The 3M™ Scotchlok™ Copper Lugs 30000 Series are a family of one hole, standard barrel lugs from 6–4/0 AWG designed for terminating copper conductors. Each lug is tin plated to resist corrosion and can be installed with standard industry tools. Chamfered ends ensure ease of conductor insertion.

O.D. = Outside Diameter; (B) = Barrel Length (B); (C) = Center of Hole to End of Pad (C); (L) = Length (L); (P) = Pad Length (P); (W) = Pad Width (W)

Barrel Style	Standard Barrel
No. of Holes	One Hole
Lug Base Metal	Copper
For use with	Copper Conductor Only
Dimension (C)	0.37" (9,5 mm), *0.53" (13,4 mm)
RoHS 2011/65/EU	Yes
Agency Approval	



Order No.	UPC (054007)	Wire & Stud Size	Color	O.D.	(B)	(L)	(P)	(W)	Min/Cs Qty
30014	-12410	6 AWG #10	Blue	0.29" (7,4 mm)	0.86" (21,8 mm)	1.78" (45,2 mm)	0.75" (19,1 mm)	0.43" (11,0 mm)	50
30015	-12428	6 AWG 1/4"	Blue	0.29" (7,4 mm)	0.86" (21,8 mm)	1.78" (45,2 mm)	0.75" (19,1 mm)	0.43" (11,0 mm)	50
30016	-12436	6 AWG 5/16"	Blue	0.29" (7,4 mm)	0.86" (21,8 mm)	1.78" (45,2 mm)	0.75" (19,1 mm)	0.50" (12,7 mm)	50
30018	-12444	4 AWG #10	Gray	0.34" (8,6 mm)	0.75" (19,1 mm)	1.94" (49,3 mm)	0.89" (22,6 mm)	0.48" (12,3 mm)	50
30019	-12451	4 AWG 1/4"	Gray	0.34" (8,6 mm)	0.75" (19,1 mm)	1.94" (49,3 mm)	0.89" (22,6 mm)	0.48" (12,3 mm)	50
30021	-12469	4 AWG 3/8"	Gray	0.34" (8,6 mm)	0.75" (19,1 mm)	1.94" (49,3 mm)	0.89" (22,6 mm)	0.59" (15,1 mm)	50
30022	-12477	2 AWG 1/4"	Brown	0.42" (10,6 mm)	0.81" (20,7 mm)	1.97" (50,0 mm)	0.89" (22,6 mm)	0.63" (15,9 mm)	25
30023	-12485	2 AWG 5/16"	Brown	0.42" (10,6 mm)	0.81" (20,7 mm)	1.97" (50,0 mm)	0.89" (22,6 mm)	0.63" (15,9 mm)	25
30024	-12493	2 AWG 3/8"	Brown	0.42" (10,6 mm)	0.81" (20,7 mm)	1.97" (50,0 mm)	0.89" (22,6 mm)	0.63" (15,9 mm)	25
30027	-12501	1 AWG 5/16"	Green	0.46" (11,7 mm)	0.81" (20,7 mm)	1.97" (50,0 mm)	0.75" (19,1 mm)	0.69" (17,5 mm)	10
30028	-12519	1 AWG 3/8"	Green	0.46" (11,7 mm)	0.81" (20,7 mm)	1.97" (50,0 mm)	0.75" (19,1 mm)	0.69" (17,5 mm)	10
30031	-12527	1/0 AWG 5/16"	Pink	0.51" (13,0 mm)	0.81" (20,7 mm)	2.16" (54,9 mm)	0.89" (22,6 mm)	0.75" (19,1 mm)	10
30032	-12535	1/0 AWG 3/8"	Pink	0.51" (13,0 mm)	0.81" (20,7 mm)	2.16" (54,9 mm)	0.89" (22,6 mm)	0.75" (19,1 mm)	10
30036	-12543	2/0 AWG 3/8"	Black	0.56" (14,2 mm)	0.87" (22,2 mm)	2.37" (60,2 mm)	1.11" (28,2 mm)	0.81" (20,7 mm)	10
30041*	-12568	3/0 AWG 1/2"	Orange	0.62" (15,8 mm)	0.94" (23,8 mm)	2.63" (66,8 mm)	1.11" (28,2 mm)	0.91" (23,1 mm)	10
30045*	-12584	4/0 AWG 1/2"	Purple	0.68" (17,4 mm)	0.97" (24,6 mm)	2.60" (65,9 mm)	1.11" (28,2 mm)	1.00" (25,4 mm)	10

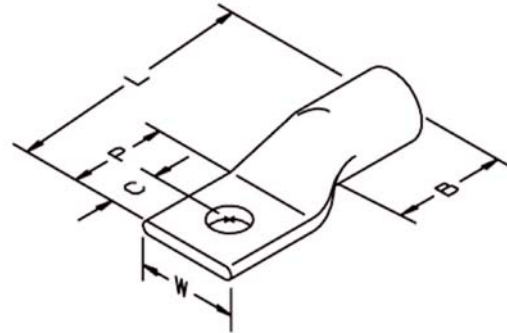
Lugs: One Hole Lugs

## 3M™ Scotchlok™ Copper Lugs 31000 Series, One Hole, Long-Barrel, up to 35 kV

The 3M™ Scotchlok™ Copper Lugs 31000 Series are a family of one hole, long barrel lugs from 2/0 AWG–600 kcmil designed for terminating copper conductors. Each lug is tin plated to resist corrosion and can be installed with standard industry tools. Chamfered ends ensure ease of conductor insertion.

O.D. = Outside Diameter; (B) = Barrel Length (B); (C) = Center of Hole to End of Pad (C); (L) = Length (L); (P) = Pad Length (P); (W) = Pad Width (W)

Barrel Style	Long Barrel
No. of Holes	One Hole
Lug Base Metal	Copper
For use with	Copper Conductor Only
RoHS 2011/65/EU	Yes
Agency Approval	



Order No.	UPC (054007)	Wire & Stud Size	Color	O.D.	(B)	(C)	(L)	(P)	(W)	Min/Cs Qty
31036	-12550	2/0 AWG 3/8"	Black	0.56" (14,2 mm)	1.44" (36,6 mm)	0.37" (9,5 mm)	2.84" (72,2 mm)	0.89" (22,6 mm)	0.81" (20,6 mm)	10
31041	-12576	3/0 AWG 1/2"	Orange	0.62" (15,8 mm)	1.44" (36,5 mm)	0.53" (13,4 mm)	3.13" (79,5 mm)	1.11" (28,2 mm)	0.91" (23,0 mm)	10
31045	-12592	4/0 AWG 1/2"	Purple	0.68" (17,4 mm)	1.56" (39,7 mm)	0.53" (13,4 mm)	3.32" (84,4 mm)	1.11" (28,2 mm)	1.00" (25,4 mm)	10
31049	-12618	250 kcmil 1/2"	Yellow	0.75" (19,1 mm)	1.50" (38,1 mm)	0.53" (13,4 mm)	3.38" (85,8 mm)	1.11" (28,2 mm)	1.11" (28,2 mm)	10
31053	-12634	300 kcmil 1/2"	White	0.81" (20,6 mm)	1.94" (49,2 mm)	0.53" (13,4 mm)	3.78" (96,0 mm)	1.11" (28,2 mm)	1.22" (30,9 mm)	10
31056	-12659	350 kcmil 1/2"	Red	0.88" (22,4 mm)	1.94" (49,2 mm)	0.53" (13,4 mm)	3.84" (97,5 mm)	1.11" (28,2 mm)	1.27" (32,2 mm)	10
31060	-11978	400 kcmil 1/2"	Blue	0.95" (24,1 mm)	2.00" (50,8 mm)	0.66" (16,7 mm)	4.16" (105,7 mm)	1.34" (34,2 mm)	1.41" (35,8 mm)	10
31066	-12675	500 kcmil 1/2"	Brown	1.06" (27,0 mm)	2.19" (55,6 mm)	0.66" (16,7 mm)	4.50" (114,3 mm)	1.34" (34,2 mm)	1.53" (38,9 mm)	10
31067	-12683	500 kcmil 5/8"	Brown	1.06" (27,0 mm)	2.19" (55,6 mm)	0.66" (16,7 mm)	4.50" (114,3 mm)	1.34" (34,2 mm)	1.53" (38,9 mm)	10
31068	-11980	600 kcmil 1/2"	Green	1.18" (30,0 mm)	2.60" (66,0 mm)	0.88" (22,4 mm)	5.12" (130,0 mm)	1.75" (44,4 mm)	1.69" (42,9 mm)	6

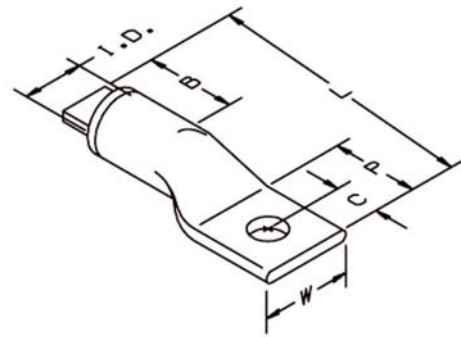
## Lugs: One Hole Lugs

### 3M™ Scotchlok™ Aluminum Lugs 40000 Series, One Hole (AL9CU), up to 35 kV

The 3M™ Scotchlok™ Aluminum Compression Lugs 40000 Series are one hole lugs made of high conductivity aluminum and are designed to cover a wide range of conductor sizes from 6 AWG–1000 kcmil. They are designed to be crimped onto either aluminum or copper conductors. Each lug is electroplated to resist electrolytic corrosion. They are installed using standard industry tools. Chamfered ends ensure simplicity and ease of conductor insertion.

O.D. = Outside Diameter; (B) = Barrel Length (B); (C) = Center of Hole to End of Pad (C); (L) = Length (L); (P) = Pad Length (P); (W) = Pad Width (W)

Barrel Style	Standard Barrel
No. of Holes	One Hole
Lug Base Metal	Aluminum
For use with	Aluminum or Copper Conductor
RoHS 2011/65/EU	Yes
Agency Approval	



Order No.	UPC (054007)	Wire & Stud Size	Color	O.D.	(B)	(C)	(L)	(P)	(W)	Min/Cs Qty
40016	-13400	6 AWG 5/16"	Gray	0.34" (8,8 mm)	0.75" (19,1 mm)	0.44" (11,2 mm)	2.28" (57,9 mm)	0.88" (22,3 mm)	0.56" (14,2 mm)	50
40020	-13418	4 AWG 5/16"	Green	0.47" (11,9 mm)	0.94" (23,8 mm)	0.44" (11,2 mm)	2.30" (58,4 mm)	0.96" (24,4 mm)	0.62" (15,7 mm)	50
40024	-13426	2 AWG 3/8"	Pink	0.53" (13,5 mm)	0.92" (23,4 mm)	0.44" (11,2 mm)	2.62" (66,5 mm)	1.03" (26,2 mm)	0.75" (19,1 mm)	25
40025	-13434	2 AWG 1/2"	Pink	0.53" (13,5 mm)	0.92" (23,4 mm)	0.44" (11,2 mm)	2.62" (66,5 mm)	1.12" (28,4 mm)	0.75" (19,1 mm)	25
40028	-13442	1 AWG 3/8"	Gold	0.53" (13,5 mm)	0.92" (23,4 mm)	0.44" (11,2 mm)	2.62" (66,5 mm)	1.03" (26,2 mm)	0.75" (19,1 mm)	10
40029	-13459	1 AWG 1/2"	Gold	0.53" (13,5 mm)	0.92" (23,4 mm)	0.44" (11,2 mm)	2.62" (66,5 mm)	1.12" (28,4 mm)	0.75" (19,1 mm)	10
40032	-13467	1/0 AWG 3/8"	Tan	0.64" (16,1 mm)	1.18" (30,0 mm)	0.62" (15,7 mm)	3.12" (79,2 mm)	1.31" (33,3 mm)	0.88" (22,4 mm)	10
40033	-13475	1/0 AWG 1/2"	Tan	0.64" (16,1 mm)	1.18" (30,0 mm)	0.62" (15,7 mm)	3.12" (79,2 mm)	1.31" (33,3 mm)	0.88" (22,4 mm)	10
40037	-13483	2/0 AWG 1/2"	Olive	0.69" (17,5 mm)	1.30" (33,0 mm)	0.62" (15,7 mm)	3.19" (81,0 mm)	1.25" (31,8 mm)	0.95" (24,2 mm)	10
40041	-13491	3/0 AWG 1/2"	Ruby	0.76" (19,3 mm)	1.50" (38,1 mm)	0.62" (15,7 mm)	3.44" (87,4 mm)	1.28" (32,5 mm)	1.06" (26,9 mm)	10
40045	-13509	4/0 AWG 1/2"	White	0.88" (22,2 mm)	1.44" (36,6 mm)	0.62" (15,7 mm)	3.56" (90,4 mm)	1.34" (34,1 mm)	1.19" (30,2 mm)	10
40046	-13517	4/0 AWG 5/8"	White	0.88" (22,2 mm)	1.44" (36,6 mm)	0.62" (15,7 mm)	3.56" (90,4 mm)	1.34" (34,1 mm)	1.19" (30,2 mm)	10

Lugs: One Hole Lugs

**3M™ Scotchlok™ Aluminum Lugs 40000 Series, One Hole (AL9CU), up to 35 kV  
(continued)**


Order No.	UPC (054007)	Wire & Stud Size	Color	O.D.	(B)	(C)	(L)	(P)	(W)	Min/Cs Qty
40049	-13525	250 kcmil 1/2"	Red	0.91" (23,0 mm)	1.56" (39,6 mm)	0.62" (15,7 mm)	3.62" (91,9 mm)	1.31" (33,2 mm)	1.24" (31,4 mm)	10
40050	-13533	250 kcmil 5/8"	Red	0.91" (23,0 mm)	1.59" (40,4 mm)	0.62" (15,7 mm)	3.62" (91,9 mm)	1.31" (33,2 mm)	1.24" (31,4 mm)	10
40053	-13541	300 kcmil 1/2"	Dark Blue	1.01" (25,7 mm)	2.20" (55,6 mm)	0.62" (15,7 mm)	4.00" (101,6 mm)	1.31" (33,2 mm)	1.36" (34,5 mm)	10
40056	-13558	350 kcmil 1/2"	Brown	1.11" (28,1 mm)	2.20" (55,6 mm)	0.62" (15,7 mm)	4.25" (108,0 mm)	1.31" (33,3 mm)	1.49" (37,8 mm)	10
40057	-13566	350 kcmil 5/8"	Brown	1.11" (28,1 mm)	2.19" (55,6 mm)	0.62" (15,7 mm)	4.32" (109,7 mm)	1.31" (33,3 mm)	1.49" (37,8 mm)	10
40067	-13574	500 kcmil 5/8"	Pink	1.32" (33,5 mm)	2.94" (74,6 mm)	0.62" (15,7 mm)	5.44" (138,2 mm)	1.50" (38,1 mm)	1.73" (43,9 mm)	10
40073	-13582	750 kcmil 5/8"	Yellow	1.50" (38,1 mm)	3.32" (84,3 mm)	0.88" (22,4 mm)	6.38" (162,1 mm)	1.87" (47,5 mm)	1.72" (43,6 mm)	6
40079	-13590	1000 kcmil 5/8"	Brown	1.84" (46,8 mm)	4.62" (117,3 mm)	0.88" (22,4 mm)	7.94" (201,6 mm)	1.87" (47,5 mm)	2.42" (61,4 mm)	6

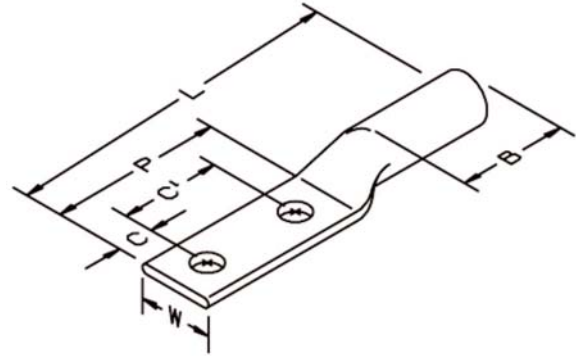
## Lugs: Two Hole Lugs

### 3M™ Scotchlok™ Copper Lugs 31100 Series, Two Hole, Long-Barrel, up to 35 kV

The 3M™ Scotchlok™ Copper Lugs 31100 Series are a family of two hole lugs from 4 AWG–1000 kcmil designed for terminating copper conductors. Each lug is tin plated to resist corrosion and can be installed with standard industry tools. Chamfered ends ensure ease of conductor insertion.

O.D. = Outside Diameter; (B) = Barrel Length; (C) = Center of Hole to End of Pad; (C') = Center of Hole to Center of Hole; (L) = Length; (P) = Pad Length; (W) = Pad Width

Barrel Style	Long Barrel
No. of Holes	Two Hole
Lug Base Metal	Copper
For use with	Copper Conductor Only
Dimension (C)	0.63" (16,0 mm)
Dimension (C')	1.75" (44,5 mm)
RoHS 2011/65/EU	Yes
*Agency Approval	* 



Order No.	UPC	Wire & Stud Size	Color	O.D.	(B)	(L)	(P)	(W)	Min/Case Qty
31122	051138-52496	4 AWG 1/2"	Gray	0.34" (8,6 mm)	0.93" (23,5 mm)	4.19" (106,4 mm)	3.00" (76,2 mm)	0.66" (16,7 mm)	25
31125	051138-52497	2 AWG 1/2"	Brown	0.42" (10,6 mm)	1.25" (31,8 mm)	4.85" (123,2 mm)	3.00" (76,2 mm)	0.63" (16,0 mm)	25
31129	051138-52498	1 AWG 1/2"	Green	0.42" (10,6 mm)	1.25" (31,8 mm)	4.85" (123,2 mm)	3.00" (76,2 mm)	0.69" (17,5 mm)	10
31130	051138-52499	1/0 AWG 1/2"	Pink	0.51" (13,0 mm)	1.38" (31,5 mm)	4.98" (126,5 mm)	3.00" (76,2 mm)	0.75" (19,0 mm)	10
31137	051138-69245	2/0 AWG 1/2"	Black	0.56" (14,2 mm)	1.50" (38,1 mm)	5.03" (127,8 mm)	3.00" (76,2 mm)	0.81" (20,7 mm)	10
31141	051138-69246	3/0 AWG 1/2"	Orange	0.62" (15,8 mm)	1.44" (36,5 mm)	5.13" (130,3 mm)	3.00" (76,2 mm)	0.91" (23,0 mm)	10
31145*	054007-12600	4/0 AWG 1/2"	Purple	0.68" (17,4 mm)	1.56" (39,7 mm)	5.16" (131,1 mm)	3.00" (76,2 mm)	1.00" (25,4 mm)	10
31149*	054007-12626	250 kcmil 1/2"	Yellow	0.75" (19,1 mm)	1.56" (39,7 mm)	5.31" (134,9 mm)	3.00" (76,2 mm)	1.13" (28,6 mm)	10
31153*	054007-12642	300 kcmil 1/2"	White	0.81" (20,6 mm)	1.94" (49,2 mm)	5.75" (146,1 mm)	3.00" (76,2 mm)	1.22" (31,0 mm)	10
31156*	054007-12667	350 kcmil 1/2"	Red	0.87" (22,1 mm)	1.94" (49,2 mm)	5.75" (146,1 mm)	3.00" (76,2 mm)	1.31" (33,4 mm)	10
31160*	054007-11979	400 kcmil 1/2"	Blue	0.95" (24,1 mm)	2.12" (53,8 mm)	6.00" (152,4 mm)	3.00" (76,2 mm)	1.41" (35,8 mm)	10
31166*	054007-12691	500 kcmil 1/2"	Brown	1.06" (26,9 mm)	2.19" (55,6 mm)	6.16" (156,4 mm)	3.00" (76,2 mm)	1.53" (38,9 mm)	10
31168*	054007-11981	600 kcmil 1/2"	Green	1.18" (30,1 mm)	2.62" (66,5 mm)	6.72" (170,6 mm)	3.00" (76,2 mm)	1.69" (42,9 mm)	6
31172*	054007-12709	750 kcmil 1/2"	Black	1.29" (33,0 mm)	2.81" (71,5 mm)	7.00" (177,8 mm)	3.00" (76,2 mm)	1.72" (43,7 mm)	6
31178*	054007-00907	1000 kcmil 1/2"	White	1.50" (38,1 mm)	2.94" (74,6 mm)	7.28" (184,9 mm)	3.00" (76,2 mm)	1.72" (43,7 mm)	6



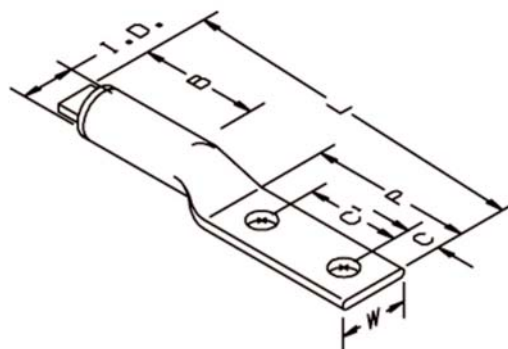
## Lugs: Two Hole Lugs

**3M™ Scotchlok™ Aluminum Lugs 40100 Series-Two Hole (AL9CU) up to 35 kV**

The 3M™ Scotchlok™ Aluminum Compression Lugs 40100 Series are a family of two hole lugs made of high conductivity aluminum and are designed to cover a wide range of conductor sizes from 1/0 AWG–1000 kcmil. They are designed to be crimped onto either aluminum or copper conductors. Each lug is electro-tin plated to resist electrolytic corrosion. They are installed using standard industry tools. Chamfered ends ensure simplicity and ease of conductor insertion.

O.D. = Outside Diameter; (B) = Barrel Length; (C) = Center of Hole to End of Pad; (C') = Center of Hole to Center of Hole; (L) = Length; (P) = Pad Length; (W) = Pad Width

Barrel Style	Standard Barrel
No. of Holes	Two Hole
Lug Base Metal	Aluminum
For use with	Aluminum or Copper Conductor
Dimension (C)	0.62" (15,7 mm)
Dimension (C')	1.75" (44,5 mm)
RoHS 2011/65/EU	Yes
Agency Approval	

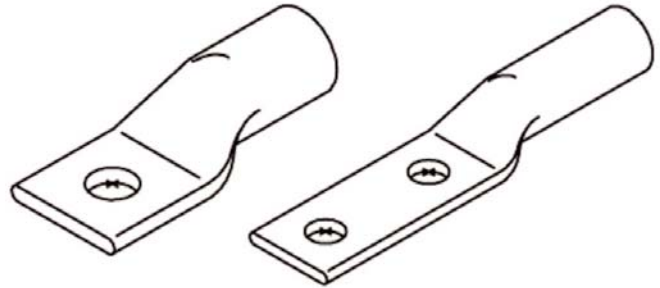


Order No.	UPC (054007)	Wire & Stud Size	Color	O.D.	(B)	(L)	(P)	(W)	Min/Cs Qty
40132	-13608	1/0 AWG, 3/8"	Tan	0.640" (16,3 mm)	1.50" (38,1 mm)	5.28" (134,1 mm)	3.25" (82,6 mm)	0.88" (22,4 mm)	10
40137	-13616	2/0 AWG, 1/2"	Olive	0.687" (17,5 mm)	1.50" (38,1 mm)	5.50" (139,7 mm)	3.25" (82,6 mm)	0.94" (23,8 mm)	10
40141	-13624	3/0 AWG, 1/2"	Ruby	0.760" (19,3 mm)	1.50" (38,1 mm)	5.50" (139,7 mm)	3.25" (82,6 mm)	1.06" (26,9 mm)	10
40145	-13632	4/0 AWG, 1/2"	White	0.875" (22,2 mm)	1.94" (49,2 mm)	6.00" (152,4 mm)	3.38" (85,8 mm)	1.19" (30,2 mm)	10
40149	-13640	250 kcmil, 1/2"	Red	0.906" (23,0 mm)	1.94" (49,2 mm)	6.00" (152,4 mm)	3.38" (85,8 mm)	1.25" (31,8 mm)	10
40153	-13657	300 kcmil, 1/2"	Dark Blue	1.010" (25,7 mm)	2.25" (57,2 mm)	6.56" (166,6 mm)	3.56" (90,4 mm)	1.38" (35,1 mm)	10
40156	-13665	350 kcmil, 1/2"	Brown	1.105" (28,1 mm)	2.25" (57,2 mm)	6.56" (166,6 mm)	3.56" (90,4 mm)	1.50" (38,1 mm)	10
40160	-13673	400 kcmil, 1/2"	Green	1.187" (30,2 mm)	2.50" (63,5 mm)	6.88" (174,8 mm)	3.56" (90,4 mm)	1.62" (41,1 mm)	10
40166	-13681	500 kcmil, 1/2"	Pink	1.320" (33,5 mm)	3.00" (76,2 mm)	7.31" (185,7 mm)	3.56" (90,4 mm)	1.75" (44,5 mm)	10
40170	-13699	600 kcmil, 1/2"	Black	1.43" (36,3 mm)	3.00" (76,2 mm)	7.75" (196,9 mm)	3.62" (92,0 mm)	1.75" (44,5 mm)	6
40172	-13707	750 kcmil, 1/2"	Yellow	1.50" (38,1 mm)	3.38" (85,9 mm)	8.25" (209,6 mm)	3.62" (92,0 mm)	1.75" (44,5 mm)	6
40178	-13715	1000 kcmil, 1/2"	Brown	1.84" (46,7 mm)	4.62" (117,4 mm)	9.68" (245,8 mm)	3.62" (92,0 mm)	2.44" (62,0 mm)	6

## 3M™ Oil Seal Lugs, up to 35 kV

3M™ Oil Seal Lugs OS Series are copper one hole and two hole lugs that feature a solid oil stop. These lugs are for copper conductors only and are used with 3M™ PILC Termination Kits 5800-Pb Series on paper insulated lead covered (PILC) cables. Each lug is electro-tin plated to resist electrolytic corrosion.

Barrel Style	Standard Barrel
Lug Base Metal	Copper
For use with	Copper Conductor Only
Type of Seal	Oil Seal



Order No.	UPC	No. of Holes	Conductor Size - Stranded (Solid)	Stud Size	Inside Diameter	O.D.	Center of Hole to Center of Hole	Center of Hole to End of Pad	Min/Case Qty
OS0001	054007-50438	One hole	2 AWG (1 AWG)	3/8"	0.307" (7,8 mm)	0.415" (10,5 mm)	N/A	0.406" (10,3 mm)	10
OS0010	054007-50439	One hole	1/0 AWG (2/0 AWG)	3/8"	0.414" (10,5 mm)	0.513" (13,1 mm)	N/A	0.406" (10,3 mm)	10
OS0020	054007-50440	One hole	2/0 AWG (3/0 AWG)	3/8"	0.439" (11,2 mm)	0.563" (14,3 mm)	N/A	0.406" (10,3 mm)	10
OS0030	054007-50441	One hole	3/0 AWG (4/0 AWG)	1/2"	0.490" (12,4 mm)	0.615" (15,6 mm)	N/A	0.531" (13,4 mm)	10
OS0040	054007-50442	One hole	4/0 AWG (250 kcmil)	1/2"	0.548" (13,9 mm)	0.688" (17,4 mm)	N/A	0.531" (13,4 mm)	10
OS0250	054007-50443	Two holes	250 kcmil (N/A)	1/2"	0.595" (15,1 mm)	0.750" (19,1 mm)	1.75" (44,5 mm)	0.625" (15,8 mm)	10
OS0350	054007-50444	Two holes	350 kcmil (N/A)	1/2"	0.700" (17,8 mm)	0.875" (22,2 mm)	1.75" (44,5 mm)	0.625" (15,8 mm)	10
OS0500	054007-50445	Two holes	500 kcmil (N/A)	1/2"	0.886" (22,5 mm)	1.060" (26,9 mm)	1.75" (44,5 mm)	0.625" (15,8 mm)	10
OS0750	054007-50446	Two holes	750 kcmil (N/A)	1/2"	1.031" (26,2 mm)	1.300" (33,0 mm)	1.75" (44,5 mm)	0.625" (15,8 mm)	3
OS1000	054007-50447	Two holes	1000 kcmil (N/A)	1/2"	1.173" (29,8 mm)	1.500" (38,1 mm)	1.75" (44,5 mm)	0.625" (15,8 mm)	3

## Lugs: Stem Connectors

## 3M™ Stem Connectors SC Series, up to 35 kV

3M™ Stem Connectors SC Series feature a tin-plated aluminum barrel for installations on either copper or aluminum cable conductors and are used when connecting a riser cable to an overhead line. The SC series connectors are also used when terminating an insulated power cable with 3M terminations. SC series connectors are provided with a factory crimped and sealed, tin-plated copper stem for aerial line connection. A suggested accessory to the stem connector is the 3M Parallel Clamp CP-1 that enables the connection of the stem connector to the overhead jumper wire.

Barrel Style	Standard Barrel
No. of Holes	N/A
Lug Base Metal	Aluminum
For use with	Aluminum or Copper Conductor



Order No.	UPC	Conductor Size (Stranded)	Conductor Size (Solid)	Stem Length	Stem Diameter	Min/Case Qty
SC0001	054007-14655	2 AWG, 1 AWG	1 AWG, 1/0 AWG	6.00" (152,4 mm)	0.25" (6,4 mm)	10
SC0002	054007-14648	4 AWG	2 AWG	6.00" (152,4 mm)	0.25" (6,4 mm)	10
SC0010	054007-14663	1/0 AWG	2/0 AWG	6.00" (152,4 mm)	0.25" (6,4 mm)	10
SC0020	054007-14671	2/0 AWG	3/0 AWG	6.00" (152,4 mm)	0.31" (7,9 mm)	10
SC0030	054007-14689	3/0 AWG	4/0 AWG	6.00" (152,4 mm)	0.31" (7,9 mm)	10
SC0040	054007-14697	4/0 AWG	N/A	6.00" (152,4 mm)	0.31" (7,9 mm)	10

## Lugs: Parallel Clamp

## 3M™ Parallel Clamp CP-1, up to 35 kV

The 3M™ Parallel Clamp CP-1 is used in aerial connections with the stem connectors SC series.

Lug Base Metal	Aluminum
For use with	Aluminum or Copper Conductor



Order No.	UPC	Product Name	Conductor Size	Min. Order Qty.	Case Qty.
CP-1	054007-12204	3M™ Parallel Clamp	6 AWG (Solid) – 2/0 AWG (Stranded) (14–60 mm²)	10	10

## 3M™ Aluminum One Hole Lugs for T-Bodies

The 3M™ Aluminum One Hole Lugs ML Series are designed to be used with the 3M™ 600 Amp T-Bodies 5815 Series fully shielded 600 Amp separable connector system which meets the requirements of ANSI/IEEE Standard 386 - "Separable Insulated Connector Systems." These modular kits are available for splicing, dead-ending and connecting to deadfront apparatus such as transformers, switches and switchgears equipped with 600 Amp bushings.

Barrel Type	Standard Barrel
No. of Holes	One Hole
Lug Base Metal	Aluminum
For use with	Aluminum or Copper Conductor

Order No.	UPC	Conductor Size	Min. Order Qty.	Case Qty.
ML-1AL	054007-43487	1 AWG	10	10
ML-2AL	054007-43486	2 AWG	10	10
ML-1/0AL	054007-43488	1/0 AWG	10	10
ML-2/0AL	054007-43489	2/0 AWG	10	10
ML-3/0AL	054007-43490	3/0 AWG	10	10
ML-4/0AL	054007-43491	4/0 AWG	10	10
ML-250AL	054007-43492	250 kcmil	10	10
ML-350AL	054007-43493	350 kcmil	10	10
ML-500AL	054007-43494	500 kcmil	10	10
ML-750AL	054007-43495	750 kcmil	3	3
ML-1000AL	054007-43496	1000 kcmil	3	10

## 3M™ Shearbolt T-Body Lugs QLS Series

3M™ Mechanical Shearbolt T-Body Lugs QLS Series: They are designed to cover a wide range of conductor sizes from 2 AWG to 1250 kcmil. This shearbolt lug design provides excellent performance and features not found in many other shearbolt lugs. No dies are needed for installation: following cable preparation, simply slide the lug over the conductor and tighten the bolts until they shear. The QLS Series lugs are designed to terminate either aluminum and/or copper conductors. The lugs are tin plated to resist corrosion.

Note: If conductor does not fit in the centering ring, use the next larger size ring or no ring if there's no larger ring.


Barrel Type	Shearbolt
Connector Base Metal	Aluminum
For use with	Copper or Aluminum Conductor
Max. Voltage	35 kV

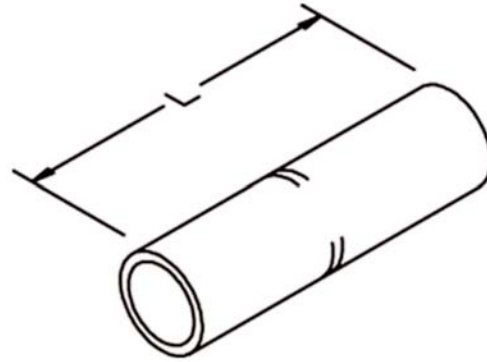


Order No.	UPC	Lug Hole Diameter	Outside Diameter Barrel	Typical Length w/Centering Ring	Conductor Size	Connector Centering Ring Color	Case Qty.
QLS 2-250	051128-61047	0.689" (17,5 mm)	1.10" (28 mm)	4.74" (120,5 mm)	2-1/0 AWG 2/0-3/0 AWG 4/0 AWG-250 kcmil	Grey Black No Ring	1
QLS 350-750	051128-61048	0.689" (17,5 mm)	1.65" (42 mm)	5.96" (151,5 mm)	350 kcmil 500-750 kcmil	White No Ring	1
QLS 750-1250	051128-61049	0.689" (17,5 mm)	2.04" (52 mm)	7.14" (181,5 mm)	750 kcmil 1000-1250 kcmil	White No Ring	1

## 3M™ Scotchlok™ Copper Connectors 10000 Series, Standard Barrel, up to 35 kV

The 3M™ Scotchlok™ Connectors 10000 Series are used on copper conductors only. They are constructed of one-piece, seamless high-conductivity copper with a standard barrel design and are electro tin-plated to resist electrolytic corrosion. (UL 486A Listed.)


Barrel Style	Standard Barrel
Connector Base Metal	Copper
For use with	Copper Conductor Only
Max. Voltage	35 kV
RoHS 2011/65/EU	Yes
Agency Approval	

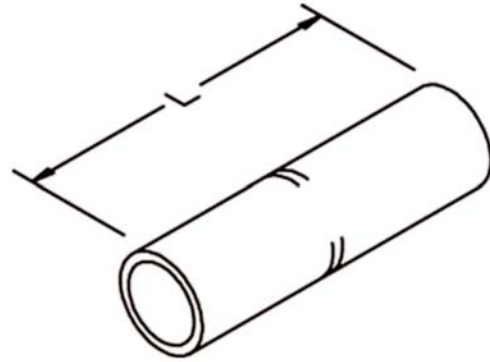


Order No.	UPC	Stranded Conductor Size	Color Code	Length	Inside Diameter (I.D.)	Outside Diameter (O.D.)	Min. Order Qty.	Case Qty.
10001	054007-12717	6 AWG	Blue	1.75" (44,4 mm)	0.20" (5,1 mm)	0.29" (7,4 mm)	50	50
10002	054007-12725	4 AWG	Gray	1.75" (44,4 mm)	0.25" (6,4 mm)	0.34" (8,6 mm)	50	50
10003	054007-12733	2 AWG	Brown	1.88" (47,7 mm)	0.31" (7,8 mm)	0.42" (10,6 mm)	25	25
10004	054007-12758	1 AWG	Green	1.88" (47,7 mm)	0.36" (9,1 mm)	0.46" (11,7 mm)	10	10
10005	054007-12766	1/0 AWG	Pink	1.88" (47,7 mm)	0.39" (10,0 mm)	0.51" (13,0 mm)	10	10
10006	054007-12774	2/0 AWG	Black	2.00" (50,8 mm)	0.44" (11,2 mm)	0.56" (14,2 mm)	10	10
10007	054007-12790	3/0 AWG	Orange	2.13" (54,0 mm)	0.49" (12,4 mm)	0.62" (15,7 mm)	10	10
10008	054007-12816	4/0 AWG	Purple	2.13" (54,0 mm)	0.55" (14,0 mm)	0.69" (17,4 mm)	10	10
10009	054007-12832	250 kcmil	Yellow	2.25" (57,2 mm)	0.60" (15,1 mm)	0.75" (19,1 mm)	3	3
10010	054007-12857	300 kcmil	White	2.25" (57,2 mm)	0.65" (16,5 mm)	0.81" (20,7 mm)	3	3
10011	054007-12873	350 kcmil	Red	2.38" (60,4 mm)	0.70" (17,8 mm)	0.88" (22,2 mm)	3	3
10014	054007-12899	500 kcmil	Brown	2.88" (73,2 mm)	0.84" (21,2 mm)	1.06" (27,0 mm)	3	3
10019	054007-12915	750 kcmil	Black	3.38" (85,8 mm)	1.03" (26,2 mm)	1.30" (33,0 mm)	3	3
10024	054007-12931	1000 kcmil	White	3.88" (98,5 mm)	1.17" (29,8 mm)	1.50" (38,1 mm)	3	3

## 3M™ Scotchlok™ Copper Connectors 11000 Series, Long Barrel, up to 35 kV

The 3M™ Scotchlok™ Connectors 11000 Series are used on copper conductors only. They are constructed of one-piece, seamless high-conductivity copper with a long barrel design and are electro tin-plated to resist electrolytic corrosion. (UL 486A Listed.)

Barrel Style	Long Barrel
Connector Base Metal	Copper
For use with	Copper Conductor Only
Max. Voltage	35 kV
RoHS 2011/65/EU	Yes
Agency Approval	



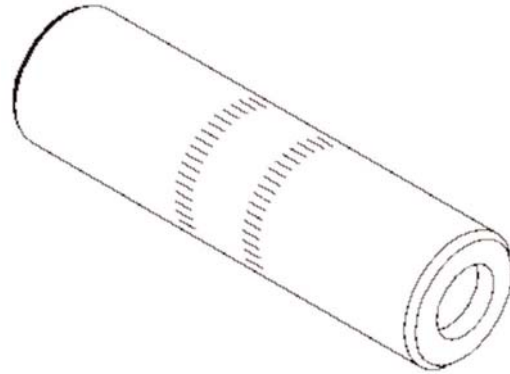
Order No.	UPC	Stranded Conductor Size	Color Code	Length	Inside Diameter (I.D.)	Outside Diameter (O.D.)	Min. Order Qty.	Case Qty.
11006	054007-12782	2/0 AWG	Black	3.13" (79,4 mm)	0.44" (11,2 mm)	0.56" (14,2 mm)	10	10
11007	054007-12808	3/0 AWG	Orange	3.13" (79,4 mm)	0.49" (12,4 mm)	0.62" (15,7 mm)	10	10
11008	054007-12824	4/0 AWG	Purple	3.38" (85,8 mm)	0.55" (13,9 mm)	0.69" (17,4 mm)	10	10
11009	054007-12840	250 kcmil	Yellow	3.38" (85,8 mm)	0.60" (15,1 mm)	0.75" (19,1 mm)	3	3
11010	054007-12865	300 kcmil	White	4.13" (104,8 mm)	0.65" (16,5 mm)	0.81" (20,7 mm)	3	3
11011	054007-12881	350 kcmil	Red	4.13" (104,8 mm)	0.70" (17,8 mm)	0.88" (22,2 mm)	3	3
11014	054007-12907	500 kcmil	Brown	4.63" (117,5 mm)	0.84" (21,3 mm)	1.06" (27,0 mm)	3	3
11019	054007-12923	750 kcmil	Black	5.88" (149,3 mm)	1.03" (26,2 mm)	1.30" (33,0 mm)	3	3
11024	054007-12949	1000 kcmil	White	6.13" (155,6 mm)	1.17" (29,8 mm)	1.50" (38,1 mm)	3	3



## 3M™ Scotchlok™ Aluminum Connectors 20000 Series (AL9CU) up to 35 kV

The 3M™ Scotchlok™ Connectors 20000 Series can be used with either copper or aluminum conductors. These aluminum connectors feature color coded end caps for identification. Contact aid provided in connector is compatible with poly/EPR insulations. Each connector is electro-tin plated to resist electrolytic corrosion, and have a solid center stop. (UL 486B Listed)

Barrel Style	Standard Barrel
Connector Base Metal	Aluminum
For use with	Aluminum or Copper Conductor
Max. Voltage	35 kV
RoHS 2011/65/EU	Yes
Agency Approval	

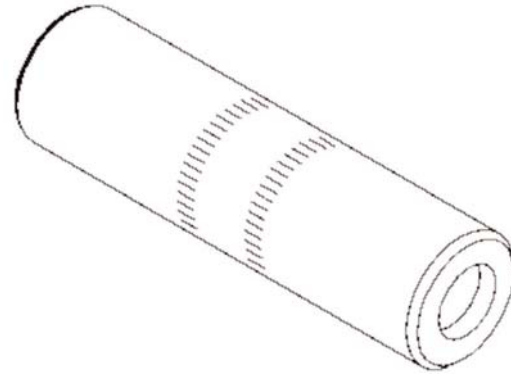


Order No.	UPC	Stranded Conductor Size	Color Code	Length	Inside Diameter (I.D.)	Outside Diameter (O.D.)	Min. Order Qty.	Case Qty.
20001	054007-13236	6 AWG	Gray	1.62" (41,1 mm)	0.20" (5,1 mm)	0.34" (8,8 mm)	50	50
20002	054007-13244	4 AWG	Green	2.12" (53,8 mm)	0.27" (6,7 mm)	0.48" (12,2 mm)	50	50
20003	054007-13251	2 AWG	Pink	2.00" (50,8 mm)	0.31" (7,8 mm)	0.53" (13,5 mm)	25	25
20004	054007-13269	1 AWG	Gold	2.00" (50,8 mm)	0.35" (8,9 mm)	0.53" (13,5 mm)	10	10
20005	054007-13277	1/0 AWG	Tan	2.12" (53,8 mm)	0.39" (9,9 mm)	0.64" (16,3 mm)	10	10
20006	054007-13285	2/0 AWG	Olive	2.31" (58,7 mm)	0.44" (11,2 mm)	0.69" (17,4 mm)	10	10
20007	054007-13293	3/0 AWG	Ruby	2.62" (66,5 mm)	0.48" (12,3 mm)	0.76" (19,3 mm)	10	10
20008	054007-13301	4/0 AWG	White	2.75" (69,9 mm)	0.54" (13,7 mm)	0.88" (22,2 mm)	10	10
20009	054007-13319	250 kcmil	Red	2.94" (74,7 mm)	0.59" (15,1 mm)	0.91" (23,0 mm)	3	3
20010	054007-13327	300 kcmil	Dark Blue	3.12" (79,2 mm)	0.65" (16,5 mm)	1.00" (25,4 mm)	3	3
20011	054007-13335	350 kcmil	Brown	3.38" (85,8 mm)	0.72" (18,3 mm)	1.12" (28,4 mm)	3	3
20012	054007-13343	400 kcmil	Green	3.75" (95,3 mm)	0.762" (19,4 mm)	1.18" (30,0 mm)	3	3
20014	054007-13350	500 kcmil	Pink	3.88" (98,6 mm)	0.843" (21,4 mm)	1.32" (33,5 mm)	3	3
20016	054007-13368	600 kcmil	Black	4.12" (104,6 mm)	0.92" (23,4 mm)	1.43" (36,3 mm)	3	3
20019	054007-13376	750 kcmil	Yellow	4.68" (118,8 mm)	1.03" (26,2 mm)	1.60" (40,6 mm)	3	3
20020	054007-13384	800 kcmil	Light Blue	4.75" (120,7 mm)	1.06" (26,9 mm)	1.65" (41,9 mm)	3	3
20024	054007-13392	1000 kcmil	Brown	5.25" (133,4 mm)	1.19" (30,3 mm)	1.84" (46,8 mm)	3	3

## 3M™ Aluminum Connectors CI Series, up to 35 kV

The 3M™ Aluminum Connectors CI Series are for splicing applications on aluminum or copper cable conductors. The CI Series aluminum connectors are specially designed for use with 3M™ QS, QS-II and QS-III Pre-molded Power Cable Splice Bodies. Each connector is electro-tin plated to resist electrolytic corrosion, and have a solid center stop. These connectors meet the requirements of ANSI C119.4.

Barrel Style	Standard Barrel
Connector Base Metal	Aluminum
For use with	Aluminum or Copper Conductor
Max. Voltage	35 kV
Agency Approval	ANSI C119.4

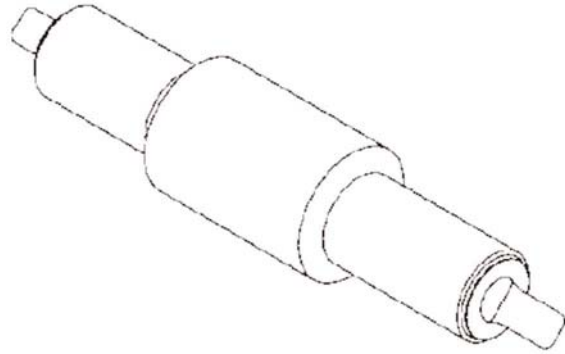


Order No.	UPC	Stranded Conductor Size	Solid Conductor Size	Compatible with	Length	Outside Diameter (O.D.)	Min. Order Qty.	Case Qty.
CI-1	054007-25628	1 AWG	N/A	Use with molded rubber splices 15 kV.	2.0" (50,8 mm)	0.64" (16,2 mm)	10	10
CI-2	054007-11651	2 AWG	1 AWG	Use with molded rubber splices 15 kV.	2.0" (50,8 mm)	0.64" (16,2 mm)	10	10
CI-21	054007-11856	2 AWG, 1 AWG	1 AWG, 1/0 AWG	Use with molded rubber splices 15 kV.	2.0" (50,8 mm)	0.64" (16,2 mm)	10	10
CI-21-840	054007-09136	2 AWG, 1 AWG	1 AWG, 1/0 AWG	Use with molded rubber splices 25 kV.	3.0" (76,2 mm)	0.91" (23,1 mm)	10	10
CI-22	054007-25636	4 AWG	2 AWG	Use with molded rubber splices 15 kV.	2.0" (50,8 mm)	0.64" (16,2 mm)	10	10
CI-1/0	054007-11867	1/0 AWG	N/A	Use with molded rubber splices 15 kV.	2.0" (50,8 mm)	0.64" (16,2 mm)	10	10
CI-1/0-840	054007-09137	1/0 AWG	N/A	Use with molded rubber splices 25 kV.	3.0" (76,2 mm)	0.91" (23,1 mm)	10	10
CI-2/0	054007-11875	2/0 AWG	N/A	Use with molded rubber splices 15 kV and 25 kV.	3.0" (76,2 mm)	0.91" (23,1 mm)	10	10
CI-3/0	054007-11883	3/0 AWG	N/A	Use with molded rubber splices 15 kV and 25 kV.	3.0" (76,2 mm)	0.91" (23,1 mm)	10	10
CI-4/0	054007-11891	4/0 AWG	N/A	Use with molded rubber splices 15 kV and 25 kV.	3.0" (76,2 mm)	0.91" (23,1 mm)	10	10
CI-250	054007-11909	250 kcmil	N/A	Use with molded rubber splices 15 kV and 25 kV.	3.75" (95,2 mm)	1.12" (28,4 mm)	10	10
CI-350	054007-11925	350 kcmil	N/A	Use with molded rubber splices 15 kV and 25 kV.	3.70" (94,0 mm)	1.12" (28,4 mm)	10	10
CI-450	054007-11933	500 kcmil (Compact)	N/A	Use with molded rubber splices 15 kV and 25 kV.	4.25" (107,9 mm)	1.32" (33,5 mm)	10	10
CI-500	054007-25644	500 kcmil	N/A	Use with molded rubber splices 15 kV and 25 kV.	4.25" (107,9 mm)	1.32" (33,5 mm)	10	10
CI-650	054007-11941	750 kcmil (Compact)	N/A	Use with molded rubber splices 15 kV and 25 kV.	4.66" (118,4 mm)	1.70" (43,0 mm)	10	10
CI-750	054007-25651	750 kcmil	N/A	Use with molded rubber splices 15 kV and 25 kV.	4.66" (118,4 mm)	1.59" (40,4 mm)	10	10

## 3M™ Aluminum Connectors CI-A Series, up to 35 kV

The 3M™ Connector CI-A series is used with the 3M™ QS-II Molded Rubber Inline Cable Splice 5420 and 5450 series as well as the 3M™ QS-II Molded Rubber Inline Cable Splice Kit 5461. Each connector is electro-tin plated to resist electrolytic corrosion.

Barrel Style	Standard Barrel
Connector Base Metal	Aluminum
For use with	Aluminum or Copper Conductor
Max. Voltage	35 kV



Order No.	UPC	Stranded Conductor Size	Solid Conductor Size	Compatible with	Outside Diameter (O.D.)	Min. Order Qty.	Case Qty.
CI-22A	054007-15868	N/A	2 AWG	5420 Series, 5461 splice kit, and 5450 Series	0.91" (23,1 mm)	10	10
CI-2A	054007-00721	2 AWG	1 AWG	5420 Series, 5461 splice kit, and 5450 Series	0.91" (23,1 mm)	10	10
CI-1A	054007-00722	1 AWG	1/0 AWG	5420 Series, 5461 splice kit, and 5450 Series	0.91" (23,1 mm)	10	10
CI-1/0A	054007-14176	1/0 AWG	N/A	5420 series, 5461 splice kit, and 5450 series	0.91" (23,1 mm)	10	10

## 3M™ Scotchlok™ Connectors 2000T-CU, up to 35 kV

The 3M™ Scotchlok™ Connectors 2000T-CU Series are copper inline sleeves for use with copper conductor cables of the same size and are specifically designed for use with PILC power cable. They can be used on concentric, compressed, and compact stranded conductors. A rounding die is recommended to round out the sector shape of the connector when used with sector shaped conductors. The 2000T-CU connectors, like all 2000T series connectors, have a solid center oil stop and meet ANSI Standard C-119.4. They are designed for use with splice kits from the 3M™ Cold Shrink Splice Kit QS-2000T Series, the 3M™ Cold Shrink Splice Kit QS-2000-3T Series, the 3M™ Cold Shrink CS500Pb Series, and the Scotch® Tape Splice Kits 5700 Series.

Barrel Style	Standard Barrel
Connector Base Metal	Copper
For use with	Copper PILC Conductor
Max. Voltage	35 kV
Agency Approval	ANSI Standard C-119.4



Order No.	UPC	Stranded Conductor Size	Length	Outside Diameter (O.D.)	Min. Order Qty.	Case Qty.
2000T-2-CU	054007-42247	2 AWG	5.32" (135,1 mm)	0.700" (17,8 mm)	9	9
2000T-2/0-CU	054007-42250	2/0 AWG	5.32" (135,1 mm)	0.700" (17,8 mm)	3	3
2000T-4/0-CU	054007-42252	4/0 AWG	5.25" (133,3 mm)	0.880" (22,3 mm)	3	3
2000T-250-CU	054007-42253	250 kcmil	5.25" (133,3 mm)	0.880" (22,3 mm)	3	3
2000T-500-CU	054007-42258	500 kcmil	6.90" (175,3 mm)	1.125" (28,6 mm)	3	3
2000T-750-CU	054007-42263	750 kcmil	6.90" (175,3 mm)	1.300" (33,0 mm)	3	3

## 3M™ Scotchlok™ Reducer Series Connectors 2000T-CU/AL, up to 35 kV

The 3M™ Scotchlok™ Reducer Series Connectors 2000T-CU/AL are aluminum inline sleeves that are applicable for both aluminum and copper conductors and specifically designed for use with PILC power cable. The barrel inner diameters on each end are different, allowing the connection of different size conductors. These connectors can be used on concentric, compressed, and compact stranded conductors. A rounding die is recommended to round out the sector shape of the connector when used with sector shaped conductors. The 2000T Reducer Series connectors, like all 2000T series connectors, have a solid center oil stop and meet ANSI Standard C-119.4. They are designed for use with splice kits from the 3M™ Scotchlok™ 2000T Series, the 3M™ Scotchlok™ 2000-3T Series, the 3M™ Cold Shrink Splice Kits Selection CS500Pb Series, and the Scotch® Tape Splice Kits 5700 Series. Each connector is electro-tin plated to resist electrolytic corrosion.

<b>Barrel Style</b>	Standard Barrel
<b>Connector Base Metal</b>	Aluminum
<b>For use with</b>	Aluminum or Copper PILC Conductor
<b>Max. Voltage</b>	35 kV
<b>Agency Approval</b>	ANSI Standard C-119.4

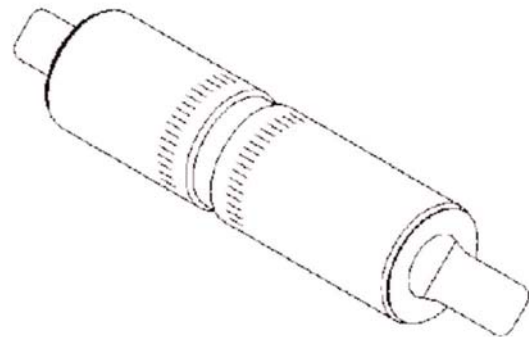


Order No.	UPC	Stranded Conductor Size	Length	Outside Diameter (O.D.)	Min. Order Qty.	Case Qty.
2000T 2-1/0 CU/AL	054007-42226	2-1/0 AWG	4.74" (120,4 mm)	0.640" (16,2 mm)	9	9
2000T 1/0-2/0 CU/AL	054007-42228	1/0-2/0 AWG	4.70" (119,4 mm)	0.910" (23,1 mm)	3	3
2000T 2/0-4/0 CU/AL	054007-42229	2/0-4/0 AWG	4.70" (119,4 mm)	0.910" (23,1 mm)	3	3
2000T 250-350 CU/AL	054007-42232	250-350 kcmil	4.70" (119,4 mm)	1.125" (28,6 mm)	3	3
2000T 350-500 CU/AL	054007-42234	350-500 kcmil	4.70" (119,4 mm)	1.320" (33,5 mm)	3	3
2000T 500-750 CU/AL	054007-42236	500-750 kcmil	6.25" (158,7 mm)	1.600" (40,6 mm)	3	3
2000T 500-1000 CU/AL	054007-42238	500-1000 kcmil	6.25" (158,7 mm)	1.625" (41,3 mm)	3	3
2000T 750-1000 CU/AL	054007-42243	750-1000 kcmil	6.25" (158,7 mm)	1.625" (41,3 mm)	3	3

## 3M™ Aluminum Transition Connectors CI-T Series, up to 35 kV

3M CI-T Series Connectors are for splicing applications on aluminum or copper cable where two different conductor sizes need to be joined. The CI Series aluminum connectors are specially designed for use with 3M pre-molded power cable splice bodies. Each connector is electro-tin plated to resist electrolytic corrosion.

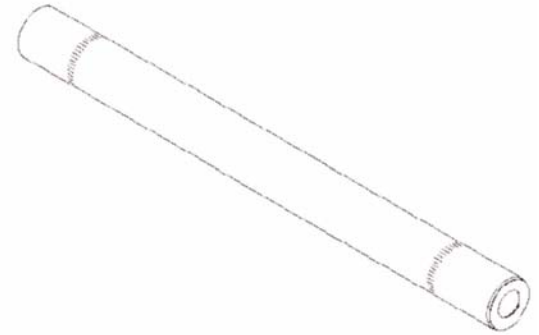
Barrel Style	Standard Barrel
Connector Base Metal	Aluminum
For use with	Aluminum or Copper Conductor
Max. Voltage	35 kV



Order No.	UPC	Conductor Size – Cable A – Stranded (Solid)	Conductor Size – Cable B – Stranded (Solid)	Outside Diameter (O.D.)	Compatible With	Min. Order Qty.	Case Qty.
CI-T-1	054007-11958	4 AWG (2 AWG )	1 AWG (1/0 AWG )	0.64" (16,2 mm)	3M™ Molded Rubber QS-II Cable Splice 5411 and 3M™ Molded Rubber QS-II Cable Splice 5501	10	10
CI-T-2	054007-11966	2 AWG (1 AWG )	1 AWG (1/0 AWG )	0.64" (16,2 mm)	3M™ Molded Rubber QS-II Cable Splice 5411 and 3M™ Molded Rubber QS-II Cable Splice 5501	10	10
CI-T-3	054007-11974	4 AWG (2 AWG)	1/0 AWG Stranded	0.64" (16,2 mm)	3M™ Molded Rubber QS-II Cable Splice 5411 and 3M™ Molded Rubber QS-II Cable Splice 5501	10	10
CI-T-4	054007-11982	2 AWG (1 AWG)	1/0 AWG Stranded	0.64" (16,2 mm)	3M™ Molded Rubber QS-II Cable Splice 5411 and 3M™ Molded Rubber QS-II Cable Splice 5501	10	10
CI-T-5	054007-11990	2 AWG (1 AWG)	4 AWG (2 AWG)	0.64" (16,2 mm)	3M™ Molded Rubber QS-II Cable Splice 5411 and 3M™ Molded Rubber QS-II Cable Splice 5501	10	10
CI-T-7	054007-41806	3/0 AWG Stranded	4/0 AWG Stranded	0.91" (23,1 mm)	3M™ Molded Rubber QS-II Cable Splice 5411 and 3M™ Molded Rubber QS-II Cable Splice 5501	10	10
CI-T-9	054007-44533	1 AWG (1/0 AWG)	1/0 AWG Stranded	0.64" (16,2 mm)	3M™ Molded Rubber QS-II Cable Splice 5411 and 3M™ Molded Rubber QS-II Cable Splice 5501	10	10

## 3M™ Aluminum Repair Connectors CIR Series

3M™ Aluminum Repair Connectors CIR Series are specially designed for use with 3M™ QS-II Repair Splice Kits. They are aluminum connectors for use on aluminum or copper cable conductors. When used with the appropriate splice kit, these connectors allow up to 6" (152 mm) of damaged cable conductor to be removed, virtually eliminating the need to splice in a new section of cable. CIR series connectors meet the requirements of ANSI C119.4. Each connector is electro-tin plated to resist electrolytic corrosion.



Connector Base Metal	Aluminum
For use with	Aluminum or Copper Conductor
Agency Approval	ANSI C119.4

Order No.	UPC	Conductor Size, Stranded	Conductor Size, Solid	Length	Outside Diameter (O.D.)	Compatible with	Case Qty.
CIR-2	054007-11966	2 AWG	-	8.0" (203,2 mm)	0.64" (16,2 mm)	5411R Splice Body	10
CIR-21	054007-09357	2 AWG, 1 AWG	1 AWG, 1/0 AWG	8.0" (203,2 mm)	0.64" (16,2 mm)	5411R Splice Body	10
CIR-21A	054007-50227	2 AWG, 1 AWG	1 AWG, 1/0 AWG	9.0" (228,6 mm)	0.91" (23,1 mm)	5451R Splice Body	10
CIR-22	054007-09356	4 AWG (220 mil insulation only)	2 AWG	8.0" (203,2 mm)	0.64" (16,2 mm)	5411R Splice Body	10
CIR-1/0	054007-09358	1/0 AWG	N/A	8.0" (203,2 mm)	0.64" (16,2 mm)	5411R Splice Body	10
CIR-1/0-840	054007-09137	1/0 AWG	N/A	9.0" (228,6 mm)	0.91" (23,1 mm)	5451R Splice Body	10
CIR-1/0A	054007-50226	1/0 AWG	2/0 AWG	9.0" (228,6 mm)	0.91" (23,1 mm)	5451R Splice Body	10
CIR-2/0	054007-41964	2/0 AWG (220 mil insulation only)	N/A	9.0" (228,6 mm)	0.91" (23,1 mm)	5412R Splice Body	10
CIR-3/0	054007-41965	3/0 AWG	-	9.0" (228,6 mm)	0.91" (23,1 mm)	5412R Splice Body	10
CIR-4/0	054007-50228	4/0 AWG	N/A	9.0" (228,6 mm)	0.91" (23,1 mm)	5412R Splice Body	10



## Connectors: Shearbolt Splice Connectors

### 3M™ Shearbolt Connector QCI Series

The 3M™ Shearbolt Connector QCI Series offer easy installation without crimp tools or dies and withstands the ANSI C119.4, Class 2 (partial tension) 40% pull out force required by IEEE-404. They connect copper and/or aluminum conductors.

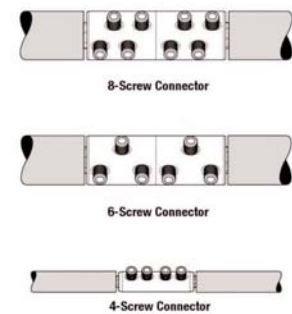
The bolts are designed to shear off just below the outer surface of the connector body to eliminate the need to file, whether you are connecting to American Wire Gauge conductors or metric conductors. These connectors can be used for applications up to 46 kV and can be packed in a kit with 3M™ Cold Shrink QS4 Integrated Splices, the 3M™ QS-III Splices or purchased separately. Each connector is electro-tin plated to resist electrolytic corrosion and contains a solid stop.

\* The 3M™ Splice Kits 5468A, 5536A, QS4-35JCN-350-1000, QS4-35SP-350-1000-BCA and QS4-35TS-350-1000 are sized to cover 35 kV 350–1000 kcmil. Therefore, two shearbolt connectors are required to cover the range.

\*\* Installer should verify that both cables are within the Insulation O.D. Range of the splice kit before using any given QCI connector.

† No centering rings used with this connector.

Barrel Style Shearbolt  
 Connector Base Metal Aluminum  
 For use with Copper or Aluminum Conductor  
 Max. Voltage 46 kV



Order No.	UPC	Stranded Conductor Size	Length w/ Centering Rings	Outside Diameter (O.D.)	3M Cold Shrink QS4 Integrated Splice Compatibility**	3M Standard Splice Kit QS-III Compatibility**	Case Qty.
QCI 2-250	051128-58537	2 AWG–250 kcmil	4.41" (112 mm)	1.10" (28 mm)	QS4-15JCN-2-4/0, QS4-15SP-2-4/0-BCA, QS4-15TS-2-4/0, QS4-25JCN-1-250, QS4-25SP-1-250-BCA, QS4-25TS-1-250	5415A, 5456A, 5513A, 5524A	3
QCI 1/0-350	051128-58538	1/0 AWG–350 kcmil	5.12" (130 mm)	1.30" (33 mm)	QS4-35JCN-1/0-350, QS4-35SP-1/0-350-BCA, QS4-35TS-1/0-350	5467A, 5535A	3
QCI 4/0-600	051128-58539	4/0 AWG–600 kcmil	5.75" (146 mm)	1.50" (38 mm)	QS4-15JCN-4/0-500, QS4-15SP-4/0-500-BCA, QS4-15TS-4/0-500, QS4-15JCN-350-750, QS4-15SP-350-750-BCA, QS4-15TS-350-750, QS4-25JCN-350-750, QS4-25SP-350-750-BCA, QS4-25TS-350-750	5416A, 5417A, 5457A, 5514A, 5515A, 5525A	1
QCI 350-750	051128-58540	350–750 kcmil	6.93" (176 mm)	1.65" (42 mm)	QS4-15JCN-350-750, QS4-15SP-350-750-BCA, QS4-15TS-350-750, QS4-15JCN-500-1000, QS4-15SP-500-1000-BCA, QS4-15TS-500-1000, QS4-25JCN-350-750, QS4-25SP-350-750, QS4-25TS-350-750, QS4-35JCN-350-1000*, QS4-35SP-350-1000-BCA*, QS4-35TS-350-1000*	5417A, 5418A, 5457A, *5468A, 5515A, 5516A, 5525A, *5536A	1
QCI 500-1000	051128-58541	500–1000 kcmil	7.83" (199 mm)	2.05" (52 mm)	QS4-15JCN-500-1000, QS4-15SP-500-1000-BCA, QS4-15TS-500-1000, QS4-25JCN-500-1000, QS4-25SP-500-1000-BCA, QS4-25TS-500-1000, QS4-35JCN-350-1000, QS4-35SP-350-1000-BCA, QS4-35TS-350-1000	5418A, 5458A, *5468A, 5516A, 5526A, *5536A	1
QCI 1000-1250†	051128-59488	1000–1250 kcmil	8.25" (210 mm)†	2.10" (53 mm)	–	5468A	1



# Cable Ties and Accessories

3M™ Cable Ties are designed to secure wire bundles and harness components quickly, without slipping. Featuring a self-locking head and a locking mechanism, they are designed to handle temperatures up to 185°F (85°C). Available in several strengths and lengths, including screw mount. Most are plenum rated and USA made.



## Cable Ties Part Number Naming Convention

The product name has been changed to better identify the characteristics of each tie.

**CT D C T X - P**

Example:

Catalog Number: CT4BK18-C

**CT                    D                    C                    T                    X                    -                    P**

CT = Cable Ties CTB = Mounting Bases	D = Dimensions (inches) Ties = Length Bases = Length X Width	C = Color BK = Black NT = Natural RD = Red BG = Beige	T* = Tensile (pounds) 18 = Miniature 40 = Intermediate 50 = Standard 120 = Light Heavy Duty 175 = Heavy Duty	X = Special Features _ = Standard Tie (Blank) S = Screw Mount A = Adhesive Mount	P = Package Size (Roman Numeral) M = 1,000 D = 500 C = 100 L = 50
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*\*Cable Tie Base Part Numbers do not include Tensile.*

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## 3M™ Standard Cable Ties

### 3M™ Miniature Ties (18 lb., 80 N) - Plenum Rated

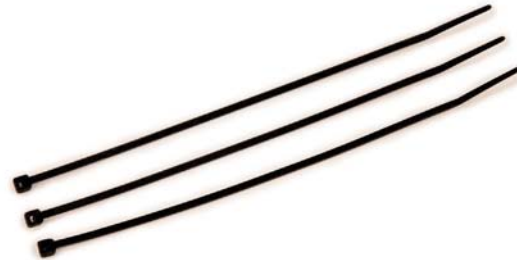
3M™ Miniature Cable Ties are small lightweight cable ties for use in holding applications up to 18 lb. Ties come in UV-resistant black for outdoor and indoor use as well as natural (white) nylon for an economical solution indoors.

Tensile Strength 18 lb (80 N)  
 Min. Operating Temp. -40°F (-40°C)  
 Max. Operating Temp. 185°F (85°C)  
 Min. Installation Temp. 32°F (0°C)  
 RoHS 2011/65/EU Yes

Agency Approvals





Country of Origin



Order No.	UPC	Color	UV Resistance	Length	Width	Thickness	Max. Bundle Dia.	Tensile lbf (N)	Items per Bag (Case)
CT4BK18-C	051128-59273	Black	Yes	4.10" (104 mm)	0.10" (3,0 mm)	0.04" (1,0 mm)	0.75" (19,1 mm)	18 (80)	100 (1000)
CT4BK18-M	051128-59274	Black	Yes	4.10" (104 mm)	0.10" (3,0 mm)	0.04" (1,0 mm)	0.75" (19,1 mm)	18 (80)	1000 (10,000)
CT4NT18-C	051128-59275	Natural	No	4.10" (104 mm)	0.10" (3,0 mm)	0.04" (1,0 mm)	0.75" (19,1 mm)	18 (80)	100 (1000)
CT4NT18-M	051128-59276	Natural	No	4.10" (104 mm)	0.10" (3,0 mm)	0.04" (1,0 mm)	0.75" (19,1 mm)	18 (80)	1000 (10,000)
CT6BK18-C	051128-59277	Black	Yes	6.10" (155 mm)	0.10" (3,0 mm)	0.05" (1,3 mm)	1.25" (31,8 mm)	18 (80)	100 (1000)
CT6NT18-C	051128-59278	Natural	No	6.10" (155 mm)	0.10" (3,0 mm)	0.05" (1,3 mm)	1.25" (31,8 mm)	18 (80)	100 (1000)
CT6NT18-M	051128-59279	Natural	No	6.10" (155 mm)	0.10" (3,0 mm)	0.05" (1,3 mm)	1.25" (31,8 mm)	18 (80)	1000 (10,000)
CT8BK18-C	051128-59280	Black	Yes	8.10" (206 mm)	0.10" (3,0 mm)	0.05" (1,3 mm)	2.00" (50,8 mm)	18 (80)	100 (1000)
CT8BK18-M	051128-59281	Black	Yes	8.10" (206 mm)	0.10" (3,0 mm)	0.05" (1,3 mm)	2.00" (50,8 mm)	18 (80)	1000 (10,000)
CT8NT18-C	051128-59282	Natural	No	8.10" (206 mm)	0.10" (3,0 mm)	0.05" (1,3 mm)	2.00" (50,8 mm)	18 (80)	100 (1000)
CT8NT18-M	051128-59283	Natural	No	8.10" (206 mm)	0.10" (3,0 mm)	0.05" (1,3 mm)	2.00" (50,8 mm)	18 (80)	1000 (10,000)

## 3M™ Intermediate Ties (30-40 lb., 135-180 N) - Plenum Rated

3M™ Intermediate Cable Ties are a great solution for holding applications up to 40 lb. They provide an economical alternative to standard cable ties when higher tensile strength is not required. Ties come in UV-resistant black for outdoor and indoor use as well as natural (white) nylon for an economical solution indoors.

<b>Tensile Strength</b>	30-40 lb (135-180 N)
<b>Min. Operating Temp.</b>	-40°F (-40°C)
<b>Max. Operating Temp.</b>	185°F (85°C)
<b>Min. Installation Temp.</b>	-4°F (-20°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	
<b>Country of Origin</b>	



Order No.	UPC	Color	UV Resistance	Length	Width	Thickness	Max. Bundle Dia.	Tensile lbf (N)	Items per Bag (Case)
CT6BK40-C	051128-59284	Black	Yes	5.80" (147 mm)	0.14" (3,6 mm)	0.05" (1,3 mm)	1.25" (31,8 mm)	30 (135)	100 (1000)
CT6BK40-M	051128-59285	Black	Yes	5.80" (147 mm)	0.14" (3,6 mm)	0.05" (1,3 mm)	1.25" (31,8 mm)	30 (135)	1000 (10,000)
CT6NT40-C	051128-59286	Natural	No	5.80" (147 mm)	0.14" (3,6 mm)	0.05" (1,3 mm)	1.25" (31,8 mm)	30 (135)	100 (1000)
CT6NT40-M	051128-59287	Natural	No	5.80" (147 mm)	0.14" (3,6 mm)	0.05" (1,3 mm)	1.25" (31,8 mm)	30 (135)	1000 (10,000)
CT8BK40-C	051128-59288	Black	Yes	8.90" (226 mm)	0.14" (3,6 mm)	0.05" (1,3 mm)	2.00" (50,8 mm)	30 (135)	100 (1000)
CT8BK40-M	051128-59289	Black	Yes	8.90" (226 mm)	0.14" (3,6 mm)	0.05" (1,3 mm)	2.00" (50,8 mm)	30 (135)	1000 (10,000)
CT8NT40-C	051128-59290	Natural	No	8.90" (226 mm)	0.14" (3,6 mm)	0.05" (1,3 mm)	2.00" (50,8 mm)	30 (135)	100 (1000)
CT8NT40-M	051128-59291	Natural	No	8.90" (226 mm)	0.14" (3,6 mm)	0.05" (1,3 mm)	2.00" (50,8 mm)	30 (135)	1000 (10,000)

## 3M™ Standard Cable Ties

### 3M™ Standard Ties (50 lb., 220 N) - Plenum Rated

3M™ Standard Cable Ties are the most common sized ties and provide a standard level of performance for general-use holding applications up to 50 lb. Ties come in UV-resistant black for outdoor and indoor use as well as natural (white) nylon for an economical solution indoors.

Tensile Strength 50 lb (220 N)  
 Min. Operating Temp. -40°F (-40°C)  
 Max. Operating Temp. 185°F (85°C)  
 Min. Installation Temp. -4°F (-20°C)  
 RoHS 2011/65/EU Yes

Agency Approvals



Country of Origin



Order No.	UPC	Color	UV Resistance	Length	Width	Thickness	Max. Bundle Dia.	Tensile lbf. (N)	Items per Bag (Case)
CT8BK50-C	051128-59293	Black	Yes	7.60" (193 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	1.87" (47,5 mm)	50 (220)	100 (1000)
CT8BK50-M	051128-59294	Black	Yes	7.60" (193 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	1.87" (47,5 mm)	50 (220)	1000 (10,000)
CT8NT50-C	051128-59297	Natural	No	7.60" (193 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	1.87" (47,5 mm)	50 (220)	100 (1000)
CT8NT50-M	051128-59299	Natural	No	7.60" (193 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	1.87" (47,5 mm)	50 (220)	1000 (10,000)
CT8RD50-C	051128-59559	Red	No	7.60" (193 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	2.00" (50,8 mm)	50 (220)	100 (1000)
CT11BK50-C	051128-59300	Black	Yes	11.10" (282 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	3.00" (76,2 mm)	50 (220)	100 (1000)
CT11BK50-D	051128-59301	Black	Yes	11.10" (282 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	3.00" (76,2 mm)	50 (220)	500 (5000)
CT11NT50-C	051128-59302	Natural	No	11.10" (282 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	3.00" (76,2 mm)	50 (220)	100 (1000)
CT11NT50-D	051128-59303	Natural	No	11.10" (282 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	3.00" (76,2 mm)	50 (220)	500 (5000)
CT11RD50-C	051128-59560	Red	No	11.10" (282 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	3.00" (76,2 mm)	50 (220)	100 (1000)
CT15BK50-C	051128-59304	Black	Yes	14.60" (371 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	4.00" (101,6 mm)	50 (220)	100 (500)
CT15BK50-D	051128-59305	Black	Yes	14.60" (371 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	4.00" (101,6 mm)	50 (220)	500 (2500)
CT15NT50-C	051128-59307	Natural	No	14.60" (371 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	4.00" (101,6 mm)	50 (220)	100 (500)
CT15NT50-D	051128-59309	Natural	No	14.60" (371 mm)	0.18" (4,6 mm)	0.05" (1,3 mm)	4.00" (101,6 mm)	50 (220)	500 (2500)



## 3M™ Light Heavy Duty Ties (120 lb., 530 N) - Plenum Rated

3M™ Light Heavy Duty Cable Ties are commonly used in more demanding commercial and industrial jobs when extra strength is required to hold up to 120 lb. Ties come in UV-resistant black for outdoor and indoor use as well as natural (white) nylon for an economical solution indoors.

**Tensile Strength** 120 lb (530 N)  
**Min. Operating Temp.** -40°F (-40°C)  
**Max. Operating Temp.** 185°F (85°C)  
**Min. Installation Temp.** -4°F (-20°C)  
**RoHS 2011/65/EU** Yes

**Agency Approvals**



**Country of Origin**



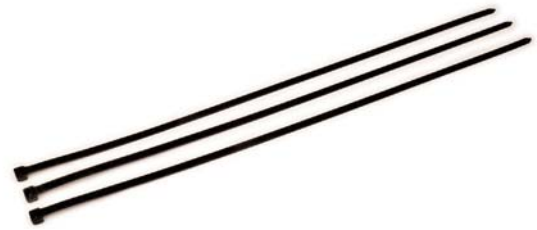
Order No.	UPC	Color	UV Resistance	Length	Width	Thickness	Max. Bundle Dia.	Tensile lbf (N)	Items per Bag (Case)
CT8BK120-L	051128-59310	Black	Yes	9.00" (229 mm)	0.30" (7,6 mm)	0.07" (1,8 mm)	2.00" (50,8 mm)	120 (530)	50 (500)
CT8NT120-L	051128-59311	Natural	No	9.00" (229 mm)	0.30" (7,6 mm)	0.07" (1,8 mm)	2.00" (50,8 mm)	120 (530)	50 (500)
CT15BK120-C	051128-59312	Black	Yes	15.00" (381 mm)	0.30" (7,6 mm)	0.07" (1,8 mm)	4.00" (101,6 mm)	120 (530)	100 (500)
CT15BK120-D	051128-59313	Black	Yes	15.00" (381 mm)	0.30" (7,6 mm)	0.07" (1,8 mm)	4.00" (101,6 mm)	120 (530)	500 (2500)
CT15NT120-C	051128-59315	Natural	No	15.00" (381 mm)	0.30" (7,6 mm)	0.07" (1,8 mm)	4.00" (101,6 mm)	120 (530)	100 (500)
CT15NT120-D	051128-59317	Natural	No	15.00" (381 mm)	0.30" (7,6 mm)	0.07" (1,8 mm)	4.00" (101,6 mm)	120 (530)	500 (2500)

## 3M™ Standard Cable Ties









### 3M™ Heavy Duty Ties (175 lb., 800 N) - Plenum Rated

3M™ Heavy Duty Cable Ties provide an added level of strength plus a larger bundle diameter for heavy duty jobs up to 175 lb. Ties come in UV-resistant black for outdoor and indoor use as well as natural (white) nylon for an economical solution indoors.

The 24" and 36" ties are also suitable for use with UL non-metallic air ducts and air connectors. (Plenum)



<b>Tensile Strength</b>	175 lb (800 N)
<b>Min. Operating Temp.</b>	32°F (0°C)
<b>Max. Operating Temp.</b>	185°F (85°C)
<b>Min. Installation Temp.</b>	32°F (0°C)
<b>RoHS 2011/65/EU</b>	Yes

	CT24BK175-L	CT24NT175-L	CT36BK175-L
UPC	051128-59318	051128-59319	051128-59320
Color	Black	Natural	Black
UV Resistance	Yes	No	Yes
Length	24.00" (610 mm)	24.00" (610 mm)	36.00" (914 mm)
Width	0.34" (8,6 mm)	0.34" (8,6 mm)	0.34" (8,6 mm)
Thickness	0.09" (2,3 mm)	0.09" (2,3 mm)	0.09" (2,3 mm)
Max. Bundle Dia.	7.20" (183 mm)	7.20" (183 mm)	11.00" (279 mm)
Tensile lbf (N)	175 (800)	175 (800)	175 (800)
Items per Bag (Case)	50 (500)	50 (500)	50 (500)
Agency Approval			
Country of Origin			
	CT36NT175-L	CT48BK175-L	CT48NT175-L
UPC	051128-59321	051128-59322	051128-59323
Color	Natural	Black	Natural
UV Resistance	No	Yes	No
Length	36.00" (914 mm)	47.90" (1217 mm)	47.90" (1217 mm)
Width	0.34" (8,6 mm)	0.36" (9,1 mm)	0.36" (9,1 mm)
Thickness	0.09" (2,3 mm)	0.07" (1,8 mm)	0.07" (1,8 mm)
Max. Bundle Dia.	11.00" (279 mm)	14.60" (372 mm)	14.60" (372 mm)
Tensile lbf (N)	175 (800)	175 (800)	175 (800)
Items per Bag (Case)	50 (500)	50 (500)	50 (500)
Agency Approval		UL Pending - Not Plenum Rated	UL Pending - Not Plenum Rated
Country of Origin		-	-



## 3M™ Standard Cable Ties

### 3M™ Screw Mountable - Plenum Rated

3M™ Screw Mount Cable Ties allow precise and controlled positioning of standard and heavy duty cables up to 120 lb. The easy-to-use ties can be quickly mounted to walls and structures with screws, bolts or rivets for added security. Ties come in UV-resistant black for outdoor and indoor use as well as natural (white) nylon for an economical solution indoors.

3M™ Screw Mount Cable Ties are suitable for use in air handling spaces (plenum).

NOTE: UL Listing is pending at this time for **CT15NT120S-D**.

Stud Size	10
Min. Operating Temp.	-40°F (-40°C)
Max. Operating Temp.	185°F (85°C)
Min. Installation Temp.	-
RoHS 2011/65/EU	Yes
Agency Approvals	
Country of Origin	





Order No.	UPC	Color	UV Resistance	Length	Width	Thickness	Max. Bundle Dia.	Tensile lbf (N)	Items per Bag (Case)
CT8BK50S-C	051128-59292	Black	Yes	8.60" (218 mm)	0.18" (4,6 mm)	0.06" (1,5 mm)	2.00" (50,8 mm)	50 (220)	100 (1000)
CT8BK50S-M	051128-59295	Black	Yes	8.60" (218 mm)	0.18" (4,6 mm)	0.06" (1,5 mm)	2.00" (50,8 mm)	50 (220)	1000 (10,000)
CT8NT50S-C	051128-59296	Natural	No	8.60" (218 mm)	0.18" (4,6 mm)	0.06" (1,5 mm)	2.00" (50,8 mm)	50 (220)	100 (1000)
CT8NT50S-M	051128-59298	Natural	No	8.60" (218 mm)	0.18" (4,6 mm)	0.06" (1,5 mm)	2.00" (50,8 mm)	50 (220)	1000 (10,000)
CT15NT50S-L	051128-59306	Natural	No	15.10" (384 mm)	0.18" (4,6 mm)	0.06" (1,5 mm)	4.00" (102,6 mm)	50 (220)	50 (500)
CT15NT50S-D	051128-59308	Natural	No	15.10" (384 mm)	0.18" (4,6 mm)	0.06" (1,5 mm)	4.00" (102,0 mm)	50 (220)	500 (2500)
CT15NT120S-L	051128-59314	Natural	No	15.70" (399 mm)	0.30" (7,6 mm)	0.07" (1,8 mm)	4.00" (102,0 mm)	120 (530)	50 (500)
CT15NT120S-D	051128-59316	Natural	No	15.70" (399 mm)	0.30" (7,6 mm)	0.07" (1,8 mm)	4.00" (102,0 mm)	120 (530)	500 (2500)

## 3M™ Standard Cable Ties

### 3M™ Standard Cable Ties - Assortment Pack

3M™ Cable Tie Assortment Pack contains 100 of our most commonly used ties. Includes three sizes, four lengths and both colors.

Min. Operating Temp.	-40°F (-40°C)
Max. Operating Temp.	185°F (85°C)
Min. Installation Temp.	Varies
RoHS 2011/65/EU	Yes
Agency Approvals	
Country of Origin	




Order No.	UPC	Product Name	Description	Items per Pack	Items per Case
CT06220	051128-59324	3M™ Cable Tie Assortment Pack 06220	Contains 15 each of natural nylon 6.6. ties: CT4NT18-, CT6NT30-, CT8NT50-, and CT11NT50- Contains 10 each of black, weather-resistant nylon 6.6 ties: CT4BK18-, CT6BK30-, CT8BK50-, and CT11BK50-	100	1000


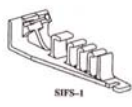
## 3M™ Cable Bases and Stackers

### 3M™ Cable Stackers

3M™ Cable Stackers organize cable runs and aid in identification, putting an end to tangled wires and the potential heating that could occur when cables are held together tightly under a single fastener. Easy installation simplifies compliance with the spacing requirements of the National Electrical Code, article 300-4-(d) and the Canadian Electric Code Part I, Section 12-516. Made from reclaimed plastic.

Cable Tie Type	Stacker
Color	White
RoHS 2011/65/EU	Yes
Country of Origin	

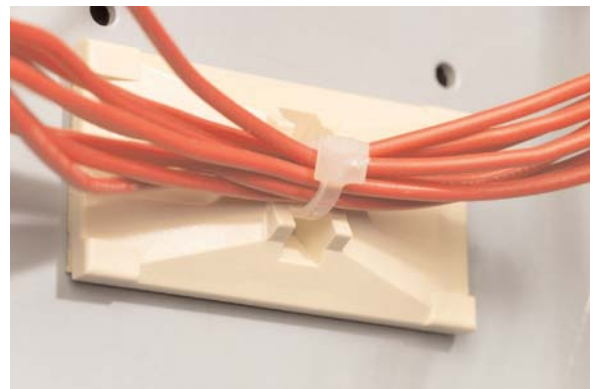


	SI-1	SIFS-1
		
UPC	054007-49554	054007-49918
Product Name	3M™ Cable Stacker SI-1	3M™ Furring Strip Cable Stacker SIFS-1
Description	The 3M™ Cable Stacker SI-1 centers multiple cables on a 2 X 4 framing member.	The 3M™ Furring Strip Cable Stacker SIFS-1 routes, fastens, and supports CATV, telephone, security and instrumentation cables.
Items per Bag	25	25
Items per Case	250	250

## 3M™ Cable Tie Mounting Bases

3M™ Cable Tie Bases make mounting wire and cable a quick, easy and secure process. 2-way and 4-way configurations as well as adhesive-backed and screw mount options offer flexible mounting alternatives to meet a variety of applications.

RoHS 2011/65/EU Yes



	CTB2X1BGA-C	CTB1X1BGA-C	CTB75X75NTA-C	CTB75X75BKA-C
UPC	054007-06290	054007-06292	054007-06294	054007-06295
Material	ABS	ABS	Nylon	Nylon
Mount Type	Foam Backed Adhesive	Foam Backed Adhesive (Screw Mount)	Foam Backed Adhesive	Foam Backed Adhesive
Color	Beige	Beige	Natural	Black (UV Resistant)
Length	2.0" (51 mm)	1.0" (25 mm)	0.74" (19 mm)	0.74" (19 mm)
Width	1.0" (25 mm)	1.2" (25 mm)	0.74" (19 mm)	0.74" (19 mm)
Height	0.35" (8,9 mm)	0.15" (3,8 mm)	0.22" (5,6 mm)	0.22" (5,6 mm)
Slot Width	0.21" (5,3 mm)	0.21" (5,3 mm)	0.21" (5,3 mm)	0.21" (5,3 mm)
Slot Height	0.18" (4,5 mm)	0.06" (1,5 mm)	0.06" (1,5 mm)	0.06" (1,5 mm)
Items per Bag	100	100	100	100
Items per Case	500	500	500	500
Country of Origin				
	CTB1X1NTA-C	CTB1X1BKA-C	CTB60X41NTS-C	CTB87X62NTS-C
UPC	054007-06296	054007-06297	054007-95667	054007-95668
Material	Nylon	Nylon	Nylon	Nylon
Mount Type	Foam Backed Adhesive	Foam Backed Adhesive	Screw Mount	Screw Mount
Color	Natural	Black (UV Resistant)	Natural	Natural
Length	0.99" (25 mm)	0.99" (25 mm)	0.60" (15 mm)	0.87" (22 mm)
Width	0.99" (25 mm)	0.99" (25 mm)	0.41" (10 mm)	0.62" (16 mm)
Height	0.22" (5,6 mm)	0.22" (5,6 mm)	0.28" (7,0 mm)	0.38" (10 mm)
Slot Width	0.21" (5,3 mm)	0.21" (5,3 mm)	0.21" (5,3 mm)	0.35" (8,9 mm)
Slot Height	0.06" (1,5 mm)	0.06" (1,5 mm)	0.06" (1,5 mm)	0.10" (2,5 mm)
Items per Bag	100	100	100	100
Items per Case	500	500	500	500
Country of Origin			-	-

## 3M™ Hook and Loop Reclosable Fasteners

### 3M™ Hook and Loop Reclosable Fasteners

3M™ Hook and Loop Reclosable Fasteners permit thousands of easy openings and secure closings. Stiff hooks on one side mesh with pliable loops on the other side to provide secure closure.

RoHS 2011/65/EU Yes



Order No.	UPC	Product Name	Description	Rolls per Case
SJ-3526N-Hook-Black-1-1/2	021200-86383	3M™ Fastener Hook SJ3526	Hook (Black) 1 1/2"x50 yd	2
SJ3526N-White-2"x50yd	021200-86247	3M™ Fastener Hook SJ3526	Hook (White) 2"x50yd	2
SJ3527N-1"x50yd-White	021200-86253	3M™ Fastener Loop SJ3527	Loop (White) 1"x50 yd Bulk	3
SJ3527N-2"x50yd-Black	021200-86255	3M™ Fastener Loop SJ3527	Loop (Black) 2"x50 yd Bulk	2
SJ3527N-2"x50yd-White	021200-86256	3M™ Fastener Loop SJ3527	Loop (White) 2"x50 yd Bulk	2
SJ3526N-Beige-1"x50yd	021200-86242	3M™ Fastener Hook SJ3526	Hook (Beige) 1"x50yd	3
SJ3526N-Beige-2"x50yd	021200-86246	3M™ Fastener Hook SJ3526	Hook (Beige) 2"x50yd	2
SJ3526N-Beige-5/8"x50yd	021200-86239	3M™ Fastener Hook SJ3526	Hook (Beige) 5/8"x50yd	4
SJ3401-1"x50yd-Black	021200-62538	3M™ Fastener Loop SJ3401	Loop (Black) 1"x50 yd	12
SJ3401-1"x50yd-White	021200-62539	3M™ Fastener Loop SJ3401	Loop (White) 1"x50 yd	12
SJ3401-2"x50yd	021200-62544	3M™ Fastener Loop SJ3401	Loop (Black) 2"x50 yd	6
SJ3402-1"x50yd-Black	021200-62553	3M™ Fastener Hook SJ3402	Hook (Black) 1"x50 yd	12
SJ3402-1"x50yd-White	021200-62554	3M™ Fastener Hook SJ3402	Hook (White) 1"x50 yd	12
SJ3402-2"x50yd	021200-62559	3M™ Fastener Hook SJ3402	Hook (Black) 2"x50 yd	6
SJ3402-3/4"x50yd-Black	021200-62550	3M™ Fastener Hook SJ3402	Hook (Black) 3/4"x50 yd	16
SJ-3522	021200-86236	3M™ Fastener Plasticizer Resistant Hook SJ3522	Hook (Black) 1"x50 yd	3
SJ-3523	021200-86238	3M™ Fastener Plasticizer Resistant Loop SJ3523	Loop (Black) 1"x50 yd	3
SJ3526N-2"x50yd	021200-86245	3M™ Fastener Hook SJ3526	Hook (Black) 2"x50 yd	2
SJ3526N-Black-5/8"x50yd	021200-86240	3M™ Fastener Hook SJ3526	Hook (Black) 5/8"x50yd	4
SJ-3526N-Hook-Black-1"	021200-86243	3M™ Fastener Hook SJ3526	Hook (Black) 1"x50 yd	3
SJ-3526N-Hook-White-5/8"	021200-86241	3M™ Fastener Hook SJ3526	Hook (White) 5/8"x50 yd	4
SJ3527N-Beige-1"x50yd	021200-86251	3M™ Fastener Loop SJ3527	Loop (Beige) 1"x50yd	3
SJ3527N-Beige-2"x50yd	021200-86254	3M™ Fastener Loop SJ3527	Loop (Beige) 2"x50yd	2
SJ3527N-Beige-5/8"x50yd	021200-86248	3M™ Fastener Loop SJ3527	Loop (Beige) 5/8"x50yd	4
SJ3527N-Black-1.5"x50yd	021200-86167	3M™ Fastener Loop SJ3527	Loop (Black) 1.5"x50yd	2
SJ-3527N-Loop-Black-1"	021200-86252	3M™ Fastener Loop SJ3527	Loop (Black) 1"x50 yd	3
SJ3527N-White-5/8"x50yd	021200-86250	3M™ Fastener Loop SJ3527	Loop (White) 5/8"x50yd	4
SJ-3532N-Hook-Black-1"	021200-86259	3M™ Fastener Hook SJ3532	Hook (Black) 1"x50 yd	3
SJ-3533N-Loop-Black-1"	021200-86266	3M™ Fastener Loop SJ3533	Loop (Black) 1"x50 yd	3
SJ-3571-1"x50yd-Black	021200-86285	3M™ Fastener Loop SJ3571	Loop (Black) 1"x50 yd	3
SJ3571-1"x50yd-White	021200-87277	3M™ Fastener Loop SJ3571	Loop (White) 1"x50 yd	3
SJ3571-5/8"x50yd-Black	021200-86289	3M™ Fastener Loop SJ3571	Loop (Black) 5/8"x50 yd	4
SJ3571-White-2"x50yd	021200-86467	3M™ Fastener Loop SJ3571	Loop (White) 2"x50yd	2
SJ-3572-1"x50yd-Black	021200-86286	3M™ Fastener Hook SJ3572	Hook (Black) 1"x50 yd	3
SJ3572-2"x50yd-Black	021200-86377	3M™ Fastener Hook SJ3572	Hook (Black) 2"x50 yd	2
SJ3572-5/8"x50yd-Black	021200-86290	3M™ Fastener Hook SJ3572	Hook (Black) 5/8"x50 yd	4
MP3401/MP3402-Black	051131-06465	3M™ Scotchmate™ Reclosable Fastener MP3401	Reclosable Fastener (Black) 1"x5 yd	5
MP-3526/27N-Black	051131-06481	3M™ Scotchmate™ Reclosable Fastener MP3526/MP3527	Hook & Loop Fastener (Black) 1"x5 yd Mini Pack, Roll	5



## 3M™ Hook and Loop Reclosable Fasteners

### 3M™ Hook and Loop Reclosable Fasteners (continued)

Order No.	UPC	Product Name	Description	Rolls per Case
MP-3526/27N-White	051131-06488	3M™ Scotchmate™ Reclosable Fastener MP3526/MP3527	Hook & Loop Fastener (White) 1"x5 yd Mini Pack, Roll	5

## 3M™ Dual Lock™ Reclosable Fasteners

### 3M™ Dual Lock™ Reclosable Fasteners

Strong. Hidden. Removable. 3M™ Dual Lock™ Reclosable Fasteners are a fastening solution that can replace screws, bolts and rivets. The fasteners contain hundreds of mushroom-shaped stems that audibly “SNAP” together to form a secure attachment with strong adhesive backings that adhere to your substrate.

RoHS 2011/65/EU Yes



Order No.	UPC	Product Name	Description	Rolls per Case
MP-3541/42-Black	051131-06483	3M™ Dual Lock™ Reclosable Fastener MP3541/MP3542 400/170	Reclosable Fastener (Black) 400 stems per square inch, 1"x5 yd	5
MP-3551/52-Black	051131-06484	3M™ Dual Lock™ Reclosable Fastener MP3551/MP3552 400/170	Reclosable Fastener (Black) 400 stems per square inch., 1"x5 yd	5
MP-3560-Clear	051131-06463	3M™ Dual Lock™ Reclosable Fastener MP3560 250	Reclosable Fastener (Clear) 250 stems per square inch, 1"x5 yd	5
SJ-3463	021200-24993	3M™ Dual Lock™ Reclosable Fastener SJ3463 400	Reclosable Fastener (Black) rigid backed circle with hole, 400 stems per square inch, 13/16" diameter with 0.16 in hole.	1000
SJ3540-1"x50yd-Black	021200-65812	3M™ Dual Lock™ Reclosable Fastener 250 SJ3540	Reclosable Fastener (Black) 250 stems per square inch, 1"x50 yd	2
SJ-3541-1"x50yd-Black	021200-86277	3M™ Dual Lock™ Reclosable Fastener 400 SJ3541	Reclosable Fastener (Black) 400 stems per square inch, 1"x50 yd	2
SJ-3542-1"x50yd-Black	021200-86309	3M™ Dual Lock™ Reclosable Fastener SJ3542 170	Reclosable Fastener (Black) 170 stems per square inch, 1"x50 yd	2
SJ-3560-1"x50yd-Clear	021200-86282	3M™ Dual Lock™ Reclosable Fastener 250 SJ3560	Reclosable Fastener (Clear) 250 stems per square inch, 1"x50 yd	2
SJ-3748	021200-63628	3M™ Dual Lock™ Reclosable Fastener 400 SJ3748 Black	Pop-in, Christmas tree style reclosable fastener with a 16.2 mm stud, 400 stems per square inch, 1 inch x 1 inch.	5000
SJ-3755	021200-24129	3M™ Dual Lock™ Reclosable Fastener 250 SJ3755 Black	Black, polypropylene reclosable fastener with rigid backing, rigid backed circle with one hole, 250 stems per square inch, 1 1/8 inch (28.5 mm) outside diameter.	1000
SJ-3762	021200-24131	3M™ Dual Lock™ Reclosable Fastener 400 SJ3762 Black	Black, polypropylene reclosable fastener with rigid backing, rigid backed circle with one hole, 400 stems per square inch, 1 1/8 inch (28.5 mm) outside diameter.	1000
SJ-3767	021200-24128	3M™ Dual Lock™ Reclosable Fastener SJ3767 Black	Black, polyolefin plastic reclosable square fastener with two counter-sunk holes, 400 stem per square inch, 1 1/2 inch (38 mm).	1000



## 3M™ Dual Lock™ Low Profile Reclosable Fastener SJ4570

Low to medium temperature performance. Bonds well to metals (aluminum, stainless steel), glass, many plastics (polypropylene, polyethylene, polycarbonate, ABS), powder coated paints and medium to low surface energy materials. Designed for indoor use. Products include SJ4570 and SJ4575.

RoHS 2011/65/EU Yes



Order No.	UPC	Product Name	Description	Rolls per Case
SJ4570-1"x50yd-Clear	021200-44883	3M™ Dual Lock™ Low Profile Reclosable Fastener SJ4570	Low Profile Clear, 1 in x 50 yd 0.105 in (2,7 mm).	2
SJ4570-2"x50yd-Clear	021200-46070	3M™ Dual Lock™ Low Profile Reclosable Fastener SJ4570	Low Profile Clear, 2 in x 50 yd 0.105 in (2,7 mm).	1
SJ4570-3/4"x50yd-Clear	021200-46239	3M™ Dual Lock™ Low Profile Reclosable Fastener SJ4570	Low Profile Clear, 3/4 in x 50 yd 0.105 in (2,7 mm).	2
SJ4570-4"x50yd-Clear	021200-46071	3M™ Dual Lock™ Low Profile Reclosable Fastener SJ4570	Low Profile Clear, 4 in x 50 yd 0.105 in (2,7 mm).	1
SJ4570-5/8"x50yd-Clear	021200-45075	3M™ Dual Lock™ Low Profile Reclosable Fastener SJ4570	Low Profile Clear, 5/8 in x 50 yd 0.105 in (2,7 mm).	3



# Identification Systems


3M Identification Systems help you quickly and easily create highly visible, durable identification for wires, panels, terminal blocks, devices and other components.



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## 3M™ Portable Labeler PL150

The 3M™ Portable Labeler PL150 features the same keyboard layout as your computer (QWERTY), along with one-touch hot keys which allow you to quickly create wire/cable wraps, flags, Code 39 and Code 128 barcodes, fixed-length labels, breaker labels and more. Print labels up to 3/4" wide in flexible nylon, permanent polyester and durable vinyl materials – plus print directly on heat-shrink tubes. Save even more time with great new features like the “Favorites” and “Custom” keys which provide single-key access to commonly used labels, symbols and terms and eliminate repeated steps by saving customized settings.


Backlit LCD	Yes
Bar Code Capability	Yes
Computer-Style Keyboard	Yes
Label Size Support	1/4"–3/4" (6,4–19,1 mm)
Label Storage	25
Rubber Protective Bumper	Yes
Symbol Library Terms	80
Manufactured by	



Order No.	UPC	Product Dimensions (HxWxD)	Unit Weight	Power	Kit Includes	Suggested Accessories	Min. Order	Case Qty.
PL150	051128-59374	7.0" x 4.6" x 2.25" (17,8 x 11,7 x 5,7 cm)	2.0 lbs (0,91 kg)	6 "AA" Batteries (not included); or Lithium Ion Battery (not included)	(1) 3M Portable Labeler PL150; (1) Refill cartridge (1/2" black/white vinyl); (1) Quick Reference Guide; Limited one-year warranty	3M™ Portable Labeler Battery Pack PL150-PL200-BAT; 3M™ Portable Labeler AC Power Supply PL-ACPS; 3M™ Portable Labeler Soft Case PL150-SOFTCASE	1	3
PL150K	051128-60251	Kit Dimensions: 10.83" x 10.43" x 3.62" (27,5 x 26,5 x 9,2 cm)	2.5 lbs (1,14 kg)	6 "AA" Batteries (not included); or Lithium Ion Battery (included)	(1) 3M Portable Labeler PL150; (1) Refill cartridge (1/2" black/white vinyl); (1) Quick Reference Guide; (1) Portable Labeler Soft Case PL150-SOFT CASE; (1) Portable Labeler Battery Pack PL150/PL200-BAT; (1) Portable Labeler AC Power Supply 3MPL-ACPS; Limited one-year warranty	3M™ Portable Labeler Battery Pack PL150-PL200-BAT; 3M™ Portable Labeler AC Power Supply PL-ACPS; 3M™ Portable Labeler Soft Case PL150-SOFT CASE	1	3

## 3M™ Portable Labeler PL200

The 3M™ Portable Labeler PL200 is an excellent portable labeling tool for high-end electrical, MRO, datacom and construction professionals. It is more than a tool. The 3M Portable Labeler PL200 is the advanced, easy-to-use labeling system that puts a premium on your reputation and time. Used in real-world jobsite conditions, the rugged, powerful and lightweight 3M Portable Labeler PL200 offers ideal features and functionality to help make your job easier.


Backlit LCD	Yes
Bar Code Capability	Yes
Computer-Style Keyboard	No
Label Size Support	1/4"–3/4" (6,4–19,1 mm)
Label Storage	100
Rubber Protective Bumper	Yes
Symbol Library Terms	120
Manufactured by	



Order No.	UPC	Product Dimensions (HxWxD)	Unit Weight	Power	Kit Includes	Suggested Accessories	Min. Order	Case Qty.
PL200	051128-58456	9.2" x 4.9" x 2.5" (23,4 x 12,5 x 6,35 cm)	2.0 lbs (0,91 kg)	6 "AA" batteries or optional lithium-ion rechargeable battery (not included)	(1) 3M Portable Labeler PL200; (1) Refill cartridge 3/4" (19 mm); (1) User manual on CD-rom; (1) Quick Reference Guide	3M™ Portable Labeler Rechargeable Battery Pack PL150-PL200-BAT	1	4
PL200K	051128-58508	Kit Dimensions: 13.75" x 14.5" x 4.7" (34,9 x 36,8 x 11,9 cm)	5.5 lbs (2,49 kg)	Lithium-ion rechargeable battery with AC adaptor (included) or optional 6 "AA" batteries	(1) 3M Portable Labeler PL200; (1) Refill cartridge 1/2" (12,7 mm) white polyester; (1) Refill cartridge 3/4" (19 mm) white vinyl; (1) Rechargeable lithium-ion battery pack; (1) AC adaptor; (1) User manual on CD-rom; (1) Quick Reference Guide	3M™ Portable Labeler AC Power Supply PL-ACPS	1	3

## 3M™ Portable Labeler PL300

The 3M™ Portable Labeler PL300 is a revolutionary printer with excellent ease-of-use, ideal functionality, and advanced PC connectivity. The 3M Portable Labeler PL300 printer features exclusive one-touch “hot keys” for quick and easy creation of commonly used label types. Utilizing the 3M Portable Labeler Software, the installer can create labels before reaching the worksite or create and edit labels on site.

Backlit LCD	Yes
Bar Code Capability	Yes
Computer-Style Keyboard	No
Label Size Support	1/4”–1” (6,4–25,4 mm)
Label Storage	1000
Rubber Protective Bumper	Yes
Symbol Library Terms	250
Manufactured by	




Order No.	UPC	Product Dimensions (HxWxD)	Unit Weight	Power	Kit Includes	Min. Order	Case Qty.
PL300	051128-59104	9.7" x 5.4" x 2.5" (24,6 x 13,7 x 6,4 cm)	4.0 lbs 1,81 kg)	6 “AA” batteries or optional lithium-ion rechargeable battery (not included)	(1) 3M Portable Labeler PL300; (1) Quick Reference Guide; (1) USB cord; (1) Quick Reference Guide; (1) User Guide on CD-ROM	1	3
PL300K	051128-58455	Kit Dimensions: 13.75" x 17.5" x 4.0" (34,9 x 44,5 x 10,2 cm)	5.0 lbs (2,27 kg)	Quick-charge lithium-ion rechargeable battery and on-screen battery life indicator	(1) 3M Portable Labeler PL300; (1) 3M™ Portable Labeler Software PL300 SOFTWARE ; (1) 3M™ Portable Labeler Hard Case PL300-HARD CASE; (1) Refill cartridge 3/4" (19 mm) black on white vinyl; (1) Refill cartridge 1/2" (12 mm) black on white polyester; (1) 3M™ Rechargeable Lithium-Ion Battery Pack, PL300-BAT; (1) 3M™ AC Adaptor and USB Cable, PL-ACPS; (1) Quick Reference Guide; (1) User Guide	1	3

## Portable Labelers

### 3M™ Portable Labeler Accessories

The following accessories are available for the 3M™ Portable Labeler family: Lithium-ion Battery Packs, Hard Carrying Cases and AC Adaptors.


Manufactured by 



Order No.	UPC	Product Name	Description	Compatible With	Min. Order	Case Qty.
PL-ACPS	051128-58518	3M™ Portable Labeler AC Power Supply PL-ACPS	AC Power Supply	PL200/PL300	1	60
PL150-PL200-BAT	051128-58517	3M™ Portable Labeler Rechargeable Battery Pack PL150-PL200-BAT	Rechargeable Battery Pack	PL150, PL200	1	48
PL150-SOFT CASE	051128-60252	3M™ Portable Labeler Soft Case PL150 SOFT CASE	Soft Case	PL150	1	3
PL200-HARD CASE	051128-58515	3M™ Portable Labeler Hard Case PL200-HARD CASE	Hard Case	PL200	1	3
PL300-BAT	051128-58520	3M™ Portable Labeler Rechargeable Battery Pack PL300-BAT	Rechargeable Battery Pack	PL300	1	60
PL300-HARD CASE	051128-59108	3M™ Portable Labeler Hard Case PL300-HARD CASE	Hard Case	PL300	1	3

### 3M™ Portable Labeler Refill Cartridges

3M™ Portable Labeler Refill Cartridges are available in a variety of materials, including heat shrink, for a variety of surfaces and environments. The label cartridges are interchangeable, easy to install and remove, and have less waste.

Manufactured by 



Order No.	UPC	Material	Width	Length	Color (Font)	Color (Label)	Compatible With	Min. Order	Case Qty.
PLFN-YEL-1	051128-58514	Flexible Nylon	1" (24 mm)	11.5'	Black	Yellow	PL300	5	25
PLFN-YEL-3/4	051128-58513	Flexible Nylon	3/4" (19 mm)	11.5'	Black	Yellow	PL150, PL200, PL300	5	25
PLFN-YEL-1/2	051128-58512	Flexible Nylon	1/2" (12 mm)	11.5'	Black	Yellow	PL150, PL200, PL300	5	25
PLFN-WHT-1	051128-58511	Flexible Nylon	1" (24 mm)	11.5'	Black	White	PL300	5	25
PLFN-WHT-3/4	051128-58510	Flexible Nylon	3/4" (19 mm)	11.5'	Black	White	PL150, PL200, PL300	5	25
PLFN-WHT-1/2	051128-58509	Flexible Nylon	1/2" (12 mm)	11.5'	Black	White	PL150, PL200, PL300	5	25
PLHS-YEL-1/4	051128-58484	Heat Shrink	1/4" (6 mm)	5.0'	Black	Yellow	PL150, PL200, PL300	5	25
PLHS-WHT-1/4	051128-58483	Heat Shrink	1/4" (6 mm)	5.0'	Black	White	PL150, PL200, PL300	5	25
PLHS-YEL-3/4	051128-58480	Heat Shrink	3/4" (19 mm)	5.0'	Black	Yellow	PL150, PL200, PL300	5	25
PLHS-YEL-1/2	051128-58479	Heat Shrink	1/2" (12 mm)	5.0'	Black	Yellow	PL150, PL200, PL300	5	25



### 3M™ Portable Labeler Refill Cartridges (continued)

Order No.	UPC	Material	Width	Length	Color (Font)	Color (Label)	Compatible With	Min. Order	Case Qty.
PLHS-YEL-3/8	051128-58478	Heat Shrink	3/8" (9 mm)	5.0'	Black	Yellow	PL150, PL200, PL300	5	25
PLHS-WHT-3/4	051128-58477	Heat Shrink	3/4" (19 mm)	5.0'	Black	White	PL150, PL200, PL300	5	25
PLHS-WHT-1/2	051128-58476	Heat Shrink	1/2" (12 mm)	5.0'	Black	White	PL150, PL200, PL300	5	25
PLHS-WHT-3/8	051128-58475	Heat Shrink	3/8" (9 mm)	5.0'	Black	White	PL150, PL200, PL300	5	25
PLNA-WHT-1/2	051128-58495	Non-Adhesive	1/2" (12 mm)	18.0'	Black	White	PL150, PL200, PL300	5	25
PLNA-WHT-1/4	051128-58493	Non-Adhesive	1/4" (6 mm)	18.0'	Black	White	PL150, PL200, PL300	5	25
PLP-BLK-MTL-1	051128-59391	Polyester	1" (24 mm)	18.0'	Black	Metal	PL300	5	25
PLP-BLK-MTL-1/4	051128-59387	Polyester	1/4" (6 mm)	18.0'	Black	Metal	PL150, PL200, PL300	5	25
PLP-BLK-CLR-1	051128-59386	Polyester	1" (24 mm)	18.0'	Black	Clear	PL300	5	25
PLP-BLK-WHT-1/4	051128-59383	Polyester	1/4" (6 mm)	18.0'	Black	White	PL150, PL200, PL300	5	25
PLP-BLK-CLR-1/4	051128-59382	Polyester	1/4" (6 mm)	18.0'	Black	Clear	PL150, PL200, PL300	5	25
PLP-CLR-3/4	051128-58507	Polyester	3/4" (19 mm)	18.0'	Black	Clear	PL150, PL200, PL300	5	25
PLP-CLR-1/2	051128-58506	Polyester	1/2" (12 mm)	18.0'	Black	Clear	PL150, PL200, PL300	5	25
PLP-MTL-3/8	051128-58492	Polyester	3/8" (9 mm)	18.0'	Black	Metal	PL150, PL200, PL300	5	25
PLP-MTL-3/4	051128-58491	Polyester	3/4" (19 mm)	18.0'	Black	Metal	PL150, PL200, PL300	5	25
PLP-MTL-1/2	051128-58490	Polyester	1/2" (12 mm)	18.0'	Black	Metal	PL150, PL200, PL300	5	25
PLP-CLR-3/8	051128-58489	Polyester	3/8" (9 mm)	18.0'	Black	Clear	PL150, PL200, PL300	5	25
PLP-WHT-1	051128-58488	Polyester	1" (24 mm)	18.0'	Black	White	PL300	5	25
PLP-WHT-3/4	051128-58487	Polyester	3/4" (19 mm)	18.0'	Black	White	PL150, PL200, PL300	5	25
PLP-WHT-1/2	051128-58486	Polyester	1/2" (12 mm)	18.0'	Black	White	PL150, PL200, PL300	5	25
PLP-WHT-3/8	051128-58485	Polyester	3/8" (9 mm)	18.0'	Black	White	PL150, PL200, PL300	5	25
PLSL-WHT-1	051128-58583	Self-Laminating	1" (24 mm)	18.0'	Black	White	PL300	5	25
PLV-BLK-GRY-3/4	051128-59414	Vinyl	3/4" (19 mm)	18.0'	Black	Gray	PL150, PL200, PL300	5	25
PLV-BLK-GRY-1/2	051128-59413	Vinyl	1/2" (12 mm)	18.0'	Black	Gray	PL150, PL200, PL300	5	25
PLV-BLK-GRY-1	051128-59415	Vinyl	1" (24 mm)	18.0'	Black	Gray	PL300	5	25
PLV-WHT-BRN-3/4	051128-59411	Vinyl	3/4" (19 mm)	18.0'	White	Brown	PL150, PL200, PL300	5	25
PLV-WHT-BRN-1/2	051128-59410	Vinyl	1/2" (12 mm)	18.0'	White	Brown	PL150, PL200, PL300	5	25
PLV-WHT-BRN-1	051128-59412	Vinyl	1" (24 mm)	18.0'	White	Brown	PL300	5	25
PLV-WHT-PUR-3/4	051128-59408	Vinyl	3/4" (19 mm)	18.0'	White	Purple	PL150, PL200, PL300	5	25
PLV-WHT-PUR-1/2	051128-59407	Vinyl	1/2" (12 mm)	18.0'	White	Purple	PL150, PL200, PL300	5	25
PLV-WHT-PUR-1	051128-59409	Vinyl	1" (24 mm)	18.0'	White	Purple	PL300	5	25
PLV-WHT-BLU-3/4	051128-59405	Vinyl	3/4" (19 mm)	18.0'	White	Blue	PL150, PL200, PL300	5	25
PLV-WHT-BLU-1/2	051128-59404	Vinyl	1/2" (12 mm)	18.0'	White	Blue	PL150, PL200, PL300	5	25
PLV-WHT-BLU-1	051128-59406	Vinyl	1" (24 mm)	18.0'	White	Blue	PL300	5	25
PLV-WHT-GRN-1	051128-59403	Vinyl	1" (24 mm)	18.0'	White	Green	PL300	5	25
PLV-WHT-GRN-3/4	051128-59402	Vinyl	3/4" (19 mm)	18.0'	White	Green	PL150, PL200, PL300	5	25
PLV-WHT-GRN-1/2	051128-59401	Vinyl	1/2" (12 mm)	18.0'	White	Green	PL150, PL200, PL300	5	25
PLV-BLK-YEL-1	051128-59400	Vinyl	1" (24 mm)	18.0'	Black	Yellow	PL300	5	25
PLV-BLK-ORG-1	051128-59397	Vinyl	1" (24 mm)	18.0'	Black	Orange	PL300	5	25
PLV-WHT-RED-3/4	051128-59393	Vinyl	3/4" (19 mm)	18.0'	White	Red	PL150, PL200, PL300	5	25
PLV-WHT-RED-1/2	051128-59392	Vinyl	1/2" (12 mm)	18.0'	White	Red	PL150, PL200, PL300	5	25
PLV-WHT-RED-1	051128-59394	Vinyl	1" (24 mm)	18.0'	White	Red	PL300	5	25
PLV-BLK-WHT-1	051128-59377	Vinyl	1" (24 mm)	18.0'	Black	White	PL300	5	25
PLV-WHT-BLK-1	051128-59381	Vinyl	1" (24 mm)	18.0'	White	Black	PL300	5	25
PLV-WHT-BLK-3/4	051128-59380	Vinyl	3/4" (19 mm)	18.0'	White	Black	PL150, PL200, PL300	5	25
PLV-WHT-BLK-1/2	051128-59379	Vinyl	1/2" (12 mm)	18.0'	White	Black	PL150, PL200, PL300	5	25
PLV-WHT-BLK-3/8	051128-59378	Vinyl	3/8" (9 mm)	18.0'	White	Black	PL150, PL200, PL300	5	25
PLV-ORG-3/4	051128-58469	Vinyl	3/4" (19 mm)	18.0'	Black	Orange	PL150, PL200, PL300	5	25
PLV-ORG-1/2	051128-58468	Vinyl	1/2" (12 mm)	18.0'	Black	Orange	PL150, PL200, PL300	5	25
PLV-YEL-3/4	051128-58463	Vinyl	3/4" (19 mm)	18.0'	Black	Yellow	PL150, PL200, PL300	5	25

## 3M™ Portable Labeler Refill Cartridges (continued)

Order No.	UPC	Material	Width	Length	Color (Font)	Color (Label)	Compatible With	Min. Order	Case Qty.
PLV-YEL-1/2	051128-58462	Vinyl	1/2" (12 mm)	18.0'	Black	Yellow	PL150, PL200, PL300	5	25
PLV-WHT-3/4	051128-58460	Vinyl	3/4" (19 mm)	18.0'	Black	White	PL150, PL200, PL300	5	25
PLV-WHT-1/2	051128-58459	Vinyl	1/2" (12 mm)	18.0'	Black	White	PL150, PL200, PL300	5	25
PLV-WHT-3/8	051128-58458	Vinyl	3/8" (9 mm)	18.0'	Black	White	PL150, PL200, PL300	5	25

## 3M™ Portable Labeler Embosser PLE

The 3M™ Portable Labeler Embosser PLE is tough enough to accompany you in the field and is easy-to-use. Since it can make labels on site that are capable of weathering harsh conditions, there's no need for time-consuming trips to an engraving shop. All you'll have to do is type, cut and apply.


- Front Scissor Cut-Off Yes
- Built-In Hole Punching Device Yes
- Manufactured by 



Order No.	UPC	Description/Kit Contents	Imprint Size	Length	Product Type	Min. Order	Case Qty.
PLE	051128-59109	(1) 3M™ Portable Labeler Embosser PLE – Metal Tape; (1) Reverse image wheel; (1) Roll 1/2" (12 mm) x 16' (4,8 m); (1) Roll 1/2" (12 mm) x 21' (6,40 m); (1) Carrying case; (1) Instruction manual	1/2" (12 mm) wide metal tapes	–	Embosser	1	3
PLE-ALA-1/2	051128-59107	Aluminum tape for 3M™ Portable Labeler Embosser PLE. 1/2" (12 mm) Aluminum with adhesive.	–	12'	Tape	10	100
PLE-ALNA-1/2	051128-59105	Aluminum tape for 3M™ Portable Labeler Embosser PLE. 1/2" (12 mm) Aluminum with no adhesive.	–	16'	Tape	10	100
PLE-SSNA-1/2	051128-59106	Stainless steel tape for 3M™ Portable Labeler Embosser PLE. 1/2" (12 mm) Stainless steel tape with no adhesive.	–	21'	Tape	10	100

## 3M™ ScotchCode™ Tag Dispensers STD-TAG


3M™ ScotchCode™ STD-TAG Dispenser is a compact write-on dispenser holding two cartridges of wire marker tags. The two sizes of non-pressure-sensitive adhesive permanent tags cover a wire diameter of 0.09–0.15" (18–10 AWG / 0,75–4,0 mm<sup>2</sup>) and 0.06–0.13" (22–14 AWG / 0,5–1,5 mm<sup>2</sup>). The write-on area for the small tag is 0.86" x 0.25" (21,8 mm x 6,4 mm) and 1.53" x 0.375" (38,9 x 9,5 mm) for the large tag. The tag material allows the user to use a permanent marking pen to create a durable marker. The thin tag provides a low profile for wires that are close together. The openings allow the tag to remain securely in place, but allow the tag to be repositionable. The dispenser is sized to fit into a pocket and includes a carrying loop which allows the dispenser to be hooked on a tool pouch.

Dispenser Type	Dispenser with Tags
Marker ID Style	Pre-printed
Marker Type	Dispenser
Refillable	Yes
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Product Name	Kit Includes	Min. Order	Case Qty.
STD-TAG	054007-50345	3M™ ScotchCode™ Wire Marker Dispenser STD-TAG	(1) STD-TAG; (1) 3M™ ScotchCode™ Tag Refill Roll STD-101; (1) 3M™ ScotchCode™ Tag Refill Rolls STD-102; (1) 3M™ ScotchCode™ Marker Pen SMP-B Black	10	10

## 3M™ ScotchCode™ Tag Refill Rolls

Marker ID Style	Pre-printed
Marker Type	Dispenser
Refill	Tag
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Number of Labels	Color	Write-on Area	Marker Size	Min. Order	Case Qty.
STD-101	054007-50346	50	Red	1.53" x 0.375" (38,9 x 9,5 mm)	2.40 x 0.375" (61,0 x 9,5 mm)	10	10
STD-102	054007-50347	75	Red	0.86" x 0.25" (21,8 x 6,4 mm)	1.6" x 0.25" (40,6 x 6,4 mm)	10	10

## Manual Labeling: Adhesive Based Wire Markers

### 3M™ ScotchCode™ Pre-Printed Wire Marker Books SPB

Use the 3M™ ScotchCode™ SPB Book Markers to mark electrical wires and terminal strips, maximum wire diameter of 0.47" (11,9 mm). Individual character markers are perforated in the center to reduce thickness on smaller gauge wires and include a single character marker for the terminal strip. Also use SPB book markers to mark load centers and alarm systems.



RoHS 2011/65/EU Yes

Country of Origin



Order No.	UPC	Marker ID Style	Kit Includes	Min. Order	Case Qty.
SPB-01	054007-49951	Pre-printed	(45) each 0–9; (15) each L1,L2,L3,T1,T2,T3	5	5
SPB-02	054007-49952	Pre-printed	(10) each A–Z, 0–15, +, -, /	5	5
SPB-03	054007-49953	Pre-printed	(10) each 1–45	5	5
SPB-04	054007-49954	Pre-printed	(150) each 1,2,3	5	5
SPB-05	054007-49955	Pre-printed	(150) each of A,B,C	5	5
SPB-06	054007-49956	Pre-printed	(150) each T1,T2,T3	5	5
SPB-07	054007-49957	Pre-printed	(150) each L1,L2,L3	5	5
SPB-08	054007-49958	Pre-printed	(6) each 1–15; (4) each 16–90; (2) each A-Z, +, -, /, 0	5	5
SPB-09	054007-49959	Pre-printed	(45) each 1,2,3,A,B,C; (30) each L1,L2,L3,T1,T2,T3	5	5
SPB-11	054007-49960	Pre-printed	(15) each of 1–30	5	5
SPB-12	054007-49961	Pre-printed	(15) each A–Z; (8) each +; (6) each - ; (21) Write-on markers	5	5
SPB-13	054007-49962	Pre-printed	(45) each +, -, AC, DC; (33) each POS, NEG, GND; (27) each NEUT, SPARE; (21) Write-on markers	5	5
SPB-14	054007-49963	Pre-printed	(10) each 46–90	5	5
SPB-15-AS1	054007-49964	Pre-printed	(9) each of 30 Alarm System legends; (5) each 1-15; (2) each 16-45; (21) Write-on markers	5	5
SPB-16-LC1	054007-49965	Pre-printed	(5) each of 68 Load Center legends; (110) Write on markers	5	5

## 3M™ ScotchCode™ Write-On Wire Marker Books SWB

Fast, convenient write-on wire marker for marking wire and cable (with an O.D. of 0.16–1.55”), while providing a self-laminating protective shield over the legend. The liner tab allows: 1) Easy removal of markers from the liner; and, 2) Removal and application of the marker without touching the adhesive thus reducing contamination of the adhesive.



RoHS 2011/65/EU Yes


Country of Origin



Order No.	UPC	Marker ID Style	Write-on Area	Marker Size	Recommended Wire O.D.	Min. Order	Case Qty.
SWB-1	054007-49904	Write-on	0.50" x 0.50" (12,7 x 12,7 mm)	0.50" x 1.50" (12,7 x 38,1 mm)	0.16–0.31" (4–8 mm)	5	5
SWB-2	054007-49905	Write-on	0.75" x 0.75" (19,1 x 19,1 mm)	0.75" x 1.75" (19,1 x 44,5 mm)	0.24–0.31" (6–8 mm)	5	5
SWB-3	054007-49906	Write-on	1.0" x 1.0" (25,4 x 25,4 mm)	1.0" x 2.85" (25,4 x 72,4 mm)	0.32–0.58" (8–15 mm)	5	5
SWB-4	054007-49907	Write-on	1.0" x 1.0" (25,4 x 25,4 mm)	1.0" x 5.0" (25,4 x 127,0 mm)	0.32–1.55" (8–39 mm)	5	5

## 3M™ ScotchCode™ Wire Marker Tape Dispensers STD

The 3M™ ScotchCode™ Tape Dispenser STD is a compact, carry-along dispenser with 10 refillable compartments that hold 8-foot rolls of smear-resistant polyester tape. Used for marking binder groups, wire or cable, the tapes' high-tack acrylic adhesive resists solvents, oil and water, and adheres firmly to insulation surfaces. An end-loop hooks the dispenser easily to a tool pouch or belt. Dispensers can be ordered empty or filled with 10 rolls of either pre-printed numbers 0–9 or NEMA colors.

Dispenser Type Dispenser Only  
 Refillable Yes  
 RoHS 2011/65/EU Yes  
 Country of Origin 



Order No.	UPC	Description	Min. Order	Case Qty.
STD	054007-12172	Compact, carry-along dispenser with 10 refillable compartments that hold 8' (20,3 cm) rolls of smear-resistant polyester tape. Dispenser only.	25	25
STD-X	054007-49519	Compact, carry-along dispenser with 10 refillable compartments that hold 8' (20,3 cm) rolls of smear-resistant polyester tape. Dispenser only.	10	10
STD-0-9	054007-12174	Dispenser filled with 10 rolls of numbered tape (one each of 0-9).	25	25
STD-0-9X	054007-49518	Dispenser filled with 10 rolls of numbered tape (one each of 0-9).	10	10
STD-C	054007-12175	Dispenser filled with 10 rolls of colored tape (one each of black, blue, brown, green, gray, orange, red, violet, white and yellow).	25	25
STD-CX	054007-49517	Dispenser filled with 10 rolls of colored tape (one each of black, blue, brown, green, gray, orange, red, violet, white and yellow).	10	10


## Manual Labeling: Adhesive Based Wire Markers

### 3M™ ScotchCode™ Write-On Dispensers

These three self-laminating, write-on marker dispensers are handy for identifying wire and cable as well as household, automotive, plumbing and sporting equipment. They are easy to use, refillable and come with an SMP permanent marking pen. The dispensers' design provides convenience and protects the die-cut adhesive markers.

**Applications:**

- Home Use: VCRs, TVs, cable, stereo components, phones, computers, luggage, satellite installation
- Do-It-Yourself Home Improvements: home security, sprinkler systems, sound systems, exterior lighting design
- Automotive: plugs, hoses, spark plugs, stereos, car alarms
- Plumbing: pipes, hoses, tubes, parts, vents
- Sporting Equipment: golf clubs, camping equipment, bags, bats, fishing rods, rackets, bicycles
- Equipment Identification: hand and power tools

Dispenser Type	Dispenser with Tape
Refillable	Yes
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Description	Labels Per Roll	Write-On Area	Marker Size	Recommended Wire O.D.	Min. Order	Case Qty.
SLS	054007-49653	Largest sized dispenser with tape and SMP marking pen.	170	1.0" x 0.50" (25,4 x 12,7 mm)	1.0" x 2.125" (25,4 x 54,0 mm)	0.15–0.49" (3,8–12,4 mm)	1	10
SLW	054007-12177	Larger sized dispenser with tape and SMP marking pen.	70	1.0" x 0.75" (25,4 x 19,1 mm)	1.0" x 5.0" (25,4 x 127,0 mm)	0.23–1.32" (5,8 x 33,5 mm)	1	10
SWD	054007-11954	Regular sized dispenser with tape and SMP marking pen.	50	0.75" x 0.312" (19,1 x 7,9 mm)	0.75" x 1.375" (19,1 x 34,9 mm)	0.09–0.31" (2,3 x 7,9 mm)	1	10

### 3M™ Wire Markers Accessories

This pen performs well on nonporous surfaces, has an extra-fine point with permanent, quick-drying ink and is available in black ink. It has excellent UV and water resistance.

Marker Type	Pen
RoHS 2011/65/EU	Yes
Country of Origin	



Order No.	UPC	Product Name	Ink Color	Suggested Accessory	Min. Order	Case Qty.
SMP-B	051128-57743	3M™ ScotchCode™ Marker Pen SMP-B Black	Black	3M™ ScotchCode™ Write-on Products	10	50



## Manual Labeling: Adhesive Based Wire Markers

### 3M™ ScotchCode™ Tape Refill Rolls

This aggressive adhesive system, combined with the flexible polyester film backing, provides a thin, conformable tape that is durable, and will hold up in most industrial electrical applications.



RoHS 2011/65/EU Yes

Country of Origin



Order No.	UPC	Printed Text Type	Printed Text	Tape Color	Write-on Area	Min. Order	Case Qty.
SDR-0	054007-09369	Numeric	"0"	White	-	10	50
SDR-1	054007-09370	Numeric	"1"	White	-	10	50
SDR-2	054007-09371	Numeric	"2"	White	-	10	50
SDR-3	054007-09372	Numeric	"3"	White	-	10	50
SDR-4	054007-09373	Numeric	"4"	White	-	10	50
SDR-5	054007-09374	Numeric	"5"	White	-	10	50
SDR-6	054007-09375	Numeric	"6"	White	-	10	50
SDR-7	054007-09376	Numeric	"7"	White	-	10	50
SDR-8	054007-09377	Numeric	"8"	White	-	10	50
SDR-9	054007-09378	Numeric	"9"	White	-	10	50
SDR-0-9	054007-09368	Numeric	"0" through "9"	White	-	10	50
SDR-10-19	054007-09379	Numeric	"10" through "19"	White	-	10	50
SDR-20-29	054007-09380	Numeric	"20" through "29"	White	-	10	50
SDR-30-39	054007-09381	Numeric	"30" through "39"	White	-	10	50
SDR-40-49	054007-09382	Numeric	"40" through "49"	White	-	10	50
SDR-50-59	054007-09383	Numeric	"50" through "59"	White	-	10	50
SDR-60-69	054007-09384	Numeric	"60" through "69"	White	-	10	50
SDR-70-79	054007-09385	Numeric	"70" through "79"	White	-	10	50
SDR-80-89	054007-09386	Numeric	"80" through "89"	White	-	10	50
SDR-90-99	054007-09387	Numeric	"90" through "99"	White	-	10	50
SDR-A	054007-09388	Alphabetic	"A"	White	-	10	50
SDR-B	054007-09389	Alphabetic	"B"	White	-	10	50
SDR-C	054007-09390	Alphabetic	"C"	White	-	10	50
SDR-D	054007-09391	Alphabetic	"D"	White	-	10	50
SDR-E	054007-09392	Alphabetic	"E"	White	-	10	50
SDR-F	054007-09393	Alphabetic	"F"	White	-	10	50
SDR-G	054007-09394	Alphabetic	"G"	White	-	10	50
SDR-H	054007-09395	Alphabetic	"H"	White	-	10	50
SDR-I	054007-09396	Alphabetic	"I"	White	-	10	50
SDR-J	054007-09397	Alphabetic	"J"	White	-	10	50
SDR-K	054007-09398	Alphabetic	"K"	White	-	10	50
SDR-L	054007-09399	Alphabetic	"L"	White	-	10	50
SDR-M	054007-09403	Alphabetic	"M"	White	-	10	50
SDR-N	054007-09405	Alphabetic	"N"	White	-	10	50
SDR-O	054007-09406	Alphabetic	"O"	White	-	10	50
SDR-P	054007-09407	Alphabetic	"P"	White	-	10	50
SDR-R	054007-09409	Alphabetic	"R"	White	-	10	50
SDR-S	054007-09410	Alphabetic	"S"	White	-	10	50
SDR-T	054007-09411	Alphabetic	"T"	White	-	10	50
SDR-U	054007-09415	Alphabetic	"U"	White	-	10	50
SDR-V	054007-09416	Alphabetic	"V"	White	-	10	50
SDR-W	054007-09417	Alphabetic	"W"	White	-	10	50



## 3M™ ScotchCode™ Tape Refill Rolls (continued)

Order No.	UPC	Printed Text Type	Printed Text	Tape Color	Write-on Area	Min. Order	Case Qty.
SDR-X	054007-09418	Alphabetic	"X"	White	-	10	50
SDR-Y	054007-09419	Alphabetic	"Y"	White	-	10	50
SDR-Z	054007-09420	Alphabetic	"Z"	White	-	10	50
SDR-L1	054007-09400	Alphanumeric	"L1"	White	-	10	50
SDR-L2	054007-09401	Alphanumeric	"L2"	White	-	10	50
SDR-L3	054007-09402	Alphanumeric	"L3"	White	-	10	50
SDR-T1	054007-09412	Alphanumeric	"T1"	White	-	10	50
SDR-T2	054007-09413	Alphanumeric	"T2"	White	-	10	50
SDR-T3	054007-09414	Alphanumeric	"T3"	White	-	10	50
SDR+ (PLUS)	054007-09421	Symbols	"+"	White	-	10	50
SDR— (MINUS)	054007-09422	Symbols	"_"	White	-	10	50
SDR-BK	054007-09423	Colors		Black	-	10	50
SDR-BL	054007-09424	Colors		Blue	-	10	50
SDR-BN	054007-09425	Colors		Brown	-	10	50
SDR-GN	054007-09426	Colors		Green	-	10	50
SDR-GY	054007-09427	Colors		Gray	-	10	50
SDR-MC	054007-09404	Colors		Multiple Colors	-	10	50
SDR-RD	054007-09429	Colors		Red	-	10	50
SDR-VL	054007-09458	Colors		Violet	-	10	50
SDR-WH	054007-09430	Colors		White	-	10	50
SDR-YL	054007-09431	Colors		Yellow	-	10	50
SLS-R	054007-49652	Write-on		White	1.0" x 0.50" (25,4 x 12,7 mm)	10	10
SWD-R	051128-56220	Write-on		White	0.75" x 0.312" (19,1 x 7,9 mm)	10	10
SLW-REFILL	051128-56221	Write-on		White	1.0" x 0.75" (25,4 x 19,1 mm)	10	10



# 3M™ Aerosols and Coatings





3M offers a full line of convenient push-button aerosol worksavers for your electrical coating and maintenance needs. Just a touch of the finger to clean, degrease or help make equipment work. Aerosols and Coatings from 3M come in convenient, economical and easy-to-store cans. They're fast and easy to use. The line of coatings and protectants from 3M protects surfaces against moisture, corrosion and other contaminants.



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## 3M™ Spray Adhesives

3M Spray Adhesives are based on 3M pioneering technology. These aerosol adhesives are formulated for industrial performance requirements.

	75-160Z	77-SUPER-240Z	90
			
UPC	021200-30067	021200-21210	021200-30023
Product Name	3M™ Repositionable Spray Adhesive 75	3M™ Super 77 Multipurpose Adhesive	3M™ Hi-Strength Adhesive 90
Description	Clean, “tape like” adhesive that sticks in seconds and permits the repositioning of material. Excellent for production line work where parts are held in place temporarily prior to final assembly. It resists bleeding, staining and wrinkling, has a smooth glue line, and bonds to paper, cardboard, acetate, foil, fabrics, and sheeting.	High level of coverage, fast, aggressive tack, and a long-bonding range that meets the performance requirements of MMM-A-1058A. With its low soak-in time for long lasting bonds, Super 77 Adhesive is excellent for jobs in display and furniture while also can be used to bond gaskets in water pumps and attach insulation to sheet metal. This is a very versatile adhesive.	3M Hi-Strength Adhesive 90 has high contact strength and a one-minute dry time under most conditions. Resistant to high temperature, it meets the performance requirements of MMM-A-130B. Use for bonding decorative laminate to tables, cabinets and shelving; kick plates to desks, and plastic sign lettering to wood. Additionally, it can adhere polyethylene and polypropylene products to wood, metal and more.
Spray Width	1.5”	1–3” variable	1–3” variable
Temperature Resistance	120°F (48°C)	110°F (43°C)	160°F (71°C)
Coverage	100 sq ft (9,29 sq m)	77–220 sq ft (7,15–20,44 sq m)	100 sq ft (9,29 sq m)
Can Size	16 fl oz (473 ml)	24 fl oz (710 ml)	24 fl oz (710 ml)
Cans per Case	12	12	12
Country of Origin	-	-	

## Contact Cleaners

3M™ Citrus Base Cleaner is an aerosol cleaner which can dissolve and flush away dirt, grease, tar, most non-curing type adhesive films, and similar substances. It is a citrus oil based cleaner that emulsifies when flushed with water. Not for sale or use in California. Consult local air quality rules before use.

RoHS 2011/65/EU Yes



Order No.	UPC	Product Name	Description	Can Size	Cans per Case
CITRUS-BASED-CLEANER-240Z	021200-76394	3M™ Citrus Base Cleaner	Used to clean and degrease metal parts, motors, tools, printing presses, concrete, or almost any dirty or greasy surface.	24 fl oz	12

## Aerosols

### 3M™ Novec™ Aerosol Cleaners

3M™ Novec™ Aerosol Cleaners give you a new way to meet today's electronics and precision cleaning challenges. Combining fast, effective cleaning performance with a wide margin of safety for workers and a favorable environmental profile, these cleaners are non-flammable, have low toxicity, are non-corrosive, and dry fast with virtually no residue. They are also responsible alternatives to HCFC 141b-based cleaners as they are non-ozone depleting.

RoHS 2011/65/EU Yes



Order No.	UPC	Description	Cleaning Strength	Can Size	Cans per Case
Novec-Contact-Cleaner	051135-71699	3M™ Novec™ Contact Cleaner effectively removes light oils, greases, silicones, dust and particulates from sensitive electrical and electronic equipment. Meets MIL-PRF 29608A Class C specifications for electrical component cleaning compounds.	Light Duty	11 fl oz (325 ml)	6
Novec-Contact-Cleaner-Plus	051138-99271	3M™ Novec™ Contact Cleaner Plus is formulated with extra cleaning power to remove stubborn oils, greases and silicones, as well as fluorinated oils and greases, dust and particulates, from sensitive electrical and electronic equipment.	Medium Duty	11 fl oz (325 ml)	6
Novec-Flux-Remover	051138-99269	3M™ Novec™ Flux Remover is a strong, non-flammable cleaner ideal for removal of a wide variety of solder fluxes used in electronic manufacturing and repair - including rosin-based and many no-clean and lead-free fluxes.	Heavy Duty	12 fl oz (340 ml)	6
Novec-Electronic-Degreaser	051138-99267	3M™ Novec™ Electronic Degreaser is a strong non-flammable cleaner ideal for removal of heavy oils, greases and handling soils from internal components of electronic equipment, precision devices and other electromechanical or sensitive devices.	Heavy Duty	12 fl oz (340 ml)	6
Novec-Contact-Cleaner-Lubricant	051138-99265	3M™ Novec™ Contact Cleaner/Lubricant penetrates and flushes away light oils and greases from electrical and electronic equipment. Removes fluorinated oils and grease, leaving a thin protective silicone coating.	Medium Duty	12 fl oz (340 ml)	6

## 3M™ Scotch-Weld™ Structural Adhesives

3M™ Scotch-Weld™ Structural Adhesives have overall strength, impact resistance and durability.




Among the first 3M engineered adhesives, 3M structural adhesives have continually improved. From the original rigid line, to flexible, and then toughened formulations that have met changing design and production requirements for industries ranging from aerospace and appliances to sporting goods and electronics.

Now, the structural adhesive line is re-energized with evolution and revolution in the 2-part toughened family which offers high shear and peel strength combinations for durability in tough environments. And production boosters that save time, labor, and overall cost.

Chemical Base Acrylic

Type Structural Adhesive

RoHS 2011/65/EU Yes

	DP810NS	DP8010NS
		
UPC	021200-49082	021200-96309
Country of Origin	-	
Description	3M™ Scotch-Weld™ Low Odor Acrylic Adhesive DP810NS is a clear, non-sag, toughened, two-part acrylic adhesive. 1:1 mix ratio, 10 minute work life and handling strength in 20 minutes.	3M™ Scotch-Weld™ Structural Plastic Adhesive DP8010NS is a non-sag, off-white, low surface energy plastic bonder. 10:1 mix ratio, 10 minute work life and handling strength in 2 hours. 3M™ Scotch-Weld™ EPX™ applicator and 10:1 Conversion Kit.
Peel Strength at 72°F (22°C)	17 Pound Per Inch (Of Width)	30 Pound Per Inch (Of Width)
Shear Strength at 72°F (22°C)	2400 Pound-Force Per Square Inch	3600 Pound-Force Per Square Inch
Cans per Case	12	12

## Coatings

### 3M™ Scotchkote™ Electrical Coating

3M™ Scotchkote™ Electrical Coating and 3M™ Scotchkote™ Electrical Coating FD are intended for use as a moisture and corrosion resistant outer seal on vinyl tape applications which are subjected to excessive amounts of oil. They are designed to improve the weather resistance of the taped splice. 3M Scotchkote Electrical Coating FD is a fast-drying coating that meets state and local Volatile Organic Compound (VOC) limits and can be purchased nationwide.

RoHS 2011/65/EU Yes

Country of Origin





Order No.	UPC	Description	Applications	Size	Cans per Case
SCOTCHKOTE FD	051128-60151	No Sales Restrictions.	Coating	15 fl oz	10

## Scotch® Insulating Sprays

Scotch® Insulating Sprays 1601 and 1602-R are electrical grade, fast drying sealers and insulators in a pressurized can. These sealers are designed to protect surfaces against weather, moisture, corrosion, oil, alkalis and acids. The sprays can afford easy access to hard-to-reach spots. Use Insulating Spray sealers to spray over insulation on wire and cable splices, as a general-purpose sealer, or for touch-up insulation on motor windings and frames.

RoHS 2011/65/EU Yes

	1601	1602-R
		
UPC	054007-50342	051128-60368
Product Name	Scotch® Insulating Spray 1601	Scotch® Insulating Spray 1602-R
Spray Color	Clear	Red
Can Size	12 fl oz (340 ml)	12 fl oz (340 ml)
Cans per Case	12	12

## 3M™ Zinc Spray 16-501

3M™ Zinc Spray 16-501 provides an effective way to inhibit rust and corrosion with 97% pure zinc. Used for generations in transmission and distribution equipment, including towers, transformers, light standards and other metal and galvanized surfaces, this convenient aerosol leaves a barrier coating similar to hot-dipped galvanized surfaces. Noted for its quick drying capability, 16-501 zinc spray preserves base metal, even when scratched or chafed. This product is extremely flammable. Read and observe warnings on the label. Not for use on energized equipment.



RoHS 2011/65/EU Yes

Order No.	UPC	Applications	Size	Cans per Case
16-501	054007-42828	Coating	16 fl oz (US)	12

## 3M™ Grease Tube SIL-5CC

RoHS 2011/65/EU Yes

Country of Origin



Order No.	UPC	Description	Tubes per Case
SIL-5CC	054007-41814	Silicone grease, clear 5cc tube with green letters	100





# Wire Pulling Lubricants

The complete line of 3M™ Wire Pulling Lubricants are designed for specific cable pulling applications. They're available in a variety of sprays and containers for various application conditions, so you can choose the right lubricant for the job at hand.



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# LUBRICANTS

FEATURES	ADVANTAGES	BENEFITS
<b>3M™ WIRE PULLING LUBRICANT GEL WL</b>		
Temperature stable	Lube is not wasted	Cost effective
Thick, non-runny gel	Faster and neater application. Less waste	Cost effective
Colorless and non-staining	Faster and easier clean-up	Saves time
Low coefficient of friction	Less wire damage and equipment wear	Safety
Low residue (<3.5% solids)	Easier cable replacement during refurbishment	Saves time
UL Listed. Broadly compatible with wire and cable jackets	Lubricant suitable for multiple uses — Minimizes inventory investment	Cost effective
<b>3M™ WIRE PULLING LUBRICANT CLEAR WLC</b>		
Excellent cling	Coats evenly	Easy to use
Low residue	Allows for easy removal	Cost effective
Non-staining and slow drying	Faster and easier clean-up	Saves time
Clear and colorless	Easy clean up	Saves time
Compatible with fiber optic, telephone and communications cable	Does not stress crack polyethylene	Safety
Does not separate at high or subfreezing temperatures	No waste due to phase separation	Cost effective
Non-flammable	No flash point	Improved workplace safety
Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200	Low health risk	Improved workplace safety
<b>3M™ WIRE PULLING LUBRICANT SPRAY WLS</b>		
Spray dispenser and non-staining formula keep you clean	Fast application and easier clean-up	Saves time
Highly concentrated and effective	Less waste	Cost effective
Significantly reduces pulling friction on “enhanced” THHN cable	Easy to use	Saves time
Continues to lubricate after drying	Long lasting lube	Cost effective
Compatible with most cable jackets	Minimize inventory investment	Cost effective
Non-flammable	No flash point	Improved workplace safety
Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200	Low health risk	Improved workplace safety
<b>3M™ WIRE PULLING LUBRICANT WAX/GEL WLX</b>		
5.3% solid residue	Easier cable replacement during refurbishment	Saves time
Heat stable at 194°F (90°C) for 24 hours	No ruined, runny lube, low evaporation rate	Cost effective
30 minutes immersed in water with minimal weight loss	Easier pulling in wet conditions	Easy to use
<b>3M™ WIRE PULLING LUBRICANT WINTERGRADE WLW</b>		
Temperature stable	Lube is not wasted	Cost effective
Thick, non-runny gel	Faster and neater application. Less waste	Cost effective
Non-staining	Faster and easier clean-up	Saves time
Low coefficient of friction	Less wire damage and equipment wear	Safety
Low residue (<3.5% solids)	Easier cable replacement during refurbishment	Saves time
Broadly compatible with wire and cable jackets	Lubricant suitable for multiple uses — electrical, co-ax, high voltage. Minimizes inventory investment	Cost effective
10-110°F Temperature Range	Use in colder climates	Wider application

## 3M™ 5-Way Penetrant

3M™ 5-Way Penetrant is designed to penetrate, lubricate, de-moisturize and protect electrical apparatus. It provides protection against electrical failures caused by moisture and corrosion.

3M 5-Way Penetrant protects component products such as switches, relays, batteries, motors and generators and keeps them highly efficient even in humid environments. Very low surface tension causes 3M 5-Way Penetrant to force its way under water on metal surfaces, displacing moisture.



<b>Aerosol Type</b>	Lubricant
<b>Color</b>	Amber
<b>RoHS 2011/65/EU</b>	Yes

Order No.	UPC	Description	Size	Weight per Case	Case Qty.
5-WAY-PENETRANT	021200-21305	Drives out moisture; Free rusted bolts; Inhibits rust; General industrial, maintenance repair and operations (MRO); Penetrating, dissolving, tapping, lubricating, rust inhibiting, cleaning and demoisturizing.	24 fl oz (710 ml)	17.6 lbs (7,98 kg)	12

## 3M™ Silicone Lubricant

3M™ Silicone Lubricant is a silicone based release agent for industrial lubrication applications. Use this lubricant to prevent build-up of glues, wax, inks and paints. Silicone lubricant has a temperature resistance of up to 350°F (177°C).

- Fast drying
- Long lasting and non-staining
- General industrial, maintenance, repair and operations (MRO), wood working and furniture
- Rubber protecting, plastic preservation, metal protecting, metal sealing and lubricating

<b>Application Method</b>	Spray
<b>Color</b>	Clear
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Size	Weight per Case	Case Qty.
SILICONE-LUBRICANT-24OZ	021200-85822	24 fl oz (710 ml)	14.8 lbs	12

## 3M™ Wire Pulling Lubricant Spray WLS

3M™ Wire Pulling Lubricant Spray WLS is a clean, non-staining, high-performance, thin liquid cable pulling lubricant. 3M™ Spray Lubricant is easily applied by either spraying or wiping. The lubricant has excellent cling and wetting properties for all cable types. The slightly gelled character of the lubricant helps to coat and wet the cable for difficult or complex cable pulls.



Applications	Lubricant
Lubricant Type	Spray
RoHS 2011/65/EU	Yes
Agency Approval	
Country of Origin	



Order No.	UPC	Size	Temperature Use Range	Color	Case Qty.
WLS-QT	051128-57925	1 quart bottle	20–120°F (-5–49°C)	Clear	12

## 3M™ Wire Pulling Lubricant Gel WL

3M™ Wire Pulling Lubricant Gel WL is a clear, colorless, slow-drying, easy-to-apply gel which is an excellent lubricant for everyday pulling of both electrical and communication cable. The clear formula makes this an ideal choice where cleanliness is a concern. 3M™ Wire Pulling Lubricant Gel WL has a low residue, less than 5% solids.



Applications	Lubricant
Lubricant Type	Gel
RoHS 2011/65/EU	Yes
Agency Approval	
Country of Origin	



Order No.	UPC	Size	Weight per Case	Temperature Use Range	Color	Case Qty.
WL-QT	054007-50622	1 quart bottle	28.0 lbs. (12,7 kg)	20–120°F (-5–49°C)	Clear	12
WL-1	054007-50623	1 gallon pail	35.0 lbs. (15,9 kg)	20–120°F (-5–49°C)	Clear	4
WL-5	054007-50624	5 gallon pail	46.0 lbs. (20,9 kg)	20–120°F (-5–49°C)	Clear	1

## 3M™ Wire Pulling Lubricant Clear WLC

3M™ Wire Pulling Lubricant Clear WLC is a clear, colorless, slow drying, easy to apply gel which is an excellent lubricant for everyday pulling of both electrical and communication cable. The clear formula makes this an ideal choice where cleanliness is a concern. 3M Wire Pulling Lubricant Clear WLC has a low residue, less than 5% solids.

Applications	Lubricant
Lubricant Type	Water-based
RoHS 2011/65/EU	Yes
Agency Approval	
Country of Origin	



Order No.	UPC	Size	Weight per Case	Temperature Use Range	Color	Case Qty.
WLC-QT	051128-57922	1 quart bottle	28.1 lbs. (12,7 kg)	20–120°F (-5–49°C)	Clear	12
WLC-1	051128-57923	1 gallon pail	35.0 lbs. (15,9 kg)	20–120°F (-5–49°C)	Clear	4
WLC-5	051128-57924	5 gallon pail	44.0 lbs. (20,0 kg)	20–120°F (-5–49°C)	Clear	1

## 3M™ Wire Pulling Lubricant Wax WLX

3M™ Wire Pulling Lubricant Wax WLX can be used and stored in temperatures as high as 194°F (90°C), making it the choice for hot weather applications. The thick, consistent lubricant does not liquefy or separate with hot aging; it scoops and applies easily to wire and cable without runs or drips in hot temperatures; and it will not evaporate too soon after pulls. The lubricant's low friction coefficient lessens the chance of wire damage from high pulling forces, wipes off the cable quickly and cleanly and leaves less residue in the conduit to block future pulls or prevent removal. Because Wire Pulling Lubricant Wax can be immersed in water for 30 minutes with minimal weight loss, it is also the choice for wet weather applications.

Application	Lubricant
Lubricant Type	Wax
RoHS 2011/65/EU	Yes
Agency Approval	
Country of Origin	



Order No.	UPC	Size	Weight per Case	Temperature Use Range	Case Qty.
WLX-QT	054007-41742	1 quart bottle	28.0 lbs (12,7 kg)	10–194°F (12–90°C)	12
WLX-1	054007-41743	1 gallon pail	35.0 lbs. (15,9 kg)	10–194°F (12–90°C)	4
WLX-5	054007-41744	5 gallon pail	44.0 lbs. (20,0 kg)	10–194°F (12–90°C)	1

## 3M™ Wire Pulling Lubricant Wintergrade WLW

3M™ Wire Pulling Lubricant Wintergrade WLW is a translucent green polymer gel used for wire and cable pulling. WLW lubricant is a version of 3M WL Gel Lubricant which has been modified for use in colder climates. The lubricant is easy to handle and apply. The gel material is non-staining and affords quick and easy cleanup. Low solids content means less conduit blocking if additional pulls are required.

Applications	Lubricant
Lubricant Type	Wintergrade
RoHS 2011/65/EU	Yes
Agency Approval	
Country of Origin	



Order No.	UPC	Size	Weight per Case	Temperature Use Range	Color	Case Qty.
WLW-QT	054007-41746	1 quart bottle	28.0 lbs. (12,7 kg)	10–110°F (12–43°C)	Translucent Green	12
WLW-1	054007-41747	1 gallon pail	35.0 lbs. (15,9 kg)	10–110°F (12–43°C)	Translucent Green	4
WLW-5	054007-41748	5 gallon pail	44.0 lbs. (20,0 kg)	10–110°F (12–43°C)	Translucent Green	1



# Low Voltage Splices, 1000 V or less

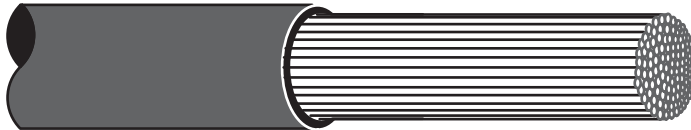
For installations from 120 V to 1 kV, 3M offers several low voltage splice options, including 3M-developed cold shrink technology, heat shrink, resin and tape. 3M™ Low Voltage Splices are reliable in buried, overhead, indoor or outdoor applications.

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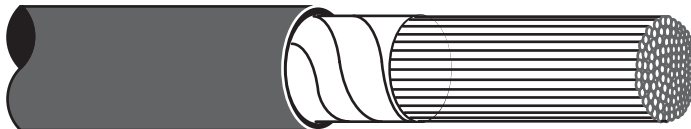
# Cable Types for Low Voltage Splicing



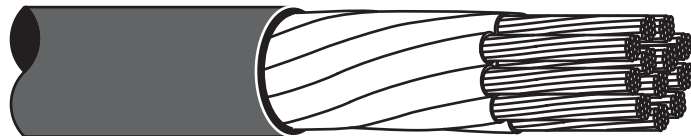
Single Conductor Cable



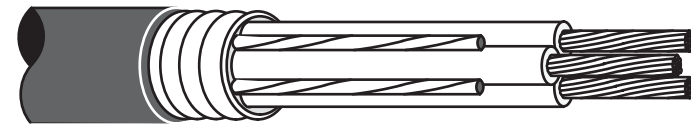
Multiple Conductor Unshielded Signal and Control Cable



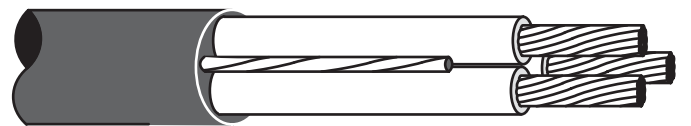
Multiple Conductor Shielded Signal and Control Cable



Multiple Conductor, to 1000 Volt, Cable



Three-Conductor Armored, Non Shielded Cable




Three-Conductor Non-Armored, Non Shielded Cable

## 3M™ Heat Shrink Splice Kits

### 3M™ Splice Kit UF

3M™ Splice Kit UF is designed to provide a reliable, moisture proof electrical connection for type UF-B underground feeder cable rated for 600 V (copper wire only) ranging from #14/3 without ground wire up to #8/3 with ground wire.

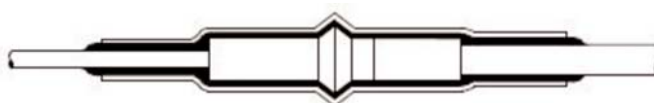
The UF splice kit consists of a connector-insulation assembly and a heat shrink tube. The connector assembly contains four cylindrical set screw connectors separated by a piece of vinyl insulation. The heat shrink tube is a heavy-wall, adhesive-lined tube. Underground Feeder (UF)-B cables are flat, and typically have three solid conductors without a ground or two solid conductors with a ground. They range in size from 14–8 AWG. The most common UF cable size is 14–10 AWG.

<b>Voltage Rating</b>	600 V (copper wire only)
<b>Number of Conductors</b>	Single Conductor
<b>Cable/Shielding Type</b>	Non-Shielded
<b>Splice Type</b>	Heat Shrink
<b>Operating Temperature Range</b>	-67°F to 230°F (-55°C to 110°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	 UL 486D listed E102356
<b>Manufacturing Origin</b>	Taiwan



Order No.	UPC	Description	Conductor Size	Min. Order Qty.	Case Qty.
UF1-Splice Kit-6 Kits	054007-42920	UF Splice Kit-Standard includes 1.8" (45,7 mm) length connector/ 8.0" (203,2 mm) length of heavy wall, adhesive lined heat shrink tube.	14–8 AWG	6 kits	6 kits
UF2-Splice Kit-6 Kits	054007-42921	UF Splice Kit-Stretcher offers an 11.5" (292,1 mm) length connector/ 20.0" (508,0 mm) length of heavy wall, adhesive lined heat shrink tube. The Stretcher Kit is used in situations where a 7–10" (17,8–25,4 cm) section of the cable has been damaged or destroyed.	14–8 AWG	6 kits	6 kits

### 3M™ Airport Lighting Connector Sealing Kit



3M™ Airport Lighting Connector Sealing Kit IAL-3 is designed especially to meet the high demands on airport lighting connections. It meets specification for sealing FAA Specification L-823 connectors.

Kit Includes:

- Heat shrinkable sleeve
- Cleaning pad
- Instructions



RoHS 2011/65/EU Yes

Order No.	UPC	Sleeve Length	Expanded/Recovered I.D.	Case Qty.
IAL-3	054007-08862	16" (406,4 mm)	1.38/0.38" (35,1/9,7 mm)	30 kit/case

## 3M™ Heat Shrink Splice Kits

### 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN

The 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN are designed to provide reliable performance for electrical splices, connections and terminations, as well as mechanical and environmental protection. ITCSN heavy-wall cable sleeves are cross-linked polyolefin. They are highly split resistant and fast shrinking to provide rapid installation. The cut-to-length sleeves come standard with a factory-applied adhesive/sealant. Order any of several packaging choices or look for the counter merchandiser assortment at a 3M authorized distributor.

<b>Voltage Rating</b>	UL Rated to 600 V 3M Internal Test Rated to 1 kV
<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	3:1
<b>Operating Temperature</b>	-67°F to 230°F (-55°C to 110°C)
<b>Flame Retardant</b>	No
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	
<b>Manufacturing Origin</b>	



Order No.	UPC	Cable Size	Length	Expanded/Recovered I.D.	UL Spec.	Adhesive Included	Direct Bury	Case Qty.
ITCSN-0400-6"-Black-25 Pcs	054007-08887	12-6 AWG	6" (152,4 mm)	0.40"/0.15" (10,2/3,8 mm)	UL 486D	Yes	Yes	25
ITCSN-0400-6"-Black-100 Pcs	054007-08963	12-6 AWG	6" (152,4 mm)	0.40"/0.15" (10,2/3,8 mm)	UL 486D	Yes	Yes	100
ITCSN-0400-6"-Black-12-3 Pc Pks	051128-60075	12-6 AWG	6" (152,4 mm)	0.40"/0.15" (10,2/3,8 mm)	UL 486D	Yes	Yes	3/pk, 12 pks
ITCSN-0400-6"-Red-12-3 Pc Pks	051128-60076	12-6 AWG	6" (152,4 mm)	0.40"/0.15" (10,2/3,8 mm)	N/A	Yes	No	3/pk, 12 pks
ITCSN-0400-48"-Black-5 Pcs	054007-08902	12-6 AWG	48" (1,22 m)	0.40"/0.15" (10,2/3,8 mm)	UL 486D	Yes	Yes	5
ITCSN-0400-48"-Black-20 Pcs	054007-08964	12-6 AWG	48" (1,22 m)	0.40"/0.15" (10,2/3,8 mm)	UL 486D	Yes	Yes	20
ITCSN-0400-25'-Black-Reel	054007-08886	12-6 AWG	25' (7,62 m)	0.40"/0.15" (10,2/3,8 mm)	N/A	No	No	1
ITCSN-0800-6"-Black-25 Pcs	054007-40067	8-1/0 AWG	6" (152,4 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	25
ITCSN-0800-6"-Black-100 Pcs	054007-08965	8-1/0 AWG	6" (152,4 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	100
ITCSN-0800-6"-Black-12-3 Pc Pks	051128-60077	8-1/0 AWG	6" (152,4 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	3/pk, 12 pks
ITCSN-0800-6"-Red-12-3 Pc Pks	051128-60078	8-1/0 AWG	6" (152,4 mm)	0.80"/0.20" (20,3/5,1 mm)	N/A	Yes	No	3/pk, 12 pks
ITCSN-0800-9"-Black-25 Pcs	054007-08890	8-1/0 AWG	9" (228,6 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	25
ITCSN-0800-9"-Black-100 Pcs	054007-08966	8-1/0 AWG	9" (228,6 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	100 pcs/cs
ITCSN-0800-12"-Black-25 Pcs	054007-08889	8-1/0 AWG	12" (304,8 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	25 pcs/cs
ITCSN-0800-12"-Black-100 Pcs	054007-08967	8-1/0 AWG	12" (304,8 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	100
ITCSN-0800-48"-Black-5 Pcs	054007-08903	8-1/0 AWG	48" (1,22 m)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	5
ITCSN-0800-48"-Black-20 Pcs	054007-08968	8-1/0 AWG	48" (1,22 m)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	20

3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN (continued)

Order No.	UPC	Cable Size	Length	Expanded/Recovered I.D.	UL Spec.	Adhesive Included	Direct Bury	Case Qty.
ITCSN-0800-48"-Red-20 Pcs	051128-55500	8-1/0 AWG	48" (1,22 m)	0.80"/0.20" (20,3/5,1 mm)	N/A	Yes	No	20
ITCSN-0800-25'-Black-Reel	054007-08888	8-1/0 AWG	25' (7,62 m)	0.80"/0.20" (20,3/5,1 mm)	N/A	No	No	1
ITCSN-1100-6"-Black-25 Pcs	054007-08894	2-4/0 AWG	6" (152,4 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	25
ITCSN-1100-6"-Black-100 Pcs	054007-08969	2-4/0 AWG	6" (152,4 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	100
ITCSN-1100-9"-Black-25 Pcs	054007-08893	2-4/0 AWG	9" (228,6 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	25
ITCSN-1100-9"-Black-100 Pcs	054007-08970	2-4/0 AWG	9" (228,6 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	100
ITCSN-1100-9"-Black-12-3 Pc Pks	051128-60079	2-4/0 AWG	9" (228,6 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	3/pk, 12 pks
ITCSN-1100-9"-Red-12-3 Pc Pks	051128-60080	2-4/0 AWG	9" (228,6 mm)	1.10"/0.37" (27,9/9,4 mm)	N/A	Yes	No	3/pk, 12 pks
ITCSN-1100-12"-Black-10 Pcs	054007-08892	2-4/0 AWG	12" (304,8 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	10
ITCSN-1100-12"-Black-100 Pcs	054007-08971	2-4/0 AWG	12" (304,8 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	100
ITCSN-1100-48"-Black-5 Pcs	054007-08904	2-4/0 AWG	48" (1,22 m)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	5
ITCSN-1100-48"-Black-20 Pcs	054007-08972	2-4/0 AWG	48" (1,22 m)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	20
ITCSN-1100-25'-Black-Reel	054007-08891	2-4/0 AWG	25' (7,62 m)	1.10"/0.37" (27,9/9,4 mm)	N/A	No	No	1
ITCSN-1500-9"-Black-10 Pcs	054007-08897	3/0 AWG- 400 kcmil	9" (228,6 mm)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	10
ITCSN-1500-9"-Black-50 Pcs	054007-08973	3/0 AWG- 400 kcmil	9" (228,6 mm)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	50
ITCSN-1500-9"-Black-12-3 Pc Pks	051128-60081	3/0 AWG- 450 kcmil	9" (228,6 mm)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	3/pk, 12 pks
ITCSN-1500-12"-Black-10 Pcs	054007-08896	3/0 AWG- 400 kcmil	12" (304,8 mm)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	10
ITCSN-1500-12"-Black-50 Pcs	054007-08974	3/0 AWG- 400 kcmil	12" (304,8 mm)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	50
ITCSN-1500-48"-Black-5 Pcs	054007-08905	3/0 AWG- 400 kcmil	48" (1,22 m)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	5
ITCSN-1500-48"-Black-20 Pcs	054007-08975	3/0 AWG- 400 kcmil	48" (1,22 m)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	20
ITCSN-1500-25'-Black-Reel	054007-08895	3/0 AWG- 450 kcmil	25' (7,62 m)	1.50"/0.50" (38,1/12,7 mm)	N/A	No	No	1
ITCSN-2000-9"-Black-10 Pcs	054007-08900	250-750 kcmil	9" (228,6 mm)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	10
ITCSN-2000-9"-Black-50 Pcs	054007-08976	250-750 kcmil	9" (228,6 mm)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	50
ITCSN-2000-12"-Black-10 Pcs	054007-08899	250-750 kcmil	12" (304,8 mm)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	10
ITCSN-2000-12"-Black-50 Pcs	054007-08977	250-750 kcmil	12" (304,8 mm)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	50
ITCSN-2000-12"-Black-12-3 Pc Pks	051128-60082	250-750 kcmil	12" (304,8 mm)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	3/pk, 12 pks
ITCSN-2000-48"-Black-5 Pcs	054007-08906	250-750 kcmil	48" (1,22 m)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	5
ITCSN-2000-48"-Black-20 Pcs	054007-08978	250-750 kcmil	48" (1,22 m)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	20

### 3M™ Heat Shrink Splice Kits


## 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN (continued)

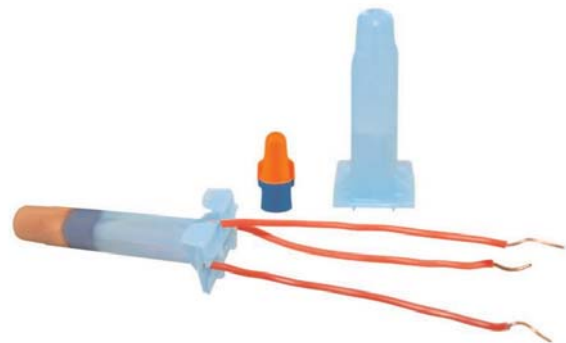
Order No.	UPC	Cable Size	Length	Expanded/Recovered I.D.	UL Spec.	Adhesive Included	Direct Bury	Case Qty.
ITCSN-2000-25'-Black-Reel	054007-08898	250-750 kcmil	25' (7,62 m)	2.00"/0.65" (50,8/16,5 mm)	N/A	No	No	1
ITCSN-3000-12"-Black-10 Pcs	054007-08901	600-1250 kcmil	12" (304,8 mm)	3.00"/1.00" (76,2/25,4 mm)	N/A	Yes	No	10
ITCSN-3000-12"-Black-50 Pcs	054007-08979	600-1250 kcmil	12" (304,8 mm)	3.00"/1.00" (76,2/25,4 mm)	N/A	Yes	No	50
ITCSN-3000-48"-Black-5 Pcs	054007-08907	600-1250 kcmil	48" (1,22 m)	3.00"/1.00" (76,2/25,4 mm)	N/A	Yes	No	5
ITCSN-3000-48"-Black-20 Pcs	054007-08980	600-1250 kcmil	48" (1,22 m)	3.00"/1.00" (76,2/25,4 mm)	N/A	Yes	No	20
ITCSN-4500-48"-Black-5 Pcs	051135-37979	1500-2500 kcmil	48" (1,22 m)	4.50"/1.50" (114,3/38,1 mm)	N/A	Yes	No	5
ITCSN-4500-48"-Black-20 Pcs	054007-08981	1500-2500 kcmil	48" (1,22 m)	4.50"/1.50" (114,3/38,1 mm)	N/A	Yes	No	20
ITCSN-6000-48"-Black-5 Pcs	051135-37980	2.1"-4.8"	48" (1,22 m)	6.00"/1.80" (152,4/45,7 mm)	N/A	Yes	No	5
ITCSN-6000-48"-Black-20 Pcs	054007-08982	2.1"-4.8"	48" (1,22 m)	6.00"/1.80" (152,4/45,7 mm)	N/A	Yes	No	20

### 3M™ Direct Bury Splice Kits

## 3M™ Direct Bury Splice Kit DB0/B-6

The 3M™ Direct Bury Splice Kit DB0/B-6 is used to electrically connect two or more pre-stripped copper wires and moisture seal the connection for direct burial. The kit includes a 3M™ Performance Plus Wire Connector O/B+ and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant grease.

Voltage	600 V
Splice Type	Direct Bury
Application Temperature Range	32–120°F (0–49°C)
Operating Temperature	221°F (105°C)
Flame Retardant	Yes
RoHS 2011/65/EU	Yes
Agency Approval	




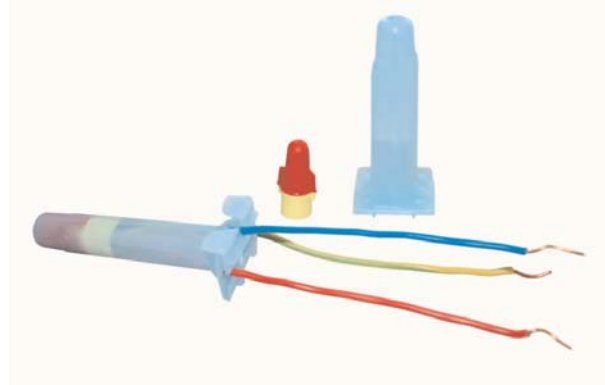
Order No.	UPC	Conductor Size	Common AWG Wire Combinations (CU only)	Case Qty.
DB0/B-6 KIT	051128-59075	18–10 AWG	2–3#16 sol/str; 2–3#14 sol/str; 2#12 sol/str; 1#14 to 1#12 sol/str; 1#18 to 1–2#14 sol/str; 1#18 to 1–2#12 sol/str; 1#16 to 1–2#14 sol/str; 1#16 to 1–2#12 sol/str	25 Kits
DB0/B-6 BULK	051128-59076	18–10 AWG	2–3#16 sol/str; 2–3#14 sol/str; 2#12 sol/str; 1#14 to 1#12 sol/str; 1#18 to 1–2#14 sol/str; 1#18 to 1–2#12 sol/str; 1#16 to 1–2#14 sol/str; 1#16 to 1–2#12 sol/str	100 Kits

## 3M™ Direct Bury Splice Kits

### 3M™ Direct Bury Splice Kit DBR/Y-6

The 3M™ Direct Bury Splice Kit DBR/Y-6 is used to electrically connect two or more pre-stripped copper wires and moisture seal the connection for direct burial. The kit includes a 3M™ Performance Plus Wire Connector R/Y+ and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant grease.

Voltage	600 V
Splice Type	Direct Bury
Application Temperature Range	32–120°F (0–49°C)
Operating Temperature Range	-40–221°F (-40–105°C)
Flame Retardant	Yes
RoHS 2011/65/EU	Yes
Agency Approval	



Order No.	UPC	Conductor Size	Common AWG Wire Combinations (CU only)	Case Qty.
DBR/Y-6 KIT	051128-58573	18–10 AWG	2–7#18; 2–6#16; 2–4#14; 2–4#12; 2–3#10; 1–3#12 w/ 1#18; 1–2#10 w/1#18; 1–2#10 w/1#12; 1–2#14 w/ 1#18	25 Kits
DBR/Y-6 BULK	051128-58574	18–10 AWG	2–7#18; 2–6#16; 2–4#14; 2–4#12; 2–3#10; 1–3#12 w/ 1#18; 1–2#10 w/1#18; 1–2#10 w/1#12; 1–2#14 w/ 1#18	100 Kits



## 3M™ Scotchcast™ Inline Splice Kits, 72-N Series

The 3M™ Scotchcast™ Inline Splicing Kits 72-N Series is a series of rigid body splices tailored for joining signal and control cables rated up to 1000 V. The kits are designed to accommodate shielded or unshielded constructions of plastic or rubber-jacketed cables. Six kit sizes cover a range of cables up to 100-pair (200 conductors) 10 AWG or 200-pair (400 conductors) 22 AWG.

**Connectors are not included, order separately.** Each kit contains sufficient material to make one splice, excluding connectors.

### 3M Scotchcast 72-N Series Selection (Based on Conductor/Connector Bundle)

Scotchlok™ Insulated Butt Connectors												
Kit No.	MV18BC 22-18 AWG				MV14BC 16-14 AWG				MV10BC 12-10 AWG			
	Shielded Cables**		Unshielded Cables**		Shielded Cables**		Unshielded Cables**		Shielded Cables**		Unshielded Cables**	
	No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs
72-N1*	—	—	6	3	—	—	4	2	—	—	3	—
72-N2	18	9	32	16	12	6	19	9	8	4	13	6
72-N3	42	21	75	37	24	12	45	22	14	7	27	13
72-N4	74	37	160	80	50	25	90	45	40	20	60	30
72-N5	140	70	200	100	120	60	160	80	100	50	100	50
72-N6	360	180	400	200	220	110	250	125	180	90	200	100

\*Nonshielded cable only.

\*\*Figures based on IMSA cable specifications.

<b>Voltage</b>	1000 V or less
<b>Number of Conductors</b>	Multiple Conductors
<b>Cable/Shielding Type</b>	Shielded and Non-Shielded Signal and Control Cable
<b>Splice Type</b>	Resin
<b>Applications</b>	To splice signal and control cables rated up to 1000 V. Inline splicing of shielded and non-shielded cables in direct burial applications.
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Shielded/Non-Shielded	Molded Body Length	Cable O.D.	Case Qty.
72-N1	054007-10623	Non-Shielded	7.125" (181,0 mm)	0.250"-0.625" (6,4-15,9 mm)	10
72-N2	054007-10625	Shielded	10.562" (268,3 mm)	0.500"-1.000" (12,7-25,4 mm)	10
72-N3	054007-10627	Shielded	15.438" (392,1 mm)	0.625"-1.500" (15,9-38,1 mm)	10
72-N4	054007-10629	Shielded	15.625" (396,9 mm)	1.000"-2.000" (25,4-50,8 mm)	1
72-N5	054007-10631	Shielded	20.312" (515,9 mm)	1.250"-2.250" (31,8-57,2 mm)	1
72-N6	054007-10633	Shielded	25" (635,0 mm)	1.250"-3.250" (31,8-82,6 mm)	1

## 3M™ Resin Splice Kits

# 3M™ Scotchcast™ Re-Enterable Signal and Control Cable Splice Kits 78-R Series

3M™ Scotchcast™ Re-Enterable Signal and Control Cable Splice Kits 78-R Series make inline or tap splices on shielded or nonshielded, plastic- and rubber-jacketed, signal and control (or power) cable rated up to 1 kV.

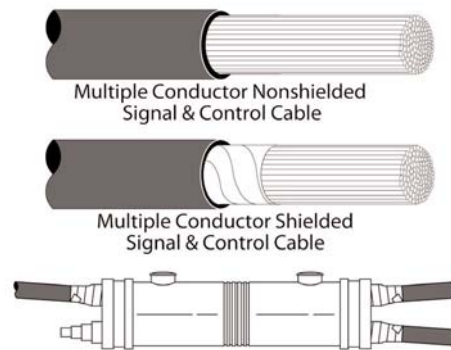
Connectors are not included, order separately. Each kit contains sufficient material to make one splice.

## 3M™ Scotchcast™ 78-R Series Connector Selection

Kit No.	Scotchlok™ Connectors																	
	Insulated Butt Connectors						Pigtail Connectors						Tap Connectors					
	MV18BC 22-18 AWG		MV14BC 16-14 AWG		MV10BC 12-10 AWG		"Y" 18-12 AWG		"R" 14-10 AWG		557 22-18 AWG		558 22-18 AWG		560 18-14 AWG		562 12-10 AWG	
No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs	No Cond.	No Pairs	
78-R1	40	20	26	13	16	8	8	4	5	2	15	7	10	5	8	4	6	3
78-R2	66	33	45	22	26	13	20	10	10	5	30	15	20	10	16	8	12	6
78-R3	160	80	110	55	70	35	50	25	28	14	80	40	50	25	40	20	36	18
78-R4	300	150	180	90	110	55	84	42	60	30	142	71	100	50	80	40	68	34
78-R5	550	275	320	160	200	100	174	87	120	60	260	130	200	100	160	80	130	65

Note: Above figures based on IMSA cable specifications.

<b>Voltage</b>	1000 V or less
<b>Number of Conductors</b>	Multiple Conductor
<b>Cable/Shielding Type</b>	Shielded and Non-Shielded Signal and Control Cable
<b>Splice Type</b>	Resin
<b>RoHS 2011/65/EU</b>	Yes
<b>Applications</b>	Inline wye, "x," or butt splicing of shielded or non-shielded cable in direct bury applications.



Order No.	UPC	Kit Size, L x I.D.	Cable O.D., Run	Cable O.D., Tap	Case Qty.
78-R1	051128-55115	12.50" x 2.75" (318 x 70 mm)	0.25"-1.00" (6,4-25,4 mm)	0.25"-1.00" (6,4-25,4 mm)	1
78-R2	051128-55116	24.50" x 2.75" (622 x 70 mm)	0.25"-1.00" (6,4-25,4 mm)	0.25"-1.00" (6,4-25,4 mm)	1
78-R3	051128-55117	24.50" x 3.81" (622 x 97 mm)	0.50"-1.50" (12,7-38,1 mm)	0.50"-1.00" (12,7-25,4 mm)	1
78-R4	051128-55118	24.50" x 4.81" (622 x 122 mm)	0.50"-2.00" (12,7-50,8 mm)	0.50"-1.75" (12,7-44,5 mm)	1
78-R5	051128-55119	26.50" x 6.00" (673 x 152 mm)	1.00"-2.50" (25,4-63,5 mm)	1.00"-2.50" (25,4-63,5 mm)	1

## 3M™ Resin Splice Kits

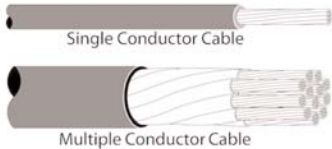

### 3M™ Scotchcast™ Multi-Mold Resin Splice Kits 85 Series

The 3M™ Scotchcast™ Multi-Mold Resin Splice Kit 85 Series are used to electrically insulate odd-sized and odd-shaped splices on cables rated through 1 kV. These flexible plastic molds are easily formed around splices. Within 30 minutes after the resin has been poured, the splice is ready for service – above ground or buried.

The 85-14CP splice is specifically designed for use in cathodic protection with 3M™ Scotchcast™ Electrical Insulating Resin 4.

Each kit makes one splice. Connectors are not included and must be ordered separately.

\* Single Conductor Cable

<b>Voltage</b>	1000 V or less		
<b>Number of Conductors</b>	Single; Multiple		
<b>Cable/Shielding Type</b>	Non-shielded		
<b>Splice Type</b>	Resin		
<b>Applications</b>	Splice cables rated up to 1000 V for inline, wye, or 4-way non-shielded cable in direct bury applications.		
<b>RoHS 2011/65/EU</b>	Yes		

Order No.	UPC	Max. Conductor, Split Bolt	Max. Conductor, H- or C-Tap Compression	Max. Conductor, Inline Compression	Max. Connector Size (height + width)	Max. Sheath Opening	Max. Cable O.D., Wye or 4-Way	Case Qty.
85-10	054007-11846	8 AWG (stranded)	4 AWG (stranded)	-	1-3/4" (44,5 mm)	3-1/2" (88,9 mm)	Run & Tap: 7/16" (11,1 mm)	10
85-12	054007-11847	1 AWG (stranded)	2/0 AWG (stranded)	-	2-3/4" (69,9 mm)	3-1/2" (88,9 mm)	Run & Tap: 3/4" (19,1 mm)	10
85-14	054007-11848	2/0 AWG (stranded)	4/0 AWG (stranded)	-	3-1/4" (82,6 mm)	6-1/2" (165,1 mm)	Run & Tap: 7/8" (22,2 mm)	10
85-14-CP*	054007-31927	2/0 AWG (stranded)	4/0 AWG (stranded)	-	3-1/4" (82,6 mm)	9" (228,6 mm)	Run & Tap: 7/8" (22,2 mm)	10
85-16	054007-02403	250 kcmil (run) 2/0 AWG (tap)	500 kcmil (run) 4/0 AWG (tap)	750 kcmil	Split Bolt: 3-3/4" (95,3 mm) H- or C-Tap Compression: 6" (152,4 mm)	9" (228,6 mm)	Run & Tap: 7/8" (22,2 mm) Inline: 1-1/2" (38,1 mm)	10

## 3M™ Resin Splice Kits

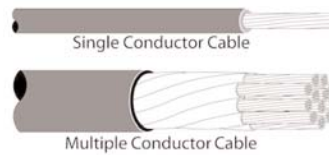
### 3M™ Scotchcast™ Multi-Mold Resin Splice Kits 85-18 and 85-20

The 3M™ Scotchcast™ Multi-Mold Resin Splice Kit 85 Series are used to electrically insulate odd-sized and odd-shaped splices on cables rated through 1 kV. These flexible plastic molds are easily formed around splices. Within 30 minutes after the resin has been poured, the splice is ready for service – above ground or buried.

Each kit makes one splice. Connectors are not included and must be ordered separately.

\* Single Conductor Cable

<b>Voltage</b>	1000 V or less
<b>Number of Conductors</b>	Single; Multiple
<b>Cable/Shielding Type</b>	Non-shielded
<b>Splice Type</b>	Resin
<b>Applications</b>	Splice cables rated up to 1000 V for inline, wye, or 4-way non-shielded cable in direct bury applications.
<b>RoHS 2011/65/EU</b>	Yes



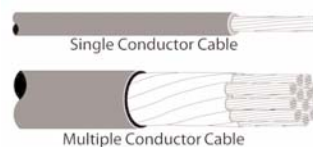
Order No.	UPC	Max. Cable Size Using Single Conductor	Max. Cables	Connector Type	Max. Sheath Opening	Case Qty.
85-18	051128-60554	2000 kcmil	1 x 4-Conductor 3/0 AWG or 4 x 1-Conductor 4/0 AWG	IPC or Other	15" (381 mm)	10
85-20	051128-60555	N/A	1 x 4-Conductor 350 kcmil or 4 x 1-Conductor 350 kcmil	IPC or Other	19" (483 mm)	10

### 3M™ Scotchcast™ Wye Resin Splice Kit 90-B1

3M™ Scotchcast™ Wye Resin Splice Kit 90-B1 insulates and moisture-seals wye splices made with the split-bolt type connectors on cables rated through 1 kV.

Each kit makes one splice. Connectors must be ordered separately.

<b>Voltage</b>	1000 V or less
<b>Number of Conductors</b>	Single; Multiple
<b>Cable/Shielding Type</b>	Single Conductor Cable, Multiple Conductor Cable
<b>Splice Type</b>	Resin
<b>Applications</b>	Insulation and protection of wye splices made with split bolt connectors on cable rated to 1000 V.
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Cable O.D. – Run	Cable O.D. (Max.) – Tap	Connector Size (Max.) – Split Bolt	Connector Size (Max.) – Crimped	Case Qty.
90-B1	054007-25115	0.50"-0.812" (12,7-20,1 mm)	0.375" (9,5 mm)	1/0 AWG	2/0 AWG	10

## 3M™ Resin Splice Kits

### 3M™ Scotchcast™ Flexible Power Cable Tap Splice Kit 82-BF1

3M™ Scotchcast™ Splice Kit 82-BF1 is for tap splices on non-shielded portable power cables and cords with copper conductors rated up to 1 kV. It can be used on single- conductor or multiple-conductor cables using a compression (crimp) “C” tap connector.

The 82-BF1 molds are removable and reusable. The 82-BF1 splice kit creates a permanent splice as recognized by the Mine Safety and Health Administration (07-KA060002-MSHA).

Each kit makes one splice.

\* Base selection on cable O.D. range.

<b>Voltage</b>	1000 V or less
<b>No. of Conductors</b>	Multiple (600 V), Single (1000 V)
<b>Cable/Shielding Type</b>	Non-Shielded Portable Power Cables and Cords
<b>Splice Type</b>	Resin
<b>Applications</b>	Making tap splices on non-shielded portable power cables and cords rated to 1000 V.
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approval</b>	Mine Safety and Health Administration acceptance: 07-KA060002-MSHA



Order No.	UPC	Cable O.D.	Voltage	Conductor Size	Case Qty.
82-BF1	051128-59175	For Single: 0.25"-0.80" (6-20 mm) For Multiple: 0.25"-0.80" (6-20 mm)	For Single: 1 kV For Multiple: 600 V	For Single: 1/0 AWG (50 mm <sup>2</sup> ) For Multiple: *	10



## 3M™ Resin Splice Kits

### 3M™ Scotchcast™ Inline Resin Power Cable Splice Kits 82-A Series

Use the 3M™ Scotchcast™ Inline Resin Splice Kits 82-A Series to insulate and seal single conductor, unshielded cable splices through 5 kV and multiple conductor cables through 1 kV. Designed for use in weather-exposed or direct-burial locations. UL listed for direct burial and submerged applications up to 600 V and 90°C. For use with UL listed connectors only.

Important: Use insulation jacket or connector O.D. for final ordering criteria.

\*Conductor size is 3/0 AWG–500 kcmil when using a 3M™ Scotchlok™ Copper Compression Connector 10014.

<b>Voltage</b>	600 V or less (Direct Bury and Submerged Applications); 1000 V (Multiple); 5 kV (Single)	
<b>Number of Conductors</b>	Single and Multiple	
<b>Cable/Shielding Type</b>	Multiple Conductor Portable Cable, Non-Shielded, Single Conductor Portable Cable	
<b>Splice Type</b>	Resin	
<b>RoHS 2011/65/EU</b>	Yes	
<b>Agency Approval</b>	Certified for 600 V or less	

Order No.	UPC	Conductor Size	Max. Connector O.D.	Max. Cable O.D.	Max. Sheath Opening (L)	Case Qty.
82-A	054007-25016	10-2 AWG	0.406" (10,3 mm)	0.60" (15,2 mm)	4.5" (114,3 mm)	10
82-A1	054007-25024	8-2 AWG	0.406" (10,3 mm)	0.60" (15,2 mm)	4.5" (114,3 mm)	10
82-A2	054007-25032	2-3/0 AWG	0.625" (15,9 mm)	1.00" (25,4 mm)	6.0" (152,4 mm)	10
82-A3	054007-25040	3/0 AWG-400 kcmil*	1.00" (25,4 mm)	1.56" (39,7 mm)	9.0" (228,6 mm)	10

### 3M™ Scotchcast™ Wye Resin Splice Kit 82-B1

3M™ Scotchcast™ Wye Resin Splice Kit 82-B1 insulates and seals wye splices for compression tap connectors (e.g., C-tap or H-tap) rated for cables up to 5 kV. Use on nonshielded cables through 5 kV and on multiple conductor cables through 1 kV.

This kit will accommodate both split bolt and crimped conductors. Each kit makes one splice. Connectors are not included in the kit and must be purchased separately.

<b>Voltage</b>	1000 V; 5 kV	
<b>Number of Conductors</b>	Multiple (1000 V), Single (5 kV)	
<b>Cable/Shielding Type</b>	Multiple Conductor Portable Cable, Non-Shielded, Single Conductor Portable Cable	
<b>Splice Type</b>	Resin	
<b>RoHS 2011/65/EU</b>	Yes	

Order No.	UPC	Voltage Rating	Cable O.D.	Max. Conductor Size – Split Bolt	Max. Conductor Size – Crimped	Case Qty.
82-B1	054007-25057	5 kV (Single); 1 kV (Multiple)	0.25"-0.625" (6,4-16,0 mm)	4 AWG	2 AWG	10

## 3M™ Scotchcast™ Flexible Power Cable Inline Splicing Kits 82-F Series

3M™ Scotchcast™ Flexible Power Cable Inline Splicing Kits 82-F Series are a series of flexible inline splices for use on non-shielded portable power cables and cords. They are designed to be used on single and multiple conductor cables and cords rated up to 1000 Volts (600/2000 Volts mine portable cable rating). The 82-F Series accommodates a 1/C cable rated up to 5 kV. The splices accommodate 1/C cables sized up to 4/0 for inline splicing. Multi-conductor sizing is based on a cable diameter range of up to 1.2" for inline splicing.

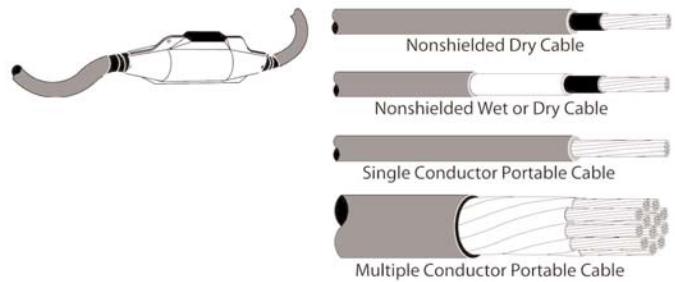
The splice kits are based on 3M™ Scotchcast™ Flame Retardant Insulating Resin 2131 for toughness, flexibility, moisture sealing and flame retardancy. They are permanent splices as assigned by the Mine Safety and Health Administration (07-KA060002-MSHA). The completed splices are designed for use in weather-exposed, direct burial or submerged locations. 3M™ Scotchcast™ Inline Splice Kits for Flexible Power Cable 82-F1 are for use on unshielded, portable power cables. The kits are rated up to 5 kV for 1/C and up to 1 kV for multiple conductors.

Each kit makes one splice. Connectors are not included in the kit, and must be purchased separately.

\*Mine portable cable rating of 600/2000 V

\*\*Base selection on cable O.D. range

<b>Voltage</b>	1000 V; 5 kV
<b>Number of Conductors</b>	Multiple (1000 V), Single (5 kV)
<b>Cable/Shielding Type</b>	Non-Shielded Dry and Wet Cables, Single and Multiple Conductor Portable Cables
<b>Splice Type</b>	Resin
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approval</b>	Mine Safety and Health Administration acceptance: 07-KA060002-MSHA



Order No.	UPC	Cable O.D.	Connection Max. O.D.	Voltage	Conductor Size	Case Qty.
82-F1	051128-59176	For Single: 0.25"-0.80" (6-20 mm) For Multiple: 0.25"-0.80" (6-20 mm)	For Single: 0.62" (16 mm) For Multiple: 0.90" (23 mm)	For Single: 5 kV For Multiple: 1 kV*	For Single: 6-1/0 AWG (16-50 mm <sup>2</sup> ) For Multiple: **	10
82-F2	051128-59177	For Single: 0.80"-1.20" (20-30 mm) For Multiple: 0.80"-1.20" (20-30 mm)	For Single: 0.82" (21 mm) For Multiple: 1.30" (33 mm)	For Single: 5 kV For Multiple: 1 kV*	For Single: 2/0-4/0 AWG (70-95 mm <sup>2</sup> ) For Multiple: **	10



## 3M™ Resin Splice Kits

### 3M™ Scotchcast™ Flame-Retardant Electrical Insulating Resin 2131

3M™ Scotchcast™ Flame-Retardant Electrical Insulating Resin 2131 is a two-part polyurethane resin designed to replace the cable jacket when splicing or repairing mine and portable cables. Its unique formulation makes it particularly suited to withstand the rugged conditions under which mine and portable cables must operate. When used in accordance with the appropriate kit configuration, Insulating Resin 2131 conforms to MSHA Part 7, Title 30 CFR.

Flame-Retardant Electrical Insulating Resin 2131 is also used as the insulating material for cable splices operating at up to 1000 volts and designed for 194°F (90°C) at continuous use and for 266°F (130°C) at temporary, overload temperature.

3M™ Scotchcast™ Flame-Retardant Electrical Insulating Resin 2131 comes in two sizes of 2-part pouch containers, one gallon pail with two pouches and 5 gallon pails for both Part A and Part B. (Note: 2.1 parts of B required for every 1 part of A by weight.)

<b>Voltage</b>	1000 Volts or less
<b>Cure Time</b>	16 to 24 Hours at 70°F (21°C)
<b>Energize Time</b>	After resin cools and solidifies
<b>Max. Operating Temperature</b>	194°F (90°C) continuous
<b>Color</b>	Black
<b>RoHS 2011/65/EU</b>	Yes
<b>Used in these kits</b>	5750; 5760; 5831; 5832; 82-F1; 82-F2; 82-BF1; M-20; M-30; M-40, 8096 Series



Order No.	UPC	Package Description	Weight	Volume	Case Qty.
2131B	051128-59166	2-part pouch	7.5 oz (213 g)	10.6 in³ (175 cm³)	10
2131C	051128-59167	2-part pouch	21.5 oz (612 g)	30.6 in³ (502 cm³)	10
2131-Part A 5 Gal	051128-59181	5 gallon pail, Part A	44.5 lb (20.1 kg)	5 gal (18.93 L)	1 pail
2131-Part B 5 Gal	051128-59182	5 gallon pail, Part B	46.5 lb (21 kg)	5 gal (18.93 L)	1 pail
2131-1GAL	051128-60952	2 pouches, 1 gallon can	12.51 lb (5.6 kg)	1 gal (3,8 L)	1 kit

## 3M™ Resin Splice Kits

### 3M™ Scotchcast™ Potting Kit 2136

The 3M™ Scotchcast™ Potting Kit 2136 is designed to provide protection against corrosion and possible deteriorating effects of fresh swimming pool or fountain water and sunlight by reliably encapsulating the 8 AWG ground connection in a wet-niche shell as required by NEC® when using rigid, non-metallic conduit in the installation of wet-niche underwater lighting fixtures. Scotchcast 2136 compound is UL Listed as a potting compound for swimming pool, fountain, or spa equipment and is for use only where adhering to copper, copper alloy and stainless steel materials.

3M™ Scotchcast™ Potting Compound 2136 is a thixotropic polyurethane resin, designed to resist dripping or sagging, and is contained in an easy mix 1.5 oz. closed mixing pouch. At temperatures above 40°F (18°C) the compound will firm up in minutes. Encapsulated connections should be allowed to cure for 4 hours prior to submersion.

<b>Voltage</b>	Up to 1000 Volts; UL Listed up to 600 Volts
<b>Cure Time</b>	4 Hours at 70°F (21°C)
<b>Energize Time</b>	When resin cools and solidifies
<b>Max. Operating Temperature</b>	220°F (105°C)
<b>Color</b>	Black
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approval</b>	UL Listed 20L02



Order No.	UPC	Package Description	Material	Weight, oz (g)	Containers per Case
2136	051128-59190	2-part pouch	Resin Potting Compound	1.50 (42,5)	10

### 3M™ Scotchcast™ Connector Sealing Pack 3570G-N

The 3M™ Scotchcast™ Connector Sealing Pack 3570G-N insulates and provides protection for electrical spring connectors against dust, soil, water, and other environmental elements.

Each sealing pack contains a specific amount of the two-part 3M™ Scotchcast™ Resin 3570G-N in a unique closed mixing pouch. The resin generates its own heat to cure and its compatibility with spring connectors makes this sealing pack a convenient insulating and encapsulating resin for electrical spring connections.

The 3570G-N sealing pack will accommodate one 3M™ Performance Plus Wire Connector O/B+, R/Y+, T/R+, T/Y+ or one 3M™ Electrical Spring and Grounding Connector 312 or 512.

<b>Voltage</b>	Up to 1000 Volts
<b>Cure Time</b>	24 Hours at 70°F (21°C)
<b>Energize Time</b>	After resin cools and solidifies
<b>Max. Operating Temperature</b>	194°F (90°C)
<b>Color</b>	Black
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Material	Weight, oz (g)	Containers per Case
3570G-N	051128-59186	Epoxy	0.24 (6,7)	10

## 3M™ Resin Splice Kits

### 3M™ Resin Pressure System Components

The 3M™ Resin Pressure System is comprised of several components used for constructing splices or splice jackets on medium voltage power cables for harsh environments. 3M™ Scotchcast™ Electrical Insulating Resin 4 is a key component of the system, which can be used as the primary insulation for shielded and non-shielded splices rated up to 8 kV. The system is also available as a resin-jacketed tape splice (TapeCast) rated up to 25 kV. The resin is a two-part epoxy, packaged in a special Unipak container that provides the exact mixing ratio for making a strong, dependable and long-lasting splice or splice jacket. The versatile resin system accommodates a variety of splice configurations and cables.

A resin pressure system splice is suitable for submerged locations (e.g. manholes and vaults), underground direct burial, and aerial applications. All parts are ordered separately. Contact your local 3M representative for further details.



### 3M™ Resin Pressure System Components

Voltage Class	Number of Conductors	Shielding	Insulation Material	Splice Configuration
5 and 8 kV	1/C, multi/C and Transitions from Multi-to single conductor	Non-shielded, Tape Shielded, Wire Shielded, UniShield®, LC, CN and JCN	Solid Dielectric (EPR, XLPE, etc.), PILC and transitions from PILC to Solid Dielectric	Inline, Wye and Tee Resin Splice
15 kV	1/C, multi/C and Transitions from Multi-to single conductor	Tape Shielded, Wire Shielded, UniShield®, LC, CN and JCN	Solid Dielectric (EPR, XLPE, etc.), PILC and transitions from PILC to Solid Dielectric	Inline and Tee TapeCast™ Splice
25 kV	1/C, multi/C and Transitions from Multi-to single conductor	Tape Shielded, Wire Shielded, UniShield®, LC, CN and JCN	Solid Dielectric (EPR, XLPE, etc.), PILC and transitions from PILC to Solid Dielectric	Inline and Tee TapeCast™ Splice

These Resin and 3M™ TapeCast™ Splices will also work on sector shaped conductors.

Order No.	UPC	Product Name	Description	Case Qty.
E-4	054007-25701	3M™ Resin Pressure Gun E-4	Reusable resin pressure gun used for constructing a resin pressure splice.	1
P-1B	054007-11857	3M™ Scotchcast™ Injection Fitting P-1B	Enables safe transfer of resin through gun and into the joint.	5
P-3	054007-25735	3M™ Scotchcast™ Spacer Tape P-3	Used to build up voids in odd shaped splices, ensures full resin coverage, and forms a liquid tight mold. 27' x 1-1/2" (8,23 m x 38,1 mm)	50
P-4	054007-25743	3M™ Cloth Tape P-4	Restrictor Tape, 1" x 30' on 1" core.	50
P-5B	054007-11858	3M™ Scotchcast™ Injection Nozzle P-5B	Used to puncture compound bag and pipe compound to P-1B injection fitting. Mastic seal prevents spillage.	5

## 3M™ Cold Shrink Connector Insulators 8420 and 8430 Series

3M™ Cold Shrink Connector Insulators 8420 and 8430 Series are designed using 3M's proprietary cold shrink delivery system. Products are supplied prestretched on a removable core for efficiency and ease of installation. Removal of the core (unwinding) after positioning the splice allows the product to shrink into position forming a moisture-tight seal. The live memory action of the specially formulated EPDM material promotes a permanent, durable environmental seal and insulation, with a typical operating temperature range from -40–194°F (-40–90°C).

The 8420 insulator meets requirements of ANSI C119-1 and Western Underground Guide 2.14 for secondary splices rated up to 1 kV.

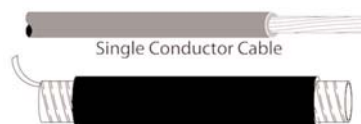
**Applications:** Primary electrical insulation for all solid dielectric (rubber and plastic) insulated wire and cable splicing rated to 1000 V. Good for repairs and environmental sealing for communication and other non-electrical applications.

**Important:** Use insulation jacket or connector O.D. for final ordering criteria.

\* Mastic pads included for cable O.D. build-up. \*\* Kit contains adapters. \*\*\* These sizes are listed for availability only and are not designed to be used as primary insulation. These tubes are for conduit sealing and breakouts. \*\*\*\*Maximum connector length: 5.625"

"Point of Purchase" packaging designated by "P". Example: 8423-6P

<b>Voltage</b>	1000 V or less
<b>Number of Conductors</b>	Single Conductor
<b>Cable Type</b>	Low Voltage Single Conductor Insulated Cable
<b>Splice Type</b>	Cold Shrink
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	ANSI C1191.1



Order No.	UPC	Typical Conductor Size	Min. Cable Dia. for Seal	Max. Dia. Insulator Cable or Connector Covers	Max. Connector Length	Relaxed Tube Length	Case Qty.
8423-6	054007-42146	6-4 AWG (14-16 mm <sup>2</sup> )	0.31" (7,8 mm)	0.56" (14,2 mm)	2.0" (50,8 mm)	6.0" (152,4 mm)	10
8423-6P	054007-42864	6-4 AWG (14-16 mm <sup>2</sup> )	0.31" (7,8 mm)	0.56" (14,2 mm)	2.0" (50,8 mm)	6.0" (152,4 mm)	10
8424-8**	054007-42390	10-1/0 AWG (6-16 mm <sup>2</sup> )	0.10" (2,5 mm)	0.82" (20,9 mm)	3.0" (76,2 mm)	8.0" (203,2 mm)	10
8424-8P	054007-42865	10-1/0 AWG (6-16 mm <sup>2</sup> )	0.10" (2,5 mm)	0.82" (20,9 mm)	3.0" (76,2 mm)	8.0" (203,2 mm)	10
8425-8	054007-42391	2-1/0 AWG (35-50 mm <sup>2</sup> )	0.40" (10,1 mm)	0.82" (20,9 mm)	3.0" (76,2 mm)	8.0" (203,2 mm)	10
8425-8P	054007-42866	2-1/0 AWG (35-50 mm <sup>2</sup> )	0.40" (10,1 mm)	0.82" (20,9 mm)	3.0" (76,2 mm)	8.0" (203,2 mm)	10
8426-9	054007-34457	2/0 AWG-250 kcmil (70-125 mm <sup>2</sup> )	0.55" (13,9 mm)	1.18" (30,1 mm)	5.0" (127,0 mm)	9.0" (228,6 mm)	10
8426-9M*	054007-43436	2-4/0 AWG (30-90 mm <sup>2</sup> )	0.40" (10,1 mm)	1.18" (30,1 mm)	5.0" (127,0 mm)	9.0" (228,6 mm)	10
8426-9P	054007-42867	2/0 AWG-250 kcmil (70-125 mm <sup>2</sup> )	0.55" (13,9 mm)	1.18" (30,1 mm)	5.0" (127,0 mm)	9.0" (228,6 mm)	10
8426-11	054007-34458	2/0 AWG-250 kcmil (70-125 mm <sup>2</sup> )	0.55" (13,9 mm)	1.18" (30,1 mm)	7.0" (177,8 mm)	11.0" (279,4 mm)	10
8427-6***	054007-09915	-	0.67" (16,8 mm)	1.38" (35,1 mm)	2.0" (50,8 mm)	6.0" (152,4 mm)	10
8427-12	054007-34459	250-400 kcmil (125-200 mm <sup>2</sup> )	0.67" (16,8 mm)	1.38" (35,1 mm)	8.0" (203,2 mm)	12.0" (304,8 mm)	10
8427-12P	054007-42868	250-400 kcmil (125-200 mm <sup>2</sup> )	0.67" (16,8 mm)	1.38" (35,1 mm)	8.0" (203,2 mm)	12.0" (304,8 mm)	10
8427-16	054007-34460	250-400 kcmil (125-200 mm <sup>2</sup> )	0.67" (16,8 mm)	1.38" (35,1 mm)	12.0" (304,8 mm)	16.0" (406,4 mm)	10

## 3M™ Cold Shrink Connector Insulators 8420 and 8430 Series (continued)

Order No.	UPC	Typical Conductor Size	Min. Cable Dia. for Seal	Max. Dia. Insulator Cable or Connector Covers	Max. Connector Length	Relaxed Tube Length	Case Qty.
8428-6***	054007-09916	-	0.95" (24,1 mm)	1.94" (49,2 mm)	2.0" (50,8 mm)	6.0" (152,4 mm)	10
8428-6M	051128-53828	450-800 kcmil (240-400 mm <sup>2</sup> )	0.95" (24,1 mm)	1.94" (49,2 mm)	2.0" (50,8 mm)	6.0" (152,4 mm)	50
8428-8	051128-53711	500-800 kcmil (300-400 mm <sup>2</sup> )	0.95" (24,1 mm)	1.94" (49,2 mm)	3.0" (76,2 mm)	8.0" (203,2 mm)	25
8428-12	054007-09056	500-800 kcmil (300-400 mm <sup>2</sup> )	0.95" (24,1 mm)	1.94" (49,2 mm)	8.0" (203,2 mm)	12.0" (304,8 mm)	10
8428-12M	054007-43746	500-800 kcmil (300-400 mm <sup>2</sup> )	0.95" (24,1 mm)	1.94" (49,2 mm)	8.0" (203,2 mm)	12.0" (304,8 mm)	10
8428-12P	054007-42869	500-800 kcmil (300-400 mm <sup>2</sup> )	0.95" (24,1 mm)	1.94" (49,2 mm)	8.0" (203,2 mm)	12.0" (304,8 mm)	10
8428-18	054007-34461	500-800 kcmil (300-400 mm <sup>2</sup> )	0.95" (24,1 mm)	1.94" (49,2 mm)	14.0" (355,6 mm)	18.0" (457,2 mm)	10
8429-6***	054007-09917	-	1.27" (32,2 mm)	2.67" (67,8 mm)	2.0" (50,8 mm)	6.0" (152,4 mm)	10
8429-9****	054007-09931	900-1000 kcmil (500 mm <sup>2</sup> )	1.27" (32,2 mm)	2.67" (67,8 mm)	5.0" (127,0 mm)	9.0" (228,6 mm)	10
8429-9M	054007-42018	900-1000 kcmil (500 mm <sup>2</sup> )	1.27" (32,2 mm)	2.67" (67,8 mm)	5.0" (127,0 mm)	9.0" (228,6 mm)	10
8429-12	054007-42389	900-1000 kcmil (500 mm <sup>2</sup> )	1.27" (32,2 mm)	2.67" (67,8 mm)	8.0" (203,2 mm)	12.0" (304,8 mm)	10
8429-15	054007-44198	900-1000 kcmil (500 mm <sup>2</sup> )	1.27" (32,2 mm)	2.67" (67,8 mm)	11.0" (279,4 mm)	15.0" (381,0 mm)	10
8429-18	054007-34462	900-1000 kcmil (500 mm <sup>2</sup> )	1.27" (32,2 mm)	2.67" (67,8 mm)	14.0" (355,6 mm)	18.0" (457,2 mm)	10
8430-9***	054007-42147	1250-2000 kcmil	1.68" (42,6 mm)	3.69" (93,7 mm)	5.0" (127,0 mm)	9.0" (228,6 mm)	10
8430-18	054007-42388	1250-2000 kcmil	1.68" (42,6 mm)	3.69" (93,7 mm)	14.0" (355,6 mm)	18.0" (457,2 mm)	10

## 3M™ Cold Shrink Silicone Insulators 8440 Series (1000 Volts or less)

3M™ Cold Shrink Silicone Insulators 8440 Series are insulating sleeves made from a specially formulated high-temperature silicone rubber with a typical operating temperature range of -67–500°F (-55–260°C).



<b>Voltage</b>	1000 V or less
<b>No. of Conductors</b>	Single Conductor
<b>Cable Type</b>	Low Voltage Single Conductor Insulated Cable
<b>Splice Type</b>	Cold Shrink
<b>Application</b>	Primary electrical insulation for all solid dielectric (rubber and plastic) insulated wire and cable splices rated to 1000 V.
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Typical Conductor Size	Min. Cable Diameter for Seal	Max. Diameter Insulator Cable or Connector Covers	Relaxed Tube Length	Case Qty.
8443-2	054007-09485	6–2 AWG (14–30 mm <sup>2</sup> )	0.30" (7,6 mm)	0.56" (14,2 mm)	2.00" (50,8 mm)	12
8443-3	051128-57098	6–2 AWG (14–30 mm <sup>2</sup> )	0.30" (7,6 mm)	0.56" (14,2 mm)	2.00" (50,8 mm)	12
8443-6.5	054007-09482	6–2 AWG (14–30 mm <sup>2</sup> )	0.30" (7,6 mm)	0.56" (14,2 mm)	6.50" (165,1 mm)	12
8445-2.5	054007-09486	2–1/0 AWG (35–50 mm <sup>2</sup> )	0.37" (9,4 mm)	0.72" (18,3 mm)	2.50" (63,5 mm)	12
8445-7.5	054007-09483	2–1/0 AWG (35–50 mm <sup>2</sup> )	0.37" (9,4 mm)	0.72" (18,3 mm)	7.50" (190,5 mm)	12
8447-3.2	054007-09487	1/0–3/0 AWG (60–80 mm <sup>2</sup> )	0.49" (12,4 mm)	0.95" (24,1 mm)	3.20" (81,3 mm)	12
8447-8	054007-09484	1/0–3/0 AWG (60–80 mm <sup>2</sup> )	0.49" (12,4 mm)	0.95" (24,1 mm)	8.00" (203,2 mm)	12

## 3M™ Cold Shrink Splice Kits

### 3M™ Cold Shrink Quick Insulator QI Series

3M™ Cold Shrink Quick Insulator QI Series are open-ended tubular rubber sleeves with sealing mastic on each end that are factory expanded and assembled onto a removable core. The core is removed by pulling from one end after the QI insulator has been positioned over an inline connector, allowing the ends of the tube to shrink and form a water-resistant seal. Sizing of the core and tube, along with the sealing mastic on each end, provides a broader application range without degrading the seal and insulating characteristics of the EPDM rubber tube. Five diameter sizes will cover a range of 1 kV or less cable from 8 AWG–3000 kcmil, copper and aluminum conductors with crimped connectors.



\* Restricted by connector length.

<b>Voltage</b>	1000 V or less
<b>Number of Conductors</b>	Single Conductor
<b>Cable Type</b>	Low Voltage Single Conductor Insulated Cable
<b>Splice Type</b>	Cold Shrink
<b>Applications</b>	Insulating and protecting low voltage splices in direct bury secondary low voltage applications.
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	ANSI C-119.1



Order No.	UPC	Conductor Size, Cu	Conductor Size, Al	Cable Insulation O.D.	Max. Connector O.D.	Max Connector Length	Case Qty.
QI-5/16-220	051128-57750	8–2/0 AWG	8–1/0 AWG	0.20"–0.65" (5,1–16,5 mm)	0.65" (16,5 mm)	2.75" (69,9 mm)	10
QI-10/37-270	051128-57698	2 AWG–750 kcmil	2 AWG–500 kcmil	0.40"–1.45" (10,2–36,8 mm)	1.45" (36,8 mm)	4.50" (114,3 mm)	10
QI-18/57-325	051128-57751	250–1250 kcmil	250–1250 kcmil	0.71"–2.25" (18,0–57,2 mm)	2.25" (57,2 mm)	6.00" (152,4 mm)	10
QI-14/70-235	051128-60790	4 AWG–500 kcmil*	4 AWG–800 kcmil*	0.30"–2.75" (7,6–69,8 mm)	2.75" (69,8 mm)	5" (127 mm)	10
QI-14/70-430	051128-60791	4 AWG–3000 kcmil	4 AWG–3000 kcmil	0.30"–2.75" (7,6–69,8 mm)	2.75" (69,8 mm)	12" (304,8 mm)	10



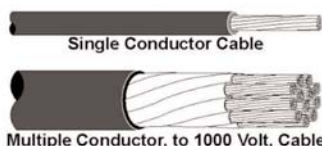
## 3M™ Cold Shrink Quick Splice Low Voltage QSLV-M Series

3M™ Cold Shrink Quick Splice Low Voltage QSLV-M are open-ended tubular rubber sleeves with sealing mastic on each end which are factory expanded and assembled onto a unique three-core system. Two cores, one on each end, are removed after the QSLV-M insulator has been centered over an inline connector, allowing the ends of the tube to shrink and form a water-resistant seal. The third, center segment of the core remains inside the cold shrink tube, acting as a support structure. Sizing of the cores and tube, along with the sealing mastic on each end, is designed to accommodate the variance in connectors and connector crimping techniques and final dimensions without degrading the seal and insulating characteristics of the EPDM rubber tube, while also making core removal easy. Two diameter sizes will cover a range of 1 kV or less cable from 8 AWG through 1000 kcmil for copper and 8 AWG through 500 kcmil for aluminum conductors with crimped connectors.

In aerial applications where intense UV radiation will be common and visual inspection is not possible, it is recommended to overwrap the tubing with Scotch® Super 33+™ Vinyl Electrical Tape or Scotch® Self-Fusing Silicone Rubber Electrical Tape 70.

Note: Insulator may be used on cable sizes outside of the recommended range provided both cables are within the insulation O.D. range, and the connector meets the dimensional requirements shown in the table.

<b>Voltage</b>	1000 V or less
<b>Number of Conductors</b>	Single Conductor; Multiple Conductor
<b>Cable Type</b>	Low Voltage Single or Multiple Conductor Insulated Cable
<b>Splice Type</b>	Cold Shrink
<b>Applications</b>	Insulating and protecting low voltage splices in direct bury secondary low voltage applications.
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	ANSI C119.1



Order No.	UPC	Cable Size, Al	Cable Size, Cu	Cable Insulation O.D.	Max. Connector O.D.	Max. Connector Length	Case Qty.
QSLV-M(8-2/0)	051128-57236	8-2/0 AWG	8-3/0 AWG	0.20"-0.75" (5-19 mm)	0.687" (17 mm)	2.50" (63 mm)	10
QSLV-M(2-500)	051128-57237	2 AWG-500 kcmil	2 AWG-1000 kcmil	0.40"-1.60" (10-41 mm)	1.500" (38 mm)	4.25" (108 mm)	10

## 3M™ Cold Shrink Connector Insulator WF Series

3M™ Cold Shrink Connector Insulator WF Series are designed using the 3M unique cold shrink delivery system. Products are supplied pre-stretched on a removable core for efficiency and ease of installation. Removal of the core (unwinding) after positioning the splice allows the product to shrink into position forming a moisture tight seal. The live memory action of the specially formulated EPDM material promotes a permanent, durable environmental seal and insulation, with typical operating range from 40° to 194°F (-40° to 90°C).

<b>Voltage</b>	2000 V or less
<b>Number of Conductors</b>	Single Conductor
<b>Cable Type</b>	Low Voltage Single Conductor Insulated Cable
<b>Splice Type</b>	Cold Shrink
<b>Applications</b>	Primary electrical insulation for all solid dielectric (rubber and plastic) insulated wire and cable splices rated to 2000 volts. Direct bury or submersible, indoor and outdoor, lug connections to bus bar, insulation of secondary splices, copper or aluminum conductors, relocation of service, dig in and sheath repairs, wind farm down tower applications, environmental sealing for communication and other non-electrical applications and insulation of inline conductor transition connector.
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	UL listed in US and Canada (WF100,WF101,WF102,WF103,WF104)



Order No.	UPC	Conductor Size AWG & kcmil	Product Diameter Range Inches (mm)	Case Qty.
WF100	051128-60145	4-2 AWG	0.35"-0.56" (8,9-14,2 mm)	10
WF101	051128-60146	1-2/0 AWG	0.45"-0.82" (11,4-20,8 mm)	10
WF102	051128-60147	3/0 AWG-250 kcmil	0.62"-1.18" (15,7-30,1 mm)	10
WF103	051128-59546	350-500 kcmil	0.88"-1.63" (22,4-41,4 mm)	10
WF104	051128-60148	600-750 kcmil (Al) 600-1000 kcmil (Cu)	1.00"-1.94" (25,4-49,3 mm) 1.00"-1.94" (25,4-49,3 mm)	10
WF105	051128-60931	1000-1500 kcmil (Al) 1000-2000 kcmil (Cu)	1.25"-2.50" (31,75-63,50 mm) 1.25"-2.50" (31,75-63,50 mm)	10


## 3M™ Inline Splices for 3/C or 4/C Armored Power Cable (Teck-90) 5730 Series

These kits are applicable for indoor and outdoor installations, including direct burial, aerial and submersible applications. Each kit requires at least 1 roll of 3M™ Armorcast Structural Material. For use with 3/C or 4/C Armor Power Cable (Teck-90) up to 1000 V.

3M™ 3/C Armored Power Cable 5730 Series accommodates a full range of cable sizes from 14 AWG–750 kcmil. The overall jacket diameter ranges from 0.62–4.00" (16–102 mm).

**Notes**

- Connectors are not included in the kit. Use only CSA certified compression connectors. Vinyl or nylon butt connectors are preferred for 5730 and 5731 series.
- Amount of armorcast needed is based on two half-lapped layers and 15' rolls.

<b>Voltage</b>	1000 V or less
<b>Number of Conductors</b>	Multiple Conductor
<b>Cable/Shielding Type</b>	Armor Power Cable (Teck 90)
<b>Splice Type</b>	Inline
<b>RoHS 2011/65/EU</b>	Yes
	
<b>Agency Approvals</b>	Certified for 600 V or less CSA Approved for use in the United States and Canada



Order No.	UPC	Voltage	Conductor Size	Overall Jacket Diameter	Number of Conductors	Amount of 3M™ Armorcast Required	Case Qty.
5730	054007-43171	0–600 V	14–10 AWG	0.62"–1.00" (15,7–25,4 mm)	3/C or 4/C	1 roll	1
5731	054007-43172	0–600 V	8–4 AWG	0.95"–1.40" (24,1–35,6 mm)	3/C or 4/C	1 roll	1
5732	054007-43173	0–1000 V	2–1/0 AWG	0.95"–2.40" (24,1–61,0 mm)	3/C only	1 roll	1
5733	054007-43174	0–1000 V	2/0 AWG–250 kcmil	1.15"–3.30" (29,2–83,8 mm)	3/C only	2 rolls	1
5734	054007-43175	0–1000 V	250–500 kcmil	1.55"–4.00" (39,4–101,6 mm)	3/C only	2 rolls	1
5735	054007-43176	0–1000 V	500–750 kcmil	1.55"–4.00" (39,4–101,6 mm)	3/C only	3 rolls	1

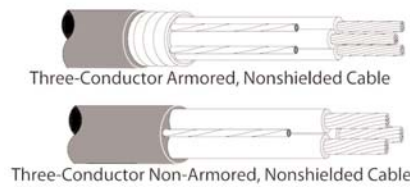
## 3M™ Resin/Cold Shrink Non-Shielded, Armored or Non-Armored Splice Kits 5750 Series

3M™ Resin/Cold Shrink 5750 Series splice kits are designed for non-shielded armored and non-armored solid dielectric cables rated up to 5 kV. Each kit makes one 3/C splice. Connectors are not included and must be ordered separately.

\* Splice diameter varies according to cable size (O.D.).

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	1 kV, 5 kV
<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Non-Armored (Non-Shielded), Armored (Non-Shielded)
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink, Resin
<b>Conductor Material</b>	Aluminum, Copper
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approval</b>	Mine Safety and Health Administration Acceptance: 07-KA060007-MSHA



Order No.	UPC	Insulation O.D. Range	1 kV Conductor Size, Copper or Aluminum	5 kV Conductor Size, Copper or Aluminum	Splice Diameter Range*	Typical Splice Length	Case Qty.
5751	051128-59169	0.50"-0.95" (13-24 mm)	1-3/0 AWG (50-95 mm <sup>2</sup> )	6-1 AWG (14-50 mm <sup>2</sup> )	1.5"-2.5" (38,1-63,5 mm)	19.0" (483 mm)	1
5752	051128-59168	0.66"-1.25" (17-31 mm)	4/0 AWG-350 kcmil (120-185 mm <sup>2</sup> )	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	2.5"-4.0" (63,5-101,6 mm)	28.0" (711 mm)	1
5753	051128-59171	0.95"-1.80" (24-46 mm)	350-750 kcmil (185-400 mm <sup>2</sup> )	350-750 kcmil (185-400 mm <sup>2</sup> )	3.5"-6.0" (88,9-152,4 mm)	42.0" (1067 mm)	1

## 3M™ Cold Shrink Portable Cable Splice Kits 2237A and 2238A

3M™ Cold Shrink Portable Cable Splice Kits 2237A and 2238A are designed to splice SO and SJ type portable power cables (commercial grade extension cords) which are typically used in industrial environments. The 2237A kit accommodates 4-conductor 12-10 AWG and the 2238A kit accommodates 4-conductor 8 AWG.

The primary application for the kits is splicing damaged portable cable. The kits can be used for cables aboard ships, cargo operations and a variety of industrial applications.

Each kit contains:

- Cold shrink tube
- Butt connectors
- Rubber phase
- Divider mastic strips
- Scotch® Vinyl Electrical Color-Coding Tape 35
- Instructions

<b>Voltage</b>	1000 V or less
<b>Number of Conductors</b>	Single Conductor
<b>Cable/Shielding Type</b>	SO, SJ
<b>Splice Type</b>	Cold Shrink
<b>Application</b>	Splicing damaged portable cable.
<b>RoHS 2011/65/EU</b>	Yes

Order No.	UPC	Conductor Size	Cable O.D.	Case Qty.
2237A	054007-41317	12-10 AWG (6 mm <sup>2</sup> )	0.62" (0.96 mm)	10
2238A	054007-41318	8 AWG (10 mm <sup>2</sup> )	0.62" (0.96 mm)	10

# Medium Voltage Splice Kits, 5 kV–46 kV

3M™ Medium Voltage Splice Solutions are designed to help you reduce the time, labor and cost involved in a variety of electrical cable splicing applications. The 3M product line covers splicing needs from 5 kV-46 kV applications, and utilizes field-proven technologies to provide dependable performance, stability and long life with every splice you make. With 3M, you can choose the right splice to fit your specific needs.



## Cold Shrink Splices

3M™ Cold Shrink splicing products are designed using 3M's proprietary cold shrink delivery system. Products are supplied pre-stretched on a removable core for efficiency and ease of installation. The removable core unwinds after positioning the splice, allowing the product to shrink into position and form a moisture resistant seal. The live-memory action of the specially formulated material ensures a permanent, durable environmental seal and insulation. All 3M™ Cold Shrink QS4 Integrated Splices and 3M Cold Shrink QS-III Medium Voltage (5 kV-46 kV) Kits meet the requirements of IEEE-404, and each splice is factory tested on power cable to ensure long-term reliability and quality. 3M QS4 and QS-III splices can be used for direct burial applications, as well as in manholes, vaults, cable trays, and junction boxes. All 3M cold shrink products require no special tools, flame or training to install.

## Molded Rubber Splices

3M™ Molded Rubber QS and QS-II Kits are molded from specially formulated, peroxide cured, EPDM rubber to provide a reliable medium voltage inline splice with a long life expectancy when properly installed. All 3M medium voltage (15 kV-35 kV) QS Series splices meet the requirements of IEEE-404, and each splice is factory tested.

## PILC Splices

3M™ Cold Shrink Splice Kits for Paper Insulated Lead Covered (PILC) cable use 3M proprietary oil stop technology. Kits install without soldering or lead wiping. 3M Cold Shrink PILC splices allow quick installation time without the need of an open flame or heat. Single conductor splice kits allow inline splicing of PILC to PILC or PILC to Poly/EPR insulated cable. Three conductor cable splices kits are designed to transition splice three conductor PILC to three single conductor poly/EPR insulated cables. All

splices are jacketed and can be fully submersed. Modular splice kits are available for single conductor PILC equipment connections and tap splicing.

### **Resin Splices**

3M™ Resin Splice Kits are used in a variety of applications where conditions require the unique properties of 3M resins. The splicing kits have a high degree of mechanical strength for physical protection of connections and provide moisture-resistant insulation in above ground or direct burial applications.

### **Tape Splices**

When you want the versatility of tape, Scotch® Cable Splicing Kits are the answer for almost any application, regardless of cable type or size. Scotch rubber splicing tape is designed for extra-long shelf life, so there's less chance of being caught without the supplies you need for emergencies. Tape products are available to splice cables from 2 kV-69 kV.

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5/8 kV.....	197-203
15 kV.....	204-226
25/28 kV.....	227-241
35 kV.....	242-253
46 kV.....	254-255






## Technology Features

Technology	Installation Time (1-5, 1=Fastest)	Installation Ease (1-5, 1=Easiest)	Wide Application Range (1-5, 1=Greatest)	Factory Tested	Re-Jacketing Included
Cold Shrink	1	1	2	Yes	Yes
Push On/Molded Rubber	2	2	4	Yes	No
Resin	3	3	3	No	Yes
Tape	4	4	1	No	Yes

## 5 kV Medium Voltage Splice Reference

<b>1</b>	<b>Three Conductor (3/C)</b>
<b>2</b>	<b>Non-shielded</b>
<b>3</b>	<b>3M™ Cold Shrink Splice Kits</b> 
<p>3M™ Resin/Cold Shrink Non-Shielded, Armored or Non-Armored Splice Kits 5750 Series</p>	

## 5/8 kV Medium Voltage Splice Reference

<b>1</b>	<b>Single Conductor (1/C)</b>		<b>Three Conductor (3/C)</b>		
<b>2</b>	<b>Shielded</b>		<b>Non-shielded</b>	<b>Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)</b>	
<b>3</b>	<b>3M™ Cold Shrink Splice Kits</b> 	<b>3M™ Tape Splice Kits</b>	<b>3M™ Cold Shrink Splice Kits</b> 	<b>3M™ Cold Shrink Splice Kits</b> 	
	3M™ Cold Shrink Shielded Splice Kits 5550 Series	Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series	3M™ Cold Shrink Inline Non-Shielded Splice Kits 5740 Series	3M™ Cold Shrink/Armorcast, Armored or Non-Armored Splice Kit 5551-3C-AC	3M™ Cold Shrink QS-III Armored or Non-Armored Cable Splice Kits 5775A-MT, 5776A-MT & 5777A-MT
				3M™ Cold Shrink In-line Shielded, Armored or Non-Armored Splice Kits 5760 Series	

# 15 kV Medium Voltage Splice Reference

1 Single Conductor (1/C)											
2 Concentric Neutral (CN) and Jacketed Concentric Neutral (JCN)				Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)			Paper Insulated Lead Cover (PILC)				
3 3M™ Cold Shrink Splice Kits (non-PILC)		3M™ Molded Rubber Splice Kits	3M™ Tape Splice Kits	3M™ Cold Shrink Splice Kits (non-PILC)		3M™ Molded Rubber Splice Kits	3M™ Tape Splice Kits	3M™ Cold Shrink Splice Kits			
QUICK TO INSTALL				QUICK TO INSTALL				QUICK TO INSTALL			
Inline		Branch		Inline		Branch					
3M™ Cold Shrink QS4 Integrated Splice JCN & SP Kits		3M™ Cold Shrink Branch JCN and Shielded Splice Kits QS-2001B		3M™ Molded Rubber QS Inline JCN/ CN Splice Kits 5400 Series	Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series	3M™ Cold Shrink QS4 Integrated Splice TS & SP Kits		3M™ Cold Shrink Branch Splice Kits QS 2001B	3M™ Molded Rubber QS-II Inline Shielded Cable Splice Kits 5500 Series	Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series	3M™ Cold Shrink QS-III 1/C Inline Transition Splice Kit 5510A-1T-PILC Series
3M™ Cold Shrink QS-III Inline JCN/ CN Splice Kits 5415A, 5416A, 5417A, 5418A		3M™ Molded Rubber QS-II Inline JCN/ CN Splice Kits 5411, 5411A and 5412 Series		3M™ Molded Rubber QS-II JCN/CN Cable Repair Splice Kit 5411R and 5412R Series		3M™ Cold Shrink QS-III Shielded Cable Splice Kits 5513A, 5514A, 5515A and 5516A Series					3M™ Cold Shrink Splice Kit QS-2000T 1/C PILC to 1/C Poly/EPR or 1/C PILC to 1/C PILC Cable Splices

1 Three Conductor (3/C)		
2 Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)		Paper Insulated Lead Cover (PILC)
3 3M™ Cold Shrink Splice Kits (non-PILC)	3M™ Cold Shrink and Resin Splice Kits (non-PILC)	3M™ Cold Shrink Splice Kits
QUICK TO INSTALL	QUICK TO INSTALL	QUICK TO INSTALL
3M™ Cold Shrink QS-III Armored, Non-Armored Cable Splices Kits 5775A-MT, 5776A-MT & 5777A-MT	3M™ Cold Shrink 3/C Inline Shielded, Armored or Non-Armored Splice Kits 5760 Series	3M™ Cold Shrink 3/C PILC to 3/C Poly/EPR Cable Transition Splice Kit QS-2013-3T-3C
		3M™ Cold Shrink Splice Kit QS-2000-3T and QS-2000-3T-WS 3/C PILC to 1/C Poly/EPR Cable Trifurcating Splices

## 25/28 kV Medium Voltage Splice Reference

1 Single Conductor (1/C)			Three Conductor (3/C)		
2 Concentric Neutral (CN) and Jacketed Concentric Neutral (JCN)			Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)	Paper Insulated Lead Cover (PILC)	Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)
3 3M™ Cold Shrink Splice Kits (non-PILC) <small>QUICK TO INSTALL</small>	3M™ Molded Rubber Splice Kits		3M™ Cold Shrink Splice Kits (non-PILC) <small>QUICK TO INSTALL</small>	3M™ Cold Shrink Splice Kits <small>QUICK TO INSTALL</small>	3M™ Cold Shrink Splice Kits (non-PILC) <small>QUICK TO INSTALL</small>
3M™ Cold Shrink QS4 Integrated Splice JCN & SP Kits	3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5420 Series	3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kit 5450 Series	3M™ Cold Shrink QS4 Integrated Splice TS & SP Kits	3M™ Cold Shrink QS-III 1/C Transition Splice Kit 5520A-1T-PILC Series	3M™ Cold Shrink QS-III 3/C Inline Armored or Non-Armored Cable Splice Kits 5786A-MT, 5787A-MT and 5788A-MT
3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5456A, 5457A and 5458A		3M™ Molded Rubber QS-II JCN Cable Repair Splice Kit 5451R Series	3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5524A, 5525A and 5526A		

## 35 kV Medium Voltage Splice Reference

1 Single Conductor (1/C)			Three Conductor (3/C)		
2 Concentric Neutral (CN) and Jacketed Concentric Neutral (JCN)			Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)	Paper Insulated Lead Cover (PILC)	Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)
3 3M™ Cold Shrink Splice Kits (non-PILC) <small>QUICK TO INSTALL</small>	3M™ Molded Rubber Splice Kits		3M™ Cold Shrink Splice Kits (non-PILC) <small>QUICK TO INSTALL</small>	3M™ Cold Shrink Splice Kits <small>QUICK TO INSTALL</small>	3M™ Cold Shrink Splice Kits (non-PILC) <small>QUICK TO INSTALL</small>
3M™ Cold Shrink QS4 Integrated Splice JCN & SP Kits	3M™ Molded Rubber QS CN/JCN Cable Splice Kits 5432 and 5433	3M™ Cold Shrink QS4 Integrated Splice TS & SP Kits	3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5530A-1T-PILC Series	3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Splice Kits 5797A-MT and 5798A-MT	
3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5467A and 5468A	3M™ Molded Rubber QS-II CN/JCN Cable Splice Kits 5461	3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5535A and 5536A			
3M™ Cold Shrink QS-III CN/JCN Cable Shield-Break Splice Kits 5467A-XB and 5468A-XB					

## 46 kV Medium Voltage Splice Reference

①	Single Conductor (1/C)
②	Shielded
③	3M™ Cold Shrink Splice Kits (non-PILC) <small>QUICK TO INSTALL</small>
3M™ Cold Shrink QS-III Inline Shielded Splice Kit 5545A	

\*For higher voltages, see High Voltage section of catalog.

# Cable Types for Medium Voltage Splicing



Tape Shielded Cable



Wire Shielded Cable



UniShield® Cable



Longitudinally Corrugated (LC) Shielded Cable



EP-Lead or XLP-Lead Cable



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable

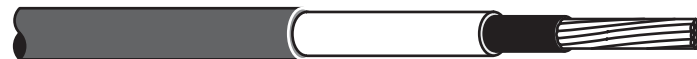


Paper Insulated Lead Covered (PILC) Cable

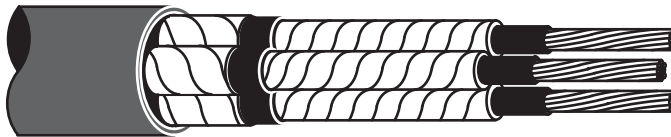
# Cable Types for Medium Voltage Splicing



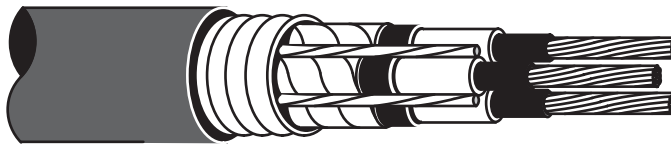
Non Shielded (Dry) Cable



Non Shielded (Wet or Dry) Cable



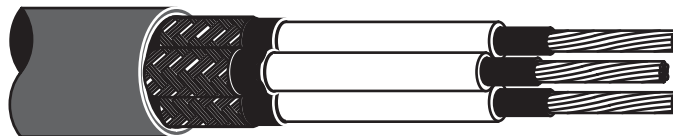
Three-Conductor Paper Insulated Lead Covered (PILC) Cable



Three-Conductor Armored, Shielded Cable



Three-Conductor Non-Armored, Shielded Cable



Three-Conductor Portable Cable Type SHD-GC

## 5 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 5 kV, and promote dependable performance, stability and long life with every splice you make.



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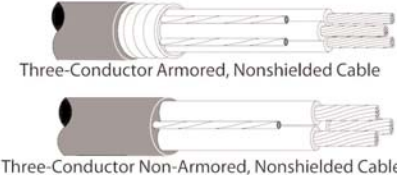

5 kV: Non-Shielded: Three Conductor (3/C)

## 3M™ Resin/Cold Shrink Non-Shielded, Armored or Non-Armored Splice Kits 5750 Series

3M™ Resin/Cold Shrink 5750 Series splice kits are designed for non-shielded armored and non-armored solid dielectric cables rated up to 5 kV. Each kit makes one 3/C splice. Connectors are not included and must be ordered separately.

\* Splice diameter varies according to cable size (O.D.).

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<p><b>Voltage</b> 1 kV, 5 kV</p> <p><b>Number of Conductors</b> Three Conductor</p> <p><b>Shielding Type</b> Non-Armored (Non-Shielded), Armored (Non-Shielded)</p> <p><b>Splice Type</b> Inline</p> <p><b>Technology</b> Cold Shrink, Resin</p> <p><b>Conductor Material</b> Aluminum, Copper</p> <p><b>RoHS 2011/65/EU</b> Yes</p> <p><b>Agency Approval</b> Mine Safety and Health Administration Acceptance: 07-KA060007-MSHA</p>	 <p>Three-Conductor Armored, Nonshielded Cable</p> <p>Three-Conductor Non-Armored, Nonshielded Cable</p>	
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Order No.	UPC	Insulation O.D. Range	1 kV Conductor Size, Copper or Aluminum	5 kV Conductor Size, Copper or Aluminum	Splice Diameter Range*	Typical Splice Length	Case Qty.
5751	051128-59169	0.50"-0.95" (13-24 mm)	1-3/0 AWG (50-95 mm <sup>2</sup> )	6-1 AWG (14-50 mm <sup>2</sup> )	1.5"-2.5" (38,1-63,5 mm)	19.0" (483 mm)	1
5752	051128-59168	0.66"-1.25" (17-31 mm)	4/0 AWG-350 kcmil (120-185 mm <sup>2</sup> )	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	2.5"-4.0" (63,5-101,6 mm)	28.0" (711 mm)	1
5753	051128-59171	0.95"-1.80" (24-46 mm)	350-750 kcmil (185-400 mm <sup>2</sup> )	350-750 kcmil (185-400 mm <sup>2</sup> )	3.5"-6.0" (88,9-152,4 mm)	42.0" (1067 mm)	1

## 5/8 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 5/8 kV, and promote dependable performance, stability and long life with every splice you make.



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3M™ Cold Shrink 3/C Inline Shielded, Armored or Non-Armored Splice Kits 5760 Series for 5/8 kV .....	203

## 5/8 kV: Non-Shielded: Single Conductor (1/C)

### 3M™ Cold Shrink Inline Non-Shielded Splice Kits 5740 Series

The 3M™ Cold Shrink Splicing Products are designed using the proprietary cold shrink delivery system developed by 3M. Products are supplied prestretched on a removable core for efficiency and ease of installation. 3M™ Cold Shrink Splices 5740 Series are used for single conductor, non-shielded 5/8 kV cables.

Each kit is a cold shrink design and contains enough material to insulate three splices. Connectors are not included and must be ordered separately.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	5/8 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Non-Shielded (Dry) Cable, Non-Shielded (Wet or Dry) Cable
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation/Jacket O.D. Range	Conductor Size	Max. Connector Length (Cu or Al)	Typical Splice Length	Case Qty.
5741	054007-49491	0.38"-0.70" (9,7-17,8 mm)	8-4 AWG (10-25 mm <sup>2</sup> )	2.5" (63,5 mm)	10" (254 mm)	1
5742	054007-49492	0.63"-1.20" (16,0-30,5 mm)	2 AWG-300 kcmil (35-150 mm <sup>2</sup> )	4.25" (108,0 mm)	12" (305 mm)	1
5743	054007-49493	0.90"-2.10" (22,9-53,3 mm)	Cu: 350-1000 kcmil (185-500 mm <sup>2</sup> ) Al: 350-750 kcmil (185-400 mm <sup>2</sup> )	6.25" (158,8 mm)	15" (381 mm)	1

5/8 kV: Shielded: Single Conductor (1/C)

## Scotch® Inline and Tee Tape Shielded Cable Splice Kit 5700 Series

Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series handle inline and tee splices on tape shielded, wire shielded or UniShield® cables with copper (Cu) or aluminum (Al) conductors. Kits are rated 5 kV-15 kV, and each kit makes three splices. Use the selector chart to determine the proper kit needed. Connectors and Lugs need to be ordered separately. 3M does not offer tee connectors.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

**Voltage:** 5 kV, 5/8 kV, 15 kV

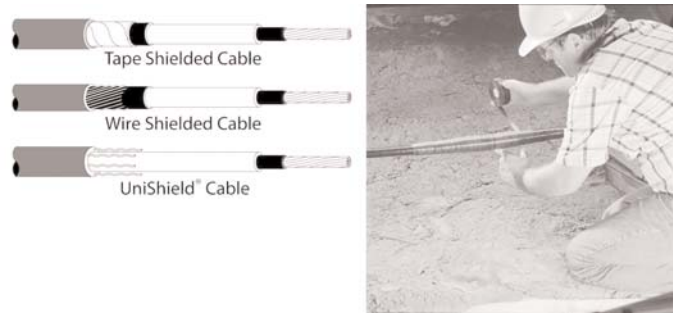
**Number of Conductors:** Single Conductor

**Shielding Type:** Tape Shield, Wire Shield, UniShield®

**Splice Type:** Inline, Tee

**Technology:** Tape

**Conductor Material:** Aluminum, Copper



Product Number	UPC (054007-)	Inline Splices						Tee Splices*						Case Qty.
		5 and 8 kV		15 kV 100% 175mil		15 kV 133% 220 mil		5 and 8 kV		15 kV 100% 175 mil		15 kV 133% 220 mil		
		Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable See above for cable type illustrations.														
5717	12030	4-250 (22-125)	4-4/0 (2-100)	4-2 (22-30)	—	4	—	—	—	—	—	—	—	1
5718	12048	300-500 (180-250)	250 (150)	1-4/0 (50-100)	4-2/0 (22-60)	2-1/0 (35-60)	—	4-2/0 (22-60)	4-1/0 (22-50)	—	—	—	—	1
5719	12055	550-1000 (300-500)	300-500 (180-250)	250-500 (180-250)	3/0-250 (95-125)	2/0-350 (70-180)	4-3/0 (22-80)	3/0-350 (95-180)	2/0-4/0 (70-100)	4-1 (22-38)	—	—	—	1
5720	12063	—	500-1000 (300-500)	550-1000 (300-500)	300-750 (180-325)	400-750 (240-325)	4/0-500 (120-250)	400-750 (240-325)	250-500 (125-250)	1/0-350 (60-180)	4-4/0 (22-100)	4-250 (22-125)	4-3/0 (22-80)	1

\*3M does not offer tee compression connectors.

**Note:** Larger-numbered kits may be used in place of smaller-numbered kits (with excess materials left over).

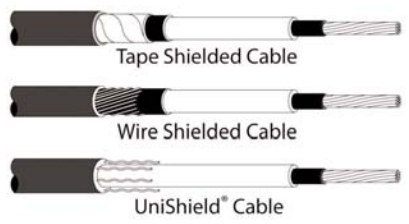

Order No.	UPC	Case Qty.
5717	054007-12030	1
5718	054007-12048	1
5719	054007-12055	1
5720	054007-12063	1

## 3M™ Cold Shrink Shielded Splice Kits 5550 Series

3M™ Cold Shrink Shielded Splice Kit 5550 Series are for splicing 5 kV and 8 kV shielded, solid dielectric, power cables. Meets requirements of IEEE 404. Each kit contains all the materials (except connectors and optional ground strap) required to construct three (3) single conductor splices on Tape Shield, Wire Shield or UniShield® cables.

Note: The kit can also be used to splice a shielded to a non-shielded 5/8 kV cable.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<p><b>Voltage</b> 5/8 kV</p> <p><b>Number of Conductors</b> 3 Single Conductors</p> <p><b>Shielding Type</b> Tape Shield, Wire Shield, UniShield®</p> <p><b>Splice Type</b> Inline</p> <p><b>Technology</b> Cold Shrink, Tape</p>	 <p>Tape Shielded Cable</p> <p>Wire Shielded Cable</p> <p>UniShield® Cable</p>	
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Order No.	UPC	Conductor Size, Cu	Conductor Size, Al	Max Connector Length, Cu	Max Connector Length, Al	Typical Splice Length	Suggested Accessory	Case Qty.
5551	054007-09089	6-4/0 AWG (14-100 mm <sup>2</sup> )	6-3/0 AWG (14-80 mm <sup>2</sup> )	3.3" (84 mm)	2.7" (69 mm)	19.0" (482,6 mm)	3M Ground Strap Assembly GS-1	1
5552	054007-09090	4/0 AWG-500 kcmil (120-250 mm <sup>2</sup> )	4/0 AWG-400 kcmil (120-200 mm <sup>2</sup> )	4.3" (109 mm)	3.7" (94 mm)	21.0" (533,4 mm)	3M Ground Strap Assembly GS-2	1
5553	054007-09091	500-1000 kcmil (300-500 mm <sup>2</sup> )	500-1000 kcmil (300-500 mm <sup>2</sup> )	6.3" (160 mm)	5.3" (135 mm)	23.0" (584,2 mm)	3M Ground Strap Assembly GS-3	1

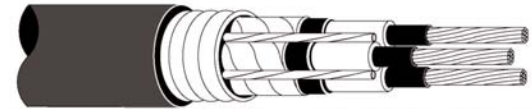
5/8 kV: Shielded: Three Conductor (3/C)

## 3M™ Cold Shrink/Armorcast, Armored or Non-Armored Splice Kit 5551-3C-AC

3M™ Cold Shrink/Armorcast, Armored or Non-Armored Splice Kit 5551-3C-AC is for splicing 3/C, 5/8 kV shielded, armored and non-armored cables. Connectors are not included. Kits include armorcast structural material to reconstitute the cable's armor. Meets the requirements of IEEE 404. Each kit makes one 3/C splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	5/8 kV
Number of Conductors	Three Conductors
Shielding Type	Shielded Armored or Non-Armored
Splice Type	Inline
Technology	Cold Shrink, Armorcast, Tape



Three-Conductor Armored, Shielded Cable



Three-Conductor Non-Armored, Shielded Cable

Order No.	UPC	Insulation O.D. Range	Conductor Size	Max. Connector Length	Typical Splice Length	Case Qty.
5551-3C-AC	051128-54317	0.37"-0.78" (9,4-19,8 mm)	Cu: 6-4/0 AWG (14-120 mm <sup>2</sup> ) Al: 6-3/0 AWG (14-95 mm <sup>2</sup> )	2.7" (68,6 mm)	34" (864 mm)	1

## 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5775A-MT, 5776A-MT & 5777A-MT for 5/8 kV

3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splices 5775A-MT, 5776A-MT and 5777A-MT Series are designed for splicing 3-conductor, armored and non-armored, shielded power cables. The kits are rated for use on 5/8 kV cables with conductor sizes from 3/0 AWG-1000 kcmil (95-500 mm<sup>2</sup>) or 15 kV cables with conductor sizes from 2 AWG-750 kcmil (35-325 mm<sup>2</sup>). The kits are designed to be used with 3M™ Scotchlok™ Connectors 10000 and 20000 Series or other UL listed inline compression connectors that fit within the dimension limits listed in the data sheet. Meets the requirements of IEEE-404.

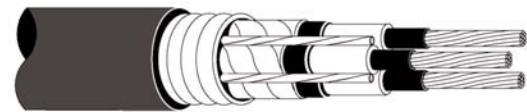
Kits include material necessary to make one 3/C splice. Connectors are not included and must be ordered separately. The completed splice is designed for use in cable trays, weather exposed or direct burial locations.

The splice utilizes several technologies to accommodate the various functions of a 3/C shielded power cable: 3M™ Cold Shrink QS-III Splice Bodies, Scotch® Tapes for moisture sealing, Constant Force Springs for connecting ground braid jumpers and armorcast for replacing the cable armor and/or jacket.

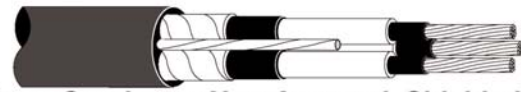
Note: When making a trifurcating splice, the 3M™ Cold Shrink MT-C or MT-E Trifurcating Accessory Kit must be used along with the splice kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	5/8 kV, 15 kV
Number of Conductors	Three Conductors
Shielding Type	Shielded Armored or Non-Armored
Splice Type	Inline, Trifurcating
Technology	Cold Shrink, Armorcast



**Three-Conductor Armored, Shielded Cable**



**Three-Conductor Non-Armored, Shielded Cable**

Order No.	UPC	Insulation O.D. Range	Conductor Size, 5/8 kV	Typical Splice Length	Suggested Accessory	Case Qty.
5775A-MT	051128-53493	0.64"-1.01" (16,3-25,7 mm)	3/0 AWG-250 kcmil (95-125 mm <sup>2</sup> )	52.0" (1320,8 mm)	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-C	1
5776A-MT	054007-44112	0.84"-1.38" (21,3-35,1 mm)	350-500 kcmil (185-240 mm <sup>2</sup> )	54.0" (1371,6 mm)	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-C; or 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E	1
5777A-MT	054007-44289	1.04"-1.70" (26,4-43,2 mm)	750-1000 kcmil (325-500 mm <sup>2</sup> )	58.0" (1473,2 mm)	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E	1



5/8 kV: Shielded: Three Conductor (3/C)

## 3M™ Cold Shrink MT-C & MT-E Trifurcating Accessory Kits (One 3/C to Three 1/C) for 5/8 kV

3M™ Cold Shrink MT-C and MT-E Trifurcating Accessory Kits are used to break out and seal a transition from 3/C to three 1/C.

For use with 3M™ Cold Shrink QS-III Splicing Series 5700A-MT.

**NOTE: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

**Voltage:** 5/8 kV

**Number of Conductors:** One 3/C to three 1/C



### Selection Table

3M™ Splice 57XXA-MT	5/8 kV (90/140 mil)	Appropriate MT Transition Kit
*Typical Conductor Size Range – AWG/kcmil		
5775A-MT	3/0-250	MT-C
5776A-MT	350	MT-C
5776A-MT	500	MT-E
5777A-MT	—	MT-E

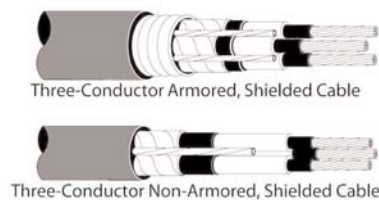
Order No.	UPC	Single Conductor Jacket O.D.	Kits per Case
MT-C	051128-55208	0.62"-1.13" (15,7-28,7 mm)	1
MT-E	051128-54318	1.13"-1.80" (28,7-45,7 mm)	1

## 3M™ Cold Shrink 3/C Inline Shielded, Armored or Non-Armored Splice Kits 5760 Series for 5/8 kV

These splice kits are designed for splicing shielded armored and non-armored cables, 5/8 kV and 15 kV. Each kit makes one 3/C splice. Connectors are not included and must be ordered separately.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	5/8 kV, 15 kV
<b>Number of Conductors</b>	Three Conductors
<b>Shielding Type</b>	Shielded Armored or Non-Armored
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink, Resin
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Insulation O.D. Range	Conductor Size, 5/8 kV	Max. Connector O.D.	Max. Connector Length	Typical Splice Length	Case Qty.
5761	051128-59172	0.65"-1.00" (16,5-25,4 mm)	2/0 AWG-350 kcmil (60-150 mm <sup>2</sup> )	0.90" (22,9 mm)	2.75" (69,9 mm)	29.0" (737 mm)	1
5762	051128-59170	0.93"-1.94" (23,6-49,3 mm)	500-1000 kcmil (300-500 mm <sup>2</sup> )	1.40" (35,5 mm)	5.00" (127,0 mm)	44.0" (1118 mm)	1

# 15 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 15 kV, and promote dependable performance, stability and long life with every splice you make.



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## 3M™ Cold Shrink QS4 Integrated Splice Kits (JCN) for 15 kV

The new 3M™ Cold Shrink QS4 Integrated Splice Kit is a premier offering that utilizes our field-proven 3M™ Cold Shrink QS-III Splice Body with additional features that make installation quick and easy. This exciting product integrates all of the layers of a shielded power cable splice into one compact joint. With this splice, 3M is introducing our easy-to-use yellow core and re-jacketing tube. We incorporated our smooth-edged shield sock (non-fraying ends) with optional customizable ground braid.

The Jacketed Concentric Neutral (JCN) inline splice kits below are designed for joining Jacketed Concentric Neutral (JCN) and Flat Strap Neutral power cables. The splice includes an integrated 7 AWG ground braid for attaching to an external ground wire (ground braid does not extend beyond the end of the re-jacketing after installation).

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

\*If using a 3M™ Shearbolt Connector QCI Series for 500 kcmil to 500 kcmil splices, use the QS4-15JCN-QCI-500-750 kit or the QS4-15JCN-500-1000 kit with the QCI 350-750 connector purchased separately.

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Jacketed Concentric Neutral (JCN), Flat Strap Neutral Cable
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
QS4-15JCN-2-4/0	051128-60171	0.64"-1.01" (16,3-25,7 mm)	2-4/0 AWG (35-95 mm <sup>2</sup> )	-	1
QS4-15JCN-QCI-2-4/0	051128-60172	0.64"-1.01" (16,3-25,7 mm)	2-4/0 AWG (35-95 mm <sup>2</sup> )	QCI 2-250	1
QS4-15JCN-4/0-500	051128-60173	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG - 500 kcmil (95-240 mm <sup>2</sup> )	-	1
QS4-15JCN-QCI-4/0-500	051128-60174	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG - 500 kcmil (95-240 mm <sup>2</sup> )	QCI 4/0-600	1
QS4-15JCN-350-750	051128-60175	1.04"-1.70" (26,4-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	-	1
QS4-15JCN-QCI-350-750	051128-60176	1.04"-1.70" (26,4-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	QCI 350-750	1
QS4-15JCN-500-1000*	051128-60177	1.08"-1.70" (27,4-43,2 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	1
QS4-15JCN-QCI-500-750*	051128-60542	1.08"-1.70" (27,4-43,2 mm)	500-750 kcmil (240-325 mm <sup>2</sup> )	QCI 350-750	1
QS4-15JCN-QCI-500-1000*	051128-60178	1.08"-1.70" (27,4-43,2 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	QCI 500-1000	1

## 3M™ Cold Shrink QS4 Integrated Splice Kits (Shielded Power) for 15 kV

The new 3M™ Cold Shrink QS4 Integrated Splice Kit is a premier offering that utilizes our field-proven 3M™ Cold Shrink QS-III Splice Body with additional features that make installation quick and easy. This exciting product integrates all of the layers of a shielded power cable splice into one compact joint. With this splice, 3M is introducing our easy-to-use yellow core and re-jacketing tube. We incorporated our smooth-edged shield sock (non-fraying ends) with optional customizable ground braid.

The Shielded Power (SP) inline splice kits below are designed for joining Jacketed Concentric Neutral (JCN), Flat Strap Neutral, Tape Shield and Longitudinally Corrugated (LC) power cables. The splice includes a 4 AWG, four-foot long integrated ground braid for attaching to an external ground (factory installed ground braid extends approximately four feet beyond the end of the re-jacketing after installation).

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

\*If using a 3M™ Shearbolt Connector QCI Series for 500 kcmil to 500 kcmil splices, use the QS4-15SP-QCI-500-750-BCA kit or the QS4-15SP-500-1000-BCA kit with the QCI 350-750 connector purchased separately.

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Jacketed Concentric Neutral (JCN), Flat Strap Neutral, Tape Shield, Longitudinally Corrugated (LC)
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
QS4-15SP-2-4/0-BCA	051128-60568	0.64"-1.01" (16,3-25,7 mm)	2-4/0 AWG (35-95 mm <sup>2</sup> )	-	1
QS4-15SP-QCI-2-4/0-BCA	051128-60569	0.64"-1.01" (16,3-25,7 mm)	2-4/0 AWG (35-95 mm <sup>2</sup> )	QCI 2-250	1
QS4-15SP-4/0-500-BCA	051128-60570	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG - 500 kcmil (95-240 mm <sup>2</sup> )	-	1
QS4-15SP-QCI-4/0-500-BCA	051128-60571	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG - 500 kcmil (95-240 mm <sup>2</sup> )	QCI 4/0-600	1
QS4-15SP-350-750-BCA	051128-60531	1.04"-1.70" (26,4-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	-	1
QS4-15SP-QCI-350-750-BCA	051128-60532	1.04"-1.70" (26,4-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	QCI 350-750	1
QS4-15SP-500-1000-BCA*	051128-60533	1.08"-1.70" (27,4-43,2 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	1
QS4-15SP-QCI-500-750-BCA*	051128-61036	1.08"-1.70" (27,4-43,2 mm)	500-750 kcmil (240-325 mm <sup>2</sup> )	QCI 350-750	1
QS4-15SP-QCI-500-1000-BCA*	051128-60534	1.08"-1.70" (27,4-43,2 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	QCI 500-1000	1

## 3M™ Cold Shrink QS4 Integrated Splice Kits (Tape Shield) for 15 kV

The new 3M™ Cold Shrink QS4 Integrated Splice Kit is a premier offering that utilizes our field-proven 3M™ Cold Shrink QS-III Splice Body with additional features that make installation quick and easy. This exciting product integrates all of the layers of a shielded power cable splice into one compact joint. With this splice, 3M is introducing our easy-to-use yellow core and re-jacketing tube. We incorporated our smooth-edged shield sock (non-fraying ends) with optional customizable ground braid.

The Tape Shielded (TS) inline splice kits below are designed for joining Tape Shield, Wire Shield, UniShield® and Longitudinally Corrugated (LC) power cables. The splice includes a separate 7 AWG U-shaped ground braid that can be attached to the shield with a constant force spring for external grounding.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

\*If using a 3M™ Shearbolt Connector QCI Series for 500 kcmil to 500 kcmil splices, use the QS4-15TS-QCI-500-750 kit or the QS4-15TS-500-1000 kit with the QCI 350-750 connector purchased separately.

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
QS4-15TS-2-4/0	051128-60190	0.64"-1.01" (16,3-25,7 mm)	2-4/0 AWG (35-95 mm²)	-	1
QS4-15TS-QCI-2-4/0	051128-60191	0.64"-1.01" (16,3-25,7 mm)	2-4/0 AWG (35-95 mm²)	QCI 2-250	1
QS4-15TS-4/0-500	051128-60192	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG - 500 kcmil (95-240 mm²)	-	1
QS4-15TS-QCI-4/0-500	051128-60193	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG - 500 kcmil (95-240 mm²)	QCI 4/0-600	1
QS4-15TS-350-750	051128-60194	1.04"-1.70" (26,4-43,2 mm)	350-750 kcmil (185-325 mm²)	-	1
QS4-15TS-QCI-350-750	051128-60195	1.04"-1.70" (26,4-43,2 mm)	350-750 kcmil (185-325 mm²)	QCI 350-750	1
QS4-15TS-500-1000*	051128-60196	1.08"-1.70" (27,4-43,2 mm)	500-1000 kcmil (240-500 mm²)	-	1
QS4-15TS-QCI-500-750*	051128-61037	1.08"-1.70" (27,4-43,2 mm)	500-750 kcmil (240-325 mm²)	QCI 350-750	1
QS4-15TS-QCI-500-1000*	051128-60197	1.08"-1.70" (27,4-43,2 mm)	500-1000 kcmil (240-500 mm²)	QCI 500-1000	1



## 3M™ Cold Shrink QS-III Inline CN/JCN Splice Kits 5415A, 5416A, 5417A and 5418A Series

The 3M™ Cold Shrink QS-III Inline CN/JCN Splice Kits 5415A, 5416A, 5417A, 5417A-WG, 5418A and 5418A-WG Series are 15 kV class inline splices for joining jacketed concentric neutral (JCN) and concentric neutral (CN) power cables. They are a cold shrink design sized to fit Type MV-90 or Type MV-105 cables with copper, or aluminum conductor sizes ranging from 2 AWG-1000 kcmil (35-500 mm<sup>2</sup>). The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the cold shrink jacketing is made of EPDM rubber for physical protection. Each splice manufactured is factory tested to provide reliability.

The splices can be used with standard copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors as well as shearbolt connectors, and can be used for size transitions within the listed kit size range. They are designed to exceed minimum industry test standards, and have a BIL rating of 150 kV (equal to a 25 kV voltage class). The 3M™ Cold Shrink QS-III Splice Kits 5415A, 5416A, 5417A, 5417A-WG, 5418A and 5418A-WG meet or exceed the 15 kV Voltage Class rating requirements of IEEE-404. Kit contents include sufficient materials to make one splice.

Note: 5417A-WG and 5418A-WG are partially jacketed splices containing built-in bleeder wires. Additional end user materials are required to convert to full jacketing.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
5415A	051128-53470	0.64"-1.01" (16,3-25,7 mm)	2-4/0 AWG (35-95 mm <sup>2</sup> )	-	1
5415A-2-AL	051128-53471	0.64"-1.01" (16,3-25,7 mm)	2 AWG	20003	1
5415A-2-CU	051128-53472	0.64"-1.01" (16,3-25,7 mm)	2 AWG	10003	1
5415A-1-AL	051128-53473	0.64"-1.01" (16,3-25,7 mm)	1 AWG	20004	1
5415A-1-CU	051128-53474	0.64"-1.01" (16,3-25,7 mm)	1 AWG	10004	1
5415A-1/0-AL	051128-53475	0.64"-1.01" (16,3-25,7 mm)	1/0 AWG	20005	1
5415A-1/0-CU	051128-53476	0.64"-1.01" (16,3-25,7 mm)	1/0 AWG	10005	1
5415A-2/0-AL	051128-53477	0.64"-1.01" (16,3-25,7 mm)	2/0 AWG	20006	1
5415A-2/0-CU	051128-53478	0.64"-1.01" (16,3-25,7 mm)	2/0 AWG	10006	1
5415A-3/0-AL	051128-53747	0.64"-1.01" (16,3-25,7 mm)	3/0 AWG	20007	1
5415A-3/0-CU	051128-53748	0.64"-1.01" (16,3-25,7 mm)	3/0 AWG	10007	1
5415A-4/0-AL	051128-53749	0.64"-1.01" (16,3-25,7 mm)	4/0 AWG	20008	1
5415A-4/0-CU	051128-53750	0.64"-1.01" (16,3-25,7 mm)	4/0 AWG	10008	1
5416A	054007-44092	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG-350 kcmil (95-185 mm <sup>2</sup> )	-	1
5416A-4/0-AL	054007-44093	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG	20008	1
5416A-4/0-CU	054007-44094	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG	10008	1
5416A-250-AL	054007-44096	0.84"-1.38" (21,3-35,1 mm)	250 kcmil	20009	
5416A-250-CU	054007-44097	0.84"-1.38" (21,3-35,1 mm)	250 kcmil	10009	1
5416A-350-AL	054007-44098	0.84"-1.38" (21,3-35,1 mm)	350 kcmil	20011	1
5416A-350-CU	054007-44099	0.84"-1.38" (21,3-35,1 mm)	350 kcmil	10011	1

## 3M™ Cold Shrink QS-III Inline CN/JCN Splice Kits 5415A, 5416A, 5417A and 5418A Series (continued)

Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
5417A	054007-42124	1.04"-1.70" (26,4-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	-	1
5417A-350-AL	054007-42125	1.04"-1.70" (26,4-43,2 mm)	350 kcmil	20011	1
5417A-350-CU	054007-44234	1.04"-1.70" (26,4-43,2 mm)	350 kcmil	10011	1
5417A-500-AL	054007-42126	1.04"-1.70" (26,4-43,2 mm)	500 kcmil	20014	1
5417A-500-CU	054007-44235	1.04"-1.70" (26,4-43,2 mm)	500 kcmil	10014	1
5417A-750-AL	054007-04587	1.04"-1.70" (26,4-43,2 mm)	750 kcmil	20019	1
5417A-750-CU	054007-04588	1.04"-1.70" (26,4-43,2 mm)	750 kcmil	10019	1
5417A-WG	054007-44090	1.04"-1.70" (26,4-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	-	1
5418A	054007-42128	1.08"-1.70" (27,4-43,2 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	1
5418A-500-AL	054007-44403	1.08"-1.70" (27,4-43,2 mm)	500 kcmil	20014	1
5418A-500-CU	054007-44404	1.08"-1.70" (27,4-43,2 mm)	500 kcmil	10014	1
5418A-750-AL	054007-42129	1.08"-1.70" (27,4-43,2 mm)	750 kcmil	20019	1
5418A-750-CU	054007-44236	1.08"-1.70" (27,4-43,2 mm)	750 kcmil	10019	1
5418A-1000-AL	054007-42130	1.08"-1.70" (27,4-43,2 mm)	1000 kcmil	20024	1
5418A-1000-CU	054007-44237	1.08"-1.70" (27,4-43,2 mm)	1000 kcmil	10024	1
5418A-WG	054007-44091	1.08"-1.70" (27,4-43,2 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	1



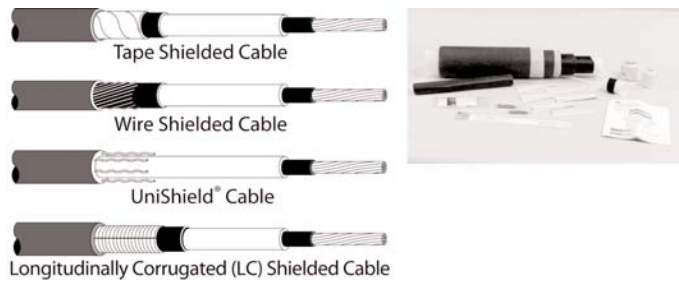
## 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5513A, 5514A, 5515A and 5516A Series

The 3M™ Cold Shrink QS-III Shielded Cable Splices 5513A, 5514A, 5515A and 5516A Series are 15 kV class inline splices for joining tape shield, wire shield, UniShield® or longitudinally corrugated (LC) shielded power cables. It is a cold shrink design sized to fit Type MV-90 or Type MV-105 cables with copper, or aluminum conductor sizes ranging from 2 AWG-1000 kcmil (35-500 mm<sup>2</sup>). The cold shrink splice body is a one-piece molded design made of special formulated silicone rubbers, while the cold shrink jacketing is made of EPDM rubber for physical protection. Each splice manufactured is factory tested to provide reliability.

The splices can be used with standard copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors, and can be used for size transitions within the listed kit size range. They are designed to exceed minimum industry test standards, and have a BIL rating of 150 kV (equal to a 25 kV voltage class). The 5513A, 5514A, 5515A and 5516A QS-III splices meet or exceed the 15 kV Voltage Class rating requirements of IEEE 404. Each kit makes one splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC) Shield
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
5513A	051128-53480	0.64"-1.01" (16,3-25,7 mm)	2-4/0 AWG	-	1
5513A-2-AL	051128-53481	0.64"-1.01" (16,3-25,7 mm)	2 AWG	20003	1
5513A-2-CU	051128-53482	0.64"-1.01" (16,3-25,7 mm)	2 AWG	10003	1
5513A-1-AL	051128-53483	0.64"-1.01" (16,3-25,7 mm)	1 AWG	20004	1
5513A-1-CU	051128-53484	0.64"-1.01" (16,3-25,7 mm)	1 AWG	10004	1
5513A-1/0-AL	051128-53485	0.64"-1.01" (16,3-25,7 mm)	1/0 AWG	20005	1
5513A-1/0-CU	051128-53486	0.64"-1.01" (16,3-25,7 mm)	1/0 AWG	10005	1
5513A-2/0-AL	051128-53487	0.64"-1.01" (16,3-25,7 mm)	2/0 AWG	20006	1
5513A-2/0-CU	051128-53488	0.64"-1.01" (16,3-25,7 mm)	2/0 AWG	10006	1
5513A-3/0-AL	051128-53489	0.64"-1.01" (16,3-25,7 mm)	3/0 AWG	20007	1
5513A-3/0-CU	051128-53490	0.64"-1.01" (16,3-25,7 mm)	3/0 AWG	10007	1
5513A-4/0-AL	051128-53491	0.64"-1.01" (16,3-25,7 mm)	4/0 AWG	20008	1
5513A-4/0-CU	051128-53492	0.64"-1.01" (16,3-25,7 mm)	4/0 AWG	10008	1
5514A	054007-44101	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG-500 kcmil	-	1
5514A-CA-1	051128-57151	0.64"-1.38" (16,3-35,1 mm)	2 AWG-500 kcmil	-	1
5514A-4/0-AL	054007-44102	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG	20008	1
5514A-4/0-CU	054007-44103	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG	10008	1
5514A-250-AL	054007-44104	0.84"-1.38" (21,3-35,1 mm)	250 kcmil	20009	1
5514A-250-CU	054007-44105	0.84"-1.38" (21,3-35,1 mm)	250 kcmil	10009	1
5514A-350-AL	054007-44106	0.84"-1.38" (21,3-35,1 mm)	350 kcmil	20011	1
5514A-350-CU	054007-44107	0.84"-1.38" (21,3-35,1 mm)	350 kcmil	10011	1
5514A-500-AL	054007-44407	0.84"-1.38" (21,3-35,1 mm)	500 kcmil	20014	1
5514A-500-CU	054007-44408	0.84"-1.38" (21,3-35,1 mm)	500 kcmil	10014	1
5515A	054007-42134	1.04"-1.70" (26,4-43,2 mm)	350-750 kcmil	-	1
5515A-350-AL	054007-42135	1.04"-1.70" (26,4-43,2 mm)	350 kcmil	20011	1
5515A-350-CU	054007-42898	1.04"-1.70" (26,4-43,2 mm)	350 kcmil	10011	1
5515A-500-AL	054007-42899	1.04"-1.70" (26,4-43,2 mm)	500 kcmil	20014	1
5515A-500-CU	054007-42136	1.04"-1.70" (26,4-43,2 mm)	500 kcmil	10014	1
5515A-750-AL	054007-42900	1.04"-1.70" (26,4-43,2 mm)	750 kcmil	20019	1

15 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C): Inline

## 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5513A, 5514A, 5515A and 5516A Series (continued)

Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
5515A-750-CU	054007-42137	1.04"-1.70" (26,4-43,2 mm)	750 kcmil	10019	1
5516A	054007-42139	1.08"-1.70" (27,4-43,2 mm)	500-1000 kcmil	–	1
5516A-500-AL	054007-44405	1.08"-1.70" (27,4-43,2 mm)	500 kcmil	20014	1
5516A-500-CU	054007-44406	1.08"-1.70" (27,4-43,2 mm)	500 kcmil	10014	1
5516A-750-AL	054007-43254	1.08"-1.70" (27,4-43,2 mm)	750 kcmil	20019	1
5516A-750-CU	054007-43255	1.08"-1.70" (27,4-43,2 mm)	750 kcmil	10019	1
5516A-1000-AL	054007-42901	1.08"-1.70" (27,4-43,2 mm)	1000 kcmil	20024	1
5516A-1000-CU	054007-42106	1.08"-1.70" (27,4-43,2 mm)	1000 kcmil	10024	1

15 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C): Branch

## 3M™ Cold Shrink Branch Splice Kit QS-2001B and 3M™ Cold Shrink Branch Splice Adapter QS-2000BA

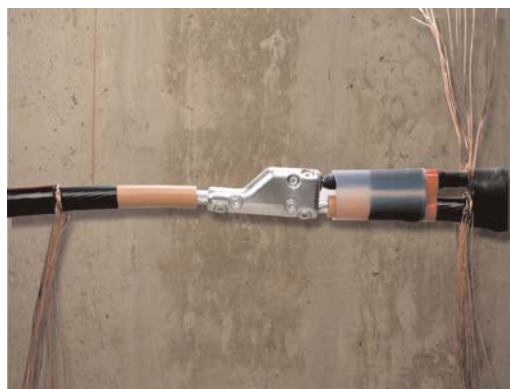
The 3M™ Cold Shrink Branch Splice QS-2001B molded rubber splice kit is designed to connect extruded dielectric power cables rated 15 kV. The basic kit handles the main and branch cable range from 350–500 kcmil. (See note below for cable between 2 AWG-250 kcmil.) This kit utilizes the QS-2000 cold shrink technology and consists of a multi-layer silicone rubber splice and stress control body, each expanded on a removable, supporting polymeric core.

Kits contain sufficient material to make one branch splice.

Note: For 2 AWG-250 kcmil cable, the 3M™ Cold Shrink Branch Splice Adapter QS-2000BA must be ordered and used in conjunction with the 3M™ Cold Shrink Branch Splice Kit QS-2001B. The adapter kit will increase the cable insulation O.D. so that the cable will work with the splice body. Order one adapter kit for each cable end (3 maximum/splice) below 350 kcmil (185 mm²) conductor size.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Single Conductor Branch Splice
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Tape Shield, UniShield®, Wire Shield
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Product Type	Suggested Accessory	Case Qty.
QS2001B	051128-55254	1.00"-1.35" (25,4-34,3 mm); or 0.64"-1.01" (16,2-25,6 mm) with QS-2000BA Adapter Kit	2 AWG-500 kcmil (35-240 mm²) Must use QS-2000BA Adapter Kit for 2 AWG-250 kcmil (35-150 mm²)	Splice	3M™ Cold Shrink Branch Splice Adapter Kit QS-2000BA	1
QS2000B-A	051128-55255	N/A	N/A	Accessory	N/A	1

## 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5775A-MT, 5776A-MT & 5777A-MT for 15 kV

3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splices 5775A-MT, 5776A-MT and 5777A-MT Series are designed for splicing 3-conductor, armored and non-armored, shielded power cables. The kits are rated for use on 5/8 kV cables with conductor sizes from 3/0 AWG-1000 kcmil (95-500 mm<sup>2</sup>) or 15 kV cables with conductor sizes from 2 AWG-750 kcmil (35-325 mm<sup>2</sup>). The kits are designed to be used with 3M™ Scotchlok™ Connectors 10000 and 20000 Series or other UL listed inline compression connectors that fit within the dimension limits listed in the data sheet. Meets the requirements of IEEE-404.

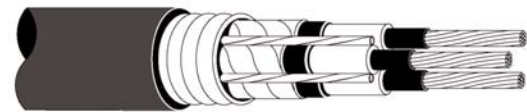
Kits include material necessary to make one 3/C splice. Connectors are not included and must be ordered separately. The completed splice is designed for use in cable trays, weather exposed or direct burial locations.

The splice utilizes several technologies to accommodate the various functions of a 3/C shielded power cable: 3M™ Cold Shrink QS-III Splice Bodies, Scotch® Tapes for moisture sealing, Constant Force Springs for connecting ground braid jumpers and armorcast for replacing the cable armor and/or jacket.

Note: When making a trifurcating splice, the 3M™ Cold Shrink MT-C or MT-E Trifurcating Accessory Kit must be used along with the splice kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	5/8 kV, 15 kV
Number of Conductors	Three Conductors
Shielding Type	Shielded Armored or Non-Armored
Splice Type	Inline, Trifurcating
Technology	Cold Shrink, Armorcast



**Three-Conductor Armored, Shielded Cable**



**Three-Conductor Non-Armored, Shielded Cable**

Order No.	UPC	Insulation O.D. Range	Conductor Size, 15 kV	Typical Splice Length	Suggested Accessory	Case Qty.
5775A-MT	051128-53493	0.64"-1.01" (16,3-25,7 mm)	2-4/0 AWG (35-95 mm <sup>2</sup> )	52.0" (1320,8 mm)	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-C	1
5776A-MT	054007-44112	0.84"-1.38" (21,3-35,1 mm)	4/0 AWG-500 kcmil (95-240 mm <sup>2</sup> )	54.0" (1371,6 mm)	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-C; or 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E	1
5777A-MT	054007-44289	1.04"-1.70" (26,4-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	58.0" (1473,2 mm)	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E	1

15 kV: 3M™ Cold Shrink Splice Kits: Three Conductor (3/C)

## 3M™ Cold Shrink MT-C & MT-E Trifurcating Accessory Kits (One 3/C to Three 1/C) for 15 kV

3M™ Cold Shrink MT-C and MT-E Trifurcating Accessory Kits are used to break out and seal a transition from 3/C to three 1/C.

For use with 3M™ Cold Shrink QS-III Splicing Series 5700A-MT.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

**Voltage:** 15 kV

**Number of Conductors:** One 3/C to three 1/C



### Selection Table

3M™ Splice 57XXA-MT	15 kV (175/220 mil)	Appropriate MT Transition Kit
Typical Conductor Size Range – AWG/kcmil		
5775A-MT	2-4/0	MT-C
5776A-MT	4/0-250	MT-C
5776A-MT	350-500	MT-E

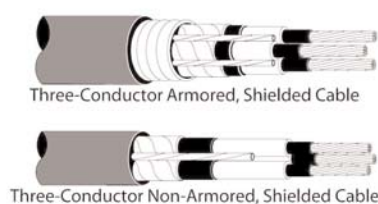
Order No.	UPC	Single Conductor Jacket O.D.	Kits per Case
MT-C	051128-55208	0.62"-1.13" (15,7-28,7 mm)	1
MT-E	051128-54318	1.13"-1.80" (28,7-45,7 mm)	1

## 3M™ Cold Shrink 3/C Inline Shielded, Armored or Non-Armored Splice Kits 5760 Series for 15 kV

These splice kits are designed for splicing shielded armored and non-armored cables, 5/8 kV and 15 kV. Each kit makes one 3/C splice. Connectors are not included and must be ordered separately.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	5/8 kV, 15 kV
<b>Number of Conductors</b>	Three Conductors
<b>Shielding Type</b>	Shielded Armored or Non-Armored
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink, Resin
<b>RoHS 2011/65/EU</b>	Yes



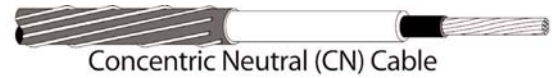
Order No.	UPC	Insulation O.D. Range	Conductor Size, 15 kV	Max. Connector O.D.	Max. Connector Length	Typical Splice Length	Case Qty.
5761	051128-59172	0.65"-1.00" (16,5-25,4 mm)	2-3/0 AWG (35-80 mm <sup>2</sup> )	0.90" (22,9 mm)	2.75" (69,9 mm)	29.0" (737 mm)	1
5762	051128-59170	0.93"-1.94" (23,6-49,3 mm)	Cu: 4/0 AWG-750 kcmil (120-325 mm <sup>2</sup> ) Al: 4/0 AWG-500 kcmil (120-250 mm <sup>2</sup> )	1.40" (35,5 mm)	5.00" (127,0 mm)	44.0" (1118 mm)	1

## 3M™ Molded Rubber QS-II Inline JCN/CN Splice Kits 5411, 5411A and 5412 Series

3M™ Molded Rubber QS-II Inline JCN/CN Splices 5411, 5411A and 5412 Series are one-piece inline splices designed for use on 15 kV rated CN and JCN cable. Meets the requirements of IEEE 404. Splice can be ordered with the special CI-Series connector packed in the kit, or the kit and connector can be ordered as separate items.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	15 kV
Number of Conductors	Single Conductor
Shielding Type	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
Splice Type	Inline
Technology	Molded Rubber



Order No.	UPC	Insulation O.D. Range	Conductor Size, Stranded	Conductor Size, Solid	Connector Included	Case Qty.
5411	054007-11852	0.637"-0.900" (16,2-22,9 mm)	4 - 2/0 AWG (175 mil)	2-1/0 AWG	-	1
5411-CI-1/0	054007-11855	0.637"-0.900" (16,2-22,9 mm)	1/0 AWG	-	CI-1/0	1
5411-CI-2	054007-08005	0.637"-0.900" (16,2-22,9 mm)	2 AWG	1 AWG	CI-2	1
5411-CI-21	054007-11853	0.637"-0.900" (16,2-22,9 mm)	2 AWG, 1 AWG	1 AWG, 1/0 AWG	CI-21	1
5411-CI-22	054007-11854	0.637"-0.900" (16,2-22,9 mm)	4 AWG (220 mil)	2 AWG	CI-22	1
5411-20006	054007-11861	0.637"-0.900" (16,2-22,9 mm)	2/0 AWG (175 mil)	-	20006	1
5411A	054007-09937	0.775"-0.900" (19,7-22,9 mm)	1 AWG (220 mil) 1/0 AWG (220 mil) 2/0 AWG (175 mil)	1/0 AWG (220 mil)	-	1
5411A-CI-1	054007-09938	0.775"-0.900" (19,7-22,9 mm)	1 AWG (220 mil)	1/0 AWG (220 mil)	CI-1	1
5411A-CI-1/0	054007-09939	0.775"-0.900" (19,7-22,9 mm)	1/0 AWG (220 mil)	-	CI-1/0	1
5411A-20006	054007-09940	0.775"-0.900" (19,7-22,9 mm)	2/0 AWG (175 mil)	-	20006	1
5412	054007-11862	0.840"-1.050" (21,3-26,7 mm)	2/0 AWG (220 mil) 3/0-4/0 AWG 250 kcmil (175 mil)	-	-	1
5412-CI-2/0	054007-11865	0.840"-1.050" (21,3-26,7 mm)	2/0 AWG (220 mil)	-	CI-2/0	1
5412-CI-3/0	054007-11863	0.840"-1.050" (21,3-26,7 mm)	3/0 AWG	-	CI-3/0	1
5412-CI-4/0	054007-11864	0.840"-1.050" (21,3-26,7 mm)	4/0 AWG	-	CI-4/0	1

15 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

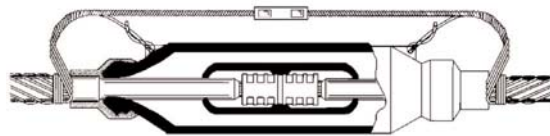
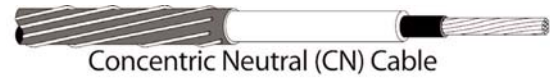
3M™ Molded Rubber QS Inline JCN/CN Splice Kits 5400 Series

3M™ Molded Rubber QS Inline JCN/CN Splice Kits 5400 Series are inline splices designed for use on 15 kV concentric neutral (CN) or jacketed concentric neutral (JCN) cable. The continuous current rating of each splice is equal to the current rating of the cable it is sized to accommodate. Meets requirements of IEEE 404 for cable joints. Jacketing kit is needed for JCN cable.

Each kit makes one splice. Connectors, unless specified, are not included in the kit, and must be ordered separately.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	15 kV
Number of Conductors	Single Conductor
Splice Type	Inline
Shielding Type	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
Technology	Molded Rubber



Order No.	UPC	Insulation O.D. Range	Conductor Size, Stranded	Connector Included	Case Qty.
5403	054007-11818	0.795"-0.940" (20,2-23,9 mm)	2/0-4/0 AWG	-	1
5404	054007-11826	0.920"-1.080" (23,4-27,4 mm)	2/0-4/0 AWG	-	1
5405	054007-11834	0.920"-1.080" (23,4-27,4 mm)	250-350 kcmil	-	1
5406	054007-11842	1.060"-1.210" (26,9-30,7 mm)	250 (220 mil)-350 kcmil	-	1
5406-CI-350	054007-41907	1.060"-1.210" (26,9-30,7 mm)	350 kcmil	CI-350	1
5407	054007-25602	1.120"-1.320" (28,5-33,5 mm)	500 kcmil	-	1
5407-CI-500	054007-02315	1.120"-1.320" (28,5-33,5 mm)	500 kcmil	CI-500	1
5408	054007-25610	1.320"-1.520" (33,5-38,6 mm)	750 kcmil	-	1
5408-CI-750	054007-02314	1.320"-1.520" (33,5-38,6 mm)	750 kcmil	CI-750	1
5408-CCI-750	054007-41709	1.320"-1.520" (33,5-38,6 mm)	750 kcmil	CCI-750	1
5409	054007-11859	1.490"-1.660" (37,8-42,2 mm)	750 kcmil	-	1
5409-CI-750	054007-30209	1.490"-1.660" (37,8-42,2 mm)	750 kcmil	CI-750	1



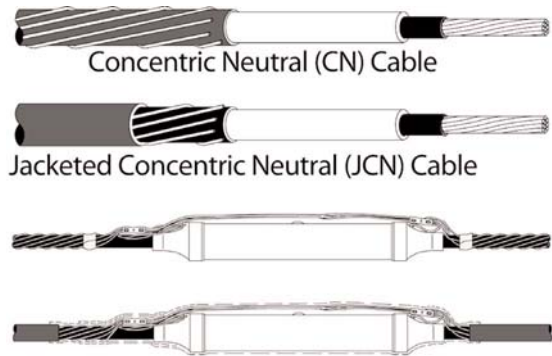
## 3M™ Molded Rubber QS-II JCN/CN Cable Repair Splice Kits 5411R and 5412R Series

3M™ Molded Rubber QS-II JCN/CN Cable Repair Splice Kit 5411R and 5412R Series are specially elongated molded rubber splices designed to repair damaged cable. They can be used on 15 kV copper or aluminum, CN or JCN cables. It is designed to replace up to 6" (152 mm) of damaged cable, thus virtually eliminating the need to splice in a new section of cable with two separate splices.

Meets the requirements of IEEE 404. The 5411R/5412R can be ordered with the special CIR-Series connector packed in the kit or the kit and connector can be ordered as separate items. Each kit makes one repair splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
<b>Splice Type</b>	Inline Repair
<b>Technology</b>	Molded Rubber



Order No.	UPC	Insulation O.D. Range	Conductor Size, Stranded	Conductor Size, Solid	Connector Included	Case Qty.
5411R	054007-09352	0.637"-0.900" (16,3-22,9 mm)	4 AWG (220 mil only); 2-1/0 AWG	2-1/0 AWG	-	1
5411R-CIR-2	051128-55097	0.637"-0.900" (16,3-22,9 mm)	2 AWG	-	CIR-2	1
5411R-CIR-1/0	054007-09355	0.637"-0.900" (16,3-22,9 mm)	1/0 AWG	-	CIR-1/0	1
5411R-CIR-1/0-2-10002	054007-44273	0.637"-0.900" (16,3-22,9 mm)	1/0 AWG	-	One CIR-1/0; and Two 10002	1
5411R-CIR-21	054007-09354	0.637"-0.900" (16,3-22,9 mm)	2-1 AWG	1-1/0 AWG	CIR-21	1
5411R-CIR-22	054007-09353	0.637"-0.900" (16,3-22,9 mm)	4 AWG (220 mil only)	2 AWG	CIR-22	1
5412R-CIR-2/0	051128-57179	0.870"-1.055" (22,1-26,9 mm)	2/0 AWG (220 mil)	-	CIR-2/0	1
5412R-CIR-3/0	054007-43501	0.870"-1.055" (22,1-26,9 mm)	3/0 AWG	-	CIR-3/0	1
5412R-CIR-4/0	054007-50101	0.870"-1.055" (22,1-26,9 mm)	4/0 AWG	-	CIR-4/0	1



## 15 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

### 3M™ Molded Rubber QS-II Inline Shielded Cable Splice Kits 5500 Series

3M™ Molded Rubber QS-II Inline Shielded Cable Splices 5500 Series are inline splices designed for use on 15 kV copper or aluminum Tape Shielded, Wire Shielded and UniShield® cable from 4 AWG-750 kcmil. The continuous current rating of each splice is equal to the current rating of the cable it is sized to accommodate. Meets requirements of IEEE 404.

Each kit makes one splice. A special CI-Series Connector is necessary to complete the splice. Order the connector separately or as part of the kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	15 kV
Number of Conductors	Single Conductor
Shielding Type	Tape Shield, Wire Shield, UniShield®
Splice Type	Inline
Technology	Molded Rubber



Tape Shielded Cable



Wire Shielded Cable



UniShield® Cable

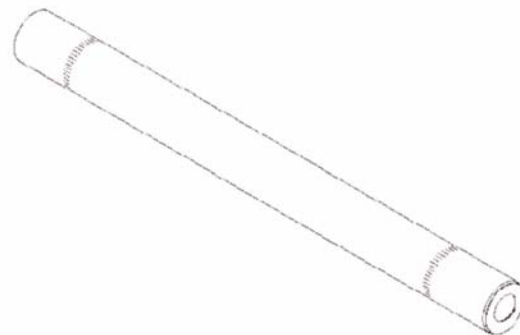
Order No.	UPC	Insulation O.D. Range	Conductor Size, Stranded, Cu or Al	Conductor Size, Solid, Cu or Al	Connector Included	Case Qty.
5501	054007-12293	0.637"-0.900" (16,2-22,9 mm)	4-1/0 AWG 2/0 AWG (175 mil)	2-1/0 AWG	-	1
5501-CI-21	054007-09628	0.637"-0.900" (16,2-22,9 mm)	2-1 AWG	1-1/0 AWG	CI-21	1
5501-CI-1/0	054007-09629	0.637"-0.900" (16,2-22,9 mm)	1/0 AWG	-	CI-1/0	1
5501-20006	054007-09630	0.637"-0.900" (16,2-22,9 mm)	2/0 AWG (175 mil)	-	20006	1
5502	054007-12294	0.840"-1.050" (21,3-26,7 mm)	2/0 AWG (220 mil) 3/0-4/0 AWG 250 kcmil (175 mil)	4/0 AWG	-	1
5502-CI-2/0	054007-09631	0.840"-1.050" (21,3-26,7 mm)	2/0 AWG (220 mil)	-	CI-2/0	1
5502-CI-3/0	054007-09632	0.840"-1.050" (21,3-26,7 mm)	3/0 AWG	4/0 AWG	CI-3/0	1
5502-CI-4/0	054007-09633	0.840"-1.050" (21,3-26,7 mm)	4/0 AWG	-	CI-4/0	1
5502-20009	054007-09634	0.840"-1.050" (21,3-26,7 mm)	250 kcmil (175 mil)	-	20009	1
5503	054007-12295	1.060"-1.210" (26,9-30,7 mm)	250 kcmil (220 mil) 350 kcmil	-	-	1
5503-CI-250	054007-09635	1.060"-1.210" (26,9-30,7 mm)	250 kcmil (220 mil)	-	CI-250	1
5503-CI-350	054007-09636	1.060"-1.210" (26,9-30,7 mm)	350 kcmil	-	CI-350	1
5504	054007-12296	1.120"-1.320" (28,4-33,5 mm)	500 kcmil	-	-	1
5504-CI-500	054007-09637	1.120"-1.320" (28,4-33,5 mm)	500 kcmil	-	CI-500	1
5505	054007-12297	1.320"-1.520" (33,5-38,6 mm)	750 kcmil	-	-	1
5505-CI-750	054007-09638	1.320"-1.520" (33,5-38,6 mm)	750 kcmil	-	CI-750	1

## 15 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

### 3M™ Aluminum Repair Connectors CIR Series for 3M™ Rubber Splices 5411R & 5412R Series

Meets the requirements of ANSI C119.4

Connector Base Metal Aluminum  
For use with Aluminum or Copper Conductor

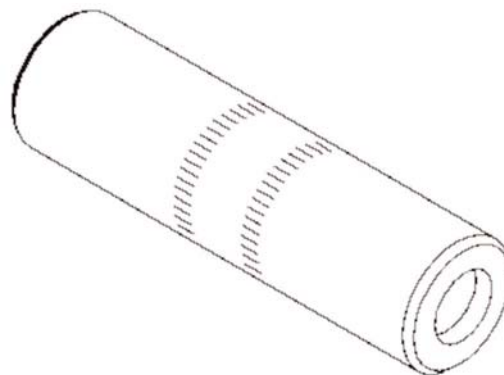


Order No.	UPC	Conductor Size, Stranded	Conductor Size, Solid	Length	Outside Diameter (O.D.)	Compatible with	Case Qty.
CIR-22	054007-09356	4 AWG (220 mil insulation only)	2 AWG	8.0" (203,2 mm)	0.64" (16,2 mm)	5411R Splice Body	10
CIR-2	054007-11966	2 AWG	-	8.0" (203,2 mm)	0.64" (16,2 mm)	5411R Splice Body	10
CIR-21	054007-09357	2 AWG, 1 AWG	1 AWG, 1/0 AWG	8.0" (203,2 mm)	0.64" (16,2 mm)	5411R Splice Body	10
CIR-1/0	054007-09358	1/0 AWG	-	8.0" (203,2 mm)	0.64" (16,2 mm)	5411R Splice Body	10
CIR-2/0	054007-41964	2/0 AWG (220 mil insulation only)	-	9.0" (228,6 mm)	0.91" (23,1 mm)	5412R Splice Body	10
CIR-3/0	054007-41965	3/0 AWG	-	9.0" (228,6 mm)	0.91" (23,1 mm)	5412R Splice Body	10
CIR-4/0	054007-50228	4/0 AWG	-	9.0" (228,6 mm)	0.91" (23,1 mm)	5412R Splice Body	10

### 3M™ Connectors CI Series for 3M™ Rubber Splices 5400 & 5500 Series

Meets the requirements of ANSI C119.4

Connector Base Metal Aluminum  
For use with Aluminum or Copper Conductor



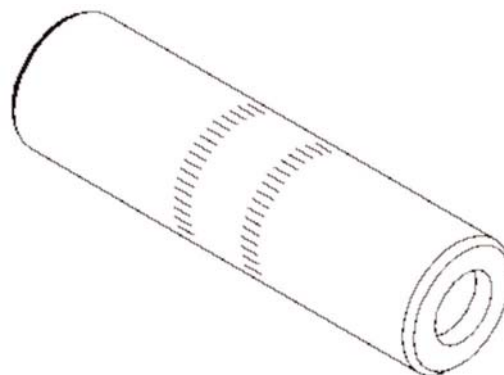
Order No.	UPC	Conductor Size, Stranded, Cu or Al	Connector O.D.	Case Qty.
CI-2/0	054007-11875	2/0 AWG	0.910" (23,1 mm)	10
CI-3/0	054007-11883	3/0 AWG	0.910" (23,1 mm)	10
CI-4/0	054007-11891	4/0 AWG	0.910" (23,1 mm)	10
CI-250	054007-11909	250 kcmil	1.125" (28,6 mm)	10
CI-350	054007-11925	350 kcmil	1.125" (28,6 mm)	10
CI-450	054007-11933	500 kcmil (Compact)	1.312" (33,3 mm)	10
CI-500	054007-25644	500 kcmil	1.312" (33,3 mm)	10
CI-650	054007-11941	750 kcmil (Compact)	1.590" (40,4 mm)	10
CI-750	054007-25651	750 kcmil	1.590" (40,4 mm)	10

## 15 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

### 3M™ Connectors CI Series for 3M™ Rubber Splices 5411, 5411A, 5412 & 5500 Series

Meets the requirements of ANSI C119.4

Connector Base Metal Aluminum  
For use with Aluminum or Copper Conductor

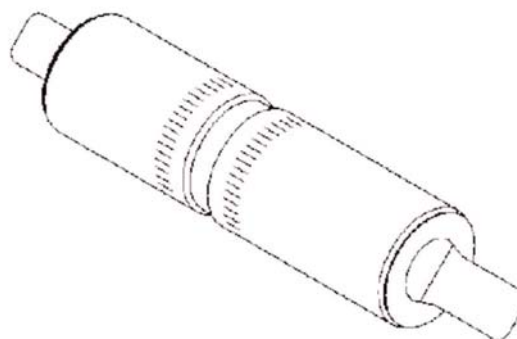


Order No.	UPC	Conductor Size, Stranded, Cu or Al	Conductor Size, Solid, Cu or Al	Connector O.D.	Case Qty.
20006	054007-13285	2/0 AWG	-	0.687" (17,4 mm)	10
20009	054007-13319	250 kcmil	-	0.906" (23,0 mm)	3
CI-1/0	054007-11867	1/0 AWG	-	0.640" (16,2 mm)	10
CI-2	054007-11651	2 AWG	1 AWG	0.640" (16,2 mm)	10
CI-2/0	054007-11875	2/0 AWG	-	0.910" (23,1 mm)	10
CI-21	054007-11856	2, 1 AWG	1, 1/0 AWG	0.640" (16,2 mm)	10
CI-22	054007-25636	4 AWG	2 AWG	0.640" (16,2 mm)	10
CI-3/0	054007-11883	3/0 AWG	-	0.910" (23,1 mm)	10
CI-4/0	054007-11891	4/0 AWG	-	0.910" (23,1 mm)	10

### 3M™ Aluminum Transition Connectors CI-T Series for 5411 & 5500 Series

Meets the requirements of ANSI C119.4

Connector Base Metal Aluminum  
For use with Aluminum or Copper Conductor



Order No.	UPC	Conductor Size, Cable A – Stranded (Solid)	Conductor Size, Cable B – Stranded (Solid)	Outside Diameter (O.D.)	Case Qty.
CI-T-1	054007-11958	4 AWG (2 AWG )	1 AWG (1/0 AWG )	0.64" (16,2 mm)	10
CI-T-2	054007-11966	2 AWG (1 AWG )	1 AWG (1/0 AWG )	0.64" (16,2 mm)	10
CI-T-3	054007-11974	4 AWG (2 AWG)	1/0 AWG Stranded	0.64" (16,2 mm)	10
CI-T-4	054007-11982	2 AWG (1 AWG)	1/0 AWG Stranded	0.64" (16,2 mm)	10
CI-T-5	054007-11990	2 AWG (1 AWG)	4 AWG (2 AWG)	0.64" (16,2 mm)	10
CI-T-9	054007-44533	1 AWG (1/0 AWG)	1/0 AWG Stranded	0.64" (16,2 mm)	10

## 15 kV: 3M™ PILC Splice Kits: Single Conductor (1/C)

### 3M™ Cold Shrink QS-III 1/C Inline Transition Splice Kits 5510A-1T-PILC Series

3M™ Cold Shrink QS-III 1/C Inline Transition Splice Kit 5510A-1T-PILC Series (which includes 5513A-1T-PILC, 5514A-1T-PILC, 5515A-1T-PILC, and 5516A-1T-PILC) are 15 kV class inline splices designed to transition single-conductor PILC to Poly/EPR cable and meet the 15 kV voltage class rating requirements of IEEE 404.

The splice kits include an oil barrier system based on a cold shrink tube design of specially formulated, oil-resistant polymer, that is laboratory tested to nominal internal pressures of 40 psi with no oil leakage. The splice body itself is a one-piece molded QS-III design made of specially formulated silicone rubber. An EPDM rubber fold-back cold shrink jacket is included for physical protection and environmental sealing.

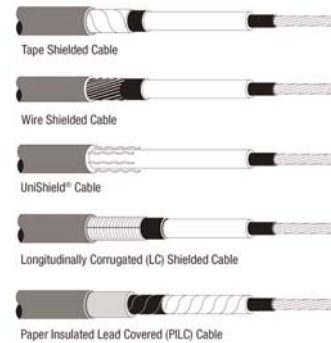
Each kit contains sufficient material to make one splice. Connector is not provided with the kits due to customer specific application requirements. To ensure a positive oil stop, a non-tapered, sealed connector (with a solid center barrier) should be used.

\*4 AWG requires use of Al connector as #4 Cu connector is below min. O.D. for the 5513A-1T-PILC kit.

\*\*2/0 AWG & 3/0 AWG require use of Al connector as Cu connectors are below min. O.D. for the 5514A-1T-PILC kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Paper Insulated Lead Covered (PILC)
<b>Splice Type</b>	Inline PILC Transition
<b>Technology</b>	Cold Shrink



Order No.	UPC 051138-	Max. O.D. Over Lead Sheath	PILC Cable Insul. O.D.	Poly/EPR Cable Insul. O.D.	PILC Cable Conductor Size 100%	PILC Cable Conductor Size 133%	Poly/EPR Cable Conductor Size	Case Qty.
5513A-1T-PILC	94339	1.01" (25,6 mm)	0.59"-0.83" (15-21 mm)	0.64"-1.01" (16-26 mm)	*4-4/0 AWG (22-95 mm <sup>2</sup> )	*4-1/0 AWG (22-50 mm <sup>2</sup> )	2-4/0 AWG (35-95 mm <sup>2</sup> )	1
5514A-1T-PILC	94340	1.23" (31,2 mm)	0.79"-1.07" (20-27 mm)	0.84"-1.38" (22-35 mm)	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	**2/0 AWG-250 kcmil (70-120 mm <sup>2</sup> )	4/0 AWG-500 kcmil (95-240 mm <sup>2</sup> )	1
5515A-1T-PILC	94341	1.53" (38,9 mm)	1.07"-1.32" (28-33 mm)	1.04"-1.70" (27-43 mm)	500-750 kcmil (300-325 mm <sup>2</sup> )	250-550 kcmil (150-250 mm <sup>2</sup> )	300-750 kcmil (185-325 mm <sup>2</sup> )	1
5516A-1T-PILC	94342	1.85" (47,0 mm)	1.24"-1.63" (32-41 mm)	1.08"-1.70" (28-43 mm)	750-1000 kcmil (400-500 mm <sup>2</sup> )	500-1000 kcmil (300-500 mm <sup>2</sup> )	500-1000 kcmil (240-500 mm <sup>2</sup> )	1

## 15 kV: 3M™ PILC Splice Kits: Single Conductor (1/C)

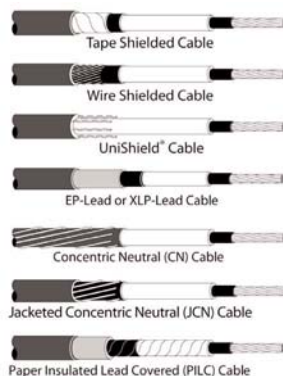
### 3M™ Cold Shrink Splice Kits QS-2000T 1/C PILC to 1/C Poly/EPR or 1/C PILC to 1/C PILC Cable Splices

The 3M™ Cold Shrink Splice Kit QS-2000T Series allows you to splice either single-conductor PILC cable to single-conductor PILC cable, or single-conductor PILC cable to single-conductor Poly/EPR cable. Because of the design of the splice, size transitions can also be accommodated rather easily. The 3M™ Cold Shrink Splice Kit QS-2000T Series meets the requirements of IEEE 404.

Use 3M™ Scotchlok™ Connectors 2000T Series with these splice kits. Each kit contains sufficient quantities of material to make one splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Paper Insulated Lead Covered (PILC)
<b>Splice Type</b>	Inline PILC Transition or Inline PILC
<b>Technology</b>	Cold Shrink



Order No.	UPC 054007-	PILC Cable Insul. O.D. Range	PILC Cable Conductor Size	Poly/EPR Cable Insul. O.D. Range	Poly/EPR Cable Conductor Size	Connector O.D. Range	Connector Max. Length	Case Qty.
QS2011T	50546	0.56-0.88" (14,2-22,4 mm)	4-3/0 AWG (25-70 mm <sup>2</sup> )	0.70"-1.07" (17,8-27,2 mm)	1-4/0 AWG (50-95 mm <sup>2</sup> )	0.70"-1.02" (17,8-25,8 mm)	Al: 5.0" (127 mm) Cu: 5.5" (140 mm)	1
QS2012T	50547	0.74"-1.17" (18,8-29,7 mm)	3/0 AWG-350 kcmil (95-185 mm <sup>2</sup> )	0.88"-1.36" (22,0-34,6 mm)	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	0.90"-1.30" (23,0-51,0 mm)	Al: 5.2" (132 mm) Cu: 5.5" (140 mm)	1
QS2013T	50555	0.98"-1.56" (24,9-39,6 mm)	400-1000 kcmil (200-500 mm <sup>2</sup> )	1.12"-1.70" (28,4-43,2 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	1.10"-1.66" (28,0-42,0 mm)	Al: 6.5" (165 mm) Cu: 7.5" (190 mm)	1

## 3M™ Cold Shrink Splice Kits QS-2000-3T and QS-2000-3T-WS 3/C PILC to 1/C Poly/EPR Cable Trifurcating Splices

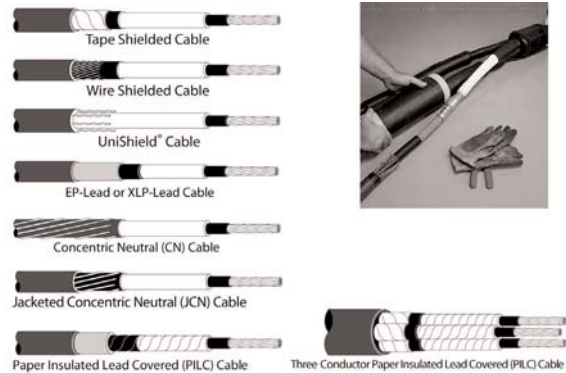
3M™ Cold Shrink Splice Kit QS-2000-3T and QS-2000-3T-WS Trifurcating Transition Splices are rated 15 kV. They are specially designed splice kits for connecting one 3/C Paper Insulated Lead Covered (PILC) cable to three 1/C Poly/EPR insulated cables. Splices meet the requirements of IEEE 404.

3M™ Scotchlok™ Connector 2000T Series are recommended for use with these kits and must be ordered separately. Each kit makes one 3/C to three 1/C splice.

\*QS-2000-3T-WS uses wrap around heat shrink re-jacketing.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Three Conductor to Single Conductor
<b>Shielding Type</b>	Paper Insulated Lead Covered (PILC)
<b>Splice Type</b>	PILC Trifurcating
<b>Technology</b>	Cold Shrink



Order No.	UPC 054007-	PILC Cable Conductor Size	Poly/EPR Cable Conductor Size	Poly/EPR Cable Insul. O.D. Range	Connector O.D. Range	Connector Max. Length	Case Qty.
QS2011-3T	42021	4-3/0 AWG (25-70 mm <sup>2</sup> )	1-4/0 AWG (50-95 mm <sup>2</sup> )	0.70"-1.07" (17,8-27,2 mm)	0.70"-1.02" (17,8-25,8 mm)	Al: 5.0" (127 mm); Cu: 5.5" (140 mm)	1
QS2012-3T	42022	3/0 AWG-250 kcmil (95-120 mm <sup>2</sup> )	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	0.88"-1.36" (22,0-34,6 mm)	0.90"-1.30" (22,9-33,0 mm)	Al: 5.2" (132 mm); Cu: 5.5" (140 mm)	1
QS2012/13-3T	44202	350-500 kcmil (195-240 mm <sup>2</sup> )	250-500 kcmil (120-240 mm <sup>2</sup> )	0.91"-1.36" (23,0-34,6 mm)	0.90"-1.30" (22,9-33,0 mm)	Al: 5.2" (132 mm); Cu: 5.5" (140 mm)	1
QS2013-3T	42023	400-800 kcmil (200-400 mm <sup>2</sup> )	500-1000 kcmil (240-500 mm <sup>2</sup> )	1.12"-1.70" (28,0-43,0 mm)	1.10"-1.66" (28,0-42,0 mm)	Al: 6.5" (165 mm); Cu: 7.5" (190 mm)	1
QS2011-3T-WS*	43248	4-3/0 AWG (25-70 mm <sup>2</sup> )	1-4/0 AWG (50-95 mm <sup>2</sup> )	0.70"-1.07" (17,8-27,2 mm)	0.70"-1.02" (17,8-25,8 mm)	Al: 5.0" (127 mm); Cu: 5.5" (140 mm)	1
QS2012-3T-WS*	04211	3/0 AWG-250 kcmil (95-120 mm <sup>2</sup> )	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	0.88"-1.36" (22,0-34,6 mm)	0.90"-1.30" (22,9-33,0 mm)	Al: 5.2" (132 mm); Cu: 5.5" (140 mm)	1
QS2012/13-3T-WS*	04644	350-500 kcmil (195-240 mm <sup>2</sup> )	250-500 kcmil (120-240 mm <sup>2</sup> )	0.91"-1.36" (23,0-34,6 mm)	0.90"-1.30" (22,9-33,0 mm)	Al: 5.2" (132 mm); Cu: 5.5" (140 mm)	1
QS2013-3T-WS*	04212	400-800 kcmil (200-400 mm <sup>2</sup> )	500-1000 kcmil (240-500 mm <sup>2</sup> )	1.12"-1.70" (28,0-43,0 mm)	1.10"-1.66" (28,0-42,0 mm)	Al: 6.5" (165 mm); Cu: 7.5" (190 mm)	1

15 kV: 3M™ PILC Splice Kits: Three Conductor (3/C)

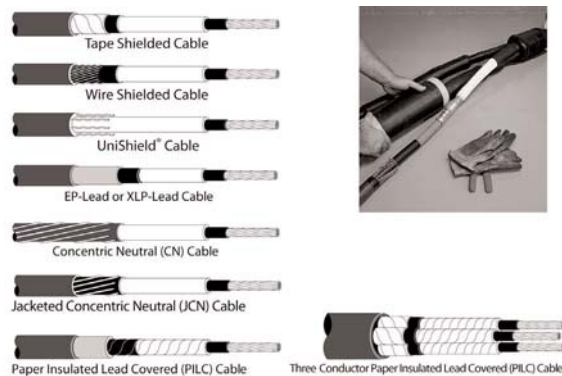
## 3M™ Cold Shrink 3/C PILC to 3/C Poly/EPR Cable Transition Splice Kit QS-2013-3T-3C

The 3M™ Cold Shrink Splice Kit QS-2013-3T-3C is rated for 15 kV cables. It is specially designed for connecting 3/C shielded or belted Paper Insulated Lead Covered (PILC) cable to 3/C shielded Poly/EPR insulated cables. The splice meets the requirements of IEEE 404.

3M™ Scotchlok™ Connector 2000T Series are recommended for this kit and must be ordered separately. Each kit has sufficient material to make one 3/C to 3/C splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	15 kV
<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Paper Insulated Lead Covered (PILC)
<b>Splice Type</b>	Inline PILC Transition
<b>Technology</b>	Cold Shrink



Order No.	UPC 054007-	PILC Cable Conductor Size	Poly/EPR Cable Conductor Size	Poly/EPR Cable Insul. O.D. Range	Connector O.D. Range	Connector Max. Length	Case Qty.
QS2013-3T-3C	43247	400-800 kcmil (200-400 mm <sup>2</sup> )	500-750 kcmil (240-325 mm <sup>2</sup> )	1.12"-1.70" (28,4-43,2 mm)	1.10"-1.66" (28,0-42,0 mm)	Al: 6.5" (165 mm); Cu: 7.5" (190 mm)	1



## 3M™ Scotchlok™ Connectors 2000T-CU for 15 kV

The 3M™ Scotchlok™ Connectors 2000T-CU Series are copper inline sleeves for use with copper conductor cables of the same size and are specifically designed for use with PILC power cable. They can be used on concentric, compressed, and compact stranded conductors. A rounding die is recommended to round out the sector shape of the connector when used with sector shaped conductors. The 2000T-CU connectors, like all 2000T series connectors, have a solid center oil stop and meet ANSI Standard C-119.4. They are designed for use with splice kits from the 3M™ Cold Shrink Splice Kit QS-2000 Series, the 3M™ Cold Shrink Splice Kit QS-2000-3T Series, the 3M™ Cold Shrink CS500Pb Series, and the Scotch® Tape Splice Kits 5700 Series. Meets the requirements of ANSI C119.4



**Connector Base Metal** Copper  
**For use with** Copper Conductor

Order No.	UPC	Stranded Conductor Size	Length	Outside Diameter (O.D.)	Min. Order Qty.	Case Qty.
2000T-2-CU	054007-42247	2 AWG	5.32" (135,1 mm)	0.700" (17,8 mm)	9	9
2000T-2/0-CU	054007-42250	2/0 AWG	5.32" (135,1 mm)	0.700" (17,8 mm)	3	3
2000T-4/0-CU	054007-42252	4/0 AWG	5.25" (133,3 mm)	0.880" (22,3 mm)	3	3
2000T-250-CU	054007-42253	250 kcmil	5.25" (133,3 mm)	0.880" (22,3 mm)	3	3
2000T-500-CU	054007-42258	500 kcmil	6.90" (175,3 mm)	1.125" (28,6 mm)	3	3
2000T-750-CU	054007-42263	750 kcmil	6.90" (175,3 mm)	1.300" (33,0 mm)	3	3

15 kV: 3M™ PILC Splice Kits: Three Conductor (3/C)

## 3M™ Scotchlok™ Reducer Series Connectors 2000T-CU/AL for 15 kV

The 3M™ Scotchlok™ Reducer Series Connectors 2000T-CU/AL are aluminum inline sleeves that are applicable for both aluminum and copper conductors and specifically designed for use with PILC power cable. The barrel inner diameters on each end are different, allowing the connection of different size conductors. These connectors can be used on concentric, compressed, and compact stranded conductors. A rounding die is recommended to round out the sector shape of the connector when used with sector shaped conductors. The 2000T Reducer Series connectors, like all 2000T series connectors, have a solid center oil stop and meet ANSI Standard C-119.4. They are designed for use with splice kits from the 3M™ Scotchlok™ Connectors 2000T Series, the 3M™ Scotchlok™ Connectors 2000-3T Series, the 3M™ Cold Shrink Splice Kits Selection CS500Pb Series, and the Scotch® Tape Splice Kits 5700 Series. Each connector is electro-tin plated to resist electrolytic corrosion. Meets the requirements of ANSI C119.4



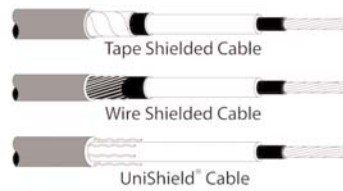
**Connector Base Metal** Aluminum  
**For use with** Copper or Aluminum Conductor

Order No.	UPC	Stranded Conductor Size	Length	Outside Diameter (O.D.)	Min. Order Qty.	Case Qty.
2000T 2-1/0 CU/AL	054007-42226	2-1/0 AWG	4.74" (120,4 mm)	0.640" (16,2 mm)	9	9
2000T 1/0-2/0 CU/AL	054007-42228	1/0-2/0 AWG	4.70" (119,4 mm)	0.910" (23,1 mm)	3	3
2000T 2/0-4/0 CU/AL	054007-42229	2/0-4/0 AWG	4.70" (119,4 mm)	0.910" (23,1 mm)	3	3
2000T 250-350 CU/AL	054007-42232	250-350 kcmil	4.70" (119,4 mm)	1.125" (28,6 mm)	3	3
2000T 350-500 CU/AL	054007-42234	350-500 kcmil	4.70" (119,4 mm)	1.320" (33,5 mm)	3	3
2000T 500-750 CU/AL	054007-42236	500-750 kcmil	6.25" (158,7 mm)	1.600" (40,6 mm)	3	3
2000T 500-1000 CU/AL	054007-42238	500-1000 kcmil	6.25" (158,7 mm)	1.625" (41,3 mm)	3	3
2000T 750-1000 CU/AL	054007-42243	750-1000 kcmil	6.25" (158,7 mm)	1.625" (41,3 mm)	3	3

15 kV: 3M™ Tape Splice Kits: Single Conductor (1/C)

## Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series

Scotch® Inline and Tee Tape Shielded Cable Splice Kits 5700 Series handle inline and tee splices on tape shielded, wire shielded or UniShield® cables with copper (Cu) or aluminum (Al) conductors. Kits are rated 5 kV-15 kV, and each kit makes three splices. Use the selector chart to determine the proper kit needed. Connectors and Lugs need to be ordered separately. 3M does not offer tee connectors.



**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

**Voltage:** 5 kV, 5/8 kV, 15 kV

**Number of Conductors:** Single Conductor

**Shielding Type:** Tape Shield, Wire Shield, UniShield®

**Splice Type:** Inline, Tee

**Technology:** Tape

Product Number	UPC (054007-)	Inline Splices						Tee Splices*						Case Qty.
		5 and 8 kV		15 kV 100% 175mil		15 kV 133% 220 mil		5 and 8 kV		15 kV 100% 175 mil		15 kV 133% 220 mil		
		Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable See above for cable type illustrations.														
5717	12030	4-250 (22-125)	4-4/0 (2-100)	4-2 (22-30)	—	4	—	—	—	—	—	—	—	1
5718	12048	300-500 (180-250)	250 (150)	1-4/0 (50-100)	4-2/0 (22-60)	2-1/0 (35-60)	—	4-2/0 (22-60)	4-1/0 (22-50)	—	—	—	—	1
5719	12055	550-1000 (300-500)	300-500 (180-250)	250-500 (180-250)	3/0-250 (95-125)	2/0-350 (70-180)	4-3/0 (22-80)	3/0-350 (95-180)	2/0-4/0 (70-100)	4-1 (22-38)	—	—	—	1
5720	12063	—	500-1000 (300-500)	550-1000 (300-500)	300-750 (180-325)	400-750 (240-325)	4/0-500 (120-250)	400-750 (240-325)	250-500 (125-250)	1/0-350 (60-180)	4-4/0 (22-100)	4-250 (22-125)	4-3/0 (22-80)	1

\*3M does not offer tee compression connectors.

**Note:** Larger-numbered kits may be used in place of smaller-numbered kits (with excess materials left over).

Order No.	UPC	Case Qty.
5717	054007-12030	1
5718	054007-12048	1
5719	054007-12055	1
5720	054007-12063	1

## 25/28 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 25/28 kV, and promote dependable performance, stability and long life with every splice you make.



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## 3M™ Cold Shrink QS4 Integrated Splice Kits (JCN) for 25/28 kV

The new 3M™ Cold Shrink QS4 Integrated Splice Kit is a premier offering that utilizes our field-proven 3M™ Cold Shrink QS-III Splice Body with additional features that make installation quick and easy. This exciting product integrates all of the layers of a shielded power cable splice into one compact joint. With this splice, 3M is introducing our easy-to-use yellow core and re-jacketing tube. We incorporated our smooth-edged shield sock (non-fraying ends) with optional customizable ground braid.

The Jacketed Concentric Neutral (JCN) inline splice kits below are designed for joining Jacketed Concentric Neutral (JCN) and Flat Strap Neutral power cables. The splice includes an integrated 7 AWG ground braid for attaching to an external ground wire (ground braid does not extend beyond the end of the re-jacketing after installation).

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	25/28 kV
Number of Conductors	Single Conductor
Shielding Type	Jacketed Concentric Neutral (JCN), Flat Strap Neutral Cable
Splice Type	Inline
Technology	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
QS4-25JCN-1-250	051128-60179	0.84"-1.36" (21,3-34,5 mm)	1 AWG-250 kcmil (50-120 mm <sup>2</sup> )	-	1
QS4-25JCN-QCI-1-250	051128-60180	0.84"-1.36" (21,3-34,5 mm)	1 AWG-250 kcmil (50-120 mm <sup>2</sup> )	QCI 2-250	1
QS4-25JCN-350-750	051128-60181	1.10"-1.70" (27,9-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	-	1
QS4-25JCN-QCI-350-750	051128-60182	1.10"-1.70" (27,9-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	QCI 350-750	1
QS4-25JCN-500-1000	051128-60183	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	1
QS4-25JCN-QCI-500-1000	051128-60184	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	QCI 500-1000	1

## 3M™ Cold Shrink QS4 Integrated Splice Kits (Shielded Power) for 25/28 kV

The new 3M™ Cold Shrink QS4 Integrated Splice Kit is a premier offering that utilizes our field-proven 3M™ Cold Shrink QS-III Splice Body with additional features that make installation quick and easy. This exciting product integrates all of the layers of a shielded power cable splice into one compact joint. With this splice, 3M is introducing our easy-to-use yellow core and re-jacketing tube. We incorporated our smooth-edged shield sock (non-fraying ends) with optional customizable ground braid.

The Shielded Power (SP) inline splice kits below are designed for joining Jacketed Concentric Neutral (JCN), Flat Strap Neutral, Tape Shield and Longitudinally Corrugated (LC) power cables. The splice includes a 4 AWG, four-foot long integrated ground braid for attaching to an external ground (factory installed ground braid extends approximately four feet beyond the end of the re-jacketing after installation).

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	25/28 kV
Number of Conductors	Single Conductor
Shielding Type	Jacketed Concentric Neutral (JCN), Flat Strap Neutral, Tape Shield, Longitudinally Corrugated (LC)
Splice Type	Inline
Technology	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
QS4-25SP-1-250-BCA	051128-60572	0.84"-1.36" (21,3-34,5 mm)	1 AWG-250 kcmil (50-120 mm <sup>2</sup> )	-	1
QS4-25SP-QCI-1-250-BCA	051128-60573	0.84"-1.36" (21,3-34,5 mm)	1 AWG-250 kcmil (50-120 mm <sup>2</sup> )	QCI 2-250	1
QS4-25SP-350-750-BCA	051128-60574	1.10"-1.70" (27,9-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	-	1
QS4-25SP-QCI-350-750-BCA	051128-60575	1.10"-1.70" (27,9-43,2 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	QCI 350-750	1
QS4-25SP-500-1000-BCA	051128-60576	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	1
QS4-25SP-QCI-500-1000-BCA	051128-60577	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	QCI 500-1000	1



## 3M™ Cold Shrink QS4 Integrated Splice Kits (Tape Shield) for 25/28 kV

The new 3M™ Cold Shrink QS4 Integrated Splice Kit is a premier offering that utilizes our field-proven 3M™ Cold Shrink QS-III Splice Body with additional features that make installation quick and easy. This exciting product integrates all of the layers of a shielded power cable splice into one compact joint. With this splice, 3M is introducing our easy-to-use yellow core and re-jacketing tube. We incorporated our smooth-edged shield sock (non-fraying ends) with optional customizable ground braid.

The Tape Shielded (TS) inline splice kits below are designed for joining Tape Shield, Wire Shield, UniShield® and Longitudinally Corrugated (LC) power cables. The splice includes a separate 7 AWG U-shaped ground braid that can be attached to the shield with a constant force spring for external grounding.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	25/28 kV
Number of Conductors	Single Conductor
Shielding Type	Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)
Splice Type	Inline
Technology	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
QS4-25TS-1-250	051128-60198	0.84"-1.36" (21,3-34,5 mm)	1 AWG-250 kcmil (50-120 mm²)	-	1
QS4-25TS-QCI-1-250	051128-60199	0.84"-1.36" (21,3-34,5 mm)	1 AWG-250 kcmil (50-120 mm²)	QCI 2-250	1
QS4-25TS-350-750	051128-60200	1.10"-1.70" (27,9-43,2 mm)	350-750 kcmil (185-325 mm²)	-	1
QS4-25TS-QCI-350-750	051128-60201	1.10"-1.70" (27,9-43,2 mm)	350-750 kcmil (185-325 mm²)	QCI 350-750	1
QS4-25TS-500-1000	051128-60202	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm²)	-	1
QS4-25TS-QCI-500-1000	051128-60203	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm²)	QCI 500-1000	1



## 3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5456A, 5457A and 5458A Series

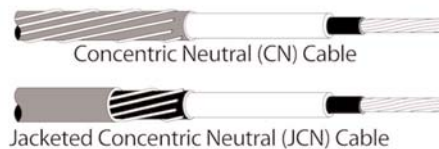
3M™ Cold Shrink QS-III Inline CN/JCN Cable Splices 5456A-WG, 5457A-WG and 5458A-WG are inline splices for joining 25/28 kV jacketed concentric neutral (JCN) or concentric neutral (CN) power cables. It is a cold shrink design. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability. Kits can be ordered with connectors packed in the kit or the kit and connector can be ordered as separate items. Meets requirements of IEEE 404.

Each kit makes one splice.

Note: 5456A-WG, 5457A-WG and 5458A-WG are partially jacketed splices containing built-in bleeder wires. Additional end user materials are required to convert to full jacketing.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	25/28 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation O.D.	Conductor Size	Connector Included	Case Qty.
5456A	051128-53793	0.84"-1.36" (21,3-34,5 mm)	1 AWG-250 kcmil (50-120 mm <sup>2</sup> )	-	1
5456A-1-AL	051128-53794	0.84"-1.36" (21,3-34,5 mm)	1 AWG	20004	1
5456A-1-CU	051128-53795	0.84"-1.36" (21,3-34,5 mm)	1 AWG	10004	1
5456A-1/0-AL	051128-53796	0.84"-1.36" (21,3-34,5 mm)	1/0 AWG	20005	1
5456A-1/0-CU	051128-53797	0.84"-1.36" (21,3-34,5 mm)	1/0 AWG	10005	1
5456A-2/0-AL	051128-53798	0.84"-1.36" (21,3-34,5 mm)	2/0 AWG	20006	1
5456A-2/0-CU	051128-53799	0.84"-1.36" (21,3-34,5 mm)	2/0 AWG	10006	1
5456A-3/0-AL	051128-53800	0.84"-1.36" (21,3-34,5 mm)	3/0 AWG	20007	1
5456A-3/0-CU	051128-53801	0.84"-1.36" (21,3-34,5 mm)	3/0 AWG	10007	1
5456A-4/0-AL	051128-53802	0.84"-1.36" (21,3-34,5 mm)	4/0 AWG	20008	1
5456A-4/0-CU	051128-53803	0.84"-1.36" (21,3-34,5 mm)	4/0 AWG	10008	1
5456A-250-AL	051128-53935	0.84"-1.36" (21,3-34,5 mm)	250 kcmil	20009	1
5456A-250-CU	051128-53936	0.84"-1.36" (21,3-34,5 mm)	250 kcmil	10009	1
5456A-WG	051128-53804	0.84"-1.36" (21,3-34,5 mm)	1 AWG-250 kcmil (50-120 mm <sup>2</sup> )	-	1
5457A	054007-42149	1.07"-1.70" (27,2-43,2 mm)	250-500 kcmil (120-240 mm <sup>2</sup> )	-	1
5457A-250-AL	051128-53836	1.07"-1.70" (27,2-43,2 mm)	250 kcmil	20009	1
5457A-250-CU	051128-53837	1.07"-1.70" (27,2-43,2 mm)	250 kcmil	10009	1
5457A-350-AL	054007-42132	1.07"-1.70" (27,2-43,2 mm)	350 kcmil	20011	1
5457A-350-CU	054007-44238	1.07"-1.70" (27,2-43,2 mm)	350 kcmil	10011	1
5457A-500-AL	054007-42133	1.07"-1.70" (27,2-43,2 mm)	500 kcmil	20014	1
5457A-500-CU	054007-44239	1.07"-1.70" (27,2-43,2 mm)	500 kcmil	10014	1
5457A-WG	054007-43416	1.07"-1.70" (27,2-43,2 mm)	250-500 kcmil (120-240 mm <sup>2</sup> )	-	1
5458A	054007-42908	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	1
5458A-500-AL	054007-04593	1.24"-2.07" (31,5-52,6 mm)	500 kcmil	20014	1
5458A-500-CU	054007-04594	1.24"-2.07" (31,5-52,6 mm)	500 kcmil	10014	1
5458A-750-AL	054007-42909	1.24"-2.07" (31,5-52,6 mm)	750 kcmil	20019	1

## 3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5456A, 5457A and 5458A Series (continued)

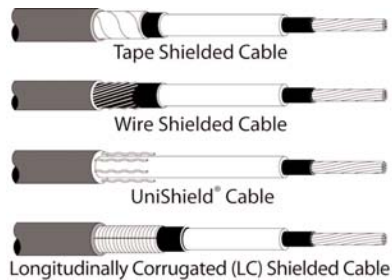

Order No.	UPC	Insulation O.D.	Conductor Size	Connector Included	Case Qty.
5458A-750-CU	054007-44240	1.24"-2.07" (31,5-52,6 mm)	750 kcmil	10019	1
5458A-1000-AL	054007-42910	1.24"-2.07" (31,5-52,6 mm)	1000 kcmil	20024	1
5458A-1000-CU	054007-44241	1.24"-2.07" (31,5-52,6 mm)	1000 kcmil	10024	1
5458A-WG	054007-43417	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	1

## 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5524A, 5525A and 5526A

3M™ Cold Shrink QS-III Inline Shielded Cable Splices 5524A, 5525A and 5526A Series are inline splices for joining 25/28 kV tape shield, wire shield, UniShield® or longitudinally corrugated (LC) shielded power cables. It is a cold shrink design. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability. Kits can be ordered with connectors packed in the kit, or the kit and connector can be ordered as separate items. Meets requirements of IEEE 404.

Each kit makes one splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<p><b>Voltage</b> 25/28 kV</p> <p><b>Number of Conductors</b> Single Conductor</p> <p><b>Shielding Type</b> Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)</p> <p><b>Splice Type</b> Inline</p> <p><b>Technology</b> Cold Shrink</p>		
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Order No.	UPC	Insulation O.D.	Conductor Size	Connector Included	Case Qty.
5524A	051128-53922	0.84"-1.36" (21,3-34,5 mm)	1 AWG-250 kcmil (50-120 mm <sup>2</sup> )	-	1
5524A-1-AL	051128-53923	0.84"-1.36" (21,3-34,5 mm)	1 AWG	20004	1
5524A-1-CU	051128-53924	0.84"-1.36" (21,3-34,5 mm)	1 AWG	10004	1
5524A-1/0-AL	051128-53925	0.84"-1.36" (21,3-34,5 mm)	1/0 AWG	20005	1
5524A-1/0-CU	051128-53926	0.84"-1.36" (21,3-34,5 mm)	1/0 AWG	10005	1
5524A-2/0-AL	051128-53927	0.84"-1.36" (21,3-34,5 mm)	2/0 AWG	20006	1
5524A-2/0-CU	051128-53928	0.84"-1.36" (21,3-34,5 mm)	2/0 AWG	10006	1
5524A-3/0-AL	051128-53929	0.84"-1.36" (21,3-34,5 mm)	3/0 AWG	20007	1
5524A-3/0-CU	051128-53930	0.84"-1.36" (21,3-34,5 mm)	3/0 AWG	10007	1
5524A-4/0-AL	051128-53931	0.84"-1.36" (21,3-34,5 mm)	4/0 AWG	20008	1
5524A-4/0-CU	051128-53932	0.84"-1.36" (21,3-34,5 mm)	4/0 AWG	10008	1
5524A-250-AL	051128-53933	0.84"-1.36" (21,3-34,5 mm)	250 kcmil	20009	1
5524A-250-CU	051128-53934	0.84"-1.36" (21,3-34,5 mm)	250 kcmil	10009	1
5525A	054007-42138	1.07"-1.70" (27,2-43,2 mm)	250-750 kcmil (120-325 mm <sup>2</sup> )	-	1
5525A-250-AL	051128-53845	1.07"-1.70" (27,2-43,2 mm)	250 kcmil	20009	1
5525A-250-CU	051128-53846	1.07"-1.70" (27,2-43,2 mm)	250 kcmil	10009	1
5525A-350-AL	054007-42140	1.07"-1.70" (27,2-43,2 mm)	350 kcmil	20011	1
5525A-350-CU	054007-42902	1.07"-1.70" (27,2-43,2 mm)	350 kcmil	10011	1
5525A-500-AL	054007-42141	1.07"-1.70" (27,2-43,2 mm)	500 kcmil	20014	1
5525A-500-CU	054007-42903	1.07"-1.70" (27,2-43,2 mm)	500 kcmil	10014	1
5525A-750-AL	054007-42904	1.07"-1.70" (27,2-43,2 mm)	750 kcmil	20019	1
5525A-750-CU	054007-42127	1.07"-1.70" (27,2-43,2 mm)	750 kcmil	10019	1

## 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5524A, 5525A and 5526A (continued)

Order No.	UPC	Insulation O.D.	Conductor Size	Connector Included	Case Qty.
5526A	054007-42905	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	1
5526A-500-AL	054007-04597	1.24"-2.07" (31,5-52,6 mm)	500 kcmil	20014	1
5526A-500-CU	054007-04598	1.24"-2.07" (31,5-52,6 mm)	500 kcmil	10014	1
5526A-750-AL	054007-04595	1.24"-2.07" (31,5-52,6 mm)	750 kcmil	20019	1
5526A-750-CU	054007-04596	1.24"-2.07" (31,5-52,6 mm)	750 kcmil	10019	1
5526A-1000-AL	054007-42906	1.24"-2.07" (31,5-52,6 mm)	1000 kcmil	20024	1
5526A-1000-CU	054007-42907	1.24"-2.07" (31,5-52,6 mm)	1000 kcmil	10024	1

## 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5786A-MT, 5787A-MT & 5788A-MT

3M™ Cold Shrink QS-III 3/C Inline Armored or Non-Armored Cable Splices 5786A-MT, 5787A-MT and 5788A-MT are designed for splicing 3-conductor, armored and non-armored, shielded power cables. The kits are rated for use on 25/28 kV cables with conductor sizes from 1 AWG-1000 kcmil (50-500 mm<sup>2</sup>). The kits are designed to be used with 3M™ Scotchlok™ Connectors 10000 and 20000 Series or other UL listed inline compression connectors that fit within the dimension limits listed in the connector dimensional requirements on the data sheet.

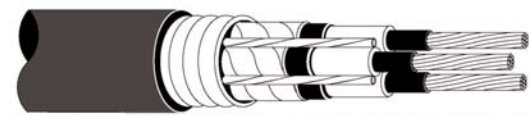
The splice utilizes several technologies to accommodate the various functions of a 3/C shielded power cable: 3M™ Cold Shrink QS-III Splice Bodies, Scotch® Tapes for moisture sealing, Constant Force Springs for connecting ground braid jumpers and Armorcast for replacing the cable armor and/or jacket. The completed splice is designed for use in cable trays, weather exposed or direct burial locations. Meets the requirements of IEEE 404.

Connectors are not included in the kit and must be ordered separately.

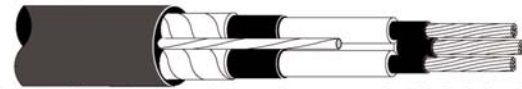
Note: When making a trifurcating splice, the 3M™ Cold Shrink MT-C or MT-E Trifurcating Accessory Kit must be used along with the splice kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	25/28 kV
Number of Conductors	Three Conductor
Shielding Type	Shielded Armored or Non-Armored
Splice Type	Inline, Trifurcating
Technology	Cold Shrink



Three-Conductor Armored, Shielded Cable



Three-Conductor Non-Armored, Shielded Cable

Order No.	UPC	Conductor Size	Insulation O.D.	Connector O.D.	Typical Splice Length	Suggested Accessory	Case Qty.
5786A-MT	051128-53937	1 AWG-250 kcmil (50-120 mm <sup>2</sup> )	0.84"-1.36" (21,3-34,5 mm)	0.46"-1.36" (11,7-34,5 mm)	57" (1447,8 mm)	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-C; 3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E	1
5787A-MT	054007-43421	250-750 kcmil (120-325 mm <sup>2</sup> )	1.07"-1.70" (27,2-43,2 mm)	0.75"-1.70" (19,1-43,2 mm)	62" (1574,8 mm)	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E	1
5788A-MT	054007-43422	500-1000 kcmil (240-500 mm <sup>2</sup> )	1.24"-2.07" (31,5-52,6 mm)	1.05"-2.07" (26,7-52,6 mm)	66" (1676,4 mm)	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E	1

25/28 kV: 3M™ Cold Shrink Splice Kits: Three Conductor (3/C)

## 3M™ Cold Shrink MT-C & MT-E Trifurcating Accessory Kits (One 3/C to Three 1/C) for 25/28 kV

3M™ Cold Shrink MT-C and MT-E Trifurcating Accessory Kits are used to break out and seal a transition from 3/C to three 1/C.

For use with 3M™ Cold Shrink QS-III Splicing Series 5700A-MT.

**Voltage:** 25/28 kV

**Number of Conductors:** One 3/C to three 1/C



### Selection Table

3M™ Splice 57XXA-MT	25/28 kV (260/280 mil)	Appropriate MT Transition Kit
Typical Conductor Size Range – AWG/kcmil*		
5786A-MT	1- 2/0	MT-C
5786A-MT	3/0-250	MT-E
5787A-MT	250-500	MT-E
5788A-MT	500	MT-E

Order No.	UPC	Single Conductor Jacket O.D.	Kits per Case
MT-C	051128-55208	0.62"-1.13" (15,7-28,7 mm)	1
MT-E	051128-54318	1.13"-1.80" (28,7-45,7 mm)	1

## 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5420 Series

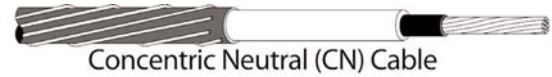
3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5420 Series are inline splices designed for use on 25 kV CN or JCN cable. The continuous current rating of each splice is equal to the current rating of the cable it is sized to accommodate. Meets requirements of IEEE 404 for cable joints.

Each kit makes one splice. Connectors, unless specified, are not included in the kit, and must be ordered separately.

Note: If connector is desired packed with any of the kits shown above, add the connector number after the splice number (example: 5420-CI-22A). Jacketing kit is needed for JCN cable.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

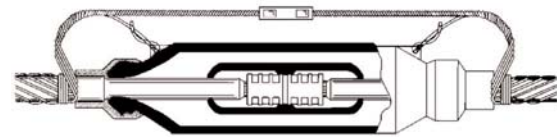
<b>Voltage</b>	25/28 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
<b>Splice Type</b>	Inline
<b>Technology</b>	Molded Rubber



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable



Order No.	UPC	Insulation O.D.	Conductor Size	Connector Included	Case Qty.
5420	054007-15819	0.795"-0.940" (20,2-23,9 mm)	2-1/0 AWG (35-50 mm <sup>2</sup> )	-	1
5420-CI-22A	054007-15820	0.795"-0.940" (20,2-23,9 mm)	2 AWG Solid	CI-22A	1
5421	054007-15827	0.920"-1.080" (23,4-27,4 mm)	1/0-3/0 AWG (60-80 mm <sup>2</sup> )	-	1
5422	054007-15835	1.060"-1.210" (26,9-30,7 mm)	3/0-4/0 AWG (95-100 mm <sup>2</sup> )	-	1
5423	054007-15843	1.120"-1.320" (28,4-33,5 mm)	250-350 kcmil (125-180 mm <sup>2</sup> )	-	1
5423-CI-350	054007-08384	1.120"-1.320" (28,4-33,5 mm)	350 kcmil	CI-350	1
5424	054007-15850	1.320"-1.520" (33,5-38,6 mm)	500 kcmil	-	1
5425	054007-09240	1.390"-1.590" (35,0-40,0 mm)	750 kcmil compact	-	1
5426	054007-09239	1.550"-1.710" (39,4-43,4 mm)	750 kcmil	-	1
5426-CI-750	054007-09177	1.550"-1.710" (39,4-43,4 mm)	750 kcmil	CI-750	1

25/28 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

## 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5450 Series

The 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5450 Series kits are one-piece inline splices designed for use on 25/28 kV CN and JCN cable. Meets requirements of IEEE 404 for cable joints.

Each kit makes one splice. Connectors, unless specified, are not included in the kit, and must be ordered separately.

Use the primary insulation O.D. range for final conductor size ordering criteria. If connector is desired packed with any of the kits shown above, add the connector number after the splice number (example: 5451-CI-1/0A). Jacketing kit is needed for JCN cable.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	25/28 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
<b>Splice Type</b>	Inline
<b>Technology</b>	Molded Rubber



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable

Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
5451	054007-09127	0.83"-1.04" (21,1-26,4 mm)	2-2/0 AWG (60 mm <sup>2</sup> )	-	1
5451-CI-2A	054007-09152	0.83"-1.04" (21,1-26,4 mm)	2 AWG (33 mm <sup>2</sup> )	CI-2A	1
5451-CI-1A	054007-09935	0.83"-1.04" (21,1-26,4 mm)	1 AWG (42 mm <sup>2</sup> )	CI-1A	1
5451-CI-21-840	054007-09154	0.83"-1.04" (21,1-26,4 mm)	2-1 AWG (33-42 mm <sup>2</sup> )	CI-21-840	1
5451-CI-1/0A	054007-09153	0.83"-1.04" (21,1-26,4 mm)	1/0 AWG (53 mm <sup>2</sup> )	CI-1/0A	1
5451-CI-1/0-840	054007-09155	0.83"-1.04" (21,1-26,4 mm)	1/0 AWG (53 mm <sup>2</sup> )	CI-1/0-840	1
5452	054007-09128	1.00"-1.15" (25,4-29,2 mm)	3/0-4/0 AWG (95 mm <sup>2</sup> )	-	1



25/28 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

### 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5451A Series

The 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5451A Series is a 25/28 kV class inline splice designed for joining concentric neutral (CN) and jacketed concentric neutral (JCN) distribution class power cables. The splice is a one-piece molded design made of specially formulated, peroxide cured EPDM rubbers. Each splice is production tested on CN cable to ensure reliability. The splice is designed for use with special CI-series Inline Compression Connectors for connecting either aluminum or copper conductors. The 5451A Quick Splice II splice meets the 25 kV voltage rating requirements of IEEE 404.

Each kit makes one splice. Jacketing kit is needed for JCN cable. Connectors, unless specified, are not included in the kit, and must be ordered separately. Refer to the index to find CI, CI-840 and CI-A series connectors.

Note: CI-A series connectors are sized for 5/8 crimping die; CI-2/0 and CI-840 series connectors are sized for 840 crimping die.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

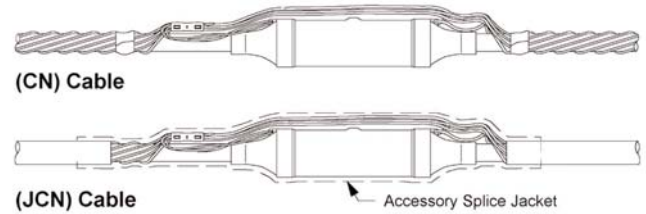
**Voltage:** 25/28 kV

**Number of Conductors:** Single Conductor

**Shielding Type:** Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)

**Splice Type:** Inline

**Technology:** Molded Rubber



### 3M™ Cable Splice 5451A Series Selection—For Thick Wall (Insulation) Cable

Product Series	UPC (054007-)	Insulation O.D. Range	Conductor		Cable Insulation Thickness	Specified Connector	Case Qty.
			Stranded	Solid			
Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable							
5451A	49527	0.905-1.055" (23,0-26,8 mm)	2 AWG	1 AWG	295 mils	CI-2A or CI-21-840	1
			1 AWG	1/0 AWG	280 mils	CI-1A or CI-21-840	1
			1/0 AWG	—	295 mils	CI-1/0A or CI-1/0-840	1
					260 mils		
					280 mils		
		2/0 AWG	—	295 mils	CI-2/0	1	
				260 mils			
				280 mils			
5451A-CI-1A	49529	0.905-1.055" (23,0-26,8 mm)	1 AWG	1/0 AWG	280 mils 295 mils	CI-1A	1
5451A-CI-1/0A	49530	0.905-1.055" (23,0-26,8 mm)	1/0 AWG	—	260 mils 280 mils 295 mils	CI-1/0A	1
5451A-CI-21-840	49532	0.905-1.055" (23,0-26,8 mm)	2 or 1 AWG	1 or 1/0 AWG	295 mils	CI-21-840	1
5451A-CI-1/0-840	49528	0.905-1.055" (23,0-26,8 mm)	1/0 AWG	—	260 mils 280 mils 295 mils	CI-1/0-840	1
5451A-CI-2/0	49531	0.905-1.055" (23,0-26,8 mm)	2/0 AWG	—	260 mils 280 mils	CI-2/0	1

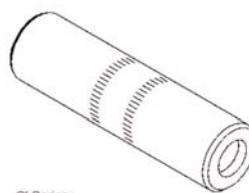
Order No.	UPC	Case Qty.
5451A	054007-49527	1
5451A-CI-1A	054007-49529	1

## 3M™ Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5451A Series (continued)

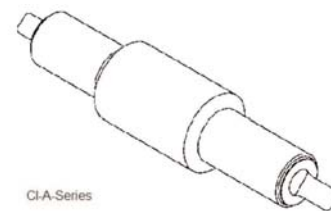
Order No.	UPC	Case Qty.
5451A-CI-1/0A	054007-49530	1
5451A-CI-21-840	054007-49532	1
5451A-CI-1/0-840	054007-49528	1
5451A-CI-2/0	054007-49531	1

## 3M™ Connectors CI and CI-A Series

Meets the requirements of ANSI C119.4



CI-Series



CI-A-Series

Order No.	UPC	Conductor Size	Connector O.D.	Connectors per Case
CI-22A	054007-15868	2 AWG Solid	0.910" (23 mm)	10
CI-2A	054007-00721	2 AWG Stranded, 1 AWG Solid	0.910" (23 mm)	10
CI-1A	054007-00722	2-1 AWG Stranded, 1-1/0 AWG Solid	0.910" (23 mm)	10
CI-21-840	054007-09136	2-1 AWG Stranded, 1-1/0 AWG Solid	0.910" (23 mm)	10
CI-1/0A	054007-14176	1/0 AWG Stranded	0.910" (23 mm)	10
CI-1/0-840	054007-09137	1/0 AWG Stranded	0.910" (23 mm)	10
CI-2/0	054007-11875	2/0 AWG Stranded	0.910" (23 mm)	10
CI-3/0	054007-11883	3/0 AWG Stranded	0.910" (23 mm)	10
CI-4/0	054007-11891	4/0 AWG Stranded	0.910" (23 mm)	10
CI-250	054007-11909	250 kcmil Stranded	1.125" (29 mm)	10
CI-350	054007-11925	350 kcmil Stranded	1.125" (29 mm)	10
CI-450	054007-11933	500 kcmil Compact	1.312" (33 mm)	10
CI-500	054007-25644	500 kcmil Stranded	1.312" (33 mm)	10
CI-650	054007-11941	750 kcmil Compact	1.590" (43 mm)	10
CI-750	054007-25651	750 kcmil Stranded	1.590" (43 mm)	10

## 3M™ Molded Rubber QS-II JCN Cable Repair Splice Kits 5451R Series

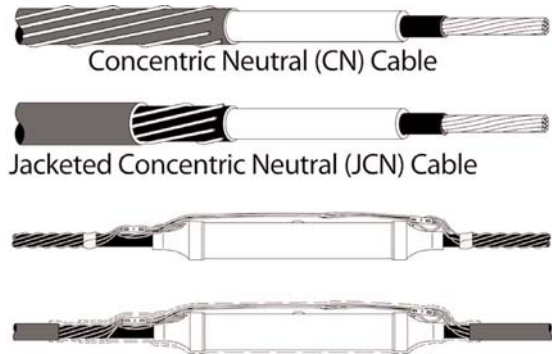
The 3M™ Molded Rubber QS-II JCN Cable Repair Splice Kit 5451R Series is a 25/28 kV class inline splice designed to serve as a cable repair for concentric neutral (CN) and jacketed concentric neutral (JCN) distribution class power cables. It is designed to replace up to 6" (15,24 cm) of damaged cable, thus virtually eliminating the need to splice in a new section of cable with two separate splices.

The splice is a one-piece molded design made of specially formulated, peroxide cured EPDM rubbers. Each splice is production tested on CN cable to ensure reliability. The splice is designed for use with the special 3M™ CIR-Series Inline Compression Connector provided, for connecting either aluminum or copper conductors. The 3M™ Molded Rubber QS-II Splice meets the 25 kV voltage rating requirements of IEEE 404. Jacketing kit is needed for JCN Cable.

Note: 3M™ Repair Connector CIR-A series connectors are sized for 5/8 crimping die; 3M™ Repair Connector CIR-840 series connectors are sized for 840 crimping die.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	25/28 kV
Number of Conductors	Single Conductor
Shielding Type	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
Splice Type	Inline Repair
Technology	Molded Rubber



Order No.	UPC	Insulation O.D. Range	Conductor Size, Stranded	Conductor Size, Solid	Connector Included	Case Qty.
5451R-CIR-21A	054007-49479	0.870"-1.055" (22,1-26,8 mm)	2-1 AWG	1-1/0 AWG	CIR-21A	1
5451R-CIR-21-840	054007-49478	0.870"-1.055" (22,1-26,8 mm)	2-1 AWG	1-1/0 AWG	CIR-21-840	1
5451R-CIR-1/0A	054007-49476	0.870"-1.055" (22,1-26,8 mm)	1/0 AWG	-	CIR-1/0A	1
5451R-CIR-1/0-840	054007-49477	0.870"-1.055" (22,1-26,8 mm)	1/0 AWG	-	CIR-1/0-840	1

## 3M™ Aluminum Repair Connector CIR Series for 3M™ Molded Rubber QS-II JCN Cable Repair Splice Kit 5451R

3M™ Aluminum Repair Connector CIR Series are extra long connectors which are used to bridge gaps up to 6" (15,24 cm) when a piece of damaged cable is removed. They can be used with copper or aluminum conductors.

3M™ CIR Series Repair Connectors are specially designed for use with 3M™ Cable Repair Splice Kits. They are aluminum connectors for use on aluminum or copper cable conductors. When used with the appropriate splice kit, these connectors allow up to 6" (15,24 cm) of damaged cable conductor to be removed, virtually eliminating the need to splice in a new section of cable. CIR series connectors meet the requirements of ANSI C119.4.

Connector Base Metal	Aluminum
For use with	Aluminum or Copper Conductor

Order No.	UPC	Conductor Size, Stranded	Conductor Size, Solid	Length	Outside Diameter (O.D.)	Case Qty.
CIR-1/0-840	054007-09137	1/0 AWG	-	9.0" (228,6 mm)	0.91" (23,1 mm)	10
CIR-1/0A	054007-50226	1/0 AWG	-	9.0" (228,6 mm)	0.91" (23,1 mm)	10
CIR-21-840	054007-09136	2-1/0 AWG	1-1/0 AWG	9.0" (228,6 mm)	0.91" (23,1 mm)	10
CIR-21A	054007-50227	2-1 AWG	1-1/0 AWG	9.0" (228,6 mm)	0.91" (23,1 mm)	10

## 3M™ Cold Shrink QS-III 1/C Transition Splice Kits 5520A-1T-PILC Series

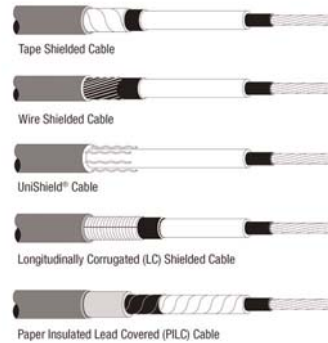
3M™ Cold Shrink QS-III 1/C Transition Splice Kits, 5520A-1T-PILC Series (which includes 5524A-1T-PILC, 5525A-1T-PILC, and 5526A-1T-PILC) are 25/28 kV class inline splices designed to transition single-conductor PILC to Poly/EPR cable and meet the 25 kV voltage class rating requirements of IEEE 404.

The splice kits include an oil barrier system based on a cold shrink tube design of specially formulated, oil-resistant polymer, and laboratory tested to nominal internal pressures of 40 psi with no oil leakage. The splice body itself is a one-piece molded design made of specially formulated silicone rubber. An EPDM rubber foldback cold shrink jacket is included for physical protection and environmental sealing.

Each kit contains sufficient material to make one splice. Connector is not provided with the kits due to customer specific application requirements. To ensure a positive oil stop, a non-tapered, sealed connector (with a solid center barrier) should be used.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	25/28 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Paper Insulated Lead Covered (PILC)
<b>Splice Type</b>	Inline PILC Transition
<b>Technology</b>	Cold Shrink



Order No.	UPC 051128-	Max. O.D. Over Lead Sheath	PILC Cable Insul. O.D.	Poly/EPR Cable Insul. O.D.	PILC Cable Conductor Size 100%	PILC Cable Conductor Size 133%	Poly/EPR Cable Conductor Size	Case Qty.
5524A-1T-PILC	-57198	1.35" (34 mm)	0.87"-1.16" (22,1-29,5 mm)	0.84"-1.32" (21,3-33,5 mm)	1 AWG-250 kcmil (50-120 mm <sup>2</sup> )	1-2/0 AWG (50-60 mm <sup>2</sup> )	1 AWG-250 kcmil (50-120 mm <sup>2</sup> )	1
5525A-1T-PILC	-57199	1.79" (45 mm)	1.14"-1.57" (29,0-39,9 mm)	1.07"-1.70" (27,2-43,2 mm)	300-650 kcmil (150-325 mm <sup>2</sup> )	250-500 kcmil (120-240 mm <sup>2</sup> )	250-750 kcmil (120-325 mm <sup>2</sup> )	1
5526A-1T-PILC	-57200	2.14" (54 mm)	1.49"-1.91" (37,8-48,5 mm)	1.24"-2.07" (31,5-52,6 mm)	700-1000 kcmil (400-500 mm <sup>2</sup> )	550-1000 kcmil (300-500 mm <sup>2</sup> )	550-1000 kcmil (300-500 mm <sup>2</sup> )	1

# 35 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 35 kV, and promote dependable performance, stability and long life with every splice you make.



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## 3M™ Cold Shrink QS4 Integrated Splice Kits (JCN) for 35 kV

The new 3M™ Cold Shrink QS4 Integrated Splice Kit is a premier offering that utilizes our field-proven 3M™ Cold Shrink QS-III Splice Body with additional features that make installation quick and easy. This exciting product integrates all of the layers of a shielded power cable splice into one compact joint. With this splice, 3M is introducing our easy-to-use yellow core and re-jacketing tube. We incorporated our smooth-edged shield sock (non-fraying ends) with optional customizable ground braid.

The Jacketed Concentric Neutral (JCN) inline splice kits below are designed for joining Jacketed Concentric Neutral (JCN) and Flat Strap Neutral power cables. The splice includes an integrated 7 AWG ground braid for attaching to an external ground wire (ground braid does not extend beyond the end of the re-jacketing after installation).

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	35 kV
Number of Conductors	Single Conductor
Shielding Type	Jacketed Concentric Neutral (JCN), Flat Strap Neutral Cable
Splice Type	Inline
Technology	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
QS4-35JCN-1/0-350	051128-60185	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	-	1
QS4-35JCN-QCI-1/0-350	051128-60186	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	QCI 1/0-350	1
QS4-35JCN-350-1000	051128-60187	1.24"-2.07" (31,5-52,6 mm)	350-1000 kcmil (185-500 mm <sup>2</sup> )	-	1
QS4-35JCN-QCI-350-750	051128-60188	1.24"-2.07" (31,5-52,6 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	QCI 350-750	1
QS4-35JCN-QCI-500-1000	051128-60189	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	QCI 500-1000	1



## 3M™ Cold Shrink QS4 Integrated Splice Kits (Shielded Power) for 35 kV

The new 3M™ Cold Shrink QS4 Integrated Splice Kit is a premier offering that utilizes our field-proven 3M™ Cold Shrink QS-III Splice Body with additional features that make installation quick and easy. This exciting product integrates all of the layers of a shielded power cable splice into one compact joint. With this splice, 3M is introducing our easy-to-use yellow core and re-jacketing tube. We incorporated our smooth-edged shield sock (non-fraying ends) with optional customizable ground braid.

The Shielded Power (SP) inline splice kits below are designed for joining Jacketed Concentric Neutral (JCN), Flat Strap Neutral, Tape Shield and Longitudinally Corrugated (LC) power cables. The splice includes a 4 AWG, four-foot long integrated ground braid for attaching to an external ground (factory installed ground braid extends approximately four feet beyond the end of the re-jacketing after installation).

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	35 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Jacketed Concentric Neutral (JCN), Flat Strap Neutral, Tape Shield, Longitudinally Corrugated (LC)
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
QS4-35SP-1/0-350-BCA	051128-60578	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	-	1
QS4-35SP-QCI-1/0-350-BCA	051128-60579	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	QCI 1/0-350	1
QS4-35SP-350-1000-BCA	051128-60580	1.24"-2.07" (31,5-52,6 mm)	350-1000 kcmil (185-500 mm <sup>2</sup> )	-	1
QS4-35SP-QCI-350-750-BCA	051128-60581	1.24"-2.07" (31,5-52,6 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	QCI 350-750	1
QS4-35SP-QCI-500-1000-BCA	051128-60582	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	QCI 500-1000	1



## 3M™ Cold Shrink QS4 Integrated Splice Kits (Tape Shield) for 35 kV

The new 3M™ Cold Shrink QS4 Integrated Splice Kit is a premier offering that utilizes our field-proven 3M™ Cold Shrink QS-III Splice Body with additional features that make installation quick and easy. This exciting product integrates all of the layers of a shielded power cable splice into one compact joint. With this splice, 3M is introducing our easy-to-use yellow core and re-jacketing tube. We incorporated our smooth-edged shield sock (non-fraying ends) with optional customizable ground braid.

The Tape Shielded (TS) inline splice kits below are designed for joining Tape Shield, Wire Shield, UniShield® and Longitudinally Corrugated (LC) power cables. The splice includes a separate 7 AWG U-shaped ground braid that can be attached to the shield with a constant force spring for external grounding.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	35 kV
Number of Conductors	Single Conductor
Shielding Type	Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)
Splice Type	Inline
Technology	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
QS4-35TS-1/0-350	051128-60204	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	-	1
QS4-35TS-QCI-1/0-350	051128-60205	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	QCI 1/0-350	1
QS4-35TS-350-1000	051128-60206	1.24"-2.07" (31,5-52,6 mm)	350-1000 kcmil (185-500 mm <sup>2</sup> )	-	1
QS4-35TS-QCI-350-750	051128-60207	1.24"-2.07" (31,5-52,6 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	QCI 350-750	1
QS4-35TS-QCI-500-1000	051128-60208	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	QCI 500-1000	1

## 3M™ Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5467A and 5468A Series

3M™ Cold Shrink QS-III Inline CN/JCN Cable Splices 5467A, 5467A-WG, 5468A and 5468A-WG are inline splices for joining 35 kV jacketed concentric neutral (JCN) or concentric neutral (CN) power cables. It is a cold shrink design. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability.

The splices can be used with standard copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors, and can be used for size transitions within the listed kit size range. They are designed to exceed minimum industry test standards, and have a BIL rating of 250 kV (equal to a 46 kV voltage class). The 3M™ Cold Shrink QS-III Splices 5467A, 5467A-WG, 5468A and 5468A-WG meet or exceed the 35 kV Voltage Class rating requirements of IEEE 404.

Kits can be ordered with connectors packed in the kit, or the kit and connector can be ordered as separate items. Each kit makes one splice.

Note: 5467A-WG and 5468A-WG are partially jacketed splices containing built-in bleeder wires. Additional end user materials are required to convert to full jacketing.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	35 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
5467A	054007-43051	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	-	1
5467A-1/0-AL	054007-43052	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG	20005	1
5467A-1/0-CU	054007-43057	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG	10005	1
5467A-2/0-AL	054007-43053	1.07"-1.70" (27,2-43,2 mm)	2/0 AWG	20006	1
5467A-2/0-CU	054007-43058	1.07"-1.70" (27,2-43,2 mm)	2/0 AWG	10006	1
5467A-3/0-AL	054007-43054	1.07"-1.70" (27,2-43,2 mm)	3/0 AWG	20007	1
5467A-3/0-CU	054007-43059	1.07"-1.70" (27,2-43,2 mm)	3/0 AWG	10007	1
5467A-4/0-AL	054007-43055	1.07"-1.70" (27,2-43,2 mm)	4/0 AWG	20008	1
5467A-4/0-CU	054007-43060	1.07"-1.70" (27,2-43,2 mm)	4/0 AWG	10008	1
5467A-250-AL	054007-43056	1.07"-1.70" (27,2-43,2 mm)	250 kcmil	20009	1
5467A-250-CU	054007-43061	1.07"-1.70" (27,2-43,2 mm)	250 kcmil	10009	1
5467A-350-AL	054007-04589	1.07"-1.70" (27,2-43,2 mm)	350 kcmil	20011	1
5467A-350-CU	054007-04590	1.07"-1.70" (27,2-43,2 mm)	350 kcmil	10011	1
5467A-WG	051128-53883	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	-	1
5468A	054007-43062	1.24"-2.07" (31,5-52,6 mm)	350-1000 kcmil (185-500 mm <sup>2</sup> )	-	1
5468A-350-AL	054007-43063	1.24"-2.07" (31,5-52,6 mm)	350 kcmil	20011	1
5468A-350-CU	054007-43067	1.24"-2.07" (31,5-52,6 mm)	350 kcmil	10011	1
5468A-500-AL	054007-43064	1.24"-2.07" (31,5-52,6 mm)	500 kcmil	20014	1
5468A-500-CU	054007-43068	1.24"-2.07" (31,5-52,6 mm)	500 kcmil	10014	1
5468A-750-AL	054007-43065	1.24"-2.07" (31,5-52,6 mm)	750 kcmil	20019	1
5468A-750-CU	054007-43069	1.24"-2.07" (31,5-52,6 mm)	750 kcmil	10019	1
5468A-1000-AL	054007-43066	1.24"-2.07" (31,5-52,6 mm)	1000 kcmil	20024	1
5468A-1000-CU	054007-43070	1.24"-2.07" (31,5-52,6 mm)	1000 kcmil	10024	1
5468A-WG	051128-53909	1.24"-2.07" (31,5-52,6 mm)	350-1000 kcmil (185-500 mm <sup>2</sup> )	-	1

## 35 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C): Inline

### 3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5535A and 5536A

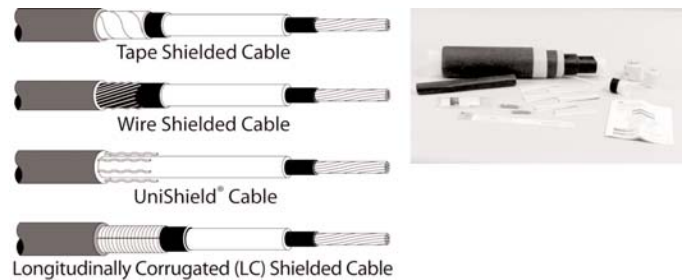
3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5535A and 5536A Series are inline splices for joining 35 kV tape shield, wire shield, UniShield® or longitudinally corrugated (LC) shielded power cables. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability.

The splices can be used with standard copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors, and can be used for size transitions within the listed kit size range. They are designed to exceed minimum industry test standards, and have a BIL rating of 250 kV (equal to a 46 kV voltage class). The 3M™ Cold Shrink QS-III Splices 5535A and 5536A meet or exceed the 35 kV Voltage Class rating requirements of IEEE 404.

Kits can be ordered with connectors packed in the kit, or the kit and connector can be ordered as separate items. Each kit makes one splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	35 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)
<b>Splice Type</b>	Inline
<b>Technology</b>	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
5535A	054007-43071	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm²)	-	1
5535A-1/0-AL	054007-43072	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG	20005	1
5535A-1/0-CU	054007-43077	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG	10005	1
5535A-2/0-AL	054007-43073	1.07"-1.70" (27,2-43,2 mm)	2/0 AWG	20006	1
5535A-2/0-CU	054007-43078	1.07"-1.70" (27,2-43,2 mm)	2/0 AWG	10006	1
5535A-3/0-AL	054007-43074	1.07"-1.70" (27,2-43,2 mm)	3/0 AWG	20007	1
5535A-3/0-CU	054007-43079	1.07"-1.70" (27,2-43,2 mm)	3/0 AWG	10007	1
5535A-4/0-AL	054007-43075	1.07"-1.70" (27,2-43,2 mm)	4/0 AWG	20008	1
5535A-4/0-CU	054007-43080	1.07"-1.70" (27,2-43,2 mm)	4/0 AWG	10008	1
5535A-250-AL	054007-43076	1.07"-1.70" (27,2-43,2 mm)	250 kcmil	20009	1
5535A-250-CU	054007-43081	1.07"-1.70" (27,2-43,2 mm)	250 kcmil	10009	1
5535A-350-AL	054007-04591	1.07"-1.70" (27,2-43,2 mm)	350 kcmil	20011	1
5535A-350-CU	054007-04592	1.07"-1.70" (27,2-43,2 mm)	350 kcmil	10011	1
5536A	054007-43082	1.24"-2.07" (31,5-52,6 mm)	350-1000 kcmil (185-500 mm²)	-	1
5536A-350-AL	054007-43083	1.24"-2.07" (31,5-52,6 mm)	350 kcmil	20011	1
5536A-350-CU	054007-43087	1.24"-2.07" (31,5-52,6 mm)	350 kcmil	10011	1
5536A-500-AL	054007-43084	1.24"-2.07" (31,5-52,6 mm)	500 kcmil	20014	1
5536A-500-CU	054007-43088	1.24"-2.07" (31,5-52,6 mm)	500 kcmil	10014	1
5536A-750-AL	054007-43085	1.24"-2.07" (31,5-52,6 mm)	750 kcmil	20019	1
5536A-750-CU	054007-43089	1.24"-2.07" (31,5-52,6 mm)	750 kcmil	10019	1
5536A-1000-AL	054007-43086	1.24"-2.07" (31,5-52,6 mm)	1000 kcmil	20024	1
5536A-1000-CU	054007-43090	1.24"-2.07" (31,5-52,6 mm)	1000 kcmil	10024	1

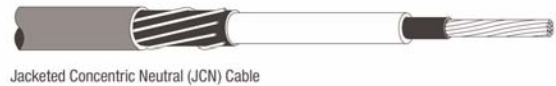
## 3M™ Cold Shrink QS-III CN/JCN Cable Shield-Break Splice Kits 5467A-XB and 5468A-XB

3M™ Cold Shrink QS-III Shield-Break Splice Kits 5467A-XB and 5468A-XB Series are inline splices designed for providing a shield-break in the joining of 35 kV jacketed concentric neutral (JCN) or concentric neutral (CN) power cables. It is a cold shrink design sized to fit Type MV-90 or type MV-105 cables with copper or aluminum conductor sizes ranging from 1/0-1000 kcmil (185-500 mm<sup>2</sup>). The shield-break allows the splice to be used for shield-break and cross-bounding installations. Each splice is high-voltage production tested to ensure reliability. Meets the requirements of IEEE 404.

Each kit makes one shield-break splice.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	35 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
<b>Splice Type</b>	Inline Cross-Bond
<b>Technology</b>	Cold Shrink



Jacketed Concentric Neutral (JCN) Cable

Order No.	UPC	Insulation O.D. Range	Conductor Size	Typical Splice Length	Case Qty.
5467A-XB	051128-54939	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	62.0" (1574,8 mm)	1
5468A-XB	051128-54940	1.24"-2.07" (31,5-52,6 mm)	350-1000 kcmil (185-500 mm <sup>2</sup> )	66.0" (1676,4 mm)	1

## 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Splice Kits 5797A-MT and 5798A-MT

The 3M™ Cold Shrink QS-III 3/C Armored or Non-Armored Splice Kits 5797A-MT and 5798A-MT Series are designed for splicing 3/C, armored and non-armored, shielded power cables. The kits are rated for use on 35 kV cables with conductor sizes from 1/0 AWG-1000 kcmil (60-500 mm<sup>2</sup>). The kits are designed to be used with 3M™ Scotchlok™ Connectors 10000 and 20000 Series or other UL listed inline compression connectors that fit within the dimension limits listed in the Connector Dimensional Requirements Table on the data sheet.

The splice utilizes several technologies to accommodate the various functions of a 3/C shielded power cable: 3M™ Cold Shrink QS-III Splice Bodies, Scotch® Tapes for moisture sealing, Constant Force Springs for connecting ground braid jumpers and Armorcast for replacing the cable armor and/or jacket. The completed splice is designed for use in cable trays, weather exposed or direct burial locations. Meets the requirements of IEEE 404.

Connectors are not included in the kit and must be ordered separately.

Note: When making a trifurcating splice, the 3M™ Cold Shrink MT-E Trifurcating Accessory Kit must be used along with the splice kit.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

Voltage	35 kV
Number of Conductors	Three Conductor
Shielding Type	Shielded Armored or Non-Armored
Splice Type	Inline, Trifurcating
Technology	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Suggested Accessory	Case Qty.
5797A-MT	054007-43419	1.07"-1.70" (27,2-43,2 mm)	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E	1
5798A-MT	054007-43420	1.24"-2.07" (31,5-52,6 mm)	350-1000 kcmil (185-500 mm <sup>2</sup> )	3M™ Trifurcating Accessory for 3-C to 3 Single Conductors MT-E	1

## 35 kV: 3M™ Cold Shrink Splice Kits: Three Conductor (3/C)

### 3M™ Cold Shrink MT-E Trifurcating Accessory Kit (One 3/C to Three 1/C) for 35 kV

3M™ Cold Shrink MT-E Trifurcating Accessory Kit is used to break out and seal a transition from 3/C to three 1/C.

For use with 3M™ Cold Shrink QS-III Splicing Series 5700A-MT.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

**Voltage:** 35 kV

**Number of Conductors:** One 3/C to three 1/C



### Selection Table

3M™ Splice 57XXA-MT	35 kV (345 mil)	Appropriate MT Transition Kit
*Typical Conductor Size Range – AWG/kcmil		
5797A-MT	1/0- 350	MT-E
5798A-MT	350	MT-E

Order No.	UPC	Single Conductor Jacket O.D.	Kits per Case
MT-E	051128-54318	1.13"-1.80" (28,7-45,7 mm)	1

## 35 kV: 3M™ Molded Rubber Splice Kits: Single Conductor (1/C)

### 3M™ Molded Rubber QS CN/JCN Cable Splice Kits 5432 and 5433

3M™ Molded Rubber QS CN/JCN Cable Splice Kits 5432 and 5433 are inline splices designed for use on 35 kV CN or JCN cable. Meets requirements of IEEE 404.

Important: On all QS kits use the primary insulation O.D. range for final ordering criteria. For copper or aluminum conductor cable, select the correct splice with connector from the table provided. Jacketing kit is needed for JCN cable.

Each kit makes one splice. Connectors are packed in kits when indicated.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	35 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
<b>Splice Type</b>	Inline
<b>Technology</b>	Molded Rubber



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable

Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
5432	054007-02338	1.06"-1.21" (26,9-30,7 mm)	2-1/0 AWG	-	1
5432-CI-1A	054007-08357	1.06"-1.21" (26,9-30,7 mm)	1 AWG (Stranded); 1/0 AWG (Solid)	CI-1A	1
5432-CI-1/0A	054007-31222	1.06"-1.21" (26,9-30,7 mm)	1/0 AWG (Stranded)	CI-1/0A	1
5433	054007-02339	1.12"-1.32" (28,4-33,5 mm)	3/0-4/0 AWG	-	1
5433-CI-3/0B	054007-49485	1.12"-1.32" (28,4-33,5 mm)	3/0 AWG	CI-3/0B	1
5433-CI-4/0B	054007-49486	1.12"-1.32" (28,4-33,5 mm)	4/0 AWG	CI-4/0B	1



## 3M™ Molded Rubber QS-II CN/JCN Cable Splice Kits 5461

3M™ Molded Rubber QS-II CN/JCN Cable Splice Kits 5461 Series are inline splices designed for use on 35 kV CN or JCN cable. Meets requirements of IEEE 404.

Important: On all QS kits use the primary insulation O.D. range for final ordering criteria. For copper or aluminum conductor cable, select the correct splice with connector from the table provided. Jacketing kit is needed for JCN cable.

Each kit makes one splice. Connectors are packed in kits when indicated.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<b>Voltage</b>	35 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
<b>Splice Type</b>	Inline
<b>Technology</b>	Molded Rubber



Concentric Neutral (CN) Cable



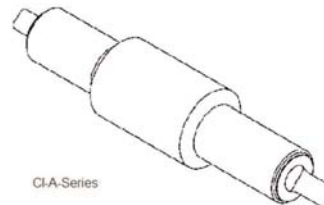
Jacketed Concentric Neutral (JCN) Cable

Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
5461	054007-09129	1.00"-1.15" (25,4-29,2 mm)	1-1/0 AWG	-	1
5461-CI-1/0A	054007-09156	1.00"-1.15" (25,4-29,2 mm)	1/0 AWG	CI-1/0A	1
5461-CI-1/0-840	054007-09157	1.00"-1.15" (25,4-29,2 mm)	1/0 AWG	CI-1/0-840	1

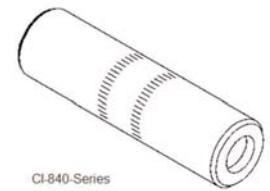
## 3M™ Connectors CI-A and CI-840 Series for 3M™ Molded Rubber QS Cable Splice Kits 5432 and 5461 Series

3M™ Aluminum Connectors CI Series are for splicing applications on aluminum or copper cable conductors.

The aluminum connectors CI Series are specially designed for use with 3M™ Molded Rubber QS Cable Splice Bodies. These connectors meet the requirements of ANSI C119.4.



CI-A-Series



CI-840-Series

<b>Barrel Style</b>	Standard Barrel
<b>Connector Base Material</b>	Aluminum
<b>For use with</b>	Aluminum or Copper Conductors

Order No.	UPC	Stranded Conductor Size, Cu or Al	Solid Conductor Size, Cu or Al	Connector O.D.	Case Qty.
CI-1A	054007-00722	2-1 AWG	1-1/0 AWG	0.91" (23,1 mm)	10
CI-1/0A	054007-14176	1/0 AWG	-	0.91" (23,1 mm)	10
CI-1/0-840	054007-09137	1/0 AWG	-	0.91" (23,1 mm)	10
CI-3/0B	-	3/0 AWG	3/0 AWG	0.91" (23,1 mm)	10
CI-4/0B	-	4/0 AWG	4/0 AWG	0.91" (23,1 mm)	10

## 35 kV: 3M™ PILC Splice Kits: Single Conductor (1/C)

### 3M™ Cold Shrink QS-III 1/C Transition Splice Kits 5530A-1T-PILC Series

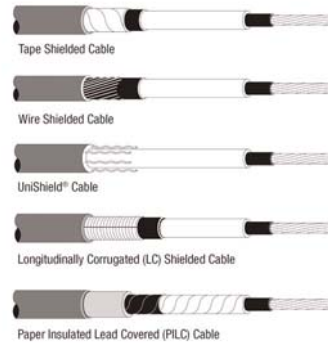
3M™ Cold Shrink QS-III 1/C Transition Splice Kits, 5530A-1T-PILC Series (which includes 5535A-1T-PILC, 5536A-1T-PILC, and 5537A-1T-PILC) are 35 kV class inline splices designed to transition single-conductor PILC to Poly/EPR cable and meet the 35 kV voltage class rating requirements of IEEE Std. 404.

The splice kits include an oil barrier system based on a cold shrink tube design of specially formulated, oil-resistant polymer, and laboratory tested to nominal internal pressures of 40 psi with no oil leakage. The splice body itself is a one-piece molded design made of specially formulated silicone rubber. An EPDM rubber foldback cold shrink jacket is included for physical protection and environmental sealing.

Each kit contains sufficient material to make one splice. Connector is not provided with the kits due to customer specific application requirements. To ensure a positive oil stop, a non-tapered, sealed connector (with a solid center barrier) should be used.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

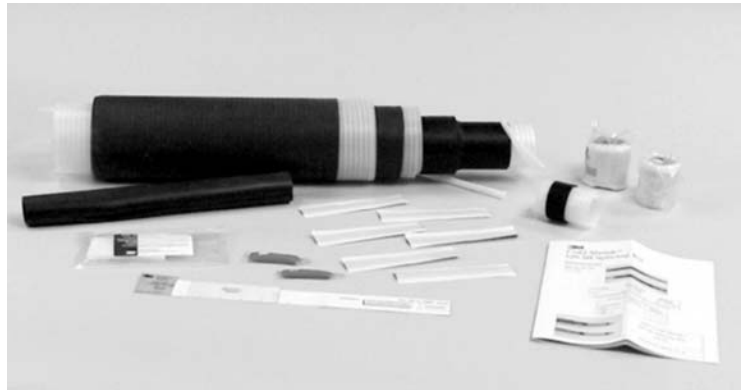
<b>Voltage</b>	35 kV
<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Paper Insulated Lead Covered (PILC)
<b>Splice Type</b>	Inline PILC Transition
<b>Technology</b>	Cold Shrink



Order No.	UPC 051128-	Max. O.D. Over Lead Sheath	PILC Cable Insul. O.D.	Poly/EPR Cable Insul. O.D.	PILC Cable Conductor Size 100%	PILC Cable Conductor Size 133%	Poly/EPR Cable Conductor Size	Case Qty.
5535A-1T-PILC	-57201	1.50" (38,1 mm)	1.10"-1.31" (27,9-33,3 mm)	1.07"-1.70" (27,2-43,2 mm)	1/0-4/0 AWG (60-95 mm <sup>2</sup> )	1/0-2/0 AWG (60 mm <sup>2</sup> )	1/0 AWG-350 kcmil (60-185 mm <sup>2</sup> )	1
5536A-1T-PILC	-57202	1.88" (47,8 mm)	1.32"-1.67" (33,5-42,4 mm)	1.11"-1.70" (28,2-43,2 mm)	250-450 kcmil (150-200 mm <sup>2</sup> )	3/0 AWG-450 kcmil (95-200 mm <sup>2</sup> )	3/0 AWG-500 kcmil (95-240 mm <sup>2</sup> )	1
5537A-1T-PILC	-57203	2.23" (56,6 mm)	1.57"-2.0" (39,9-50,8 mm)	1.24"-2.07" (31,5-52,6 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	500-900 kcmil (240-400 mm <sup>2</sup> )	500-1000 kcmil (240-500 mm <sup>2</sup> )	1

# 46 kV Medium Voltage Splices

The following 3M products cover splicing needs for applications up to 46 kV, and promote dependable performance, stability and long life with every splice you make.



Section	Page
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3M™ Cold Shrink Splice Kits.....	255
Single Conductor (1/C).....	255
3M™ Cold Shrink QS-III Inline Shielded Splice Kit 5545A.....	255

46 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C)

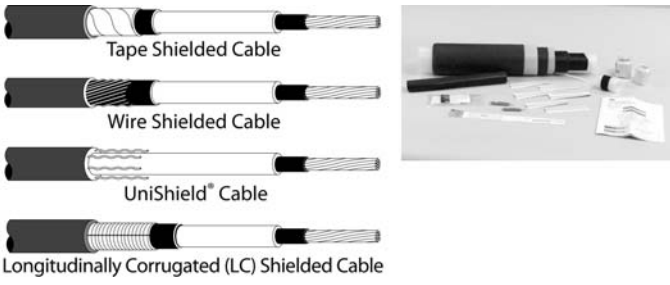
## 3M™ Cold Shrink QS-III Inline Shielded Splice Kit 5545A

3M™ Cold Shrink QS-III Splice Kit 5545A Series are inline splices for joining 46 kV Tape, Wire, LC, and UniShield® power cables. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability.

The splice can be used with standard copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors, and can be used for size transitions within the listed kit size range. The kit is designed to exceed minimum industry test standards, and has a BIL rating of 250 kV. The 3M™ Cold Shrink QS-III Splice 5545A meets or exceeds the 46 kV Voltage Class rating requirements of IEEE 404.

Each kit makes one splice. Connectors are not included in the kit and must be ordered separately.

**Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

<p><b>Voltage</b> 46 kV</p> <p><b>Number of Conductors</b> Single Conductor</p> <p><b>Shielding Type</b> Tape Shield, Wire Shield, UniShield®, Longitudinally Corrugated (LC)</p> <p><b>Splice Type</b> Inline</p> <p><b>Technology</b> Cold Shrink</p>	 <p>Tape Shielded Cable</p> <p>Wire Shielded Cable</p> <p>UniShield® Cable</p> <p>Longitudinally Corrugated (LC) Shielded Cable</p>
---	---

Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector	Case Qty.
5545A	051128-55089	1.24"-2.07" (31,5-52,6 mm)	4/0-1000 kcmil* (120-500 mm <sup>2</sup> ) *4/0 AWG - 250 kcmil cable may be used with aluminum connectors only - do not use 4/0 AWG or 250 kcmil copper connector.	-	1



# Mining Splice Kits

You're in a demanding industry. To be successful, you need a wide range of reliable products designed to effectively manage your daily processes. You need a supplier with a solid understanding of your industry and the technology that drives it. Quite simply, you need 3M. Our Electrical Markets Division designs and manufactures a comprehensive line of products that can address your diverse applications. Widely recognized for our innovation, reliability and global corporate strength, 3M has the products you need and the name you trust.



Section	Page
Mining Tapes .....	258-259
Cold Shrink .....	260
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Heat Shrink .....	263

## Scotch® Heavy Duty Mining Tape 31

Scotch® Heavy Duty Mining Tape 31 has a tough, abrasion-resistant backing for jacket repair on mining cables. Due to the extreme mining environment, the original jacket on mining cable gets damaged and needs repair. Scotch® Heavy Duty Mining Tape 31 offers an innovative solution for cable repair. With its CSM Rubber backing, abrasion-resistant properties and flame retardant mastic, the tape applies easily and remains flexible while maintaining a strong moisture seal. MSHA-approved.

Adhesive Material	Flame Retardant Mastic
Backing Material	CSM Rubber
Tape Grade	Premium
Tape Type	Mining Tape
Operating Temperature Range	32–221°F (0–105°C)
RoHS 2011/65/EU	Yes



Order No.	UPC	Color	Length	Width	Thickness	Breaking Strength	Rolls per Case
31-2"X10FT	051128-57150	Black	10'	2.00"	60 mil	156 lbs/in	10
31-2"X6FT	051128-57149	Black	6'	2.00"	60 mil	156 lbs/in	10
31-2"X8.5FT	051128-56812	Black	8.5'	2.00"	60 mil	156 lbs/in	10



## 3M™ Mining Cable Splice Kit 3100 Series

3M™ Mining Cable Splice Kits may be used for flexible conduit and jacket repairs, as well as for splicing three conductor mine and portable cables, type SHD-GC, MPF-GC, and MPF.

<b>Voltage</b>	110 V - 15 kV
<b>Number of Conductors</b>	3 Conductor or 4 Conductor
<b>Cable Type</b>	Multiple
<b>Splice Type</b>	Inline
<b>Technology</b>	Tape
<b>Agency Approval</b>	Mine Safety and Health Administrations Acceptance: P-07-KA080005/00-MSHA



Order No.	UPC	Description	Voltage	Cable Size Range	Kits per Case
3100	051128-56842	For use on 2, 3 or 4 Conductor Flat Type W, G, or G-GC 3 or 4 Conductor Round-Type W, G, or G-GC.	600 V - 2 kV	16 AWG - 4/0 AWG (1-110 mm <sup>2</sup> ) Can accommodate up to 500 kcmil with additional tape.	10
3101	051128-58553	For use in making Cable Jacket Repairs on Single or Multi-Conductor, Flat or Round cables.	110 V - 15 kV	16 AWG - 4/0 AWG (1-110 mm <sup>2</sup> ) Can accommodate larger conductor sizes with additional tape.	10
3103	051128-56844	For use on 3-conductor mine and portable cables, type SHD-GC, MPF-GC and MPF.	5 kV - 15 kV	6 AWG - 1 AWG (14-38 mm <sup>2</sup> ) Can accommodate up to 500 kcmil with additional tape.	1
3104	051128-56845	For use on 3-conductor mine and portable cables, type SHD-GC.	2 kV	6 AWG - 1/0 AWG (14-50 mm <sup>2</sup> ) Can accommodate up to 500 kcmil with additional tape.	10

## Cold Shrink

### 3M™ Cold Shrink Mine and Portable Splice Kit 8043-1

For 5 kV and 8 kV Cable, Types SHD-GC, MP and MP-GC. The 8043-1 Kit can be installed without the use of heat or additional tools, and the cable returned to service immediately. 3M™ Cold Shrink Tubes, with the removable core, are designed for quick installation.

Connectors are ordered separately. If regular power connectors are used, length cannot exceed 2 1/2 inches.

<b>Voltage</b>	5 kV, 8 kV
<b>Shielding Type</b>	Non-Shielded
<b>Splice Type</b>	Cold Shrink
<b>Agency Approval</b>	Meets American Bureau of Shipping 93-DL11873-X



Order No.	UPC	Cable Type	Typical Conductor Size Range	Cable Insulation O.D. Range	Voltage	Case Qty.
8043-1	054007-15668	SHD-GC	4-2 AWG (22-30 mm <sup>2</sup> )	0.63"-1.10" (16,0-27,9 mm)	5-8 kV	1
		MP-GC, MP	3/0-4/0 AWG (95-120 mm <sup>2</sup> )	0.63"-1.10" (16,0-27,9 mm)	5 kV	1
		MP-GC, MP	1/0-2/0 AWG (60-70 mm <sup>2</sup> )	0.63"-1.10" (16,0-27,9 mm)	8 kV	1

## 3M™ Scotchcast™ Mine and Portable Cable Splice Kits 8096 Series

The 3M™ Scotchcast™ Splice Kits 8096 Series are complete cable splicing kits designed for splicing type SHD-GC three-conductor shielded cables up to 15 kV on draglines, power shovels, drills and type MPF underground power feeder cables and select trailing cables.

Using 3M Scotchcast Splice Kits, you obtain durable, permanent, shop-quality splices without vulcanizing.

**Non-vulcanizing:** Jacket restored by 3M Scotchcast Flame Retardant Compound 2131 poured from two-part closed mixing pouch for convenient mixing and pouring. Compound is self-curing. **Permanent:** Both electrically and mechanically flexible and moisture-resistant. **Portable:** Make repairs in the mine or in the shop. Reduce costly cable and equipment downtime. Cables can be energized immediately. **Versatile:** Three different cable splice kits handle nearly all common cable sizes. **No end-lifting:** Polyurethane-based cable repair compound bonds to all modern cable jacket material is neoprene and nitrile/PVC, even PVC, EPR and Hypalon. **Abrasion-resistant:** Equal in performance to vulcanizing. **Weather resistant:** Designed to maintain physical and electrical properties in temperature extremes.

\* Note: Additional splicing material may be needed for 15 kV.

<b>Voltage</b>	5 kV, 8 kV, 15 kV
<b>Number of Conductors</b>	3/C
<b>Shielding Type</b>	Shielded
<b>Splice Type</b>	Cold Shrink/Resin
<b>EU RoHS</b>	Yes
<b>Agency Approvals</b>	Meets Mine Safety and Health Administration requirements for flame retardancy and carries acceptance number P-142-5 MSHA. American Bureau of Shipping 93 DL11873-X.

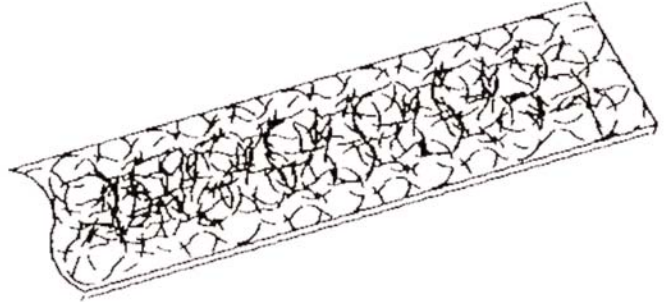


Order No.	UPC	Cable Type	Conductor Size Range AWG and kcmil	Cable O.D. Range	Voltage Rating	Case Qty.
8096-2	051128-59178	SHD-GC SHD-GC MPF-GC & MPF MPF-GC & MPF	4-1/0 AWG (22-50 mm <sup>2</sup> ) 2 AWG (35 mm <sup>2</sup> ) 4-3/0 AWG (22-80 mm <sup>2</sup> ) 2-1/0 AWG (35-50 mm <sup>2</sup> )	1.85"-4.0" (47,0-101,6 mm)	5 & 8 kV 15 kV* 5 & 8 kV 15 kV*	1
8096-4	051128-59179	SHD-GC SHD-GC MPF-GC & MPF MPF-GC & MPF	4-4/0 AWG (22-100 mm <sup>2</sup> ) 2 AWG (35 mm <sup>2</sup> ) 1/0 AWG-300 kcmil (55-150 mm <sup>2</sup> ) 2-3/0 AWG (35-80 mm <sup>2</sup> )	1.85"-4.0" (47,0-101,6 mm)	5 & 8 kV 15 kV* 5 & 8 kV 15 kV*	1
8096-6	051128-59180	SHD-GC SHD-GC MPF-GC & MPF MPF-GC & MPF	4/0 AWG-500 kcmil (120-250 mm <sup>2</sup> ) 1/0 AWG-500 kcmil (60-250 mm <sup>2</sup> ) 250-500 kcmil (150-250 mm <sup>2</sup> ) 1/0 AWG-500 kcmil (60-250 mm <sup>2</sup> )	1.85"-6.0" (47,0-152,4 mm)	5 & 8 kV 15 kV* 5 & 8 kV 15 kV*	1

## 3M™ Spacer Web 7820

3M™ Spacer Web 7820 is for use with the 3M™ Scotchcast™ Re-Enterable Signal and Control Cable Splice Kits 78-R Series after re-entry. It is loosely woven polyester that keeps the splice bundle away from the mold body wall, providing even compound distribution around the splice.

Voltage	15–35 kV
Product Type	Splice Jacketing and Rejacketing Kit
Splice Type	Resin
EU RoHS	Yes



Order No.	UPC	Product Name	Roll Size	Rolls per Case
7820	054007-02415	3M™ Spacer Web 7820	3" x 20' (76,2 mm x 6,10 m)	1

## Heat Shrink

## 3M™ Heat Shrink Mine & Portable Cable Splicing Kits HSK

The 3M™ Heat Shrink Cable Splicing and Repair Products are engineered for long-term reliable performance. They combine easy handling and installation with maximum operating reliability and system protection. With the application of moderate heat, the heat shrinkable tubes and wraparound sleeves mold to fit over even irregularly shaped objects.

Use 3M Splice Kits HSK to splice mine and portable cable rated 600-2000 volts. Choose from three kits (HSK-2, HSK-4, HSK-6) for use with flat and round types W, G and G-GC cables.

### Agencies

All 3M Heat Shrink Mine and Portable Cable Splicing Kit Products are accepted by The Mine Safety and Health Administration, acceptance number P-154-13 MSHA.

Each kit contains:

- High-performance cross-linked, flame-retardant polyolefin tubes
- Scotch® Glass Cloth Tape 27 and Scotch Rubber Mastic Tape 2228

An internal adhesive sealant provides environmental protection.

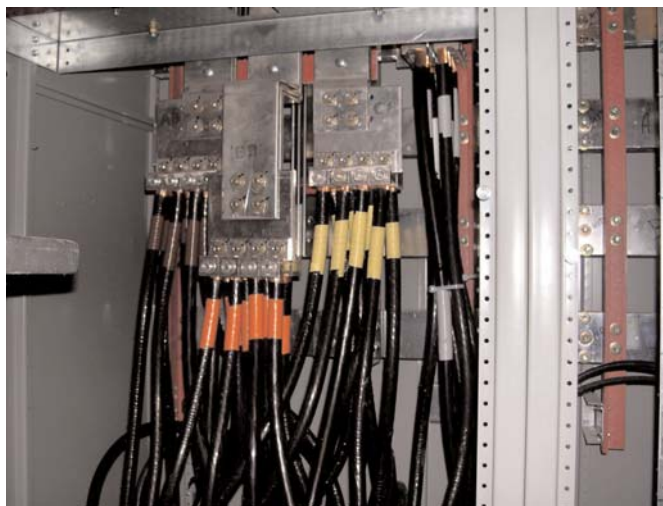
**Voltage** 600-2000 V

Order No.	UPC	Product Description and Cable Type	Conductor Size	Case Qty.
HSK-2	054007-09163	2-Conductor Flat Cable Type W & G 3-Conductor Flat Cable Type G & G-GC 3- & 4-Conductor Round Cable Type W, G & G-GC	6-1 AWG (14-38 mm <sup>2</sup> ) 6-4 AWG (14-22 mm <sup>2</sup> ) 6-3 AWG (14-25 mm <sup>2</sup> )	10 kits
HSK-4	054007-09164	2-Conductor Flat Cable Type W & G 3-Conductor Flat Cable Type G & G-GC 3- & 4-Conductor Round Cable Type W, G & G-GC	1/0-4/0 AWG (60-100 mm <sup>2</sup> ) 2-1 AWG (35-38 mm <sup>2</sup> ) 2-1 AWG (35-38 mm <sup>2</sup> )	10 kits
HSK-6	054007-09165	3-Conductor Flat Cable Type G & G-GC 3- & 4-Conductor Round Cable Type W, G & G-GC	1/0-2/0 AWG (60-70 mm <sup>2</sup> ) 1/0-4/0 AWG (60-100 mm <sup>2</sup> )	10 kits



## Medium Voltage Terminations, 5 kV–46 kV

Over 40 years ago, 3M pioneered cold shrink technology. Since then, field use and laboratory analysis have repeatedly proven its merits and reliability. Through constant innovation, we have refined cold shrink products making them better than ever. They're easier to apply and built to withstand some of the most punishing environmental conditions. Enhanced performance at a lower installed cost continues to make 3M the preferred choice for cold shrink solutions.



3M™ Cold Shrink QT-II and QT-III Terminations are designed using 3M developed track-resistant silicone rubber and Hi-K stress control material in conjunction with 3M's unique cold shrink delivery system. The QT-II and the QT-III terminations are supplied prestretched on a removable core. Removal of the core by unwinding after positioning the termination allows the product to shrink into position, providing a living seal.

3M cold shrink terminations offer easy installation and reliable performance when terminating indoor and outdoor medium voltage cable.

QT-II and QT-III cold shrink silicone rubber is specifically formulated as a high track-resistant material with hydrophobicity (water repelling action) and UV resistance to ensure a long life expectancy when properly installed.

These cold shrink terminations are lightweight for either free-hanging or bracket mounting arrangements. 3M offers you two options for choosing a cold shrink termination. The QT-III termination utilizes the latest technology with built-in Hi-K stress controlling mastic and environmental sealing mastic resulting in a much more user-friendly application that reduces chances of errors. The QT-II termination offers some of the same advantages as the QT-III termination but without a few of the integrated features that the QT-III termination possesses.

All terminations meet or exceed IEEE 48 requirements.



## Termination Feature and Benefit Guide

Technical Features	3M QT-II	3M QT-III
Cold Shrink Technology	Yes - Available from 5kV - 46kV	Yes - Available from 5kV - 35kV and 69kV
Pull Core	Yes	Yes
Step Core	Yes	Yes
Red Shipping Core	No	Yes
Stress Control built into Termination	Yes	Yes
Semicon Filler Hi-K Mastic built into Termination	No - Semicon step filling grease applied by hand	Yes
Top Seal Mastic built into Termination	No - Kits contain #70 Silicone Tape that is hand applied	Yes
IEEE-48 Tested	Yes	Yes
Hi Dielectric Constant Stress Control Tube	Less than 15V/mil Surface Stress	Less than 15V/mil Surface Stress
Arc and Track Resistance Test ASTM 2303 @ 3.5kV	1.2 Hours	5.0 Hours
Silicone Body for Excellent UV Resistance	Yes	Yes

### Section

### Page

JCN & CN Cable, 5-35 kV .....	272-282
PILC Cable, 15-25/28 kV.....	284-285
Single Core Tape Shield, Wire Shield & UniShield® Cable, 5-46 kV ..	287-295
Three Core Tape Shield, Wire Shield & UniShield® Cable, 5-35 kV ...	297-313
Single Core Tape Shield, Wire-Over-Tape Shield & LC Shield Cable, 5-35 kV.....	315-319
Tape Terminations, 5-25/28 kV.....	321
Non-Shielded Cable .....	323

# Cable Types for Terminating



Tape Shielded Cable



Wire Shielded Cable



UniShield® Cable



Wire Over Tape Shielded Cable



LC Shielded Cable



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable



Paper Insulated Lead Covered (PILC) Cable



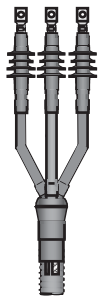
Non-Shielded (Dry) Cable



Non-Shielded (Wet or Dry) Cable

## Termination Type Selection Guide for 3M™ Three Conductor Cable 7600 Series

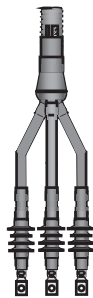
Kit Series	Insulator Configuration	Installation Environment	Orientation	For Cable Type(s) (With or Without Ground Wires)
7600-S-3G	Skirted	Outdoor	Normal	With ground wires
7600-T-3G	Tubular	Indoor	Normal	With ground wires
7690-S-INV-3G	Skirted	Outdoor	Inverted	With ground wires
7600-S-3-RJS	Skirted	Indoor-Cabinet Mount (No Breakout Boot)	Normal	With or without ground wires
7600-T-3-RJS	Tubular	Indoor-Cabinet Mount (No Breakout Boot)	Normal	With or without ground wires
7690-S-INV-3-RJS	Skirted	Indoor-Cabinet Mount (No Breakout Boot)	Inverted	With or without ground wires
7600-S-3W	Skirted	Outdoor	Normal	Without ground wires
7600-T-3W	Tubular	Indoor	Normal	Without ground wires
7690-S-INV-3W	Skirted	Outdoor	Inverted	Without ground wires



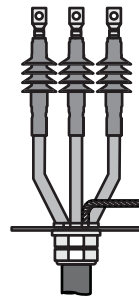
7600-S-3G



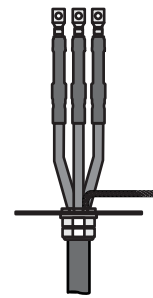
7600-T-3G



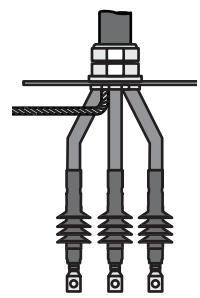
7690-S-INV-3G



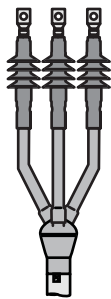
7600-S-3-RJS



7600-T-3-RJS



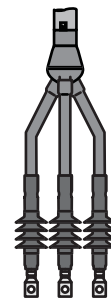
7690-S-INV-3-RJS



7600-S-3W



7600-T-3W



7690-S-INV-3W

The 3M™ Cold Shrink Three Conductor Breakout Kits (3C-BOK) also provide a flexible and easy solution for 3/C medium voltage application. These kits can be used with 1/C terminations, elbows and T-bodies. Please refer to page 297 for more information.

## Termination Kit Selection Guide

Products	Technology				Shielding Type						Core		Indoor/ Outdoor			
	3M™ Cold Shrink QT-III	3M™ Cold Shrink QT-II	Tape	PILC	CN	JCN	Tape Shield	Wire Shield	UnsShield®	Longitudinally Corrugated	Wire-Over-Tape Shield	Nonshielded		Single Core	Three Core	Indoor
3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7640-T and 7650-T Series for 5-35 kV	X					X									X	
3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7640-S, 7650-S, & 7660-S Series for 5-35 kV	X					X										X
3M™ Cold Shrink QT-III Silicone Rubber Termination Kit with Jumper Wire Top Insulator* 7640-S & 7650-S Series for 5-25/28 kV	X					X										X
3M™ Cold Shrink QT-III Inverted Termination Kits 7640-S-INV & 7650-S-INV Series for 5-35 kV (One Termination per Kit)	X					X										X
3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7620-T & 7690-T Series for 5-35 kV	X					X	X							X		
3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7620-S, 7680-S & 7690-S Series for 5-35 kV	X					X	X							X		
3M™ Cold Shrink QT-III Silicone Rubber Inverted Termination Kit 7620-S & 7690-S Series for 5-35 kV	X					X	X							X		
3M™ Cold Shrink QT-III Termination Kit 7600-T-3-RJS Series for 5-35 kV	X					X	X							X		
3M™ Cold Shrink QT-III Termination Kit 7600-T-3G Series for 5-35 kV	X					X	X							X		
3M™ Cold Shrink QT-III Termination Kit 7600-T-3W Series for 5-35 kV	X					X	X							X		
3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7600-S-3G Series for 5-35 kV	X					X	X									X
3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7600-S-3RJS Series for 5-35 kV	X					X	X									X
3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7600-S-3W Series for 5-35 kV	X					X	X									X
3M™ Cold Shrink QT-III Silicone Rubber Inverted Termination Kit 7600-S-4-INV-3G Series for 5-25 kV	X					X	X									X
3M™ Cold Shrink QT-III Silicone Rubber Inverted Termination Kit 7600-S-INV-3RJS Series for 5-25/28 kV	X					X	X									X
3M™ Cold Shrink QT-III Silicone Rubber Inverted Termination Kit 7600-S-INV-3W Series - 4 Skirt, for 5-25/28 kV	X					X	X									X
3M™ Cold Shrink QT-III Silicone Rubber Termination 7640-T-HSG and 7650-T-HSG Series for 5-35 kV	X					X	X								X	
3M™ Cold Shrink QT-III High Fault Current Termination Kit 7650-S-HSG & 7660-S-HSG Series for 5-35 kV	X					X	X							X		
3M™ Cold Shrink QT-III High Fault Cable Kits with High Ampacity Ground Connections 7650-S-HSG and 7660-S-HSG Series for 5-35 kV	X					X	X							X		

## Termination Kit Selection Guide

Products	Technology			Shielding Type						Core		Indoor/ Outdoor				
	3M™ Cold Shrink QT-II	3M™ Cold Shrink QT-III	Tape	PILC	CN	JCN	Tape Shield	Wire Shield	UnsShield®	Longitudinally Corrugated	Wire-Over-Tape Shield		Nonshielded	Single Core	Three Core	Indoor
3M™ Cold Shrink QT-II Silicone Rubber Termination Kits 5670 Series for 15 kV	X					X									X	
3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 5640 & 5650 Series - 4-Skirt, for 15 kV	X					X	X									X
3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 5640 & 5650 Series - 6-Skirt, for 15-25/28 kV	X					X	X									X
3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 5640 & 5650 Series - 8-Skirt, for 15-35 kV	X					X	X									X
3M™ Cold Shrink QT-II Termination Kit 5600 & 5680 Series - 4 Skirt, for 5-15 kV	X					X										X
3M™ Cold Shrink QT-II Termination Kit 5600 & 5680 Series - 6 Skirt, for 5-35 kV	X					X										X
3M™ Cold Shrink QT-II Termination Kit 5600 & 5680 Series - 8 Skirt, for 5-35 kV	X					X										X
3M™ PILC Silicone Rubber Termination Kits 5800-Pb Series - 4 Skirt, for 15 kV	X			X												X
3M™ PILC Silicone Rubber Termination Kits 5800-Pb Series - 6 Skirt, for 15-25/28 kV	X			X												X
3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 5620K Series for 5-15 kV	X							X								X
3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 6020K Series for 15-25/28 kV	X							X	X							X
3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 5630K Series - 4 Skirt, for 5-15 kV	X							X	X							X
3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 5690K Series - 6 Skirt, for 15-25/28 kV	X							X	X							X
3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 5690K Series - 8 Skirt, for 15-35 kV	X							X	X							X
3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 4604 & 4605 Series for 46 kV	X							X								X
3M™ Cold Shrink QT-II Silicone Rubber Termination Kits 5610-A Series for 5 and 8 kV Non-Shielded Cables	X															X
Scotch® Tape Termination Kits 5700 Series for 5-25/28 kV																X

# 3M™ Medium Voltage Terminations for JCN and CN Cable, 5 kV – 35 kV

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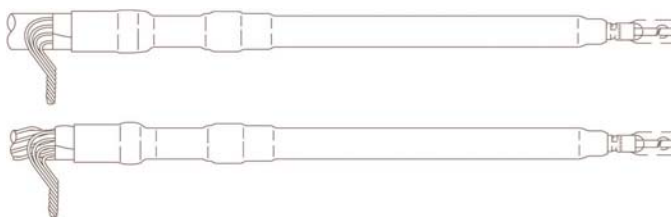
## 3M™ Cold Shrink QT-III Termination Kit 7640-T & 7650-T Series for 5-35 kV

3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7640-T and 7650-T Series contain one-piece, non-skirted, silicone rubber terminations, qualified as IEEE Standard 48 Class 1 for indoor and weather-protected applications. The termination assemblies consist of a tubular insulator, high-dielectric constant (Hi-K) stress control tube, conformable Hi-K stress controlling compound and built-in environmental top seal. The insulator is made of a dark gray silicone rubber with excellent tracking resistance and hydrophobic properties. The complete assembly is pre-stretched and loaded onto a removable core which can be recycled. The kits are designed for terminating jacketed concentric neutral (JCN) and concentric neutral (CN) power cables rated 5–35 kV.

Each kit contains sufficient quantities of material to make one single-phase termination. Lugs need to be ordered separately.

**\*150 kV impulse level meets the impulse requirements for 35 kV class equipment where indoor terminations are used.**

Number of Conductors	Single Conductor
Shielding Type	Jacketed Concentric Neutral (JCN), Concentric Neutral (CN)
Indoor/Outdoor	Indoor
Breakout Boot	No
Insulation Rejacketing	No
No. Skirts	0
Voltage	5 kV, 8 kV, 15 kV, 25/28 kV 35 kV
Lug/Stem Connector Included in Kit	No
Packaging	1 kit per case (one termination per kit)



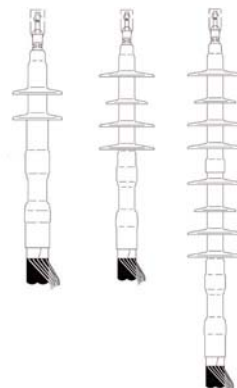
Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 5 kV	Conductor Size 8 kV	Conductor Size 15 kV	Conductor Size 25/28 kV	Conductor Size 35 kV*
7642-T-110	054007-41764	110 kV	12.0" (305 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-2/0 AWG (35-70 mm <sup>2</sup> )	-	-
7643-T-110	054007-41796	110 kV	12.0" (305 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm <sup>2</sup> )	-	-
7644-T-110	054007-41766	110 kV	12.0" (305 mm)	0.83"-1.53" (21,1-38,9 mm)	500-750 kcmil	350-700 kcmil	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	-	-
7645-T-110	054007-41768	110 kV	12.0" (305 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	-
7646-T-110	054007-41770	110 kV	12.0" (305 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm <sup>2</sup> )	-	-
7653-T-150	054007-41772	150 kV	16" (406 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm <sup>2</sup> )	2-4/0 AWG (35-120 mm <sup>2</sup> )	2-2/0 AWG (35-70 mm <sup>2</sup> )
7655-T-150	054007-41774	150 kV	16" (406 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1250 kcmil (240-625 mm <sup>2</sup> )	250-800 kcmil (150-400 mm <sup>2</sup> )	3/0 AWG-600 kcmil (95-325 mm <sup>2</sup> )
7656-T-150	054007-41776	150 kV	16" (406 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm <sup>2</sup> )	900-1750 kcmil (500-800 mm <sup>2</sup> )	700-1500 kcmil (400-725 mm <sup>2</sup> )



## 3M™ Cold Shrink QT-III Termination Kit 7640-S, 7650-S & 7660-S Series for 5-35 kV

3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7640-S, 7650-S and 7660-S Series contain one-piece, skirted, silicone rubber terminations, qualified as IEEE Standard 48 Class 1 for outdoor weather-exposed applications. The termination assemblies consist of a skirted insulator, high-dielectric constant (Hi-K) stress control tube, conformable Hi-K stress controlling compound and built-in environmental top seal. The insulator is made of a dark gray silicone rubber with excellent tracking resistance and hydrophobic properties. The complete assembly is prestretched and loaded onto a removable core which can be recycled. The kits are designed for terminating jacketed concentric neutral (JCN) and concentric neutral (CN) power cables rated 5–35 kV. Each kit contains sufficient quantities of material to make one single-phase termination. Lugs need to be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Jacketed Concentric Neutral (JCN), Concentric Neutral (CN)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



Order No.	UPC	Skirts	BIL	Max. Installed Length	Insulation O.D. Range	Cond. Size 5 kV	Cond. Size 8 kV	Cond. Size 15 kV	Cond. Size 25/28 kV	Cond. Size 35 kV
7642-S-2	054007-42011	2	110 kV	9.80" (249 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-4/0 AWG (35-120 mm <sup>2</sup> )	-	-
7652-S-4	054007-42178	4	150 kV	12.25" (311 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-4/0 AWG (35-120 mm <sup>2</sup> )	2-1/0 AWG (35-50 mm <sup>2</sup> )	-
7653-S-4	054007-42192	4	150 kV	12.25" (311 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm <sup>2</sup> )	2-4/0 AWG (35-120 mm <sup>2</sup> )	-
7654-S-4	054007-42203	4	150 kV	12.25" (311 mm)	0.83"-1.53" (21,1-38,9 mm)	500-750 kcmil	350-700 kcmil	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	2/0 AWG-250 kcmil (70-150 mm <sup>2</sup> )	-
7655-S-4	054007-42208	4	150 kV	12.25" (311 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm <sup>2</sup> )	250-800 kcmil (150-400 mm <sup>2</sup> )	-
7656-S-4	054007-42210	4	150 kV	13.25" (337 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm <sup>2</sup> )	900-1750 kcmil (500-800 mm <sup>2</sup> )	-
7663-S-8	054007-42433	8	200 kV	20.50" (521 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm <sup>2</sup> )	2-4/0 AWG (35-120 mm <sup>2</sup> )	2-2/0 AWG (35-70 mm <sup>2</sup> )
7664-S-8	054007-42447	8	200 kV	20.50" (521 mm)	0.83"-1.53" (21,1-38,9 mm)	500-750 kcmil	350-700 kcmil	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	2/0 AWG-250 kcmil (70-150 mm <sup>2</sup> )	2-4/0 AWG (35-120 mm <sup>2</sup> )
7665-S-8	054007-42461	8	200 kV	20.50" (521 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm <sup>2</sup> )	250-800 kcmil (150-400 mm <sup>2</sup> )	3/0 AWG-600 kcmil (95-325 mm <sup>2</sup> )
7666-S-8	054007-42463	8	200 kV	21.50" (546 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm <sup>2</sup> )	900-1750 kcmil (500-800 mm <sup>2</sup> )	700-1500 kcmil (400-725 mm <sup>2</sup> )

## 3M™ Cold Shrink QT-III Termination Kit with Jumper Wire Top Insulator 7640-S & 7650-S Series for 5-25/28 kV

3M™ Cold Shrink QT-III Silicone Rubber Termination Kit with Jumper Wire Top Insulator\* 7640-S & 7650-S Series offer easy installation and reliable performance when terminating indoor and outdoor medium voltage cable. The unique step-core design combined with the built in Hi-K stress control and environmental sealing compounds means simpler installation on most types of cable. It has UV stability and track and erosion resistance. Plus its Hi-K stress control design delivers excellent BIL performance and lower surface stress resulting in a more compact termination. Through excellent engineering, 3M™ Cold Shrink QT-III Outdoor Terminations deliver maximum performance.

Each kit contains sufficient quantities of material to make one termination. Lugs need to be ordered separately.

\*Top insulator is a cold shrink silicone rubber tube provided on a removable core for easy installation on a jumper wire. Provides additional circuit protection against animal damage (i.e. squirrels) and environmental corrosion.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Jacketed Concentric Neutral (JCN), Concentric Neutral (CN)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV
<b>Lug Included in Kit (Cu Cond. Only)</b>	No (for Al conductor), Yes (for Cu conductor)
<b>Packaging</b>	1 kit per case (one termination per kit)



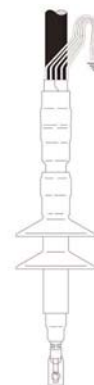
Order No.	UPC	Skirts	BIL	Max. Installed Length	Insulation O.D. Range	Jacket O.D.	Connector & Drop Wire O.D.	Cond. Size 5 kV	Cond. Size 8 kV	Cond. Size 15 kV	Cond. Size 25/28 kV
7642-S-2-TI	051128-54114	2	110 kV	15.8" (401 mm)	0.64"-1.08" (16,3-27,4 mm)	0.97"-1.48" (24,6-37,6 mm)	0.22"-1.31" (5,6-33,3 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-4/0 AWG (35-120 mm <sup>2</sup> )	-
7652-S-4-TI	054007-43409	4	150 kV	12.25" (311 mm)	0.64"-1.08" (16,3-27,4 mm)	0.97"-1.48" (24,6-37,6 mm)	0.22"-1.31" (5,6-33,3 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-4/0 AWG (35-120 mm <sup>2</sup> )	2-1/0 AWG (35-50 mm <sup>2</sup> )
7653-S-4-TI	054007-43410	4	150 kV	12.25" (311 mm)	0.72"-1.29" (18,3-32,8 mm)	1.04"-1.60" (26,4-40,6 mm)	0.22"-1.31" (5,6-33,3 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm <sup>2</sup> )	2-4/0 AWG (35-120 mm <sup>2</sup> )
7654-S-4-TI	054007-43411	4	150 kV	12.25" (311 mm)	0.83"-1.53" (21,1-38,9 mm)	1.12"-1.87" (28,4-47,5 mm)	0.24"-1.60" (6,1-40,6 mm)	500-750 kcmil	350-700 kcmil	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	2/0 AWG-250 kcmil (70-150 mm <sup>2</sup> )
7655-S-4-TI	054007-43412	4	150 kV	12.25" (311 mm)	1.05"-1.80" (26,7-45,7 mm)	1.39"-2.40" (35,3-61,0 mm)	0.32"-2.20" (8,1-55,9 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm <sup>2</sup> )	250-800 kcmil (150-400 mm <sup>2</sup> )
7656-S-4-TI	054007-43413	4	150 kV	13.25" (337 mm)	1.53"-2.32" (38,9-58,9 mm)	1.84"-2.80" (46,8-71,1 mm)	0.60"-2.80" (15,2-71,1 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (630-1000 mm <sup>2</sup> )	900-1750 kcmil (500-800 mm <sup>2</sup> )

## 3M™ Cold Shrink QT-III Inverted Termination Kits 7640-S-INV & 7650-S-INV Series for 5-35 kV

For applications where the cable will be mounted pointing down, the 3M™ Cold Shrink QT-III Inverted Termination Kits 7640-S-INV and 7650-S-INV Series offer easy installation and reliable performance when terminating indoor and outdoor medium voltage cable. The unique step-core design combined with the built in Hi-K stress control and environmental sealing compounds means simpler installation on most types of cable. It has UV stability and track and erosion resistance. Plus its Hi-K stress control design delivers excellent BIL performance and lower surface stress resulting in a more compact termination. Through excellent engineering, 3M™ Cold Shrink QT-III terminations deliver maximum performance. Designed for terminating jacketed concentric neutral (JCN) and concentric neutral (CN) power cables rated 5–35 kV.

Each kit makes one termination. Lugs need to be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



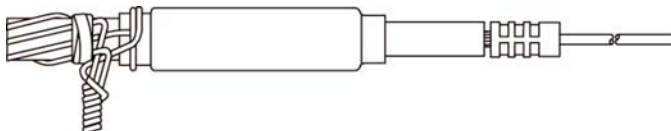
Order No.	UPC	Skirts	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 5 kV	Conductor Size 8 kV	Conductor Size 15 kV	Conductor Size 25/28 kV	Conductor Size 35 kV
7642-S-INV-2	054007-04622	2	110 kV	12.0" (305 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-4/0 AWG (35-120 mm²)	-	-
7653-S-INV-4	054007-04625	4	200 kV	16.0" (406 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm²)	2-4/0 AWG (35-120 mm²)	2-2/0 AWG (35-70 mm²)
7655-S-INV-4	054007-04623	4	200 kV	16.0" (406 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm²)	250-800 kcmil (150-400 mm²)	3/0 AWG-600 kcmil (95-325 mm²)
7656-S-INV-4	054007-04624	4	200 kV	16.0" (406 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm²)	900-1750 kcmil (500-800 mm²)	700-1500 kcmil (400-725 mm²)

## 3M™ Cold Shrink QT-II Termination Kits 5670 Series for 15 kV

3M™ Cold Shrink QT-II Silicone Rubber Termination Kits 5671 and 5672 are one piece, 15 kV, non-skirted terminations classified as IEEE Standard 48, Class 3 terminations. They consist of a High-K (high dielectric constant) stress control tube insulated with a silicone rubber insulator, pre-stretched together onto a removable cold-shrink core. The kits are designed for terminating 15 kV rated concentric neutral (CN) or jacketed concentric neutral (JCN) power cables.

Each kit contains sufficient quantities of material to make one termination. Lugs must be ordered separately.

Number of Conductors	Single Conductor
Shielding Type	Jacketed Concentric Neutral (JCN), Concentric Neutral (CN)
Indoor/Outdoor	Indoor
Breakout Boot	No
Insulation Rejacketing	No
No. Skirts	0
Voltage	15 kV
Packaging	10 kits per case (one termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 15 kV	Lug/Stem Connector Included in Kit
5671	054007-33798	110 kV	6.25" (159 mm)	0.64"-1.12" (16,2-28,4 mm)	2 AWG-250 kcmil (35-120 mm <sup>2</sup> )	No
5672	054007-33799	110 kV	6.5" (165 mm)	0.94"-1.81" (23,8-46,0 mm)	250-1000 kcmil (150-500 mm <sup>2</sup> )	No

## 3M™ Cold Shrink QT-II Termination Kit 5640 & 5650 Series - 4 Skirt for 15 kV

3M™ Cold Shrink QT-II Silicone Rubber Termination Kits 5640 and 5650 are one-piece cold shrink terminations for jacketed concentric neutral (JCN) power cable. They meet the requirements of IEEE Standard 48, for Class 1 terminations. The 3M QT-II consists of a high dielectric constant (High-K) stress control tube insulated with a molded silicone skirted insulator. This four skirt design is rated 15 kV.

Each kit contains sufficient material to make one termination. Lugs may, or may not, be included in a specific kit. Details are provided regarding lug/connector contents.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Jacketed Concentric Neutral (JCN)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	4
<b>Voltage</b>	15 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Cable Jacket O.D.	Conductor Size 15 kV	Lug/Stem Connector Included in Kit	Additional Kit Contents
5641	054007-11963	110 kV	10.0" (254 mm)	0.64"-1.12" (16,3-28,4 mm)	0.93"-1.35" (23,6-34,3 mm)	2-2/0 AWG (35-60 mm <sup>2</sup> )	No	-
5641-1/0	054007-11964	110 kV	10.0" (254 mm)	0.64"-1.12" (16,2-28,4 mm)	0.93"-1.35" (23,6-34,3 mm)	1/0 AWG	Yes	(1) SC0010 Stem Connector
5641-1/0-MB3	054007-70501	110 kV	10.0" (254 mm)	0.64"-1.12" (16,3-28,4 mm)	0.93"-1.35" (23,6-34,3 mm)	1/0 AWG	Yes	(1) SC0010 Stem Connector, (1) MB3 Mounting Bracket
5641-2/0	054007-11967	110 kV	10.0" (254 mm)	0.64"-1.12" (16,3-28,4 mm)	0.93"-1.35" (23,6-34,3 mm)	2/0 AWG	Yes	(1) SC0020 Stem Connector
5641-2	054007-11965	110 kV	10.0" (254 mm)	0.64"-1.12" (16,3-28,4 mm)	0.93"-1.35" (23,6-34,3 mm)	2 AWG	Yes	(1) SC0001 Stem Connector
5641-22	054007-11968	110 kV	10.0" (254 mm)	0.64"-1.12" (16,3-28,4 mm)	0.93"-1.35" (23,6-34,3 mm)	2 AWG Solid 4 AWG Stranded	Yes	(1) SC0002 Stem Connector
5642	054007-11970	110 kV	10.0" (254 mm)	0.84"-1.38" (21,3-35,1 mm)	1.19"-1.72" (30,2-43,6 mm)	3/0 AWG- 350 kcmil (95-180 mm <sup>2</sup> )	No	-
5642-4/0	054007-11971	110 kV	10.0" (254 mm)	0.84"-1.38" (21,3-35,1 mm)	1.19"-1.72" (30,2-43,7 mm)	4/0 AWG	Yes	(1) SC0040 Stem Connector
5643	054007-11972	110 kV	11.0" (279 mm)	1.08"-1.80" (27,4-45,7 mm)	1.37"-2.02" (34,8-51,3 mm)	400-700 kcmil (240-325 mm <sup>2</sup> )	No	-
5644	054007-11973	110 kV	11.25" (286 mm)	1.31"-2.10" (33,3-53,3 mm)	1.62"-2.55" (41,2-64,8 mm)	700-1500 kcmil (400-725 mm <sup>2</sup> )	No	-

## 3M™ Cold Shrink QT-II Termination Kit 5640 & 5650 Series - 6 Skirt for 15-25/28 kV

3M™ Cold Shrink QT-II Silicone Rubber Termination Kits 5640 and 5650 are one-piece cold shrink terminations for jacketed concentric neutral (JCN) power cable. They meet the requirements of IEEE Standard 48, for Class 1 terminations. The 3M QT-II termination consists of a high dielectric constant (High-K) stress control tube insulated with a molded silicone skirted insulator. This six skirt design is rated 25/28 kV.

Each kit contains sufficient material to make one termination. Lugs may, or may not, be included in a specific kit. Details are provided regarding lug/connector contents.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Jacketed Concentric Neutral (JCN)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	6
<b>Voltage</b>	15 kV, 25/28 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Cable Jacket O.D.	Conductor Size 15 kV	Conductor Size 25/28 kV	Additional Kit Contents
5651	054007-09132	150 kV	13.0" (330 mm)	0.64"-1.12" (16,3-28,4 mm)	0.93"-1.35" (23,6-34,3 mm)	2-2/0 AWG (35-60 mm <sup>2</sup> )	2-1/0 AWG (35-50 mm <sup>2</sup> )	—
5651-1/0	054007-70527	150 kV	13.0" (330 mm)	0.64"-1.12" (16,3-28,4 mm)	0.93"-1.35" (23,6-34,3 mm)	1/0 AWG	1/0 AWG	(1) SC0010 Stem Connector
5651-2	054007-70528	150 kV	13.0" (330 mm)	0.64"-1.12" (16,3-28,4 mm)	0.93"-1.35" (23,6-34,3 mm)	2 AWG	2 AWG	(1) SC0001 Stem Connector
5652	054007-69791	150 kV	13.0" (330 mm)	0.84"-1.38" (21,3-35,1 mm)	1.19"-1.72" (30,2-43,6 mm)	3/0 AWG-350 kcmil (95-150 mm <sup>2</sup> )	1/0 AWG-250 kcmil (60-120 mm <sup>2</sup> )	—
5652-1/0	054007-04818	150 kV	13.0" (330 mm)	0.84"-1.38" (21,3-35,1 mm)	1.19"-1.72" (30,2-43,6 mm)	—	1/0 AWG	(1) SC0010 Stem Connector
5652-4/0	054007-50757	150 kV	13.0" (330 mm)	0.84"-1.38" (21,3-35,1 mm)	1.19"-1.72" (30,2-43,6 mm)	4/0 AWG	4/0 AWG	(1) SC0040 Stem Connector
5653	054007-69792	150 kV	14.5" (368 mm)	1.08"-1.80" (27,4-45,7 mm)	1.37"-2.02" (34,8-51,3 mm)	400-700 kcmil (240-325 mm <sup>2</sup> )	250-500 kcmil (150-250 mm <sup>2</sup> )	—
5654	054007-69793	150 kV	14.75" (375 mm)	1.31"-2.10" (33,3-53,3 mm)	1.62"-2.55" (41,2-64,8 mm)	750-1500 kcmil (400-725 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )	—

## 3M™ Cold Shrink QT-II Termination Kit 5640 & 5650 Series - 8 Skirt for 15-35 kV

3M™ Cold Shrink QT-II Silicone Rubber Termination Kits 5640 and 5650 are one-piece cold shrink terminations for jacketed concentric neutral (JCN) power cable. They meet the requirements of IEEE Standard 48, for Class 1 terminations. The 3M QT-II termination consists of a high dielectric constant (High-K) stress control tube insulated with a molded silicone skirted insulator. This eight skirt design is rated 35 kV.

Each kit contains sufficient material to make one termination. Lugs may, or may not, be included in a specific kit. Details are provided regarding lug/connector contents.

\* Shielding type for kit QT-II termination 5649 is tape shield.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Jacketed Concentric Neutral (JCN), *Tape Shield
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	8
<b>Voltage</b>	15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



Order No.	UPC	Shielding Type	BIL	Max. Installed Length	Insulation O.D. Range	Cable Jacket O.D.	Conductor Size 15 kV	Conductor Size 25/28 kV	Conductor Size 35 kV	Additional Kit Contents
5646	054007-11975	JCN	200 kV	17.5" (444 mm)	0.84"-1.38" (21,3-35,1 mm)	1.19"-1.72" (30,2-43,6 mm)	3/0 AWG-350 kcmil (95-150 mm <sup>2</sup> )	1/0 AWG-250 kcmil (60-120 mm <sup>2</sup> )	1-3/0 AWG (50-80 mm <sup>2</sup> )	—
5646-1/0	054007-70507	JCN	200 kV	17.5" (444 mm)	0.84"-1.38" (21,3-35,1 mm)	1.19"-1.72" (30,2-43,6 mm)	—	1/0 AWG	1/0 AWG	(1) SC0010 Stem Connector
5646-1/0-MB4	054007-70508	JCN	200 kV	17.5" (444 mm)	0.84"-1.38" (21,3-35,1 mm)	1.19"-1.72" (30,2-43,6 mm)	—	1/0 AWG	1/0 AWG	(1) SC0010 Stem Connector (1) MB4 Mounting Bracket
5647	054007-11976	JCN	200 kV	19.5" (495 mm)	1.08"-1.80" (27,4-45,7 mm)	1.37"-2.02" (34,8-51,3 mm)	400-700 kcmil (240-325 mm <sup>2</sup> )	250-500 kcmil (150-250 mm <sup>2</sup> )	4/0 AWG-300 kcmil (120-150 mm <sup>2</sup> )	—
5647-4/0	054007-70512	JCN	200 kV	19.5" (495 mm)	1.08"-1.80" (27,4-45,7 mm)	1.37"-2.02" (34,8-51,3 mm)	—	—	4/0 AWG	(1) SC0040 Stem Connector
5648	054007-11977	JCN	200 kV	19.75" (501 mm)	1.31"-2.10" (33,3-53,3 mm)	1.62"-2.55" (41,2-64,8 mm)	750-1500 kcmil (400-725 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )	350-1000 kcmil (185-500 mm <sup>2</sup> )	—
5649*	054007-09958	Tape Shield	200 kV	21.0" (533 mm)	1.80"-2.30" (45,7-58,4 mm)	2.10"-2.75" (53,4-69,8 mm)	—	—	1000-1500 kcmil (600-725 mm <sup>2</sup> )	—



JCN & CN Cable, 5-35 kV: 3M™ Cold Shrink QT-II Terminations: Outdoor Skirted Non-Jacketed Concentric Neutral (CN) Kits

## 3M™ Cold Shrink QT-II Termination Kit 5600 & 5680 Series - 4 Skirt for 5-15 kV

The 3M™ Cold Shrink QT-II Outdoor Termination Kits 5600 and 5680 contain one-piece silicone rubber terminations designed for concentric neutral (CN) cable. They meet the requirements of IEEE Standard 48, for Class 1 terminations. The 3M termination consists of a high dielectric-constant (High-K) stress control tube insulated with a molded silicone skirted insulator.

Each kit makes one termination. Lugs may, or may not, be included in a specific kit. Details are provided regarding lug/connector contents.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	4
<b>Voltage</b>	5 kV, 8 kV, 15 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 5 kV 100%	Conductor Size 5 kV 133% / 8 kV 100%	Conductor Size 8 kV 133%	Conductor Size 15 kV	Additional Kit Contents
5601	054007-02427	110 kV	8.50" (216 mm)	0.64"-1.12" (16,3-28,4 mm)	3/0 AWG-500 kcmil (95-250 mm <sup>2</sup> )	2/0 AWG-500 kcmil (70-250 mm <sup>2</sup> )	1/0 AWG-350 kcmil (60-150 mm <sup>2</sup> )	2-4/0 AWG (35-100 mm <sup>2</sup> )	-
5601-1/0	054007-02422	110 kV	8.50" (216 mm)	0.64"-1.12" (16,3-28,4 mm)	-	-	1/0 AWG	1/0 AWG	(1) SC0010 Stem Connector
5601-2	054007-13550	110 kV	8.50" (216 mm)	0.64"-1.12" (16,3-28,4 mm)	-	-	-	2 AWG	(1) SC0001 Stem Connector
5601-2/0	054007-02423	110 kV	8.50" (216 mm)	0.64"-1.12" (16,3-28,4 mm)	-	2/0 AWG	2/0 AWG	2/0 AWG	(1) SC0020 Stem Connector
5601-4/0	054007-13544	110 kV	8.50" (216 mm)	0.64"-1.12" (16,3-28,4 mm)	4/0 AWG	4/0 AWG	4/0 AWG	4/0 AWG	(1) SC0040 Stem Connector
5602	054007-11882	110 kV	8.50" (216 mm)	0.84"-1.38" (21,3-35,1 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	350-750 kcmil (185-325 mm <sup>2</sup> )	250-750 kcmil (150-325 mm <sup>2</sup> )	250-500 kcmil (150-250 mm <sup>2</sup> )	-
5603	054007-11885	110 kV	9.50" (241 mm)	1.08"-1.80" (27,4-45,7 mm)	750-1000 kcmil (400-500 mm <sup>2</sup> )	750-1500 kcmil (400-725 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )	-

JCN & CN Cable, 5-35 kV: 3M™ Cold Shrink QT-II Terminations: Outdoor Skirted Non-Jacketed Concentric Neutral (CN) Kits

## 3M™ Cold Shrink QT-II Termination Kit 5600 & 5680 Series - 6 Skirt for 5-35 kV

The 3M™ Cold Shrink QT-II Outdoor Termination Kits 5600 and 5680 contain one-piece silicone rubber terminations designed for concentric neutral (CN) cable. They meet the requirements of IEEE Standard 48, for Class 1 terminations. The 3M termination consists of a high dielectric-constant (High-K) stress control tube insulated with a molded silicone skirted insulator.

Each kit has sufficient material to make one termination. Lugs may, or may not, be included in a specific kit. Details are provided regarding lug/connector contents.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	6
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



	5681	5681-1/0	5681-2
UPC	054007-09133	054007-70491	054007-70492
BIL	150 kV	150 kV	150 kV
Max. Installed Length	11.50" (292 mm)	11.50" (292 mm)	11.50" (292 mm)
Insulation O.D. Range	0.64"-1.12" (16,3-28,4 mm)	0.64"-1.12" (16,3-28,4 mm)	0.64"-1.12" (16,3-28,4 mm)
Conductor Size 5 kV 100%	3/0 AWG-500 kcmil (95-250 mm <sup>2</sup> )	-	-
Conductor Size 5 kV 133%: 8 kV 100%	2/0 AWG-500 kcmil (70-250 mm <sup>2</sup> )	-	-
Conductor Size 8 kV 133%	1/0 AWG-350 kcmil (60-150 mm <sup>2</sup> )	1/0 AWG	-
Conductor Size 15 kV	4-4/0 AWG (22-100 mm <sup>2</sup> )	1/0 AWG	2 AWG
Conductor Size 25/28 kV	4-2/0 AWG (22-60 mm <sup>2</sup> )	1/0 AWG	2 AWG
Conductor Size 35 kV	-	-	-
Additional Kit Contents	-	(1) SC0010 Stem Connector	(1) SC0001 Stem Connector
	5682	5683	5684
UPC	054007-69794	054007-69795	054007-69796
BIL	150 kV	150 kV	150 kV
Max. Installed Length	11.50" (292 mm)	13.00" (330 mm)	13.25" (337 mm)
Insulation O.D. Range	0.84"-1.38" (21,3-35,1 mm)	1.08"-1.80" (27,4-45,7 mm)	1.31"-2.10" (33,3-53,3 mm)
Conductor Size 5 kV 100%	350-750 kcmil (185-325 mm <sup>2</sup> )	750-1000 kcmil (400-500 mm <sup>2</sup> )	-
Conductor Size 5 kV 133%: 8 kV 100%	350-750 kcmil (185-325 mm <sup>2</sup> )	750-1500 kcmil (400-725 mm <sup>2</sup> )	-
Conductor Size 8 kV 133%	250-750 kcmil (150-325 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )	-
Conductor Size 15 kV	250-500 kcmil (150-250 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )	1000-1750 kcmil (500-850 mm <sup>2</sup> )
Conductor Size 25/28 kV	1/0 AWG-350 kcmil (60-150 mm <sup>2</sup> )	350-750 kcmil (185-325 mm <sup>2</sup> )	750-1500 kcmil (400-725 mm <sup>2</sup> )
Conductor Size 35 kV	1-4/0 AWG (50-100 mm <sup>2</sup> )	4/0 AWG-500 kcmil (120-250 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )
Additional Kit Contents	-	-	-

JCN & CN Cable, 5-35 kV: 3M™ Cold Shrink QT-II Terminations: Outdoor Skirted Non-Jacketed Concentric Neutral (CN) Kits

## 3M™ Cold Shrink QT-II Termination Kit 5600 & 5680 Series - 8 Skirt for 5-35 kV

The 3M™ Cold Shrink QT-II Outdoor Termination Kits 5600 and 5680 contain one-piece silicone rubber terminations designed for concentric neutral (CN) cable. They meet the requirements of IEEE Standard 48, for Class 1 terminations. The 3M termination consists of a high dielectric-constant (High-K) stress control tube insulated with a molded silicone skirted insulator.

Each kit contains sufficient material to make one termination. Lugs must be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Concentric Neutral (CN)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	8
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 5 kV 100%	Conductor Size 5 kV 133%: 8 kV 100%	Conductor Size 8 kV 133%	Conductor Size 15 kV	Conductor Size 25/28 kV	Conductor Size 35 kV
5604	054007-08002	200 kV	16.00" (406 mm)	0.64"-1.12" (16,3-28,4 mm)	3/0 AWG-500 kcmil (95-250 mm <sup>2</sup> )	2/0 AWG-500 kcmil (70-250 mm <sup>2</sup> )	1/0 AWG-350 kcmil (60-150 mm <sup>2</sup> )	4-4/0 AWG (22-100 mm <sup>2</sup> )	4-2/0 AWG (22-60 mm <sup>2</sup> )	2-1/0 AWG (30-50 mm <sup>2</sup> )
5605	054007-11888	200 kV	16.00" (406 mm)	0.84"-1.38" (21,3-35,1 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	350-750 kcmil (185-325 mm <sup>2</sup> )	250-750 kcmil (150-325 mm <sup>2</sup> )	250-500 kcmil (150-250 mm <sup>2</sup> )	1/0 AWG-350 kcmil (60-150 mm <sup>2</sup> )	1-4/0 AWG (50-100 mm <sup>2</sup> )
5606	054007-11893	200 kV	18.00" (457 mm)	1.08"-1.80" (27,4-45,7 mm)	750-1000 kcmil (400-500 mm <sup>2</sup> )	750-1500 kcmil (400-725 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )	350-750 kcmil (185-325 mm <sup>2</sup> )	4/0 AWG-500 kcmil (120-250 mm <sup>2</sup> )
5607	054007-11897	200 kV	18.25" (464 mm)	1.31"-2.10" (33,3-53,3 mm)	-	-	-	1000-1750 kcmil (600-850 mm <sup>2</sup> )	750-1500 kcmil (325-725 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )
5608	054007-09168	200 kV	19.50" (495 mm)	1.80"-2.75" (45,7-69,8 mm)	-	-	-	1500-2000 kcmil (800-1000 mm <sup>2</sup> )	1250-2000 kcmil (725-1000 mm <sup>2</sup> )	1000-2000 kcmil (600-1000 mm <sup>2</sup> )

# 3M™ Medium Voltage Terminations for PILC Cable, 15 kV – 25/28 kV

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PILC Cable, 15-25/28 kV: 3M™ Cold Shrink QT-II Terminations: Outdoor Skirted Kits (can be used for indoor applications also)

## 3M™ PILC Termination Kits 5800-Pb Series - 4 Skirt for 15 kV

The 3M™ PILC Silicone Rubber Termination Kits 5800-Pb Series are designed for oil/paper insulated power cable. They meet the requirements of IEEE Standard 48, for Class 1 terminations and applicable sections of IEEE 404. The 3M QT-II termination consists of a high dielectric constant (High-K) stress control tube insulated with a molded silicone skirted insulator. There is a four-skirt design rated 15 kV and a six-skirt design rated 25/28 kV. To ensure a positive oil seal and to conform with pressure test requirements, a sealed terminal lug or connector must be used with the 5800-Pb series kits.

Each kit contains sufficient quantities of material to make one termination. These kits can be specified with or without sealed copper lugs (see selection table).

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Paper Insulated Lead Covered (PILC)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	4
<b>Voltage</b>	15 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 15 kV	Conductor Size Stranded	Conductor Size Solid	Lug/Stem Connector Included in Kit
5801-Pb	054007-50448	110 kV	17.25" (438 mm)	0.59"-0.90" (14,9-22,9 mm)	4-2/0 AWG (22-60 mm <sup>2</sup> )	-	-	-
5801-Pb-2	054007-50451	110 kV	17.25" (438 mm)	0.59"-0.90" (14,9-22,9 mm)	-	2 AWG	1 AWG	OS-0001 (1-Hole)
5801-Pb-1/0	054007-50449	110 kV	17.25" (438 mm)	0.59"-0.90" (14,9-22,9 mm)	-	1/0 AWG	2/0 AWG	OS-0010 (1-Hole)
5801-Pb-2/0	054007-50450	110 kV	17.25" (438 mm)	0.59"-0.90" (14,9-22,9 mm)	-	2/0 AWG	3/0 AWG	OS-0020 (1-Hole)
5802-Pb	054007-50452	110 kV	17.25" (438 mm)	0.71"-1.01" (18,0-25,6 mm)	2/0 AWG-250 kcmil (70-120 mm <sup>2</sup> )	-	-	-
5802-Pb-4/0	054007-50454	110 kV	17.25" (438 mm)	0.71"-1.01" (18,0-25,6 mm)	-	4/0 AWG	250 kcmil	OS-0040 (1-Hole)
5802-Pb-250	054007-50455	110 kV	17.25" (438 mm)	0.71"-1.01" (18,0-25,6 mm)	-	250 kcmil	-	OS-0250 (2-Hole)
5803-Pb	054007-50456	110 kV	18.25" (464 mm)	0.94"-1.36" (23,9-34,5 mm)	350-600 kcmil (185-300 mm <sup>2</sup> )	-	-	-
5803-Pb-350	054007-50457	110 kV	18.25" (464 mm)	0.94"-1.36" (23,9-34,5 mm)	-	350 kcmil	-	OS-0350 (2-Hole)
5803-Pb-500	054007-50458	110 kV	18.25" (464 mm)	0.94"-1.36" (23,9-34,5 mm)	-	500 kcmil	-	OS-0500 (2-Hole)
5804-Pb	054007-50459	110 kV	18.50" (464 mm)	1.20"-1.90" (30,5-48,2 mm)	750-1250 kcmil (400-625 mm <sup>2</sup> )	-	-	-

PILC Cable, 15-25/28 kV: 3M™ Cold Shrink QT-II Terminations: Outdoor Skirted Kits (can be used for indoor applications also)

## 3M™ PILC Termination Kits 5800-Pb Series - 6 Skirt for 15-25/28 kV

The 3M™ PILC Silicone Rubber Termination Kits 5800-Pb Series are designed for oil/paper insulated power cable. They meet the requirements of IEEE Standard 48, for Class 1 terminations and applicable sections of IEEE 404. The 3M QT-II termination consists of a high dielectric constant (High-K) stress control tube insulated with a molded silicone skirted insulator. There is a four-skirt design rated 15 kV and a six-skirt design rated 25/28 kV. To ensure a positive oil seal and to conform with pressure test requirements, a sealed terminal lug or connector must be used with the 5800-Pb series kits.

Each kit contains sufficient quantities of material to make one termination. These kits can be specified with or without sealed copper lugs (see selection table).

Note: Because of the various factors which affect cable primary insulation O.D. and cable jacket O.D. (e.g. types of conductor, insulation thickness), the cable sizes in the charts are guidelines. Confirm that cable insulation O.D. fits range specified for the termination. For three conductor applications, consult your 3M sales representative.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Paper Insulated Lead Covered (PILC)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	6
<b>Voltage</b>	15 kV, 25/28 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 15 kV	Conductor Size 25/28 kV	Conductor Size 25/28 kV Stranded	Conductor Size 25/28 kV Solid	Lug/Stem Connector Included in Kit
5806-Pb	054007-50460	150 kV	20.25" (514 mm)	0.71"-1.01" (18,0-25,6 mm)	2/0 AWG-250 kcmil (70-120 mm <sup>2</sup> )	2-1/0 AWG (35-50 mm <sup>2</sup> )	-	-	-
5806-Pb-2	054007-50462	150 kV	20.25" (514 mm)	0.71"-1.01" (18,0-25,6 mm)	-	-	2 AWG	1 AWG	OS-0001 (1-Hole)
5806-Pb-1/0	054007-50461	150 kV	20.25" (514 mm)	0.71"-1.01" (18,0-25,6 mm)	-	-	1/0 AWG	-	OS-0010 (1-Hole)
5807-Pb	054007-50463	150 kV	21.75" (553 mm)	0.94"-1.36" (23,9-34,5 mm)	350-600 kcmil (185-300 mm <sup>2</sup> )	2/0 AWG-250 kcmil (70-120 mm <sup>2</sup> )	-	-	-
5807-Pb-2/0	054007-50464	150 kV	21.75" (553 mm)	0.94"-1.36" (23,9-34,5 mm)	-	-	2/0 AWG	3/0 AWG	OS-0020 (1-Hole)
5807-Pb-3/0	054007-50465	150 kV	21.75" (553 mm)	0.94"-1.36" (23,9-34,5 mm)	-	-	3/0 AWG	4/0 AWG	OS-0030 (1-Hole)
5807-Pb-250	054007-50467	150 kV	21.75" (553 mm)	0.94"-1.36" (23,9-34,5 mm)	-	-	250 kcmil	-	OS-0250 (2-Hole)
5808-Pb	054007-50468	150 kV	21.75" (553 mm)	1.20"-1.90" (30,5-48,2 mm)	750-1250 kcmil (400-625 mm <sup>2</sup> )	350-1000 kcmil (185-500 mm <sup>2</sup> )	-	-	-
5808-Pb-350	054007-50469	150 kV	21.75" (553 mm)	1.20"-1.90" (30,5-48,2 mm)	-	-	350 kcmil	-	OS-0350 (2-Hole)
5808-Pb-500	054007-50470	150 kV	21.75" (553 mm)	1.20"-1.90" (30,5-48,2 mm)	-	-	500 kcmil	-	OS-0500 (2-Hole)
5808-Pb-750	054007-41909	150 kV	21.75" (553 mm)	1.20"-1.90" (30,5-48,2 mm)	750 kcmil	-	750 kcmil	-	OS-0750 (2-Hole)

# 3M™ Medium Voltage Terminations for Single Core Tape Shield, Wire Shield and UniShield® Cable, 5 kV – 46 kV

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## 3M™ Cold Shrink QT-III Termination Kit 7620-T & 7690-T Series for 5-35 kV

3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7620-T and 7690-T Series contain one-piece, non-skirted, silicone rubber terminations, qualified as IEEE Standard 48 Class 1 for indoor and weather-protected applications. The termination assemblies consist of a tubular insulator, high dielectric constant (Hi-K) stress control tube (7620-T designed and assembled with stress controlling compound only), conformable Hi-K stress controlling compound, and built-in environmental top seal. The insulator is made of a dark gray silicone rubber with advanced tracking resistant and hydrophobic properties. The complete assembly is prestretched and loaded onto a removable core which can be recycled. The kits are designed for terminating solid dielectric shielded power cable rated 5–35 kV, with tape shield, wire shield and UniShield® constructions.

Each kit contains sufficient quantities of material to make three single-phase terminations. Lugs need to be ordered separately.

**\*150 kV impulse level meets the impulse requirements for 35 kV class equipment where indoor terminations are used.**

Number of Conductors	Single Conductor
Shielding Type	Tape Shield, Wire Shield, UniShield®
Indoor/Outdoor	Indoor
Breakout Boot	No
Insulation Rejacketing	No
No. Skirts	0
Voltage	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
Packaging	1 kit per case (three single-phase terminations per kit)



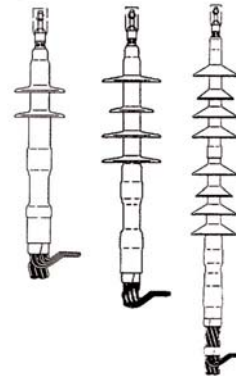
Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 5 kV	Conductor Size 8 kV	Conductor Size 15 kV	Conductor Size 25/28 kV	Conductor Size 35 kV*
7620-T-95	054007-41758	95 kV	8.5" (216 mm)	0.32"-0.59" (8,1-15,0 mm)	8-4 AWG	8-6 AWG	-	-	-
7621-T-95	054007-41759	95 kV	8.5" (216 mm)	0.44"-0.89" (11,2-22,6 mm)	2-3/0 AWG	4-2/0 AWG	-	-	-
7622-T-95	051128-57483	95 kV	8.5" (216 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	-	-	-
7624-T-95	051128-57484	95 kV	8.5" (216 mm)	0.83"-1.53" (21,1-38,9 mm)	500-750 kcmil	350-700 kcmil	-	-	-
7625-T-95	051128-57485	95 kV	8.5" (216 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	-	-	-
7622-T-110	054007-41760	110 kV	12.0" (305 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-2/0 AWG (35-70 mm²)	-	-
7623-T-110	054007-41795	110 kV	12.0" (305 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm²)	-	-
7624-T-110	054007-41761	110 kV	12.0" (305 mm)	0.83"-1.53" (21,1-38,9 mm)	500-750 kcmil	350-700 kcmil	4/0 AWG-500 kcmil (120-240 mm²)	-	-
7625-T-110	054007-41762	110 kV	12.0" (305 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm²)	-	-
7626-T-110	054007-41763	110 kV	12.0" (305 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm²)	-	-
7693-T-150	054007-41778	150 kV	16.0" (406 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm²)	2-4/0 AWG (35-120 mm²)	2-2/0 AWG (35-70 mm²)
7695-T-150	054007-41779	150 kV	16.0" (406 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm²)	250-800 kcmil (150-400 mm²)	3/0 AWG-600 kcmil (95-325 mm²)
7696-T-150	054007-41780	150 kV	16.0" (406 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm²)	900-1750 kcmil (500-800 mm²)	700-1500 kcmil (400-725 mm²)

Single Core Tape Shield, Wire Shield & UniShield® Cable, 5-46 kV: 3M™ Cold Shrink QT-III Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-III Termination Kit 7620-S, 7680-S & 7690-S Series for 5-35 kV

3M™ Cold Shrink QT-III Silicone Rubber Termination Kit 7620-S, 7680-S and 7690-S Series contain one-piece, skirted, silicone rubber terminations, qualified as IEEE Standard 48 Class 1 for outdoor weather-exposed applications. The termination assemblies consist of a skirted insulator, high-dielectric constant (Hi-K) stress control tube (7620-S is designed and assembled with stress controlling compound only) conformable Hi-K stress controlling compound and built-in environmental top seal. The insulator is made of a dark gray silicone rubber with excellent tracking resistance and hydrophobic properties. The complete assembly is prestretched and loaded onto a removable core which can be recycled. The kits are designed for terminating solid dielectric shielded power cables rated 5–35 kV, with tape shield, wire shield and UniShield® constructions. Each kit makes 3 terminations. Lugs need to be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit/case (three terminations/kit)



Order No.	UPC	Skirts	BIL	Max. Installed Length	Insulation O.D. Range	Cond. Size 5 kV	Cond. Size 8 kV	Cond. Size 15 kV	Cond. Size 25/28 kV	Cond. Size 35 kV
7620-S-2	054007-42168	2	95 kV	10.50" (267 mm)	0.32"-0.59" (8,1-15,0 mm)	8-4 AWG	8-6 AWG	-	-	-
7621-S-2	054007-42169	2	95 kV	10.50" (267 mm)	0.44"-0.89" (11,2-22,6 mm)	2-3/0 AWG	4-2/0 AWG	-	-	-
7622-S-2	054007-42170	2	110 kV	9.80" (249 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-4/0 AWG (35-120 mm²)	-	-
7692-S-4	054007-42211	4	150 kV	12.25" (311 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-4/0 AWG (35-120 mm²)	2-1/0 AWG (35-50 mm²)	-
7693-S-4	054007-42212	4	150 kV	12.25" (311 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm²)	2-4/0 AWG (35-120 mm²)	-
7694-S-4	054007-42213	4	150 kV	12.25" (311 mm)	0.83"-1.53" (21,1-38,9 mm)	500-750 kcmil	350-700 kcmil	4/0 AWG-500 kcmil (120-240 mm²)	2/0 AWG-250 kcmil (70-150 mm²)	-
7695-S-4	054007-42214	4	150 kV	12.25" (311 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm²)	250-800 kcmil (150-400 mm²)	-
7696-S-4	054007-42215	4	150 kV	13.25" (336 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm²)	900-1750 kcmil (500-800 mm²)	-
7683-S-8	054007-42465	8	200 kV	20.50" (521 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm²)	2-4/0 AWG (35-120 mm²)	2-2/0 AWG (35-70 mm²)
7684-S-8	054007-42466	8	200 kV	20.50" (521 mm)	0.83"-1.53" (21,1-38,9 mm)	500-750 kcmil	350-700 kcmil	4/0 AWG-500 kcmil (120-240 mm²)	2/0 AWG-250 kcmil (70-150 mm²)	2-4/0 AWG (35-120 mm²)
7685-S-8	054007-42467	8	200 kV	20.50" (521 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm²)	250-800 kcmil (125-400 mm²)	3/0 AWG-600 kcmil (95-325 mm²)

## 3M™ Cold Shrink QT-III Termination Kit 7620-S, 7680-S & 7690-S Series for 5-35 kV (continued)

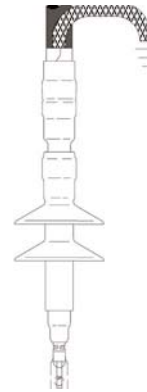
Order No.	UPC	Skirts	BIL	Max. Installed Length	Insulation O.D. Range	Cond. Size 5 kV	Cond. Size 8 kV	Cond. Size 15 kV	Cond. Size 25/28 kV	Cond. Size 35 kV
7686-S-8	054007-42468	8	200 kV	21.50" (546 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm²)	900-1750 kcmil (500-800 mm²)	700-1500 kcmil (400-725 mm²)

## 3M™ Cold Shrink QT-III Inverted Termination Kit 7620-S & 7690-S Series for 5-35 kV

For applications where the cable will be mounted pointing down, the 3M™ Cold Shrink QT-III Inverted Terminations offer easy installation and reliable performance when terminating indoor and outdoor medium voltage cable. The unique step-core design combined with the built-in Hi-K stress control and environmental sealing compounds means simpler installation on most types of cable. It has UV stability, track and erosion resistance. Plus its Hi-K stress control design delivers excellent BIL performance and lower surface stress resulting in a more compact termination. Through excellent engineering, 3M Cold Shrink QT-III terminations deliver maximum performance. The kits are designed for terminating solid dielectric shielded power cables rated 5–35 kV with tape shield, wire shield, and UniShield® constructions.

Each kit makes three terminations. Lugs need to be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (three terminations per kit)



Order No.	UPC	Skirts	BIL	Max. Installed Length	Insulation O.D. Range	Cond. Size 5 kV	Cond. Size 8 kV	Cond. Size 15 kV	Cond. Size 25/28 kV	Cond. Size 35 kV
7622-S-INV-2	054007-43016	2	110 kV	12.0" (305 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-4/0 AWG (35-120 mm²)	-	-
7693-S-INV-4	054007-43017	4	200 kV	16.0" (406 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm²)	2-4/0 AWG (35-120 mm²)	2-2/0 AWG (35-70 mm²)
7695-S-INV-4	054007-43018	4	200 kV	16.0" (406 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	350-1000 kcmil (185-500 mm²)	250-800 kcmil (150-400 mm²)	3/0 AWG-600 kcmil (95-325 mm²)
7696-S-INV-4	054007-43019	4	200 kV	16.0" (406 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm²)	900-1750 kcmil (500-800 mm²)	700-1500 kcmil (400-725 mm²)

## 3M™ Cold Shrink QT-II Termination Kit 5620K Series for 5-15 kV

3M™ Cold Shrink QT-II Silicone Rubber Termination Kits 5620K Series contain one-piece, nonskirted, silicone rubber terminations, qualified as IEEE Standard 48 Class I for weather-protected applications. Termination assemblies consist of a high dielectric constant (Hi-K) stress control tube insulated with a nontracking silicone rubber insulator, prestretched and loaded together onto a removable core. The kits are designed for terminating solid dielectric shielded power cable rated 5–15 kV, with tape shield, wire shield and UniShield® constructions.

Each kit contains sufficient material to make 3 single-phase terminations. Lugs must be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®
<b>Indoor/Outdoor</b>	Indoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	0
<b>Voltage</b>	5 kV, 8 kV, 15 kV
<b>Packaging</b>	1 kit per case (three single-phase terminations per kit)



Order No.	UPC	BIL	Max. Installed Length	Insul. O.D. Range	Cond. Size 5 kV 100%	Cond. Size 5 kV 133% / 8 kV 100%	Cond. Size 8 kV 133%	Cond. Size 15 kV 100%	Cond. Size 15 kV 133%
5621K	054007-12250	95 kV	9.5" (241 mm)	0.32"-0.46" (8,1-11,7 mm)	8-4 AWG (10-16 mm <sup>2</sup> )	8-6 AWG (10-14 mm <sup>2</sup> )	8 AWG (10 mm <sup>2</sup> )	-	-
5622K	054007-12251	95 kV	9.5" (241 mm)	0.44"-0.65" (11,2-16,5 mm)	2-2/0 AWG (35-60 mm <sup>2</sup> )	4-1/0 AWG (22-50 mm <sup>2</sup> )	6-1 AWG (14-38 mm <sup>2</sup> )	-	-
5623K	054007-12252	110 kV	11.0" (279 mm)	0.56"-0.87" (14,2-22,1 mm)	2/0 AWG-250 kcmil (70-120 mm <sup>2</sup> )	1/0-4/0 AWG (60-100 mm <sup>2</sup> )	1-3/0 AWG (50-80 mm <sup>2</sup> )	4-2/0 AWG (22-60 mm <sup>2</sup> )	4-1 AWG (22-38 mm <sup>2</sup> )
5624K	054007-12254	110 kV	11.0" (279 mm)	0.78"-1.30" (19,8-33,0 mm)	300-750 kcmil (185-325 mm <sup>2</sup> )	250-750 kcmil (150-325 mm <sup>2</sup> )	4/0 AWG-600 kcmil (120-300 mm <sup>2</sup> )	2/0 AWG-500 kcmil (70-250 mm <sup>2</sup> )	1 AWG-350 kcmil (50-150 mm <sup>2</sup> )
5625K	054007-12255	110 kV	11.0" (279 mm)	1.09"-1.80" (27,7-45,7 mm)	600-1500 kcmil (325-725 mm <sup>2</sup> )	600-1500 kcmil (325-725 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )	500-1250 kcmil (300-625 mm <sup>2</sup> )	350-1000 kcmil (185-500 mm <sup>2</sup> )

## 3M™ Cold Shrink QT-II Termination Kit 6020K Series for 15-25/28 kV

3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 6020K Series provide easy installation for a broad spectrum of indoor and outdoor applications. The Cold Shrink QT-II termination is based on specially formulated, track-resistant silicone rubber insulators with built-in Hi-K stress relief. The insulators are prestretched around a spiral -wound, plastic core. When the terminator is slipped over a properly prepared cable and the core is removed, the terminator immediately shrinks to the cable's dimensions. The result is a void-free, flexible seal without special tools or torches. The kits are designed for terminating solid dielectric shielded power cable rated 15–25/28 kV, with tape shield, wire shield and UniShield® constructions.

Each kit has sufficient material to make 3 terminations. Lugs must be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®
<b>Indoor/Outdoor</b>	Indoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	0
<b>Voltage</b>	15 kV, 25/28 kV
<b>Packaging</b>	1 kit per case (three terminations per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Cable Jacket O.D.	Cond. Size 15 kV 100%	Cond. Size 15 kV 133%	Cond. Size 25/28 kV
6022K	054007-49934	125 kV	21.8" (554 mm)	0.64"-0.90" (16,3-22,9 mm)	0.80"-1.20" (20,3-30,5 mm)	2-3/0 AWG (35-80 mm²)	4-2/0 AWG (22-60 mm²)	2-1 AWG (35-38 mm²)
6023K	054007-49935	125 kV	21.8" (554 mm)	0.84"-1.33" (21,3-33,8 mm)	1.00"-1.60" (25,4-40,6 mm)	3/0 AWG-500 kcmil (95-250 mm²)	2/0 AWG-350 kcmil (70-150 mm²)	1 AWG-250 kcmil (38-125 mm²)
6024K	054007-49936	125 kV	21.8" (554 mm)	1.10"-1.65" (27,9-41,9 mm)	1.30"-1.90" (33,0-48,3 mm)	500-750 kcmil (300-325 mm²)	350-700 kcmil (180-325 mm²)	250-600 kcmil (125-300 mm²)
6025K	054007-49937	125 kV	22.25" (565 mm)	1.30"-1.95" (33,0-49,5 mm)	1.50"-2.40" (38,1-61,0 mm)	750-1750 kcmil (400-850 mm²)	700-1500 kcmil (400-750 mm²)	600-1250 kcmil (325-625 mm²)

Single Core Tape Shield, Wire Shield & UniShield® Cable, 5-46 kV: 3M™ Cold Shrink QT-II Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-II Termination Kit 5630K Series - 4 Skirt for 5-15 kV

The 3M™ Cold Shrink QT-II Outdoor Termination Kits 5630K Series are one-piece cold shrink terminations for tape shield, wire shield, and Unishield® power cables. They meet the requirements of IEEE Standard 48, for Class 1 terminations. The 3M QT-II termination consists of a high dielectric-constant (High-K) stress control tube insulated with a molded silicone skirted insulator. Each insulator design incorporates an extended base feature which when combined with mastic ensures a seal at the cable jacket end where the termination ground strap is brought out.

Each kit contains sufficient material to make 3 terminations. Lugs must be ordered separately.

Number of Conductors	Single Conductor
Shielding Type	Tape Shield, Wire Shield, UniShield®
Indoor/Outdoor	Outdoor
Breakout Boot	No
Insulation Rejacketing	No
No. Skirts	4
Voltage	5 kV, 8 kV, 15 kV
Packaging	1 kit per case (three terminations per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Cond. Size 5 kV 100%	Cond. Size 5 kV 133% / 8 kV 100%	Cond. Size 8 kV 133%	Cond. Size 15 kV 100%	Cond. Size 15 kV 133%
5632K	054007-49681	110 kV	13.25" (337 mm)	0.33"-0.69" (8,4-17,5 mm)	8-2/0 AWG (10-60 mm <sup>2</sup> )	8-1/0 AWG (10-50 mm <sup>2</sup> )	8-1 AWG (10-38 mm <sup>2</sup> )	8-4 AWG (10-16 mm <sup>2</sup> )	8-6 AWG (10-14 mm <sup>2</sup> )
5633K	054007-12256	110 kV	12.0" (305 mm)	0.64"-0.90" (16,3-22,9 mm)	3/0 AWG-300 kcmil (95-150 mm <sup>2</sup> )	2/0 AWG-250 kcmil (70-120 mm <sup>2</sup> )	1/0-4/0 AWG (60-100 mm <sup>2</sup> )	2-3/0 AWG (35-80 mm <sup>2</sup> )	4-1/0 AWG (22-50 mm <sup>2</sup> )
5635K	054007-12257	110 kV	12.0" (305 mm)	0.84"-1.33" (21,3-33,8 mm)	350-750 kcmil (185-325 mm <sup>2</sup> )	300-750 kcmil (185-325 mm <sup>2</sup> )	250-600 kcmil (150-300 mm <sup>2</sup> )	3/0 AWG-500 kcmil (95-250 mm <sup>2</sup> )	2/0 AWG-350 kcmil (70-150 mm <sup>2</sup> )
5636K	054007-12258	110 kV	13.5" (343 mm)	1.10"-1.65" (27,9-41,9 mm)	750-1500 kcmil (400-725 mm <sup>2</sup> )	750-1250 kcmil (400-625 mm <sup>2</sup> )	600-1000 kcmil (325-500 mm <sup>2</sup> )	500-1000 kcmil (300-500 mm <sup>2</sup> )	350-750 kcmil (185-325 mm <sup>2</sup> )
5637K	054007-12259	110 kV	13.75" (349 mm)	1.30"-1.95" (33,0-49,5 mm)	1000-2000 kcmil (600-1000 mm <sup>2</sup> )	1000-2000 kcmil (600-1000 mm <sup>2</sup> )	800-1750 kcmil (500-850 mm <sup>2</sup> )	750-1750 kcmil (400-850 mm <sup>2</sup> )	600-1500 kcmil (325-725 mm <sup>2</sup> )

Single Core Tape Shield, Wire Shield & UniShield® Cable, 5-46 kV: 3M™ Cold Shrink QT-II Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-II Termination Kit 5690K Series - 6 Skirt for 15-25/28 kV

3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 5690K Series are one-piece cold shrink terminations for tape shield, wire shield and UniShield® power cables. They meet the requirements of IEEE Standard 48, for Class 1 terminations. The 3M QT-II termination consists of a high dielectric constant (High-K) stress control tube insulated with a molded silicone skirted insulator.

Each kit contains sufficient material to make three terminations. Lugs must be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	6
<b>Voltage</b>	15 kV, 25/28 kV
<b>Packaging</b>	1 kit per case (three terminations per kit)



Order No.	UPC	BIL	Max. Installed Length A: Tape & Wire Shield B: UniShield®	Insulation O.D. Range	Cable Jacket O.D.	Conductor Size 15 kV 100%	Conductor Size 15 kV 133%	Conductor Size 25/28 kV
5691K	054007-49395	150 kV	15.0" (381 mm) 14.5" (368 mm)	0.64"-0.90" (16,3-22,9 mm)	0.80"-1.20" (20,3-30,5 mm)	2-3/0 AWG (35-80 mm <sup>2</sup> )	2-1/0 AWG (35-50 mm <sup>2</sup> )	2-1 AWG (35-38 mm <sup>2</sup> )
5692K	054007-49396	150 kV	15.0" (381 mm) 14.5" (368 mm)	0.84"-1.33" (21,3-33,8 mm)	1.00"-1.60" (25,4-40,6 mm)	3/0 AWG-400 kcmil (95-200 mm <sup>2</sup> )	2/0 AWG-350 kcmil (70-150 mm <sup>2</sup> )	1/0 AWG-250 kcmil (60-120 mm <sup>2</sup> )
5693K	054007-49397	150 kV	16.5" (419 mm) 16.0" (406 mm)	1.10"-1.65" (27,9-41,9 mm)	1.30"-1.90" (33,0-48,3 mm)	500-750 kcmil (300-325 mm <sup>2</sup> )	400-750 kcmil (240-325 mm <sup>2</sup> )	300-500 kcmil (185-250 mm <sup>2</sup> )
5694K	054007-49398	150 kV	16.75" (425 mm) 16.25" (413 mm)	1.30"-1.95" (33,0-49,5 mm)	1.50"-2.40" (38,1-61,0 mm)	800-1750 kcmil (500-850 mm <sup>2</sup> )	800-1500 kcmil (500-725 mm <sup>2</sup> )	600-1250 kcmil (325-625 mm <sup>2</sup> )



Single Core Tape Shield, Wire Shield & UniShield® Cable, 5-46 kV: 3M™ Cold Shrink QT-II Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-II Termination Kit 5690K Series - 8 Skirt for 15-35 kV

3M™ Cold Shrink QT-II Silicone Rubber Termination Kits 5690K are one-piece cold shrink terminations for tape shield, wire shield and UniShield® power cables. They meet the requirements of IEEE Standard 48, for Class 1 terminations. The 3M QT-II termination consists of a high dielectric constant (High-K) stress control tube insulated with a molded silicone skirted insulator.

Each kit contains sufficient material to make three terminations. Lugs must be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	8
<b>Voltage</b>	15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (three terminations per kit)



Order No.	UPC	BIL	Max. Installed Length A: Tape & Wire Shield B: UniShield®	Insulation O.D. Range	Cable Jacket O.D.	Conductor Size 15 kV 100%	Conductor Size 15 kV 133%	Conductor Size 25/28 kV	Conductor Size 35 kV
5696K	054007-49399	200 kV	19.5" (495 mm) 19.0" (483 mm)	0.84"-1.33" (21,3-33,8 mm)	1.00"-1.60" (25,4-40,6 mm)	3/0 AWG-400 kcmil (95-200 mm²)	2/0 AWG-350 kcmil (70-150 mm²)	1/0 AWG-250 kcmil (60-120 mm²)	2-3/0 AWG (35-80 mm²)
5697K	054007-49400	200 kV	21.5" (546 mm) 21.0" (533 mm)	1.10"-1.65" (27,9-41,9 mm)	1.30"-1.90" (33,0-48,2 mm)	500-750 kcmil (300-325 mm²)	400-750 kcmil (240-325 mm²)	300-500 kcmil (185-250 mm²)	4/0 AWG-400 kcmil (120-200 mm²)
5698K	054007-49401	200 kV	21.75" (552 mm) 21.25" (540 mm)	1.30"-1.95" (33,0-49,5 mm)	1.50"-2.40" (38,1-61,0 mm)	800-1750 kcmil (500-850 mm²)	800-1500 kcmil (500-725 mm²)	600-1250 kcmil (325-625 mm²)	500-1000 kcmil (300-500 mm²)

Single Core Tape Shield, Wire Shield & UniShield® Cable, 5-46 kV: 3M™ Cold Shrink QT-II Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-II Termination Kit QT-II 4604 & 4605 Series for 46 kV

3M™ Cold Shrink QT-II Silicone Rubber Termination Kit 4604 and 4605 are three-piece cold shrink terminations for tape shield, wire shield and longitudinally corrugated (LC) power cables. They meet the requirements of IEEE Standard 48, for Class 1 terminations. The 3M QT-II termination consists of a high dielectric constant (High-K) stress control tube insulated with a molded silicone skirted insulator. The 4600-series termination is a twelve-skirt design incorporating a one-piece base termination assembly, a four-skirt extension insulator, and a silicone rubber jacket-sealing cold shrink tube assembly.

Each kit contains sufficient material to make one termination. Lugs must be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, Longitudinally Corrugated (LC)
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	12
<b>Voltage</b>	46 kV
<b>Packaging</b>	1 kit per case (one termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Creepage Distance	Arcing Distance	Insulation O.D. Range	Conductor Size
4604	054007-50192	250 kV	28.0" (711 mm)	46.0" (1,17 m)	30.0" (762 mm)	1.31"-2.10" (33,2-53,4 mm)	4/0 AWG-600 kcmil (120-300 mm <sup>2</sup> )
4605	054007-50193	250 kV	28.0" (711 mm)	46.0" (1,17 m)	30.0" (762 mm)	1.80"-2.60" (45,7-66,1 mm)	600-1500 kcmil (325-725 mm <sup>2</sup> )

# 3M™ Medium Voltage Terminations for Three Core Tape Shield, Wire Shield and UniShield® Cable, 5 kV – 35 kV

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## 3M Cold Shrink Three Conductor Breakout Kit 3C-BOK Series

The 3M™ Cold Shrink Three Conductor Breakout Kit includes everything you need to use 3M™ Single Conductor Accessories on three conductor cables; ultimately, this offers you much greater flexibility for 3/C medium voltage applications – especially in tight spaces. Based on field-proven cold shrink technology pioneered by 3M and 40+ years of experience, the Breakout Kit is easy and quick to install, even in confined spaces – with no special tools, torch/flame or hot permits required. These kits, when used with our 1/C Terminations, allow for a much shorter overall install length than is possible with our “3G” series kits (3M™ Cold Shrink QT-III Termination Kit 3G Series)– and with fewer parts.

There are many other possible configurations for these Breakout Kits (e.g. with more or less re-jacketing, etc.), and 3M can custom package these kits to fit your needs.

### Kit Contents

Use one Breakout Kit (BOK) per three-conductor cable. Each Breakout Kit contains the following appropriately sized components and accessories.

- 1 Cold Shrink Silicone Rubber Breakout Boot (includes 2 Strips Scotch® Mastic Strip 2230)
- 3 Silicone Rubber Phase Rejacketing Sleeve (RJS) Assemblies (4 ft. length each)
- 1 Constant Force Spring (Large) - for armored cable only
- 1 Long Tail Tinned Copper Ground Braid with Solder Block - for armored cable only
- 3 Strips Scotch® Mastic Strip 2230 (black with white release liner, bagged)
- 1 Roll Scotch® Super 33+™ Vinyl Electrical Tape, 3/4 IN.
- 1 Roll Scotch® Electrical Shielding Tape 24 - for armored cable only

<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Tape Shield (Armored or Unarmored), Wire Shield*, UniShield®*
<b>Indoor/Outdoor</b>	Indoor and Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	Yes, it is included in the kit
<b>No. Skirts</b>	0
<b>Voltage</b>	3.3 kV, 5 kV, 6.6 kV, 8 kV, 10 kV, 15 kV, 20 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case



	3C-BOK-1	3C-BOK-2	3C-BOK-3
UPC	051128-60684	051128-60685	051128-60686
Cable Insulation O.D. Range	0.33"–0.50" (8,4–12,7 mm)	0.50"–0.70" (12,7–17,8 mm)	0.70"–0.92" (17,8–23,4 mm)
Cable O.D. Max.	1.94" (49,3 mm)	2.67" (67,8 mm)	3.10" (78,7 mm)
Conductor Size 5 kV 100%	8–2 AWG	1–3/0 AWG	4/0 AWG–350 kcmil
Conductor Size 5 kV 133%	6–4 AWG	2–2/0 AWG	3/0 AWG–350 kcmil
Conductor Size 8 kV 100%	6–4 AWG	2–2/0 AWG	3/0 AWG–350 kcmil
Conductor Size 8 kV 133%	6–4 AWG	2–2/0 AWG	3/0 AWG–350 kcmil
Conductor Size 15 kV 100%	–	2–1 AWG	1/0–4/0 AWG
Conductor Size 15 kV 133%	–	–	2–3/0 AWG
Conductor Size 25/28 kV 100%	–	–	1–1/0 AWG
Conductor Size 25/28 kV 133%	–	–	–
Conductor Size 35 kV 100%	–	–	–
Conductor Size 35 kV 133%	–	–	–

### 3M Cold Shrink Three Conductor Breakout Kit 3C-BOK Series (continued)

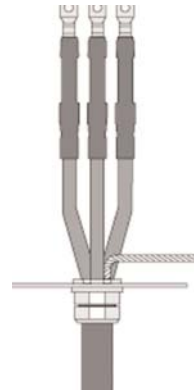
	3C-BOK-4	3C-BOK-5	3C-BOK-6
UPC	051128-60687	051128-60688	051128-60689
Cable Insulation O.D. Range	0.92"–1.18" (23,4–30,0 mm)	1.18"–1.52" (30,0–38,6 mm)	1.53"–1.81" (38,8–46,0 mm)
Cable O.D. Max.	4.32" (109,7 mm)	4.70" (119,4 mm)	5.52" (140,2 mm)
Conductor Size 5 kV 100%	400–500 kcmil	700–1000 kcmil	–
Conductor Size 5 kV 133%	400–500 kcmil	700–1000 kcmil	–
Conductor Size 8 kV 100%	400–500 kcmil	700–1000 kcmil	–
Conductor Size 8 kV 133%	400–500 kcmil	700–1000 kcmil	–
Conductor Size 15 kV 100%	250–350 kcmil	500–750 kcmil	1000 kcmil
Conductor Size 15 kV 133%	4/0 AWG–350 kcmil	500–750 kcmil	1000 kcmil
Conductor Size 25/28 kV 100%	2/0 AWG–250 kcmil	350–500 kcmil	750 kcmil
Conductor Size 25/28 kV 133%	1–4/0 AWG	250–500 kcmil	500–750 kcmil
Conductor Size 35 kV 100%	–	4/0 AWG–500 kcmil	500–750 kcmil
Conductor Size 35 kV 133%	–	1/0 AWG–350 kcmil	350–750 kcmil

## 3M™ Cold Shrink QT-III Termination Kit 7600-T-3-RJS Series for 5-35 kV

3M™ Cold Shrink QT-III Termination Kit 7600-T-3-RJS Series are designed for cabinet-mount installations and can be used on cables with, or without, internal ground wires. Each termination kit has all of the materials required to make one 3-conductor termination. Lugs must be ordered separately.

\*For Wire or UniShield® shielding, please contact 3M for technical assistance.

<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Tape Shield (Armored or Unarmored), Wire Shield*, UniShield®*
<b>Indoor/Outdoor</b>	Indoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	Yes
<b>No. Skirts</b>	0
<b>Voltage</b>	3.3 kV, 5 kV, 6.6 kV, 8 kV, 10 kV, 15 kV, 20 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one three-phase termination per kit)



	7620-T-95-3-RJS	7621-T-95-3-RJS	7623-T-95-3-RJS	7624-T-95-3-RJS
UPC	054007-04810	054007-04586	054007-04707	054007-04708
BIL	95 kV	95 kV	95 kV	95 kV
Max. Installed Length	8.5" (216 mm)	8.5" (216 mm)	8.5" (216 mm)	8.5" (216 mm)
Insulation O.D. Range	0.33"-0.50" (8,4-12,7 mm)	0.50"-0.70" (12,7-17,8 mm)	0.70"-0.92" (17,8-23,4 mm)	0.92"-1.18" (23,4-30,0 mm)
Conductor Size 3.3 kV 100% - IEC (JIS)	16-35 mm <sup>2</sup> (8-22 mm <sup>2</sup> )	50-95 mm <sup>2</sup> (38-60 mm <sup>2</sup> )	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )
Conductor Size 5.0 kV 100% - AEIC	8-2 AWG	1-3/0 AWG	4/0 AWG-400 kcmil	500-750 kcmil
Conductor Size 6.6 kV 100% - IEC (JIS)	16-25 mm <sup>2</sup> ( - )	35-70 mm <sup>2</sup> ( - )	95-150 mm <sup>2</sup> ( - )	185-300 mm <sup>2</sup> ( - )
Conductor Size 8 kV 100% - AEIC	6-4 AWG	2-2/0 AWG	3/0 AWG-350 kcmil	400-600 kcmil
Conductor Size 10 kV 100% - IEC	-	10-50 mm <sup>2</sup>	70-150 mm <sup>2</sup>	185-300 mm <sup>2</sup>
Conductor Size 15 kV 100% - IEC (AEIC)	- ( - )	16-25 mm <sup>2</sup> ( - )	35-95 mm <sup>2</sup> ( - )	120-185 mm <sup>2</sup> ( - )
Conductor Size 20 kV 100% - IEC	-	-	-	-
Conductor Size 25/28 kV 100% - AEIC	-	-	-	-
Conductor Size 35 kV 100% - AEIC	-	-	-	-
	7625-T-95-3-RJS	7621-T-110-3-RJS	7622-T-110-3-RJS	7624-T-110-3-RJS
UPC	051138-98395	054007-04710	054007-04711	054007-04712
BIL	95 kV	110 kV	110 kV	110 kV
Max. Installed Length	8.5" (216 mm)	12.0" (305 mm)	12.0" (305 mm)	12.0" (305 mm)
Insulation O.D. Range	1.18"-1.52" (30,0-38,6 mm)	0.50"-0.70" (12,7-17,8 mm)	0.70"-0.92" (17,8-23,4 mm)	0.92"-1.18" (23,4-30,0 mm)
Conductor Size 3.3 kV 100% - IEC (JIS)	-	50-95 mm <sup>2</sup> (38-60 mm <sup>2</sup> )	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )
Conductor Size 5.0 kV 100% - AEIC	700-1000 kcmil	1-3/0 AWG	4/0 AWG-400 kcmil	500-750 kcmil
Conductor Size 6.6 kV 100% - IEC (JIS)	-	35-70 mm <sup>2</sup> (14-38 mm <sup>2</sup> )	95-150 mm <sup>2</sup> (60-100 mm <sup>2</sup> )	185-300 mm <sup>2</sup> (150-250 mm <sup>2</sup> )
Conductor Size 8 kV 100% - AEIC	700-1000 kcmil	2-2/0 AWG	3/0 AWG-350 kcmil	400-600 kcmil
Conductor Size 10 kV 100% - IEC	-	10-50 mm <sup>2</sup>	70-150 mm <sup>2</sup>	185-300 mm <sup>2</sup>
Conductor Size 15 kV 100% - IEC (AEIC)	-	16-25 mm <sup>2</sup> (2-1 AWG)	35-95 mm <sup>2</sup> (1/0-4/0 AWG)	120-185 mm <sup>2</sup> (250-450 kcmil)
Conductor Size 20 kV 100% - IEC	-	-	-	-
Conductor Size 25/28 kV 100% - AEIC	-	-	-	-
Conductor Size 35 kV 100% - AEIC	-	-	-	-

## 3M™ Cold Shrink QT-III Termination Kit 7600-T-3-RJS Series for 5-35 kV (continued)

	7625-T-110-3-RJS	7622-T-125-3-RJS	7624-T-125-3-RJS	7625-T-125-3-RJS
UPC	054007-04713	054007-04714	054007-04715	054007-04716
BIL	110 kV	125 kV	125 kV	125 kV
Max. Installed Length	12.0" (305 mm)	10.5" (267 mm)	10.5" (267 mm)	10.5" (267 mm)
Insulation O.D. Range	1.18"-1.52" (30,0-38,6 mm)	0.70"-0.92" (17,8-23,4 mm)	0.92"-1.18" (23,4-30,0 mm)	1.18"-1.52" (30,0-38,6 mm)
Conductor Size 3.3 kV 100% - IEC (JIS)	- (300-325 mm <sup>2</sup> )	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )
Conductor Size 5.0 kV 100% - AEIC	800-1000 kcmil	4/0 AWG-400 kcmil	500-750 kcmil	800-1000 kcmil
Conductor Size 6.6 kV 100% - IEC (JIS)	- (300-325 mm <sup>2</sup> )	95-150 mm <sup>2</sup> (60-100 mm <sup>2</sup> )	185-300 mm <sup>2</sup> (150-250 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )
Conductor Size 8 kV 100% - AEIC	750-1000 kcmil	3/0 AWG-350 kcmil	400-600 kcmil	750-1000 kcmil
Conductor Size 10 kV 100% - IEC	-	70-150 mm <sup>2</sup>	185-300 mm <sup>2</sup>	-
Conductor Size 15 kV 100% - IEC (AEIC)	200-325 mm <sup>2</sup> (500-750 kcmil)	35-95 mm <sup>2</sup> (1/0-4/0 AWG)	120-185 mm <sup>2</sup> (250-450 kcmil)	200-325 mm <sup>2</sup> (500-750 kcmil)
Conductor Size 20 kV 100% - IEC	-	25-70 mm <sup>2</sup>	95-185 mm <sup>2</sup>	240-300 mm <sup>2</sup>
Conductor Size 25/28 kV 100% - AEIC	-	-	-	-
Conductor Size 35 kV 100% - AEIC	-	-	-	-
	7693-T-150-3-RJS	7694-T-150-3-RJS	7695-T-150-3-RJS	7696-T-150-3-RJS
UPC	054007-04717	054007-04718	054007-04719	051128-59533
BIL	150 kV	150 kV	150 kV	150 kV
Max. Installed Length	16.0" (406 mm)	16.0" (406 mm)	16.0" (406 mm)	16.0" (406 mm)
Insulation O.D. Range	0.70"-0.92" (17,8-23,4 mm)	0.92"-1.18" (23,4-30,0 mm)	1.18"-1.52" (30,0-38,6 mm)	1.53"-1.81" (38,4-46,0 mm)
Conductor Size 3.3 kV 100% - IEC (JIS)	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )	-
Conductor Size 5.0 kV 100% - AEIC	4/0 AWG-400 kcmil	500-750 kcmil	800-1000 kcmil	-
Conductor Size 6.6 kV 100% - IEC (JIS)	95-150 mm <sup>2</sup> (60-100 mm <sup>2</sup> )	185-300 mm <sup>2</sup> (150-250 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )	-
Conductor Size 8 kV 100% - AEIC	3/0 AWG-350 kcmil	400-600 kcmil	750-1000 kcmil	-
Conductor Size 10 kV 100% - IEC	70-150 mm <sup>2</sup>	185-300 mm <sup>2</sup>	-	-
Conductor Size 15 kV 100% - IEC (AEIC)	35-95 mm <sup>2</sup> (1/0-4/0 AWG)	120-185 mm <sup>2</sup> (250-450 kcmil)	200-325 mm <sup>2</sup> (500-750 kcmil)	-
Conductor Size 20 kV 100% - IEC	25-70 mm <sup>2</sup>	95-185 mm <sup>2</sup>	240-300 mm <sup>2</sup>	-
Conductor Size 25/28 kV 100% - AEIC	2-1/0 AWG	2/0 AWG-250 kcmil	300-500 kcmil	750 kcmil
Conductor Size 35 kV 100% - AEIC	-	1/0-3/0 AWG	4/0 AWG-500 kcmil	500-750 kcmil



## 3M™ Cold Shrink QT-III Termination Kit 7600-T-3G Series for 5-35 kV

3M™ Cold Shrink QT-III Silicone Rubber Three-Conductor Cable Termination Kits 7600-T-3G Series are designed to accommodate medium voltage 3/C shielded power cables rated up to 35 kV. They are designed for cables with internal ground wires for indoor applications. Each termination kit is supplied with all the materials required for terminating one three conductor cable. All main termination components are produced from color-matched dark gray silicone rubber.

Each kit has the necessary materials to make one 3-conductor termination. Lugs need to be ordered separately.

\*For Wire or UniShield® shielding, please contact 3M for technical assistance.

<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Tape Shield (Armored or Unarmored), Wire Shield*, UniShield®*
<b>Indoor/Outdoor</b>	Indoor
<b>Breakout Boot</b>	Yes
<b>Insulation Rejacketing</b>	Yes
<b>No. Skirts</b>	0
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one three-phase termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Insul. O.D. Range	Max. Cable O.D.	Cond. Size 5 kV 100% (133%)	Cond. Size 8 kV 100% (133%)	Cond. Size 15 kV 100% (133%)	Cond. Size 25/28 kV 100% (133%)	Cond. Size 35 kV 100% (133%)
7620-T-95-3G	054007-43664	95 kV	8.5" (216 mm)	0.33"-0.50" (8,4-12,7 mm)	2.20" (55,9 mm)	8-2 AWG (6-4 AWG)	6-4 AWG (6-4 AWG)	-	-	-
7621-T-95-3G	054007-43665	95 kV	8.5" (216 mm)	0.50"-0.70" (12,7-17,8 mm)	2.80" (71,1 mm)	1-3/0 AWG (2-2/0 AWG)	2-2/0 AWG (2-2/0 AWG)	-	-	-
7623-T-95-3G	054007-43666	95 kV	8.5" (216 mm)	0.70"-0.92" (17,8-23,4 mm)	3.30" (83,8 mm)	4/0 AWG-350 kcmil (3/0 AWG-350 kcmil)	3/0 AWG-350 kcmil (3/0 AWG-350 kcmil)	-	-	-
7624-T-95-3G	054007-43667	95 kV	8.5" (216 mm)	0.92"-1.18" (23,4-30,0 mm)	3.90" (99,1 mm)	400-500 kcmil (400-500 kcmil)	400-500 kcmil (400-500 kcmil)	-	-	-
7625-T-95-3G	054007-43668	95 kV	8.5" (216 mm)	1.18"-1.52" (30,0-38,4 mm)	4.50" (114,3 mm)	700-1000 kcmil (700-1000 kcmil)	700-1000 kcmil (700-1000 kcmil)	-	-	-
7621-T-110-3G	054007-43669	110 kV	12.0" (305 mm)	0.50"-0.70" (12,7-17,8 mm)	2.80" (71,1 mm)	1-3/0 AWG (2-2/0 AWG)	2-2/0 AWG (2-2/0 AWG)	2-1 AWG (-)	-	-
7622-T-110-3G	054007-43670	110 kV	12.0" (305 mm)	0.70"-0.92" (17,8-23,4 mm)	3.30" (83,8 mm)	4/0 AWG-350 kcmil (3/0 AWG-350 kcmil)	3/0 AWG-350 kcmil (3/0 AWG-350 kcmil)	1/0-4/0 AWG (2-3/0 AWG)	-	-
7624-T-110-3G	054007-43671	110 kV	12.0" (305 mm)	0.92"-1.18" (23,4-30,0 mm)	3.90" (99,1 mm)	400-500 kcmil (400-500 kcmil)	400-500 kcmil (400-500 kcmil)	250-350 kcmil (4/0 AWG-350 kcmil)	-	-
7625-T-110-3G	054007-43673	110 kV	12.0" (305 mm)	1.18"-1.52" (30,0-38,4 mm)	4.50" (114,3 mm)	700-1000 kcmil (700-1000 kcmil)	700-1000 kcmil (700-1000 kcmil)	500-750 kcmil (500-750 kcmil)	-	-

### 3M™ Cold Shrink QT-III Termination Kit 7600-T-3G Series for 5-35 kV (continued)

Order No.	UPC	BIL	Max. Installed Length	Insul. O.D. Range	Max. Cable O.D.	Cond. Size 5 kV 100% (133%)	Cond. Size 8 kV 100% (133%)	Cond. Size 15 kV 100% (133%)	Cond. Size 25/28 kV 100% (133%)	Cond. Size 35 kV 100% (133%)
7693-T-150-3G	054007-43674	150 kV	16.0" (406 mm)	0.70"-0.92" (17,8-23,4 mm)	3.30" (83,8 mm)	4/0 AWG-350 kcmil (3/0 AWG-350 kcmil)	3/0 AWG-350 kcmil (3/0 AWG-350 kcmil)	1/0-4/0 AWG (2-3/0 AWG)	1-1/0 AWG (-)	-
7694-T-150-3G	054007-43676	150 kV	16.0" (406 mm)	0.92"-1.18" (23,4-30,0 mm)	3.90" (99,1 mm)	400-500 kcmil (400-500 kcmil)	400-500 kcmil (400-500 kcmil)	250-350 kcmil (4/0 AWG-350 kcmil)	2/0 AWG-250 kcmil (1-4/0 AWG)	1/0-3/0 AWG (-)
7695-T-150-3G	054007-43675	150 kV	16.0" (406 mm)	1.18"-1.52" (30,0-38,4 mm)	4.50" (114,3 mm)	700-1000 kcmil (700-1000 kcmil)	700-1000 kcmil (700-1000 kcmil)	500-750 kcmil (500-750 kcmil)	350-500 kcmil (250-500 kcmil)	4/0 AWG-500 kcmil (1/0 AWG-350 kcmil)
7696-T-150-3G	051128-59532	150 kV	16.0" (406 mm)	1.53"-1.81" (38,8-46,0 mm)	5.40" (137,2 mm)	-	-	- (1000 kcmil)	750 kcmil (500-750 kcmil)	500-750 kcmil (350-750 kcmil)

## 3M™ Cold Shrink QT-III Termination Kit 7600-T-3W Series for 5-35 kV

3M™ Cold Shrink QT-III Silicone Rubber Three-Conductor Cable Termination Kit 7600-T-3W Series is designed to accommodate medium-voltage 3/C shielded power cables without ground wires. Each termination kit is supplied with all the materials required for terminating one 3/C cable. Terminal and lugs must be ordered separately.

The one-piece, skirted silicone rubber terminations come with factory-applied, pre-positioned Hi-K stress control layers underneath the insulator. Its short installed length is excellent for installations in limited spaces, such as those with motors, starters, switchgear, variable speed drives, transformers and similar connections – often reducing the need to add auxiliary boxes. Kits are designed for a range of cable types including tape shield, wire shield and UniShield® constructions.

\*For Wire or UniShield® shielding, please contact 3M for technical assistance.

<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Tape Shield (Armored or Unarmored), Wire Shield*, UniShield®*
<b>Indoor/Outdoor</b>	Indoor
<b>Breakout Boot</b>	Yes
<b>Insulation Rejacketing</b>	Yes
<b>No. Skirts</b>	0
<b>Voltage</b>	3.3 kV, 5 kV, 6.6 kV, 8 kV, 10 kV, 15 kV, 20 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one three-phase termination per kit)



	7620-T-95-3W	7621-T-95-3W	7623-T-95-3W	7624-T-95-3W
UPC	054007-04731	054007-04732	054007-04733	054007-04734
BIL	95 kV	95 kV	95 kV	95 kV
Max. Installed Length	8.5" (216 mm)	8.5" (216 mm)	8.5" (216 mm)	8.5" (216 mm)
Insulation O.D. Range	0.33"-0.50" (8,4-12,7 mm)	0.50"-0.70" (12,7-17,8 mm)	0.70"-0.92" (17,8-23,4 mm)	0.92"-1.18" (23,4-30,0 mm)
Conductor Size 3.3 kV IEC (JIS)	16-35 mm <sup>2</sup> (8-22 mm <sup>2</sup> )	50-95 mm <sup>2</sup> (38-60 mm <sup>2</sup> )	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )
Conductor Size 5.0 kV AEIC	8-2 AWG	1-3/0 AWG	4/0 AWG-400 kcmil	500-750 kcmil
Conductor Size 6.6 kV IEC (JIS)	- (16-25 mm <sup>2</sup> )	- (35-70 mm <sup>2</sup> )	- (95-150 mm <sup>2</sup> )	- (185-300 mm <sup>2</sup> )
Conductor Size 8 kV AEIC	6-4 AWG	2-2/0 AWG	3/0 AWG-350 kcmil	400-600 kcmil
Conductor Size 10 kV IEC	-	10-50 mm <sup>2</sup>	70-150 mm <sup>2</sup>	185-300 mm <sup>2</sup>
Conductor Size 15 kV IEC (AEIC)	-	16-25 mm <sup>2</sup> ( - )	35-95 mm <sup>2</sup> ( - )	120-185 mm <sup>2</sup> ( - )
Conductor Size 20 kV IEC	-	-	-	-
Conductor Size 25/28 kV AEIC	-	-	-	-
Conductor Size 35 kV AEIC	-	-	-	-
	7625-T-95-3W	7621-T-110-3W	7622-T-110-3W	7624-T-110-3W
UPC	054007-04735	054007-04736	054007-04737	054007-04738
BIL	95 kV	110 kV	110 kV	110 kV
Max. Installed Length	8.5" (216 mm)	12.0" (305 mm)	12.0" (305 mm)	12.0" (305 mm)
Insulation O.D. Range	1.18"-1.52" (30,0-38,6 mm)	0.50"-0.70" (12,7-17,8 mm)	0.70"-0.92" (17,8-23,4 mm)	0.92"-1.18" (23,4-30,0 mm)
Conductor Size 3.3 kV IEC (JIS)	- (300-325 mm <sup>2</sup> )	50-95 mm <sup>2</sup> (38-60 mm <sup>2</sup> )	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )
Conductor Size 5.0 kV AEIC	800-1000 kcmil	1-3/0 AWG	4/0 AWG-400 kcmil	500-750 kcmil
Conductor Size 6.6 kV IEC (JIS)	-	14-38 mm <sup>2</sup> (35-70 mm <sup>2</sup> )	60-100 mm <sup>2</sup> (95-150 mm <sup>2</sup> )	150-250 mm <sup>2</sup> (185-300 mm <sup>2</sup> )
Conductor Size 8 kV AEIC	750-1000 kcmil	2-2/0 AWG	3/0 AWG-350 kcmil	400-600 kcmil
Conductor Size 10 kV IEC	-	10-50 mm <sup>2</sup>	70-150 mm <sup>2</sup>	185-300 mm <sup>2</sup>
Conductor Size 15 kV IEC (AEIC)	200-325 mm <sup>2</sup> ( - )	16-25 mm <sup>2</sup> (2-1 AWG)	35-95 mm <sup>2</sup> (1/0-4/0 AWG)	120-185 mm <sup>2</sup> (250-450 kcmil)
Conductor Size 20 kV IEC	-	-	-	-
Conductor Size 25/28 kV AEIC	-	-	-	-
Conductor Size 35 kV AEIC	-	-	-	-

### 3M™ Cold Shrink QT-III Termination Kit 7600-T-3W Series for 5-35 kV (continued)

	7625-T-110-3W	7625-T-125-3W	7693-T-150-3W	7694-T-150-3W
UPC	054007-04739	054007-04742	054007-04743	054007-04744
BIL	110 kV	125 kV	150 kV	150 kV
Max. Installed Length	12.0" (305 mm)	10.5" (267 mm)	16.00" (406 mm)	16.00" (406 mm)
Insulation O.D. Range	1.18"-1.52" (30,0-38,6 mm)	1.18"-1.52" (30,0-38,6 mm)	0.70"-0.92" (17,8-23,4 mm)	0.92"-1.18" (23,4-30,0 mm)
Conductor Size 3.3 kV IEC (JIS)	- (300-325 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )
Conductor Size 5.0 kV AEIC	800-1000 kcmil	800-1000 kcmil	4/0 AWG-400 kcmil	500-750 kcmil
Conductor Size 6.6 kV IEC (JIS)	300-325 mm <sup>2</sup> ( - )	300-325 mm <sup>2</sup> ( - )	60-100 mm <sup>2</sup> (95-150 mm <sup>2</sup> )	150-250 mm <sup>2</sup> (185-300 mm <sup>2</sup> )
Conductor Size 8 kV AEIC	750-1000 kcmil	750-1000 kcmil	3/0 AWG-350 kcmil	400-600 kcmil
Conductor Size 10 kV IEC	-	-	70-150 mm <sup>2</sup>	185-300 mm <sup>2</sup>
Conductor Size 15 kV IEC (AEIC)	200-325 mm <sup>2</sup> (500-750 kcmil)	200-325 mm <sup>2</sup> (500-750 kcmil)	35-95 mm <sup>2</sup> (1/0-4/0 AWG)	120-185 mm <sup>2</sup> (250-450 kcmil)
Conductor Size 20 kV IEC	-	240-300 mm <sup>2</sup>	25-70 mm <sup>2</sup>	95-185 mm <sup>2</sup>
Conductor Size 25/28 kV AEIC	-	-	2-1/0 AWG	2/0 AWG-250 kcmil
Conductor Size 35 kV AEIC	-	-	-	1/0-3/0 AWG
<b>7695-T-150-3W</b>				
UPC	054007-04745			
BIL	150 kV			
Max. Installed Length	16.00" (406 mm)			
Insulation O.D. Range	1.18"-1.52" (30,0-38,6 mm)			
Conductor Size 3.3 kV IEC (JIS)	- (300-325 mm <sup>2</sup> )			
Conductor Size 5.0 kV AEIC	800-1000 kcmil			
Conductor Size 6.6 kV IEC (JIS)	300-325 mm <sup>2</sup> ( - )			
Conductor Size 8 kV AEIC	750-1000 kcmil			
Conductor Size 10 kV IEC	-			
Conductor Size 15 kV IEC (AEIC)	200-325 mm <sup>2</sup> (500-750 kcmil)			
Conductor Size 20 kV IEC	240-300 mm <sup>2</sup>			
Conductor Size 25/28 kV AEIC	300-500 kcmil			
Conductor Size 35 kV AEIC	4/0 AWG-500 kcmil			

Three Core Tape Shield, Wire Shield & UniShield® Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-III Termination Kit 7600-S-3W Series for 5-35 kV

3M™ Cold Shrink QT-III Silicone Rubber Three-Conductor Cable Termination Kit 7600-S-3W Series is designed to accommodate medium-voltage 3/C shielded power cables without ground wires. Each termination kit is supplied with all the materials required for terminating one three-conductor cable. Terminal and lugs must be ordered separately.

The one-piece, skirted silicone rubber terminations come with factory-applied, pre-positioned Hi-K stress control layers underneath the insulator. Its short installed length is excellent for installations in limited spaces, such as those with motors, starters, switchgear, variable speed drives, transformers and similar connections — often reducing the need to add auxiliary boxes. Kits are designed for a range of cable types including tape shield, wire shield and UniShield® constructions.

\*For Wire or UniShield® shielding, please contact 3M for technical assistance.

<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Tape Shield (Armored or Unarmored), Wire Shield*, UniShield®*
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	Yes
<b>Insulation Rejacketing</b>	Yes
<b>Voltage</b>	3.3 kV, 5 kV, 6.6 kV, 8 kV, 10 kV, 15 kV, 20 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one three-phase termination per kit)



	7620-S-2-3W	7621-S-2-3W	7622-S-2-3W	7691-S-4-3W
UPC	054007-04748	054007-04749	054007-04750	054007-04751
Skirts	2	2	2	4
BIL	95 kV	95 kV	110 kV	150 kV
Max. Installed Length	10.5" (267 mm)	10.5" (267 mm)	9.8" (249 mm)	12.25" (311 mm)
Insulation O.D. Range	0.33"-0.50" (8,40-12,7 mm)	0.50"-0.70" (12,7-17,8 mm)	0.70"-0.92" (17,8-23,4 mm)	0.50"-0.70" (12,7-17,8 mm)
Conductor Size 3.3 kV IEC (JIS)	16-35 mm <sup>2</sup> (8-22 mm <sup>2</sup> )	50-95 mm <sup>2</sup> (38-60 mm <sup>2</sup> )	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	50-95 mm <sup>2</sup> (38-60 mm <sup>2</sup> )
Conductor Size 5.0 kV AEIC	8-2 AWG	1-3/0 AWG	4/0 AWG-400 kcmil	1-3/0 AWG
Conductor Size 6.6 kV JIS (IEC)	- (16-25 mm <sup>2</sup> )	- (35-70 mm <sup>2</sup> )	60-100 mm <sup>2</sup> (95-150 mm <sup>2</sup> )	- (35-70 mm <sup>2</sup> )
Conductor Size 8 kV AEIC	6-4 AWG	2-2/0 AWG	3/0 AWG-350 kcmil	2-2/0 AWG
Conductor Size 10 kV IEC	-	10-50 mm <sup>2</sup>	70-150 mm <sup>2</sup>	10-50 mm <sup>2</sup>
Conductor Size 15 kV IEC (AEIC)	-	16-25 mm <sup>2</sup> ( - )	35-95 mm <sup>2</sup> (1/0-4/0 AWG)	16-25 mm <sup>2</sup> ( - )
Conductor Size 20 kV IEC	-	-	-	-
Conductor Size 25/28 kV AEIC	-	-	-	-
Conductor Size 30 kV IEC	-	-	-	-
Conductor Size 35 kV AEIC	-	-	-	-

Three Core Tape Shield, Wire Shield & UniShield® Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations: Outdoor Skirted Kits

3M™ Cold Shrink QT-III Termination Kit 7600-S-3W Series for 5-35 kV (continued)

	7692-S-4-3W	7693-S-4-3W	7695-S-4-3W	7685-S-8-3W
UPC	054007-04752	054007-04753	054007-04754	054007-04756
Skirts	4	4	4	8
BIL	150 kV	150 kV	150 kV	200 kV
Max. Installed Length	12.25" (311 mm)	12.25" (311 mm)	12.25" (311 mm)	21.50" (546 mm)
Insulation O.D. Range	0.70"-0.92" (17,8-23,4 mm)	0.92"-1.18" (23,4-30,0 mm)	1.18"-1.52" (30,0-38,6 mm)	1.18"-1.52" (30,0-38,6 mm)
Conductor Size 3.3 kV IEC (JIS)	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )
Conductor Size 5.0 kV AEIC	4/0 AWG-400 kcmil	500-750 kcmil	800-1000 kcmil	800-1000 kcmil
Conductor Size 6.6 kV JIS (IEC)	60-100 mm <sup>2</sup> (95-150 mm <sup>2</sup> )	150-250 mm <sup>2</sup> (185-300 mm <sup>2</sup> )	300-325 mm <sup>2</sup> ( - )	300-325 mm <sup>2</sup> ( - )
Conductor Size 8 kV AEIC	3/0 AWG-350 kcmil	400-600 kcmil	750-1000 kcmil	750-1000 kcmil
Conductor Size 10 kV IEC	70-150 mm <sup>2</sup>	185-300 mm <sup>2</sup>	-	-
Conductor Size 15 kV IEC (AEIC)	35-95 mm <sup>2</sup> (1/0-4/0 AWG)	120-185 mm <sup>2</sup> (250-450 kcmil)	200-325 mm <sup>2</sup> (500-750 kcmil)	200-325 mm <sup>2</sup> (500-750 kcmil)
Conductor Size 20 kV IEC	25-70 mm <sup>2</sup>	95-185 mm <sup>2</sup>	240-300 mm <sup>2</sup>	240-300 mm <sup>2</sup>
Conductor Size 25/28 kV AEIC	2-1/0 AWG	2/0 AWG-250 kcmil	300-500 kcmil	300-500 kcmil
Conductor Size 30 kV IEC	-	-	-	95-240 mm <sup>2</sup>
Conductor Size 35 kV AEIC	-	-	-	4/0 AWG-500 kcmil

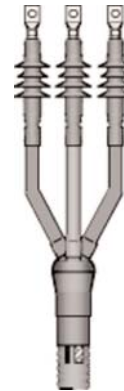
Three Core Tape Shield, Wire Shield & UniShield® Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-III Termination Kit 7600-S-3G Series for 5-35 kV

The 3M™ Cold Shrink QT-III Termination Kit 7600-S-3G Series kits are skirted and designed for outdoor installations and can be used on three conductor cables with internal ground wires. They are designed to terminate medium voltage power cables rated up to 35 kV. Each kit has the necessary materials to make one three-conductor termination. Lugs need to be ordered separately.

\*For Wire or UniShield® shielding, please contact 3M for technical assistance.

<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Tape Shield (Armored or Unarmored), Wire Shield*, UniShield®*
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	Yes
<b>Insulation Rejacketing</b>	Yes
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one three-phase termination per kit)



	7620-S-2-3G	7621-S-2-3G	7622-S-2-3G	7691-S-4-3G
UPC	054007-43679	054007-43680	054007-43681	054007-43682
Skirts	2	2	2	4
BIL	95 kV	95 kV	110 kV	150 kV
Max. Installed Length	10.5" (267 mm)	10.5" (267 mm)	9.8" (249 mm)	12.25" (311 mm)
Insulation O.D. Range	0.33"-0.50" (8,4-12,7 mm)	0.50"-0.70" (12,7-17,8 mm)	0.70"-0.92" (17,8-23,4 mm)	0.50"-0.70" (12,7-17,8 mm)
Max. Cable O.D.	2.20" (55,9 mm)	2.80" (71,1 mm)	3.30" (83,8 mm)	2.80" (71,1 mm)
Conductor Size AWG & kcmil 5 kV - 100% (133%)	8-2 (6-4)	1-3/0 (2-2/0)	4/0-350 (3/0-350)	1-3/0 (2-2/0)
Conductor Size AWG & kcmil 8 kV - 100% (133%)	6-4 (6-4)	2-2/0 (2-2/0)	3/0-350 (3/0-350)	2-2/0 (2-2/0)
Conductor Size AWG & kcmil 15 kV - 100% (133%)	-	2-1 (-)	1/0-4/0 (2-3/0)	2-1 (-)
Conductor Size AWG & kcmil 25/28 kV - 100% (133%)	-	-	-	-
Conductor Size AWG & kcmil 35 kV - 100% (133%)	-	-	-	-
	7692-S-4-3G	7693-S-4-3G	7695-S-4-3G	7684-S-8-3G
UPC	054007-43683	054007-43684	054007-43685	054007-43686
Skirts	4	4	4	8
BIL	150 kV	150 kV	150 kV	200 kV
Max. Installed Length	12.25" (311 mm)	12.25" (311 mm)	12.25" (311 mm)	20.5" (521 mm)
Insulation O.D. Range	0.70"-0.92" (17,8-23,4 mm)	0.92"-1.18" (23,4-30,0 mm)	1.18"-1.52" (30,0-38,6 mm)	0.92"-1.18" (23,4-30,0 mm)
Max. Cable O.D.	3.30" (83,8 mm)	3.90" (99,1 mm)	4.50" (114,3 mm)	3.90" (99,1 mm)
Conductor Size AWG & kcmil 5 kV - 100% (133%)	4/0-350 (3/0-350)	400-500 (400-500)	700-1000 (700-1000)	-
Conductor Size AWG & kcmil 8 kV - 100% (133%)	3/0-350 (3/0-350)	400-500 (400-500)	700-1000 (700-1000)	-
Conductor Size AWG & kcmil 15 kV - 100% (133%)	1/0-4/0 (2-3/0)	250-350 (4/0-350)	500-750 (500-750)	250-350 (4/0-350)
Conductor Size AWG & kcmil 25/28 kV - 100% (133%)	1-1/0 (-)	2/0-250 (1-4/0)	350-500 (250-500)	2/0-250 (1-4/0)
Conductor Size AWG & kcmil 35 kV - 100% (133%)	-	-	-	1/0-3/0 (-)



Three Core Tape Shield, Wire Shield & UniShield® Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations: Outdoor Skirted Kits

3M™ Cold Shrink QT-III Termination Kit 7600-S-3G Series for 5-35 kV (continued)

	7685-S-8-3G	7686-S-8-3G
UPC	054007-43687	051128-59530
Skirts	8	8
BIL	200 kV	200 kV
Max. Installed Length	20.5" (521 mm)	21.5" (546 mm)
Insulation O.D. Range	1.18"-1.52" (30,0-38,6 mm)	1.53"-1.81" (38,8-46,0 mm)
Max. Cable O.D.	4.50" (114,3 mm)	5.40" (137,2 mm)
Conductor Size AWG & kcmil 5 kV - 100% (133%)	-	-
Conductor Size AWG & kcmil 8 kV - 100% (133%)	-	-
Conductor Size AWG & kcmil 15 kV - 100% (133%)	500-750 (500-750)	- (1000)
Conductor Size AWG & kcmil 25/28 kV - 100% (133%)	350-500 (250-500)	750 (500-750)
Conductor Size AWG & kcmil 35 kV - 100% (133%)	4/0-500 (1/0-350)	500-750 (350-750)

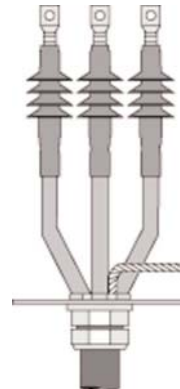
Three Core Tape Shield, Wire Shield & UniShield® Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-III Termination Kit 7600-S-3RJS Series for 5-35 kV

The 3M™ Cold Shrink QT-III Termination Kit 7600-S-3RJS Series are designed for cabinet-mount installations and can be used on cables with, or without, internal ground wires. Each termination kit has all of the materials required to make a three-conductor termination. Lugs must be ordered separately.

\*For Wire or UniShield® shielding, please contact 3M for technical assistance.

<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Tape Shield (Armored or Unarmored), Wire Shield*, UniShield®*
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	Yes
<b>Voltage</b>	3.3 kV, 5 kV, 6.6 kV, 8 kV, 10 kV, 15 kV, 20 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one three-phase termination per kit)



	7620-S-2-3-RJS	7621-S-2-3-RJS	7622-S-2-3-RJS	7691-S-4-3-RJS
UPC	054007-04722	054007-04723	054007-04724	054007-04725
Skirts	2	2	2	4
BIL	95 kV	95 kV	110 kV	150 kV
Max. Installed Length	10.5" (267 mm)	10.5" (267 mm)	9.8" (249 mm)	12.25" (311 mm)
Insulation O.D. Range	0.33"-0.50" (8,4-12,7 mm)	0.50"-0.70" (12,7-17,8 mm)	0.70"-0.92" (17,8-23,4 mm)	0.50"-0.70" (12,7-17,8 mm)
Conductor Size 3.3 kV 100% - IEC (JIS)	16-35 mm <sup>2</sup> (8-22 mm <sup>2</sup> )	50-95 mm <sup>2</sup> (38-60 mm <sup>2</sup> )	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	50-95 mm <sup>2</sup> (38-60 mm <sup>2</sup> )
Conductor Size 5.0 kV 100% - AEIC	8-2 AWG	1-3/0 AWG	4/0 AWG-400 kcmil	1-3/0 AWG
Conductor Size 6.6 kV 100% - IEC (JIS)	16-25 mm <sup>2</sup> (-)	35-70 mm <sup>2</sup> (-)	95-150 mm <sup>2</sup> (60-100 mm <sup>2</sup> )	35-70 mm <sup>2</sup> (-)
Conductor Size 8 kV 100% - AEIC	6-4 AWG	2-2/0 AWG	3/0 AWG-350 kcmil	2-2/0 AWG
Conductor Size 10 kV 100% - IEC	-	10-50 mm <sup>2</sup>	70-150 mm <sup>2</sup>	10-50 mm <sup>2</sup>
Conductor Size 15 kV 100% - IEC (AEIC)	-	16-25 mm <sup>2</sup> (-)	35-95 mm <sup>2</sup> (1/0-4/0 AWG)	16-25 mm <sup>2</sup> (2-1 AWG)
Conductor Size 20 kV 100% - IEC	-	-	-	-
Conductor Size 25/28 kV 100% - AEIC	-	-	-	-
Conductor Size 30 kV 100% - IEC	-	-	-	-
Conductor Size 35 kV 100% - AEIC	-	-	-	-
	7692-S-4-3-RJS	7693-S-4-3-RJS	7695-S-4-3-RJS	7684-S-8-3-RJS
UPC	054007-04726	054007-04727	054007-04728	054007-04729
Skirts	4	4	4	8
BIL	150 kV	150 kV	150 kV	200 kV
Max. Installed Length	12.25" (311 mm)	12.25" (311 mm)	12.25" (311 mm)	20.5" (521 mm)
Insulation O.D. Range	0.70"-0.92" (17,8-23,4 mm)	0.92"-1.18" (23,4-30,0 mm)	1.18"-1.52" (30,0-38,6 mm)	0.92"-1.18" (23,4-30,0 mm)
Conductor Size 3.3 kV 100% - IEC (JIS)	120-185 mm <sup>2</sup> (100-150 mm <sup>2</sup> )	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )
Conductor Size 5.0 kV 100% - AEIC	4/0 AWG-400 kcmil	500-750 kcmil	800-1000 kcmil	500-750 kcmil
Conductor Size 6.6 kV 100% - IEC (JIS)	95-150 mm <sup>2</sup> (60-100 mm <sup>2</sup> )	185-300 mm <sup>2</sup> (150-250 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )	185-300 mm <sup>2</sup> (150-250 mm <sup>2</sup> )
Conductor Size 8 kV 100% - AEIC	3/0 AWG-350 kcmil	400-600 kcmil	750-1000 kcmil	400-600 kcmil
Conductor Size 10 kV 100% - IEC	70-150 mm <sup>2</sup>	185-300 mm <sup>2</sup>	-	185-300 mm <sup>2</sup>
Conductor Size 15 kV 100% - IEC (AEIC)	35-95 mm <sup>2</sup> (1/0-4/0 AWG)	120-185 mm <sup>2</sup> (250-450 kcmil)	200-325 mm <sup>2</sup> (500-750 kcmil)	120-185 mm <sup>2</sup> (250-450 kcmil)
Conductor Size 20 kV 100% - IEC	25-70 mm <sup>2</sup>	95-185 mm <sup>2</sup>	240-300 mm <sup>2</sup>	95-185 mm <sup>2</sup>
Conductor Size 25/28 kV 100% - AEIC	2-1/0 AWG	2/0 AWG-250 kcmil	300-500 kcmil	2/0 AWG-250 kcmil
Conductor Size 30 kV 100% - IEC	-	-	-	35-70 mm <sup>2</sup>
Conductor Size 35 kV 100% - AEIC	-	-	-	1/0-3/0 AWG

Three Core Tape Shield, Wire Shield & UniShield® Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations: Outdoor Skirted Kits

3M™ Cold Shrink QT-III Termination Kit 7600-S-3RJS Series for 5-35 kV (continued)

	7685-S-8-3-RJS	7686-S-8-3-RJS
UPC	054007-04730	051128-59531
Skirts	8	8
BIL	200 kV	200 kV
Max. Installed Length	20.5" (521 mm)	21.5" (546 mm)
Insulation O.D. Range	1.18"-1.52" (30,0-38,6 mm)	1.53"-1.81" (38,8-46,0 mm)
Conductor Size 3.3 kV 100% - IEC (JIS)	- (300-325 mm <sup>2</sup> )	-
Conductor Size 5.0 kV 100% - AEIC	800-1000 kcmil	-
Conductor Size 6.6 kV 100% - IEC (JIS)	- (300-325 mm <sup>2</sup> )	-
Conductor Size 8 kV 100% - AEIC	750-1000 kcmil	-
Conductor Size 10 kV 100% - IEC	-	-
Conductor Size 15 kV 100% - IEC (AEIC)	200-325 mm <sup>2</sup> (500-750 kcmil)	-
Conductor Size 20 kV 100% - IEC	240-300 mm <sup>2</sup>	-
Conductor Size 25/28 kV 100% - AEIC	300-500 kcmil	750 kcmil
Conductor Size 30 kV 100% - IEC	95-240 mm <sup>2</sup>	240-325 mm <sup>2</sup>
Conductor Size 35 kV 100% - AEIC	4/0 AWG-500 kcmil	500-750 kcmil

Three Core Tape Shield, Wire Shield & UniShield® Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-III Inverted Termination Kit 7600-S-INV-3W Series - 4 Skirt, for 5-25/28 kV

3M™ Cold Shrink QT-III Inverted Termination Kit 7600-S-INV-3W Series are skirted and designed for outdoor installations and can be used on three conductor cables without internal ground wires. These kits are designed to terminate medium voltage power cables rated up to 25/28 kV. Each termination kit has all of the materials required to make a three conductor termination. Lugs must be ordered separately.

\*For Wire or UniShield® shielding, please contact 3M for technical assistance.

<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Tape Shield (Armored or Unarmored), Wire Shield*, UniShield®*
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	Yes
<b>Insulation Rejacketing</b>	Yes
<b>No. Skirts</b>	4
<b>Voltage</b>	3.3 kV, 5 kV, 6.6 kV, 8 kV, 10 kV, 15 kV, 20 kV, 25/28 kV
<b>Packaging</b>	1 kit per case (one three-phase termination per kit)



	7693-S-4-INV-3W	7695-S-4-INV-3W
UPC	054007-04746	054007-04747
BIL	200 kV	200 kV
Max. Installed Length	16.0" (406 mm)	16.0" (406 mm)
Insulation O.D. Range	0.92"-1.18" (23,4-30,0 mm)	1.18"-1.52" (30,0-38,6 mm)
Conductor Size 3.3 kV IEC (JIS)	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )
Conductor Size 5.0 kV AEIC	500-750 kcmil	800-1000 kcmil
Conductor Size 6.6 kV JIS (IEC)	150-250 mm <sup>2</sup> (185-300 mm <sup>2</sup> )	300-325 mm <sup>2</sup> ( - )
Conductor Size 8 kV AEIC	400-600 kcmil	750-1000 kcmil
Conductor Size 10 kV IEC	185-300 mm <sup>2</sup>	-
Conductor Size 15 kV IEC (AEIC)	120-185 mm <sup>2</sup> (250-450 kcmil)	200-325 mm <sup>2</sup> (500-750 kcmil)
Conductor Size 20 kV IEC	95-185 mm <sup>2</sup>	240-300 mm <sup>2</sup>
Conductor Size 25/28 kV AEIC	2/0 AWG-250 kcmil	300-500 kcmil

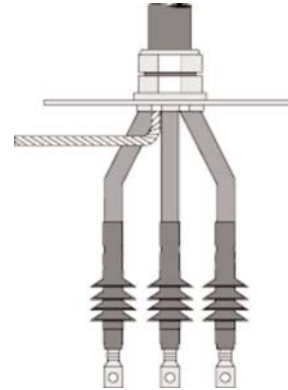
Three Core Tape Shield, Wire Shield & UniShield® Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-III Inverted Termination Kit 7600-S-INV-3RJS Series for 5-25/28 kV

3M™ Cold Shrink QT-III Inverted Termination Kit 7600-S-INV-3RJS Series are designed to accommodate medium voltage 3/C shielded power cable kits for 7600-3-RJS Series cabinet-mount installations and can be used on cables with or without ground wires. Each termination kit is supplied with all the materials required for terminating one three-conductor cable. Terminal and/or lug must be ordered separately.

\*For Wire or UniShield® shielding, please contact 3M for technical assistance.

<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Tape Shield (Armored or Unarmored), Wire Shield*, UniShield®*
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	Yes
<b>No. Skirts</b>	4
<b>Voltage</b>	3.3 kV, 5 kV, 6.6 kV, 8 kV, 10 kV, 15 kV, 20 kV, 25/28 kV
<b>Packaging</b>	1 kit per case (one three-phase termination per kit)



	7693-S-4-INV-3-RJS	7695-S-4-INV-3-RJS
UPC	054007-04720	054007-04721
BIL	200 kV	200
Max. Installed Length	16.0" (406 mm)	16.0" (406 mm)
Insulation O.D. Range	0.92"-1.18" (23,4-30,0 mm)	1.18-1.52" (30,0-38,6 mm)
Conductor Size 3.3 kV IEC (JIS)	240-300 mm <sup>2</sup> (200-250 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )
Conductor Size 5.0 kV AEIC	500-750 kcmil	800-1000 kcmil
Conductor Size 6.6 kV IEC (JIS)	185-300 mm <sup>2</sup> (150-250 mm <sup>2</sup> )	- (300-325 mm <sup>2</sup> )
Conductor Size 8 kV AEIC	400-600 kcmil	750-1000 kcmil
Conductor Size 10 kV IEC	185-300 mm <sup>2</sup>	-
Conductor Size 15 kV IEC (AEIC)	120-185 mm <sup>2</sup> (250-450 kcmil)	200-325 mm <sup>2</sup> (500-750 kcmil)
Conductor Size 20 kV IEC	95-185 mm <sup>2</sup>	240-300 mm <sup>2</sup>
Conductor Size 25/28 kV AEIC	2/0 AWG-250 kcmil	300-500 kcmil

Three Core Tape Shield, Wire Shield & UniShield® Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations: Outdoor Skirted Kits

## 3M™ Cold Shrink QT-III Inverted Termination Kit 7600-S-4-INV-3G Series for 5-25 kV

The 3M™ Cold Shrink QT-III Inverted Termination Kit 7600-S-4-INV-3G Series are skirted and designed for outdoor installations and can be used on three conductor cables with internal ground wires. They are designed to terminate medium voltage power cables rated up to 25 kV. Each termination kit has sufficient material to make a one three-conductor termination. Lugs must be ordered separately.

\*For Wire or UniShield® shielding, please contact 3M for technical assistance.

<b>Number of Conductors</b>	Three Conductor
<b>Shielding Type</b>	Tape Shield (Armored or Unarmored), Wire Shield*, UniShield®*
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	Yes
<b>Insulation Rejacketing</b>	Yes
<b>No. Skirts</b>	4
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV
<b>Packaging</b>	1 kit per case (one three-phase termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Cable O.D.	Conductor Size 5 kV 100% (133%)	Conductor Size 8 kV 100% (133%)	Conductor Size 15 kV 100% (133%)	Conductor Size 25/28 kV 100% (133%)
7693-S-4-INV-3G	054007-43677	200 kV	16.0" (406 mm)	0.92"-1.18" (23,4-30,0 mm)	3.90" (99,1 mm)	400-500 kcmil (400-500 kcmil)	400-500 kcmil (400-500 kcmil)	250-350 kcmil (4/0 AWG-350 kcmil)	2/0 AWG-250 kcmil (1-4/0 AWG)
7695-S-4-INV-3G	054007-43678	200 kV	16.0" (406 mm)	1.18"-1.52" (30,0-38,4 mm)	4.50" (114,3 mm)	700-1000 kcmil (700-1000 kcmil)	700-1000 kcmil (700-1000 kcmil)	500-750 kcmil (500-750 kcmil)	350-500 kcmil (250-500 kcmil)

# 3M™ Medium Voltage Terminations for Single Core Tape Shield, Wire-Over-Tape Shield and Longitudinally Corrugated (LC) Shield Cable, 5 kV - 35 kV

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Single Core Tape Shield, Wire-Over-Tape Shield & LC Shield Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations: Indoor Kits

## 3M™ Cold Shrink QT-III Termination 7640-T-HSG & 7650-T-HSG Series for 5-35 kV

3M™ Cold Shrink QT-III Silicone Rubber Termination 7640-T-HSG and 7650-T-HSG Series are designed for applications requiring a high-ampacity ground. Each kit contains a one-piece, non-skirted, silicone rubber termination with high-ampacity ground assembly and is qualified as IEEE Standard 48 Class 1 for indoor and weather-protected applications. The termination assembly consists of a tubular insulator, high-dielectric constant (Hi-K) stress control tube, conformable Hi-K stress controlling compound and built-in environmental top seal. The insulator is made of a dark gray silicone rubber with excellent tracking resistance and hydrophobic properties. The complete assembly is pre-stretched and loaded onto a removable core which can be recycled. The kits are designed for terminating solid dielectric shielded power cable rated 5–35 kV, with tape shield, wire-over-tape shield and longitudinally corrugated (LC) shield constructions.

Each kit contains sufficient quantities of material to make one termination. Lugs need to be ordered separately.

**\*150 kV impulse level meets the impulse requirements for 35 kV class equipment where indoor terminations are used.**

Number of Conductors	Single Conductor
Shielding Type	Tape Shield, Wire-Over-Tape Shield, Longitudinally Corrugated (LC) Shield
Indoor/Outdoor	Indoor
Breakout Boot	No
Insulation Rejacketing	No
No. Skirts	0
Voltage	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
Packaging	1 kit per case (one termination per kit)



Order No.	UPC	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 5 kV	Conductor Size 8 kV	Conductor Size 15 kV	Conductor Size 25/28 kV	Conductor Size 35 kV*
7642-T-HSG-110	054007-41765	110 kV	12.0" (305 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-2/0 AWG (35-70 mm <sup>2</sup> )	-	-
7643-T-HSG-110	054007-41797	110 kV	12.0" (305 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150mm <sup>2</sup> )	-	-
7644-T-HSG-110	054007-41767	110 kV	12.0" (305 mm)	0.83"-1.53" (21,1-38,9 mm)	500-750 kcmil	350-700 kcmil	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	-	-
7645-T-HSG-110	054007-41769	110 kV	12.0" (305 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm <sup>2</sup> )	-	-
7646-T-HSG-110	054007-41771	110 kV	12.0" (305 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm <sup>2</sup> )	-	-
7653-T-HSG-150	054007-41773	150 kV	16.0" (406 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0-300 kcmil (70-150 mm <sup>2</sup> )	2-4/0 AWG (35-120 mm <sup>2</sup> )	2-2/0 AWG (35-70 mm <sup>2</sup> )
7655-T-HSG-150	054007-41775	150 kV	16.0" (406 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm <sup>2</sup> )	250-800 kcmil (150-400 mm <sup>2</sup> )	3/0 AWG-600 kcmil (95-325 mm <sup>2</sup> )
7656-T-HSG-150	054007-41777	150 kV	16.0" (406 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm <sup>2</sup> )	900-1750 kcmil (500-800 mm <sup>2</sup> )	700-1500 kcmil (400-725 mm <sup>2</sup> )

Single Core Tape Shield, Wire-Over-Tape Shield & LC Shield Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations:

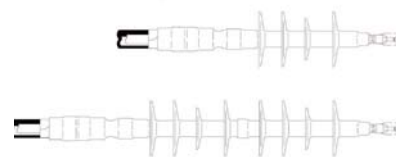
Outdoor Skirted Kits

## 3M™ Cold Shrink QT-III High Fault Current Termination Kit 7650-S-HSG & 7660-S-HSG Series for 5-35 kV

3M™ Cold Shrink QT-III Terminations offer easy installation and reliable performance when terminating indoor and outdoor medium voltage cable. The unique step-core design combined with the built in Hi-K stress control and environmental sealing compounds means simpler installation on most types of cable. It has UV stability and track and erosion resistance. Plus its Hi-K stress control design delivers excellent BIL performance and lower surface stress resulting in a more compact termination. Through excellent engineering, 3M™ Cold Shrink QT-III terminations deliver maximum performance. The kits are designed for terminating solid dielectric shielded power cables rated 5–35 kV with tape shield, longitudinally corrugated (LC) shield, and wire-over-tape shield constructions.

Each kit contains sufficient quantities of material to make one single-phase termination. Lugs need to be ordered separately.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire-Over-Tape Shield, Longitudinally Corrugated (LC) Shield
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one single-phase termination per kit)



Order No.	UPC	Skirts	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 5 kV	Conductor Size 8 kV	Conductor Size 15 kV	Conductor Size 25/28 kV	Conductor Size 35 kV
7652-S-HSG-4	054007-42171	4	150 kV	12.25" (311 mm)	0.64"-1.08" (16,3-27,4 mm)	4/0 AWG-400 kcmil	3/0 AWG-300 kcmil	2-2/0 AWG (35-70 mm <sup>2</sup> )	2-1/0 AWG (35-50 mm <sup>2</sup> )	-
7653-S-HSG-4	054007-42185	4	150 kV	12.25" (311 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm <sup>2</sup> )	2-4/0 AWG (35-120 mm <sup>2</sup> )	-
7654-S-HSG-4	054007-42199	4	150 kV	12.25" (311 mm)	0.83"-1.53" (21,1-38,9 mm)	500-750 kcmil	350-700 kcmil	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	2/0 AWG-250 kcmil (70-150 mm <sup>2</sup> )	-
7655-S-HSG-4	054007-42207	4	150 kV	12.25" (311 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm <sup>2</sup> )	250-800 kcmil (150-400 mm <sup>2</sup> )	-
7656-S-HSG-4	054007-42209	4	150 kV	13.25" (337 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm <sup>2</sup> )	900-1750 kcmil (500-800 mm <sup>2</sup> )	-
7663-S-HSG-8	054007-42440	8	200 kV	20.50" (521 mm)	0.72"-1.29" (18,3-32,8 mm)	300-500 kcmil	250-500 kcmil	2/0 AWG-300 kcmil (70-150 mm <sup>2</sup> )	2-4/0 AWG (35-120 mm <sup>2</sup> )	2-2/0 AWG (35-70 mm <sup>2</sup> )
7664-S-HSG-8	054007-42454	8	200 kV	20.50" (521 mm)	0.83"-1.53" (21,1-38,9 mm)	500-750 kcmil	350-700 kcmil	4/0 AWG-500 kcmil (120-240 mm <sup>2</sup> )	2/0 AWG-250 kcmil (70-150 mm <sup>2</sup> )	2-4/0 AWG (35-120 mm <sup>2</sup> )
7665-S-HSG-8	054007-42462	8	200 kV	20.50" (521 mm)	1.05"-1.80" (26,7-45,7 mm)	700-1500 kcmil	600-1250 kcmil	500-1000 kcmil (240-500 mm <sup>2</sup> )	250-800 kcmil (125-400 mm <sup>2</sup> )	3/0 AWG-600 kcmil (95-325 mm <sup>2</sup> )

Single Core Tape Shield, Wire-Over-Tape Shield & LC Shield Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations:  
Outdoor Skirted Kits

## 3M™ Cold Shrink QT-III High Fault Current Termination Kit 7650-S-HSG & 7660-S-HSG Series for 5-35 kV (continued)

Order No.	UPC	Skirts	BIL	Max. Installed Length	Insulation O.D. Range	Conductor Size 5 kV	Conductor Size 8 kV	Conductor Size 15 kV	Conductor Size 25/28 kV	Conductor Size 35 kV
7666-S-HSG-8	054007-42464	8	200 kV	21.50" (546 mm)	1.53"-2.32" (38,9-58,9 mm)	1750-2000 kcmil	1500-2000 kcmil	1250-2000 kcmil (625-1000 mm <sup>2</sup> )	900-1750 kcmil (500-800 mm <sup>2</sup> )	700-1500 kcmil (400-725 mm <sup>2</sup> )

Single Core Tape Shield, Wire-Over-Tape Shield & LC Shield Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations:  
Outdoor Skirted Kits

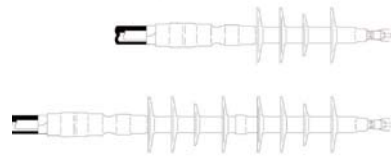
## 3M™ Cold Shrink QT-III High Fault Current Termination Kit 7650-S-HSG & 7660-S-HSG Series (w/ Connector) for 5-35 kV

3M™ Cold Shrink QT-III Terminations offer easy installation and reliable performance when terminating indoor and outdoor medium voltage cable. The unique step-core design combined with the built in Hi-K stress control and environmental sealing compounds means simpler installation on most types of cable. It has UV stability and track and erosion resistance. Plus its Hi-K stress control design delivers excellent BIL performance and lower surface stress resulting in a more compact termination. Through excellent engineering, 3M™ Cold Shrink QT-III terminations deliver maximum performance. The kits are designed for terminating solid dielectric shielded power cables rated 5–35 kV with tape shield, longitudinally corrugated (LC) shield, and wire-over-tape shield constructions.

Each kit contains sufficient quantities of material to make one single-phase termination.

NOTE: Lug or mounting bracket included. These termination kits use 3M™ Scotchlok™ Copper Lugs 30000 Series and 31000 Series, 3M™ Scotchlok™ Aluminum Lugs 40000 Series, or or 3M™ Stem Connectors SC Series. See Lugs and Connectors for more information about these accessories.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire-Over-Tape Shield, Longitudinally Corrugated (LC) Shield
<b>Indoor/Outdoor</b>	Outdoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	Yes
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV, 35 kV
<b>Packaging</b>	1 kit per case (one single-phase termination per kit)



	7652-S-HSG-4-1/0	7652-S-HSG-4-2	7652-S-HSG-4-2/0	7652-S-HSG-4-3/0
UPC	054007-42172	054007-42173	054007-42174	054007-42176
Skirts	4	4	4	4
BIL	150 kV	150 kV	150 kV	150 kV
Max. Installed Length	12.25" (311 mm)	12.25" (311 mm)	12.25" (311 mm)	12.25" (311 mm)
Insulation O.D. Range	0.64"-1.08" (16,3-27,4 mm)	0.64"-1.08" (16,3-27,4 mm)	0.64"-1.08" (16,3-27,4 mm)	0.64"-1.08" (16,3-27,4 mm)
Conductor Size 5 kV	-	-	-	-
Conductor Size 8 kV	-	-	-	3/0 AWG (95 mm <sup>2</sup> )
Conductor Size 15 kV	1/0 AWG (50 mm <sup>2</sup> )	2 AWG (35 mm <sup>2</sup> )	2/0 AWG (70 mm <sup>2</sup> )	3/0 AWG (95 mm <sup>2</sup> )
Conductor Size 25/28 kV	1/0 AWG (50 mm <sup>2</sup> )	2 AWG (35 mm <sup>2</sup> )	-	-
Conductor Size 35 kV	-	-	-	-
Lug/Stem Connector Included	(1) SC0010 Stem Connector	(1) SC0001 Stem Connector	(1) SC0020 Stem Connector	(1) SC0030 Stem Connector
Mounting Bracket Included	No	No	No	No

Single Core Tape Shield, Wire-Over-Tape Shield & LC Shield Cable, 5-35 kV: 3M™ Cold Shrink QT-III Terminations:  
Outdoor Skirted Kits

## 3M™ Cold Shrink QT-III High Fault Current Termination Kit 7650-S-HSG & 7660-S-HSG Series (w/ Connector) for 5-35 kV (continued)

	7652-S-HSG-4-4/0	7653-S-HSG-4-4/0	7654-S-HSG-4-4/0	7655-S-HSG-4-MB5
UPC	054007-42177	054007-42191	054007-42202	054007-43393
Skirts	4	4	4	4
BIL	150 kV	150 kV	150 kV	150 kV
Max. Installed Length	12.25" (311 mm)	12.25" (311 mm)	12.25" (311 mm)	12.25" (311 mm)
Insulation O.D. Range	0.64"-1.08" (16,3-27,4 mm)	0.72"-1.29" (18,3-32,8 mm)	0.83"-1.53" (21,1-38,9 mm)	1.05"-1.80" (26,7-45,7 mm)
Conductor Size 5 kV	4/0 AWG	-	-	700-1500 kcmil
Conductor Size 8 kV	4/0 AWG	-	-	600-1250 kcmil
Conductor Size 15 kV	4/0 AWG (120 mm <sup>2</sup> )	4/0 AWG (120 mm <sup>2</sup> )	4/0 AWG (120 mm <sup>2</sup> )	500-1000 kcmil (240-500 mm <sup>2</sup> )
Conductor Size 25/28 kV	-	4/0 AWG (120 mm <sup>2</sup> )	4/0 AWG (120 mm <sup>2</sup> )	250-800 kcmil (150-400 mm <sup>2</sup> )
Conductor Size 35 kV	-	-	-	-
Lug/Stem Connector Included	(1) SC0040 Stem Connector	(1) SC0040 Stem Connector	(1) SC0040 Stem Connector	No
Mounting Bracket Included	No	No	No	(1) MB5 Mounting Bracket
	7655-S-HSG-4-MB6	7663-S-HSG-8-1/0		
UPC	054007-44276	054007-42441		
Skirts	4	8		
BIL	150 kV	200 kV		
Max. Installed Length	12.25" (311 mm)	20.50" (520 mm)		
Insulation O.D. Range	1.05"-1.80" (26,7-45,7 mm)	0.72"-1.29" (18,3-32,8 mm)		
Conductor Size 5 kV	700-1500 kcmil	-		
Conductor Size 8 kV	600-1250 kcmil	-		
Conductor Size 15 kV	500-1000 kcmil (240-500 mm <sup>2</sup> )	-		
Conductor Size 25/28 kV	250-800 kcmil (150-400 mm <sup>2</sup> )	1/0 AWG (50 mm <sup>2</sup> )		
Conductor Size 35 kV	-	1/0 AWG (50 mm <sup>2</sup> )		
Lug/Stem Connector Included	No	(1) SC0010 Stem Connector		
Mounting Bracket Included	(1) MB6 Mounting Bracket	No		

# Tape Termination Kits, 5 kV – 25/28 kV

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## Scotch® Tape Termination Kits 5700 Series for 5–25/28 kV

Scotch® Tape Termination Kits 5700 Series are designed to terminate solid dielectric shielded power cables rated 5–25/28 kV with tape shield, wire shield, UniShield® and concentric neutral (CN) construction in weather-protected areas. They can be upgraded to Class 1 (indoors only) with the use of Scotch® Silicone Rubber Electrical Tape 70 (see kit instructions).

Lugs are not included and must be ordered separately.

Note: For 25/28 kV applications using the 5703 termination kit, additional tapes must be purchased: (2) rolls of Scotch® High Voltage Splicing Tape 130C; (5) rolls of Scotch® Silicone Rubber Electrical Tape 70; and (1) roll of Scotch® Super 33+™ Vinyl Electrical Tape.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®, Concentric Neutral (CN)
<b>Indoor/Outdoor</b>	Indoor
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>Number of Skirts</b>	0
<b>Voltage</b>	5 kV, 8 kV, 15 kV, 25/28 kV
<b>Packaging</b>	3 kits per case (three terminations per kit)



Order No.	UPC	Max. Installed Length	Conductor Size 5 kV	Conductor Size 8 kV	Conductor Size 15 kV	Conductor Size 25/28 kV
5701	054007-11248	Wire Shielded Cable, 5 kV: 12.75" (323,9 mm) Wire Shielded Cable, 8 kV: 15" (381,0 mm) Wire Shielded Cable, 15 kV: 20" (508,0 mm) UniShield®, 5 kV: 11.25" (285,8 mm) UniShield®, 8 kV: 13.5" (342,9 mm) UniShield®, 15 kV: 18.5" (469,9 mm) Concentric Neutral, 5 kV: 11.25" (285,8 mm) Concentric Neutral, 8 kV: 13.5" (342,9 mm) Concentric Neutral, 15 kV: 18.5" (469,9 mm)	8-4/0 AWG (10-100 mm <sup>2</sup> )	8-4/0 AWG (10-100 mm <sup>2</sup> )	8-4/0 AWG (10-100 mm <sup>2</sup> )	-
5702	054007-11255	Wire Shielded Cable, 5 kV: 12.75" (323,9 mm) Wire Shielded Cable, 8 kV: 15" (381,0 mm) Wire Shielded Cable, 15 kV: 20" (508,0 mm) UniShield®, 5 kV: 11.25" (285,8 mm) UniShield®, 8 kV: 13.5" (342,9 mm) UniShield®, 15 kV: 18.5" (469,9 mm) Concentric Neutral, 5 kV: 11.25" (285,8 mm) Concentric Neutral, 8 kV: 13.5" (342,9 mm) Concentric Neutral, 15 kV: 18.5" (469,9 mm)	250-1000 kcmil (150-500 mm <sup>2</sup> )	250-1000 kcmil (150-500 mm <sup>2</sup> )	250-750 kcmil (150-325 mm <sup>2</sup> )	-
5703	054007-11263	Wire Shielded Cable, 15 kV: 20" (508,0 mm) UniShield®, 15 kV: 18.5" (469,9 mm) Concentric Neutral, 15 kV: 18.5" (469,9 mm) Tape Shield, 15 kV: 20" (508,0 mm)	-	-	800-1000 kcmil (400-500 mm <sup>2</sup> )	800-1000 kcmil (400-500 mm <sup>2</sup> )



# Non-Shielded Cable

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## Non-Shielded Cable

### 3M™ Cold Shrink Termination Kits 5610-A Series for 5 & 8 kV Non-Shielded Cables

3M™ Cold Shrink Termination Kits 5610-A series provide an environmental seal to the terminal lug area of 5–8 kV unshielded power cable. Each kit contains material needed to seal three cable ends. Terminal lug must be ordered separately. Kits can be used for both indoor (protected) and outdoor (weather-exposed) applications.

The silicone rubber provides tracking protection for the lug ends of the cable.

<b>Number of Conductors</b>	Single Conductor
<b>Shielding Type</b>	Non-Shielded
<b>Indoor/Outdoor</b>	Both
<b>Breakout Boot</b>	No
<b>Insulation Rejacketing</b>	No
<b>No. Skirts</b>	0
<b>Voltage</b>	5 kV, 8 kV
<b>Packaging</b>	1 kit per case



Order No.	UPC	Max. Installed Length	Cable Insulation O.D.	Conductor Size 5 kV & 8 kV
5611A	054007-49549	7.5" (191 mm)	0.31"-0.72" (7,9-18,3 mm)	8-4 AWG (10-16 mm <sup>2</sup> )
5612A	054007-49550	8.0" (203 mm)	0.44"-0.95" (11,2-24,1 mm)	2-2/0 AWG (35-60 mm <sup>2</sup> )
5613A	054007-49551	8.0" (203 mm)	0.56"-1.18" (14,2-30,0 mm)	3/0 AWG-300 kcmil (95-150 mm <sup>2</sup> )
5614A	054007-49552	8.0" (203 mm)	0.95"-1.94" (24,1-49,3 mm)	350-1000 kcmil (185-500 mm <sup>2</sup> )



# High Voltage Joints and Terminations up to 72,5 kV–145 kV

3M™ Cold Shrink QT-III Termination Kits and Joint Kits are designed to provide high reliability and save you time and money. They install quickly and easily, helping to reduce potential craft errors. They require no special tools, adhesives, torches, or other heat sources. Once installed, the cold shrink accessory creates a dynamic, compressive environmental seal and electrical interface without sealants or adhesives.



The QT-III terminations meet or exceed the requirements of IEEE 48, Class 1, 69 kV and IEC 60840 for 72,5 kV. The QS-III joints meet or exceed the requirements of IEEE 404, for 69 kV and IEC 60840 for 72,5 kV.

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# High Voltage Joints and Termination 72.5kV to 145kV

## A Cable Accessory Expert

Cable accessories are a critical part of the electrical network. As the voltage class increases, so do the challenges faced on the job site. In order to ensure the reliability of your network, you need a cable accessory expert, you need 3M.

For nearly 40 years, 3M has been providing dependable solutions for low and medium voltage installations. 3M has developed a core technology platform for constructing cable accessories. Now, this proven technology is available for high voltage applications up to 138 kv (IEEE) / 145 kv (IEC).



## 3M™ Core Technology Platform



## A Trusted Supplier

3M offers more than high voltage cable accessories. We provide peace of mind. 3M has provided reliable cable accessories with a consistent track record around the globe. Every pre-molded component (joint body and stress cone) is 100% electrical factory tested and every solution is backed by the strong reputation 3M commands in the industry.

## 3M™ Cold Shrink QT-III Termination Kit 7673-S-8 Series for 69/72,5 kV

The 3M™ Cold Shrink QT-III Termination Kit 7673-S-8 Series are designed to terminate 69 kV, 650 mil solid dielectric, tape shield, longitudinally corrugated (LC), jacketed concentric neutral (JCN), tape-over-wire (TOW), or wire-over-tape (WOT) shielded power cable. Covering a conductor size range of 350 kcmil–3000 kcmil (185-1500 mm<sup>2</sup>). See the selection table for detailed sizing information.

**Kit contents:** Each kit contains sufficient quantities of the following materials as appropriate to make one single-phase termination (lug not included unless requested in advance.)

- Silicone Rubber Skirted Stress Control Assembly
- Hi-K Stress Control Adapter Assembly
- Lug Seal Tube
- Ground Seal Tube
- Ground Strap Assembly
- Constant Force Springs
- Tubes 3M™ Red Compound P55/R (Non-Silicone Grease)
- Scotch® Electrical Shielding Tape 24
- 3M™ Scotch-Seal™ Mastic Sealing Tape 2229
- 3M™ Copper Foil Shielding Tape 1181
- Scotch® Vinyl Electrical Tape Super 88
- 3M™ Cable Cleaning Pads CC-3
- Scotch® Self-fusing Silicone Rubber Tape 70
- Instruction Sheets

Order No.	Primary Insulation O.D. Range	Jacket O.D. Range	Typical Conductor Size Range	Typical Creepage Distance	Approximate Installed Length
7673-S-8(R)	1.30"–2.36" (33,0–60,0mm)	1.60"–2.85" (40,6–72,4mm)	1/0 AWG–350 kcmil (50–175 mm <sup>2</sup> )	79" (200 cm)	39"–41" (102–107 cm)
7673-S-8(S)	2.01"–2.87" (51,1–72,9 mm)	2.25"–3.45" (57,2–87,6 mm)	350–1500 kcmil (175–725 mm <sup>2</sup> )	82" (208 cm)	40"–42" (102–107 cm)
7673-S-8	2.79"–3.45" (70,9–87,6 mm)	3.00"–4.25" (76,2–108,0 mm)	1500–3000 kcmil (800–1500 mm <sup>2</sup> )	82" (208 cm)	40"–42" (102–107 cm)
7673-S-10(R)	1.30"–2.36" (33,0–60,0 mm)	1.60"–2.85" (40,6–72,4 mm)	1/0 AWG–350 kcmil (50–175 mm <sup>2</sup> )	93" (238 cm)	47"–49" (119–124 cm)
7673-S-10(S)	2.01"–2.87" (51,1–72,9 mm)	2.25"–3.45" (57,2–87,6 mm)	350–1500 kcmil (175–725 mm <sup>2</sup> )	97" (248 cm)	48"–50" (122–127 cm)
7673-S-10	2.79"–3.45" (70,9–87,6 mm)	3.00"–4.25" (76,2–108,0 mm)	1500–3000 kcmil (800–1500 mm <sup>2</sup> )	97" (248 cm)	48"–50" (122–127 cm)
7673-S-INV-10(R)	1.30"–2.36" (33,0–60,0 mm)	1.60"–2.85" (40,6–72,4 mm)	1/0 AWG–350 kcmil (50–175 mm <sup>2</sup> )	93" (238 cm)	47"–49" (119–124 cm)
7673-S-INV-10(S)	2.01"–2.87" (51,1–72,9 mm)	2.25"–3.45" (57,2–87,6 mm)	350–1500 kcmil (175–725 mm <sup>2</sup> )	97" (248 cm)	48"–50" (122–127 cm)
7673-S-INV-10	2.79"–3.45" (70,9–87,6 mm)	3.00"–4.25" (76,2–108,0 mm)	1500–3000 kcmil (800–1500 mm <sup>2</sup> )	97" (248 cm)	48"–50" (122–127 cm)

## 3M™ Cold Shrink QS-III Splice Kit 5488A Series for 69 kV

The 3M™ Cold Shrink QS-III Splice Kit 5488A is a 69 kV-class splice for joining jacketed concentric neutral (JCN), tape shield, longitudinally corrugated (LC) shielded, tape-over-wire (TOW) or wire-over-tape (WOT) shielded power cables. It is a cold shrink design sized to fit Type MV-90 or type MV-105 cables with copper or aluminum conductor sizes ranging from 250 kcmil–2000 kcmil (120–1000 mm<sup>2</sup>). The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the cold shrink jacketing is made of EPDM rubber for physical protection. Each splice manufactured is factory tested to provide reliability. The product numbers containing “XB” are for crossbond or shield break applications.

### Kit Contents for 5488A Splice:

- Silicone Rubber Splice Body
- Jacketing Tubes
- Shielding Sleeve
- Pre-formed Braid Assembly (except JCN)
- Constant Force Springs
- 3M™ Red Compound P55/R Tubes (non-silicone grease)
- Roll 3M™ Scotch-Seal™ Mastic Tape 2229
- Rolls Scotch® Rubber Mastic Tape 2228
- Roll Scotch® Semi-conducting Tape 13
- Roll Scotch® Vinyl Electrical Tape Super 88
- 3M™ Cable Cleaning Pads CC-3
- 3M™ Copper Foil Tape Strips 1811, 15” long; (except JCN)
- Rolls 3M™ Armocast Structural Material 4560, 3” x 15’
- Shear Bolt Connector
- Instruction Booklets

### Additional Kit Contents for 5488A-JCN-XB and 5488A-Shielded-XB:

- Silicone Rubber Tube Assembly
- Roll, Scotch® Linerless Rubber Splicing Tape 130C
- Roll, Scotch® Electrical Shielding Tape 24

Shielding Type	Tape Shield, Longitudinally Corrugated, Jacketed Concentric Neutral, Tape Over Wire, Wire Over Tape
Indoor/Outdoor	Outdoor
BIL Rating	350 kV
Voltage	69 kV
Certifications	IEEE Std. 404 for 69 kV

Order No.	UPC	Conductor Size	Cable Insulation O.D.	Connector O.D.	Case Qty
5488A-250-500	051128-56798	250–500 kcmil	1.94”–3.08” (49,3–75,4 mm)	2.44” (62,0 mm)	1
5488A-750-1000	051128-56799	750–1000 kcmil	1.94”–3.08” (49,3–75,4 mm)	2.76” (70,1 mm)	1
5488A-1250-1500	051128-56800	1250–1500 kcmil	1.94”–3.08” (49,3–75,4 mm)	3.06” (77,7 mm)	1
5488A-1750-2000	051128-56801	1750–2000 kcmil	1.94”–3.08” (49,3–75,4 mm)	3.25” (82,6 mm)	1
5488A-XB-JCN250-500	051128-56802	250–500 kcmil	1.94”–3.08” (49,3–75,4 mm)	2.44” (62,0 mm)	1
5488A-XB-JCN750-1000	051128-56803	750–1000 kcmil	1.94”–3.08” (49,3–75,4 mm)	2.76” (70,1 mm)	1
5488A-XB-JCN1250-1500	051128-56804	1250–1500 kcmil	1.94”–3.08” (49,3–75,4 mm)	3.06” (77,7 mm)	1
5488A-XB-JCN1750-2000	051128-56805	1750–2000 kcmil	1.94”–3.08” (49,3–75,4 mm)	3.25” (82,6 mm)	1
5488A-XB-SHIELDED-250-500	051128-57882	250–500 kcmil	1.94”–3.08” (49,3–75,4 mm)	2.44” (62,0 mm)	1
5488A-XB-SHIELDED-750-1000	051128-57883	750–1000 kcmil	1.94”–3.08” (49,3–75,4 mm)	2.76” (70,1 mm)	1
5488A-XB-SHIELDED-1250-1500	051128-57884	1250–1500 kcmil	1.94”–3.08” (49,3–75,4 mm)	3.06” (77,7 mm)	1
5488A-XB-SHIELDED-1750-2000	051128-57885	1750–2000 kcmil	1.94”–3.08” (49,3–75,4 mm)	3.25” (82,6 mm)	1





## 3M™ Dry Termination TD-II Family for up to 123kV Applications

### Description

- One-piece dry termination, for indoor or outdoor installations

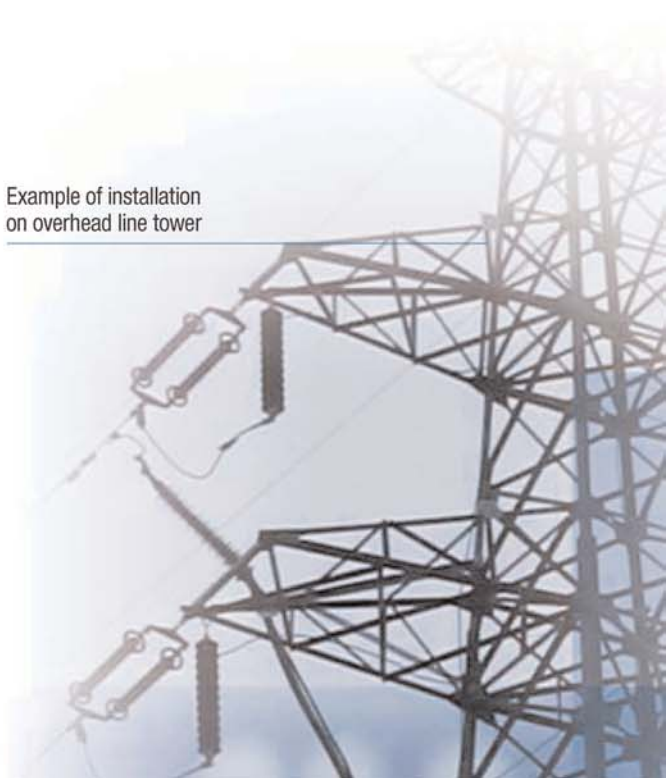
### Applications

- Conductor size up to 1750 kcmil (800 mm<sup>2</sup>)
- Meets class 3 (heavy pollution) requirements
- Not self-supporting, requires holding structure

### Features

- Light weight
- Dry design – does not require liquid dielectric
- Can be installed at any angle or inverted
- No special maintenance required
- Top- and bottom-sealing system based on proven cold shrink technology
- Alternating sheds (skirts)
- One-piece factory-tested push-on termination body

Example of installation on overhead line tower



## 3M™ Wet Silicone Termination TS-II Family with Cold Shrink Stress Cone for up to 145kV Applications

### Description

- Self-supporting, outdoor termination with silicone insulator

### Applications

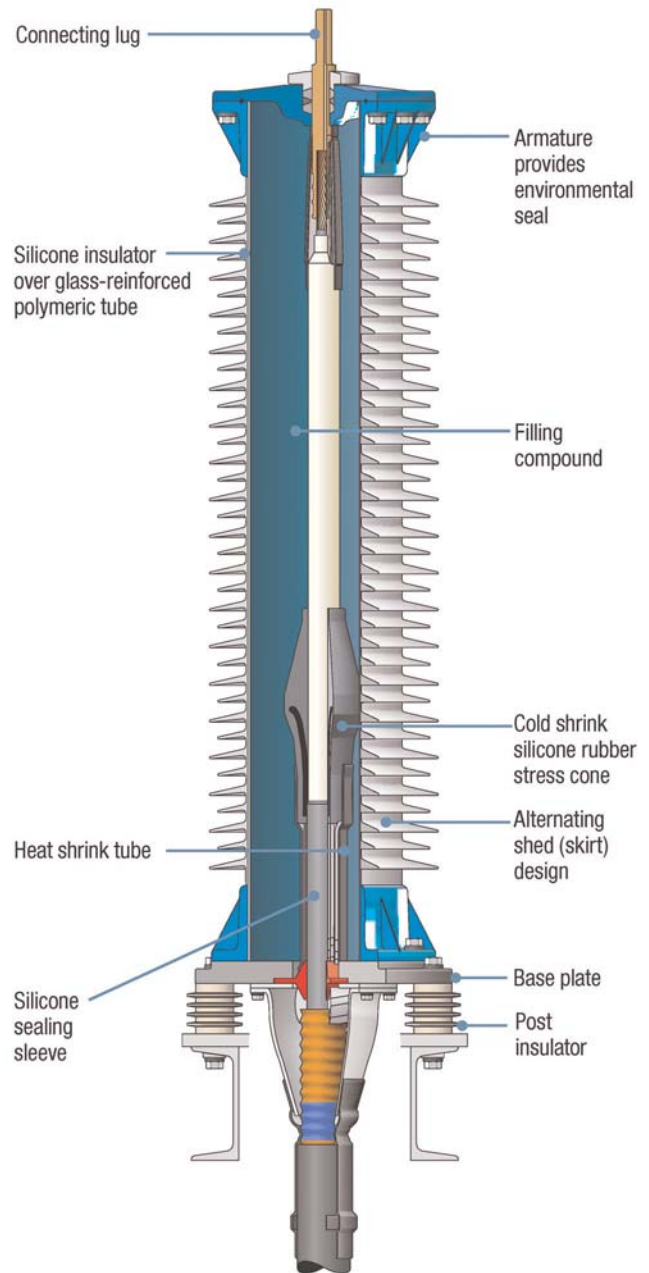
- Conductor size up to 2,000 kcmil (1,200 mm<sup>2</sup>)
- Can accommodate a variety of pollution classes and lengths
- Maximum installation angle of 30°

### Features

- One-piece pre-molded cold shrink silicone stress cone
- Light-weight construction, approximately 1/3 the weight of most porcelain terminations
- Easier handling, transportation and installation than porcelain insulator
- Hydrophobic silicone materials provide excellent environmental performance
- Smooth surface enables self-cleaning properties
- Less sensitive to earthquakes, vibrations and thermal variations
- Internal shear bolt connection option eliminates need for crimp-type connections
- No special tools required
- One kit covers a wide range of cable sizes
- Alternating sheds (skirts)

### Optional

- Arcing horns
- Variety of lengths available
- Available with porcelain insulator upon request (TP-II)



## 3M™ Cold Shrink Joint SC-II & SS-II Family for up to 145kV Applications

### Description

- One-piece, cold shrink silicone rubber joint for in-line and cross bond applications with different re-jacketing and grounding options

### Applications

- Conductor size up to 2,000 kcmil (1,200mm<sup>2</sup>)
- In-line and cross bond design available

### Features

- One piece silicone rubber cold shrink joint body
- Shear bolt connector included (optional crimp connector)
- Connectors for round compacted or round segmented cable available
- Flexible design accommodates different shielding and cable re-jacketing systems

- No special tools required
- Short installation length
- No parking positioning required
- Kit covers a wide range of cable sizes

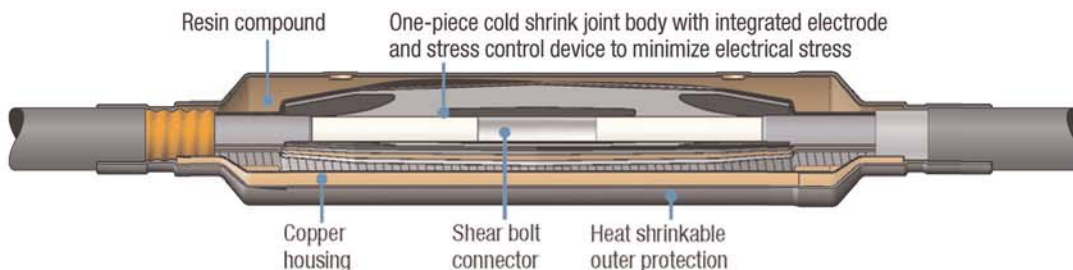
### Optional

- Re-jacketing with cold shrink, heat shrink or resin-filled enclosure
- Metal housing (optional)
- Link boxes for a variety of grounding systems

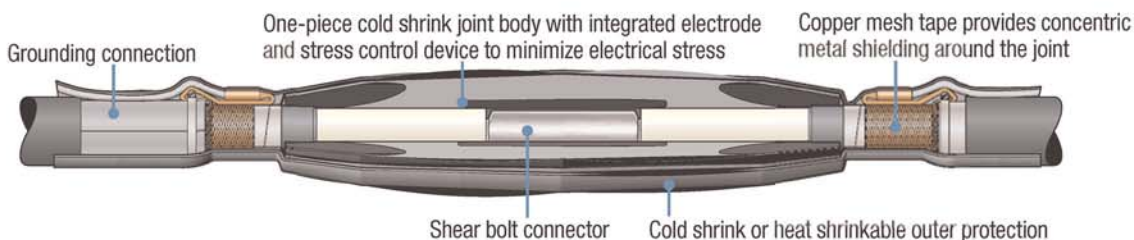
### Available Grounding Systems

- Removable links
- Surge voltage limiters (SVL)
- Cross bond boxes

### 3M™ Cold Shrink Joint SS-II with an in-line configuration, copper housing and heat shrink re-jacketing



### 3M™ Cold Shrink Joint SC-II with a cross bond configuration and cold shrink or heat shrink jacket



## 3M™ Cold Shrink Terminations and Joints Certification & Selection Guide

To assist you in determining the appropriate kit for your intended application, please submit your cable specifications to 3M.

Application Class	Dry Termination	Silicone Wet Termination	In-Line Joint	Cross Bond Joint
IEEE 115 kV	TD-II 115	TS-II 115	SS-II 115	SC-II 115
IEC 123 kV	TD-II 123	TS-II 123	SS-II 123	SC-II 123
IEEE 138 kV	-	TS-II 138	SS-II 138	SC-II 138
IEC 145 kV	-	TS-II 145	SS-II 145	SC-II 145
Test Certification	IEC 60840	IEC 60840	IEC 60840	IEC 60840

### 3M™ Peeling Tool

The right tools for cable preparation and installation are essential to ensure long-term reliability of the network. 3M is available to discuss the appropriate standard and special tools required for your installation.

These tools are recommended to prepare the cable for all installations:

- Straightening bar, angle-type
- Heating sleeve with temperature control unit
- Roll-type peeling tool



Peeling Tool

Order No.	Description	Case Qty.
SH 80	For cables with maximum diameter over outer semicon of 80 mm.	1
SH 130	For cables with maximum diameter over outer semicon of 130 mm.	1



# Separable Connectors

## **3M™ 200 Amp Industrial Load Break Elbows**

Providing a convenient method to connect/disconnect cable and equipment on power distribution systems, loadbreak elbows include provisions for energized operation using standard hotstick tools, allowing loadmake/break operation and a visible disconnect. Components can be isolated with insulated caps, plugs and parking bushings.

The 3M™ 200 Amp Industrial Loadbreak Elbow is a fully shielded and insulated plug-in separable connector connecting 5-25 kV. Designed to be used on tape shield,



wire shield, UniShield® and jacketed concentric neutral types of cable. 3M's elbows are molded using high quality peroxide-cured EPDM insulation and meet requirements of ANSI/IEEE Standard 386.

## **3M 600 Amp Deadbreak T-Bodies**

600 Series deadbreak elbows are used to connect equipment and cable on primary feeder and network circuits. The 3M™ Modular Splice Kit Series 5815 is easy to expand and is flexible – allowing for easy disconnects and additions. With 3M modular technology, splices are designed to maintain the insulating and shielding integrity of the original cable.

Easy to install, our modular splicing kits install easily on standard shielded power cables and are compatible with copper and aluminum conductors. The 5815 Series kits are designed for use with tape shield, wire shield, UniShield® and jacketed concentric neutral cables. Meets requirements of ANSI/IEEE Standard 386.

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## 200 Amp Load Break Elbows

### 3M™ Industrial Loadbreak Elbow, 5810 Series (5-15 kV)

3M™ 200 Amp Industrial Loadbreak Elbow 5810 Series is a fully shielded and insulated plug-in separable connector for connecting 5–15 kV underground cable to transformers, switchgear and junctions equipped with loadbreak bushings. The elbow and the bushing insert comprise the essential components of all loadbreak connections. The 3M 200 Amp Industrial Loadbreak Elbow 5810 Series kits are designed for use on tape shield, wire shield, UniShield® and jacketed concentric neutral types of cables. The jacket seal for each of these cable types is accomplished by use of a specially designed cold shrink tube. This tube seals from the bottom of the elbow to the cable jacket. Also included in the kit are all the ground assemblies necessary to ground both the cable and the elbow.

The loadbreak elbows are molded using high quality peroxide-cured EPDM insulation. Standard features include a copper-top connector, tin-plated copper loadbreak probe with an ablative arc-follower tip, stainless steel reinforced pulling-eye and a capacitive test point.

The copper-top compression connector is a standard item to transition from the cable to the loadbreak probe. An aluminum crimp barrel is inertia-welded to a copper lug. The aluminum barrel makes the connector easy to crimp on both aluminum and copper conductors and the copper lug ensures a reliable, tight, cool operating connection with the loadbreak probe. Meets requirements of ANSI/IEEE Standard 386.

Note: Kits 5810-CA, 5810-CB, 5810-A, 5810-B, 5810-C, and 5810-D are without a compression connector.



<b>Voltage</b>	5-15 kV
<b>Current</b>	200 Ampere
<b>Component Type</b>	Elbow
<b>Agency Approval</b>	ANSI/IEEE Standard 386

	5810-A	5810-A-3	5810-A-2	5810-A-1
UPC	054007-04656	054007-04813	054007-04768	054007-04660
Insulation Diameter	0.630-0.820" (16,0-20,8 mm)	0.630-0.820" (16,0-20,8 mm)	0.630-0.820" (16,0-20,8 mm)	0.630-0.820" (16,0-20,8 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded	3/0-4/0 AWG	-	-	-
Conductor Size 5 kV 100% (90 mil) - Compact/Solid	3/0 AWG-250 kcmil	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded	2/0-3/0 AWG	-	-	-
Conductor Size 5 kV 133% (115 mil) - Compact/Solid	2/0-4/0 AWG	-	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded	2/0-3/0 AWG	-	-	-
Conductor Size 8 kV 100% (115 mil) - Compact/Solid	2/0-4/0 AWG	-	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded	1-2/0 AWG	-	-	1 AWG
Conductor Size 8 kV 133% (140 mil) - Compact/Solid	1/0-3/0 AWG	-	-	1/0 AWG
Conductor Size 15 kV 100% (175 mil) - Stranded	2-1 AWG	-	2 AWG	1 AWG
Conductor Size 15 kV 100% (175 mil) - Compact/Solid	2-1/0 AWG	2 AWG	1 AWG	1/0 AWG
Conductor Size 15 kV 133% (220 mil) - Stranded	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Compact/Solid	2 AWG	2 AWG	-	-
Kits per Case	1	1	1	1



**3M™ Industrial Loadbreak Elbow, 5810 Series (5-15 kV) (continued)**

	5810-A-1/0	5810-A-2/0	5810-A-3/0	5810-A-4/0
UPC	054007-04767	054007-04769	054007-04770	054007-04771
Insulation Diameter	0.630-0.820" (16,0-20,8 mm)	0.630-0.820" (16,0-20,8 mm)	0.630-0.820" (16,0-20,8 mm)	0.630-0.820" (16,0-20,8 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded	-	-	3/0 AWG	4/0 AWG
Conductor Size 5 kV 100% (90 mil) - Compact/Solid	-	3/0 AWG	4/0 AWG	250 kcmil
Conductor Size 5 kV 133% (115 mil) - Stranded	-	2/0 AWG	3/0 AWG	-
Conductor Size 5 kV 133% (115 mil) - Compact/Solid	2/0 AWG	3/0 AWG	4/0 AWG	-
Conductor Size 8 kV 100% (115 mil) - Stranded	-	2/0 AWG	3/0 AWG	-
Conductor Size 8 kV 100% (115 mil) - Compact/Solid	2/0 AWG	3/0 AWG	4/0 AWG	-
Conductor Size 8 kV 133% (140 mil) - Stranded	1/0 AWG	2/0 AWG	-	-
Conductor Size 8 kV 133% (140 mil) - Compact/Solid	2/0 AWG	3/0 AWG	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded	-	-	-	-
Conductor Size 15 kV 100% (175 mil) - Compact/Solid	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Compact/Solid	-	-	-	-
Kits per Case	1	1	1	1
	5810-B	5810-B-2	5810-B-1	5810-B-1/0
UPC	054007-04657	054007-04774	054007-04772	054007-04773
Insulation Diameter	0.700-0.910" (17,8-23,1 mm)	0.700-0.910" (17,8-23,1 mm)	0.700-0.910" (17,8-23,1 mm)	0.700-0.910" (17,8-23,1 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded	250 kcmil	-	-	-
Conductor Size 5 kV 100% (90 mil) - Compact/Solid	-	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded	4/0 AWG-250 kcmil	-	-	-
Conductor Size 5 kV 133% (115 mil) - Compact/Solid	250 kcmil	-	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded	4/0 AWG-250 kcmil	-	-	-
Conductor Size 8 kV 100% (115 mil) - Compact/Solid	250 kcmil	-	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded	3/0-4/0 AWG	-	-	-
Conductor Size 8 kV 133% (140 mil) - Compact/Solid	4/0 AWG-250 kcmil	-	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded	1/0-2/0 AWG	-	-	1/0 AWG
Conductor Size 15 kV 100% (175 mil) - Compact/Solid	2/0-3/0 AWG	-	-	2/0 AWG
Conductor Size 15 kV 133% (220 mil) - Stranded	2-1/0 AWG	2 AWG	1 AWG	1/0 AWG
Conductor Size 15 kV 133% (220 mil) - Compact/Solid	1-2/0 AWG	1 AWG	1/0 AWG	2/0 AWG
Kits per Case	1	1	1	1

200 Amp Load Break Elbows

3M™ Industrial Loadbreak Elbow, 5810 Series (5-15 kV) (continued)

	5810-B-2/0	5810-B-3/0	5810-B-4/0	5810-B-250
UPC	054007-04775	054007-04776	054007-04778	054007-04777
Insulation Diameter	0.700-0.910" (17,8-23,1 mm)	0.700-0.910" (17,8-23,1 mm)	0.700-0.910" (17,8-23,1 mm)	0.700-0.910" (17,8-23,1 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded	-	-	-	250 kcmil
Conductor Size 5 kV 100% (90 mil) - Compact/Solid	-	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded	-	-	4/0 AWG	250 kcmil
Conductor Size 5 kV 133% (115 mil) - Compact/Solid	-	-	250 kcmil	-
Conductor Size 8 kV 100% (115 mil) - Stranded	-	-	4/0 AWG	250 kcmil
Conductor Size 8 kV 100% (115 mil) - Compact/Solid	-	-	250 kcmil	-
Conductor Size 8 kV 133% (140 mil) - Stranded	-	3/0 AWG	4/0 AWG	-
Conductor Size 8 kV 133% (140 mil) - Compact/Solid	-	4/0 AWG	250 kcmil	-
Conductor Size 15 kV 100% (175 mil) - Stranded	2/0 AWG	-	-	-
Conductor Size 15 kV 100% (175 mil) - Compact/Solid	3/0 AWG	-	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Compact/Solid	-	-	-	-
Kits per Case	1	1	1	1
	5810-C	5810-C-2/0	5810-C-3/0	5810-C-4/0
UPC	054007-04659	054007-04780	054007-04782	054007-04783
Insulation Diameter	0.850-1.100" (21,6-27,9 mm)	0.850-1.100" (21,6-27,9 mm)	0.850-1.100" (21,6-27,9 mm)	0.850-1.100" (21,6-27,9 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded	-	-	-	-
Conductor Size 5 kV 100% (90 mil) - Compact/Solid	-	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded	-	-	-	-
Conductor Size 5 kV 133% (115 mil) - Compact/Solid	-	-	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded	-	-	-	-
Conductor Size 8 kV 100% (115 mil) - Compact/Solid	-	-	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded	250 kcmil	-	-	-
Conductor Size 8 kV 133% (140 mil) - Compact/Solid	-	-	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded	3/0 AWG-250 kcmil	-	3/0 AWG	4/0 AWG
Conductor Size 15 kV 100% (175 mil) - Compact/Solid	4/0 AWG-250 kcmil	-	4/0 AWG	250 kcmil
Conductor Size 15 kV 133% (220 mil) - Stranded	2/0-4/0 AWG	2/0 AWG	3/0 AWG	4/0 AWG
Conductor Size 15 kV 133% (220 mil) - Compact/Solid	3/0 AWG-250 kcmil	3/0 AWG	4/0 AWG	250 kcmil
Kits per Case	1	1	1	1

3M™ Industrial Loadbreak Elbow, 5810 Series (5-15 kV) (continued)

	5810-C-250	5810-CA	5810-CA-1	5810-CA-2
UPC	054007-04781	054007-04641	054007-04784	054007-04785
Insulation Diameter	0.850-1.100" (21,6-27,9 mm)	0.495-0.585" (12,6-14,9 mm)	0.495-0.585" (12,6-14,9 mm)	0.495-0.585" (12,6-14,9 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded	-	2-1 AWG	1 AWG	2 AWG
Conductor Size 5 kV 100% (90 mil) - Compact/Solid	-	1-1/0 AWG	1/0 AWG	1 AWG
Conductor Size 5 kV 133% (115 mil) - Stranded	-	2 AWG	-	2 AWG
Conductor Size 5 kV 133% (115 mil) - Compact/Solid	-	1 AWG	-	1 AWG
Conductor Size 8 kV 100% (115 mil) - Stranded	-	2 AWG	-	2 AWG
Conductor Size 8 kV 100% (115 mil) - Compact/Solid	-	1 AWG	-	1 AWG
Conductor Size 8 kV 133% (140 mil) - Stranded	250 kmcil	-	-	-
Conductor Size 8 kV 133% (140 mil) - Compact/Solid	-	-	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded	250 kcmil	-	-	-
Conductor Size 15 kV 100% (175 mil) - Compact/Solid	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Compact/Solid	-	-	-	-
Kits per Case	1	1	1	1
	5810-CB	5810-CB-4	5810-CB-1	5810-CB-1/0
UPC	054007-04642	054007-04817	054007-04787	054007-04788
Insulation Diameter	0.575-0.685" (14,6-17,4 mm)	0.575-0.685" (14,6-17,4 mm)	0.575-0.685" (14,6-17,4 mm)	0.575-0.685" (14,6-17,4 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded	1/0-2/0 AWG	-	-	1/0 AWG
Conductor Size 5 kV 100% (90 mil) - Compact/Solid	2/0 AWG	-	-	2/0 AWG
Conductor Size 5 kV 133% (115 mil) - Stranded	1-1/0 AWG	-	1 AWG	1/0 AWG
Conductor Size 5 kV 133% (115 mil) - Compact/Solid	1/0 AWG	-	1/0 AWG	-
Conductor Size 8 kV 100% (115 mil) - Stranded	1-1/0 AWG	-	1 AWG	1/0 AWG
Conductor Size 8 kV 100% (115 mil) - Compact/Solid	1/0 AWG	-	1/0 AWG	-
Conductor Size 8 kV 133% (140 mil) - Stranded	2 AWG	-	-	-
Conductor Size 8 kV 133% (140 mil) - Compact/Solid	2-1 AWG	-	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded	4 AWG	4 AWG	-	-
Conductor Size 15 kV 100% (175 mil) - Compact/Solid	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Compact/Solid	-	-	-	-
Kits per Case	1	1	1	1

200 Amp Load Break Elbows

**3M™ Industrial Loadbreak Elbow, 5810 Series (5-15 kV) (continued)**

	5810-CB-2/0	5810-D	5810-D-250
UPC	054007-04790	054007-04670	054007-04793
Insulation Diameter	0.575-0.685" (14,6-17,4 mm)	1.040-1.250" (26,4-31,8 mm)	1.040-1.250" (26,4-31,8 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded	2/0 AWG	-	-
Conductor Size 5 kV 100% (90 mil) - Compact/Solid	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded	-	-	-
Conductor Size 5 kV 133% (115 mil) - Compact/Solid	-	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded	-	-	-
Conductor Size 8 kV 100% (115 mil) - Compact/Solid	-	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded	-	-	-
Conductor Size 8 kV 133% (140 mil) - Compact/Solid	-	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded	-	-	-
Conductor Size 15 kV 100% (175 mil) - Compact/Solid	-	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded	-	250 kcmil	250 kcmil
Conductor Size 15 kV 133% (220 mil) - Compact/Solid	-	-	-
Kits per Case	1	1	1

## 3M™ Industrial Loadbreak Elbow, 5811 Series (25 kV)

3M™ 200 Amp Industrial Loadbreak Elbow 5811 Series is a fully shielded and insulated plug-in separable connector for connecting 25 kV underground cable to transformers, switchgear and junctions equipped with loadbreak bushings. The elbow and the bushing insert comprise the essential components of all loadbreak connections. The 3M 200 Amp Industrial Loadbreak Elbow 5811 Series kits are designed for use on tape shield, wire shield, UniShield® and jacketed concentric neutral types of cables. The jacket seal for each of these cable types is accomplished by use of a specially designed cold shrink tube. This tube seals from the bottom of the elbow to the cable jacket. Also included in the kit are all the ground assemblies necessary to ground both the cable and the elbow.

The loadbreak elbows are molded using high quality peroxide-cured EPDM insulation. Standard features include a copper-top connector, tin-plated copper loadbreak probe with an ablative arc-follower tip, stainless steel reinforced pulling-eye and a capacitive test point.

The copper-top compression connector is a standard item to transition from the cable to the loadbreak probe. An aluminum crimp barrel is inertia-welded to a copper lug. The aluminum barrel makes the connector easy to crimp on both aluminum and copper conductors and the copper lug ensures a reliable, tight, cool operating connection with the loadbreak probe. Meets requirements of ANSI/IEEE Standard 386.

Voltage	25 kV
Current	200 Ampere
Component Type	Elbow
Agency Approval	ANSI/IEEE Standard 386



Order No.	UPC	Insulation Diameter	Conductor Size 25 kV 100% (260 mil) Stranded	Conductor Size 25 kV 100% (260 mil) Compact/Solid	Conductor Size 25 kV 133% (320 mil) Stranded	Conductor Size 25 kV 133% (320 mil) Compact/Solid	Kits per Case
5811-B	054007-43586	0.700"-0.910" (17,8-23,1 mm)	2 AWG	2-1 AWG	-	-	1
5811-B-2	054007-43588	0.700"-0.910" (17,8-23,1 mm)	2 AWG	1 AWG	-	-	1
5811-B-3	054007-43587	0.700"-0.910" (17,8-23,1 mm)	-	2 AWG	-	-	1
5811-C	054007-43589	0.850"-1.100" (21,6-27,9 mm)	1-3/0 AWG	1/0-4/0 AWG	2-1/0 AWG	2-1/0 AWG	1
5811-C-1	054007-43592	0.850"-1.100" (21,6-27,9 mm)	1 AWG	1/0 AWG	1 AWG	1/0 AWG	1
5811-C-2	054007-43591	0.850"-1.100" (21,6-27,9 mm)	-	-	2 AWG	1 AWG	1
5811-C-3	054007-43590	0.850"-1.100" (21,6-27,9 mm)	-	-	-	2 AWG	1
5811-C-1/0	054007-43593	0.850"-1.100" (21,6-27,9 mm)	1/0 AWG	2/0 AWG	1/0 AWG	-	1
5811-C-2/0	054007-43594	0.850"-1.100" (21,6-27,9 mm)	2/0 AWG	3/0 AWG	-	-	1
5811-C-3/0	054007-43601	0.850"-1.100" (21,6-27,9 mm)	3/0 AWG	4/0 AWG	-	-	1
5811-D	054007-43602	1.040"-1.250" (26,4-31,8 mm)	4/0 AWG-250 kcmil	250 kcmil	2/0-4/0 AWG	2/0-4/0 AWG	1
5811-D-1/0	054007-43603	1.040"-1.250" (26,4-31,8 mm)	-	-	-	2/0 AWG	1
5811-D-2/0	054007-43604	1.040"-1.250" (26,4-31,8 mm)	-	-	2/0 AWG	3/0 AWG	1

### 3M™ Industrial Loadbreak Elbow, 5811 Series (25 kV) (continued)

Order No.	UPC	Insulation Diameter	Conductor Size 25 kV 100% (260 mil) Stranded	Conductor Size 25 kV 100% (260 mil) Compact/Solid	Conductor Size 25 kV 133% (320 mil) Stranded	Conductor Size 25 kV 133% (320 mil) Compact/Solid	Kits per Case
5811-D-3/0	054007-43605	1.040"-1.250" (26,4-31,8 mm)	-	-	3/0 AWG	4/0 AWG	1
5811-D-4/0	054007-43606	1.040"-1.250" (26,4-31,8 mm)	4/0 AWG	250 kcmil	4/0 AWG	-	1
5811-D-250	054007-43607	1.040"-1.250" (26,4-31,8 mm)	250 kcmil	-	-	-	1

### 3M™ Cold Shrink 5110-OS Series 15–25/28 kV Cable Accessory Oil Stops

3M™ Cold Shrink 5110-OS Series Kits are designed for use on Paper Insulated Lead Covered (PILC) cable with 200 amp elbows and 600 amp modular splice (separable connector) components that meet the requirements of IEEE Standard 386. There are four kits in the series that seal the oil inside the PILC cable, provide an accessory ground lead and environmentally seal the accessory end and cable jacket. These kits can be used on PILC cables sized 4 AWG–1000 kcmil rated 15 kV and 2 AWG–800 kcmil rated 25/28 kV.

Each kit contains sufficient quantities to seal and ground one cable end.

<b>Voltage</b>	15 kV, 25/28 kV
<b>Cable/Shielding Type</b>	Paper Insulated Lead Covered (PILC)
<b>Current Rating</b>	200 Ampere
<b>Agency Approvals</b>	IEEE Std. No. 386



Order No.	UPC	Min. Insulation Diameter (Over Paper)	Max. Lead Diameter	Conductor Size 15 kV	Conductor Size 25/28 kV	Kits per Case
5110-OS	054007-43404	0.58" (14,7 mm)	1.10" (27,9 mm)	4-3/0 AWG	-	1
5111-OS	054007-43405	0.72" (18,3 mm)	1.30" (33,0 mm)	4/0 AWG-300 kcmil	2-1/0 AWG	1
5112-OS	054007-43406	0.92" (23,4 mm)	1.60" (40,6 mm)	350-600 kcmil	2/0 AWG-300 kcmil	1
5113-OS	054007-43407	1.10" (27,9 mm)	2.00" (50,8 mm)	750-1000 kcmil	350-800 kcmil	1

## 600 Amp Dead Break T-Bodies

### 3M™ 600 Amp T-Bodies 5815 Series (5–25 kV)

The 3M™ 600 Amp T-Bodies 5815 Series is a fully shielded 600 amp separable connector system which meets the requirements of ANSI/IEEE Standard 386, "Separable Insulated Connector Systems." These modular kits are available for splicing, dead-ending and connecting to dead-front apparatus such as transformers, switches and switchgear equipped with 600 amp bushings. The system has the capability for future modification by simply adding or removing modular components. By combining kits, the system can accommodate 3-way, 4-way, parallel feed, etc. connections in various tap splicing configurations.

The modular kits are designed for use on 5, 8, 15 and 25 kV rated industrial shielded power cables. Kit instructions describe installations for tape shield, wire shield, UniShield®, and jacketed concentric neutral types of solid dielectric cables with extruded semi-conductive insulation shields. A capacitive test point on the insulating plug provides a safe means of testing the circuit without disturbing the bolted connection. The completed installation is fully shielded to provide a complete dead-front connection which is suitable for operation in submerged or direct burial locations.

Each kit can splice one cable.



<b>Voltage</b>	5-25 kV
<b>Current</b>	600 Ampere
<b>Shielding Type</b>	Tape Shield, Wire Shield, UniShield®, Jacketed Concentric Neutral (JCN)
<b>Splicing Type</b>	Modular
<b>Agency Approval</b>	ANSI/IEEE Standard 386
<b>Packaging</b>	1 kit/case

	5815-B1	5815-B2	5815-B3	5815-B4
UPC	054007-04235	054007-04237	054007-04238	054007-04239
Insulation Diameter	0.640-0.760" (16,3-19,3 mm)	0.640-0.760" (16,3-19,3 mm)	0.640-0.760" (16,3-19,3 mm)	0.640-0.760 (16,3-19,3 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-	3/0 AWG (4/0 AWG)	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	2/0 AWG (3/0 AWG)	-	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	2/0 AWG (3/0 AWG)	-	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-	-	2 AWG (1 AWG)	1 AWG (1/0 AWG)
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	-	-	-



600 Amp Dead Break T-Bodies

3M™ 600 Amp T-Bodies 5815 Series (5–25 kV) (continued)

	5815-B5	5815-B6	5815-B7	5815-B8
UPC	054007-04244	054007-04259	054007-04260	054007-04261
Insulation Diameter	0.720-0.845" (18,3-21,5 mm)	0.720-0.845" (18,3-21,5 mm)	0.720-0.845" (18,3-21,5 mm)	0.720-0.845" (18,3-21,5 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-	-	4/0 AWG (-)	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	3/0 AWG (4/0 AWG)	4/0 AWG (250 kcmil)	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	3/0 AWG (4/0 AWG)	4/0 AWG (250 kcmil)	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	2/0 AWG (-)	3/0 AWG (4/0 AWG)	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	2/0 AWG (3/0 AWG)	-	-	1/0 AWG (2/0 AWG)
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	-	-	-
	5815-B9	5815-B10	5815-B11	5815-B12
UPC	054007-04262	054007-04263	054007-04264	054007-04603
Insulation Diameter	0.720-0.845" (18,3-21,5 mm)	0.720-0.845" (18,3-21,5 mm)	0.785-0.970" (19,9-24,6 mm)	0.785-0.970" (19,9-24,6 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-	250 kcmil (250 kcmil)	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	-	-	4/0 AWG (250 kcmil)
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	2 AWG (1 AWG)	-	1 AWG (1/0 AWG)	-
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	-	1 AWG (1/0 AWG)	-
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	-	-	-

3M™ 600 Amp T-Bodies 5815 Series (5–25 kV) (continued)

	5815-B13	5815-B14	5815-B15	5815-B16
UPC	054007-04266	054007-04267	054007-04268	054007-04269
Insulation Diameter	0.785-0.970" (19,9-24,6 mm)	0.785-0.970" (19,9-24,6 mm)	0.785-0.970" (19,9-24,6 mm)	0.785-0.970" (19,9-24,6 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	-	250 kcmil (-)	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	-	250 kcmil (-)	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	-	250 kcmil (-)	-
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-	-	-	3/0 AWG (4/0 AWG)
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	1/0 AWG (2/0 AWG)	-	-	-
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	2 AWG (1 AWG)	-	-
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	-	-	-
	5815-B17	5815-B18	5815-B19	5815-B20
UPC	054007-04570	054007-04571	054007-04572	054007-04573
Insulation Diameter	0.785-0.970" (19,9-24,6 mm)	0.785-0.970" (19,9-24,6 mm)	0.785-0.970" (19,9-24,6 mm)	0.910-1.065" (23,1-27,1 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	350 kcmil (-)	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-	4/0 AWG (250 kcmil)	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	-	-	2/0 AWG (3/0 AWG)	-
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	-	-	1/0 AWG (2/0 AWG)
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	-	-	-

600 Amp Dead Break T-Bodies

3M™ 600 Amp T-Bodies 5815 Series (5–25 kV) (continued)

	5815-B22	5815-B23	5815-B24	5815-B26
UPC	054007-04575	054007-04576	054007-04577	054007-04579
Insulation Diameter	0.910-1.065" (23,1-27,1 mm)	0.910-1.065" (23,1-27,1 mm)	0.910-1.065" (23,1-27,1 mm)	0.910-1.065" (23,1-27,1 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	350 kcmil (-)	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	350 kcmil (-)	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	350 kcmil (-)	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-	-	250 kcmil (-)	-
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	3/0 AWG (4/0 AWG)	-	-	4/0 AWG (250 kcmil)
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	-	-	-
	5815-B28	5815-B29	5815-B30	5815-B31
UPC	054007-04582	054007-43437	054007-43438	054007-43439
Insulation Diameter	0.980-1.140" (24,9-29,0 mm)	0.980-1.140" (24,9-29,0 mm)	0.980-1.140" (24,9-29,0 mm)	0.980-1.140" (24,9-29,0 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-	500 kcmil (-)	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	500 kcmil (-)	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	500 kcmil (-)	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	3/0 AWG (4/0 AWG)	-	-	-
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	-	1/0 AWG (2/0 AWG)	2/0 AWG (3/0 AWG)

## 3M™ 600 Amp T-Bodies 5815 Series (5–25 kV) (continued)

	5815-B32	5815-B33	5815-B34	5815-B35
UPC	054007-43440	054007-43441	054007-43442	054007-43443
Insulation Diameter	0.980-1.140" (24,9-29,0 mm)	0.980-1.140" (24,9-29,0 mm)	0.980-1.140" (24,9-29,0 mm)	1.080-1.280" (27,4-32,5 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	-	-	500 kcmil ( - )
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-	350 kcmil ( - )	-	500 kcmil ( - )
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	250 kcmil ( - )	-	-	-
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	-	4/0 AWG (250 kcmil)	-
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	-	-	-
	5815-B36	5815-B37	5815-B38	5815-B39
UPC	054007-43444	054007-43445	054007-43446	054007-43447
Insulation Diameter	1.080-1.280" (27,4-32,5 mm)	1.080-1.280" (27,4-32,5 mm)	1.080-1.280" (27,4-32,5 mm)	1.080-1.280" (27,4-32,5 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	-	-	350 kcmil ( - )	-
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	250 kcmil ( - )	-	-
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	3/0 AWG (4/0 AWG)	-	-	4/0 AWG

600 Amp Dead Break T-Bodies

3M™ 600 Amp T-Bodies 5815 Series (5–25 kV) (continued)

	5815-B40	5815-B41	5815-B42	5815-B43
UPC	054007-43448	054007-43449	054007-43450	054007-43451
Insulation Diameter	1.080-1.280" (27,4-32,5 mm)	1.220-1.420" (31,0-36,1 mm)	1.220-1.420" (31,0-36,1 mm)	1.220-1.420" (31,0-36,1 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	750 kcmil ( - )	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	-	-	750 kcmil ( - )
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	-	-	750 kcmil ( - )
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	-	-	750 kcmil ( - )
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	350 kcmil ( - )	-	-
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	350 kcmil ( - )	250 kcmil ( - )	-
	5815-B44	5815-B46	5815-B47	5815-B48
UPC	054007-43452	054007-43454	054007-43455	054007-43456
Insulation Diameter	1.220-1.420" (31,0-36,1 mm)	1.360-1.560" (34,5-39,6 mm)	1.360-1.560" (34,5-39,6 mm)	1.360-1.560" (34,5-39,6 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	1000 kcmil, Al ( - )	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	1000 kcmil, Al ( - )	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	1000 kcmil, Al ( - )	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-	-	-	750 kcmil ( - )
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	500 kcmil ( - )	-	-	750 kcmil ( - )
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	-	500 kcmil ( - )	-
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	-	500 kcmil ( - )	-

**3M™ 600 Amp T-Bodies 5815 Series (5–25 kV) (continued)**

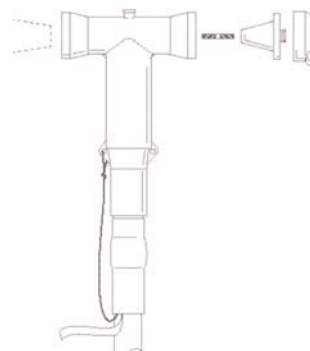
	5815-B49	5815-B50	5815-B51	5815-B52
UPC	054007-43457	054007-43461	054007-43465	054007-43466
Insulation Diameter	1.480-1.700" (37,6-43,2 mm)	1.480-1.700" (37,6-43,2 mm)	1.640-1.840" (41,7-46,7 mm)	1.640-1.840" (41,7-46,7 mm)
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-	-	-	-
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	1000 kcmil, Al (-)	-	-	-
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	1000 kcmil, Al (-)	-	-	-
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-	750 kcmil (-)	-	1000 kcmil, Al (-)
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	-	-	750 kcmil (-)	-
<b>5815-B53</b>				
UPC	054007-43467			
Insulation Diameter	1.780-1.965" (45,2-49,9 mm)			
Conductor Size 5 kV 100% (90 mil) - Stranded (Compact/Solid)	-			
Conductor Size 5 kV 133% (115 mil) - Stranded (Compact/Solid)	-			
Conductor Size 8 kV 100% (115 mil) - Stranded (Compact/Solid)	-			
Conductor Size 8 kV 133% (140 mil) - Stranded (Compact/Solid)	-			
Conductor Size 15 kV 100% (175 mil) - Stranded (Compact/Solid)	-			
Conductor Size 15 kV 133% (220 mil) - Stranded (Compact/Solid)	-			
Conductor Size 25 kV 100% (260 mil) - Stranded (Compact/Solid)	-			
Conductor Size 25 kV 133% (320 mil) - Stranded (Compact/Solid)	1000 kcmil, Al (-)			

## 600 Amp Dead Break T-Bodies

### 3M™ Equipment Connection Splicing Kit 5815-E

This 3M™ Equipment Connection Splicing Kit 5815-E permits connection to standard non-loadbreak 600 amp bushings to provide fully shielded, dead-front cable connections to apparatus such as transformers, oil switches and transformer switches.

Every kit contains 1 tee-module, 1 dead-end plug, 1 connecting stud, 1 instruction booklet and silicone lubricant. A cable adapter kit is required for each cable.



<b>Voltage</b>	5–25 kV
<b>Current</b>	600 Ampere
<b>Component Type</b>	Accessory

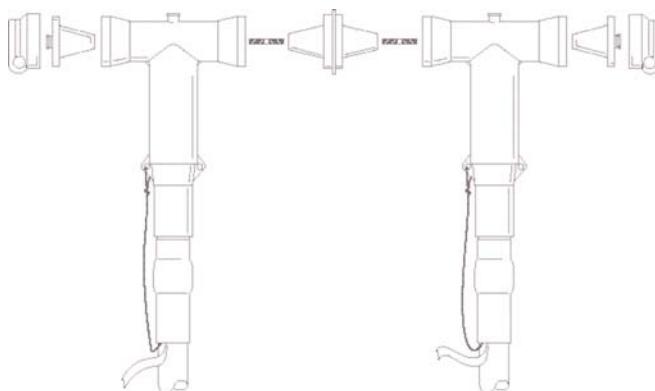
Order No.	UPC	Conductor Size - Stranded (Cu)	Conductor Size - Stranded (Al)	Required Accessory	Items per Case
5815-E	054007-04234	2 AWG-750 kcmil	2 AWG-1000 kcmil	One cable adapter kit	1

### 3M™ Modular Splicing Kit 5815-S

The 3M™ Modular Splicing Kit 5815-S Kit, your basic splice, is for two-way shielded power cable connections. The 5815-S Splice Kit is easy to disconnect, without affecting integrity, while adding or removing cables. It is also an excellent alternative to expensive switches when isolating circuits for maintenance. The “square corner” configuration saves space.

Each kit contains 2 tee-modules, 1 connecting plug, 2 dead-end plugs, 2 connecting studs, 1 instruction booklet and silicone lubricant. Cable adapter kit is required for each cable.

The voltage rating 5-25 kV meets requirements of ANSI/IEEE standard 386.



<b>Voltage</b>	5–25 kV
<b>Current</b>	600 Ampere
<b>Component Type</b>	Accessory
<b>Agency Approval</b>	ANSI/IEEE standard 386

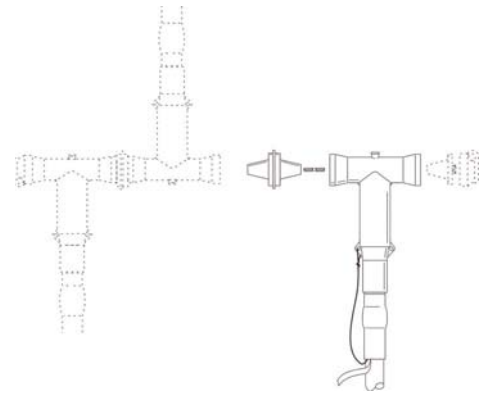
Order No.	UPC	Conductor Size - Stranded (Cu)	Conductor Size - Stranded (Al)	Required Accessory	Items per Case
5815-S	054007-04230	2 AWG-750 kcmil	2 AWG-1000 kcmil	Two cable adapter kit	1



### 3M™ Modular Tap Splice Kit 5815-T

The 3M™ Modular Tap Splice Kit 5815-T provides an easy way to tap into an existing dead-end or to combine with a 5815-S splice for a three-way installation, while maintaining integrity of the original connection. Add on to the 5815-E equipment connection for an easy method of connecting parallel feeds.

Each kit contains 1 tee-modules, 1 connecting plug, 1 connecting stud, 1 instruction booklet and silicone lubricant. Cable adapter kit is required for each cable.



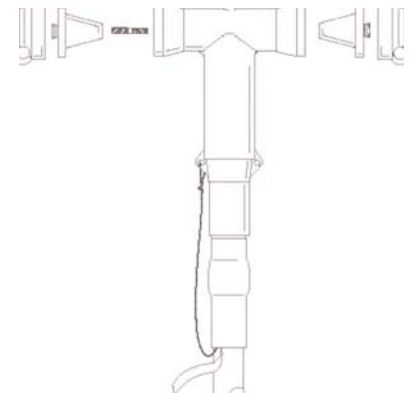
<b>Voltage</b>	5–25 kV
<b>Current</b>	600 Ampere
<b>Component Type</b>	Accessory

Order No.	UPC	Conductor Size - Stranded (Cu)	Conductor Size - Stranded (Al)	Required Accessory	Items per Case
5815-T	054007-04231	2 AWG-750 kcmil	2 AWG-1000 kcmil	One cable adapter kit	1

### 3M™ Dead-End Modular Kit 5815-D

Use the 3M™ Dead-End Modular Kit 5815-D for plan-ahead cable systems including submersible dead-end for cables put down during site construction.

Each kit contains 1 tee-module, 2 dead-end plugs, 1 connecting stud, 1 instruction booklet and silicone lubricant. A cable adapter kit is required for each cable.

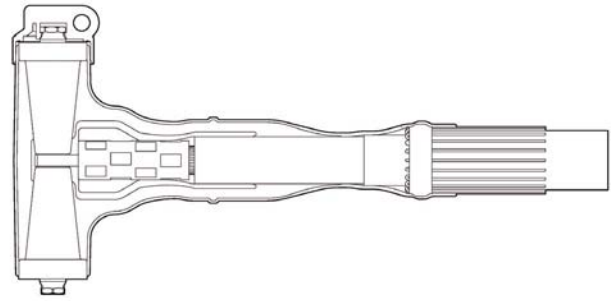


<b>Voltage</b>	5–25 kV
<b>Current</b>	600 Ampere
<b>Component Type</b>	Accessory

Order No.	UPC	Conductor Size - Stranded (Cu)	Conductor Size - Stranded (Al)	Required Accessory	Items per Case
5815-D	054007-04233	2 AWG-750 kcmil	2 AWG-1000 kcmil	One cable adapter kit	1

## 3M™ Cold Shrink T-Body 7706-35TC Series (35 kV)

3M™ Cold Shrink T-Body Equipment Connection Kit 7706-35TC Series, 600A 35 kV Class, is a fully shielded 600-amp separable connector system, which meets the requirements of ANSI/IEEE Standard 386 “Separable Insulated Connector Systems.” This T-body connection kit is available for splicing, dead-ending and connecting to dead-front apparatus such as transformers, switches, and switchgear equipped with 600-amp bushings. The system has the capability for future modification by simply adding or removing modular components. By combining kits, the system can accommodate 3-Way, 4-way, parallel feed, etc. connections in various tap splicing configurations.



This T-body connection kit is designed for use on 35 kV-rated shielded cables. Kit instructions describe installation for all shielded types of solid dielectric cables with extruded semi-conductive insulation shields. The completed installation is fully shielded to provide a complete dead-front connection, which is suitable for operation in submerged or enclosed locations.

A complete T-body connection kit installation requires one or more splicing kits (base kits) along with an aluminum compression or shearbolt lug rated for each cable being used. (For tape shield cable, a grounding kit would be required)

Each base kit contains (1) 3M™ Cold Shrink T-body, 35 kV; (1) Dead End Plug, AL, 35 kV; (1) Dead End Plug Cap; (1) Connecting Stud, AL; (3) Tubes 3M Red Compound P/55; (2) Scotch® Mastic Sealing Strips 2230, 6” long; (1) Connector Adapter; (1) 3M™ Cable Cleaning Preparation Kit CC-2; and (1) Instruction Sheet. **Additional Contents for Grounding Kits** are (1) Ground Braid with Solder Block; (1) Constant Force Spring; and (1) Copper Foil Tape Strip.

**Equipment Required Tools:** Torque Wrench (for measuring 55 ft – lb of torque)

**The 35kV Cold Shrink T-Body is also available with Shearbolt Lugs. Please contact your 3M Sales Professional or call Customer Service for more information.**

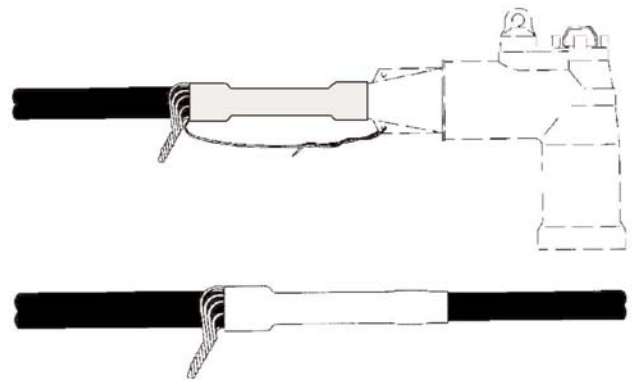
<b>Voltage</b>	35 kV
<b>Current</b>	600 Ampere
<b>Shielding Type</b>	Tape Shield, Jacketed Concentric Neutral (JCN)
<b>Splicing Type</b>	Modular

Order No.	UPC	Primary Cable Installation O.D. Range	Max. Jacket O.D. Range	Conductor Size Range (Adapter Included)	Shielding Type	Lug Type	Items per Case
7706-35TC-D2E-A	051128-60765	1.01"-1.50" (25,7-38,1 mm)	1.80" (45,7 mm)	1/0 AWG-250 kcmil	JCN	Compression Connector	1
7706-35TC-D2E	051128-60169	1.31"-2.00" (33,3-50,8 mm)	2.30" (58,4 mm)	350-1000 kcmil	JCN	Compression Connector	1
7706-35TC-D2E-G	051128-59251	1.31"-2.00" (33,3-50,8 mm)	2.30" (58,4 mm)	350-1000 kcmil	TS - Grounding included	Compression Connector	1
7706-35TC-D2E-B	051128-59103	1.35"-2.30" (34,2-58,4 mm)	2.80" (71,1 mm)	500-1250 kcmil	JCN	Compression Connector	1

## 3M™ Cold Shrink Cable Accessory Sealing Kits 8450 Series

The 3M™ Cold Shrink Cable Accessory Sealing Kits 8450 Series are designed to seal the jacket end of power cables where elbows or other cable accessories are installed. Both the sealing tube and mastic are compatible with commonly used power cable jacketing and semiconductive materials.

Each kit contains enough materials to seal one cable jacket end. Kit contents include: Cold Shrink sealing tube; 6" (15,24 cm) mastic sealing strips (3 strips in 8452/8452L, 4 strips in 8453, 6 strips in 8454); and Instruction sheet.



**Voltage** 15-35 kV

**Cable/Shielding Type** Jacketed Concentric Neutral (JCN)

**Component Type** Accessory Kit

**RoHS 2011/65/EU** Yes

	8452	8452-L	8453	8454
UPC	054007-08336	054007-44312	054007-09676	054007-49938
Typical Expanded Tube Length	4.50" (114 mm)	5.00" (127 mm)	6.50" (165 mm)	7.50" (190 mm)
Typical Relaxed Tube Length	6.00" (150 mm)	6.50" (165 mm)	8.00" (200 mm)	9.00" (225 mm)
Expanded Tube Diameter	2.12" (53 mm)	2.12" (53 mm)	2.85" (73 mm)	3.87" (98 mm)
Minimum Seal Diameter	0.95" (24 mm)	0.95" (24 mm)	1.28" (33 mm)	1.60" (41 mm)
Maximum Installed Diameter	1.94" (49 mm)	1.94" (49 mm)	2.67" (68 mm)	3.50" (89 mm)
Cable Size for 15 kV Class	2-4/0 AWG (35-100 mm <sup>2</sup> )	2-4/0 AWG (35-100 mm <sup>2</sup> )	2/0 AWG-1000 kcmil (70-500 mm <sup>2</sup> )	750-1500 kcmil (380-725 mm <sup>2</sup> )
Cable Size for 25 kV Class	2-2/0 AWG (35-50 mm <sup>2</sup> )	2-2/0 AWG (35-50 mm <sup>2</sup> )	1/0 AWG-750 kcmil (60-380 mm <sup>2</sup> )	600-1250 kcmil (325-625 mm <sup>2</sup> )
Cable Size for 35 kV Class	1/0 AWG (60 mm <sup>2</sup> )	1/0 AWG (60 mm <sup>2</sup> )	1/0 AWG-500 kcmil (60-250 mm <sup>2</sup> )	350-1000 kcmil (180-500 mm <sup>2</sup> )
Kits per Case	10	10	10	10

## 600 Amp Dead Break T-Bodies: Accessories

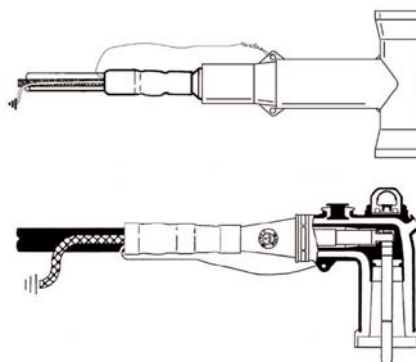
### 3M™ Cold Shrink Shield Adapter Kits 8459/8460 Series

3M™ Cold Shrink Shield Adapter Kits are designed for grounding and sealing tape shield, wire shield and Unishield® power cables when using cable accessories such as elbows, modular splices and terminations. The Shield Adapter Kit design provides a fault current capacity of 600 amps on 15–35 kV class cables.

These cold shrink kits require no heat, special tools or special skills to install. The cold shrink kits come complete with all necessary components (except the cable accessory) and are installed in a few simple steps. We've even attached a “bleeder wire” to the ground strap eliminating the need for additional wire and connectors.

Each kit contains enough material to ground one cable accessory.

<b>Voltage</b>	15-35 kV
<b>Current</b>	600 Ampere
<b>Cable/Shielding Type</b>	Tape Shield, Wire Shield, Unishield®
<b>Component Type</b>	Accessory



Order No.	UPC	Jacket O.D. Size	Cond. Size 5/8 kV	Cond. Size 15 kV	Cond. Size 25 kV	Cond. Size 35 kV	Kits/Case
8459	051128-53236	0.59"-1.05" (15,0-26,6 mm)	8-1 AWG (10-38 mm <sup>2</sup> )	-	-	-	3
8460	054007-41458	0.83"-1.64" (21,1-41,6 mm)	1/0 AWG-350 kcmil (50-200 mm <sup>2</sup> )	2 AWG-250 kcmil (35-150 mm <sup>2</sup> )	2 AWG-250 kcmil (35-150 mm <sup>2</sup> )	2-1/0 AWG (35-60 mm <sup>2</sup> )	3
8461	054007-41459	1.27"-2.17" (32,3-55,1 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	350-1000 kcmil (185-500 mm <sup>2</sup> )	350-750 kcmil (185-500 mm <sup>2</sup> )	2/0 AWG-350 kcmil (70-200 mm <sup>2</sup> )	3
8462	051128-53131	1.70"-2.60" (43,2-66,0 mm)	-	1250-1750 kcmil (600-850 mm <sup>2</sup> )	1000-1500 kcmil (600-725 mm <sup>2</sup> )	500-1000 kcmil (240-500 mm <sup>2</sup> )	3

### 3M™ T-Wrench 5815-TW

The 3M™ T-Wrench 5815-TW is a 5/16-inch hex wrench required to install the connecting plugs on the 3M™ Modular Splicing Kit 5815-S and 3M™ Modular Tap Splice Kit 5815-T.

<b>Voltage</b>	5–25 kV
<b>Current</b>	600 Ampere
<b>Component Type</b>	Accessory



Order No.	UPC	Application	Items per Case
5815-TW	054007-43468	Used to install connecting plug into a tee module.	1

## 3M™ Industrial Insulated Protective Cap

The 3M™ Industrial Insulated Protective Cap is an accessory device designed to electrically insulate (dead-front) and mechanically seal loadbreak bushing interfaces. When mated to a loadbreak bushing interface with the drain wire attached to ground, the 3M Industrial Insulated Protective Cap provides a fully shielded, insulating cover for energized bushings. The cap can be used for permanent or temporary installation on bushings, junctions, or feed-thru devices that meet the requirements of ANSI/IEEE Standard 386.

No special tools are required for installation. A shotgun stick tool is used to place the protective cap on an exposed bushing interface. Refer to Installation Instructions for details.

Voltage	15-25 kV
Current	200 Ampere
Component Type	Elbow/Accessory
Agency Approval	ANSI/IEEE Standard 386

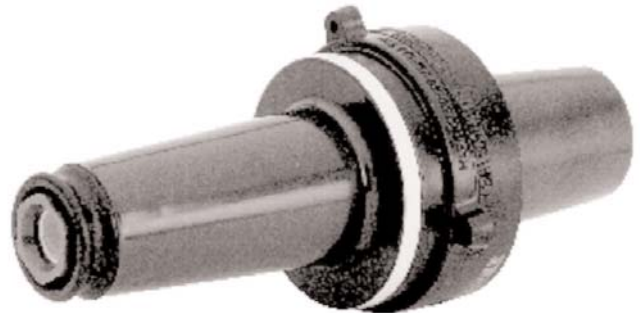


Order No.	UPC	Description	Compatible With	Kits per Case
5810-PC-15	054007-04664	This kit contains a 15 kV insulated protective cap, silicone lubricant, and an installation instruction sheet.	3M Industrial Loadbreak Elbow 5810 Series	1
5811-PC-25	054007-43777	This kit contains a 25 kV insulated protective cap, silicone lubricant, and an installation instruction sheet.	3M Industrial Loadbreak Elbow 5811 Series	1

## 3M™ Industrial Loadbreak Bushing Insert

The 3M™ Industrial Loadbreak Bushing Inserts thread into a universal bushing well to provide the same function as an integral loadbreak bushing. Using bushing inserts makes field installation and replacement possible and efficient. Bushing inserts and elbow connectors comprise the essential components of all loadbreak connections. No special tools are necessary for installation.

Voltage	15-25 kV
Current	200 Ampere
Component Type	Elbow/Accessory



Order No.	UPC	Description	Compatible With	Kits per Case
5810-BI-15	054007-04662	This kit contains a 15 kV loadbreak bushing insert, a shipping cap (not for energized operation), silicone lubricant, and an installation instruction sheet.	3M Industrial Loadbreak Elbow 5810 Series	1
5811-BI-25	054007-43776	This kit contains a 25 kV loadbreak bushing insert, a shipping cap (not for energized operation), silicone lubricant, and an installation instruction sheet.	3M Industrial Loadbreak Elbow 5811 Series	1

## 3M™ Industrial Loadbreak Probe Replacement Kit

<b>Voltage</b>	5-15 kV
<b>Current</b>	200 Ampere
<b>Component Type</b>	Accessory/Elbow

Order No.	UPC	Description	Compatible With	Kits per Case
LBP-15	054007-04825	Loadbreak Elbow Probe, 15 kV 200 Amp. Field replaceable, tin plated copper probe ensures reliable electrical connection. Specially formulated ablative arc follower provides dependable loadbreak switching characteristics.	3M Industrial Loadbreak Elbow 5810 Series	1 Item (not a kit)
LBP-25	054007-43893	Loadbreak Elbow Probe, 25 kV 200 Amp. Field replaceable, tin plated copper probe ensures reliable electrical connection. Specially formulated ablative arc follower provides dependable loadbreak switching characteristics.	3M Industrial Loadbreak Elbow 5811 Series	1 item (not a kit)

## 3M™ 200 Amp Industrial Loadbreak Elbow Connector

3M™ 200 Amp Industrial Loadbreak Elbow Connector LBC Series are for use with the 3M™ Industrial Loadbreak Elbow 5810 Series and the 3M™ Industrial Loadbreak Elbow 5811 Series.

<b>Cable/Shielding Type</b>	Compact/Solid, Stranded
<b>Current Rating</b>	200 Ampere
<b>Component Type</b>	Connector



Order No.	UPC	Conductor Size - Stranded	Conductor Size - Compact/Solid	Nominal Barrel Diameter	Connectors per Case
LBC-4	054007-04672	4 AWG	-	5/8" (15,9 mm)	1
LBC-3	054007-04811	3 AWG	2 AWG	5/8" (15,9 mm)	1
LBC-2	054007-04673	2 AWG	1 AWG	5/8" (15,9 mm)	1
LBC-1	054007-04674	1 AWG	1/0 AWG	5/8" (15,9 mm)	1
LBC-1/0	054007-04820	1/0 AWG	2/0 AWG	5/8" (15,9 mm)	1
LBC-2/0	054007-04821	2/0 AWG	3/0 AWG	5/8" (15,9 mm)	1
LBC-3/0	054007-04822	3/0 AWG	4/0 AWG	3/4" (19,1 mm)	1
LBC-4/0	054007-04823	4/0 AWG	250 kcmil	3/4" (19,1 mm)	1
LBC-250	054007-04824	250 kcmil	-	3/4" (19,1 mm)	1





# Motor Lead Connections

3M provides a convenient kit with sufficient material needed to quickly make lugged motor lead connections to feeder cables. Each kit makes three splices and is designed exclusively for the abrasion, moisture, grime and temperature extremes of the industrial environment. 3M™ Motor Lead Connectors meet requirements for CSA certification and NRTL certification.

## Low Voltage Motor Leads—Pigtail and Inline for 1 kV

Motor lead pigtail connections (5300 through 5304) and inline splices (5311 through 5314) are designed to splice 1000 V or less, non-shielded feeder and motor lead cable. The splices are made with a slip-on lug cover made of EPDM rubber. Use with one-hole lug only. Each kit makes three splices.

## Medium Voltage Motor Leads—Pigtail for Nonshielded 5–8 kV

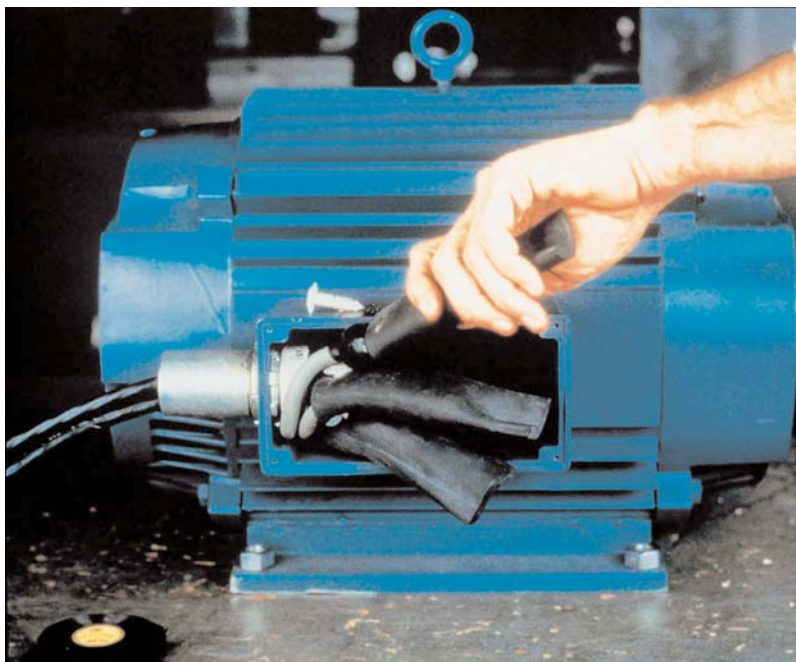
Motor lead pigtail connections (5316 through 5319) are designed to splice 5–8 kV non-shielded feeder and motor lead cables. The splices are made with a slip-on lug cover made of EPDM rubber. Use with one- or two-hole copper lugs. Each kit makes three splices.

## Medium Voltage Motor Leads—Pigtail and Inline for 5–8 kV

Motor lead pigtail connections (5321 through 5324) and inline splices (5331 through 5334) are designed to splice 5–8 kV shielded (tape shield, wire shield and UniShield®) and non-shielded feeder cable. The splices are made with a slip-on lug cover made of EPDM rubber. Use with one- or two-hole lugs. Each kit makes three splices.

## Medium Voltage Motor Leads with High-K Stress Control—Pigtail or V-Stub Splice for 5–8 kV Shielded and Nonshielded Cables

3M™ Motor Lead Splicing Kits 5380 Series are designed for splicing motor lead cables to incoming feeder cables. These kits are removable and reusable. These kits can accommodate pigtail (stub) connections, 5/8 kV shielded and non-shielded feeders. The splice's main component, the lug cover, is



made from EPDM rubber as a slip-on insulator. Mastic is used for the moisture seal on the pigtail kits. The kits utilize a high dielectric constant (K) stress control termination and slip-on lug cover for the feeder cable's electrical stress control.

These kits are designed to be used with copper compression lugs. After being crimped onto the cables, the lugs are bolted together, then insulated and sealed with the 3M™ Motor Lead Splicing Kits.

Each kit contains all the necessary materials (except lugs) needed to make three splices. The lugs must be purchased separately. 3M™ Scotchlok™ Copper Compression Lugs 30000 Series, or other UL listed copper lugs, can be used.

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## 3M™ Motor Lead Pigtail Splice Kits, 1-Hole Lug Connections, 5300–5304

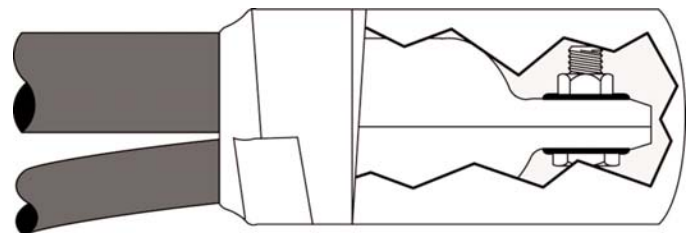
3M™ Motor Lead Pigtail Splicing Kits 5300 Series are designed for splicing motor lead cables to incoming feeder cables, including the accommodation of pigtail (stub) connections at 1000 volts and less. The splice's main component, the slip-on lug cover, is made from EPDM rubber. Mastic strips are used for the moisture seal.

These kits are designed to be used with copper compression, one-hole lugs. After being crimped onto the cables, the lugs are bolted together in a pigtail configuration, then insulated and sealed with the 3M Motor Lead Splicing Kit. Each kit makes three splices and contains the necessary materials (except lugs) needed to make three splices. The lugs must be purchased separately. 3M™ Scotchlok™ Copper Compression Lugs 30000 Series, or other UL listed copper lugs, can be used.

Kit contents include

- (3) Pigtail lug covers
- (3) Mastic sealing strips
- (3) Locking pins (kits 5302–5304 only)
- (3) Tubes of silicone grease
- (1) Instruction sheet

<b>Voltage</b>	1000 V and less
<b>Cable/Shielding Type</b>	Single Conductor Non-Shielded Cable
<b>Connection Type</b>	Pigtail, 1-Hole Lugs
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approval</b>	



5300 Pigtail

Order No.	UPC	Feeder Cable Wire Range	Motor Lead Cable Wire Range	Maximum Bolt Length	Insulation O.D.	Lug Cover I.D.	Lug Cover Length	Case Qty.
5300	054007-08317	14-10 AWG	16-12 AWG	3/8" (9,5 mm)	0.12"-0.21" (3,0-5,3 mm)	0.45" (11,4 mm)	2.1" (53,3 mm)	1
5301	054007-12263	10-4 AWG	12-4 AWG	1/2" (12,7 mm)	0.17"-0.36" (4,3-9,1 mm)	0.70" (17,8 mm)	3.4" (86,4 mm)	1
5302	054007-12264	2-1/0 AWG	4-1/0 AWG	3/4" (19,1 mm)	0.34"-0.54" (8,6-13,7 mm)	0.95" (24,1 mm)	4.2" (106,7 mm)	1
5303	054007-12265	1/0 AWG-250 kcmil	2 AWG-250 kcmil	1-1/4" (31,8 mm)	0.40"-0.80" (10,2-20,3 mm)	1.20" (30,5 mm)	5.3" (134,6 mm)	1
5304	054007-12266	250-500 kcmil	4/0 AWG-500 kcmil	1-1/2" (38,1 mm)	0.67"-1.05" (17,0-26,7 mm)	1.70" (43,2 mm)	6.7" (170,2 mm)	1

## 3M™ Motor Lead Inline Splice Kits, 1-Hole Lug Connections, 5311–5314


3M™ Motor Lead Inline Splicing Kits 5300 Series are designed for splicing motor lead cables to incoming feeder cables, including the accommodation of inline connections at 1000 volts and less. The splice's main component, the slip-on splice cover, is made from EPDM rubber. A mastic strip is used for the moisture seal.

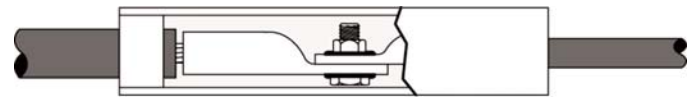
These kits are designed to be used with copper compression, one- or two-hole lugs. After being crimped onto the cables, the lugs are bolted together in an inline configuration, then insulated and sealed with the 3M Motor Lead Splicing Kit. Each kit contains the necessary materials (except lugs) needed to make three splices. The lugs must be purchased separately. 3M™ Scotchlok™ Copper Compression Lugs 30000 Series, or other UL listed copper lugs, can be used.

*For inline splice kits: The longitudinal space required for assembly will be approximately 2 (splice cover lengths), to allow space for the splice while the connection is being made.*

Kit contents include

- (3) Adapter sleeves
- (1) Inline splice cover
- (1) Tubes of silicone grease (3 tubes in kit 5314)
- (1) Instruction sheet

Voltage	1000 V and less
Cable/Shielding Type	Single Conductor Non-Shielded Cable
Connection Type	Inline (1-Hole Lugs)
RoHS 2011/65/EU	Yes
Agency Approval	



5311 Inline

Order No.	UPC	Feeder Cable Wire Range	Motor Lead Cable Wire Range	Max. Bolt Length	Insulation O.D.	Splice Cover I.D.	Splice Cover Length	Case Qty.
5311	054007-12267	10-4 AWG	12-4 AWG	1/2" (12,7 mm)	12-8 AWG: 0.17"-0.24" (4,3-6,1 mm) 8-4 AWG: 0.30"-0.36" (7,6-9,1 mm)	12-8 AWG: 0.14" (3,6 mm) 8-4 AWG: 0.24" (6,1 mm)	4"-5" (101,6-127,0 mm)	1
5312	054007-12268	2-1/0 AWG	4-1/0 AWG	3/4" (19,1 mm)	0.34"-0.54" (8,6-13,7 mm)	0.30" (7,6 mm)	8"-9" (203,2-228,6 mm)	1
5313	054007-12269	1/0 AWG-250 kcmil	2 AWG-250 kcmil	1" (25,4 mm)	2-1/0 AWG: 0.40"-0.54" (10,2-13,7 mm) 1/0 AWG-250 kcmil: 0.52"-0.80" (13,2-20,3 mm)	2-1/0 AWG: 0.50" (12,7 mm) 1/0 AWG-250 kcmil: 0.42" (10,7 mm)	9"-10" (228,6-254,0 mm)	1
5314	054007-12270	250-500 kcmil	4/0 AWG-500 kcmil	1-1/4" (31,8 mm)	4/0 AWG-350 kcmil: 0.67"-0.91" (17,0-23,1 mm) 350-500 kcmil: 0.90"-1.05" (22,9-26,7 mm)	4/0 AWG-350 kcmil: 0.60" (15,2 mm) 350-500 kcmil: 0.84" (21,3 mm)	12"-13" (304,8-330,2 mm)	1

## Medium Voltage Leads, 5–8 kV


### 3M™ Motor Lead Pigtail Splice Kits, Non-Shielded Pigtail, 5316-5319

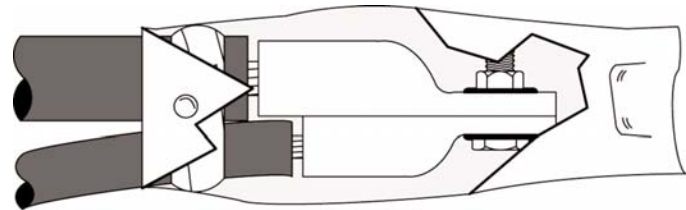
3M™ Motor Lead Pigtail Splicing Kits 5300 Series are a series of kits designed for splicing motor lead cables to incoming feeder cables, including pigtail (stub) connections at 1000 volts or less, as well as 5/8 kV non-shielded feeders. The splice's main component, the slip-on splice cover, is made from EPDM rubber. A mastic strip is used for the moisture seal.

These kits are designed to be used with copper compression, one- or two-hole lugs. After being crimped onto the cables, the lugs are bolted together in a pigtail configuration, then insulated and sealed with the 3M Motor Lead Splicing Kit. Each kit contains the necessary materials (except lugs) needed to make three splices. The lugs must be purchased separately. 3M™ Scotchlok™ Copper Compression Lugs 30000 Series, or other UL listed copper lugs, can be used.

Kit contents include

- (3) Pigtail lug covers
- (3) Locking pins
- (3) Tubes of silicone grease
- (3) Bags of solvent cleaning cloths
- (3) Mastic sealing strips
- (3) Scotch® Linerless Rubber Splicing Tape 130C strips
- (3) Instruction sheets

<b>Voltage</b>	1000 V & 5/8 kV
<b>Cable/Shielding Type</b>	Single Conductor Cable, Non-Shielded Dry Cable, Non-Shielded Wet or Dry Cable
<b>Connection Type</b>	Non-Shielded Pigtail, 1- or 2-Hole Lugs
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	



**Pigtail Nonshielded**

Order No.	UPC	Feeder Cable Wire Range	Motor Lead Cable Wire Range	Max. Bolt Length	Insulation O.D.	Lug Length	Case Qty.
5316	054007-08313	8-4 AWG	10-4 AWG	1/2" (12,7 mm)	0.30"-0.51" (7,6-13,0 mm)	8.0" (203,2 mm)	1
5317	054007-08314	2-1/0 AWG	4-1/0 AWG	3/4" (19,1 mm)	0.43"-0.65" (10,9-16,5 mm)	9.5" (241,3 mm)	1
5318	054007-08315	1/0 AWG-250 kcmil	2 AWG-250 kcmil	1-1/4" (31,8 mm)	0.53"-0.88" (13,5-22,4 mm)	11.0" (279,4 mm)	1
5319	054007-08316	250-500 kcmil	4/0 AWG-500 kcmil	1-1/2" (38,1 mm)	0.75"-1.12" (19,1-28,4 mm)	13.0" (330,2 mm)	1

## 3M™ Motor Lead Pigtail Splice Kits, Shielded and Non-Shielded Cables, 5321-5324

3M™ Motor Lead Pigtail Splicing Kits 5300 Series are designed for splicing motor lead cables to incoming feeder cables. These kits can accommodate pigtail (stub) connections of 5/8 kV with shielded feeders. The splice's main component, the slip-on splice cover, is made from EPDM rubber. A mastic strip is used for the moisture seal.

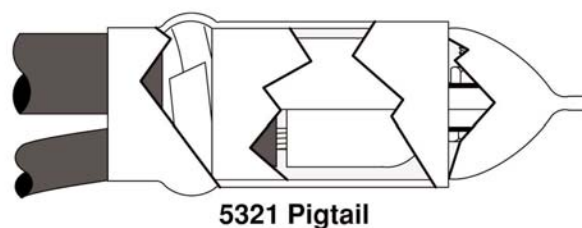
These kits are designed to be used with copper compression, one- or two-hole lugs. After being crimped onto the cables, the lugs are bolted together in a pigtail configuration, then insulated and sealed with the 3M™ Motor Lead Splicing Kits. Each kit contains the necessary materials (except lugs) needed to make three splices. The lugs must be purchased separately. 3M™ Scotchlok™ Copper Compression Lugs 30000 Series, or other UL listed copper lugs, can be used.

Note: 3M™ Motor Lead Kits 5321-5324 also require vinyl tape which is not included.

Kit contents include

- (3) Pigtail lug covers
- (3) Cold Shrink tubes
- (9) Mastic sealing strips
- (3) Rolls Scotch® Stress Control Tape 2200
- (3) Bags of solvent cleaning cloths
- (3) Tubes of silicone grease
- (3) Rolls Scotch® Linerless Rubber Splicing Tape 130C
- (3) Instruction sheets

<b>Voltage</b>	5/8 kV
<b>Cable/Shielding Type</b>	Tape Shield, Wire Shield, UniShield®
<b>Connection Type</b>	Pigtail (Shielded and Non-Shielded), 1- or 2-Hole Lugs
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Feeder Cable Wire Range	Motor Lead Cable Wire Range	Max. Bolt Length	Insulation O.D.	Lug Cover Length	Case Qty.
5321	054007-12271	8-4 AWG	10-4 AWG	1/2" (12,7 mm)	0.30"-0.51" (7,6-13,0 mm)	7"-8" (177,8-203,2 mm)	1
5322	054007-12272	2-1/0 AWG	4-1/0 AWG	3/4" (19,1 mm)	0.43"-0.65" (10,9-16,5 mm)	8"-9" (203,2-228,6 mm)	1
5323	054007-12273	1/0 AWG-250 kcmil	2 AWG-250 kcmil	1-1/4" (31,8 mm)	0.53"-0.88" (13,5-22,4 mm)	9"-10" (228,6-254,0 mm)	1
5324	054007-12274	250-500 kcmil	4/0 AWG-500 kcmil	1-1/2" (38,1 mm)	0.75"-1.12" (19,1-28,4 mm)	10.5"-11.5" (266,7-292,1 mm)	1

## Medium Voltage Leads, 5–8 kV

### 3M™ Motor Lead Inline Splice Kits, Non-Shielded and Shielded Cables, 5331- 5334

3M™ Motor Lead Inline Splicing Kits 5300 Series are designed for splicing motor lead cables to incoming feeder cables. 3M™ Motor Lead Splicing Kits 5331-5334 can accommodate inline connections, 5/8 kV shielded and non-shielded feeders. The splice's main component, the slip-on splice cover, is made from EPDM rubber. A mastic strip is used for the moisture seal on the inline kits.

These kits are designed to be used with copper compression, one- or two-hole lugs. After being crimped onto the cables, the lugs are bolted together in an inline configuration, then insulated and sealed with the 3M Motor Lead Splicing Kits. Each kit contains all the necessary materials (except lugs) needed to make three splices. The lugs must be purchased separately. 3M™ Scotchlok™ 30000 Series copper compression lugs, or other UL listed copper lugs, can be used. In addition, 3M™ Motor Lead Splicing Kits 5331-5334 require vinyl tape which can also be purchased separately.

*For inline splice kits: The longitudinal space required for assembly will be approximately 2 (splice cover length), to allow space for the splice while the connection is being made.*

Kit contents include

- (3) Cold Shrink tubes
- (12) Adapters
- (3) Rolls Scotch® Stress Control Tape 2220
- (3) Bags of solvent cleaning cloths
- (6) Tubes of silicone grease
- (3) Rolls Scotch® Linerless Rubber Splicing Tape 130C
- (3) Instruction sheets

<b>Voltage</b>	5/8 kV
<b>Cable/Shielding Type</b>	Tape Shield, Wire Shield, UniShield®
<b>Connection Type</b>	Inline (Shielded or Non-Shielded), 1- or 2-Hole Lugs
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Feeder Cable Wire Range	Motor Lead Cable Wire Range	Max. Bolt Length	Insulation O.D.	Splice Cover I.D.	Splice Cover Length	Case Qty.
5331	054007-12275	8-4 AWG	10-4 AWG	3/4" (19,1 mm)	10-6 AWG: 0.30"-0.46" (7,6-11,7 mm) 6-4 AWG: 0.37"-0.51" (9,4-13,0 mm)	10-6 AWG: 0.24" (6,1 mm) 6-4 AWG: 0.30" (7,6 mm)	10"-11" (254,0-279,4 mm)	1
5332	054007-12276	2-1/0 AWG	4-1/0 AWG	1" 25,4 mm)	4-2 AWG: 0.43"-0.57" (10,9-14,5 mm) 2-1/0 AWG: 0.52"-0.65" (13,2-16,5 mm)	4-2 AWG: 0.30" (7,6 mm) 2-1/0 AWG: 0.42" (10,7 mm)	12"-13" (304,8-330,2 mm)	1
5333	054007-12277	1/0 AWG-250 kcmil	2 AWG-250 kcmil	1-1/4" (31,8 mm)	2-2/0 AWG: 0.53"-0.71" (13,5-18,0 mm) 3/0 AWG-250 kcmil: 0.70"-0.88" (17,8-22,4 mm)	2-2/0 AWG: 0.50" (12,7 mm) 3/0 AWG-250 kcmil: 0.60" (15,2 mm)	15"-16" (381,0-406,4 mm)	1
5334	054007-12278	250-500 kcmil	4/0 AWG-500 kcmil	1-1/2" (38,1 mm)	4/0-350 kcmil: 0.75"-0.98" (19,1-24,9 mm) 350-500 kcmil: 0.94"-1.12" (23,9-28,4 mm)	4/0 AWG-350 kcmil: 0.60" (15,2 mm) 350-500 kcmil: 0.84" (21,3 mm)	17"-18" (431,8-457,2 mm)	1



## 3M™ Motor Lead Pigtail or V-Stub Splice, Shielded and Non-Shielded Cable, 5380 Series

3M™ Motor Lead Pigtail Splicing Kits 5380 Series are designed for splicing motor lead cables to incoming feeder cables. These kits are removable and reusable. These kits can accommodate pigtail (stub) connections, 5/8 kV shielded and non-shielded feeders. The splice's main component, the slip-on splice cover, is made from EPDM rubber. Mastic is used for the moisture seal on the pigtail kits. The kits utilize a high dielectric constant (K) stress control termination for the feeder cable's electrical stress control.

These kits are designed to be used with copper compression lugs. After being crimped onto the cables, the lugs are bolted together, then insulated and sealed with the 3M Motor Lead Splicing Kits. Each kit contains all the necessary materials (except lugs) needed to make three splices. The lugs must be purchased separately. 3M™ Scotchlock™ Copper Compression Lugs 30000 Series, or other UL listed copper lugs, can be used.

Kit contents include

- (3) Lug covers
- (3) Cold Shrink terminations
- (12) Mastic sealing strips
- (3) Copper tape strips
- (3) Cleaning kits
- (6) Tubes of silicone grease
- (3) Cold Shrink jacket tubes
- (3) Constant force springs
- (3) Cable ties
- (3) Ground straps
- (1) Instruction sheet

<b>Voltage</b>	5/8 kV
<b>Cable/Shielding Type</b>	Tape Shield, Wire Shield, UniShield®
<b>Connection Type</b>	Pigtail (Non-Shielded or Non-Shielded), 1- or 2-Hole Lugs
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Feeder Cable Wire Range	Motor Lead Cable Wire Range	Insulation O.D.	I.D. of Boot to Size of Cables	Max. Bolt Length	Max. Lug Length	Case Qty.
5381	051128-55951	8-4 AWG	10-4 AWG	0.30"-0.51" (7,6-13,0 mm)	0.90" (22,9 mm)	5/8" (15,9 mm)	2-1/2" (63,5 mm)	1
5382	051128-55952	2-1/0 AWG	4-1/0 AWG	0.43"-0.65" (10,9-16,5 mm)	1.16" (29,5 mm)	3/4" (19,1 mm)	2-3/4" (69,9 mm)	1
5383	051128-55953	1/0 AWG-250 kcmil	2 AWG-250 kcmil	0.53"-0.88" (13,5-22,4 mm)	1.60" (40,6 mm)	1-1/4" (31,8 mm)	4" (101,6 mm)	1
5384	051128-55954	250-500 kcmil	4/0 AWG-500 kcmil	0.75"-1.12" (19,1-28,4 mm)	2.06" (52,3 mm)	1-1/2" (38,1 mm)	5-1/2" (139,7 mm)	1

# Cable Accessory Products

3M offers accessory products to assist with splice re-jacketing, cable jacket sealing, grounding and cable preparation. Many of the products shown here are used with 3M splices and terminations. Remember to reference those sections for more product information.



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## Overhead Conductor Animal Guard Cover

3M™ Conductor Covers CCI Series are extruded silicone rubber tubes designed for field installation over bare conductors to insulate them from adjacent phases, grounded equipment, and animal contact. These covers are made with a full-length longitudinal bias cut to allow for easy slip-on installation, and provide an increased creepage distance between the conductor and the outer surface of the cover.

The covers are offered in two thickness sizes for covering both 15 kV and 25 kV rated conductors, and are available in ACSR conductor sizes from 2 AWG–266 kcmil.

Features:

- Excellent UV, arc and ozone resistance
- Good dielectric strength, conformability and cold weather installation
- Munsel grey color
- Bias cut enables easy field installation without any special tools



CCI Series  
Conductor Covers

Voltage 15–25 kV

Order No.	UPC	ACSR Conductor Size	Conductor Voltage Rating	Insulation Diameter	Insulation Thickness	Case Qty.
CCI-2-125	051141-04238	2 AWG	15 kV	0.34" (9 mm)	0.125" (3 mm)	100 ft. rolls
CCI-2/0-125	051141-04239	2/0 AWG	15 kV	0.46" (12 mm)	0.125" (3 mm)	100 ft. rolls
CCI-266-125	051141-04241	266 kcmil	15 kV	0.63" (16 mm)	0.125" (3 mm)	100 ft. rolls
CCI-2/0-200	051141-04240	2/0 AWG	25 kV	0.46" (12 mm)	0.200" (5 mm)	100 ft. rolls
CCI-266-200	051141-04242	266 kcmil	25 kV	0.63" (16 mm)	0.200" (5 mm)	100 ft. rolls

## 3M™ Electrostatic Animal Guard

This is a proprietary electrostatic barrier that attaches to energized electrical insulators/bushings rated up to 35 kV.

The 3M™ Electrostatic Animal Guard consists of rugged plastic with metal spokes radiating outward. When an animal touches the spokes, it receives an electric shock, similar to those generated by electrified livestock fences. The animal is not injured and power service is not interrupted.

Note: Insulator neck diameter range is defined as the diameter of the insulator in between the skirts.



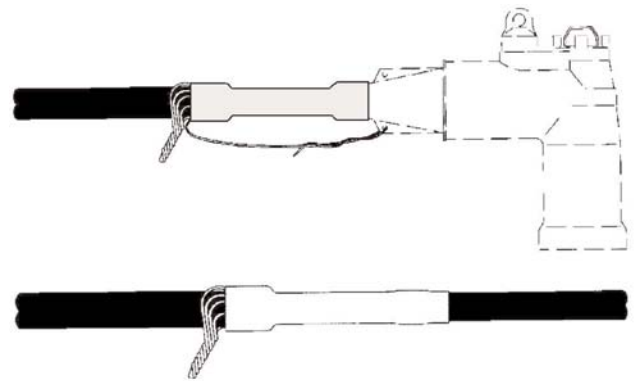
Voltage 35 kV and less

Order No.	UPC	Insulator Neck Diameter Range	Case Qty.
GG-7525	054007-43128	0.75"-2.50" (19,1-63,7 mm)	100
GG-1525	054007-43125	1.50"-2.50" (38,2-63,7 mm)	100
GG-2545	054007-43126	2.50"-4.50" (63,7-114,7 mm)	100
GG-4565	054007-43127	4.50"-6.50" (114,7-165,7 mm)	100

## 3M™ Cold Shrink Cable Accessory Sealing Kits 8450 Series

The 3M™ Cold Shrink Cable Accessory Sealing Kits 8450 Series are designed to seal the jacket end of power cables where elbows or other cable accessories are installed. Both the sealing tube and mastic are compatible with commonly used power cable jacketing and semiconductive materials.

Each kit contains enough materials to seal one cable jacket end. Kit contents include: Cold Shrink sealing tube; 6" (15,24 cm) mastic sealing strips (3 strips in 8452/8452L, 4 strips in 8453, 6 strips in 8454); and Instruction sheet.



<b>Voltage</b>	15-35 kV
<b>Cable/Shielding Type</b>	Jacketed Concentric Neutral (JCN)
<b>Component Type</b>	Accessory Kit
<b>RoHS 2011/65/EU</b>	Yes

	8452	8452-L	8453	8454
UPC	054007-08336	054007-44312	054007-09676	054007-49938
Typical Expanded Tube Length	4.50" (114 mm)	5.00" (127 mm)	6.50" (165 mm)	7.50" (190 mm)
Typical Relaxed Tube Length	6.00" (150 mm)	6.50" (165 mm)	8.00" (200 mm)	9.00" (225 mm)
Expanded Tube Diameter	2.12" (53 mm)	2.12" (53 mm)	2.85" (73 mm)	3.87" (98 mm)
Minimum Seal Diameter	0.95" (24 mm)	0.95" (24 mm)	1.28" (33 mm)	1.60" (41 mm)
Maximum Installed Diameter	1.94" (49 mm)	1.94" (49 mm)	2.67" (68 mm)	3.50" (89 mm)
Cable Size for 15 kV Class	2-4/0 AWG (35-100 mm <sup>2</sup> )	2-4/0 AWG (35-100 mm <sup>2</sup> )	2/0 AWG-1000 kcmil (70-500 mm <sup>2</sup> )	750-1500 kcmil (380-725 mm <sup>2</sup> )
Cable Size for 25 kV Class	2-2/0 AWG (35-50 mm <sup>2</sup> )	2-2/0 AWG (35-50 mm <sup>2</sup> )	1/0 AWG-750 kcmil (60-380 mm <sup>2</sup> )	600-1250 kcmil (325-625 mm <sup>2</sup> )
Cable Size for 35 kV Class	1/0 AWG (60 mm <sup>2</sup> )	1/0 AWG (60 mm <sup>2</sup> )	1/0 AWG-500 kcmil (60-250 mm <sup>2</sup> )	350-1000 kcmil (180-500 mm <sup>2</sup> )
Kits per Case	10	10	10	10

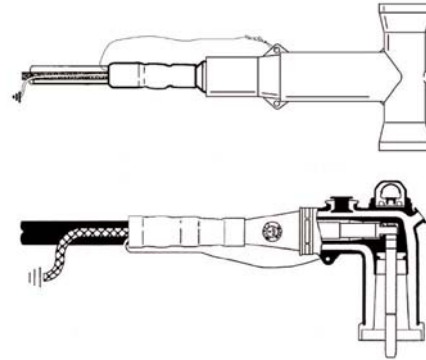
## 3M™ Cold Shrink Shield Adapter Kits 8459/8460 Series

3M™ Cold Shrink Shield Adapter Kits are designed for grounding and sealing tape shield, wire shield and Unishield® power cables when using cable accessories such as elbows, modular splices and terminations. The Shield Adapter Kit design provides a fault current capacity of 600 amps on 15–35 kV class cables.

These cold shrink kits require no heat, special tools or special skills to install. The cold shrink kits come complete with all necessary components (except the cable accessory) and are installed in a few simple steps. We've even attached a "bleeder wire" to the ground strap eliminating the need for additional wire and connectors.

Each kit contains enough material to ground one cable accessory.

<b>Voltage</b>	15-35 kV
<b>Current</b>	600 Ampere
<b>Cable/Shielding Type</b>	Tape Shield, Wire Shield, Unishield®
<b>Component Type</b>	Accessory



Order No.	UPC	Jacket O.D. Size	Cond. Size 5/8 kV	Cond. Size 15 kV	Cond. Size 25 kV	Cond. Size 35 kV	Kits/Case
8459	051128-53236	0.59"-1.05" (15,0-26,6 mm)	8-1 AWG (10-38 mm <sup>2</sup> )	-	-	-	3
8460	054007-41458	0.83"-1.64" (21,1-41,6 mm)	1/0 AWG-350 kcmil (50-200 mm <sup>2</sup> )	2 AWG-250 kcmil (35-150 mm <sup>2</sup> )	2 AWG-250 kcmil (35-150 mm <sup>2</sup> )	2-1/0 AWG (35-60 mm <sup>2</sup> )	3
8461	054007-41459	1.27"-2.17" (32,3-55,1 mm)	500-1000 kcmil (240-500 mm <sup>2</sup> )	350-1000 kcmil (185-500 mm <sup>2</sup> )	350-750 kcmil (185-500 mm <sup>2</sup> )	2/0 AWG-350 kcmil (70-200 mm <sup>2</sup> )	3
8462	051128-53131	1.70"-2.60" (43,2-66,0 mm)	-	1250-1750 kcmil (600-850 mm <sup>2</sup> )	1000-1500 kcmil (600-725 mm <sup>2</sup> )	500-1000 kcmil (240-500 mm <sup>2</sup> )	3

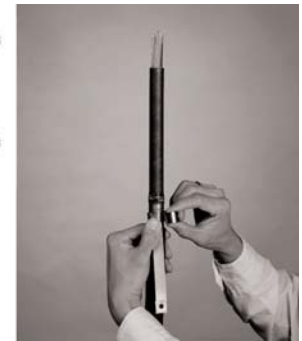
## Sealing and Grounding Kits

### 3M™ Ground Strap Assembly GS Series

3M™ Ground Strap Assembly Kits GS Series are designed for grounding tape and wire shielded power cables.

**Voltage** 5-35 kV

**Cable/Shielding Type** Tape & Wire Shielded Power Cables



Order No.	UPC 054007-	Strap (LxW)	Conductor Size 5 kV-100% (90 mil)	Conductor Size 5 kV- 133%/ 8 kV-100% (115 mil)	Conductor Size 8 kV- 133% (140 mil)	Conductor Size 15 kV- 100% (175 mil)	Conductor Size 15 kV- 133% (220 mil)	Conductor Size 25 kV (260 mil)	Conductor Size 35 kV (345 mil)	Bags/ Case
GS-1	33976	4.75" x 0.31" (120,7 x 7,9 mm)	8-3/0 AWG (10-80 mm <sup>2</sup> )	8-1/0 AWG (10-50 mm <sup>2</sup> )	8-1 AWG (10-38 mm <sup>2</sup> )	-	-	-	-	9
GS-2	33977	7.12" x 0.62" (180,8 x 15,7 mm)	2/0 AWG-750 kcmil (70-325 mm <sup>2</sup> )	1/0 AWG-750 kcmil (60-325 mm <sup>2</sup> )	1 AWG-600 kcmil (50-300 mm <sup>2</sup> )	2 AWG-500 kcmil (35-250 mm <sup>2</sup> )	2 AWG-350 kcmil (35-180 mm <sup>2</sup> )	2 AWG-400 kcmil (35-200 mm <sup>2</sup> )	1/0 AWG- 300 kcmil (60-150 mm <sup>2</sup> )	9
GS-3	33978	6.87" x 0.62" (175,0 x 15,7 mm)	600-2000 kcmil (325-1000 mm <sup>2</sup> )	500-2000 kcmil (300-1000 mm <sup>2</sup> )	400-1750 kcmil (240-850 mm <sup>2</sup> )	350-1750 kcmil (180-850 mm <sup>2</sup> )	250-1500 kcmil (125-725 mm <sup>2</sup> )	3/0 AWG- 1000 kcmil (95-500 mm <sup>2</sup> )	1/0 AWG- 750 kcmil (60-325 mm <sup>2</sup> )	9

### 3M™ Constant Force Spring

3M™ Constant Force Springs are a range of solderless connections for earthing or grounding use on:

- Lead and aluminium cable sheaths
- Cable screening tapes or wires
- Steel or aluminum armour wires

The springs are easily applied by rolling onto the cable core or outside diameter, whereupon it continues to exert a constant radial pressure.

**RoHS 2011/65/EU** Yes





Order No.	UPC	Application Range	Width	Springs per Case
CFS-.47/1.78	054007-42372	0.50"-0.75" (12,7-19,0 mm)	0.500" (12,7 mm)	30
CFS-.80/1.50	054007-42374	0.80"-1.50" (20,3-38,1 mm)	0.625" (15,9 mm)	30
CFS-1.00/2.20	054007-42375	1.00"-2.20" (25,4-56,0 mm)	0.625" (15,9 mm)	30
CFS-1.50/3.00	054007-42376	1.50"-3.00" (38,1-76,2 mm)	0.625" (15,9 mm)	9
CFS-1.50/3.00W	054007-42378	1.50"-3.00" (38,1-76,2 mm)	0.750" (19,0 mm)	9
CFS-1.80/4.00	054007-42379	1.80"-4.00" (45,7-101,6 mm)	0.625" (15,9 mm)	9

## 3M™ Shield Grounding Accessory Kits GSK

3M™ Shield Grounding Accessory Kits GSK Series are designed to convert concentric neutral (CN) or jacketed concentric neutral (JCN) QT-II or QT-III termination kits for use on longitudinally corrugated (LC) and tape shielded power cables. The GSK kits eliminate the need to stock separate termination kits for shielded power cables. The ground braids provided in the GSK kits are designed for applications where high ampacity grounding is desired.

\* **Conductor Size Ranges expressed in AWG & kcmil.**

<b>Voltage</b>	5–35 kV	
<b>Cable/Shielding Type</b>	Tape Shield, Longitudinally Corrugated (LC)	
<b>Shield Diameter Range (GSK-22)</b>	0.74"–1.18" (18,8–30,0 mm)	
<b>Shield Diameter Range (GSK-34)</b>	0.82"–1.63" (20,8–41,4 mm)	
<b>Shield Diameter Range (GSK-56)</b>	1.15"–2.42" (29,2–61,5 mm)	
<b>Packaging</b>	3 kits per case	

Order No.	UPC	Compatible with	5 kV (90 mil) AWG & kcmil	5/8 kV (115 mil) AWG & kcmil	8 kV (140 mil) AWG & kcmil	15 kV (175 mil) AWG & kcmil	15 kV (220 mil) AWG & kcmil	25/28 kV (260/280 mil) AWG & kcmil	35 kV (345 mil) AWG & kcmil
GSK-22	051128-53087	QT-II 5641	3/0-300	2/0-250	1/0-4/0	2-3/0	2-1/0	-	-
		QT-II 5651	3/0-300	2/0-250	1/0-4/0	2-3/0	2-1/0	2-1	-
		QT-III 7642-T-110	4/0-400	3/0-350	-	2-4/0	2-4/0	-	-
		QT-III 7642-S-2	4/0-400	3/0-350	-	2-4/0	2-4/0	-	-
		QT-III 7652-S-4	4/0-400	3/0-350	-	2-4/0	2-4/0	-	-
GSK-34	051128-53088	QT-II 5642	350-750	300-750	250-600	3/0-500	2/0-350	-	-
		QT-II 5652	350-750	300-750	250-600	3/0-500	2/0-350	1/0-250	-
		QT-II 5646	350-750	300-750	250-600	3/0-500	2/0-350	1/0-250	2-3/0
		QT-III 7653-S-4	300-500	300-500	4/0-350	2/0-300	2/0-300	2-4/0	-
		QT-III 7654-S-4	500-750	350-700	250-500	4/0-500	4/0-500	2/0-250	-
		QT-III 7644-T-110	500-750	350-700	250-500	4/0-500	4/0-500	-	-
		QT-III 7653-T-150	300-500	250-500	4/0-350	2/0-300	2/0-300	2-4/0	2-2/0
		QT-III 7663-S-8	300-500	250-500	4/0-350	2/0-300	2/0-300	2-4/0	2-2/0
QT-III 7664-S-8	500-750	350-700	250-500	4/0-500	4/0-500	2/0-250	2-4/0		
GSK-56	051128-53089	QT-II 5643	750-1500	750-1250	600-1000	500-1000	350-500	-	-
		QT-II 5644	1000-2000	1000-2000	800-1750	750-1750	600-1500	-	-
		QT-II 5653	750-1500	750-1250	600-1000	500-1000	350-500	300-500	-
		QT-II 5654	1000-2000	1000-2000	800-1750	750-1750	600-1500	600-1250	-
		QT-II 5647	750-1500	750-1250	600-1000	500-1000	350-500	300-500	4/0-400
		QT-II 5648	1000-2000	1000-2000	800-1750	750-1750	600-1500	600-1250	500-1000
		QT-III 7655-S-4	700-1500	600-1250	500-1000	500-1000	500-1000	250-800	-
		QT-III 7656-S-4	1750-2000	1500-2000	1250-1750	1250-2000	1250-2000	900-1750	-
		QT-III 7645-T-110	700-1500	600-1250	500-1000	500-1000	500-1000	-	-
		QT-III 7646-T-110	1750-2000	1500-2000	1250-1750	1250-2000	1250-2000	-	-
		QT-III 7655-T-150	700-1500	600-1250	500-1000	500-1000	500-1000	250-800	3/0-600
		QT-III 7656-T-150	1750-2000	1500-2000	1250-1750	1250-2000	1250-2000	900-1750	700-1500
		QT-III 7665-S-8	700-1500	600-1250	500-1000	500-1000	500-1000	250-800	3/0-600
QT-III 7666-S-8	1750-2000	1500-2000	1250-1750	1250-2000	1250-2000	900-1750	700-1500		



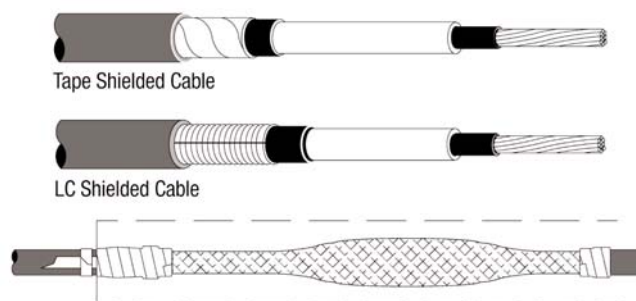
## Sealing and Grounding Kits

## 3M™ Hi-Amp Splice Grounding Accessory Kits SG-2 and SG-3

3M™ Hi-Amp Splice Grounding Accessory Kits SG-2 and SG-3 are designed to accommodate the shielding and grounding of inline splices made on longitudinally corrugated (LC) shield, heavy-duty tape and conventional tape-shielded power cables. The SG-2 and SG-3 designs provide a fault current capacity of 15,000 Amps for 15 cycles on 15 kV, 25 kV and 35 kV class cables. The 3M kits SG-2 and SG-3 were designed to accommodate 3M™ QS Splice Bodies as well as most other rubber-molded inline splices currently used in the electrical power distribution industry.

The 3M Copper Screen Sleeves SG-2 and SG-3 are applied over molded rubber splices on cables with shield diameters ranging from 1.25"–2.25" (31,8–57,2 mm). In most cases this will include conductor sizes between 350–1000 kcmil and voltage classes of 15–35 kV. The 3M copper screen sleeves SG-2 and SG-3 and the preformed ground connection braid have a capacity greater than that of 4 AWG copper wire and are fault current rated at 15,000 amps for 15 cycles. The 3M Kit SG-3 has a larger CMA (greater than 2 AWG) copper screen sleeve and two constant force springs per end. This provides additional neutral current capacity.

Each kit provides shielding and grounding for one splice.



**Voltage** 15–35 kV

**Cable/Shielding Type** Tape Shield, Longitudinally Corrugated (LC)

Order No.	UPC	Shield O.D. Range	Conductor Size Range	Circular Mil Area	Kits per Case
SG-2	054007-50041	1.25"–2.25" (31,8–57,2 mm)	350–1000 kcmil	61,000	10
SG-3	054007-41511	1.25"–2.25" (31,8–57,2 mm)	350–1000 kcmil	72,000	10

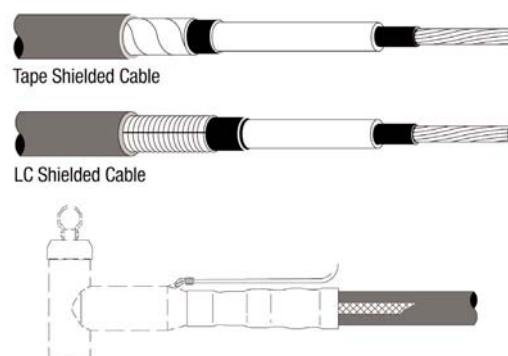
## 3M™ Hi-Amp Accessory Grounding Kits 8473 and GSHA-8 QT-II

3M™ Hi-Amp Accessory Grounding Kits 8473 and GSHA-8 QT-II are both designed to accommodate the grounding of accessories installed on 15 kV, 25 kV and 35 kV Class longitudinally corrugated (LC), heavy-duty tape and conventional tape-shielded power cables.

The 8473 kit is a cold shrink design to be used with 600-Amp elbows and other accessories where cable jacket-to-accessory sealing and high-ampacity grounding is desired. Its preformed ground braid has a fault current capacity of 15,000 Amps for 15 cycles with an equivalent cross-sectional area greater than 4 AWG copper wire.

The GSHA-8 kit is designed to accommodate the grounding of terminations made on 15 kV, 25 kV and 35 kV Class longitudinally corrugated (LC), heavy-duty tape and conventional tape-shielded power cables. The 3M Kit GSHA-8 QT-II preformed ground braid design also provides a fault current capacity of 15,000 Amps for 15 cycles on 15–35 kV class cables.

Each kit provides grounding and/or sealing for one accessory or termination.



**Voltage** 15 kV, 25/28 kV, 35 kV

**Cable/Shielding Type** Tape Shield, Longitudinally Corrugated (LC)

Order No.	UPC	Shield O.D. Range	Conductor Size Range AWG and kcmil	Kits per Case
8473	054007-50043	1.25"–2.25" (31,8–57,2 mm)	350–1000 kcmil	10
GSHA-8	054007-50042	1.25"–2.25" (31,8–57,2 mm)	350–1000 kcmil	10

## Sealing and Grounding Kits

### 3M™ Cable Grounding Kits 2252, 2253 and 2254

The 3M™ Cable Grounding Kits 2252, 2253 and 2254 provide a simple, reliable and secure method for grounding and resealing the jacket of direct buried distribution cables. These kits are designed for use with jacketed concentric neutral (JCN) power cables ranging from 2–4/0 AWG, rated through 35 kV. A common kit application is for grounding a primary neutral at least every 1320' (1/4 mile) per Rural Utilities Service (RUS) Bulletin 83-1.


Each kit provides enough material for one cable ground.



Jacketed Concentric Neutral Cable (JCN)



**Voltage** 35 kV  
**Cable/Shielding Type** Jacketed Concentric Neutral (JCN)

**Agency Approvals** 

Order No.	UPC	Conductor Size Range	Kits per Case
2252	054007-08335	2–4/0 AWG	10
2253	051128-55648	250–500 kcmil	10
2254	051128-56939	500–1000 kcmil	10

### 3M™ Cold Shrink Insertion Seal

Seals open space between a steel casing and plastic, gas, or utility pipe. Seal consists of EPDM rubber tubing that is expanded over a removable core and shrinks in diameter.



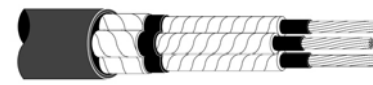
**Technology** Cold Shrink  
**Material** EPDM Rubber  
**RoHS 2011/65/EU** Yes

Order No.	UPC	Case Qty.
PS-2	054007-49886	10
PS-3	054007-50201	10
PS-4	054007-49887	10

## Lead Sheath Repair Kit



Paper Insulated Lead Covered (PILC) Cable



Three-Conductor Paper Insulated Lead Covered (PILC) Cable

Order No.	UPC	Description	Kits per Case
LEAD-SHEATH-REPAIR-KIT	054007-44246	For sealing oil leaks on PILC cable.	1

## 3M™ Cold Shrink Silicone Rubber 3/C Cable Breakout Boots 8560 Series

3M™ Cold Shrink Silicone Rubber 3/C Cable Breakout Boots 8560 Series are a series of open-ended molded rubber sealing assemblies that are factory expanded and mounted on removable inner supporting plastic cores. They are supplied for field installation in a pre-stretched condition. The supporting cores are removed after the seal has been positioned for installation around the breakout area of a 3/C (three-conductor) cable. Core removal allows the silicone rubber boot to shrink down to a pre-determined diameter, creating an environmental enclosure for individual cable phase legs and the overall cable jacket.

3M™ Cold Shrink Silicone Rubber 3/C Cable Breakout Boots 8560 Series are designed to protect the phase leg breakout area of 3/C medium voltage shielded power cable from exposure to moisture, contamination, corrosion, ozone, ultra-violet radiation, physical contact and other hazards associated with 3/C termination operating environments.

The 8560 Series Breakout Boots can be used in conjunction with 3M™ Cold Shrink Silicone Rubber Termination assemblies and 3M™ RJS Series Rejacketing Sleeves for 3/C shielded power cable terminating applications.

Full Breakout Boot Kits (BOK) are also available.

<b>Voltage</b>	35 kV and less
<b>Number of Conductors</b>	Three Conductors
<b>Cable/Shielding Type</b>	Shielded Power Cable
<b>Color</b>	Dark Gray
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Cable Phase Shield Diameter Range	Cable Outer Jacket Diameter Range	Case Qty.
8561	054007-43143	0.48"–0.72" (12,2–18,3 mm)	1.30"–1.94" (33,0–49,3 mm)	1
8562	054007-43144	0.61"–0.95" (15,5–24,1 mm)	1.46"–2.67" (37,1–67,8 mm)	1
8563	054007-43145	0.82"–1.18" (20,8–30,0 mm)	1.92"–3.10" (48,8–78,7 mm)	1
8564	054007-43146	1.02"–1.63" (25,9–41,4 mm)	2.52"–4.32" (64,0–109,7 mm)	1
8565	054007-43147	1.09"–1.94" (27,7–49,3 mm)	2.60"–4.70" (66,0–119,4 mm)	1
8566	051128-57174	1.23"–2.17" (31,2–55,1 mm)	3.18"–5.52" (80,7–140,2 mm)	1

### 3M™ RJS Series Rejacketing Sleeves

The 3M™ RJS Series Rejacketing Sleeves are designed so that 3M™ Cold Shrink QT-III Silicone Rubber Terminations can be used on three-conductor (3/C) medium voltage shielded power cables of tape shield, wire shield, armored and non-armored configurations.

The RJS Series rejacketing assemblies are a series of silicone rubber insulators incorporating an inner-expandable polyester braid designed to reduce sliding friction and deliver the insulator onto the cable. Rejacketing sleeves are designed to protect the phase legs (core) of 3/C shielded power cable from exposure to moisture, corrosion, ozone, ultra-violet radiation, physical contact and other hazards associated with termination operating environments.

Rejacketing sleeves are designed to be used in conjunction with 3M™ Cold Shrink Silicone Rubber Breakout Boots and Silicone Rubber Terminations.



<b>Voltage</b>	35 kV and less
<b>Number of Conductors</b>	Three Conductors
<b>Cable/Shielding Type</b>	Tape Shield, Wire Shield
<b>RoHS 2011/65/EU</b>	Yes

	RJS-1-4FT	RJS-1-10FT	RJS-2-4FT	RJS-2-10FT
UPC	054007-43098	054007-43099	054007-43100	054007-43101
Length	4' (1,22 m)	10' (3,05 m)	4' (1,22 m)	10' (3,05 m)
Metallic Shield Diameter Range	0.43"–0.60" (10,9–15,2 mm)	0.43"–0.60" (10,9–15,2 mm)	0.60"–0.80" (15,2–20,3 mm)	0.60"–0.80" (15,2–20,3 mm)
Conductor Size 3.3 kV - IEC	16–35 mm <sup>2</sup>	16–35 mm <sup>2</sup>	50–95 mm <sup>2</sup>	50–95 mm <sup>2</sup>
Conductor Size 3.3 kV - JIS	8–22 mm <sup>2</sup>	8–22 mm <sup>2</sup>	38–60 mm <sup>2</sup>	38–60 mm <sup>2</sup>
Conductor Size 5.0 kV - AEIC	8–2 AWG	8–2 AWG	1–3/0 AWG	1–3/0 AWG
Conductor Size 6.6 kV - JIS	16–25 mm <sup>2</sup>	16–25 mm <sup>2</sup>	35–70 mm <sup>2</sup>	35–70 mm <sup>2</sup>
Conductor Size 6.6 kV - IEC	8–10 mm <sup>2</sup>	8–10 mm <sup>2</sup>	14–38 mm <sup>2</sup>	14–38 mm <sup>2</sup>
Conductor Size 8.0 kV - AEIC	6–4 AWG	6–4 AWG	2–2/0 AWG	2–2/0 AWG
Conductor Size 10 kV - IEC	-	-	10–50 mm <sup>2</sup>	10–50 mm <sup>2</sup>
Conductor Size 15 kV - AEIC	-	-	2–1 AWG	2–1 AWG
Conductor Size 20 kV - IEC	-	-	-	-
Conductor Size 25 kV - AEIC	-	-	-	-
Conductor Size 30 kV - IEC	-	-	-	-
Conductor Size 35 kV - AEIC	-	-	-	-
Sleeves per Case	10	1	10	1
	RJS-3-4FT	RJS-3-10FT	RJS-4-4FT	RJS-4-10FT
UPC	054007-43102	054007-43103	054007-43104	054007-43105
Length	4' (1,22 m)	10' (3,05 m)	4' (1,22 m)	10' (3,05 m)
Metallic Shield Diameter Range	0.80"–1.02" (20,3–25,9 mm)	0.80"–1.02" (20,3–25,9 mm)	1.02"–1.28" (25,9–32,5 mm)	1.02"–1.28" (25,9–32,5 mm)
Conductor Size 3.3 kV - IEC	120–185 mm <sup>2</sup>	120–185 mm <sup>2</sup>	240–300 mm <sup>2</sup>	240–300 mm <sup>2</sup>
Conductor Size 3.3 kV - JIS	100–150 mm <sup>2</sup>	100–150 mm <sup>2</sup>	200–250 mm <sup>2</sup>	200–250 mm <sup>2</sup>
Conductor Size 5.0 kV - AEIC	4/0 AWG–400 kcmil	4/0 AWG–400 kcmil	500–750 kcmil	500–750 kcmil
Conductor Size 6.6 kV - JIS	95–150 mm <sup>2</sup>	95–150 mm <sup>2</sup>	185–300 mm <sup>2</sup>	185–300 mm <sup>2</sup>
Conductor Size 6.6 kV - IEC	60–100 mm <sup>2</sup>	60–100 mm <sup>2</sup>	150–250 mm <sup>2</sup>	150–250 mm <sup>2</sup>
Conductor Size 8.0 kV - AEIC	3/0 AWG–350 kcmil	3/0 AWG–350 kcmil	400–600 kcmil	400–600 kcmil
Conductor Size 10 kV - IEC	70–150 mm <sup>2</sup>	70–150 mm <sup>2</sup>	185–300 mm <sup>2</sup>	185–300 mm <sup>2</sup>
Conductor Size 15 kV - AEIC	1/0–4/0 AWG	1/0–4/0 AWG	250–450 kcmil	250–450 kcmil
Conductor Size 20 kV - IEC	25–70 mm <sup>2</sup>	25–70 mm <sup>2</sup>	95–185 mm <sup>2</sup>	95–185 mm <sup>2</sup>
Conductor Size 25 kV - AEIC	2–1/0 AWG	2–1/0 AWG	2/0 AWG–250 kcmil	2/0 AWG–250 kcmil
Conductor Size 30 kV - IEC	-	-	35–70 mm <sup>2</sup>	35–70 mm <sup>2</sup>
Conductor Size 35 kV - AEIC	-	-	1/0–3/0 AWG	1/0–3/0 AWG
Sleeves per Case	10	1	10	1

### 3M™ RJS Series Rejacketing Sleeves (continued)

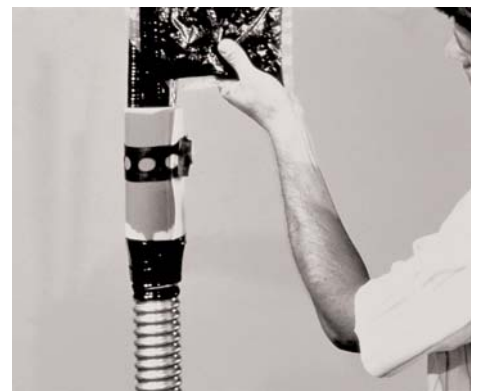
	RJS-5-4FT	RJS-5-10FT	RJS-6-4FT	RJS-6-10FT
UPC	054007-43106	054007-43107	051128-54320	051128-54319
Length	4' (1,22 m)	10' (3,05 m)	4' (1,22 m)	10' (3,05 m)
Metallic Shield Diameter Range	1.28"–1.62" (32,5–41,1 mm)	1.28"–1.62" (32,5–41,1 mm)	1.62"–1.91" (41,1–48,5 mm)	1.62"–1.91" (41,1–48,5 mm)
Conductor Size 3.3 kV - IEC	-	-	-	-
Conductor Size 3.3 kV - JIS	300–325 mm <sup>2</sup>	300–325 mm <sup>2</sup>	-	-
Conductor Size 5.0 kV - AEIC	800–1000 kcmil	800–1000 kcmil	-	-
Conductor Size 6.6 kV - JIS	-	-	-	-
Conductor Size 6.6 kV - IEC	300–325 mm <sup>2</sup>	300–325 mm <sup>2</sup>	-	-
Conductor Size 8.0 kV - AEIC	750–1000 kcmil	750–1000 kcmil	-	-
Conductor Size 10 kV - IEC	-	-	-	-
Conductor Size 15 kV - AEIC	500–750 kcmil	500–750 kcmil	-	-
Conductor Size 20 kV - IEC	240–300 mm <sup>2</sup>	240–300 mm <sup>2</sup>	-	-
Conductor Size 25 kV - AEIC	300–500 kcmil	300–500 kcmil	-	-
Conductor Size 30 kV - IEC	95–240 mm <sup>2</sup>	95–240 mm <sup>2</sup>	-	-
Conductor Size 35 kV - AEIC	4/0 AWG–500 kcmil	4/0 AWG–500 kcmil	-	-
Sleeves per Case	10	1	1	1

### Sheath Seal Kits

#### 3M™ Sheath Seal Kits 5831 and 5832

The 3M™ Sheath Seal Kits 5831 and 5832 are designed to seal the sheath area for shielded and non-shielded multi-conductor cables with or without ground wires. These resin kits handle copper or aluminum cable from 2 AWG-500 kcmil (35-250 mm<sup>2</sup>). Each kit makes one seal.

Number of Conductors	Multiple Conductor
RoHS 2011/65/EU	Yes

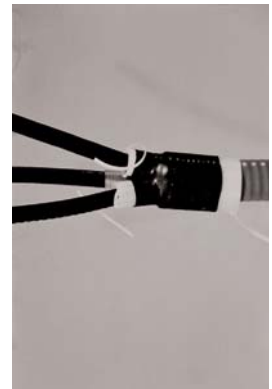


Order No.	UPC	Conductor Size	Maximum Jacket or Armor O.D.	Kits per Case
5831	051128-59173	2-3/0 AWG (35-80 mm <sup>2</sup> )	2.60" (66,0 mm)	1
5832	051128-59174	4/0 AWG-500 kcmil (120-250 mm <sup>2</sup> )	3.75" (95,3 mm)	1

## Sheath Seal Kits

### 3M™ Cold Shrink Sheath Seal Kits 5841 and 5842

The 3M™ Cold Shrink Sheath Seal Kits 5841 and 5842 are designed to seal the sheath area for three-conductor (3/C) cables without ground wires. They handle both copper and aluminum cables from 2AWG-500 kcmil (35-250 mm<sup>2</sup>). No heat is required when using these kits. Each kit makes one seal.



Number of Conductors	Three Conductor
RoHS 2011/65/EU	Yes

Order No.	UPC	Conductor Size	Conductor Insulation O.D.	Cable Jacket Range	Kits per Case
5841	054007-12291	2-4/0 AWG (35-100 mm <sup>2</sup> )	0.30"-1.18" (7,6-30,0 mm)	1.20"-1.90" (30,5-48,3 mm)	1
5842	054007-12292	4/0 AWG-500 kcmil (120-250 mm <sup>2</sup> )	0.77"-1.38" (19,6-35,1 mm)	1.80"-3.10" (45,7-78,7 mm)	1

## Electrical Resins

### 3M™ Scotchcast™ Electrical Insulating Resin 4

3M™ Scotchcast™ Electrical Insulating Resin 4 is a two-part epoxy insulating and encapsulating resin. This resin, mixed in its two-part closed mixing pouch, generates its own heat to cure. Its compatibility with solid and synthetic cable insulations and jackets makes Resin 4 an excellent insulator and sealer for cable splicing. Use 3M™ Scotchcast™ Electrical Insulating Resin 4 to splice solid dielectric and oil filled cables up to 8 kV and to jacket high voltage splices. It is included in the 3M™ Scotchcast™ Splice Kits 82-A Series, 82-B1, 85-14CP and 90-B1. Gel time is 16 min. at 73°F (23°C).

\*At 73°F (23°C) and cooler temperatures, resin will cure slower. Do not energize until resin has cooled and solidified.

Voltage	8 kV or less (for splicing solid dielectric and oil filled cables)
Cure Time	1 to 2 Hours at 70°F (21°C) 4 to 8 Hours at 50°F (10°C)
Energize Time	After resin cools and solidifies
Max. Operating Temperature	194°F (90°C) continuous
Color	Black
RoHS 2011/65/EU	Yes
Used in these kits	82-A Series; 82-B1; 85-14CP; 90-B1



Order No.	UPC	Package Description	Weight oz (g)	Volume in <sup>3</sup> (cm <sup>3</sup> )	Containers per Case
4A	054007-43165	2-part pouch	3.1 (88)	4.8 (78,6)	10
4B	054007-43166	2-part pouch	7.2 (205)	11.1 (181,9)	10
4C	054007-43167	2-part pouch	14.6 (414)	22.5 (368,7)	10
4D	054007-04206	2-part pouch	21.8 (619)	33.6 (550,6)	10
4E	054007-04207	2-part pouch	10.1 (288)	15.6 (255,6)	10



## Electrical Resins

### 3M™ Armorcast Structural Material 4560

3M™ Armorcast Structural Material 4560 is a flexible fiberglass knit fabric strip that has been saturated with a black urethane resin syrup. The material is rolled and packed dry in a sealed foil envelope. Armorcast structural material is completely safe for use in manholes, vaults, and other hazardous environments, because no heat source is required. No flames, electric heaters or chemicals are needed. The only thing your crews will ever have to add is water.



Material	Fiberglass
RoHS 2011/65/EU	Yes
Agency Approvals	RUS

Order No.	UPC	Color	Roll Size	Case Qty.
4560-5	051138-57719	Black	5 ft (1,52 m)	5
4560-10	051138-57717	Black	10 ft (3,05 m)	5
4560-15	051138-57718	Black	15 ft (4,57 m)	5

### 3M™ Scotchcast™ Electrical Insulating Resin 2104

3M™ Scotchcast™ Electrical Insulating Resin 2104 is a hard, two-part, polyurethane resin encapsulant designed specifically for permanent splice protection. Resin 2104 is formulated for virtually every electrical application requiring hard, non-reenterable resin with good handling and performance characteristics. Resin 2104 is also used as the insulating material for cable splices operating at 1000 volts or less and is rated for continuous use at 194°F (90°C) with an overload rating of 266°F (130°C). It may be stocked to cover all hard resin needs, ending the need for multiple encapsulant inventories.

Voltage	1000 Volts or less
Cure Time	1 Hour at 70°F (21°C) 20 Hours at 20°F (-4°C)
Energize Time	After resin cools and solidifies
Max. Operating Temperature	194°F (90°C) continuous
Color	Dark Green
RoHS 2011/65/EU	Yes
Used in these kits	72-N; 85 Series



Order No.	UPC	Package Description	Weight	Volume	Containers per Case
2104A	054007-31189	2-part pouch	3.46 oz (98 g)	5.7 in³ (93,4 cm³)	10
2104B	054007-31382	2-part pouch	7.40 oz (210 g)	12.6 in³ (206,4 cm³)	10
2104C	054007-31383	2-part pouch	14.82 oz (420 g)	25.4 in³ (416,2 cm³)	10
2104D	054007-11849	2-part pouch	23.80 oz (675 g)	40.8 in³ (668,5 cm³)	10
2104E	054007-31187	2-part pouch	10.6 oz (300 g)	19.1 in³ (313,5 cm³)	10
2104-1GAL	051128-60949	2 pouches, 1 gallon can	16 lb (7,2 kg)	1 gal (3,8 L)	1 kit
2104-PART A 5 GAL	051128-60950	5 gallon pail, Part A	40 lb (18,1 kg)	5 gal (18,9 L)	1 pail
2104-PART B 5 GAL	051128-60951	5 gallon pail, Part B	40 lb (18,1 kg)	5 gal (18,9 L)	1 pail

## 3M™ Scotchcast™ Re-Enterable Electrical Insulating Resin 2123

3M™ Scotchcast™ Re-enterable Electrical Resin 2123 is a soft, two-part polybutadiene resin encapsulant designed especially for re-enterable splice protection. It is formulated for virtually every electrical application requiring a soft, re-enterable resin with good handling and performance characteristics. This resin is also used as the insulating material for cable splices operating at 1000 volts, and is rated for continuous use at 194°F (90°C) with an overload rating at 266°F (130°C). It may be stocked to cover most re-enterable resin needs, ending the need for multiple encapsulant inventories.

Scotchcast Resin 2123 is formulated with excellent wetting properties and low viscosity. The resin flows well even at low temperatures, filling the enclosure and minimizing voids. Scotchcast Resin 2123 is packaged in a convenient two-part closed mixing pouch.

<b>Voltage</b>	1000 Volts or less
<b>Cure Time</b>	24 Hours @70°F (21°C)
<b>Energize Time</b>	After resin cools and solidifies
<b>Max. Operating Temperature</b>	194°F (90°C) continuous
<b>Color</b>	Amber, Translucent
<b>RoHS 2011/65/EU</b>	Yes
<b>Used in these kits</b>	78-R Series



Order No.	UPC	Package Description	Weight	Volume	Containers per Case
2123C	051128-55120	2-part pouch	12.3 oz (350 g)	23.7 in <sup>3</sup> (338,3 cm <sup>3</sup> )	10
2123D	051128-55121	2-part pouch	21.2 oz (600 g)	40.6 in <sup>3</sup> (665,3 cm <sup>3</sup> )	10
2123-6.6LBS	051128-59502	2 pouches	6.6 lb (3,0 kg)	0.47 gal (1,8 L)	1
2123-1-GAL	051128-60946	2 pouches, 1 gallon can	14 lb (6,2 kg)	1 gal (3,8 L)	1
2123-2.2-GAL	051128-60614	2 pouches, 1 pail	30.8 lb (13,9 kg)	2.2 gal (8,3 L)	1
2123-PartA-5GAL	051128-60947	5 gallon pail, Part A	35 lb (15,8 kg)	5 gal (18,9 L)	1 pail
2123-PartB-5GAL	051128-60948	5 gallon pail, Part B	35 lb (15,8 kg)	5 gal (18,9 L)	1 pail

## 3M™ Scotchcast™ Flame-Retardant Electrical Insulating Resin 2131

3M™ Scotchcast™ Flame-Retardant Electrical Insulating Resin 2131 is a two-part polyurethane resin designed to replace the cable jacket when splicing or repairing mine and portable cables. Its unique formulation makes it particularly suited to withstand the rugged conditions under which mine and portable cables must operate. When used in accordance with the appropriate kit configuration, Insulating Resin 2131 conforms to MSHA Part 7, Title 30 CFR.

Flame-Retardant Electrical Insulating Resin 2131 is also used as the insulating material for cable splices operating at up to 1000 volts and designed for 194°F (90°C) at continuous use and for 266°F (130°C) at temporary, overload temperature.

3M™ Scotchcast™ Flame-Retardant Electrical Insulating Resin 2131 comes in two sizes of 2-part pouch containers, one gallon pail with two pouches and 5 gallon pails for both Part A and Part B. (Note: 2.1 parts of B required for every 1 part of A by weight.)

<b>Voltage</b>	1000 Volts or less
<b>Cure Time</b>	16 to 24 Hours at 70°F (21°C)
<b>Energize Time</b>	After resin cools and solidifies
<b>Max. Operating Temperature</b>	194°F (90°C) continuous
<b>Color</b>	Black
<b>RoHS 2011/65/EU</b>	Yes
<b>Used in these kits</b>	5750; 5760; 5831; 5832; 82-F1; 82-F2; 82-BF1; M-20; M-30; M-40, 8096 Series



Order No.	UPC	Package Description	Weight	Volume	Case Qty.
2131B	051128-59166	2-part pouch	7.5 oz (213 g)	10.6 in³ (175 cm³)	10
2131C	051128-59167	2-part pouch	21.5 oz (612 g)	30.6 in³ (502 cm³)	10
2131-Part A 5 Gal	051128-59181	5 gallon pail, Part A	44.5 lb (20.1 kg)	5 gal (18.93 L)	1 pail
2131-Part B 5 Gal	051128-59182	5 gallon pail, Part B	46.5 lb (21 kg)	5 gal (18.93 L)	1 pail
2131-1GAL	051128-60952	2 pouches, 1 gallon can	12.51 lb (5.6 kg)	1 gal (3,8 L)	1 kit

## Electrical Resins

### 3M™ Scotchcast™ Potting Kit 2136

The 3M™ Scotchcast™ Potting Kit 2136 is designed to provide protection against corrosion and possible deteriorating effects of fresh swimming pool or fountain water and sunlight by reliably encapsulating the 8 AWG ground connection in a wet-niche shell as required by NEC® when using rigid, non-metallic conduit in the installation of wet-niche underwater lighting fixtures. Scotchcast 2136 compound is UL Listed as a potting compound for swimming pool, fountain, or spa equipment and is for use only where adhering to copper, copper alloy and stainless steel materials.

3M™ Scotchcast™ Potting Compound 2136 is a thixotropic polyurethane resin, designed to resist dripping or sagging, and is contained in an easy mix 1.5 oz. closed mixing pouch. At temperatures above 40°F (18°C) the compound will firm up in minutes. Encapsulated connections should be allowed to cure for 4 hours prior to submersion.

<b>Voltage</b>	Up to 1000 Volts; UL Listed up to 600 Volts
<b>Cure Time</b>	4 Hours at 70°F (21°C)
<b>Energize Time</b>	When resin cools and solidifies
<b>Max. Operating Temperature</b>	220°F (105°C)
<b>Color</b>	Black
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approval</b>	UL Listed 20L02



Order No.	UPC	Package Description	Material	Weight, oz (g)	Containers per Case
2136	051128-59190	2-part pouch	Resin Potting Compound	1.50 (42,5)	10

### Resin Kit Accessories

Order No.	UPC	Product Name	Description	Items per Case
F-10	054007-09142	3M™ Funnel PE 2.75 Large M-Series F-10	Funnel used with M-series molds for resin re-jacketing or cable repair with 3M Scotchcast™ Resins 2131.	1
E-4	054007-25701	3M™ Resin Pressure Gun E-4	Reusable resin pressure gun used for constructing a resin pressure splice.	1

## Electrical Resins

### 3M™ Scotchcast™ Connector Sealing Pack 3570G-N

The 3M™ Scotchcast™ Connector Sealing Pack 3570G-N insulates and provides protection for electrical spring connectors against dust, soil, water, and other environmental elements.

Each sealing pack contains a specific amount of the two-part 3M™ Scotchcast™ Resin 3570G-N in a unique closed mixing pouch. The resin generates its own heat to cure and its compatibility with spring connectors makes this sealing pack a convenient insulating and encapsulating resin for electrical spring connections.

The 3570G-N sealing pack will accommodate one 3M™ Performance Plus Wire Connector O/B+, R/Y+, T/R+, T/Y+ or one 3M™ Electrical Spring and Grounding Connector 312 or 512.

<b>Voltage</b>	Up to 1000 Volts
<b>Cure Time</b>	24 Hours at 70°F (21°C)
<b>Energize Time</b>	After resin cools and solidifies
<b>Max. Operating Temperature</b>	194°F (90°C)
<b>Color</b>	Black
<b>RoHS 2011/65/EU</b>	Yes



Order No.	UPC	Material	Weight, oz (g)	Containers per Case
3570G-N	051128-59186	Epoxy	0.24 (6,7)	10

## Cold Shrink Corrosion Protection Kits

### 3M™ Cold Shrink Corrosion Protection Kit CPT Series

3M™ Cold Shrink Corrosion Protection Kit CPT Series are designed to provide a quick and easy method for protecting bulkhead termination connectors from the corrosive influences of wet and salt-fog installation environments.

A CPT series assembly is an open-ended tubular rubber sleeve which is factory expanded and assembled onto a removable core. The core is removed after the assembly has been positioned for installation over a bulkhead terminator connector. Mastic strips are provided for sealing between NPT fitting threads and the enclosure in use (junction box, cabinet, panel board, etc.). CPT insulating sleeves are made of an EPDM rubber that contains no chlorides or sulfers.



<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	Meets salt spray requirements

Order No.	UPC	Min. Cable O.D.	Max. Connector O.D.	Max. Connector Installed Length	Kits per Case
CPT-1/2	054007-43021	0.50" (12,7 mm)	1.60" (40,6 mm)	4.50" (114 mm)	10
CPT-3/4	054007-43022	0.66" (16,8 mm)	1.90" (48,3 mm)	4.80" (122 mm)	10
CPT-1	054007-43023	0.66" (16,8 mm)	2.20" (55,9 mm)	4.80" (122 mm)	10
CPT-1-1/4	054007-43024	1.22" (31,0 mm)	2.65" (67,3 mm)	4.80" (122 mm)	10
CPT-1-1/2	054007-43025	1.40" (35,6 mm)	3.00" (76,2 mm)	5.50" (140 mm)	10
CPT-2	054007-43026	1.68" (42,7 mm)	3.60" (91,4 mm)	6.50" (165 mm)	10

## Cold Shrink Corrosion Protection Kits

### 3M™ Cold Shrink Corrosion Protection Kit CPT Series (continued)

Order No.	UPC	Min. Cable O.D.	Max. Connector O.D.	Max. Connector Installed Length	Kits per Case
CPT-2-1/2	054007-43027	1.97" (50,0 mm)	4.30" (109,2 mm)	8.50" (215 mm)	5
CPT-3	054007-43028	2.60" (66,0 mm)	5.40" (137,2 mm)	10.50" (266 mm)	5
CPT-3-1/2	054007-43029	2.90" (73,7 mm)	6.00" (152,4 mm)	13.50" (343 mm)	5
CPT-4	054007-43030	2.90" (73,7 mm)	6.00" (152,4 mm)	13.00" (330 mm)	5

## Cold Shrink End Caps

### 3M™ Cold Shrink End Caps EC-Series

3M™ Cold Shrink End Caps EC-Series are close-ended, tubular rubber sleeves that are factory expanded and loaded onto a removable core. When positioned over the end of a cable or other cylindrical object, the core is removed to provide a reliable environmental seal. Four different end caps are available to accommodate a wide range of sizes.

Color Black  
RoHS 2011/65/EU Yes



Order No.	UPC	Use Range	Sleeves per Case
EC-1	051128-58388	0.46"–0.82" (11,6–20,9 mm)	10
EC-2	051128-58389	0.63"–1.18" (15,9–30,1 mm)	10
EC-3	051128-58390	1.02"–1.94" (26,0–49,3 mm)	10
EC-4	051128-58391	1.79"–3.32" (45,6–84,3 mm)	10

## Mounting Brackets

### 3M™ Cross-Arm Mounting Brackets MB-1

The 3M™ Cross-Arm Mounting Bracket MB-1 is a cross-arm bracket for use in holding terminated cable. The MB-1 bracket is ideal to use when ordering the MB or MBS termination mounting brackets featured on this page.



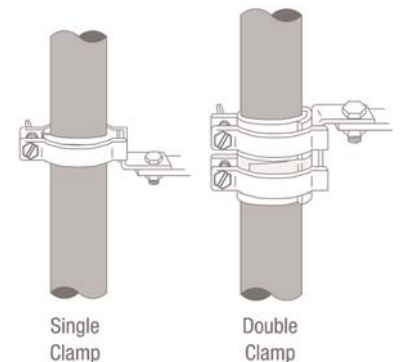
Order No.	UPC	Compatible with	Brackets per Case
MB-1	054007-11230	3M™ Mounting Brackets MB and MBS Series	10 each

### 3M™ Mounting Brackets MB and MBS Series

The 3M™ Mounting Brackets MB and MBS Series have been designed to mount rubber terminations. The MB series brackets are made from galvanized steel, while the MBS series brackets are made from zinc plated steel to provide corrosion protection in highly contaminated environments. These brackets are attached to the cable just below the termination. This provides a tongue that can then be attached to an MB-1 mounting bracket or to any other support.

\* CAUTION: Use cable O.D., not insulation O.D. for determining the proper size.

\*\* Has double-clamps.



Order No.	UPC	Cable O.D. Range	Brackets per Case
MB-3	054007-14754	0.80"–1.25" (20,3–31,8 mm)	10 each
MB-4	054007-14755	1.10"–1.50" (27,9–38,1 mm)	10 each
MB-5**	054007-08200	1.45"–1.95" (36,8–49,5 mm)	10 each
MB-6**	054007-08286	1.80"–2.40" (45,7–61,0 mm)	10 each
MBS-3**	05128-60911	0.80"–1.25" (20,3–31,8 mm)	10 each
MBS-4**	054007-49685	1.10"–1.70" (27,9–43,2 mm)	10 each
MBS-5**	054007-49686	1.45"–1.95" (36,8–49,5 mm)	10 each
MBS-6**	054007-49687	1.80"–2.40" (45,7–61,0 mm)	10 each






## 3M™ Scotch-Brite™ Hand Pads 7440 Series

3M™ Scotch-Brite™ Hand Pads 7440 Series make the toughest cleaning jobs easier. They resist tearing, splintering, shredding and loading and will never rust. Blending pads are made of a coarse mineral abrasive. General Purpose Pads are reusable—they rinse clean and are constructed of a nylon web. Ultra Fine Pads are highly conformable. 3M Scotch-Brite Hand Pads measure 6" x 9" (152 x 228 mm).

Select the 3M Scotch-Brite Hand Pads for your specific abrasion needs and carry them with you everywhere you work. You can use them on virtually any surface material, including all kinds of metals, plastics, composites, ceramics, porcelain, glass and rubber.



	7446	7447	7448
			
UPC	048011-04051	048011-04029	048011-04028
Description	Open, aggressive web that is excellent to grain, clean, denib, defuzz and finish. Resistant to loading. May be used by hand, on a hand pad block, or on an in-line sander.	Most universally used in a variety of applications. Excellent starting point to clean, finish, grain, denib and defuzz. May be used by hand, with a hand pad block, or on an in-line sander.	Conformable web and finest silicon carbide hand pad available. Excellent for final finishing and light cleaning. May be used by hand, with a hand block, or on an in-line sander.
Abrasive Mineral Type	Silicon Carbide	Aluminum Oxide	Silicon Carbide
Grade	Medium	Very Fine	Ultra Fine
Color	Gray	Maroon	Light Gray
Length	9" (228,6 mm)	9" (228,6 mm)	9" (228,6 mm)
Width	6" (152,4 mm)	6" (152,4 mm)	6" (152,4 mm)
Pads per Box	10	20	20
Boxes per Case	4	3	3

## Preparation and Cleaning

### 3M™ Cable Cleaning System CC Series

3M™ Cable Cleaning System CC Series cleans cable insulation, metal, electrical and mechanical parts. It can be used for PCB cleanup and as parts cleaners for degreasing.

CC-Dry contains three each 4" x 8" (102 x 203 mm) lintless non-woven pads packed in a bag. These are used for drying the common citrus cable cleaner (CC series) off of cable installation when preparing cable. The CC-2-Dry Kit contains a CC-2 Kit and three each dry lintless pads.

RoHS 2011/65/EU Yes



Order No.	UPC	Description	Kit Contents	Kits per Case
CC-2	054007-49563	Cable preparation kit	(3) Solvent saturated cable cleaning pads; and (1) Non-conductive grit abrasive cloth	10
CC-DRY	054007-43415	Dry wiping cloths	(3) Unsaturated cable cleaning pads	10
CC-2-DRY	054007-43414	Dry cable preparation kit	(3) Solvent saturated cable cleaning pads; (3) Unsaturated cable cleaning pads; and (1) Non-conductive grit abrasive cloth	10
CC-3	054007-49564	Cable cleaning pads	(3) Solvent saturated cable cleaning pads	10

### Scotch® Electricians' Abrasive Roll A-3

Scotch® Electricians' Abrasive Roll A-3 is a 120-grit, closed-coat aluminum oxide strip, which is nonconductive and flexible. It is packaged in a dispenser-type box.

Abrasive Backing Type Cloth  
 Abrasive Backing Weight J Weight  
 Abrasive Mineral Type Aluminum Oxide



Order No.	UPC	Length	Width	Grade	Product Form	Rolls per Case
A-3	054007-11560	75' (22,86 m)	1" (25,4 mm)	120	Roll	10

## 3M™ Wraparound Heat Shrink Cable Repair HDCW Sleeves

### 3M™ Heat Shrink Wraparound Cable Repair Wrap Sleeve HDCW

3M™ Heat Shrink Wraparound Cable Repair Wrap Sleeves HDCW are designed to quickly repair damaged cable jacketing. They may also be used to re-jacket in-line splices. HDCW wrap sleeves can be used as insulation material on cable and splices up to 1000 volts and as jacket repair material on cable up to 35 kV. The design of the wrap sleeve allows it to be installed in tight spaces with ordinary heating equipment such as a torch.

HDCW wrap sleeves are made from modified cross-linked polyolefin, with a hot-melt adhesive liner on the inner side of the sleeve. Upon heating, the sleeve shrinks and the adhesive melts, creating a water-tight bond between the sleeve and the cable. 3M Heat Shrink Wraparound Cable Repair Wrap Sleeves HDCW meet ANSI C119.1 requirements. A corrosion proof metal channel is used to close the sleeve during installation.



**Voltage** 1000 Volts Max.

**Material** Adhesive-lined, Cross-Linked Polyolefin

**RoHS 2011/65/EU** Yes

Order No.	UPC	Cable Size	Sleeve Length	Jacket Repair Use Range	Expanded/Recovered Diameter	Case Qty.
HDCW-35/10-250	051138-48416	8-2/0 AWG	9.8" (250 mm)	1.38"-0.39" (35-10 mm)	1.97"/0.32" (50/8 mm)	5
HDCW-35/10-500	051138-48417	8-2/0 AWG	19.7" (500 mm)	1.38"-0.39" (35-10 mm)	1.97"/0.32" (50/8 mm)	5
HDCW-35/10-750	051138-48418	8-2/0 AWG	29.5" (750 mm)	1.38"-0.39" (35-10 mm)	1.97"/0.32" (50/8 mm)	5
HDCW-35/10-1000	051138-48419	8-2/0 AWG	39.4" (1000 mm)	1.38"-0.39" (35-10 mm)	1.97"/0.32" (50/8 mm)	5
HDCW-35/10-1200	051138-48436	8-2/0 AWG	47.2" (1200 mm)	1.38"-0.39" (35-10 mm)	1.97"/0.32" (50/8 mm)	5
HDCW-55/15-250	051138-48420	3/0 AWG-400 kcmil	9.8" (250 mm)	2.17"-0.59" (55-15 mm)	2.95"/.51" (75/13 mm)	5
HDCW-55/15-500	051138-48421	3/0 AWG-400 kcmil	19.7" (500 mm)	2.17"-0.59" (55-15 mm)	2.95"/.51" (75/13 mm)	5
HDCW-55/15-750	051138-48422	3/0 AWG-400 kcmil	29.5" (750 mm)	2.17"-0.59" (55-15 mm)	2.95"/.51" (75/13 mm)	5
HDCW-55/15-1000	051138-48423	3/0 AWG-400 kcmil	39.4" (1000 mm)	2.17"-0.59" (55-15 mm)	2.95"/.51" (75/13 mm)	5
HDCW-55/15-1200	051138-48437	3/0 AWG-400 kcmil	47.2" (1200 mm)	2.17"-0.59" (55-15 mm)	2.95"/.51" (75/13 mm)	5
HDCW-80/25-250	051138-48424	500-1000 kcmil	9.8" (250 mm)	3.15"-0.98" (80-25 mm)	3.94"/0.91" (100/23 mm)	5
HDCW-80/25-500	051138-48425	500-1000 kcmil	19.7" (500 mm)	3.15"-0.98" (80-25 mm)	3.94"/0.91" (100/23 mm)	5
HDCW-80/25-750	051138-48426	500-1000 kcmil	29.5" (750 mm)	3.15"-0.98" (80-25 mm)	3.94"/0.91" (100/23 mm)	5
HDCW-80/25-1000	051138-48427	500-1000 kcmil	39.4" (1000 mm)	3.15"-0.98" (80-25 mm)	3.94"/0.91" (100/23 mm)	5
HDCW-80/25-1200	051138-48438	500-1000 kcmil	47.2" (1200 mm)	3.15"-0.98" (80-25 mm)	3.94"/0.91" (100/23 mm)	5
HDCW-110/30-500	051138-48429	1000-2000 kcmil	19.7" (500 mm)	4.33"-1.18" (110-30 mm)	5.20"/0.98" (132/25 mm)	5
HDCW-110/30-750	051138-48430	1000-2000 kcmil	29.5" (750 mm)	4.33"-1.18" (110-30 mm)	5.20"/0.98" (132/25 mm)	5
HDCW-110/30-1000	051138-48431	1000-2000 kcmil	39.4" (1000 mm)	4.33"-1.18" (110-30 mm)	5.20"/0.98" (132/25 mm)	5
HDCW-110/30-1200	051138-48439	1000-2000 kcmil	47.2" (1200 mm)	4.33"-1.18" (110-30 mm)	5.20"/0.98" (132/25 mm)	5
HDCW-140/40-1000	051138-48435	N/A	39.4" (1000 mm)	5.51"-1.57" (140-40 mm)	5.71"/1.26" (145/32 mm)	5
HDCW-140/40-1200	051138-48440	N/A	47.2" (1200 mm)	5.51"-1.57" (140-40 mm)	5.71"/1.26" (145/32 mm)	5

# Splice Jacketing, Rejacketing and Cable Repair, For 15–35 kV Cables and Splices

The following 3M products cover splicing needs for applications 15-35 kV, and promote dependable performance, stability and long life with every splice you make.

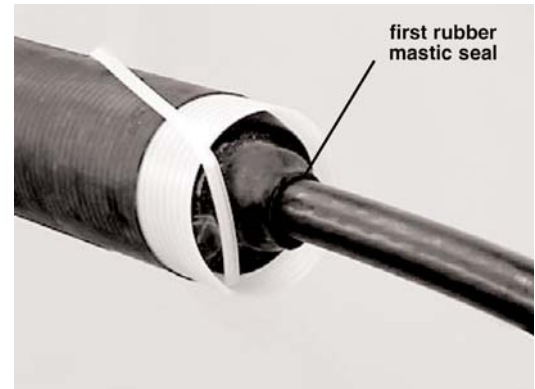


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## 3M™ Cold Shrink Foldback Splice Jacket Kits

3M™ Cold Shrink Foldback Splice Jacket Kits SJ-FB Series are a series of folded back, tubular, rubber sleeves that, combined with Scotch® Rubber Mastic Tape 2228, provide a sealed jacket over cable splices installed on jacketed power cable. The Scotch® Rubber Mastic Tape 2228 helps assure a seal between the cable jacket and cold shrink foldback jacket tube. Mastic strips are also used to seal around the optional, external ground conductor. The cold shrink jacket tube is provided in an expanded state, mounted on two inner supporting cores. As supplied in this pre-stretched condition, the tube is ready for field installation. The jacketing tube is made from EPDM rubber that contains no chlorides or sulfurs. The completed jacket tube will be continuous from cable jacket to cable jacket, with no seams. Four kit sizes cover an application range from 4 AWG, 15 kV to sizes larger than 4/0 AWG, 35 kV.

Each kit contains sufficient materials to jacket one cable splice.



<b>Voltage</b>	15–35 kV
<b>Number of Conductors</b>	Single Conductor
<b>RoHS 2011/65/EU</b>	Yes

Order No.	UPC	Min. Cable Jacket O.D.	Max. Splice O.D.	Max. Cable Jacket Opening	Application Parking Space Required	Compatible With	Kits per Case
SJ-1FB	051128-55302	0.95" (24,1 mm)	2.00" (50,8 mm)	25.0" (635 mm)	20.0" (510 mm)	15 kV: 3M™ Splice No. 5411, 5411A, and 5412	6
SJ-2FB	051128-55303	1.15" (29,2 mm)	3.00" (76,2 mm)	31.0" (787,4 mm)	22.0" (560 mm)	15 kV: 3M™ Splice No. 5403, 5404, 5405, and 5406 25 kV: 3M™ Splice No. 5420, 5421, 5422, 5451, 5451A, and 5452 35 kV: 3M™ Splice No. 5432 and 5461	6
SJ-3FB	051128-55304	1.55" (39,4 mm)	3.62" (91,9 mm)	34.0" (863,6 mm)	24.0" (610 mm)	15 kV: 3M™ Splice No. 5407, 5408, and 5409 25 kV: 3M™ Splice No. 5423, 5424, 5425, and 5426 35 kV: 3M™ Splice No. 5433	6
SJ-4FB	051128-55305	1.75" (44,5 mm)	4.10" (104,1 mm)	32.0" (812,8 mm)	24.0" (610 mm)	-	6

## 3M™ Cold Shrink Splice Jacket Kits

3M™ Cold Shrink Splice Jacket Kits SJ Series are a series of open ended, tubular, rubber sleeves that combined with Scotch® Rubber Mastic Tape 2228 provide a sealed jacket over cable splices installed on jacketed power cable. The Scotch® Rubber Mastic Tape 2228 helps assure a seal between the cable jacket and the cold shrink jacket tube. It is also used to seal around a cable ground conductor. The cold shrink jacket tube is provided in an expanded state, mounted on two inner supporting plastic cores. As supplied in this prestretched condition, the tube is ready for field installation. The jacketing tube is made of EPDM rubber which contains no chlorides or sulfurs. Three kit sizes cover an application range of 0.95"-4.00" (24-102 mm).



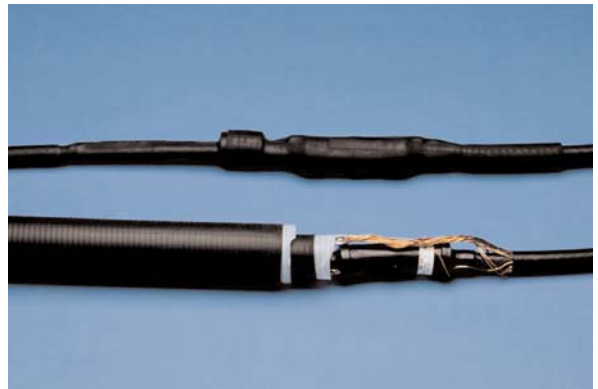
<b>Voltage</b>	15–35 kV
<b>Number of Conductors</b>	Single Conductor
<b>RoHS 2011/65/EU</b>	Yes

Order No.	UPC	Application Parking Length	Application Installed Length	Min. Cable Jacket O.D.	Max. Splice O.D.	Max. Cable Jacket Opening	Compatible With	Kits per Case
SJ-1A	054007-69742	29.0" (737 mm)	23.0"-27.0" (584,2-685,8 mm)	0.95" (24,1 mm)	2.4" (61,0 mm)	20.0" (508 mm)	15 kV: 3M™ Splice No. 5411, 5411A, 5412, 5411R	6
SJ-2A	054007-69743	36.0" (914 mm)	32.0"-35.0" (813-889 mm)	1.15" (29,2 mm)	3.3" (83,8 mm)	28.0" (711 mm)	15 kV: 3M™ Splice No. 5403, 5404, 5405, and 5406 25 kV: 3M™ Splice No. 5420, 5421, 5422, 5451, and 5452 35 kV: 3M™ Splice No. 5432 and 5461	6
SJ-3A	054007-69744	38.0" (965 mm)	33.0"-37.0" (83,82-93,98 cm)	1.55" (39,4 mm)	4.0" (101,6 mm)	30.0" (762,0 mm)	15 kV: 3M™ Splice No. 5407, 5408, and 5409 25 kV: 3M™ Splice No. 5423, 5424, 5425, and 5426 35 kV: 3M™ Splice No. 5433	6

## 3M™ Cold Shrink Stacked Sleeve Splice Jacket Kits

3M™ Cold Shrink Stacked Sleeve Splice Jacket Kits SJ-SS Series are a series of open ended, tubular rubber sleeves that, combined with Scotch® Rubber Mastic Tape 2228 and a profile bushing, provide a sealed jacket over cable splices installed on jacketed power cable. The Scotch® Rubber Mastic Tape 2228 provides a seal between the cable jacket and cold shrink jacket tube. Mastic strips are also used to seal around an optional, external ground conductor. The cold shrink jacket tubes are provided in an expanded state, mounted on inner supporting plastic cores. As supplied in this prestretched condition, the tubes are ready for field installation. The jacketing tubes are made of EPDM rubber which contains no chlorides or sulfurs. Three kit sizes cover an application range of 0.95”–3.62” (24,1–92,0 mm).

Each kit jackets one cable splice.



<b>Voltage</b>	15–35 kV
<b>Number of Conductors</b>	Single Conductor
<b>RoHS 2011/65/EU</b>	Yes

Order No.	UPC	Min. Cable Jacket O.D.	Max. Splice O.D.	Max. Cable Jacket Opening	Parking Space Required (approximate)	Compatible With	Kits per Case
SJ-1SS	054007-50777	0.95” (24,1 mm)	1.95” (49,5 mm)	23.0” (584 mm)	19.0” (483 mm)	15 kV: 3M™ Splice No 5411, 5411A, and 5412	6
SJ-2SS	054007-50778	1.15” (29,2 mm)	3.00” (76,2 mm)	31.0” (787 mm)	25.0” (635 mm)	15 kV: 3M™ Splice No. 5403, 5404, 5405, and 5406 25 kV: 3M™ Splice No. 5420, 5421, 5422, 5451, 5451A, and 5452 35 kV: 3M™ Splice No. 5432 and 5461	6
SJ-3SS	054007-50779	1.55” (39,4 mm)	3.62” (92,0 mm)	35.0” (889 mm)	26.0” (660 mm)	15 kV: 3M™ Splice No. 5407, 5408, and 5409 25 kV: 3M™ Splice No. 5423, 5424, 5425, and 5426 35 kV: 3M™ Splice No. 5433	6
SJ-4SS	054007-43894						6
SJ-1SSR	054007-41956	0.95” (24,1 mm)	1.95” (49,5 mm)	29.0” (737 mm)	25.0” (635 mm)	15 kV: 3M™ Splice No. 5411R	6
SJ-2SSR	054007-41957	1.15” (29,2 mm)	3.00” (76,2 mm)	37.0” (940 mm)	31.0” (787 mm)	15 kV: 3M™ Splice No. 5412R 25/28 kV: 3M™ Splice No. 5451R	6



## 3M™ Heat Shrinkable Splice Jacket Kits HSJ Series

3M™ Heat Shrinkable Splice Jacket Kits HSJ Series are designed to jacket power cable splices installed on jacketed power cable. The sleeves physically cover the cable neutral wires to environmentally protect the cable at the splice location. Fabricated from medium wall cross-linked polyolefin, the sleeves are flexible, highly split resistant and fast shrinking to provide rapid installation. The sleeves come with a factory applied adhesive/sealant. Sleeves are supplied in black only.



**Voltage** 15–35 kV  
**Number of Conductors** Single Conductor

Order No.	UPC	Sleeve Length	Expanded Sleeve I.D.	Min. Cable Jacket Diameter	Max. Splice Diameter	Max. Cable Jacket Opening	Compatible With	Kits per Case
HSJ-1	054007-09270	33.0" (838,2 mm)	2.50" (64 mm)	0.85" (22 mm)	1.90" (48,3 mm)	22.0" (559 mm)	15 kV: 3M™ Splice No 5411, 5411A and 5412	10
HSJ-2	054007-09271	40.0" (1016 mm)	3.00" (76,2 mm)	1.00" (25,4 mm)	2.60" (66,0 mm)	28.0" (711,2 mm)	15 kV: 3M™ Splice No. 5403, 5404, 5405, and 5406 25 kV: 3M™ Splice No. 5420, 5421, 5422, 5451, 5451A, 5452, and 5451R 35 kV: 3M™ Splice No. 5432 and 5461	10
HSJ-3	054007-09272	40.0" (1016 mm)	4.30" (109,2 mm)	1.50" (38,1 mm)	3.40" (86,4 mm)	28.0" (711,2 mm)	15 kV: 3M™ Splice No. 5407, 5408, and 5409 25 kV: 3M™ Splice No. 5423, 5424, 5425, and 5426 35 kV: 3M™ Splice No. 5433	5

## 3M™ Scotchcast™ Jacket Repair Kits M Series (up to 2 kV)

3M™ Scotchcast™ Jacket Repair Kits M Series contain a reusable wrap-around mold and accessory materials needed to make 10 permanent, flexible and moisture-resistant jacket repairs or splices of portable cable. The kit contains a wrap around mold that permits jacket repair without cutting through the cable. The M series kits, when used with 3M™ Scotchcast™ Flame-Retardant Electrical Insulating Resin 2131, provide durable, flexible jacket repair. Scotchcast kits can be used with portable power cable or standard cable.

Note: Scotchcast Flame-Retardant Electrical Insulating Resin 2131 needed to jacket the repair or splice is not included and must be ordered separately. U.S. Mine Safety and Health Administration acceptance No. 07-KA060007-MSHA.

<b>Voltage</b>	Up to 2 kV
<b>Cable/Shielding Type</b>	Shielded and Non-Shielded
<b>Splice Type</b>	Jacket Repair
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approval</b>	07-KA060007-MSHA approved when used with Scotchcast Resin 2131.



Order No.	UPC	Cable O.D.	Max. Repair Length	Case Qty.
M-20	051128-59223	1.60"-2.50" (41-63 mm)	13.0"-15" (330-381 mm)	1 kit
M-30	051128-59224	1.85"-4.00" (47-102 mm)	20.0" (508 mm)	1 kit
M-40	051128-59225	1.85"-6.00" (47-152 mm)	32.0" (813 mm)	1 kit



# Heat Shrink

3M offers a broad range of US-made heat shrink tubing at competitive prices that allow you to address your heat shrink needs while still taking pride in buying American. 3M™ Heat Shrink Tubing is designed to insulate and protect in a wide variety of electrical and mechanical applications. Buying from 3M provides the quality assurance that comes with a 100+ year-old company synonymous with American innovation.



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# Single (Thin) Wall Tubing

Lightweight, tough and flexible. 3M™ Single Wall Tubing is the right choice for electrical insulation in many industrial and manufactured products. It's also dependable as a lightweight wire harness, wire



marking, wire bundling, component packaging and fire-resistant cover.

## Standard Sizes and Dimensions

Ordering Size in.	Expanded I.D. (Minimum)		Recovered I.D. (Maximum)		Recovered Wall Thickness (Nominal)	
	in.	(mm)	in.	(mm)	in.	(mm)
3/64	.046	(1,17)	.023	(0,58)	.016	(0,41)
1/16	.063	(1,60)	.031	(0,79)	.017	(0,43)
3/32	.093	(2,36)	.046	(1,17)	.020	(0,51)
1/8	.125	(3,18)	.062	(1,57)	.020	(0,51)
3/16	.187	(4,75)	.093	(2,36)	.020	(0,51)
1/4	.250	(6,35)	.125	(3,18)	.025	(0,64)
3/8	.375	(9,53)	.187	(4,75)	.025	(0,64)
1/2	.500	(12,70)	.250	(6,35)	.025	(0,64)
3/4	.750	(19,05)	.375	(9,53)	.030	(0,76)
1	1.000	(25,40)	.500	(12,70)	.035	(0,89)
1-1/2	1.500	(38,10)	.750	(19,05)	.040	(1,02)
2	2.000	(50,80)	1.000	(25,40)	.045	(1,14)
3	3.000	(76,20)	1.500	(38,10)	.050	(1,27)
4	4.000	(101,60)	2.000	(50,80)	.055	(1,40)

Note: Dimensions in inches are approximate.

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## Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing

### 3M™ Heat Shrink Thin-Wall Tubing FP-301 (3/64 Inch)

3M™ Heat Shrink Tubing FP-301 offers an outstanding balance of electrical, physical and chemical properties for a wide variety of industrial and military applications. Rated for 135°C continuous operation, all FP-301 tubing is split resistant, mechanically tough, easily marked and resists cold flow.




FP-301 tubing is rated for continuous operation at -55°C (-67°F) to 135°C (275°F), and is designed to withstand elevated temperatures to 300°C (572°F) for short periods. Minimum shrink temperature for all FP-301 tubing is 100°C (212°F).

**Ordering Size:** 3/64" (1,17 mm)

**Expanded I.D. (Min.):** 0.046" (1,17 mm)

**Recovered I.D. (Max.):** 0.023" (0,58 mm)

**Recovered Wall Thickness (Nominal):** 0.016" (0,41 mm)

Material	Polyolefin
Shrink Ratio	2:1
Operating Temperature	-67°F to 275°F (-55°C to 135°C)
Voltage	600 Volts Max.
RoHS 2011/65/EU	Yes
Application Specifications	SAE-AMS-DTL-23053/5, Class 1, 2
Agency Approvals	  UL File E-39100
Manufacturing Origin	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-3/64-6"-Black-10-10 Pc Pks	051128-60126	Black	6" (152,4 mm) pieces	Yes	10/pk, 10 pks
FP301-3/64-48"-Black-25 Pcs	051128-59960	Black	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/64-48"-Black-250 Pcs	051128-59806	Black	48" (1,22 m) sticks	Yes	250 pcs
FP301-3/64-48"-Blue-25 Pcs	051128-59964	Blue	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/64-48"-Clear-25 Pcs	051128-59961	Clear	48" (1,22 m) sticks	No	25 pcis
FP301-3/64-48"-Red-25 Pcs	051128-59963	Red	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/64-48"-White-25 Pcs	051128-59962	White	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/64-100'-Black-Spool	051138-36027	Black	100' (30,48 m) Reel	Yes	3 Reels
FP301-3/64-100'-Clear-Spool	051138-36028	Clear	100' (30,48 m) Reel	No	3 Reels
FP301-3/64-1000'-Black-Spool	054007-08458	Black	1000' (304,8 m) Reel	Yes	3 Reels
FP301-3/64-1000'-Clear-Spool	054007-08523	Clear	1000' (304,8 m) Reel	No	3 Reels

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing



## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (1/16 Inch)

**Ordering Size:** 1/16" (1,59 mm)

**Expanded I.D. (Min.):** 0.063" (1,60 mm)

**Recovered I.D. (Max.):** 0.031" (0,79 mm)

**Recovered Wall Thickness (Nominal):** 0.017" (0,43 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-1/16-6"-Black-200 Pcs	051128-59887	Black	6" (152,4 mm) pieces	Yes	200 pcs
FP301-1/16-6"-Black-10-10 Pc Pks	051128-60110	Black	6" (152,4 mm) pieces	Yes	10/pk, 10 pks
FP301-1/16-6"-Clear-10-10 Pc Pks	051128-60111	Clear	6" (152,4 mm) pieces	No	10/pk, 10 pks
FP301-1/16-48"-Black-250 Pcs	051128-59808	Black	48" (1,22 m) sticks	Yes	250 pcs
FP301-1/16-48"-Clear-25 Pcs	051128-59966	Clear	48" (1,22 m) sticks	No	25 pcs
FP301-1/16-48"-Clear-250 Pcs	051128-59813	Clear	48" (1,22 m) sticks	No	250 pcs
FP301-1/16-48"-Blue-25 Pcs	051128-59970	Blue	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/16-48"-Green-25 Pcs	051128-59971	Green	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/16-48"-Red-25 Pcs	051128-59968	Red	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/16-48"-White-25 Pcs	051128-59967	White	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/16-48"-Yellow-25 Pcs	051128-59969	Yellow	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/16-48"-Black-Hdr-25 Pcs	051128-59626	Black	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/16-48"-Blue-Hdr-25 Pcs	051128-59631	Blue	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/16-48"-Clear-Hdr-25 Pcs	051128-59627	Clear	48" (1,22 m) sticks w/ Hdr Label	No	25 pcs
FP301-1/16-48"-Green-Hdr-25 Pcs	051128-59632	Green	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/16-48"-Red-Hdr-25 Pcs	051128-59629	Red	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/16-48"-White-Hdr-25 Pcs	051128-59628	White	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/16-48"-Yellow-Hdr-25 Pcs	051128-59630	Yellow	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/16-25'-Black-Reel	054007-40058	Black	25' (7,62 m) reel	Yes	1 reel
FP301-1/16-100'-Black-Spool	051135-35550	Black	100' (30,48 m) spool	Yes	3 spools
FP301-1/16-100'-Clear-Spool	051135-35555	Clear	100' (30,48 m) spool	No	3 spools
FP301-1/16-1000'-Black-Spool	054007-08461	Black	1000' (304,80 m) spool	Yes	3 spools
FP301-1/16-1000'-Clear-Spool	054007-08524	Clear	1000' (304,80 m) spool	No	3 spools
FP301-1/16-100'-Blue-Spool	051135-35553	Blue	100' (304,80 m) spool	Yes	3 spools
FP301-1/16-100'-Green-Spool	051135-37591	Green	100' (304,80 m) spool	Yes	3 spools
FP301-1/16-100'-White-Spool	051135-35551	White	100' (304,80 m) spool	Yes	3 spools
FP301-1/16-100'-Yellow-Spool	051135-35554	Yellow	100' (304,80 m) spool	Yes	3 spools



Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing



## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (3/32 Inch)

**Ordering Size:** 3/32"

**Expanded I.D. (Min.):** 0.093" (2,36 mm)

**Recovered I.D. (Max.):** 0.046" (1,17 mm)

**Recovered Wall Thickness (Nominal):** 0.020" (0,51 mm)

<b>Material</b>	Polyolefin
<b>Expanded/Recovered I.D.</b>	0.093"/0.046" (2,36/1,17 mm)
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-3/32-6"-Black-10-10 Pc Pks	051128-60122	Black	6" (152,4 mm) pieces	Yes	10/pk, 10 pks
FP301-3/32-6"-Black-200 Pcs	051128-59888	Black	6" (152,4 mm) pieces	Yes	200 pcs
FP301-3/32-6"-Clear-10-10 Pc Pks	051128-60123	Clear	6" (152,4 mm) pieces	No	10/pk, 10 pks
FP301-3/32-48"-Black-25 Pcs	051128-59972	Black	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/32-48"-Black-250 Pcs	051128-59810	Black	48" (1,22 m) sticks	Yes	250 pcs
FP301-3/32-48"-Clear-25 Pcs	051128-59973	Clear	48" (1,22 m) sticks	No	25 pcs
FP301-3/32-48"-Clear-250 Pcs	051128-59814	Clear	48" (1,22 m) sticks	No	250 pcs
FP301-3/32-48"-Blue-25 Pcs	051128-59977	Blue	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/32-48"-Green-25 Pcs	051128-59978	Green	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/32-48"-Red-25 Pcs	051128-59975	Red	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/32-48"-White-25 Pcs	051128-59974	White	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/32-48"-Yellow-25 Pcs	051128-59976	Yellow	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/32-48"-Black-Hdr-25 Pcs	051128-59633	Black	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/32-48"-Blue-Hdr-25 Pcs	051128-59638	Blue	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/32-48"-Clear-Hdr-25 Pcs	051128-59634	Clear	48" (1,22 m) sticks w/ Hdr Label	No	25 pcs
FP301-3/32-48"-Green-Hdr-25 Pcs	051128-59639	Green	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/32-48"-Red-Hdr-25 Pcs	051128-59636	Red	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/32-48"-White-Hdr-25 Pcs	051128-59635	White	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/32-48"-Yellow-Hdr-25 Pcs	051128-59637	Yellow	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/32-25'-Black-Reel	054007-40059	Black	25' (7,62 m) reel	Yes	1 reel
FP301-3/32-100'-Black-Spool	051135-35556	Black	100' (30,48 m) spool	Yes	3 spools
FP301-3/32-100'-Blue-Spool	051135-35559	Blue	100' (30,48 m) spool	Yes	3 spools
FP301-3/32-100'-Clear-Spool	051135-35548	Clear	100' (30,48 m) spool	No	3 spools
FP301-3/32-100'-Green-Spool	051135-37592	Green	100' (30,48 m) spool	Yes	3 spools
FP301-3/32-100'-Red-Spool	051135-35558	Red	100' (30,48 m) spool	Yes	3 spools
FP301-3/32-100'-White-Spool	051135-35557	White	100' (30,48 m) spool	Yes	3 spools
FP301-3/32-100'-Yellow-Spool	051135-35560	Yellow	100' (30,48 m) spool	Yes	3 spools
FP301-3/32-500'-Black-Spool	054007-08466	Black	500' (152,40 m) spool	Yes	3 spools
FP301-3/32-500'-Clear-Spool	054007-08525	Clear	500' (152,40 m) spool	No	3 spools

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing



## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (1/8 Inch)

**Ordering Size:** 1/8" (3,18 mm)

**Expanded I.D. (Min.):** 0.125" (3,18 mm)

**Recovered I.D. (Max.):** 0.062" (1,57 mm)

**Recovered Wall Thickness (Nominal):** 0.020" (0,51 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-1/8-6"-Black-10-10 Pc Pks	051128-60116	Black	6" (152,4 mm) pieces	Yes	10/pk, 10 pks
FP301-1/8-6"-Black-200 Pcs	051128-59889	Black	6" (152,4 mm) pieces	Yes	200 pcs
FP301-1/8-6"-Clear-10-10 Pc Pks	051128-60117	Clear	6" (152,4 mm) pieces	No	10/pk, 10 pks
FP301-1/8-48"-Black-25 Pcs	051128-59979	Black	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/8-48"-Black-250 Pcs	051128-59828	Black	48" (1,22 m) sticks	Yes	250 pcs
FP301-1/8-48"-Blue-25 Pcs	051128-59984	Blue	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/8-48"-Clear-25 Pcs	051128-59980	Clear	48" (1,22 m) sticks	No	25 pcs
FP301-1/8-48"-Clear-250 Pcs	051128-59850	Clear	48" (1,22 m) sticks	No	250 Pcs
FP301-1/8-48"-Green-25 Pcs	051128-59985	Green	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/8-48"-Red-25 Pcs	051128-59982	Red	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/8-48"-White-25 Pcs	051128-59981	White	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/8-48"-Yellow-25 Pcs	051128-59983	Yellow	48" (1,22 m) sticks	Yes	25 pcs
FP301-1/8-48"-Black-Hdr-25 Pcs	051128-59640	Black	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/8-48"-Blue-Hdr-25 Pcs	051128-59645	Blue	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/8-48"-Clear-Hdr-25 Pcs	051128-59641	Clear	48" (1,22 m) sticks w/ Hdr Label	No	25 pcs
FP301-1/8-48"-Green-Hdr-25 Pcs	051128-59646	Green	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/8-48"-Red-Hdr-25 Pcs	051128-59643	Red	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/8-48"-White-Hdr-25 Pcs	051128-59642	White	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/8-48"-Yellow-Hdr-25 Pcs	051128-59644	Yellow	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-1/8-25'-Black-Reel	054007-40060	Black	25' (7,62 m) reel	Yes	1 reel
FP301-1/8-100'-Black-Spool	051135-35562	Black	100' (30,48 m) spool	Yes	3 spools
FP301-1/8-100'-Blue-Spool	051135-35565	Blue	100' (30,48 m) spool	Yes	3 spools
FP301-1/8-100'-Clear-Spool	051135-35567	Clear	100' (30,48 m) spool	No	3 spools
FP301-1/8-100'-Green-Spool	051135-37593	Green	100' (30,48 m) spool	Yes	3 spools
FP301-1/8-100'-Red-Spool	051135-35564	Red	100' (30,48 m) spool	Yes	3 spools
FP301-1/8-100'-White-Spool	051135-35563	White	100' (30,48 m) spool	Yes	3 spools
FP301-1/8-100'-Yellow-Spool	051135-35566	Yellow	100' (30,48 m) spool	Yes	3 spools
FP301-1/8-500'-Black-Spool	054007-08472	Black	500' (152,40 m) spool	Yes	3 spools
FP301-1/8-500'-Clear-Spool	054007-08526	Clear	500' (152,40 m) spool	No	3 spools

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing




## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (3/16 Inch)

**Ordering Size:** 3/16" (4,75 mm)

**Expanded I.D. (Min.):** 0.187" (4,75 mm)

**Recovered I.D. (Max.):** 0.093" (2,36 mm)

**Recovered Wall Thickness (Nominal):** 0.020" (0,51 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	  UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-3/16-6"-Black-10-10 Pc Pks	051128-60120	Black	6" (152,4 mm) pieces	Yes	10/pk, 10 pks
FP301-3/16-6"-Black-200 Pcs	051128-59890	Black	6" (152,4 mm) pieces	Yes	200 pcs
FP301-3/16-6"-Clear-10-10 Pc Pks	051128-60121	Clear	6" (152,4 mm) pieces	No	10/pk, 10 pks
FP301-3/16-48"-Black-25 Pcs	051128-59570	Black	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/16-48"-Black-250 Pcs	051128-59832	Black	48" (1,22 m) sticks	Yes	250 pcs
FP301-3/16-48"-Clear-25 Pcs	051128-59571	Clear	48" (1,22 m) sticks	No	25 pcs
FP301-3/16-48"-Clear-250 Pcs	051128-59851	Clear	48" (1,22 m) sticks	No	250 pcs
FP301-3/16-48"-Blue-25 Pcs	051128-59575	Blue	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/16-48"-Green-25 Pcs	051128-59576	Green	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/16-48"-Red-25 Pcs	051128-59573	Red	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/16-48"-White-25 Pcs	051128-59572	White	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/16-48"-Yellow-25 Pcs	051128-59574	Yellow	48" (1,22 m) sticks	Yes	25 pcs
FP301-3/16-48"-Black-Hdr-25 Pcs	051128-59647	Black	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/16-48"-Blue-Hdr-25 Pcs	051128-59652	Blue	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/16-48"-Clear-Hdr-25 Pcs	051128-59648	Clear	48" (1,22 m) sticks w/ Hdr Label	No	25 pcs
FP301-3/16-48"-Green-Hdr-25 Pcs	051128-59653	Green	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/16-48"-Red-Hdr-25 Pcs	051128-59650	Red	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/16-48"-White-Hdr-25 Pcs	051128-59649	White	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/16-48"-Yellow-Hdr-25 Pcs	051128-59651	Yellow	48" (1,22 m) sticks w/ Hdr Label	Yes	25 pcs
FP301-3/16-25'-Black-Reel	054007-40061	Black	25' (7,62 m) reel	Yes	1 reel
FP301-3/16-100'-Black-Spool	051135-35568	Black	100' (30,48 m) spool	Yes	3 spools
FP301-3/16-100'-Blue-Spool	051135-35571	Blue	100' (30,48 m) spool	Yes	3 spools
FP301-3/16-100'-Clear-Spool	051135-35573	Clear	100' (30,48 m) spool	No	3 spools
FP301-3/16-100'-Green-Spool	051135-37594	Green	100' (30,48 m) spool	Yes	3 spools
FP301-3/16-100'-Red-Spool	051135-35570	Red	100' (30,48 m) spool	Yes	3 spools
FP301-3/16-100'-White-Spool	051135-35569	White	100' (30,48 m) spool	Yes	3 spools
FP301-3/16-100'-Yellow-Spool	051135-35572	Yellow	100' (30,48 m) spool	Yes	3 spools
FP301-3/16-250'-Black-Spool	054007-08478	Black	250' (76,20 m) spool	Yes	3 spools
FP301-3/16-250'-Clear-Spool	054007-08527	Clear	250' (76,20 m) spool	No	3 spools

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing



## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (1/4 Inch)

**Ordering Size:** 1/4" (6,35 mm)

**Expanded I.D. (Min.):** 0.250" (6,35 mm)

**Recovered I.D. (Max.):** 0.125" (3,18 mm)

**Recovered Wall Thickness (Nominal):** 0.025" (0,64 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	 MADE IN USA



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-1/4-6"-Black-200 Pcs	051128-59891	Black	6" (152,4 mm) pieces	Yes	200 pcs
FP301-1/4-6"-Black-10-10 Pc Pks	051128-60114	Black	6" (152,4 mm) pieces	Yes	10/pk, 10 pks
FP301-1/4-6"-Clear-10-10 Pc Pks	051128-60115	Clear	6" (152,4 mm) pieces	No	10/pk, 10 pks
FP301-1/4-48"-Black-12 Pcs	051128-59577	Black	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/4-48"-Black-200 Pcs	051128-59835	Black	48" (1,22 m) sticks	Yes	200 pcs
FP301-1/4-48"-Blue-12 Pcs	051128-59582	Blue	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/4-48"-Clear-12 Pcs	051128-59578	Clear	48" (1,22 m) sticks	No	12 pcs
FP301-1/4-48"-Clear-200 Pcs	051128-59852	Clear	48" (1,22 m) sticks	No	200 pcs
FP301-1/4-48"-Green-12 Pcs	051128-59583	Green	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/4-48"-Red-12 Pcs	051128-59580	Red	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/4-48"-White-12 Pcs	051128-59579	White	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/4-48"-Yellow-12 Pcs	051128-59581	Yellow	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/4-48"-Black-Hdr-12 Pcs	051128-59654	Black	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/4-48"-Blue-Hdr-12 Pcs	051128-59659	Blue	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/4-48"-Clear-Hdr-12 Pcs	051128-59655	Clear	48" (1,22 m) sticks w/ Hdr Label	No	12 pcs
FP301-1/4-48"-Green-Hdr-12 Pcs	051128-59660	Green	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/4-48"-Red-Hdr-12 Pcs	051128-59657	Red	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/4-48"-White-Hdr-12 Pcs	051128-59656	White	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/4-48"-Yellow-Hdr-12 Pcs	051128-59658	Yellow	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/4-25'-Black-Reel	054007-40062	Black	25' (7,62 m) reel	Yes	1 reel
FP301-1/4-100'-Black-Spool	051135-35574	Black	100' (30,48 m) spool	Yes	3 spools
FP301-1/4-100'-Blue-Spool	051135-35577	Blue	100' (30,48 m) spool	Yes	3 spools
FP301-1/4-100'-Clear-Spool	051135-35579	Clear	100' (30,48 m) spool	No	3 Spools
FP301-1/4-100'-Green-Spool	051135-37346	Green	100' (30,48 m) spool	Yes	3 spools
FP301-1/4-100'-Red-Spool	051135-35576	Red	100' (30,48 m) spool	Yes	3 spools
FP301-1/4-100'-White-Spool	051135-35575	White	100' (30,48 m) spool	Yes	3 spools
FP301-1/4-100'-Yellow-Spool	051135-35578	Yellow	100' (30,48 m) spool	Yes	3 spools
FP301-1/4-200'-Black-Spool	054007-08485	Black	200' (60,96 m) spool	Yes	3 spools
FP301-1/4-200'-Clear-Spool	054007-08528	Clear	200' (60,96 m) spool	No	3 spools

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing




## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (3/8 Inch)

**Ordering Size:** 3/8" (9,52 mm)

**Expanded I.D. (Min.):** 0.375" (9,53 mm)

**Recovered I.D. (Max.):** 0.187" (4,75 mm)

**Recovered Wall Thickness (Nominal):** 0.025" (0,64 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	  UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-3/8-6"-Black-200 Pcs	051128-59892	Black	6" (152,4 mm) pieces	Yes	200 pcs
FP301-3/8-6"-Black-10-10 Pc Pks	051128-60127	Black	6" (152,4 mm) pieces	Yes	10/pk, 10 pks
FP301-3/8-6"-Clear-10-10 Pc Pks	051128-60128	Clear	6" (152,4 mm) pieces	No	10/pk, 10 pks
FP301-3/8-48"-Black-12 Pcs	051128-59584	Black	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/8-48"-Black-125 Pcs	051128-59837	Black	48" (1,22 m) sticks	Yes	125 pcs
FP301-3/8-48"-Blue-12 Pcs	051128-59589	Blue	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/8-48"-Clear-12 Pcs	051128-59585	Clear	48" (1,22 m) sticks	No	12 pcs
FP301-3/8-48"-Clear-125 Pcs	051128-59853	Clear	48" (1,22 m) sticks	No	125 pcs
FP301-3/8-48"-Green-12 Pcs	051128-59590	Green	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/8-48"-Red-12 Pcs	051128-59587	Red	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/8-48"-White-12 Pcs	051128-59586	White	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/8-48"-Yellow-12 Pcs	051128-59588	Yellow	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/8-48"-Black-Hdr-12 Pcs	051128-59661	Black	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/8-48"-Blue-Hdr-12 Pcs	051128-59666	Blue	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/8-48"-Clear-Hdr-12 Pcs	051128-59662	Clear	48" (1,22 m) sticks w/ Hdr Label	No	12 pcs
FP301-3/8-48"-Green-Hdr-12 Pcs	051128-59667	Green	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/8-48"-Red-Hdr-12 Pcs	051128-59664	Red	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/8-48"-White-Hdr-12 Pcs	051128-59663	White	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/8-48"-Yellow-Hdr-12 Pcs	051128-59665	Yellow	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/8-25'-Black-Reel	054007-40063	Black	25' (7,62 m) reel	Yes	1 reel
FP301-3/8-100'-Black-Spool	051135-35580	Black	100' (30,48 m) spool	Yes	3 spools
FP301-3/8-100'-Blue-Spool	051135-35583	Blue	100' (30,48 m) spool	Yes	3 spools
FP301-3/8-100'-Clear-Spool	051135-35585	Clear	100' (30,48 m) spool	No	3 spools
FP301-3/8-100'-Green-Spool	051135-37643	Green	100' (30,48 m) spool	Yes	3 spools
FP301-3/8-100'-Red-Spool	051135-35582	Red	100' (30,48 m) spool	Yes	3 spools
FP301-3/8-100'-White-Spool	051135-35581	White	100' (30,48 m) spool	Yes	3 spools
FP301-3/8-100'-Yellow-Spool	051135-35584	Yellow	100' (30,48 m) spool	Yes	3 spools
FP301-3/8-200'-Black-Spool	054007-08491	Black	200' (60,96 m) spool	Yes	3 spools
FP301-3/8-200'-Clear-Spool	054007-08529	Clear	200' (60,96 m) spool	No	3 spools

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing



## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (1/2 Inch)

**Ordering Size:** 1/2" (12,7 mm)

**Expanded I.D. (Min.):** 0.500" (12,70 mm)

**Recovered I.D. (Max.):** 0.250" (6,35 mm)

**Recovered Wall Thickness (Nominal):** 0.025" (0,64 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-1/2-6"-Black-10-10 Pc Pks	051128-60112	Black	6" (152,4 mm) pieces	Yes	10/pk, 10 pks
FP301-1/2-6"-Clear-10-10 Pc Pks	051128-60113	Clear	6" (152,4 mm) pieces	No	10/pk, 10 pks
FP301-1/2-6"-Black-200 Pcs	051128-59893	Black	6" (152,4 mm) pieces	Yes	200 pcs
FP301-1/2-48"-Black-12 Pcs	051128-59591	Black	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/2-48"-Black-100 Pcs	051128-59859	Black	48" (1,22 m) sticks	Yes	100 pcs
FP301-1/2-48"-Blue-12 Pcs	051128-59596	Blue	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/2-48"-Clear-12 Pcs	051128-59592	Clear	48" (1,22 m) sticks	No	12 pcs
FP301-1/2-48"-Clear-100 Pcs	051128-59854	Clear	48" (1,22 m) sticks	No	100 pcs
FP301-1/2-48"-Green-12 Pcs	051128-59597	Green	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/2-48"-Red-12 Pcs	051128-59594	Red	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/2-48"-White-12 Pcs	051128-59593	White	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/2-48"-Yellow-12 Pcs	051128-59595	Yellow	48" (1,22 m) sticks	Yes	12 pcs
FP301-1/2-48"-Blue-Hdr-12 Pcs	051128-59673	Blue	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/2-48"-Clear-Hdr-12 Pcs	051128-59669	Clear	48" (1,22 m) sticks w/ Hdr Label	No	12 pcs
FP301-1/2-48"-Green-Hdr-12 Pcs	051128-59674	Green	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/2-48"-Red-Hdr-12 Pcs	051128-59671	Red	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/2-48"-White-Hdr-12 Pcs	051128-59670	White	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/2-48"-Yellow-Hdr-12 Pcs	051128-59672	Yellow	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-1/2-25'-Black-Reel	054007-40064	Black	25' (7,62 m) reel	Yes	1 reel
FP301-1/2-100'-Black-Spool	051135-35586	Black	100' (30,48 m) spool	Yes	3 spools
FP301-1/2-100'-Blue-Spool	051135-35589	Blue	100' (30,48 m) spool	Yes	3 spools
FP301-1/2-100'-Clear-Spool	051135-35591	Clear	100' (30,48 m) spool	No	3 spools
FP301-1/2-100'-Green-Spool	051135-37347	Green	100' (30,48 m) spool	Yes	3 spools
FP301-1/2-100'-Red-Spool	051135-35588	Red	100' (30,48 m) spool	Yes	3 spools
FP301-1/2-100'-White-Spool	051135-35587	White	100' (30,48 m) spool	Yes	3 spools
FP301-1/2-100'-Yellow-Spool	051135-35590	Yellow	100' (30,48 m) spool	Yes	3 spools
FP301-1/2-200'-Black-Spool	054007-08496	Black	200' (60,96 m) spool	Yes	3 spools
FP301-1/2-200'-Clear-Spool	054007-08530	Clear	200' (60,96 m) spool	No	3 spools



Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing




## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (3/4 Inch)

**Ordering Size:** 3/4" (19,0 mm)

**Expanded I.D. (Min.):** 0.750" (19,05 mm)

**Recovered I.D. (Max.):** 0.375" (9,53 mm)

**Recovered Wall Thickness (Nominal):** 0.030" (0,76 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	  UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-3/4-6"-Clear-10-10 Pc Pks	051128-60125	Clear	6" (152,4 mm) pieces	No	10/pk, 10 pks
FP301-3/4-6"-Black-10-10 Pc Pks	051128-60124	Black	6" (152,4 mm) pieces	Yes	10/pk, 10 pks
FP301-3/4-6"-Black-200 Pcs	051128-59894	Black	6" (152,4 mm) pieces	Yes	200 pcs
FP301-3/4-48"-Black-12 Pcs	051128-59598	Black	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/4-48"-Black-50 Pcs	051128-59864	Black	48" (1,22 m) sticks	Yes	50 pcs
FP301-3/4-48"-Clear-12 Pcs	051128-59599	Clear	48" (1,22 m) sticks	No	12 pcs
FP301-3/4-48"-Clear-50 Pcs	051128-59855	Clear	48" (1,22 m) sticks	No	50 pcs
FP301-3/4-48"-Blue-12 Pcs	051128-59603	Blue	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/4-48"-Green-12 Pcs	051128-59783	Green	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/4-48"-Red-12 Pcs	051128-59601	Red	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/4-48"-White-12 Pcs	051128-59600	White	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/4-48"-Yellow-12 Pcs	051128-59602	Yellow	48" (1,22 m) sticks	Yes	12 pcs
FP301-3/4-48"-Black-Hdr-12 Pcs	051128-59675	Black	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/4-48"-Blue-Hdr-12 Pcs	051128-59680	Blue	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/4-48"-Clear-Hdr-12 Pcs	051128-59676	Clear	48" (1,22 m) sticks w/ Hdr Label	No	12 pcs
FP301-3/4-48"-Green-Hdr-12 Pcs	051128-59782	Green	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/4-48"-Red-Hdr-12 Pcs	051128-59678	Red	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/4-48"-White-Hdr-12 Pcs	051128-59677	White	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/4-48"-Yellow-Hdr-12 Pcs	051128-59679	Yellow	48" (1,22 m) sticks w/ Hdr Label	Yes	12 pcs
FP301-3/4-25'-Black-Reel	054007-40065	Black	25' (7,62 m) reel	Yes	1 reel
FP301-3/4-50'-Black-Spool	051135-35592	Black	50' (15,24 m) spool	Yes	3 spools
FP301-3/4-50'-Blue-Spool	051135-35595	Blue	50' (15,24 m) spool	Yes	3 spools
FP301-3/4-50'-Clear-Spool	051135-35597	Clear	50' (15,24 m) spool	No	3 spools
FP301-3/4-50'-Green-Spool	051135-37348	Green	50' (15,24 m) spool	Yes	3 spools
FP301-3/4-50'-Red-Spool	051135-35594	Red	50' (15,24 m) spool	Yes	3 spools
FP301-3/4-50'-White-Spool	051135-35593	White	50' (15,24 m) spool	Yes	3 spools
FP301-3/4-50'-Yellow-Spool	051135-35596	Yellow	50' (15,24 m) spool	Yes	3 spools
FP301-3/4-200'-Black-Spool	054007-08502	Black	200' (60,96 m) spool	Yes	3 spools
FP301-3/4-200'-Clear-Spool	054007-08531	Clear	200' (60,96 m) spool	No	3 spools



Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing



## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (1 Inch)

**Ordering Size:** 1" (25,4 mm)

**Expanded I.D. (Min.):** 1.00" (25,40 mm)

**Recovered I.D. (Max.):** 0.500" (12,70 mm)

**Recovered Wall Thickness (Nominal):** 0.035" (0,89 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-1-6"-Clear-10-10 Pc Pks	051128-60119	Clear	6" (152,4 mm) pieces	No	10 pcs/pk, 10 pks
FP301-1-6"-Black-10-10 Pc Pks	051128-60118	Black	6" (152,4 mm) pieces	Yes	10 pcs/pk, 10 pks
FP301-1-48"-Black-5 Pcs	051128-59604	Black	48" (1,22 m) sticks	Yes	5 pcs
FP301-1-48"-Black-24 Pcs	051128-59841	Black	48" (1,22 m) sticks	Yes	24 pcs
FP301-1-48"-Blue-5 Pcs	051128-59609	Blue	48" (1,22 m) sticks	Yes	5 pcs
FP301-1-48"-Clear-5 Pcs	051128-59605	Clear	48" (1,22 m) sticks	No	5 pcs
FP301-1-48"-Clear-24 Pcs	051128-59856	Clear	48" (1,22 m) sticks	No	24 pcs
FP301-1-48"-Green-5 Pcs	051128-59785	Green	48" (1,22 m) sticks	Yes	5 pcs
FP301-1-48"-Red-5 Pcs	051128-59607	Red	48" (1,22 m) sticks	Yes	5 pcs
FP301-1-48"-White-5 Pcs	051128-59606	White	48" (1,22 m) sticks	Yes	5 pcs
FP301-1-48"-Yellow-5 Pcs	051128-59608	Yellow	48" (1,22 m) sticks	Yes	5 pcs
FP301-1-48"-Black-Hdr-5 Pcs	051128-59681	Black	48" (1,22 m) sticks w/ Hdr Label	Yes	5 pcs
FP301-1-48"-Blue-Hdr-5 Pcs	051128-59686	Blue	48" (1,22 m) sticks w/ Hdr Label	Yes	5 pcs
FP301-1-48"-Clear-Hdr-5 Pcs	051128-59682	Clear	48" (1,22 m) sticks w/ Hdr Label	No	5 pcs
FP301-1-48"-Green-Hdr-5 Pcs	051128-59784	Green	48" (1,22 m) sticks w/ Hdr Label	Yes	5 pcs
FP301-1-48"-Red-Hdr-5 Pcs	051128-59684	Red	48" (1,22 m) sticks w/ Hdr Label	Yes	5 pcs
FP301-1-48"-White-Hdr-5 Pcs	051128-59683	White	48" (1,22 m) sticks w/ Hdr Label	Yes	5 pcs
FP301-1-48"-Yellow-Hdr-5 Pcs	051128-59685	Yellow	48" (1,22 m) sticks w/ Hdr Label	Yes	5 pcs
FP301-1-25'-Black-Reel	054007-40066	Black	25' (7,62 m) reel	Yes	1 reel
FP301-1-50'-Black-Spool	051135-35598	Black	50' (15,24 m) spool	Yes	3 spools
FP301-1-50'-Blue-Spool	051135-35601	Blue	50' (15,24 m) spool	Yes	3 spools
FP301-1-50'-Clear-Spool	051135-35603	Clear	50' (15,24 m) spool	No	3 spools
FP301-1-50'-Green-Spool	051135-37768	Green	50' (15,24 m) spool	Yes	3 spools
FP301-1-50'-Red-Spool	051135-35600	Red	50' (15,24 m) spool	Yes	3 spools
FP301-1-50'-White-Spool	051135-35599	White	50' (15,24 m) spool	Yes	3 spools
FP301-1-50'-Yellow-Spool	051135-35602	Yellow	50' (15,24 m) spool	Yes	3 spools
FP301-1-100'-Black-Spool	054007-08508	Black	100' (30,48 m) spool	Yes	3 spools
FP301-1-100'-Clear-Spool	054007-08532	Clear	100' (30,48 m) spool	No	3 spools

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing



## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (1-1/2 Inch)

**Ordering Size:** 1-1/2" (38,1 mm)

**Expanded I.D. (Min.):** 1.500" (38,10 mm)

**Recovered I.D. (Max.):** 0.750" (19,05 mm)

**Recovered Wall Thickness (Nominal):** 0.040" (1,02 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-1 1/2-6"-Black-10-3 Pc Pks	051128-60132	Black	6" (152,4 mm) pieces	Yes	3/pk, 10 pks
FP301-1 1/2-6"-Clear-10-3 Pc Pks	051128-60133	Clear	6" (152,4 mm) pieces	No	3/pk, 10 pks
FP301-1 1/2-48"-Black-5 Pcs	051128-59610	Black	48" (1,22 m) sticks	Yes	5 pcs
FP301-1 1/2-48"-Black-24 Pcs	051128-59845	Black	48" (1,22 m) sticks	Yes	24 pcs
FP301-1 1/2-48"-Blue-5 Pcs	051128-59615	Blue	48" (1,22 m) sticks	Yes	5 pcs
FP301-1 1/2-48"-Clear-5 Pcs	051128-59611	Clear	48" (1,22 m) sticks	No	5 pcs
FP301-1 1/2-48"-Red-5 Pcs	051128-59613	Red	48" (1,22 m) sticks	Yes	5 pcs
FP301-1 1/2-48"-White-5 Pcs	051128-59612	White	48" (1,22 m) sticks	Yes	5 pcs
FP301-1 1/2-48"-Yellow-5 Pcs	051128-59614	Yellow	48" (1,22 m) sticks	Yes	5 pcs
FP301-1.5-50'-Black-Spool	051138-36026	Black	50' (15,24 m) spool	Yes	1 spool
FP301-1.5-50'-Clear-Spool	051138-36025	Clear	50' (15,24 m) spool	No	1 spool
FP301-1.5-100'-Black-Spool	054007-08514	Black	100' (30,48 m) spool	Yes	2 spools
FP301-1.5-100'-Clear-Spool	054007-08533	Clear	100' (30,48 m) spool	No	2 spools
FP301-1.5-100'-Blue-Spool	054007-38857	Blue	100' (30,48 m) Spool	Yes	2 spools
FP301-1.5-100'-Red-Spool	054007-38860	Red	100' (30,48 m) Spool	Yes	2 spools
FP301-1.5-100'-White-Spool	054007-08515	White	100' (30,48 m) Spool	Yes	2 spools
FP301-1.5-100'-Yellow-Spool	054007-08516	Yellow	100' (30,48 m) Spool	Yes	2 spools

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing



## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (2 Inch)

**Ordering Size:** 2" (50,8 mm)

**Expanded I.D. (Min.):** 2.00" (50,80 mm)

**Recovered I.D. (Max.):** 1.00" (25,40 mm)

**Recovered Wall Thickness (Nominal):** 0.045" (1,14 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	 MADE IN USA



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-2-48"-Black-5 Pcs	051128-59616	Black	48" (1,22 m) sticks	Yes	5 pcs
FP301-2-48"-Black-24 Pcs	051128-59847	Black	48" (1,22 m) sticks	Yes	24 pcs
FP301-2-48"-Blue-5 Pcs	051128-59621	Blue	48" (1,22 m) sticks	Yes	5 pcs
FP301-2-48"-Clear-5 Pcs	051128-59617	Clear	48" (1,22 m) sticks	No	5 pcs
FP301-2-48"-Clear-24 Pcs	051128-59858	Clear	48" (1,22 m) sticks	No	24 pcs
FP301-2-48"-Red-5 Pcs	051128-59619	Red	48" (1,22 m) sticks	Yes	5 pcs
FP301-2-48"-White-5 Pcs	051128-59618	White	48" (1,22 m) sticks	Yes	5 pcs
FP301-2-48"-Yellow-5 Pcs	051128-59620	Yellow	48" (1,22 m) sticks	Yes	5 pcs
FP301-2-50'-Black-Spool	051138-36024	Black	50' (15,24 m) Spool	Yes	1 Spool
FP301-2-50'-Clear-Spool	051138-36023	Clear	50' (15,24 m) Spool	No	1 Spool
FP301-2-100'-Black-Spool	054007-08517	Black	100' (30,48 m) Spool	Yes	2 Spools
FP301-2-100'-Clear-Spool	054007-08534	Clear	100' (30,48 m) Spool	No	2 Spools

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing




## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (3 Inch)

**Ordering Size:** 3" (76,2 mm)

**Expanded I.D. (Min.):** 3.00" (76,20 mm)

**Recovered I.D. (Max.):** 1.50" (38,10 mm)

**Recovered Wall Thickness (Nominal):** 0.050" (1,27 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	  UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-3-48"-Black-2 Pcs	051128-59622	Black	48" (1,22 m) sticks	Yes	2 pcs
FP301-3-48"-Black-12 Pcs	051128-59848	Black	48" (1,22 m) sticks	Yes	12 pcs
FP301-3-48"-Blue-12 Pcs	051128-59907	Blue	48" (1,22 m) sticks	Yes	12 pcs
FP301-3-48"-Clear-2 Pcs	051128-59623	Clear	48" (1,22 m) sticks	No	2 pcs
FP301-3-48"-Clear-12 Pcs	051128-59910	Clear	48" (1,22 m) sticks	No	12 pcs
FP301-3-48"-Red-12 Pcs	051128-59908	Red	48" (1,22 m) sticks	Yes	12 pcs
FP301-3-48"-White-12 Pcs	051128-59849	White	48" (1,22 m) sticks	Yes	12 pcs
FP301-3-48"-Yellow-12 Pcs	051128-59942	Yellow	48" (1,22 m) sticks	Yes	12 pcs
FP301-3-50'-Black-Spool	054007-08521	Black	50' (15,24 m) spool	Yes	1 spool
FP301-3-50'-Blue-Spool	054007-38880	Blue	50' (15,24 m) spool	Yes	1 spool
FP301-3-50'-Clear-Spool	054007-38982	Clear	50' (15,24 m) spool	No	1 spool
FP301-3-50'-Red-Spool	054007-38881	Red	50' (15,24 m) spool	Yes	1 spool
FP301-3-50'-White-Spool	054007-08522	White	50' (15,24 m) spool	Yes	1 spool
FP301-3-50'-Yellow-Spool	054007-38883	Yellow	50' (15,24 m) spool	Yes	1 spool

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing



## 3M™ Heat Shrink Thin-Wall Tubing FP-301 (4 Inch)

**Ordering Size:** 4" (101,6 mm)

**Expanded I.D. (Min.):** 4.00" (101,60 mm)

**Recovered I.D. (Max.):** 2.00" (50,80 mm)

**Recovered Wall Thickness (Nominal):** 0.055" (1,40 mm)

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	





Order No.	UPC	Color	Format	Flame Retardant	Case Qty.
FP301-4-48"-Black-2 Pcs	051128-59624	Black	48" (1,22 m) sticks	Yes	2 pcs
FP301-4-48"-Black-12 Pcs	051128-59909	Black	48" (1,22 m) sticks	Yes	12 pcs
FP301-4-48"-Clear-2 Pcs	051128-59625	Clear	48" (1,22 m) sticks	No	2 pcs
FP301-4-50'-Black-Spool	054007-38884	Black	50' (15,24 m) spool	Yes	1 spool
FP301-4-50'-Clear-Spool	054007-38986	Clear	50' (15,24 m) spool	No	1 spool
FP301-4-50'-Blue-Spool	054007-58973	Blue	50' (15,24 m) spool	Yes	1 spool
FP301-4-50'-Red-Spool	054007-38893	Red	50' (15,24 m) spool	Yes	1 spool
FP301-4-50'-Yellow-Spool	054007-38895	Yellow	50' (15,24 m) spool	Yes	1 spool

Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing

## 3M™ Heat Shrink Thin-Wall Tubing FP-301 Assorted Sizes Kits

The 3M™ Heat Shrink Thin-Wall Tubing FP-301 Kits are a versatile assortment of flexible polyolefin heat shrink tubing. The kits are available in two different types: Assorted Colors or Black only. Each box is constructed of rugged translucent plastic with product and installation information on the cover. Heat shrink kits allow an engineer, designer or technician to have a complete selection of popular sizes and colors for small projects and product development programs.

<b>Material</b>	Flexible Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	





Order No.	UPC	Description	Color	Size	Format	Case Qty.
FP301-3/32 to 1/2-Assrted-5-133 Pc Kits	051135-37677	Each kit has 133 pieces and contains 7 colors: black, red, white, yellow, blue, green, and clear tubing in sizes of 3/32", 1/8", 3/16", 1/4", 3/8", and 1/2".	black, red, white, yellow, blue, green, and clear	3/32" (2,38 mm) 1/8" (3,18 mm) 3/16" (4,75 mm) 1/4" (6,35 mm) 3/8" (9,52 mm) 1/2" (12,7 mm)	6" (15,24 cm) pieces	133 pcs/kit, 5 kits
FP301-3/16 to 1-Black-5-102 Pc Kits	051135-38139	Each kit has 102 pieces and contains 6 sizes: 3/16", 1/4", 3/8", 1/2", 3/4", and 1".	Black	3/16" – 1" (4,75 – 25,4 mm)	6" (15,24 cm) pieces	102 pcs/pk, 5 pks

## Single (Thin) Wall Tubing: 3M™ FP-301 Thin-Wall Tubing

### 3M™ Heat Shrink Thin-Wall Tubing FP-301 Assorted Color Packs

The 3M™ Heat Shrink Thin-Wall Tubing FP-301 Kits are a versatile assortment of flexible polyolefin heat shrink tubing. The kits are available in two different types: Assorted Colors or Black only. Each box is constructed of rugged translucent plastic with product and installation information on the cover. Heat shrink kits allow an engineer, designer or technician to have a complete selection of popular sizes and colors for small projects and product development programs.

<b>Material</b>	Flexible Polyolefin
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	SAE-AMS-DTL-23053/5, Class 1, 2
<b>Agency Approvals</b>	 UL File E-39100
<b>Manufacturing Origin</b>	






Order No.	UPC	Description	Color	Size	Format	Case Qty.
FP301-3/32-6"-Assorted-10-35 Pc Pks	051135-36618	Assorted 6" Pcs, 5 Each of 7 Color	Assorted	3/32" (2,38 mm)	6" (152,4 mm) pieces	35 pcs/pk, 10 pks
FP301-1/8-6"-Assorted-10-28 Pc Pks	051135-36619	Assorted 6" Pcs, 4 Each of 7 Color	Assorted	1/8" (3,18 mm)	6" (152,4 mm) pieces	28 pcs/pks, 10 pks
FP301-3/16-6"-Assorted-10-21 Pc Pks	051135-36620	Assorted 6" Pcs, 3 Each of 7 Color	Assorted	3/16" (4,75 mm)	6" (152,4 mm) pieces	21 pcs/pk, 10 pks
FP301-1/4-6"-Assorted-10-21 Pc Pks	051135-36621	Assorted 6" Pcs, 3 Each of 7 Color	Assorted	1/4" (6,35 mm)	6" (152,4 mm) pieces	21 pcs/pks, 10 pks
FP301-3/8-6"-Assorted-10-14 Pc Pks	051135-36622	Assorted 6" Pcs, 2 Each of 7 Color	Assorted	3/8" (9,52 mm)	6" (152,4 mm) pieces	14 pcs/pk, 10 pks
FP301-1/2-6"-Assorted-10-14 Pc Pks	051135-36623	Assorted 6" Pcs, 2 Each of 7 Color	Assorted	1/2" (12,7 mm)	6" (152,4 mm) pieces	14 Pcs/pk, 10 pks



## Single (Thin) Wall Tubing: 3M™ Heat Shrink Thin-Wall Tubing MFP (Modified Polyvinylidene Fluoride)

### 3M™ Heat Shrink Thin-Wall Tubing MFP

3M™ Heat Shrink Thin-Wall Tubing MFP is a cross-linked, thin-walled, heat-shrinkable tubing offering a high degree of mechanical strength and high-temperature resistance. Fabricated from polyvinylidene fluoride, the tubing has outstanding abrasion resistance and cut-through properties in combination with high dielectric strength. It is inherently flame retardant, (VW-1 Rated) semi-rigid and highly resistant to most industrial fuels, chemicals and solvents. When heated in excess of 347°F (175°C), MFP tubing rapidly shrinks to a skintight fit. MFP tubing is rated for continuous operation from -67°F (-55°C) to 347°F (175°C). MFP tubing is recommended for shrink-fit protection and strain relief of wires, solder joints, terminals and connections.

<b>Material</b>	Polyvinylidene Fluoride
<b>Color</b>	Clear
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 347°F (-55 to 175°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Specification</b>	Meets performance claims of SAE-AMS-DTL-23053/18, Class 1; SAE-AMSDTL-23053/8
<b>Agency Approvals</b>	  UL File E-39100
<b>Manufacturing Origin</b>	



Order No.	UPC	Size	Format	Expanded/Recovered I.D.	Case Qty.
MFP-3/64-48"-Clear-25 Pcs	051128-59739	3/64" (1,19 mm)	48" (1.22 m) sticks	0.046"/0.023" (1,2/0,6 mm)	25
MFP-3/64-48"-Clear-250 Pcs	051128-59925	3/64" (1,19 mm)	48" (1.22 m) sticks	0.046"/0.023" (1,2/0,6 mm)	250
MFP-1/16-48"-Clear-25 Pcs	051128-59740	1/16" (1,59 mm)	48" (1.22 m) sticks	0.063"/0.031" (1,6/0,8 mm)	25
MFP-1/16-48"-Clear-250 Pcs	051128-59926	1/16" (1,59 mm)	48" (1.22 m) sticks	0.063"/0.031" (1,6/0,8 mm)	250
MFP-3/32-48"-Clear-25 Pcs	051128-59741	3/32" (2,38 mm)	48" (1.22 m) sticks	0.093"/0.046" (2,4/1,2 mm)	25
MFP-3/32-48"-Clear-250 Pcs	051128-59927	3/32" (2,38 mm)	48" (1.22 m) sticks	0.093"/0.046" (2,4/1,2 mm)	250
MFP-1/8-48"-Clear-25 Pcs	051128-59742	1/8" (3,18 mm)	48" (1.22 m) sticks	0.125"/0.062" (3,2/1,6 mm)	25
MFP-1/8-48"-Clear-250 Pcs	051128-59928	1/8" (3,18 mm)	48" (1.22 m) sticks	0.125"/0.062" (3,2/1,6 mm)	250
MFP-3/16-48"-Clear-12 Pcs	051128-59743	3/16" (4,75 mm)	48" (1.22 m) sticks	0.187"/0.093" (4,8/2,4 mm)	12
MFP-3/16-48"-Clear-250 Pcs	051128-59929	3/16" (4,75 mm)	48" (1.22 m) sticks	0.187"/0.093" (4,8/2,4 mm)	250
MFP-1/4-48"-Clear-12 Pcs	051128-59744	1/4" (6,35 mm)	48" (1.22 m) sticks	0.250"/0.125" (6,4/3,2 mm)	12
MFP-1/4-48"-Clear-125 Pcs	051128-59930	1/4" (6,35 mm)	48" (1.22 m) sticks	0.250"/0.125" (6,4/3,2 mm)	125
MFP-3/8-48"-Clear-12 Pcs	051128-59745	3/8" (9,52 mm)	48" (1.22 m) sticks	0.375"/0.187" (9,5/4,8 mm)	12
MFP-3/8-48"-Clear-125 Pcs	051128-59931	3/8" (9,52 mm)	48" (1.22 m) sticks	0.375"/0.187" (9,5/4,8 mm)	125
MFP-1/2-48"-Clear-5 Pcs	051128-59746	1/2" (12,7 mm)	48" (1.22 m) sticks	0.500"/0.250" (12,7/6,4 mm)	5
MFP-1/2-48"-Clear-100 Pcs	051128-59934	1/2" (12,7 mm)	48" (1.22 m) sticks	0.500"/0.250" (12,7/6,4 mm)	100
MFP-5/8-48"-Clear-50 Pcs	051128-59953	5/8" (15,88 mm)	48" (1.22 m) sticks	0.625"/0.313" (15,9/7,9 mm)	50
MFP-3/4-48"-Clear-5 Pcs	051128-59747	3/4" (19,0 mm)	48" (1.22 m) sticks	0.750"/0.375" (19,1/9,5 mm)	5
MFP-3/4-48"-Clear-50 Pcs	051128-59932	3/4" (19,0 mm)	48" (1.22 m) sticks	0.750"/0.375" (19,1/9,5 mm)	50
MFP-1-48"-Clear-30 Pcs	051128-59933	1" (25,4 mm)	48" (1.22 m) sticks	1.00"/0.500" (25,4/12,7 mm)	30
MFP-1/16-48"-Clear-Hdr-25 Pcs	051128-59799	1/16" (1,59 mm)	48" (1.22 m) sticks w/ header label	0.063"/0.031" (1,6/0,8 mm)	25
MFP-3/32-48"-Clear-Hdr-25 Pcs	051128-59800	3/32" (2,38 mm)	48" (1.22 m) sticks w/ header label	0.093"/0.046" (2,4/1,2 mm)	25
MFP-1/8-48"-Clear-Hdr-25 Pcs	051128-59801	1/8" (3,18 mm)	48" (1.22 m) sticks w/ header label	0.125"/0.062" (3,2/1,6 mm)	25
MFP-3/16-48"-Clear-Hdr-12 Pcs	051128-59798	3/16" (4,75 mm)	48" (1.22 m) sticks w/ header label	0.187"/0.093" (4,8/2,4 mm)	12
MFP-1/4-48"-Clear-Hdr-12 Pcs	051128-59802	1/4" (6,35 mm)	48" (1.22 m) sticks w/ header label	0.250"/0.125" (6,4/3,2 mm)	12
MFP-3/8-48"-Clear-Hdr-12 Pcs	051128-59803	3/8" (9,52 mm)	48" (1.22 m) sticks w/ header label	0.375"/0.187" (9,5/4,8 mm)	12
MFP-1/2-48"-Clear-Hdr-5 Pcs	051128-59804	1/2" (12,7 mm)	48" (1.22 m) sticks w/ header label	0.500"/0.250" (12,7/6,4 mm)	5
MFP-1-48"-Clear-Hdr-5 Pcs	051128-59805	1" (25,4 mm)	48" (1.22 m) sticks w/ header label	1.00"/0.500" (25,4/12,7 mm)	5


## Single (Thin) Wall Tubing: 3M™ Very Flexible Polyolefin Tubing VFP-876

### 3M™ Heat Shrink Very Flexible Polyolefin Tubing VFP-876

3M™ Heat Shrink Very Flexible Polyolefin Tubing VFP-876 is the most flexible of the 3M heat shrinkable, polyolefin tubings. The extra flexibility and low shrink temperature of VFP-876 tubing make it ideal for shrink-fit jacketing and insulation of flexible wire bundles and sensitive components. VFP-876 tubing has a 2:1 shrink ratio. When freely recovered, the tubing will shrink to 50% of its as-supplied internal diameter. The recovered wall thickness of the tubing is proportional to the degree of recovery. High expansion-ratio VFP-876 tubing is available subject to factory quotation.

<b>Material</b>	Polyolefin
<b>Color</b>	Black
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 275°F (-55 to 135°C)
<b>Voltage</b>	600 Volts Max.
<b>RoHS 2011/65/EU</b>	Yes
<b>Specification</b>	SAE-AMS-DTL-23053/5

**Agency Approvals**  UL File E-39100

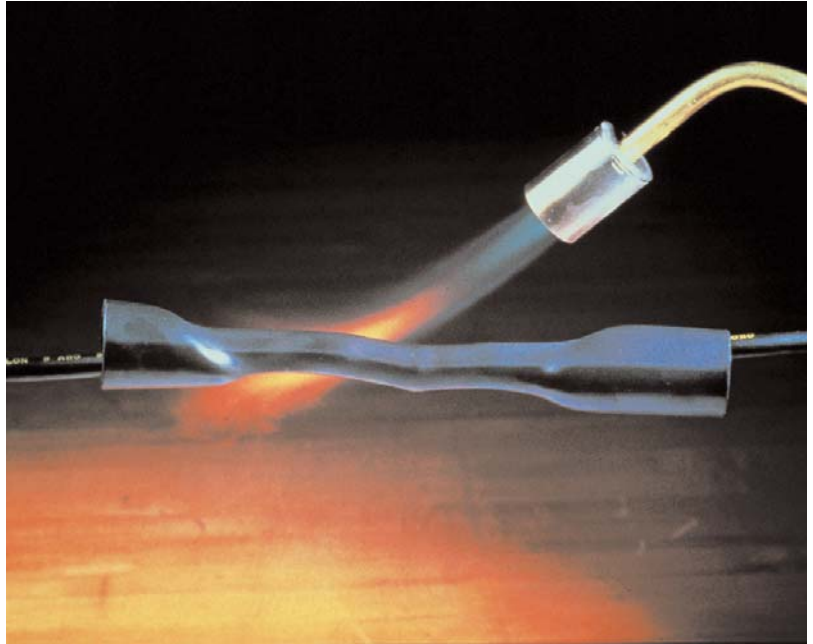
**Manufacturing Origin** 



Order No.	UPC	Size	Format	Case Qty.
VFP-3/64-6"-Black-10-10 Pc Pks	051128-60108	3/64" (1,17 mm)	6" (152,4 mm) pieces	10/pk, 10 pks
VFP-1/16-6"-Black-10-10 Pc Pks	051128-60100	1/16" (1,60 mm)	6" (152,4 mm) pieces	10/pk, 10 pks
VFP-3/32-6"-Black-10-10 Pc Pks	051128-60106	3/32" (2,36 mm)	6" (152,4 mm) pieces	10/pk, 10 pks
VFP-1/8-6"-Black-10-10 Pc Pks	051128-60103	1/8" (3,18 mm)	6" (152,4 mm) pieces	10/pk, 10 pks
VFP-3/16-6"-Black-10-10 Pc Pks	051128-60105	3/16" (4,75 mm)	6" (152,4 mm) pieces	10/pk, 10 pks
VFP-1/4-6"-Black-10-10 Pc Pks	051128-60102	1/4" (6,35 mm)	6" (152,4 mm) pieces	10/pk, 10 pks
VFP-3/8-6"-Black-10-10 Pc Pks	051128-60109	3/8" (9,53 mm)	6" (152,4 mm) pieces	10/pk, 10 pks
VFP-1/2-6"-Black-10-10 Pc Pks	051128-60101	1/2" (12,70 mm)	6" (152,4 mm) pieces	10/pk, 10 pks
VFP-3/4-6"-Black-10-10 Pc Pks	051128-60107	3/4" (19,05 mm)	6" (152,4 mm) pieces	10/pk, 10 pks
VFP-1-6"-Black-10-10 Pc Pks	051128-60104	1" (25,40 mm)	6" (152,4 mm) pieces	10/pk, 10 pks
VFP-1 1/2-6"-Black-10-3 Pc Pks	051128-60099	1 1/2" (38,1 mm)	6" (15,24 cm) pieces	3/pk, 10 pks
VFP-3/64-48"-Black-25 Pcs	051128-59701	3/64" (1,17 mm)	48" (1,22 m) sticks	25 pcs
VFP-1/16-48"-Black-25 Pcs	051128-59702	1/16" (1,60 mm)	48" (1,22 m) sticks	25 pcs
VFP-3/32-48"-Black-25 Pcs	051128-59703	3/32" (2,36 mm)	48" (1,22 m) sticks	25 pcs
VFP-1/8-48"-Black-25 Pcs	051128-59704	1/8" (3,18 mm)	48" (1,22 m) sticks	25 pcs
VFP-3/16-48"-Black-25 Pcs	051128-59705	3/16" (4,75 mm)	48" (1,22 m) sticks	25 pcs
VFP-1/4-48"-Black-12 Pcs	051128-59706	1/4" (6,35 mm)	48" (1,22 m) sticks	12 pcs
VFP-3/8-48"-Black-12 Pcs	051128-59707	3/8" (9,53 mm)	48" (1,22 m) sticks	12 pcs
VFP-1/2-48"-Black-12 Pcs	051128-59708	1/2" (12,70 mm)	48" (1,22 m) sticks	12 pcs
VFP-3/4-48"-Black-12 Pcs	051128-59709	3/4" (19,05 mm)	48" (1,22 m) sticks	12 pcs
VFP-1-48"-Black-5 Pcs	051128-59710	1" (25,40 mm)	48" (1,22 m) sticks	5 pcs
VFP-1 1/2-48"-Black-5 Pcs	051128-59711	1 1/2" (38,10 mm)	48" (1,22 m) sticks	5 pcs

# Medium/Heavy Wall

Demanding conditions call for heavy-duty abrasion protection. With 3M™ Heavy Wall Tubing, you can get the level of protection you want from a broad range of products. Choose the tubing you need based on the degree of temperature protection, flexibility, chemical resistance, or moisture protection.



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## 3M™ Heat Shrink Thick-Wall Cable Sleeves ITCSF

3M™ Heat Shrink Thick-Wall Cable Sleeves ITCSF are cross-linked polyolefin. They are flame retardant, highly split resistant and fast shrinking to provide rapid installation. The 48" (1,22 m) sleeves come standard with a factory applied adhesive/sealant. Order any of several packaging choices or look for the counter merchandiser assortment at a 3M authorized distributor.

<b>Voltage Rating</b>	3M Internal Test Rated to 1 kV
<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	3:1
<b>Operating Temperature</b>	-67°F to 230°F (-55°C to 110°C)
<b>Voltage</b>	600 Volts Max.
<b>Flame Retardant</b>	Yes
<b>RoHS 2011/65/EU</b>	Yes
<b>Specification</b>	MSHA

**Manufacturing Origin**





Order No.	UPC	Typical Cable Range	Length	Expanded/Recovered I.D.	Adhesive Included	Case Qty.
ITCSF-0400-48"-Black-100 Pcs	051135-38230	12-6 AWG	48" (1,22 m) Sleeve	0.40"/0.15" (10,2/3,8 mm)	Yes	100
ITCSF-0800-48"-Black-20 Pcs	051135-38231	8-1/0 AWG	48" (1,22 m) Sleeve	0.80"/0.20" (20,3/5,1 mm)	Yes	20
ITCSF-1100-48"-Black-20 Pcs	051135-38232	2-4/0 AWG	48" (1,22 m) Sleeve	1.10"/0.37" (27,9/9,4 mm)	Yes	20
ITCSF-2000-48"-Black-10 Pcs	051135-38234	250-750 kcmil	48" (1,22 m) Sleeve	2.00"/0.65" (50,8/16,5 mm)	Yes	10
ITCSF-4500-48"-Black-5 Pcs	051135-38236	1500-2500 kcmil	48" (1,22 m) Sleeve	4.50"/1.50" (114,3/38,1 mm)	Yes	5

## Medium/Heavy Wall

### 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN

The 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN are designed to provide reliable performance for electrical splices, connections and terminations, as well as mechanical and environmental protection. ITCSN heavy-wall cable sleeves are cross-linked polyolefin. They are highly split resistant and fast shrinking to provide rapid installation. The cut-to-length sleeves come standard with a factory-applied adhesive/sealant. Order any of several packaging choices or look for the counter merchandiser assortment at a 3M authorized distributor.

<b>Voltage Rating</b>	UL Rated to 600 V 3M Internal Test Rated to 1 kV
<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	3:1
<b>Operating Temperature</b>	-67°F to 230°F (-55°C to 110°C)
<b>Flame Retardant</b>	No
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	
<b>Manufacturing Origin</b>	



Order No.	UPC	Cable Size	Length	Expanded/Recovered I.D.	UL Spec.	Adhesive Included	Direct Bury	Case Qty.
ITCSN-0400-6"-Black-25 Pcs	054007-08887	12-6 AWG	6" (152,4 mm)	0.40"/0.15" (10,2/3,8 mm)	UL 486D	Yes	Yes	25
ITCSN-0400-6"-Black-100 Pcs	054007-08963	12-6 AWG	6" (152,4 mm)	0.40"/0.15" (10,2/3,8 mm)	UL 486D	Yes	Yes	100
ITCSN-0400-6"-Black-12-3 Pc Pks	051128-60075	12-6 AWG	6" (152,4 mm)	0.40"/0.15" (10,2/3,8 mm)	UL 486D	Yes	Yes	3/pk, 12 pks
ITCSN-0400-6"-Red-12-3 Pc Pks	051128-60076	12-6 AWG	6" (152,4 mm)	0.40"/0.15" (10,2/3,8 mm)	N/A	Yes	No	3/pk, 12 pks
ITCSN-0400-48"-Black-5 Pcs	054007-08902	12-6 AWG	48" (1,22 m)	0.40"/0.15" (10,2/3,8 mm)	UL 486D	Yes	Yes	5
ITCSN-0400-48"-Black-20 Pcs	054007-08964	12-6 AWG	48" (1,22 m)	0.40"/0.15" (10,2/3,8 mm)	UL 486D	Yes	Yes	20
ITCSN-0400-25'-Black-Reel	054007-08886	12-6 AWG	25' (7,62 m)	0.40"/0.15" (10,2/3,8 mm)	N/A	No	No	1
ITCSN-0800-6"-Black-25 Pcs	054007-40067	8-1/0 AWG	6" (152,4 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	25
ITCSN-0800-6"-Black-100 Pcs	054007-08965	8-1/0 AWG	6" (152,4 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	100
ITCSN-0800-6"-Black-12-3 Pc Pks	051128-60077	8-1/0 AWG	6" (152,4 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	3/pk, 12 pks
ITCSN-0800-6"-Red-12-3 Pc Pks	051128-60078	8-1/0 AWG	6" (152,4 mm)	0.80"/0.20" (20,3/5,1 mm)	N/A	Yes	No	3/pk, 12 pks
ITCSN-0800-9"-Black-25 Pcs	054007-08890	8-1/0 AWG	9" (228,6 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	25
ITCSN-0800-9"-Black-100 Pcs	054007-08966	8-1/0 AWG	9" (228,6 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	100 pcs/cs
ITCSN-0800-12"-Black-25 Pcs	054007-08889	8-1/0 AWG	12" (304,8 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	25 pcs/cs
ITCSN-0800-12"-Black-100 Pcs	054007-08967	8-1/0 AWG	12" (304,8 mm)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	100
ITCSN-0800-48"-Black-5 Pcs	054007-08903	8-1/0 AWG	48" (1,22 m)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	5
ITCSN-0800-48"-Black-20 Pcs	054007-08968	8-1/0 AWG	48" (1,22 m)	0.80"/0.20" (20,3/5,1 mm)	UL 486D	Yes	Yes	20

### 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN (continued)

Order No.	UPC	Cable Size	Length	Expanded/Recovered I.D.	UL Spec.	Adhesive Included	Direct Bury	Case Qty.
ITCSN-0800-48"-Red-20 Pcs	051128-55500	8-1/0 AWG	48" (1,22 m)	0.80"/0.20" (20,3/5,1 mm)	N/A	Yes	No	20
ITCSN-0800-25'-Black-Reel	054007-08888	8-1/0 AWG	25' (7,62 m)	0.80"/0.20" (20,3/5,1 mm)	N/A	No	No	1
ITCSN-1100-6"-Black-25 Pcs	054007-08894	2-4/0 AWG	6" (152,4 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	25
ITCSN-1100-6"-Black-100 Pcs	054007-08969	2-4/0 AWG	6" (152,4 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	100
ITCSN-1100-9"-Black-25 Pcs	054007-08893	2-4/0 AWG	9" (228,6 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	25
ITCSN-1100-9"-Black-100 Pcs	054007-08970	2-4/0 AWG	9" (228,6 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	100
ITCSN-1100-9"-Black-12-3 Pc Pks	051128-60079	2-4/0 AWG	9" (228,6 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	3/pk, 12 pks
ITCSN-1100-9"-Red-12-3 Pc Pks	051128-60080	2-4/0 AWG	9" (228,6 mm)	1.10"/0.37" (27,9/9,4 mm)	N/A	Yes	No	3/pk, 12 pks
ITCSN-1100-12"-Black-10 Pcs	054007-08892	2-4/0 AWG	12" (304,8 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	10
ITCSN-1100-12"-Black-100 Pcs	054007-08971	2-4/0 AWG	12" (304,8 mm)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	100
ITCSN-1100-48"-Black-5 Pcs	054007-08904	2-4/0 AWG	48" (1,22 m)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	5
ITCSN-1100-48"-Black-20 Pcs	054007-08972	2-4/0 AWG	48" (1,22 m)	1.10"/0.37" (27,9/9,4 mm)	UL 486D	Yes	Yes	20
ITCSN-1100-25'-Black-Reel	054007-08891	2-4/0 AWG	25' (7,62 m)	1.10"/0.37" (27,9/9,4 mm)	N/A	No	No	1
ITCSN-1500-9"-Black-10 Pcs	054007-08897	3/0 AWG- 400 kcmil	9" (228,6 mm)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	10
ITCSN-1500-9"-Black-50 Pcs	054007-08973	3/0 AWG- 400 kcmil	9" (228,6 mm)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	50
ITCSN-1500-9"-Black-12-3 Pc Pks	051128-60081	3/0 AWG- 450 kcmil	9" (228,6 mm)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	3/pk, 12 pks
ITCSN-1500-12"-Black-10 Pcs	054007-08896	3/0 AWG- 400 kcmil	12" (304,8 mm)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	10
ITCSN-1500-12"-Black-50 Pcs	054007-08974	3/0 AWG- 400 kcmil	12" (304,8 mm)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	50
ITCSN-1500-48"-Black-5 Pcs	054007-08905	3/0 AWG- 400 kcmil	48" (1,22 m)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	5
ITCSN-1500-48"-Black-20 Pcs	054007-08975	3/0 AWG- 400 kcmil	48" (1,22 m)	1.50"/0.50" (38,1/12,7 mm)	UL 486D	Yes	Yes	20
ITCSN-1500-25'-Black-Reel	054007-08895	3/0 AWG- 450 kcmil	25' (7,62 m)	1.50"/0.50" (38,1/12,7 mm)	N/A	No	No	1
ITCSN-2000-9"-Black-10 Pcs	054007-08900	250-750 kcmil	9" (228,6 mm)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	10
ITCSN-2000-9"-Black-50 Pcs	054007-08976	250-750 kcmil	9" (228,6 mm)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	50
ITCSN-2000-12"-Black-10 Pcs	054007-08899	250-750 kcmil	12" (304,8 mm)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	10
ITCSN-2000-12"-Black-50 Pcs	054007-08977	250-750 kcmil	12" (304,8 mm)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	50
ITCSN-2000-12"-Black-12-3 Pc Pks	051128-60082	250-750 kcmil	12" (304,8 mm)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	3/pk, 12 pks
ITCSN-2000-48"-Black-5 Pcs	054007-08906	250-750 kcmil	48" (1,22 m)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	5
ITCSN-2000-48"-Black-20 Pcs	054007-08978	250-750 kcmil	48" (1,22 m)	2.00"/0.65" (50,8/16,5 mm)	UL 486D	Yes	Yes	20

### 3M™ Heat Shrink Heavy-Wall Cable Sleeves ITCSN (continued)


Order No.	UPC	Cable Size	Length	Expanded/Recovered I.D.	UL Spec.	Adhesive Included	Direct Bury	Case Qty.
ITCSN-2000-25'-Black-Reel	054007-08898	250-750 kcmil	25' (7,62 m)	2.00"/0.65" (50,8/16,5 mm)	N/A	No	No	1
ITCSN-3000-12"-Black-10 Pcs	054007-08901	600-1250 kcmil	12" (304,8 mm)	3.00"/1.00" (76,2/25,4 mm)	N/A	Yes	No	10
ITCSN-3000-12"-Black-50 Pcs	054007-08979	600-1250 kcmil	12" (304,8 mm)	3.00"/1.00" (76,2/25,4 mm)	N/A	Yes	No	50
ITCSN-3000-48"-Black-5 Pcs	054007-08907	600-1250 kcmil	48" (1,22 m)	3.00"/1.00" (76,2/25,4 mm)	N/A	Yes	No	5
ITCSN-3000-48"-Black-20 Pcs	054007-08980	600-1250 kcmil	48" (1,22 m)	3.00"/1.00" (76,2/25,4 mm)	N/A	Yes	No	20
ITCSN-4500-48"-Black-5 Pcs	051135-37979	1500-2500 kcmil	48" (1,22 m)	4.50"/1.50" (114,3/38,1 mm)	N/A	Yes	No	5
ITCSN-4500-48"-Black-20 Pcs	054007-08981	1500-2500 kcmil	48" (1,22 m)	4.50"/1.50" (114,3/38,1 mm)	N/A	Yes	No	20
ITCSN-6000-48"-Black-5 Pcs	051135-37980	2.1"-4.8"	48" (1,22 m)	6.00"/1.80" (152,4/45,7 mm)	N/A	Yes	No	5
ITCSN-6000-48"-Black-20 Pcs	054007-08982	2.1"-4.8"	48" (1,22 m)	6.00"/1.80" (152,4/45,7 mm)	N/A	Yes	No	20



## Medium/Heavy Wall

### 3M™ Heat Shrink Heavy-Wall Flame-Retardant Cable Sleeves HDT for 1 kV

The 3M™ Heat Shrink Heavy-Wall Flame-Retardant Cable Sleeves HDT are designed to provide reliable performance for electrical splices, connections and terminations, as well as mechanical and environmental protection. HDT heavy-wall cable sleeves are cross-linked polyolefin. They are flame-retardant, highly split resistant and fast shrinking to provide rapid installation. The 48" (1,22 m) sleeves come standard with a factory-applied adhesive/sealant. Order any of several packaging choices or look for the counter merchandiser assortment at a 3M authorized distributor. Order in the size equivalent to expanded inside diameter required.

<b>Voltage Rating</b>	3M Internal Test Rated to 1 kV
<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	3:1
<b>Operating Temperature</b>	-67°F to 230°F (-55°C to 110°C)
<b>Minimum Shrink Temperature</b>	250°F (121°C)
<b>Flame Retardant</b>	Yes
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	ABS; SAE-AMS-DTL-23053/15, Class 1
<b>Manufacturing Origin</b>	




Order No.	UPC	Cable Size Range	Color	Length	Expanded/Recovered I.D.	Adhesive Included	Case Qty.
HDT-0400-48"-Black-20 Pcs	054007-40649	12-6 AWG	Black	48" (1,22 m) Sleeves	0.40"/0.15" (10,2/3,8 mm)	Yes	20
HDT-0800-48"-Black-20 Pcs	054007-40650	8-1/0 AWG	Black	48" (1,22 m) Sleeves	0.80"/0.20" (20,3/5,1 mm)	Yes	20
HDT-1100-48"-Black-20 Pcs	054007-40651	2-4/0 AWG	Black	48" (1,22 m) Sleeves	1.10"/0.37" (27,9/9,4 mm)	Yes	20
HDT-1500-48"-Black-20 Pcs	054007-40652	3/0 AWG-400 kcmil	Black	48" (1,22 m) Sleeves	1.50"/0.50" (38,1/12,7 mm)	Yes	20
HDT-2000-48"-Black-10 Pcs	054007-40654	250-750 kcmil	Black	48" (1,22 m) Sleeves	2.00"/0.65" (50,8/16,5 mm)	Yes	10
HDT-3000-48"-Black-10 Pcs	054007-40655	600-1250 kcmil	Black	48" (1,22 m) Sleeves	3.00"/1.00" (76,2/25,4 mm)	Yes	10
HDT-4500-48"-Black-5 Pcs	054007-40656	1500-2500 kcmil	Black	48" (1,22 m) Sleeves	4.50"/1.50" (114,3/38,1 mm)	Yes	5
HDT-6000-48"-Black-5 Pcs	054007-59022	2.1"-4.8" O.D.	Black	48" (1,22 m) Sleeves	6.00"/1.80" (152,4/45,7 mm)	Yes	5
HDT-7000-48"-Black-5 Pcs	051135-37774	2.5"-5.6" O.D.	Black	48" (1,22 m) Sleeves	7.00"/2.00" (177,8/50,8 mm)	Yes	5

## Medium/Heavy Wall

### 3M™ Heat Shrink Medium-Wall Flame-Retardant Cable Sleeves MDT for 1 kV

3M™ Heat Shrink Medium-Wall Flame-Retardant Cable Sleeves MDT are flame-retardant and protect against mechanical and environmental dangers, providing excellent abrasion, corrosion and chemical resistance. MDT sleeves have greater flexibility than the HDT sleeves, our heavy-wall version. Installation of these fast-shrinking sleeves is easy with little training necessary. The 48 in (121,9 cm) lengths are unprinted and come standard with a factory-applied adhesive/sealant, a thermoplastic material that remains flexible over long periods under adverse environmental conditions. During heating, the sealant softens, bonds to underlying surfaces and fills small voids that might be present. Order in the size equivalent to expanded inside diameter required.

<b>Voltage Rating</b>	3M Internal Test Rated to 1 kV
<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	3:1
<b>Operating Temperature</b>	-67°F to 230°F (-55°C to 110°C)
<b>Minimum Shrink Temperature</b>	250°F (121°C)
<b>Flame Retardant</b>	Yes
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specifications</b>	ABS; SAE-AMS-DTL- 23053/15, Class 2
<b>Manufacturing Origin</b>	



Order No.	UPC	Typical Cable Range	Color	Format	Expanded/Recovered I.D.	Adhesive Included	Case Qty.
MDT-0400-48"-Black-20 Pcs	054007-40672	12-6 AWG	Black	48" (1,22 m) Sleeves	0.40"/0.15" (10,2/3,8 mm)	Yes	20
MDT-0800-48"-Black-20 Pcs	054007-40673	8-3 AWG	Black	48" (1,22 m) Sleeves	0.80"/0.22" (20,3/5,6 mm)	Yes	20
MDT-1100-48"-Black-20 Pcs	054007-40674	2-2/0 AWG	Black	48" (1,22 m) Sleeves	1.10"/0.37" (27,9/9,4 mm)	Yes	20
MDT-1300-48"-Black-20 Pcs	054007-40675	1-4/0 AWG	Black	48" (1,22 m) Sleeves	1.30"/0.43" (33,0/10,9 mm)	Yes	20
MDT-1500-48"-Black-20 Pcs	054007-40676	1/0 AWG-250 kcmil	Black	48" (1,22 m) Sleeves	1.50"/0.50" (38,1/12,7 mm)	Yes	20
MDT-1700-48"-Black-20 Pcs	054007-40677	4/0 AWG-400 kcmil	Black	48" (1,22 m) Sleeves	1.70"/0.60" (43,2/15,2 mm)	Yes	20
MDT-2000-48"-Black-15 Pcs	054007-40678	300-500 kcmil	Black	48" (1,22 m) Sleeves	2.00"/0.75" (50,8/19,1 mm)	Yes	15
MDT-3000-48"-Black-15 Pcs	054007-40679	600-1250 kcmil	Black	48" (1,22 m) Sleeves	3.00"/1.00" (76,2/25,4 mm)	Yes	15
MDT-4300-48"-Black-10 Pcs	054007-40680	1000-2500 kcmil	Black	48" (1,22 m) Sleeves	4.30"/1.50" (109,2/38,1 mm)	Yes	10

## Medium/Heavy Wall

### 3M™ Heat Shrink Medium-Wall Cable Sleeves IMCSN for 1 kV

3M™ Heat Shrink Medium-Wall Cable Sleeves IMCSN are designed to provide reliable performance for electrical splices, connections, and terminations, as well as mechanical and environmental protection. IMCSN sleeves are fabricated from cross-linked polyolefin. The tubing is highly split resistant, and fast-shrinking to provide rapid installation. The tubing comes standard with a factory-applied adhesive/sealant.



<b>Voltage Rating</b>	3M Internal Test Rated to 1 kV
<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	3:1
<b>Operating Temperature</b>	-67°F to 230°F (-55°C to 110°C)
<b>RoHS 2011/65/EU</b>	Yes


Order No.	UPC	Cable Size Range	Length	Expanded/Recovered I.D.	Adhesive Included	Case Qty.
IMCSN-0400-48"-Black-20 Pcs	054007-58810	12-6 AWG (4-10 mm <sup>2</sup> )	48" (1,22 m) Sleeves	0.40"/0.15" (10,2/3,8 mm)	Yes	20
IMCSN-0400-25'-Black-Reel	051135-03481	12-6 AWG (4-10 mm <sup>2</sup> )	25' (7,62 m) Reels	0.40"/0.15" (10,2/3,8 mm)	No	1
IMCSN-0800-48"-Black-20 Pcs	054007-58811	8-3 AWG (10-25 mm <sup>2</sup> )	48" (1,22 m) Sleeves	0.80"/0.22" (20,3/5,6 mm)	Yes	20
IMCSN-0800-25'-Black-Reel	051135-03482	8-3 AWG (10-25 mm <sup>2</sup> )	25' (7,62 m) Reels	0.80"/0.22" (20,3/5,6 mm)	No	1
IMCSN-1100-48"-Black-20 Pcs	054007-58812	2-2/0 AWG (35-60 mm <sup>2</sup> )	48" (1,22 m) Sleeves	1.10"/0.37" (27,9/9,4 mm)	Yes	20
IMCSN-1100-25'-Black-Reel	051135-03483	2-2/0 AWG (35-60 mm <sup>2</sup> )	25' (7,62 m) Reels	1.10"/0.37" (27,9/9,4 mm)	No	1
IMCSN-1300-48"-Black-20 Pcs	051135-03448	1-4/0 AWG (50-100 mm <sup>2</sup> )	48" (1,22 m) Sleeves	1.30"/0.43" (33/10,9 mm)	Yes	20
IMCSN-1300-25'-Black-Reel	051135-03484	1-4/0 AWG (50-100 mm <sup>2</sup> )	25' (7,62 m) Reels	1.30"/0.43" (33/10,9 mm)	No	1
IMCSN-1500-48"-Black-20 Pcs	054007-58813	1/0 AWG-250 kcmil (60-120 mm <sup>2</sup> )	48" (1,22 m) Sleeves	1.50"/0.50" (38,1/12,7 mm)	Yes	20
IMCSN-1500-25'-Black-Reel	051135-03485	1/0 AWG-250 kcmil (60-120 mm <sup>2</sup> )	25' (7,62 m) Reels	1.50"/0.50" (38,1/12,7 mm)	No	1
IMCSN-1700-48"-Black-20 Pcs	051135-03317	4/0 AWG-400 kcmil (120-200 mm <sup>2</sup> )	48" (1,22 m) Sleeves	1.70"/0.60" (43,2/15,2 mm)	Yes	20
IMCSN-1700-25'-Black-Reel	051135-03486	4/0 AWG-400 kcmil (120-200 mm <sup>2</sup> )	25' (7,62 m) Reels	1.70"/0.60" (43,2/15,2 mm)	No	1
IMCSN-2000-48"-Black-15 Pcs	054007-58814	300-500 kcmil (185-250 mm <sup>2</sup> )	48" (1,22 m) Sleeves	2.00"/0.75" (50,8/19,1 mm)	Yes	15
IMCSN-2000-25'-Black-Reel	051135-03487	300-500 kcmil (185-250 mm <sup>2</sup> )	25' (7,62 m) Reels	2.00"/0.75" (50,8/19,1 mm)	No	1
IMCSN-3000-48"-Black-15 Pcs	054007-58815	600-1250 kcmil (325-625 mm <sup>2</sup> )	48" (1,22 m) Sleeves	3.00"/1.00" (76,2/25,4 mm)	Yes	15
IMCSN-3000-25'-Black-Reel	051135-03530	600-1250 kcmil (325-625 mm <sup>2</sup> )	25' (7,62 m) Reels	3.00"/1.00" (76,2/25,4 mm)	No	1
IMCSN-4300-48"-Black-10 Pcs	054007-58809	1000-2500 kcmil (625-1000 mm <sup>2</sup> )	48" (1,22 m) Sleeves	4.30"/1.50" (109,2/38,1 mm)	Yes	10
IMCSN-4300-25'-Black-Reel	051135-03531	1000-2500 kcmil (625-1000 mm <sup>2</sup> )	25' (7,62 m) Reels	4.30"/1.50" (109,2/38,1 mm)	No	1

## Medium/Heavy Wall

### 3M™ Splice Kit UF

3M™ Splice Kit UF is designed to provide a reliable, moisture proof electrical connection for type UF-B underground feeder cable rated for 600 V (copper wire only) ranging from #14/3 without ground wire up to #8/3 with ground wire.

The UF splice kit consists of a connector-insulation assembly and a heat shrink tube. The connector assembly contains four cylindrical set screw connectors separated by a piece of vinyl insulation. The heat shrink tube is a heavy-wall, adhesive-lined tube. Underground Feeder (UF)-B cables are flat, and typically have three solid conductors without a ground or two solid conductors with a ground. They range in size from 14–8 AWG. The most common UF cable size is 14–10 AWG.

<b>Voltage Rating</b>	600 V (copper wire only)
<b>Number of Conductors</b>	Single Conductor
<b>Cable/Shielding Type</b>	Non-Shielded
<b>Splice Type</b>	Heat Shrink
<b>Operating Temperature Range</b>	-67°F to 230°F (-55°C to 110°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Agency Approvals</b>	 UL 486D listed E102356
<b>Manufacturing Origin</b>	Taiwan



Order No.	UPC	Description	Conductor Size	Min. Order Qty.	Case Qty.
UF1-Splice Kit-6 Kits	054007-42920	UF Splice Kit-Standard includes 1.8" (45,7 mm) length connector/ 8.0" (203,2 mm) length of heavy wall, adhesive lined heat shrink tube.	14–8 AWG	6 kits	6 kits
UF2-Splice Kit-6 Kits	054007-42921	UF Splice Kit-Stretcher offers an 11.5" (292,1 mm) length connector/ 20.0" (508,0 mm) length of heavy wall, adhesive lined heat shrink tube. The Stretcher Kit is used in situations where a 7–10" (17,8–25,4 cm) section of the cable has been damaged or destroyed.	14–8 AWG	6 kits	6 kits

# 3M™ Bus Bar Tubing BBI-A

Get durable and reliable protection that helps prevent failures and downtime in applications from 5-35 kV. 3M™ Heat Shrinkable Bus Bar Tubing BBI-A covers and insulates rectangular, square or round bus bars, resists splitting and solvents, and provides excellent tracking resistance.



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## 3M™ Bus Bar Tubing BBI-A Series for 5-15 kV Bus Bar Size Ranges

**Material:** Cross-Linked Polyolefin

**Max. Operating Temperature:** 230°F (110°C)

**Voltage Rating:** 5-15 kV

**BIL:** 110 V

**Flame Retardant:** Yes

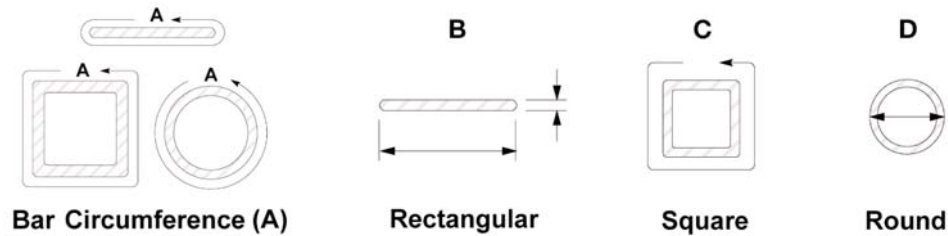
**RoHS 2011/65/EU:** Yes

**Specification:** ASTM-D-257, 149, 150, 2303; IEC 216; ANSI/IEEE Std C37.20

**Manufacturing Origin:**  MADE IN USA



Heat Shrink



Order No.	UPC	Bar Circum. (A)	Rectangular Dimension (B)	Square Dimension (C)	Round Diameter (D)	Linear Ft/Cs
BBI-3A-Red-20' Roll	051135-35726	3.28"-5.57" (83-141 mm)	1-1/2" x 1/4" to 2-1/2" x 1/2" (38 x 6 to 64 x 13 mm)	1" x 1" to 1-1/2" x 1-1/2" (25 x 25 to 38 x 38 mm)	1-1/8" to 1-3/4" (29 to 44 mm)	20'
BBI-3A-Red-50' Roll	051135-35727	3.28"-5.57" (83-141 mm)	1-1/2" x 1/4" to 2-1/2" x 1/2" (38 x 6 to 64 x 13 mm)	1" x 1" to 1-1/2" x 1-1/2" (25 x 25 to 38 x 38 mm)	1-1/8" to 1-3/4" (29 to 44 mm)	50'
BBI-4A-Red-20' Roll	051135-35728	5.43"-8.86" (138-225 mm)	2-1/2" x 3/8" to 4" x 3/4" (64 x 10 to 102 x 19 mm)	2" x 2" (51 x 51 mm)	1-3/4" to 2-3/4" (44 to 70 mm)	20'
BBI-4A-Red-50' Roll	051135-35729	5.43"-8.86" (138-225 mm)	2-1/2" x 3/8" to 4" x 3/4" (64 x 10 to 102 x 19 mm)	2" x 2" (51 x 51 mm)	1-3/4" to 2-3/4" (44 to 70 mm)	50'
BBI-5A-Red-20' Roll	051135-35730	6.67"-10.86" (169-276 mm)	3" x 5/8" to 5" x 3/4" (76 x 16 to 127 x 19 mm)	2" x 2" to 2-1/2" x 2-1/2" (51 x 51 to 64 x 64 mm)	2-1/8" to 3-3/8" (54 to 86 mm)	20'
BBI-5A-Red-50' Roll	051135-35731	6.67"-10.86" (169-276 mm)	3" x 5/8" to 5" x 3/4" (76 x 16 to 127 x 19 mm)	2" x 2" to 2-1/2" x 2-1/2" (51 x 51 to 64 x 64 mm)	2-1/8" to 3-3/8" (54 to 86 mm)	50'
BBI-6A-Red-20' Roll	051135-35732	7.57"-12.86" (192-327 mm)	3-1/2" x 1/2" to 6" x 3/4" (89 x 13 to 152 x 19 mm)	2-1/2" x 2-1/2" to 3" x 3" (64 x 64 to 76 x 76 mm)	2-1/2" to 4" (64 to 102 mm)	20'
BBI-6A-Red-50' Roll	051135-35733	7.57"-12.86" (192-327 mm)	3-1/2" x 1/2" to 6" x 3/4" (89 x 13 to 152 x 19 mm)	2-1/2" x 2-1/2" to 3" x 3" (64 x 64 to 76 x 76 mm)	2-1/2" to 4" (64 to 102 mm)	50'
BBI-7A-Red-20' Roll	051135-35734	8.28"-13.00" (210-330 mm)	4" x 1/4" to 6" x 3/4" (102 x 6 to 152 x 19 mm)	2-1/2" x 2-1/2" to 3" x 3" (64 x 64 to 76 x 76 mm)	2-3/4" to 4-1/8" (70 to 105 mm)	20'
BBI-7A-Red-50' Roll	051135-35735	8.28"-13.00" (210-330 mm)	4" x 1/4" to 6" x 3/4" (102 x 6 to 152 x 19 mm)	2-1/2" x 2-1/2" to 3" x 3" (64 x 64 to 76 x 76 mm)	2-3/4" to 4-1/8" (70 to 105 mm)	50'
BBI-8A-Red-20' Roll	051135-35736	10.29"-16.43" (261-417 mm)	5" x 1/4" to 8" x 3/8" (127 x 6 to 203 x 10 mm)	3" x 3" to 4" x 4" (76 x 76 to 102 x 102 mm)	3-3/8" to 5-1/8" (86 to 130 mm)	20'
BBI-8A-Red-50' Roll	051135-35737	10.29"-16.43" (261-417 mm)	5" x 1/4" to 8" x 3/8" (127 x 6 to 203 x 10 mm)	3" x 3" to 4" x 4" (76 x 76 to 102 x 102 mm)	3-3/8" to 5-1/8" (86 to 130 mm)	50'
BBI-9A-Red-20' Roll	051135-35876	12.29"-19.23" (312-488 mm)	6" x 1/4" to 9" x 3/4" (152 x 6 to 229 x 19 mm)	3-1/2" x 3-1/2" to 5" x 5" (89 x 89 to 127 x 127 mm)	4" to 6-1/8" (102 to 156 mm)	20'
BBI-9A-Red-50' Roll	051135-35877	12.29"-19.23" (312-488 mm)	6" x 1/4" to 9" x 3/4" (152 x 6 to 229 x 19 mm)	3-1/2" x 3-1/2" to 5" x 5" (89 x 89 to 127 x 127 mm)	4" to 6-1/8" (102 to 156 mm)	50'
BBI-10A-Red-20' Roll	051135-35878	15.43"-24.14" (392-612 mm)	8" x 1/4" to 10" x 3/4" (203 x 6 to 254 x 19 mm)	5" x 5" to 6" x 6" (127 x 127 to 152 x 152 mm)	5" to 7-5/8" (127 to 194 mm)	20'
BBI-10A-Red-50' Roll	051135-35879	15.43"-24.14" (392-612 mm)	8" x 1/4" to 10" x 3/4" (203 x 6 to 254 x 19 mm)	5" x 5" to 6" x 6" (127 x 127 to 152 x 152 mm)	5" to 7-5/8" (127 to 194 mm)	50'

## 3M™ Bus Bar Tubing BBI-A Series for 25 kV Bus Bar Size Ranges

**Material:** Cross-Linked Polyolefin

**Max. Operating Temperature:** 230°F (110°C)

**Voltage Rating:** 25 kV

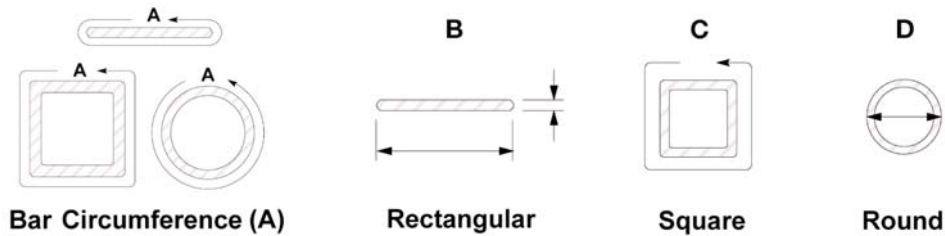
**BIL:** 125 V

**Flame Retardant:** Yes

**RoHS 2011/65/EU:** Yes

**Specification:** ASTM-D-257, 149, 150, 2303; IEC 216; ANSI/IEEE Std C37.20

**Manufacturing Origin:**  MADE IN USA



Order No.	UPC	Bar Circum. (A)	Rectangular Dimension (B)	Square Dimension (C)	Round Diameter (D)	Linear Ft/Cs
BBI-3A-Red-20' Roll	051135-35726	3.28"-3.56" (83-90 mm)	1-1/2" x 1/4" to 1-1/2" x 3/8" (38 x 6 to 38 x 10 mm)	Measure circumference	1-1/8" (29 mm)	20'
BBI-3A-Red-50' Roll	051135-35727	3.28"-3.56" (83-90 mm)	1-1/2" x 1/4" to 1-1/2" x 3/8" (38 x 6 to 38 x 10 mm)	Measure circumference	1-1/8" (29 mm)	50'
BBI-4A-Red-20' Roll	051135-35728	5.43"-5.80" (138-147 mm)	2-1/2" x 3/8" to 2-1/2" x 5/8" (64 x 10 to 64 x 16 mm)	Measure circumference	1-3/4" (44 mm)	20'
BBI-4A-Red-50' Roll	051135-35729	5.43"-5.80" (138-147 mm)	2-1/2" x 3/8" to 2-1/2" x 5/8" (64 x 10 to 64 x 16 mm)	Measure circumference	1-3/4" (44 mm)	50'
BBI-5A-Red-20' Roll	051135-35730	6.67"-7.18" (169-182 mm)	3" x 5/8" to 3" x 3/4" (76 x 16 to 76 x 19 mm)	Measure circumference	2-1/8" to 2-1/4" (54 to 57 mm)	20'
BBI-5A-Red-50' Roll	051135-35731	6.67"-7.18" (169-182 mm)	3" x 5/8" to 3" x 3/4" (76 x 16 to 76 x 19 mm)	Measure circumference	2-1/8" to 2-1/4" (54 to 57 mm)	50'
BBI-6A-Red-20' Roll	051135-35732	7.57"-8.43" (192-214 mm)	3-1/2" x 1/2" to 4" x 1/4" (89 x 13 to 102 x 6 mm)	Measure circumference	2-1/2" to 2-5/8" (64 to 67 mm)	20'
BBI-6A-Red-50' Roll	051135-35733	7.57"-8.43" (192-214 mm)	3-1/2" x 1/2" to 4" x 1/4" (89 x 13 to 102 x 6 mm)	Measure circumference	2-1/2" to 2-5/8" (64 to 67 mm)	50'
BBI-7A-Red-20' Roll	051135-35734	8.28"-10.44" (210-265 mm)	4" x 1/4" to 5" x 3/8" (102 x 6 to 127 x 10 mm)	2-1/2" x 2-1/2" (64 x 64 mm)	2-3/4" to 3-1/4" (70 to 83 mm)	20'
BBI-7A-Red-50' Roll	051135-35735	8.28"-10.44" (210-265 mm)	4" x 1/4" to 5" x 3/8" (102 x 6 to 127 x 10 mm)	2-1/2" x 2-1/2" (64 x 64 mm)	2-3/4" to 3-1/4" (70 to 83 mm)	50'
BBI-8A-Red-20' Roll	051135-35736	10.29"-12.88" (261-327 mm)	5" x 1/4" to 6" x 3/4" (127 x 6 to 152 x 19 mm)	3" x 3" (76 x 76 mm)	3-3/8" to 4" (86 to 102 mm)	20'
BBI-8A-Red-50' Roll	051135-35737	10.29"-12.88" (261-327 mm)	5" x 1/4" to 6" x 3/4" (127 x 6 to 152 x 19 mm)	3" x 3" (76 x 76 mm)	3-3/8" to 4" (86 to 102 mm)	50'
BBI-9A-Red-20' Roll	051135-35876	12.29"-15.31" (312-389 mm)	6" x 1/4" to 7" x 3/4" (152 x 6 to 178 x 19 mm)	3-1/2" x 3-1/2" to 4" x 4" (89 x 89 to 102 x 102 mm)	4" to 4-7/8" (102 to 124 mm)	20'
BBI-9A-Red-50' Roll	051135-35877	12.29"-15.31" (312-389 mm)	6" x 1/4" to 7" x 3/4" (152 x 6 to 178 x 19 mm)	3-1/2" x 3-1/2" to 4" x 4" (89 x 89 to 102 x 102 mm)	4" to 4-7/8" (102 to 124 mm)	50'
BBI-10A-Red-20' Roll	051135-35878	15.43"-19.79" (392-503 mm)	8" x 1/4" to 9" x 3/4" (203 x 6 to 229 x 19 mm)	5" x 5" (127x127 mm)	5" to 6-1/4" (127 to 159 mm)	20'
BBI-10A-Red-50' Roll	051135-35879	15.43"-19.79" (392-503 mm)	8" x 1/4" to 9" x 3/4" (203 x 6 to 229 x 19 mm)	5" x 5" (127x127 mm)	5" to 6-1/4" (127 to 159 mm)	50'



## 3M™ Bus Bar Tubing BBI-A Series for 35 kV Bus Bar Size Ranges

**Material:** Cross-Linked Polyolefin

**Max. Operating Temperature:** 230°F (110°C)

**Voltage Rating:** 35 kV

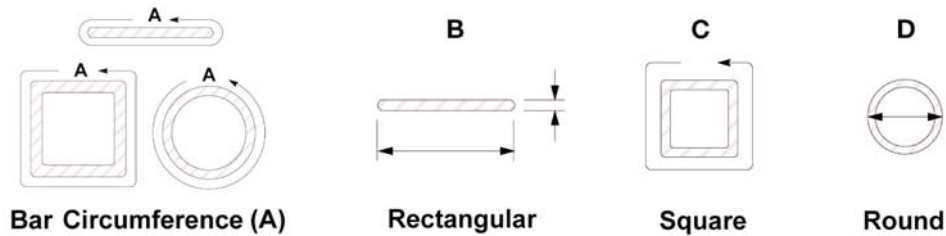
**BIL:** 150 V

**Flame Retardant:** Yes

**RoHS 2011/65/EU:** Yes

**Specification:** ASTM-D-257, 149, 150, 2303; IEC 216; ANSI/IEEE Std C37.20

**Manufacturing Origin:**  MADE IN USA



Order No.	UPC	Bar Circum. (A)	Rectangular Dimension (B)	Square Dimension (C)	Round Diameter (D)	Linear Ft/Cs
BBI-7A-Red-20' Roll	051135-35734	8.28"-8.86" (210-225 mm)	4" x 1/4" to 4" x 3/4" (102 x 6 to 102 x 19 mm)	Measure circumference	2-3/4" (70 mm)	20'
BBI-7A-Red-50' Roll	051135-35735	8.28"-8.86" (210-225 mm)	4" x 1/4" to 4" x 3/4" (102 x 6 to 102 x 19 mm)	Measure circumference	2-3/4" (70 mm)	50'
BBI-8A-Red-20' Roll	051135-35736	10.29"-10.94" (261-278 mm)	5" x 1/4" to 5" x 3/4" (127 x 6 to 127 x 19 mm)	Measure circumference	3-3/8" (86 mm)	20'
BBI-8A-Red-50' Roll	051135-35737	10.29"-10.94" (261-278 mm)	5" x 1/4" to 5" x 3/4" (127 x 6 to 127 x 19 mm)	Measure circumference	3-3/8" (86 mm)	50'
BBI-9A-Red-20' Roll	051135-35876	12.29"-13.00" (312-330 mm)	6" x 1/4" to 6" x 3/4" (152 x 6 to 152 x 19 mm)	Measure circumference	4" to 4-1/8" (102 to 105 mm)	20'
BBI-9A-Red-50' Roll	051135-35877	12.29"-13.00" (312-330 mm)	6" x 1/4" to 6" x 3/4" (152x6 to 152x19 mm)	Measure circumference	4" to 4-1/8" (102 to 105 mm)	50'
BBI-10A-Red-20' Roll	051135-35878	15.43"-16.86" (392-428 mm)	8" x 1/4" to 8" x 3/4" (203x6 to 203x19 mm)	Measure circumference	5" to 5-1/4" (127 to 133 mm)	20'
BBI-10A-Red-50' Roll	051135-35879	15.43"-16.86" (392-428 mm)	8" x 1/4" to 8" x 3/4" (203x6 to 203x19 mm)	Measure circumference	5" to 5-1/4" (127 to 133 mm)	50'

# Molded Shapes

Need a waterproof seal on your electrical connections? Put 3M™ Heat Shrink Molded Shapes to the task. Available in breakout boots and end caps, each shape is easy to install and provides exceptional protection from chemicals, water, moisture, air and dirt.



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## Molded Shapes: 3M™ Heat Shrink Heavy Duty Breakout Boots and End Caps

### 3M™ Heat Shrink Heavy Duty Breakout Boots HDBB

3M™ Heat Shrink Heavy Duty Breakout Boots HDBB provide strain relief and environmental/mechanical protection for breakouts in multiconductor armored or sheathed cables. This style is designed for two to six conductors.

<b>Material</b>	Semi-Rigid Flame Retardant Polyolefin
<b>RoHS 2011/65/EU</b>	Yes
<b>Application Specification</b>	NAVSEA or DOD-STD-2003-1



Heat Shrink

Order No.	UPC	Outlet	Cable End, Expanded/Recovered	Conductor Legs, Expanded/Recovered	Case Qty.
HDBB-205-1-250	054007-58793	2-way	0.80"/0.37" (20,3/9,4 mm)	0.33"/0.11" (8,4/2,8 mm)	1
HDBB-210-1-250	051135-35992	2-way	1.20"/0.60" (30,5/15,2 mm)	0.50"/0.17" (12,7/4,3 mm)	1
HDBB-220-1-250	051138-46654	2-way	1.90"/0.90" (48,3/22,9 mm)	0.75"/0.30" (19,1/7,6 mm)	1
HDBB-230-1-250	051135-35993	2-way	3.00"/1.50" (76,2/38,1 mm)	1.45"/0.50" (36,8/12,7 mm)	1
HDBB-310-1-250	051135-35994	3-way	0.90"/0.36" (22,9/9,1 mm)	0.33"/0.12" (8,4/3,1 mm)	1
HDBB-320-1-250	051135-35995	3-way	1.20"/0.50" (30,5/12,7 mm)	0.50"/0.16" (12,7/4,1 mm)	1
HDBB-321-1-250	051135-35996	3-way	1.50"/0.69" (38,1/17,5 mm)	0.65"/0.18" (16,5/4,6 mm)	1
HDBB-325-1-250	051135-35997	3-way	1.70"/0.90" (43,2/22,9 mm)	0.82"/0.30" (20,8/7,6 mm)	1
HDBB-335-1-250	051135-03409	3-way	2.40"/1.40" (61,0/35,6 mm)	1.25"/0.50" (31,8/12,7 mm)	1
HDBB-340-1-250	051135-35998	3-way	3.20"/2.00" (81,3/50,8 mm)	1.40"/0.75" (35,6/19,1 mm)	1
HDBB-345-1-250	054007-58794	3-way	4.90"/2.32" (124,5/58,9 mm)	2.00"/1.00" (50,8/25,4 mm)	1
HDBB-405-1-250	054007-58795	4-way	0.90"/0.43" (22,9/10,9 mm)	0.28"/0.11" (7,1/2,8 mm)	1
HDBB-410-1-250	051135-35999	4-way	1.25"/0.80" (31,8/20,3 mm)	0.50"/0.19" (12,7/4,8 mm)	1
HDBB-415-1-250	054007-58855	4-way	1.75"/0.98" (44,5/24,9 mm)	0.79"/0.28" (20,1/7,1 mm)	1
HDBB-420-1-250	051135-36000	4-way	2.35"/1.00" (59,7/25,4 mm)	1.00"/0.35" (25,4/8,9 mm)	1
HDBB-425-1-250	054007-58797	4-way	2.65"/1.40" (67,3/35,6 mm)	1.20"/0.53" (30,5/13,5 mm)	1
HDBB-430-1-250	054007-58798	4-way	5.25"/3.00" (133,4/76,2 mm)	1.35"/0.55" (34,3/14,0 mm)	1
HDBB-505-1-250	051138-46648	5-way	2.36"/0.96" (59,9/24,4 mm)	1.18"/0.29" (30,0/7,4 mm)	1
HDBB-605-1-250	051135-36001	6-way	2.39"/1.45" (60,7/36,8 mm)	0.80"/0.35" (20,3/8,9 mm)	1

## Molded Shapes: 3M™ Heat Shrink Heavy Duty Breakout Boots and End Caps

### 3M™ Heat Shrink Heavy Duty End Caps SKE

3M™ Heat Shrink Heavy Duty End Caps SKE are typically used to seal cable ends and provide mechanical and environmental protection. With the exception of SKE 4/10 end cap, these end caps can be fitted with air valves suitable for pressurized cable applications. Consult factory.

**Material** Semi-Rigid Flame Retardant Polyolefin  
**RoHS 2011/65/EU** Yes



Order No.	UPC	For Cable Diameter Range	"H Diameter" Expanded/Recovered	"J Diameter" Recovered	Case Qty.
SKE-4/10	051138-48153	0.16"-0.31" (4,1-7,9 mm)	0.39"/0.16" (9,9/4,1 mm)	0.12" (3,1 mm)	1000
SKE-8/20	051138-48154	0.31"-0.43" (7,9-10,9 mm)	0.79"/0.30" (20,1/7,6 mm)	0.26" (6,6 mm)	250
SKE-15/40	051138-48155	0.59"-1.26" (15,0-32,0 mm)	1.57"/0.59" (39,9/15,0 mm)	0.41" (10,4 mm)	60
SKE-25/63	051138-48156	1.00"-1.97" (25,4-50,0 mm)	2.48"/0.98" (63,0/24,9 mm)	0.63" (16,0 mm)	60
SKE-30/76	051138-48157	1.18"-2.36" (30,0-59,9 mm)	2.99"/1.18" (76,0/30,0 mm)	0.67" (17,0 mm)	40
SKE-45/100	051138-48158	1.77"-3.15" (45,0-80,0 mm)	3.94"/1.77" (100,1/45,0 mm)	1.02" (25,9 mm)	30

## 3M™ Heat Shrink Wraparound Cable Repair Wrap Sleeve HDCW

3M™ Heat Shrink Wraparound Cable Repair Wrap Sleeves HDCW are designed to quickly repair damaged cable jacketing. They may also be used to re-jacket in-line splices. HDCW wrap sleeves can be used as insulation material on cable and splices up to 1000 volts and as jacket repair material on cable up to 35 kV. The design of the wrap sleeve allows it to be installed in tight spaces with ordinary heating equipment such as a torch.

HDCW wrap sleeves are made from modified cross-linked polyolefin, with a hot-melt adhesive liner on the inner side of the sleeve. Upon heating, the sleeve shrinks and the adhesive melts, creating a water-tight bond between the sleeve and the cable. 3M Heat Shrink Wraparound Cable Repair Wrap Sleeves HDCW meet ANSI C119.1 requirements. A corrosion proof metal channel is used to close the sleeve during installation.



<b>Voltage</b>	1000 Volts Max.
<b>Material</b>	Adhesive-lined, Cross-Linked Polyolefin
<b>RoHS 2011/65/EU</b>	Yes

Order No.	UPC	Cable Size	Sleeve Length	Jacket Repair Use Range	Expanded/Recovered Diameter	Case Qty.
HDCW-35/10-250	051138-48416	8-2/0 AWG	9.8" (250 mm)	1.38"-0.39" (35-10 mm)	1.97"/0.32" (50/8 mm)	5
HDCW-35/10-500	051138-48417	8-2/0 AWG	19.7" (500 mm)	1.38"-0.39" (35-10 mm)	1.97"/0.32" (50/8 mm)	5
HDCW-35/10-750	051138-48418	8-2/0 AWG	29.5" (750 mm)	1.38"-0.39" (35-10 mm)	1.97"/0.32" (50/8 mm)	5
HDCW-35/10-1000	051138-48419	8-2/0 AWG	39.4" (1000 mm)	1.38"-0.39" (35-10 mm)	1.97"/0.32" (50/8 mm)	5
HDCW-35/10-1200	051138-48436	8-2/0 AWG	47.2" (1200 mm)	1.38"-0.39" (35-10 mm)	1.97"/0.32" (50/8 mm)	5
HDCW-55/15-250	051138-48420	3/0 AWG-400 kcmil	9.8" (250 mm)	2.17"-0.59" (55-15 mm)	2.95"/.51" (75/13 mm)	5
HDCW-55/15-500	051138-48421	3/0 AWG-400 kcmil	19.7" (500 mm)	2.17"-0.59" (55-15 mm)	2.95"/.51" (75/13 mm)	5
HDCW-55/15-750	051138-48422	3/0 AWG-400 kcmil	29.5" (750 mm)	2.17"-0.59" (55-15 mm)	2.95"/.51" (75/13 mm)	5
HDCW-55/15-1000	051138-48423	3/0 AWG-400 kcmil	39.4" (1000 mm)	2.17"-0.59" (55-15 mm)	2.95"/.51" (75/13 mm)	5
HDCW-55/15-1200	051138-48437	3/0 AWG-400 kcmil	47.2" (1200 mm)	2.17"-0.59" (55-15 mm)	2.95"/.51" (75/13 mm)	5
HDCW-80/25-250	051138-48424	500-1000 kcmil	9.8" (250 mm)	3.15"-0.98" (80-25 mm)	3.94"/0.91" (100/23 mm)	5
HDCW-80/25-500	051138-48425	500-1000 kcmil	19.7" (500 mm)	3.15"-0.98" (80-25 mm)	3.94"/0.91" (100/23 mm)	5
HDCW-80/25-750	051138-48426	500-1000 kcmil	29.5" (750 mm)	3.15"-0.98" (80-25 mm)	3.94"/0.91" (100/23 mm)	5
HDCW-80/25-1000	051138-48427	500-1000 kcmil	39.4" (1000 mm)	3.15"-0.98" (80-25 mm)	3.94"/0.91" (100/23 mm)	5
HDCW-80/25-1200	051138-48438	500-1000 kcmil	47.2" (1200 mm)	3.15"-0.98" (80-25 mm)	3.94"/0.91" (100/23 mm)	5
HDCW-110/30-500	051138-48429	1000-2000 kcmil	19.7" (500 mm)	4.33"-1.18" (110-30 mm)	5.20"/0.98" (132/25 mm)	5
HDCW-110/30-750	051138-48430	1000-2000 kcmil	29.5" (750 mm)	4.33"-1.18" (110-30 mm)	5.20"/0.98" (132/25 mm)	5
HDCW-110/30-1000	051138-48431	1000-2000 kcmil	39.4" (1000 mm)	4.33"-1.18" (110-30 mm)	5.20"/0.98" (132/25 mm)	5
HDCW-110/30-1200	051138-48439	1000-2000 kcmil	47.2" (1200 mm)	4.33"-1.18" (110-30 mm)	5.20"/0.98" (132/25 mm)	5
HDCW-140/40-1000	051138-48435	N/A	39.4" (1000 mm)	5.51"-1.57" (140-40 mm)	5.71"/1.26" (145/32 mm)	5
HDCW-140/40-1200	051138-48440	N/A	47.2" (1200 mm)	5.51"-1.57" (140-40 mm)	5.71"/1.26" (145/32 mm)	5

# Dual Wall (Adhesive-Lined)

The outer wall resists abrasion. The meltable inner wall keeps out moisture. These are just two of the many reasons why 3M™ Dual Wall Tubing and Adhesive (Dual Wall) is a smart pick when you need to protect components and equipment in high-moisture environments such as automotive and marine applications.



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## Dual Wall (Adhesive-Lined)

# 3M™ Heat Shrink Tubing EPS-200

3M™ Heat Shrink Tubing EPS-200 is a 2:1 thin-wall tubing offering the advantages of integral adhesive-lined construction.


### Standard Sizes and Dimensions

Ordering Size in.	Expanded I.D. (Minimum)		Recovered I.D. (Maximum)		Total Recovered Wall Thickness (Nominal)		Meltable Recovered Wall Thickness (Nominal)	
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)
1/8	.125	(3,18)	.063	(1,60)	.027	(0,68)	.004	(0,10)
3/16	.187	(4,75)	.093	(2,36)	.027	(0,68)	.004	(0,10)
1/4	.250	(6,35)	.125	(3,18)	.030	(0,76)	.005	(0,13)
3/8	.375	(9,53)	.187	(4,75)	.031	(0,79)	.005	(0,13)
1/2	.500	(12,70)	.250	(6,35)	.032	(0,81)	.006	(0,15)
3/4	.750	(19,05)	.375	(9,53)	.037	(0,94)	.006	(0,15)
1	1.000	(25,40)	.500	(12,70)	.046	(1,17)	.008	(0,20)
1-1/2	1.500	(38,10)	.750	(19,05)	.049	(1,24)	.008	(0,20)
2	2.000	(50,80)	1.000	(25,40)	.060	(1,52)	.015	(0,38)

Note: Dimensions in inches are approximate.

<b>Material</b>	Polyolefin
<b>Color</b>	Black
<b>Shrink Ratio</b>	2:1
<b>Operating Temperature</b>	-67 to 230°F (-55 to 110°C)
<b>Voltage</b>	600 Volts Max.
<b>Flame Retardant</b>	Yes
<b>RoHS 2011/65/EU</b>	Yes
<b>Specification</b>	SAE-AMS-DTL-23053/4, Class 2

**Agency Approvals**  UL File E-39100

**Manufacturing Origin** 



Order No.	UPC	Size	Format	Expanded/Recovered I.D.	Case Qty.
EPS200-1/8-6"-Black-10-10 Pc Pks	051128-60057	1/8" (3,18 mm)	6" (152,4 mm) pieces	0.125"/0.063" (3,18/1,60 mm)	10/pk, 10 pks
EPS200-1/8-48"-Black-25 Pcs	051128-59719	1/8" (3,18 mm)	48" (1,22 m) sticks	0.125"/0.063" (3,18/1,60 mm)	25 pcs
EPS200-3/16-6"-Black-10-10 Pc Pks	051128-60059	3/16" (4,75 mm)	6" (152,4 mm) pieces	0.187"/0.093" (4,75/2,36 mm)	10/pk, 10 pks
EPS200-3/16-48"-Black-12 Pcs	051128-59720	3/16" (4,75 mm)	48" (1,22 m) sticks	0.187"/0.093" (4,75/2,36 mm)	12 pcs
EPS200-1/4-6"-Black-10-10 Pc Pks	051128-60056	1/4" (6,35 mm)	6" (152,4 mm) pieces	0.25"/0.125" (6,35/3,18 mm)	10/pk, 10 pks
EPS200-1/4-48"-Black-12 Pcs	051128-59721	1/4" (6,35 mm)	48" (1,22 m) sticks	0.25"/0.125" (6,35/3,18 mm)	12 pcs
EPS200-3/8-6"-Black-10-10 Pc Pks	051128-60061	3/8" (9,53 mm)	6" (152,4 mm) pieces	0.375"/0.187" (9,53/4,75 mm)	10/pk, 10 pks
EPS200-3/8-48"-Black-12 Pcs	051128-59722	3/8" (9,53 mm)	48" (1,22 m) sticks	0.375"/0.187" (9,53/4,75 mm)	12 pcs
EPS200-1/2-6"-Black-10-10 Pc Pks	051128-60055	1/2" (12,7 mm)	6" (152,4 mm) pieces	0.50"/0.25" (12,70/6,35 mm)	10/pk, 10 pks
EPS200-1/2-48"-Black-12 Pcs	051128-59723	1/2" (12,7 mm)	48" (1,22 m) sticks	0.50"/0.25" (12,70/6,35 mm)	12 pcs
EPS200-3/4-6"-Black-10-10 Pc Pks	051128-60060	3/4" (19,0 mm)	6" (152,4 mm) pieces	0.75"/0.375" (19,05/9,53 mm)	10/pk, 10 pks
EPS200-3/4-48"-Black-5 Pcs	051128-59724	3/4" (19,0 mm)	48" (1,22 m) sticks	0.75"/0.375" (19,05/9,53 mm)	5 pcs
EPS200-1-6"-Black-10-10 Pc Pks	051128-60058	1" (25,4 mm)	6" (152,4 mm) pieces	1.00"/0.50" (25,40/12,70 mm)	10/pk, 10 pks
EPS200-1-48"-Black-5 Pcs	051128-59725	1" (25,4 mm)	48" (1,22 m) sticks	1.00"/0.50" (25,40/12,70 mm)	5 pcs
EPS200-1 1/2-6"-Black-10-3 Pc Pks	051128-60130	1-1/2" (38,1 mm)	6" (152,4 mm) pieces	1.50"/0.75" (38,10/19,05 mm)	3/pk, 10 pks
EPS200-1 1/2-48"-Black-5 Pcs	051128-59726	1-1/2" (38,1 mm)	48" (1,22 m) sticks	1.50"/0.75" (38,10/19,05 mm)	5 pcs
EPS200-2-48"-Black-2 Pcs	051128-59727	2" (50,8 mm)	48" (1,22 m) sticks	2.00"/1.00" (50,80/25,40 mm)	2 pcs



## 3M™ Heat Shrink Tubing EPS-300

3M™ Heat Shrink Tubing EPS-300 is a thin-wall tubing offering the advantages of integral, dual wall construction. The tubing is made from flame-retardant, flexible polyolefin with an internal layer of special thermoplastic adhesive. The heat shrinkable outer wall is selectively irradiation cross-linked, while the adhesive maintains high flow and excellent adhesion characteristics. Standard color is black and standard length is six-inch (15,24 cm) cut pieces or four-foot (1,22 m) sticks. Additional sizes, colors and put-ups are available - please contact your 3M Electrical Products Sales Representative.

### Standard Sizes and Dimensions

Ordering Size	Expanded I.D.		Recovered I.D.		Total Recovered Wall Thickness		Meltable Recovered Wall Thickness	
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)
1/8	.125	(3,18)	.040	(1,02)	.040	(1,02)	.020	(0,51)
3/16	.187	(4,75)	.062	(1,57)	.040	(1,02)	.020	(0,51)
1/4	.250	(6,35)	.080	(2,03)	.040	(1,02)	.020	(0,51)
3/8	.375	(9,53)	.120	(3,05)	.055	(1,40)	.025	(0,62)
1/2	.500	(12,70)	.160	(4,06)	.070	(1,78)	.030	(0,76)
3/4	.750	(19,05)	.250	(6,35)	.085	(2,16)	.035	(0,89)
1	1.000	(25,40)	.320	(8,13)	.100	(2,54)	.040	(1,02)
1-1/2	1.500	(38,10)	.510	(12,95)	.100	(2,54)	.040	(1,02)

Note: Dimensions in inches are approximate.

Material	Polyolefin
Shrink Ratio	3:1
Operating Temperature	-67 to 230°F (-55 to 110°C)
Voltage	600 Volts Max.
Flame Retardant	Yes
RoHS 2011/65/EU Specification	Yes
Agency Approvals	ABS

Agency Approvals



Manufacturing Origin



Order No.	UPC	Size	Color	Format	Expanded/Recovered I.D.	Case Qty.
EPS300-1/8-6"-Black-10-10 Pc Pks	051128-60131	1/8" (3,18 mm)	Black	6" (152,4 mm) pieces	0.125"/0.040" (3,18/1,02 mm)	10/pk, 10 pks
EPS300-1/8-48"-Black-25 Pcs	051128-59770	1/8" (3,18 mm)	Black	48" (1,22 m) sticks	0.125"/0.040" (3,18/1,02 mm)	25
EPS300-1/8-48"-Black-250 Pcs	051128-59768	1/8" (3,18 mm)	Black	48" (1,22 m) sticks	0.125"/0.040" (3,18/1,02 mm)	250
EPS300-1/8-48"-Clear-250 Pcs	051128-59769	1/8" (3,18 mm)	Clear	48" (1,22 m) sticks	0.125"/0.040" (3,18/1,02 mm)	250
EPS300-1/8-48"-Black-Hdr-25 Pcs	051128-59789	1/8" (3,18 mm)	Black	48" (1,22 m) sticks w/ Hdr Label	0.125"/0.040" (3,18/1,02 mm)	25
EPS300-3/16-6"-Black-10-10 Pc Pks	051128-60067	3/16" (4,75 mm)	Black	6" (152,4 mm) pieces	0.187"/0.062" (4,75/1,57 mm)	10/pk, 10 pks
EPS300-3/16-48"-Black-12 Pcs	051128-59728	3/16" (4,75 mm)	Black	48" (1,22 m) sticks	0.187"/0.062" (4,75/1,57 mm)	12
EPS300-3/16-48"-Black-250 Pcs	051128-59917	3/16" (4,75 mm)	Black	48" (1,22 m) sticks	0.187"/0.062" (4,75/1,57 mm)	250
EPS300-3/16-48"-Clear-250 Pcs	051128-59755	3/16" (4,75 mm)	Clear	48" (1,22 m) sticks	0.187"/0.062" (4,75/1,57 mm)	250
EPS300-3/16-48"-Black-Hdr-12 Pcs	051128-59790	3/16" (4,75 mm)	Black	48" (1,22 m) sticks w/ Hdr Label	0.187"/0.062" (4,75/1,57 mm)	12
EPS300-1/4-6"-Black-10-10 Pc Pks	051128-60064	1/4" (6,35 mm)	Black	6" (152,4 mm) pieces	0.250"/0.080" (6,35/2,03 mm)	10/pk, 10 pks
EPS300-1/4-48"-Red-200 Pcs	051128-59766	1/4" (6,35 mm)	Red	48" (1,22 m) sticks	0.250"/0.080" (6,35/2,03 mm)	200
EPS300-1/4-48"-Clear-200 Pcs	051128-59756	1/4" (6,35 mm)	Clear	48" (1,22 m) sticks	0.250"/0.080" (6,35/2,03 mm)	200
EPS300-1/4-48"-Black-200 Pcs	051128-59918	1/4" (6,35 mm)	Black	48" (1,22 m) sticks	0.250"/0.080" (6,35/2,03 mm)	200
EPS300-1/4-48"-Black-12 Pcs	051128-59729	1/4" (6,35 mm)	Black	48" (1,22 m) sticks	0.250"/0.080" (6,35/2,03 mm)	12



## 3M™ Heat Shrink Tubing EPS-300 (continued)

Order No.	UPC	Size	Color	Format	Expanded/Recovered I.D.	Case Qty.
EPS300-1/4-48"-Black-Hdr-12 Pcs	051128-59791	1/4" (6,35 mm)	Black	48" (1,22 m) sticks w/ Hdr Label	0.250"/0.080" (6,35/2,03 mm)	12
EPS300-3/8-6"-Black-10-10 Pc Pks	051128-60070	3/8" (9,53 mm)	Black	6" (152,4 mm) pieces	0.375"/0.120" (9,53/3,05 mm)	10/pk, 10 pks
EPS300-3/8-48"-Red-125 Pcs	051128-59767	3/8" (9,52 mm)	Red	48" (1,22 m) sticks	0.375"/0.120" (9,53/3,05 mm)	125
EPS300-3/8-48"-Clear-125 Pcs	051128-59757	3/8" (9,52 mm)	Clear	48" (1,22 m) sticks	0.375"/0.120" (9,53/3,05 mm)	125
EPS300-3/8-48"-Black-125 Pcs	051128-59919	3/8" (9,52 mm)	Black	48" (1,22 m) sticks	0.375"/0.120" (9,53/3,05 mm)	125
EPS300-3/8-48"-Black-12 Pcs	051128-59730	3/8" (9,52 mm)	Black	48" (1,22 m) sticks	0.375"/0.120" (9,53/3,05 mm)	12
EPS300-3/8-48"-Black-Hdr-12 Pcs	051128-59792	3/8" (9,52 mm)	Black	48" (1,22 m) sticks w/ Hdr Label	0.375"/0.120" (9,53/3,05 mm)	12
EPS300-1/2-6"-Black-10-10 Pc Pks	051128-60062	1/2" (12,7 mm)	Black	6" (152,4 mm) pieces	0.50"/0.160" (12,70/4,06 mm)	10/pk, 10 pks
EPS300-1/2-6"-Red-10-10 Pc Pks	051128-60063	1/2" (12,7 mm)	Red	6" (152,4 mm) pieces	0.50"/0.160" (12,70/4,06 mm)	10/pk, 10 pks
EPS300-1/2-48"-Black-12 Pcs	051128-59731	1/2" (12,7 mm)	Black	48" (1,22 m) sticks	0.50"/0.160" (12,70/4,06 mm)	12
EPS300-1/2-48"-Black-75 Pcs	051128-59920	1/2" (12,7 mm)	Black	48" (1,22 m) sticks	0.50"/0.160" (12,70/4,06 mm)	75
EPS300-1/2-48"-Clear-75 Pcs	051128-59758	1/2" (12,7 mm)	Clear	48" (1,22 m) sticks	0.50"/0.160" (12,70/4,06 mm)	75
EPS300-1/2-48"-Red-75 Pcs	051128-59762	1/2" (12,7 mm)	Red	48" (1,22 m) sticks	0.50"/0.160" (12,70/4,06 mm)	75
EPS300-1/2-48"-Black-Hdr-12 Pcs	051128-59793	1/2" (12,7 mm)	Black	48" (1,22 m) sticks w/ Hdr Label	0.50"/0.160" (12,70/4,06 mm)	12
EPS300-1/2-48"-Red-Hdr-12 Pcs	051128-59794	1/2" (12,7 mm)	Red	48" (1,22 m) sticks w/ Hdr Label	0.50"/0.160" (12,70/4,06 mm)	12
EPS300-3/4-6"-Black-10-10 Pc Pks	051128-60068	3/4" (19,0 mm)	Black	6" (152,4 mm) pieces	0.750"/0.250" (19,05/6,35 mm)	10/pk, 10 pks
EPS300-3/4-6"-Red-10-10 Pc Pks	051128-60069	3/4" (19,0 mm)	Red	6" (152,4 mm) pieces	0.750"/0.250" (19,05/6,35 mm)	10/pk, 10 pks
EPS300-3/4-48"-Black-5 Pcs	051128-59732	3/4" (19,0 mm)	Black	48" (1,22 m) sticks	0.750"/0.250" (19,05/6,35 mm)	5
EPS300-3/4-48"-Black-45 Pcs	051128-59921	3/4" (19,0 mm)	Black	48" (1,22 m) sticks	0.750"/0.250" (19,05/6,35 mm)	45
EPS300-3/4-48"-Clear-45 Pcs	051128-59759	3/4" (19,0 mm)	Clear	48" (1,22 m) sticks	0.750"/0.250" (19,05/6,35 mm)	45
EPS300-3/4-48"-Red-45 Pcs	051128-59763	3/4" (19,0 mm)	Red	48" (1,22 m) sticks	0.750"/0.250" (19,05/6,35 mm)	45
EPS300-3/4-48"-Black-Hdr-5 Pcs	051128-59795	3/4" (19,0 mm)	Black	48" (1,22 m) sticks w/ Hdr Label	0.750"/0.250" (19,05/6,35 mm)	5
EPS300-3/4-48"-Red-Hdr-5 Pcs	051128-59796	3/4" (19,0 mm)	Red	48" (1,22 m) sticks w/ Hdr Label	0.750"/0.250" (19,05/6,35 mm)	5
EPS300-1-6"-Black-10-10 Pc Pks	051128-60065	1" (25,4 mm)	Black	6" (152,4 mm) pieces	1.00"/0.320" (25,40/8,13 mm)	10/pk, 10 pks
EPS300-1-6"-Red-10-10 Pc Pks	051128-60066	1" (25,4 mm)	Red	6" (152,4 mm) pieces	1.00"/0.320" (25,40/8,13 mm)	10/pk, 10 pks
EPS300-1-48"-Black-5 Pcs	051128-59733	1" (25,4 mm)	Black	48" (1,22 m) sticks	1.00"/0.320" (25,40/8,13 mm)	5
EPS300-1-48"-Black-24 Pcs	051128-59922	1" (25,4 mm)	Black	48" (1,22 m) sticks	1.00"/0.320" (25,40/8,13 mm)	24
EPS300-1-48"-Clear-24 Pcs	051128-59760	1" (25,4 mm)	Clear	48" (1,22 m) sticks	1.00"/0.320" (25,40/8,13 mm)	24
EPS300-1-48"-Red-24 Pcs	051128-59764	1" (25,4 mm)	Red	48" (1,22 m) sticks	1.00"/0.320" (25,40/8,13 mm)	24
EPS300-1-48"-Black-Hdr-5 Pcs	051128-59797	1" (25,4 mm)	Black	48" (1,22 m) sticks w/ Hdr Label	1.00"/0.320" (25,40/8,13 mm)	5
EPS300-1 1/2-48"-Black-5 Pcs	051128-59734	1-1/2" (38,1 mm)	Black	48" (1,22 m) sticks	1.50"/0.51" (38,10/12,95 mm)	5
EPS300-1 1/2-48"-Black-24 Pcs	051128-59923	1-1/2" (38,1 mm)	Black	48" (1,22 m) sticks	1.50"/0.51" (38,10/12,95 mm)	24
EPS300-1 1/2-48"-Clear-24 Pcs	051128-59761	1-1/2" (38,1 mm)	Clear	48" (1,22 m) sticks	1.50"/0.51" (38,10/12,95 mm)	24
EPS300-1 1/2-6"-Black-10-3 Pc Pks	051128-60129	1-1/2" (38,1 mm)	Black	6" (152,4 mm) pieces	1.50"/0.51" (38,10/12,95 mm)	3/pk, 10 pks

## Dual Wall (Adhesive-Lined)

### 3M™ Heat Shrink Tubing EPS-300 Tubing Kit

3M™ Heat Shrink Tubing EPS-300 is a thin-wall tubing offering the advantages of integral, dual wall construction. The tubing is made from flame-retardant, flexible polyolefin-lined with an internal layer of special thermoplastic adhesive. The heat shrinkable outer wall is selectively irradiation cross-linked, while the adhesive maintains high flow and excellent adhesion characteristics. Standard color is black and standard lengths are four-foot (1,22 m) sticks and six-inch (15,24 cm) cut pieces. Additional sizes, colors and put-ups are available - please contact your 3M Electrical Markets Sales Representative.

Size	1/2", 3/4", 1" (12,7, 19,05, 25,4 mm)
Colors	Black & Red
Format	6" (15,24 cm) pieces
Material	Polyolefin
Shrink Ratio	3:1
Operating Temperature	-67 to 230°F (-55 to 110°C)
Voltage	600 Volts Max.
Flame Retardant	Yes
RoHS 2011/65/EU	Yes
Specification	ABS
Agency Approvals	 E-157227
Manufacturing Origin	
Packaging	42 pieces/kit, 5 kits



Order No.	UPC	Contents	Expanded/Recovered I.D.	Size
EPS300-1/2 to 1-Black&Red-5-42 Pc Kits	051135- 38444	12-pcs EPS300-1/2-6"-Black	0.50"/0.16" (12,7/4,06 mm)	1/2" (12,7 mm)
		12-pcs EPS300-1/2-6"-Red	0.50"/0.16" (12,7/4,06 mm)	1/2" (12,7 mm)
		6-pcs EPS300-3/4-6"-Black	0.75"/0.25" (19,05/6,35 mm)	3/4" (19,05 mm)
		6-pcs EPS300-3/4-6"-Red	0.75"/0.25" (19,05/6,35 mm)	3/4" (19,05 mm)
		3-pcs EPS300-1-6"-Black	1.00"/0.32" (25,4/8,13 mm)	1" (25,4 mm)
		3-pcs EPS300-1-6"-Red	1.00"/0.32" (25,4/8,13 mm)	1" (25,4 mm)

## Dual Wall (Adhesive-Lined)

**3M™ Heat Shrink Tubing EPS-400**


3M™ Heat Shrink Tubing EPS-400 offers excellent environmental protection for electronic components, wire splices, wire bundles and harness breakouts. This tubing comes in a quantity of 48 feet per full carton.

3M Heat Shrink Tubing EPS-400 is a semi-rigid tubing offering the advantages of integral, adhesive-lined construction. The tubing is made from flame-retardant, flexible polyolefin with an internal layer of special thermoplastic adhesive. The heat shrinkable outer wall is selectively cross-linked, while the adhesive maintains high flow and excellent adhesion characteristics.

**Standard Sizes and Dimensions**

Ordering Size in.	Expanded I.D. (Minimum)		Recovered I.D. (Maximum)		Recovered Melt Wall (Nominal)		Recovered Outer Wall (Minimum)	
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)
.300	.300	(7,62)	.060	(1,52)	.033	(0,84)	.028	(0,71)
.350	.350	(8,89)	.080	(2,03)	.038	(0,97)	.033	(0,84)
.450	.450	(11,43)	.105	(2,67)	.043	(1,09)	.053	(1,35)
.700	.700	(17,78)	.175	(4,45)	.060	(1,52)	.055	(1,40)

Note: Dimensions in inches are approximate.

Material	Polyolefin
Color	Black
Shrink Ratio	4:1
Operating Temperature	-67 to 230°F (-55 to 110°C)
Voltage	600 Volts Max.
Flame Retardant	Yes
RoHS 2011/65/EU	Yes
Agency Approvals	 E-157227

Manufacturing Origin





Order No.	UPC	Size	Format	Case Qty.
EPS400-.300-6"-Black-10-10 Pc Pks	051128-60071	0.300"	6" (152,4 mm) pieces	10/pk, 10 pks
EPS400-.300-48"-Black-12 Pcs	051128-59735	0.300"	48" (1,22 m) sticks	12 pcs
EPS400-.350-6"-Black-10-10 Pc Pks	051128-60072	0.350"	6" (152,4 mm) pieces	10/pk, 10 pks
EPS400-.350-48"-Black-12 Pcs	051128-59736	0.350"	48" (1,22 m) sticks	12 pcs
EPS400-.450-6"-Black-10-10 Pc Pks	051128-60073	0.450"	6" (152,4 mm) pieces	10/pk, 10 pks
EPS400-.450-48"-Black-12 Pcs	051128-59737	0.450"	48" (1,22 m) sticks	12 pcs
EPS400-.700-6"-Black-10-10 Pc Pks	051128-60074	0.700"	6" (152,4 mm) pieces	10/pk, 10 pks
EPS400-.700-48"-Black-5 Pcs	051128-59738	0.700"	48" (1,22 m) sticks	5 pcs

## Dual Wall (Adhesive-Lined)

### 3M™ Heat Shrink Tubing MW, Multiple Wall, Semi-Rigid Polyolefin

3M™ Heat Shrink Tubing MW is a semi-rigid, heat shrinkable polyolefin tubing that is co-extruded and selectively cross-linked to provide an integral, melttable inner wall. When heated in excess of 275°F (135°C), the inner melttable wall of the tubing is simultaneously softened and forced by the shrink action into intimate contact with all underlying surfaces, interstices and small voids. Upon cooling, the MW tubing provides a tough protective and insulating barrier, highly resistant to penetration by moisture and the attack of chemicals and solvents. Uses include strain relief for delicate wire terminations, connections, solder joints and harness breakouts — where semi-rigid environmental protective sleeving and insulation is needed.

Standard color is black, and standard lengths are 4' (1,22 m) lengths and 6" (15,24 cm) cut pieces. Additional sizes, colors and put-ups are available — please contact your 3M Electrical Markets Sales Representative.

<b>Material</b>	Polyolefin
<b>Shrink Ratio</b>	2.5:1
<b>Operating Temperature</b>	-67 to 230°F (-55 to 110°C)
<b>Voltage</b>	600 Volts Max.
<b>Flame Retardant</b>	Yes
<b>RoHS 2011/65/EU</b>	Yes
<b>Specification</b>	SAE-AMS-DTL-23053/4, Class 1
<b>Agency Approvals</b>	 E-157227
<b>Manufacturing Origin</b>	



Order No.	UPC	Size	Color	Format	Expanded/Recovered I.D.	Case Qty.
MW-1/8-48"-Black-25 Pcs	051128-59712	1/8" (3,18 mm)	Black	48" (1,22 m) sticks	0.125"/0.023" (3,18/0,58 mm)	25
MW-3/16-48"-Black-12 Pcs	051128-59713	3/16" (4,75 mm)	Black	48" (1,22 m) sticks	0.187"/0.060" (4,75/1,52 mm)	12
MW-1/4-48"-Black-12 Pcs	051128-59714	1/4" (6,35 mm)	Black	48" (1,22 m) sticks	0.250"/0.080" (6,35/2,03 mm)	12
MW-3/8-48"-Black-12 Pcs	051128-59715	3/8" (9,53 mm)	Black	48" (1,22 m) sticks	0.375"/0.135" (9,53/3,43 mm)	12
MW-1/2-48"-Black-12 Pcs	051128-59716	1/2" (12,70 mm)	Black	48" (1,22 m) sticks	0.500"/0.195" (12,70/4,95 mm)	12
MW-3/4-48"-Black-5 Pcs	051128-59717	3/4" (19,05 mm)	Black	48" (1,22 m) sticks	0.750"/0.313" (19,05/7,95 mm)	5
MW-1-48"-Black-5 Pcs	051128-59718	1" (25,4 mm)	Black	48" (1,22 m) sticks	1.000"/0.400" (25,40/10,16 mm)	5

# Locating and Marking

The 3M™ Dynatel™ Locators and 3M Electronic Marking Products provide accurate marking and locating of critical underground assets. Included are sophisticated systems that allow programming of identifying features into intelligent markers using RFID technology, and interfaces with GPS/GIS systems for accurate mapping.



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## Locators

### 3M™ Dynatel™ Locators 1420 Series

3M™ Dynatel™ EMS-iD Marker Locators 1420 are high performance locators that quickly and efficiently locate markers and have the capability to read/write to 3M™ EMS Markers.



Order No.	UPC	Electronic Marker Locate	Transmitter	Direct Connect Cable	Coupler Size	2200RB Rechargeable Battery	Carrying Bag Included	Packaging	Minimum Order
1420	051115-13589	Yes	NA	No Direct Connect Cable	No Coupler	NA	No	1 each per box	1 each

### 3M™ Dynatel™ Locators 2220M Series

The 3M™ Dynatel™ Locator 2220M Series is designed to find the path and estimated depth of buried pipes and cables.

Features include:

- Two active frequencies (8 kHz, 82 kHz)
- Passive frequencies for power, cathodic protection systems
- Detects frequencies from sondes and remote transmitters (512 Hz, 640 Hz, 33 kHz)
- Direct readout of active duct probe (sonde)
- Cable/pair identification
- Receivers incorporate an “expander” function to make peaks and nulls more pronounced
- Receiver and transmitter self-test each time the unit is turned on



Order No.	UPC	Electronic Marker Locate	Transmitter	Direct Connect Cable	Coupler Size	2200RB Rechargeable Battery	Carrying Bag Included	Packaging	Minimum Order
2220M-CU12W/RT	051115-06079	No	12 watt	Small clips, Large clips	3 inches	Yes	Yes	1 each per box	1 each
2220M-U3W	051115-26014	No	3 watt	Large clips	No Coupler	No	Yes	1 each per box	1 each
2220M-U3W3-CPLR	051115-26123	No	3 watt	Large clips	3 inches	No	Yes	1 each per box	1 each



## Locators

### 3M™ Dynatel™ Locators 2250/2273 Series

The 3M™ Dynatel™ Locator 2250/2273 Series is designed to find the path and estimated depth of buried cables and pipes.

Features include:

- Four active frequencies
- Passive frequencies for power, cathodic protection systems and CATV
- Auxiliary frequencies for long distance locating from remote transmitters
- Direct readout of active duct probe (sonde)
- Cable/pair identification
- Receivers incorporate an “expander” function to make peaks and nulls more pronounced

As with other locator models, the 3M™ Dynatel™ Locator 2273 performs all functions of the 2250 locator plus the ability to find underground faults.



IMAGE SHOWN: 2273 Series Locator

	2250-U3P3	2273-U3P3	2273-U5P3/A
UPC	051138-34630	051138-34648	051138-70446
Cable/Pipe Locate	Yes	Yes	Yes
Fault Locate	No	Yes	Yes
Electronic Marker Locate	No	No	No
Transmitter	3 watt	3 watt	5 watt
Direct Connect Cable	Large clips	Large clips	Large clips
Coupler Size	3 inches	3 inches	3 inches
2200RB Rechargeable Battery	No	No	No
Carrying Bag Included	No	No	No
Packaging	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each

## Locators

### 3M™ Dynatel™ Locators 2250M/2273M Series

The 3M™ Dynatel™ Locator 2250M/2273M Series is designed to find the path and estimated depth of buried cables and pipes.

Features include:

- Four active frequencies
- Passive frequencies for power, cathodic protection systems and CATV
- Auxiliary frequencies for long distance locating from remote transmitters
- Direct readout of active duct probe (sonde)
- Cable/pair identification
- Toning of aerial cable
- Receivers incorporate an “expander” function to make peaks and nulls more pronounced
- Receiver and transmitter self-test each time the unit is turned on



IMAGE SHOWN: 2273M Series Locator

As with other locator models, the 3M™ Dynatel™ Locator 2273M performs all functions of the 2250M locator plus the ability to find underground faults.

	2250M-ID/UCU12W-RT	2250M-ID/UU3W-RT	2250M-ID/UU5W-6IN	2250M-ID/UU5W-RT
UPC	051115-30293	051115-13613	051115-18602	051115-13609
Cable/Pipe Locate	Yes	Yes	Yes	Yes
Fault Locate	No	No	No	No
Electronic Marker Locate	Yes	Yes	Yes	Yes
Transmitter	12 watt	3 watt	5 watt	5 watt
Direct Connect Cable	Small clips, Large clips	Large clips	Large clips	Large clips
Coupler Size	3 inches	3 inches	6 inches	3 inches
2200RB Rechargeable Battery	Yes	No	No	No
Carrying Bag Included	Yes	No	No	No
Packaging	1 each per box	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each	1 each
	2250M-UCU12W/RT	2250M-UU3W-RT	2250M-UU5W/RT	2273M-ID/UCU12W-RT
UPC	051115-30295	051115-13621	051115-13617	051115-30298
Cable/Pipe Locate	Yes	Yes	Yes	Yes
Fault Locate	No	No	No	Yes
Electronic Marker Locate	No	No	No	Yes
Transmitter	12 watt	3 watt	5 watt	12 watt
Direct Connect Cable	Small clips, Large clips	Large clips	Large clips	Small clips, Large clips
Coupler Size	3 inches	3 inches	3 inches	3 inches
2200RB Rechargeable Battery	Yes	No	No	Yes
Carrying Bag Included	Yes	No	No	Yes
Packaging	1 each per box	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each	1 each

## Locators

### 3M™ Dynatel™ Locators 2250M/2273M Series (continued)

	2273M-ID/UU3W-RT	2273M-ID/UU5W-6IN	2273M-ID/UU5W-RT	2273M-UCU12W/RT
UPC	051115-13597	051115-18600	051115-13593	051115-06018
Cable/Pipe Locate	Yes	Yes	Yes	Yes
Fault Locate	Yes	Yes	Yes	Yes
Electronic Marker Locate	Yes	Yes	Yes	No
Transmitter	3 watt	5 watt	5 watt	12 watt
Direct Connect Cable	Large clips	Large clips	Large clips	Small clips, Large clips
Coupler Size	3 inches	6 inches	3 inches	3 inches
2200RB Rechargeable Battery	No	No	No	Yes
Carrying Bag Included	No	No	No	Yes
Packaging	1 each per box	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each	1 each
	2273M-UU3W/RT	2273M-UU5W/RT		
UPC	051115-13605	051115-13601		
Cable/Pipe Locate	Yes	Yes		
Fault Locate	Yes	Yes		
Electronic Marker Locate	No	No		
Transmitter	3 watt	5 watt		
Direct Connect Cable	Large clips	Large clips		
Coupler Size	3 inches	3 inches		
2200RB Rechargeable Battery	No	No		
Carrying Bag Included	No	No		
Packaging	1 each per box	1 each per box		
Minimum Order	1 each	1 each per box		

## 3M™ Dynatel™ Locators 2550/2573 Series

Designed to be more accurate, faster and more integrated than most locators on the market, the 3M™ Dynatel™ Locators 2550/2573 Series represent an advancement in locating and fault finding technology for the field professional. Offering a broad feature set with advanced digital processing, the 2550/2573 Series locators combine simple interfaces with precision locating capabilities.

Features include:

- Six active frequencies for direct connect
- Trace view mapping display mode
- Four induction frequencies with maximum allowed output power
- All frequency mode in direct connect (four simultaneously)
- EMS-iD capability on select models



IMAGE SHOWN: 2550 Series Locator

As with other locator models, the 3M™ Dynatel™ Locator 2573 performs all functions of the 2550 locator plus the ability to find underground faults.

	2550-ID/U3	2550-ID/U12	2550-U3	2550-U12
UPC	051135-33184	051115-53532	051135-33183	051115-53530
Cable/Pipe Locate	Yes	Yes	Yes	Yes
Fault Locate	No	No	No	No
Electronic Marker Locate	Yes	Yes	No	No
Transmitter	3 watt	12 watt	3 watt	12 watt
Direct Connect Cable	Large clips	Large clips	Large clips	Large clips
Coupler Size	4.5 inches	4.5 inches	4.5 inches	4.5 inches
2200RB Rechargeable Battery	No	Yes	No	Yes
Carrying Bag Included	Yes	Yes	Yes	Yes
Packaging	1 each per box	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each	1 each
	2573-ID/U3	2573-ID/U12	2573-U3	2573-U12
UPC	051135-33186	051115-53544	051135-33185	051115-53540
Cable/Pipe Locate	Yes	Yes	Yes	Yes
Fault Locate	Yes	Yes	Yes	Yes
Electronic Marker Locate	Yes	Yes	No	No
Transmitter	3 watt	12 watt	3 watt	12 watt
Direct Connect Cable	Large clips	Large clips	Large clip	Large clips
Coupler Size	4.5 inches	4.5 inches	4.5 inches	4.5 inches
2200RB Rechargeable Battery	No	Yes	No	Yes
Carrying Bag Included	Yes	Yes	Yes	Yes
Packaging	1 each per box	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each	1 each

## Locators

### 3M™ Dynatel™ Locators 7420 Series

3M™ Dynatel™ Marker Tape Locators 7420 are high performance locators that quickly and efficiently locate 3M™ EMS Caution Tape and existing electronic markers. In addition, the locators have the capability to read/write to 3M™ ID Markers.

Features include:

- Six active frequencies for direct connect
- Trace view mapping display mode
- Four induction frequencies with maximum allowed output power
- All frequency mode in direct connect (four simultaneously)
- EMS-ID capability on select models

As with other locator models, the 3M™ Dynatel™ Locator 2573 performs all functions of the 2550 locator plus the ability to find underground faults.



IMAGE SHOWN: 2550 Series Locator

7420	
UPC	051115-62464
Cable/Pipe Locate	Yes
Fault Locate	No
Electronic Marker Locate	Yes
Transmitter	3 watt
Direct Connect Cable	Large clips
Coupler Size	4.5 inches
2200RB Rechargeable Battery	No
Carrying Bag Included	Yes
Packaging	1 each per box
Minimum Order	1 each

## Locators

### 3M™ Dynatel™ Locators 7550/7553 Series

Designed to be more accurate, faster and more integrated than most locators on the market, the 3M™ Dynatel™ Locators 7500 Series represent an advancement in locating and fault finding technology for the field professional. Offering a broad feature set with advanced digital processing, the 7500 Series locators combine simple interfaces with precision locating capabilities.

Features include:

- Six active frequencies for direct connect
- Trace view mapping display mode
- Four induction frequencies
- All frequency mode in direct connect (four simultaneously)
- EMS-iD and EMS Tape capability on all models
- Push button depth to all 3M underground electronic markers



As with other locator models, the 3M™ Dynatel™ Locator 7573 performs all functions of the 7550 locator plus the ability to find underground faults.



Order No.	UPC	Electronic Marker/Tape Locate	Transmitter	Direct Connect Cable	Coupler Size	2200RB Rechargeable Battery	Carrying Bag Included	Packaging	Minimum Order
7550-ID/U12	051135-33198	Yes	12 watt	Large clips	4.5 inches	Yes	Yes	1 each per box	1 each
7550-ID/U3	051135-33196	Yes	3 watt	Large clips	4.5 inches	No	Yes	1 each per box	1 each
7550-ID/U5	051135-33197	Yes	5 watt	Large clips	4.5 inches	Yes	Yes	1 each per box	1 each
7573-ID/U12	051135-33204	Yes	12 watt	Large clips	4.5 inches	Yes	Yes	1 each per box	1 each
7573-ID/U3	051135-33202	Yes	3 watt	Large clips	4.5 inches	No	Yes	1 each per box	1 each
7573-ID/U5	051135-33203	Yes	5 watt	Large clips	4.5 inches	Yes	Yes	1 each per box	1 each

## Locator & Marker Accessories





### 3M™ Direct Connect Accessories

	2876	2892	8006
UPC	054007-71921	054007-19483	054007-34027
Product Name	3M™ Large Clip Direct-Connect Transmitter Cable for Most Cable/Fault Locators 2876	3M™ Small Clip Direct-Connect Transmitter Cable for All Cable/Fault Locators 2892	3M™ Ground Rod 8006
Description	Two lead, 10 ft cables used for direct connection to cable and ground.	Two lead, 10 ft cables used for direct connection to cable and ground.	For applying ground capability. Stainless steel.
Compatible With	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573
Packaging	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each

### 3M™ Direct Connect Accessories (continued)




	9012	9043
		
UPC	054007-31275	054007-34026
Product Name	3M™ Direct Connect, 5-foot Transmitter Cable, Telephone 9012	3M™ Ground Extension Cable 9043
Description	Two lead, 5 ft cables used for direct connection to conductor and ground. The 9012 cable has smaller Telco style alligator clips with an insulation piercing needle incorporated.	Extends ground capability to 12 ft.
Compatible With	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573
Packaging	1 each per box	1 each per box
Minimum Order	1 each	1 each

### 3M™ Couplers



	1196	1196/C	3001	3019
				
UPC	054007-19042	051115-18603	054007-31258	054007-91427
Product Name	3M™ 6" Dyna-Coupler with Pouch, 1196	3M™ 6" Dyna-Coupler with Pouch & 9011 Coupler Cable, 1196/C	3M™ 3" Dyna-Coupler, 3001	3M™ Cable Locator Coupler Accessory Kit 3019
Description	Permits coupling of RF trace tone to large diameter cables, bundle cables, and cables enclosed in accessible non-metallic ducts. For use on cables and conduits with a maximum diameter of 6.9 feet.	Permits coupling of RF trace tone to large diameter cables, bundle cables, and cables enclosed in accessible non-metallic ducts. For use on cables and conduits with a maximum diameter of 6.9 feet.	Permits coupling of RF trace tone to cables with a maximum diameter of 3 feet.	The 3019 Accessory Kit contains a 3001 3 inch Dyna-coupler and a 9011 Coupler Cable with a case that can be attached onto the locator.
Compatible With	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573
Packaging	1 each per box	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each	1 each







### 3M™ Couplers (continued)

	4001	4519	9011
			
UPC	051115-26012	051115-53600	054007-31274
Product Name	3M™ 4.5" Dyna-Coupler 4001	3M™ Locator Coupler Accessory Kit 4519	3M™ Coupler Cable 9011
Description	Permits coupling of RF trace tone to cables with a maximum diameter of 4.5 feet.	The 4519 Accessory Kit contains a 4001 4.5 inch Dyna-coupler and a 9011 Coupler Cable with a case that can be attached to the transmitter.	For use with any 3M Dynatel™ Transmitter, Receiver, or Coupler: length of 12 feet.
Compatible With	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573
Packaging	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each



### 3M™ Fault Finding Accessories

	3014	9026
		
UPC	054007-31267	054007-31284
Product Name	3M™ Earth Contact Frame 3014	3M™ Earth Contact Frame Cable 9026
Description	Used only when locating sheath (earth return) faults. It indicates direction to the fault and is color coded to correspond with the receiver's indicator.	For use with the 3014 Earth Contact Frame for sheath (earth return) fault location; length of 4 feet.
Compatible With	2273, 2273M, 2573, 7573	2273, 2273M, 2573, 7573
Packaging	1 each per box	1 each per box
Minimum Order	1 each	1 each




### 3M™ Dynatel™ Receivers

	2250-UR3	2250M-ID/UR	2250M-UR	2273-U3R
				
UPC	051138-36421	051115-13606	051115-13614	051138-88218
Product Name	3M™ Dynatel™ Locator Model 2250-UR Receiver Only	3M™ Ultra Advanced Cable/Pipe Locator US Receiver with ID Features 2250M-ID/UR	3M™ Ultra Advanced Cable/Pipe Locator US Receiver 2250M-UR	3M™ Cable/Fault Locator Receiver US 60HZ/ inches 2273-U3R
Description	3M™ Dynatel™ Locator Model 2250-UR Receiver only, US model.	Includes 2250M Receiver only with EMS-ID locating capabilities.	Includes 2250M Receiver only.	3M™ Dynatel™ Locator Model 2273 Receiver only, US model.
Compatible With	2250-U3T, 2250-U5T	2250-U3T, 2250-U5T	2250-U3T, 2250-U5T	2273-U3T, 2273-U5T
Packaging	1 each per box	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each	1 each

### 3M™ Dynatel™ Receivers (continued)

	2273M-ID/UR	2273M-UR	2573-ID/UR
			
UPC	051115-13590	051115-13598	051135-33081
Product Name	3M™ Cable/Pipe/Fault Locator US Receiver with ID Features 2273M-ID/UR	3M™ Cable/Pipe Fault Locator US Receiver 2273M-UR	3M™ Cable/Pipe/Fault Locator US Receiver with ID Features 2573-ID/UR
Description	Includes 2273M Receiver only with EMS-ID locating capabilities.	Includes 2273M Receiver only.	Includes 2573 Receiver only with EMS-ID locating capabilities.
Compatible With	2250-U3T, 2250-U5T, 2250-U12WT	2250-U3T, 2250-U5T, 2250-U12WT	2250-U3T, 2250-U5T, 2250-U12WT
Packaging	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each


### 3M™ Dynatel™ Transmitters

	2250M-U12WT	2273-U3T	2273M-U12WT
			
UPC	051115-06080	051138-88219	051115-30286
Product Name	3M™ Dynatel™ 12-watt Transmitter 2200M Series, 2250M-U12WT	3M™ Cable/Fault Locator Transmitter US 3W 2273-U3T	3M™ Dynatel™ 12-watt Transmitter 2200M Series, 2273M-U12WT
Description	Includes 2250M 12-watt Transmitter, ground rod, and rechargeable battery.	Includes 2273/2273M transmitter only.	Includes 2273M 12-watt Transmitter, ground rod, and rechargeable battery.
Compatible With	2250-UR, 2250M-UR, 2250M-ID/UR	2273-UR, 2273M-UR, 2273M-ID/UR	2250-UR, 2250M-UR, 2250M-ID/UR
Packaging	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each

### 3M™ Locator Carrying Bags and Batteries

	2200	2200M	2200M-USB	2200/7000RB
				
UPC	051138-57443	051115-14549	051115-30290	051115-18256
Product Name	3M™ Soft Carrying Bag	3M™ Soft Carrying Bag	3M™ USB Cord for 2200M/1420	3M™ Rechargeable Battery
Description	Soft carrying bag for the 2200 series product line (2250 and 2273).	Soft carrying bag for the 2200M, 2500, and 7000 series product line.	USB cord to the RS232 Converter for 1420, 2200M, 2500 and 7000 series locators.	2200RB Series rechargeable battery for 5- and 12-watt transmitters.
Compatible With	2250/2273	1420, 2200M, 2250M/2273M, 2550/2573, 7420, 7550/7573	1420, 2250M/2273M, 2550/2573, 7420, 7550/7573	2273-U5T, 2250-U12WT, 2273-U12WT
Packaging	1 each per box	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each	1 each

## 3M™ Sondes

3229	
	
UPC	054007-92360
Product Name	3M™ ADP 33KHZ Sonde for use with 3M Dynatel™ Series Locators 3229
Description	The 3200 Series Active Duct Probe is an active mini-transmitter (sonde) which allows the user to trace the path of conduit. The ADP can help the user pinpoint key points, such as J-boxes, handholes and stubs.
Compatible With	2250/2273, 2220M, 2250M/2273M, 2550/2573, 7550/7573
Packaging	1 each per box
Minimum Order	1 each

## 3M™ Dynatel™ Marker EZ Writer Station

	1420EZ-STATION	1420EZ-STAND	1420EZ-WRITER
			
UPC	051115-30242	051115-30243	051115-30241
Product Name	3M™ Dynatel™ 1420EZ-Station	3M™ Dynatel™ 1420EZ-Stand	3M™ Dynatel™ 1420EZ-Writer
Description	Writer and stand (writes up to 10 ID markers).	Stand only (writes up to 10 ID markers).	Writer only (for use with 1420EZ-STAND).
Packaging	1 each per box	1 each per box	1 each per box
Minimum Order	1 each	1 each	1 each
Compatible With		1420EZ-WRITER	1420

## Markers

### 3M™ EMS Extended-Range Ball Markers

The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

Marker Type	Ball Marker
Passive Depth	5 ft (1.5 m)
Programmable Depth	5 ft (1.5 m)
Dimensions (Inches)	4 in Diameter
Dimensions (Metric)	10.2 cm Diameter



Order No.	UPC	Programmable/Passive	Application/Industry	Packaging	Minimum Order
1401-XR	051138-88364	Passive	Telephone	30 each per box	30 each
1402-XR	051138-88365	Passive	Power	30 each per box	30 each
1403-XR	051138-71764	Passive	Water	30 each per box	30 each
1404-XR	051138-71765	Passive	Wastewater	30 each per box	30 each
1405-XR	051138-71734	Passive	Gas	30 each per box	30 each
1407-XR	051138-88366	Passive	CATV	30 each per box	30 each
1408-XR	051138-75702	Passive	General Purpose	30 each per box	30 each
1421-XR/ID	051115-13688	Programmable	Telephone	30 each per box	30 each
1422-XR/ID	051115-13689	Programmable	Power	30 each per box	30 each
1423-XR/ID	051115-13791	Programmable	Water	30 each per box	30 each
1424-XR/ID	051115-13792	Programmable	Wastewater	30 each per box	30 each
1425-XR/ID	051115-13793	Programmable	Gas	30 each per box	30 each
1427-XR/ID	051115-13690	Programmable	CATV	30 each per box	30 each
1428-XR/ID	051115-13691	Programmable	General Purpose	30 each per box	30 each

## Markers

### 3M™ EMS Near-Surface Markers

The 3M™ EMS Near-Surface Markers provide an accurate, long-lasting method of marking underground facilities. The markers have a range of up to three feet from marker to locator and can be programmed to include customer specific information (ID version).

<b>Marker Type</b>	Near Surface
<b>Passive Depth</b>	2 ft (0.6 m)
<b>Programmable Depth</b>	3 ft (0.9 m)
<b>Dimensions (Inches)</b>	3 in Height x .78 in Diameter
<b>Dimensions (Metric)</b>	7.6 cm Height x 2 cm Diameter



Order No.	UPC	Programmable/Passive	Application/Industry	Packaging	Minimum Order
1432	054007-69162	Passive	Telephone	50 each per box	50 each
1432-XR/ID	051115-22750	Programmable	Telephone	50 each per box	50 each
1433	054007-69168	Passive	Power	50 each per box	50 each
1433-XR/ID	051115-22751	Programmable	Power	50 each per box	50 each
1434	054007-69169	Passive	Water	50 each per box	50 each
1434-XR/ID	051115-22752	Programmable	Water	50 each per box	50 each
1435	054007-69170	Passive	Wastewater	50 each per box	50 each
1435-XR/ID	051115-22753	Programmable	Wastewater	50 each per box	50 each
1436	054007-69171	Passive	Gas	50 each per box	50 each
1436-XR/ID	051115-22754	Programmable	Gas	50 each per box	50 each
1437-XR/ID	051115-30248	Programmable	CATV	50 each per box	50 each
1438-XR/ID	051115-22755	Programmable	General Purpose	50 each per box	50 each

## Markers

### 3M™ EMS Mini-Markers

3M™ EMS Mini-Markers provide an accurate, convenient, long-lasting method of marking underground facilities at depths of up to six feet (1.8 m) from marker to locator.

Marker Type	Mid-Range
Passive Depth	6 ft (1.8 m)
Programmable Depth	N/A
Dimensions (Inches)	8.25 in Diameter x 1.25 in Thick
Dimensions (Metric)	20.1 cm Diameter x 3.2 cm Thick



Order No.	UPC	Programmable/Passive	Application/Industry	Packaging	Minimum Order
1255	054007-37764	Passive	Telephone	50 each per box	50 each
1256	054007-37765	Passive	Power	50 each per box	50 each
1257	054007-37766	Passive	Water	50 each per box	50 each
1258	054007-37767	Passive	Wastewater	50 each per box	50 each
1259	054007-37768	Passive	Gas	50 each per box	50 each

### 3M™ EMS Full-Range Markers

3M™ EMS Full-Range Markers provide an accurate, convenient, long-lasting method of marking underground facilities. The marker has a range of up to eight feet (2.4 m) from marker to locator, and can be programmed to include customer specific information (ID version).

Marker Type	Full Range
Passive Depth	8 ft (2.4 m)
Programmable Depth	8 ft (2.4 m)
Dimensions (Inches)	15 in Diameter x .65 in Thick
Dimensions (Metric)	38.1 cm Diameter x 1.7 cm Thick



Order No.	UPC	Programmable/Passive	Application/Industry	Packaging	Minimum Order
1248-XR/ID	051115-22749	Programmable	General Purpose	25 each per box	25 each
1250	054007-37699	Passive	Telephone	25 each per box	25 each
1250-XR/ID	051115-22744	Programmable	Telephone	25 each per box	25 each
1251	054007-37706	Passive	Power	25 each per box	25 each
1251-XR/ID	051115-22745	Programmable	Power	25 each per box	25 each
1252	054007-37727	Passive	Water	25 each per box	25 each
1252-XR/ID	051115-22746	Programmable	Water	25 each per box	25 each
1253	054007-37726	Passive	Wastewater	25 each per box	25 each
1253-XR/ID	051115-22747	Programmable	Wastewater	25 each per box	25 each

## Markers

### 3M™ EMS Full-Range Markers (continued)

Order No.	UPC	Programmable/Passive	Application/Industry	Packaging	Minimum Order
1254	054007-37731	Passive	Gas	25 each per box	25 each
1254-XR/ID	051115-22748	Programmable	Gas	25 each per box	25 each

### 3M™ Extended-Range Disk Markers (Not for Direct Bury)

3M™ Extended-Range 5' Disk Markers are not for direct buried applications and provide an easy, accurate method of locating flush-mounted facilities which become covered by backfill or other obstructions, such as snow or vegetation. ID version markers can be programmed to include customer specific information.

<b>Marker Type</b>	Disk Marker
<b>Passive Depth</b>	5 ft (1.5 m)
<b>Programmable Depth</b>	5 ft (1.5 m)
<b>Dimensions (Inches)</b>	4 in Diameter x .38 in Thick
<b>Dimensions (Metric)</b>	10.2 cm Diameter x 0.09 cm Thick



Order No.	UPC	Programmable/Passive	Application/Industry	Packaging	Minimum Order
1411-XR	051138-88369	Passive	Telephone	210 each per box	210 each
1411-XR/ID	051115-16091	Programmable	Telephone	210 each per box	210 each
1412-XR	051138-88370	Passive	Power	210 each per box	210 each
1412-XR/ID	051115-16092	Programmable	Power	210 each per box	210 each
1413-XR	051138-71735	Passive	Water	210 each per box	210 each
1413-XR/ID	051115-16093	Programmable	Water	210 each per box	210 each
1414-XR	051138-71736	Passive	Wastewater	210 each per box	210 each
1414-XR/ID	051115-16094	Programmable	Wastewater	210 each per box	210 each
1415-XR	051138-71737	Passive	Gas	210 each per box	210 each
1415-XR/ID	051115-16095	Programmable	Gas	210 each per box	210 each
1417-XR	051138-75575	Passive	CATV	210 each per box	210 each
1418-XR	051138-87075	Passive	General Purpose	210 each per box	210 each



# Fire Protection Products

The complete line of 3M™ Fire Protection Products, when properly installed, helps prevent fires, smoke, toxic fumes and moisture from passing through penetrations in fire-rated walls and floors. These easy-to-install products are suitable for a wide variety of firestop applications, including plastic pipes, metal pipes, HVAC ductwork, cables, construction gaps, grease ducts, top of wall and control joints.



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## Sealants and Packing Material

All 3M™ Fire Barrier Sealants have either intumescent, endothermic or ablative technologies designed to provide a tight and dependable seal against fire, smoke, toxic fumes and moisture when properly installed. 3M intumescent sealants expand up to 10 times their original size when exposed to temperatures over 300°F (149°C). This intumescent action forms a strong, insulating char that seals the opening for up to four hours when exposed to extreme heat.

Fire barrier sealants are ideal for new construction or retrofit in a wide variety of applications such as metal, plastic, insulated

and glass pipe, construction gaps, dynamic joints, HVAC ductwork and insulated cable applications.

All come in convenient job-size packages and install easily with a standard caulking gun, pneumatic pumping equipment or putty knife.






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## 3M™ Fire Barrier Sealant CP 25WB+

3M™ Fire Barrier Sealant CP 25WB+ is a high-performance, ready-to-use, gun-grade, latex-based, intumescent sealant that dries to form a monolithic fire-stop seal that also acts as a barrier to airborne sound transmission. 3M Fire Barrier Sealant CP 25WB+ helps control the spread of fire, smoke and noxious gasses before, during and after exposure to a fire when installed in accordance with a listed through penetration or fire-resistive joint assembly system.

Fire Barrier Sealant CP25WB+ blank openings and penetrations passing through fire-rated floor, floor/ceiling or wall assemblies and other fire-rated interior building construction. The unique intumescent property of this material allows 3M Fire Barrier Sealant CP 25WB+ to expand and help maintain a firestop penetration seal for up to 4 hours as penetrants are exposed to fire. 3M Fire Barrier Sealant CP 25WB+ exhibits excellent adhesion to a full range of construction substrates and penetrants. No mixing is required.

<b>Description</b>	Intumescent Sealant
<b>Properties</b>	Latex Based
<b>Application Temperature Range</b>	40–122°F (4–50°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	Fire Barrier up to 4 Hr; Smoke Seal L Rated; STC 54 Rating; L-Rating; LEED® VOC environmental regulations
<b>Agency Approvals</b>	   IBC; IRC; IFC; IPC; IMC; NFPA 5000; NEC (NFPA 70); NPFA 101



Order No.	UPC	Product Name	Color	Size	Case Quantity
CP-25WB+10.1OZ	051115-11638	3M™ Fire Barrier Sealant CP 25WB+, 10.1 fl. oz., Cartridge	Red	10.1 fl oz (298 ml)	12
CP-25WB+20OZ	051115-11642	3M™ Fire Barrier Sealant CP 25WB+, 20 fl. oz., Sausage	Red	20 fl oz (591 ml)	10
CP-25WB+27OZ	051115-11641	3M™ Fire Barrier Sealant CP 25WB+, 27 fl. oz., Cartridge	Red	27 fl oz (798 ml)	6
CP-25WB+2GAL	051115-11639	3M™ Fire Barrier Sealant CP 25WB+, 2 gallon, Pail	Red	2 gal (7,6 l)	1
CP-25WB+5GAL	051115-11640	3M™ Fire Barrier Sealant CP 25WB+, 5 gallon, Pail	Red	5 gal (18,9 l)	1

## 3M™ Fire Barrier Sealant IC 15WB+

3M™ Fire Barrier Sealant IC 15WB+ is an economical, one-part, gun-grade, latex-based, intumescent firestop sealant that dries to form a monolithic firestop seal that also acts as a barrier to airborne sound transmission. 3M Fire Barrier Sealant IC 15WB+ firestops through penetrations passing through fire-rated floor, floor/ceiling or wall assemblies, as well as other fire-rated interior building partitions and assemblies (e.g. static construction joints or blank openings) when properly installed. In addition, the unique intumescent property of this material allows 3M Fire Barrier Sealant IC 15WB+ to expand and help maintain a firestop penetration seal for up to 3 hours as penetrants are exposed to fire. 3M Fire Barrier Sealant IC 15WB+ bonds to most construction substrates, including: gypsum wallboard, concrete, metals, wood, plastic (including CPVC) and cable jacketing. No mixing is required.

<b>Description</b>	Intumescent Sealant
<b>Properties</b>	Latex Based
<b>Application Temperature Range</b>	40–122°F (4–50°C)
<b>RoHS 2011/65/EU</b>	Undetermined
<b>Specifications</b>	Fire Barrier up to 3 Hr; Smoke Seal L Rated; STC Rating 54; L-Rating; LEED® VOC environmental requirements
<b>Agency Approvals</b>	IBC; IRC, NBCC; IFC; IPC; IMC; NPFA 5000; NEC (NFPA 70); NFPA 101



Order No.	UPC	Product Name	Color	Size	Case Quantity
IC-15WB+-10.1OZ	051115-16557	3M™ Fire Barrier Sealant IC 15WB+, 10.1 fl. oz., Cartridge	Yellow	10.1 fl oz (296 ml)	12
IC-15WB+-20OZ	051115-16560	3M™ Fire Barrier Sealant IC 15WB+, 20 fl. oz., Sausage	Yellow	20 fl oz (591 ml)	10
IC-15WB+-4.5GAL	051115-16558	3M™ Fire Barrier Sealant IC 15WB+, 4.5 gallon, Pail	Yellow	4.5 gal (15,1 l)	1

## 3M™ Fire Block Sealant FB 136

3M™ Fire Block Sealant FB 136 is a one component, non-combustible draft, smoke and fireblocking sealant, designed to resist high temperatures and smoke passage in non-rated construction. Fire Block Sealant FB 136 meets ASTM E-136, current 2003 International Building Code (IBC), 2003 International Residential Code (IRC), 2003 International Residential Mechanical Code, 2003 International Fuel Gas Code and NFPA 5000 draft, smoke and fireblocking requirements.

3M™ Fire Block Sealant FB 136 features excellent adhesion strength, caulk rate and no sag application.

3M™ Fire Block Sealant FB 136 can be installed with a standard caulking gun, pneumatic pumping equipment or it can be easily applied with a putty knife or trowel. Fire Block Sealant FB 136 will bond to concrete, brick, metals, wood, plastic and cable jacketing. No mixing is required.

<b>Description</b>	Water Based Sealant
<b>Agency Approvals</b>	IBC; IFC; IRC; International Residential Mechanical Code; International Fuel Gas Code; NFPA 5000



Order No.	UPC	Product Name	Color	Size	Case Quantity
FB-136	051115-16591	3M™ Fire Block Sealant FB 136, 10.1 fl. oz., Cartridge	Gray	10.1 fl oz (298 ml)	12

## 3M™ Fire Barrier Sealant FD 150+ (RED)

3M™ Fire Barrier Sealant FD 150+ is a ready to use, gun-grade, elastomeric sealant that dries to form a monolithic flexible seal. 3M™ Fire Barrier Sealant FD 150+ firestops joints and through penetrations through floor slabs, walls and other fire-rated building partitions and assemblies. 3M™ Fire Barrier Sealant FD 150+, when properly installed, helps control the spread of fire, smoke and noxious gasses before, during and after exposure to a fire. 3M™ Fire Barrier Sealant FD 150+ remains elastomeric and exhibits excellent adhesion to a full range of construction substrates.


<b>Description</b>	Water Based Sealant
<b>Properties</b>	Elastomeric Based
<b>Application Temperature Range</b>	40–122°F (4–50°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	Fire Barrier up to 4 Hr; Smoke Seal L Rated; STC Rating 56; Elastomeric +- 19%; LEED® VOC environmental regulations; IBC
<b>Agency Approvals</b>	IBC; IRC; IFC; IPC; IMC; NFPA 5000; NEC (NFPA 70); NFPA 101



Order No.	UPC	Product Name	Color	Size	Case Quantity
FD150+RED(10.1OZ)	051115-18812	3M™ Fire Barrier Sealant FD 150+, Red, 10.1 fl. oz., Cartridge	Red	10.1 fl oz (298 ml)	12
FD150+RED(20OZ)	051115-18810	3M™ Fire Barrier Sealant FD 150+, Red, 20 fl. oz., Sausage	Red	20 fl oz (591 ml)	12
FD150+RED(28OZ)	051115-18811	3M™ Fire Barrier Sealant FD 150+, Red, 28 fl. oz., Cartridge	Red	28 fl oz (828 ml)	6
FD150+RED(4.5GAL)	051115-18813	3M™ Fire Barrier Sealant FD 150+, Red, 4.5 gal, Pail	Red	4.5 gal (15,1 l)	1

## 3M™ Fire Barrier Water Tight Sealant 3000 WT (W-Rated)

3M™ Fire Barrier Water Tight Sealant 3000 WT is a premium, ready-to-use, single component, neutral cure, non-slumping, intumescent silicone sealant. The sealant cures upon exposure to atmospheric humidity to form a flexible seal. 3M™ Fire Barrier Water Tight Sealant 3000 WT is used to firestop openings and penetrations through fire rated floor slabs, walls, other building partitions and assemblies. 3M™ Fire Barrier Water Tight Sealant 3000 WT, when properly installed, will help control the spread of fire, smoke and noxious gases. 3M™ Fire Barrier Water Tight Sealant 3000 WT also meets the new UL Water Leakage Test, W Rating – Class 1 requirements for systems tested and listed in accordance with ANSI/UL 1479.

<b>Description</b>	Water Tight Sealant Intumescent
<b>Properties</b>	Silicone
<b>Application Temperature Range</b>	-20–122°F (-29–50°C)
<b>Specifications</b>	UL Water Leakage Test, W-Rating- Class 1; ANSI/UL 1479; STC Rating 53; L-Rating; LEED® VOC environmental regulations; IBC
<b>Agency Approvals</b>	 Intertek; Omega Point Laboratories





Order No.	UPC	Product Name	Color	Size	Case Quantity
3000WT-10.1OZ	051115-16593	3M™ Fire Barrier Water Tight Sealant 3000 WT, 10.1 fl. oz., Cartridge	Gray	10.1 fl oz (298 ml)	12
3000WT	051115-18788	3M™ Fire Barrier Water Tight Sealant 3000 WT, 20 fl. oz., Sausage	Gray	20 fl oz (591 ml)	12
3000WT-4.5GAL	051115-16594	3M™ Fire Barrier Water Tight Sealant 3000 WT, 4.5 gallon, Pail	Gray	4.5 gal (15,1 l)	1

## 3M™ Fire Barrier Water Tight Sealant 1000 NS

3M™ Fire Barrier Water Tight Sealant 1000 NS is a ready-to-use, single component, neutral cure, silicone sealant that cures upon exposure to atmospheric humidity to form a flexible firestop seal. 3M™ Fire Barrier Water Tight Sealant helps control the spread of fire, smoke and noxious gasses before, during and after exposure to a fire when installed in accordance with a listed through penetration or fire-resistive joint assembly.

3M™ Fire Barrier Water Tight Sealant 1000 NS is a non-slump firestop used primarily on vertical surfaces. The firestop sealant also meets UL Water Leakage Test, W Rating – Class 1 requirements for systems tested and listed in accordance with ANSI/UL 1479. Product is elastomeric, ready-to use and exhibits excellent weather ability.

<b>Description</b>	Water Tight Sealant Non-Slump
<b>Properties</b>	Silicone
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	Fire Barrier 3 Hr; Smoke Seal L-Rated; Sound Barrier STC-Rating 56; Elastometric +-25%; Water Barrier UL W-Rating Class-1; ANSI/UL 1479; LEED® VOC environmental regulations
<b>Agency Approvals</b>	  Intertek; NEC (NFPA 70); IBC; IFC; IRC; NFPA 101; NFPA 5000




Order No.	UPC	Product Name	Color	Size	Case Quantity
1000-N/S-10.10Z	051115-11535	3M™ Fire Barrier Water Tight Sealant 1000 NS, 10.1 fl. oz., Cartridge	Light Gray	10.1 fl oz (295,6 ml)	12
1000NS	051115-18790	3M™ Fire Barrier Water Tight Sealant 1000 NS, 20 fl. oz., Sausage	Light Gray	20 fl oz (591,3 ml)	12
1000-N/S-4.5GAL	051115-11537	3M™ Fire Barrier Water Tight Sealant 1000 NS, 4.5 gallon, Pail	Light Gray	4.5 gal (15,1 l)	1



## 3M™ Fire Barrier Sealant FD 150+ (BLUE)

3M™ Fire Barrier Sealant FD 150+ is a ready to use, gun-grade, elastomeric sealant that dries to form a monolithic flexible seal. 3M™ Fire Barrier Sealant FD 150+ firestops joints and through penetrations through floor slabs, walls and other fire-rated building partitions and assemblies. 3M™ Fire Barrier Sealant FD 150+, when properly installed, helps control the spread of fire, smoke and noxious gasses before, during and after exposure to a fire. 3M™ Fire Barrier Sealant FD 150+ remains elastomeric and exhibits excellent adhesion to a full range of construction substrates.

<b>Description</b>	Water Based Sealant
<b>Properties</b>	Elastomeric Based
<b>Application Temperature Range</b>	40–122°F (4–50°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	Fire Barrier up to 4 Hr; Smoke Seal L Rated; STC Rating 56; Elastomeric +- 19%; LEED® VOC environmental regulations; IBC
<b>Agency Approvals</b>	 IBC; IRC; IFC; IPC; IMC; NFPA 5000; NEC (NFPA 70); NFPA 101



Order No.	UPC	Product Name	Color	Size	Case Quantity
FIREDAM-150+10.1OZ	051115-11574	3M™ Fire Barrier Sealant FD 150+, Blue, 10.1 fl. oz., Cartridge	Blue	10.1 fl oz (298 ml)	12
FIREDAM-150+20OZ	051115-11634	3M™ Fire Barrier Sealant FD 150+, Blue, 20 fl. oz., Sausage	Blue	20 fl oz (591 ml)	12
FIREDAM-150+28OZ	051115-11602	3M™ Fire Barrier Sealant FD 150+, Blue, 28 fl. oz., Cartridge	Blue	28.5 fl oz (842 ml)	6
FIREDAM-150+4.5GAL	051115-11575	3M™ Fire Barrier Sealant FD 150+, Blue, 4.5 gallon, Pail	Blue	4.5 gal (15,1 l)	1

## 3M™ Fire Barrier Water Tight Sealants 1003 SL (W-Rated)

3M™ Fire Barrier Water Tight Sealant 1003 SL is a ready-to-use, single component, neutral cure, silicone sealants that cure upon exposure to atmospheric humidity to form a flexible firestop seal. 3M™ Fire Barrier Water Tight Sealants helps control the spread of fire, smoke and noxious gasses before, during and after exposure to a fire when installed in accordance with a listed through penetration or fire-resistive joint assembly.

3M™ Fire Barrier Water Tight Sealant 1003 SL is a self-leveling firestop ideal for floor applications. The firestop sealant also meets UL Water Leakage Test, W Rating – Class 1 requirements for systems tested and listed in accordance with ANSI/UL 1479. Both products are elastomeric, are ready-to use and exhibit excellent weather ability.


<b>Description</b>	Water Tight Sealant Self-Leveling
<b>Properties</b>	Silicone
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	Fire Barrier 3 Hr; Smoke Seal L-Rated; Sound Barrier STC-Rating 56; Elastometric +-25%; Water Barrier UL W-Rating Class-1; ANSI/UL 1479; LEED® VOC environmental regulations
<b>Agency Approvals</b>	 Intertek; NEC (NFPA 70); IBC; IFC; IRC; NFPA 101; NFPA 5000



Order No.	UPC	Product Name	Color	Size	Case Quantity
1003-S/L-10.10Z	051115-11538	3M™ Fire Barrier Water Tight Sealant 1003 SL, 10.1 fl. oz., Cartridge	Light Gray	10.1 fl oz (295,6 ml)	12
1003SL	051115-18789	3M™ Fire Barrier Water Tight Sealant 1003 SL, 20 fl. oz., Sausage	Light Gray	20 fl oz (591,3 ml)	12
1003-S/L-4.5GAL	051115-11540	3M™ Fire Barrier Water Tight Sealant 1003 SL, 4.5 gallon, Pail	Light Gray	4.5 gal (15,1 l)	1

## 3M™ Fire Barrier Sealant FD 150+ (LIMESTONE)

3M™ Fire Barrier Sealant FD 150+ is a ready to use, gun-grade, elastomeric sealant that dries to form a monolithic flexible seal. 3M™ Fire Barrier Sealant FD 150+ firestops joints and through penetrations through floor slabs, walls and other fire-rated building partitions and assemblies. 3M™ Fire Barrier Sealant FD 150+, when properly installed, helps control the spread of fire, smoke and noxious gasses before, during and after exposure to a fire. 3M™ Fire Barrier Sealant FD 150+ remains elastomeric and exhibits excellent adhesion to a full range of construction substrates.

<b>Description</b>	Water Based Sealant
<b>Properties</b>	Elastomeric Based
<b>Application Temperature Range</b>	40–122°F (4–50°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	Fire Barrier up to 4 Hr; Smoke Seal L Rated; STC Rating 56; Elastomeric +- 19%; LEED® VOC environmental regulations; IBC
<b>Agency Approvals</b>	 IBC; IRC; IFC; IPC; IMC; NFPA 5000; NEC (NFPA 70); NFPA 101



Order No.	UPC	Product Name	Color	Size	Case Quantity
FIREDAM-150+10L	051115-16564	3M™ Fire Barrier Sealant FD 150+, Limestone, 10.1 fl. oz., Cartridge	Limestone	10.1 fl oz (298 ml)	12
FIREDAM-150+20L	051115-16567	3M™ Fire Barrier Sealant FD 150+, Limestone, 20 fl. oz., Sausage	Limestone	20 fl oz (591 ml)	12
FIREDAM-150+28L	051115-16566	3M™ Fire Barrier Sealant FD 150+, Limestone, 28 fl. oz., Cartridge	Limestone	28.5 fl oz (842 ml)	6
FIREDAM-150+4.5L	051115-16565	3M™ Fire Barrier Sealant FD 150+, Limestone, 4.5 gallon, Pail	Limestone	4.5 gal (17,0 l)	1

## 3M™ Fire Barrier Silicone Sealant 2000+ (Water Resistant)

3M™ Fire Barrier Silicone Sealant 2000+ is a ready-to-use, gun-grade, one-component non-slump silicone elastomer that cures upon exposure to atmospheric humidity to form a flexible firestop seal that also resists water leakage and acts as a barrier to airborne sound transmission. 3M™ Fire Barrier Silicone Sealant 2000+ helps control the spread of fire, smoke and noxious gasses before, during and after exposure to a fire when installed in accordance with a listed through penetration or fire-resistive joint assembly.

3M™ Fire Barrier Silicone Sealant 2000+ firestops penetrations passing through fire-rated floor, floor/ceiling or wall assemblies, as well as dynamic construction joints, blank openings and other fire-rated interior building construction. The sealant remains elastomeric, bonds to most common construction materials and exhibits excellent weatherability during construction. No mixing is required.

<b>Description</b>	Non-Slump Silicone Elastomer
<b>Application Temperature Range</b>	-20–122°F (-29–50°C)
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	Fire Barrier 4 Hr Protection; Smoke Seal L-Rated; Sound Barrier STC-56 Rating; Elastomeric +-13%; LEED® VOC environmental regulations
<b>Agency Approvals</b>	Intertek Omega Point Laboratories; IBC; IRC; IFC; IPC, IMC; NFPA 5000; NEC (NFPA 70); NFPA 101



Order No.	UPC	Product Name	Color	Size	Case Quantity
2000+10.3OZ	051115-11558	3M™ Fire Barrier Silicone Sealant 2000+, 10.3 fl. oz., Cartridge	Light Gray	10.3 fl oz	12
2000+5GAL	051115-11559	3M™ Fire Barrier Silicone Sealant 2000+, 4.5 gallon, Pail	Light Gray	4.5 gal	1

## 3M™ FireDam™ Spray 200

3M™ FireDam™ Spray 200 is a sprayable water-based material, that dries to form a tough, elastomeric coating. This material when used as part of an assembly is intended to firestop building joints, perimeter joints (curtain wall), and through penetration seals. This firestop spray helps prevent the spread of fire, smoke and noxious gas when properly installed. In addition, this product acts as an acoustic barrier by minimizing noise transfer (STC-Rating of 56 when tested in a STC 56-rated wall assembly). Note: when tested at 50% movement for 100 cycles in a 4-inch joint, product remained elastomeric and did not show signs of cracking.

The coating complies with the current requirements of the International Building Code (IBC), NFPA 5000 and NFPA 101. It has been fire tested and evaluated for use in construction joints under the pass/fail criteria of ASTM E 1966 (UL 2079), for Perimeter Joints under the pass/fail criteria of ASTM E 2307 and for Through Penetrations under the pass/fail criteria of ASTM E 814 (UL 1479) Standard.

<b>Description</b>	Water Based Sealant
<b>Properties</b>	Water Based
<b>Specifications</b>	Fire Barrier 4 Hr Protection; Smoke Seal L-Rated; Sound Barrier STC-56 Rated; Elastomeric +-50%
<b>Agency Approvals</b>	Intertek; Omega Point Laboratories; FM Approved; IBC; NBCC; NPFA 5000; NFPA 101



Order No.	UPC	Product Name	Color	Size	Case Quantity
FIREHAM200-5G	051115-18797	3M™ FireDam™ Spray 200, Gray, 5 gallon, Pail	Gray	5 gal (18,9 l)	1
FIREHAM-SPRAY-5GAL	051115-18798	3M™ FireDam™ Spray 200, Red, 5 gallon, Pail	Red	5 gal (18,9 l)	1

## 3M™ Fire Barrier Packing Material PM 4

3M™ Fire Barrier Packing Material PM4 is designed to be used as an alternative packing material to mineral wool, fiberglass and backer rod in through-penetration firestop systems. With excellent strength and flexibility characteristics, it is an ideal through-penetration packing material. PM4 is also non-asbestos, mold resistant, and inorganic. This installation friendly material is easy to dispense and its compact packaging is optimized for portability. The smooth textured woven material can be torn by hand, virtually eliminating the need for a knife.

<b>Description</b>	Hand-Tear Dispensed Packing Material
<b>Specifications</b>	UL 1479 (ASTM E 814) 4 Hr Fire Rating; ASTM E 84; ASTM E 136; ASTM E 814; ASTM C 1338; UL 1479
<b>Agency Approvals</b>	ICC; BOCA; ICBO; SBCCI



Order No.	UPC	Product Name	Length	Width	Thickness	Case Quantity
PM4-BULK	051115-18764	3M™ Fire Barrier Packing Material PM4	20.5' (6,25 m)	4.0" (10,16 cm)	0.5" (12,7 mm)	5

## Pillows and Putty

The 3M™ Fire Barrier Pillow is a self-contained, highly intumescent product designed to firestop a wide variety of through-penetrations including cable trays (up to two per opening), conduit and blank openings, which penetrate fire-rated construction. During a fire, 3M Fire Barrier Pillow intumesces (expands) and locks itself into place, completely surrounding the penetrant(s) stopping smoke, fire and toxic gases from spreading to the next room or next floor for the rated time period. They are easy to install and great for retrofit projects. Just remove and replace pillows as needed.



3M Fire Barrier Moldable Putty+ is a one-part, halogen-free product designed to firestop electrical outlet boxes and a wide variety of through penetrations including cable, conduit, insulated pipe and metal pipe, which penetrate fire-rated construction. During a fire, in a through-penetration application, 3M Fire Barrier Moldable Putty+ intumesces (expands) in the annular space. It completely surrounds the penetrant and stops fire and hot gases from spreading to the next room or next floor for the rated time period. 3M Fire Barrier Moldable Putty Pads MPP+ on electrical outlet boxes will provide thermal and fire resistance plus reduce sound transmission in fire rated wall assemblies.

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## Pillows and Putty

### 3M™ Fire Barrier Self-Locking Pillows

3M™ Fire Barrier Self-Locking Pillows are a self-contained, intumescent firestop product for use in through-penetration firestops. Simple to use, with interlocking strips that lock pillows together. The 3M™ Fire Barrier Self-Locking Pillows achieve up to 3-hour fire ratings when tested by Underwriters Laboratories, Inc. in accordance with ASTM E 814 (UL1479) and CAN/ULC-S115.

RoHS 2011/65/EU Yes  
 Specifications 3 Hr Fire Ratings; UL L-Rating (Air Leakage); ASTM E 814; ASTM E 84; CAN/ULC-S115

Agency Approvals   



Order No.	UPC	Product Name	Size	Case Quantity
SLP-SMALL*	051115-16578	3M™ Fire Barrier Self-Locking Pillows FB249SL, Small, 2 in x 4 in x 9 in	2" x 4" x 9" (51 mm x 10.2 cm x 22.8 cm)	24
SLP-MEDIUM*	051115-16579	3M™ Fire Barrier Self-Locking Pillows FB269SL, Medium, 2 in x 6 in x 9 in	2" x 6" x 9" (51 mm x 15.2 cm x 22.8 cm)	16
SLP-LARGE*	051115-16580	3M™ Fire Barrier Self-Locking Pillows FB369SL, Large, 3 in x 6 in x 9 in	3" x 6" x 9" (76 mm x 15.2 cm x 22.8 cm)	20

### 3M™ Fire Barrier Pillows

3M™ Fire Barrier Pillow is a self contained, highly intumescent firestop product for use in through-penetration firestops. The 3M™ Fire Barrier Pillows achieve up to 3 hour fire ratings when tested by Underwriters Laboratory, Inc. in accordance with ASTM E 814 (UL1479).

RoHS 2011/65/EU Yes  
 Specifications 3 Hr Fire Ratings; UL L-Rating (Air Leakage); ASTM E 814; ASTM E 84; CAN/ULC-S115

Agency Approvals   



Order No.	UPC	Product Name	Size	Case Quantity
FB-249*	051115-16530	3M™ Fire Barrier Pillows FB249, Small, 2 in x 4 in x 9 in	2" x 4" x 9" (51 x 102 x 229 mm)	24
FB-269*	051115-16531	3M™ Fire Barrier Pillows FB269, Medium, 2 in x 6 in x 9 in	2" x 6" x 9" (51 x 152 x 229 mm)	16
FB-369*	051115-16532	3M™ Fire Barrier Pillows FB369, Large, 3 in x 6 in x 9 in	3" x 6" x 9" (76 x 152 x 229 mm)	20



## Pillows and Putty

### 3M™ Fire Barrier Moldable Putty+

Provides up to 4-hours of fire protection. 4-inch x 8-inch dark red moldable pad (101.6 mm x 203.2 mm). Protective and moldable putty that helps prevent the spread of fire, smoke and noxious gas. Acts as a draft and cold smoke seal for systems with L-Ratings. In addition to its fire-resistant properties, the 1/10th in. (2.5 mm) thick pads have airborne sound reduction characteristics which helps minimize sound transmission through assemblies requiring an STC rating.

Meets the requirements of key life safety codes, including the International Building Code (IBC), NFPA 5000, NEC (NFPA 70), NFPA 101 and NBC (Canada) Building Codes. Meets the intent of LEED® VOC guidelines.



Order No.	UPC	Product Name	Size	Case Quantity
MPP+4"X8"*	051115-16508	3M™ Fire Barrier Moldable Putty Pads MPP+, 4 in x 8 in	4.0" x 8.0" (102 x 204 mm)	100
MPP+7"X7"*	051115-16509	3M™ Fire Barrier Moldable Putty Pads MPP+, 7 in x 7 in	7.0" x 7.0" (178 x 178 mm)	20
MPP+9.5"X9.5"*	051115-16510	3M™ Fire Barrier Moldable Putty Pads MPP+, 9.5 in x 9.5 in	9.5" x 9.5" (241 x 241 mm)	20
MP+STICK	051115-16561	3M™ Fire Barrier Moldable Putty Stix MP+, 1.45 in x 6 in	1.5" x 6.0" (38 x 152 mm)	12
MP+1.4X11	051115-16526	3M™ Fire Barrier Moldable Putty Stix MP+, 1.4 in x 11 in	1.4" x 11.0" (41 x 279 mm)	10

### 3M™ Fire Barrier Putty Sleeve Kits

3M™ Fire Barrier Putty Sleeve Kits DT 100, DT 200 and DT 400 are designed to help prevent the passage of fire and smoke in new or existing cable penetrations through walls or floors. Each kit comes complete in a box containing a 3M™ Fire Barrier Putty Sleeve (two-part metallic sleeve with set of two-part metallic flanges), 3M™ Fire Barrier Moldable Putty+, sheet metal screws, drywall screws and two installation identification labels. These kits can be used as a one-piece sleeve or the sleeve may be split/ hinged for existing cable installations. The sleeves can be easily installed in openings that are either tight to the sleeve or irregular. The over- sized openings can accommodate up to a 1" larger diameter than the 3M™ Fire Barrier Putty Sleeve diameter.



Specifications ASTM E 814 (UL 1479);

Agency Approvals



Order No.	UPC	Product Name	Sleeve Size	Flange Dimension	Min. Opening Size	Max. Opening Size	Case Quantity
DT100	051115-18809	3M™ Fire Barrier Putty Sleeve Kit DT 100, 1 inch, Round	1" x 12" (25 x 304 mm)	3-3/8" x 3-3/8" (86 x 86 mm)	1-1/8" (29 mm)	2-1/4" (57 mm)	1
DT200	051115-18808	3M™ Fire Barrier Putty Sleeve Kit DT 200, 2 inch, Round	2" x 12" (51 x 304 mm)	5-1/4" x 5-1/4" (133 x 133 mm)	2-3/8" (60 mm)	4" (102 mm)	1
DT400	051115-18806	3M™ Fire Barrier Putty Sleeve Kit DT 400, 4 inch, Round	4" x 12" (102 x 304 mm)	8" x 8" (203 x 203 mm)	4-1/2" (114 mm)	6" (152 mm)	1

## Pass-Through and Cast-In Devices

The 3M™ Fire Barrier Pass-Through Device is a one-piece hinged metal enclosure designed to help prevent the passage of fire and smoke when properly installed. The metal device has a fixed firestopping intumescent material which works in conjunction with foam smoke seals and an optional mounting bracket. It has been contractor-designed to allow for use in either retrofit or new construction applications where an “install and be done” technology is

needed. It is designed to provide years of dependable through-penetration firestopping with no reapplication of additional product to maintain its rating. The 3M™ Fire Barrier Pass-Through Device achieved up to 4 hour fire ratings (dependent upon system application) when tested by Underwriter Laboratories Inc. in accordance with ASTM E814 (UL1479).





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## Pass-Through and Cast-In Devices

### 3M™ Fire Barrier Square Pass-Through Device

Simple-to-install device keeps penetrants protected and organized (0% to 100% fillable) throughout the lifecycle of a building. Provides up to 4-hour fire protection. 3M™ Fire Barrier Pass-Through Devices use a unique fixed fire-rated intumescent material which works in conjunction with a foam smoke seal and optional mounting brackets. In the event of a fire, intumescent material quickly expands to seal the inside of the device, helping to prevent the spread of smoke and fire into other compartments when properly installed. Square devices can be stacked in multiple device configurations for larger cable management and firestop requirements. Optional mounting brackets and additional foam smoke seal replacements (device comes with 2 foam seals) sold separately. Device dimensions: 4" x 4" Square x 10" length (101.6 mm x 101.6 mm x 254 mm).





RoHS 2011/65/EU	Yes
Specifications	ASTM E 814 (UL 1479); UL Classified 1, 2, 3 and 4 hr Fire and Temperature Rating; L-Rating, Hot and Cold Smoke Seal
Agency Approvals	 

Order No.	UPC	Product Name	Description	Case Quantity
PT4SD	051115-16597	3M™ Fire Barrier Pass-Through Device PT4SD, 4 in, Square	4" (101,6 mm) Square Device	6

### 3M™ Fire Barrier Round Pass Through Device

Ideal for vital telecom equipment, especially in high-traffic areas where cable is constantly being added or removed. Simple-to-install device keeps penetrants protected and organized (0% to 100% fillable) throughout the lifecycle of a building. Provides up to 4-hour fire protection. 3M™ Fire Barrier Pass-Through Devices use a unique fixed fire-rated intumescent material which works in conjunction with a foam smoke seal and optional mounting brackets. In the event of a fire, intumescent material quickly expands to seal the inside of the device, helping to prevent the spread of smoke and fire into other compartments when properly installed. Optional mounting brackets and additional foam smoke seal replacements (device comes with 2 foam seals) sold separately. Device dimensions: 2" round diameter x 10" length (50,8 mm x 254 mm) and 4" round diameter x 10" length (101,6 mm x 254 mm).



RoHS 2011/65/EU	Yes
Specifications	ASTM E 814 (UL 1479); UL Classified 1, 2, 3 and 4 hr Fire and Temperature Rating; L-Rating, Hot and Cold Smoke Seal
Agency Approvals	 



Order No.	UPC	Product Name	Description	Case Quantity
PT2RD	051115-18773	3M™ Fire Barrier Pass-Through Device PT2RD, 2 in, Round	2" (50,8 mm) Round Device	6
PT4RD	051115-16598	3M™ Fire Barrier Pass-Through Device PT4RD, 4 in, Round	4" (101,6 mm) Round Device	6

## Pass-Through and Cast-In Devices

### 3M™ Fire Barrier Pass-Through Single Mounting Brackets

Used in conjunction with the 4" Square 3M™ Fire Barrier Pass-Through Device. These brackets provide additional support to the device. Comes with a pair of brackets (includes bracketing screws) for mounting on both sides of an assembly.

RoHS 2011/65/EU Yes  
 Specifications ASTM E 814 (UL 1479); UL Classified 1, 2, and 3 hr  
 Fire and Temperature Rating; L-Rating, Hot and Cold Smoke Seal

Agency Approvals  



Order No.	UPC	Product Name	Description	Case Quantity
PT4SMB	051115-18752	3M™ Fire Barrier Pass-Through Single Mounting Brackets PT4SMB, Pair, 4 inch, Square	4" (101,6 mm) Square Single Mounting Brackets (Pair)	24
PT2RMB	051115-18774	3M™ Fire Barrier Pass-Through Mounting Brackets PT2RMB, Pair, 2 in, Round	2" (50,8 mm) Round Mounting Brackets (Pair)	24
PT4RMB*	051115-18754	3M™ Fire Barrier Pass-Through Single Mounting Brackets PT4RMB, Pair, 4 in, Round	4" (101,6 mm) Round Mounting Brackets (Pair)	24

### 3M™ Fire Barrier Pass-Through Triplex Mounting Brackets

Used in conjunction with three 4" Square 3M Fire Barrier Pass-Through Devices.

RoHS 2011/65/EU Yes  
 Specifications ASTM E 814 (UL 1479); UL Classified 1, 2, 3 and 4 hr Fire and Temperature Rating; L-Rating, Hot and Cold Smoke Seal

Agency Approvals  





Order No.	UPC	Product Name	Description	Case Quantity
PT4TMB	051115-18753	3M™ Fire Barrier Pass-Through Triple Mounting Brackets PT4TMB, Pair, 4 inch, Square	4" (101,6 mm) Square Triple Mounting Brackets (Pair)	24

## 3M™ Fire Barrier Pass-Through Sixplex Mounting Brackets

The sixplex mounting brackets provide additional support to the device when installing six devices stacked (vertically or horizontally) together in a 2 x 3 array. Comes with a pair of brackets (includes bracketing screws) for mounting on both sides of an assembly. 3M™ Fire Barrier Pass-Through Devices use a unique fixed fire-rated intumescent material which works in conjunction with a foam smoke seal and optional mounting brackets. In the event of a fire, intumescent material quickly expands to seal the inside of the device, helping to prevent the spread of smoke and fire into other compartments when properly installed. Optional mounting brackets and additional foam smoke seal replacements (device comes with 2 foam seals) sold separately. Square devices can be stacked in multiple device configurations for larger cable management and firestop requirements.



**RoHS 2011/65/EU** Yes  
**Specifications** ASTM E 814 (UL 1479); UL Classified 1, 2, 3 and 4 hr Fire and Temperature Rating; L-Rating, Hot and Cold Smoke Seal



**Agency Approvals**  

Order No.	UPC	Product Name	Description	Case Quantity
PT4SSMB	051115-18777	3M™ Fire Barrier Pass-Through Sixplex Mounting Brackets PT4SSMB, Pair, 4 inch, Square	4" (101,6 mm) Square Sixplex Mounting Brackets (Pair)	6

## 3M™ Fire Barrier Pass-Through Device Foam Plugs

These foam plugs enhance the Cold and Hot smoke seal (device can achieve UL classified L-Rating with foam plugs and 3M™ Fire Barrier Sealant or Putty MP+, see system details).

**RoHS 2011/65/EU** Yes  
**Specifications** ASTM E 814 (UL 1479); UL Classified 1, 2, 3 and 4 hr Fire and Temperature Rating; L-Rating, Hot and Cold Smoke Seal

**Agency Approvals**  



Order No.	UPC	Product Name	Description	Case Quantity
4SQPTF	051115-18794	3M™ Fire Barrier Pass-Through Device Foam Plugs, 4 in, Square	Replacement foam plugs for 4-inch Square 3M™ Fire Barrier Pass-Through Device.	24
2RDPTF	051115-18793	3M™ Fire Barrier Pass-Through Device Foam Plugs, 2 in, Round	Replacement foam plugs for 2-inch Round 3M™ Fire Barrier Pass-Through Device.	24
4RDPTF	051115-18791	3M™ Fire Barrier Pass-Through Device Foam Plugs, 4 in, Round	Replacement foam plugs for 4-inch Round 3M™ Fire Barrier Pass-Through Device.	24



## 3M™ Fire Barrier Cast-In Device for Plastic Pipes

3M™ Fire Barrier Cast-In Device (3M CID) is a one piece plastic body assembly with many unique features. The 3M™ Plastic CID assembly contains 3M™ Interam™ Ultra GS intumescent wrap, a flexible smoke and water resistant seal and features easily adjustable bodies that can be adopted to concrete height, before or after pour, with only a pliers.

3M CID is used primarily in new installations and is designed to accommodate concrete thickness as small as 2-1/2" and pipe sizes from 1-1/2"–6" at this time. 3M CID achieves up to 3 hour F and T Ratings when tested by Underwriters Laboratories, Inc. in accordance with ASTM E 814 (UL 1479).



**Specifications** Class 1 Water tight rating UL; 3 hr UL Fire Barrier listing

**Agency Approvals**  

Order No.	UPC	Product Name	Diameter	Case Quantity
2PCID	051115-16536	3M™ Fire Barrier Cast-In Device 2PCID for Plastic Pipes	2" (50,8 mm)	12
3PCID	051115-16537	3M™ Fire Barrier Cast-In Device 3PCID for Plastic Pipes	3" (76,2 mm)	12
4PCID	051115-16538	3M™ Fire Barrier Cast-In Device 4PCID for Plastic Pipes	4" (101,6 mm)	6
6PCID	051115-16539	3M™ Fire Barrier Cast-in Device 6PCID for Plastic Pipes	6" (152,4 mm)	2



## 3M™ Fire Barrier Cast-In Device for Metal Pipes

3M™ Fire Barrier Cast-In Device (3M CID) is a one piece plastic body assembly with many unique features. The 3M™ Metal CID assembly contains a proprietary firestop design with 3M™ Interam™ Ultra GS intumescent wrap incorporating plastic wrap and a flexible smoke and water resistant seal and features easily adjustable bodies that can be adopted to concrete height, before or after pour, with only a pliers.

3M CID is used primarily in new installations and is designed to accommodate concrete thickness as small as 2-1/2" and pipe sizes from 1-1/2"–4" at this time. 3M CID achieves up to 3 hour F and T Ratings when tested by Underwriters Laboratories, Inc. in accordance with ASTM E 814 (UL 1479).



**Specifications** Class 1 Water tight rating UL; 3 hr UL Fire Barrier listing

**Agency Approvals**  

Order No.	UPC	Product Name	Diameter	Case Quantity
2MCID	051115-16540	3M™ Fire Barrier Cast-in Device 2MCID for Metal Pipes	2" (50,8 mm)	12
3MCID	051115-16541	3M™ Fire Barrier Cast-in Device 3MCID for Metal Pipes	3" (76,2 mm)	12
4MCID	051115-16542	3M™ Fire Barrier Cast-in Device 4MCID for Metal Pipes	4" (101,6 mm)	12
6MCID	051115-16543	3M™ Fire Barrier Cast-in Device 6MCID for Metal Pipes	6" (152,4 mm)	2



## Pass-Through and Cast-In Devices

### 3M™ Fire Barrier Cast-In Device Metal Deck Adaptors

3M™ Fire Barrier Cast-In Device (3M CID) Metal Deck Adaptors are one-piece plastic body assemblies for use with metallic or non-metallic 3M™ Fire Barrier Cast-In Devices. The adaptors are used in new construction installations involving fluted metal decks with a minimum 2-1/2" (63,5 mm) concrete topping. The adaptor is available in sizes to accommodate single or multiple penetrants from 1-1/2–6" total diameter (38,1–152,4 mm).



<b>Specifications</b>	Class 1 Water tight rating UL; 3 hr UL Fire Barrier listing
<b>Agency Approvals</b>	 

Order No.	UPC	Product Name	Description	Case Quantity
2MDA	051115-16544	3M™ Fire Barrier Cast-in Device Metal Deck Adaptor 2MDA	2" Diameter Metal Deck Adaptor for use with 2PCID & 2MCID	12
3MDA	051115-16545	3M™ Fire Barrier Cast-in Device Metal Deck Adaptor 3MDA	3" Diameter Metal Deck Adaptor for use with 3PCID & 3MCID	12
4MDA	051115-16546	3M™ Fire Barrier Cast-in Device Metal Deck Adaptor 4MDA	4" Diameter Metal Deck Adaptor for use with 4PCID & 4MCID	12

### 3M™ Fire Barrier Cast-In Device Height Adaptor

3M™ Fire Barrier Cast-In Device (3M CID) Height Adapter (3M HA) is a unique one-piece plastic body assembly. The height adapter is used primarily in new installations and is designed to accommodate unlimited concrete thickness and pipe sizes from 1-1/2–4" at this time. The height adapter, when used in conjunction with 3M CID, achieves up to a 3 hour F and T rating when tested by Underwriters Laboratories, Inc. in accordance with ASTM E 814 (UL 1479).



<b>Specifications</b>	Class 1 Water tight rating UL; 3 hr UL Fire Barrier listing
<b>Agency Approvals</b>	 

Order No.	UPC	Product Name	Description	Case Quantity
2HA	051115-16548	3M™ Fire Barrier Cast-in Device Height Adaptor 2HA	2" Diameter Height Adaptor for use with 2PCID & 2MCID	12
3HA	051115-16549	3M™ Fire Barrier Cast-in Device Height Adaptor 3HA	3" Diameter Height Adaptor for use with 3PCID & 3MCID	12
4HA	051115-16550	3M™ Fire Barrier Cast-in Device Height Adaptor 4HA	4" Diameter Height Adaptor for use with 4PCID & 4MCID	12
6HA	051115-16551	3M™ Fire Barrier Cast-In Device Height Adapter 6HA	6" Diameter Height Adaptor for use with 6PCID & 6MCID	12





## 3M™ Fire Barrier Cast-In Tub Box Assembly

3M™ Fire Barrier Cast-In Device Tub Box (3M TB) is a plastic body assembly designed to be used with the 3M Metal CID. The 3M Tub Box has many unique features. 3M TB is used primarily in new installations and is designed to accommodate concrete thickness as small as 4-1/2" and pipe sizes from 1-1/2"-2".



**Specifications** Class 1 Water tight rating UL; 3 hr UL Fire Barrier listing

**Agency Approvals**  



Order No.	UPC	Product Name	Description	Case Quantity
3TB	051115-16586	3M™ Fire Barrier Cast-In Tub Box Assembly 3TB, Foam	Remove 3" (76,2 mm) foam insert after slab is cured to create 3" (76,2 mm) deep void	6

## 3M™ Fire Barrier Cast-In Aerator Adaptor

Primarily used in new installations when firestopping 4" (10,16 cm) pipes that pass through flat concrete decks with a 6-1/2" (16,51 cm) minimum concrete topping. Device with adaptor are installed on forms prior to the concrete pour to create a void at the bottom of the concrete slab surface.



**Specifications** Class 1 Water tight rating UL; 3 hr UL Fire Barrier listing

**Agency Approvals**  

Order No.	UPC	Product Name	Description	Case Quantity
4AA	051115-16589	3M™ Fire Barrier Cast-In Aerator Adaptor 4AA	For use with 4PCID and 4MCID	12

## Collars and Wrapstrips

3M™ Fire Barrier Wraps and Collars are one-part, organic/inorganic, fire-resistive elastomeric strip with foil on one side and intumescent for complete, rapid sealing during a fire. They are available in standard 2 inch width with excellent, documented aging properties. 3M™ Fire Barrier Wraps and Collars have improved flexibility for easy, cost-effective installation, are versatile and can be cut to fit irregular shapes. They are reenterable with no special tools required and are non-flame



supporting. Applications include: telephone cable, metal pipe, plastic pipe, conduit, insulated metal pipe and cable trays. They can be used to firestop up to 10 inch (254,0 mm) diameter PVC pipe and are UL-Classified for use on PVC, CPVC, ABS, CCPVC, CCABS, PVDF, FRPP, PP and PB plastic pipe.

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## 3M™ Fire Barrier Ultra Plastic Pipe Device

The proven technology of this fire barrier product's intumescent action quickly seals off plastic pipes in a fire, and meets up to 3-hour fire and temperature ratings when properly installed.

3M™ Fire Barrier Collars and Devices are UL-classified for use on PVC, CPVC, CCPVC, ABS, CCABS, PVDF, and FRPP. It is easy to install in one step and expands up to 25 times. This device is factory-made, has consistent quality and is red in color for easy identification as a fire-rated device during inspections.



RoHS 2011/65/EU Yes  
 Specifications Up to 3 Hr Fire Rating

Agency Approvals  

Order No.	UPC	Product Name	Diameter	Fire Protection	Case Quantity
ULTRA-PPD-1.5	051115-08378	3M™ Fire Barrier Ultra Plastic Pipe Device ULTRA PPD 1.5	1.5" (38,1 mm)	3 hrs	10
ULTRA-PPD-2	051115-08379	3M™ Fire Barrier Ultra Plastic Pipe Device ULTRA PPD 2.0	2.0" (50,8 mm)	3 hrs	10
ULTRA-PPD-3	051115-08380	3M™ Fire Barrier Ultra Plastic Pipe Device ULTRA PPD 3.0	3.0" (76,2 mm)	3 hrs	10
ULTRA-PPD-4	051115-08381	3M™ Fire Barrier Ultra Plastic Pipe Device ULTRA PPD 4.0	4.0" (101,6 mm)	3 hrs	10
PPD-6	051115-08253	3M™ Fire Barrier Plastic Pipe Device PPD 6.0	6.0" (152,4 mm)	2 hrs	5

## 3M™ Interam™ Fire Barrier Ultra GS

Simply roll out and cut as much material as required to wrap around the penetrant. Works with most non-metallic and metallic insulated penetrants. Used for "in-hole" firestop installations or in conjunction with 3M™ Fire Barrier RC-1 Restricting Collars. When the wrap is properly installed "in-hole" in conjunction with a 3M™ Fire Barrier Sealant or Moldable Putty+, it also provides a cold smoke seal, which helps prevent the spread of toxic gases and other combustion by-products even before heat initiates the intumescent process. Available in 2" x 40' roll (50.8 mm x 12.2 m).



Order No.	UPC	Product Name	Description	Size	Case Qty.
ULTRA GS40	051115-16507	3M™ Ultra GS Wrap Strip GS-40	40-foot roll (12.2 m) of intumescent firestop wrap. Flexible wrap makes installation easy.	2"x40' (50,8 mm x 12,2 m)	5

Collars and Wrapstrips

### 3M™ Ultra Fast Anchors UFA-16

The quick and easy way to install 3M™ Fire Barrier Plastic Pipe Devices. Takes minutes to install. Unique anchor straps replace the need for power tools, mounting screws, washers and other fasteners - all you need are pliers. 16" Anchors can be used in up to 12" concrete or 12" gypsum floor or wall assemblies. Note: some installations do not have sufficient space required to install 3M™ Ultra Fast Anchors. In such cases, the device can be mounted using conventional anchoring systems (e.g. toggle screws for gypsum or masonry screws for concrete).



Order No.	UPC	Product Name	Description	Case Quantity
ULTRA-16	051115-11530	3M™ Ultra Fast Anchors UFA-16	3/4" x 16" anchors for fast installation of plastic pipe devices	400

### 3M™ Fire Barrier Wrap/Strip FS-195+

Used for "in-hole" firestop installations or in conjunction with 3M™ Fire Barrier RC-1 Restricting Collars. When the wrap is properly installed "in-hole" in conjunction with a 3M™ Fire Barrier Sealant or Moldable Putty+, it also provides a cold smoke seal, which helps prevent the spread of toxic gases and other combustion by-products even before heat initiates the intumescent process. Available in 2" x 24" strips (50.8 mm x 609 mm).



Order No.	UPC	Product Name	Description	Size	Case Qty
FS-195+	051115-07115	3M™ Fire Barrier Wrap Strips FS-195+	One-part, fire-resistive wraps with foil on one side that are designed to firestop penetrations in fire-rated floor, wall and floor/ceiling assemblies. These intumescent wraps provide up to 4 hours of fire protection in tested and listed systems.	2"x24" (50,8 mm x 6,1 cm)	10

## 3M™ Fire Barrier Tuck-In Wrap Strip WS

3M™ Fire Barrier Tuck-In Wrap Strips are designed to help prevent the passage of fire and smoke in new or existing non-metallic (e.g. plastic) pipe penetrations through wall or floor assemblies. 3M Fire Barrier Tuck-In Wrap Strips are engineered primarily for top-side firestop installations and help eliminate the need for retaining collars, concrete screws, ladders or most other material and equipment necessary for bottom-side installations. 3M Fire Barrier Tuck-In Wrap Strips are 3/16" (4,8 mm) thick and 2-1/2" (63,5 mm) wide, and come ready-to-install with an adhesive-backed closure label (excludes WS Roll). The wrap strips can be easily installed in both concrete floor and wall assemblies, as well as gypsum wallboard assemblies.

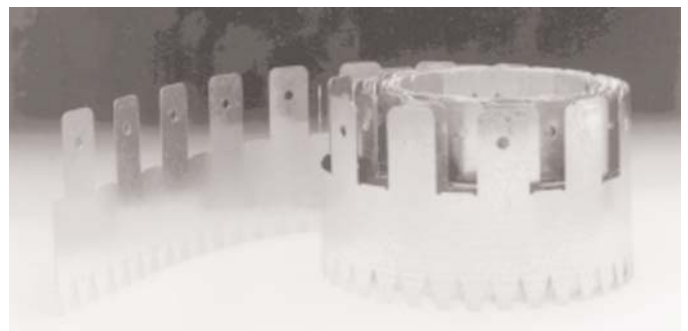
<b>Description</b>	Flexible Intumescent Strip Wraps
<b>Color</b>	Gray with Red Liner
<b>Activation Temperature</b>	550°F (288°C)
<b>Expansion Volume</b>	100x
<b>Specifications</b>	3 Hr Fire Barrier Protection; ASTM E 814 (UL 1479)
<b>Agency Approvals</b>	 IBC; NFPA 5000; NFPA 101



Order No.	UPC	Length	Nominal Pipe Diameter	Installation Hole Size (max)	Case Quantity
WS200	051115-18814	8-1/4" (21,0 cm)	2" (50,8 mm)	4" (10,16 cm)	24
WS300	051115-18815	11-1/2" (29,21 cm)	3" (76,2 mm)	5" (12,7 cm)	24
WS400	051115-18817	14-7/8" (37,78 cm)	4" (102 mm)	6" (15,24 cm)	24
WS-ROLL	051115-18821	8.2' (2,5 m)	up to 6" (152,4 mm)	up to 8" (20,32 cm)	6

## 3M™ Fire Barrier Restricting Collar RC-1

Works in conjunction with 3M™ Fire Barrier Wrap Strip FS-195+ or 3M™ Interam™ Fire Barrier Ultra GS for firestopping penetrations in wall, floor and floor/ceiling assemblies. Holds the wrap strip in place and provides anchor tabs for securing the collar assembly to the wall or floor.



Order No.	UPC	Product Name	Length	Width	Case Quantity
RC-1	054007-08324	3M™ Fire Barrier Restricting Collar, 2 Inch	25' (7,62 m)	2" (50,8 mm)	1

## Sheets and Mats

Large openings can easily be sealed to prevent the spread of flames, smoke or toxic fumes in the event of a fire with 3M™ Fire Barrier Sheets. These flexible sheets and mats expand under heated conditions and seal openings by turning into a firm char.



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## 3M™ Fire Barrier Composite Sheet CS-195+

3M™ Fire Barrier CS-195+ Composite Sheet is a one-part composite system comprised of four components. The heart of the system is an organic/inorganic, fire-resistive elastomeric sheet. It is bonded on one side to a layer of 28-gauge galvanized steel. The other side is reinforced with hexagonal shaped steel-wire mesh and covered with aluminum foil. CS-195+ Composite Sheet is designed to seal larger penetrations through fire-rated walls and floors. It is also used for shielding cable trays and conduit, HVAC ductwork and vital process equipment from radiant heat, flame spread and smoke. CS-195+ Composite Sheet is excellent for both new and retrofit construction.

The nominal 0.3" (7.62 mm) thick composite sheet provides up to a 4-hour fire rating when properly installed. It is lightweight and can be easily installed with common trade tools. When exposed to temperatures in excess of 250°F (121°C), the fire-resistive sheet begins to volumetrically expand and swells 8–10 times its original size, forming a high strength, hard char that retards heat transmission.



RoHS 2011/65/EU Yes  
 Specifications ASTM E 814

Agency Approvals   

Order No.	UPC	Product Name	Size	Case Quantity
CS-195+3X2-BOX*	051115-07220	3M™ Fire Barrier Composite Sheet CS-195+, 36 in x 24 in	3' x 2' (91,4 x 61,0 cm)	1
CS-195+28X52*	051115-08260	3M™ Fire Barrier Composite Sheet CS-195+, 28 in x 52 in	28" x 52" (71,1 x 132,1 cm)	1
CS-195+16X28-BOX*	051115-07437	3M™ Fire Barrier Composite Sheet CS-195+, 16 in x 28 in	16" x 28" (40,6 x 71,1 cm)	1
CS-195+3X41-BOX*	051115-07224	3M™ Fire Barrier Composite Sheet CS-195+, 36 in x 41 in	3' x 41" (91,44 x 104,1 cm)	1
CS-195+3X3-BOX*	051115-07222	3M™ Fire Barrier Composite Sheet CS-195+, 36 in x 36 in	3' x 3' (91,4 x 91,4 cm)	1

## 3M™ Interam™ Endothermic Wrap E-5A-4

When properly installed, 3M™ Interam™ Endothermic Mat E-5A-4 provides a uniform covering that, when exposed to high temperatures, releases chemically-bound water to cool the outer surfaces of the wrap material and significantly retard heat transfer. When properly installed, helps protect structural steel components for up to four hours, critical electrical components for up to three hours and wall opening membranes for up to two hours. Applied to the back and sides of metallic utility boxes, this product helps achieve an equal F-rating and T-rating in membrane penetrations of rated wall assemblies. 3M™ Interam™ Endothermic Mat E-5A-4 is non-flame supporting with low-smoke evolution. The mat is flexible which aids in installation and allows it to more easily be applied on complex shapes and around corners.

Material Aluminum/Scrim  
 RoHS 2011/65/EU Yes  
 Specifications 2 Hr Fire Protection Wall Opening Membranes; 3 Hr Fire Protection Electrical Circuits; 4 Hr Fire Protection Structural Steel; ASTM E 84 (UL 723); ASTM E 119 (UL 263); ASTM E 1529 (UL 1709); ASTM E 1725; NBN 713-20/ISO TC 92

Agency Approvals     
 Intertek Omega Point Laboratories



Order No.	UPC	Product Name	Length	Width	Thickness	Case Quantity
E-5A-4	051115-54913	3M™ Interam™ Endothermic Mat E-5A-4	20' (6,1 m)	24.5" (62,2 cm)	0.4" (10,2 mm)	1 roll



## Miscellaneous

The complete line of 3M™ Fire Protection Products helps prevent fire, smoke, toxic fumes and moisture from passing through penetrations in fire-rated walls and floors. These easy-to-install products are suitable for a wide variety of firestop applications, including plastic pipes, metal pipes, HVAC ductwork, cables, construction gaps, grease ducts, wall tops and control joints.



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## 3M™ Fire Barrier Mortar

A cost-effective lightweight, cementitious firestop with variable mix ratios for use in through penetration applications. When properly installed, this product helps prevent the spread of fire, smoke and noxious gases. Up to 3-hour fire protection in tested and listed systems. Off-white with dark flecks, ready for mixing with potable water. Mix ratio can be varied from 1 part water to 2 parts powder for self-leveling and 1 part water to 3 parts powder for trowelable mortar. For vertical surfaces, use 3 parts mix to 1 part water.



<b>Description</b>	Cementitious Firestop
<b>Properties</b>	Mortar
<b>Color</b>	Off-White with Black Flecks
<b>Specifications</b>	ASTM E 814 (UL 1479); CAN/ULC S115; Warnock Hersey Certified 3M/PHV 120-01 for 2 Hr separations
<b>Agency Approvals</b>	 



Order No.	UPC	Size	Case Quantity
MORTAR-28LB*	051115-54901	28 lb (12,7 kg)	1
MORTAR-44LB*	051115-54900	44 lb (20,0 kg)	1

## 3M™ Fire Barrier Plenum Wrap 5A+

3M™ Fire Barrier Plenum Wrap 5A is a fire resistant wrap consisting of a proprietary inorganic blanket encapsulated with a scrim-reinforced foil. It provides a flexible, non-combustible enclosure for cables and pipe in return air plenums as tested to UL 910. Use with single and multiple 1" (25,4 mm) and larger plastic pipe and cables. This non-asbestos wrap contains a safer fiber construction and installs easily because of its high flexibility and strength.

<b>Description</b>	Inorganic Blanket Encapsulated With Aluminum Foil Scrim
<b>RoHS 2011/65/EU</b>	Yes
<b>Specifications</b>	ASTM E 84; NFPA 262 (UL 910); UL 1887
<b>Agency Approvals</b>	  Cable & Plastic Pipe Plenum Space Fire Protection Flexible Wrap Listed; Intertek Omega Point Laboratories




Order No.	UPC	Size	Case Quantity
PLENUM-WRAP-5A+(24")	051115-18802	1/2" x 24" x 50' (12,7 mm x 60,9 cm x 15,24 m)	1
PLENUM-WRAP-5A+(48")	051115-18805	1/2" x 48" x 25' (12,7 mm x 121 cm x 7,62 m)	2

## 3M™ Fire Barrier Duct Wrap 615+

3M™ Fire Barrier Duct Wrap 615+ is a flexible fire-resistant wrap consisting of an inorganic fiber blanket encapsulated with a scrim-reinforced foil. The product is 1-1/2" thick, 6 pcf density. It is used to fire rate commercial kitchen grease ducts as well as ventilation ducts, and is a proven alternative to 1- or 2-hour fire-resistant rated shaft enclosures. With its excellent insulating capabilities, low weight and thin profile, it is an ideal choice for a duct enclosure system. This non-asbestos wrap installs easily due to its high flexibility and strength.




<b>Description</b>	Inorganic Blanket Encapsulated with Aluminum Scrim
<b>Specifications</b>	2 Hr Fire Protection; ASTM E 2336; ICC-ES AC101; ASTM E 119; ASTM E 814; ASTM E 136; ASTM C 518; ASTM C 1338; ASTM E 84; ISO 6944-85
<b>Agency Approvals</b>	 ULC; Intertek Firestop Systems and Intertek Omega Point Laboratories; NFPA; IMC; IBC.

Order No.	UPC	Dimensions	Case Quantity
615+24	051115-54905	24" x 25' (60,96 cm x 7,62 m) Roll	1
615+48	051115-54906	48" x 25' (121,9 cm x 7,62 m) Roll	1
615+ COLLAR	051115-18804	1.5" x 6" x 25' (3,81 cm x 15,24 cm x 7,62 m)	4

## 3M™ Fire Block Foam FB-Foam (for Residential and Type-V Non-Rated Construction)

3M™ Fire Block Foam FB-Foam is a ready-to-use foam fireblock designed to help prevent the spread of flames and smoke in residential Type-V and commercial non-rated construction. This product is intended to resist the free passage of flame and the by-products of combustion within the concealed space of a floor, ceiling or wall cavity by restricting the movement of air, fire and smoke. Also acts as a draftstop to restrict air infiltration and movement. Meets current fireblocking sealant requirements of the International Building Code (IBC) and International Residential Code (IRC), and state and local codes based on the IBC and IRC. 3M™ Fire Block Foam FB-Foam is recognized as a requirement to the methods prescribed by IBC and/or IRC codes for maintaining the integrity of penetrations of fireblocking and for draftstopping.

Note: Not to be used as a firestop in commercial construction.

<b>Description</b>	Intumescent Foam
<b>Properties</b>	Polyurethane
<b>Heat Resistance</b>	Up to 240°F (115°C)
<b>Specifications</b>	ASTM E 84; LEED® VOC environmental regulations.
<b>Agency Approvals</b>	 ICC-ES; IBC; IRC



Order No.	UPC	Product Name	Color	Product Size	Case Quantity
FB-FOAM-ORANGE	051115-54907	3M™ Fire Block Foam FB-Foam	Orange	12 oz. Can	12

## 3M™ Fire Barrier Rated Foam FIP 1-Step

Firestop foam used to fill the annular space created by pipes and cables penetrating through fire-rated construction.

- Firestop tested up to 2 hours in accordance with ASTM E 814 (UL 1479) and CAN/ULC S115
- Meets the International Building Code for Passive Fire Protection
- Expands up to 5X when dispensed. One cartridge FIP 1-Step equals up to 6 tubes 10.1 oz caulk
- Intumescent. Expands in a fire
- Expansive UL systems for blank openings, metal pipe, cables, cable trays, combos, insulated pipe
- UL systems require no mineral wool
- Remains pliable after installation for easy installation of new cables/conduit in existing opening
- Excellent adhesion. Can be installed in wall or floor applications with no backing material
- Quick cure. Full expansion after approximately 2 minutes
- Paintable with primer
- STC rating of 57 when tested in STC 57 rated wall assembly
- Air leakage less than 1 CFM/Sq Ft
- Meets the intent of LEED VOC regulations. <250 g/L VOC contents (less H2O and exempt solvents)



Specifications ASTM E 814

Agency Approvals



Order No.	UPC	Color	Product Type	Product Size	Smoke Seal	Sound Barrier	Water Tight	Case Quantity
FIP 1-STEP	051115-54925	Maroon	Rated Foam	12.85 fl oz. Cartridge	Yes	57 in 57	No	6

# Safety and Protection Products

3M makes comfortable protection solutions designed to help ensure worker safety and meet protection requirements. Products include, but are not limited to, respirators, eye and hearing protection, headgear, sorbents, software, and services.



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# Respiratory Protection Products

Safety and hygiene professionals need products that enhance and improve their respiratory protection programs, while wearers want comfort and performance. 3M offers the best of both worlds with one of the most complete line of disposable, reusable, powered and supplied air respirators.



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3M™ Full Facepiece Reusable Respirator .....	495
3M™ Full Facepiece 7000 Series Reusable .....	496
3M™ Ultimate FX Full Facepiece Respirator, FF-400 Series .....	496
3M™ Particulate Filters for Reusable Respirators .....	497
3M™ Gas and Vapor Cartridges for Reusable Respirators .....	498
3M™ Combination Cartridge/Filters for Reusable Respirators .....	498-499
3M™ Reusable Respirator Accessories and Spare Parts .....	499-500
3M™ Mold Remediation Respirator Kit .....	500
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## Respiratory Protection Products: Disposable Respirators

### 3M™ Filtering Facepiece Respirators, N95

Suggested Applications: Sweeping, sanding, grinding, sawing and bagging in a non-oil environment.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
8110S	051138-54305	3M™ Particulate Respirator 8110S, N95	This disposable N95 particulate respirator is a small size version similar to our classic 8210 N95 respirator. It is designed to help provide comfortable, reliable worker respiratory protection against certain non-oil based particles. Small.	160
8210-PLUS	051131-52924	3M™ Particulate Respirator 8210Plus, N95	This disposable N95 particulate respirator offers braided headbands and staple free attachment points. It is designed to help provide comfortable, reliable worker respiratory protection against certain non-oil based particles.	160
8210	051138-46457	3M™ Particulate Respirator 8210, N95	This classic disposable N95 particulate respirator is designed to help provide comfortable, reliable worker respiratory protection against certain non-oil based particles.	160
8211	051131-52750	3M™ Particulate Respirator 8211, N95	This respirator offers all the great features of the 3M™ Particulate Respirator 8511, plus a comfortable foam face seal. It is uniquely designed to help provide protection against certain non-oil based particles. It is ideally suited for work settings that involve heat, humidity, or long periods of wear.	80
8511	051138-54343	3M™ Particulate Respirator 8511, N95	This disposable N95 particulate respirator is uniquely constructed with 3M™ Cool Flow™ Valve and helps provide comfortable, reliable worker respiratory protection. It is ideally suited for hot/dusty work settings that require long periods of wear.	80
9105	051131-17397	3M™ VFlex™ Particulate Respirator 9105, N95	This respirator has a unique folded design with 3M patented filter media and V-shaped pleats to help make breathing easier and provide a comfortable seal. The product is available in two sizes to fit a broad range of faces.	400
9105S	051131-17394	3M™ VFlex™ Particulate Respirator 9105S, N95, Small	This respirator has a unique folded design with 3M patented filter media and V-shaped pleats to help make breathing easier and provide a comfortable seal. The product is available in two sizes to fit a broad range of faces.	400
9210+	051131-37192	3M™ Particulate Respirator 9210+/37192(A AD), N95	The 3M™ Aura™ Series Particulate Respirator 9210+, N95 is a breakthrough in comfort and convenience. This three-panel, flat-fold disposable respirator with its innovative design helps provide comfortable, reliable worker protection against non-oil based particles.	240
9211+	051131-37193	3M™ Particulate Respirator 9211+/37193(A AD), N95	The 3M™ Aura™ Particulate Respirator 9211+, N95 is a breakthrough in comfort and convenience. This three-panel disposable flat-fold respirator features soft inner material and 3M™ Cool Flow™ Valve to help provide comfortable, reliable worker respiratory protection. Ideally suited for hot/dusty work settings that require long periods of wear.	120



## 3M™ Filtering Facepiece Particulate Welding Respirators, N95

Suggested Applications: Welding, torch cutting, brazing and soldering.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.







Order No.	UPC	Product Name	Description	Case Quantity
8212	051138-54141	3M™ Filtering Facepiece Particulate Welding Respirator 8212, N95	Designed for applications such as welding, soldering and other operations where metal fumes may be present.	80
8214	051138-66192	3M™ Filtering Facepiece Particulate Welding Respirator 8214, N95	Designed for applications such as welding, soldering and other operations where metal fumes may be present including those with ozone and nuisance level organic vapors.	80
8512	051138-66298	3M™ Particulate Welding Respirator 8512, N95	Designed for applications such as welding, soldering and other operations where metal fumes are present.	80
8514	051138-66299	3M™ Particulate Respirator 8514, N95, with Nuisance Level Organic Vapor Relief	Designed for applications such as welding, soldering and other operations where metal fumes are present including those with ozone and nuisance level organic vapors.	80
8515	051131-07189	3M™ Particulate Welding Respirator 8515/07189(AAD), N95	Is designed to help provide comfortable, reliable worker protection for applications such as welding, soldering, cutting, grinding, and sanding.	80




## 3M™ Filtering Facepiece Specialty Respirators

Suggested Applications: Grinding, bagging, sanding, sweeping in oil and non-oil environments and other dusty operations.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

	8240	8246	8247	8271
				
UPC	051138-66297	051138-54357	051138-54358	051138-54285
Product Name	3M™ Particulate Respirator 8240, R95	3M™ Particulate Respirator 8246, R95	3M™ Particulate Respirator 8247, R95 with Nuisance Level Organic Vapor Relief	3M™ Particulate Respirator 8271, P95
Description	Designed to help provide protection against certain oil and non-oil based particles. It features a collapse resistant shell for increased durability in most hot, humid conditions.	Helps provide protection against certain oil and non-oil based particles including those present with nuisance levels of acid gases such as sulphur dioxide, hydrogen fluoride, and/or chlorine.	Designed to help provide comfortable protection against certain oil and non-oil based particles including those present with nuisance levels of organic vapors, such as solvents, degreasers, and resins.	This disposable P95 particulate respirator features 3M proprietary advanced electret filter media, foam face seal and 3M™ Cool Flow™ Valve to help provide comfortable worker respiratory protection against certain oil and non-oil based particles.
Case Quantity	120	120	120	80



### 3M™ Filtering Facepiece Specialty Respirators (continued)

	8516	8576	8577
			
UPC	051138-66392	051138-54370	051138-54371
Product Name	3M™ Particulate Respirator 8516, N95 with Nuisance Level Acid Gas Relief	3M™ Particulate Respirator 8576, P95 with Nuisance Level Acid Gas Relief	3M™ Particulate Respirator 8577, P95 with Nuisance Level Organic Vapor Relief
Description	Designed for the aluminum industry. It helps provide protection against certain non-oil based particles including those present with nuisance levels of acid gases such as sulphur dioxide, hydrogen fluoride, and/or chlorine.	This disposable P95 particulate respirator helps provide reliable respiratory protection against certain oil and non-oil based particles. The respirator features a carbon layer to remove nuisance levels of acid gases. See product warning for use details.	This disposable P95 particulate respirator helps provide respiratory protection against certain oil and non-oil based particles. The respirator features a carbon layer to remove nuisance levels of organic vapors. See product warning for use details.
Case Quantity	80	80	80

### 3M™ Filtering Facepiece Particulate Respirators, Class 100

Ideal for certain OSHA substance specific contaminants including lead, MDA, arsenic, cadmium (excluding asbestos); additionally for welding and pharmaceutical manufacturing.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

	8293	8233
		
UPC	051138-54336	051138-54143
Product Name	3M™ Particulate Respirator 8293, P100	3M™ Particulate Respirator 8233, N100
Description	This P100 particulate respirator is designed to help provide comfortable, reliable worker respiratory protection against certain oil and non-oil base particles. Provides NIOSH's highest rated filtration efficiency in a filtering facepiece respirator.	Well suited for those who want NIOSH's highest rated filtration efficiency in a maintenance free respirator. It provides a minimum filter efficiency of 99.97% against non-oil based particles.
Case Quantity	20	20

## 3M™ Disposable Respirators 5000 Series

NIOSH approved against certain vapors and gasses. Use in a variety of workplace applications, including petrochemical, chemical manufacturing, construction, transportation and electronics.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
5101-Small	051138-21565	3M™ Organic Vapor Respirator Assembly 5101	Small	12
5201-Medium	051138-21571	3M™ Organic Vapor Respirator Assembly 5201	Medium	12
5301-Large	051138-21577	3M™ Organic Vapor Respirator Assembly 5301	Large	12
5103-Small	051138-21567	3M™ Organic Vapor/Acid Gas Respirator Assembly 5103	Small	12
5203-Medium	051138-21573	3M™ Organic Vapor/Acid Gas Respirator Assembly 5203	Medium	12
5303-Large	051138-21579	3M™ Organic Vapor/Acid Gas Respirator Assembly 5303	Large	12

## 3M™ Disposable Organic Vapor/P95 Respirator Assemblies, 5000 Series

NIOSH approved against certain organic vapours and particulates. Use for a variety of applications including spray painting, pesticides, agriculture, construction and transportation. Use with replacement filters and retainers listed below.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
51P71	051138-66068	3M™ Dual Cartridge Respirator Assembly 51P71	Paint Spray/Pesticide, Small	12
52P71	051138-66069	3M™ Dual Cartridge Respirator Assembly 52P71	Paint Spray/Pesticide, Medium	12
53P71	051138-66070	3M™ Dual Cartridge Respirator Assembly 53P71	Paint Spray/Pesticide, Large	12
5P71	051131-07194	3M™ Particulate Filter 5P71/07194(AAD)	Filter for use with 3M™ Respirators 5000 Series or 3M™ Cartridges 6000 Series or 3M™ Filter Adapter 603, and 3M™ Filter Retainer 501.	100
501	051138-17668	3M™ Filter Retainer 501, Respiratory Protection System Component	Used to hold 3M™ Particulate Filters 5N11 and 5P71/07194(AAD) in place on top of 3M™ Respirators 5000 Series and 3M™ Cartridges 6000 Series and 3M™ Filter Adapter 603.	100
5N11	051138-46464	3M™ Particulate Filter 5N11, N95	NIOSH approved for environments containing certain non-oil based particles. Use with 3M™ Respirators 5000 Series or 3M™ Cartridges 6000 Series, and 3M™ Filter Retainer 501.	100

## 3M™ Half Facepiece 6000 Series Respirator Assembly

The lightweight 3M™ Half Face Respirator 6000 Series offer safety, comfort and ease of use.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
6191/07001	051131-07001	3M™ Half Facepiece Respirator Assembly 6191/07001(AAD) Small	Small	24
6291/07002	051131-07002	3M™ Half Facepiece Respirator Assembly 6291/07002(AAD) Medium	Medium	24
6391/07003	051131-07003	3M™ Half Facepiece Respirator Assembly 6391/07003(AAD) Large	Large	24

## 3M™ Half Facepiece 6000 Series Reusable Respirator

Use with 3M™ Filters 2000 Series, 3M™ Filter 7093, P100, 3M™ Cartridges 6000 Series, or 3M™ Dual Airline Systems against a variety of gases, vapours and particulate hazards according to NIOSH approvals.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
6100/07024	051131-07024	3M™ Half Facepiece 6100/07024(AAD) Small	Small	24
6200/07025	051131-07025	3M™ Half Facepiece 6200/07025(AAD) Medium	Medium	24
6300/07026	051131-07026	3M™ Half Facepiece 6300/07026(AAD) Large	Large	24

## 3M™ Rugged Comfort Half Facepiece 6500 Series

The 3M™ Rugged Comfort 6500 Series Half Facepiece Reusable Respirator helps provide respiratory protection in harsh, dirty environments against airborne contaminants when used with approved 3M cartridges and filters.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Connection Type	Color	Size	Case Quantity
6501	051141-56344	Rugged Comfort Half Facepiece Reusable Respirator	Bayonet	Gray/Teal	Small	10
6502	051141-56345	Rugged Comfort Half Facepiece Reusable Respirator	Bayonet	Gray/Teal	Medium	10
6503	051141-56346	Rugged Comfort Half Facepiece Reusable Respirator	Bayonet	Gray/Teal	Large	10
6501QL	051141-56347	Rugged Comfort Quick Latch Half Facepiece Reusable Respirator	Bayonet	Gray/Teal	Small	10
6502QL	051141-56348	Rugged Comfort Quick Latch Half Facepiece Reusable Respirator,	Bayonet	Gray/Teal	Medium	10
6503QL	051141-56349	Rugged Comfort Quick Latch Half Facepiece Reusable Respirator	Bayonet	Gray/Teal	Large	10

## 3M™ Half Facepiece 7500 Series Reusable Respirator

This half facepiece reusable respirator 7500 Series uses advanced silicone material to help provide comfortable and durable respiratory protection. The 3M™ Cool Flow™ Valve helps make breathing easier and can reduce heat and moisture build-up for cool, dry comfort.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
7501/37081(AAD)	051131-37081	3M™ Half Facepiece Reusable Respirator 7501/37081(AAD), Respiratory Protection	Small	10
7502/37082(AAD)	051131-37082	3M™ Half Facepiece Reusable Respirator 7502/37082(AAD), Respiratory Protection	Medium	10
7503/37083(AAD)	051131 37083	3M™ Half Facepiece Reusable Respirator 7503/37083(AAD), Respiratory Protection	Large	10

## 3M™ Full Facepiece 6000 Series Reusable

Use with 3M™ Filters 2000 Series, 3M™ Filter 7093, P100, 3M™ Cartridges 6000 Series, or 3M™ Dual Airline Systems against a variety of gases, vapours and particulate hazards according to NIOSH approvals.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
6700-Small	051138-54145	3M™ Full Facepiece 6700 Small	Small	4
6800-Medium	051138-54146	3M™ Full Facepiece 6800 Medium	Medium	4
6900-Large	051138-54159	3M™ Full Facepiece 6900 Large	Large	4

## 3M™ Full Facepiece Reusable Respirator

Use with 3M™ Filters 2000 Series, 3M™ Filter 7093, P100, 3M™ Cartridges 6000 Series and powered or supplied air systems against a variety of gases, vapors and particulate hazards according to NIOSH approvals.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
6700DIN	051138-76701	3M™ Full Facepiece 6700DIN Small	Full facepiece (small)	4
6800DIN	051138-76702	3M™ Full Facepiece 6800DIN Medium	Full facepiece (medium)	4
6900DIN	051138-76703	3M™ Full Facepiece 6900DIN Large	Full facepiece (large)	4

## Respiratory Protection Products: Reusable Respirators

### 3M™ Full Facepiece 7000 Series Reusable

Use with 3M™ Filters 2000 Series, 3M™ Cartridges 6000 Series, 3M™ Cartridges and Filters 7000 Series and powered and supplied air systems against a variety of gases, vapors and particulates according to NIOSH approvals.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
7800S-S	051138-54257	3M™ Full Facepiece 7800S-S Small	Small	1
7800S-M	051138-54258	3M™ Full Facepiece 7800S-M Medium	Medium	1
7800S-L	051138-54259	3M™ Full Facepiece 7800S-L Large	Large	1

### 3M™ Ultimate FX Full Facepiece Respirator, FF-400 Series

Engineered for maximum comfort, durability and visibility, the Ultimate FX FF-400 respirator is the only known respirator with 3M Scotchgard™ Protector. This respirator features soft yet durable, silicone material and a large lens for superior peripheral vision.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.










Order No.	UPC	Product Name	Description	Case Quantity
FF-401	051135 89418	3M™ Ultimate FX Full Facepiece Reusable Respirator FF-401, Respiratory Protection	Small	4
FF-402	051135 89421	3M™ Ultimate FX Full Facepiece Reusable Respirator FF-402, Respiratory Protection	Medium	4
FF-403	051135 89424	3M™ Ultimate FX Full Facepiece Reusable Respirator FF-403, Respiratory Protection	Large	4



## 3M™ Particulate Filters for Reusable Respirators

Filters either non-oil or both non-oil and oil aerosols (e.g., dusts, mists, fumes, smoke, mold, bacteria). Some filters also have nuisance level gas and vapor capabilities. Nuisance level refers to exposure levels that are less than applicable exposure limits.







**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

	2071	2076HF	2078	2091
				
UPC	051138-54356	051138-54369	051138-54368	051131-07000
Product Name	3M™ Particulate Filter 2071, P95 Respiratory Protection	3M™ Particulate Cartridge 2076HF, Hydrogen Fluoride/P95 with Nuisance Level Acid Gas Relief	3M™ Particulate Filter 2078, P95 Respiratory Protection with Nuisance Level Organic Vapour/Acid Gas Relief	3M™ Particulate Filter 2091/07000(AAD) P100 Respiratory Protection
Description	NIOSH approved for environments containing certain oil and non-oil based particles. Use with 3M™ Respirators 5000 Series or Cartridges 6000 Series with 3M™ Adapter 502, 3M™ Facepieces 6000 Series, or 3M™ Facepieces 7000 Series with bayonet filter holders.	NIOSH approved for hydrogen fluoride and certain oil and non-oil based particles. 3M recommended for relief against nuisance levels of acid gases.	NIOSH approved for environments containing certain oil and non-oil based particles. 3M recommended for relief against nuisance levels of organic vapour/acid gases and for ozone protection up to 10X OSHA PEL. Not NIOSH certified for use against ozone.	This NIOSH-approved P100 particulate filter helps provide respiratory protection in environments containing certain oil and non-oil based particles when combined with 3M™ Half and Full Facepiece Respirators according to NIOSH approvals.
Case Quantity	100	100	100	100
	2096	2097	7093	
				
UPC	051138-54295	051131-07184	051131-52705	
Product Name	3M™ Particulate Filter 2096, P100 Respiratory Protection with Nuisance Level Acid Gas Relief	3M™ Particulate Filter 2097/07184(AAD), P100 Respiratory Protection with Nuisance Level Organic Vapor Relief	3M™ Particulate Filter 7093, P100 Respiratory Protection	
Description	NIOSH approved for environments containing certain oil and non-oil based particles. 3M recommended for relief against nuisance levels of acid gases.	P100 particulate filter helps provide respiratory protection in environments containing certain oil and non-oil based particles. 3M recommended for nuisance level organic vapor relief. Use with 3M™ Half and Full Facepieces according to NIOSH approvals.	NIOSH approved for environments containing certain oil and non-oil based particles. Use with 3M™ Respirators 5000 Series or 3M™ Cartridges 6000 Series with 3M™ Adapter 502, 3M™ Facepieces 6000 Series, or 3M™ Facepieces 7000 Series with bayonet filter holders.	
Case Quantity	100	100	60	

## 3M™ Gas and Vapor Cartridges for Reusable Respirators

Filters only gases and vapors. There are different kinds of cartridges for different kinds of gases and vapors.





**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

	6001	6002	6004
			
UPC	051138-21674	051138-28880	051138-28882
Product Name	3M™ Organic Vapor Cartridge 6001	3M™ Acid Gas Cartridge 6002	3M™ Ammonia Methylamine Cartridge 6004
Description	NIOSH approved against certain organic vapors. Use with 3M™ Half and Full Facepieces 6000, 7000 and FF-400 Series with bayonet filter holders.	NIOSH approved against certain acid gases. Use with 3M™ Half and Full Facepieces 6000, 7000 and FF-400 Series with bayonet filter holders.	NIOSH approved against ammonia and methylamine. Use with 3M™ Half and Full Facepieces 6000, 7000 and FF-400 Series with bayonet filter holders.
Case Quantity	60	60	60
	6005	6006	6009S
			
UPC	051138-28883	051138-54186	051138-29148
Product Name	3M™ Formaldehyde/Organic Vapor Cartridge 6005	3M™ Multi Gas/Vapor Cartridge 6006	3M™ Mercury Vapor or Chlorine Cartridge 6009S
Description	NIOSH approved against formaldehyde and certain organic vapors. Use with 3M™ Half and Full Facepieces 6000, 7000 and FF-400 Series with bayonet filter holders.	NIOSH approved against certain organic vapors, acid gases, ammonia, methylamine or formaldehyde. Use with 3M™ Half and Full Facepieces 6000, 7000 and FF-400 Series with bayonet filter holders.	NIOSH approved against mercury vapor or chlorine. Use with 3M™ Half and Full Facepieces 6000, 7000 and FF-400 Series with bayonet filter holders.
Case Quantity	60	60	60





## 3M™ Combination Cartridge/Filters for Reusable Respirators

Filters particles, gases and vapors. Different combination particulate cartridge/filters are used depending on the gas or vapor present in the air.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.




	60921	60922	60923	60924
				
UPC	051138-46465	051138-46466	051138-46467	051138-46468
Product Name	3M™ Cartridge/Filter 60921 Organic Vapor/P100	3M™ Cartridge/Filter 60922 Acid Gas/P100	3M™ Cartridge/Filter 60923 Organic Vapor/Acid Gas/P100	3M™ Cartridge/Filter 60924 Ammonia/ Methylamine/ P100
Description	NIOSH approved against certain organic vapors and particulates. Use with 3M™ Half and Full Facepieces 6000 Series and 3M™ Half and Full Facepieces 7000 Series with bayonet style cartridge holders.	NIOSH approved against certain acid gases and particulates. Use with 3M™ Half and Full Facepieces 6000 Series and 3M™ Half and Full Facepieces 7000 Series with bayonet style cartridge holders.	NIOSH approved against certain organic vapors, acid gases and particulates. Use with 3M™ Half and Full Facepieces 6000 Series and 3M™ Half and Full Facepieces 7000 Series with bayonet style cartridge holders.	NIOSH approved against ammonia, methylamine and certain particulates. Use with 3M™ Half and Full Facepieces 6000 Series and 3M™ Half and Full Facepieces 7000 Series with bayonet style cartridge holders.
Case Quantity	60	60	60	60

## 3M™ Combination Cartridge/Filters for Reusable Respirators (continued)




	60925	60926	60928	60929S
				
UPC	051138-46469	051138-54187	051138-46470	051138-46471
Product Name	3M™ Cartridge/Filter 60925 Formaldehyde/Organic Vapor/P100	3M™ Cartridge/Filter 60926 Multi Gas/Vapor/P100	3M™ Cartridge/Filter 60928 Organic Vapor/Acid Gas/P100	3M™ Cartridge/Filter 60929S Mercury Vapor/Chlorine Gas and Particulates/P100
Description	NIOSH approved against formaldehyde, certain organic vapors and particulates. Use with 3M™ Half and Full Facepieces 6000 Series and 3M™ Half and Full Facepieces 7000 Series with bayonet style cartridge holders.	NIOSH approved against certain organic vapors, acid gases and particulates. Use with 3M™ Half and Full Facepieces 6000 Series and 3M™ Half and Full Facepieces 7000 Series with bayonet style cartridge holders.	NIOSH approved for certain organic vapors, acid gases and particulates. 3M recommended for use against radioiodine or methyl bromide with 3M™ Half and Full Facepieces with bayonet cartridge connections.	NIOSH approved against mercury vapor or chlorine and certain particulates. Use with 3M™ Half and Full Facepieces 6000 Series and 3M™ Half and Full Facepieces 7000 Series with bayonet style cartridge holders.
Case Quantity	60	60	60	60

## 3M™ Reusable Respirator Accessories and Spare Parts




**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

	501	502	504
			
UPC	051138-17668	051138-21511	051131-07065
Product Name	3M™ Filter Retainer 501	3M™ Filter Adapter 502	3M™ Respirator Cleaning Wipe 504/07065(AAD)
Description	Used to hold 3M™ Particulate Filters 5N11 and 5P71/07194(AAD) in place on top of 3M™ Respirators 5000 Series and 3M™ Cartridges 6000 Series.	Use to attach 3M™ Particulate Filters 2000 Series and 7093 to the 3M™ Respirators 5000 Series and 3M™ Cartridges 6000 Series for a wide variety of applications.	Used to clean 3M™ Elastomeric Facepiece Respirators. Individually packed 8 in x 10 in towelettes are alcohol free and will not damage the facepiece materials.
Case Quantity	100	100	500

	5N11	5P71	6872
			
UPC	051138-46464	051131-07194	051138-76697
Product Name	3M™ Particulate Filter 5N11, N95	3M™ Particulate Filter 5P71/07194(AAD), P95	3M™ Pressure Demand (PD) Exhalation Valve 6872
Description	NIOSH approved for environments containing certain non-oil based particles. Use with 3M™ Respirators 5000 Series or 3M™ Cartridges 6000 Series, and 3M™ Filter Retainer 501.	NIOSH approved for environments containing certain oil and non-oil based particles. Use with 3M™ Respirators 5000 Series or 3M™ Cartridges 6000 Series, and 3M™ Filter Retainer 501.	Used in the 3M™ Pressure Demand Adapter Assembly 6874 for the 6000 Series.
Case Quantity	100	100	10

## 3M™ Reusable Respirator Accessories and Spare Parts (continued)

	6874	6876	6281
			
UPC	051138-76698	051138-76718	051138-76567
Product Name	3M™ Pressure Demand Adapter Assembly 6874	3M™ Breathing Tube Gasket 6876	3M™ Head Harness Assembly 6281
Description	This assembly allows the 3M™ Full Facepieces 6000 Series to be converted to a pressure demand system.	Replacement part for 3M™ DIN Port Adapter Assembly 6884. Used to seal 3M™ Plug 7890, 3M™ Canister CP3N 450-02-11R06, 3M™ Breathing Tube GBP-123 or 3M™ Breathing Tube 520-01-77 to DIN port.	Use as a replacement part for 3M™ Half Facepieces 6000 Series.
Case Quantity	5	5	20

## 3M™ Mold Remediation Respirator Kit

Includes a 3M™ Full Facepiece 6000 and two pairs of 3M Particulate Filters 2097, P100, to help reduce exposure to mold and low level organic compounds produced by mold.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
68097	051131-52792	3M™ Mold Remediation Respirator Kit 68097 Medium	Includes a 3M™ Full Facepiece 6000 and two pairs of 3M™ Particulate Filters 2097, P100, to help reduce exposure to mold and low level organic compounds produced by mold.	2 Kits/Case
69097	051131-52793	3M™ Mold Remediation Respirator Kit 69097 Large	Includes a 3M™ Full Facepiece 6000 and two pairs of 3M™ Particulate Filters 2097, P100, to help reduce exposure to mold and low level organic compounds produced by mold.	2 Kits/Case

## Respiratory Protection Products: Respiration Fit Test

### 3M™ Sensitivity and Fit Testing Solutions

Test kits and accessories designed to help your organization meet OSHA fit testing requirements for respirators. The products can be used to check face-to-respirator seal on any particulate respirator or gas/vapor respirator with a particulate prefilter.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.





Order No.	UPC	Product Name	Description	Case Quantity
FT-10	051138-16358	3M™ Qualitative Fit Test Apparatus FT-10, Sweet	Meets the performance criteria for fit testing respirators under the current OSHA Standard for Respirator Protection: 29 CFR 1910.134, Appendix A.	1
FT-11	051138-16359	3M™ Sensitivity Solution FT-11, Sweet	Used to test the sensitivity of the respirator wearer to a saccharin solution. It is used with the 3M™ Qualitative Fit Test Apparatus FT-10.	6
FT-12	051138-16356	3M™ Fit Test Solution FT-12, Sweet	Meet the performance criteria for fit testing respirators under the current OSHA Standard for Respirator Protection: 29 CFR 1910.134, Appendix A and other applicable standards.	6
FT-20	051138-29137	3M™ Training and Fit Testing Case FT-20, Sweet	A durable case that includes all 3M™ Qualitative Fit Test Apparatus FT-10 materials and training materials, including videos, posters and literature.	1
FT-30	051138-54203	3M™ Qualitative Fit Test Apparatus FT-30, Bitter	Meets the performance criteria for fit testing respirators under the current OSHA Standard for Respirator Protection: 29 CFR 1910.134, Appendix A.	1
FT-31	051138-54204	3M™ Sensitivity Solution FT-31, Bitter	Used to test the sensitivity of the respirator wearer to a bitter solution. It is used with the 3M™ Qualitative Fit Test Apparatus FT-30.	6
FT-32	051138-54205	3M™ Fit Test Solution FT-32, Bitter	Meets the performance criteria for fit testing respirators under the current OSHA Standard for Respirator Protection: 29 CFR 1910.134, Appendix A and other applicable standards.	6

## Respiratory Protection Products: Air Monitors

### 3M™ Organic Vapor Monitor

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

	3510	3720
		
UPC	021200-17309	051138-08785
Product Name	3M™ Organic Vapor Monitor 3510	3M™ Formaldehyde Monitor 3720
Description	This monitor uses a single charcoal sorbent wafer for collecting organic vapors. Accuracy of +/-25% at a 95% confidence level for many workplace contaminants. Includes prepaid analysis.	This monitor meets OSHA accuracy requirements of +/-25% for 8-hour TWA sampling of formaldehyde. Not for 15 minute STEL sampling. Includes prepaid analysis.
Case Quantity	5	5

# Hearing Conservation

3M™ E-A-R™ Hearing products are some of the most recognized on the market. At 3M, we don't just sell hearing protection, we're dedicated to the success of your entire hearing conservation program. 3M™ Peltor™ Products are a global leader in 2-way communications, offering a broad selection of headsets and 2-way radio accessories for use in a variety of high noise environments.



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## Hearing Conservation: 3M™ E-A-R™ Hearing Conservation

### 3M™ Disposable Earplugs

A full-line of disposable foam earplugs that includes different materials and shapes of corded and uncorded products.









**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	1100	1110	310-1001	310-1101
				
UPC	051138-29008	051138-29009	080529-10000	080529-10051
Product Name	3M™ Uncorded Foam Earplugs, Hearing Conservation 1100 1000 PR/Case	3M™ Corded Foam Earplugs, Hearing Conservation 1110 500 PR/Case	3M™ E-A-R™ Classic™ Uncorded Earplugs, Hearing Conservation in Pillow Pack 310-1001 2000 PR/Case	3M™ E-A-R™ Classic™ Plus Uncorded Earplugs, Hearing Conservation 310-1101 in Pillow Pack 2000 PR/Case
Description	Soft, uncorded foam earplugs that conform to the unique shape of each ear for excellent hearing protection and comfort.	Soft, corded foam earplugs that conform to the unique shape of each ear for excellent hearing protection and comfort.	Classic uncorded foam earplugs set the standard in hearing protection as the world's first foam earplugs. Constructed from slow-recovery foam, the disposable earplug comes in a clean, convenient pillow pack.	Classic uncorded foam earplugs set the standard in hearing protection as the world's first foam earplugs. Classic plus earplugs are slightly longer than regular Classic earplugs for higher noise reduction when fit deeply in the ear canal.
NRR	29 dB	29 dB	29 dB	33 dB
Case Quantity	5000 Pair	500 Pair	2000 Pair	2000 Pair
	311-1101	311-1105	311-1250	311-1251
				
UPC	080529-11001	080529-11023	080529-11033	080529-11034
Product Name	3M™ E-A-R™ Classic™ Corded VP311-1101, Vending Pack 500 PR/Case	3M™ E-A-R™ Classic™ Plus Corded Earplugs, Hearing Conservation 311-1105 in Poly Bag 2000 PR/Case	3M™ E-A-Rsoft™ Yellow Neon™ Corded Earplugs, Hearing Conservation 311-1250 in Poly Bag Regular Size 2000 PR/Case	3M™ E-A-Rsoft™ Yellow Neon™ Corded Earplugs Large, Hearing Conservation 311-1251 in Poly Bag Large Size 2000 PR/Case
Description	Specifically packaged for vending application. 3M™ E-A-R™ Classic™ corded foam earplugs set the standard in hearing protection as the world's first known foam earplugs. Constructed from slow-recovery foam, these disposable earplugs are uniquely moisture-resistant.	3M™ E-A-R™ Classic™ corded foam earplugs set the standard in hearing protection as the world's first known foam earplugs. Classic™ Plus earplugs are slightly longer than regular E-A-R™ Classic™ earplugs to fit deeper into the ear canal and provide higher noise reduction.	3M™ E-A-Rsoft™ Yellow Neon™ earplugs seal the ear canal with soft, slow-recovery foam for excellent noise reduction and comfort.	3M™ E-A-Rsoft™ Yellow Neon™ corded earplugs seal the ear canal with soft, slow-recovery foam for excellent noise reduction and comfort. Large size E-A-Rsoft™ earplugs are ideal for persons with larger ear canals.
NRR	29 dB	33 dB	33 dB	33 dB
Case Quantity	2000 Pair	2000 Pair	2000 Pair	2000 Pair



### 3M™ Disposable Earplugs (continued)

	311-1252	311-4106	312-1201	312-1250
				
UPC	080529-11035	080529-11042	080529-12002	080529-12063
Product Name	3M™ E-A-Rsoft™ Yellow Neon™ Blasts™ Corded Earplugs, Hearing Conservation 311-1252 in Poly Bag Regular Size 2000 PR/Case	3M™ E-A-Rsoft™ Metal Detectable Corded Earplugs, Hearing Conservation 311-4106 in Poly Bag Regular Size 2000 PR/Case	3M™ E-A-R™ Classic™ Uncorded Earplugs, Hearing Conservation 312-1201 in Poly Bag 2000 PR/Case	3M™ E-A-Rsoft™ Yellow Neon™ Uncorded Earplugs, Hearing Conservation 312-1250 in Pillow Pack Regular Size 2000 PR/Case
Description	3M™ E-A-Rsoft™ Yellow Neon™ Blasts™ corded earplugs seal the earcanal with soft, slow-recovery foam for excellent noise reduction and comfort.	3M™ E-A-Rsoft™ Metal Detectable earplugs were specially developed for food processing and other industries where it is critical to keep earplugs from contaminating products and processes. Recognized by most metal-sensing systems, these earplugs feature an implanted stainless steel ball bearing in the plug and metal particles in the cord.	3M™ E-A-R™ Classic™ uncorded earplugs set the standard in hearing protection as the world's first foam earplugs. Constructed from slow-recovery foam, these disposable earplugs are uniquely moisture-resistant.	3M™ E-A-Rsoft™ Yellow Neon™ uncorded earplugs seal the earcanal with soft, slow-recovery foam for excellent noise reduction and comfort.
NRR	33 dB	32 dB	29 dB	33 dB
Case Quantity	2000 Pair	2000 Pair	2000 Pair	2000 Pair
	312-1251	312-1252	312-1260	312-1261
				
UPC	080529-12064	080529-12065	080529-12085	080529-12086
Product Name	3M™ E-A-Rsoft™ Yellow Neon™ Uncorded Earplugs, Hearing Conservation 312-1251 in Poly Bag Large Size 2000 PR/Case	3M™ E-A-Rsoft™ Yellow Neon™ Blasts™ Uncorded Earplugs, Hearing Conservation 312-1252 in Poly Bag Regular Size 2000 PR/Case	3M™ E-A-Rsoft™ FX™ Corded Earplugs, Hearing Conservation 312-1260 in Poly Bag 2000 PR/Case	3M™ E-A-Rsoft™ FX™ Uncorded Earplugs, Hearing Conservation 312-1261 in Poly Bag 2000 PR/Case
Description	3M™ E-A-Rsoft™ Yellow Neon™ earplugs seal the earcanal with soft, slow-recovery foam for excellent noise reduction and comfort.	3M™ E-A-Rsoft™ Yellow Neon™ Blasts™ earplugs seal the earcanal with soft, slow-recovery foam for excellent noise reduction and comfort. Exciting flame graphics.	3M™ E-A-Rsoft™ FX™ corded earplugs feature a bell shape and super-soft, slow-recovery foam to effectively seal the earcanal and provide reliable hearing protection.	3M™ E-A-Rsoft™ FX™ earplugs feature a bell shape and super-soft, slow-recovery foam to effectively seal the earcanal and provide reliable hearing protection.
NRR	33 dB	33 dB	33 dB	33 dB
Case Quantity	2000 Pair	2000 Pair	2000 Pair	2000 Pair

## Hearing Conservation: 3M™ E-A-R™ Hearing Conservation

### 3M™ E-A-R™ Reusable Earplugs

Reusable earplugs are durable, washable, and offer moderate noise reduction.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	340-4001	340-4002	340-4003	340-4004
UPC	080529-40000	080529-40001	080529-40002	080529-40003
Product Name	3M™ E-A-R™ UltraFit™ Uncorded Earplugs, Hearing Conservation 340-4001 in Carrying Case 200 PR/Case	3M™ E-A-R™ UltraFit™ Corded Earplugs, Hearing Conservation 340-4002 in Carrying Case 200 PR/Case	3M™ E-A-R™ UltraFit™ Uncorded Earplugs, Hearing Conservation 340-4003 in Poly Bag 400 PR/Case	3M™ E-A-R™ UltraFit™ Corded Earplugs, Hearing Conservation 340-4004 in Poly Bag 400 PR/Case
Description	The 3M™ E-A-R™ UltraFit™ uncorded earplugs features a proprietary, premolded, triple-flange design that fits comfortably in most earcanals.	The 3M™ E-A-R™ UltraFit™ corded earplugs features a proprietary, premolded, triple-flange design that fits comfortably in most earcanals.	The 3M™ E-A-R™ UltraFit™ uncorded earplugs features a proprietary, premolded, triple-flange design that fits comfortably in most earcanals.	The 3M™ E-A-R™ UltraFit™ corded earplugs features a proprietary, premolded, triple-flange design that fits comfortably in most earcanals.
NRR	25 dB	25 dB	25 dB	25 dB
Case Quantity	200 Pair	200 Pair	400 Pair	400 Pair
	340-4007	340-4014	370-2000	
UPC	080529-40004	080529-40053	080529-70012	
Product Name	3M™ E-A-R™ UltraFit™ Metal Detectable Corded Earplugs, Hearing Conservation 340-4007 in Poly Bag 400 PR/Case	3M™ E-A-R™ UltraFit™ Corded Earplugs, Hearing Conservation 340-4014 in Econopack 2000 PR/Case	3M™ E-A-R™ ARC Plug™ Earplugs, Hearing Conservation 370-2000 in Carrying Case 10 PR/Case	
Description	The 3M™ E-A-R™ UltraFit™ corded earplugs features a proprietary, premolded, triple-flange design that fits comfortably in most earcanals. Metal-detectable ball bearing for high detectability.	The 3M™ E-A-R™ UltraFit™ corded earplugs features a proprietary, premolded, triple-flange design that fits comfortably in most earcanals.	3M™ E-A-R™ ARC Plug™ earplugs feature Hear-Through™ design allow workers to hear conversations, signals, or other critical sounds clearly, while helping protect against impulse noise from an arc flash.	
NRR	25 dB	25 dB	Red End: 22 dB; Yellow End: 0 dB	
Case Quantity	400 Pair	2000 Pair	10 Pair	







## Hearing Conservation: 3M™ E-A-R™ Hearing Conservation

### 3M™ Push-in Foam Earplugs




No roll down required on this style of earplugs, which helps make them easy to insert, clean and hygienic.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	311-1115	318-1000	318-1001
			
UPC	080529-11011	080529-18000	080529-18001
Product Name	3M™ E-A-R™ Express™ Pod Plugs™ Corded Earplugs, Hearing Conservation Assorted Color Grips 311-1115 in Pillow Pack 400 PR/Case	3M™ E-A-R™ Push-Ins™ Uncorded Earplugs, Hearing Conservation 318-1000 in Poly Bag 400 PR/Case	3M™ E-A-R™ Push-Ins™ Corded Earplugs, Hearing Conservation 318-1001 in Poly Bag 400 PR/Case
Description	3M™ E-A-R™ Express™ Pod Plugs™ corded earplugs feature advanced “no-roll”, slow-recovery foam and assorted color grips. Paddle-style grips allow easy fitting and help keep earplug tips clean even when your hands are dirty.	3M™ E-A-R™ Push-Ins™ earplugs provide all-day hearing comfort, convenience and protection. Constructed of 3M™ E-A-Rform™ foam, these earplugs feature a no roll-down design and a blue stem for a quick and easy fit.	3M™ E-A-R™ Push-Ins™ corded foam earplugs provide all-day hearing comfort, convenience and protection. Constructed of 3M™ E-A-Rform™ foam, these earplugs feature a no roll-down design and a blue stem for a quick and easy fit.
NRR	25 dB	28 dB	28 dB
Case Quantity	400 Pair	400 Pair	400 Pair
	318-4001	318-4000	P1400
			
UPC	080529-18018	080529-18017	093045-93401
Product Name	3M™ E-A-R™ Push-Ins™ SofTouch™ Corded Earplugs, Hearing Conservation 318-4001 in Poly Bag 2000 PR/Case	3M™ E-A-R™ Push-Ins™ SofTouch™ Uncorded Earplugs, Hearing Conservation 318-4000 in Poly Bag 2000 PR/Case	3M™ E-A-R™ Pistonz™ Uncorded Earplugs P1400, Hearing Conservation NRR 29dB 400 PR/Case
Description	3M™ E-A-R™ Push-Ins™ SofTouch™ corded foam earplugs feature 3M™ E-A-Rform™ Foam, engineered for all-day comfort and hearing protection, this foam adjusts to the shape of the ear canal, helping to create a noise-reducing seal.	3M™ E-A-R™ Push-Ins™ SofTouch™ Uncorded foam earplugs feature 3M™ E-A-Rform™ Foam, engineered for all-day comfort and hearing protection, this foam adjusts to the shape of the ear canal, helping to create a noise-reducing seal.	3M™ E-A-R™ Pistonz™ uncorded, push-to-fit earplugs are stylish hearing protection that feature soft foam tips with a metallic look and a convenient thumb-grip stem. No-roll foam makes fitting easy; simply push the earplug into the ear canal and twist to adjust the fit.
NRR	31 dB	31 dB	29 dB
Case Quantity	2000 Pair	2000 Pair	400 Pair

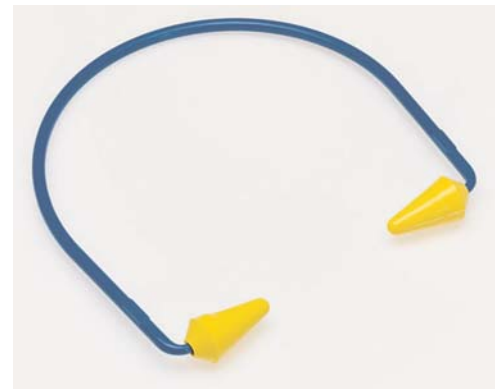
## 3M™ Push-in Foam Earplugs (continued)





	P1400A	P1401	P1401A
			
UPC	051131-37050	093045-93402	051131-37051
Product Name	3M™ E-A-R™ Pistonz™ Earplug P1400A, Uncorded, NRR 29dB 50 PR/Case, 2 PR/Pack, 25 Packs/Case	3M™ E-A-R™ Pistonz™ Corded Earplug, Hearing Conservation P1401 NRR 29dB 400 PR/Case	3M™ E-A-R™ Pistonz™ Corded Earplug, Hearing Conservation P1401A NRR 29dB 50 PR/Case
Description	3M™ E-A-R™ Pistonz™ uncorded, push-to-fit earplugs are stylish hearing protection that feature soft foam tips with a metallic look and a convenient thumb-grip stem. No-roll foam makes fitting easy; simply push the earplug into the ear canal and twist to adjust the fit.	3M™ E-A-R™ Pistonz™ corded, push-to-fit earplugs are stylish hearing protection that feature soft foam tips with a metallic look and a convenient thumb-grip stem. No-roll foam makes fitting easy; simply push the earplug into the ear canal and twist to adjust the fit.	3M™ E-A-R™ Pistonz™ corded, push-to-fit earplugs are stylish hearing protection that feature soft foam tips with a metallic look and a convenient thumb-grip stem. No-roll foam makes fitting easy; simply push the earplug into the ear canal and twist to adjust the fit.
NRR	29 dB	29 dB	29 dB
Case Quantity	50 Pair	400 Pair	50 Pair

## 3M™ Banded Hearing Protection

Often used by people who need intermittent hearing protection when going in and out of loud environments.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.






	320-1000	320-1001	322-2000	322-2001
				
UPC	080529-20006	080529-19063	080529-22004	080529-19067
Product Name	3M™ E-A-Rflex™ 28 Banded Hearing Protector, Hearing Conservation 320-1000, 100 EA/Case	3M™ E-A-Rflex™ 28 Replacement Pods, Hearing Conservation 320-1001, 50 PR/Case	3M™ E-A-R™ Swerve™ Banded Hearing Protector, Hearing Conservation 322-2000, 10 PR/Case	E-A-R™ Replacement Comfort Pod Tips 322-2001, 500 PR/Case
Description	3M™ E-A-Rflex™ 28 banded hearing protector features soft, E-A-Rform™ foam tips that reacts to body temperature for enhanced comfort and fit.	Replacement foam tips for 3M™ E-A-Rflex™ 28 Banded Hearing Protector 320-1000. Not for use without band.	3M™ E-A-R™ Swerve™ Banded Hearing Protector combines a cutting-edge band design with the effectiveness of E-A-R foam earplugs.	E-A-R™ Replacement Comfort Pod Tips 322-2001, 500 PR/Case
NRR	28 dB	28 dB	Flex 28 Tips: 28 dB; Comfort Pod Tips: 19 dB	19 dB
Case Quantity	100	50 Pair	10 Pair	50 Pair

## 3M™ Earplug Dispensers

The widest variety of earplugs available in earplug dispensers.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	391-1000	391-1001	391-1004
			
UPC	080529-91000	080529-91001	080529-91004
Product Name	3M™ E-A-R™ One Touch™ Earplug Dispenser 391-1000 Hearing Conservation, 1 EA/Case	3M™ E-A-R™ Classic™ One Touch™ Refill 391-1001 2000 PR/Case	3M™ E-A-Rsoft™ Yellow Neons™ One Touch™ Refill Uncorded Earplugs, Hearing Conservation 391-1004 Regular Size 2000 PR/Case
Description	The 3M™ E-A-R™ One Touch™ dispenser offers convenient access to workers on the move. A “No Waste Funnel” is designed to deliver earplugs with each turn. The reusable free-standing base can be re-stocked with One Touch™ refills of our most popular 3M™ E-A-R™ Earplugs.	3M™ E-A-R™ Classic™ earplugs packaged in convenient Refill Bottles to fit your One Touch™ dispenser 391-1000.	3M™ E-A-Rsoft™ Yellow Neons™ earplugs in a refill container for One Touch™ dispenser 391-1000. Yellow Neons™ earplugs seal the ear canal with soft, slow-recovery foam for excellent noise reduction and comfort.
Case Quantity	1 EA/Case	2000 Pair	2000 Pair
	391-1005	391-1010	
			
UPC	080529-91005	080529-91012	
Product Name	3M™ E-A-Rsoft™ Yellow Neons™ Large Uncorded Earplugs 391-1005, in One Touch™ Dispenser Refill Bottle, Large Size 1600 PR/Case	3M™ E-A-Rsoft™ Yellow Neon™ Blasts™ One Touch™ Dispenser Refill	
Description	3M™ E-A-Rsoft™ Yellow Neons™ Large earplugs in a refill container for One Touch™ dispenser 391-1000. Large-size Yellow Neons™ earplugs are slightly larger than regular size E-A-Rsoft™ Yellow Neons™ to fit comfortably in larger ears.	3M™ E-A-Rsoft™ Yellow Neon™ Blasts™ earplugs in a refill container for One Touch™ dispenser 391-1000. Yellow Neon Blasts™ earplugs seal the ear canal with soft, slow-recovery foam for excellent noise reduction and comfort. Exciting flame graphic on each earplug.	
Case Quantity	1600 Pair	2000 Pair	

## Hearing Conservation: 3M™ Hearing Protection

### 3M™ Earplugs

Covers a wide range of products from disposable, re-usable and banded earplugs. There is the option to choose from corded or uncorded within disposable or re-usable earplugs.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	P1300	P1301	P2000	P2001
UPC	093045-92951	093045-92952	093045-98014	093045-98015
Product Name	3M™ Skull Screws™ Earplug P1300, Uncorded 480 PR/Case	3M™ Skull Screws™ Corded Earplugs, Hearing Conservation P1301, 480 PR/Case	3M™ No-Touch™ Foam Plugs Uncorded P2000 400 PR/Case	3M™ No-Touch™ Corded Push-to-Fit Earplugs, Hearing Conservation P2001 400 PR/Case
Description	3M™ Skull Screws™ push-to fit uncorded foam earplugs sport the tough look of threaded metal, but feel of soft foam, while offering push-to-fit convenience and noise attenuation with attitude. Effective hearing protection and compliance with a clean, easy twist.	3M™ Skull Screws™ push-to fit corded foam earplugs sport the tough look of threaded metal, but feel of soft foam, while offering push-to-fit convenience and noise attenuation with attitude. Effective hearing protection and compliance with a clean, easy twist.	3M™ No-Touch™ uncorded push-to-fit foam earplugs create a hygienic, noise-reducing seal in the ear canal with soft foam, a smooth tapered shape and paddle stems. Push-to-fit design makes fitting hearing protection easy.	3M™ No-Touch™ corded push-to-fit foam earplugs create a hygienic, noise-reducing seal in the ear canal with soft foam, a smooth tapered shape and paddle stems. Push-to-fit design makes fitting hearing protection easy.
Case Quantity	480 Pair	480 Pair	400 Pair	400 Pair













## 3M™ Peltor™ Earmuffs X Series

The X-Series earmuffs are 3M's latest advancement in hearing conservation. New technologies in comfort, design and protection all come together in this groundbreaking earmuff line.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	X1A	X1P3E	X2A	X2P3E
				
UPC	093045-93723	093045-93728	093045-93724	093045-93729
Product Name	3M™ Peltor™ Over-the-Head Earmuffs X1A	3M™ Peltor™ Cap-Mount Earmuffs X1P3E	3M™ Peltor™ Over-the-Head Earmuffs X2A	3M™ Peltor™ Cap-Mount Earmuffs X2P3E
Description	Ultra-slim earmuffs for low-to-moderate noise exposures where overprotection is a concern	Ultra-slim earmuffs for low-to-moderate noise exposures where overprotection is a concern	Lightweight earmuffs for moderate noise exposure situations	Lightweight earmuffs for moderate noise exposure situations
NRR	21-22 dB	21-22 dB	24 dB	24 dB
Case Quantity	10	10	10	10
	X3A	X3P3E	X4A	X4P3E
				
UPC	093045-93725	093045-93730	093045-93726	093045-93731
Product Name	3M™ Peltor™ Over-the-Head Earmuffs X3A	3M™ Peltor™ Cap-Mount Earmuffs X3P3E	3M™ Peltor™ Over-the-Head Earmuffs X4A	3M™ Peltor™ Cap-Mount Earmuffs X4P3E
Description	For high-noise exposure situations	For high-noise exposure situations	Extremely lightweight, low-profile earmuffs for use in high-noise exposure situations	Extremely lightweight, low-profile earmuffs for use in high-noise exposure situations
NRR	25-28 dB	25-28 dB	25-27 dB	25-27 dB
Case Quantity	10	10	10	10
	X5A	X5P3E		
				
UPC	093045-93727	093045-93732		
Product Name	3M™ Peltor™ Over-the-Head Earmuffs X5A	3M™ Peltor™ Cap-Mount Earmuffs X5P3E		
Description	3M's highest attenuation earmuffs for very high-noise exposures	3M's highest attenuation earmuffs for very high-noise exposures		
NRR	31 dB	31 dB		
Case Quantity	10	10		



## Hearing Conservation: 3M™ Peltor™ Hearing Conservation

### 3M™ Earmuffs



Stainless steel band construction which resists warping and provides consistent band force; multiple band options including over-the-head, behind-the-head, helmet attached and folding.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	H6A/V	H6B/V	H6F/V	H6P3E/V
UPC	093045-08061	093045-08062	093045-08063	093045-08065
Product Name	3M™ Peltor™ Optime™ 95 Over-the-Head Earmuffs, Hearing Conservation H6A/V	3M™ Peltor™ Optime™ 95 Behind-the-Head Earmuffs, Hearing Conservation H6B/V	3M™ Peltor™ Optime™ 95 Over-the-Head Folding Earmuffs, Hearing Conservation H6F/V	3M™ Peltor™ Optime™ 95 Cap-Mount Earmuffs, Hearing Conservation H6P3E/V
Description	For noise levels up to 95dBA, the lightweight and comfortable Optime 95 features low-profile ear cups that fit well with most helmets, eyewear, and other safety equipment.	For noise levels up to 95 dBA, the lightweight and comfortable behind-the-head earmuffs feature low-profile earcups that fit well with most helmets, eyewear, and other safety equipment.	For noise levels up to 95dBA, the lightweight and comfortable Optime 95 features low-profile ear cups that fit well with most helmets, eyewear, and other safety equipment.	For noise levels up to 95dBA, the lightweight and comfortable Optime 95 features low-profile ear cups that fit well with most helmets, eyewear, and other safety equipment.
Case Quantity	10	10	10	10
	H9A	H9P3E	H7P3E	H10A
UPC	093045-08091	093045-08093	093045-08073	093045-08101
Product Name	3M™ Peltor™ Optime™ 98 Over-the-Head Earmuffs, Hearing Conservation H9A	3M™ Peltor™ Optime™ 98 Cap-Mount Earmuffs, Hearing Conservation H9P3E	3M™ Peltor™ Optime™ 101 Cap-Mount Earmuffs, Hearing Conservation H7P3E	3M™ Peltor™ Optime™ 105 Over-the-Head Earmuff Hearing Conservation H10A
Description	For noise levels up to 98dBA, delivers effective protection for mid-range environments comfortably.	For noise levels up to 101dBA, delivers effective protection for mid-range environments comfortably.	For noise levels up to 101 dBA, these cap-mount earmuffs provide effective hearing protection.	For noise levels up to 105 dBA, these over-the-head earmuffs feature double-shell technology to provide effective hearing protection.
Case Quantity	10	10	10	10

### 3M™ Earmuffs (continued)

	H10B	H10P3E	H7A
			
UPC	093045-08102	093045-08103	093045-08071
Product Name	3M™ Peltor™ Optime™ 105 Behind-the-Head Earmuffs, Hearing Conservation H10B	3M™ Peltor™ Optime™ 105 Cap-Mount Earmuffs, Hearing Conservation H10P3E	3M™ Peltor™ PTL™ Earmuff, H7A-PTL, Headband Headset
Description	For noise levels up to 105 dBA, these behind-the-head earmuffs feature double-shell technology to provide effective hearing protection.	For noise levels up to 105 dBA, these cap attached with double-shell technology to provide effective hearing protection	For noise levels up to 101 dBA, these over-the-head earmuffs provide effective hearing protection.
Case Quantity	10	10	10

### 3M™ Reusable Earplugs

Multiple seals, multiple uses; flexible flanges conform to the ear canal. Stem provides for quick and clean insertion.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	NRR	Case Quantity
P3000	093045-98016	3M™ Tri-Flange™ Corded Earplugs, Hearing Conservation P3000 400 PR/Case	3M™ Tri-Flange™ corded reusable earplugs features a proven, triple-flange design and pliable, premolded material to provide clean and comfortable hearing protection. Fits flexibly in most ear canals.	26 dB	400 Pair
P3001	093045-98017	3M™ Tri-Flange™ Cloth Corded Earplugs, Hearing Conservation P3001 400 PR/Case	3M™ Tri-Flange™ cloth corded reusable earplugs features a proven, triple-flange design and pliable, premolded material to provide clean and comfortable hearing protection. Fits flexibly in most ear canals.	26 dB	400 Pair

## Hearing Conservation: 3M™ Noise Detection

### 3M™ Noise Indicator

The new 3M™ Noise Indicator offers easy, durable noise level detection, helping identify areas where hearing protection may need to be worn.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Description	Case Quantity
NI-100	051131-17453	3M™ Noise Indicator NI-100, Hearing Conservation	A Popular Science “Best of What’s New” in 2011, Noise Indicator NI-100 is designed to alert users to hazardous noise levels. It clips to clothing and uses a LED light to offer real-time noise detection, signaling when hearing protection may be required.	10

## Hearing Conservation: 3M™ Hearing Communications

### 3M™ Peltor™ ORA TAC In-Ear Tactical Communications Headset

This is the 3M™ Peltor™ ORA TAC dual-sided in-ear tactical communications headset. The ORA TAC headset is lightweight, compact and provides hearing protection with comfortable, ambient listening.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	ORA-BASE	CON-SDBB	ORA-BASE-BB	ORA-LOOPS
UPC	093045-93542	093045-93691	093045-93690	093045-93629
Product Name	3M™ Peltor™ ORA TAC In-Ear Tactical Communications Headset ORA-BASE	3M™ Peltor™ ORA TAC Big Button Connector, CON-SDBB	3M™ Peltor™ ORA TAC In-Ear Tactical Communications Headset ORA-BASE-BB	3M™ Peltor™ ORA TAC Ear Loops, ORA-LOOPS
Case Quantity	1	1	1	1 pair

## Hearing Conservation: 3M™ Hearing Communications

### 3M™ Peltor™ ComTac Headsets

3M™ Peltor™ ComTac™ Headsets are designed to provide warfighters the options needed for successful field hearing protection and combat communications.

- Level-dependent surround sound for “talk through”
- Ambidextrous noise-canceling boom mic
- Adjustable sizing.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	MT17H682FB-47	MT17H682FB-FB	MT17H682FB-19	MT17H682BB-19
UPC	093045-93631	093045-93721	093045-93428	093045-93429
Product Name	3M™ Peltor™ ComTac™ ACH Communication Headset, Single Comm, 20" Straight Single Downlead, MT17H682FB-47 CYH, Coyote Brown	3M™ Peltor™ ComTac™ ACH Communication Headset MT17H682FB-FB, No Comm, Foliage Green	3M™ MT17H682FB-19 FG ComTac™ ACH Dual Comm, Foliage Green	3M™ MT17H682BB-19 FG ComTac™ ACH Dual Comm, BB, Foliage Green
Case Quantity	1	1	1	1

### 3M™ Peltor™ TEP-100 Tactical Earplugs

Helps provide hearing protection, and helps improve situational awareness and communication. The small, lightweight, and rechargeable tactical earplugs are designed for tactical, engineering, and maintenance applications.





- Level dependent technology helps provide hearing protection in noise and improves communication in quiet. Protecting hearing and improving situational awareness can help increase safety and improve productivity.
- Compatible with most headborne 3M™ Personal Protective Equipment (PPE) such as helmets, hardhats, and face shields.
- The small and lightweight design helps improve overall comfort and user experience.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	TEP-100	TEP-CORD	TEP-100E	TEP-100C
UPC	078371-66525	093045-93783	078371-66523	078371-66524
Product Name	3M™ PELTOR™ TEP-100 Tactical Earplug	3M™ PELTOR™ TEP-CORD Tactical Earplug Replacement Cord	3M™ PELTOR™ TEP-100E Tactical Earplug Replacement Earpiece	3M™ PELTOR™ TEP-100C Tactical Earplug Replacement Case
Case Quantity	1 kit	5 each	1 each	1 each

## 3M™ Peltor™ TEP-100 Tactical Earplugs (continued)

	370-TEPL-25	370-TEPM-25	370-TEPS-25	370-1019-10
				
UPC	093045-93782	093045-93781	093045-93780	093045-93645
Product Name	3M™ PELTOR™ UltraFit™ Communication Tip Replacement, Large	3M™ PELTOR™ UltraFit™ Communication Tip Replacement, Medium	3M™ PELTOR™ UltraFit™ Communication Tip Replacement, Small	3M™ PELTOR™ Skull Screw™ Communication Tip Replacement
Case Quantity	25 pair	25 pair	25 pair	10 pair

# Eye Protection

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## Eye Protection: 3M™ Premium Eyewear

### 3M™ Light Vision™ 2 Protective Eyewear

Designed for workers who have difficulty reading small print or who are engaged in small detail work. Dual LED lights provide hands-free lighting. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

[Note: 11476-00000-10 are not Reader goggles.]

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
11476-00000-10	078371-62111	Clear Anti-Fog Lens, Gray Frame	10
11477-00000-10	078371-62112	Clear Anti-Fog Lens, Gray Frame, +1.5 Diopter	10
11478-00000-10	078371-62113	Clear Anti-Fog Lens, Gray Frame, +2.0 Diopter	10
11479-00000-10	078371-62114	Clear Anti-Fog Lens, Gray Frame, +2.5 Diopter	10

### 3M™ Moon Dawg™ Protective Eyewear

Surf-inspired Moon Dawg safety glasses are your comfortable, stylish choice for protective eyewear. Its lightweight, wide temple frame offers enhanced coverage, and its durable construction makes it a cool outdoor safety sunwear option. Ideal for outdoor safety sunwear. Stylish, lightweight, comfortable frame. Wide temples provide enhanced side coverage. Meets the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
11215-00000-20	078371-62178	Gray Anti-Fog Lens, Black Frame	20
11216-00000-20	078371-62179	Mirror Lens, Black Frame	20



## Eye Protection: 3M™ Premium Eyewear

### 3M™ Smart Lens™ Protective Eyewear

Changing outdoor light conditions doesn't require changing eyewear anymore. SmartLens protective eyewear lightens and darkens with rise and fall of outdoor light conditions. Transitions from light to dark in less than 20 seconds (allowing just 22% light transmission), dark to light in less than 3 minutes (allowing 77.5% light transmission). Features transitional, abrasion-resistant polycarbonate lenses, and a soft adjustable nose bridge, nylon brow and magnesium alloy spring-hinged temple for a flexible fit.



**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

Order No.	UPC	Description	Case Quantity
13407-00000-5	078371-62033	Photochromatic Lens, Black Frame	5

## Eye Protection: 3M™ Economy Eyewear

### 3M™ Tour-Guard™ III Protective Eyewear

Economical protection for visitors. Polycarbonate construction. Integral sideshields provide wraparound protection. Large lens fits over prescription eyewear. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003



**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

Order No.	UPC	Description	Case Quantity
41120-00000-100	078371-62343	Clear Lens, Regular	100
41210-00000-100	078371-62345	Clear Lens, Small	100

Eye Protection: 3M™ Economy Eyewear

### 3M™ Virtua™ Protective Eyewear

Unisex styling. Lightweight design weighs less than one ounce. High wrap offers additional coverage. Contoured temples for comfortable fit. Polycarbonate lens absorbs 99.9% UV. Meets the High Impact Requirements of ANSI Z87.1-2003.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
11326-00000-20	078371-62099	Clear Hard Coat Lens, Clear Temple	20
11327-00000-20	078371-62102	Gray Hard Coat Lens, Gray Temple	20
11328-00000-20	078371-62103	I/O Hard Coat Lens, Clear Temple	20
11329-00000-20	07837162105	Clear Anti-Fog Lens, Clear Temple	20
11331-00000-20	078371-62108	Blue Mirror Hard Coat Lens, Blue Mirror Temple	20
11228-00000-100	078371-11228	Clear Lens, Clear Temple	100

### 3M™ Virtua™ Plus Protective Eyewear

The Virtua plus protective eyewear merges outstanding unisex style, protection and affordability, all while offering a high impact polycarbonate frame construction, cushioned brow, flexible, universal-fit nose bridge and soft tip temples. Virtua plus protective eyewear is a valuable choice in vision safety.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
11394-00000-20	078371-62110	Clear Anti-Fog Lens, Clear Temple	20

## Eye Protection: 3M™ Economy Eyewear

### 3M™ Virtua™ Sport Protective Eyewear

Sleek unisex sport styling look. Comfortable, lightweight frame. High wrap lens for front/side coverage. Meets the requirements of CSA Z94.3-2007 and the High Impact requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
11545-00000-20	078371-62084	Ligh Amber Hard Coat Lens, Amber Temple	20

### 3M™ Virtua™ Sport CCS Protective Eyewear

Virtua sport with corded earplug control system (CCS) merges outstanding unisex style, protection and affordability, all while offering convenient access to hearing protection when it's needed. Designed for indoor or outdoor use, Virtua sport CCS protective eyewear is a valuable and clear choice for virtually any eye protection need.

This unique temple design controls and holds the cord of the earplug to keep it securely in place and untangled while in use. The corded control system (CCS) is convenient for workers who are intermittently exposed to noisy areas. When earplugs are not in use, the CCS helps prevent the loss of the hearing protector. The CCS feature also allows the corded earplugs to dual as a lanyard - a cord worn around the neck for carrying your protective eyewear.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
11796-00000-20	078371-11796	Clear Anti-Fog Lens	20
11798-00000-20	078371-11798	Gray Anti-Fog Lens	20

## Eye Protection: 3M™ Economy Eyewear

### 3M™ Virtua™ V4 Protective Eyewear

Unisex styling. Lightweight design. Soft, dual injected temples for increased comfort. Adjustable nose bridge. Polycarbonate lens absorbs 99.9% UV. Meets the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
11670-00000-20	078371-62034	Clear Hard Coat Lens, Black/Gray Temple	20
11671-00000-20	078371-62035	Gray Hard Coat Lens, Black/Gray Temple	20
11674-00000-20	078371-62038	Mirror Lens, Black/Gray Temple	20

## Eye Protection: 3M™ Value Eyewear

### 3M™ BX™ Protective Eyewear

Polycarbonate lens with three angles for custom fit. Adjustable soft-tip temples provide comfort for extended wear. Soft nose bridge. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
11380-00000-20	078371-62052	Clear Anti-Fog Lens, Silver/Black Frame	20
11381-00000-20	078371-62053	Gray Anti-Fog Lens, Silver/Black Frame	20
11471-00000-20	078371-62065	Clear Anti-Fog Lens, Ocean Blue Frame	20
11472-00000-20	078371-62066	Mirror Lens, Ocean Blue Frame	20
11523-00000-20	078371-62078	Light Blue Anti-Fog Lens, Ocean Blue Frame	20
11524-00000-20	078371-62079	Light Amber Anti-Fog Lens, Ocean Blue Frame	20
11525-00000-20	078371-62080	Gray Anti-Fog Lens, Ocean Blue Frame	20

### 3M™ BX™ Reader Protective Eyewear

Designed for workers who have difficulty reading small print or are engaged in small detail work. BX protective reader eyewear features magnifying diopters, lightweight lenses with adjustable soft tip temples and integrated sideshields.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
11374-00000-20	078371-62046	Clear Lens, Silver Frame, +1.5 Diopter	20
11375-00000-20	078371-62047	Clear Lens, Silver Frame, +2.0 Diopter	20
11376-00000-20	078371-62048	Clear Lens, Silver Frame, +2.5 Diopter	20
11377-00000-20	078371-62049	Gray Lens, Silver Frame, +1.5 Diopter	20
11378-00000-20	078371-62050	Gray Lens, Silver Frame, +2.0 Diopter	20
11379-00000-20	078371-62051	Gray Lens, Silver Frame, +2.5 Diopter	20
11473-00000-20	078371-62067	Mirror Lens, Blue Frame, +1.5 Diopter	20
11474-00000-20	078371-62068	Mirror Lens, Blue Frame, +2.0 Diopter	20
11475-00000-20	078371-62069	Mirror Lens, Blue Frame, +2.5 Diopter	20

### 3M™ Lexa™ Protective Eyewear

Combines extra wide viewing range and contoured design. Lightweight, high wrap offers additional coverage. Fully customizable with multiple lens options, three lens angles and four temple lengths. Meets the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
15100-00000-20	078371-62277	Clear Anti-Fog Lens, Black Temple, Large	20
15154-00000-100	078371-62284	Clear Anti-Fog Lens, Black Temple, Large	100
15200-00000-20	078371-62287	Clear Anti-Fog Lens, Black Temple, Medium	20
15204-00000-20	078371-62289	Gray Anti-Fog Lens, Black Temple, Medium	20

## Eye Protection: 3M™ Value Eyewear

### 3M™ Lexa™ Reader Protective Eyewear

Designed for workers who have difficulty reading small print or who are engaged in small detail work. Lightweight, high wrap offers additional coverage. Multiple lens options, angles and temple lengths. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
13353-00000-20	078371-62250	Clear Anti-Fog Lens, Black Temple, Medium, +1.5 Diopter	20
13354-00000-20	078371-62251	Clear Anti-Fog Lens, Black Temple, Medium, +2.0 Diopter	20
13355-00000-20	078371-62252	Clear Anti-Fog Lens, Black Temple, Medium, +2.5 Diopter	20

### 3M™ Lexa™ Splash GoggleGear™ Safety Goggles

Lightweight, contoured, low profile design. Three lens angle adjustments for custom fit. Vent channels at top and bottom designed to help minimize fogging. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
16644-00000-10	078371-62336	Clear Lens, Medium	10
16645-00000-10	078371-62337	Clear Lens, Large	10

## Eye Protection: 3M™ Value Eyewear

### 3M™ Maxim™ Protective Eyewear

Contemporary styling. Adjustable temple lengths. Ventilation channel designed to help minimize fogging. Soft, adjustable nose bridge. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
13250-00000-20	078371-62235	Clear Lens, Black Temple	20
13251-00000-20	078371-62236	Bronze Lens, Black Temple	20

### 3M™ Metaliks™ Protective Eyewear

Distinctive style. High wrap offers additional coverage. Impact-resistant polycarbonate lenses. Anti-fog hardcoat. Soft, adjustable nose bridge and temple tips. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
15170-10000-20	078371-62380	Clear Anti-Fog Lens, Polished Metal Frame	20
15171-10000-20	078371-62381	Gray Anti-Fog Lens, Polished Metal Frame	20
15172-10000-20	078371-62382	Mirror Hard Coat Lens, Metal Frame	20



## Eye Protection: 3M™ Value Eyewear

### 3M™ Metaliks™ Sport Protective Eyewear

Distinctive style. High wrap offers additional coverage. Impact-resistant polycarbonate lenses. Anti-fog hardcoat. Soft, adjustable nose bridge and temple tips. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
11343-10000-20	078371-62355	Clear Anti-Fog Lens, Nickel Frame	20
11344-10000-20	078371-62356	Gray Anti-Fog Lens, Nickel Frame	20
11345-10000-20	078371-62357	Mirror Lens, Nickel Frame	20
11540-10000-20	078371-62375	Blue Mirror Lens, Nickel Frame	20

### 3M™ Nuvo™ Protective Eyewear

Lightweight, retro-styled Nuvo protective eyewear features adjustable temples, an integral brow bar and soft nosepiece. Contoured frame and sideshields offer additional comfort.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
11411-00000-20	078371-62059	Clear Anti-Fog Lens, Gray Frame	20

## Eye Protection: 3M™ Value Eyewear

### 3M™ Privo™ Protective Eyewear

European styling. Soft temple tips. Soft, comfortable nose bridge. Polycarbonate lens absorbs 99.9% UV. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
12265-00000-20	078371-62091	Clear Anti-Fog Lens, Silver Frame	20
12268-00000-20	078371-62094	Mirror Lens, Silver Frame	20

### 3M™ Refine™ 200 Protective Eyewear

Specially sized for the smaller face profile of women. Lightweight, slim frame design. Wrap-around lens. Padded, adjustable nose bridge. Polycarbonate lens absorbs 99.9% UV. Meets the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
11735-00000-20	07837162186	Clear Anti-Fog Lens, Teal Frame	20
11736-00000-20	078371-62187	Gray Anti-Fog Lens, Teal Frame	20
11737-00000-20	078371-62188	Mirror Lens, Teal Frame	20

## 3M™ SecureFit™ Protective Eyewear 400 Series

Clear anti-fog coated polycarbonate lens absorb 99.9%UV and featuring a +1.5, +2.0, or +2.5 reading diopter to help workers who have difficulty reading small print or who are engaged in small detail work. Meets the requirements of CSA Z94.3-2007 and ANSI Z87.1-2010.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
SF401AF	100-78371-66211-7	Clear Anti-Fog Lens	20
SF402AF	100-78371-66212-4	Gray Anti-Fog Lens	20
SF410AS	100-78371-66213-1	Indoor/Outdoor Mirror lens	20
SF415AF	100-78371-66512-5	Clear Anti-Fog Lens, +1.5 diopter	20
SF420AF	100-78371-66513-2	Clear Anti-Fog Lens, +2.0 diopter	20
SF425AF	100-78371-66514-9	Clear Anti-Fog Lens, +2.5 diopter	20

## 3M™ SecureFit™ Protective Eyewear 200 Series

Stylish, lightweight design weighs less than 1oz. Features proprietary 3M™ Pressure Diffusion Temple Technology that helps diffuse pressure over the ear to enhance frame comfort while not compromising the security of fit across a diverse workforce.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
SF201AF	100-78371-65717-5	Clear Anti-Fog Lens	20
SF202AF	100-78371-65718-2	Gray Anti-Fog Lens	20
SF203AF	100-78371-65719-9	Amber Anti-Fog Lens	20
SF201AS	100-78371-65720-5	Clear Anti-Scratch	20
SF202AS	100-78371-65721-2	Gray Anti-Scratch Lens	20
SF203AS	100-78371-65722-9	Amber Anti-Scratch Lens	20

## Eye Protection: 3M™ Safety Goggles

### 3M™ Centurion™ Safety Impact Goggle

Wide-angle wraparound design offers exceptional side-to-side peripheral vision. Large lens opening to accommodate prescription and safety eyewear. Wide nasal flare. Vertical, indirect-venting system to minimize fogging. Polycarbonate lens absorbs 99.9% UV. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

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Order No.	UPC	Description	Case Quantity
40300-00000-10	078371-62387	Clear Lens	10
40301-00000-10	078371-62388	Clear Anti-Fog Lens	10

### 3M™ Centurion™ Safety Splash Goggle

High wrap offers additional coverage. Large lens opening to accommodate prescription and safety eyewear. Wide nasal flare. Vertical, indirect-venting system designed to minimize fogging. Polycarbonate lens absorbs 99.9% UV. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
40304-00000-10	078371-62389	Clear Lens	10
40305-00000-10	078371-62390	Clear Anti-Fog Lens	10

## Eye Protection: 3M™ Safety Goggles

### 3M™ GoggleGear™ Safety Goggles

Top and bottom vent channels increase airflow, designed to help minimize fogging. Soft foam flange seals entire lens perimeter to help keep out particulates. Can be used with existing 3M Lexa™ eyewear. Meets the requirements of CSA Z94.3-2007 and the High Impact Requirements of ANSI Z87.1-2003.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
16617-00000-10	078371-62330	Clear Lens, Headband, Medium	10
16618-00000-10	078371-62331	Clear Lens, Headband, Large	10

### 3M™ Safety Impact Goggle 332

One of the most economical goggle options available. Fits over most prescription eyewear. Direct venting designed to help minimize fogging. Polycarbonate lens absorbs 99.9% UV. Meets the High Impact Requirements of ANSI Z87.1-2003.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Case Quantity
40650-00000-10	078371-62137	Clear Lens	10

## 3M™ Super-Clear™ Protective Eyewear Lens Cleaning Towelettes

Individual lens cleaning toilette packets. Safe for use on all lens types including hard coat and anti fog lenses. Convenient self-dispensing box.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Product Name	Case Quantity
83745-00000	078371-83745	3M™ Super-Clear™ Protective Eyewear Lens Cleaning Towelettes, 83745-00000 1000 ea/case	1000

## Fall Protection

When it comes to fall protection equipment, a full body harness is one of the most important choices you can make. 3M™ Fall Protection Harnesses offer high-end durability, maximum movement and easy-to-wear comfort, all while providing a system component designed and tested to meet the rigorous requirements of OSHA regulations and ANSI Z359 standards. Select products also certified to CSA Z259 standards. With a harness for nearly every task, 3M is committed to delivering you carefully-crafted, innovatively-designed gear to help keep you productive and safe.



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## Fall Protection

### 3M™ Aerial Lift Kits

For workers in aerial and scissor lifts, these kits are designed to help simplify regulatory compliance and inventory management. A variety of harness and lanyard combinations available.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

	30500	30514
		
UPC	078371-00088	078371-00458
Product Name	3M™ Aerial Kit 30500	3M™ Aerial Kit 30514
Description	This kit for use on aerial lifts contains the 3M™ SafeLight Fall Protection Harness 10910 (Universal size), the 3M™ SafeLight 6 ft. Energy Absorbing Lanyard with Snap Hooks 209512 and 3M™ Tool Bag 4514 for storage.	This kit for use on aerial lifts contains the 3M™ SafeLight Fall Protection Harness 10950 (Universal size), the 3M™ SafeLight 6 ft. Low Profile Energy Absorbing Lanyard with Snap Hooks 209712 and the 3M™ Tool Bag 4514 for storage.
Features	External Shock Absorber	Internal Shock Absorber
Harness Size	Universal	Universal
Lanyard Length	6 Linear Foot	6 Linear Foot
Style	Single Leg	Single Leg
Case Qty	1	1

### 3M™ Latchways PRD™ with 3M™ Elavation™ Harness 7510Q Series

3M offers real solutions for escape and rescue, built around descent technology that sets a whole new standard for innovation and ease of use. The result is more positive escape and rescue outcomes for workers in at-height environments.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.









Order No.	UPC	Description	Length	Rescue Type	Case Qty
PRD-7510Q (S-M)	078371-66259	Elavation Harness, size small-medium, has Quick Connect Buckle Chest and Leg Connection and Back D-ring.	65 Linear Foot	Self-Rescue	1
PRD-7510Q (L-XL)	078371-66260	Elavation Harness, size L-XL, has Quick Connect Buckle Chest and Leg Connection and Back D-ring.	65 Linear Foot	Self-Rescue	1
PRD-7510Q (XXL)	078371-66261	Elavation Harness, size XXL, has Quick Connect Buckle Chest and Leg Connection and Back D-ring.	65 Linear Foot	Self-Rescue	1

## Fall Protection

### 3M™ Fall Protection Products

3M Fall Protection provides safe and secure product solutions that can be trusted by your employees who work at height.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

	1450	REW-7	20058
			
UPC	70071599792	078371-01145	078371-00086
Product Name	3M™ Ameba Harness 1450, Universal size	3M™ ReLoad™ Self-Retracting Lanyard REW-7, 7 foot web	3M™ Roofing Kit 20058
Description	Ameba Fall Protection Comfort Harness with Pass Thru Chest Connection, Grommet Leg Connection, Back D-ring. Lanyard storage and web keepers.	This self-retracting lanyard has a 7 foot Vectran™ web lifeline with aluminum housing and snap hook. Designed for general purpose use and/or in environments that may be sensitive to contact with traditional steel cable lanyards.	This roofing kit contains: 3M™ SafeLight Harness 10910 (Universal); 3M™ SafeLight 6 foot Lanyard with Snap Hooks 209512; 3M™ 50 foot Vertical Rope Lifeline with Manual Rope Adjuster 0221-50RG; 3M™ Reusable Roof Anchor 4000; 3M™ Storage Bucket 5000
Case Qty	1	1	1
	20058-QP	DEUS-02	DEUS-04
			
UPC	078371-01383	078371-66447	70071655529
Product Name	3M™ Roofing Kit 20058-QP	3M™ and DEUSTM™ “O” Ring DEUS-02	3M™ and DEUSTM™ “O” Ring DEUS-04
Description	QUARTER PALLET DISPLAY	Rope termination thimble, which eliminates rope wear caused by carabiner or other connector. #2 sized for 7-1/2 mm and 8 mm rope.	Rope termination thimble, which eliminates rope wear caused by carabiner or other connector. #4 sized for 12 mm rope.
Case Qty	16	1	1

# Face and Head Protection

3M is the trusted leader in the head and face protection market providing robust, comfortable and easy-to-use products to a wide spectrum of industries. These products are designed for strength, to provide all day comfort, enhance visibility, and sometimes serve as “carrier” to other personal protective equipment (PPE) products.



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### 3M™ Hard Hat H-700 Series 4-point Pinlock Suspension

Protective hard hat with comfortable 4-point pinlock suspension and standard brow pad. Available in several colors. Hard hat features accessory slots for ear muff attachment and/or headgear and faceshield attachment. Custom imprinting is available. Meets requirements of ANSI/ISEA Z89.1-2009 Type 1, Class C, G and E.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Color	4-Point Suspension	Case Quantity
H-701P	078371-64187	Hard Hat	White	Pinlock	20
H-702P	078371-64188	Hard Hat	Yellow	Pinlock	20
H-703P	078371-64189	Hard Hat	Blue	Pinlock	20
H-704P	078371-64190	Hard Hat	Green	Pinlock	20
H-705P	078371-64191	Hard Hat	Red	Pinlock	20
H-706P	078371-64192	Hard Hat	Orange	Pinlock	20
H-707P	078371-64193	Hard Hat	Bright Orange	Pinlock	20
H-708P	078371-64194	Hard Hat	Gray	Pinlock	20
H-709P	078371-64195	Hard Hat	Bright Yellow	Pinlock	20
H-710P	078371-64196	Hard Hat	Navy Blue	Pinlock	20

### 3M™ Hard Hat H-700 Series 4-Point Ratchet Suspension

Protective hard hat with comfortable 4-point pinlock suspension and standard brow pad. Available in several colors. Hard hat features accessory slots for ear muff attachment and/or headgear and faceshield attachment. Custom imprinting is available. Meets requirements of ANSI/ISEA Z89.1-2009 Type 1, Class C, G and E.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Color	4-Point Suspension	Case Quantity
H-701R	078371-64197	Hard Hat	White	Ratchet	20
H-702R	078371-64198	Hard Hat	Yellow	Ratchet	20
H-703R	078371-64199	Hard Hat	Blue	Ratchet	20
H-704R	078371-64200	Hard Hat	Green	Ratchet	20
H-705R	078371-64201	Hard Hat	Red	Ratchet	20
H-706R	078371-64202	Hard Hat	Orange	Ratchet	20
H-707R	078371-64203	Hard Hat	Bright Orange	Ratchet	20
H-708R	078371-64204	Hard Hat	Gray	Ratchet	20
H-709R	078371-64205	Hard Hat	Bright Yellow	Ratchet	20
H-710R	078371-64206	Hard Hat	Navy Blue	Ratchet	20
H-711R	078371-66535	Hard Hat	Tan	Ratchet	20
H-712R	078371-66536	Hard Hat	Black	Ratchet	20

### 3M™ Hard Hat H-700 Series 4-Point Ratchet Suspension (continued)

Order No.	UPC	Description	Color	4-Point Suspension	Case Quantity
H-713R	078371-66537	Hard Hat	Pink	Ratchet	20

### 3M™ Hard Hat H-700 Series with 3M Uvicator™ Sensor, 4-Point Ratchet Suspension

The 3M™ Hard Hat H-700 Series helps deliver lightweight protection and durability for extended comfort. With the new Uvicator sensor, workers have an easy way to monitor their hard hat exposure to the sun, so they will know when it's time for a replacement. These hard hats feature a low-profile design for stability and balance, and include accessory slots for 3M's cap-mounted earmuffs, headgear, faceshields and welding helmets. The H-700 series with Uvicator sensor is available in both vented and non-vented versions, ratchet suspension only.

The 3M H-700 Hard Hat (Non-Vented) meets the requirements of ANSI/ISEA Z89.1-2009 Type I, Class C, G and E. The H-700 Vented Hard Hat meets the requirements of ANSI/ISEA Z89.1 Type I, Class C.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.







Order No.	UPC	Description	Color	4-Point Suspension	Case Quantity
H-701R-UV	078371-65550	Hard Hat with Uvicator™ Sensor	White	Ratchet	20
H-702R-UV	078371-65551	Hard Hat with Uvicator™ Sensor	Yellow	Ratchet	20
H-703R-UV	078371-65552	Hard Hat with Uvicator™ Sensor	Blue	Ratchet	20
H-704R-UV	078371-65553	Hard Hat with Uvicator™ Sensor	Green	Ratchet	20
H-705R-UV	078371-65695	Hard Hat with Uvicator™ Sensor	Red	Ratchet	20
H-706R-UV	078371-65654	Hard Hat with Uvicator™ Sensor	Orange	Ratchet	20
H-707R-UV	078371-65291	Hard Hat with Uvicator™ Sensor	High Vis Orange	Ratchet	20
H-708R-UV	078371-65697	Hard Hat with Uvicator™ Sensor	Gray	Ratchet	20
H-709R-UV	078371-65554	Hard Hat with Uvicator™ Sensor	Bright Yellow	Ratchet	20
H-710R-UV	078371-65699	Hard Hat with Uvicator™ Sensor	Navy Blue	Ratchet	20
H-711R-UV	078371-66546	Hard Hat with Uvicator™ Sensor	Tan	Ratchet	20
H-712R-UV	078371-66547	Hard Hat with Uvicator™ Sensor	Black	Ratchet	20
H-713R-UV	078371-66548	Hard Hat with Uvicator™ Sensor	Pink	Ratchet	20

## Face and Head Protection

### 3M™ Hard Hat H-700 Series Replacement Parts and Accessories

3M™ Hard Hat H-700 Series is comfortable, tough and lightweight. Designed with a low profile for stability and balance, the H-700 series hat helps provide ultimate comfort and protection from small falling objects striking the top of the hard hat. These hard hats feature accessory slots to accommodate 3M's cap-mounted earmuffs, headgear, faceshields and welding helmets. The H-700 series hard hat (non-vented) meets the requirements of ANSI/ISEA Z89.1-2009 Type I, Class C, G and E. The H-700 vented hard hat meets the requirements of ANSI/ISEA Z89.1 Type I, Class C.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.

	H-700-BP	H-700-S6	H-700-PS4	H-700-RS4
				
UPC	078371-65491	078371-65492	078371-64212	078371-64211
Product Name	3M™ Hard Hat Replacement Brow Pad H-700-BP	3M™ H-700 Series Hard Hat Suspension 6-Point Strap	3M™ H-700 Series Hard Hat Suspension Replacement	3M™ H-700 Series Hard Hat Suspension Replacement
Description	Replacement Brow Pad	Suspension strap used with 4-point Pinlock or 4-point Ratchet suspensions to create a 6-point suspension for 3M™ H-700 Series hard hats.	Replacement 4-point pinlock suspension with standard brow pad for 3M™ H-700 Series hard hats.	Replacement 4-point ratchet suspension with standard brow pad for 3M™ H-700 Series hard hats.
Case Quantity	20	20	20	20

### 3M™ Full Brim Hard Hat H-800 Series

Protective full brim hard hat with comfortable 4-point ratchet suspension and standard brow pad. Available in several colors. Meets requirements of ANSI/ISEA Z89.1-2009 Type 1, Class C, G and E.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Color	4-Point Suspension	Case Quantity
H-801R	078371-65775	Full Brim Hard Hat	White	Ratchet	20
H-802R	078371-65776	Full Brim Hard Hat	Yellow	Ratchet	20
H-803R	078371-65777	Full Brim Hard Hat	Blue	Ratchet	20
H-804R	078371-65778	Full Brim Hard Hat	Green	Ratchet	20
H-805R	078371-65779	Full Brim Hard Hat	Red	Ratchet	20
H-806R	078371-65780	Full Brim Hard Hat	Orange	Ratchet	20
H-807R	078371-65781	Full Brim Hard Hat	Hi-Viz Orange	Ratchet	20
H-808R	078371-65782	Full Brim Hard Hat	Gray	Ratchet	20
H-809R	078371-65783	Full Brim Hard Hat	Hi-Viz Yellow	Ratchet	20
H-810R	078371-65784	Full Brim Hard Hat	Navy Blue	Ratchet	20
H-811R	078371-65785	Full Brim Hard Hat	Tan	Ratchet	20
H-812R	078371-66560	Full Brim Hard Hat	Black	Ratchet	20
H-813R	078371-66561	Full Brim Hard Hat	Pink	Ratchet	20

## 3M™ Full Brim Hard Hat H-800 Series with 3M Uvicator™ Sensor

Protective full brim hard hat with comfortable 4-point ratchet suspension, standard brow pad and Uvicator™ Sensor. Available in several colors. Meets requirements of ANSI/ISEA Z89.1-2009 Type 1, Class C, G and E.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



Order No.	UPC	Description	Color	4-Point Suspension	Case Quantity
H-801R-UV	078371-65797	Full Brim Hard Hat with Uvicator™ Sensor	White	Ratchet	20
H-802R-UV	078371-65798	Full Brim Hard Hat with Uvicator™ Sensor	Yellow	Ratchet	20
H-803R-UV	078371-65799	Full Brim Hard Hat with Uvicator™ Sensor	Blue	Ratchet	20
H-804R-UV	078371-65800	Full Brim Hard Hat with Uvicator™ Sensor	Green	Ratchet	20
H-805R-UV	078371-65801	Full Brim Hard Hat with Uvicator™ Sensor	Red	Ratchet	20
H-806R-UV	078371-65802	Full Brim Hard Hat with Uvicator™ Sensor	Orange	Ratchet	20
H-807R-UV	078371-65803	Full Brim Hard Hat with Uvicator™ Sensor	Hi-Viz Orange	Ratchet	20
H-808R-UV	078371-65804	Full Brim Hard Hat with Uvicator™ Sensor	Gray	Ratchet	20
H-809R-UV	078371-65805	Full Brim Hard Hat with Uvicator™ Sensor	Hi-Viz Yellow	Ratchet	20
H-810R-UV	078371-65806	Full Brim Hard Hat with Uvicator™ Sensor	Navy Blue	Ratchet	20
H-811R-UV	078371-65807	Full Brim Hard Hat with Uvicator™ Sensor	Tan	Ratchet	20
H-812R-UV	078371-66564	Full Brim Hard Hat with Uvicator™ Sensor	Black	Ratchet	20
H-813R-UV	078371-66565	Full Brim Hard Hat with Uvicator™ Sensor	Pink	Ratchet	20



## Face and Head Protection

### 3M™ Headgear and Facepieces

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.






Order No.	UPC	Product Name	Description	Case Quantity
82501-00000	078371-82501	3M™ Ratchet Headgear H8A, Face Protection 82501-00000	Ratchet headgear for use with any 3M™ Faceshield. High-strength thermoplastic crown provides impact resistance and face protection. Adjustable ratchet suspension with five position crown strap.	10
82502-00000	078371-82502	3M™ Cap Mount Hard Hat Headgear H18, Face Protection 82502-00000	Cap-mounted headgear assembly can be used with any 3M™ Faceshield to help provide face protection. Designed to fit most hard hat accessory slots. High-strength thermoplastic crown provides impact resistance.	10
82520-10000	078371-82520	3M™ Universal Headgear For Hard Hat H24M, Face Protection 82520-10000	Cap-mounted headgear assembly can be used with any 3M™ Faceshield to help provide face protection. Designed to fit most hard hats. Does not interfere with most cap-mounted ear muffs. Requires protective eyewear, sold separately.	20
82579-00000	078371-82579	3M™ Standard Clear Polycarbonate Faceshield WP96R	Standard size general purpose polycarbonate faceshield helps provide high impact face protection. Faceshield mounts quickly to any 3M™ Headgear without tools, snaps or cams.	25
82581-00000	078371-82581	3M™ Wide Clear PETG Faceshield WE96X, Face Protection 82581-00000, Flat Stock	Wide, PETG faceshield helps provide splash resistance and face protection. Faceshield mounts quickly to any 3M™ Headgear without tools, snaps or cams. Faceshield mounts inside headgear crown for added splash protection.	25
82700-00000	078371-82700	3M™ Clear Propionate Faceshield W96, Face Protection 82700-00000, Molded	Standard size, molded Propionate faceshield helps provide splash resistance and face protection. Faceshield mounts quickly to any 3M™ Headgear without tools, snaps or cams. Faceshield mounts inside headgear crown for added splash protection.	10
82701-00000	078371-82701	3M™ Clear Polycarbonate Faceshield WP96, Face Protection 82701-00000, Molded	Standard size, molded general purpose polycarbonate faceshield offers high impact face protection. Faceshield mounts quickly to any 3M™ Headgear without tools, snaps or cams. Requires protective eyewear, sold separately.	10
82782-00000	078371-82782	3M™ Ratchet Headgear H8A, Head and Face Protection 82782-00000, with 3M™ Clear Propionate Faceshield W96	A complete headgear and faceshield safety system, this high-strength thermoplastic hard hat helps provide durable impact resistance and reliable head and face protection over a wide range of temperatures. Adjustable ratchet suspension.	5
82783-00000	078371-82783	3M™ Ratchet Headgear H8A, Head and Face Protection 82783-00000, with 3M™ Clear Polycarbonate Faceshield WP96	A combination headgear and faceshield safety system. Includes H8A ratchet headgear and WP96 polycarbonate faceshield. Adjustable ratchet suspension. Molded faceshield provides impact protection. Requires protective eyewear, sold separately.	5

### 3M™ HIE6 Protective Eyewear

This integrated lightweight retractable eyewear is easy to attach to the headband of 3M hard hats. Available in amber, gray and clear lenses.

**IMPORTANT:** The 3M products in this catalogue must be used in accordance with OSHA regulations, and the user instructions, warnings, and limitations accompanying each product.



	HIE601AF	HIE602AF	HIE603AF
			
UPC	078371-66743	078371-66744	078371-66745
Description	Clear Anti-Fog Lens	Amber Anti-Fog Lens	Gray Anti-Fog Lens
Case Quantity	20	20	20

## Miscellaneous Personal Safety

3M™ Safety Products are designed to enhance your personal safety and comfort.



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## 3M™ Ultrathon™ Insect Repellent

Rated #1 by a leading consumer magazine! Ultrathon™, with proprietary 3M™ Controlled Release Technology, repels mosquitoes for up to twelve hours.

- 3M technology allows time released protection for up to 8 Hours
- Splash and sweat resistant to ensure consistent protection through all your outdoor activities
- Repels deer ticks that may carry Lyme Disease, and mosquitoes that may carry
- Formulation developed for and used by the US Military
- Freeze Thaw Stable



Order No.	UPC	Product Name	Description	Weight	Containers per Case
SRA-6	051131-67777	3M™ Ultrathon™ Insect Repellant Aerosol SRA-6	Aerosol	6 oz	6 per case
SRA-12	051131-83169	3M™ Ultrathon™ Insect Repellant Aerosol SRA-12	Aerosol	6 oz	12 per display
SRL-12	051131-67442	3M™ Ultrathon™ Insect Repellent Lotion SRL-12	Lotion	2 oz	12 per display

## Scotch® Barricade Tapes

Scotch® Barricade Tapes are a fast, effective way to mark hazardous areas. Whether you need buried or non-buried, detectable or non-detectable, 3M has a barricade tape to meet your marking requirements.



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## Scotch® Barricade Tape 300 Series

Scotch® Barricade Tapes 300 Series are effective and economical. One roll has sufficient length to mark a large area. Constructed of durable polyethylene plastic that prevents accidental tearing, the tapes have bold 2" black characters on bright background and are sure to attract attention and provide a clearly visible warning message. Different sizes and messages available.

Adhesive Material None  
 Backing Material Polyethylene Film  
 RoHS 2011/65/EU Yes



Order No.	UPC	Text	Color	Length	Width	Thickness	Rolls per Case
300	051128-53042	CAUTION	Yellow	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
301	051128-53460	CAUTION	Yellow	300' (91,44 m)	3" (76,2 mm)	2 mil	16
330	051128-58371	CAUTION	Yellow	1000' (304,8 m)	3" (76,2 mm)	3 mil	8
331	051128-58372	DANGER	Red	1000' (304,8 m)	3" (76,2 mm)	3 mil	8
332	051128-58373	CAUTION HIGH VOLTAGE AREA	Yellow	1000' (304,8 m)	3" (76,2 mm)	3 mil	8
333	051128-58374	CAUTION DO NOT ENTER	Yellow	1000' (304,8 m)	3" (76,2 mm)	3 mil	8
334	051128-58375	CAUTION DO NOT ENTER	Red	1000' (304,8 m)	3" (76,2 mm)	3 mil	8
356	051128-57767	DANGER	Red	300' (91,44 m)	3" (76,2 mm)	2 mil	16
357	051128-57764	DANGER	Red	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
358	051128-57761	CAUTION HIGH VOLTAGE	Yellow	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
360	051128-57763	CAUTION OPEN TRENCH	Yellow	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
361	051128-57765	CAUTION DO NOT ENTER	Yellow	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
362	051128-57766	DANGER DO NOT ENTER	Red	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
374	051128-57961	CAUTION DO NOT ENTER	Yellow	300' (91,44 m)	3" (76,2 mm)	2 mil	16
381	051128-59234	DANGER / PELIGRO	Red	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
382	051128-59235	CAUTION / CUIDADO	Yellow	1000' (304,8 m)	3" (76,2 mm)	2 mil	8
383	051128-59236	CAUTION / CUIDADO	Yellow	300' (91,44 m)	3" (76,2 mm)	2 mil	16
384	051128-59237	CAUTION DO NOT ENTER / CUIDADO NO ENTRE	Yellow	300' (91,44 m)	3" (76,2 mm)	2 mil	16

## Scotch® Barricade Tapes

### Scotch® Buried Barricade Tape 300 Series

Scotch® Barricade Tapes 300 Series are effective and economical. One roll has sufficient length to mark a large area. Constructed of durable polyethylene plastic that prevents accidental tearing, the tapes have bold 2" black characters on bright background and are sure to attract attention and provide a clearly visible warning message. Different sizes and messages available.



Adhesive Material	None
Backing Material	Polyethylene Film
RoHS 2011/65/EU	Yes

Order No.	UPC	Text	Color	Length	Width	Thickness	Rolls per Case
302	051128-53461	CAUTION BURIED ELECTRIC LINE BELOW	Red	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
303	051128-53462	CAUTION BURIED ELECTRIC LINE BELOW	Red	300' (91,44 m)	3" (76,2 mm)	4 mil	16
363	051128-57768	CAUTION HIGH VOLTAGE CABLE BURIED BELOW	Red	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
364	051128-57769	CAUTION BURIED ELECTRIC LINE BELOW	Yellow	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
365	051128-57770	CAUTION BURIED FIBER OPTIC LINE BELOW	Orange	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
366	051128-57771	CAUTION BURIED CABLE TV LINE BELOW	Orange	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
367	051128-57772	CAUTION BURIED TELEPHONE LINE BELOW	Orange	1000' (304,8 m)	3" (76,2 mm)	4 mil	8
368	051128-57773	CAUTION BURIED ELECTRIC LINE BELOW	Red	1000' (304,8 m)	6" (15,24 cm)	4 mil	4
369	051128-57774	CAUTION HIGH VOLTAGE CABLE BURIED BELOW	Red	1000' (304,8 m)	6" (15,24 cm)	4 mil	4
370	051128-57775	CAUTION BURIED ELECTRIC LINE BELOW	Yellow	1000' (304,8 m)	6" (15,24 cm)	4 mil	4
371	051128-57776	CAUTION BURIED FIBER OPTIC LINE BELOW	Orange	1000' (304,8 m)	6" (15,24 cm)	4 mil	4

### Scotch® Detectable Buried Barricade Tapes 400 Series

Scotch® Detectable Buried Barricade Tapes 400 Series are designed for accurately locating and helping prevent damage to valuable underground utility installations. The tapes have an aluminum backing, which helps make underground assets easier to find when using a non-ferrous locator. Properly installed, these tapes may help avoid catastrophically inaccurate digging when locating utilities such as electrical lines and communication cables.



Adhesive Material	None
Backing Material	Aluminum Foil
RoHS 2011/65/EU	Yes

Order No.	UPC	Text	Color	Length	Width	Thickness	Rolls per Case
406	051128-57779	CAUTION BURIED ELECTRIC LINE BELOW	Red	1000' (304,8 m)	3" (76,2 mm)	5 mil	8
407	051128-57780	CAUTION BURIED FIBER OPTIC LINE BELOW	Orange	1000' (304,8 m)	3" (76,2 mm)	5 mil	8
408	051128-57781	CAUTION BURIED ELECTRIC LINE BELOW	Red	1000' (304,8 m)	6" (15,24 cm)	5 mil	4
409	051128-57782	CAUTION BURIED FIBER OPTIC LINE BELOW	Orange	1000' (304,8 m)	6" (15,24 cm)	5 mil	4
410	051128-57880	CAUTION BURIED TELEPHONE LINE BELOW	Orange	1000' (304,8 m)	3" (76,2 mm)	5 mil	8
411	051128-57881	CAUTION BURIED TELEPHONE LINE BELOW	Orange	1000' (304,8 m)	6" (15,24 cm)	5 mil	4
412	051128-57962	CAUTION BURIED HIGH VOLTAGE CABLE BELOW	Red	1000' (304,8 m)	3" (76,2 mm)	5 mil	8
413	051128-57964	CAUTION BURIED HIGH VOLTAGE CABLE BELOW	Red	1000' (304,8 m)	6" (15,24 cm)	5 mil	4



## Scotch® Repulpable Barricade Tapes 500 Series

Made of tightly woven cotton fibers, these reusable tapes are an excellent alternative to standard barricade tapes for areas where plastics are prohibited. Also appropriate for clean rooms and recycling areas, these non-conductive tapes measure 3" wide x 150' long and are supplied on rolls.



Adhesive Material None  
 Backing Material Cotton Fabric  
 RoHS 2011/65/EU Yes

Order No.	UPC	Text	Color	Length	Width	Thickness	Rolls per Case
515	051128-57788	DANGER	Red	150' (45,72 m)	3" (76,2 mm)	10 mil	8
516	051128-57787	CAUTION	Yellow	150' (45,72 m)	3" (76,2 mm)	10 mil	8

## Hand Protection

Protect your hands with the technology and craftsmanship of 3M™ Comfort Grip and Gripping Materials Work Gloves. For decades, 3M has been a leader in innovative personal safety for the body, head, ears and now hands. These 3M gloves provide comfort and dexterity for precision work, protection when handling sharp objects and extra grip in wet and oily applications.



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## 3M™ Comfort Grip General Use Gloves

With a nitrile palm coating over a breathable nylon stretch liner, the 3M™ Comfort Grip Glove CGM-GU is light, flexible and abrasion-resistant. Count on it for light- to medium-duty jobs that require precision handling, even in hot and sweaty conditions.

- Low cost and economical for everyday use.
- EN388 4122 for great resistance to abrasion with limited tear and puncture resistance.
- Foamed nitrile palm provides excellent grip, even in wet or oily condition.
- Elastic knit wrist cuff is easy to pull on and off quickly and keeps out debris.
- Long-lasting, durable and washable.



Order No.	UPC	Color	Cuff Style	Material	Size	Type	Pair/Bag
CGM-GU	054007-98954	Grey	Knit wrist	Nylon	Medium	General Use	6
CGL-GU	054007-98955	Grey	Knit wrist	Nylon	Large	General Use	6
CGXL-GU	054007-98956	Grey	Knit wrist	Nylon	Extra Large	General Use	6

## 3M™ Comfort Grip Cut Resistant Gloves

The breathable liner for the 3M™ Comfort Grip Cut-Resistant Glove CGM-CR is designed to withstand cuts, punctures and tears without loss of dexterity. The nitrile palm coating on these medium-duty glove provides firm grip even for wet or slippery jobs.

- Gloves are EN388 4544 and ANSI Cut Level 3 for improved hand protection from mechanical risks.
- The ultra high molecular weight polyethylene (UHMWPE) composite liner provides greater cut, puncture and tear resistance.
- Foamed nitrile palm provides excellent grip, even in wet or oily conditions.
- Long-lasting, durable and washable.



Order No.	UPC	Color	Cuff Style	Material	Size	Type	Pair/Bag
CGM-CR	054007-98957	Grey	Knit wrist	UHMWPE Fiber	Medium	Cut Resistance	6
CGL-CR	054007-98958	Grey	Knit wrist	UHMWPE Fiber	Large	Cut Resistance	6
CGXL-CR	054007-98959	Grey	Knit wrist	UHMWPE Fiber	Extra Large	Cut Resistance	6

## Hand Protection

### 3M™ Gripping Material Work Gloves

3M™ Gripping Material Work Glove WGL is a size large and features a grey and black synthetic suede leather with 3M™ Gripping Material GM110 sewn into the palm and fingers of the glove.

- Thousands of gripping fingers offer the ability to grip lighter and hold tighter, even in wet and oily conditions.
- Wash by hand. Air dry away from heat.
- Slip resistant, vibration dampening, and easy release properties.
- Markets: General industrial, Leisure, DIY, construction.
- Utilize gloves in combination with 3M™ Gripping Material Tape TB400 for better grip in applications utilizing power tools, gardening tools, industrial tool handles and levers, truck, forklift, and auto steering wheels or lawn care equipment handles.



Order No.	UPC	Color	Cuff Style	Material	Size	Type	Pair/Bag
WGS-1	051115-63527	Black & Grey	Elastic Adjustable	Synthetic Suede	Small	Work	1
WGM-1	051115-63546	Black & Grey	Elastic Adjustable	Synthetic Suede	Medium	Work	1
WGL-1	051115-63548	Black & Grey	Elastic Adjustable	Synthetic Suede	Large	Work	1
WGXL-1	051115-63550	Black & Grey	Elastic Adjustable	Synthetic Suede	Extra Large	Work	1

# Sorbents

3M has a wide range of maintenance sorbents, chemical sorbents, oil sorbents and spill kits to meet your requirements. 3M sorbents are available in a variety of formats, from rugs to multi-format, so that you can choose the format that meets your needs.



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## Sorbents

### Chemical Sorbents





Chemical sorbents are useful for all spills, including most aggressive chemical fluids. These sorbents resist reactions with chemicals such as acids or bases. Chemical sorbents are ideal for emergency response situations.

**⚠ WARNING** Failure to properly handle and dispose of sorbents contaminated by hazardous materials could result in serious physical injury or death. For proper handling, consult the Material Safety Data Sheet for the material absorbed, applicable safety and health standards, contact your supervisor, or call 3M B&CSD Technical Services in the USA at 1-800-626-8578.

	C-PD914DD	C-RL15150DD	C-RL38150DD	C-SKFL31
				
UPC	50-051138-29096-7	00-051138-29097-9	00-051138-29098-6	00-051138-46287-1
Product Name	3M™ Chemical Sorbent Pad High Capacity	3M™ Chemical Sorbent Roll High Capacity	3M™ Chemical Sorbent Roll High Capacity	3M™ Chemical Sorbent Spill Kit
Description	High capacity sorbents have a scrim on one side to increase strength and help eliminate linting. Conveniently sized pads allow the user to quickly spread sorbent to and in the path of a spill. Pads may also be used on a work surface in anticipation of a spill or as a wipe. 9" x 14.5" pad size.	High capacity sorbents have a scrim on one side to increase strength and help eliminate linting. Rolls of sorbent material are used to cover and sorb large spills or in areas where spills may occur. They can be cut to the desired length and are the most economical way to purchase sorbent. Each roll is 15.25" X 150". Able to sorb 31 Gallons/roll.	High capacity sorbents have a scrim on one side to increase strength and help eliminate linting. Covers large surfaces, can be easily cut to cover small areas or fit corners. Acting as a work surface, can be used on top of benches or tables in anticipation of leaks or spills. Roll is 38" X 150' (76 gallons/roll).	Folded sorbent spill kit is the perfect solution for emergency response flexibility. Can be stored in various locations throughout a facility. Yellow color for easy identification. Handles are molded for easy transportation. Packed in an element-resistant 20 gallon drum with: (2) Rolls of folded chemical sorbent; (30) Pads; (3) Disposal bags and ties. 31 gallon capacity per kit.
Inner Unit Pack	25 Pads per Box	-	-	-
Case Qty.	6	1	1	1
	C-SKFL5	P-110	P-200	P-208
				
UPC	50-051131-07175-4	50-051138-17593-6	50-051138-17596-7	50-051138-21343-0
Product Name	3M™ Chemical Sorbent Spill Kit	3M™ Chemical Sorbent Pad	3M™ Chemical Sorbent Mini-Boom	3M™ Chemical Sorbent Mini-Boom
Description	Compact for easy storage, and ideal for rapid response. Can be squeezed/molded into confined areas such as behind truck seats and in the trunks of cars. Each kit contains: (1) Chemroll, 5" X 26"; (1) Temporary disposal bag	Ideal for cleaning up small spills and wiping down contaminated areas. Packaged in convenient dispenser box for storage in confined spaces or mounting on a wall near where spills may occur. 11" X 13". Able to sorb 17 gal/case.	Mini-booms are typically used to encircle spills and to contain leaks. A 3 inch diameter scrim on the outside of the boom identifies the application. This mini-boom is 4 feet in length.	Ideal for placing around hazardous liquid spills to help prevent spreading. They work quickly, providing time to ensure proper cleanup while minimizing employee exposure. Each case contains (6) booms (3" dia. x 8') which sorb 12 gal/case.
Inner Unit Pack	-	50 Pads per Dispenser	-	-
Case Qty.	3	4	12	6

## Sorbents





### Chemical Sorbents (continued)

	P-212	P-300	P-500	SRP-CHEM
				
UPC	50-051138-21344-7	50-051138-17597-4	00-051138-17598-6	50-051138-28910-7
Product Name	3M™ Chemical Sorbent Mini-Boom	3M Chemical Sorbent Pillow	3M™ Chemical Sorbent Particulate	3M™ Chemical Sorbent Spill Response Pack
Description	Mini-booms are typically used to encircle hazardous liquid spills and to contain leaks. A 3" diameter scrim on the outside of the boom identifies the application. This mini-boom is 12 feet in length.	Small, lightweight pillows may be placed quickly at the source of a leak or thrown into the contained spill, helping to save clean up time.	Designed for use in spill response applications. This material may be sprinkled over a spill or broadcast over a large area. 12 pounds, able to sorb 14 gal/case.	The 3M™ Chemical Sorbent Spill Response Pack SRP-CHEM will sorb most aggressive chemicals. The pack is encased in a box which can be used as a warning sign and includes both mini-booms and pads. This spill pack has containment bags for temporary storage of materials to be disposed of. Each Response Pack includes: (3) Chemical sorbent mini-booms; (10) Chemical pads; (1) Poly bag for temporary disposal. Ideal for spills up to 3.5 gallons.
Inner Unit Pack	-	-	-	-
Case Qty.	4	16	1	3

### Maintenance Sorbents





Maintenance sorbents are all-purpose sorbents. Ideal for plants and facilities, the sorbent cleans up non-aggressive fluids, including cutting oil, coolants, aqueous-based liquids and petroleum-based products.

**⚠ WARNING** Failure to properly handle and dispose of sorbents contaminated by hazardous materials could result in serious physical injury or death. For proper handling, consult the Material Safety Data Sheet for the material absorbed, applicable safety and health standards, contact your supervisor, or call 3M B&CSD Technical Services in the USA at 1-800-626-8578.

	M-MB304	M-MB308	M-MB312	M-PD720GG
				
UPC	50-051138-21526-7	50-051138-21527-4	50-051138-21528-1	50-051131-07165-5
Product Name	3M™ Maintenance Sorbent Mini-Boom	3M™ Maintenance Sorbent Mini-Boom	3M™ Maintenance Sorbent Mini-Boom	3M™ Maintenance Sorbent Production Pad, High Capacity
Description	4' long by 3" diameter Maintenance Sorbent Mini-Booms can be placed around the base of equipment to help contain fluids that may leak or spill, preventing spread to adjacent work areas, 1 gallon capacity per 4 foot Mini-Boom.	8' long by 3" diameter Maintenance Sorbent Mini-Booms can be placed around the base of equipment to help contain fluids that may leak or spill, preventing spread to adjacent work areas, 2 gallon capacity per 8 foot Mini-Boom.	Because of their tube-like shape, mini-booms are typically used to encircle spills and to contain leaks. A 3 inch diameter scrim on the outside of the boom identifies the application. 3 gallon capacity per 12 foot mini-boom.	Used to clean up small spills and wipe down oily tools and equipment. Designed to be placed on machinery to catch leaks at the source. Each case sorbs 31.5 gal and contains 100 pads (each 7.5" x 20.5").
Case Qty.	12	6	4	100







## Maintenance Sorbents (continued)

	M-PL715	M-RGC36100E	M-RG36300E	M-RL33150DD
				
UPC	50-051138-21531-1	00-051138-29003-0	00-051138-29002-0	00-051138-29070-2
Product Name	3M™ Maintenance Sorbent Pillow	3M™ Maintenance Sorbent Rug with Coating, High Capacity	3M™ Maintenance Sorbent Rug	3M™ Maintenance Sorbent Roll, High Capacity
Description	Small, lightweight pillows are tear-resistant and ideal for use in a drip pan, under equipment or at the source of a leak. Each case contains 16 pillows (each 7" x 15") which will sorb 0.5 gallons.	This rug is designed for use in industrial maintenance applications where foot and vehicle traffic is a concern, and will sorb most non-aggressive liquids. Each rug comes in a roll 36 inches by 100 feet and sorbs 10.5 gallons per roll.	Used in areas where foot and vehicle traffic is a concern. Designed to sorb liquids while enduring the punishment of being tread upon, sorbent rugs are both durable and versatile. Each rug comes in a roll 36" x 300' and sorbs 32 gallons per roll.	Designed to cover large surfaces and may be easily cut to fit tight corners. Can also be used to cover large spills or as a precaution in areas where large spills may occur. Each roll is 33" x 150' and sorbs 66 gallons.
Case Qty.	16	1	1	1









## Petroleum Sorbents

Petroleum sorbents are primarily used with hydro-carbon spills. These sorbents save time and money as only oil, and not water, is recovered. Petroleum sorbents can be used outside as well as in-plant.









**▲WARNING** Failure to properly handle and dispose of sorbents contaminated by hazardous materials could result in serious physical injury or death. For proper handling, consult the Material Safety Data Sheet for the material absorbed, applicable safety and health standards, contact your supervisor, or call 3M B&CSD Technical Services in the USA at 1-800-626-8578.

	HP-100	HP-156	HP-157	HP-255
				
UPC	00-051138-28990-4	50-051138-28991-6	00-051138-29116-7	50-051138-28992-3
Product Name	3M™ Petroleum Sorbent Roll, High Capacity	3M™ Petroleum Sorbent Pad, High Capacity	3M™ Petroleum Sorbent Pad, High Capacity	3M™ Petroleum Sorbent Pad, High Capacity
Description	Designed to cover large surfaces, can be easily cut to length. Perfect for lining drawers, covering workbenches or masking larger areas from mist and overspray. The HP-100 roll sorbs 73 gallons per roll and is 38" by 144' long.	This high capacity, low profile Sorbent pad, picks up petroleum based fluids, will not absorb water. For routine use, cleaning up small spills and wiping contaminated areas. 100 pads (19" x 17") per bale, (sorbs 37.5 gallons/bale).	This highly sorbent pad features a low-profile design, so that it can be easily placed in tight areas. Ideal for cleaning up small spills and wiping down contaminated areas. Each bale sorbs 75 gals and contains 50 pads (each 34" x 38").	This highly sorbent pad features a low-profile design, so that it can be easily placed in tight areas. Ideal for cleaning up small spills and wiping down contaminated areas. Each bale sorbs 33 gals and contains 50 pads (each 17" x 19").
Case Qty.	1	100	50	50





Petroleum Sorbents (continued)

	HP-500	HP-556	HP-557	P-DC22DD
				
UPC	00-051138-29067-2	00-051138-29068-4	00-051138-29069-1	50-051138-29234-3
Product Name	3M™ Petroleum Sorbent Static Resistant Roll, High Capacity	3M™ Petroleum Sorbent Static Resistant Pad, High Capacity	3M™ Petroleum Sorbent Static Resistant Pad, High Capacity	3M™ Petroleum Sorbent Drum Cover, High Capacity
Description	Static resistant petroleum sorbents are designed to be used for the clean up of highly flammable petroleum-based liquids. They are treated to resist static charge build-up. The roll is 38" x 144' long and absorbs 73 gal.	Static resistant petroleum sorbents are designed to be used for the clean up of highly flammable petroleum-based liquids. They are treated to resist static charge build-up. Each bale sorbs 37.5 gal and contains 100 pads (17" x 19").	Static resistant petroleum sorbents are designed to be used for the clean up of highly flammable petroleum-based liquids. They are treated to resist static charge build-up. Each bale absorbs 75 gal and contains 50 pads (34" x 38").	Will sorb hydrocarbon based liquids and repel aqueous based liquids. Use on a 55-gallon drum to catch drips and spills. Skirt fits neatly around base of the drum.
Case Qty.	1	100	50	25
	P-SKFL31	P-SKFL5	SRP-PETRO	T-4
				
UPC	00-051138-46286-4	50-051138-46289-0	50-051138-28950-2	50-051138-21354-6
Product Name	3M™ Petroleum Sorbent Spill Kit, 31 Gallon Capacity	3M™ Petroleum Sorbent Spill Kit, Petroll, 5 Gallon Capacity	3M™ Petroleum Sorbent Spill Response Pack, 4 Gallon Capacity	3M™ Petroleum Sorbent Mini-Boom
Description	This spill kit combines the best of both worlds - petroleum folded sorbent (which can be used as booms, pillows or rolls) and high capacity pads. This unique combination allows you to easily select the product to fit the response. Packaged in a 20 gal drum, the kit can be placed in key locations throughout a facility, both inside and out. To make transporting the drum easier, handles are molded all the way around the side of the container. Each kit contains: (2) Rolls of folded sorbent (each 5" x 50"); (30) Pads (each 17" x 19"); (3) Temporary disposal bags and ties; and (1) 20 gal white drum.	Can be used for containing and sorbing petroleum-based liquids of up to 5 gal. It is conformable, making it an excellent solution for storage where space is limited. It is ideal for use in fuel dispensing applications and the transportation industry where immediate on-site response is needed. Utilizing the 3M™ Folded Sorbent Technology, which allows the material to be used as a pillow, pad, roll or boom, it is the most versatile spill kit on the market. With the included containment bag and tie, it is the most complete spill kit in a roll.	Designed to sorb and contain small petroleum spills and leaks fast. The 3M™ Petroleum Sorbent Spill Response Pack SRP-Petro will sorb hydrocarbon based liquids and repel aqueous based liquids. The pack is encased in a box which can be used as a warning sign and includes both mini-booms and pads. This spill pack has containment bags for temporary storage of materials to be disposed of. Packaged 3 per case: (3) Petroleum sorbent mini-booms; (10) Petroleum pads; and (1) Poly bag for temporary disposal in each response pack. Ideal for spills up to 4 gal.	A 3" diameter scrim on the outside of the boom identifies the use while containing particulate sorbent material. The T-4 mini-boom is 4' in length. 1 gallon capacity per 4' mini-boom.
Case Qty.	1	1	3	12

Petroleum Sorbents (continued)

	T-8	T-12	T-30	T-100
				
UPC	50-051138-21355-3	50-051138-21356-0	50-051138-21545-8	00-021200-16047-9
Product Name	3M™ Petroleum Sorbent Mini-Boom	3M™ Petroleum Sorbent Mini-Boom	3M™ Petroleum Sorbent Mini-Pillow	3M™ Petroleum Sorbent Roll
Description	Mini-Booms are a selective sorbent which will “sorb” hydrocarbon-based liquids (oleophilic) and repel aqueous-based liquids (hydrophobic). Mini-booms are typically used because of their tube-like shape to encircle spills and contain leaks. A 3” diameter scrim on the outside of the boom identifies the use while containing particulate sorbent material. The T-8 mini-boom is 8’ in length.	Mini-Booms are a selective sorbent which will “sorb” hydrocarbon-based liquids (oleophilic) and repel aqueous-based liquids (hydrophobic). Mini-booms are typically used because of their tube-like shape to encircle spills and contain leaks. A 3” diameter scrim on the outside of the boom identifies the use while containing particulate sorbent material. The T-12 mini-boom is 12’ in length.	Pillows are designed with a scrim that encases particulate sorbent material. Pillows are used in areas where more capacity is desired than can easily be achieved using a sorbent pad. Each 7” x 15” pillow will sorb 0.5 gallons.	Designed to cover large surfaces and easy to cut to cover small areas or to fit tight corners. Can also be used as a precaution in areas where spills may occur. The T-100 roll sorbs 84 gal and is 38” by 144’ long.
Case Qty.	6 Mini-Booms	4 Mini-Booms	16 Pillows	1 Roll
	T-126	T-151	T-156	T-157
				
UPC	00-021200-16048-6	00-021200-16049-3	00-021200-16050-9	00-021200-16051-6
Product Name	3M Petroleum Sorbent Sweep	3M™ Petroleum Sorbent Pad	3M™ Petroleum Sorbent Pad	3M™ Petroleum Sorbent Pad
Description	This sweep incorporates a rope which is attached to one side of the sorbent material. This allows the sorbent to be drawn across an “on water spill” to recover the petroleum product. 21” x 100’ (25 gal/sweep)	This highly sorbent pad features a low-profile design, for easy placement in tight areas. Ideal for cleaning up small spills and wiping down contaminated areas. Each bale sorbs 43.5 gal and is 17” x 19”.	This highly sorbent pad features a low-profile design, so that it can be easily placed in tight areas. Ideal for cleaning up small spills and wiping down contaminated areas. Each bale sorbs 37.5 gal and contains 100 pads 17” x 19”.	This highly sorbent pad features a low-profile design, so that it can be easily placed in tight areas. Ideal for cleaning up small spills and wiping down contaminated areas. Each bale sorbs 75 gal and contains 50 pads 34” x 38”.
Case Qty.	1 Bale	200 Pads	100 Pads	50 Pads

**Petroleum Sorbents (continued)**

	T-190	T-240	T-270	T-280
				
UPC	00-051138-21648-1	00-021200-16053-0	00-021200-16054-7	00-021200-16085-1
Product Name	3M™ Petroleum Sorbent Roll	3M™ Petroleum Sorbent Pillow	3M™ Petroleum Sorbent Boom	3M™ Petroleum Sorbent Double Boom
Description	Designed to cover large surfaces and may be easily cut to cover small areas or to fit tight corners. Can also be used as a precaution in areas where spills may occur. The T-190 roll sorbs 42 gal and is 19" x 144'.	These open mesh bags of particulate sorbent are excellent for handling large quantities of light oil in confined spaces. Designed for long term use. UV resistant. General Purpose Oil Sorbent Pillows 5"x 14"x 25" (3.5 gal/pill).	This boom is a 8" x 10' scrim encased tube of particulate sorbent material secured by a UV resistant netting. Built-in attachment clips are provided at each end of the boom allowing the booms to be linked together, overlapping and preventing seepage between segments.	This boom is a double boom 10' long with two 4" scrim encased tubes of particulate sorbent material secured by a UV resistant netting. Built-in attachment clips are provided at each end of the boom allowing the booms to be linked together, overlapping and preventing seepage between segments.
Case Qty.	1 Roll	10 Pillows	4 Booms	4 Double Booms

## Thermal Insoles

3M™ Thinsulate™ Thermal Insoles are made with a combination of 3M™ Thinsulate™ Insulation to provide exceptional warmth, performance foams to minimize shock in each step and antimicrobial and moisture management technology to help reduce odor in the insoles.



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## Thermal Insoles

### 3M™ Thinsulate™ Thermal Insoles

Multi-layer performance materials provide foot-forming comfort, moisture wicking fabrics to help keep feet drier, antimicrobial technology to reduce odors in the insoles and 3M™ Thinsulate™ Insulation for exceptional warmth.

- Exceptional Warmth
- Conforms to your Foot
- Controls Moisture
- Reduces Odor in the Insole



Order No.	UPC	Description	Packaging	Case Quantity
THMW-4-CON-CS	051131-49604	Women's Size 5-6	Clam Shell	3 Pair
THMW-4-RD	051131-17116	Women's Size 5-6	Paperboard	3 Pair
THMW-6-CON-CS	051131-49605	Women's Size 7-8	Clam Shell	3 Pair
THMW-6-RD	051131-17117	Women's Size 7-8	Paperboard	3 Pair
THMW-8-CON-CS	051131-49606	Men's Size 7-8, Women's Size 9-10	Clam Shell	3 Pair
THMW-8-RD	051131-17112	Men's Size 7-8, Women's Size 9-10	Paperboard	3 Pair
THMW-10-CON-CS	051131-49607	Men's Size 9-10, Women's Size 11-12	Clam Shell	3 Pair
THMW-10-RD	051131-17113	Men's Size 9-10, Women's Size 11-12	Paperboard	3 Pair
THMW-12-CON-CS	051131-49608	Men's Size 11-12	Clam Shell	3 Pair
THMW-12-RD	051131-17114	Men's Size 11-12	Paperboard	3 Pair
THMW-14-CON-CS	051131-49609	Men's Size 13-14	Clam Shell	3 Pair
THMW-14-RD	051131-17115	Men's Size 13-14	Paperboard	3 Pair

# 3M™ PanelSafe™ Lockout System

3M™ PanelSafe™ Lockout System reliably isolates electrical circuits, effectively “locking out” the circuit for the servicing and maintenance of machines, lighting and equipment.



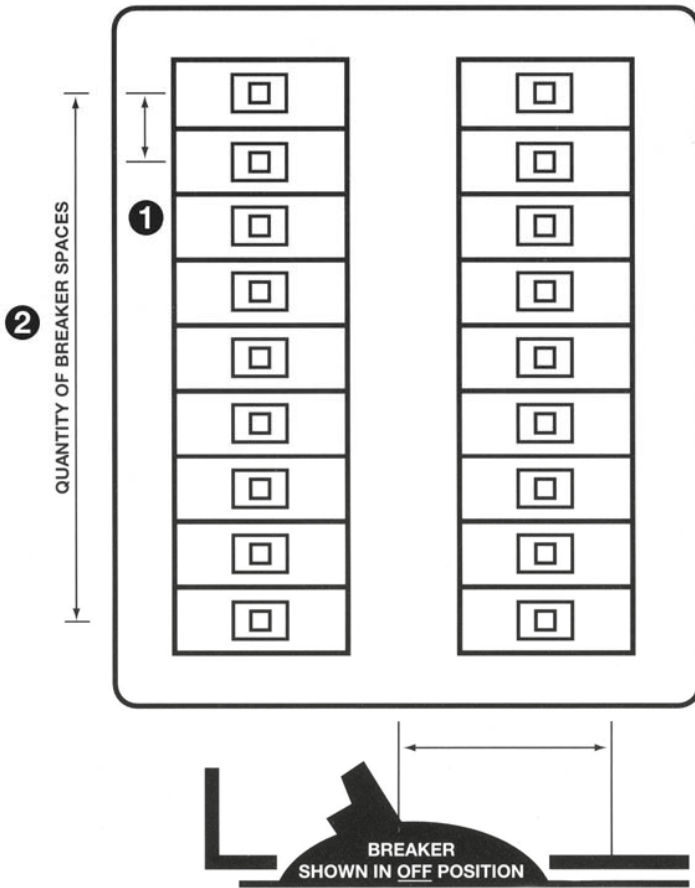
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# Determining the correct 3M™ PanelSafe™ Unit



**Step 1:** Measure the distance between breaker space center lines (❶ on diagram). Reference chart 1 for first two digits of product numbers.

**Step 2:** Count the number of breaker spaces on one side of the load center (❷ on diagram). These are the last two digits of your product number.

Examples of various load centers:

3/4" spacing between breakers and 42 circuits = 07 (designation for 3/4") 21 (number of circuits down one side of the load center). In this case, the part number for the required unit is PS-0721.

1" spacing between breakers and 18 circuits = 10 (designation for 1") 09 (number of circuits down one side of the load center). In this case, the part number for the required unit is PS-1009.

**Step 3:** Visually check the configuration of the breakers and the surface that the PanelSafe is to be mounted upon. If the surface has any irregular shapes or the breakers use a non-traditional setup (traditional 2 rows with a metal center strip as shown on cover), please order the correct shims or accessories shown in this brochure.

**How to Read 3M Panel Safe Product Numbers**

PanelSafe—PS—**07** **03**

<p>Breaker Spacing (measurement ❶)</p> <p>07 = 3/4"</p> <p>10 = 1"</p> <p>12 = 1 1/4"</p> <p>13 = 1 3/8"</p> <p>15 = 1 1/2"</p>	<p>Number of Breaker Slots On one side (measurement ❷)</p> <p>03 = 3 slots</p> <p>04 = 4 slots</p> <p>05 = 5 slots</p> <p>↓</p> <p>21 = 21 slots</p>
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*The first two digits correspond to the breaker spacing and the last two digits correspond to the number of breaker slots.*

## Standard 3M™ PanelSafe™ Unit

A standard 3M PanelSafe unit varies in length, number of slots, and covers according to part number required. Each 3M PanelSafe unit is packaged to include: 1 pin holder; 2 one way pins; 1 two way pin; 1 hook pin; assembly screws and instruction sheet.

## 3M™ PanelSafe™ Lockout System

### 3M™ PanelSafe™ Lockout System

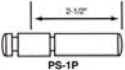
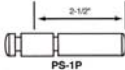
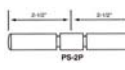
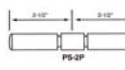
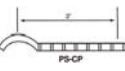
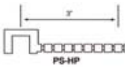

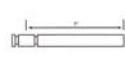
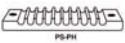

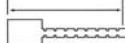

3M™ PanelSafe™ Lockout system reliably isolates electrical circuits, effectively “locking out” the circuit for the servicing and maintenance of machines, lighting and equipment. The use of 3M™ PanelSafe™ increases safety while helping meet applicable OSHA regulations and reducing costs in such areas as workman’s compensation claims, insurance claims and fewer federal fines.

Unit Contents:

- (1) Pin holder
- (2) One-way pins
- (1) Two-way pin
- (1) Hook pin
- Assembly screws
- Instruction sheet

Order No.	UPC	Product Name	Spacing	Slots	Units per Case
PS-0703	054007-44539	3M™ PanelSafe™ Lockout System PS-0703	3/4 Inch	3	1
PS-0708	054007-44544	3M™ PanelSafe™ Lockout System PS-0708	3/4 Inch	8	1
PS-0709	054007-44545	3M™ PanelSafe™ Lockout System PS-0709	3/4 Inch	9	1
PS-0710	054007-44546	3M™ PanelSafe™ Lockout System PS-0710	3/4 Inch	10	1
PS-0712	054007-44548	3M™ PanelSafe™ Lockout System PS-0713	3/4 Inch	12	1
PS-0715	054007-44551	3M™ PanelSafe™ Lockout System PS-0715	3/4 Inch	15	1
PS-0716	054007-44552	3M™ PanelSafe™ Lockout System PS-0716	3/4 Inch	16	1
PS-0720	054007-44556	3M™ PanelSafe™ Lockout System PS-0720	3/4 Inch	20	1
PS-0721	054007-44557	3M™ PanelSafe™ Lockout System PS-0721	3/4 Inch	21	1
PS-1003	054007-44558	3M™ PanelSafe™ Lockout System PS-1003	1 Inch	3	1
PS-1006	054007-44561	3M™ PanelSafe™ Lockout System PS-1006	1 Inch	6	1
PS-1008	054007-44563	3M™ PanelSafe™ Lockout System PS-1008	1 Inch	8	1
PS-1009	051128-53058	3M™ PanelSafe™ Lockout System PS-1009	1 Inch	9	1
PS-1010	051128-53059	3M™ PanelSafe™ Lockout System PS-1010	1 Inch	10	1
PS-1012	054007-44568	3M™ PanelSafe™ Lockout System PS-1012	1 Inch	12	1
PS-1014	054007-44570	3M™ PanelSafe™ Lockout System PS-1014	1 Inch	14	1
PS-1015	054007-44571	3M™ PanelSafe™ Lockout System PS-1015	1 Inch	15	1
PS-1018	054007-44574	3M™ PanelSafe™ Lockout System PS-1018	1 Inch	18	1
PS-1021	054007-44577	3M™ PanelSafe™ Lockout System PS-1021	1 Inch	21	1
PS-1207	054007-44582	3M™ PanelSafe™ Lockout System PS-1207	1-1/4 Inch	7	1
PS-1216	054007-44591	3M™ PanelSafe™ Lockout System PS-1216	1-1/4 Inch	16	1
PS-1217	054007-44592	3M™ PanelSafe™ Lockout System PS-1217	1-1/4 Inch	17	1
PS-1219	054007-44594	3M™ PanelSafe™ Lockout System PS-1219	1-1/4 Inch	19	1
PS-1504	054007-44612	3M™ PanelSafe™ Lockout System PS-1504	1-1/2 Inch	4	1
PS-1505	054007-44613	3M™ PanelSafe™ Lockout System PS-1505	1-1/2 Inch	5	1
PS-1507	054007-44615	3M™ PanelSafe™ Lockout System PS-1507	1-1/2 Inch	7	1
PS-1508	054007-44616	3M™ PanelSafe™ Lockout System PS-1508	1-1/2 Inch	8	1
PS-1510	054007-44618	3M™ PanelSafe™ Lockout System PS-1510	1-1/2 Inch	10	1
PS-1511	054007-44619	3M™ PanelSafe™ Lockout System PS-1511	1-1/2 Inch	11	1
PS-1512	054007-44620	3M™ PanelSafe™ Lockout System PS-1512	1-1/2 Inch	12	1
PS-1513	054007-44621	3M™ PanelSafe™ Lockout System PS-1513	1-1/2 Inch	13	1
PS-1514	054007-44622	3M™ PanelSafe™ Lockout System PS-1514	1-1/2 Inch	14	1
PS-1305	054007-44597	3M™ PanelSafe™ Lockout System PS-1305	1-3/8 Inch	5	1
PS-1309	054007-44601	3M™ PanelSafe™ Lockout System PS-1309	1-3/8 Inch	9	1
PS-1310	054007-44602	3M™ PanelSafe™ Lockout System PS-1310	1-3/8 Inch	10	1
PS-1312	054007-44604	3M™ PanelSafe™ Lockout System PS-1312	1-3/8 Inch	12	1
PS-1314	054007-44606	3M™ PanelSafe™ Lockout System PS-1314	1-3/8 Inch	14	1
PS-1316	054007-44608	3M™ PanelSafe™ Lockout System PS-1316	1-3/8 Inch	16	1

## 3M™ PanelSafe™ Lockout System Accessories

	PS-1P	PS-1P-B	PS-2P	PS-2P-B
				
UPC	054007-44630	054007-44631	054007-44632	054007-44633
Product Name	3M™ PanelSafe™ 1 Way Pin PS-1P	3M™ PanelSafe™ 1 Way Pin PS-1P-B, Bulk	3M™ PanelSafe™ 2 Way Pin PS-2P	3M™ PanelSafe™ 2 Way Pin PS-2P-B, Bulk
Description	One-way pin used to lockout an individual circuit located on either the left or right side of the panel.	One-way pin used to lockout an individual circuit located on either the left or right side of the panel.	Two-way pin used to lockout two circuits directly opposite each other.	Two-way pin used to lockout two circuits directly opposite each other.
Items per Case	5	15	5	15
	PS-CP	PS-HP	PS-MB	PS-MP
				
UPC	054007-44639	054007-44637	054007-44624	054007-44627
Product Name	3M™ PanelSafe™ Cup Pin PS-CP	3M™ PanelSafe™ Hook Pin PS-HP	3M™ PanelSafe™ Main Breaker Lockout PS-MB	3M™ PanelSafe™ Pin PS-MP
Description	The cup pin is used to secure “on” individual circuits (i.e. dedicated circuits) located on either the left or right side of the panel.	The hook pin can be used to secure “on” individual circuits (i.e. dedicated passive circuits), or to lockout individual circuits from either the left or right side of the panel.	When a main breaker lockout cannot be directly attached to the dead front because of extended breaker casing, a pair of expanding brackets must be used. Expanding brackets for PS-MB are sold in pairs only.	Used in conjunction with the expanding bracket, a brace that attaches to the bracket which is then expanded and attached to the insides of both sides of the panel. For PS-MB.
Items per Case	5	5	1 Pair	15
	PS-PH	PS-SH3	PS-SP	PS-SP-B
				
UPC	051128-53427	051128-53002	054007-44634	054007-44635
Product Name	3M™ PanelSafe™ Pin Holder PS-PH	3M™ PanelSafe™ Shim PS-SH3, 1/2 inch	3M™ PanelSafe™ Spade Pin PS-SP	3M™ PanelSafe™ Spade Pin PS-SP-B, Bulk
Description	Stores all pins, (except main breaker pin) at each panel location for easy access when lockout functions are required.	On distribution panels where the body of each breaker extends out beyond the level of the dead front. The 1/2” shim is used to raise the surface where a 3M™ PanelSafe™ unit is mounted, level with the body of each breaker. Available only in pairs.	A spade pin is used to lockout on either the left or right side of the panel when the measured distance from the center line of the dead front to the max position on the breaker handle in the off position is greater than 2 1/2”.	A spade pin is used to lockout on either the left or right side of the panel when the measured distance from the center line of the dead front to the max position on the breaker handle in the off position is greater than 2 1/2”.
Items per Case	5	5 pair	5	15

# LED Lamps

## 3M™ LED advanced light

**Significant energy savings:** 60-watt-equivalent emits same light as incandescent, using just 9.6 watts—80% less.

**Excellent heat management:** The only A19 bulb approved for use in enclosed luminaires.

**Light evenly distributed across the entire bulb:** Avoids the top-lit “snow cone” effect.

**Fits traditional (Edison) sockets**

**Gold Edison Award Winner for Innovation in Energy**

**Recommended for replacing CFL bulbs:** Excellent light without mercury or slower, dimmer warm-up required.

**From 3M, a company known for such innovations as light-enhancing film and which has provided cutting-edge electrical products for more than 50 years.**



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## 3M™ LED Advanced Light for Commercial Applications

### 3M™ Commercial LED A-19 General Purpose Lamps

With its proprietary light guide technology, 3M manufactures a lamp that resembles the traditional incandescent light bulb but with the advantages of LED technology. These A19 LED lamps are Made in USA with global components, certified for use in enclosed luminaires and feature an innovative design honored with the Gold Edison Award for innovation in energy.



Voltage	120 VAC 50/60 Hz
Base Type	E26
Size/Format	A-19
Weight	130 g
Country of Origin	Made in U.S.A. with globally sourced materials



Order No.	UPC	Lumens	CCT (deg K)	Power (W)	CRI	Lifetime (based on 3 hrs/day)	Case Qty.
RCA19A3	051128-94410	450	3,000	4.6	83	32 years	8
RCA19B3	051141-35753	800	3,000	9.6	83	32 years	8
RCA19B4	051141-35755	800	4,000	8.5	82	32 years	8
RCA19C3	051141-35752	750	3,000	8	83	32 years	8
RCA19C4	051141-35754	750	4,000	8	82	32 years	8

## 3M™ Commercial LED PAR-38 Spot Lamps

These innovative PAR-38 LED lamps are energy-efficient spot lamps designed to provide significant energy savings. 3M PAR-38 lamps are dimmable, 25-degree spots designed to last 50,000 hours.



Voltage	120 V
Socket Type	Medium Screw Base
Power Factor	0.9
Weight	236 g
Life	50,000 hour
Country of Origin	China



Order No.	UPC	Lumens	CCT (deg K)	Power (W)	Beam Angle	CRI	CBCP	Case Qty.
RCPAR38B27	051128-94395	900	2,700	15	25 degree	82	3,800	16
RCPAR38B3	051128-94396	1,000	3,000	15	25 degree	82	4,250	16

## 3M™ Commercial LED BR-30 Flood Lamps

These Energy Star® certified BR-30 LED lamps are energy-efficient flood lamps. They are dimmable and designed to last 50,000 hours.



Voltage	120 VAC
Socket Type	Medium Screw Base
Power Factor	0.9
Weight	354 g
Life	50,000 hour
Country of Origin	China



Order No.	UPC	Lumens	CCT (deg K)	Power (W)	Beam Angle	CRI	CBCP	Case Qty.
RCBR30B27	051128-94397	810	2,700	12	Flood	82	-	16
RCBR30B3	051128-94398	830	3,000	12	Flood	82	-	16

## 3M™ Commercial LED PAR-30L Spot Lamps

These innovative PAR-30L LED lamps are energy-efficient spot lamps designed to provide significant energy savings. 3M PAR-30L Lamps are dimmable, 25-degree spots designed to last 50,000 hours.



Voltage	120 V
Socket Type	Medium Screw Base
Power Factor	0.9
Weight	200 g
Life	50,000 hour
Country of Origin	China



Order No.	UPC	Lumens	CCT (deg K)	Power (W)	Beam Angle	CRI	CBCP	Case Qty.
RCPAR30LB3	051128-94399	820	3,000	13	25 degree	82	3,525	16
RCPAR30LB27	051128-94400	760	2,700	13	25 degree	82	3,268	16

## 3M™ Commercial LED MR-16 Accent Lamps

This innovative MR-16 LED lamp is an energy-efficient low-voltage accent lamp designed to provide significant energy savings. 3M MR-16 Lamps are dimmable, 25-degree accents designed to last 50,000 hours.



Voltage	120 V
Socket Type	MR16 Base
Power Factor	0.9
Weight	200 g
Life	50,000 hour
Country of Origin	China



Order No.	UPC	Lumens	CCT (deg K)	Power (W)	Beam Angle	CRI	CBCP	Case Qty.
RCMR16A27	051128-94401	415	2,700	6	25 degree	80	1,600	8



## 3M™ LED Advanced Light for Commercial Applications

### 3M™ Commercial LED GU-10 Accent Lamps

The energy-efficient, long-lasting 3M™ LED advanced light GU-10 requires just 7 watts to match the light output of conventional 40W MR bulbs. Featuring proprietary CrimpFin™ Heatsink Design, these dimmable lights last up to 50,000 hours. They're ideal for a wide range of commercial, retail and residential fixtures with GU-10 sockets.



Voltage	120 V
Socket Type	GU-10 Base
Power Factor	0.9
Weight	42 g
Life	50,000 hour
Country of Origin	China



Order No.	UPC	Lumens	CCT (deg K)	Power (W)	Beam Angle	CRI	CBCP	Case Qty.
RCGU10A27	051128-94402	415	2,700	7	25 degree	80	1,600	8

## 3M™ Contractor Grade LED Lamps

Voltage 120 VAC 50/60 Hz

Life 25,000 hours

Country of Origin China



	CGA19B4D	CGA19B8D	CGA19C8D	CGB30B8D
				
UPC	051128-94414	051128-94415	051128-94416	051128-94417
Format	A19	A19	A19	BR30
Lumens	450	800	800	800
CCT (deg K)	3,000	3,000	4,000	3,000
Beam Angle	240°	240°	240°	Flood
Power (W)	5.5	9	9	12.5
Case Qty.	8	8	8	8
	CGP3025B8D	CGP3825B13D	CGGU25B4D	CGMR25B4D
				
UPC	051128-94418	051128-94419	051128-94421	051128-94420
Format	PAR30L	PAR38	GU10	MR16
Lumens	850	1,350	500	500
CCT (deg K)	3,000	3,000	3,000	3,000
Beam Angle	25°	25°	25°	25°
Power (W)	12.5	19	7	8
Case Qty.	8	8	8	8

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