Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



77812WS Multi-Conductor - 600V Shielded, Continous Flexing Applications Up to 14 Million Flex Life Cycles



For more Information please call

1-800-Belden1

General Description:

Flex Cycle Rating:

18 AWG stranded (105x38) bare copper conductors, PVC insulation, oil-resistant PVC inner jacket, tinned copper braid shield, 85% coverage, oil-resistant overall PVC jacket.

copper braid shield, 85% coverage, oil-resista	ant overall PVC jacket.
Physical Characteristics (Overall)	
Conductor AWG:	
# Conductors AWG Stranding Conductor Material Dia. (in.)	
11 18 105x38 BC - Bare Copper 0.052	
Total Number of Conductors:	12
Ground Wire	
Ground Wire (Y/N):	Y
Ground Wire AWG:	18
Ground Wire Stranding:	105x38
Ground Wire Conductor Material:	BC - Bare Copper
Ground Wire Insulation Material:	PVC - Polyvinyl Chloride
Insulation Insulation Material:	
Insulation Material Wall Thickness (in.) Dia. (in.)	
PVC - Polyvinyl Chloride 0.022 0.096	
Insulation Color Code Chart: Color Description	
Black Individually Numbered	
Yellow/Green Ground	
Inner Jacket	
Inner Jacket Material: Inner Jacket Material Nom Wall (in.) Nom. Dia. (in.)	
PVC - Polyvinyl Chloride 0.030 0.480	
Outer Shield	
Outer Shield Material: Outer Shield Material Coverage (%)	
TC - Tinned Copper 85.000	
Outer Shield Separator Material:	Tissue Tape, 25% Overlap, Min.
Outer Jacket	
Outer Jacket Material: Outer Jacket Material Nom. Wall Thickness (in.)	
Outer Jacket Material Nom. Wall Thickness (in.) PVC - Polyvinyl Chloride 0.060	
Overall Cable	
Overall Nominal Diameter:	0.634 in.
Mechanical Characteristics (Overall)	
Storage Temperature Range:	-40°C To +90°C
Installation Temperature Range:	Flexing: -5°C To +90°C
Operating Temperature Range:	Flexing: -5°C To +90°C
Bulk Cable Weight:	497 lbs/1000 ft.
Max. Recommended Pulling Tension:	174 lbs.
Min. Bend Radius/Minor Axis:	5.100 in.
Min. Bend/Installation:	5.100 in.
Min. Bend Radius (Continuous Flexing):	5.100 in.
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14 Million Flexes

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Detailed Specifications & Technical Data





77812WS Multi-Conductor - 600V Shielded, Continous Flexing Applications Up to 14 Million Flex Life Cycles

olicable Standards & Environmental Progr	ams
NEC/(UL) Specification:	THHN/THWN Singles
AWM Specification:	UL Style 2587 (600 V 90°C)
CSA Specification:	600 V AWM I/II A/B
EU Directive 2011/65/EU (ROHS II):	Yes
Other Specification:	AWM/STYLE 10012, AWM/STYLE 2587, AWM I/II A/B, FT1, VDE 0472, Section 803 Oil Test, EU Low Voltage Directive 2014/35/EC, EU Directive 2011/65/EU(RoHS2), REACH Regulation (EC 1907/2006), California Proposition 65
ne Test	
CSA Flame Test:	FT1

Electrical Characteristics (Overall)

Nom. Inductance:

Inductance (µH/ft) 0.190

Nom. Capacitance Cond. to Other Cond. & Ground:

Description	Freq. (kHz)	Capacitance (pF/ft)
Nom. Cond. to Cond	1.000	45.000
Nom. Ground.	1.000	81.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 6.400

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 1.620

Put Ups and Colors:

Item# Putup Ship Weight Color Notes Item Desc		
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