Twist-Lock® Wiring Devices and Safety Enclosures

HUBBELL

We Never Stop Putting More Performance, Safety and Convenience into Each Product.



Hubbell Twist-Lock® Wiring Devices and Safety Enclosures: At Hubbell, We're Never Satisfied, but Our Customers Always Are.

Hubbell Twist-Lock wiring devices and safety enclosures have long set the standard for innovation, performance, durability, safety and convenience. But, if there's an underlying secret to our continuing success it's our philosophy

of never leaving well enough alone. We believe we can always make our products better– and the record shows we have.

The latest case in point: Insulgrip plugs and connectors. We've redesigned the line, making big improvements in the body, cord grips, dust shield, markings and contacts. But we've kept the same rugged construction, durable materials, insulated housing, superior strain relief, powerful cord grip and roomy wiring chamber.

The new Insulgrip line follows our introduction of a complete family of Safety-Shroud Twist-Lock devices, with plug blades protected by a fixed shroud which shields them from possible deformation and allows the plug to be used with a mechanical interlock and, even more importantly, virtually eliminates users contact with an energized, partially connected plug. These products set an entirely new standard for improved safety and reliability and are available in two distinct series: Safety-Shroud Twist-Lock and Watertight Safety-Shroud Twist-Lock.

Product for product, our Twist-Lock line continues to respond to your changing needs. Another enhancement is our Switched Twist-Lock Safety Enclosure. This Hubbell innovation replaces boxes, switches and covers with a compact enclosure that is Type 3R Rainproof and 12K Dust-tight rated. Hubbell developed the Switched Twist-Lock Enclosure to answer users' desire to disconnect higher voltage devices safely and confidently.

There's much more, including:

- Twist-Lock receptacles with a ring of color on the face that's keyed to an internationally recognized color coding scheme, enabling devices with identical voltage ratings to be matched quickly.
- Equipment Mounting Flanged Inlets and Flanged Receptacles for flush fit on panel mounting surfaces in applications where a detachable cord is desired.
- Insulgrip 50 Amp Twist-Lock, the heavy duty design for heavy duty applications and harsh environments.
- Midget Twist-Lock, the compact size plugs and connectors with exclusive Valise® design for easy wiring, quick assembly, superior cord gripping and abuse resistance.

Hubbell Twist-Lock Wiring Devices: Count on them for a new twist in performance, safety and convenience.



Insulgrip® Plugs and Connectors – Restyled, reengineered, refined but still the same product you've trusted over the years. Now, the best is even better. And, still Hubbell's widest range of singly rated NEMA devices.



Receptacles – Face color coding by voltage provides a quick, sure way to locate and identify mating devices. And, mechanical and electrically, these Twist-Lock receptacles are the finest available.



Flanged Devices – For equipment mounting or equipment where a detachable cord is desired, Hubbell's complete line of inlets and flanged receptables offers OEMs the ultimate in value, wiring speed, long life—and flexibility.



Safety-Shroud Twist-Lock®—Where watertightness is not a factor—but the added margin of safety from the Hubbell Safety-Shroud Twist-Lock is—we offer a total product line for all applications. In addition to Safety Shroud plugs, the new line includes nonwatertight receptacles in three styles—angle, surface and semi-flush to satisfy every installation need.





Watertight Safety-Shroud Twist Lock®

This UL Type 4X rated product line is offered in a complete family consisting of plugs, connector bodies, receptacles and inlets. Tough and light, these products are unequaled in performance in even the most hostile applications.



Watertight Mechanical Interlock for Safety-Shroud Twist-Lock

Hubbell's CIRCUIT-LOCK[®] enclosure line has been expanded to include a mechanical interlock designed for use with the new Safety-Shroud Twist-Lock line. The addition of this mechanical interlock will complete your Safety-Shroud Twist-Lock industrial wiring system. The mechanical interlock is a breakthrough in design and virtually eliminates the possibility of making or breaking the circuit under load. The switched Twist-Lock safety enclosure is also available for 3R applications which don't require interlocking.



50 Amp Insulgrip Twist-Lock Line

An exclusive Hubbell design delivering Insulgrip features, insulated housing and superior strain relief to 50 amp plugs and connectors. They're tough and rugged enough for the most demanding construction or industrial applications.



Midget Twist-Lock Line

The 2- and 3-wire Midget Twist-Lock line offers the same quality as its larger counterpart—but the size to go where they can't. And, Midget Twist-Lock Valise® devices are designed for fast, simple wiring.



Twist-Lock Accessories

The accessories that make the Twist-Lock line fit your precise application needs. Includes adapters, weatherproofing devices, Plugout[™] electrical lockout devices, back boxes, and Add-A-Shroud[®]devices.

20 and 30 Amp Plugs and Connectors: The Difference Is Insulgrip...and a Whole Lot More



They're new and better than ever. They're the same and better than anything else on the market. They're 20 and 30 amp Insulgrip plugs and connectors. We kept the same classic integrity, rock-solid construction and safety features that have made these devices the industry standard. But, we added enhancements because good is never good enough for Hubbell. We improved the contacts with

better terminations and an exclusive double rivet design for the female contacts.

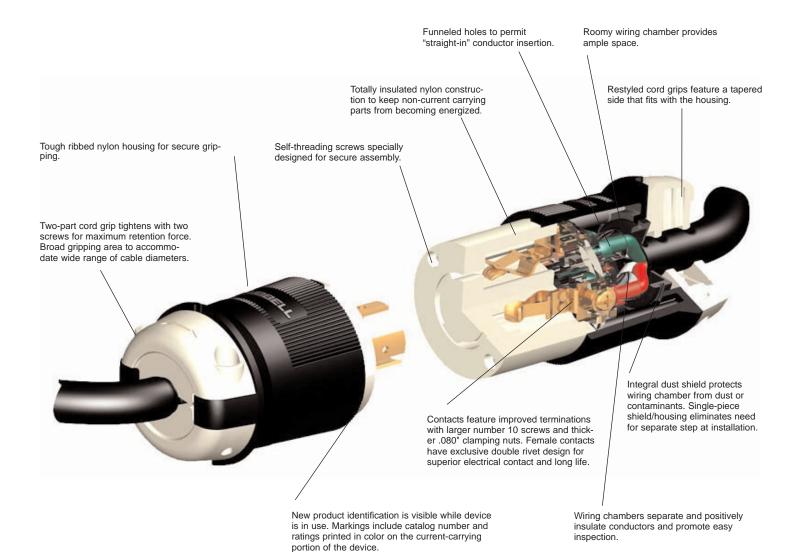
We restyled the cord grips for a clean, one-piece look—and made them stronger at the same time. And we introduced a whole new easier to read identification system. And more. All the while, of course, we maintained traditional Insulgrip features and benefits. Like the most power-

HUBBELL

Wiring Device-Kellems

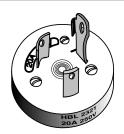
ful cord grip in the industry. Insulgrip's cord gripping design actually clamps the conductors, not just the cable jacket. We kept the same nylon body and housing material for resistance to industrial chemicals, solvents and hydrocarbons. And, the front of each plug is still molded to its specific blade configuration, leaving no holes to invite debris or contamination (plus we added a new dust shield).

Of course, the Hubbell Twist-Lock line of plugs and connectors remains the broadest in the industry. So if you prefer proven performance, innovation or selection—Hubbell has you covered.



Get a Grip on Insulgrip Features and Benefits





Not Just a Pretty Face

- Terminals feature improved terminations with larger number 10 screws and thicker .080" clamping nuts.
- Female contacts with exclusive double rivet design for superior electrical contact and long life.
- Dead front construction, with individual mold for each blade configuration. Eliminates
 vacant slot openings found in universal molds, which allow passage of contaminants into
 plug interior.



Rough and Ready

- Restyled look is not only clean and contemporary, it's practical, as the design conforms comfortably to the user's hand.
- Traditional ribbed housing is easy to turn; flared grip makes connections easy to make and break, even with gloved hands.
- Highly abuse-resistant thermoplastic body resists chemical attacks and is ideal for industrial/commercial/construction environments.



Bulldog-Like Grip Won't Let Go

- Two opposing grips provide maximum strength and expanded cord range, a design proven time and again on larger pin and sleeve, Hubbellock and 50 amp Twist-Lock devices.
- Molded counter-bores form pockets for the cord grip screw heads to produce a smooth look and prevent screwdriver from slipping. Grip screws are installed from same side to make tightening easy.
- Long, molded screw thread bosses make starting the cord clamp screws easy and give the grips an extremely powerful hold.



Markings Make Wiring a Whiz

- New product identification markings are visible while the device is in use. The products have the catalog number and ratings marked on the current-carrying portion of the device
- Information is clearly printed in the color corresponding to the rating of the products for quick identification.
- Epoxy-based ink resists wear-off and chemical attack from common cleaners and solvents. Redundant molded-in rating provides added integrity.



Integral Shield Gives Contaminants the Dust-Off

- A dust shield captured by the housing provides protection for the wiring chamber by preventing entry of dust or contaminants.
- Shield fits into housing below the cord grips to form a single piece, eliminating need for separate step at installation.



The Standard for Locking Receptacles:



On the high-impact nylon face of a Hubbell Twist-Lock receptacle is a ring of color. Keyed to an internationally recognized color coding scheme, this ring enables devices with identical voltage ratings to be matched quickly.

It's just one more example of user-oriented thinking at Hubbell.

Twist-Lock receptacles have always held advantages over conventional ones. Today's Twist-Lock receptacles maintain the advantage by combining functional design features, unparalleled quality and pacesetting performance.

The terminals in each Hubbell Twist-Lock receptacle are mechanically and electrically the finest available. These terminals incorporate unique design features to contain and hold conductors, including an external backwiring "wraparound" clamp, a wire restraint recess and more.

The materials used in every receptacle are of the highest quality. The all-brass mounting system provides a safer, lower resistance ground path than those made of steel. The thick wall base is constructed of an engineered thermoplastic to offer the benefits of thermoset, yet with much greater impact resistance.

Hubbell Twist-Lock Receptacles: Voltage color coding on the outside. Proven designs and quality materials on the inside. Any way you look at them, they're the standard of the industry.

Boss diameter is 1.562" on













Face color coding by voltage facilitates locating and mating of proper devices.

High-impact, abuse-resistant nylon face.

All-brass mounting and grounding system provides a lower resistance ground path and greater resistance to corrosion than steel mounting systems.

Color coding by voltage rating helps facilitate mating of proper devices.

20 and 30 amp devices for simplifying installation and accessory selection.

Glass-filled thermoplastic polyester base has the desirable characteristics of a thermoset material, including heat and flame resistance - plus the additional advantage of dimensional stability. The impact resistance it provides, however, is much greater than that of a thermoset.

> One-piece contact with long spring arm (low stress) and oxide cutting nibs: prevents stress and overheating associated with riveted contacts and short spring

#10 silicon bronze terminal screw provides greater strength and resistance to corrosion and stripping. Anti-rotational clamp has a stop to limit the amount of cocking when only one side is used. Accommodates both back and side wiring.



Wire restraint recess for both back and side wiring. Greatly reduces the possi-bility of loosening the terminal connection.



Flanged Inlets/Receptacles: A Complete Line for Equipment Reliability, Convenience, Flexibility

Hubbell Twist-Lock flanged receptacles and inlets fit flush on panel mounting surfaces in applications where a detachable cord is desired.

Unlike polycarbonate housings, Hubbell nylon flanges aren't susceptible to stress cracking around the mounting holes as a result of exposure to hydrocarbon environments or tightening torque.

Hubbell color coded markings provide quick, positive identification— which means fast, accurate mating of devices with identical voltage ratings. Picture window wiring facilitates proper wiring connection. Also available in the Midget line for applications where space is limited. See page 21. And there's a complete line of weatherproofing accessories.

Breadth of line. Performanceoriented features. Ease and convenience. That's what Hubbell Twist-Lock flanged inlets and receptacles are all about.



Hubbell Flanged Inlets/Receptacles Selection Chart

Inlet/Outlet Dimensions

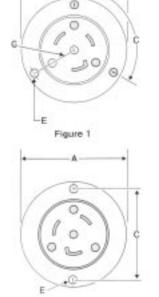
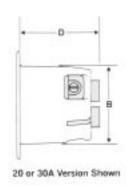


Figure 2





		Inlet	and Outle	et Dimens	sions			
Catalog Number HBL4716C	Fig.	Α	В	С	D	E 2 Holes	F	G
HBL4586C HBL4786C	2	(65.1) 2 ⁹ / ₁₆ "	(42.9) 1 ¹¹ / ₁₈ "	(55.6) 2³/ ₁₆ "	(43.7) 1 ²³ / ₃₂ "	(4.0) ⁵ / ₃₂ "D	(44.5) 1 ³ / ₄ "	_
HBL2315 HBL2325 HBL2335 HBL2345 HBL2355	1	(73.0) 2 ⁷ /8"	(52.0) 2 ³ / ₆₄ "	120°	(56.4) 2 ⁷ / ₃₂ "	3 Holes (4.8) ³ / ₁₆ "D	(53.0) 2 ³ / ₃₂ "	(31.8) 1 ¹ / ₄ "
HBL2415 HBL2425 HBL2435 HBL2515 HBL2525 HBL2535	1	(77.8) 3 ¹ / ₁₆ "	(57.2) 2 ¹ / ₄ "	120°	(31.4) 2 ¹⁵ / ₆₄ "	3 Holes (4.8) ³ / ₁₆ "D	(58.0) 2 ⁹ / ₃₂ "	(34.1) 1 ¹¹ / ₃₂ "
HBL2615 HBL2625 HBL2635 HBL2645 HBL2655	1	(73.0) 2 ⁷ /8"	(52.0) 2³/ ₆₄ "	120°	(56.4) 2 ⁷ / ₃₂ "	3 Holes (4.8) ³ / ₁₆ "D	(53.0) 2 ³ / ₃₂ "	(31.8) 1 ¹ / ₄ "
HBL2715 HBL2725 HBL2735 HBL2745						3 Holes		
HBL2815 HBL2825 HBL2835	1	(77.8) 3 ¹ / ₁₆ "	(57.2) 2 ¹ / ₄ "	120°	(31.4) 2 ¹⁵ / ₆₄ "	(4.8) ³ / ₁₆ "D	(58.0) 2 ⁹ / ₃₂ "	(34.1) 1 ¹¹ / ₃₂ "
HBL4715C HBL4585C HBL4785C	2	(65.1) 2 ⁹ / ₁₆ "	(42.9) 1 ¹¹ / ₁₆ "	(55.6) 2 ³ / ₁₆	(43.7) 1 ²³ / ₃₂ "	2 Holes (4.8) ⁵ / ₃₂ "D	(44.5) 1 ³ / ₄ "	_
HBL2316 HBL2326 HBL2336 HBL2346 HBL2356	1	(73.0) 2 ⁷ /8"	(52.0) 2 ³ / ₆₄ "	120°	(56.4) 2 ⁷ / ₃₂ "	3 Holes (4.8) ³ / ₁₆ "D	(53.0) 2 ³ / ₃₂ "	(31.8) 1 ¹ / ₄ "
HBL2416 HBL2426 HBL2436 HBL2516 HBL2526 HBL2536	1	(77.8) 3 ¹ / ₁₆ "	(57.2) 2 ¹ / ₄ "	120°	(31.3) 2 ¹⁵ / ₆₄ "	3 Holes (4.8) ³ / ₁₆ "D	(58.0) 2 ⁹ / ₃₂ "	(34.1) 1 ¹¹ / ₃₂ "
HBL2616 HBL2626 HBL2636 HBL2646 HBL2656	1	(73.0) 2 ⁷ /8"	(52.0) 2 ³ / ₆₄ "	120°	(56.4) 2 ⁷ / ₃₂ "	3 Holes (4.8) ³ / ₁₆ "D	(53.0) 2 ³ / ₃₂ "	(31.8) 1 ¹ / ₄ "
HBL2716 HBL2726 HBL2736 HBL2746						3 Holes		
HBL2816 HBL2826 HBL2836	1	(77.8) 3 ¹ / ₁₆ "	(57.2) 2 ¹ / ₄ "	120°	(31.3) 2 ¹⁵ / ₆₄ "	(4.8) ³ / ₁₆ "D	(58.0) 2 ⁹ / ₃₂ "	(34.1) 1 ¹¹ / ₃₂ "

Dimensions in Inches (mm)



Equipment's Better Equipped with Hubbell: Insulgrip® Twist-Lock® Devices







Hubbell Twist-Lock Devices Selection Chart

NEMA Grounding Twist-lock

Insulgrip Nylon Nylon Single IG Single IG Single Shortstrap Duplex IG Duplex								Plug	Body	Inlet	Outlet		Receptacles			
Poles Wires Amps Volts																
Poles Wires Amps Volts NEMA Code No. NEMA N								Insulgrip	Nylon	Nylon	Single	Single	IG Single	Shortstrap	Duplex	IG Duplex
Poles Wires Amps Volts Code No. Refling Code No. C													6		Š	Ĭ
15	Poles	Wires	Amps	Volts						3		A	345	Line 1	300	7
277AC L7-15 2 HBL4770C* HBL4778C HBL478C HBL478C HBL478C* HBL478C* HBL4760* HBL4763A HBL4750 28	-			125		L5-15	0.5	HBL4720C*	HBL4729C*	HBL4716C	HBL4715C*	HBL4710*	IG4710*	HBL4731A	HBL4700*	IG4700*
2 3			15	250		L6-15	2	HBL4570C*	HBL4579C*	HBL4586C	HBL4585C	HBL4560*	IG4560*	HBL4563A	HBL4560	IG4550
250				277AC		L7-15	2	HBL4770C*	HBL4779C*	HBL4786C	HBL4785C	HBL4760*		HBL4763A	HBL4750	
2 3 20 277AC				125		L5-20	1	HBL2311*	HBL2313*	HBL2315*	HBL2316*	HBL2310*	IG2310*			
2				250		L6-20	2	HBL2321*	HBL2323*	HBL2325	HBL2326*	HBL2320*	IG2320*			
600AC			20	277AC		L7-20	2	HBL2331*	HBL2333	HBL2335	HBL2336	HBL2330*				
125	2	3		480AC		L8-20	5	HBL2341*	HBL2343*	HBL2345	HBL2346	HBL2340*	IG2340			
250				600AC		L9-20		HBL2351*	HBL2353*	HBL2355	HBL2356*	HBL2350				
30 277AC				125		L5-30	2	HBL2611*	HBL2613*	HBL2615	HBL2616	HBL2610*	IG2610*			
ABOAC				250		L6-30	3	HBL2621*	HBL2623*	HBL2625*	HBL2626*	HBL2620*	IG2620*			
Column			30	277AC		L7-30	3	HBL2631	HBL2633	HBL2635	HBL2636	HBL2630				
20				480AC		L8-30	7.5	HBL2641	HBL2643	HBL2645	HBL2646	HBL2640				
3 4				600AC		L9-30		HBL2651	HBL2653	HBL2655	HBL2656	HBL2650				
3 4 3Ø480AC L16-20 10 HBL2431* HBL2433* HBL2436 HBL2430*	-			125/250		L14-20	2(1)	HBL2411*	HBL2413*	HBL2415	HBL2416*	HBL2410*	IG2410*			
3 4 125/250			20	3Ø250AC		L15-20	5	HBL2421*	HBL2423*	HBL2425	HBL2426	HBL2420*	IG2420*			
30/250AC L15-30 7.5 HBL2721* HBL2723* HBL2725 HBL2726 HBL2720* IG2720 30/480AC L16-30 15 HBL2731* HBL2733* HBL2735 HBL2736 HBL2730* 30/600AC L17-30 HBL2741* HBL2743* HBL2745 HBL2746 HBL2740* 30/97120/208AC L21-20 3 HBL2511* HBL2513* HBL2515 HBL2516 HBL2510* IG2510				3Ø480AC		L16-20	10	HBL2431*	HBL2433*	HBL2435	HBL2436	HBL2430*				
30/480AC L16-30 15 HBL2731* HBL2735* HBL2736 HBL2730* 30/600AC L17-30 HBL2741* HBL2743* HBL2745 HBL2746 HBL2740* 30/7120/208AC L21-20 3 HBL2511* HBL2513* HBL2515 HBL2516 HBL2510* IG2510	3	4		125/250		L14-30	3(2)	HBL2711*	HBL2713*	HBL2715*	HBL2716	HBL2710*	IG2710			
3Ø480AC L16-30 15 HBL2731* HBL2733* HBL2735 HBL2730* HBL2730* HBL2740* HBL2741* HBL2741* HBL2743* HBL2745 HBL2746 HBL2740* HBL2740* HBL2740* HBL2513* HBL2515 HBL2516 HBL2510* IG2510			20	3Ø250AC		L15-30	7.5	HBL2721*	HBL2723*	HBL2725	HBL2726	HBL2720*	IG2720			
3ØY120/208AC			30	3Ø480AC		L16-30	15	HBL2731*	HBL2733*	HBL2735	HBL2736	HBL2730*				
				3Ø600AC		L17-30		HBL2741*	HBL2743*	HBL2745	HBL2746	HBL2740*				
20 3ØY277/480AC L22-20 10 HBL2521 HBL2523 HBL2525 HBL2526 HBL2520 IG2520				3ØY120/208AC		L21-20	3	HBL2511*	HBL2513*	HBL2515	HBL2516	HBL2510*	IG2510			
TO THE EDUCATION OF THE PROPERTY OF THE PROPER			20	3ØY277/480AC		L22-20	10	HBL2521	HBL2523	HBL2525	HBL2526	HBL2520	IG2520			
4 5 3ØY347/600AC L23-20 HBL2531* HBL2533* HBL2536 HBL2530 IG2530 IG2530		_		3ØY347/600AC		L23-20		HBL2531*	HBL2533*	HBL2535	HBL2536	HBL2530	IG2530			
4 5 3ØY120/208AC L21-30 5 HBL2811* HBL2813* HBL2815 HBL2816 HBL2810* IG2810	-	5		3ØY120/208AC		L21-30	5	HBL2811*	HBL2813*	HBL2815	HBL2816	HBL2810*	IG2810			
30 3ØY277/480AC L22-30 15 HBL2821 HBL2823 HBL2825 HBL2826 HBL2820 IG2820			30	3ØY277/480AC		L22-30	15	HBL2821	HBL2823	HBL2825	HBL2826	HBL2820	IG2820			
3ØY347/600AC L23-30 HBL2831 HBL2833 HBL2836 HBL2830 IG2830				3ØY347/600AC		L23-30		HBL2831	HBL2833	HBL2835	HBL2836	HBL2830	IG2830			

Connector

¹The Horsepower Ratings are the Phase Values. The Values in Parentheses are Phase to Neutral.

Note: Horsepower Ratings are Applicable to Plugs and Receptacles Only and Do Not Apply to Connectors, Flanged Inlets and Outlets.

See Full Line Catalog for Non-NEMA/Non-Grounding Devices, weatherproofing Accessories and selected corrosion resistant configurations.

*Add 'CN' suffix for Robertson/Slot combination head screws.



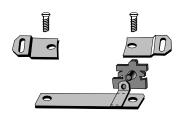
The Ins and Outs of Twist-Lock: Receptacle Features and Benefits





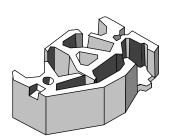
Face Designed with Use in Mind

- High-impact, abuse-resistant nylon face.
- Color coding by voltage rating facilitates locating and mating of proper devices.
- Boss face diameter is 1.562" on 20 and 30 amp devices for simplifying installation and accessory selection.



Less Resistance, More Resistant

• All-brass mounting and grounding system provides a lower resistance ground path, and is more resistant to corrosion than steel mounting straps.



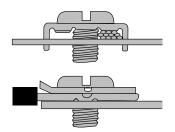
Keeps its Cool

• Glass-filled thermoplastic polyester base has the desirable characteristics of a thermoset material, including heat and flame resistance... plus the additional advantage of dimensional stability and strength.



Less Stress

 One-piece contact with long spring arm (low stress) and oxide cutting nibs: prevents stress and overheating associated with single riveted contacts and short spring arms.



Terrific Terminations

- External backwiring "wraparound" clamp with anti-rotation strand containment feature that also bundles the conductor strands.
- Wire indentor feature with bump and barbs to achieve oxide cutting and superior retention of the conductors.

Safety-Shroud Twist-Lock® System: Receptacles and Plugs







Safety-Shroud Plug Features and Benefits

- Mates with most NEMA locking connector bodies.
- Virtually eliminates bent and broken plug blades.
- Provides protection for personnel by reducing chance of inadvertent contact with blades when connecting or disconnecting energized devices.
- Reduces exposure to arcing when connecting or disconnecting under load.
- Extends life of mating receptacles by eliminating damage caused by insertion of bent blades.
- Complies with California Code of Regulation, which requires shrouding for devices exceeding 300 volts.
- Lockout/tagout hole allows compliance to OSHA regulation 29 CFR 1910.147.
- Allows engagement with Mechanical Interlock Enclosure which virtually prevents make and break under load.



Semi-flush receptacle mounting provides lowest installed profile when plug is not in use with receptacle. This device is designed for installation on two-gang boxes.



Straight receptacle housing provides a low installed profile when plug is not in use with receptacle. This device is designed for installation on single-gang boxes.



Angle receptacle housing provides low installed profile when plug is in use with receptacle. This device is designed for installation on single-gang boxes.

Receptacle Features and Benefits

- Internal keying on receptacles aligns blades for quick mating of devices.
- Accepts all NEMA locking plugs, allowing interchangeability with existing devices.
- Catalog number and color-coded voltage rating are visible when in use.
- All screws are combination Phillips/slotted head
- Engineered thermoplastic housing is impact and corrosion-resistant, for use in heavy-duty industrial environments.





Safety-Shroud Twist-Lock® System: Hubbell Safety-Shroud Twist-Lock and NEMA **Locking Selection Chart 20 Ampere**





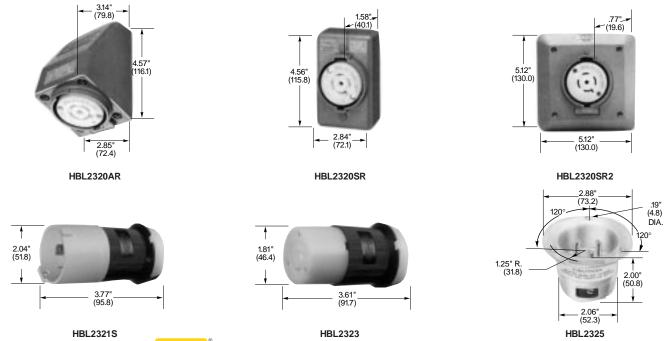
Single Safety-Shroud Twist-Lock Receptacles 20 Ampere Devices

		NEMA				Catalog Num	hore				NEMA Loc Devices	cking
Rating	Voltage	Config. Ref. Number	AC HP Rating	Config Male	urations Female	Angle Housing One Gang	Surface Mounting One Gang	Semi-Flush Two Gang	Safety Shroud Male Plug	Configurations Male Female	Connect.	Flanged Male Inlet
2 Pole 3 Wire	125	L5-20	1			HBL2310AR	HBL2310SR	HBL2310SR2	HBL2311S	(1) (F)	HBL2313	HBL2315
	250	L6-20	2*			HBL2320AR	HBL2320SR	HBL2320SR2	HBL2321S		HBL2323	HBL2325
	277V AC	L7-20	2			HBL2330AR	HBL2330SR	HBL2330SR2	HBL2331S		HBL2333	HBL2335
3 Pole 4 Wire	125/250	L14-20	2			HBL2410AR	HBL2410SR	HBL2410SR2	HBL2411S		HBL2413	HBL2415
	3Ø250V AC	L15-20	3			HBL2420AR	HBL2420SR	HBL2420SR2	HBL2421S		HBL2423	HBL2425
	3Ø480V AC	L16-20	5			HBL2430AR	HBL2430SR	HBL2430SR2	HBL2431S		HBL2433	HBL2435
4 Pole 5 Wire	3ØY120/ 208V AC	L21-20	2	٩		HBL2510AR	HBL2510SR	HBL2510SR2	HBL2511S		HBL2513	HBL2515

Available Oct. 1995

Only receptacles and plugs 480V AC or less are HP rated.

Dimensions for 4- and 5-wire Safety-Shroud plugs and Twist-Lock flanged inlets and connector bodies are shown on next page.



^{*}Also suitable for 208V



Safety-Shroud Twist-Lock® System: Hubbell Safety-Shroud Twist-Lock and NEMA Locking Selection Chart 30 Ampere





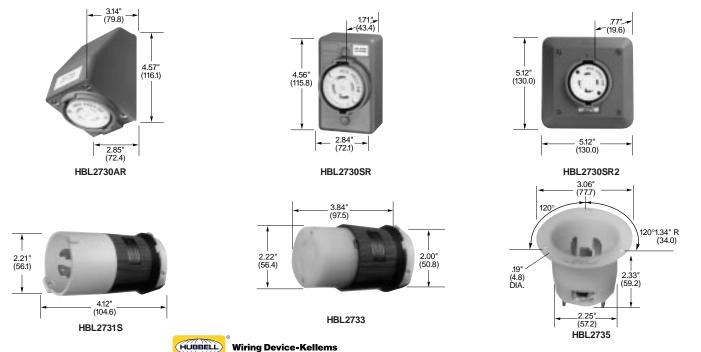
Single Safety-Shroud Twist-Lock Receptacles 30 Ampere Devices

		NEMA				Catalog Num	hers					NEMA Loc Devices	cking
Rating	Voltage	Config. Ref. Number	AC HP Rating	Config Male	urations Female	Angle	Surface Mounting One Gang	Semi-Flush Two Gang	Safety Shroud Male Plug	Configui Male	rations Female	Connect. Body	Flanged Male Inlet
2 Pole 3 Wire	125	L5-30	2			HBL2610AR	HBL2610SR	HBL2610SR2	HBL2611S	(V, 1)s)		HBL2613	HBL2615
	250	L6-30	2*			HBL2620AR	HBL2620SR	HBL2620SR2	HBL2621S	() J _G		HBL2623	HBL2625
3 Pole 4 Wire	125/250V AC	L7-30	2			HBL2710AR	HBL2710SR	HBL2710SR2	HBL2711S	(V) Jc		HBL2713	HBL2715
	3Ø250V AC	L14-30	3			HBL2720AR	HBL2720SR	HBL2720SR2	HBL2721S	w JG		HBL2723	HBL2725
	3Ø480V AC	L15-30	10			HBL2730AR	HBL2730SR	HBL2730SR2	HBL2731S	Y J JG		HBL2733	HBL2735
	3Ø600V AC	L16-30	_			HBL2740AR	HBL2740SR	HBL2740SR2	HBL2741S	VI JG		HBL2743	HBL2745
4 Pole 5 Wire	3ØY120/ 208V AC	L21-30	3	٩		HBL2810AR	HBL2810SR	HBL2810SR2	HBL2811S	Y G. IW		HBL2813	HBL2815

Only receptacles and plugs 480V AC or less are HP rated.

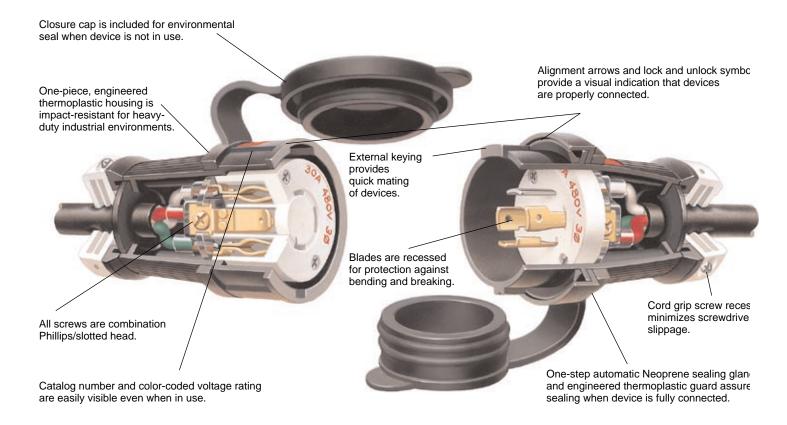
*Also suitable for 208V

Dimensions for 3-wire Safety-Shroud plugs and Twist-Lock flanged inlets and connector bodies are shown on previous page.



Watertight Safety-Shroud Twist-Lock System: Receptacles, Plugs, Connector Bodies and Flanged Inlets







UNIVERSAL NEOPRENE DIAPHRAGM SEAL

Seal accommodates a wide range of cord sizes from #16-3 Type SJ – #8-5 Type S, SO. See ordering pages 2 and 3 for details.



SPRING-LOADED COVER

One-step push-to-close spring-loaded cover with latch allows for fast opening and closing of lift cover. Result: environmental sealing is assured.



PANEL OR BOX MOUNT RECEPTACLES AND INLETS

- High impact, thermoplastic housing for heavy-duty industrial environments.
- Catalog number and color-coded voltage rating are easily visible when in use.
- Stainless Steel 302/304, combination Phillips/ slotted head mounting screws provide corrosion resistance.
- Mounting screw recesses minimize screwdriver slippage.
- Lockout/tagout hole on inlets allow compliance to OSHA regulation 29 CFR 1910.147.
- Neoprene closure cap provided with inlets for environmental seal when not in use.
- Accepts all mating NEMA locking plugs and most connector bodies, allowing interchangeability with existing devices.



SAFETY-SHROUD

- Virtually eliminates bent and broken plug blades, leading to longer equipment life.
- Extends life of mating receptacles by eliminating damage caused by insertion of bent blades.
- Extra protection for personnel by significantly reducing chance of inadvertent contact with blades when connecting or disconnecting energized receptacles and connector bodies.
- Reduces exposure to arcing when connecting or disconnecting plugs under load.
- Compliance with California code of regulations, Title 8, Article 51, subsection 2510.7(b), which requires shrouding for devices exceeding 300 volts
- Lockout/tagout hole allows compliance with OSHA regulation 29 CFR 1910.147.
- Sealing gland and thermoplastic guard assure sealing when fully connected.





Watertight Safety-Shroud Twist-Lock System: Hubbell Watertight Safety-Shroud Twist-Lock Selection Chart-20 Ampere



TYPES 4, 4X, 12

IP66

Watertight Safety-Shroud Twist-Lock 20 Ampere Devices

		NEMA Config.	AC	·		Catalog Number	ers		
Rating	Voltage	Reference Number	HP Rating	Configura Male	ations Female	Receptacle	Male Plug	Connector Body	Male Inlet
2 Pole 3 Wire	125	L5-20	1	(J)		HBL2310SW	HBL2311SW	HBL2313SW	HBL2315SW
	250	L6-20	2*	(3)		HBL2320SW	HBL2321SW	HBL2323SW	HBL2325SW
	277V AC	L7-20	2	(بُ)		HBL2330SW	HBL2331SW	HBL2333SW	HBL2335SW
3 Pole 4 Wire	125/250V AC	L14-20	2	()		HBL2410SW	HBL2411SW	HBL2413SW	HBL2415SW
	3Ø250V AC	L15-20	3	(بُ)		HBL2420SW	HBL2421SW	HBL2423SW	HBL2425SW
	3Ø480V AC	L16-20	5	٦		HBL2430SW	HBL2431SW	HBL2433SW	HBL2435SW
4 Pole 5 Wire	3ØY120/ 208V AC	L21-20	2	٩		HBL2510SW	HBL2511SW	HBL2513SW	HBL2515SW

Only receptacles and plugs 480V AC or less are HP rated. *Also suitable for 208V.

Cord grip range for plugs and connector bodies:

- 3 Wire .32-.93 (8-24), #16-3 Type SJ #8-3 Type S, SO 4 Wire .35-1.15 (9-29), #16-4 Type SJ #8-4 Type S, SO 5 Wire .35-1.15 (9-29), #16-5 Type S, SO #8-5 Type S, SO

For replacement weatherproof caps contact the factory.

Dimensions shown are for 3-wire devices. Dimensions for 4- and 5-wire devices are shown on the next page.





Watertight Safety-Shroud Twist-Lock System: Hubbell Watertight Safety-Shroud Twist-Lock Selection Chart-30 Ampere





TYPE 4X

IP66 SUITABILITY

Watertight Safety-Shroud Twist-Lock 30 Ampere Devices

		NEMA Config.	AC			Catalog Numb	ers		
Rating	Voltage	Reference Number	HP Rating	Configur Male	ations Female	Receptacle	Male Plug	Connector Body	Male Inlet
2 Pole 3 Wire	125	L5-30	2	(<u>)</u>		HBL2610SW	HBL2611SW	HBL2613SW	HBL2615SW
	250	L6-30	2*			HBL2620SW	HBL2621SW	HBL2623SW	HBL2625SW
3 Pole 4 Wire	125/250V AC	L14-30	2	(رُبُ)		HBL2710SW	HBL2711SW	HBL2713SW	HBL2715SW
	3Ø250V AC	L15-30	3	(<u></u>		HBL2720SW	HBL2721SW	HBL2723SW	HBL2725SW
	3Ø480V AC	L16-30	10	())		HBL2730SW	HBL2731SW	HBL2733SW	HBL2735SW
	3Ø600V AC	L17-30	_			HBL2740SW	HBL2741SW	HBL2743SW	HBL2745SW
4 Pole 5 Wire	3ØY120/ 208V AC	L21-30	3	(HBL2810SW	HBL2811SW	HBL2813SW	HBL2815SW

Only receptacles and plugs 480V AC or less are HP rated. *Also suitable for 208V.

Cord grip range for plugs and connector bodies:

- 3 Wire .32-.93 (8-24), #16-3 Type SJ #8-3 Type S, SO 4 Wire .35-1.15 (9-29), #16-4 Type SJ #8-4 Type S, SO 5 Wire .35-1.15 (9-29), #16-5 Type S, SO #8-5 Type S, SO

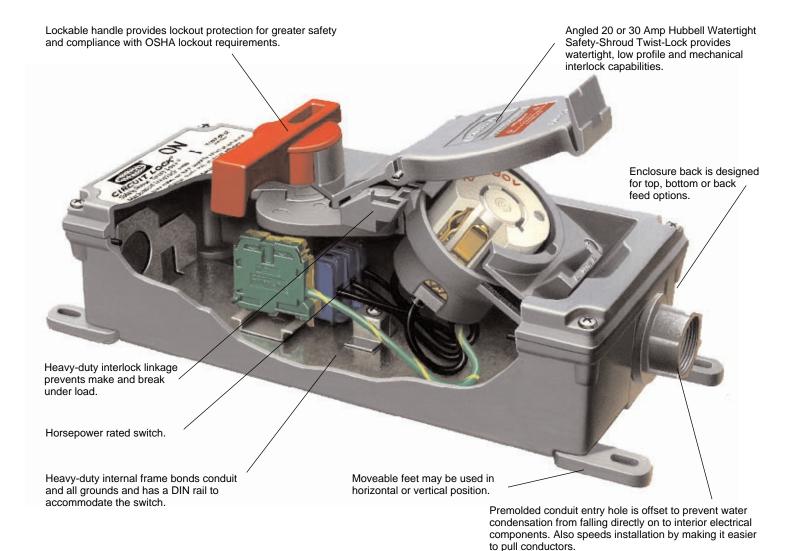
For replacement weatherproof caps contact the factory.

Dimensions shown are for 4- and 5-wire devices. Dimensions for 3-wire devices are shown on the previous page.



Switched Safety Enclosures: CIRCUIT-LOCK® Unfused Safety-Shroud Twist-Lock Mechanical Interlock





This new, unfused mechanical interlock for watertight Safety-Shroud Twist-Lock integrates a watertight receptacle with a linked disconnect switch to provide a mechanically interlocked receptacle. This virtually eliminates the possibility of making or breaking the circuit while

under load or making a casual or "lazy" connection. The switch cannot be turned "ON" until the plug is properly inserted and locked, and the plug cannot be removed until the switch is turned "OFF." All these protective features are included in a compact Type 4X

hose-directed water and corrosion resistant enclosure that allows for top, bottom or backfeed options. The nonmetallic enclosure is nonconductive, yet has an internal frame to assure ground continuity with metallic conduit. In addition, this inter-

lock works with all Safety-Shroud Twist-Lock plugs. The new unfused mechanical interlock for watertight Safety-Shroud Twist-Lock can be locked out as a method of compliance with OSHA lockout/tagout regulations.

Switched Safety-Shroud[™] Enclosures: CIRCUIT-LOCK Unfused Safety-Shroud Twist-Lock Mechanical Interlock







TYPES 4, 4X, 12

IP66

Ordering Information

This unit is a complete enclosure ready to accept any 20 or 30A Watertight Safety-Shroud Twist-Lock Receptacle.

1 toooptaolo:			
Description	Ratings	Catalog Number	
Mechanical Interlock without 20 or 30A watertight Safety-Shroud Twist-Lock	Amperage and voltage ratings will be determined by the choice of the Watertight Safety-Shroud Twist-Lock selected.	HBLMITL	



20 Amperes

NEMA Config. Max. Receptacle Voltage Reference Catalog Rating AC Number Rating Numbers 2 Pole, 3 Wire L5-20 HBL2310SW 120 1Ø HBL2320SW 208-240 1Ø L6-20 2.5 277 1Ø L7-20 HBL2330SW 3 Pole, 4 Wire 120/240 1Ø L14-20 2.5 **HBL2410SW** 5 (3@208V) HBL2420SW 240 3Ø L15-20 480 3Ø L16-20 HBL2430SW 4 Pole, 5 Wire 120/208 3ØY L21-20 3 HBL2510SW

30 Amperes

Rating	Voltage AC	NEMA Config. Reference Number	Max. HP Rating	Receptacle Catalog Numbers
2 Pole, 3 Wire	120 1Ø	L5-30	1	HBL2610SW
	280-240 1Ø	L6-30	2.5	HBL2620SW
3 Pole, 4 Wire	120/240 1Ø	L14-30	2.5	HBL2710SW
	240 3Ø	L15-30	5	HBL2720SW
	480 3Ø	L16-30	10	HBL2730SW
	600 3Ø	L17-30	10	HBL2740SW
4 Pole, 5 Wire	120/208 3ØY	L21-30	5	HBL2810SW

Material

Part	Material
Base	Valox [®]
Тор	Valox
Handle	Valox
Conduit Hub	Zinc 3/4" Watertight
Enclosure Gasket	Neoprene
Shaft	Valox
Shaft Seal	Molded Neoprene
Frame	Galvanized Steel
Enclosure Screws	Stainless Steel 300 Series

Performance

Performance					
Electrical					
Dielectric Voltage Withstand	3000V minimum				
Max. Working Voltage	600V RMS				
Current Interrupting Short Circuit Withstand Rating	Certified for current interrupting at full-rated current and voltage. Suitable for use on a circuit capable of delivering not more than 10,000 RMS symmetrical amperes at the voltage rating of the receptacle.				
Operations:	Mechanical 10,000 cycles minimum				
	Electrical 6,000 cycles minimum				
Mechanical					
Impact Resistance	In accordance with UL 746C				
Terminal Identification	In accordance with UL, CSA and international conventions				
Product Identification	Identification and ratings are part of external label and receptacle face.				
Weight	3.5 pounds				
Mounting	External fully adjustable feet				
Environmental					
Moisture Resistance	Outdoor-Type 4x (hose-directed water, corrosion resistance), IP66 suitability Indoor - Type 12 (Dust tight, falling dirt, non corrosive liquids)				
Flammability	Meets UL94V0 material classification				

Maximum continuous +60° C Minimum continuous -40° C

All exposed materials are UV stabilized

Operating Temperature

UV Resistance



Switched Twist-Lock Safety Enclosure Selection Information:

Switched Enclosure ready for receptacle addition

Ideal unit for stockroom. This single unit provides the complete enclosure ready to accept any Hubbell 20 or 30 Amp Twist-Lock receptacle.

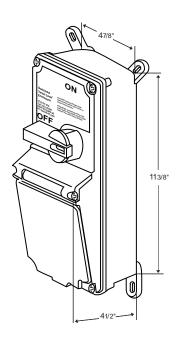
Catalog #	Description	Ratings
SETL3	Switched Enclosure without 20 or 30 Amp receptacle	Amperage, Voltage, and Horsepower ratings will be determined by the choice of the NEMA 20 or 30 Amp Twist-Lock receptacle selected.

Switched Enclosure complete with Twist-Lock Receptacle

Completely prewired with a Twist-Lock receptacle, these application oriented combinations are available to satisfy your needs.

Switched Enclosure Catalog #	Description	NEMA Config.	Amperage	Voltage	Horsepower	Use Twist-Lock Plug
	· · · · · · · · · · · · · · · · · · ·				Horsepower	
SE2310A	Switched Enclosure with a prewired 2310A receptacle	L5-20R	20	120	1	HBL2311
SE2320A	Switched Enclosure with a prewired 2320A receptacle	L6-20R	20	240	2 (208-240 VAC)	HBL2321
SE2720A	Switched Enclosure with a prewired 2720A receptacle	L15-30R	30	3Ø240	3	HBL2721
SE2730A	Switched Enclosure with a prewired 2730A receptacle	L16-30R	30	3Ø480	5	HBL2731





Material

Part	Material
Base	Valox/Makroblend
Тор	Valox/Makroblend
Handle	Valox/Makroblend
Conduit Hub	Zinc 3/4" Watertight
Enclosure Gasket	Neoprene
Shaft	Valox/Makroblend
Shaft Seal	Molded Neoprene
Frame	Galvanized Steel
Enclosure Screws	Stainless Steel 300 Series
Lift Cover	Valox/Makroblend
Hinge Pin	Stainless Steel 300 Series
Hinge Spring	Stainless Steel 300 Series
Typical Specifications	
Manufacturer's Identification:	Hubbell #SE2320A
Description:	Lockable Switched Twist-Lock Enclosure with Prewired Twist-Lock Receptacle
Electrical Type:	2 Pole+Earth
Rating:	20 Ampere, 250 Volt
Configuration:	NEMA Locking L6-20R
Enclosure Type:	Outdoor-Type 3R (Rainproof, Sleet, External Ice) Indoor-Type 12K (Dust-tight, Falling Dirt, Noncorrosive Liquids, with Knockout)
Enclosure Material:	Nonmetallic enclosure suitable for metallic conduit

UL Listed

CSA Certified

This device provides on/off switched control of a plug connected load and includes lockout provision: ON-OFF control knob (in the OFF position) accepts up to a 5/16 inch (8.0 mm) diameter shackle of suitable padlock lockout device to isolate energy from the receptacle and CORD CONNECTED EQUIPMENT as a method of compliance to OSHA Lockout/Tagout Regulation 29CFR Part 1910.147.

Valox[®] is a registered trademark of GE. Makroblend[®] is a registered trademark of Bayer.

Performance

Performance	
Electrical	
Dielectric Voltage Withstand	3000V minimum
Max. Working Voltage	600 Volts RMS
Current Interrupting	Certified for current interrupting at full rated current and voltage
Short Circuit	Suitable for use on a circuit capable of delivering
Withstand Rating	not more than 10,000 RMS symmetrical Amp at the voltage rating of the receptacle
Operations: Mechanical Electrical	10,000 Cycles 6,000 Cycles
Mechanical	
Impact Resistance	In accordance with UL 746C
Terminal Identification	In accordance with UL, CSA and International Conventions
Product Identification	Identification and ratings are part of external label and receptacle face
Weight	3.5 pounds
Mounting	External fully adjustable feet
Environmental	
Moisture Resistance	Outdoor – Type 3R (Rainproof, Sleet, External Ice)
	Indoor – Type 12K (Dust-tight, Falling Dirt, Noncorrosive Liquids, with Knockout)
Flammability	UL94 - 5 VA and V-O Classification
Operating Temperature	Maximum Continuous +60°C
	Minimum Continuous -40°C
UV Resistance	All materials are UV stabilized





Twist-Lock® System: Compatibility and Environmental Protection Watertight Safety-Shroud, Safety-Shroud and NEMA Devices

Twist-Lock Receptacles

Twist-Lock Connector Bodies

		teceptacies				Connecto	
		Watertight Safety- Shroud Mechanical Interlock		Switched		Watertight Safety-	
	Watertight	Enclosure	Safety-Shroud	Enclosure	NEMA	Shroud	NEMA
gs							
Watertight Safety-Shroud	YES Type 4X, 12	YES Type 4X, 12	YES Type 1	NO	NO	YES Type 4X, 12	YES Type 1
Safety-Shroud	YES Type 1	YES Type 1	YES Type 1	NO	NO	YES Type 1	YES Type 1
NEMA	YES Type 1	NO	YES Type 1	YES Type 3R	YES Type 1	YES Type 1	YES Type 1
ts							
NEMA	NA	NA	NA	NA	NA	NO	YES Type 1
Watertight Safety-Shroud	NA	NA	NA	NA	NA	YES Type 4X, 12	YES Type 1
	Watertight Safety-Shroud Safety-Shroud NEMA ts NEMA	Watertight YES Safety-Shroud Type 4X, 12 Safety-Shroud YES Type 1 NEMA YES Type 1 ts NEMA NA Watertight NA	Watertight YES YES Safety-Shroud YES Type 4X, 12 Safety-Shroud YES Type 4X, 12 Safety-Shroud YES Type 1 NEMA YES Type 1 NEMA NA NA Watertight NA NA NA	Safety-Shroud Mechanical Interlock Enclosure Safety-Shroud Watertight YES YES YES Type 4X, 12 Type 4X, 12 Type 1 Safety-Shroud YES YES YES YES Type 1 Safety-Shroud YES YES YES YES Type 1 NEMA YES Type 1 Type 1 NEMA YES NO YES Type 1 NEMA NA NA NA NA NA Watertight NA NA NA NA	Safety-Shroud Mechanical Interlock Enclosure Watertight YES YES YES YES NO Safety-Shroud Type 4X, 12 Type 4X, 12 Type 1 Safety-Shroud YES YES YES YES NO Type 1 Safety-Shroud YES YES YES YES NO Type 1 NEMA YES Type 1 Type 1 Type 1 NEMA NA NA NA NA NA NA Watertight NA NA NA NA NA	Watertight Safety-Shroud Mechanical Interlock Enclosure Safety-Shroud Enclosure NEMA Watertight YES YES YES NO NO NO Safety-Shroud YES Type 4X, 12 Type 1 Safety-Shroud YES YES YES NO NO NO NO NO NO Type 1 Type 1 NEMA YES Type 1 Type 1 NEMA YES Type 1 Type 1 NEMA NA	Watertight Safety-Shroud Mechanical Interlock Enclosure Safety-Shroud Mechanical Interlock Enclosure Safety-Shroud Enclosure NEMA Watertight Safety-Shroud PES YES YES NO NO NO YES Type 4X, 12 Type 1 Type 1 Safety-Shroud YES Type 1 Type 1 Type 1 NEMA YES Type 1 Type 1 Type 1 Type 1 NEMA YES Type 1 Type 1 Type 1 Type 1 Type 1 NEMA NA YES

Type 1 (Indoor)

Type 3R (Raintight)

Type 4X (hose-directed water and corrosion resistant)

Type 12 (dust tight, drip proof without knockouts)

Type 12K (dust tight, drip proof with knockouts)

YES Interchangeable

NO Does not interchange

NA Not applicable

Insulgrip 50 Amp Twist-Lock: Built-in Strength Takes the Worst You Can Dish Out



Heavy-duty design for heavy-duty applications. These Hubbell 50 Amp Twist-Lock plugs and connectors are built to go where you need power... even in some of the harshest environments.

On the outside, 50 amp plugs and connectors are made of Supertough® nylon for better impact resistance. On the plug, the stainless steel shroud not only provides protection and durability, but safety, as well. That's because the rigid construction cannot be distorted, thus minimizing the possibility of mating incorrect devices.

On the inside, there are the kinds of features that separate Hubbell from all the rest. The cord grip has been designed with offset gripping jaws to securely hold the conductor— not just the cable

jacket. Hubbell's box terminals speed wiring and provide a superior termination. The plug's Rynite® thermoplastic interior provides excellent heat resistance without compromising strength.

In all, it's the combination of function and performance that Hubbell demands of all its products. And it's why we'll never add a feature that compromises performance.

For plug to connector interface sealing, newly designed Seal-Tite® covers easily slip over housing without requiring cable removal

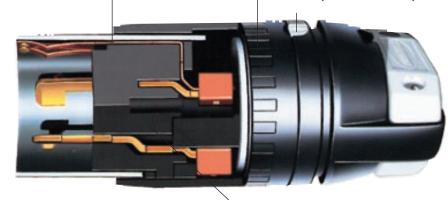




Supertough® nylon housing offers better impact qualities than regular nylon.

Stainless steel shroud cannot be distorted to mate with the wrong device.

Housing assembly latch slotted to fit standard flat-blade screwdriver. Provides secure assembly and fast disassembly for wiring.





Thermoplastic polyester interior provides heat resistance and impact strength.

6/6 nylon nose—thermoplastic polyester terminal cover provides heat resistance in terminal area and impact strength of nose piece.

Three-piece thermoplastic clamp assembly with stainless steel fast lead screws provides a more consistent, durable grip. Sealed cable entry keeps out moisture and dust.

Box terminal with hex socket threaded slug is superior to clamp-type terminations because it permits high-clamping pressure on conductors without damaging strands One-piece grounding contact on 4-wire devices provides a more reliable grounding system for a safer device.



Insulgrip 50 Amp Twist-Lock Devices: A Powerful Feature-Benefit Story





Strong but Gentle

• Moving box terminal with hex socket threaded slug is superior to clamp-type terminations because it permits high-clamping pressure on conductors without damaging strands.



Block and Tackle

- Sealed cable entry keeps out moisture and dust.
- Three-piece nylon clamp assembly with stainless steel fast lead screws provides a consistent, dependable grip.



Always Correct

• Stainless steel shroud cannot be distorted, minimizing the possibility of incorrectly mating devices.



Withstands Heat or Hit

• 6/6 nylon nose—thermoplastic polyester terminal cover provides heat resistance in terminal area and impact strength of nose piece.

Hubbell Twist-Lock Devices Selection Chart

50 Amp Twist-lock		Weatherproof Plate	Receptacle	Plug	Connector Body	Flanged Inlet	Plug Mini-Boot	Connector Mini-Boot		
						Insulgrip	Insulgrip			
	Poles Wires Amps Volts									
Poles	vvires	Amps	Voits 125	HBL7774WO	CS6370	CS6361C	CS6360C	CS6377	HBL7716C	HBL7717C
2	3	50	250	HBL7774WU	CS8269	CS6361C CS8265C	CS8264C	CS6377 CS8275	HBL7716C	HBL7717C
2	3	50								
			480AC	HBL7774WO	CS8469	CS8465C	CS8464C	CS8475	HBL7716C	HBL7717C
			125/250	HBL7774WO	CS6369	CS6365C	CS6364C	CS6375	HBL7716C	HBL7717C
3	4	50	3Ø250AC	HBL7774WO	CS8369	CS8365C	CS8364C	CS8375	HBL7716C	HBL7717C
			3Ø480AC	HBL7774WO	CS8169	CS8165C	CS8164C	CS8175	HBL7716C	HBL7717C
2	3	50	250V DC	HBL7774WO	HBL3771	HBL3763C	HBL3762C	HBL3777	HBL7716C	HBL7717C
2	3	50	600V AC	HBL7774WO	HBL3771	HBL3763C	HBL3762C	HBL3777	HBL7716C	HBL7717C
3	4	50	250V DC	HBL7774WO	HBL3769	HBL3765C	HBL3764C	HBL3775	HBL7716C	HBL7717C
3	4	50	600V AC	HBL7774WO	HBL7379*	HBL7765C*	HBL7764C*	HBL7958*	HBL7716C	HBL7717C

Note: See Full Line Catalog for Additional Product Information.

*Replacement Use Only.

Midget Twist-Lock: Compact Size Packed with Features OEMs Appreciate



The plugs and connectors in this full line are available in the Hubbell exclusive Valise style for quick wiring ease, quick assembly, superior cord gripping and abuse resistance.

The 2-wire Midget Twist-Lock Valise plugs and connectors (ML-1) feature bundling terminals that eliminate the need to wrap wire around terminals. With this design, connection of terminals is as easy as inserting the stripped conductor wire into a clamp-type terminal and tightening... the terminal positively grips and bundles the wire. The 3-wire (ML-2, ML-3) Valise plugs and connectors make conductor

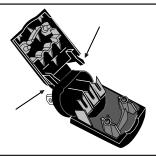
connection swift and sure with built-in insulation displacement terminal compartments. With this feature, there is no need to strip insulation on individual conductors.

The rest of the Midget Twist-Lock line contains stainless steel and nylon flanged inlets and outlets and weatherproofing accessories, including Seal-Tite boots and inlet closure plugs. Plugs and connectors are also available in angled versions.



Hubbell 3-wire Valise Midget Twist-Lock: A complete line that's UL Listed ... and full of features for quick, sure assembly and reliable performance on the job.

Insulation Displacent Midget Twist-Lock: Small on Size, Big on Features and Benefits



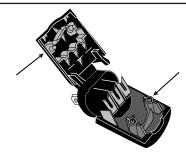
Assembly: An Open and Shut Case

- Only two assembly screws are needed to close the device, make the wire terminations and retain the cord.
- The insulation displacement terminal reduces the time required for wire preparation and insures uniformity in the quality of termination.
- A unique, patented system of special locking lugs interlocks the two sections together when the device is assembled. This provides exceptional strength and security and keeps the Midget Twist-Lock device intact even with rough use.



Housing: Safe and Secure

- Totally insulated body adds an extra measure of safety.
- Tough nylon construction resists impact.
- For convenience, assembly screws have a combination standard slotted and Phillips head design.



Cord Grip: No Slip, No Strain

 Powerful, cord-gripping jaws are designed to eliminate conductor cord grip slip and strain on terminals.



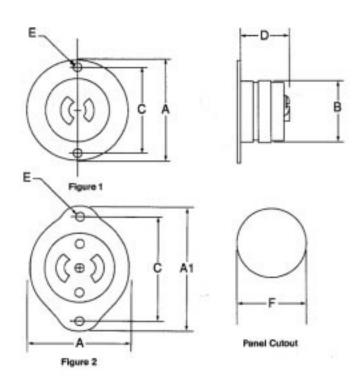
Hubbell Twist-Lock Devices Selection Chart

NEMA Midget Twist-Lock		Plug		Connector Body		Flanged Inlet		Flanged Outlet		Protective Cover					
		,			Straight	Angle	Straight	Angle	Metal	Nylon	Metal	Nylon	Plug Boot	Connector Boot	Inlet Clos. Plug
											(00)				
Poles	Wires	Amps	Volts	NEMA No.											
			405.40		HBL7465V [†]		HBL7464V [†]		HBL7467		HBL7468		HBL7490V	HBL7459V	HBL4890
2	2	15	125 AC or DC	ML-1	HBL7465VM4 ³		HBL7464VM4 ³		HBL74661		HBL7471 ²				
			01 00								HBL7472 ²				
3	3	15	125/250	ML-3	HBL7485V*	HBL7432	HBL7484V*	HBL7433	HBL7486	HBL7486N	HBL7487	HBL7487N	HBL7495V	HBL7440V	HBL4889
3	3	13	AC	IVIL=3	HBL7485		HBL7484				HBL7489 ²				
Grou	nding	15	125 AC	ML-2	HBL7594V*	HBL7570	HBL7593V*	HBL7571	HBL7595	HBL7595N	HBL7596	HBL7596N	HBL7495V	HBL7440V	HBL4889
2	3	13	or DC	IVIL-Z	HBL7594		HBL7593		HBL7551 ²		HBL7551 ²				

²With Covered Terminal

Hubbell Twist-Lock Devices Selection Chart

Midget Twist-Lock Dimensions



	Inlet and Outlet Dimensions							
Catalog Numb	er Fig.	Α	A1	В	С	D	Е	F
HBL7466 HBL7467	1	(41.3) 1 ⁵ / ₈ "	-	(27.0) 1 ¹ / ₁₆ "	(34.9) 1 ³ / ₈ "	(23.8) 15/16"	2 Holes 5/32"(4.1)D	(27.8) 1 ³ / ₃₂ "
HBL7486	2	(41.3) 1 ⁵ /8"	(52.4) 2 ¹ / ₁₆ "	(31.0) 1 ⁷ / ₃₂ "	(44.5) 1 ³ / ₄ "	(25.0) 63/64"	2 Holes 5/32"(4.1)D	(31.8) 1 ¹ / ₄ "
HBL7486N	2	(41.3) 1 ⁵ /8"	(52.4) 2 ¹ / ₁₆ "	(32.2) 1 ¹⁷ / ₆₄ "	(44.5) 1 ³ / ₄ "	(23.8) 15/16"	2 Holes 9/64"(3.6)D	(32.9) 1 ¹⁹ / ₆₄ "
HBL7551	2	(41.3) 1 ⁵ /8"	(52.4) 2 ¹ / ₁₆ "	(31.0) 1 ⁷ / ₃₂ "	(44.5) 1 ³ / ₄ "	(32.2) 1 ¹⁷ / ₆₄ "	2 Holes 5/32"(4.1)D	(31.8) 1 ¹ / ₄ "
HBL7595	2	(41.3) 1 ⁵ / ₈ "	(52.4) 2 ¹ / ₁₆ "	(31.0) 1 ⁷ / ₃₂ "	(44.5) 1 ³ / ₄ "	(25.4) 1"	2 Holes 5/32"(4.1)D	(31.8) 1 ¹ / ₄ "
HBL7595N	2	(41.3) 1 ⁵ / ₈ "	(52.4) 2 ¹ / ₁₆ "	(32.5) 1 ⁹ / ₃₂ "	(44.5) 1 ³ / ₄ "	(23.8) 15/16"	2 Holes 9/64"(3.6)D	(49.2) 1 ¹⁵ / ₁₆ "
HBL7468	1	(41.3) 1 ⁵ / ₈ "	_	(26.2) 1 ¹ / ₃₂ "	(34.9) 1 ³ / ₈ "	(19.9) 25/32"	2 Holes 5/32"(4.1)D	(27.0) 1 ¹ / ₁₆ "
HBL7471	1	(41.3) 1 ⁵ /8"	-	(26.2) 1 ¹ / ₃₂ "	(34.9) 1 ³ / ₈ "	(30.2) 1 ³ / ₁₆ "	2 Holes 5/32"(4.1)D	(27.0) 1 ¹ / ₁₆ "
HBL7472	1	(41.3) 1 ⁵ / ₈ "	_	(26.2) 1 ¹ / ₃₂ "	(34.9) 1 ³ / ₈ "	(39.3) 1 ³⁵ / ₆₄ "	2 Holes 5/32"(4.1)D	(27.0) 1 ¹ / ₁₆ "
HBL7487	2	(41.3) 1 ⁵ /8"	(52.4) 2 ¹ / ₁₆ "	(30.2) 1 ³ / ₁₆ "	(44.5) 1 ³ / ₄	(23.0)	2 Holes 5/32"(4.1)D	(31.0) 1 ⁷ / ₃₂ "
HBL7487N	2	(41.3) 1 ⁵ /8"	(52.4) 2 ¹ / ₁₆ "	(28.6) 1 ¹ / ₈ "	(44.5) 1 ³ / ₄	(23.4) 59/64"	2 Holes 9/64"(3.6)D	(29.4) 1 ⁵ / ₃₂ "
HBL7489	2	(41.3) 1 ⁵ / ₈ "	(52.4) 2 ¹ / ₁₆ "	(29.8) 1 ¹¹ / ₆₄ "	(44.5) 1 ³ / ₄	(31.8) 1 ¹ / ₄ "	2 Holes 5/32"(4.1)D	(34.6) 1 ¹³ / ₆₄ "
HBL7596	2	(41.3) 1 ⁵ / ₈ "	(52.4) 2 ¹ / ₁₆ "	(29.8) 1 ¹¹ / ₆₄ "	(44.5) 1 ³ / ₄	(24.6) 31/32"	2 Holes 5/32"(4.1)D	(34.6) 1 ¹³ / ₆₄ "
HBL7596N	2	(41.3) 1 ⁵ / ₈ "	(52.4) 2 ¹ / ₁₆ "	(29.0) 1 ⁹ / ₆₄ "	(44.5) 1 ³ / ₄	(23.4) 59/64"	2 Holes 9/64"(3.6)D	(29.8) 1 ¹¹ / ₆₄ "
HBL7598	2	(41.3) 1 ⁵ /8"	(52.4) 2 ¹ / ₁₆ "	(29.8) 1 ¹¹ / ₆₄ "	(44.5) 1 ³ / ₄	(31.8) 1 ¹ / ₄ "	2 Holes 5/32"(4.1)D	(34.6) 1 ¹³ / ₆₄ "

Dimensions in Inches (mm)



³Bulk Packed 100 Units Per Case

^{**}Teaturing Insulation Displacement Terminals.

See Full Line Catalog for Additional Product Information.

**Tadd 'CN' suffix for Robertson/Slot combination head screws.

More Twist-Lock Accessories: More Reasons to Choose Hubbell





Weatherproof Liftcover Plates

Weatherproof liftcover plates protect receptacles, flanged inlets and flanged receptacles from the elements. Made of impact-resistant thermoplastic, they feature continuing, positive cover closing action.

(See Full Line Catalog)



Seal-Tite Covers

IP55 SUITABILITY

Black Seal-Tite Covers are made of insulating elastomeric materials. A special triple seal—which creates a sealing chamber—locks out water, dust and other foreign particles. For the 50 amp Insulgrip Twist-Lock, a new Mini-Seal-Tite Cover installs right over the plug or connector. (See page 19)

<u>20-30A</u>	Plug	Connector	Connector Used w/Inlet
3 wire	HBL6031	HBL6032	HBL6031
4 and 5 wire	HBL6035	HBL6036	HBL6035



Add-A-Shroud™ Devices

The Add-A-Shroud devices allow conversion of existing 20 and 30A 3 to 5-Wire Hubbell Insulgrip® Twist-Lock devices to a Safety-Shroud Twist-Lock plug. These devices provide a convenient and cost-effective way to convert existing Hubbell Insulgrip Twist-Lock Plugs to safety-Shroud Twist-Lock plugs.

20-30A	Add-A-Shroud
3 wire	HBLSS3
4 and 5 wire	HBLSS45



Angle Devices

Angle adapters permit the conversion of Insulgrip 20 and 30 Amp plugs and connector bodies to angle devices—thus permitting the cord to lie flush with a surface without dangerous jamming, twisting or bending. This need is often found on semi-permanent equipment.

Angle Device
HBL3WAA
HBL45WAA



Back Boxes

Hubbell manufacturers an extensive line of back boxes for use with the new Safety-Shroud Twist-Lock system. Each back box is designed to give the user the maximum amount of wiring room while achieving grounding to metallic conduit. Hubbell back boxes are available in nonmetallic and cast metal versions.

(See Full Line Catalog)



Plugout® Electrical Plug Lockout Devices

Plugout locks out the plug on cord connected electrical equipment when maintenance and servicing activities are being performed. Provides an assured method of complying with OSHA Lockout/Tagout Regulation.

(See Full Line Catalog)



15-30 Amp Twist-Lock and 20-30 Amp Safety-Shroud Twist-Lock Listings and Specifications:

Listed to UL Standard 498 (Attachment Plugs and Receptacles)

Fed. Spec. W-C-596G

Certified to CSA Standard C22.2M 42M (General Use Receptacles, Attachment Plugs and Similar Wiring Devices)

Materials

Part	Material				
Plug and Connectors (Insulgrip)	15-30A				
Blade/Contact Carrier	Natural (white) nylon				
Terminal Retainer	Clear polycarbonate				
Cover (Housing)	Black nylon (yellow in "CM" devices)				
Cord Clamp	Natural (white) nylon				
Dust Shield	EPDM				
Blades/Contacts	Brass				
Terminal Clamp	Cold rolled steel – nickel plated				
Terminal Screws	15A (8-32), 20-30A (10-32) Brass (white finish on neutral screw when used)				
Hex Head Grounding Screws	Brass (green finish)				
Cord Clamp Screws	Steel– zinc plated				
Body Holding Screws	Steel- zinc plated				
*Flanged Inlet/Receptacles	15-30A				
Flanged Casing	Natural (white) nylon				
Blade/Contact Carrier	Natural (white) nylon				
Terminal Retainer	Clear polycarbonate				
Blades/Contacts	Brass				
Drive Screws	Steel- zinc plated				
Terminal Clamp	Cold rolled steel- nickel plated				
Terminal Screws	15A (8-32), 20-30A (10-32) Brass (white finish on neutral screw when used)				
Hex Head Grounding Screw	Brass (green finish)				
Mounting Screws	Nickel plated brass Round head screws				
Screw Sizes	15A: 6-32, 3/8" long 20A & 30A: 8-32, 7/16" long				

^{*} Not Applicable to Midget Twist-Lock

Receptacle, Single	15A	20A & 30A		
Cover (Top)	Nylon (Black)	Nylon (Black)		
Base	Polyester (Black)	Polyester (Natural)		
Contact Springs	.031 Brass	.040 Brass		
Clamp	.031 Brass	.040 Brass		
Ground Contact	.031 Brass	.040 Brass		
Ground Shunt		.015 Brass		
Bridge (Mounting Strap) .050 Steel-zinc plated				
End Plates (Mounting)		.050 Brass		
Back Plate		.040 Brass		
Binding Screws	Brass (8-32)	(10-32) (white finish on neutral screw when used)		
Hex Head Binding Screws	Brass (Green)	Bronze (Green)		
Flat Head Mounting Screws	Steel-zinc plated	Steel-zinc plated		
Auto Ground Clip	Stainless Steel	Stainless Steel (Used only on IG receptacle)		

Part	Material
Safety-Shroud Receptacles Angle, Straight, Semi-Flush	20-30A
Housing and Mounting Flange	Gray Valox 357U
Mounting Plate (Angle Housing Only)	Galvanized steel
Body Contact Carrier	Natural (white) nylon
Terminal Retainer	Clear Polycarbonate
Body Holding Screws	Steel, zinc plated
Contact Springs	Brass
Spring Binding Plate	Brass
Terminal Clamp	Steel, nickel plated .080" curved, scalloped
Terminal Screws	10-32 Brass (white finish on neutral screw when used)
Hex Head Grounding Screw	Brass (green finish)
Mounting Plate Screws	Steel, zinc plated
Wall Plate Mounting Screws	Steel, zinc plated
Safety-Shroud Twist-Lock Plug	20-30A
Insulgrip Plug with Safety-Shroud insta	alled
Safety-Shroud	White Valox
Cord Clamp	White nylon

Performance

Electrical	
Dielectric Voltage Withstand	2,000V minimum
Max. Working Voltage	600 Volts RMS
Current Interrupting	Certified for current interrupting at full rated current
Temperature Rise Fed. Spec. 200%	Max 30°C temperature rise at full rated current after 250 cycles of overload at
	of rated current at a power factor of .75
Mechanical	
Cord Accommodation (Plugs and connectors only)	Round portable service cords of diameters commensurate with the device rating as defined in UL Standard 62, CSA C22.2 No. 49
Cord Grip Accommodation	20A & 30A 3W: .325"930" (8-24mm) 20A & 30A 4W-5W: .350"-1.150" (9-29mm)
Terminal Identification	Terminals identified in accordance with UL 498 (X, Y, Z, White, Green)
Terminal Accommodation	#8AWG
Product Identification	Ratings are a permanent part of the device housing
Environmental	
Flammability (Enclosure) Plugs, Connectors, Flanged Receptacles & Flanged Inlets	HB or better per UL94/CSA 22.2 No. 0.6
Receptacles (Box Mount)	VO or better
Operating Temperatures	Maximum Continuous 60 deg. C Minimum -40 deg. C (w/o impact)





20 & 30 Amp Watertight Safety-Shroud Twist-Lock Listings and Specifications:

Listed to UL Standard 498 (Attachment Plugs and Receptacles), UL Standard 50 (Enclosures for Electrical Equipment)
Certified to CSA Standard C22.2 No. 42M (General Use Receptacles, Attachment
Plugs and Similar Wiring Devices), CSA Standard C22.2 No. 94M (Special Purpose Enclosures)

Part	Material
Watertight Safety-Shroud [™] Plug	
and Connector (Insulgrip®)	20 and 30A
Blade Contact Carrier	Natural (white) nylon
Terminal Retainer	Clear polycarbonate
Cover (Housing)	Black Valox®
Cord Clamp	White Valox
Contacts	Brass
Terminal Clamp	Steel, nickel plated .080" Curved scalloped
Terminal Screws	10-32 Brass (white finish on neutral screw when used)
Hex Head Grounding Screw	Brass (green finish)
Cord Clamp Screws	Stainless steel 302/304
Body Holding Screws	Stainless steel 302/304
Plug Cap and Strap	Neoprene EPDM Blend
Connector Cap and Strap	Polypropylene with neoprene gasket
*Watertight Safety-Shroud Receptacle, Single	20 and 30A
Housing and Flange	Gray Valox
Body Contact Carrier	Natural (white) nylon
Terminal Retainer	Clear polycarbonate
Drive Screws	Steel, zinc plated
Contact Spring	Brass
Spring Binding Plate	Brass
Terminal Clamp	Steel, nickel plated .080" Curved, scalloped
Flange Gasket	Closed-cell Neoprene foam
Lid Gasket	Closed-cell Neoprene foam
Cover Hinge Pin	Stainless Steel 302/304
Cover Spring	Stainless Steel 302/304
Terminal Screws	10-32 Brass (white finish on neutral screw when used)
Hex Head Grounding Screw	Brass (green finish)
Mounting Screws	Stainless Steel 302/304
Watertight Safety-Shroud Flanged Inlet	20 and 30A
Housing and Flange	Gray Valox
Blade Holder	Natural (white) nylon
Terminal Retainer	Clear polycarbonate
Blades	Brass
Drive Screws	Steel, zinc plated
Terminal Clamp	Steel, nickel plated .080" Curved scalloped
Terminal Screws	10-32 brass (white finish on neutral screw when used)
Hex Head Grounding Screws	Brass (green finish)

Closure Cap

Mounting Screws

Performance	
Part	Material
Electrical	
Dielectric Voltage Withstand	2,000V minimum
Max. Working Voltage	600 Volts RMS
Current Interrupting	Certified for current interrupting at full rated current
Temperature Rise Fed. Spec. 200%	Max 30°C temperature rise at full rated current after 250 cycles of overload at
20070	of rated current at a power factor of .75
Mechanical	
Cord Accommodation (Plugs and connectors only)	Round portable service cords of diameters commensurate with the device rating as defined In UL Standard 62, CSA C22.2 No. 49
Cord Grip Accommodation	20 and 30A, 3W: .3293" (8.0-24.0mm) #16-3 Type SJ-#8-3 Type S, SO 20 and 30A, 4W: .35-1.15" (9.0-29.0mm) #16-4 Type SJ-#8-4 Type S, SO 20 and 30A, 5W: .35-1.15" (9.0-29.0mm) #16-5 Type S, SO - #8-5 Type S, SO
Terminal Identification	Terminals identified in accordance with UL 498 (X, Y, Z, White, Green)
Terminal Accommodation	#8AWG
Product Identification	Ratings are a permanent part of the device blade holder, and are also labeled on
device	color coded by voltage, visible in use. Catalog No. I.D. is on device visible in use.
Environmental	
Moisture Resistance	Type 4, 4X, 12, IP66 suitability
Flammability (Enclosure)	V0 per UL94 or CSA 22.2 No. 0.6
Operating Temperatures 40°C	Maximum Continuous 60°C; Minimum -

(w/o impact)



Neoprene EPDM blend

Stainless Steel 302/304

^{*}Suitable for use as a flanged receptacle.

50 Amp Twist-Lock Listings and Specifications:



Listed to UL Standard 498 (Attachment Plugs and Receptacles) Certified to CSA Standard 42M (General Use Receptacles, Attachment Plugs and Similar Wiring Devices)

Materials

Part	Materials
Plug (Twist-Lock)	50A
Blade Holder	Rynite® (black)
Power Blades	Brass
Terminal Set Screw	Stainless Steel
Terminal Retainer	Rynite
Front & Rear (housing)	Supertough [®] nylon
Cord Clamp	Rynite (white)
Seal	Neoprene
Seal Cup	Nylon
Box Terminal	Copper
Latches	Supertough nylon
Ground Contact Spring	One Piece Copper/Nickel
Cord Clamp Screws	302/304 Stainless Steel
Shroud	302/304 Stainless Steel
Connector (Twist-Lock)	50A
Contact Nose	Nylon (black)
Terminal Retainer	Rynite (black)
Terminal Set Screw	302/304 Stainless Steel
Contact Spring	Brass
Assembly Rin	302/304 Stainless Steel
Front & Rear (housing)	Supertough nylon (black)
Latches	Supertough nylon (white)
Cord Clamp	Rynite (white)
Box Terminal	Copper
Contact Holder	Rynite (black)
Ground Contact	One Piece Copper/Nickel
Seal Cup	Nylon
Cord Grip Screws	302/304 Stainless Steel
Seal	Neoprene
Flanged Inlet	50A
Flanged Casing	.062" Steel, Zinc Plate
Blade Holder	Phenolic
Pressure Screws	Steel, Zinc Plate
Blades	.100" Brass
Ground Spring	.025" Bronze
Terminals	.050" Steel, Brass Finish
Grounding Terminal	.062" Copper, Green Finish
Round Head Screws	Steel, Zinc Plate

Part	Materials
Receptacle	50A
Body	Phenolic
Face	Phenolic
Contact Springs	.100" Brass Alloy
Contact Binding Plates	.100" Brass
Ground Contact	.031" Brass
Insulator	.093" Laminated Phenolic
Bridge (Mounting Strap)	.062" Steel, Zinc Plate
Pressure Screws	Steel, Zinc Plate
Terminals	.050" Steel
Casing	.062" Steel, Zinc Plate
Center Pin (CS Devices)	Steel, Zinc Plate
Product Identification	
Ratings	Molded into face for all devices and stamped into stainless steel shroud on plug devices.
Catalog No.	Molded into face for plug and connector bodies and stamped into stainless steel shroud on plug devices.
Performance	
Electrical	
Dielectric Voltage	Withstands 2,000V minimum.
Max. Working Voltage	600 Volts RMS.
Current Interrupting	Certified for current interrupting at full rated current.
Temperature Rise	30°C maximum after 50 cycles at 150% rated current.
Mechanical	
Terminal Accommodation	#10 AWG min -#6 AWG max.
Cord Grip Accommodation	.750" - 1.150" (19.1-29.2)
Environmental	
Flammability	UL 94 VO for Receptacles and Inlets. HB of better for Plugs and Connectors.
Operating Temperatures mum – 40°C	Maximum continuous 60°C, mini-
	(w/o impact)

(w/o impact).

Please consult the Factory for Product Dimensions and Specifications for other

products listed in this catalog.

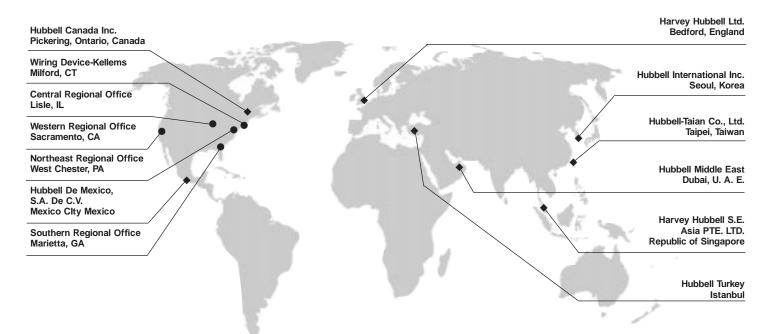
Rynite® is a registered trademark of Dupont.

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