

## Pin & Sleeve

# G

### North American Rated Plugs, Connectors

Inlets & Receptacles ..... G-2  
Accessories ..... G-11

### International Rated Plugs, Connectors

Inlets & Receptacles ..... G-16  
Mechanical Interlocks ..... G-21

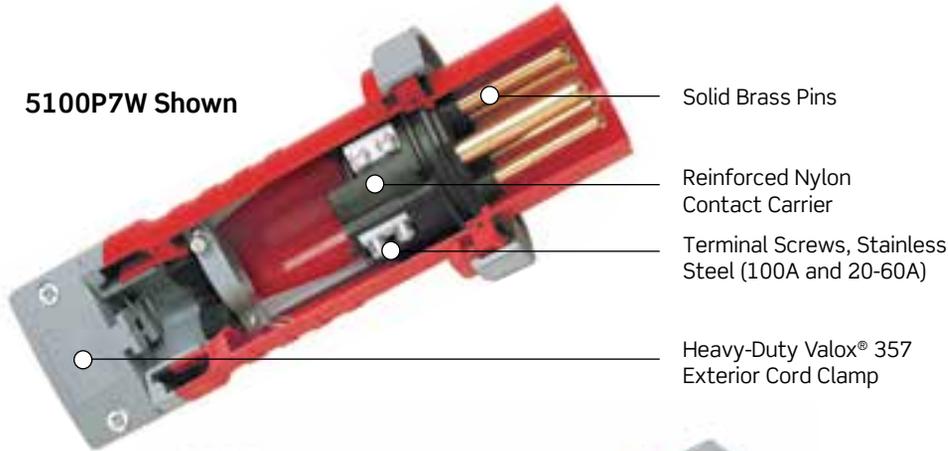


## NORTH AMERICAN RATED

### North American Rated Devices

The Watertight Line. Superior Connection...Superior Protection

5100P7W Shown

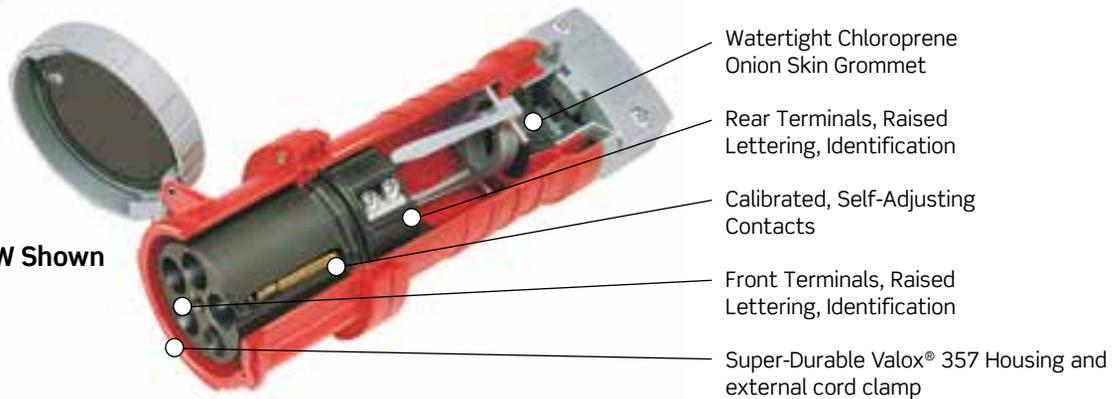


- Solid Brass Pins
- Reinforced Nylon Contact Carrier
- Terminal Screws, Stainless Steel (100A and 20-60A)
- Heavy-Duty Valox® 357 Exterior Cord Clamp

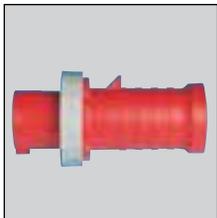


Accepts liquid-tight conduit with adapter accessory (p. G-20)

5100C7W Shown

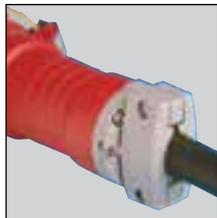


- Watertight Chloroprene Onion Skin Grommet
- Rear Terminals, Raised Lettering, Identification
- Calibrated, Self-Adjusting Contacts
- Front Terminals, Raised Lettering, Identification
- Super-Durable Valox® 357 Housing and external cord clamp



#### Super Tough Housing

- Provides maximum protection from abuse and environment
- Heavy-wall molding of Valox® 357 resists impact, heat, flame and chemicals
- Superior performance in low-to-high ambient temperature extremes (-40°C to 60°C)
- Excellent UV stability for superior outdoor performance (UL1682)
- V-0 flammability rating
- Fully insulated
- Color-coded by voltage for easy identification



#### External Cord Clamp

- Protects terminals from strain
- Accommodates a wide variety of cord sizes
- Excellent impact strength
- Excellent UV stability for superior outdoor performance (UL1682)
- V-0 flammability rating
- Accepts wire mesh strain relief



#### Internal Cord Clamp

- Secondary method for eliminating strain on terminals and conductors
- True IEC 60309-1 & 60309-2 acceptance
- Constructed of sturdy thermoplastic for tough environments
- Removes easily for user convenience



#### Spring Loaded Cover, Cover Arm, & Locking Rings

- Rings lock plug to connector
- Spring loaded cover closes automatically
- "Performance grade" Stainless Steel cover spring for superior corrosion-resistance and long life
- Excellent UV stability for outdoor use
- V-0 flammability rating
- Interior arm design in 60 and 100 amp helps eliminate breakage



#### Gasket/Grommet

- Prevents moisture, dust, and contaminants from entering housing or pin/contact carrier
- Solid Chloroprene for positive seal and excellent chemical/corrosion-resistance
- Onion skin design on grommet provides precise watertight fit, eliminating the need to choose from multiple grommets that may not fit the cable jacket precisely

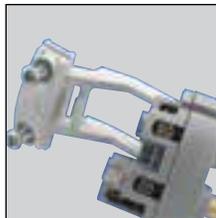
Valox® is a registered trademark of SABIC.

**North American Rated Devices**
**Features and Benefits**

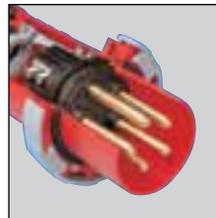
- Rugged housing, made of superior performance Valox® 357, provides maximum corrosion protection and makes the device resistant to impact and abuse; greater resistance to temperature extremes, V-0 flame rated and superior UV stability
- Contact carrier resists arcing and internal heat build-up; 60 and 100 amp contact/pin carriers are made of reinforced nylon for even greater strength and temperature resistance
- Zinc coated steel terminal screws on 20A and 30A devices
- Brass terminal screws on 60A devices
- Dependable, clean brass construction for long life, reliable electrical contact, maximum conductivity, and corrosion resistance
- Watertight chloroprene onion skin grommet provides a precise, reliable seal at the cable entry point
- Ground, neutral and phase terminals are clearly identified by color coding or letters and numbering on both front and back side
- Multiple contact points assure a continuously reliable electrical connection
- Engineered to IP67 Watertight Standards
- North American Rated Devices 20, 30, 60 and 100 Amp
- Meets North American IEC 60309-1 and 60309-2 Standards
- UL Rated for both 50 and 60 Hz applications
- Rockwell Automation Encompass™ Product Partner
- Backed by a limited 2 year warranty


**Pin & Contact Carrier 60 & 100 Amp**

- Protects pins & contacts, holding them firmly in place
- Pin Carrier and Contact Carrier constructed of glass fiber reinforced nylon for maximum impact resistance and maximum protection of pins and contacts
- Superior arc-tracking resistance
- Excellent heat-resistance and flame resistance
- Chamfered wire entry makes wiring easier


**Pin & Contact Carrier 20 & 30 Amp**

- Pin Carrier and Contact Carrier constructed of nylon for maximum impact resistance and maximum protection of pins and contacts
- Terminal screws are aligned on a single plane for easier access
- Internal hinged cord clamp adds strain-relief and swings aside when wiring terminals
- Large diameter combination head terminal screws


**Pins**

- Designed for manageable insertion/withdrawal force
- Clean brass construction resists corrosion, provides superior contact and low electrical resistance
- Rounded tips reduce insertion force and decrease wear on the contact surface area


**Sleeves (Contacts)**

- Designed for manageable insertion/withdrawal force
- Clean brass construction resists corrosion, provides superior contact and low electrical resistance
- Self-adjusting, machine-calibrated contacts for accurate contact pressure designed for superior wiping and cleaning action
- Made from high performance Swedish Industrial Standard (SIS) Brass 5170-04
- Positioned at sleeve entrance, stainless steel spring enables pin cleaning at earliest point of entry


**Terminal Screws**

- Engineered to provide maximum holding power and lowest electrical resistance
- Accepts a wide range of conductors
- Double screws ensure secure connection
- Direct bearing pressure terminals for 20, 30 and 60 Amp ratings; pressure clamp termination for 100 Amp devices

## NORTH AMERICAN RATED | 20A and 30A Watertight

### North American Rated Devices

#### 20A and 30A Watertight Pin & Sleeve Devices



Plug — 320P4W



Connector — 320C4W



Receptacle — 420R9W



Inlet — 420B9W



Back Box — BX230-V

#### Features and Benefits

- Engineered to IP67 Watertight Standards
- Backed by a limited 2 year warranty
- Meets North American IEC 60309-1 and 60309-2 Standards

#### 20A and 30A Watertight Pin & Sleeve Devices

Amp	Wiring	Voltage AC	Color	Connector/ Receptacle	Plug/ Inlet	Cat. No. Plug	Cat. No. Connector	Cat. No. Receptacle	Cat. No. Inlet	Cat. No. Back Box
20	2p3w	125	Yellow			320P4W	320C4W	320R4W	320B4W	BX230-V
	2p3w	250	Blue			320P6W	320C6W	320R6W	320B6W	BX230-V
	2p3w	480	Red			320P7W	320C7W	320R7W	320B7W	BX230-V
	3p4w	125/250	Orange			420P12W	420C12W	420R12W	420B12W	BX230-V
	3p4w	3Ø250	Blue			420P9W	420C9W	420R9W	420B9W	BX230-V
	3p4w	3Ø480	Red			420P7W	420C7W	420R7W	420B7W	BX230-V
	3p4w	3Ø600	Black			420P5W	420C5W	420R5W	420B5W	BX230-V
	4p5w	3ØY120/208	Blue			520P9W	520C9W	520R9W	520B9W	BX230-V
	4p5w	3ØY277/480	Red			520P7W	520C7W	520R7W	520B7W	BX230-V
	4p5w	3ØY347/600	Black			520P5W	520C5W	520R5W	520B5W	BX230-V
30	2p3w	125	Yellow			330P4W	330C4W	330R4W	330B4W	BX230-V
	2p3w	250	Blue			330P6W	330C6W	330R6W	330B6W	BX230-V
	2p3w	480	Red			330P7W	330C7W	330R7W	330B7W	BX230-V
	3p4w	125/250	Orange			430P12W	430C12W	430R12W	430B12W	BX230-V
	3p4w	3Ø250	Blue			430P9W	430C9W	430R9W	430B9W	BX230-V
	3p4w	3Ø480	Red			430P7W	430C7W	430R7W	430B7W	BX230-V
	3p4w	3Ø600	Black			430P5W	430C5W	430R5W	430B5W	BX230-V
	4p5w	3ØY120/208	Blue			530P9W	530C9W	530R9W	530B9W	BX230-V
	4p5w	3ØY277/480	Red			530P7W	530C7W	530R7W	530B7W	BX230-V
	4p5w	3ØY347/600	Black			530P5W	530C5W	530R5W	530B5W	BX230-V

**NORTH AMERICAN RATED | 60A and 100A Watertight**
**60A and 100A Watertight Pin & Sleeve Devices**


Plug — 4100P12W



Connector — 4100C12W



Receptacle — 360R6W



Inlet — 360B7W



Back Box — BX100-V

**Features and Benefits**

- Engineered to IP67 Watertight Standards
- Backed by a limited 2 year warranty
- Meets North American IEC 60309-1 and 60309-2 Standards

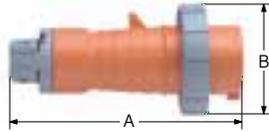
**60A and 100A Watertight Pin & Sleeve Devices**

Amp	Wiring	Voltage AC	Color	Connector/ Receptacle	Plug/ Inlet	Cat. No. Plug	Cat. No. Connector	Cat. No. Receptacle	Cat. No. Inlet	Cat. No. Back Box
60	2p3w	125	Yellow			360P4W	360C4W	360R4W	360B4W	BX60-V
	2p3w	250	Blue			360P6W	360C6W	360R6W	360B6W	BX60-V
	2p3w	480	Red			360P7W	360C7W	360R7W	360B7W	BX60-V
	3p4w	125/250	Orange			460P12W	460C12W	460R12W	460B12W	BX60-V
	3p4w	3Ø250	Blue			460P9W	460C9W	460R9W	460B9W	BX60-V
	3p4w	3Ø480	Red			460P7W	460C7W	460R7W	460B7W	BX60-V
	3p4w	3Ø600	Black			460P5W	460C5W	460R5W	460B5W	BX60-V
	4p5w	3ØY120/208	Blue			560P9W	560C9W	560R9W	560B9W	BX60-V
	4p5w	3ØY277/480	Red			560P7W	560C7W	560R7W	560B7W	BX60-V
	4p5w	3ØY347/600	Black			560P5W	560C5W	560R5W	560B5W	BX60-V
100	2p3w	125	Yellow			3100P4W	3100C4W	3100R4W	3100B4W	BX100-V
	2p3w	250	Blue			3100P6W	3100C6W	3100R6W	3100B6W	BX100-V
	2p3w	480	Red			3100P7W	3100C7W	3100R7W	3100B7W	BX100-V
	3p4w	125/250	Orange			4100P12W	4100C12W	4100R12W	4100B12W	BX100-V
	3p4w	3Ø250	Blue			4100P9W	4100C9W	4100R9W	4100B9W	BX100-V
	3p4w	3Ø480	Red			4100P7W	4100C7W	4100R7W	4100B7W	BX100-V
	3p4w	3Ø600	Black			4100P5W	4100C5W	4100R5W	4100B5W	BX100-V
	4p5w	3ØY120/208	Blue			5100P9W	5100C9W	5100R9W	5100B9W	BX100-V
	4p5w	3ØY277/480	Red			5100P7W	5100C7W	5100R7W	5100B7W	BX100-V
	4p5w	3ØY347/600	Black			5100P5W	5100C5W	5100R5W	5100B5W	BX100-V

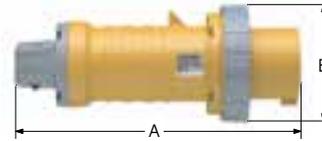
## NORTH AMERICAN RATED | Dimensions for Plugs and Connectors

### North American Rated Devices

#### Plugs



20A, 30A Plug

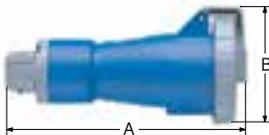


60A, 100A Plug

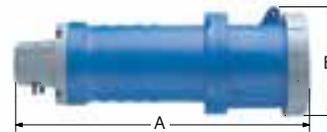
#### Dimensions for Plugs

Cat. No.	Amps	Unit (inches) A	Unit (inches) B	Unit (mm) A	Unit (mm) B	Cord Grip Range (Inches)	Cord Grip Range (mm)
320P	20	5.83	2.80	148	71	.350 - .860	9 - 22
420P	20	6.46	3.11	164	79	.350 - .860	9 - 22
520P	20	6.61	3.43	168	87	.437 - 1.187	11 - 30
330P	30	6.85	3.70	174	94	.437 - 1.187	11 - 30
430P	30	6.85	3.70	174	94	.437 - 1.187	11 - 30
530P	30	7.40	3.98	188	101	.437 - 1.450	11 - 37
360P	60	10.83	4.49	275	114	.670 - 1.625	17 - 41
460P	60	10.83	4.49	275	114	.670 - 1.625	17 - 41
560P	60	10.83	4.49	275	114	.670 - 1.625	17 - 41
3100P	100	12.3	5	312	127	.950 - 1.875	24 - 48
4100P	100	12.3	5	312	127	.950 - 1.875	24 - 48
5100P	100	12.3	5	312	127	.950 - 1.875	24 - 48

#### Connectors



20A, 30A Connector



60A, 100A Connector

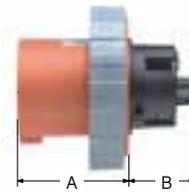
#### Dimensions for Connectors

Cat. No.	Amps	Unit (inches) A	Unit (inches) B	Unit (mm) A	Unit (mm) B	Cord Grip Range (Inches)	Cord Grip Range (mm)
320C	20	6.73	3.19	171	81	.350 - .860	9 - 22
420C	20	7.36	3.46	187	88	.350 - .860	9 - 22
520C	20	7.95	3.82	202	97	.437 - 1.187	11 - 30
330C	30	7.95	4.02	202	102	.437 - 1.187	11 - 30
430C	30	7.95	4.02	202	102	.437 - 1.187	11 - 30
530C	30	8.27	4.29	210	109	.437 - 1.450	11 - 37
360C	60	11.26	4.41	286	112	.670 - 1.625	17 - 41
460C	60	11.26	4.41	286	112	.670 - 1.625	17 - 41
560C	60	11.26	4.41	286	112	.670 - 1.625	17 - 41
3100C	100	12.8	4.84	325	123	.950 - 1.875	24 - 48
4100C	100	12.8	4.84	325	123	.950 - 1.875	24 - 48
5100C	100	12.8	4.84	325	123	.950 - 1.875	24 - 48

**NORTH AMERICAN RATED** | Dimensions for Inlets and Receptacles

**Inlets**

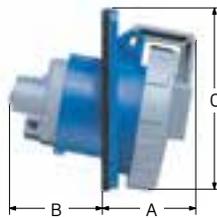

20A, 30A Inlet



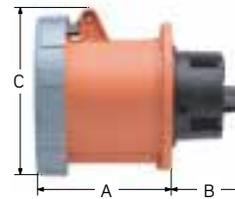
60A, 100A Inlet

**Dimensions for Inlets**

Cat. No.	Amps	Unit (inches)		Unit (mm)	
		A	B	A	B
320B	20	1.85	0.39	47	10
420B	20	2.09	0.39	53	10
520B	20	2.32	0.39	59	10
330B	30	2.36	0.47	60	12
430B	30	2.36	0.47	60	12
530B	30	2.64	0.47	67	12
360B	60	3.15	1.97	80	50
460B	60	3.15	1.97	80	50
560B	60	3.15	1.97	80	50
3100B	100	3.50	2.21	89	56
4100B	100	3.50	2.21	89	56
5100B	100	3.50	2.21	89	56

**Receptacles**


20A, 30A Receptacle



60A, 100A Receptacle

**Dimensions for Receptacles**

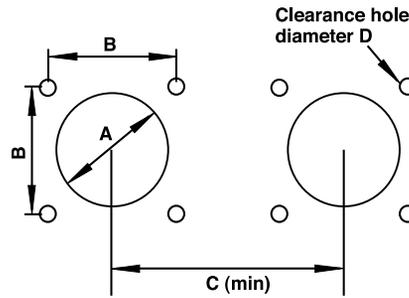
Cat. No.	Amps	Unit (inches)			Unit (mm)		
		A	B	C	A	B	C
320R	20	1.77	2.24	3.74	45	57	95
420R	20	1.77	2.24	3.74	45	57	95
520R	20	1.85	2.24	3.90	47	57	99
330R	30	2.20	2.40	4.10	56	61	104
430R	30	2.20	2.40	4.10	56	61	104
530R	30	2.20	2.44	4.37	56	62	111
360R	60	3.50	1.89	4.37	89	48	111
460R	60	3.50	1.89	4.37	89	48	111
560R	60	3.50	1.89	4.37	89	48	111
3100R	100	3.94	2.28	4.80	100	58	122
4100R	100	3.94	2.28	4.80	100	58	122
5100R	100	3.94	2.28	4.80	100	58	122

## NORTH AMERICAN RATED | Drilling Plan for Inlets and Receptacles

### North American Rated Devices

Drilling Plan for Inlets & Receptacles

Device Size	Device	A		B		C (min)		D
		inches	mm	inches	mm	inches	mm	
20A; 3-wire:	Receptacle	2.13	54	2.17	55	3.94	100	#8
	Inlet	1.93	49	1.73	44	3.35	85	#8
20A; 4-wire:	Receptacle	2.52	64	2.36	60	4.33	110	#8
	Inlet	2.32	59	2.05	52	3.94	100	#8
20A; 5-wire:	Receptacle	2.87	73	2.72	69	3.94	100	#8
	Inlet	2.32	59	2.05	52	3.94	100	#8
30A; 3-wire:	Receptacle	2.99	76	2.72	69	5.12	130	#8
	Inlet	2.56	65	2.40	61	4.53	115	#8
30A; 4-wire:	Receptacle	2.99	76	2.72	69	5.12	130	#8
	Inlet	2.56	65	2.40	61	4.53	115	#8
30A; 5-wire:	Receptacle	3.11	79	2.72	69	5.71	145	#8
	Inlet	2.56	65	2.40	61	4.53	115	#8
60A	All	2.76	70	2.40	61	6.69	170	#8
100A	All	3.19	81	2.80	71	7.87	200	#8



**Performance Specifications — UL 1682 & 1686**

Electrical		
Category	Specifications	
Dielectric Voltage	Devices rated $\leq 300V$ : 2000V for 1 min. Devices rated $> 300V$ : 3000V for 1 min.	
Insulation Resistance	500V for 1 min. Insulation Resistance $\geq 5$ megohms	
Ground Path Current	Apply high current for short time and maintain continuity	
Overload	150% of rated current and 100% of rated voltage for 50 cycles (Power factor 0.75-0.80)	
Current Interrupting	Certified for current interrupting at full-rated current and voltage	
Temperature Rise	Max 30°C rise at full rated current (after overload)	
Resistance to Arcing	Continuation of overload for additional 200 cycles	
Endurance with Load	Device	# Cycles with Load
	20A	5000 Rated Current, Voltage
	30A, 60A	1000 Rated Current, Voltage
	100A	250 Rated Current, Voltage (Power Factor 0.75 - 0.80)

Mechanical		
Category	Specifications	
Mold Stress Relief	70°C for 7 hrs	
Humidity	32°C, 93% humidity, 168 hrs	
Cable Secureness	Pull force and apply torque for 1 minute	
Impact	Drop from 30" 8 times after conditioning to -25°C, for 6 hrs	
Crush	250 lbs for 1 min after -25°C for 6 hrs	
Withdrawal Force	Pull for one minute	
Strength of Insulating Base and Support	110% of specified tightening torque on terminal screws	
Endurance with Load	Device	Total # Cycles (connect & disconnect)
	20A	5000
	30A, 60A	2000
	100A	500
Polarization Integrity	Matching devices will not mate so that ground is energized even when polarization feature is removed and 40-lb insertion force applied	

Environmental		
Category	Specifications	
Flammability	V-2 or better on 20 and 30 Amp devices per UL 94 or CSA 22.2 #0.6 ; V-0 on 60 & 100 Amp devices	
Resistance to Corrosion	Ferrous parts immersed in 10% ammonium chloride solution at 20°C for 10 min.	
Moisture Resistance per UL 1682	Watertight: Device immersed for 24 hrs in 5 cm of 25°C water Splashproof: 1" dia. water stream at 15 PSI from 10 ft. for 5 minutes	
UV Resistance	Exposed plastic materials are UV stabilized	

Continued on next page



460P7W



460C12W

## NORTH AMERICAN RATED | Performance Specifications UL 1682 and 1686

Continued from previous page

### North American Rated Devices

#### Performance Specifications — UL 1682 & 1686

##### Short-Time Grounding Test Currents

Device Rating Amperes	Minimum Size Equipment Grounding Conductor (Copper)		Time Seconds	Test Current, Amperes
	AWG	(mm <sup>2</sup> )		
20	12	(3.3)	4	470
30	10	(5.3)	4	750
60	10	(5.3)	4	750
100	8	(8.4)	4	1180

Ground-path integrity is of critical importance to safe operation of industrial equipment. Leviton pin and sleeve devices are tested by applying a test current through their ground path that far exceeds the device rating. All devices are properly wired and connected to line current at rated values. Then the ground path is subjected to a dramatic, sudden increase in current for 4 seconds. In all cases, the ground pin, sleeve, and terminals of the devices must sustain the test current, continue to function properly, and show no evidence of damage or deterioration in any electrical or mechanical elements of the ground path. Test current values and test parameters are displayed in the above chart.

##### Cord Secureness Test Values

Device Rating Amperes	Force		Torque		Maximum Displacement	
	lb	N	ft-lb	N • M	inches	mm
20	30	133	0.4	0.54	≤3/32	2.38
30	75	333	0.5	0.68	≤3/32	2.38
60	150	667	1.0	1.4	≤3/32	2.38
100	150	667	2.0	2.7	≤3/32	2.38

Heavy cord stress is typical of industrial applications. To assure you of top performance, Leviton pin and sleeve devices are subjected to a punishing series of tests to confirm they can absorb heavy cord pulls. The cord conductors wired to devices are simultaneously twisted and pulled. Values for the applied twisting torque and force of pull are shown above. In all cases, the cord displacement is less than 3/32 inches.

##### Minimum Withdrawal Force

Device Rating Amperes	Minimum Withdrawal Force	
	lb	N
20	5	22
30	6	27
60	15	67
100	20	89

In industrial settings, inadvertent disconnection of power can be troublesome at best, dangerous at worst, and unacceptable in any case. To verify that Leviton pin and sleeve plugs and connectors remain securely connected, they are tested to establish the minimum force required for withdrawal. In establishing these minimum withdrawal forces, the plugs and connectors are properly mated, but not locked with locking rings or other mechanical means. The pins and sleeves provide the only resistance to the force of withdrawal. In all cases, the values in the table above show the minimum force required to separate the plugs and connectors.

## Accessories

### Valox® Back Boxes



BX230-V



BX100-V  
(Same Geometry as BX60-V)

### Valox® Back Boxes for Watertight Inlets and Receptacles

Application	Hub Size Used	Cat. No.
20 & 30 Amp No Adapter Plate Required	1 inch	BX230-V
60 Amp Adapter Plate Included	1 ½"	BX60-V
100 Amp Adapter Plate Included	2"	BX100-V

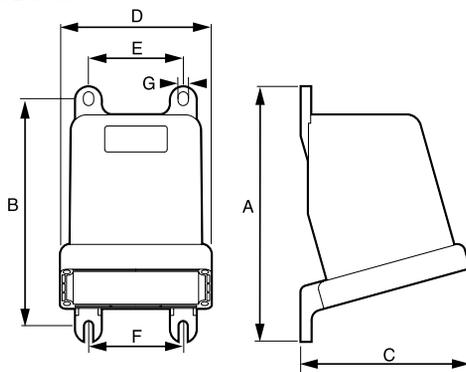
\*Hub not included.

### Dimensions for Valox® Back Boxes

Description	Unit	A	B	C	D	E	F	G
20 Amp & 30 Amp	inch	6.69	5.91	4.53	3.90	2.35	2.35	0.25
	mm	170.0	150.0	115.0	99.0	60.0	60.0	6.5
60 Amp	inch	7.68	6.92	5.20	4.65	2.99	2.99	0.31
	mm	195.0	176.0	132.0	118.0	76.0	76.0	8.0
100 Amp	inch	8.23	7.39	6.30	5.71	3.99	3.33	0.33
	mm	209.0	188.0	160.0	145.0	101.0	84.5	8.5

Valox® is a registered trademark of SABIC.

### Back Boxes

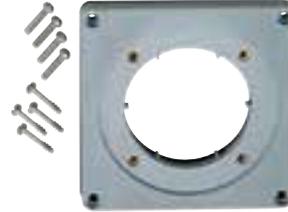


## Accessories

### Replacement Valox® Adapter Plates



AP60



AP100

### Replacement Valox® Adapter Plates for Leviton and Hubbell Back Boxes

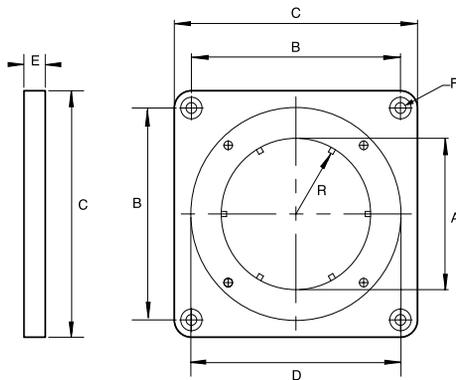
Application	Cat. No.
60 Amp Watertight Inlets & Receptacles	AP60
100 Amp Watertight Inlets & Receptacles	AP100

### Dimensions for Valox® Adapter Plates

Description	Unit	A	B	C	D	E	F	G
60 Amp	inch	2.76	3.86	4.50	3.88	.40	.20	1.28
	mm	70	98	114	98.5	10	5	32.5
100 Amp	inch	3.23	4.88	5.50	4.60	.40	.22	1.50
	mm	82	124	140	117	10	5.5	38

Valox® is a registered trademark of SABIC.

### Adapter Plates



### Watertight Hubs With Insulated Throat

Conduit hubs of die-cast zinc provide a positive ground with insulated throats to prevent wire abrasion. Embedded O-ring ensures a watertight seal

#### Watertight Hubs with Insulated Throat



HUB-200 Front



HUB-200 Back

#### Watertight Hubs with Insulated Throat for all Disconnects, Mechanical Interlocks and Back Boxes

Description	Size	Cat. No.
Die-cast zinc conduit hubs w/ insulated throat and embedded O-ring	3/4"	HUB-034
	1"	HUB-100
	1 1/4"	HUB-114
	1 1/2"	HUB-112
	2"	HUB-200

#### Protective Closure Caps



PC420



PC60



PC100

#### Protective Closure Caps for Plugs and Inlets

Application North American	Application International	Cat. No. Watertight
20 Amp, 3-Wire	16 Amp, 3-Wire	PC320
20 Amp, 4-Wire	16 Amp, 4-Wire	PC420
20 Amp, 5-Wire	16 Amp, 5-Wire	PC520
30 Amp, 3-, 4-Wire	32 Amp, 3-, 4-Wire	PC3430
30 Amp, 5-Wire	32 Amp, 5-Wire	PC530
All 60 Amp	All 63 Amp	PC60
All 100 Amp	All 125 Amp	PC100

## Accessories

### Lockout/Tagout



PLG1



In Use With PLUG



In Use With INLET

### Lockout/Tagout for Pin and Sleeve Devices

**Application**

Can be used for any IEC 60309-1 and 60309-2 pin and sleeve plugs or inlets

**Cat. No.**

PLG1

### Replacement Watertight Closure Kit



CA520



CA100

### Replacement Watertight Closure Cover Kit for Connectors and Receptacles

**Application**

- 20 Amp, 3 Wire
- 20 Amp, 4 Wire
- 20 Amp, 5 Wire
- 30 Amp, 3 - 4 Wire
- 30 Amp, 5 Wire
- All 60 Amp
- All 100 Amp

**Cat. No.**

- CA320
- CA420
- CA520
- CA343
- CA530
- CA060
- CA100

**Replacement Watertight Locking Ring**


RA420



RA100

**Replacement Watertight Locking Ring for Plugs and Inlets**

Application	Cat. No.
20 Amp, 3-wire	RA320
20 Amp, 4-wire	RA420
20 Amp, 5-wire	RA520
30 Amp, 3-, 4-wire	RA343
30 Amp, 5-wire	RA530
All 60 Amp	RA060
All 100 Amp	RA100

**Replacement Grommets for Plugs and Connectors**

Application	Cat. No.
20A, 3 - 4 Wire	GROMT-020
20A, 5 Wire 30A; 3 - 4 Wire	GROMT-023
30A, 5 Wire	GROMT-030
All 60A	GROMT-060
All 100A	GROMT-100

**Liquid-Tight Adapters**

 L7902 Straight Male Liquid-Tight Grip  
 For use with flexible metal conduit.


SAD125

**Liquid-Tight Adapters for Plugs and Connectors**

Application	NPT Size Adapter	Cat. No. Straight Male Fitting	Cat. No.
20 Amp, 3 - 4 Wire	1/2" NPT	SAA12	L7902
20 Amp, 5 Wire	1/2" NPT	SAB12	L7902
30 Amp, 3 - 4 Wire	3/4" NPT	SAB34	L7903
30 Amp, 5 Wire	3/4" NPT	SAC34	L7903
30 Amp, 5 Wire	1" NPT	SAC100	L7904
60 Amp, All	1 1/4" NPT	SAC125	L7905
100 Amp, All	1 1/4" NPT	SAD125	L7905

**INTERNATIONAL RATED** | 16, 32, 63A Splashproof and 125A Watertight

## International-Rated Devices

Leviton offers international-rated pin and sleeve devices available in 16, 32, 63 and 125 Amps. These IEC 60309-1 and 60309-2 compliant devices are ideal for use overseas where voltage and amperage requirements differ from North American standards, but where rigorous performance, quality, and reliability criteria need to be met. Our 16, 32 and 63 Amp devices have an environmental classification of splashproof (IP44), and 125 Amp devices are classified as watertight (IP67).

### Features and Benefits

- Rockwell Automation Encompass™ Product Partner
- Classified to IEC Standards 60309-1 and 60309-2
- CE Marking per low-voltage directives 73/23/EEC, 93/68/EEC



SP516C6

SP516P6



SP516R6



SP516B6

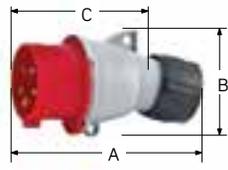
### International Rated Devices

Amp	Wiring	Voltage AC	Color	Connector/ Receptacle	Plug/ Inlet	Plug	Connector	Receptacle	Inlet
16	2p3w	100 - 130	Yellow			SP316P4	SP316C4	SP316R4	SP316B4
	2p3w	200-250	Blue			SP316P6	SP316C6	SP316R6	SP316B6
	3p4w	380 - 415	Red			SP416P6	SP416C6	SP416R6	SP416B6
	4p5w	200/346 - 240/415	Red			SP516P6	SP516C6	SP516R6	SP516B6
32	2p3w	200-250	Blue			SP332P6	SP332C6	SP332R6	SP332B6
	3p4w	380 - 415	Red			SP432P6	SP432C6	SP432R6	SP432B6
	3p4w	3Ø380 - 3Ø440	Gray			432P3WL**	432C3WL**	—	—
	4p5w	200/346 - 240/415	Red			SP532P6	SP532C6	SP532R6	SP532B6
63	2p3w	250	Blue			SP363P6	SP363C6	SP363R6	SP363B6
	3p4w	380 - 415	Red			SP463P6	SP463C6	SP463R6	SP463B6
	4p5w	200/346 - 240/415	Red			SP563P6	SP563C6	SP563R6	SP563B6
125	2p3w	250	Blue			3125P6W	3125C6W	3125R6W	3125B6W
	3p4w	380 - 415	Red			4125P6W	4125C6W	4125R6W	4125B6W
	4p5w	200/346 - 240/415	Red			5125P6W	5125C6W	5125R6W	5125B6W

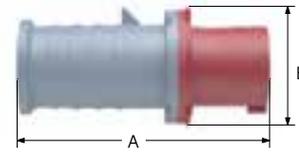
\*Consult the factory for availability before placing your order. These are specialty order items and are not regularly stocked.

\*\*This device has North American 30 Amp construction and is used in refrigerated container applications.

**INTERNATIONAL RATED** | Dimensions for Plugs and Connectors

**Plugs**


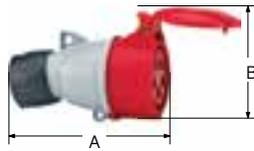
16A, 32A Plug



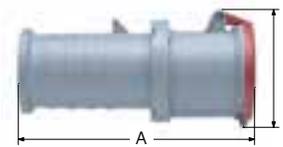
63A Plug

**Dimensions for Plugs**

Cat. No.	Amps	Unit (inches)			Unit (mm)			Cord Grip Range Dia. (Inches)	Cord Grip Range Dia.(mm)
		A	B	C	A	B	C		
SP316P	16	4.92	2.48	3.46	125	63	88	.276 -.511	7 - 13
SP416P	16	5.59	2.87	4.13	142	73	105	.315 -.669	8 - 17
SP516P	16	5.59	2.99	4.13	142	76	105	.315 -.669	8 - 17
SP332P	32	6.38	3.35	4.57	162	85	116	.433-.827	11 - 20
SP432P	32	6.38	3.35	4.57	162	85	116	.433-.827	11 - 20
SP532P	32	6.38	3.54	4.57	162	90	116	.433-.827	11 - 20
SP363P	63	8.46	4.06	—	215	103	—	.669 -1.378	17 - 35
SP463P	63	8.46	4.06	—	215	103	—	.669 -1.378	17 - 35
SP563P	63	8.46	4.06	—	215	103	—	.669 -1.378	17 - 35

**Connectors**


16A, 32A Connector



63A Connector

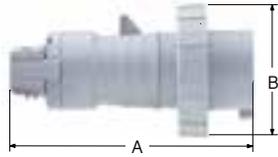
**Dimensions for Connectors**

Cat. No.	Amps	Unit (inches)		Unit (mm)		Cord Grip Range Dia. (Inches)	Cord Grip Range Dia.(mm)
		A	B	A	B		
SP316C	16	5.28	2.95	134	75	.276 -.511	7 - 13
SP416C	16	6.06	3.39	154	86	.315 -.669	8 - 17
SP516C	16	6.06	3.54	154	90	.315 -.669	8 - 17
SP332C	32	6.97	3.78	177	96	.433-.827	11 - 20
SP432C	32	6.97	3.78	177	96	.433-.827	11 - 20
SP532C	32	6.97	3.94	177	100	.433-.827	11 - 20
SP363C	63	8.82	4.41	224	112	.669 -1.378	17 - 35
SP463C	63	8.82	4.41	224	112	.669 -1.378	17 - 35
SP563C	63	8.82	4.41	224	112	.669 -1.378	17 - 35

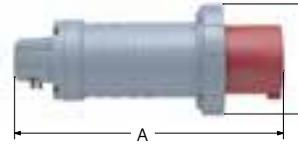
## INTERNATIONAL RATED | Dimensions for Plugs and Connectors

### International-Rated Devices

#### Plugs



432P3WL



125A Plug

#### Dimensions for Plugs

Cat. No.	Amps	Unit (inches)		Unit (mm)		Cord Grip Range Dia. (Inches)	Cord Grip Range Dia.(mm)
		A	B	A	B		
432P3WL	32	5.79	3.70	147	94	.437 - 1.450	11 - 37
3125P	125	12.32	5.12	313	130	.950 - 1.875	24 - 48
4125P	125	12.32	5.12	313	130	.950 - 1.875	24 - 48
5125P	125	12.32	5.12	313	130	.950 - 1.875	24 - 48

#### Connectors



432C3WL



125A Connector

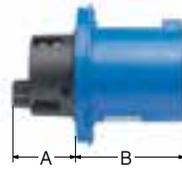
#### Dimensions for Connectors

Cat. No.	Amps	Unit (inches)		Unit (mm)		Cord Grip Range Dia. (Inches)	Cord Grip Range Dia.(mm)
		A	B	A	B		
432C3WL	32	6.97	4.02	177	102	.437 - 1.187	11 - 30
3125C	125	12.80	4.80	325	122	.950 - 1.875	28 - 48
4125C	125	12.80	4.80	325	122	.950 - 1.875	28 - 48
5125C	125	12.80	4.80	325	122	.950 - 1.875	28 - 48

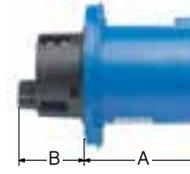
**INTERNATIONAL RATED** | Dimensions for Inlets and Receptacles

**Inlets**


16A, 32A Inlet



63A Inlet



125A Inlet

**Dimensions for Inlets**

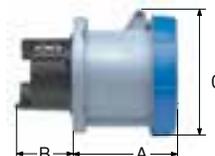
Cat. No.	Amps	Unit (inches)		Unit (mm)	
		A	B	A	B
SP316B	16	.85	1.83	21.5	46.5
SP416B	16	.83	1.85	21	47
SP516B	16	.83	1.83	21	46.5
SP332B	32	.95	2.19	24.5	55.5
SP432B	32	.95	2.19	24.5	55.5
SP532B	32	.98	2.19	25	55.5
SP363B	63	1.97	3.0	50	78
SP463B	63	1.97	3.0	50	78
SP563B	63	1.97	3.0	50	78
3125B	125	3.50	2.21	89	56
4125B	125	3.50	2.21	89	56
5125B	125	3.50	2.21	89	56

**Receptacles**


16, 32A Receptacle



63A Receptacle



125A Receptacle

**Dimensions for Receptacles**

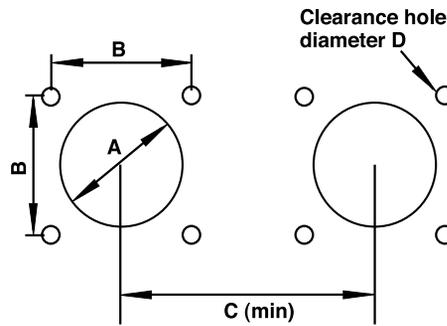
Cat. No.	Amps	Unit (inches)			Unit (mm)		
		A	B	C	A	B	C
SP316R	16	2.20	1.14	2.87	56	29	73
SP416R	16	2.28	1.18	3.43	58	30	87
SP516R	16	2.36	1.22	3.50	60	31	89
SP332R	32	2.76	1.34	3.66	70	34	93
SP432R	32	2.76	1.34	3.66	70	34	93
SP532R	32	2.76	1.34	3.90	71	34	99
SP363R	63	3.43	1.89	4.41	87	48	112
SP463R	63	3.43	1.89	4.41	87	48	112
SP563R	63	3.43	1.89	4.41	87	48	112
3125R	125	3.94	2.28	4.80	100	58	122
4125R	125	3.94	2.28	4.80	100	58	122
5125R	125	3.94	2.28	4.80	100	58	122

## INTERNATIONAL RATED | Drilling Plan for Inlets and Receptacles

### International-Rated Devices

#### Drilling Plan for Inlets & Receptacles

Device Size		A		B		C (min)		D	
		inches	mm	inches	mm	inches	mm	inches	mm
16A; 3-wire:	Receptacle	1.93	49	1.73	44	3.35	85	.185	4.7
	Inlet	1.93	49	1.73	44	3.35	85	.185	4.7
16A; 4-wire:	Receptacle	2.32	59	2.05	52	3.94	100	.185	4.7
	Inlet	2.32	59	2.05	52	3.94	100	.185	4.7
16A; 5-wire:	Receptacle	2.32	59	2.05	52	3.94	100	.185	4.7
	Inlet	2.32	59	2.05	52	3.94	100	.185	4.7
32A; 3-wire:	Receptacle	2.60	66	2.40	61	4.53	115	.185	4.7
	Inlet	2.60	66	2.40	61	4.53	115	.185	4.7
32A; 4-wire:	Receptacle	2.60	66	2.40	61	4.53	115	.185	4.7
	Inlet	2.60	66	2.40	61	4.53	115	.185	4.7
32A; 5-wire:	Receptacle	2.60	66	2.40	61	4.53	115	.185	4.7
	Inlet	2.60	66	2.40	61	4.53	115	.185	4.7
63A	All	2.76	70	2.40	61	6.69	170	.185	4.7
125A	All	3.47	88	2.80	71	7.87	200	.280	7.1



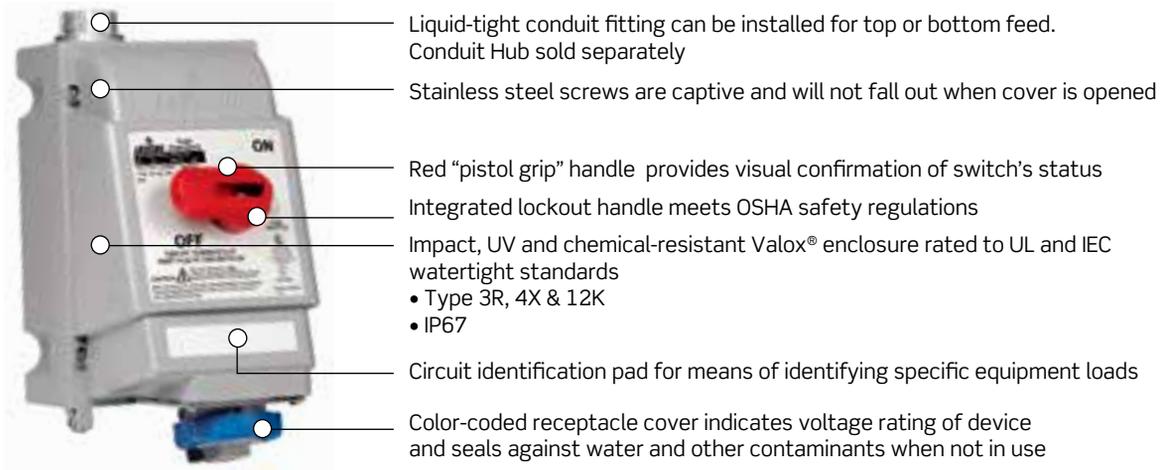
## Powerswitch® Mechanical Interlocks

Powerswitch® Mechanical Interlock devices incorporate a safety disconnect switch and IEC receptacle in a non-metallic watertight enclosure. The interlock mechanism prevents making and breaking of power under load. The switch cannot be actuated to the ON position until an IEC compatible plug is fully inserted, and the plug cannot be removed until the switch is in the OFF position. The complete IEC 60309-1 and 60309-2 system of plugs, connectors, inlets and mechanical interlock devices can be used for both retrofit and new installations enhancing safety and performance in critical power connections.

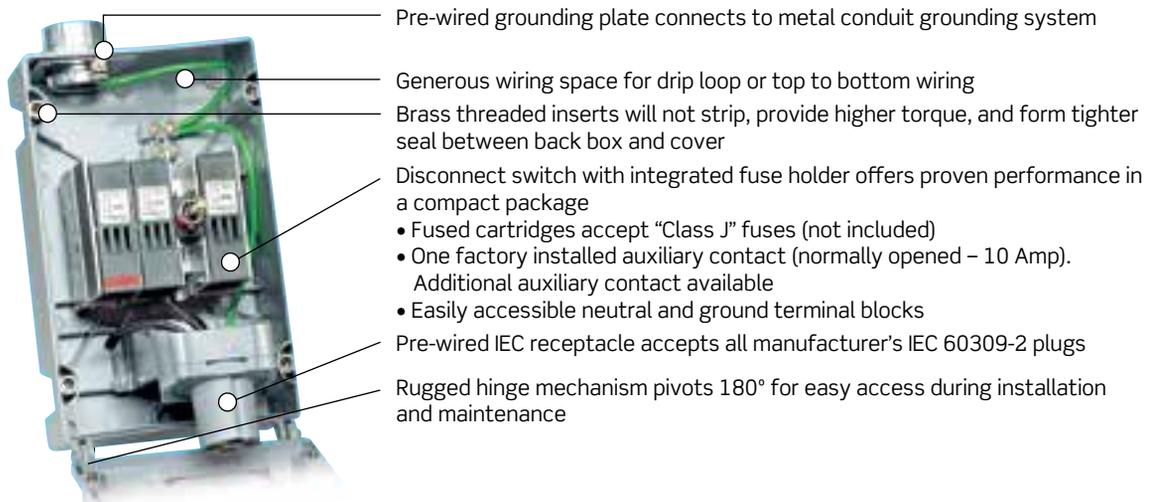
### Features and Benefits

- 20, 30, 60 Amp Non-Fused and Fused
- 100 Amp Non-Fused and breaker
- Engineered to IP67 Watertight Standards
- Fused models accept “Class J” Time-Delay Fuses
- Backed by a limited 2 year warranty

### 420MF9W Shown



### 420MF9W Shown



Valox® is a registered trademark of SABIC.

## NORTH AMERICAN MECHANICAL INTERLOCKS

### North American Watertight Breakered Mechanical Interlocks (20A, 30A, 60A & 100A)

#### Features and Benefits

- Enclosures are rated Type 3R, 4X & 12K, IP67
- Listed to UL 231 and 1686
- Certified to CSA Standard C22.2 number 182.1& 14
- Classified to IEC Standards 60309-1 and 60309-2
- CE marking per low-voltage directives 73/23/EEC, 93/68/EEC
- Switches are listed to UL 508 for Non-Fused and UL 98 for Fused models (including 100 Amp Non-Fused) and breakered models

#### 4100MB9W Shown

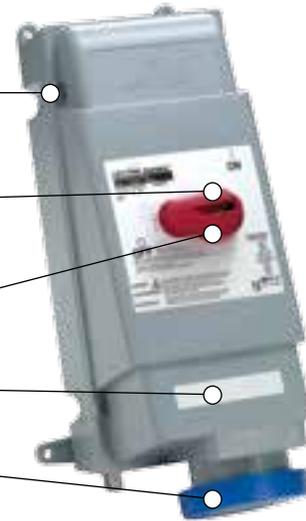
Stainless steel screws are captive and will not fall out when cover is opened

Red "pistol grip" handle provides visual confirmation of switch's status: ON, OFF, TRIPPED

Integrated lockout handle meets OSHA safety regulations

Circuit identification pad for means of identifying specific equipment loads

Color-coded receptacle cover indicates voltage rating of device and seals against water and other contaminants when receptacle is not in use



Generous wiring space for drip loop or top to bottom wiring

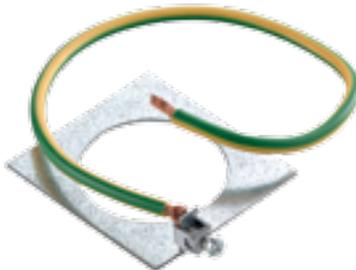
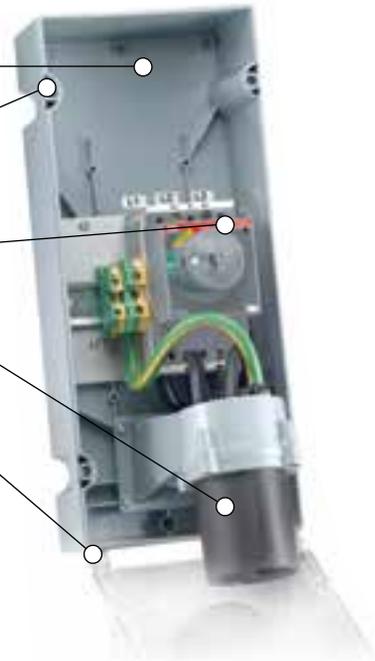
Brass threaded inserts resist stripping, provide higher torque, and form tighter seal between back box and cover

Circuit-Breaker integrated into switch provides overload protection

Pre-wired IEC receptacle accepts all manufacturers' IEC 60309-2 plugs

Rugged hinge mechanism pivots 180° for easy access during installation and maintenance

Liquid-tight conduit fitting can be installed for top or bottom feed. Four mounting feet and grounding plate included



**NORTH AMERICAN RATED** | Mechanical Interlocks 20 and 30A

**North American Watertight Mechanical Interlocks (Fused and Non-Fused)  
 Type 3R, 4X & 12K — 20A and 30A**

IP67										
Amp	Wiring	Voltage AC	Color	Receptacle Config.	Plug Config.	Non-Fused Mech. Interlock	HP Rating	Fused Mech. Interlock	HP Rating	Cat. No. Use Plug
20	2p3w	240	Blue			320MI6W	3	—	—	320P6W
	2p3w	480	Red			320MI7W	5	—	—	320P7W
	3p4w	125/250	Orange			420MI12W	*	420MF12W	*	420P12W
	3p4w	3Ø240	Blue			420MI9W	10	420MF9W	5	420P9W
	3p4w	3Ø480	Red			420MI7W	20	420MF7W	10	420P7W
	3p4w	3Ø600	Black			420MI5W	25	420MF5W	15	420P5W
	4p5w	3ØY120/208	Blue			520MI9W	10	—	—	520P9W
	4p5w	3ØY277/480	Red			520MI7W	20	—	—	520P7W
	4p5w	3ØY347/600	Black			520MI5W	25	—	—	520P5W
30	2p3w	240	Blue			330MI6W	5	—	—	330P6W
	2p3w	480	Red			330MI7W	10	—	—	330P7W
	3p4w	125/250	Orange			430MI12W	*	430MF12W	*	430P12W
	3p4w	3Ø240	Blue			430MI9W	10	430MF9W	7.5	430P9W
	3p4w	3Ø480	Red			430MI7W	20	430MF7W	15	430P7W
	3p4w	3Ø600	Black			430MI5W	25	430MF5W	20	430P5W
	4p5w	3ØY120/208	Blue			530MI9W	10	—	—	530P9W
	4p5w	3ØY277/480	Red			530MI7W	20	530MF7W	15	530P7W
	4p5w	3ØY347/600	Black			530MI5W	25	530MF5W	20	530P5W

\*Consult factory for your specific application.

Continued on next page



420MF9W



560MI7W



5100MI9W

## NORTH AMERICAN RATED | Mechanical Interlocks 60A | 100A

Continued from previous page

### North American Watertight Mechanical Interlocks (Fused and Non-Fused) Type 3R, 4X & 12K — 60A

IP67										
Amp	Wiring	Voltage AC	Color	Receptacle Config.	Plug Config.	Non-Fused Mech. Interlock	HP Rating	Fused Mech. Interlock	HP Rating	Cat. No. Use Plug
60	2p3w	240	Blue			360MI6W	10	360MF6W	*	360P6W
	2p3w	480	Red			360MI7W	20	—	—	360P7W
	3p4w	125/250	Orange			460MI12W	*	460MF12W	*	460P12W
	3p4w	3Ø240	Blue			460MI9W	20	460MF9W	15	460P9W
	3p4w	3Ø480	Red			460MI7W	40	460MF7W	30	460P7W
	3p4w	3Ø600	Black			460MI5W	40	460MF5W	50	460P5W
	4p5w	3ØY120/208	Blue			560MI9W	20	560MF9W	15	560P9W
	4p5w	3ØY277/480	Red			560MI7W	40	—	—	560P7W
	4p5w	3ØY347/600	Black			560MI5W	40	—	—	560P5W

\*Consult factory for your specific application.  
Fused Models Accept "Class J" Time-Delay Fuses.

### North American Watertight Mechanical Interlocks (Non-Fused and Breakered) Type 3R, 4X & 12K — 100A

IP67										
Amp	Wiring	Voltage AC	Color	Receptacle Config.	Plug Config.	Non-Fused Mech. Interlock	HP Rating	Breakered Mech. Interlock	HP Rating	Cat. No. Use Plug
100	2p3w	125	Yellow			3100MI4W	*	—	—	3100P4W
	2p3w	240	Blue			3100MI6W	15	—	—	3100P6W
	2p3w	480	Red			3100MI7W	25	—	—	3100P7W
	3p4w	125/250	Orange			4100MI12W	*	—	—	4100P12W
	3p4w	3Ø240	Blue			4100MI9W	30	4100MB9W	30	4100P9W
	3p4w	3Ø480	Red			4100MI7W	50	4100MB7W	50	4100P7W
	3p4w	3Ø600	Black			4100MI5W	50	—	—	4100P5W
	4p5w	3ØY120/208	Blue			5100MI9W	25	5100MB9W	25	5100P9W
	4p5w	3ØY277/480	Red			5100MI7W	50	—	—	5100P7W
	4p5w	3ØY347/600	Black			5100MI5W	50	—	—	5100P5W

\*Consult factory for your specific application.

**NORTH AMERICAN RATED** | Mechanical Interlock Performance Specifications

**Performance Specifications**

Electrical			
Description	Device	Current Applied	Duration
Ground Path Integity	20A	40A	2 min.
	30A	60A	2 min.
	60A	120A	4 min.
	100A	200A	6 min.
Description	Result		
Current Interrupting	Certified for current interrupting at full-rated current and voltage		
Endurance	6000 operations at rated current and voltage (Power Factor 0.75 — 0.80)		
Dielectric	1000 V plus rated voltage for 1-minute		

Mechanical	
Description	Result
Mold Stress Relief	70°C for 7 hours
Crush	100 lb
Impact	1.2 lb steel ball dropped from 5 ft
Cold Impact	Same as above, after conditioning to -35°C
Strength of Insulating Base and Support	110% of specified tightening torque on terminal screws
Pullout	18 lb pull on internal wires

Environmental	
Description	Result
Flammability	No 0.6; V-0 for watertight enclosure
Rain (3R) per UL 50	Water spray @ 5 PSI from all sides for 1 hr
Hosedown (4X) per UL 50	Water spray @ 65 gal/min for 5 min.
Dust (12K) per UL 50	Cement Dust Circulated @ 1000 ft/minute for 5 minutes
Gasket Aging	70°C for 168 hours
UV Resistance	Exposed plastic materials are UV stabilized
Operating Temperature	-40°C to +60°C (-40°F to +140°F)

## NORTH AMERICAN RATED | Mechanical Interlocks

### Making the Right Connection is as Easy as Matching Colors and Telling Time

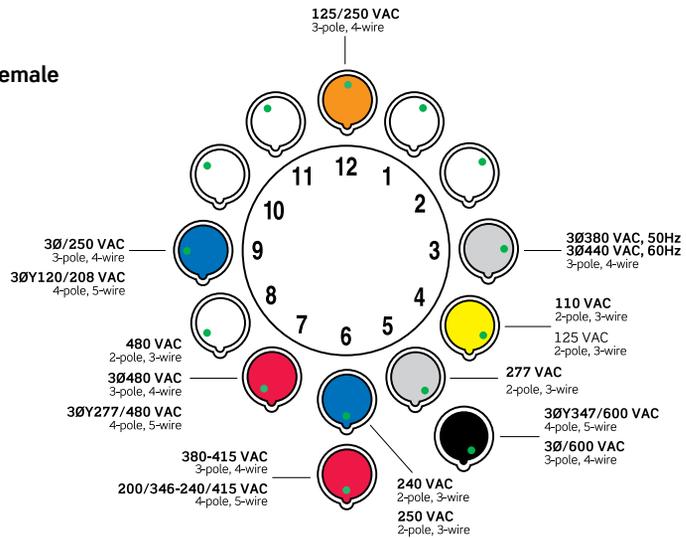
Leviton's pin and sleeve devices are easy to use. Matching amperage and voltage requirements is literally as easy as matching colors and telling time. The amperage rating is related to the size of the device; devices of the same amperage are the same size. The voltage rating is related to the location of the ground sleeve on the female device and the number of conductors. This location is based on a clock face with the key-way at the 6 o'clock position. The ground sleeve is positioned at a specific hour location, depending on the device's voltage rating.

The clock position for plugs and inlets is a mirror image of the position for matching connectors and receptacles. For quick visual identification, voltage ratings are also color-coded and the housings of interconnecting units are always the same color. All 125V AC devices are yellow; 250V AC are blue, etc. Matching up interconnecting devices is as easy as matching colors.

#### North American

**Green Dot** • Represents the Ground Sleeve of Female Devices (Connectors & Receptacles)

Rated Voltage	Color
110V-130V	Yellow
125V-250V	Orange
200V-250V	Blue
277V, 380V, 440V	Gray
346V-480V	Red
500V and above	Black



### Catalog Numbering System

Leviton's catalog numbering system is easy to use. Each letter or number provides a description of the product. Simply follow the six-part code below, made up of letters and numbers. Each catalog number contains the number of conductors, amperage rating, device type, clock position of the ground sleeve, and environmental rating. For example, the catalog number below refers to a 3-wire, 20 amp receptacle with a grounding sleeve located at the 6 o'clock position and an environmental classification of watertight.

	3	20	R	6	W
<b>Prefix</b>	<b>1st digit</b>	<b>2nd-4th digit</b>	<b>Letter</b>	<b>Grounding</b>	<b>Suffix</b>
<b>SP</b> SP= Splashproof	3 = 3 wire 4 = 4 wire 5 = 5 wire	16 = 16 Amp 20 = 20 Amp 30 = 30 Amp 32 = 32 Amp 60 = 60 Amp 63 = 63 Amp 100 = 100 Amp 125 = 125 Amp	P = Plug C = Connector R = Receptacle B = Inlet MI = Mechanical Interlock MF = Mechanical Interlock Fused AX = Disconnect Switch Non-Fused FAX = Disconnect Switch Fused	Clock position of female grounding contact	W = Watertight  <b>Not Used for Disconnects</b>
<b>DS</b> DS= Disconnect Switch	<b>Not Used for Disconnects</b>			<b>Not Used for Disconnects</b>	