



INTRODUCTION • NEMA 4X METALLIC

600 VAC/250VDC; 50-400 hertz
 NEMA 3, 4, 4X
 Class I, Div. 1 & 2, Groups B, C, D;
 NEMA 7 B, C, D^②
 Class I, Zones 1 & 2, IIB+H2, IIA^②
 Class II, Div. 1 & 2, Groups F & G;
 NEMA 9 F, G^②
 Class III^②



VR/VP



ALLEN/SLOT
TERMINALS



VSQ



VBQ

FEATURES-SPECIFICATIONS

NEMA 4X VersaMATE®

THE FIRST NEMA 4X RATED LINE OF METALLIC PLUGS & RECEPTACLES.

VersaMate® metallic pin & sleeve plugs & receptacles are designed for heavy duty industrial use. These devices supply power to both fixed and portable electrical equipment including pumps, generators, welders, vacuums, blowers and similar apparatus.

Suitable for indoor or outdoor use. Applications include the wet, cold, hosedown, hazardous or corrosive areas in such industrial applications as:

- Pulp & Paper Mills
- Electrical Power Plants
- Petrochemical Plants
- Wastewater Treatment
- Marine, Docks, Ports
- Construction Sites
- Breweries
- Refineries
- Chemical Plants
- Grain Facilities
- Textile Manufacturing
- Food Processing Facilities

^① VersaMate® components are UL classified and intermateable with other UL 1686-C1 configured devices (when installed in accordance with instructions furnished with device). Assemblies containing components from other manufacturers would have the NEMA type rating of the lowest rated device. 150A models UL intermateable w/Appleton® Powertite® only.

^② See product pages for specific ratings.

Arktite® is a registered trademark of Crouse-Hinds®. Powertite® is a registered trademark of Appleton®.

Standard Materials:

Copper-free aluminum construction with electrostatically applied epoxy/polyester finish. Contacts are brass with a patented beryllium copper spring tensiometer. External screws are 316 stainless steel.

Features:

The VersaMate product line includes 30, 60, 150^①, 100 and 200 Amp plugs, receptacles and connectors with a full range of back boxes. Popular options include reverse service and polarization. The VersaMate line is **FULLY INTERCHANGEABLE**^① with UL1686 configured and listed devices such as Crouse-Hinds® Arktite® or Appleton® Powertite®. Standard location receptacle bolt hole patterns match competitive back boxes so users can upgrade to VersaMate without changing back boxes in instances where changing the conduit system is difficult.

Plugs:

Octagonal style (patented) for a firm and sure grip when connecting or disconnecting is featured on both plug and cable connector bodies. Insulators have high mechanical and dielectric strength and are “Low Arc Tracking.” “Increased Safety” type box terminals with gripper ribs securely clamp around conductors. Funneled conductor entry chambers lead all properly stripped conductors into terminals **simultaneously**. NEMA 4X rating when inserted into VersaMate receptacle and locking ring is tightened. Includes suitability for Type P marine cable.



Receptacles:

Exclusive Patented “Breach-Lock” cap serves as either flip lid or screw cover. Receptacle is NEMA 3R with lid snapped shut or NEMA 4X with lid turned shut or when VersaMate plug is inserted and locking ring tightened. Patented notch in cap arm holds cap open for easy plug insertion or maintenance. Patented pin design uses slotted spring clip which avoids excessive wear while providing continuous electrical pin to sleeve contact. VersaMate® receptacles use the same “Increased Safety” terminals and funnel design as VersaMate® plugs.



Cable Clamping Assembly:

Plugs and cable connectors are supplied with an exclusive neoprene “Onion Skin” peel-away type grommet. The VersaMate® cable clamp system captures cable with **four grip points** using **only two** tightening screws. Clamp guide assembly provides a firm fit over a wide range of cable diameters. Non-removable set screws prevent clamp guide assembly from backing out. Clamps have smooth contoured shoulder design to prevent snags or damage when moving equipment.



Back Boxes:

VersaMate back boxes come in a variety of mounting styles. Exclusive “blind” receptacle mounting holes prevent moisture from entering box via thread cavities. Boxes come with a green grounding screw.



RECEPTACLES

VERSAMATE® SERIES








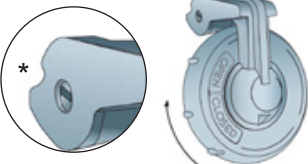

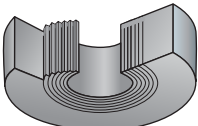


FEATURES / COMPARISONS



- First NEMA 4X – Still the BEST!
- Exclusive interior gasketing
- Exclusive Terminal Designs
 - » No conductor machining
 - » Allen or Phillips types

- Exclusive Onion-Skin Gasket
 - » Perfect Cable Fit
- Exclusive 4-Point Cable Grip
 - » Uses only 2 Recessed Screws
- Exclusive Breech-Lock Cap
 - » Flip or Screw-On
 - » Notch to hold open

KILLARK BRAND	RECEPTACLE/CONNECTOR PIN CONFIGURATION						
	STYLE 1			STYLE 2			
TERMINALS	AMPS	POLES AND WIRES	RECEPTACLE/CONNECTOR CONFIGURATION*	AMPS	POLES AND WIRES	RECEPTACLE/CONNECTOR CONFIGURATION*	
 <p>New Allen/slot terminal screws do not contact or machine conductor. Allows higher torque values typical in the oil industry.</p>	30	2W2P		30	2W3P		
		3W3P			3W4P		
 <p>VersaMate original Phillips/slot "Increased Safety" type terminals reduce connection fatigue. Screws do not contact or machine conductor and are under spring tension to reduce loosening and pullout due to vibration.</p>		60	2W2P		60	2W3P	
			3W3P			3W4P	
<p>CAP</p>  <p>"Breech-Lock" design serves as both flip lid or screw cover style. Special notch in lid arm holds cover open to ease plug insertion or maintenance. *Slip pencil or screwdriver into notch.</p>		100	2W2P		100	2W3P	
			3W3P			3W4P	
<p>GASKET</p>  <p>Exclusive "Onion Skin" style gasket assures a tight seal around cable. Skin layers are removed from a single gasket to adjust for various cable diameters.</p>	150A	2W2P		150A	3W4P		
		200	3W3P			200	2W3P
	4W4P				3W4P		

REVERSE SERVICE: S39

Add suffix **S39** for factory Reverse Service of receptacles, plugs or connectors. Receptacles or connectors are assembled with plug interiors while plugs are assembled with receptacle interiors. For applications where the plug is energized (i.e. from a generator) to feed a non-energized receptacle. Prevents easy contact with energized exposed pins. This conversion can be performed in the field with a complementary plug and receptacle (30A to 150A devices shown on pages PR5-PR8). 200A Amp devices shown on page PR9 are a factory-only option. Reverse service is not for hazardous locations.



Typical Application

POLARIZED OPTION: S37

Add suffix **S37** for special polarity.

Can prevent connection between mismatched voltages or frequencies in areas where devices of the same amperage, poles and grounding style are used. Receptacle or connector interiors are rotated 22-1/2° to the right; plug is rotated opposite to match. This is a factory only option.



Standard



S37 Option



EXCLUSIVE FEATURES & GROUNDING METHODS



P Patented Exclusive “Breech-Lock” cap serves as either flip lid or screw cover

- NEMA 3R Rating: When receptacle cap is snapped shut
- NEMA 4X Rating: When receptacle cap is turned shut or with VersaMate® plug inserted and ring tightened

P Patented Special notch is designed to hold cap open for easy field service or plug insertion with **two** free hands

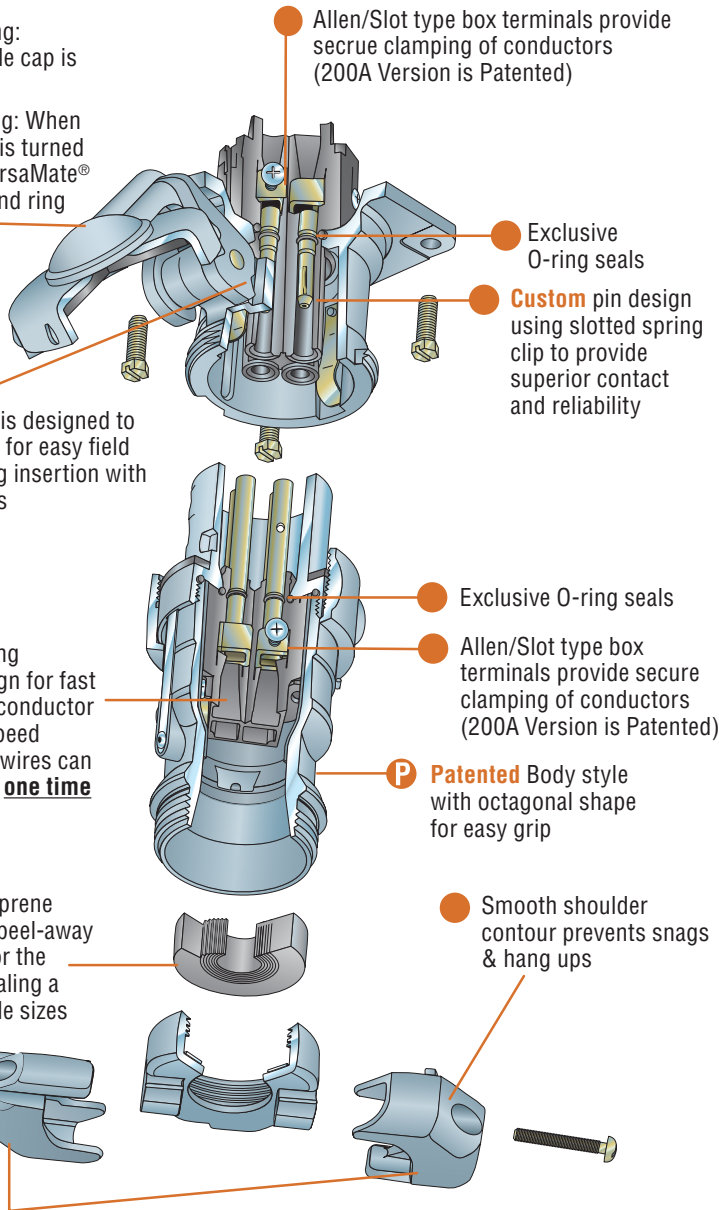
• Funneled wiring chamber design for fast and accurate conductor insertion to speed assembly. All wires can be inserted at **one time**

• Exclusive neoprene “Onion Skin” peel-away type gasket for the ultimate in sealing a variety of cable sizes

• The VersaMate® Cable clamp system captures cable with four grip points using only two tightening screws. Provides secure grip without damaging the cable insulation

• **Unique VersaMate® Feature**
The VersaMate Line is designed for the industrial customer based on engineering and user surveys

P Denotes Patented Feature

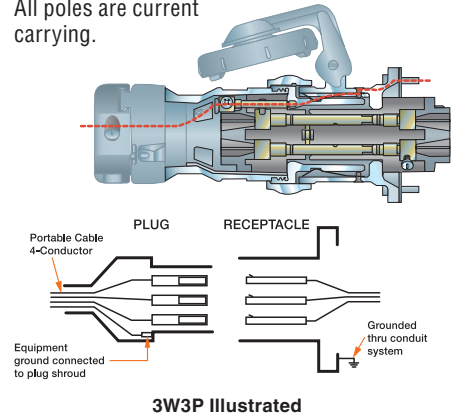


Grounding:

To minimize the danger of electrical shock when utilizing portable equipment, the National Electrical Code requires exposed metal parts be grounded if operated at more than 150 volts to ground. The VersaMate® plug & receptacle system is available in two grounding styles. Please note Style I and II devices cannot be intermated.

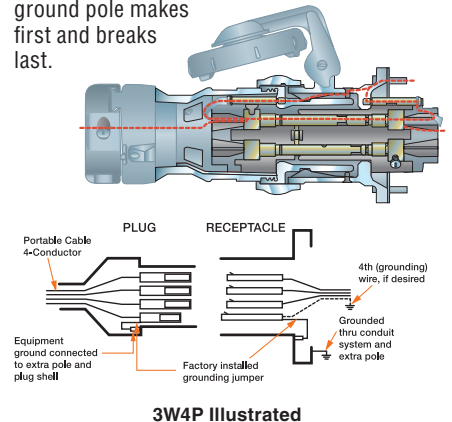
Style I

In a Style I plug, the cable's ground conductor is bonded to the plug housing by means of solderless connector. The receptacle is grounded by being part of a grounded conduit system. Upon insertion, detent springs in the receptacle housing contact and ground the plug housing before current carrying poles. All poles are current carrying.



Style II

In a Style II plug, the cable's ground conductor is bonded to the extra grounding pole and to the plug housing via a bonding jumper. The receptacle has a matching grounding pole connected to the system ground conductor which is further tied to the grounded conduit system via a bonding jumper. Upon insertion, detent springs in the receptacle housing contact and ground the plug housing; then the extra long ground pole connects before the current carrying poles engage. The Style II ground pole makes first and breaks last.

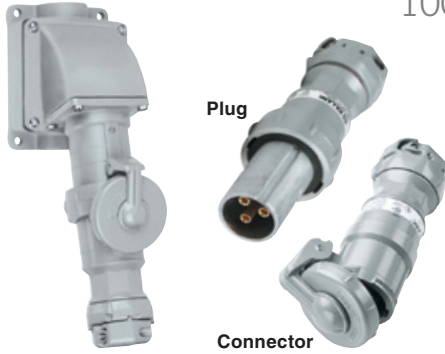


RECEPTACLES

VERSAMATE® SERIES



100A SELECTION INFORMATION



Plug

Connector



Original or AT Terminals. See PR3 for more information

• 100 Amp 600VAC/250VDC; 50-400 Hertz
NEMA 3, 4, 4X^①

Wire Range

Regular Stranding: #4 - #2 original style or "AT" type
(Includes Type P marine)
Extra flex: #4 - #2 original style or "AT" type

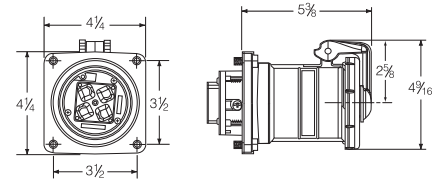
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FEATURES-SPECIFICATIONS

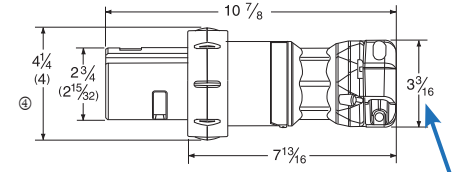
100 AMP PLUGS & CONNECTORS						
GROUND STYLE	CIRCUIT	GROMMET RANGE	CATALOG NUMBER			
			PLUG		CONNECTOR	
			ORIG.	AT	ORIG.	AT
Style I	2W2P	.88 - 1.68 IN	VP10277	VP1022	VPR10257	VPR1022
	3W3P	.88 - 1.68 IN	VP10377	VP1033	VPR10357	VPR1033
	4W4P	.88 - 1.68 IN	VP10477	VP1044	VPR10457	VPR1044
Style II	2W3P	.88 - 1.68 IN	VP10387	VP1023	VPR10367	VPR1023
	3W4P	.88 - 1.68 IN	VP10487	VP1034	VPR10467	VPR1034



Receptacle

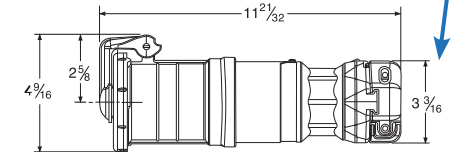


Plug



VersaMate® clamps provide a firm fit for one plug (or connector) over a wide range of cable diameters (competitors often need two - requiring additional sizing decisions).

Connector



MODIFICATIONS*	
CATALOG NUMBER	DESCRIPTION
S39	Reverse service for receptacles, plugs & connectors
S37	Polarization for receptacles, plugs & connectors

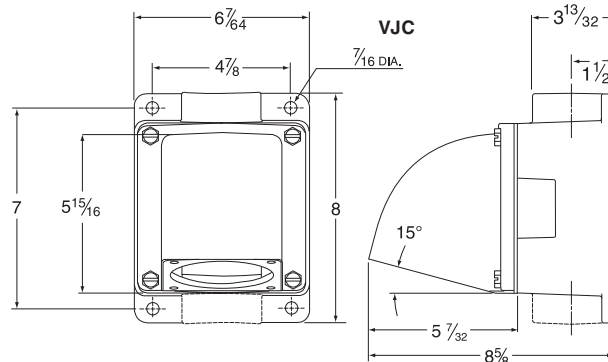
* See page PR3 for more information on these options.

100 AMP RECEPTACLES & BACK BOXES							
GROUND STYLE	CIRCUIT	CATALOG NUMBER					
		E ^② TYPE DEAD END		C ^② TYPE FEED THRU		RECEPTACLE ONLY	
		ORIG.	AT	ORIG.	AT	ORIG.	AT
Style I	2W2P	VR1021E5	VR1022E5	VR1021C5	VR1022C5	VR1021	VR1022
	3W3P	VR1031E5	VR1033E5	VR1031C5	VR1033C5	VR1031	VR1033
	4W4P	VR1041E5	VR1044E5	VR1041C5	VR1044C5	VR1041	VR1044
Style II	2W3P	VR1032E5	VR1023E5	VR1032C5	VR1023C5	VR1032	VR1023
	3W4P	VR1042E5	VR1034E5	VR1042C5	VR1034C5	VR1042	VR1034
Splice box only ^③		VJ57	VJ57	VJC57	VJC57	VJA100*	VJA100*

* Angle adapter only

- ① Components are intermateable & UL classified with other UL1686 configured devices (when installed in accordance with instructions furnished with device). Assemblies containing components from other manufacturers would have the NEMA type rating of the lowest rated device.
- ② 100 Amp Back Boxes are available in 1", 1-1/4", 1-1/2" & 2" conduit sizes. Size listed above is 1-1/2". For other available sizes, change the BOLD "5" in either the assembly or box only number as follows: **3**=1", **4**=1-1/4", **5**=1-1/2", **6**=2". Assembly catalog numbers are listed for ease of ordering or specification and devices are shipped as components.
- ③ 100 Amp Boxes & Adapters also fit 60 Amp receptacles. Adapter only can be used to attach receptacle at an angle to a standard sheet metal box.
- ④ Dimensions in () are 3 pole devices; balance are 4 pole.

Back Box Dimensions



Feed through style shown



INTRODUCTION • NEMA 4X METALLIC



VR/VP



ALLEN/SLOT TERMINALS



VSQ



VBQ

600 VAC/250VDC; 50-400 hertz
 NEMA 3, 4, 4X
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 Class I, Zones 1 & 2, IIB+H2, IIA^②
 Class II, Div. 1 & 2, Groups F & G;
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 Class III^②



FEATURES-SPECIFICATIONS

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Plugs:

Octagonal style (patented) for a firm and sure grip when connecting or disconnecting is featured on both plug and cable connector bodies. Insulators have high mechanical and dielectric strength and are “Low Arc Tracking.” “Increased Safety” type box terminals with gripper ribs securely clamp around conductors. Funneled conductor entry chambers lead all properly stripped conductors into terminals **simultaneously**. NEMA 4X rating when inserted into VersaMate receptacle and locking ring is tightened. Includes suitability for Type P marine cable.



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Cable Clamping Assembly:

Plugs and cable connectors are supplied with an exclusive neoprene “Onion Skin” peel-away type grommet. The VersaMate® cable clamp system captures cable with **four grip points** using **only two** tightening screws. Clamp guide assembly provides a firm fit over a wide range of cable diameters. Non-removable set screws prevent clamp guide assembly from backing out. Clamps have smooth contoured shoulder design to prevent snags or damage when moving equipment.



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RECEPTACLES

VERSAMATE® SERIES








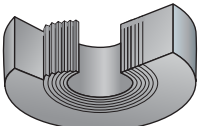


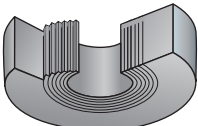







FEATURES / COMPARISONS



- First NEMA 4X – Still the BEST!
- Exclusive interior gasketing
- Exclusive Terminal Designs
 - » No conductor machining
 - » Allen or Phillips types

- Exclusive Onion-Skin Gasket
 - » Perfect Cable Fit
- Exclusive 4-Point Cable Grip
 - » Uses only 2 Recessed Screws
- Exclusive Breech-Lock Cap
 - » Flip or Screw-On
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KILLARK BRAND	RECEPTACLE/CONNECTOR PIN CONFIGURATION						
	STYLE 1			STYLE 2			
TERMINALS	AMPS	POLES AND WIRES	RECEPTACLE/CONNECTOR CONFIGURATION*	AMPS	POLES AND WIRES	RECEPTACLE/CONNECTOR CONFIGURATION*	
 <p>New Allen/slot terminal screws do not contact or machine conductor. Allows higher torque values typical in the oil industry.</p>	30	2W2P		60	2W3P		
		3W3P			3W4P		
4W4P			100		2W3P		
 <p>VersaMate original Phillips/slot "Increased Safety" type terminals reduce connection fatigue. Screws do not contact or machine conductor and are under spring tension to reduce loosening and pullout due to vibration.</p>		2W2P			150A	3W4P	
		3W3P				200	2W3P
		4W4P		3W4P			
CAP	100	2W2P		150A	3W4P		
 <p>"Breech-Lock" design serves as both flip lid or screw cover style. Special notch in lid arm holds cover open to ease plug insertion or maintenance. *Slip pencil or screwdriver into notch.</p>		3W3P			200	2W3P	
		4W4P				3W4P	
GASKET	150A	4W4P		200	3W3P		
 <p>Exclusive "Onion Skin" style gasket assures a tight seal around cable. Skin layers are removed from a single gasket to adjust for various cable diameters.</p>	200	3W3P			3W4P		
		4W4P					

REVERSE SERVICE: S39

Add suffix **S39** for factory Reverse Service of receptacles, plugs or connectors. Receptacles or connectors are assembled with plug interiors while plugs are assembled with receptacle interiors. For applications where the plug is energized (i.e. from a generator) to feed a non-energized receptacle. Prevents easy contact with energized exposed pins. This conversion can be performed in the field with a complementary plug and receptacle (30A to 150A devices shown on pages PR5-PR8). 200A Amp devices shown on page PR9 are a factory-only option. Reverse service is not for hazardous locations.



Typical Application

POLARIZED OPTION: S37

Add suffix **S37** for special polarity.

Can prevent connection between mismatched voltages or frequencies in areas where devices of the same amperage, poles and grounding style are used. Receptacle or connector interiors are rotated 22-1/2° to the right; plug is rotated opposite to match. This is a factory only option.



Standard



S37 Option



EXCLUSIVE FEATURES & GROUNDING METHODS



P **Patented** Exclusive “Breech-Lock” cap serves as either flip lid or screw cover

- NEMA 3R Rating: When receptacle cap is snapped shut
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P **Patented** Special notch is designed to hold cap open for easy field service or plug insertion with **two** free hands

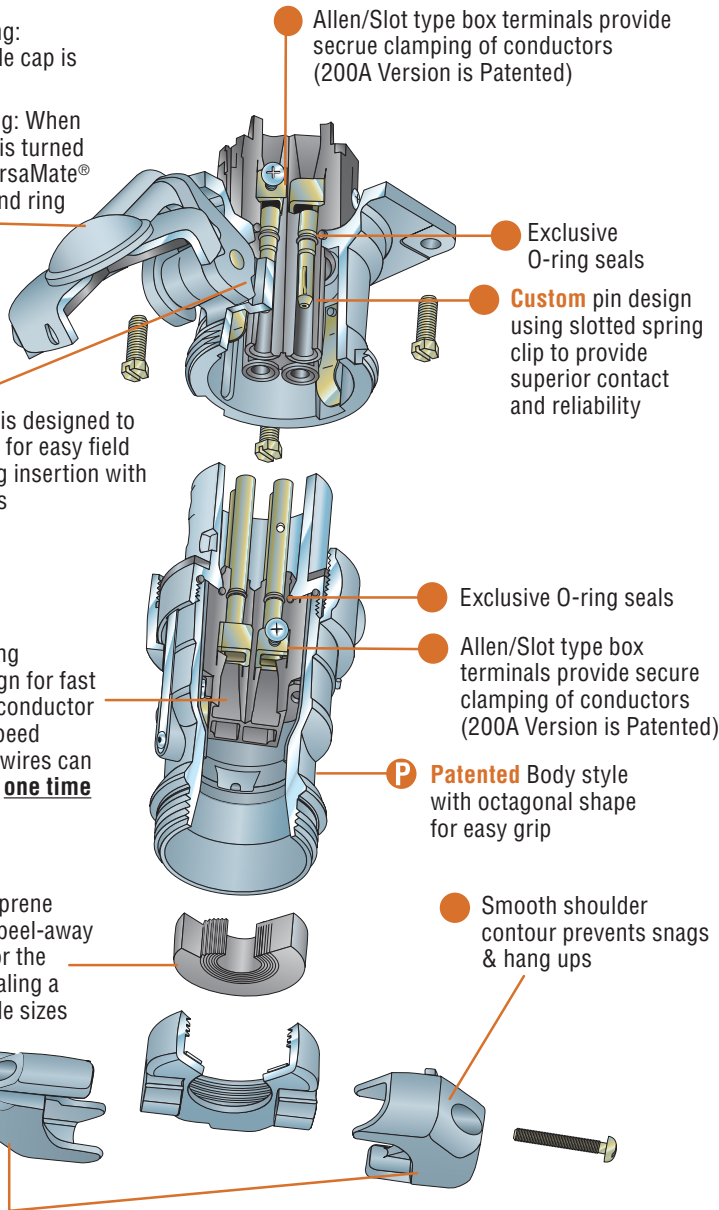
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• The VersaMate® Cable clamp system captures cable with four grip points using only two tightening screws. Provides secure grip without damaging the cable insulation

• **Unique VersaMate® Feature**
The VersaMate Line is designed for the industrial customer based on engineering and user surveys

P **Denotes Patented Feature**

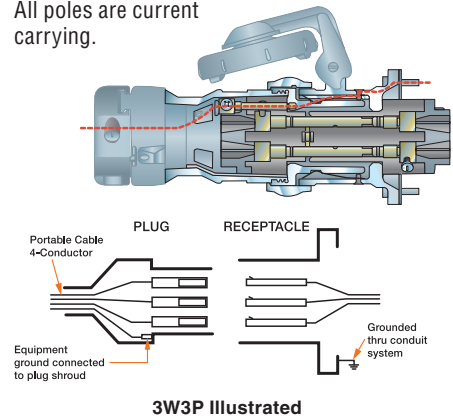


Grounding:

To minimize the danger of electrical shock when utilizing portable equipment, the National Electrical Code requires exposed metal parts be grounded if operated at more than 150 volts to ground. The VersaMate® plug & receptacle system is available in two grounding styles. Please note Style I and II devices cannot be intermated.

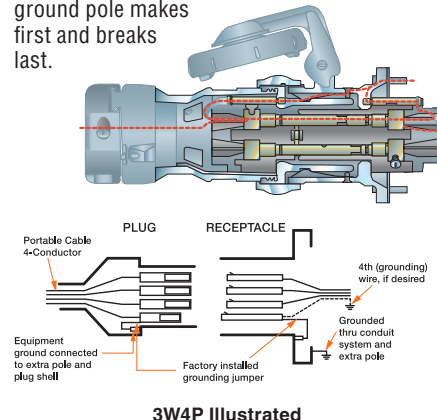
Style I

In a Style I plug, the cable's ground conductor is bonded to the plug housing by means of solderless connector. The receptacle is grounded by being part of a grounded conduit system. Upon insertion, detent springs in the receptacle housing contact and ground the plug housing before current carrying poles. All poles are current carrying.



Style II

In a Style II plug, the cable's ground conductor is bonded to the extra grounding pole and to the plug housing via a bonding jumper. The receptacle has a matching grounding pole connected to the system ground conductor which is further tied to the grounded conduit system via a bonding jumper. Upon insertion, detent springs in the receptacle housing contact and ground the plug housing; then the extra long ground pole connects before the current carrying poles engage. The Style II ground pole makes first and breaks last.

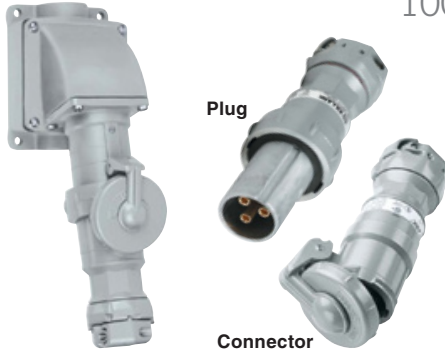


RECEPTACLES

VERSAMATE® SERIES



100A SELECTION INFORMATION



Plug

Connector



Original or AT Terminals. See PR3 for more information

• 100 Amp 600VAC/250VDC; 50-400 Hertz
NEMA 3, 4, 4X^①

Wire Range

Regular Stranding: #4 - #2 original style or "AT" type
(Includes Type P marine)
Extra flex: #4 - #2 original style or "AT" type

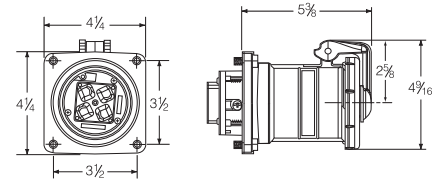
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FEATURES-SPECIFICATIONS

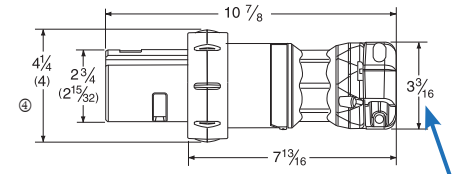
100 AMP PLUGS & CONNECTORS						
GROUND STYLE	CIRCUIT	GROMMET RANGE	CATALOG NUMBER			
			PLUG		CONNECTOR	
			ORIG.	AT	ORIG.	AT
Style I	2W2P	.88 - 1.68 IN	VP10277	VP1022	VPR10257	VPR1022
	3W3P	.88 - 1.68 IN	VP10377	VP1033	VPR10357	VPR1033
	4W4P	.88 - 1.68 IN	VP10477	VP1044	VPR10457	VPR1044
Style II	2W3P	.88 - 1.68 IN	VP10387	VP1023	VPR10367	VPR1023
	3W4P	.88 - 1.68 IN	VP10487	VP1034	VPR10467	VPR1034



Receptacle

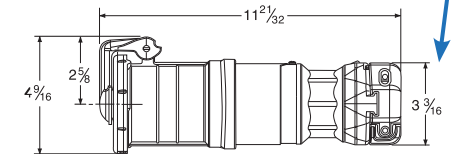


Plug



VersaMate® clamps provide a firm fit for one plug (or connector) over a wide range of cable diameters (competitors often need two - requiring additional sizing decisions).

Connector



MODIFICATIONS*	
CATALOG NUMBER	DESCRIPTION
S39	Reverse service for receptacles, plugs & connectors
S37	Polarization for receptacles, plugs & connectors

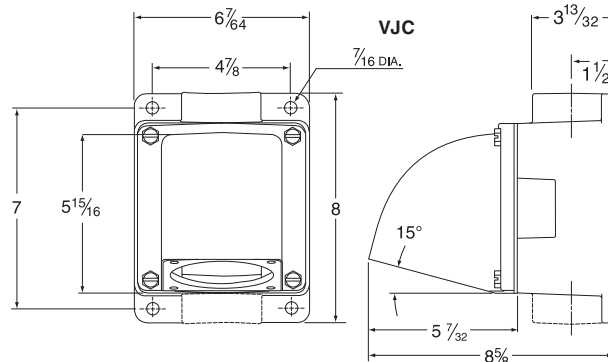
* See page PR3 for more information on these options.

100 AMP RECEPTACLES & BACK BOXES							
GROUND STYLE	CIRCUIT	CATALOG NUMBER					
		E ^② TYPE DEAD END		C ^② TYPE FEED THRU		RECEPTACLE ONLY	
		ORIG.	AT	ORIG.	AT	ORIG.	AT
Style I	2W2P	VR1021E5	VR1022E5	VR1021C5	VR1022C5	VR1021	VR1022
	3W3P	VR1031E5	VR1033E5	VR1031C5	VR1033C5	VR1031	VR1033
	4W4P	VR1041E5	VR1044E5	VR1041C5	VR1044C5	VR1041	VR1044
Style II	2W3P	VR1032E5	VR1023E5	VR1032C5	VR1023C5	VR1032	VR1023
	3W4P	VR1042E5	VR1034E5	VR1042C5	VR1034C5	VR1042	VR1034
Splice box only ^③		VJ57	VJ57	VJC57	VJC57	VJA100*	VJA100*

* Angle adapter only

- ① Components are intermateable & UL classified with other UL1686 configured devices (when installed in accordance with instructions furnished with device). Assemblies containing components from other manufacturers would have the NEMA type rating of the lowest rated device.
- ② 100 Amp Back Boxes are available in 1", 1-1/4", 1-1/2" & 2" conduit sizes. Size listed above is 1-1/2". For other available sizes, change the BOLD "5" in either the assembly or box only number as follows: **3**=1", **4**=1-1/4", **5**=1-1/2", **6**=2". Assembly catalog numbers are listed for ease of ordering or specification and devices are shipped as components.
- ③ 100 Amp Boxes & Adapters also fit 60 Amp receptacles. Adapter only can be used to attach receptacle at an angle to a standard sheet metal box.
- ④ Dimensions in () are 3 pole devices; balance are 4 pole.

Back Box Dimensions



Feed through style shown