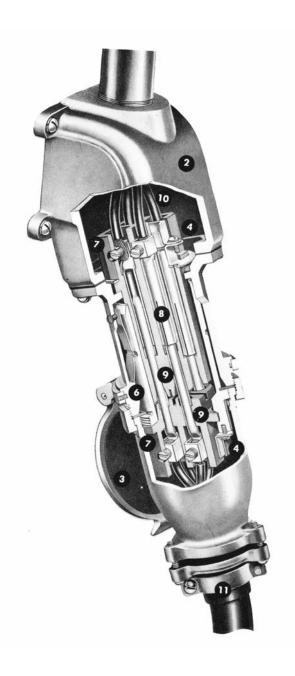


30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

### Design Features

### J-Line Load Breaking Plugs, Connectors and Receptacles



- 1. Circuit interrupting rated safety.
- Cast aluminum, corrosion resistant copper free alloy housings and enclosures provide light weight and maximum corrosion resistance, along with electrostatic epoxy powder coat finish.
- Quick conversion between weathertight flap cover and watertight screw cap assemblies. Basic receptacle housing accommodates both covers and is the basic component of all complete units. All watertight configured plugs may be used interchangeably.
- 4. Two grounding arrangements (Style No. 1 and Style No. 2).
- Four Complete J-Lines
   30, 60, 100 and 200 Amps, 600 Volts, A.C. 250
   Volts, D.C. (plus 150A/270A specials)
- Flap cover can be rotated and locked in any convenient position.
- 7. Pressure type solderless wiring terminals.
- 8. Silver plated contacts.
- One-piece interior assemblies.
   Interchangeable from regular to reverse service in the field with a screwdriver.
- 10. Wiring space Ample for maximum requirements.
- Cable Clamps
   Adjustable, for maximum range of cable size. Oil
   resistant neoprene strain-relief bushing
   compresses around cable tightly, prevents entry of
   dust and moisture.
- 12. Polarization
  Provides positive non-interchangeability for different electrical systems.
- 13. Reversed contacts flexibility male-female reversed installation within any housing.



30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

### **Polarization**



### Conversion To Weathertight and Watertight Types



Substitution of either the flap cover assembly or the screw cap assembly on the housing of the basic receptacle permits quick and easy conversion between the weathertight and watertight types. Only a small screwdriver is needed to change in the field.

The basic receptacle housing is constructed with a threaded end to accommodate a screw cap or the collar nut of a watertight plug. A special groove above the threads



accommodates the flap cover assembly. The flap cover assembly may be rotated around this grooved shell and the set-screw locked in any convenient position.

The watertight plug, with its collar screwed firmly to the basic receptacle shell, forms a completely watertight connection on either type of receptacle assembly.

These conversion features also permit the use of flap cover or screw cap on connector housings.

30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

### **Reversed Contacts Service**

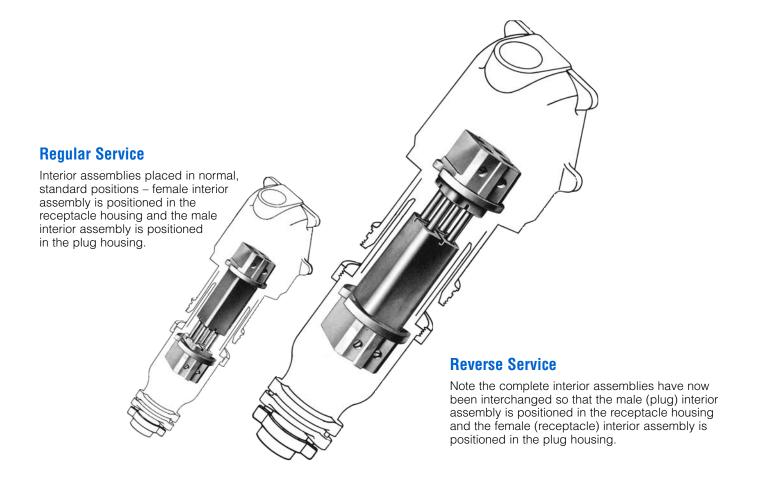
#### For all Weathertight and Watertight types

All J-Line plugs, receptacles and connectors can be furnished for Reverse Service – male (plug) interiors in the receptacles and female (receptacle) interiors in the plugs. When ordering reverse service add a final suffix "R" to the complete catalog number. Price on application.

Example: JRFA334HR

J-Line receptacle and plug interior assemblies of the same amperage may be quickly interchanged from regular to reverse service (or vice versa) in the field. A screwdriver is the only tool required.

Example: Panel mounted low profile receptacles with male interiors act as Male Inlets in remote equipment; receive power from "Female Plugs". (Cup cap also recommended).



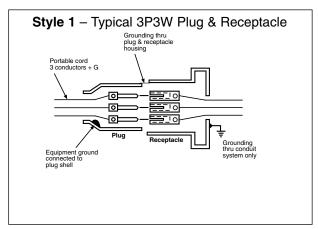


30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

### **Grounding Data**

Effective grounding of portable electric equipment is necessary to protect operators from electric shock. The National Electrical Code requires that in most cases exposed non-current-carrying metal parts of portable equipment shall be grounded if operated at more than 150 volts to ground. Grounding must be used in other than residential occupancies when used in damp or wet

locations, or by persons standing on the ground or on metal floors or working inside of metal tanks or boilers, except where supplied through an insulating transformer with ungrounded secondary of not over 50 volts. Plugs and receptacles provide for grounding of portable equipment in either of two ways:



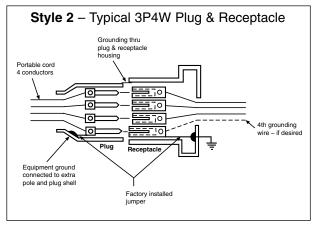
### STYLE 1

#### 4P4W (or 3P3W)

#### Through Metal Housings of Plug and Receptacle

In this system shown above, the equipment grounding conductor in the flexible cable is electrically connected directly to the plug or cable connector housing by a suitable terminal. The receptacle is grounded by being part of a grounded conduit system.

When inserted, the plug housing makes contact with the grounded receptacle or connector housing by means of the receptacle ground spring before the current-carrying contacts engage. On withdrawal, it remains in contact until after the current-carrying contacts disengage.



#### STYLE 2

#### 3P4W (or 2P3W)

# Through a Separate Grounding Pole in Plug and Receptacle

In this system shown above, the equipment grounding conductor in the flexible cable is electrically connected to the equipment grounding pole in the plug or cable connector interior. The grounding pole of the receptacle interior is electrically connected by a spring strap jumper to the receptacle housing which itself is grounded by being part of the ground spring of the receptacle or connector housing as described in system number one.

The grounding contact in a type 2 receptacle is longer than the current-carrying contacts so that the ground connection makes first and breaks last.

**Corrosive Locations:** The National Electrical Code requires that under conditions favorable to corrosion, the grounding conductor for enclosures and equipment be of copper or other corrosion-resistant material. In alternating current systems, this necessitates running another conductor back to the common grounding electrode. This may be run

through the conduit containing the circuit conductors. At the receptacle, this grounding conductor should be connected to the extra (grounding) pole by the pressure connector provided for that purpose. Where such an extra grounding conductor is required, Style 2 receptacles should be used.



30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

# Receptacle Mounting Options – J-Line Construction

### **Progressive Assembly**

Mounting			Current Rating						
Style	To Order Use:	30 Amp	60 Amp	100/150 Amps	200/270 Amps				
Standard Series	Receptacle	Basic Receptacle*	Basic Receptacle*	Basic Receptacle*	Basic Receptacle*				
JRFA/JRSA □	<b>◎</b> \$ +	+	+	+	+				
	Vertical or Square Mount Box + Angle Adapter	JB3 1" Std. Conduit Size + JAA3 (20°) or JAA3-45 (45°)	JB6 1½" Std. Conduit Size + JAA6-AB6 (20°) or JAA6-45 (45°)	JB10 2" Std. Conduit Size + JAA10 (20°) or JAA10-45 (45°)	JB20 3" Std. Conduit Size + JAA20 (20°) or JAA20-45 (45°)				
Series	Receptacle	Basic Receptacle*	Basic Receptacle*	Basic Receptacle*	Basic Receptacle*				
JRFR/JRSR □ Straight	+	+	+	+	+				
	Vertical Mount Box + Straight Adapter	JB3 1" Std. Conduit Size + JRA3	JB6 1½" Std. Conduit Size + JRA6-AB6	JB10 2" Std. Conduit Size + JRA10	JB20 3" Std. Conduit Size + JRA20				
Series JRFB/JRSB □	Receptacle	Basic Receptacle*	Basic Receptacle*	Basic Receptacle*	Basic Receptacle*				
	+ 30° Angle Adapter	+ JAAB3	+ JAAB6	+ JAAB10	+ JAAB20				
Series	Receptacle	Basic Receptacle*	Basic Receptacle*	Basic Receptacle*					
JRFE/JRSE □	+	+	+	+	N/A				
	Angle Enclosure	JE3 1" Std. Conduit Size	JE6 1½" Std. Conduit Size	JE10 2" Std. Conduit Size					
Series JRFH/JRSH	Receptacle +	Basic Receptacle*							
Horizontal	Horizontal Mount Box + Angle Adapter	JB3 1" Std. Conduit Size + JHA3 (20°)	N/A	N/A	N/A				

<sup>\*</sup> Select appropriate receptacle by rating, configuration and voltage on Page 07.

□ Note: JRXX 3rd letter denotes Flap (F) or Screw (S) Cover.

STAN - Screw Cover

JRFA - Flap Cover

JRF - Flap Cover, Basic Receptacle

JRS - Screw Cover, Basic Receptacle



# **J-Line** Interconnection Systems – Ordering Information

30-270 Amp, (30, 60, 100 and 200 Amp Load Breaking 150 and 270 Amp Special Service) Maximum 600 VAC/250 VDC Receptacles, Plugs, Connectors & Inlets

For any J-Line catalog numbers not shown here, check page 05 for "Series" information

For special polarizations (suffixes) contact Technical Services.

### Max. 600VAC / 250VDC



		watertight screw collar)	
Current Rating	Weathertight / Watertight	Configuration	
			□▼
		2P3W	JPS323H
	Weathertight	3P3W*	JPS333F
	(Spring Hinged Flap Cover)	3P4W	JPS334H
30 Amp		4P4W*	JPS344F
		2P3W	JPS323H
	Watertight	3P3W*	JPS333F
	(Screw Cover)	3P4W	JPS334H
		4P4W*	JPS344F
		2P3W	JPS623H
	Weathertight	3P3W*	JPS633F
	(Spring Hinged Flap Cover)	3P4W	JPS634H
60 Amp	(1 5 5 1 )	4P4W*	JPS644F
		2P3W	JPS623H
	Watertight	3P3W*	JPS633F
	(Screw Cover)	3P4W	JPS634H
	(53.51. 55.51)	4P4W*	JPS644F
		2P3W	JPS1023H
	Weathertight	3P3W*	JPS1033F
	(Spring Hinged Flap Cover)	3P4W	JPS1034H
100 Amp	(opining similar surpression)	4P4W*	JPS1044F
150 Amp)**		2P3W	JPS1023H
100 /unp)	Watertight	3P3W*	JPS1033F
	(Screw Cover)	3P4W	JPS1034H
	(ddiew ddver)	4P4W*	JPS1044F
		2P3W	JPS2023H
	Weathertight	3P3W*	JPS2033F
	(Spring Hinged Flap Cover)	3P4W	JPS2033F
200 Amp	(Spring riniged riap Gover)	4P4W*	JPS2044F
· -			
270 Amp)**	Water timb	2P3W	JPS2023H
	Watertight	3P3W*	JPS2033F
	(Screw Cover)	3P4W	JPS2034H
		4P4W*	JPS2044F

<sup>\*</sup> Housing Ground Only (Style 1 Grounding) see page 04.

Note: To order Reverse Service add a final suffix "R" to catalog number. Examples: JRFA334HR — a receptacle housing with male interior.

- Polarization index (std. shown) Consult Technical Services for more.
- ♦ Flap Cover "F" noted. Screw Cover "S" also available
- ▼ For Reversed Contacts, use "R" suffix to any catalog number.

#### Std. Cable Bushing

<b>Current Rating</b>	Bushing I.D.	Max. AWG Size
30	7/8"	#6 - 7 strand or #8 flexible
60	13/16"	#4 - 7 strand or flexible
100	1½"	#0 - 19 strand or #1 flexible
200	2"	#4/0 - 19 strand or flexible

(see page 11 for other bushings)

Shown with 20° angle adapter. Can be furnished with 45° angle at same price. When ordering add suffix -45 to catalog number.

<sup>\*\*</sup> Special rated devices (not shown). Consult customer service for details.



# **J-Line** Interconnection Systems – Ordering Information

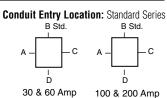
30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

Connectors		Receptacles	
	Panel Mount	Basic Receptacle	Standard Series*
<b>→</b> □▼	<b>♦</b> □▼	• □▼	<b>→</b> □▼
JCF323H	JRFX323H	JRF323H	JRFA323H
JCF333F	JRFX333F	JRF333F	JRFA333F
JCF334H	JRFX334H	JRF334H	JRFA334H
JCF344F	JRFX344F	JRF344F	JRFA344F
JCS323H	JRSX323H	JRS323H	JRSA323H
JCS333F	JRSX333F	JRS333F	JRSA333F
JCS334H	JRSX334H	JRS334H	JRSA334H
JCS344F	JRSX344F	JRS344F	JRSA344F
JCF623H	JRFX623H	JRF623H	JRFA623H
JCF633F	JRFX633F	JRF633F	JRFA633F
JCF634H	JRFX634H	JRF634H	JRFA634H
JCF644F	JRFX644F	JRF644F	JRFA644F
JCS623H	JRSX623H	JRS623H	JRSA623H
JCS633F	JRSX633F	JRS633F	JRSA633F
JCS634H	JRSX634H	JRS634H	JRSA634H
JCS644F	JRSX644F	JRS644F	JRSA644F
JCF1023H	JRFX1023H	JRF1023H	JRFA1023H
JCF1033F	JRFX1033F	JRF1033F	JRFA1033F
JCF1034H	JRFX1034H	JRF1034H	JRFA1034H
JCF1044F	JRFX1044F	JRF1044F	JRFA1044F
JCS1023H	JRSX1023H	JRS1023H	JRSA1023H
JCS1033F	JRSX1033F	JRS1033F	JRSA1033F
JCS1034H	JRSX1034H	JRS1034H	JRSA1034H
JCS1044F	JRSX1044F	JRS1044F	JRSA1044F
JCF2023H	JRFX2023H	JRF2023H	JRFA2023H
JCF2033F	JRFX2033F	JRF2033F	JRFA2033F
JCF2034H	JRFX2034H	JRF2034H	JRFA2034H
JCF2044F	JRFX2044F	JRF2044F	JRFA2044F
JCS2023H	JRSX2023H	JRS2023H	JRSA2023H
JCS2033F	JRSX2033F	JRS2033F	JRSA2033F
JCS2034H	JRSX2034H	JRS2034H	JRSA2034H
JCS2044F	JRSX2044F	JRS2044F	JRSA2044F

Conduit Size: (Using JPA\_ Series Conduit Adapters)

Current Rating	Std. Size	Max. Size		
30	1"	11/4"		
60	1½"	1½"		
100	2"	2"		
200	3"	3"		

<sup>\*</sup> Smaller NPT openings available on request. **Cable Conduit Adapters:** see page 12.

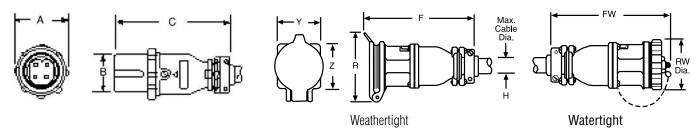




# **J-Line** Interconnection Systems – Dimensions

30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

# **Plugs and Connectors**

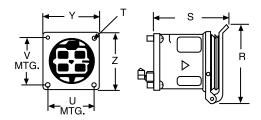


Watertight Male - Plug

Female - Connector

Dimens	Dimensions for 2, 3 or 4 wire Weathertight and Watertight Units										
Amp	A	В	C	Weathertight F	Watertight FW	Weathertight R	Watertight RW	Υ	Z	н	
30	3"	21/8"	7"	81/8"	8¾"	41⁄4"	3"	2¾"	2¾"	1	
60	3¾"	29/16"	8%"	10¾"	10%"	5"	3¾"	3½"	3½"	33/8"	
100/150	41/8"	213/16"	101/4"	10½"	10%"	51⁄4"	41/8"	4"	4"	1%"	
200/270	5¾"	315/16"	14%"	14%"	15%"	71⁄8"	5¾"	55%"	5%"	21/2"	

# **Basic Receptacles**



Dimen	Dimensions for 2, 3 or 4 wire Units										
Amp	Z	Υ	Х	Weathertight S	Watertight SW	Weathertight R	Watertight RW	V	U	Т	
30	2¾"	2¾"	1	3%"	3¾"	41/4"	3"	21/4"	21/4"	1/4"	
60	31⁄2"	3½"	11/4"	45%"	4¾"	5"	3¾"	2%"	2%"	9/32"	
100/150	4"	4"	11⁄4"	5"	51⁄4"	51⁄4"	41/8"	3%"	3%"	9⁄32"	
200/270	5%"	55/8"	1¾"	61/8"	63/8"	71⁄8"	5¾"	4%"	47⁄8"	11/32"	



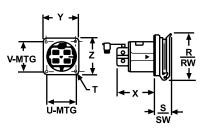
# **J-Line** Interconnection Systems – Dimensions

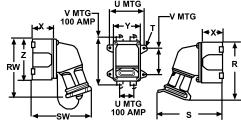
30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

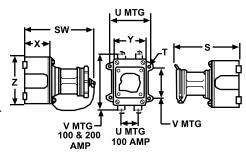
## **Panel Mount Series**

## Standard Series JRFA/JRSA

# Series JRFR/JRSR



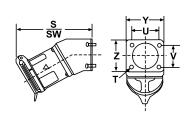


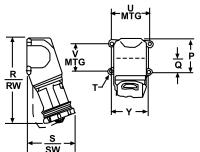


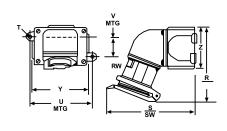
## Series JRFB/JRSB

# Series JRFE/JRSE

# Series JRFH/HRSH







						Weath	ertight							Panel
Amp	Series	Z	Υ	X	S	SW	R	RW	Q	P	V	U	T	Opening
	Panel Mount	3½"	3½"	2%6"	13/4"	2"	41/4"	3"	-	-	2%"	21/8"	1/4"	2¾"
	Standard (20°)	41/2"	3"	21/8"	7"	6½"	6¾"	6¾"	-	-	211/16"	311/16"	1/4"	-
30	JRFR/JRSR	41/2"	3"	21/8"	61/8"	6½"	-	-	-	-	211/16"	311/16"	1/4"	-
	JRFB/JRSB	31/8"	31/8"	_	5¾"	5¾"	-	_	-	-	21/4"	21/4"	1/4"	21/4"
	JRFE/JRSE	-	3½"	-	51/4"	45%"	71⁄8"	71/8"	11/4"	2¾"	-	4	1/4"	-
	JRFH/JRSH	35/16"	41/2"	21/8"	7"	61/2"	6%"	6%"	_	-	211/16"	311/16"	1/4"	_
	Panel Mount	4"	4"	3%"	1¾"	2"	5"	3¾"	_	-	3%"	3%"	9/32"	31⁄4"
	Standard (20°)	55%"	4"	3"	91/4"	85%"	8%"	9"	_	_	313/16"	413/16"	11/32"	-
60	JRFR/JRSR	5%"	4"	3"	8%"	81⁄2"	-	_	_	_	313/16"	415/16"	11/32"	-
	JRFB/JRSB	3¾6"	3%"	_	7%"	73/8"	-	_	-	-	23/16"	25/8"	9/32"	21/2"
	JRFE/JRSE	-	41/4"	-	6%"	5¾"	9¾"	91⁄2"	1%6"	311/16"	31⁄8"	41/2"	%2"	-
	Panel Mount	41/4"	41/4"	4 7/16"	13/4"	2"	51/4"	41/8"	_	_	35%"	35%"	9/32"	3½"
	Standard (20°)	5½"	5½"	3½"	10½"	9%"	9%"	9¾"	-	-	6¾"	41/4"	11/32"	-
100/150	JRFR/JRSR	5½"	5½"	3½"	111/4"	11%"	-	_	_	_	6¾"	41/4"	11/32"	-
	JRFB/JRSB	3¾6"	35%"	-	81/4"	81⁄4"	-	-	-	-	23/16"	2%"	9/32"	-
	Panel Mount	6"	6"	5%"	2"	2½"	71/8"	5¾"	_	_	51⁄4"	51/4"	11/32"	51/8"
	Standard (20°)	85/16"	85/16"	65/16"	15%"	15%"	1211/16"	125/16"	_	-	95%"	71/8"	3/8"	_
200/270	JRFR/JRSR	85/16"	85/16"	65/16"	15"	151/2"	_	_	-	-	95%"	71/8"	3/8"	_
	JRFB/JRSB	4"	4"	-	121⁄4"	121⁄4"	-	-	-	-	2¾"	2¾"	11/32"	_

Note: U = horizontal mounting hole centers; V = vertical mounting hole centers



# **J-Line** Interconnection Systems – Accessories

30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

### **Replacement Interiors**

For Receptacles, Connectors, Plugs & Male Inlets



Female Interiors: Receptacles & Connectors



Male Interiors: Plug & Male Inlets

Poles/Wires	30 Amp	60 Amp	100/150 Amp	200/270 Amp	30 Amp	60 Amp	100/150 Amp	200/270 Amp
+ 2P2W	JRU322	JRU622	JRU1022	JRU2022	JPU322	JPU622	JPU1022	JPU2022
2P3W	JRU323	JRU623	JRU1023	JRU2023	JPU323	JPU623	JPU1023	JPU2023
* 3P3W	JRU333	JRU633	JRU1033	JRU2033	JPU333	JPU633	JPU1033	JPU2033
3P4W	JRU334	JRU634	JRU1034	JRU2034	JPU334	JPU634	JPU1034	JPU2034
* 4P4W	JRU344	JRU644	JRU1044	JRU2044	JPU344	JPU644	JPU1044	JPU2044

<sup>\*</sup>Includes equipment grounding lug for attachment to enclosure.

Material - Molded composition with silvered copper contacts.

## **Cup Caps**

For Watertight (Series JPS) Plugs - Standard or Reverse Service



Amperes	Cat. No.
30	F30717A
60	F30718A
100	F30814A
200	F30815A

Cup Caps are used:

Material – cast aluminum, corrosion-resistant copper-free alloy, electrostatic epoxy coated with steel braid cable attached.

<sup>+</sup>For replacement only – includes equipment grounding lug.

<sup>\*</sup>Where portable equipment is on a standby basis and plugs are not in use.

<sup>\*</sup> To effectively protect insulation and contacts from excessive moisture, dirt, dust and corrosion.



# **J-Line** Interconnection Systems – Accessories

30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

## **Cable Bushings**

#### For J-Line Plugs and Connectors

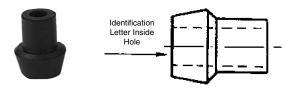
Boxed catalog numbers are standard bushing sizes. To order non-standard bushing, specify as follows: example JPS634H/JG65

Hole Diameter for Cable	30 Amp	60 Amp	100/150 Amp	200/270 Amp
.375"	JG31			
.500"	JG32			
.563"	JG325			
.594"	JG32B			
.625"	JG33	JG63		
.750"	JG34	JG64	JG104	
.781"	JG341			
.875"	JG35	JG65	JG105	
.938"	JG355			
1.000"	JG36*	JG66	JG106	JG206
1.125"	JG361*			
1.188"		JG67	JG107	JG207
1.313"			JG108	JG208
1.375"		JG69*		
1.500"		JG610*	JG1010	JG2010
1.688"			JG1011	JG2011
1.813"				JG2012
1.875"			JG1013*	
2.000"				JG2014
2.125"				JG2015
2.500"				JG2016*

#### Notes:

Boxed numbers denote standard bushing size supplied. When ordering, select bushing size slightly larger than your cable O.D. for best fit. **Material** – Neoprene

#### **Standard Cable Bushings:**



Size No. 3 - 6 - 10 and 20

#### \* Oversize Cable Bushings:





# **J-Line** Interconnection Systems – Accessories

30-200/270 Amp, (30-200A Load Breaking) Maximum 600 VAC/250 VDC Load Breaking Receptacles, Plugs, Connectors & Inlets

## Adapters for Conduit and Fittings

#### For use on J-Line Plugs and Connectors

Adapters are tapped NPT standard pipe thread to accommodate rigid conduit or standard connectors for armored and non-metallic cable or flexible conduit.



JPA 64 Conduit Adapter (replaces cable gland assembly)

Plug or Connector Sizes										
<b>30 Amp</b>	Tapped Hole	<b>60 Amp</b>	Tapped Hole	<b>100/150 Amp</b>	Tapped Hole	<b>200/270 Amp</b>	Tapped Hole			
Cat. No.	Size NPT	Cat. No.	Size NPT	Cat. No.	Size NPT	Cat. No.	Size NPT			
JPA31	½"	JPA62	3¼"	JPA104	1½"	JPA205	1½"			
JPA32	¾"	JPA63	1"	JPA105	1½"	JPA206	2"			
JPA33	1"	JPA64	11¼"*	JPA106	2"	JPA207	2½"			

#### Notes:

**Material** — cast aluminum, corrosion-resistant copper-free alloy, electrostatic epoxy coated. Furnished complete with gasket and screws.

To specify standard plugs or connectors equipped with one of the above adapters, add the catalog number of the adapter selected to the catalog number of the plug or connector. Complete list price is the list price of the device plus list price of the adapter.

**Example:** Cat. No. JPS634H with adapter tapped 1-inch would be Cat. No. JPS634H/JPA63.

### **Covers**

### For Connectors & Receptacles

Description	Amperage	Cat. No.
Flap Cover Assembly (Weathertight)	30 60 100/150 200/270	JFC3 JFC6 JFC10 JFC20
Screw Cap and Braid Cable Assembly (Watertight)	30 60 100/150 200/270	JSC3 JSC6 JSC10 JSC20





<sup>\*</sup>JPA65 @ 1½" also available.