

## PLM • Cable Coupler Selection Guide

### PORTABLE CABLE SYSTEMS COUPLERS/PLUGS-RECEPTACLES CABLE COUPLERS IDENTIFICATION & APPLICATION

Basic nomenclature identifies the metallic shell (Plug or Socket) first, the type of contact (Male or Female) second. For switchgear or other non-cable mounted units, the letter G suffix designation is added. Example of the PLM Catalog number system is as listed:

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| <b>PMG 415A</b> | Plug, male contacts, switchgear mount, with ground check contact.       |
| <b>PML 415A</b> | Plug, male contacts, line mount, with ground check contact.             |
| <b>SFL 415A</b> | Socket, female contacts, line mount, with ground check contact.         |
| <b>SFG 415A</b> | Socket, female contacts, switchgear mounted, with ground check contact. |

### PLM CABLE COUPLER SELECTION GUIDE

**\* Thread**

\*Q Prefix PLM Quick Thread style double start Acme thread

T Quick Turn Ramp Style

B Bolted Quick-Flip

X Permissible

Blank Standard Thread

**Housing**

S Socket  
P Plug

**Contacts**

F Female  
M Male

**Mounting**

G Gear Mount  
L Line Mount

**VOLTAGE CLASS & END BELL SIZE**

Fiberglass Insulator **475 or 575**

EPDM Insulator **415 or 515 Dura-Tube**

Nylon Polymer Insulator **055 X Series Permissible**

**Ground Check**

A One Contact Included

AA Two Contacts

AAA Three Contacts

AAAA Four Contacts

**ADDED FEATURES**

-B Interlock contacts in cover for plug

-BB Interlock contacts in cover for socket

-C Kirklock sockets only

-D Pan skid mount

-L Insulation in plug cover

-N Non-interchangeable amperage or voltage index

-P Padlock provision socket

-R Insulation in socket cover

-TF Teflon Insulator

-Z Beryllium contacts

**EXAMPLE**

**Q P M L 4 1 5 A B**

Quik Thread Plug Male Contacts Line Mount Dura-Tube Insulator One Ground Check Connector Interlock Cover For Plug

**To Order, Provide:**

- Conductor sizes of phase, ground wires, and ground check wire.
- Overall cable diameter.

#### Applications

- Extending Portable Cables
- Mine Power Centers
- Electric Shovels, Drills, Draglines
- Tunneling Machines
- Transformer Connections
- Barge, Ship-Dock Applications
- Turbine Generators
- Motor Disconnect 600V-15kV to 500 Amp
- Filling Compounds

#### Features

- Corrosion-Resistant Aluminum
- Electrically Tested Insulator
- Silver-Plated Copper Contacts
- Ground Check System
- Portable Cable Connections
- Switchgear or Equipment Mounting
- Standard Cover Included
- FSD Terminations Included
- Interlock Covers Available

#### Benefits

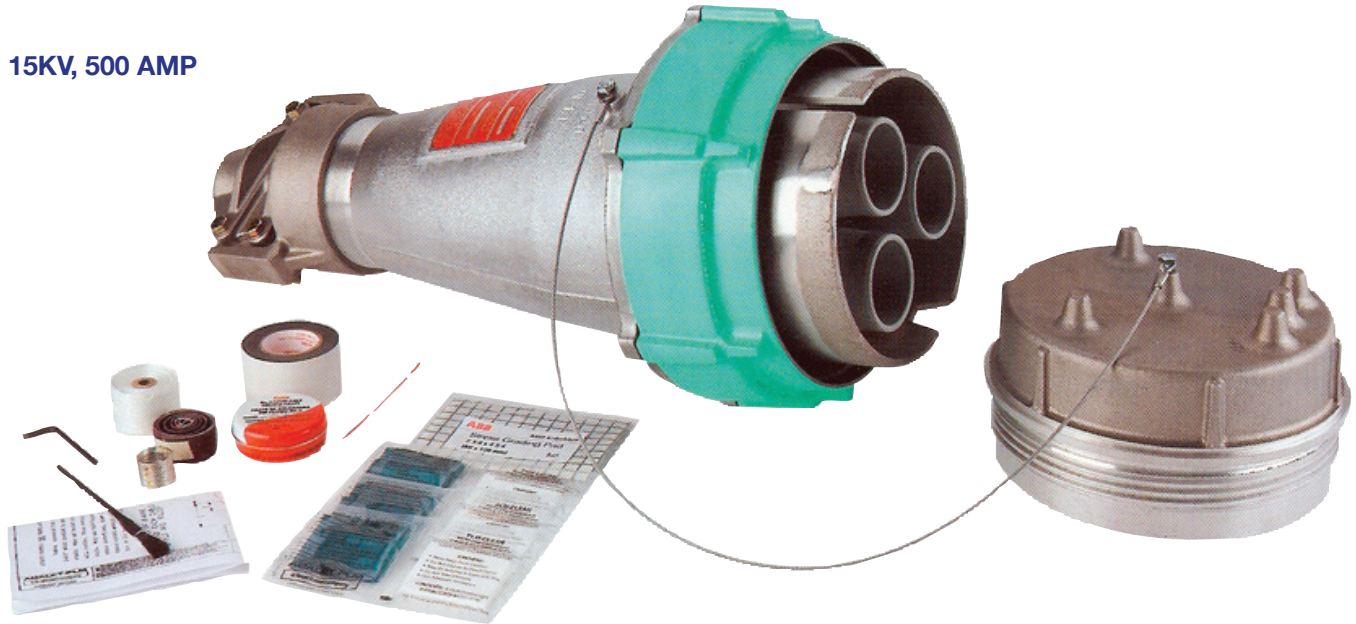
- Physical, Electrical Protection
- Quick, Connect-Disconnect
- Provides Proper Phase Alignment
- Longer Coupler Life
- Entirely Watertight
- Easy Installation

#### Compliance

- Pennsylvania Bureau of Deep Mine Safety

## PLM • 415/515 Series Cable Couplers (Standard EPDM Insulators)

15KV, 500 AMP



### OPTIONS AVAILABLE AT ADDITIONAL COST

#### Catalog Number Suffix

#### Additional Options

|     |                                               |
|-----|-----------------------------------------------|
| -A  | Ground check circuit contact (1) included     |
| -AA | Two ground check circuit contacts             |
| -B  | Cover interlock for plug                      |
| -BB | Cover interlock for socket                    |
| -C  | Kirk interlock (key type)-sockets only        |
| -E  | Electrolytic copper contacts-female           |
| -L  | Cover/insulator assembly for plug             |
| -N  | Non-interchangeable amperage or voltage index |
| -P  | Padlock provision-socket                      |
| -R  | Cover/insulator assembly for socket           |
| -Z  | Beryllium contacts-male                       |
| -TF | Teflon Insulator                              |

#### Features

- Corrosion-resistant aluminum
- Rigid, non-breakable EPDM insulators
- 500 Amp contacts
- Portable cable mounting
- Switchgear or equipment mounting
- Standard cover, stress control kit instructions included

#### Benefits

- Superior electrical and physical protection
- Fewer mating problems
- Quicker installation
- Quick connect-disconnect
- Versatile application

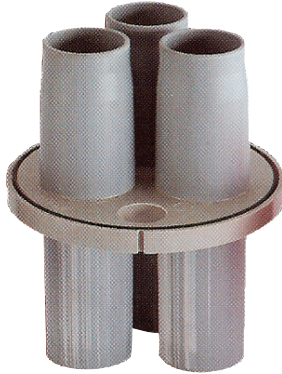
Compound is not included and is not required up to 7,500 volts. Above 7,500 Volts and when compound is required, use COLDPOUR® Compound. Do not use asphalt compound with EPDM style couplers. Compound mandatory for 15kv.

| Catalog Number<br>Standard Threads | Catalog Number<br>ACME Quick-Thread | Catalog Number<br>Quick-Turn | Catalog Number<br>Quick-Flip | Description                                                                                        | Ship Wt.<br>(lbs.) |
|------------------------------------|-------------------------------------|------------------------------|------------------------------|----------------------------------------------------------------------------------------------------|--------------------|
| SFG 415A<br>PMG 415A               | QSFG 415A<br>QPMG 415A              | TSFG 415A<br>TPMG 415A       | BSFG 415A<br>BPMG 415A       | Equipment mounted couplers<br>Socket, Female Contacts<br>Plug, Male Contacts                       | 34<br>34           |
| SFL 415A<br>PML 415A               | QSFL 415A<br>QPML 415A              | TSGL 415A<br>TPML 415A       | BSFL 415A<br>BPML 415A       | Line-mounted couplers<br>1.50 - 3.50 O.D. Cables<br>Socket, Female Contacts<br>Plug, Male Contacts | 51<br>51           |
| SFL 515A<br>PML 515A               | QSFL 515A<br>QPML 515A              | TSFL 515A<br>TPML 515A       | BSFL 515A<br>BPML 515A       | 3.50 - 4.50 O.D. Cables<br>Socket, Female Contacts<br>Plug, Male Contacts                          | 53<br>53           |

## PLM • Electrical Characteristics

### 415/515 Series Cable Couplers (Standard EPDM Insulators)

15KV, 500 AMP



#### Electrical Characteristics

- Maximum Voltage Phase-to-Ground
- 1 Minute Dry Withstand AC
- 6 Hour Dry Withstand DC
- 15 Minute Dry Withstand DC
- Corona Extinction level
- Basic Impulse level

#### No Compound

5.5 KV rms  
35.0 KV rms  
25.0 KV rms  
65.0 KV rms  
7.5KV rms  
75.0KV crest

#### With Compound

8.7 KV rms  
45.0 KV rms  
35.0 KV rms  
75.0 KV rms  
11.0 KV rms  
95.0 KV crest

*All tests per IEEE Standard 48-1990*

### 415/515 Series Cable Couplers (Teflon Insulators)

15KV, 500 AMP



#### Electrical Characteristics

- Maximum Voltage Phase-to-Ground
- 1 Minute Dry Withstand AC
- 6 Hour Dry Withstand AC
- 15 Minute Dry Withstand DC
- Corona Extinction Level
- Basic Impulse Level

#### No Compound

5.5 KV rms  
35.0 KV rms  
25.0 KV rms  
65.0 KV rms  
7.5KV rms  
75.0KV crest

#### With Compound

8.7 KV rms  
45.0 KV rms  
35.0 KV rms  
75.0 KV rms  
11.0 KV rms  
95.0 KV crest

*All tests per IEEE Standard 48-1990*

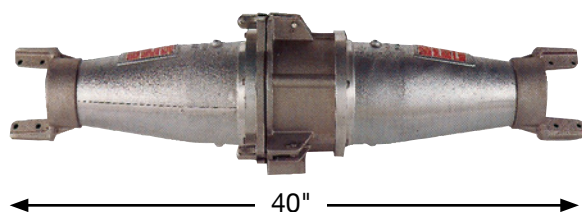
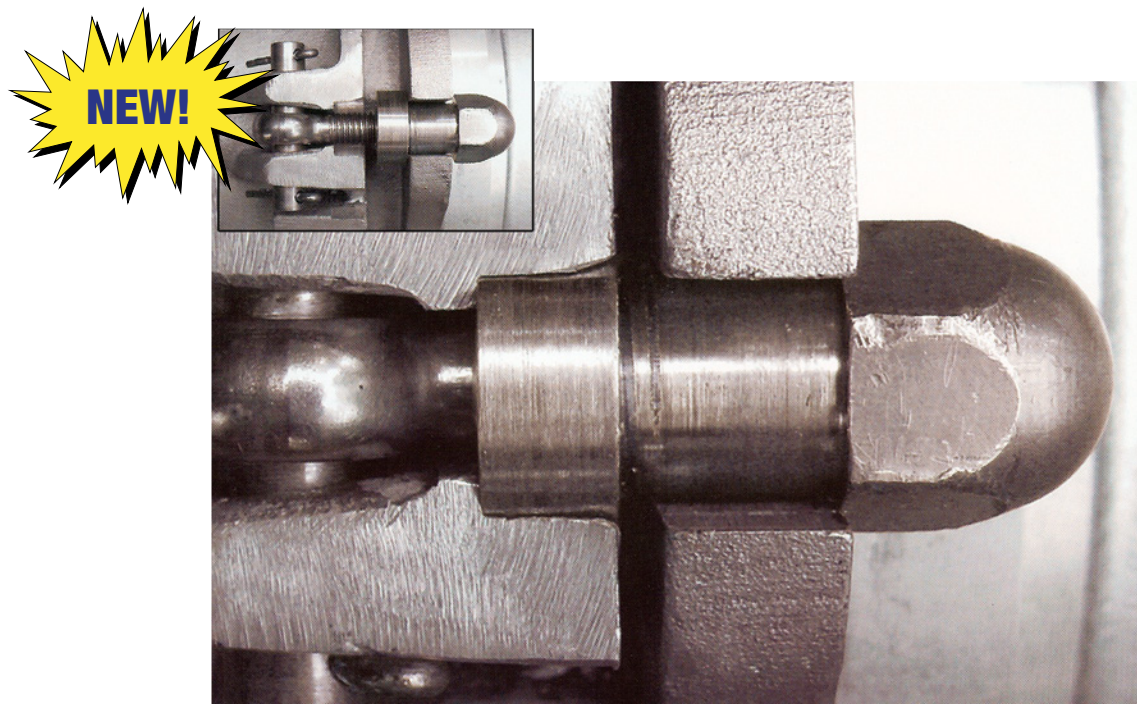
## PLM • Connection Options

### Quik-Flip Bolted Coupler Connection

PLM's new Quik-Flip connection option is ideal for harsh environments where excessive dirt and other contaminants can seize threads and cause coupler damage. The innovative flip-bolt design utilizes stainless steel bolts that provide a one-second time delay between ground check and phase contact disengagement.

#### OTHER OPTIONS (AVAILABLE ON 415/515 AND 475/575 SERIES COUPLERS)

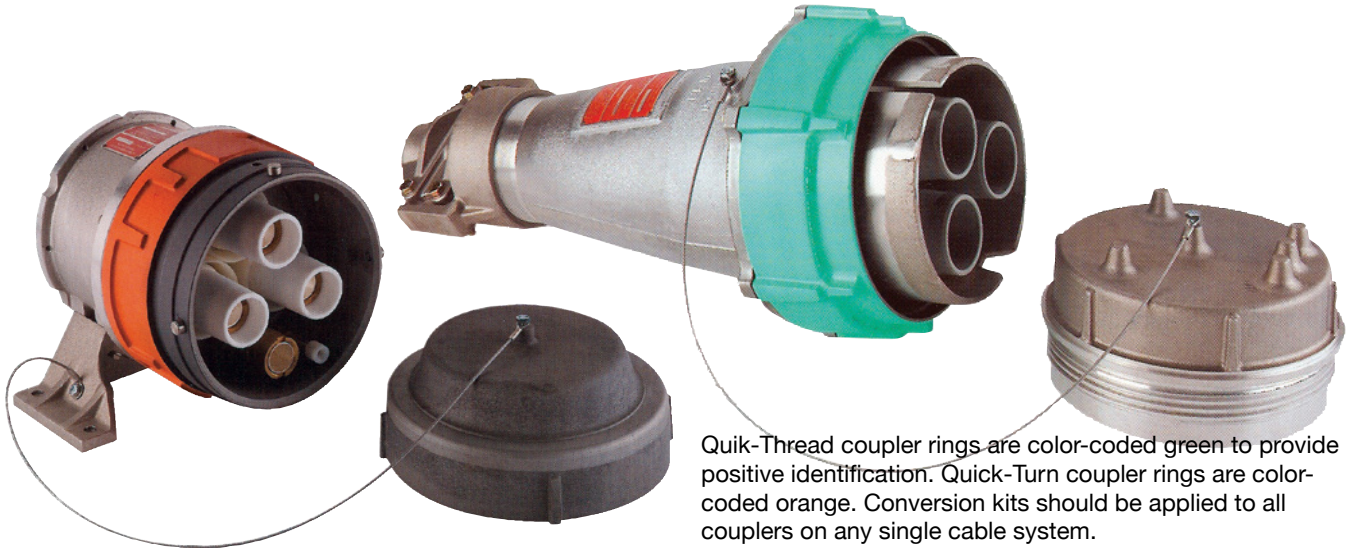
- B-Pitch Thread (standard)
- Quik-Thread Double-Start ACME Thread, (Color-Coded Green. (use prefix "Q" when ordering)
- Quik-Turn Ramp Style Quarter-Turn, Color-coded Orange. (use prefix "T" when ordering)



| Catalog Number<br>Quik-Flip<br>EPDM Insulators | Catalog Number<br>Quik-Flip<br>Teflon Insulators |
|------------------------------------------------|--------------------------------------------------|
| BSFG 415A<br>BPMG 415A                         | BSFG 415ATF<br>BPMG 415ATF                       |
| BSFL 415A<br>BPML 415A                         | BSFL 415ATF<br>BPML 415ATF                       |
| BSFL 515A<br>BPML 515A                         | BSFL 515ATF<br>BPML 515ATF                       |

## PLM • Conversion Kits QT

Any cable coupler, line mount or gear mount, may be converted to Quik-Thread, Quik-Turn, or Quik-Flip style. These style couplers will not mate with standard 8 pitch thread couplers; therefore, it is necessary to change the socket body, lock ring, and covers. Select the correct conversion plug or socket kit from the table below. Kits include only the thread parts which must be changed, plus new screws and gaskets.



| Catalog Number<br>Standard Threads           | Acme Thread Parts Furnished                                                                       | Description                                                                                                                                                                                                 |
|----------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>QKP-8</b><br><b>TKP-8</b><br><b>BKP-8</b> | Plug cover and lock ring                                                                          | Replacement for plug-style couplers. Includes plain cover (without drilling for pilot or ground contacts).                                                                                                  |
| <b>QKP-M/F-8</b><br><b>TKP-M/F-8</b>         | Plug cover (drilled for pilot and ground contacts) and left ring                                  | Replacement for plug-style couplers. Includes cover drilled for ground and pilot contacts (male or female), Customer to use existing contacts.                                                              |
| <b>QKP-M/F-15</b><br><b>TKP-M/F-15</b>       | Plug cover (drilled for pilot and ground contacts and for cover insulator assembly) and lock ring | Replacement for plug-style couplers. Includes over drilled for ground and pilot contacts (male or female) and for cover insulator assembly. Customer to use existing contacts and cover insulator assembly. |
| <b>QKS-8</b><br><b>TKS-8</b><br><b>BKS-8</b> | Socket cover and socket body                                                                      | Replacement for socket-style couplers. Includes over ring to be used with existing cover. Customer to use existing contacts.                                                                                |
| <b>QKS-M/F-8</b><br><b>TKS-M/F-8</b>         | Socket cover ring and socket body                                                                 | Replacement for socket-style couplers Includes cover ring to be used with existing cover and cover insulator assembly. Customer to use existing contacts.                                                   |
| <b>QKS-M/F-15</b><br><b>TKS-M/F-15</b>       | Socket cover ring and socket body                                                                 | Replacement for socket-style couplers Includes cover ring to be used with existing cover and cover insulator assembly. Customer to use existing contacts.                                                   |

## PLM • Accessories

### Coupler Contact Insulation (Cleaning Kit)

Compound filling can prevent condensation and provide added protection in wet locations. Asphaltic compounds cannot be used with EPDM insulation's. For those customers who may wish to use compound, ADALET offers a COLDPOUR® compound which does not require heating for installation or removal. Suitable for all couplers. No shrinkage or waste. Approximately 2-hour gel time.

| Catalog Number | Description                                                                                     | Ship Wt. (lbs.) |
|----------------|-------------------------------------------------------------------------------------------------|-----------------|
| CP-24          | 1-5/8 gal. 2-part mix for one LINE mount or two GEAR mount couplers, Series 415 or 475 coupler. | 13              |
| CP-50          | 1-7/8 gal. 2-part mix for one LINE mount Series, 515 or 575 coupler.                            | 14              |
| CP-55          | 2-1/4 gal. 2-part mix for one Suffix-X LINE mount coupler with extended end bell.               | 24              |



\*Shelf life, 6 mos. Should be installed at normal room temperature.

### Coupler Contact Insulation (Cleaning Kit)

Dirt contamination can cause electrical failures. The mating contact insulators can be efficiently cleaned with the PCK100 Cleaning Kit.

Kit consists of 16-oz. aerosol can of non-flammable electrical parts cleaner, bristle brush, two white wiping cloths and polyethylene glove. Ozone-safe spray can contains no fluorocarbons.

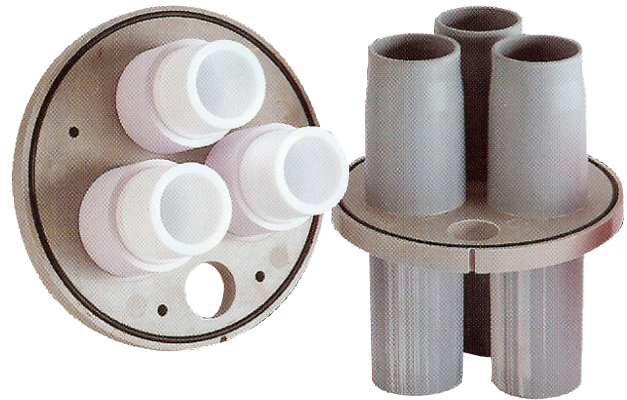
| Catalog Number | Description  | Ship Wt. (lbs.) |
|----------------|--------------|-----------------|
| PCK-100        | Cleaning Kit | 1-1/2           |



## PLM • Accessories

### Replacement Coupler Insulators

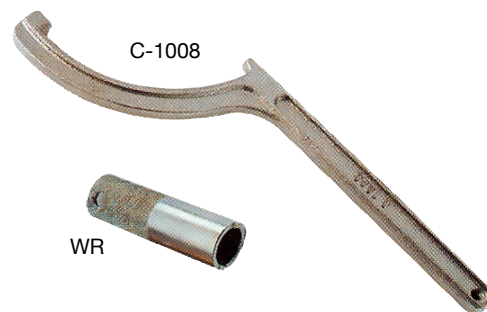
Insulator kits to replace polyester fiberglass and cone seal style insulators. Complete package includes rigid, unbreakable insulator tubes with flame-retardant flange and all necessary conductor and insulation shield terminating material except contacts. May be used with existing PLM Couplers. Add COLDPOUR® for 15kV applications.



| Catalog Number | Description                             | Ship Wt. (lbs.) |
|----------------|-----------------------------------------|-----------------|
| K 415 F        | For female line plugs or sockets.       | 10              |
| K 415 M        | For male line plugs or sockets.         | 10              |
| K 415 FG       | For female gear-mount plugs or sockets. | 8               |
| K 415 MG       | For male gear-mount plugs or sockets.   | 8               |

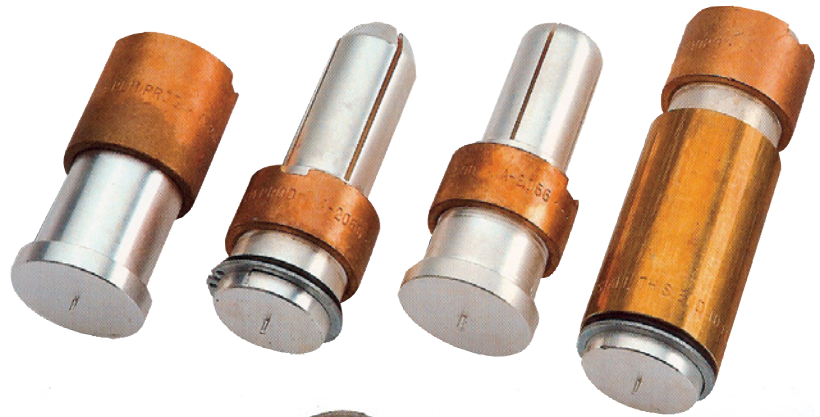
### Coupling and Contact Wrenches

| Catalog Number | Description                                               | Ship Wt. (lbs.) |
|----------------|-----------------------------------------------------------|-----------------|
| WR             | Contact wrench for 415, 515, 475, S75 series.             | 1               |
| C-1008         | Coupling wrench (Aluminum) for 415, 515, 475, 575 series. | 1               |
| C-1008-S       | Coupling wrench (Steel) for 415, 515, 475, 575 series.    | 3               |



## PLM • Spare Parts

PLM phase and ground contacts can be modified to meet your specific cable requirements. Simply specify the phase and ground conductor diameter and PLM will machine the parts to your specifications.



PLM couplers and accessories are utilized in some of the world's most extreme environments. PLM offers a full line of spare parts for use in maintaining, rebuilding, or repairing used couplers. All individual coupler parts are available for purchase. Most are in stock (and available for immediate shipment. Contact PLM or your local PLM distributor for price and availability information.



## PLM • Fittings For Metal Clad Cable

### FEATURES/BENEFITS

- Slip-on design with no disassembly for easy installation.
- Neoprene bushing for raintight seal.
- Locknuts, bushings and flange gasket included - no additional materials to purchase.
- Flange gasket prevents moisture penetration through threads.
- Made from copper-free aluminum alloy for corrosion resistance.
- Fits broad range - .351-4.62 cable O.D.

### APPLICATION

- For terminating metal clad cable

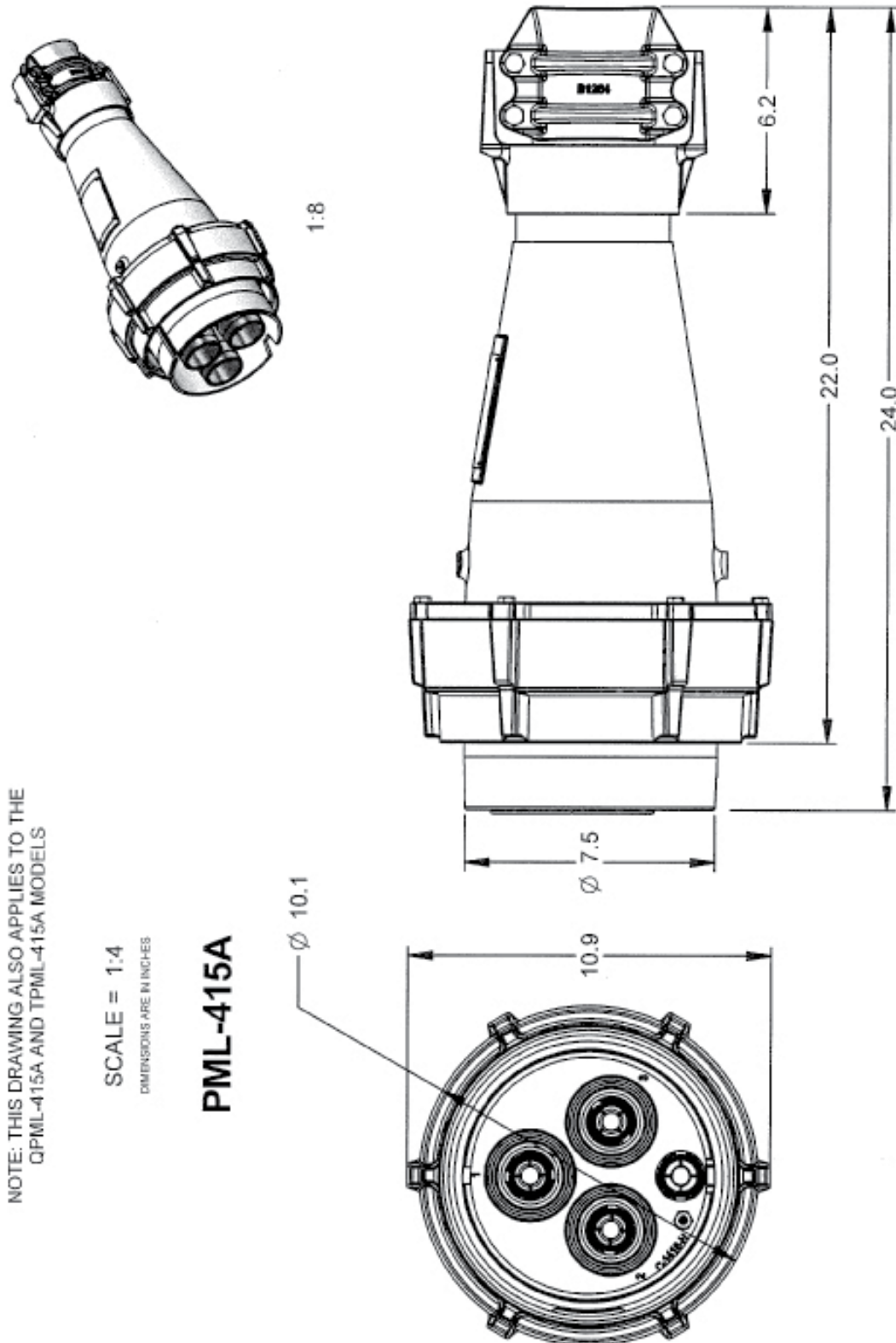
### CERTIFICATION



### TO ORDER

DETERMINE SATISFACTORY FIT BY CHECKING CABLE DIMENSIONS A AND B. IF CABLE DIMENSIONS DO NOT FALL WITHIN ACCEPTABLE RANGE, CONSULT FACTORY.

| Catalog Number<br>Ship Wt. | A<br>Dia. Over Jacket |      | B<br>Core Dia. | C<br>Max. Cable Size | D<br>Conduit O.D. | E<br>Fitting Overall | Length<br>(Lbs.) |
|----------------------------|-----------------------|------|----------------|----------------------|-------------------|----------------------|------------------|
| JAG 45-0S                  | .35                   | .45  | .61            | 1/2                  | 1-5/8             | 2-1/4                | 1/4              |
| JAG 55-0S                  | .45                   | .55  | .61            | 1/2                  | 1-5/8             | 2-1/4                | 1/4              |
| JAG 65-0S                  | .55                   | .65  | .61            | 1/2                  | 1-5/8             | 2-1/4                | 1/4              |
| JAG 75-0S                  | .65                   | .75  | .61            | 1/2                  | 1-5/8             | 2-1/4                | 1/4              |
| JAG 85-0S                  | .75                   | .85  | .61            | 1/2                  | 1-5/8             | 2-1/4                | 1/4              |
| JAG 95-0S                  | .85                   | .95  | .61            | 1/2                  | 1-5/8             | 2-1/4                | 1/4              |
| JAG 99-07                  | .85                   | .99  | .81            | 3/4                  | 2                 | 2-5/8                | 1/3              |
| JAG 107-07                 | .92                   | 1.07 | .81            | 3/4                  | 2                 | 2-1/4                | 1/3              |
| JAG 113-07                 | .98                   | 1.13 | .81            | 3/4                  | 2                 | 2-1/4                | 1/3              |
| JAG 121-07                 | 1.07                  | 1.21 | .81            | 3/4                  | 2                 | 2-1/4                | 1/3              |
| JAG 112-10                 | 1.00                  | 1.12 | 1.00           | 1                    | 2-3/8             | 3-1/16               | 1/2              |
| JAG 125-10                 | 1.12                  | 1.25 | 1.00           | 1                    | 2-3/8             | 3-1/16               | 1/2              |
| JAG 138-10                 | 1.22                  | 1.38 | 1.00           | 1                    | 2-3/8             | 3-1/16               | 1/2              |
| JAG 138-12                 | 1.28                  | 1.38 | 1.25           | 1-1/4                | 2-7/8             | 3-3/8                | 2/3              |
| JAG 156-12                 | 1.38                  | 1.56 | 1.25           | 1-1/4                | 2-7/8             | 3-3/8                | 2/3              |
| JAG 174-12                 | 1.56                  | 1.74 | 1.25           | 1-1/4                | 2-7/8             | 3-3/8                | 2/3              |
| JAG 188-12                 | 1.74                  | 1.88 | 1.25           | 1-1/4                | 2-7/8             | 3-3/8                | 2/3              |
| JA6 174-15                 | 1.60                  | 1.74 | 1.63           | 1-1/2                | 3-1/4             | 4-1/16               | 1                |
| JAG 188-15                 | 1.74                  | 1.88 | 1.63           | 1-1/2                | 3-1/4             | 4-1/16               | 1                |
| JAG 200-15                 | 1.88                  | 2.00 | 1.63           | 1-1/2                | 3-1/4             | 4-1/16               | 1                |
| JAG 218-15                 | 2.00                  | 2.18 | 1.63           | 1-1/2                | 3-1/4             | 4-1/16               | 1                |
| JAG 219-20                 | 2.05                  | 2.19 | 2.09           | 2                    | 4                 | 4-5/16               | 1-1/2            |
| JAG 236-20                 | 2.19                  | 2.36 | 2.09           | 2                    | 4                 | 4-5/16               | 1-1/2            |
| JAG 247-20                 | 2.35                  | 2.47 | 2.09           | 2                    | 4                 | 4-5/16               | 1-1/2            |
| JAG 261-20                 | 2.47                  | 2.61 | 2.09           | 2                    | 4                 | 4-5/16               | 1-1/2            |
| JAG 263-25                 | 2.46                  | 2.63 | 2.49           | 2-1/2                | 4-23/32           | 5-7/16               | 2-1/2            |
| JAG 280-25                 | 2.62                  | 2.80 | 2.49           | 2-1/2                | 4-23/32           | 5-7/16               | 2-1/2            |
| JAG 296-25                 | 2.80                  | 2.96 | 2~49           | 2-1/2                | 4-23/32           | 5-7/16               | 2-1/2            |
| JAG 297-30                 | 2.80                  | 2.97 | 3.11           | 3                    | 5-3/32            | 5-3/4                | 3                |
| JAG 311-30                 | 2.95                  | 3.11 | 3.11           | 3                    | 5-3/32            | 5-3/4                | 3                |
| JAG 327-30                 | 3.10                  | 3.27 | 3.11           | 3                    | 5-3/32            | 5-3/4                | 3                |
| JAG 343-30                 | 3.26                  | 3.43 | 3.11           | 3                    | 5-3/32            | 5-3/4                | 3                |
| JAG 359-30                 | 3.42                  | 3.59 | 3.11           | 3                    | 5-3/32            | 5-3/4                | 3                |
| JAG 375-35                 | 3.52                  | 3.75 | 3.61           | 3-1/2                | 5-11/16           | 5-13/16              | 3-1/4            |
| JAG 392-35                 | 3.75                  | 3.92 | 3.61           | 3-1/2                | 5-11/16           | 5-13/16              | 3-1/4            |
| JAG 412-35                 | 3.90                  | 4.12 | 3.61           | 3-1/2                | 5-11/16           | 5-13/16              | 3-1/4            |
| JAG 423-40                 | 4.05                  | 4.23 | 4.11           | 4                    | 6-3/32            | 5-13/16              | 3-1/2            |
| JAG 437-40                 | 4.20                  | 4.37 | 4.11           | 4                    | 6-3/32            | 5-13/16              | 3-1/2            |
| JAG 4S1-4B                 | 4.34                  | 4.51 | 4.11           | 4                    | 6-3/32            | 5-13/16              | 3-1/2            |
| JAG 462-40                 | 4.43                  | 4.62 | 4.11           | 4                    | 6-3/32            | 5-13/16              | 3-1/2            |

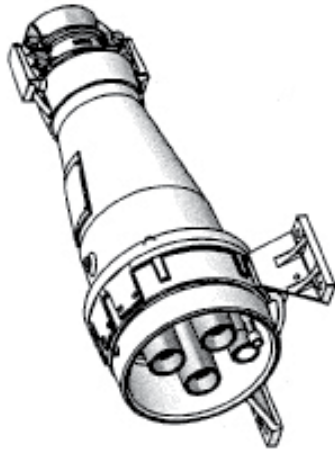
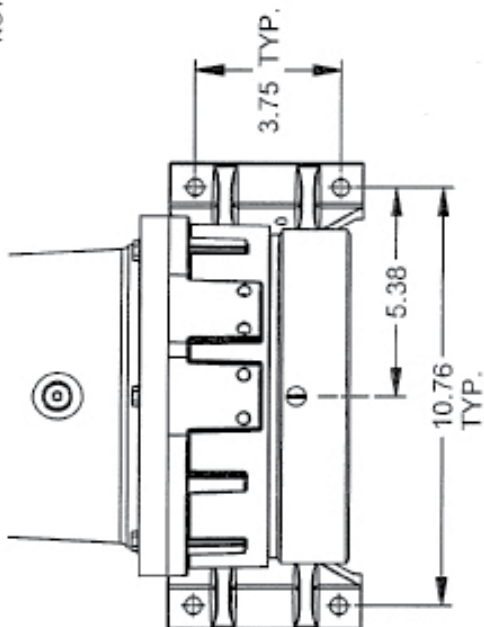


NOTE: THIS DRAWING ALSO APPLIES TO THE  
QSFL-415A AND TSFL-415A MODELS

SCALE = 1:4

DIMENSIONS ARE IN INCHES

**SFL-415A**



1:8

