

# Cable Couplers

## Portable Cable Systems Couplers/Plugs-Receptacles Cable Couplers Identification & Application

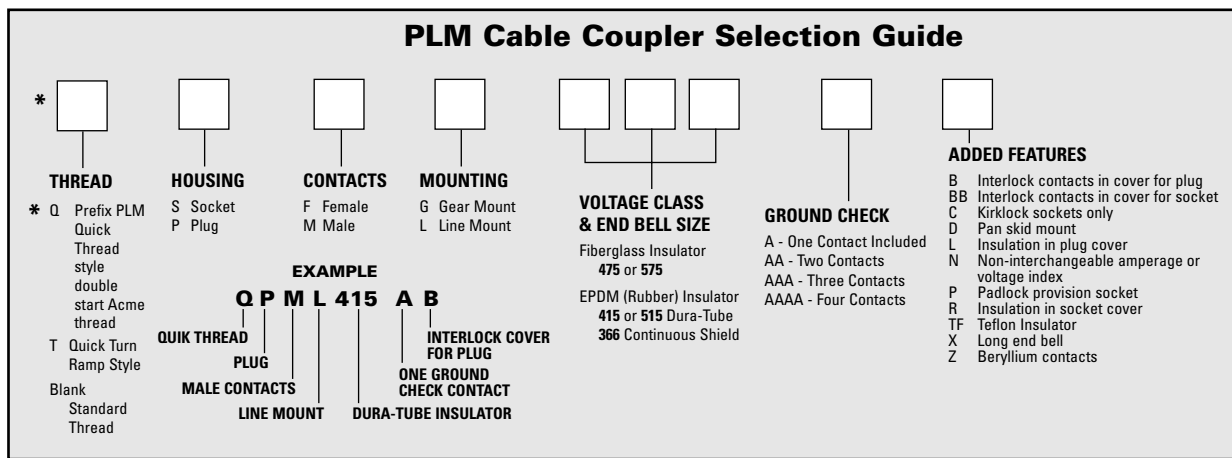
Basic nomenclature identifies the metallic shell (Plug or Socket) first, the type of contact (Male or Female) second. For switchgear or other non-cable mounted units, the letter G suffix designation is added. Example of the PLM Catalog number system is as listed:

- PMG 415A** Plug, male contacts, switchgear mount, with ground check contact.  
**PML 415A** Plug, male contacts, line mount, with ground check contact.  
**SFL 415A** Socket, female contacts, line mount, with ground check contact.  
**SFG 415A** Socket, female contacts, switchgear mounted, with ground check contact.

Other added options available for the coupler and catalog number identification is listed.

Spare part requirements are minimized by widely interchangeable components.

Suggested application of cable couplers is a plug on one end of a cable and a socket on the other end. Common usage has the socket being on the source end and the plug on the load end.



### 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.

### 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
- Filling Compounds

### Benefits

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

### Compliance

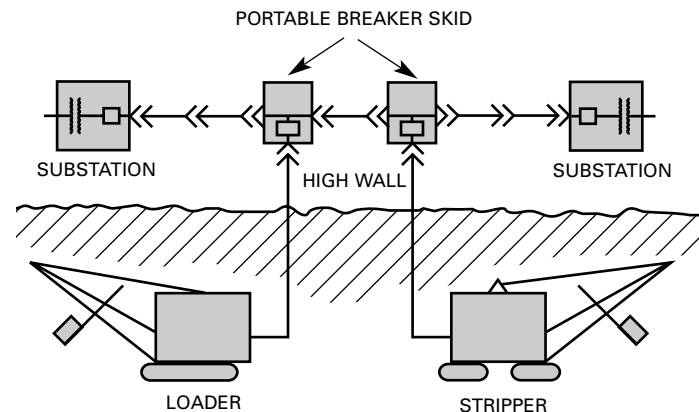
- Pennsylvania Bureau of Deep Mine Safety

### Typical Surface Mine

1. Female sockets on source side of substations, line, and portable skids.
2. Male plugs on load side of skids, loader and stripper.

### To Order, Provide:

1. Catalog numbers.
2. Voltage requirements.
3. Conductor sizes of phase, ground wires, and ground check wire.
4. Overall cable diameter. Also on 366 series, diameter over each phase conductor insulation.



## Portable High-Voltage Cable Couplers 415, 515

### EPDM Insulators — Dura-Tube<sup>SM</sup> 500 Amperes • 15,000 Volts Maximum

#### 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.

#### Electrical Characteristics

	No Compound	With Compound
<b>Maximum Voltage Phase-to-Ground</b>	5.5 KV rms	8.7 KV rms
<b>1 Minute Dry Withstand AC</b>	35.0 KV rms	45.0 KV rms
<b>6 Hour Dry Withstand DC</b>	25.0 KV rms	35.0 KV rms
<b>15 Minute Dry Withstand DC</b>	65.0 KV rms	75.0 KV rms
<b>Corona Extinction Level</b>	7.5 KV rms	11.0 KV rms
<b>Basic Impulse Level</b>	75.0 KV crest	95.0 KV crest
<i>All tests per IEEE Standard 48-1990</i>		



Catalog Number Standard Threads	Catalog Number Acme Quik-Thread	Description	Ship Wt. (lbs.)
<b>SFG 415 A</b>	<b>QSFG 415A</b>	<i>Equipment-mounted couplers</i>	
<b>PMG 415 A</b>	<b>QPMG 415A</b>	Socket, Female Contacts	34
		Plug, Male Contacts	34
<b>SFL 415 A</b>	<b>QSFL 415A</b>	<i>Line-mounted couplers</i>	
<b>PML 415 A</b>	<b>QPML 415A</b>	<i>1.50-3.50 O.D. Cables</i>	51
		Socket, Female Contacts	51
		Plug, Male Contacts	51
<b>SFL 515 A</b>	<b>QSFL 515A</b>	<i>3.50-4.50 O.D. Cables</i>	53
<b>PML 515 A</b>	<b>QPML 515A</b>	Socket, Female Contacts	53
		Plug, Male Contacts	53



#### 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
-X	Extended end bell for larger cable sizes
-Z	Beryllium contacts—male
-TF	Teflon Insulator

Series 415 and 515 are recommended for all existing installations where 375, 475, 575, 154 and 155 series couplers have been used and will interface with these couplers. The Q prefix 2 1/2 turn Quik-thread is suggested for new applications or those customers presently using Quik-thread applications. Quik-thread, Quick-turn and 8 pitch couplers will not interface.

Note: Male/Female insulator and contact assemblies are interchangeable within coupler housings.

Specify PF or SM in catalog selection or consult factory.

On initial orders, one coupling wrench and one contact wrench will be required. See page 11A-9. For aluminum conductors, consult factory.

11A-2

## Couplers Teflon Insulators

### 415TF/515TF Portable High-Voltage Cable Couplers

#### ADALET-PLM NOW OFFERS AN IMPROVED HIGH VOLTAGE MINING COUPLER INSULATOR SYSTEM

Combining a non-tracking, easy-to-clean hydrophobic material with an internal o-ring seal between tubes.

**500 AMPERES**

**15,000 VOLTS MAXIMUM**

#### Features

- Corrosion-Resistant Aluminum
- Rigid, Non-Breakable TEFLON® Insulators
- 500 Amp Contacts
- Portable Cable Mounting
- Switchgear or Equipment Mounting
- Standard Cover, Stress Control Kit, Instructions Included
- Solid Polyester Fiberglass Flange
- Teflon Tubes O-ring Sealed to Flange
- Nylon Lock Nuts for Positive Seal



SFL 415ATF

#### Electrical Characteristics

	No Compound	With Compound
Maximum Voltage Phase-to-Ground	5.5 kV rms	8.7 kV rms
1 Minute Dry Withstand AC	35.0 kV rms	45.0 kV rms
6 Hour Dry Withstand AC	25.0 kV rms	35.0 kV rms
15 Minute Dry Withstand DC	65.0 kV aver	75.0 kV aver
Corona Extinction Level	7.5 kV rms	11.0 kV rms
Basic Impulse Level	75.0 kV crest	95.0 kV crest

All tests per IEEE Standard 48-1990

#### 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.

Series 415 and 515 are recommended for all existing installations where 375, 475, 575, 154, and 155 series couplers have been used and will interface with these couplers. The Q prefix 2 1/2 turn Quik-Thread or threadless Quik-Turn is suggested for new applications or those customers presently using such couplers. Quik-Thread, Quik-Turn and 8 pitch couplers will not interface.

NOTE: Male/Female insulator and contact assemblies are interchangeable within coupler housings. Specify PF or SM in catalog selection or consult factory. On initial orders, one coupling wrench and one contact wrench will be required. See page 11A-9. For aluminum conductors, consult factory.

**Teflon® is a registered trademark of E.I. DuPont de Nemours and Company**

#### 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
-X	Extended End Bell for Larger Cable Sizes
-Z	Beryllium Contacts-Male

#### Catalog Number and Description

Catalog No. Stand. Threads	Catalog No. Quik-Thread	Catalog No. Quik-Turn	Description	Ship Wt.
SFG 415ATF	QSFG 415ATF	TSFG 415ATF	<b>EQUIPMENT-MOUNTED COUPLERS</b> Socket, Female Contacts	34
PMG 415ATF	QPMG 415ATF	TPMG 415ATF		34
SFL 415ATF	QSFL 415ATF	TSFL 415ATF	<b>LINE-MOUNTED COUPLERS</b> 1.50-3.50 O.D. Cables Socket, Female Contacts	51
PML 415ATF	QPML 415ATF	TSFL 415ATF		51
SFL 515ATF	QSFL 515ATF	TSFL 515ATF	3.50-4.50 O.D. Cables Socket, Female Contacts	53
PML 515ATF	QPML 515ATF	TPML 515ATF		53
			Plug, Male Contacts	

315

## Cable Couplers T415, T515

### Quik-Turn

#### Application

- New installations where maximum convenience and speed is required
- Existing installations where abusive conditions cause thread damage

#### Features (Quik-Turn Couplers)

- 1/4 turn engagement for fast connection.
- Stainless steel pin and sleeve for corrosion resistance.
- Color coded orange for high visibility identification.
- Fully interchangeable with other threadless couplers using EPDM insulators.
- Spare parts common to PLM 8 pitch and Quik-Thread coupler designs.

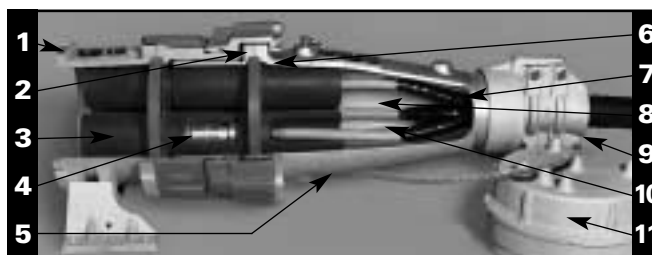
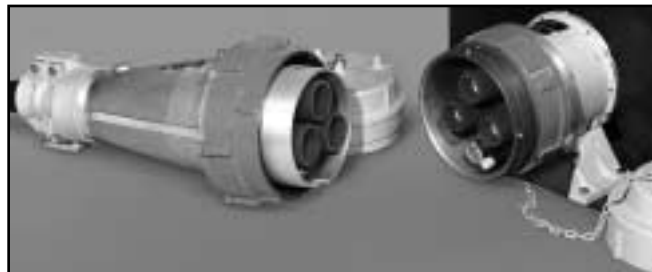
#### Ratings

500 Amperes, 15,000 Volts Max.

#### Approvals

Pennsylvania Bureau of Deep Mines Safety – BOTE 1363-92

Catalog Number Quik-Turn	Description	Ship Wt. (lbs.)
<b>TSFG 415A</b>	<i>Equipment-mounted Couplers</i>	
<b>TPMG 415A</b>	Socket, Female Contacts	34
	Plug, Male Contacts	34
	<i>Line-mounted Couplers</i>	
	<i>1.50-3.50" O.D. Cables</i>	
<b>TSFL 415A</b>	Socket, Female Contacts	51
<b>TPML 415A</b>	Plug, Male Contacts	51
	<i>3.50-4.50" O.D. Cables</i>	
<b>TSFL 515A</b>	Socket, Female Contacts	53
<b>TPML 515A</b>	Plug, Male Contacts	53



#### Features (Common to All PLM Couplers)

- 1 Heavy duty Ecoalube coated aluminum castings for high strength and corrosion protection.
- 2 Completely metal enclosed insulators, O-ring sealed.
- 3 Rigid non-breakable DURATUBE EPDM insulator tubes eliminate mating problems. Grey color provides easy check of cleanliness.
- 4 Close tolerance, silver plated contacts provide reliable connections and assured conductivity.
- 5 Smooth profile end bell resists snags.
- 6 Solid one piece flame retardant flange with O-rings on both sides insures against the entrance of moisture.
- 7 FSD stress relief pads provide fast, safe, dependable cable terminations within coupler housing.
- 8 Easy access chamber for COLDPOUR® filling compound when required.
- 9 Rugged cable entrance clamp and thick neoprene gasket for excellent moisture seal at cable entrance.
- 10 Ground check circuit contact is included. Additional contacts available.
- 11 Captive metal covers to keep insulators clean and dry when disconnected.

#### Electrical Characteristics

	No Compound	With Compound
Maximum Voltage Phase-to-Ground	5.5 KV rms	8.7 KV rms
1 Minute Dry Withstand AC	35.0 KV rms	45.0 KV rms
6 Hour Dry Withstand DC	25.0 KV rms	35.0 KV rms
15 Minute Dry Withstand DC	65.0 KV rms	75.0 KV rms
Corona Extinction Level	7.5 KV rms	11.0 KV rms
Basic Impulse Level	75.0 KV crest	95.0 KV crest
<i>All tests per IEEE Standard 48-1990</i>		

## Portable High-Voltage Cable Couplers 475, 575

**Polyester Fiberglass Insulator** 500 Amperes • 7,500 Volts Maximum

This series is the same as the 415 and 515 series except the insulator is polyester fiberglass rather than EPDM. COLDPOUR® compound must be ordered as a separate item.



SFL 475 A



### Electrical Characteristics\*

<b>Maximum Voltage, Phase-to-Ground</b>	5.5 kV rms
<b>15 Minute Dry Withstand D.C.</b>	65.0 kV aver
<b>1 Minute Dry Withstand 60Hz</b>	35.0 kV rms
<b>6 Hour Dry Withstand 60Hz</b>	25.0 kV rms
<b>Corona Extinction Level</b>	7.5 kV rms

All tests per IEEE Standard 48-1962.

\* Filled with compound

Catalog Number	Description	Ship Wt. (lbs.)
<b>SFG 375 A</b>	<i>Equipment-mounted couplers</i>	
<b>PMG 375 A</b>	Socket, Female Contacts	32
	Plug, Male Contacts	32
<b>SFL 475 A</b>	<i>Line-mounted couplers</i>	
<b>PML 475 A</b>	1.50-3.50 O.D. Cables	
	Socket, Female contacts	50
	Plug, Male contacts	50
<b>SFL 575 A</b>	<i>3.50-4.50 O.D. Cables</i>	
<b>PML 575 A</b>	Socket, Female contacts	52
	Plug, Male contacts	52

### 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
-X	Extended end bell for larger cable sizes
-Z	Beryllium contacts-male

### Data Required on Order

- Sizes and number of ground checks
- Phase conductor size
- Catalog number
- Overall O.D. of cable
- Sizes and number of ground wires
- Voltage class

Note: Male/Female insulator and contact assemblies are interchangeable within coupler housings.

Specify PF or SM in catalog selection or consult factory.

On initial orders, one coupling wrench and one contact wrench will be required. See page 11A-9. For aluminum conductors, consult factory.

## Portable High-Voltage Cable Couplers 366

**EPDM Insulators — Continu-Shield<sup>SM</sup>** 200 Amperes • 6,600 Volts Maximum

### Features

- Corrosion-resistant aluminum
- Compact design
- Unbreakable molded EPDM insulators
- Continuous shield design
- Airtight insulator connection
- Double start Acme thread

### Benefits

- No compound required
- Small size, lightweight
- More economical
- Better fault protection
- Better electrical characteristics

### Electrical Characteristics

<b>Maximum Voltage, Phase-to-Ground</b>	3.8 kV rms
<b>1 Minute Dry Withstand AC</b>	35.0 kV rms
<b>6 Hour Dry Withstand AC</b>	25.0 kV rms
<b>15 Minute Dry Withstand DC</b>	65.0 kV aver
<b>Corona Extinction Level</b>	7.5 kV rms
<b>Basic Impulse Level</b>	75.0 kV crest

All tests per IEEE Standard 48-1962

Catalog Number	Description	Ship Wt. (lbs.)
<b>SFG 366 A</b>	<i>Equipment-mounted couplers</i>	
	Socket, Female Contacts	11
<b>PMG 366 A</b>	Plug, Male Contacts	11
<b>SFL 366 A</b>	<i>Line-mounted couplers</i>	
	Socket, Female contacts	17
<b>PML 366 A</b>	Plug, Male contacts	17



SFL 366A



### Options Available at Additional Cost

Catalog Number Suffix	Additional Options
-A	Ground check circuit contact (1) included
-AA	Two ground check circuit contacts
-BL	Cover interlock for plug
-BBR	Cover interlock for socket
-P	Padlock provision-socket
-C	Kirk interlock (keytype) sockets only

Note: On initial orders, one coupling wrench will be required.  
See page 11A-9.

Maximum diameter over phase insulation .840".

Maximum conductor size 4/0 Awg.

For use on copper cable only. For aluminum cables, consult factory.

### Data Required on Order

- Catalog number
- Sizes and number of ground wires
- O.D. over insulation of phase conductors
- Voltage class
- Sizes and number of ground checks
- O.D. of cable over jacket
- Phase conductor size and type
- Class of stranding
- For unshielded cables, order kit #A1746

11A-6

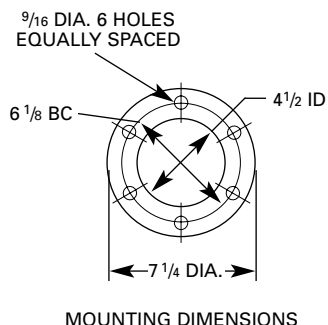
## Other Portable Cable Products PCF, WACS

### Cable Strain Relief PCF

Flange-mounted cable strain reliefs provide gasket-sealed, strain-relief entrance of portable cables into metal-clad equipment. All hardware, fasteners and gaskets are included.

#### Type PCF and PCFL

Round Cables	
Catalog Number	Cable Range
PCF 175	1.50-1.75
PCF 200	1.75-2.00
PCF 225	2.00-2.25
PCF 250	2.25-2.50
PCF 275	2.50-2.75
PCF 300	2.75-3.00
PCF 325	3.00-3.25
PCF 350	3.25-3.50
PCF 375	3.50-3.75
PCF 400	3.75-4.00

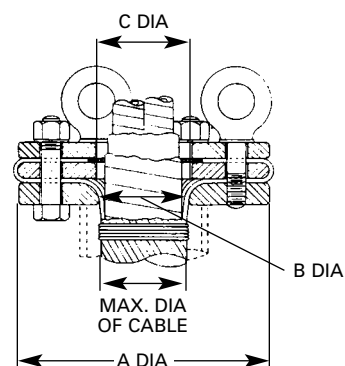
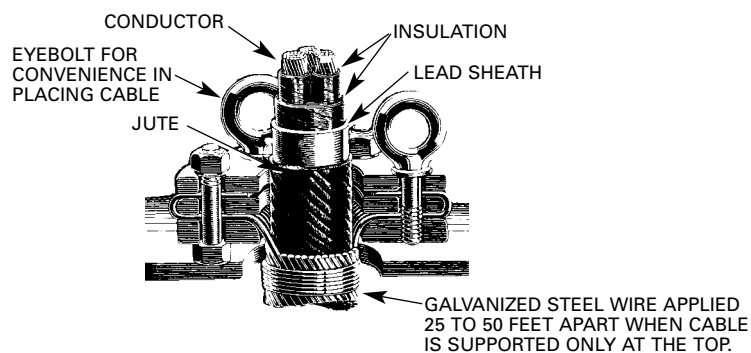


For Blind Tap mounting holes add suffix "L". On all orders Cable Diameter must be specified.

### Wire Armored Cable Support WACS

Type WACS Cable Supports are designed for use as supports for wire armored cable in borehole or vertical wireways. In such applications, the cables are usually wire armored and supported at the top by the wire armor. Single support systems are particularly useful for primary distribution in high-rise buildings where permissible. In accessible locations the cable may be clamped to the side wall in addition to the top support. The supports should be chosen first on the basis of weight to be supported and secondly, on diameter of cable. Fabricated from steel plate and hot-dip galvanized.

Order by catalog number and include description and O.D. of cable.



#### Discount Schedule A

Catalog Number	Weight Capacity (lbs.)	Max. Cable O.D.	Dimensions (Inches)			Ship Weight (lbs.)
			Three Plate Support			
			A	B	C	
WACS238	7500	2.37	9.75	2.60	3.00	50
WACS288	7500	2.87	9.75	3.10	3.50	50
WACS338	7500	3.37	9.75	3.60	4.00	50
WACS388	7500	3.87	9.75	4.10	4.50	50
WACS330	10000	3.37	12.00	3.60	4.00	80
WACS380	10000	3.87	12.00	4.10	4.50	80
WACS420	10000	4.25	12.00	4.50	4.90	80

## Other Portable Cable Products CP, PCK

### **COLDPOUR® Compound\* CP**

Compound filling can prevent condensation and provide added protection in wet locations. Asphaltic compounds cannot be used with EPDM insulations. 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	Shipping Weight (lbs.)
<b>CP-40</b>	1 5/8 gal. 2-part mix for one LINE mount or two GEAR mount couplers, Series 415 or 475 coupler.	13
<b>CP-50</b>	1 7/8 gal. 2-part mix for one LINE mount, Series 515 or 575 coupler	14
<b>CP-55</b>	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	Shipping Weight (lbs.)
<b>PCK-100</b>	Cleaning Kit	1 1/2



### **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	Shipping Weight (lbs.)
<b>K 415 F</b>	For female line plugs or sockets	10
<b>K 415 M</b>	For male line plugs or sockets	10
<b>K 415 FG</b>	For female gear-mount plugs or sockets	8
<b>K 415 MG</b>	For male gear-mount plugs or sockets	8



11A-8



## Other Portable Cable Products Type QT

### Conversion Kits QT

Any cable coupler line mount or gear mount may be converted to Acme double start Quik-Thread style or Quik-Turn 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.

Quik-Thread coupler rings are color-coded green to provide positive identification. Quick-Turn coupler rings are color-coded orange. Conversion kits should be applied to all couplers on any single cable system.



Catalog Number	Acme Thread Parts Furnished	Description
<b>QKP-8</b> <b>TKP-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> <b>TKP-M/F-8</b>	Plug cover (drilled for pilot and ground contacts) and lock 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> <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 cover 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> <b>TKS-8</b>	Socket cover and socket body	Replacement for socket-style couplers. Includes plain cover (without drilling for pilot or ground contacts).
<b>QKS-M/F-8</b> <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. Customer to use existing contacts.
<b>QKS-M/F-15</b> <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.

### Coupler Wrenches

Catalog Number	Description	Shipping Weight (lbs.)
<b>WR</b>	Contact wrench for 415, 515, 475, 575 series	1
<b>C-1008</b>	Coupling wrench (Aluminum) for 415, 515, 475, 575 series	1
<b>C-1008-S</b>	Coupling wrench (Steel) for 415, 515, 475, 575 series	3
<b>C-1678-S</b>	Coupling wrench (Steel) for 366 series	3



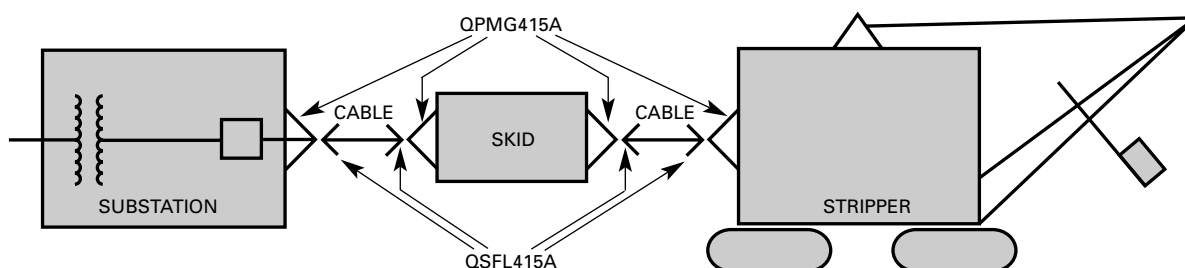
## Other Portable Cable Products Skids

### Adalet Cable Couplers — Surface Mining Application

Because of operational convenience, economics, and added safety, many surface mining operations use Adalet Couplers in conjunction with handling trailing cables. Adalet Couplers are designed so that the first circuit to open and the last to close is the ground check, so that the circuit breakers cannot be operated until the ground and phase contacts are connected. Furthermore all live parts are enclosed in the housing. Thus couplers provide a compact, safe, watertight, and dust-tight connection.

For rugged surface conditions, Adalet has designed features and products to utilize couplers and provide rapid, safe means for handling trailing cables.

For high inrush currents associated with surface mining equipment, Adalet provides high conductivity split copper, silver plated, male contacts with pressure maintaining elastomeric inserts. Female contacts are silver plated high conductivity copper.



QPMG ON SUBSTATION, SKIDS, STRIPPER.  
QSFL (LESS FEET) ON BOTH CABLE ENDS.

11A-10

#### Type Q – Quik-Thread

Coupling rings with double start Acme thread permits couplers to be connected or disconnected in only 2 1/2 turns. Special hardened and permanently lubricated threads are recessed from the end of the coupler to prevent damage and eliminate clogging and seizing. Adalet Quik-Thread Style Couplers are color coded green to provide positive identification.

#### Type JB-1 Coupler Box

Compact, rugged steel plate box protects couplers from rock fall and offers double environmental protection for electrical connection. Fast connect-disconnect even in the most adverse conditions. The coupler is positioned on mounting pins, inside the skid house. For removal, simply raise cover and lift out coupler and cable. Mounted on skids, the skid house is equipped with tow hooks providing rapid means of moving skid, coupler & cable.

#### Type EP-1 Coupler Skid

For moving cables and support of cable couplers. Couplers are mounted on a turntable positioned on skid. A steel cable support in the center of the sled supports cable loops which are fed off the back of the skid as the equipment moves forward. Ten inch high posts on each back corner of skid provide a tie point for pulling loops when picking up cables, and prevent the cables from sliding under the skid.

#### Type JB Skids

For cable handling ease and for two to three feeder junction boxes. Normally wired with 1, 2, or 3 sockets for outgoing power and one plug incoming. May be utilized as illustrated above.

#### Type HB Sleds

Same as above, mounted on high runners for clearing rubble.

## Other Portable Cable Products Skids

### Lowboy Skids 2-way, 3-way or 4-way

Factory-wired for 15 kV–500 ampere service includes ground and ground check wiring. Lowboy skids are used for two-way, three-way or four-way connections of portable cables. Boxes are wired internally and compound-filled. Prices do not include couplers – order separately.

Catalog Number	Application
LB-2	2-way
LB-3	3-way
LB-4	4-way



### Hi-Boy Sleds 2-way, 3-way or 4-way

Factory-wired for 15 kV–500 ampere service includes ground and ground check wiring. Hi-boy sleds offer tubular runners suitable for clearing rubble or keeping couplers out of mud, water or snow. Boxes are wired internally and compound-filled. Prices do not include couplers – order separately.

Catalog Number	Application
HB-2	2-way
HB-3	3-way
HB-4	4-way



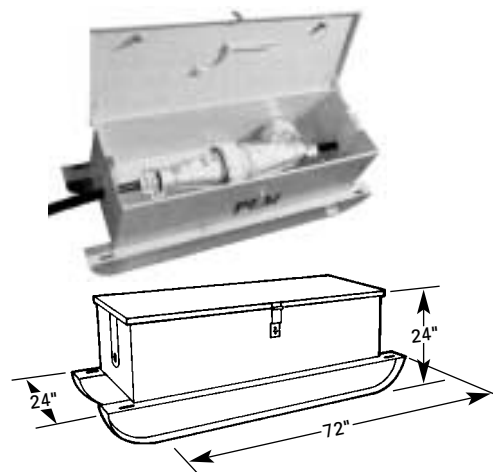
### JB-1 Coupler Box

#### Features

- 3/16" steel plate fabrication
- Compact design
- Skid-mounted
- Cable entry seal and support
- Painted safety yellow
- Hinged cover with provision for padlock

#### Benefits

- Maximum physical protection of coupler
- Protects coupler from environment
- Simplifies cable movement
- Labor and material cost savings when compared with high-voltage connection boxes



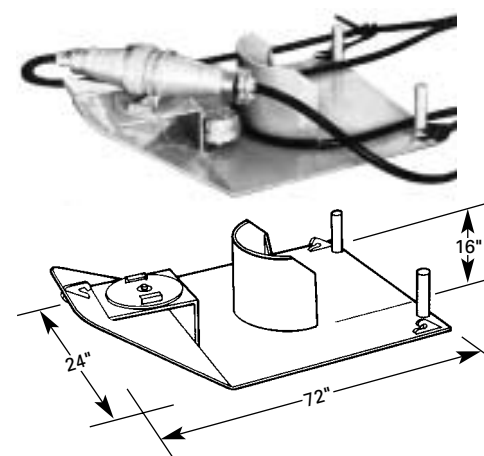
### EP-1 Coupler Skid

#### Features

- 1/2" steel plate construction
- Compact design
- Turntable coupler mount
- Steel cable support
- Protects cable from sharp bends

#### Benefits

- Rugged design prevents couplers from snagging when moving equipment in rough terrain
- Simplifies the movement of trailing cables
- Reduced cable handling downtime
- Offers superior electrical features of using cable couplers

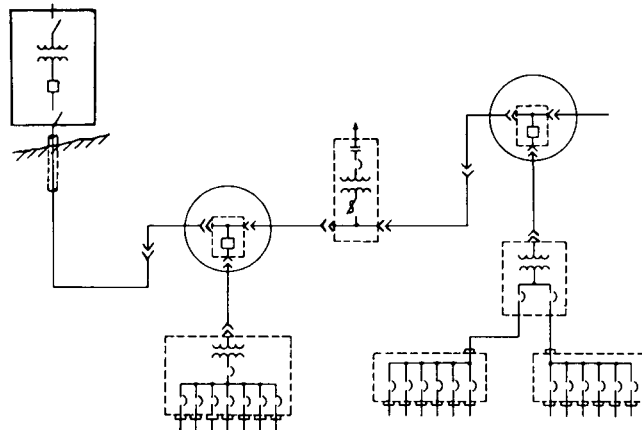


11A-11

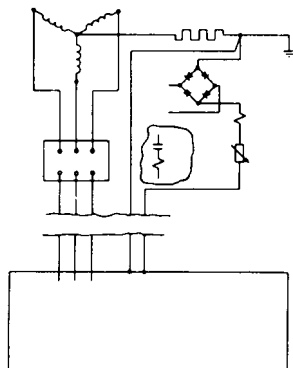
## Systems

### Voltage Selection

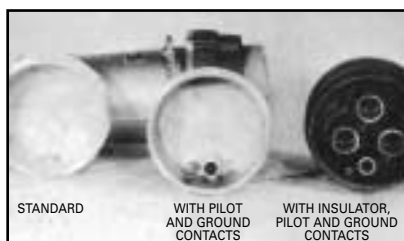
In many mining systems the original and replacement costs of cable can become a major item of expense. From an economic standpoint, the distribution voltage should be as high as possible. At 7500 volts, the cost of cables is approximately half of the cost of cables required to handle the same load at 2300 or 4160 volts with very little extra cost on the other electrical equipment. 13.2kV equipment is considerably more expensive than 7500 volt equipment, but in boreholes, or where long cable runs are necessary in open pit mines, the use of 15kV cables and couplers can be advantageous.



TYPICAL SYSTEM FOR A-C POWER IN DEEP MINING



SCHEMATIC OF TYPICAL GROUND CHECK SYSTEM



### Ground Check and Key Interlock Methods

With a total of four pilot wire contacts available, the Adalet Coupler is adaptable to any presently used ground check system. In addition to the electrical interlock (ground check system), mechanical key type locks may be used to insure no voltage disconnection of couplers.

### Coupler Covers

The Adalet Coupler is furnished with the Standard Cover. This prevents moisture and contamination from coming in contact with the coupler insulator and contacts.

When it is desired to have the Cover equipped with a Pilot contact and a Ground contact, add the suffix letter "B" to the catalog number for Plug style coupler and letter "BB" for Socket style coupler. With these contacts installed it is then possible to check the integrity of the Ground Check circuit.

The covers are available with an insulator, pilot contact, and ground contact. It is then possible to energize the cable without the coupler being connected to another coupler. Add the suffix letters "BL" to the catalog number for Plug style coupler and letters "BBR" for Socket style coupler.

11A-12

## Couplers

### ***PLM: The Leading Coupler in the Mining Industry***

#### **A History**

PLM products began in 1951 as a supplier of cable accessories for high voltage cables. Although Cable Couplers had been used in the mining industry, it was not until 1957 when requirements began to develop for voltages higher than 5kV and Amperages greater than 200 Ampere that the first 7.5kV 500 AMP Coupler was developed by PLM Products.

Published test values backed by a high voltage laboratory and continuous innovations have kept PLM Products, now known as Adalet, as a world leader of cable couplers.

#### **Design**

From the beginning, PLM designed Couplers to standards subsequently incorporated into mine safety codes in the United States. All PLM Couplers are completely metal enclosed with the outer shell grounded to the ground wires in the cable. Couplers are designed so that the first contact to make and last to break is the ground contact. With ground check circuits the Coupler ground check circuit is the last to make and first to break. The ground contact is also grounded to the housing assuring the operator that the Coupler is grounded.

#### **Use**

Couplers have been utilized in underground, strip, and pit operations on every continent in the world, and for coal and hard rock mining operations of every type. Adalet Cable Couplers provide safe, convenient means for connecting portable cable rated up to 15,000 volt and up to 500 Amperes, copper or aluminum conductor to mining equipment, electric shovels, draglines, loaders, barges, tunneling machines, portable substations, portable junction boxes, or for joining lengths of high voltage cables.

Housings are of rugged, corrosion resistant cast aluminum providing high strength with light weight. Thorough gasketing makes the coupler entirely watertight. Tight fitting covers for plug and socket, protect contacts and insulators from moisture when disconnected.

Positive thread engagement of the metal housing prevents accidental disconnecting and insures proper opening and closing sequence. For further safeguard, optional electrical and mechanical (key type) systems are available.

### ***Other Couplers Available Upon Request***

Note: Male/Female assemblies are interchangeable within housings. Specify PF or SM or consult factory.

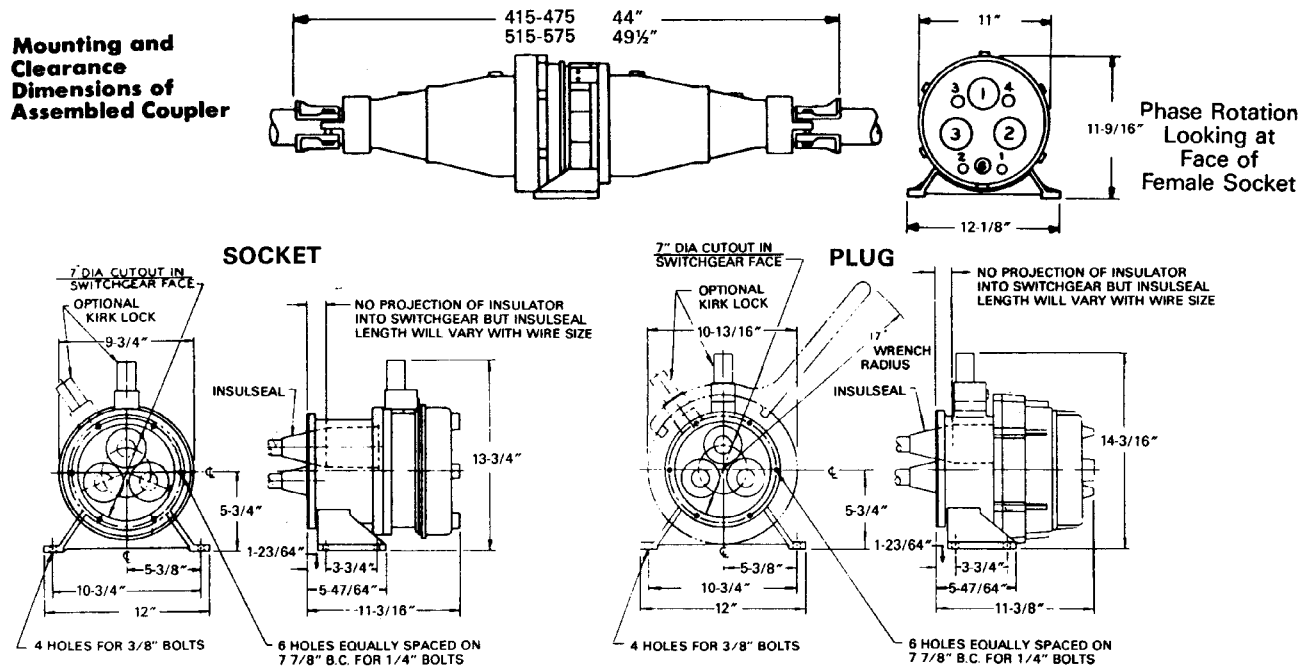
All additional options are available for the above coupler.

# Couplers Dimensional Data

## CABLE COUPLERS DATA SHEET

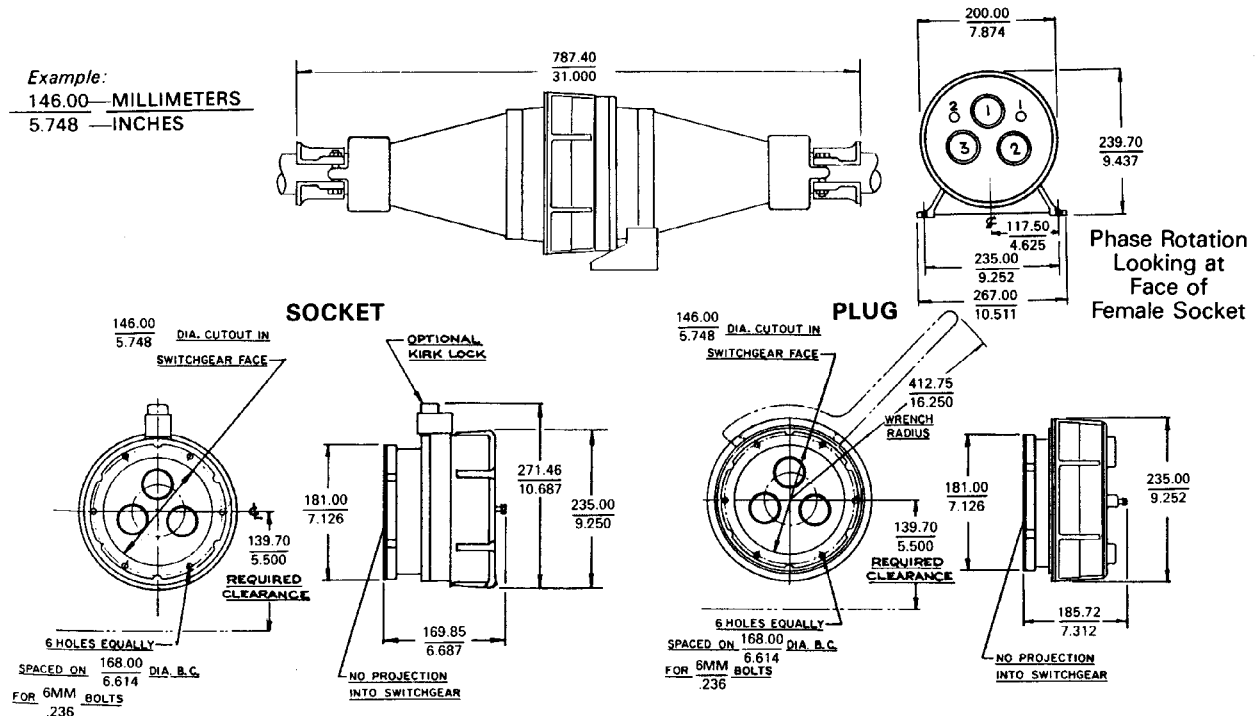
415, 515, 475, 575 Series

**Mounting and Clearance Dimensions of Assembled Coupler**



## 366 SERIES

Example:  
146.00—MILLIMETERS  
5.748—INCHES



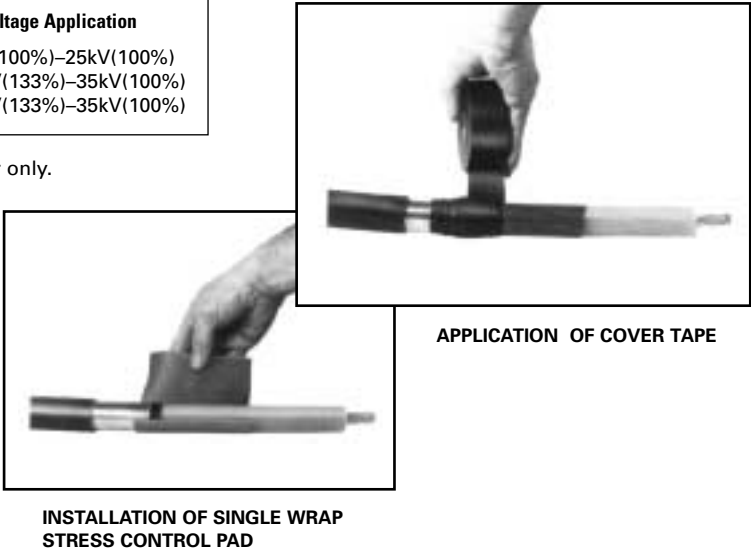
# Indoor Termination Kits 5 - 35 kV

## For Use on Solid Dielectric Cable

Each indoor kit includes material to make three single- or one three-conductor termination. Kit includes three FSD pads, high voltage tape, abrasive cloth and instructions.

Catalog No.	Cable Range	Voltage Application
FSD	#8-600MCM	5kV(100%)-25kV(100%)
FSD35	#1-1000MCM	25kV(133%)-35kV(100%)
FSDS35*	#1-1000MCM	25kV(133%)-35kV(100%)

\* Silicone overwrap for contaminated areas – indoor only.



# Outdoor Termination Kits 5 kV - 25 kV

## For Use on Solid Dielectric Cable

Each outdoor kit includes material to make three single- or one three-conductor termination. Kit includes three FSD pads, high voltage tape, abrasive cloth, silicone tape, PVC all-weather tape and instructions.

Catalog No.	Cable Range	Voltage Application
FSDS1	#8-600MCM	5kV(100%)-15kV(100%)
FSDS2	#8-600MCM	15kV(133%)-25kV(100%)



# Grounding Kits & Pads

Catalog No.	Cable Range	Voltage Application
FSDP3	3 Extra Pads	5kV(100%)-25kV(100%)
FSDP35	3 Extra Pads	25kV(133%)-35kV(100%)
FSD35*	3 Extra Pads	25kV(133%)-35kV(100%)



## PowerSpec™

### Features

Fast, simple installation

360° grounding system provides superior conductivity

Durable seal prohibits cable twisting or pull-out

Watertight (UL-50 listed as a Type 4 cable fitting)

Compact design

Lightweight and corrosion resistant

### Material/Finish

Body, Nut: Copper-Free Aluminum

Flange Gasket, Grommet: Neoprene

Armor Stop: Phenolic

Spring: Phosphur Bronze

### Standard Sizes

.55" - 2.18"

### PowerSpec for ordinary locations, PowerSpecX for hazardous locations - there's one suited for your application

power plants

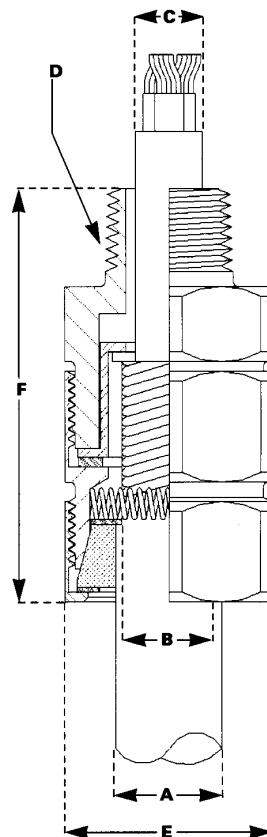
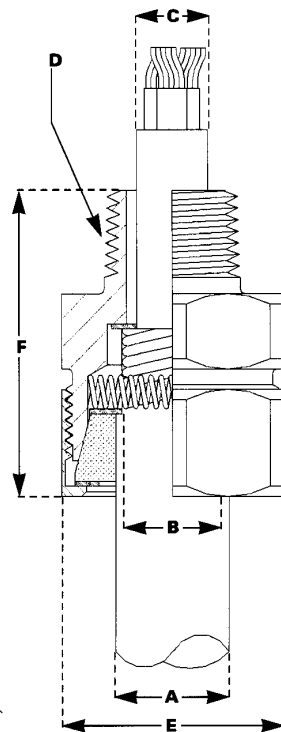
paper mills

oil refineries

offshore drilling platforms

waste treatment facilities

chemical plants



### Type PS Description

Use where jacketed metal clad (MC) cable is installed in a non-hazardous or Division 2 area when sealing is not required. The connector is hexagonally designed for easy wrenching with a minimal overall length. The connector is UL listed according to UL 514B and does not require any disassembly to install.

### Applications

For terminating TECK and jacketed Metal Clad cable. For vertical or horizontal runs.

### Certifications



### Applicable Standard

Meets UL standard for raintight armored cable fitting.

### PowerSpecX (Class I, Div. 1 and 2, Haz. Locations)

### Type PSX Description

Use where jacketed MC cable is installed in a Class I, Division 1 area or a Class I, Division 2 area when sealing is required, i.e. enclosures containing arcing or sparking devices. The connector is hexagonally designed for easy wrenching with a minimal overall length. An epoxy type sealing compound is used and the connector is UL listed according to UL 2225.

### Applications

Terminates and seals jacketed continuous corrugated MC cable in Class I, Div. 1 and 2 and TECK and jacketed interlocked MC cable in Class I, Div. 2 locations. For vertical or horizontal runs. Provides seal for cable core where armor is removed and between the jacket and armor.

### Certifications



Class I, Groups A, B, C, D

Class II, Groups E, F, G

### Applicable Standard

Meets NEC Sec. 501-5(e) requirements for sealing of MC cable in Class I, Div. 1, and 2 hazardous locations. Also meets UL standards for rain tight fitting in hazardous locations.



# PowerSpec™

Catalog Number	Diameter Over Jacket		Diameter Over Armor		Maximum Cable Core Diameter	Conduit Size	Fitting O.D.	Length Overall	Ship Weight (lbs.)
	min.	max.	min.	max.					
PS-065-05	0.55"	0.65"	0.45"	0.56"	0.56"	1/2"	1 5/8"	2 1/6"	1/4
PS-075-05	0.65"	0.75"	0.55"	0.66"	0.56"	1/2"	1 5/8"	2 1/6"	1/4
PS-085-05	0.75"	0.85"	0.65"	0.76"	0.56"	1/2"	1 5/8"	2 1/6"	1/4
PS-100-07	0.85"	1.00"	0.72"	0.90"	0.82"	3/4"	2"	2 3/16"	1/3
PS-115-07	1.00"	1.15"	0.87"	1.05"	0.82"	3/4"	2"	2 3/16"	1/3
PS-125-10	1.13"	1.25"	1.00"	1.15"	1.00"	1"	2 3/16"	2 7/16"	1/2
PS-138-10	1.25"	1.38"	1.12"	1.28"	1.00"	1"	2 3/16"	2 7/16"	1/2
PS-150-12	1.33"	1.50"	1.23"	1.40"	1.33"	1 1/4"	2 7/8"	2 7/8"	2/3
PS-168-12	1.50"	1.68"	1.40"	1.58"	1.33"	1 1/4"	2 7/8"	2 7/8"	2/3
PS-183-15	1.68"	1.83"	1.58"	1.73"	1.61"	1 1/2"	3 1/4"	3 5/8"	1
PS-200-15	1.83"	2.00"	1.73"	1.90"	1.61"	1 1/2"	3 1/4"	3 5/8"	1
PS-218-15	2.00"	2.18"	1.90"	2.08"	1.61"	1 1/2"	3 1/4"	3 5/8"	1
Catalog Number	Diameter Over Jacket		Diameter Over Armor		Maximum Cable Core Diameter	Conduit Size	Fitting O.D.	Length Overall	Ship Weight (lbs.)
	min.	max.	min.	max.					
PSX-065-05	0.55"	0.65"	0.45"	0.56"	0.56"	1/2"	1 5/8"	2 3/4"	5/8
PSX-075-05	0.65"	0.75"	0.55"	0.66"	0.56"	1/2"	1 5/8"	2 3/4"	5/8
PSX-085-05	0.75"	0.85"	0.65"	0.76"	0.56"	1/2"	1 5/8"	2 3/4"	5/8
PSX-100-07	0.85"	1.00"	0.72"	0.90"	0.82"	3/4"	2"	3 1/8"	7/8
PSX-115-07	1.00"	1.15"	0.87"	1.05"	0.82"	3/4"	2"	3 1/8"	7/8
PSX-125-10	1.13"	1.25"	1.00"	1.15"	1.00"	1"	2 3/16"	3 1/2"	1
PSX-138-10	1.25"	1.38"	1.12"	1.28"	1.00"	1"	2 3/16"	3 1/2"	1
PSX-150-12	1.33"	1.50"	1.23"	1.40"	1.33"	1 1/4"	2 7/8"	4 1/8"	1 1/4
PSX-168-12	1.50"	1.68"	1.40"	1.58"	1.33"	1 1/4"	2 7/8"	4 1/8"	1 1/4
PSX-183-15	1.68"	1.83"	1.58"	1.73"	1.61"	1 1/2"	3 1/4"	4 11/16"	1 3/4
PSX-200-15	1.83"	2.00"	1.73"	1.90"	1.61"	1 1/2"	3 1/4"	4 11/16"	1 3/4
PSX-218-15	2.00"	2.18"	1.90"	2.08"	1.61"	1 1/2"	3 1/4"	4 11/16"	1 3/4

**To Order:** Select fitting based on diameter over jacket and armor by using the table above. For locknut and bushing, add suffix LB.

11A-17

## Fittings for Metal Clad Cables Jacket over Armor

### 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:

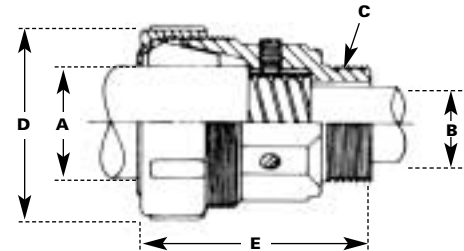
- For terminating metal clad cable

### Certification:



### To Order:

Determine satisfactory fit by checking cable dimensions A and B.  
If cable dimensions do not fall within acceptable range, consult factory.



	Dimensions (Inches)						
	A		B	C	D	E	
Catalog Number	Dia. Over Jacket Min.	Max.	Max. Cable Core Dia.	Conduit Size	Fitting O.D.	Length Overall	Ship Wt. (Lbs.)
JAG 45-05	.35	.45	.61	1/2	1 5/8	2 1/4	1/4
JAG 55-05	.45	.55	.61	1/2	1 5/8	2 1/4	1/4
JAG 65-05	.55	.65	.61	1/2	1 5/8	2 1/4	1/4
JAG 75-05	.65	.75	.61	1/2	1 5/8	2 1/4	1/4
JAG 85-05	.75	.85	.61	1/2	1 5/8	2 1/4	1/4
JAG 95-05	.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
JAG 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 451-40	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



## Fittings for Metal Clad Cables Unjacketed Armor Dry Location

### Features/Benefits:

- Wide armor range – sizes on .200 intervals
- Raised boss in strap offers excellent pullout protection
- Copper-free aluminum for corrosion resistance and suitability with aluminum or galvanized steel armor

### Application:

For terminating metal clad cable with unjacketed armor in dry locations

### Certifications:



### Note:

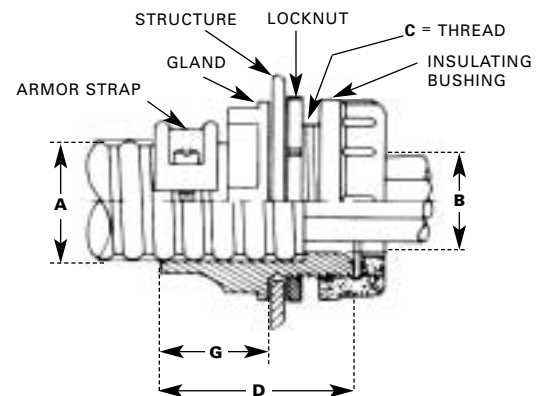
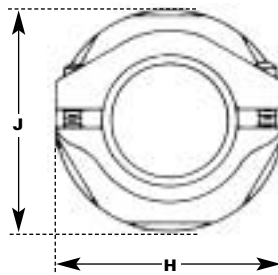
For use with Cable O.D. over armor

### To Order:

Select fitting based on diameter over armor

	Dimensions (Inches)								
Catalog Number	For Use With Cable O.D. Over Armor Min. Max.		A	B	C Conduit Size	D	G	H-J	Ship Wt. (Lbs.)
AC6	.45	.64	.65	.40	¾	1 ⅜	⅞	1 ⅜	½
AC8	.65	.84	.85	.60	1	1 13⁄16	1 ⅛	1 11⁄16	½
AC10	.85	1.04	1.05	.80	1 ¼	1 ⅞	1 ⅛	2	½
AC12	1.05	1.24	1.25	1.00	1 ¼	2	1 ¼	2	½
AC14	1.25	1.44	1.45	1.20	1 ½	2 ⅛	1 5⁄16	2 5⁄16	¾
AC16	1.45	1.64	1.65	1.40	2	2 ⅜	1 ½	2 5⁄8	1 ½
AC18	1.65	1.84	1.85	1.60	2	2 ⅜	1 ½	2 5⁄8	1 ½
AC20	1.85	2.04	2.05	1.80	2 ½	2 5⁄8	1 5⁄8	3 ¼	1 ¾
AC22	2.05	2.24	2.25	2.00	2 ½	2 5⁄8	1 5⁄8	3 ¼	1 ¾
AC24	2.25	2.44	2.45	2.20	3	2 ¾	1 ¾	3 ¾	2
AC26	2.45	2.64	2.65	2.40	3	2 ¾	1 ¾	3 ¾	2
AC28	2.65	2.84	2.85	2.60	3	2 ¾	1 ¾	3 ⅞	2
AC30	2.85	3.04	3.05	2.80	3 ½	3 ⅛	2	4 7⁄16	2 ¾
AC32	3.05	3.24	3.25	3.00	3 ½	3 ⅛	2	4 ⅜	2 ¾
AC34	3.25	3.44	3.45	3.20	3 ½	3 ⅛	2	4 9⁄16	2 ¾
AC36	3.45	3.64	3.65	3.40	4	3 ⅛	1 15⁄16	5 ⅛	3
AC38	3.65	3.84	3.85	3.60	5	3 ¼	2 ⅛	6	4
AC40*	3.85	4.04	4.05	3.80	5	3 5⁄16	2 ⅛	6	4 ½
AC42*	4.05	4.24	4.25	4.00	5	3 ¼	2 ¼	6 ⅛	4 ½
AC44*	4.25	4.44	4.45	4.20	5	3 ¼	2 ¼	6 ⅛	4 ½
AC46*	4.45	4.64	4.65	4.40	5	3 ¼	2 ¼	6 ⅛	4 ½
AC48*	4.65	4.84	4.85	4.60	5	3 ¼	2 ¼	6 ⅛	4 ½

\*CSA only



11A-19

## Fittings for Metal Clad Cables Jacket under Armor

### Features/Benefits:

- Clamping action ensures a positive mechanical and ground connection without damage to cable construction
- Fits broad armor range – sizes on .200" intervals
- Raised boss in strap offers excellent pull out protection
- Copper-free aluminum alloy for corrosion resistance and suitability with aluminum or galvanized steel armor
- Gland provides watertight cable seal in all positions

### Certification:



### Note:

For use with cable O.D. over armor

### To Order:

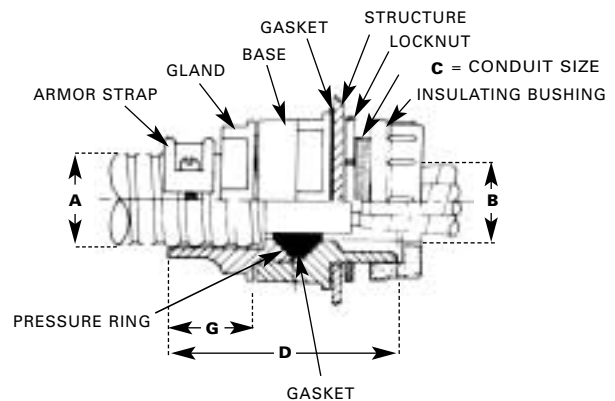
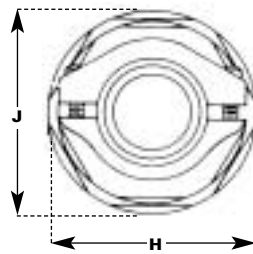
Select fitting based on diameter over bare armor

### Application:

For terminating metal clad cable with jacket under armor

Catalog Number	Dimensions (Inches)								Ship Wt. (Lbs.)
	Dia Over Armor Min.	Dia Over Armor Max.	A	B	C Conduit Size	D	G	H-J	
ACS6	.45	.64	.65	.50	3/4	2 1/2	7/8	1 1/2	1
ACS8	.65	.84	.85	.70	1	3	1 1/8	2	1
ACS10	.85	1.04	1.05	1.10	1 1/4	3 1/16	1 1/8	2 1/4	1 1/2
ACS12	1.05	1.24	1.25	1.10	1 1/4	3 5/16	1 1/4	2 1/4	1 1/2
ACS14	1.25	1.44	1.45	1.35	1 1/2	3 3/8	1 5/16	2 3/8	1 1/2
ACS16	1.45	1.64	1.65	1.70	2	3 3/4	1 1/2	3 1/16	1 3/4
ACS18	1.65	1.84	1.85	1.70	2	3 3/4	1 1/2	3 1/16	1 3/4
ACS20	1.85	2.04	2.05	2.12	2 1/2	4 3/8	1 5/8	3 1/2	2 1/2
ACS22	2.05	2.24	2.25	2.12	2 1/2	4 3/8	1 5/8	3 1/2	2 1/2
ACS24	2.25	2.44	2.45	2.75	3	4 1/2	1 3/4	4 3/16	3
ACS26	2.45	2.64	2.65	2.75	3	4 1/2	1 3/4	4 3/16	3
ACS28	2.65	2.84	2.85	2.75	3	4 1/2	1 3/4	4 3/16	3
ACS30	2.85	3.04	3.05	3.30	3 1/2	4 7/8	2	4 11/16	4
ACS32	3.05	3.24	3.25	3.30	3 1/2	4 7/8	2	4 11/16	4
ACS34	3.25	3.44	3.45	3.30	3 1/2	4 7/8	2	4 11/16	4
ACS36	3.45	3.64	3.65	3.50	4	5 1/8	1 15/16	5 1/4	5
ACS38	3.65	3.84	3.85	3.85	5	5 1/2	2 1/16	6 9/16	6 1/2
ACS40	3.85	4.04	4.05	3.85	5	5 3/8	2 1/8	6 9/16	6 1/2
ACS42	4.05	4.24	4.25	4.44	5	5 3/8	2 1/4	6 9/16	6 1/2
ACS44	4.25	4.44	4.45	4.44	5	5 3/8	2 1/4	6 9/16	6 1/2
ACS46	4.45	4.64	4.65	4.44	5	5 3/8	2 1/4	6 9/16	6 1/2
ACS48	4.65	4.84	4.85	4.44	5	5 3/8	2 1/4	6 9/16	6 1/2

11A-20



## Cord Grip Fittings (Straight Body)

### Features/Benefits:

- Aluminum body and nut for exceptional corrosion resistance
- Tapered rubber bushing (grommet) provides raintight, dust-tight seal and provides resistance to cutting oils, age hardening, compression set and normal temperature extremes
- Anti-friction washer is supplied between the nut and bushing for ease in compression
- Machine cut threads prevent cross threading, ensure smooth compression and watertight make-up in conduit hubs
- Mesh option available in most sizes for additional support

### Applications:

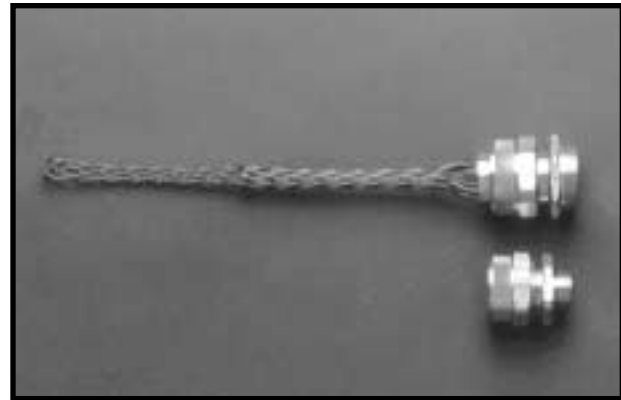
For terminating cable in conduit hubs or knock-outs and for providing relief from strain on cable

### Certifications:



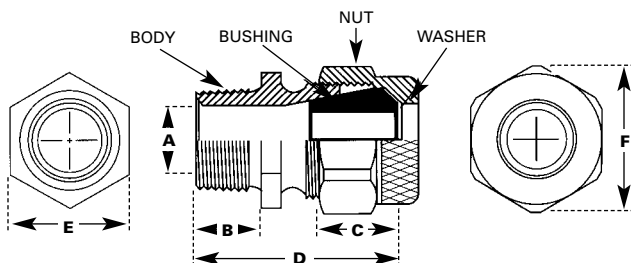
### Note:

Consult factory for alternate materials (i.e., stainless steel)



CGP (Straight Body)

Conduit Size (Inches)	Cable Range (Inches)	Catalog Number Cord Grip Only	Catalog Number Cord Grip with Mesh	Conduit Size (Inches)	Cable Range (Inches)	Catalog Number Cord Grip Only	Catalog Number Cord Grip with Mesh
1/2	.125-.188	CGP 2188*	—	1 1/4	.750-.875	CGP 5875	—
1/2	.188-.250	CGP 2250	CGP 2250-M	1 1/4	.875-1.000	CGP 51000	CGP 51000-M
1/2	.250-.312	CGP 2312	CGP 2312-M	1 1/4	1.000-1.125	CGP 51125	CGP 51125-M
1/2	.312-.375	CGP 2375	CGP 2375-M	1 1/4	1.125-1.250	CGP 51250	CGP 51250-M
1/2	.375-.438	CGP 2438	CGP 2438-M	1 1/4	1.250-1.375	CGP 51375	CGP 51375-M
1/2	.438-.500	CGP 2500	CGP 2500-M	1 1/2	.750-.875	CGP 6875	—
1/2	.500-.562	CGP 2562	CGP 2562-M	1 1/2	.875-1.000	CGP 61000	CGP 61000-M
1/2	.562-.625	CGP 2625	CGP 2625-M	1 1/2	1.000-1.125	CGP 61125	CGP 61125-M
3/4	.438-.562	CGP 3562	CGP 3562-M	1 1/2	1.125-1.250	CGP 61250	CGP 61250-M
3/4	.500-.625	CGP 3625	CGP 3625-M	1 1/2	1.250-1.375	CGP 61375	CGP 61375-M
3/4	.562-.688	CGP 3688	CGP 3688-M	1 1/2	1.312-1.438	CGP61438	CGP61438-M
3/4	.625-.750	CGP 3725	CGP 3725-M	2	1.250-1.375	CGP 81250	—
3/4	.688-.812	CGP 3812	—	2	1.438-1.562	CGP 81562	CGP 81562-M
1	.438-.562	CGP 4562	CGP 4562-M	2	1.562-1.688	CGP 81688	CGP 81688-M
1	.500-.625	CGP 4625	CGP 4625-M	2	1.688-1.812	CGP 81812	CGP 81812-M
1	.562-.688	CGP 4688	CGP 4688-M				
1	.625-.750	CGP 4750	CGP 4750-M				
1	.688-.812	CGP 4812	CGP 4812-M				
1	.750-.875	CGP 4875	CGP 4875-M				
1	.812-.938	CGP 4938	CGP 4938-M				



\*Not UL listed

Dimension Table (Straight Body)

Dimensions (Inches)						
Conduit Size	A	B	C	D	E	F
1/2	0.58	0.53	0.72	1.81	1.09	1.33
3/4	0.81	0.56	0.86	2.06	1.38	1.52
1	1.00	0.62	0.97	2.31	1.56	1.70
1 1/4	1.31	0.69	1.25	2.78	2.16	2.50
1 1/2	1.50	0.69	1.25	2.78	2.16	2.50
2	1.84	0.84	1.72	3.75	2.83	3.25

11A-21

## Cord Grip Fittings (90 Degree Body)

### Features/Benefits:

- Aluminum body and nut for exceptional corrosion resistance
- Tapered rubber bushing (grommet) provides raintight, dust-tight seal and provides resistance to cutting oils, age hardening, compression set and normal temperature extremes
- Anti-friction washer is supplied between the nut and bushing for ease in compression
- Machine cut threads prevent cross threading, ensure smooth compression and watertight make-up in conduit hubs
- Mesh option available in most sizes for additional support

### Applications:

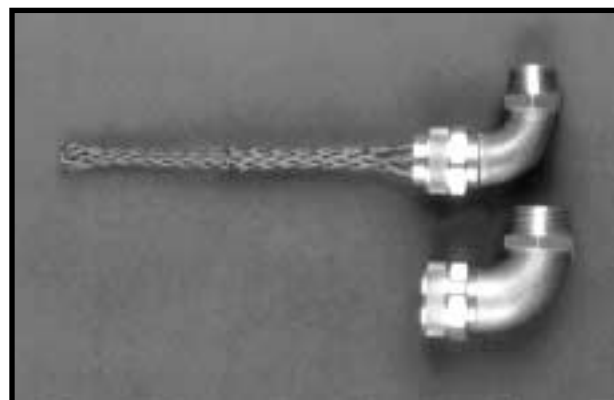
For terminating cable in conduit hubs or knock-outs and for providing relief from strain on cable

### Certifications:



### Note:

Consult factory for alternate materials (i.e., stainless steel)

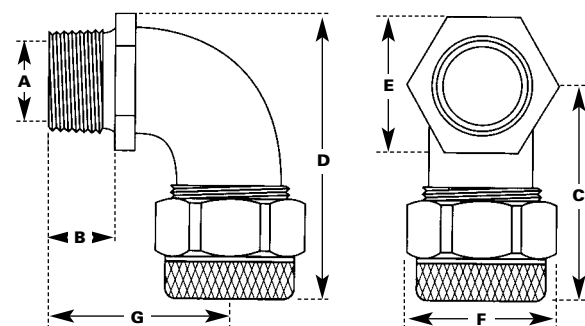


CGP (90 Degree Body)

Conduit Size (Inches)	Cable Range (Inches)	Catalog Number Cord Grip Only	Catalog Number Cord Grip with Mesh	Conduit Size (Inches)	Cable Range (Inches)	Catalog Number Cord Grip Only	Catalog Number Cord Grip with Mesh
1/2	.125-.188	CGP 92188*	—	1 1/4	.750-.875	CGP 95875	—
1/2	.188-.250	CGP 92250	CGP 92250-M	1 1/4	.875-1.000	CGP 951000	CGP 951000-M
1/2	.250-.312	CGP 92312	CGP 92312-M	1 1/4	1.000-1.125	CGP 951125	CGP 951125-M
1/2	.312-.375	CGP 92375	CGP 92375-M	1 1/4	1.125-1.250	CGP 951250	CGP 951250-M
1/2	.375-.438	CGP 92438	CGP 92438-M	1 1/4	1.250-1.375	CGP 951375	CGP 951375-M
1/2	.438-.500	CGP 92500	CGP 92500-M				
1/2	.500-.562	CGP 92562	CGP 92562-M	1 1/2	.750-.875	CGP 96875	—
1/2	.562-.625	CGP 92625	CGP 92625-M	1 1/2	.875-1.000	CGP 961000	CGP 961000-M
				1 1/2	1.000-1.125	CGP 961125	CGP 961125-M
3/4	.438-.562	CGP 93562	CGP 93562-M	1 1/2	1.125-1.250	CGP 961250	CGP 961250-M
3/4	.500-.625	CGP 93625	CGP 93625-M	1 1/2	1.250-1.375	CGP 961375	CGP 961375-M
3/4	.562-.688	CGP 93688	CGP 93688-M	1 1/2	1.312-1.438	CGP961438	CGP961438-M
3/4	.625-.750	CGP 93725	CGP 93725-M				
3/4	.688-.812	CGP 93812	CGP 93812-M	2	1.250-1.375	CGP 981250	—
1	.438-.562	CGP 94562	CGP 94562-M	2	1.438-1.562	CGP 981562	CGP 981562-M
1	.500-.625	CGP 94625	CGP 94625-M	2	1.562-1.688	CGP 981688	CGP 981688-M
1	.562-.688	CGP 94688	CGP 94688-M	2	1.688-1.812	CGP 981812	CGP 981812-M
1	.625-.750	CGP 94750	CGP 94750-M				
1	.688-.812	CGP 94812	CGP 94812-M				
1	.750-.875	CGP 94875	CGP 94875-M				
1	.812-.938	CGP 94938	CGP 94938-M				

Dimension Table (90 Degree Body)

Dimensions (Inches)							
Conduit Size	A	B	C	D	E	F	G
1/2	0.58	0.56	1.88	2.39	1.03	1.33	1.50
3/4	0.76	0.63	2.25	2.88	1.25	1.52	1.94
1	0.99	0.63	2.41	3.13	1.44	1.70	2.00
1 1/4	1.28	0.69	3.19	4.41	2.13	2.55	2.69
1 1/2	1.40	0.69	3.19	4.41	2.13	2.55	2.69
2	1.90	0.81	4.03	5.56	2.81	3.25	3.19



\*Not UL listed

## Cable Grip Fittings

### Features/Benefits:

- Neoprene bushing provides raintight seal
- Smooth bored for passage of the cable straight into the metal clad equipment or through a bulkhead

### Application:

For terminating cable in all locations

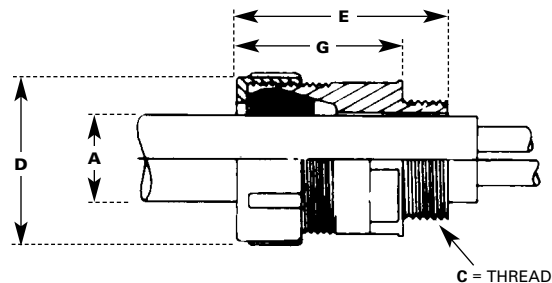
### Note:

Provides cable support for multiple conductor and/or large single conductor cables entering metal cabinets or passage through metal plates, switchgear, etc.

### To Order:

Select fitting based on diameter of cable

Catalog Number	Dimensions (Inches)					Ship Wt. (Lbs.)
	A Dia. Over Jacket Min.      Max.		C Conduit Size	D Fitting O.D.	E Overall Length	
CG 138-15 CG 155-15	1.28 1.38	1.38 1.55	1 1/2 1 1/2	2 7/8 2 7/8	3 1/4 3 1/4	1 1
CG 174-20 CG 188-20 CG 195-20	1.54 1.66 1.73	1.74 1.88 1.95	2 2 2	3 1/4 3 1/4 3 1/4	4 4 4	1 1/4 1 1/4 1 1/4
CG 219-25 CG 236-25	1.95 2.16	2.19 2.36	2 1/2 2 1/2	4 4	4 1/2 4 1/2	2 2
CG 263-30 CG 280-30 CG 296-30	2.35 2.61 2.74	2.63 2.80 2.96	3 3 3	4 13/16 4 13/16 4 13/16	4 7/8 4 7/8 4 7/8	3 3 3
CG 297-35 CG 311-35 CG 327-35 CG 343-35	2.74 2.94 3.09 3.20	2.97 3.11 3.27 3.43	3 1/2 3 1/2 3 1/2 3 1/2	5 3/16 5 3/16 5 3/16 5 3/16	5 1/4 5 1/4 5 1/4 5 1/4	3 3/4 3 3/4 3 3/4 3 3/4
CG 364-40 CG 369-40 CG 387-40	3.31 3.52 3.64	3.64 3.69 3.87	4 4 4	5 13/16 5 3/16 5 3/16	5 3/8 5 3/8 5 3/8	4 1/4 4 1/4 4 1/4



# Boots – Protective Covering For AC Type Fittings

Because of superior holding strength, AC fittings are sometimes used with jacketed cables in wet or contaminated areas. For these applications, boots are available.

End fitting clamping is made on the bare armor and the boot protects the fitting and exposed cable armor. Boots are used on cable splice entrance fittings and AC or ACS type terminations.

**Application:**

Protects AC fittings in wet or contaminated areas

**Note:**

50 piece minimum

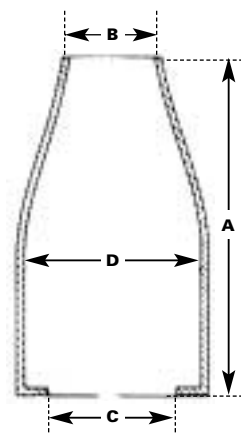
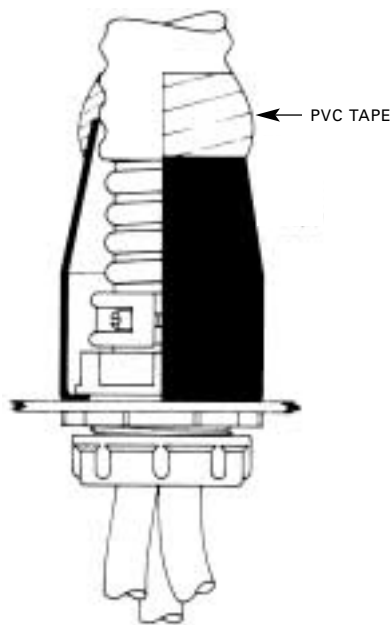
**To Install:**

Measure O.D. over jacket. Turn boot inside out and cut to diameter 1/4" less than measured O.D. Leaving boot inside out, push back over cable. Install fitting with jacket removed as shown. Tighten clamp. Pull boot into place snapping rim around flange of fitting. Tighten locknut and, if desired, apply wrap of PVC tape around junction of jacket and boot.

**To Order:**

Select boot based on selected AC fitting (see page 11A-19 for AC fittings)

Catalog Number	For Use With Fitting Catalog Number	Dimensions (Inches)				Ship Wt. (Ozs.)
		A	B	C	D	
BT3	AC 6-8	5 1/2	1 1/16	1 1/8	2 1/2	5
BT15	AC 10-14	5 1/4	1 3/16	1 5/8	2 1/2	5
BT20	AC 16-18	6 1/2	1 5/16	2 3/8	3 1/4	7
BT25	AC 20-22	7	1 7/8	2 7/8	3 5/8	8
BT30	AC 24-28	7	2	3 1/2	4 1/4	10
BT35	AC 30-34	7 1/2	2 5/8	4	4 1/2	12
BT40	AC 36	8	3 3/16	4 1/2	5 1/4	13
BT50	AC 38-48	8 1/2	3 3/8	5 9/16	6 5/8	15



BT neoprene boot installed on Type AC fitting to provide moisture and corrosion protection



# Flange Supports for Cable Connector Fittings

**Features/Benefits:**

- Flanges complete with hardware and gaskets
- Copper free aluminum alloy for excellent corrosion resistance
- Provides threaded hub for terminators

**Application:**

For added support on switchgear or entrances to metallic enclosures

**Notes:**

- For use with JAG, AC(S) and CG
- For blind tap, use suffix L

FS Cat. No.	FS5 Cat. No.	Conduit Size (Inches)	Ship Wt. (Lbs.)
FS20	—	2	2 3/4
FS25	FS525	2 1/2	2 3/4
FS30	FS530	3	2 3/4
FS35	FS535	3 1/2	2 3/4
FS40	FS540	4	2 3/4
FS50	—	5	2 3/4
*FS60L	—	6	2 3/4

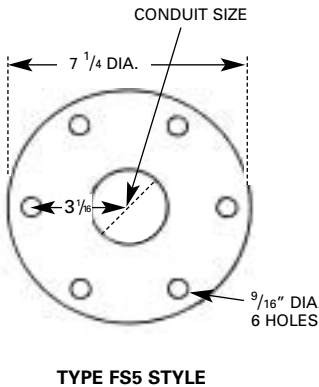
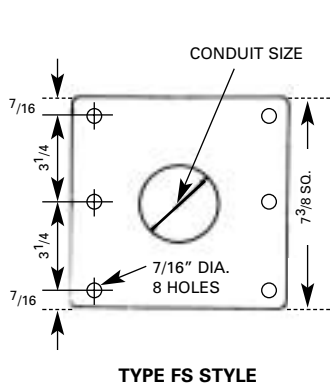
\*Available in blind tap only



FS for JAG, AC(S) and CG



FS5 for JAG, AC(S) and CG



11A-25

# Brackets

**Features/Benefits:**

- Aluminum alloy for excellent corrosion resistance
- Provide rigid support and effectively prevent movement of cables at termination point

**Applications:**

For mounting of connectors and terminators on walls, ceilings or structures.

Type BAC Brackets provide convenient means for installing and terminating armored cable inside switchgear and control compartments. They may also be used to terminate cable parallel to wall, ceiling, or other surfaces, when desired.

**Certification:**

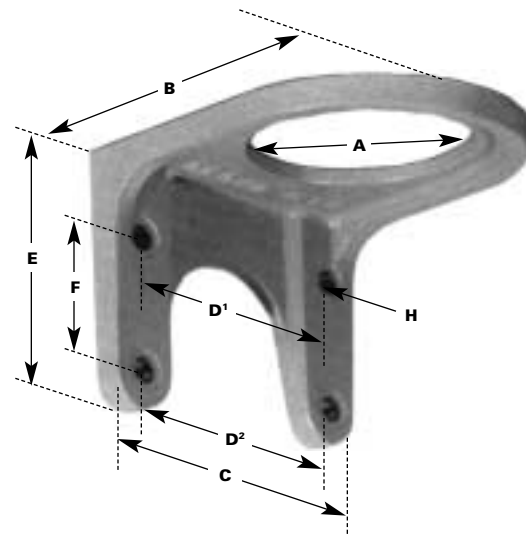


**Note:**

For use with all Adalet Fittings

**To Order:**

Order BAC based on conduit size of the fittings to be used



11A-26

Catalog Number	Dimensions (Inches)								Ship Wt. (Lbs.)
	A Conduit Size	B	C	D <sup>1</sup>	D <sup>2</sup>	E	F	H	
BAC12	1 1/4	4	3 1/2	2 3/4	2 3/4	2 3/4	17/16	9/32	2
BAC15	1 1/2	4	3 1/2	2 3/4	2 3/4	2 3/4	17/16	9/32	2
BAC20	2	4 1/8	4 1/8	3 5/16	3 5/16	3	1 1/2	9/32	2
BAC25	2 1/2	5	4 1/2	3 3/4	3 3/4	3 1/4	1 1/2	9/32	2 1/2
BAC30	3	5 5/8	5 1/8	4 3/8	4 3/8	3 9/16	1 3/4	9/32	3
BAC35	3 1/2	6 1/8	5 5/8	4 7/8	4 7/8	3 13/16	2	11/32	3 1/2
BAC40	4	6 1/2	6 1/2	4 5/8	5 5/8	4 1/2	3 1/8	11/32	3 1/2
BAC50	5	7 9/16	7 1/2	5 1/2	6 5/8	4 3/4	3 3/8	11/32	4
BAC60	6	9 1/4	9 1/8	7 1/8	8 1/4	6	4 1/2	11/32	6

# Flanged Angle Adapter for Metal Clad Terminators

**Features/Benefits:**

- Terminate armor at a 45° angle and permit bending single conductors in a reduced space
- Adapters are supplied complete with gaskets and fasteners
- Aluminum alloy for excellent corrosion resistance

**Application:**

For angle mounting of connectors and terminators to boxes and equipment

**Certification:**



**Note:**

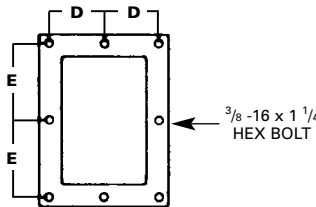
Type TFA Terminating Fitting Adapters are designed for use with Type AC, ACS, or JAG fittings in conduit sizes from 2 1/2" to 6"

**To Order:**

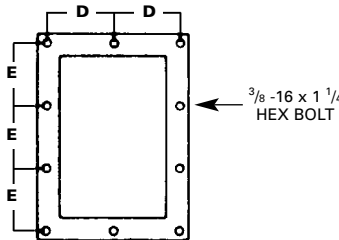
Base selection on fitting conduit size from Column C of fitting catalog page



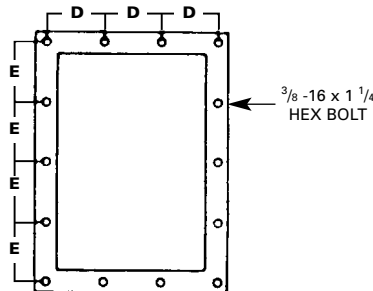
Catalog Number	Dimensions (Inches)						Ship Wt. (Lbs.)
	For Fittings Having Conduit Size	A Length	B Width	C Height	D	E	
TFA45-25	2 1/2	8 3/4	6 1/2	3 9/16	2 13/16	3 15/16	3
TFA45-30	3	10	6 3/4	4 1/4	2 15/16	3	3 1/2
TFA45-35	3 1/2	10 1/2	7 5/8	4 3/8	3 3/8	3 3/16	3 3/4
TFA45-40	4	11 1/4	8 1/8	4 3/4	3 5/8	3 7/16	4
TFA45-50	5	13 5/16	9 3/4	5 7/8	2 5/16	3 1/16	5 1/2
TFA45-60	6	15 7/16	11 1/8	6 3/4	3 3/8	3 5/8	9



TFA45-25



TFA45-30  
TFA45-35  
TFA45-40



TFA45-50  
TFA45-60

11A-27

# Conduit Ventilating Cable Supports

**Features/Benefits:**

- Helps reduce temperatures in conduit, improving service life and load carrying capacity of the cable
- Neoprene packing gland provides watertight seal and cable support
- Set screws secure the ventilator to conduit

**Application:**

For supporting and sealing cable risers and allowing escape of heated air from conduit

**Note:**

Type CV Supports are designed for use at top of conduit where cable extends into air

**To Order:**

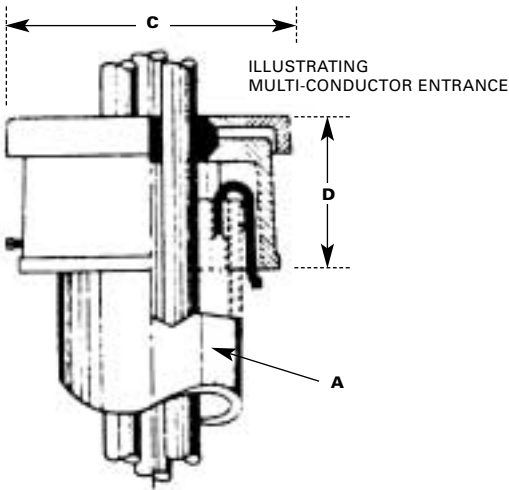
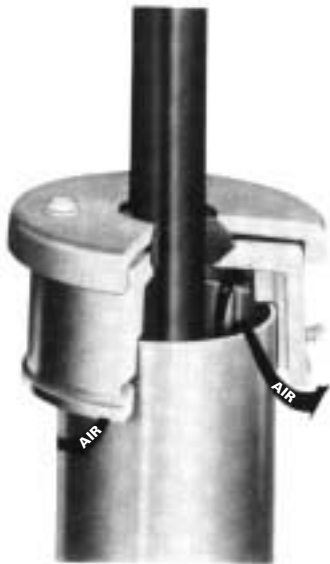
1. Select catalog number of fitting
2. Indicate number and diameter of cables
3. Where used with interlocked armored cable, specify whether gasket to fit over jacket or over armor

	Dimensions (Inches)					
Catalog Number	A* Conduit Size	B Max. Cable O.D.		C	D	Ship Wt. (Lbs.)
		1-3/C	3-1/C**			
CV20	2	1.60	.74	4 11⁄16	2 5⁄8	2 1⁄2
CV25	2 1⁄2	1.91	.93	5 5⁄32	2 5⁄8	2 1⁄2
CV30	3	2.37	1.19	5 13⁄16	2 3⁄4	3
CV35	3 1⁄2	2.75	1.41	6 3⁄16	2 3⁄4	3 1⁄2
CV40	4	3.12	1.63	6 13⁄16	2 7⁄8	4
CV50	5	3.82	2.13	8 1⁄8	3 3⁄8	5
CV60	6	4.42	2.55	9 5⁄8	3 3⁄4	6

\* Metallic conduit - fitting can be adapted for other materials

\*\* Additional holes can be supplied - consult factory

11A-28



# Bottom Conduit Ventilators

**Features/Benefits:**

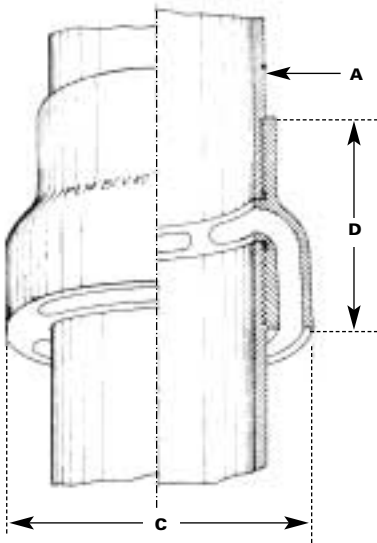
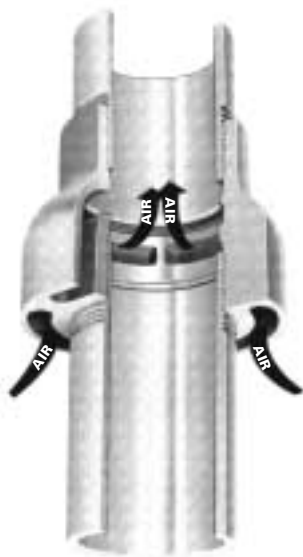
- Castings are aluminum, anodized and Teflon sealed for maximum corrosion resistance
- Helps reduce temperature in conduit riser, improving service life and load carrying capacity of the cable

**Application:**

Used in conduit system to allow air to enter conduit riser

Catalog Number	Dimensions (Inches)			Ship Wt. (Lbs.)
	A Conduit Size*	C	D	
BCV 20	2	3 5/8	2 7/8	2
BCV 25	2 1/2	5 1/8	4	3
BCV 30	3	5 9/16	4 1/4	3 1/2
BCV 35	3 1/2	6 1/8	4 1/2	4
BCV 40	4	6 1/2	4 1/2	4
BCV 50	5	8 1/4	4 7/8	6
BCV 60	6	9 5/16	5 1/4	8

\* Metallic conduit. Fitting can be adapted for other types.



11A-29

# Split Conduit Ventilating Cable Supports

**Feature/Benefit:**

- Split to permit insulation after cable has been pulled or where cable extends some distance from ventilator mounting

**Application:**

Used where existing XLP or EPR cables are installed in conduit

**Note:**

For installation after pulling cable

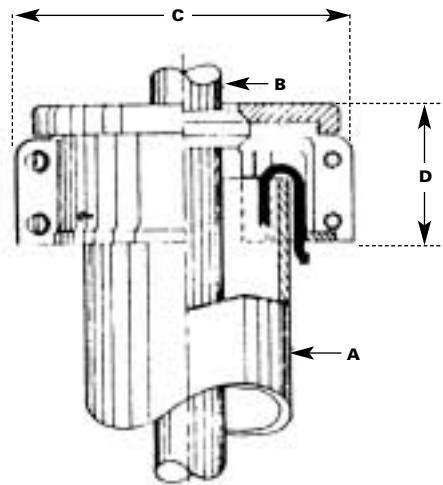
**To Order:**

1. Select catalog number of fitting
2. Indicate number and diameter of cables
3. Where used with interlocked armored cable, specify whether gasket to fit over jacket or over armor

	Dimensions (Inches)					
Catalog Number	A Conduit Size*	B Max. Cable O.D.		C	D	Ship Wt. (Lbs.)
		1-3/C	3-1/C**			
CVS 20	2	1.50	.54	4 5/8	2 3/8	2
CVS 25	2 1/2	1.80	.75	5 1/4	2 3/8	2
CVS 30	3	2.23	1.00	5 3/4	2 3/8	3
CVS 35	3 1/2	2.60	1.25	6 1/8	2 5/8	3 1/2
CVS 40	4	2.92	1.44	6 3/4	2 5/8	4
CVS 50	5	3.68	1.87	7 3/4	2 3/4	5
CVS 60	6	4.42	2.18	9	2 3/4	6

- \* Metallic conduit - fitting can be adapted for other materials
- \*\* Additional hole can be supplied - consult factory

11A-30



## Splicing Kits

### **For Use on Solid Dielectric Cable** 600 V to 35 kV 100%

Kits include all tapes, braids, abrasive cloth, instructions (connectors not included) for one straight splice of 1/C or 3/C cable.

#### Notes

- Catalog system provides five kits to cover most sizes from #8 AWG through 1000 MCM. Suffix provides voltage information.
- For aluminum conductors or other than straight two way splices, see other options available.
- Splice kits are designed for cables having standard insulation thickness and concentric strand conductors. Consult factory if insulation or stranding differs.
- Reference on connectors indicate splice design. Connectors also available.
- Kits suitable for tapered high voltage compression or solder connectors to standard TD-160 (not furnished).

#### To Order

Select catalog number not to exceed maximum conductor size shown. Add voltage suffix.

#### Examples

- 3/C 1/0 AWG copper 5 kV unshielded XLP – CATALOG #3SB-5 1/C 350 MCM copper cable. 175 XLP insulation 15kV 100% – CATALOG #SC-15.
- 3/C 4/0 Aluminum 15kV 133%, T splice – CATALOG #3SB-16AT 1/C 600 MCM Aluminum cable. EPR insulation, 3-way-Y-35kV 100% – CATALOG #SD35AY.

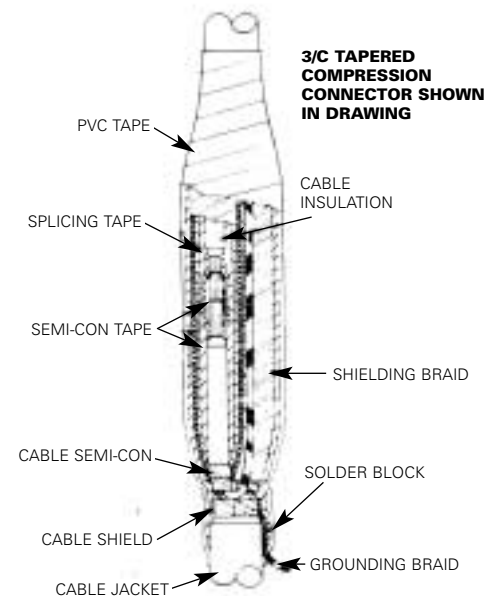
Catalog Number		Maximum Conductor Size
1/C	3/C	
SA	3SA	# 1AWG
SB	3SB	250 MCM
SC	3SC	500 MCM
SD	3SD	750 MCM
SE	3SE	1000 MCM

#### Voltage Suffix for Catalog Number

Catalog Suffix No.	Shielded & Unshielded	Voltage (kV)
5	Unshielded	600V – 5kV 100%
8	Shielded	5 kV – 8kV 100%
15	Shielded	8 kV 133% – 15 kV 100%
16	Shielded	15 kV 133%
25	Shielded	16 kV – 25 kV 100%
35	Shielded	26 kV – 35 kV 100%

#### Other Types Available

Suffix	Application
A	Aluminum Conductor–2 way tapered connector
AT	Aluminum Conductor–3 way-T-tapered connector
AY	Aluminum Conductor–3 way-Y-tapered connector
T	Copper–3 way-T-solder connector to TD-160
TC	Copper–3 way-T-tapered compression connector
YC	Copper–3 way-Y-tapered compression connector
X	Copper–4 way-solder full duplex TD-160
Y	Copper–3 way-solder half duplex to TD-160



## Splicing Kits

### For Splicing PILC

Complete materials, instructions, and detailed drawings for making a correctly designed straight splice in varnished cambric or paper-insulated cable are provided. (Connectors available separately.)

#### Notes

- Splice kits are designed for cables with standard cable insulations and concentric strand. Consult factory for kits varying from standard construction.
- Kits are designed to be used with tapered compression or solder connectors (not furnished). See page 11A-15 to order.
- For larger sizes, higher voltage, X or Y splices, or non-standard dimensions, consult factory.

#### To Order

Select catalog number for conductor size and voltage. Provide full cable description and dimensions with order.

#### Example

3/C 350 MCM Copper PILC 15 kV 133% insulation Catalog Number: 3LPC 16

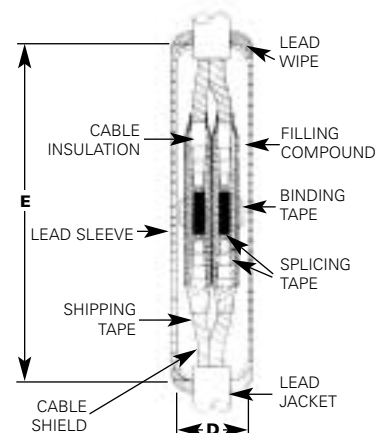
Catalog Number		Maximum Conductor Size
1/C	3/C	
LPA	3LPA	# 1
LPB	3LPB	250 MCM
LPC	3LPC	500 MCM
LPD	3LPD	750 MCM
LPE	3LPE	1000 MCM

#### Voltage Suffix for Catalog Number

Catalog Suffix No.	Shielded & Unshielded	Voltage (kV)
5	Unshielded	600V – 5kV 100%
8	Shielded	5 kV – 8kV 100%
15	Shielded	8 kV 133% – 15 kV 100%
16	Shielded	15 kV 133%
25	Shielded	16 kV – 25 kV 100%
35	Shielded	26 kV – 35 kV 100%

#### Other Suffixes Also Available

Suffix	Application
X	Copper – 4-way solder full duplex to TD160
Y	Copper – 3-way solder half duplex to TD160



#### One Conductor (Copper) Dimensional Data

Catalog No.	Dimensions (Inches)					
	5kV - 8kV		Shielded 15kV - 100%		Shielded 15kV - 133%	
	D	E	D	E	D	E
LPA	1 1/2	13	2	15 1/2	2	21
LPB	2	13 1/2	2	16	2 1/2	21 1/2
LPC	2 1/2	14	2 1/2	16 1/2	3	22
LPD	2 1/2	14 1/2	3	17	3	22 1/2
LPE	3	15 1/2	3	18	3 1/2	23 1/2

#### Three Conductor (Copper) Dimensional Data

Catalog No.	Dimensions (Inches)					
	Belted 5kV - 8kV		Shielded 15kV - 100%		Shielded 15kV - 133%	
	D	E	D	E	D	E
3 LPA	3	18 1/2	3 1/2	21	4	24 1/2
3 LPB	3 1/2	20	4 1/2	22 1/2	4 1/2	26
3 LPC	4 1/2	21 1/2	5	24	5 1/2	27 1/2
3 LPD	5	22	5 1/2	24 1/2	6	28
3 LPE	5 1/2	24	6	26	6 1/2	30



## Type 3AS Splicing Kits

### For Splicing Metal Clad Cable 600 V to 35 kV

Kits complete for three copper conductors, jacketed MC cables. Designed for tapered compression or solder connectors. Connectors not included. Aluminum conductor kits available. 3-way or 4-way kits available. Aluminum casings furnished (steel and bronze casings and bronze end castings are available).

#### Notes

- Consult factory for connectors required for 3-way or 4-way splices.
- Standard design includes taping cone entrances.
- Compound included. If not desired, specify "less compound" on order and jacketing tapes will be furnished at same price. Complete cable description is required with order.
- Reference on connectors indicates splice design. Connectors NOT included.
- Order within range of conductor sizes. 3/C #8 through 3/C #1 use 3ASA kit.
- Splice kits are designed for cables having standard insulation thickness and concentric strand conductors. Consult factory if insulation or stranding differs.
- Kits suitable for tapered high voltage compression or solder connectors to standard TD-160 (not furnished).

#### To Order

Select catalog number for conductor size and add voltage suffix.

#### Examples

- Typical 3/C 500MCM copper 15 kV 100% insulation – CATALOG #3ASC15 (Provide O.D. over jacket and over armor with order)
- Above cable Y or 3-way splice – CATALOG #3ASC-15Y
- Above cable – straight splice, armor clamps, no compound – CATALOG #3ASC-15-4 entrance both ends, less compound

#### Copper Conductor

Catalog No.	Conductor Size	Dimensions (Inches)									
		Unshielded 600 - 1kV		Unshielded 2300 - 5kV		Shielded 5kV - 8kV 100%		Shielded 8kV - 133% - 15kV 100%		Shielded 15kV 133%	
		D	E	D	E	D	E	D	E	D	E
3 ASA	# 1	3 1/2	26	3 1/2	26	3 1/2	29	3 1/2	33	4	33
3 ASB	250 MCM	3 1/2	26	4	29	3 1/2	32	4	33	5	41
3 ASC	500 MCM	4	28	5	29	5	33	5	41	5	41
3 ASD	750 MCM	5	29	5	30	5	33	5	41	6	41
3 ASE	1000 MCM	5	31	6	35	6	41	6	41	6	41

#### Voltage Suffix for Catalog Number

Catalog Suffix No.	Shielded & Unshielded	Voltage (kV)
1	Unshielded	600V – 1kV 100%
5	Unshielded	2300V – 5kV 100%
8	Shielded	5 kV 133% – 8kV 100%
15	Shielded	8 kV 133% – 15 kV 100%
16	Shielded	15 kV 133%
25	Shielded	16 kV 100% – 25 kV 133%
35	Shielded	26 kV 100% – 35 kV 100%



TYPICAL SPLICING KIT FOR 15kV CABLE

#### Other Suffixes Also Available

Suffix	Application
A	Aluminum Conductor – 2 way tapered connector
AT	Aluminum Conductor–3 way - T-tapered connector

11A-33

## Insulating Compounds for Splices, Potheads, Encapsulating

### Type OI Compound

A medium soft, oil-insoluble, resin-base compound for applications where migration of cable oils may be a problem.

### Type 3000 Oil

Type 3000 Oil is used for filling cable accessories where ambient temperatures do not fall below 32°F. It is also used to exclude air between layers of varnished cambric or paper tapes.

### Physical and Electrical Properties

Property	Unit	OI	3000
Flash Point	°F	490	350
Fire Point	°F	545	395
Softening Point	°F	133	—
Pouring Temp (max.)	°F	356	266
Coefficient of Expansion	°F	.0006	—
Specific Gravity at 77°F	—	1.13	.88
Dielectric Strength			
.050" gap 86°F	Volts	830	—
.050" gap 140°F	Per	586	—
.050" gap 194°F	Mil	444	—
.1" gap 77°F		—	350
Power Factor .050 gap at 60 cycle			
185°F	%	13.0	—
212°F	—	—	.1
Normal State	—	Med. Soft	—

Compound	Catalog No.	Container Size	Net Wt. (Lbs.)
OI Compound	OI-32	1 quart	2
OI Compound	OI-128	1 gallon	8
OI Compound	OI-256	2 gallons	16
OI Compound	OI-640	5 gallons	40
3000 Flushing Oil	3000-8	1/2 pint	3/4
3000 Flushing Oil	3000-16	1 pint	1 1/2
3000 Flushing Oil	3000-32	1 quart	2 1/4
3000 Flushing Oil	3000-128	1 gallon	8
3000 Flushing Oil	3000-640	5 gallons	40



## Thermometer for Compound Temperature Control

Thermometer has 1 1/2" diameter dial, with 50°F to 500°F temperature range, 8" stainless steel stem and adjustable clip for supporting thermometer. Used for determining proper pouring temperature of filling compounds and flushing oils.

Catalog No. GT-100F5-50-8



## Cable Stripping Tools – Square Cut End of Cable Insulation

### Tool and Bushing Selection

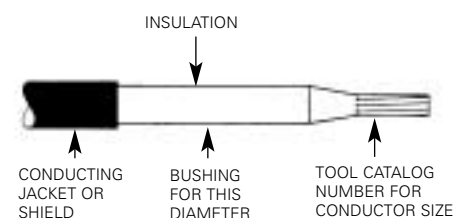
Conductor Size	Tool Catalog Number	Bushing Range Over Insulation Dia.		Extra Bushing Catalog Number	Replacement Blades Catalog Number
		Min.	Max.		
#6-3/0	1 SQ	.375	1.125	1-S	B-1
4/0-500	2 SQ	.766	1.469	2-S	B-1
550-1000	3 SQ	1.109	1.812	3-S	B-1

### Note

The Type SQ tool is designed to remove insulations such as PVC, cross-linked polyethylene, EPR or high molecular polyethylene on round conductors. It is NOT recommended for use on rubber, butyl, VC or paper insulations.

### Bushing Size for SQ and PT Tools

.375	.625	.875	1.125	1.375	1.625
.390	.640	.890	1.140	1.390	1.640
.406	.656	.906	1.156	1.406	1.656
.421	.671	.921	1.171	1.421	1.671
.437	.687	.937	1.187	1.437	1.687
.453	.703	.953	1.203	1.453	1.703
.468	.718	.968	1.218	1.468	1.718
.484	.734	.984	1.234	1.484	1.734
.500	.750	1.000	1.250	1.500	1.750
.515	.765	1.015	1.265	1.515	1.781
.531	.781	1.031	1.281	1.531	1.796
.546	.796	1.046	1.296	1.546	1.812
.562	.812	1.062	1.312	1.562	
.578	.828	1.078	1.328	1.578	
.593	.843	1.093	1.343	1.593	
.609	.859	1.109	1.359	1.609	



### To Order

1. Select tool for conductor size.
2. Diameter over insulation – after semiconducting jacket is removed – must be provided with order.
3. Tool will include two bushings – one based on nearest O.D., the other to accommodate oversize insulation.
4. To obtain additional bushings order size 1S for tool 1SQ, 2S for tool 2SQ, or 3S for tool 3SQ plus diameter from above chart. Then make sure the bushing size fits the available range for the tool.

11A-35

## Cable Insulation Penciling Tools

For preparing cable splices and terminations with savings in time and labor.

PT tools are built to guide on the cable connector. Because of close tolerance they will work only on standard stranding indicated below. Tools may be used on XLP, polyethylene, or EPR insulation on voltage range 5 kV 100% through 25 kV 100%.

### Note

For intermediate or special sizes or stranding consult factory for price and delivery.

### To Order

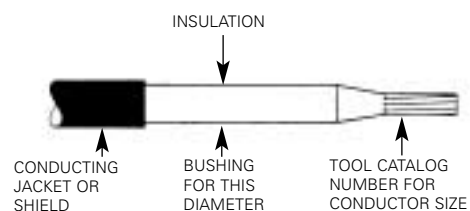
1. Select tool for conductor size. Diameter over insulation – after semiconducting jacket is removed – must be provided with order.
2. Tool will include two bushings – one based on nearest O.D., the other to accommodate oversize insulation – plus one extra blade.
3. To obtain additional bushings, order B bushing for suffix “B” tool, C bushing for suffix “C” tool, D bushing for suffix “D” tool, plus diameter from chart below. Then make sure the bushing size fits the available range for the tool.
4. For extra blades order the correct blade for tool size as noted in the chart.

### Tool and Bushing Selection

Catalog No.	Conductor Size Left Hand Lay Standard Strand Concentric Round	Catalog No.	Conductor Size Left Hand Lay Standard Strand Concentric Round
PT 8B	8- 7-Strand	PT 250C	250-37-Strand
PT 6B	6- 7-Strand	PT 300C	300-37-Strand
PT 4B	4- 7-Strand	PT 350C	350-37-Strand
PT 2B	2- 7-Strand	PT 400C	400-37-Strand
PT 1B	1- 19-Strand	PT 500C	500-37-Strand
PT 10B	1/0- 19-Strand	PT 600D	600-61-Strand
PT 20B	2/0- 19-Strand	PT 700D	700-61-Strand
PT 30B	3/0- 19-Strand	PT 750D	750-61-Strand
PT 40C	4/0- 19-Strand	PT 1000D	1000-61-Strand

### Suffix

Tool Ending Suffix	Bushing Size Range for B, C, or D tools	
	Min.	Max.
B	.375	1.062
C	.500	1.330
D	.625	1.745



### Replacement Parts

Bushing Size	Blade Size
B	.295B
C	.295C
D	.295D



## Cable Accessories

### High Voltage Insulating Tape

High voltage insulating tape used with rubber, cross-linked polyethylene, or EPR insulated cables for terminations or splices up to 69 kV. Properly applied, tape is self amalgamating, providing waterproof seal for direct burial. Tape will provide protection against corona even after repeated load cycles. Suitable for 130°C emergency conditions.

Catalog Number	Thickness	Length (Ft.)	Width (inches)	Standard Packaging Qty.
THVT 3075	.030	30	$\frac{3}{4}$	10 rolls
THVT 3010	.030	30	1	10 rolls
THVT 3015	.030	30	1 $\frac{1}{2}$	10 rolls
THVT 3020	.030	30	2	10 rolls



### Semi Conducting Tape

.030 semi conducting EPR tape, self amalgamating. Used for shielding of high-voltage terminations and splices, filling indents on compression connectors, or as a replacement of strand shields.

Catalog Number	Thickness	Length (Ft.)	Width (inches)	Standard Packaging Qty.
TSC-15	.030	15	$\frac{3}{4}$	10 rolls



### PVC All Weather Plastic Tape

.085 flame-retardant, weather-resistant, cold temperature tape. Resistant to sunlight, oil, acids, alkalis, and chemicals. Suitable for low-voltage taping or outer jacketing on terminations and splices.

Catalog Number	Thickness	Length (Ft.)	Width (inches)	Standard Packaging Qty.
TPVC-20	.085	20	$\frac{3}{4}$	20 rolls
TPVC-66	.085	66	$\frac{3}{4}$	10 rolls



### Silicone Rubber Tape

.015 rectangular, unsupported, self-adhering, track resistant silicone tape used with terminations such as the FSD in contaminated areas or salt atmospheres.

Catalog Number	Thickness	Length (Ft.)	Width (inches)	Standard Packaging Qty.
TSIL-30	.015	30	$\frac{3}{4}$	10 rolls



### Neoprene Jacketing Tape

.030 self-amalgamating jacket tape for protection of cable joints exposed to hydrocarbons. Also used for corrosion protection on lead sleeves or splice cases.

Catalog Number	Thickness	Length (Ft.)	Width (inches)	Standard Packaging Qty.
TNJ-3075	.030	30	$\frac{3}{4}$	10 rolls
TNJ-3010	.030	30	1	10 rolls
TNJ-3015	.030	30	1 $\frac{1}{2}$	10 rolls
TNJ-3020	.030	30	2	10 rolls



## Cable Accessories

### Arc Proofing Tape

Fire resistant tape used for arc proofing and fireproofing cables in manholes, cable trays, switchboxes and substations.

Catalog Number	Length (Ft.)	Width (inches)	Standard Packaging Qty.
TAP-2015	20	1 1/2	10 rolls
TAP-2030	20	3	5 rolls



### Friction Tape

.015 cotton weave tape coated both sides with asphalt. Used for mechanical protection against abrasion, bare wire, and to prevent mechanical damage.

Catalog Number	Length (Ft.)	Width (inches)	Standard Packaging Qty.
TFT-6575	60	3/4	10 rolls
TFT-6015	60	1 1/2	10 rolls
TFT-6020	60	2	10 rolls



### Varnished Dacron® Glass Tape

Dacron® glass tapes are composed of Dacron® yarn and glass fiber filling thread treated with an oleoresinous varnish. These tapes may be used for splicing paper or varnished cambric and lead cables or for stress cones with pothead terminations. Tapes are dry packed. .012 thickness.

Catalog Number	Length (Yards)	Width (inches)	Standard Packaging Qty.
TVD-1205	4	1/2	100 rolls
TVD-1275	4	3/4	100 rolls
TVD-5475	18	3/4	10 rolls
TVD-1210	4	1	100 rolls
TVD-4810	16	1	10 rolls



\*Oil packed .012 X 4 yd. X 1/4, 1/2, 3/4, 1" rolls available. Consult factory.

### Cotton Tape

Cotton Tape is one of the more versatile items required in splicing. It can be used to tie cables together, protect insulation when soldering and in extra high-voltage applications, it is used to protect the entire splice and keep it oiled during other operations.

Catalog Number	Length (Yards)	Width (inches)	Standard Packaging Qty.
TCT-2705	9	1/2	50 rolls



### Cotton Yarn

Cotton Yarn is utilized to fill the corners in a properly stepped paper insulated cable. These free untwisted strands of pure cotton help to smooth the contour of these steps and effectively change them to a long, smooth taper. This is necessary to provide a surface that can be easily taped with no voids in the corners. Dry packed.

Catalog Number	Length (Feet)	Width (Lbs.)	Standard Packaging Qty.
TCY-8025	80	1/4	50



## Cable Accessories

### ***Cleaning Kit for Extruded Dielectric Cables***

Kit including aluminum oxide abrasive cloth, clean, lint-free rags, and non-chlorinated solvent designated for use in cleaning cables. Each kit will clean three cables from #8 through 1000 MCM in voltage ranges up to 35 kV for either termination or splicing.

Catalog Number	Standard Packaging Qty.
PLCK-35	10



### ***Tinned Grounding Braid***

Tinned copper grounding braid used for grounding terminations and splices.

Catalog Number	Length (Ft.)	Width (inches)	Standard Strand	Packaging Qty.
TGB-10025	100	1/4	192/#36 (13 AWG)	1
TGB-20025	200	1/4	192/#36 (13 AWG)	1
TGB-10050	100	1/2	240/#30 (6 AWG)	1



### ***Tinned Shielding Braid***

Tinned copper 1" tubular mesh for use with stress cones, terminations and splices.

Catalog Number	Length (Ft.)	Packaging	Standard Packaging Qty.
TSB-15	15	Box	20
TSB-100	100	Spool	1
TSB-432	432	Spool	1



### ***Bar Solder***

Each bar is plainly marked as to its tin / lead content. 40/60 solder is recommended for sweating connectors and joints.

Catalog Number	Content (Tin/Lead)	Weight (Lbs.)	Standard Packaging Qty.
SB-4060	38/62	1	50 Lbs.



## Cable Accessories

### Wire Solder

Wire solder is supplied 1/8" diameter, solid. Wire solder is highly desirable for use in the tacking and joining of shielding braid and ground strap.

Catalog Number	Content (Tin/Lead)	Weight (Lbs.)	Standard Packaging Qty.
SW-5050	50/50	1	5 lbs.



### Stearine Soldering Flux

An activated Stearic formula flux molded in easy-to-use wickless candle form. Its waxlike texture allows the protection of areas prior to soldering by rubbing on a layer which will melt and clean the surface upon heating. Used for wiping lead joints.

Catalog Number	Form	Weight (Oz.)	Standard Packaging Qty.
SSF-2	Candle	2	10



### Rosin Based Soldering Flux

Non-conductive, non-corrosive flux paste for soldering of connectors, ground and shielding braid. Brush Included.

Catalog Number	Form	Can Weight (Oz.)	Standard Packaging Qty.
SSR	Paste	2	12

### Miscellaneous Chemicals

Catalog Number	Description	Container	Standard Packaging Qty.
RC-1	A50P68 butyl base rubber cement	1-oz. tube	24
PCL-2	Non-Chlorinated cleaning solvent w/cloth	2-oz. jar	40
PCL-32	Non-Chlorinated cleaning solvent	1-qt. can	10
PCL-128	Non-Chlorinated cleaning solvent	1-gal. can	41
SG-1	Silicone Grease	1/4-oz. tube	50



11A-40