

SEPARABLE CONNECTORS

CABLE JOINTS

TERMINATIONS

SURGE ARRESTERS

FUSES

LOADBREAK SWITCHES

FAULT INTERRUPTERS

*For 5kV-35kV Distribution Systems*





# ELASTIMOLD System Planning Guide



## INTRODUCTION

Catalog SP2 provides an easy-to-use, comprehensive listing of ELASTIMOLD products for 5kV thru 35kV underground power distribution systems. Included are separable elbow connectors, cable joints, terminations, surge arresters, fused elbows and other cable accessory components. The catalog incorporates information relative to product application, ratings and selection.

ELASTIMOLD is recognized as the leading producer of premolded cable accessory components worldwide. Utilizing specially formulated materials with 100% peroxide-cured insulation and shielding, Elastimold products represent the state-of-the-art in premolded process technology. Durable, quality construction and non-degrading, high-reliability, maintenance-free performance is assured when specifying ELASTIMOLD products.

ELASTIMOLD's broad line of premolded products offer significant advantages over field-fabricated and other alternatives, including: 100% factory assurance testing prior to delivery and installation; simplified, single-piece construction with built-in insulating, shielding and sealing surfaces; ease of installation with no special skills or tools required; and compact, lightweight, durable designs for easy handling and application.

**Separable Elbow Connectors** and their related accessories are available in 200 Amp loadbreak, 200 Amp deadbreak and 600 Amp deadbreak styles. Rated for padmount, subsurface, vault, indoor, outdoor and other applications, units feature interchangeable interfaces which can be easily engaged or separated to provide a convenient method to connect or disconnect cable and equipment to the distribution system.

**Cable Joints** are available in permanently crimped or bolted (separable) connector styles. Permanently crimped units are rated the same as the cable they are connecting and are available for all applications including direct buried.

**Cable Terminations** are available in single-piece or modular designs. Rated for indoor, outdoor or padmount applications, units allow connection and transition from shielded underground cables to bare overhead conductors and live-front equipment.

**Surge Arresters** are constructed using metal oxide blocks for overvoltage protection and 200 Amp separable connector interfaces for attachment to other ELASTIMOLD accessories.

**Fused Elbows** combine replaceable current-limiting fuses for overcurrent protection and 200 Amp separable connector interfaces for attachment to other ELASTIMOLD accessories.

**Loadbreak Switches, Current Limiting Fuses, Fault Interrupters, Junctions, Faulted Circuit Indicators, Secondary Underground and Transmission Products** are shown on the back cover. For additional catalog information on these product lines, please contact your ELASTIMOLD Sales Representative.

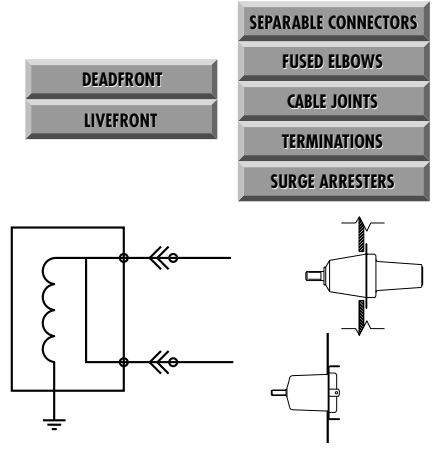
**Elastimold Special Component Services Group** provides custom products tailored to specific application requirements. Please contact the factory for further information regarding this service.

DEADFRONT	SEPARABLE CONNECTORS	200 AMP LOADBREAK	5-15kV	PART #	
LIVEFRONT	FUSED ELBOWS	200 AMP DEADBREAK	25kV		
	CABLE JOINTS	600 SERIES DEADBREAK	35kV		
	TERMINATIONS				
	SURGE ARRESTERS				

Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

## COMPONENT APPLICATION AND SELECTION

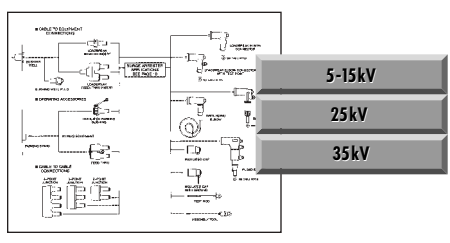
Catalog SP2 includes component group schematics, part numbers and standard ratings of ELASTIMOLD products for application on underground power distribution systems utilizing solid dielectric cable. Go directly to the product section in the table of contents or follow the decision path outlined below for component selection and application.



- Determine if the application involves **Deadfront** (shielded) or **Livefront** (unshielded) connections. Terminations are air insulated and classified as Livefront.
- Determine if the application requires **Separable Connectors, Fused Elbows, Cable Joints, Terminations** or **Surge Arresters**.
- If Separable Connectors are involved, determine the required current class: **200 Amp, 600 Amp** or **900 Amp**. This decision is based on the conductor size, loading, and system short circuit currents. The selected connector must be compatible with the mating interface on any equipment.

200 AMP LOADBREAK
200 AMP DEADBREAK
600 SERIES DEADBREAK

- 200 Amp connectors are available in **Loadbreak** and **Deadbreak** styles. Determine which style is required. 600 Series Connectors are Deadbreak only and Fused Elbows are Loadbreak only.



5-15kV
25kV
35kV

- Determine the part number related to the specific **Voltage Class** by utilizing the schematic layouts and product tables.

PART #
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- If the component mates with cable, determine the cable insulation diameter, conductor size, type of cable shield and if jacket sealing is required.

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# CERTIFIED TESTS AND PERFORMANCE

Elastimold Separable Connectors, Cable Joints, Cable Terminators, Surge Arresters, Fused Elbows and other cable accessory products have been designed and tested per applicable portions of IEEE, ANSI, NEMA and other industry standards including:

- IEEE 386™ Standard For Separable Connectors
- IEEE 404™ Standard For Cable Joints and Splices
- IEEE 48™ Standard For Cable Terminations

- IEEE C62.11™ Standard For Metal Oxide Surge Arresters
- ANSI C37.41 Standard For Current Limiting Fuses
- IEEE 592™ Standard For Exposed Semiconducting Shields
- ANSI C119.4 Standard For Copper and Aluminum Conductor Connectors
- AEIC CS6 and CS8 Standards For XLP and EPR Insulated Cables

## CABLE JOINTS, TERMINATIONS AND ARRESTER RATINGS

Refer to the pages listed below for rating information:

- PCJ Cable Joints, page 20.
- Cable Terminations, page 22
- Surge Arresters, page 26.

## SEPARABLE CONNECTOR RATINGS

Table 1 shows voltage and current ratings which apply to all Separable Connectors including 200 AMP Loadbreak, 200 AMP Deadbreak and 600 Series Deadbreak products. Table 2 shows switching and fault close ratings which only apply to 200 AMP Loadbreak Connectors.

TABLE 1	15kV Class Ratings	25kV Class Ratings	35kV Class Ratings
<ul style="list-style-type: none"> <li>• <b>OPERATING VOLTAGE</b> Maximum line-to-ground (See Application Info Note 1)</li> </ul>	8.3kV	15.2kV	21.1kV
<ul style="list-style-type: none"> <li>• <b>BIL</b> Impulse withstand 1.2 x 50 microsecond wave</li> </ul>	95kV	125kV	150kV
<ul style="list-style-type: none"> <li>• <b>WITHSTAND VOLTAGE</b> AC One Minute DC Fifteen Minute</li> </ul>	34kV 53kV	40kV 78kV	50kV 103kV
<ul style="list-style-type: none"> <li>• <b>CORONA EXTINGUISH LEVEL @ 3pC Sensitivity</b></li> </ul>	11kV	19kV	26kV
<b>200 AMP Products</b> Continuous Current: Symmetrical Momentary Current:  <b>600 Series Products</b> Continuous Current: Symmetrical Momentary Current:	200 AMP* 10kA sym, 10 cycle duration  600 and 900 AMP* 25kA sym, 10 cycle duration  * Designed for 90° C maximum continuous operating temperature		

TABLE 2	LOADMAKE/LOADBREAK SWITCHING	FAULT CLOSE
<b>15kV Class Ratings</b>	<ul style="list-style-type: none"> <li>• 1Ø and 3Ø circuits 8.3kV line to ground, 14.4kV max. across open contacts.</li> <li>• 10 loadmake/break operations at 200 Amps max. with 70 to 80% lagging power factor.</li> </ul>	1 fault close operation at 8.3kV or 14.4kV; 10,000 Amps, rms, sym. 10 cycles (0.17 sec.) 1.3 max. asym factor applies to new or used mating parts (up to maximum designated switching operations.)
<b>25kV Class Ratings</b>	<ul style="list-style-type: none"> <li>• 1Ø and 3Ø circuits 15.2kV line to ground, 26.3kV max. across open contacts.</li> <li>• 10 loadmake/break operations at 200 Amps max. with 70 to 80% lagging power factor.</li> </ul>	1 fault close operation at 15.2kV or 26.3kV; 10,000 Amps, rms, sym. 10 cycles (0.17 sec.) 1.3 max. asym factor applies to new or used mating parts (up to maximum designated switching operations.)
<b>35kV Class Ratings</b>	<ul style="list-style-type: none"> <li>• 1Ø and 3Ø circuits 21.1kV line to ground, 36.6kV max. across open contacts.</li> <li>• 10 loadmake/break operations at 200 Amps max. with 70 to 80% lagging power factor.</li> </ul>	1 fault close operation at 21.1kV or 36.6kV; 10,000 Amps, rms, sym. 10 cycles (0.17 sec.) 1.3 max. asym factor applies to new or used mating parts (up to maximum designated switching operations.)

### Application Information:

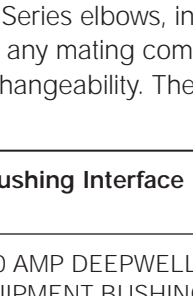
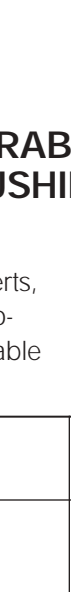
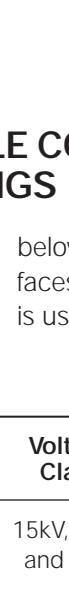
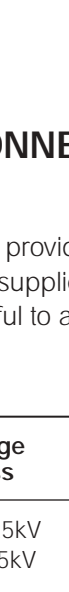
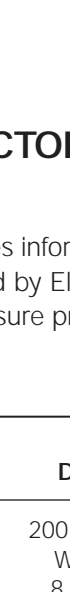

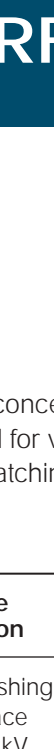
1. Loadbreak connectors are designed and rated for use on grounded WYE systems. For application on ungrounded WYE or delta systems, the next higher voltage class product is recommended. Examples: 5kV ungrounded: use 15kV class products; 15kV ungrounded: use 25kV class products; 25kV ungrounded: use 35kV class products; 35kV ungrounded: contact factory.
2. Products are designed and constructed for all applications including padmount, subsurface, vault, indoor, outdoor, direct sunlight, direct buried and continuously submerged in water.
3. Products are designed and rated for ambient temperatures of -40° C to +65° C. It is recommended that loadbreak connectors be hotstick operated at -20° C to +65° C ambient temperature range and at altitudes not exceeding 6000 feet.

# SEPARABLE CONNECTOR INTERFACES

## STANDARD INTERFACES FOR SEPARABLE CONNECTORS, COMPONENTS AND EQUIPMENT BUSHINGS

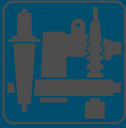
ANSI/IEEE Standard 386 defines the specific interface dimensions that 200 Amp and 600 Series elbows, inserts, junctions, equipment bushings and any mating components must conform to insure interchangeability. The table

below provides information concerning the types of interfaces supplied by Elastimold for various applications and is useful to assure proper matching of components.

Bushing Interface	Voltage Class	Interface Description	Standard No Figure No.
 <p>200 AMP DEEPWELL EQUIPMENT BUSHING</p>	15kV, 25kV and 35kV	200 AMP Bushing Well Interface 8.3kV, 15.2kV, 21.1kV	<b>A</b> IEEE 386-1995 Fig. 3
 <p>200 AMP LOADBREAK INSERT</p>	15kV	200 AMP Loadbreak 8.3kV and 8.3kV/14.4kV	<b>B</b> IEEE 386-1995 Fig. 5
 <p>200 AMP LOADBREAK INSERT</p>	25kV	200 AMP Loadbreak 15.2kV and 15.2kV/26.3kV	<b>C</b> IEEE 386-1995 Fig. 7, Note 3
 <p>200 AMP LOADBREAK INSERT</p>	35kV	200 AMP Loadbreak Interface No. 2 21.1kV and 21.1kV/36.6kV	<b>D</b> IEEE 386-1995 Fig. 7, Note 3
 <p>200 AMP DEADBREAK INSERT</p>	15kV and 25kV	200 AMP Deadbreak 8.3kV and 15.2kV	<b>E</b> IEEE 386-1995 Fig. 4
 <p>600 SERIES EQUIPMENT BUSHING</p>	15kV and 25kV	600 AMP Deadbreak Interface No.1 8.3kV and 15.2kV	<b>F</b> IEEE 386-1995 Fig.11, Note 1
 <p>600 SERIES EQUIPMENT BUSHING</p>	35kV	600 AMP Deadbreak Interface No.1 21.1kV	<b>G</b> IEEE 386-1995 Fig.13, Note 2

NOTES:

1. Was Fig. 10 in previous IEEE 386-1985 publication.
2. Was Fig. 11 in previous IEEE 386-1985 publication.
3. Elastimold uses Fig. 7 interface for both 25 and 35kV applications.



# SEPARABLE CONNECTORS 200 AMP LOADBREAK

200 Amp loadbreak connectors and accessories provide a convenient method to connect/disconnect cable and equipment on power distribution systems. Loadbreak elbows include provisions for energized operation using standard hotstick tools, allowing load-make/break operation and a visible disconnect. Components can be isolated with insulated caps, plugs and parking bushings.

Optional accessories allow system grounding, testing, bypass, lightning surge protection and current limiting fusing. Additional connecting points and taps can be provided by use of junctions or feed-thrus.



## RATINGS OVERVIEW

See page 2 for complete information including switching and fault close ratings.

### CURRENT RATINGS

200A Continuous  
10kA sym. 10 Cycles

### VOLTAGE RATINGS

**15kV Class**  
8.3kV Phase-to-Ground  
14.4kV Phase-to-Phase  
95kV BIL  
34kV AC Withstand  
53kV DC Withstand  
11kV Corona Extinction

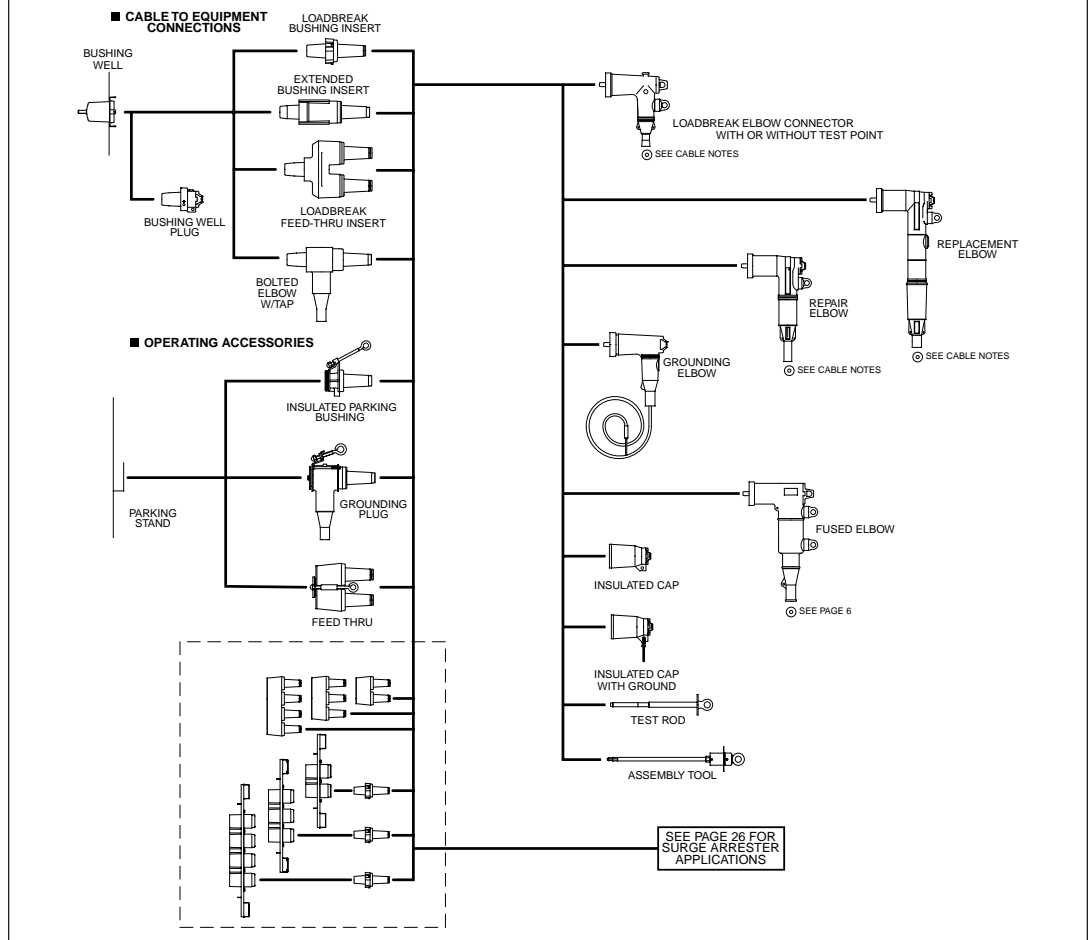
### 25kV Class

15.2kV Phase-to-Ground  
26.3kV Phase-to-Phase  
125kV BIL  
40kV AC Withstand  
78kV DC Withstand  
19kV Corona Extinction

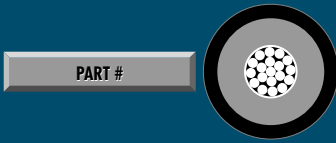
### 35kV Class

21.1kV Phase-to-Ground  
36.6kV Phase-to-Phase  
150kV BIL  
50kV AC Withstand  
103kV DC Withstand  
26kV Corona Extinction

## 200 AMP LOADBREAK SEPARABLE CONNECTOR COMPONENTS



	<b>SEPARABLE CONNECTORS</b>		
<b>DEADFRONT</b>	<b>FUSED ELBOWS</b>	<b>200 AMP LOADBREAK</b>	<b>5-15kV</b>
<b>LIVEFRONT</b>	<b>CABLE JOINTS</b>	<b>200 AMP DEADBREAK</b>	<b>25kV</b>
	<b>TERMINATIONS</b>	<b>600 SERIES DEADBREAK</b>	<b>35kV</b>
	<b>SURGE ARRESTERS</b>		



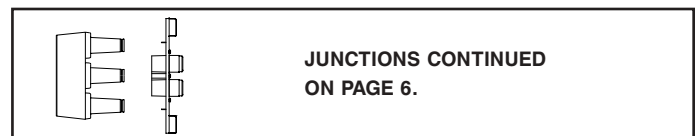
Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

**200 AMP LOADBREAK**

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Elbow Connector	15kV	<b>165LR-WX</b> Use Tables W1 and X1	N2,3,4,5
		25kV	<b>273LR-WX</b> Use Tables W2 and X1	N2,3,4,5
		35kV	<b>375LR-WX</b> Use Tables W3 and X2	N2,3, 5
	Elbow Connector w/ Test Point	15kV	<b>166LR-WX</b> Use Tables W1 and X1	N2,3,4,5
		25kV	<b>274LR-WX</b> Use Tables W2 and X1	N2,3,4,5
		35kV	<b>376LR-WX</b> Use Tables W3 and X2	N2,3, 5
	Jacket Seal Elbow Connector	15kV	<b>165LRJS-WX</b> Use Table W1 (B&C sizes only) and Table X1	N2,19
		15kV	<b>166LRJS-WX</b> Use Tables W1 (B&C sizes only) and Table X1	N2,19
	Repair Elbow Connector	15kV	<b>167ELR-WX</b> Use Tables W5 and X1	N5,10,18
		25kV	<b>273ELR-WX</b> Use Tables W5 and X1	N5,10,18
	Repair Elbow Connector w/ Test Point	15kV	<b>168ELR-WX</b> Use Tables W5 and X1	N5,10,18
		25kV	<b>274ELR-WX</b> Use Tables W5 and X1	N5,10,18
	Replacement Elbow	15kV	<b>167RLR-WX</b> Use Tables W4 and X1	N5,11,13
		25kV	<b>273RLR-WX</b> Use Tables W2 and X1	N5,11,13
	Replacement Elbow w/ Test Point	15kV	<b>168RLR-WX</b> Use Tables W4 and X1	N5,11,13
		25kV	<b>274RLR-WX</b> Use Tables W2 and X1	N5,11,13
	Fused Elbow (General Purpose Current Limiting)	15kV	<b>166FLR-WX</b> Use W and X Tables on Page 6	N5,15
	Bolted Elbow w/ Tap	15kV	<b>167LRT-WX</b> Use Tables W4 and X1	N17
	Bushing Insert	15kV	<b>1601A4</b>	N4,8
		25kV	<b>2701A4</b>	N4,8
		35kV	<b>3701A4</b>	N6
		35kV	<b>3701A3</b>	N8
	Extended Bushing Insert	15kV	<b>1601EA4</b>	N8
		25kV	<b>2701EA4</b>	N8
	Feed-Thru Insert	15kV	<b>1602A3R</b>	N16
		25kV	<b>2702A1</b>	N16
		35kV	<b>3702A1</b>	N6,16
	Insulated Cap	15kV	<b>160DR</b>	N9
	Insulated Cap w/ Ground	15kV	<b>160DRG</b>	N9
		15kV	<b>167DRG</b>	N7, 9
		25kV	<b>273DRG</b>	N7, 9
	Insulated Cap w/ Ground and Test Point	15kV	<b>168DRG</b>	N7
		25kV	<b>274DRG</b>	N7
		35kV	<b>376DRG</b>	N7
	Grounding Plug (1/0 AWG x 6' Ground Lead)	15kV	<b>161GP</b>	
	Grounding Elbow (1/0 AWG x 6' Ground Lead)	15kV	<b>272GP</b>	
	Grounding Elbow (1/0 AWG x 6' Ground Lead)	15kV	<b>160GLR</b>	
		25/35kV	<b>370GLR</b>	N12

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Feed-Thru	15kV	<b>164FT</b>	
		25kV	<b>274FT</b>	
	Feed-Thru Vertical	15kV	<b>164FTV</b>	
		25kV	<b>274FTV</b>	
	Feed-Thru Well	15/25kV	<b>K1601WFT</b>	
		15/25kV	<b>K1601WFTV</b>	
	Insulated Parking Bushing	15kV	<b>161SOP</b>	
		25kV	<b>272SOP</b>	
		35kV	<b>372SOP</b>	
	Test Rod	ALL	<b>370TR</b>	
	Bushing Well Plug	15/25kV	<b>276BWP</b>	
		35kV	<b>M276BWP</b>	
	Assembly Tool	ALL	<b>200AT</b>	N8
	<b>Contacts:</b> Long Bi-Metal ELR Bi-Metal Copper LRT Contact RLR Contact	ALL	Use Table X1 <b>02500X</b>	
		15/25kV	<b>02509X</b>	N10
		ALL	<b>02702X</b>	N1
		15kV	<b>02800X</b>	
		15/25kV	<b>00400X</b>	N11
	Elbow Probe	15kV	<b>166LRF</b>	
		25kV	<b>274LRF</b>	
		35kV	<b>376LRF</b>	
	Elbow Cable Entrance Insulating Plug	ALL	<b>10EP-W</b>	Use Table W6
	Cable Size Adapter	15kV	<b>160CA-W</b>	N14
			Use Table W6 EB-FA Only	

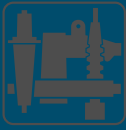
- N1. Copper lug for use on COPPER CONDUCTOR ONLY.
- N2. Includes 02500X long bi-metal compression lug as standard.
- N3. Also available as housing only. Specify: 165BLR-W; 273BLR-W; 375BLR-W; 166BLR-W; 274BLR-W; 376BLR-W.
- N4. Also available as elbow/insert combination. Specify: 165A4-WX; 273A4-WX; 166A4-WX; 274A4-WX; 376A4-WX.
- N5. Also available with 200ECS jacket seal included. Add - "S" suffix to part number.
- N6. Rated for single-phase applications only.
- N7. Equipped with insulated cuff.
- N8. Includes internal torquing feature using 200AT Assembly Tool.
- N9. Also available without probe. Specify "A" suffix - Example: 273DRGA.
- N10. Repair elbow has extended length contact and elbow housing resulting in a net gain of 3-1/4" in length.
- N11. Replacement elbow has extended length contact and elbow housing resulting in a net gain of 9-7/8" in length.
- N12. Rated for 25kV thru 35kV applications.
- N13. Includes long bi-metal contact 00400X.
- N14. 160CA Cable Size Adapter can only be used with elbow part numbers 165LR/166LR C size only.
- N15. See page 6 for WX size tables and for fuse sizes.
- N16. Fully rotatable for 360° positioning. Includes bail assembly to secure feed-thru insert to bushing well.
- N17. Includes 02800X long bi-metal contact.
- N18. Includes 02509X long bi-metal contact.
- N19. Includes built-in jacket seal. Also available as housing only—specify: 165BLRJS-W or 166BLRJS-W. Also available as elbow/insert combination—specify: 165JSA4-WX or 166JSA4-WX.



**JUNCTIONS CONTINUED ON PAGE 6.**

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# SEPARABLE CONNECTORS 200 AMP LOADBREAK

Cont'd from Pg. 5

## RATINGS OVERVIEW

See page 2 for complete information including switching and fault close ratings.

### CURRENT RATINGS

200A Continuous  
10kA sym. 10 Cycles

### VOLTAGE RATINGS

**15kV Class**  
8.3kV Phase-to-Ground  
14.4kV Phase-to-Phase  
95kV BIL  
34kV AC Withstand  
53kV DC Withstand  
11kV Corona Extinction

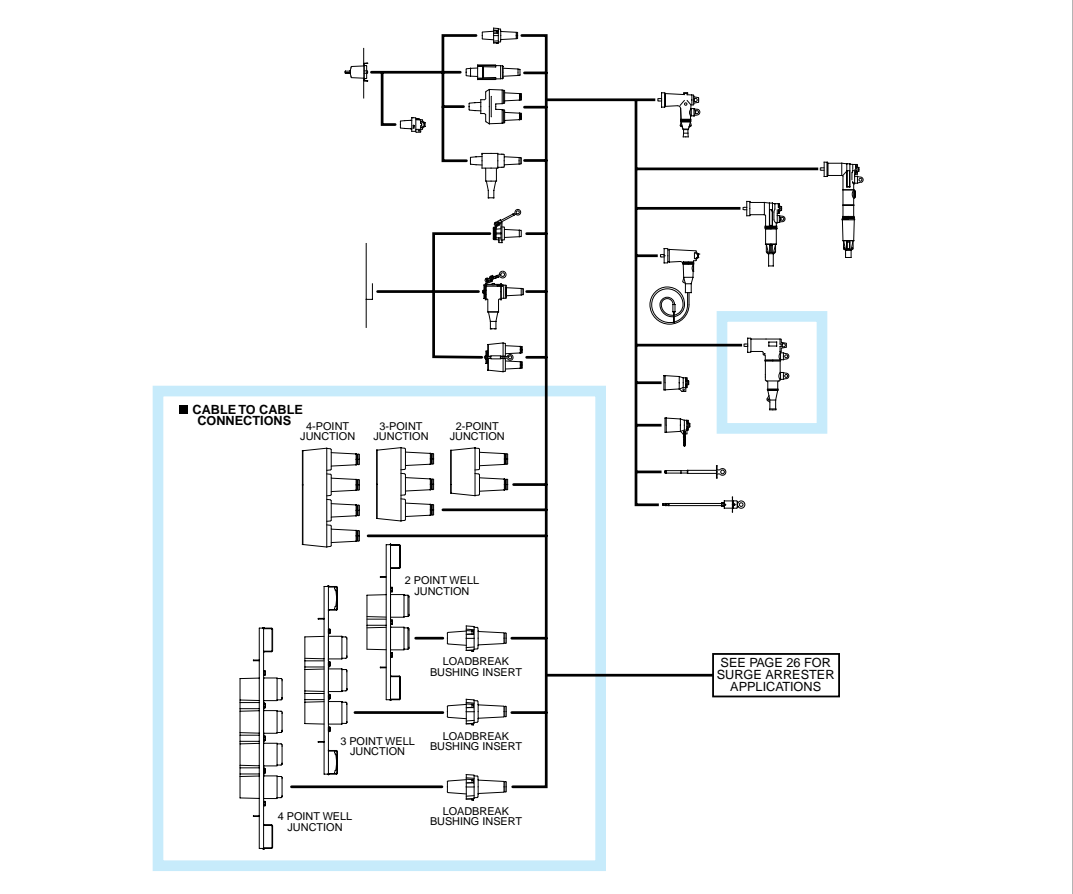
### 25kV Class

15.2kV Phase-to-Ground  
26.3kV Phase-to-Phase  
125kV BIL  
40kV AC Withstand  
78kV DC Withstand  
19kV Corona Extinction

### 35kV Class

21.1kV Phase-to-Ground  
36.6kV Phase-to-Phase  
150kV BIL  
50kV AC Withstand  
103kV DC Withstand  
26kV Corona Extinction

## 200 AMP LOADBREAK SEPARABLE CONNECTOR COMPONENTS



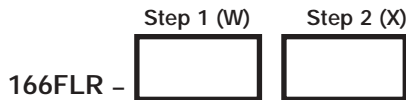
## FUSED ELBOW ORDERING INSTRUCTIONS

### Step 1 (W)

Determine the insulation diameter of the cable. Select the insulation letter code that best straddles the insulation diameter. Insert code into catalog number.

### Step 2 (X)

Choose the proper connector code according to the conductor size. Insert code into the catalog number after the insulation code.



Cable Insulation Diameter Range Inches	Symbol For W
.610 - .735	FAB
.675 - .785	FB
.725 - .835	FG
.775 - .885	GA
.825 - .935	GAB

Conductor Size* (AWG)	Symbol For X	
	Stranded/Compr.	Solid/Compact
2	0220	0210
1	0230	0220
1/0	0240	0230
2/0	0250	0240
3/0	—	0250

\*Cu or Al Conductor

## ORDERING INSTRUCTIONS FOR FUSE KIT (to be ordered separately)

Determine the ampere rating required. Insert rating into the catalog number below.

166PF8 -  

Voltage (kV)	Ampere Rating
8.3	5
	8
	12
	18
	30

For solid link, specify 166 PF8-BUSS

### The Fused Elbow kit contains the following:

- 1 - Upper elbow half
- 1 - Lower elbow half
- 1 - Upper connector
- 1 - Lower connector
- 1 - Probe
- 1 - Torque-limiting wrench
- 1 - Lubricant
- 1 - Instruction sheet

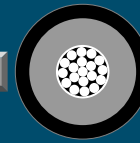
### The Fuse Kit includes the following:

- 1 - Current limiting fuse
- 1 - Allen wrench
- 1 - Air vent rod
- 1 - Instruction sheet

### To order replacement parts, specify the following:

- For an upper elbow half, specify 166BFLR-T
- For a lower elbow half, specify 166BFLR-W
- For an upper connector, specify 166-88
- For a lower connector, specify 02600X
- For a probe, specify 166LRF





Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

## 200 AMP LOADBREAK

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	2-Way Well Junction w/ s.s. Bracket	15/25kV	<b>K1601WJ2</b>	N2
	2-Way Well Junction w/ "U" Straps	15/25kV	<b>K1601WJ2-5</b>	N1, N2
	3-Way Well Junction w/ s.s. Bracket	15/25kV	<b>K1601WJ3</b>	N2
	3-Way Well Junction w/ "U" Straps	15/25kV	<b>K1601WJ3-5</b>	N1, N2
	4-Way Well Junction w/ s.s. Bracket	15/25kV	<b>K1601WJ4</b>	N2
	4-Way Well Junction w/ "U" Straps	15/25kV	<b>K1601WJ4-5</b>	N1, N2
	2-Point Junction with/stainless steel bracket	15kV 25kV 35kV	<b>164J2</b> <b>274J2</b> <b>373J2</b>	N3 N3 N3
	2-Point Junction w/"U"-straps	15kV 25kV 35kV	<b>164J2-5</b> <b>274J2-5</b> <b>373J2-5</b>	N1 N1 N1
	3-Point Junction with/stainless steel bracket	15kV 25kV 35kV	<b>164J3</b> <b>274J3</b> <b>373J3</b>	N3 N3 N3
	3-Point Junction w/"U"-straps	15kV 25kV 35kV	<b>164J3-5</b> <b>274J3-5</b> <b>373J3-5</b>	N1 N1 N1
	4-Point Junction with/stainless steel bracket	15kV 25kV 35kV	<b>164J4</b> <b>274J4</b> <b>373J4</b>	N3 N3 N3
	4-Point Junction w/"U"-straps	15kV 25kV 35kV	<b>164J4-5</b> <b>274J4-5</b> <b>373J4-5</b>	N1 N1 N1

- N1. Also available without straps. Specify suffix "-4" in place of "-5" in the part number.
- N2. Supplied with replaceable stud. Replacement stud available separately. Specify 1601RS.
- N3. Hardware packages, consisting of brackets & straps only, may be ordered separately by specifying "-6" in the part number.



# SEPARABLE CONNECTORS 200 AMP DEADBREAK

200 Amp deadbreak connectors and accessories provide a quick disconnect feature for cable and equipment connections on power distribution systems. All deadbreak connectors must be DE-ENERGIZED before operating and must be mechanically secured with bails when connected. Components can be isolated with insulated caps, plugs and parking bushings.

All deadbreak elbows are equipped with test points as standard. Optional accessories allow system grounding, bypass and lightning surge protection. Additional connecting points and taps can be provided by use of junctions or feed-thrus.



## RATINGS OVERVIEW

See page 2 for complete information.

### CURRENT RATINGS

200A Continuous  
10kA sym. 10 Cycles

### VOLTAGE RATINGS

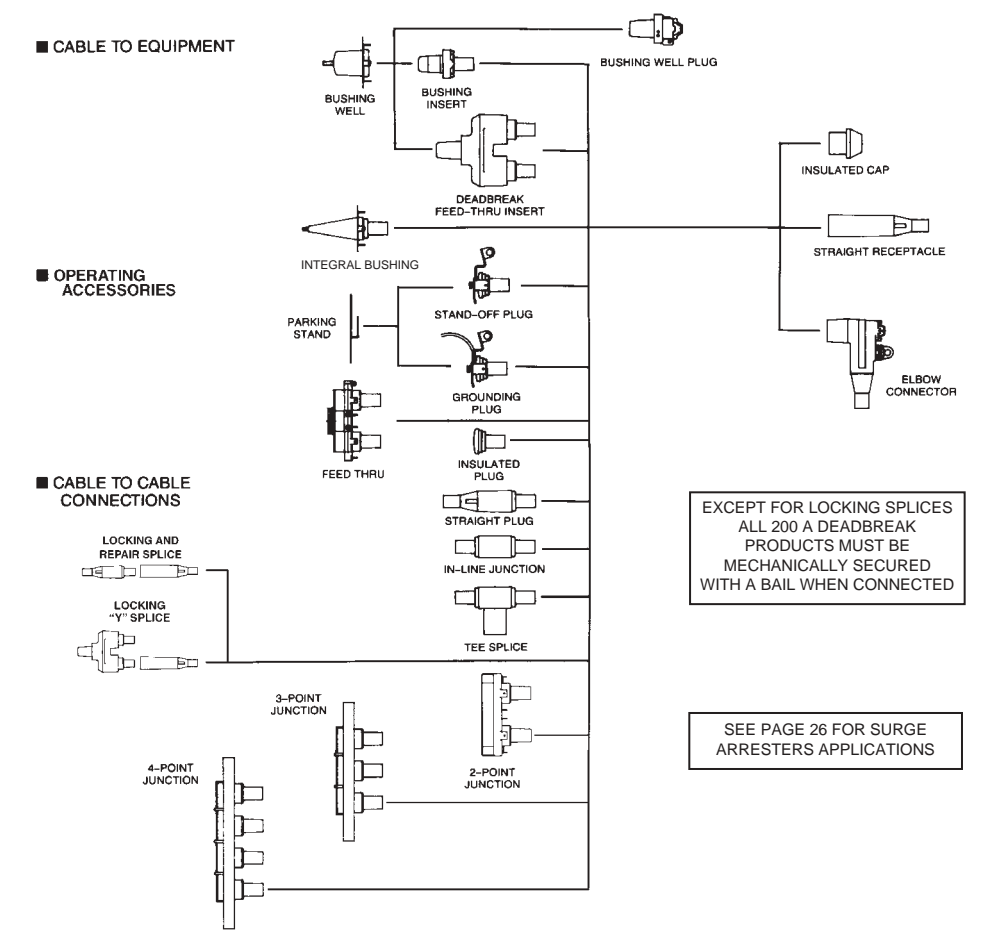
#### 15kV Class

8.3kV Phase-to-Ground  
14.4kV Phase-to-Phase  
95kV BIL  
34kV AC Withstand  
53kV DC Withstand  
11kV Corona Extinction

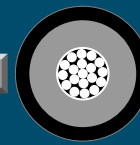
#### 25kV Class

15.2kV Phase-to-Ground  
26.3kV Phase-to-Phase  
125kV BIL  
40kV AC Withstand  
78kV DC Withstand  
19kV Corona Extinction

## 200 AMP DEADBREAK SEPARABLE CONNECTOR COMPONENTS



	<b>SEPARABLE CONNECTORS</b>			
<b>DEADFRONT</b>	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV	
<b>LIVEFRONT</b>	CABLE JOINTS	200 AMP DEADBREAK	25kV	<b>PART #</b>
	TERMINATIONS	600 SERIES DEADBREAK	35kV	
	SURGE ARRESTERS			



Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

## 200 AMP DEADBREAK

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Elbow Connector w/ Test Point	15/25kV	<b>156LR-WX</b> Use Tables W4 and X1	N1,2
	Bail Assembly for 156LR Elbow	15/25kV	<b>150BA</b>	
	Bushing Insert	15/25kV	<b>K1501A1</b>	N3
	Feed-thru Insert	15/25kV	<b>K1502A1</b>	N3,4
	Insulated Plug	15/25kV	<b>K150DP</b>	N3
	Insulated Cap	15/25kV	<b>K150DR</b>	N3
	Insulated Parking Bushing	15/25kV	<b>K151SOP</b>	N3
	Grounding Plug	15/25kV	<b>151GP</b>	N3
	Feed-Thru	15/25kV	<b>K1501FT</b>	N3,6
	2-Point Junction	15/25kV	<b>K1501J2-U</b>	N3,6
	3-Point Junction	15/25kV	<b>K1501J3-U</b>	N3,6,7
	4-Point Junction	15/25kV	<b>K1501J4-U</b>	N3,6,7
	Elbow Probe	15/25kV	<b>156LRF</b>	
	Straight Receptacle	15/25kV	<b>K151SR-WX</b> Use Tables W1 and X5	N3,12,13,17
	Straight Plug	15/25kV	<b>K151SP-WX</b> Use Tables W1 and X5	N3,12,13
	Tee Splice	15/25kV	<b>K150T</b>	N3
	In-Line Junction	15/25kV	<b>K150S</b>	N3
	Locking Splice/Repair Splice	15/25kV	<b>K151LS-WX</b> Use Tables W1 and X8	N8,9,13,15,16,17
	Locking "Y" Splice	15/25kV	<b>K151LY-WX</b> Use Tables W1 and X8	N8,9,13,15,17
	BAIL	15/25kV	<b>150TB1</b>	N5
	BAIL	15/25kV	<b>150TB2</b>	N5
	BAIL	15/25kV	<b>150TB3</b>	N5

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	BAIL	15/25kV	<b>150TB4</b>	N5
	BAIL	15/25kV	<b>150TB5</b>	N5
	<b>Contacts:</b> Long Bi-Metal Copper	15/25kV 15/25kV	<b>02500X</b> <b>02702X</b>	N7
	Elbow Cable Entrance Insulating Plug	15/25kV	<b>10EP-W</b> Use Table W6	N10
	Cable Entrance Insulating Plug	15/25kV	<b>152EA-W</b> Use Table W6	N11
	Cable Size Adapter	15/25kV	<b>160CA-W</b> Use Table W6 EB-FA Only	N14

- N1. Includes bail assembly.
- N2. Includes 02500X long, bi-metal compression lug as standard.
- N3. Bails are required but not included. Order separately. Consult factory for bails not listed for a specific application.
- N4. Fully rotatable for 360° positioning. Includes bail assembly to secure feed-thru insert to bushing well.
- N5. Refer to general catalog for application details.
- N6. Center-to-center spacing equals 4 inches.
- N7. Copper lug for copper cable only.
- N8. To order cable legs for different cable sizes, list each leg size "W" and "X". Example: K151LY-A240-A240-B220. See Tables W1 and X8 for sizes.
- N9. To order locking contacts for K151LS and K151LY, order 01401X (Al) or 01402X (Cu) for plug contact. Order 01301X (Al) or 01302X (Cu) for receptacle. See Table X8 for sizes.
- N10. For use with 156LR elbows.
- N11. For use with K151SR, K151SP, K151LS, K151LY receptacles, plugs and splices.
- N12. Also available as housing only. Specify K151SPH-W or K151SRH-W.
- N13. Also available in EB-FA sizes per table W6 by using 160CA cable adapter with C size plugs & receptacles.
- N14. 160CA cable adapter can only be used with C size plugs & receptacles.
- N15. Bails are not required for locking splices.
- N16. When used as a repair splice, the assembled length allows 4" for cable-replacement/repair.
- N17. Straight receptacles are also available with test point. Specify K152 part number.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# SEPARABLE CONNECTORS 600 SERIES DEADBREAK

600 Series deadbreak elbows, straight receptacles, vault stretchers and accessories are used to connect equipment and cable on primary feeder and network circuits. Designs accommodate large conductors and feature bolted connections and deadfront modular construction for maximum reliability, performance and versatility.

DE-ENERGIZED connectors can be quickly and easily connected and disconnected using standard hand tools and equipment in accordance with accepted operating practices. Optional accessories allow visible external separation, by-pass, isolation, dead-ending, grounding, and testing as well as adding taps, surge arresters and circuit protection.

Hot-stick operable and separable joint systems are shown on pages 14 thru 19.



## RATINGS OVERVIEW

See page 2 for complete information.

### CURRENT RATINGS

(Prefixes: 650, K650, K655, K656, 750, 755, 756 & 03700)

600 Amp Continuous  
25kA sym., 10 cycles

(Prefixes 675, K675, K676, 775, 776 & 03702)

900 Amp Continuous  
25kA sym., 10 cycles

NOTE: 900 Amp ratings require copper cable and copper current-carrying components.

### VOLTAGE RATINGS

15/25kV Class (5kV thru 28kV)

16.2kV Phase-to-Ground

28kV Phase-to-Phase

140kV BIL

45kV AC Withstand

84kV DC Withstand

21.5kV Corona Extinction

### 35kV Class

21.1kV Phase-to-Ground

36.6kV Phase-to-Phase

150kV BIL

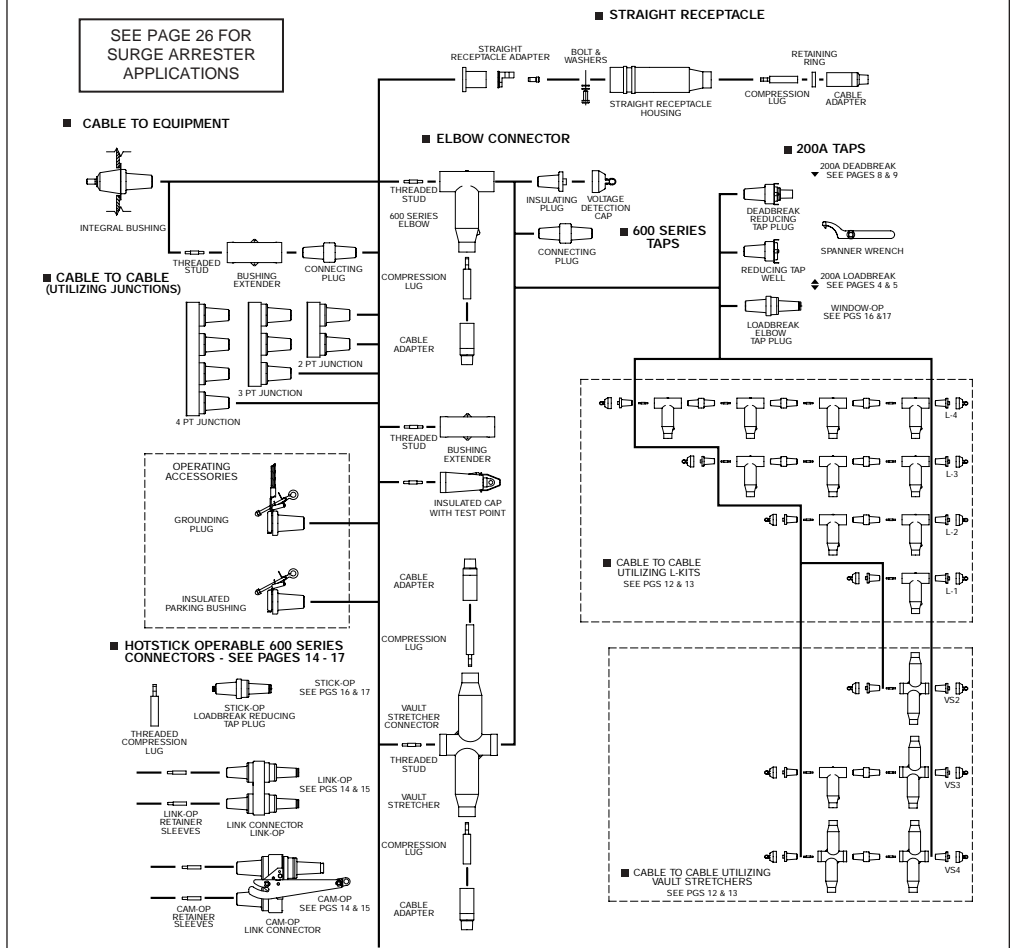
50kV AC Withstand

103kV DC Withstand

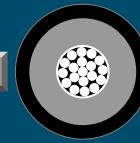
26kV Corona Extinction

Note: Elastimold has increased the IEEE Standard Production and Design Test levels for 25kV Class products to include 27kV and 28kV systems.

## SEPARABLE CONNECTORS 600 SERIES DEADBREAK



	<b>SEPARABLE CONNECTORS</b>			
<b>DEADFRONT</b>	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV	
<b>LIVEFRONT</b>	CABLE JOINTS	200 AMP DEADBREAK	25kV	<b>PART #</b>
	TERMINATIONS	600 SERIES DEADBREAK	35kV	
	SURGE ARRESTERS			



Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

### 600 SERIES DEADBREAK

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	600 Series Elbow (w/ Insul. Plug, Cap, Stud, Lug & Cable Adapter)	15/25kV 35kV	<b>K655LR-W0X</b> Use Tables W7 and X6 <b>755LR-W0X</b> Use Tables W9 and X6	N1,2 N1,2
	600 Series Elbow w/ Test Point (w/ Insul. Plug, Cap, Stud, Lug & Cable Adapter)	15/25kV 35kV	<b>K656LR-W0X</b> Use Tables W7 and X6 <b>756LR-W0X</b> Use Tables W9 and X6	N1,2 N1,2
	600 Series Elbow Housing only (w/ Stud)	15/25kV 35kV	<b>K655BLR</b> <b>755BLR</b>	N1,3 N1,3
	600 Series Elbow w/ Test Point (Housing only w/ Stud)	15/25kV 35kV	<b>K656BLR</b> <b>756BLR</b>	N1,3 N1,3
	600 Series Straight Receptacle (w/Cable Adapter, Lug & Retaining Ring)	15/25kV	<b>K655SR-W0X</b> Use Tables W7 and X6	N1,2,12
	600 Series Straight Receptacle Housing (Lug & Cable Adapter not included)	15/25kV	<b>K655BSR</b>	N1,12
	Straight Receptacle Adapter	15/25kV	<b>K650SRA</b>	N1,4
	600 Series Vault Stretcher (Housing only w/ Stud)	15/25kV 35kV	<b>K655BVS</b> <b>755BVS</b>	N1,9 N1,9
	Cable Size Adapter	15/25kV 35kV	<b>655CA-W</b> Use Table W7 <b>755CA-W</b> Use Table W9	
	Compression Lug	ALL ALL	<b>03700X</b> Use Table X6 <b>03702X</b> Use Table X6	N5 N6
	600 Series Elbow & Vault Stretcher Size Sensitive Kit (Cable Adapter & Lug)	15/25kV 35kV	<b>655CK-W0X</b> Use Tables W7 and X6 <b>755CK-W0X</b> Use Tables W9 and X6	N2 N2
	Adapter Retaining Ring	ALL	<b>650ARR-X</b> Use Table X6	
	600 Series Straight Receptacle Size Sensitive Kit (Cable Adapter, Retaining Ring & Lug)	15/25kV	<b>655CK-W0X-ARR</b> Use Tables W7 and X6	N2
	Bushing Extender (w/ Stud)	15/25kV 35kV	<b>K655BE</b> <b>755BE</b>	N1,3 N1,3
	Insulated Cap w/ Test Point (w/ Stud)	15/25kV	<b>K656DR</b>	N3,7
	Insulating Plug (w/ Cap)	15/25kV 35kV	<b>K650BIP</b> <b>750BIP</b>	N1,7,8 N1,7,8
	Grounding Plug (Ground Lead 2/0 AWG x 30")	15/25kV 35kV	<b>650GP</b> <b>750GP</b>	N1,7,8 N1,7,8
	Insulated Parking Bushing	15/25kV 35kV	<b>K650SOP</b> <b>750SOP</b>	N7,8 N7,8
	Connecting Plug	15/25kV 35kV	<b>K650CP</b> <b>750CP</b>	N1,7,8,9 N1,7,8

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Deadbreak Reducing Tap Plug	15/25kV	<b>K650RTP</b>	N1,7,8,9
	Reducing Tap Well	15/25kV	<b>K650RTW</b>	N1,7,8,9
	Loadbreak Elbow Tap Plug	15kV 25kV 35kV	<b>650ETP</b> <b>K650ETP</b> <b>750ETP</b>	N1,7,8,10,13 N1,7,8,10,13 N1,7,8,10,13
	Vault Stretcher Threaded Stud	15/25kV 35kV	<b>650VSA</b> <b>750VSA</b>	N1 N1
	600 Series Elbow Threaded Stud	15/25kV 35kV	<b>650SA</b> <b>750SA</b>	N1 N1
	Assembly Tool	ALL	<b>600AT</b>	N10
	Spanner Wrench	ALL	<b>600SW</b>	N9
	2-Point Junction	15/25kV 35kV	<b>K650J2</b> <b>750J2</b>	N1,11 N1,11
	3-Point Junction	15/25kV 35kV	<b>K650J3</b> <b>750J3</b>	N1,11 N1,11
	4-Point Junction	15/25kV 35kV	<b>K650J4</b> <b>750J4</b>	N1,11 N1,11

N1. For 900 Amp ratings, substitute 675 for 650 and 655; 676 for 656; K675 for K650 and K655; K676 for K656; 775 for 750 and 755; 776 for 756 and 2X for 0X in the part number. The 900 Amp rating requires copper current-carrying connector components and copper conductor cable.

N2. Add suffix symbol from page 29 to include cable shield grounding kit and/or cable jacket sealing kit.

N3. Available without the stud by adding "N" to the part number.

N4. Straight Receptacle Adapter is used to connect Straight Receptacles K655YBSR and K655YSR-W0X (Pg.14) to equipment bushings.

N5. Aluminum lug for use on aluminum or copper conductors. DO NOT substitute threaded 03600X lug.

N6. Copper lug for use on COPPER CONDUCTOR ONLY. DO NOT substitute threaded 03602X lug.

N7. Available with the stud factory-assembled by adding "SP" to the part number.

N8. Available with a loose stud by adding suffix "S" to the part number.

N9. 600SW spanner wrench is recommended for installation of connecting plugs, deadbreak reducing tap plugs and reducing tap wells.

N10. 600AT assembly tool is required for installation of loadbreak reducing tap plugs.

N11. Rubber junction with stainless steel mounting plate and back plate. Add "-U" for rubber junction with stainless steel mounting plate, back plate and adjustable bracket. Add "-4" for rubber junction only. Add "-5" for rubber junction, stainless steel U-straps and back plate.

N12. 600 Series Elbows and Straight Receptacles with IEEE Std. 386 capacitive test points are available by substituting 656 for 655; K656 for K655; K676 for K675; 756 for 755; 676 for 675; K676 for K675 and 776 for 775 in the part number.

N13. See page 17 for Window-Op Connector Kit.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



## SEPARABLE CONNECTORS

# 600 SERIES DEADBREAK Cont'd from Pg. 11

600 Series deadbreak elbows, straight receptacles, vault stretchers and accessories are used to connect equipment and cable on primary feeder and network circuits. Designs accommodate large conductors and feature bolted connections and deadfront modular construction for maximum reliability, performance and versatility.

DE-ENERGIZED connectors can be quickly and easily connected and disconnected using standard hand tools and equipment in accordance with accepted operating practices. Optional accessories allow visible external separation, by-pass, isolation, dead-ending, grounding, and testing as well as adding taps, surge arresters and circuit protection.

Hot-stick operable and separable joint systems are shown on pages 14 thru 19.



### RATINGS OVERVIEW

See page 2 for complete information.

#### CURRENT RATINGS

(Prefixes: 650, K650, K655, K656, 750, 755, 756 & 03700)

600 Amp Continuous  
25kA sym., 10 cycles

(Prefixes 675, K675, K676, 775, 776 & 03702)

900 Amp Continuous  
25kA sym., 10 cycles

NOTE: 900 Amp ratings require copper cable and copper current-carrying components.

#### VOLTAGE RATINGS

15/25kV Class (5kV thru 28kV)

16.2kV Phase-to-Ground

28kV Phase-to-Phase

140kV BIL

45kV AC Withstand

84kV DC Withstand

21.5kV Corona Extinction

#### 35kV Class

21.1kV Phase-to-Ground

36.6kV Phase-to-Phase

150kV BIL

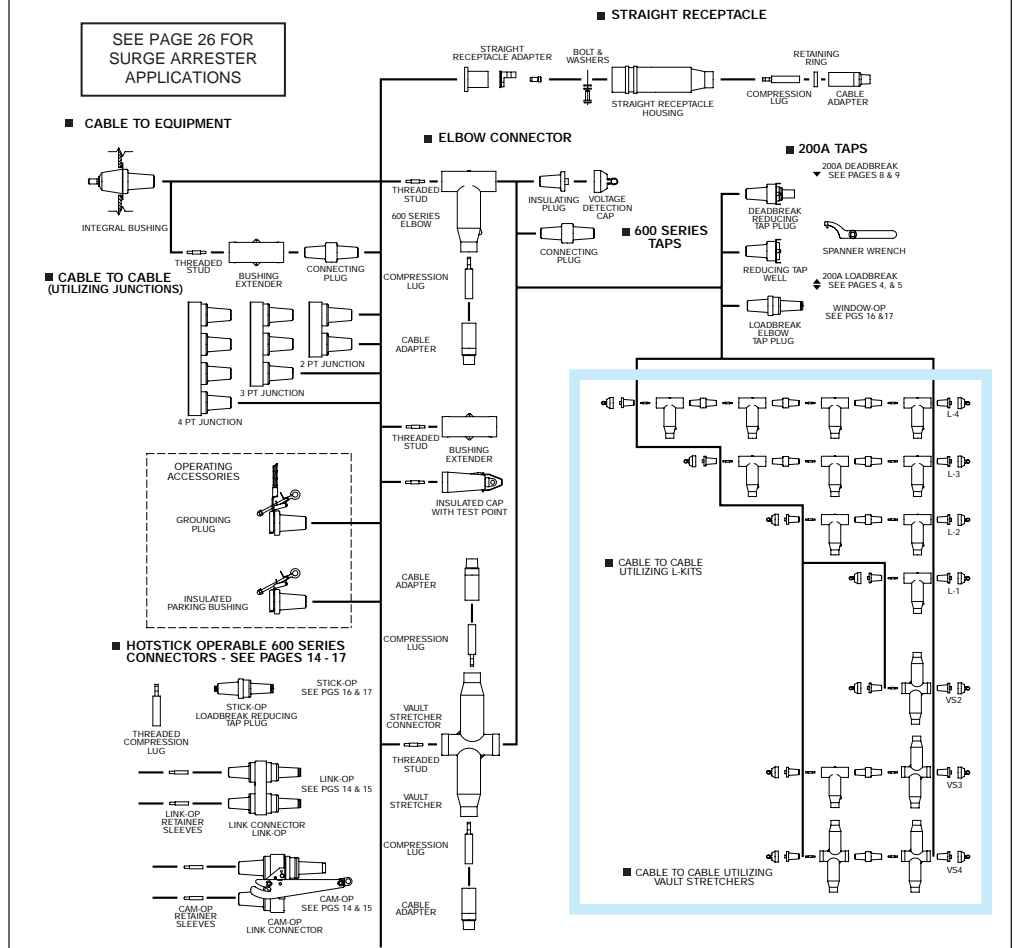
50kV AC Withstand

103kV DC Withstand

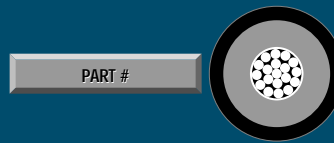
26kV Corona Extinction

Note: Elastimold has increased the IEEE Standard Production and Design Test levels for 25kV Class products to include 27kV and 28kV systems.

### SEPARABLE CONNECTORS 600 SERIES DEADBREAK



	<b>SEPARABLE CONNECTORS</b>		
<b>DEADFRONT</b>	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV
	TERMINATIONS	600 SERIES DEADBREAK	35kV
	SURGE ARRESTERS		

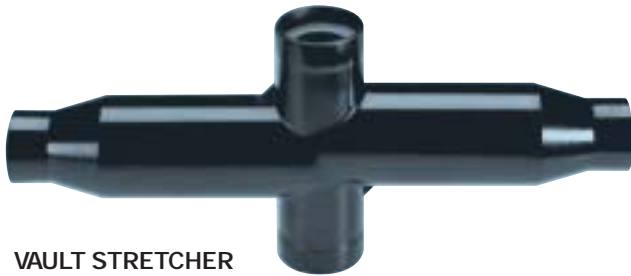


Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

### 600 SERIES DEADBREAK

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	1-way L-Kit	15/25kV 35kV	<b>K655L1</b> <b>755L1</b>	N1,2,3,4 N1,2,3,4
	2-way L-Kit	15/25kV 35kV	<b>K655L2</b> <b>755L2</b>	N1,2,3,4 N1,2,3,4
	2-way VS-Kit	15/25kV 35kV	<b>K655VSL2</b> <b>755VSL2</b>	N1,2,3 N1,2,3
	3-way L-Kit	15/25kV 35kV	<b>K655L3</b> <b>755L3</b>	N1,2,3,4 N1,2,3,4
	3-Way VS Kit	15/25kV 35kV	<b>K655VSL3</b> <b>755VSL3</b>	N1,2,3 N1,2,3
	4-Way L-Kit	15/25kV 35kV	<b>K655L4</b> <b>755L4</b>	N1,2,3,4 N1,2,3,4
	4-Way VS-Kit	15/25kV 35kV	<b>K655VSL4</b> <b>755VSL4</b>	N1,2,3 N1,2,3
	Spanner Wrench	ALL	<b>600SW</b>	N2

- N1. For 900 Amp ratings, substitute 675 for 650 and 655; 676 for 656; K675 for K650 and K655; K676 for K656; 775 for 750 and 755; 776 for 756 and 2X for 0X in the part number. The 900 Amp rating requires copper current-carrying connector components and copper conductor cable.
- N2. 600SW spanner wrench is recommended for installation of connecting plugs, deadbreak reducing tap plugs and reducing tap wells.
- N3. L-Kits and VS-Kits do not include cable adapters or compression lugs. These items must be ordered separately.
- N4. 600 Series Elbows and Straight Receptacles with IEEE Std. 386 capacitive test points are available by substituting 656 for 655; K656 for K655; K676 for K675; 756 for 755; 676 for 675; K676 for K675 and 776 for 775 in the part number.



### VAULT STRETCHER

Provides an alternate method of splicing and joining various types and styles of cables using standard 600 Series components.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# SEPARABLE CONNECTORS CAM-OP, LINK-OP 600 SERIES DEADBREAK

Elastimold's 600 Series Cam-Op™, and Link-Op™ deadbreak connector systems incorporate provisions for hotstick operation of DE-ENERGIZED primary feeder or network circuits. Configurations allow external visible break, testing, grounding and isolation. Retrofit kits allow upgrading existing equipment.

Cam-Op systems utilize pin and socket connectors. Link-Op connectors are bolted and installed using torque controlled tools. Either system can be retrofitted to existing equipment.

The Cam-Op and Link-Op connectors are unique, allowing all hotstick operations to be completed without moving the cable, an important consideration when large, stiff cables prohibit movement.

The Cam-Op connector is easily installed or removed by hotstick operation of the cam action disconnect lever.



## RATINGS OVERVIEW

See page 2 for complete information.

### CURRENT RATINGS

600 & 900 Amp Continuous  
25kA sym., 10 cycles

NOTE: 900 Amp ratings require copper cable and copper current-carrying components.

### CONTINUOUS VOLTAGE RATINGS

#### 15kV Class

8.3kV Phase-to-Ground  
14.4kV Phase-to-Phase  
95kV BIL

34kV AC Withstand  
53kV DC Withstand  
11kV Corona Extinction

#### 25kV Class

15.2kV Phase-to-Ground  
26.3kV Phase-to-Phase  
125kV BIL

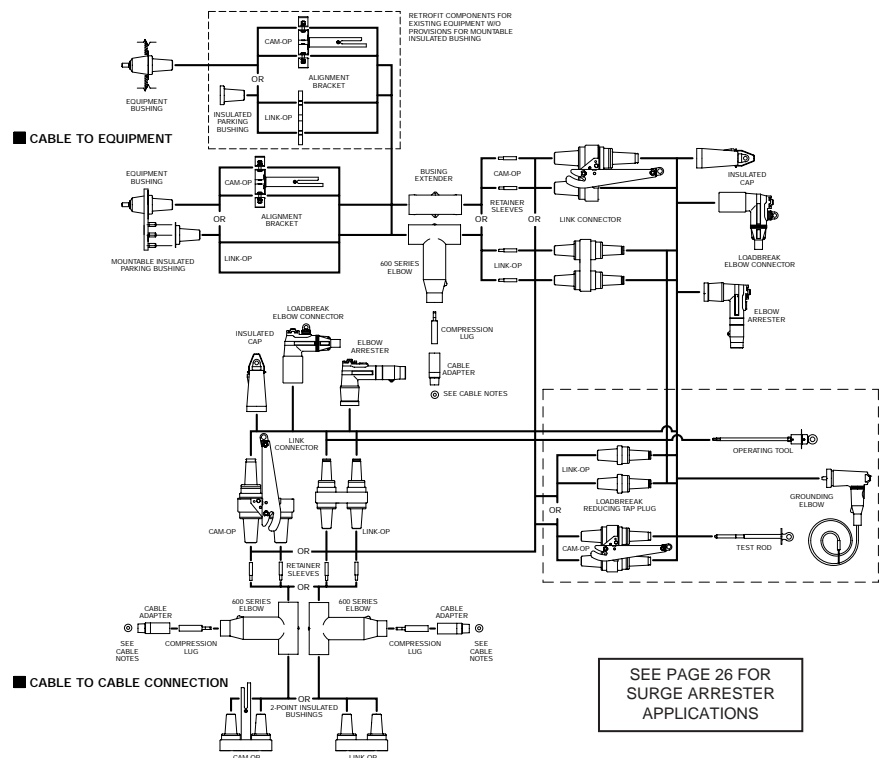
40kV AC Withstand  
78kV DC Withstand  
19kV Corona Extinction

#### 35kV Class

21.1kV Phase-to-Ground  
36.6kV Phase-to-Phase  
150kV BIL

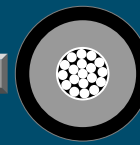
50kV AC Withstand  
103kV DC Withstand  
26kV Corona Extinction

## CAM-OP & LINK-OP SYSTEM – 600 SERIES DEADBREAK





	SEPARABLE CONNECTORS				
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV		
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV		
	TERMINATIONS	600 SERIES DEADBREAK	35kV		
	SURGE ARRESTERS				



Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

### CAM-OP™ & LINK-OP™

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	CAM-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655LINK-C-LR-WOX-B-DRG</b> Use Tables W7 and X6 <b>K655LINK-C-LR-WOX-B-DRG</b> Use Tables W7 and X6 <b>755LINK-C-LR-WOX-B-DRG</b> Use Tables W9 and X6	N1,3,11, 13,14,18 N1,3,11, 13,14,18 N1,3,11, 13,14,18
	LINK-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655LINK-B-LR-WOX-B-DRG</b> Use Tables W7 and X6 <b>K655LINK-B-LR-WOX-B-DRG</b> Use Tables W7 and X6 <b>755LINK-B-LR-WOX-B-DRG</b> Use Tables W9 and X6	N2,3,11,12 13,14,18 N2,3,11, 13,14,18 N2,3,11, 13,14,18
	Mountable Insulated Bushing	25kV 35kV	<b>K650LBM-3</b> <b>750LBM-3</b>	N3 N3
	RETROFIT CAM-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655LINK-C-LR-WOX-A-DRG</b> Use Tables W7 and X6 <b>K655LINK-C-LR-WOX-A-DRG</b> Use Tables W7 and X6 <b>755LINK-C-LR-WOX-A-DRG</b> Use Tables W9 and X6	N5,11,13 14,18 N5,11,13 14,18 N5,11,13 14,18
	RETROFIT LINK-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655LINK-B-LR-WOX-A-DRG</b> Use Tables W7 and X6 <b>K655LINK-B-LR-WOX-A-DRG</b> Use Tables W7 and X6 <b>755LINK-B-LR-WOX-A-DRG</b> Use Tables W9 and X6	N6,11,12, 13,14,18 N6,11,12, 13,14,18 N6,11,12, 13,14,18
	Insulating Plug	25kV 35kV	<b>K650LB</b> <b>750LB</b>	N4 N4
	CAM-OP Alignment Bracket	15kV 25kV 35kV	<b>650CAB</b> <b>K650CAB</b> <b>750CAB</b>	
	LINK-OP Alignment Bracket (Retrofit LINK-OP Only)	ALL ALL	<b>650AB</b> <b>650ABV</b>	N15 N15
	Compression Lug	ALL ALL	<b>03700X</b> Use Table X6 <b>03702X</b> Use Table X6	N7 N8
	CAM-OP & LINK-OP Size Sensitive Kit (Cable Adapter & Lug)	15/25kV 35kV	<b>655CK-WOX</b> Use Tables W7 and X6 <b>755CK-WOX</b> Use Tables W9 and X6	N13 N13
	CAM-OP Retaining Sleeve	ALL	<b>650RSC</b>	N11
	LINK-OP Retaining Sleeve	ALL	<b>650RS</b>	N11
	CAM-OP CABLE JOINT KIT	15kV 25kV 35kV	<b>655BI-LINK-C-LR-WOX-DRG</b> Use Tables W7 and X6 <b>K655BI-LINK-C-LR-WOX-DRG</b> Use Tables W7 and X6 <b>755BI-LINK-C-LR-WOX-DRG</b> Use Tables W9 and X6	N9,11,13 14,18 N9,11,13 14,18 N9,11,13 14,18
	LINK-OP CABLE JOINT KIT	15kV 25kV 35kV	<b>655BI-LINK-B-LR-WOX-DRG</b> Use Tables W7 and X6 <b>K655BI-LINK-B-LR-WOX-DRG</b> Use Tables W7 and X6 <b>755BI-LINK-B-LR-WOX-DRG</b> Use Tables W9 and X6	N10,11,12, 13,14,18 N10,11,12, 13,14,18 N10,11,12, 13,14,18
	CAM-OP Loadbreak Reducing Tap Plugs (Visi-Break)	15kV 25kV 35kV	<b>650LK-C-VB</b> <b>K650LK-C-VB</b> <b>750LK-C-VB</b>	
	LINK-OP Loadbreak Reducing Tap Plug	15kV 25kV 35kV	<b>650LT-B</b> <b>K650LT-B</b> <b>750LT-B</b>	N11

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Grounding Elbow (1/0 AWG x 6' Ground Lead)	15kV 25kV 35kV	<b>160GLR</b> <b>370GLR</b> <b>370GLR</b>	N19 N19
	Test Rod	ALL	<b>370TR</b>	
	Assembly Tool	ALL	<b>600AT</b>	N11
	CAM-OP OPERATING KIT	15kV 25kV 35kV	<b>650CAM-OK</b> <b>K650CAM-OK</b> <b>750CAM-OK</b>	N16 N16 N16
	LINK-OP OPERATING KIT	15kV 25kV 35kV	<b>650LINK-OK</b> <b>K650LINK-OK</b> <b>750LINK-OK</b>	N17 N17 N17

- N1. Cam-Op connector kit includes: 1- Cam-Op link; 1- elbow housing; 1- cable adapter; 1-0370 style lug; 1- bushing extender; 2- retainer sleeves; 1- insulated cap; 1- mountable insulated bushing and 1- alignment bracket.
- N2. Link-Op connector kit includes: 1- Link-Op link; 1- elbow housing; 1- cable adapter; 1-0370 style lug; 1- bushing extender; 2- retainer sleeves; 2- insulated caps; and 1- mountable insulated bushing.
- N3. Mountable insulated bushing included with Cam-Op and Link-Op connector kit. Requires 3 threaded studs on equipment faceplate for installation.
- N4. Use with the Retrofit Cam-Op and Retrofit Link-Op connector kit.
- N5. Retrofit Cam-Op connector kit includes: 1- link; 1- elbow housing; 1- cable adapter; 1-0370 style lug; 1- bushing extender; 2- retainer sleeves; 1- insulated cap; 1- insulating plug; and 1- alignment bracket.
- N6. Retrofit Link-Op connector kit includes: 1- link; 1- elbow housing; 1- cable adapter; 1-0370 style lug; 1- bushing extender; 2- retainer sleeves; 2- insulated caps; 1- insulating plug; and 1- alignment bracket.
- N7. Aluminum lug for use on aluminum or copper conductors. DO NOT substitute threaded 03600X lug.
- N8. Copper lug for use on COPPER CONDUCTOR ONLY. DO NOT substitute 03602X threaded lug.
- N9. Cam-Op Cable Joint Kit includes: 1- Cam-Op link; 1- Cam-Op BI-SOP; 2- elbow housings; 2- cable adapters; 2- 0370 style lugs; 2- retainer sleeves; 1- insulated cap.
- N10. Link-Op Cable Joint Kit includes: 1- Link-Op link; 1- Link-Op BI-SOP; 2- elbow housings; 2- cable adapters; 2- 0370 style lugs; 2- retainer sleeves; 2- insulated caps.
- N11. 600AT assembly tool required for operation and/or installation.
- N12. For 900 Amp ratings, substitute 675 for 650 and 655; 676 for 656; K675 for K650 and K655; K676 for K656; 775 for 750 and 755; 776 for 756 and 2X for 0X in the part number. The 900 Amp rating requires copper current-carrying connector components and copper conductor cable.
- N13. Add suffix symbol from page 29 to include cable shield grounding kit and/or cable jacket sealing kit.
- N14. To add elbows or arresters instead of insulating caps, replace the "DRG" with "LR-WX" for elbows (with test point) or "ESA" for elbow arresters.
- N15. The 650ABV is required when the bushing horizontal spacing on the equipment or junctions is less than 5".
- N16. Cam-Op operating kit includes accessories that enable visible break, testing, isolation and grounding functions to be performed. Kit includes: 3- Cam-Op loadbreak reducing tap plugs; 3- grounding elbows; 1- assembly tool; 1- test rod; 1- carry case; 1- lubricant; 1- instructions.
- N17. Link-Op operating kit includes accessories that enable visible break, testing, isolation and grounding functions to be performed. Kit includes: 6- Link-Op loadbreak reducing tap plugs; 3- grounding elbows; 1- assembly tool; 1- test rod; 1- carry case; 1- lubricant; 1- instructions.
- N18. 600 Series Elbows and Straight Receptacles with IEEE Std. 386 capacitive test points are available by substituting 656 for 655; K656 for K655; K676 for K675; 756 for 755; 676 for 675; K676 for K675 and 776 for 775 in the part number.
- N19. Rated for both 25kV and 35kV applications.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# SEPARABLE CONNECTORS STICK-OP, WINDOW-OP 600 SERIES DEADBREAK

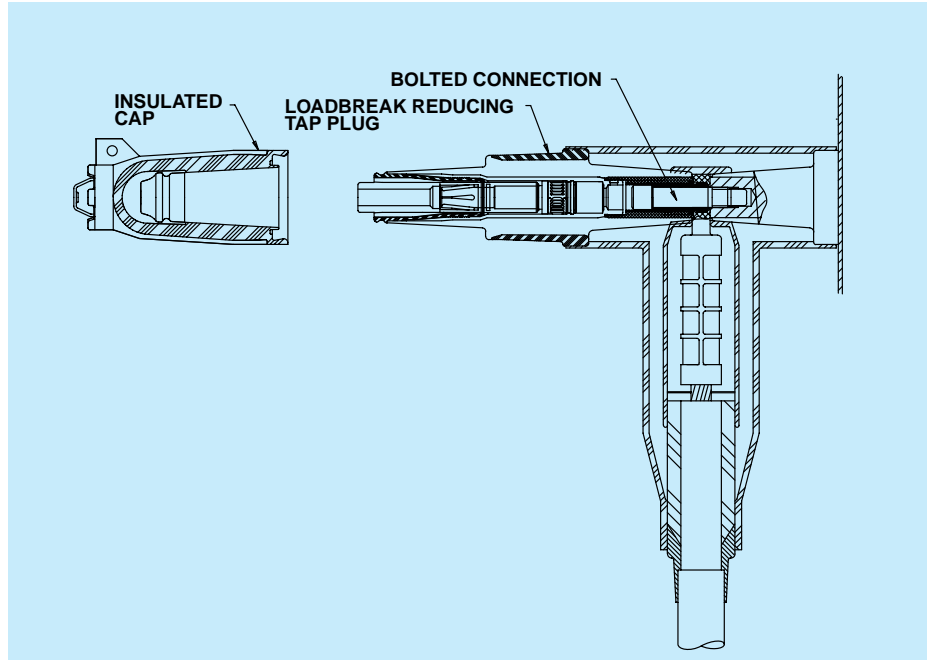
Elastimold's 600 Series Window-Op™ and Stick-Op™ deadbreak connector systems incorporate provisions for hotstick operation of DE-ENERGIZED primary feeder or network circuits.

The Window-Op and Stick-Op connectors allow direct testing and grounding with no required cable movement.

Window-Op is ideal for equipment applications which include viewing windows to provide an internal visible break that does not require hot stick removal of the elbows.

Stick-Op provides an external visible break by hot stick removal of the elbow.

Window-Op and Stick-Op connectors are bolted and installed using torque controlled tools.



## RATINGS OVERVIEW

See page 2 for complete information.

### CURRENT RATINGS

600 & 900 Amp Continuous  
25kA sym., 10 cycles

NOTE: 900 Amp ratings require copper cable and copper current-carrying components.

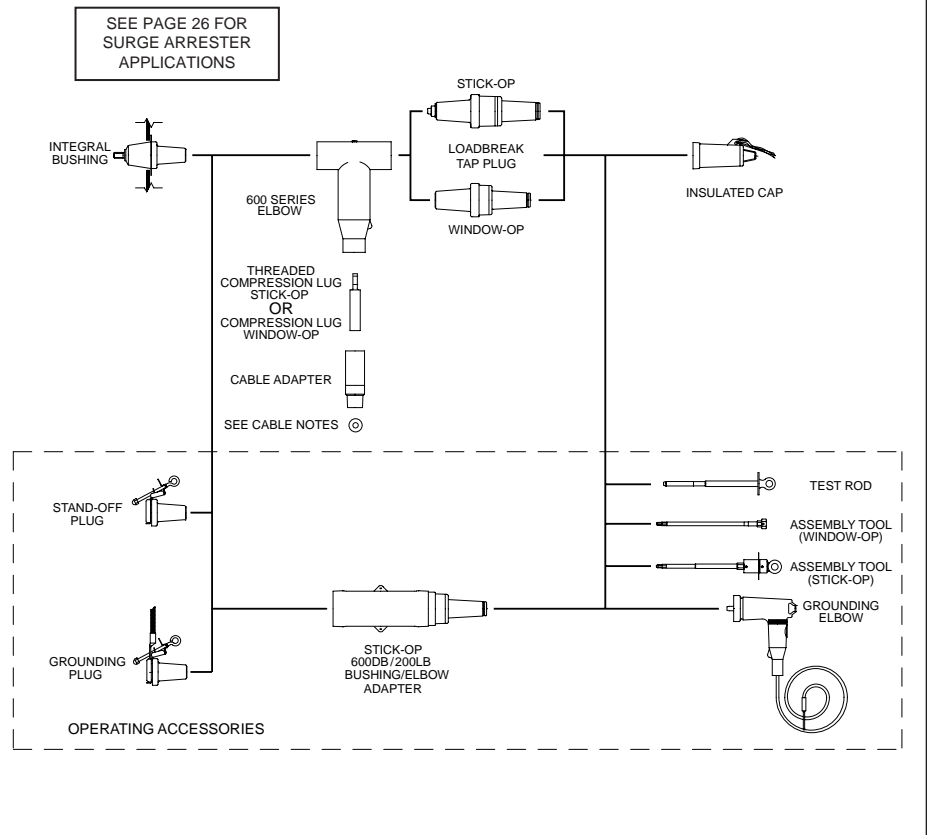
### CONTINUOUS VOLTAGE RATINGS

**15kV Class**  
8.3kV Phase-to-Ground  
14.4kV Phase-to-Phase  
95kV BIL  
34kV AC Withstand  
53kV DC Withstand  
11kV Corona Extinction

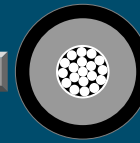
**25kV Class**  
15.2kV Phase-to-Ground  
26.3kV Phase-to-Phase  
125kV BIL  
40kV AC Withstand  
78kV DC Withstand  
19kV Corona Extinction

**35kV Class**  
21.1kV Phase-to-Ground  
36.6kV Phase-to-Phase  
150kV BIL  
50kV AC Withstand  
103kV DC Withstand  
26kV Corona Extinction

## STICK-OP & WINDOW-OP SYSTEM – 600 SERIES DEADBREAK



	<b>SEPARABLE CONNECTORS</b>			
<b>DEADFRONT</b>	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV	
<b>LIVEFRONT</b>	CABLE JOINTS	200 AMP DEADBREAK	25kV	<b>PART #</b>
	TERMINATIONS	600 SERIES DEADBREAK	35kV	
	SURGE ARRESTERS			



Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

### STICK-OP™ & WINDOW-OP™

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	WINDOW-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655ETP-W0X-DRG</b> Use Tables W7 and X6 <b>K655ETP-W0X-DRG</b> Use Tables W7 and X6 <b>755ETP-W0X-DRG</b> Use Tables W9 and X6	N1,3,4,5,6,13
	STICK-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655LRTP-W0X-DRG</b> Use Tables W7 and X6 <b>K655LRTP-W0X-DRG</b> Use Tables W7 and X6 <b>755LRTP-W0X-DRG</b> Use Tables W9 and X6	N2,3,4,5,8,13
	WINDOW-OP Loadbreak Elbow Tap Plug	15kV 25kV 35kV	<b>650ETP</b> <b>K650ETP</b> <b>750ETP</b>	N4,15 N4,15 N4,15
	STICK-OP Loadbreak Reducing Tap Plug	15kV 25kV 35kV	<b>650LRTPA3</b> <b>K650LRTPA2</b> <b>750LRTPA2</b>	N3,4
	STICK-OP Bushing Adapter	15kV 25kV 35kV	<b>650BEA3</b> <b>K650BEA2</b> <b>750BEA2</b>	N3,4
	Compression Lug	ALL	<b>03700X</b> Use Tables X6	N6
	WINDOW-OP Compression Lug	ALL	<b>03702X</b> Use Tables X6	N7
	Threaded Compression Lug	ALL	<b>03600X</b> Use Tables X6	N8
	STICK-OP Threaded Compression Lug	ALL	<b>03602X</b> Use Tables X6	N9
	WINDOW-OP Size Sensitive Kit (Cable Adapter & Lug)	15/25kV 35kV	<b>655CK-W0X</b> Use Tables W7 and X6 <b>755CK-W0X</b> Use Tables W9 and X6	N5 N5
	STICK-OP Size Sensitive Kit (Cable Adapter & Threaded Lug)	15/25kV 35kV	<b>655TCK-W0X</b> Use Tables W7 and X6 <b>755TCK-W0X</b> Use Tables W9 and X6	N5 N5
	Extraction Tool	ALL	<b>650ET</b>	N3,10
	Grounding Elbow (1/0 AWG x 6' Ground Lead)	15kV 25kV 35kV	<b>160GLR</b> <b>370GLR</b> <b>370GLR</b>	N14 N14
	Test Rod	ALL	<b>370TR</b>	
	Assembly Tool (Stick-Op)	ALL	<b>600AT</b>	N3
	Assembly Tool (Window-Op)	ALL	<b>600ATM</b>	N15
	STICK-OP OPERATING KIT	15kV 25kV 35kV	<b>650STICK-OK</b> <b>K650STICK-OK</b> <b>750STICK-OK</b>	N11 N11 N11
	WINDOW-OP OPERATING KIT	15kV 25kV 35kV	<b>650WINDOW-OK</b> <b>K650WINDOW-OK</b> <b>750WINDOW-OK</b>	N12 N12 N12

- N1. Window-Op Kit includes: insulated cap; Window-Op reducing tap plug; 600 Series elbow housing; cable adapter; and 0370 style compression lug.
- N2. Stick-Op Kit includes insulated cap; Stick-Op Loadbreak reducing tap plug; 600A Elbow Housing; cable adapter; and threaded 0360 style compression lug.
- N3. 600AT assembly tool required for operation and/or installation.
- N4. For 900 Amp ratings, substitute 675 for 650 and 655; 676 for 656; K675 for K650 and K655; K676 for K656; 775 for 750 and 755; 776 for 756 and 2X for 0X in the part number. The 900 Amp rating requires copper current-carrying connector components and copper conductor cable.
- N5. Add suffix symbol from page 29 to include cable shield grounding kit and/or cable jacket sealing kit.
- N6. Aluminum lug for use on aluminum or copper conductors. DO NOT substitute threaded 03600X lug.
- N7. Copper lug for use on COPPER CONDUCTOR ONLY. DO NOT substitute 03602X threaded lug.
- N8. Threaded aluminum lug (Stick-Op only) for use on copper or aluminum conductors. DO NOT substitute unthreaded 03700X lugs. DO NOT use with 675, 676, K675, K676, 775 or 776 part numbers.
- N9. Threaded copper lug (Stick-Op only) for use on copper conductors only. DO NOT substitute unthreaded 03702X lugs.
- N10. Required to disassemble Stick-Op loadbreak reducing tap plug from the threaded compression lug and 600 Series elbow after the shear-pin is broken during assembly.
- N11. Stick-Op Operating Kit includes accessories that enable visible break direct testing, isolation, and grounding functions to be performed. Kit includes: 3-insulated parking bushings; 3-grounding elbows; 3-600DB/200LB bushing/elbow adapters; 1-assembly tool; 1-test rod; 1-carry case; 1-lubricant; 1-instructions.
- N12. Window-Op Operating Kit includes accessories that enable visible grounding and direct testing functions to be performed. Kit includes: 3-grounding elbows; 1-test rod; 1-carry case; 1-lubricant; 1-instructions.
- N13. 600 Series Elbows and Straight Receptacles with IEEE Std. 386 capacitive test points are available by substituting 656 for 655; K656 for K655; K676 for K675; 756 for 755; 676 for 675; K676 for K675 and 776 for 775 in the part number.
- N14. Rated for both 25kV and 35kV applications.
- N15. 600ATM assembly tool required for Window-Op assembly.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



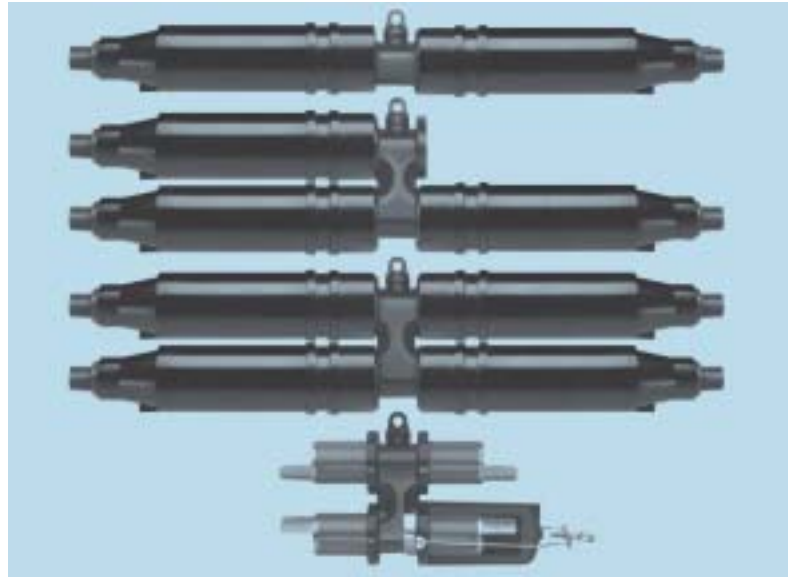
# SEPARABLE CONNECTORS CABLE JOINTS

## 600 SERIES DEADBREAK

600 Series Separable Cable Joints are available in 2, 3 and 4-way versions and include a capacitive test point as standard. Units are interchangeable, featuring bolted connections. Designs are compact and ideally suited for small vaults and manholes.

DE-ENERGIZED joints can be quickly and easily connected and disconnected using standard hand tools and equipment in accordance with accepted operating practices. Bus bars can be changed to add or remove cables from the joint.

Optional accessories include insulating and grounding caps and plugs which allow visible external separation, by-pass, isolation, dead-ending, grounding and testing.



### RATINGS OVERVIEW

See page 2 for complete information

#### CURRENT RATINGS

(Prefixes: 650, K650, K655, K656 & 03700)

600 Amp Continuous  
25kA sym., 10 cycles

(Prefixes: 675, K675, K676 & 03702)

900 Amp Continuous  
25kA sym., 10 cycles

NOTE: 900 Amp ratings require copper cable and copper current-carrying components.

#### VOLTAGE RATINGS

15/25kV Class (5kV thru 28kV)

16.2kV Phase-to-Ground

28kV Phase-to-Phase

140kV BIL

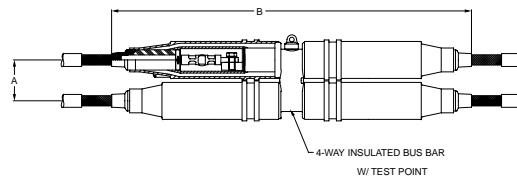
45kV AC Withstand

84kV DC Withstand

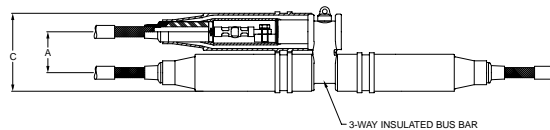
21.5kV Corona Extinction

Note: Elastimold has increased the IEEE Standard Production and Design Test levels for 25kV Class products to include 27kV and 28kV systems.

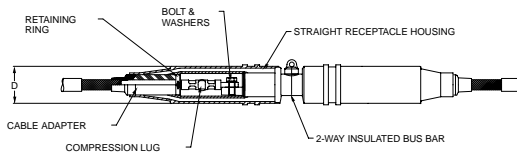
### SEPARABLE CABLE JOINTS – 600 SERIES DEADBREAK



SEPARABLE H-JOINT (4-WAY)

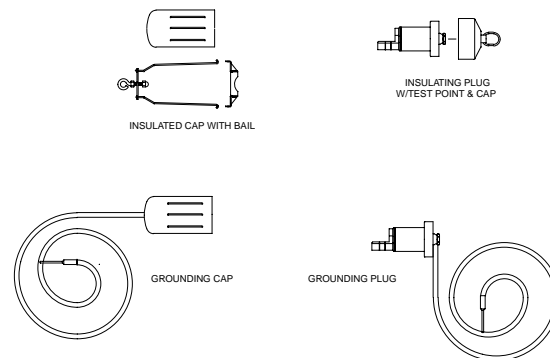


SEPARABLE WYE-JOINT (3-WAY)



SEPARABLE STRAIGHT JOINT (2-WAY)

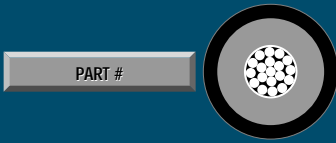
#### OPERATING ACCESSORIES



Note: The separable cable joints shown here use a special "Y" interface that may not be interchangeable with other 600 Series interfaces.

DIMENSION	INCHES
A	4 1/4
B	37 1/8
C	8 1/8
D	3 7/8

DEADFRONT LIVEFRONT	SEPARABLE CONNECTORS	200 AMP LOADBREAK	5-15kV
	FUSED ELBOWS	200 AMP DEADBREAK	25kV
	CABLE JOINTS	600 SERIES DEADBREAK	35kV
	TERMINATIONS		
	SURGE ARRESTERS		



Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

### 600 SERIES DEADBREAK

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Separable Straight Joint Pkg. (2-way) w/ Test Point	15/25kV	<b>K6561-W0X</b> Use Tables W7 and X6	N1,6,8
	Basic Housing Pkg. Straight Joint w/ Test Point	15/25kV	<b>K6561-HP</b>	N2,6
	Separable Wye Joint Pkg. (3-Way) w/ Test Point	15/25kV	<b>K656CY-W0X</b> Use Tables W7 and X6	N1,6,8
	Basic Housing Pkg. Wye Joint w/ Test point	15/25kV	<b>K656CY-HP</b>	N2,6
	Separable "H" Joint Pkg. (4-Way) w/ Test Point	15/25kV	<b>K656CH-W0X</b> Use Tables W7 and X6	N1,6,8
	Basic Housing Pkg. "H" Joint w/ Test Point	15/25kV	<b>K656CH-HP</b>	N2,6
	2-Way Insulated Bus Bar w/Test Point	15/25kV	<b>K6561-BUS</b>	N3,6
	3-Way Insulated Bus Bar w/Test Point	15/25kV	<b>K656CY-BUS</b>	N3,6
	4-Way Insulated Bus Bar w/Test Point	15/25kV	<b>K656CH-BUS</b>	N3,6
	Straight Receptacle	15/25kV	<b>K655YSR-W0X</b> Use Tables W7 and X6	N4,6,8
	Straight Receptacle Housing Only	15/25kV	<b>K655YBSR</b>	N5,6,10
	Insulated Cap w/ Bail	15/25kV	<b>K655YDR</b>	
	Bail Only	15/25kV	<b>650BA</b>	
	Cable Adapter	15/25kV	<b>655CA-W</b> Use Table W7	
	Adapter Retaining Ring	15/25kV	<b>650ARR-X</b> Use Table X6	
	Compression Lug	15/25kV 15/25kV	<b>03700X</b> <b>03702X</b> Use Table X6	N6,7 N6,9
	600 Series Straight Receptacle Size Sensitive Kit (Cable Adapter, Retaining Ring & Lug)	15/25kV	<b>655CK-W0X-ARR</b> Use Tables W7 and X6	N8

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Insulating Plug w/ Test Point & Cap	15/25kV	<b>K650YBIP</b>	
	Grounding Plug (4/0 AWG x 6' Ground Lead)	15/25kV	<b>650YGP</b>	
	Grounding Cap (4/0 AWG x 6' Ground Lead)	15/25kV	<b>650GYDR</b>	
	Aluminum Bolt & Washers	15/25kV	<b>650BAW</b>	N6
	Brass Bolt & Washers	15/25kV	<b>675BAW</b>	N6
	Assembly/ Disassembly Tool	ALL	<b>600YADT</b>	N11
	Assembly/ Disassembly Tool	ALL	<b>600RRT</b>	N11

- N1. Complete Joint Packages consisting of: insulated bus bar; straight receptacle housings, retaining rings, cable size adapters, lugs, bolts and washers.
- N2. Housing Packages consisting of the following non-size sensitive components of the joint: insulated bus bar, straight receptacle housings, bolts and washers.
- N3. Insulated bus bar only.
- N4. Straight Receptacle consisting of: straight receptacle housing, retaining ring, cable adapter, lug, bolt and washers.
- N5. Straight receptacle housing consisting of: straight receptacle housing, bolt and washers.
- N6. For 900 Amp ratings, substitute 675 for 650 and 655; 676 for 656; K675 for K650 and K655; K676 for K656; 775 for 750 and 755; 776 for 756 and 2X for 0X in the part number. The 900 Amp rating requires copper current-carrying connector components and copper conductor cable.
- N7. Aluminum lug for use on aluminum or copper conductors. DO NOT substitute threaded 03600X lug.
- N8. Add suffix symbol from page 29 to include cable shield grounding kit and/or cable jacket sealing kit.
- N9. Copper lug for use with COPPER CONDUCTOR ONLY. DO NOT substitute threaded 03602X lug.
- N10. Available without the bolt & washers by adding "N" to the part number.
- N11. Recommended for ease of assembly/disassembly of receptacles to Bus. 600 YADT is lever drive & 600RRT is screw drive.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.  
For cable shield adapters and jacket seals, see page 28.



# PCJ CABLE JOINTS

PCJ™ Power Cable Joints utilize permanently crimped connectors. PCJ Housings are fully insulated, shielded and sealed for direct buried, vault, submersible and other severe service applications. Units have been designed and tested per IEEE Standard 404 to assure system matched performance and ratings equal to the cable to which the splice will be installed.

PCJ Power Cable Joints are available in 2 styles:

Style 1 uses a single piece housing that is sized to accommodate a specific range of cable. Style 1 units are ideally suited for straight splicing of the same or similar cable.

Style 2 designs incorporate a universal housing with separate cable adapters to allow transition splices of different types and sizes of cable.



## ELECTRICAL RATINGS SUMMARY

The follow ratings summary is based on **IEEE Std. 404** and applies to all Elastimold PCJ Power Cable Joints.

### VOLTAGE

- A.** 15kV Class (8.7kV Phase-to-Ground)
- B.** 25kV Class (14.4kV Phase-to-Ground)
- C.** 35kV Class (20.2kV Phase-to-Ground)
- **Impulse Withstand:** A = 110kV, B = 150kV, C = 200kV BIL, 1.2 x 50 microsecond wave.
- **Corona Extinction Voltage:** A = 13kV, B = 22kV, C = 30kV minimum, 3pC sensitivity.
- **DC Withstand:** During installation: A = 56kV, B = 80kV, C = 100kV (Reference AEIC CS6 and CS8, Section L.1.)
- **DC Withstand:**  
After installation and in service for the first 5 years:  
A = 18kV, B = 25kV, C = 31kV for XLPE Insulated Cables  
and A = 45kV, B = 64kV, C = 80kV for EPR Insulated Cables.  
(Reference AEIC CS6 and CS8, Section L.2.)

### CURRENT

- Continuous rating equal to the rating of the cable.
- Short-Time rating equal to the rating of the cable up to 35kA.

### SHIELD DESIGN

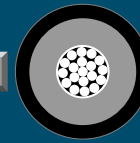
- Meets IEEE standard 592 for Exposed Semiconducting Shields on Premolded High Voltage Cable Joints and Separable Insulated Connectors.

### *Production tests include 100% tests of the premolded joints to assure:*

- **Corona Extinction Voltage:** A = 13kV, B = 22kV, C = 30kV minimum, 3pC sensitivity.
- **AC Withstand:** A = 35kV, B = 52kV, C = 69kV, 60 Hz, 1 minute.

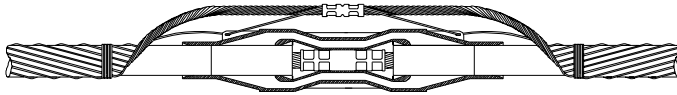
### *Design tests on production joints demonstrate compliance with IEEE 404 including:*

- **Corona Extinction Voltage:** A = 13.0kV, B = 22.0kV, C = 30.0kV minimum, 3pC sensitivity.
- **AC Withstand:** A = 35kV, B = 52kV, C = 69kV, 60 Hz 1 minute.
- **DC Withstand:** A = 70kV, B = 100kV, C = 125kV negative polarity, 15 minutes.
- **Impulse Withstand (BIL):** A = 110kV, B = 150kV, C = 200kV, 10 positive and 10 negative, 1.2 x 50 microsecond wave, at conductor temperatures of 20° and 130°C, nominal.
- **Short-Time Current:** magnitude equal to cable up to 35kA.
- **Cyclic Aging:** 30 days at: A = 26.1kV, B = 43.2kV, C = 60.6kV AC continuous, load current for 8 hours per day providing 130° conductor temperature. Joints then subjected to: A = 31kV, B = 50kV, C = 71kV for 5 hours followed by: A = 39kV, B = 65kV, C = 91kV for 5 min.
- **Load Cycle:** Connectors meet requirements of ANSI C119.4, Class A ratings.

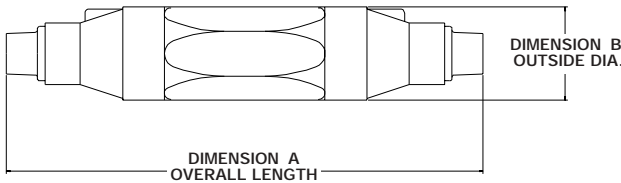
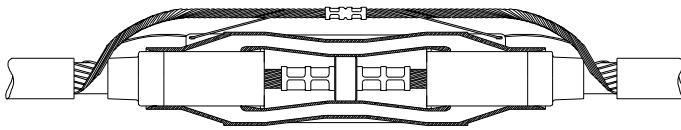


Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

### PCJ Style 1 with single-piece housing

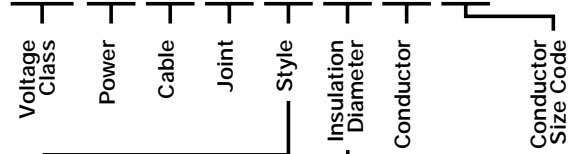


### PCJ Style 2 with universal housing and separate cable adapters that can be varied with the cable application.



### ORDERING INFORMATION

**15 P C J 1 W 1 X**



1- Style 1  
2- Style 2

1- Aluminum  
2- Copper

#### W SIZING INFORMATION AND SELECTION

Use Table W8 for 15PCJ  
Use Table W9 for 25PCJ  
Use Table W10 for 35PCJ

#### X SIZING INFORMATION AND SELECTION

Use Table X7 for 15PCJ, 25PCJ and 35PCJ

### DIMENSIONAL DATA

STYLE 1 PART NUMBER	A	B
	inches	inches
15PCJ1FX	10 1/4"	1 3/4"
15PCJ1GX	10 1/4"	1 3/4"
25PCJ1GX	14 3/8"	2 7/16"
15/25/35PCJ1HX	14 3/8"	2 7/16"
15/25/35PCJ1JX	14 3/8"	2 7/16"
15/25/35PCJ1KX	14 3/8"	2 25/32"
15/25/35PCJ1LX	14 3/8"	2 25/32"
15/25/35PCJ1LMX	14 3/8"	2 25/32"
15/25/35PCJ1MX	14 3/8"	2 25/32"
15/25/35PCJ1NX	15 3/4"	3 3/16"
15/25/35PCJ1PX	15 3/4"	3 3/16"
15/25/35PCJ1QX	15 3/4"	3 3/16"

STYLE 2 PART NUMBER	A	B
	inches	inches
15PCJ2EX	16 3/8"	2 25/32"
15PCJ2FX	16 3/8"	2 25/32"
15/25PCJ2GX	16 3/8"	2 25/32"
15/25/35PCJ2HX	16 3/8"	2 25/32"
15/25/35PCJ2JX	16 3/8"	2 25/32"
15/25/35PCJ2KX	21"	3 3/4"
15/25/35PCJ2LX	21"	3 3/4"
15/25/35PCJ2MX	21"	3 3/4"
15/25/35PCJ2NX	21"	3 3/4"
15/25/35PCJ2PX	21"	3 3/4"
15/25/35PCJ2QX	21"	3 3/4"

Description	Voltage Class	ELASTIMOLD Part Number	Notes
Power Cable Joint  Style 1	15kV	15PCJ1W1X	N1
	15kV	15PCJ1W2X	N2
	25kV	25PCJ1W1X	N1
	25kV	25PCJ1W2X	N2
	35kV	35PCJ1W1X	N1
	35kV	35PCJ1W2X	N2
Power Cable Joint  Style 2	15kV	15PCJ2W1X	N1
	15kV	15PCJ2W2X	N2
	25kV	25PCJ2W1X	N1
	25kV	25PCJ2W2X	N2
	35kV	35PCJ2W1X	N1
	35kV	35PCJ2W2X	N2

- N1. Kit includes aluminum compression connector suitable for splicing aluminum conductor to aluminum conductor or aluminum conductor to copper conductor.
- N2. Kit includes copper compression connector suitable for splicing copper conductor to copper conductor only.

Refer to the W and X tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# CABLE TERMINATIONS

Elastimold cable terminations are available in single piece or modular designs. Terminators allow connection and transition from shielded, underground cable to bare overhead conductors and live-front equipment. Units are designed and rated per IEEE Standard 48 for riser pole, padmount, indoor and outdoor applications. PCT1, PCT2, 16THG and 35MTG terminators provide sufficient creep, strike and weather sealing for class 1 outdoor service. PCT1 and PCT2 also include an integral cable jacket seal. The 35MTGI terminators and 35MSC stress cones are rated for class 2 and class 3 indoor service respectively. Optional mounting brackets, aerial lugs and equipment connectors are available as required.



## ELECTRICAL RATINGS SUMMARY

The following ratings summary is based on IEEE Std. 48 and applies to all the terminations on page 22 thru 25. Elastimold terminations are designed for use on three-phase systems, either 3-wire or 4-wire and the single-phase laterals of these systems.

### VOLTAGE RATINGS

#### 15kV Class

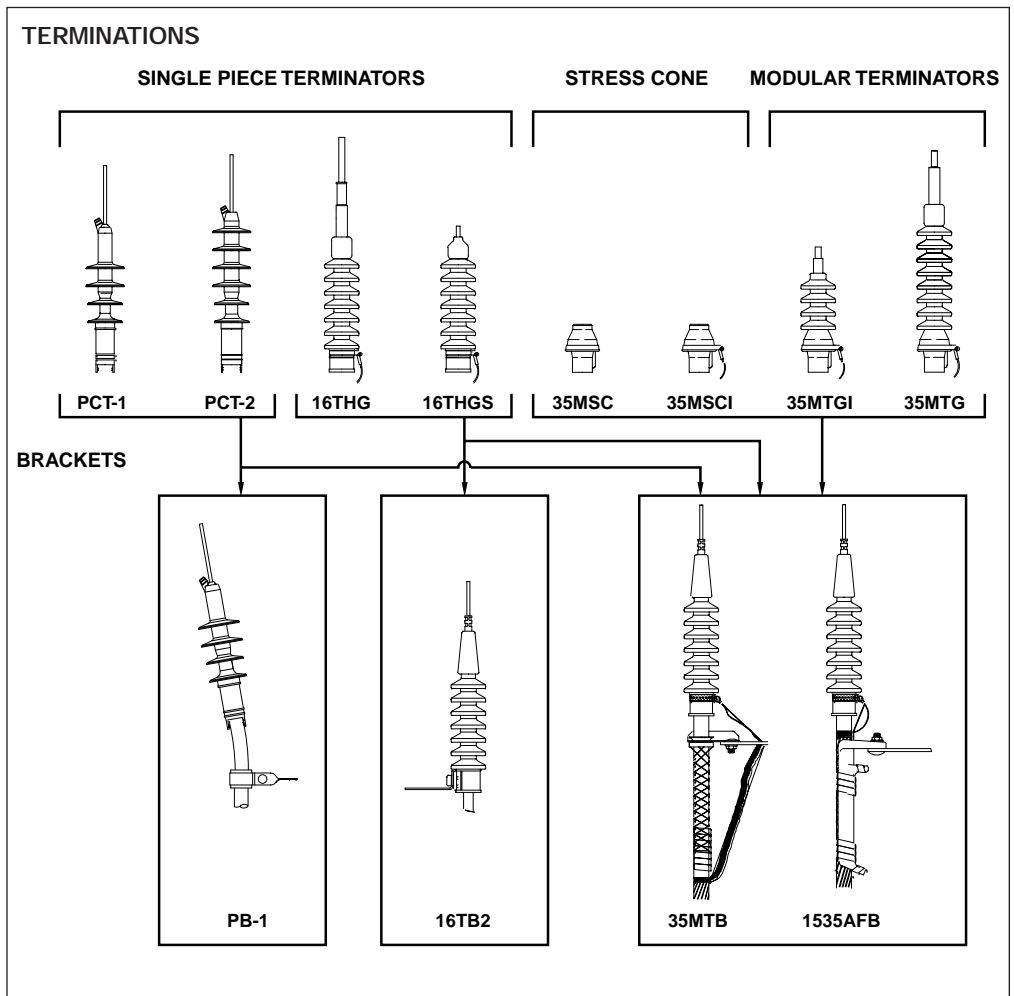
9.5kV Phase-to-Ground  
 110kV BIL 1.2 x 50 microsecond wave  
 AC Withstand:  
 50kV 1 min. – dry  
 35kV 6 hr. – dry  
 45kV 10 sec. – wet  
 13kV Corona Extinction

#### 25kV Class

16kV Phase-to-Ground  
 150kV BIL 1.2 x 50 microsecond wave  
 AC Withstand:  
 65kV 1 min. – dry  
 55kV 6 hr. – dry  
 60kV 10 sec. – wet  
 21.5kV Corona Extinction

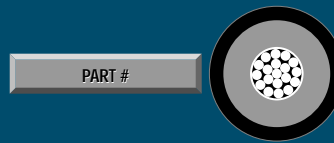
#### 35kV Class

22kV Phase-to-Ground  
 200kV BIL 1.2 x 50 microsecond wave  
 AC Withstand:  
 90kV 1 min. – dry  
 75kV 6 hr. – dry  
 80kV 10 sec. – wet  
 30kV Corona Extinction





	SEPARABLE CONNECTORS		
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV
	TERMINATIONS	600 SERIES DEADBREAK	35kV
	SURGE ARRESTERS		



Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

## TERMINATIONS

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Single-Piece Terminator (Class 1)	15kV 25kV	<b>PCT1-X-4</b> Use Table X9 <b>PCT2-X-4</b> Use Table X9	N12,14, 15, 22 N12,14, 15, 23
	Housing only	15kV 25kV	<b>PCT1-4</b> <b>PCT2-4</b>	N13, 22 N13, 23
	Single-Piece Terminator (Class 1)	15/25kV	<b>16THG-WX-4</b> Use Tables W12 and X8	N2,14 15
	Housing only	15/25kV	<b>16THGH-W</b> Use Table W12	
	Single-Piece Terminator for solid conductor only (Class 1)	15/25kV	<b>16THGS-WX</b> Use Tables W12 and X4	N3
	Stress Cone (Class 3)	ALL	<b>35MSC-W</b> Use Table W11	N17
	w/Grd. Strap	ALL	<b>35MSCI-W</b> Use Table W11	N17
	Modules only	ALL	<b>35MG-W</b> Use Table W13	N11,16
	Modular Terminator (Class 1)	15kV	<b>35MTG-WX-4-CA</b> Use Tables W13 and X3	N2,11
		25kV	<b>35MTG-WX-8-CA</b> Use Tables W13 and X3	N2,5,11
		35kV	<b>35MTG-WX-10-CA</b> Use Tables W13 and X3	N2,6,11
	Modular Terminator (Class 2) w/o Rain Cap	15kV	<b>35MTGI-W-4</b> Use Table W13	N11
		25kV	<b>35MTGI-W-6</b> Use Table W13	N11
		35kV	<b>35MTGI-W-8</b> Use Table W13	N7,11
	Rod Contact for PCT	15/25kV	<b>0070X</b> Use Table X9	N1,14, 15
	Rod Contact for 16THG	15/25kV	<b>16TCA-X</b> Use Table X8	N2, 8
	Solid Conductor Package for 16THGS	15/25kV	<b>16CAS-X</b> Use Table X4	N3, 9
	3/4"-16 Threaded Rod for MTG	ALL	<b>35MTGA-WX-1</b> Use Tables W13 and X3	N2,10,11 18, 25
	1"-14 Threaded Rod for MTG	ALL	<b>35MTGA-WX-2</b> Use Tables W13 and X3A	N2,10,11 19, 25
	Two-Hole Spade for MTG	ALL	<b>35MTGA-WX-3</b> Use Tables W13 and X3	N4,10,11 20, 25
	Two-Hole Spade for PCT	ALL	<b>0100X</b> Use Table X9	N1
	One-Hole Spade for PCT	ALL	<b>0110X</b> Use Table X9	N1
	Universal Rod for MTG	ALL	<b>35MTGA-WX-4</b> Use Tables W13 and X3	N2,10,11 21, 25
	Aerial Lugs for MTG Threaded Rod (Two-hole spade or bare wire)	ALL	<b>35AL-A</b>	N10, 24

- N1. Use with PCT1 or PCT2 Terminators.
- N2. Includes contact rod, ground strap and rain cap.
- N3. Includes crimp ring, ground strap and rain cap.
- N4. Includes spade contact, ground strap and rain cap.
- N5. For KA thru PB sizes use 35MTG-WX-6-CA.
- N6. For KA thru PB sizes use 35MTG-WX-8-CA.
- N7. For KA thru PB sizes use 35MTGI-W-6.
- N8. Use with 16THG Terminators.
- N9. Use with 16THGS Terminators.
- N10. Use with 35MTG Terminators.
- N11. Refer to page 24 for detailed ordering instructions.
- N12. Includes rod contact as standard. Specify suffix "-3" in place of "-4" for two-hole spade lug. Specify suffix "-5" in place of "-4" for one-hole spade lug.
- N13. Specify suffix "-3" or "-5" in place of "-4" for two-hole spade lug housing or one-hole spade style housing.
- N14. Use 1X for rod contact for aluminum conductors only.
- N15. Use 0X for rod contact for aluminum or copper conductors.
- N16. Available in sizes from GA thru PB & are supplied qty. 2 per package.
- N17. Available in sizes EB thru PB.
- N18. For conductors from 1/0 thru 350 kcmil.
- N19. For conductors from 400 kcmil thru 1000 kcmil.
- N20. For conductors from #2 to 1000 kcmil.
- N21. For conductors from #6 thru 4/0.
- N22. Use for insulation dia. range from .640" thru 1.070".
- N23. Use for insulation dia. range from .830" thru 1.180".
- N24. Select symbol for "A" from aerial lug ordering information on page 24.
- N25. W13 Table provides sizing for rain cap  
X10 Table provides sizing for connectors.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# CABLE TERMINATIONS cont'd

## ORDERING INSTRUCTIONS FOR MODULAR TERMINATORS

**35MTG - W X - N - C A**

I = Indoor  
Blank = Outdoor

Use Table W13, below

Use Table X3 or Table X3A

NOTE: Applicable table and available sizes depend upon connector style. Reference Connector Style Selection Chart and notes A through D.

### Recommended Number of Modules

	GA-JB	KA-PB
15kV	4	4
25kV	8	6
35kV	10	8

### Connector Style Selection Chart

Description	Available for Conductor Sizes	Symbol	Notes
3/4"-16 Threaded Rod	1/0 thru 350 kcmil	-1	A
1"-14 Threaded Rod	400 thru 1000 kcmil	-2	B
2-Hole Spade	#2 thru 1000 kcmil	-3	C
Universal Rod	#6 thru 4/0	-4	D

### Aerial Lugs for Threaded Rod Connectors Only

Type	Connector	Symbol
Bare Wire	3/4"-16 Rod	-11
2-Hole Spade	3/4"-16 Rod	-12
Bare Wire	1"-14 Rod	-21
2-Hole Spade	1"-14 Rod	-22

#### NOTES:

- A. Available for 1/0 through 350 conductor sizes only. Use Table X3 for size selection.
- B. Available for 400 through 1000 conductor sizes only. Use Table X3A for size selection.
- C. Available for #2 through 1000 conductor sizes only. Use Table X3 for size selection.
- D. Available for #6 through 4/0 conductor sizes only. Use Table X3 for size selection.

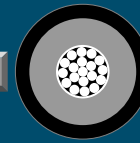
Table W13 USE FOR FOLLOWING PRODUCTS 35MTG 35MTGI	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.775	.885	GA
	.825	.935	GAB
	.875	.985	GB
	.930	1.040	GH
	.980	1.115	HA
	1.040	1.175	HAB
	1.095	1.240	HB
	1.160	1.305	HJ
	1.220	1.375	JA
	1.285	1.395	JAB
	1.355	1.520	JB
	1.485	1.595	KA
	1.530	1.640	KAB
	1.575	1.685	KB
	1.665	1.785	PA
	1.755	1.875	PB

Table X3 USE FOR FOLLOWING PRODUCT 35MTG FOR USE WITH STYLE -1,-3, & -4 CONNECTORS ONLY. SEE NOTES A, C, & D FOR APPLICATION INFORMATION	Conductor SIZE AWG or kcmil	Symbol for X	
		Strand./ Compr.	Compt./ Solid.
	#6	5	-
	#5	4	5
	#4	3	4
	#3	2	3
	#2	1	2
	#1	0	1
	1/0	10	0
	2/0	20	10
	3/0	30	20
	4/0	40	30
	250	250	40
	300	300	250
	350	350	300
	400	400	350
	450	450	-
	500	500	400
	550	550	450
	600	600	500
	650	650	550
	700	750	600
	750	750	650
	800	800	750
	900	900	800
	1000	1000	900

Table X3A USE FOR FOLLOWING PRODUCT 35MTG FOR USE WITH STYLE -2 CONNECTORS ONLY. SEE NOTE B FOR APPLICATION INFORMATION	Conductor SIZE AWG or kcmil	Symbol for X	
		Strand./ Compr.	Compt./ Solid.
	400	400	-
	450	450	400
	500	500	450
	550	550	500
	600	600	500
	650-700	650	550
	750	750	600
	800	750	650
	1000	1000	-

	SEPARABLE CONNECTORS		
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV
	TERMINATIONS	600 SERIES DEADBREAK	35kV
	SURGE ARRESTERS		

PART #



Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

## TERMINATIONS

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	PCT Positioning Bracket	ALL	<b>PB-1</b>	N1,12
	16THG Bracket	ALL	<b>16TB-2</b>	N6
	Bracket for crossarm mounting 16THG	ALL	<b>16TB-3</b>	N6
	Bracket for riser pole mounting 16THG	ALL	<b>16TB-4</b>	N6
	Bracket for tri-mounting 16THG	ALL	<b>16TB-5</b>	N6
	KELLUMS GRIP Bracket	ALL ALL ALL ALL	<b>35MTB1-A</b> <b>35MTB1-B</b> <b>35MTB1-C</b> <b>35MTB1-D</b>	N1,2,6,7 N1,3,6,7 N1,4,6,7 N1,5,6,7
	KELLUMS Bracket for crossarm mounting	ALL ALL ALL ALL	<b>35MTB3-A</b> <b>35MTB3-B</b> <b>35MTB3-C</b> <b>35MTB3-D</b>	N1,2,6,7 N1,3,6,7 N1,4,6,7 N1,5,6,7
	Bracket (for riser pole mounting)	ALL ALL ALL ALL	<b>35MTB4-A</b> <b>35MTB4-B</b> <b>35MTB4-C</b> <b>35MTB4-D</b>	N1,2,6,7 N1,3,6,7 N1,4,6,7 N1,5,6,7
	KELLUMS Bracket for tri-mounting	ALL ALL ALL ALL	<b>35MTB5-A</b> <b>35MTB5-B</b> <b>35MTB5-C</b> <b>35MTB5-D</b>	N1,2,6,7 N1,3,6,7 N1,4,6,7 N1,5,6,7
	ALUMA FORM Bracket	ALL	<b>1535AFB-1</b>	N1,6,7
	ALUMA FORM Bracket for Crossarm mounting	ALL	<b>1535AFB-3</b>	N1,6,7
	ALUMA FORM Bracket for riser-pole mounting	ALL	<b>1535AFB-4</b>	N1,6,7
	ALUMA FORM Bracket for tri-mounting	ALL	<b>1535AFB-5</b>	N1,6,7

- N1. Use with PCT-1 or PCT-2 Terminators.
- N2. Fits overall cable O.D. from 1.195" to 1.625".
- N3. Fits overall cable O.D. from .925" to 1.335".
- N4. Fits overall cable O.D. from .890" to 1.185".
- N5. Fits overall cable O.D. from 1.500" to 2.000".
- N6. Use with 16THG & 16THGS Terminators.
- N7. Use with MTG, MTG1 & MSC Terminators.
- N8. For conductors from 1/0 thru 350 kcmil.
- N9. For conductors from 400 kcmil thru 1000 kcmil.
- N10. For conductors from #2 to 1000 kcmil.
- N11. For conductors from #6 thru 4/0.
- N12. Fits overall cable O.D. from .750" to 1.625"

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



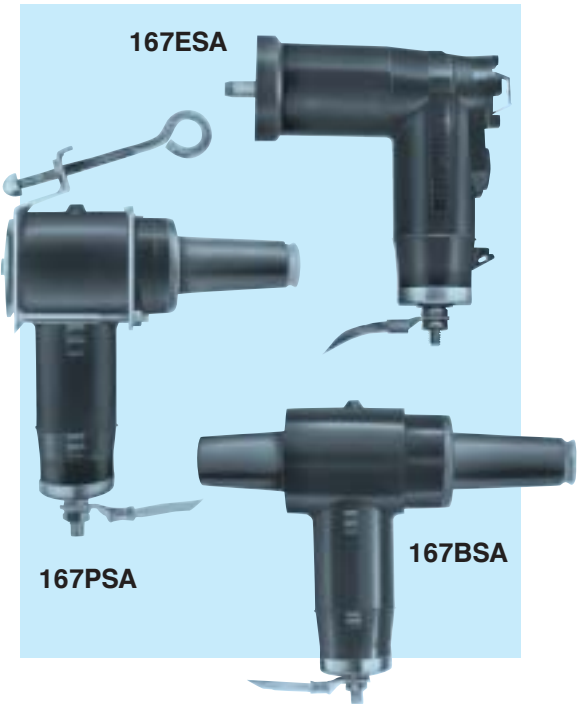
# SURGE ARRESTERS

ELASTIMOLD Metal Oxide Varistor (MOV) surge arresters are fully-shielded, fully-submersible and are equipped with IEEE 386 interfaces for convenient energized connection with other 200 Amp loadbreak components. Units are compact, allowing installation in existing cabinetry. For application ease, arresters are available in 3 styles: Elbow (ESA), Parking Stand (PSA) and Bushing (BSA). The PSA and BSA arresters permit direct connection eliminating the need for additional accessories.

Elastimold arresters provide high voltage lightning and switching surge protection of transformers, cable, equipment and other components typically located on underground power distribution systems. Proper placement, voltage selection and coordination with riser pole arresters minimizes damaging surge voltages by improving protective margins.

Typical applications include installing an arrester at the end of a radial system or at both ends of an open point on a loop system. Additional arresters can be added at strategic locations upstream from the end point for optimum protection. Request Form 2068 (Surge Protection Options For Underground Distribution) and Form 2069 (Arrester Applications – Underground Electrical Systems) for additional application and margin of protection information.

ESA Elbow Arresters are also available with a 200 Amp Deadbreak interface for mating with other Deadbreak accessories.



## ELECTRICAL RATINGS & PROTECTIVE CHARACTERISTICS

### Performance:

High Current Short Duration - All MOV Arresters withstand two discharges of 40kA crest.

Low Current Long Duration - All MOV Arresters withstand 20 surges of 75 amperes/2000 microsecond duration.

Duty Cycle Test - All MOV Arresters withstand 22 operations of 5kA crest at 8 x 20 microsecond duration while energized at rated voltage for the initial 20 operations and at maximum continuous operating voltage (MCOV) for the final two operations.

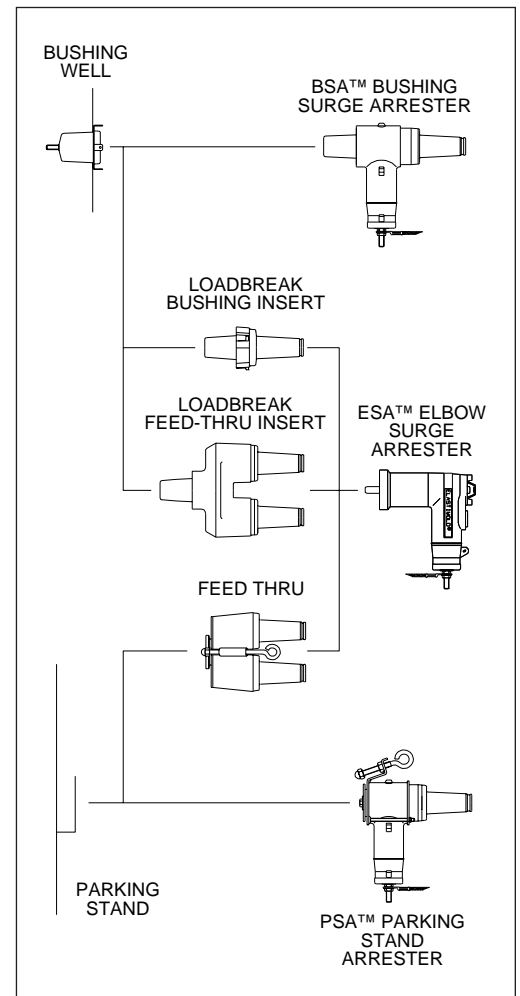
Following each of the preceding tests, MOV Arresters demonstrate thermal recovery at MCOV.

### PROTECTIVE CHARACTERISTICS:

	MCOV (kVrms) Note 1	Duty Cycle Rating (kVrms)	Maximum Discharge Voltage (kV crest) 8x20 microsecond current wave				
			1.5kA	3kA	5kA	10kA	20kA
<b>15kV CLASS</b>	2.55	3	10.5	11.0	11.5	13.0	14.5
	5.1	6	20.5	21.5	23.0	25.5	30.0
	8.4	10	30.5	32.5	34.5	38.5	43.5
	10.2	12	40.0	42.5	45.0	50.0	56.5
	12.7	15	48.0	51.0	54.0	60.0	68.0
<b>25kV CLASS</b>	15.3	18	56.5	60.0	64.0	71.0	80.5
	8.4	10	30.5	32.5	34.5	38.5	43.5
	10.2	12	40.0	42.5	45.0	50.0	56.5
	12.7	15	48.0	51.0	54.0	60.0	68.0
<b>35kV CLASS</b>	15.3	18	56.5	60.0	64.0	71.0	80.5
	17.0	21	65.5	69.5	74.0	82.5	93.0
	19.5	24	78.5	83.5	89.0	99.0	112.0
<b>35kV CLASS</b>	22.0	27	87.5	93.0	99.0	110.0	124.5
	24.4	30	95.5	101.5	108.0	120.0	136.0

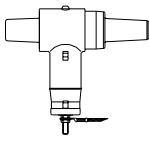
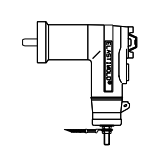
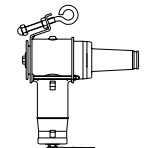
NOTES:

1. MCOV = Maximum Continuous Operating Voltage.



	SEPARABLE CONNECTORS		
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV
	TERMINATIONS	600 SERIES DEADBREAK	35kV
	SURGE ARRESTERS		

### SELECTION CHART

Illustration (not to scale)	Description	Voltage Class	Elastimold Part Number	MCOV kVrms
	BSA Bushing Surge Arrester (includes assembly tool)	15kV	<b>167BSA-3</b>	2.55
		15kV	<b>167BSA-6</b>	5.10
		15kV	<b>167BSA-10</b>	8.40
		15kV	<b>167BSA-12</b>	10.20
		15kV	<b>167BSA-15</b>	12.70
	See Notes N1, 2, 3, 4	15kV	<b>167BSA-18</b>	15.30
		25kV	<b>273BSA-10</b>	8.40
		25kV	<b>273BSA-12</b>	10.20
		25kV	<b>273BSA-15</b>	12.70
		25kV	<b>273BSA-18</b>	15.30
		25kV	<b>273BSA-21</b>	17.00
		35kV	<b>375BSA-24</b>	19.50
		35kV	<b>375BSA-27</b>	22.00
		35kV	<b>375BSA-30</b>	24.40
	ESA Elbow Surge Arrester	15kV	<b>167ESA-3</b>	2.55
		15kV	<b>167ESA-6</b>	5.10
		15kV	<b>167ESA-10</b>	8.40
		15kV	<b>167ESA-12</b>	10.20
		15kV	<b>167ESA-15</b>	12.70
	See Notes N2, 3, 5	15kV	<b>167ESA-18</b>	15.30
		25kV	<b>273ESA-10</b>	8.40
		25kV	<b>273ESA-12</b>	10.20
		25kV	<b>273ESA-15</b>	12.70
		25kV	<b>273ESA-18</b>	15.30
		25kV	<b>273ESA-21</b>	17.00
		35kV	<b>375ESA-24</b>	19.50
		35kV	<b>375ESA-27</b>	22.00
		35kV	<b>375ESA-30</b>	24.40
	PSA Parking Stand Arrester	15kV	<b>167PSA-3</b>	2.55
		15kV	<b>167PSA-6</b>	5.10
		15kV	<b>167PSA-10</b>	8.40
		15kV	<b>167PSA-12</b>	10.20
		15kV	<b>167PSA-15</b>	12.70
	See Notes N1, 2, 3	15kV	<b>167PSA-18</b>	15.30
		25kV	<b>273PSA-10</b>	8.40
		25kV	<b>273PSA-12</b>	10.20
		25kV	<b>273PSA-15</b>	12.70
		25kV	<b>273PSA-18</b>	15.30
		25kV	<b>273PSA-21</b>	17.00
		35kV	<b>375PSA-24</b>	19.50
		35kV	<b>375PSA-27</b>	22.00
		35kV	<b>375PSA-30</b>	24.40

### ARRESTER APPLICATION TABLE

	System Line-to-Line Voltage kV rms		MCOV (Max. Continuous Operating Voltage) kV rms	
	Nominal	Max.	Solidly Grounded Neutral Circuits	3-Wire Ungrounded Circuits
<b>15kV Class</b>	2.40	2.54	2.55	2.55
	4.16	4.40	2.55	5.10
	4.80	5.08	5.10	5.10
	6.90	7.26	5.10	8.40
	8.32	8.80	5.10	8.40
	12.47	13.20	8.40	15.30
	13.20	13.97	8.40	15.30
	13.80	14.50	8.40*	15.30
	13.80	14.50	10.20	15.30
	<b>25kV Class</b>	6.90	7.26	5.10
8.32		8.80	5.10	8.40
12.47		13.20	8.40	15.30
13.20		13.97	8.40	15.30
13.80		14.50	8.40*	15.30
13.80		14.50	10.20	15.30
20.78		22.00	12.70	-
20.78		22.00	15.30*	-
23.00		24.34	15.30	-
24.94		26.40	15.30	-
24.94	26.40	17.00*	-	
28.00	29.80	17.00	-	
<b>35kV Class</b>	23.00	24.34	-	22.00
	34.50	36.51	22.00*	-
	34.50	36.51	24.40	-

\* Preferred arrester MCOV for this system voltage

- N1. Elastimold PSA and BSA Arresters are equipped with a fully rated 200A switching and fault close loadbreak bushing.
- N2. Elastimold Arresters use high-strength silver epoxy bonded MOV blocks and shunted spring connections for the best circuit connection.
- N3. A 36 inch #4 AWG ground lead provided with each unit.
- N4. BSA installed by turning internal hex bolt (accessed thru the 200 Amp Bushing Interface) with 5/16" hex wrench supplied with each unit.
- N5. For 15kV and 25kV Class DEADBREAK system Elbow Arresters, use part number 156ESA with the appropriate Duty Cycle rating.

#### ORDERING INSTRUCTIONS:

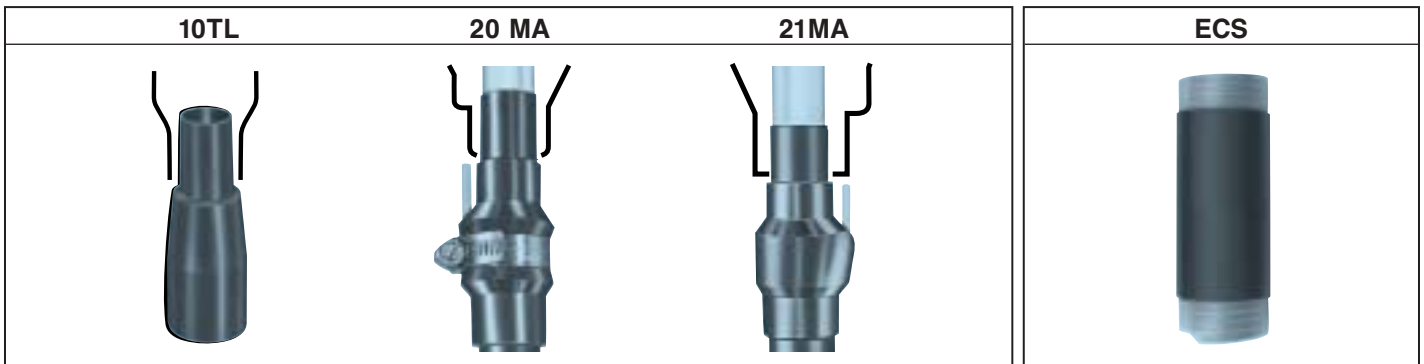
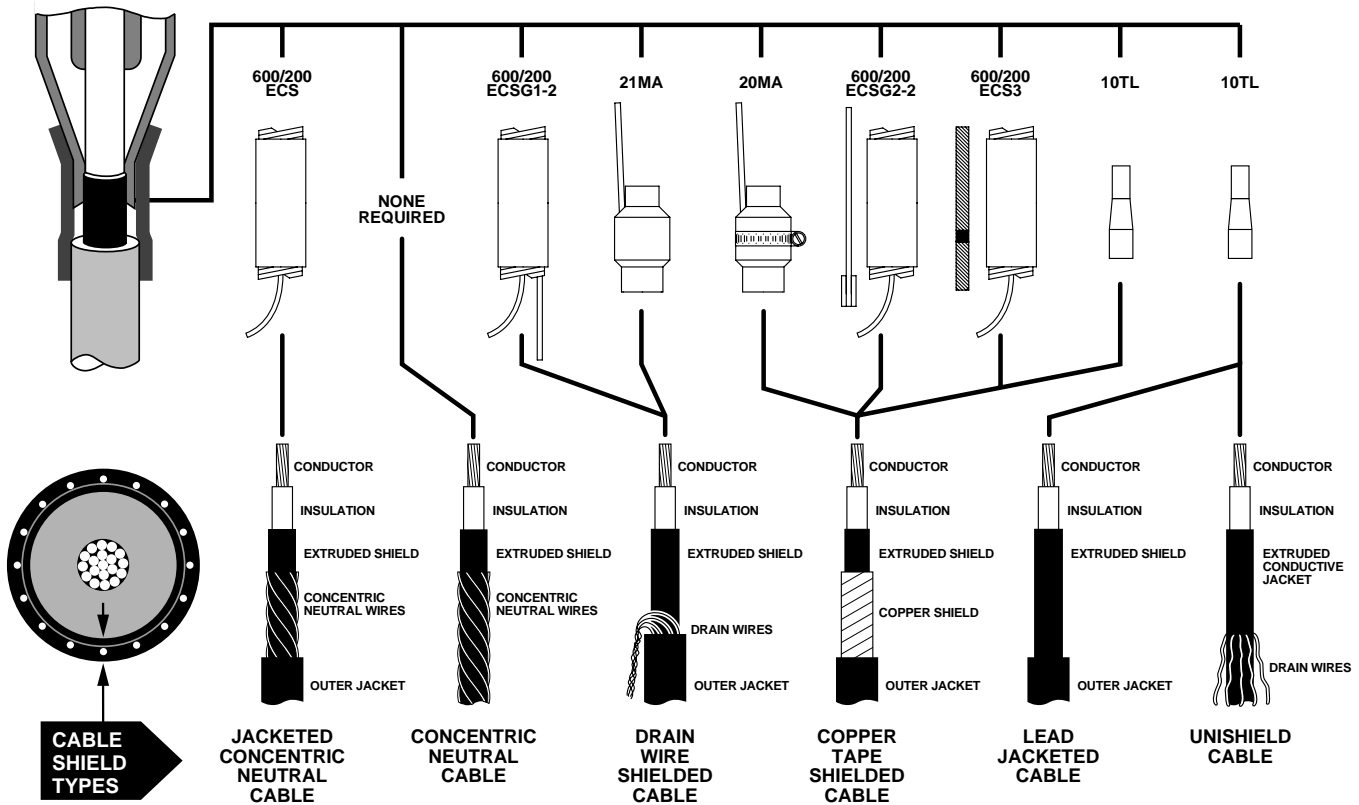
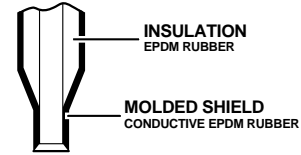
- (1.) Determine the appropriate Maximum Continuous Operating Voltage (MCOV) for your system voltage by using the ELASTIMOLD ARRESTER APPLICATION TABLE.
- (2.) Specify the appropriate ELASTIMOLD part number from the selection chart.



# SHIELD ADAPTERS, GROUNDING KITS AND JACKET SEALS

Elastimold elbows, cable joints and terminators have been designed for use on XLP, EPR or similar solid dielectric insulated power cables. These cables are available with a variety of optional shielding and jacket constructions. In order to properly mate and install the cable to an Elastimold product, the use of a shield adaptor, grounding kit or jacket seal may be required. The diagram below provides information concerning the application and selection of various shield adaptors, grounding kits and jacket seals for the most popular cable types. Consult the factory for recommendations concerning other cable constructions.

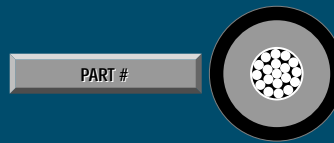
## CABLE ENTRANCE DETAIL



Cable Insulation Dia.	CABLE SHIELD ADAPTERS		
	10TL inches	20MA inches	21MA inches
min.	.495	.530	.530
max.	1.875	1.780	1.780

Jacket O.D.	JACKET SEALS	
	200ECS inches	600ECS inches
min.	.80	1.28
max.	1.50	2.30

	<b>SEPARABLE CONNECTORS</b>		
<b>DEADFRONT</b>	<b>FUSED ELBOWS</b>	<b>200 AMP LOADBREAK</b>	<b>5-15kV</b>
<b>LIVEFRONT</b>	<b>CABLE JOINTS</b>	<b>200 AMP DEADBREAK</b>	<b>25kV</b>
	<b>TERMINATIONS</b>	<b>600 SERIES DEADBREAK</b>	<b>35kV</b>
	<b>SURGE ARRESTERS</b>		



Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

Illustration (not to scale)	Description	ELASTIMOLD Part Number	Suffix	Notes
	Cold Shrinkable Jacket Seal	<b>200ECS</b>	<b>-S</b>	N1,3
	Cold Shrinkable Jacket Seal	<b>600ECS</b>	<b>-S</b>	N1,4
	Metallic Tape Shield Adapter	<b>20MA-W</b> Use Table W14 for sizing	<b>-0MA</b>	N1,2
	Wire Shield Adapter	<b>21MA-W</b> Use Table W14 for sizing	<b>-1MA</b>	N1,2
	Shield Adapter	<b>10TL-W</b> Use Table W15 for sizing	<b>-TL</b>	N1,2
	Cold Shrinkable Seal w/ Copper Rod & Crimp Connector	<b>200ECSG1-2</b>	<b>-SG1</b>	N1,3
	Cold Shrinkable Seal w/ Copper Rod & Crimp Connector	<b>600ECSG1-2</b>	<b>-SG1</b>	N1,4
	Cold Shrinkable Seal w/ Copper Rod & Constant Force Spring	<b>200ECSG2-2</b>	<b>-SG2</b>	N1,3
	Cold Shrinkable Seal w/ Copper Rod & Constant Force Spring	<b>600ECSG2-2</b>	<b>-SG2</b>	N1,4
	Cold Shrinkable Seal w/ Copper Braid & Constant Force Spring	<b>200ECSG3</b>	<b>-SG3</b>	N1,3
	Cold Shrinkable Seal w/ Copper Braid & Constant Force Spring	<b>600ECSG3</b>	<b>-SG3</b>	N1,4

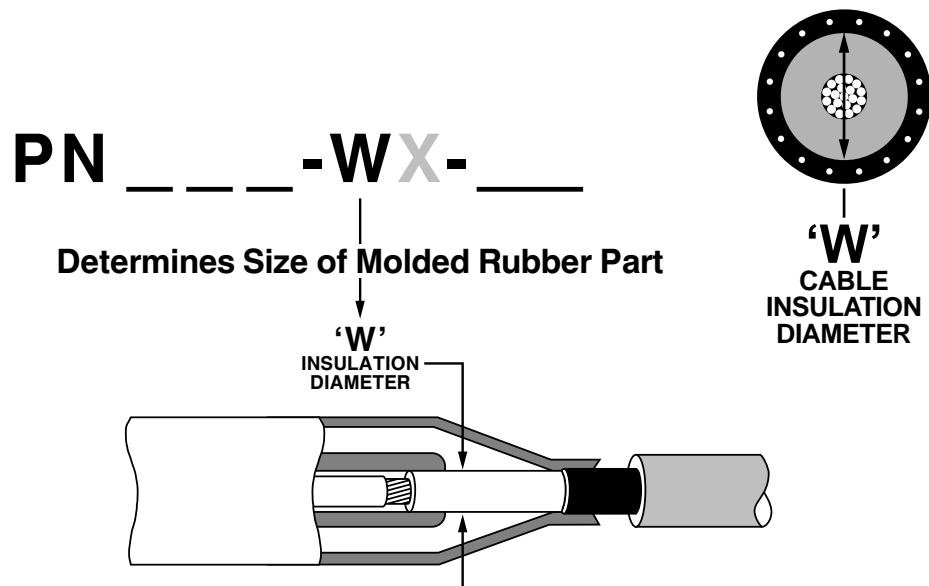
- N1. To order the kits as separate items, use the part numbers shown in the table. Example: To order a cold shrinkable tube as a separate item, use the part number 200ECS.  
To order the kits as components of other items, add the suffix to the end of the part number. Example: To order a cold shrinkable jacket seal as a component of an elbow kit, use the part number 166LR-A520-S.
- N2. Only use this suffix with part numbers that designate a "W" housing size. Sizing the main component will also size the suffix adapter.
- N3. Size range .80" to 1.50" jacket diameters. Maximum installed diameter is approx. 2".
- N4. Size range 1.28" to 2.30" jacket diameters. Maximum installed diameter is approx. 2.75".

Table W14 USE FOR 20MA 21MA	Insulation Inches		Symbol for W
	MIN.	MAX.	
	.530	.680	
.640	.820	F	
.760	.950	G	
.850	1.050	H	
.980	1.180	J	
1.090	1.310	K	
1.180	1.465	L	
1.370	1.630	M	
1.515	1.780	N	

Table W15 USE FOR 10TL	Insulation Inches		Symbol for W
	MIN.	MAX.	
	.495	.585	
.525	.635	EF	
.575	.585	FA	
.625	.735	FAB	
.675	.785	FB	
.725	.835	FG	
.775	.885	GA	
.825	.935	GAB	
.875	.985	GB	
.930	1.040	GH	
.980	1.115	HA	
1.040	1.175	HAB	
1.095	1.240	HB	
1.160	1.305	HJ	
1.220	1.375	JA	
1.285	1.395	JAB	
1.355	1.520	JB	
1.485	1.595	KA	
1.530	1.640	KAB	
1.575	1.685	KB	
1.755	1.875	PB	



# How to specify Size-Sensitive Products



## INSULATION DIAMETER SELECTION GUIDE

Elastimold Elbows, cable joints and terminations are designed for application on XLP, EPR and other solid dielectric insulated power cables. These components are constructed of molded elastomer and rely on an interference fit with the cable insulation diameter in order to maintain proper dielectric strength, creep path integrity and a water seal. Elastimold components are available in a wide range of sizes in order to accommodate a variety of cable insulation diameters.

Selection of size-sensitive components requires determining the cable insulation diameter. This can be done in several ways:

- Refer to the cable manufacturer's spec sheet for dimensions.
- Measure the cable.
- If the cable conforms to AEIC standards with a 175, 220, 260 or 345 mil wall thickness, use the table on page 34.
- If the cable is constructed to the new ICEA standard, refer to the cable manufacturer's spec sheet for dimensions.

After the cable insulation diameter has been determined:

- Locate the W table indicated in the part number selection chart.
- Complete the ordering information by selecting and inserting the symbol (given in the W table) into the part number.

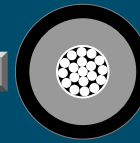
### Ordering Example

To complete the information required to order a K655LR-W0X elbow for use on standard AEIC 500 kcmil stranded aluminum cable with .220 inch thick insulation wall.

- Determine that the insulation diameter (from AEIC table on page 34) is  $1.325 \pm .030$  inches.
- For this elbow, the part number selection chart on page 11 indicates to use table W7 for elbow sizing and table X6 for connector sizing.
- From table W7 the symbol for W is L.
- From table X6 the symbol for X is 330.
- The completed part number therefore is K655LR-L0330.



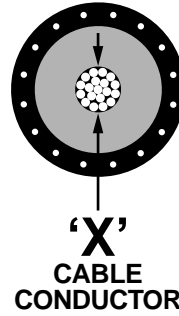
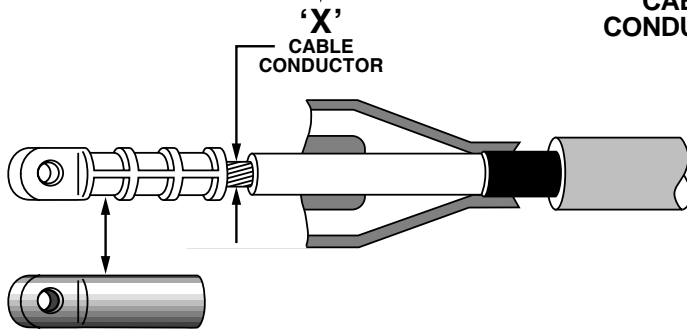
	SEPARABLE CONNECTORS			
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV	PART #
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV	
	TERMINATIONS	600 SERIES DEADBREAK	35kV	
	SURGE ARRESTERS			



Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

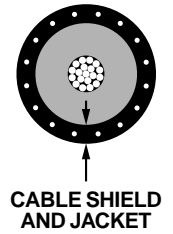
PN \_\_\_\_ -WX- \_\_\_\_

Determines Crimp Connector Size



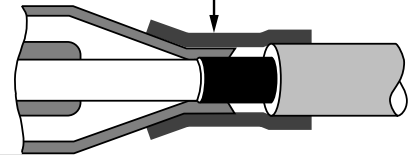
PN \_\_\_\_ -WX- \_\_\_\_

'Suffix'



Determines Required Accessories (if any)

- Cable Shield Adaptors
- Cable Grounding Kits
- Cable Jacket Seal



Reference Pages 28 & 29 for application, selection and ordering information.

## CONNECTOR SELECTION GUIDE

Elastimold elbows, cable joints and terminations are furnished with crimp style cable connectors. As standard, these connectors are constructed with a tin-plated aluminum barrel filled with an oxide inhibitor. Aluminum barrel connectors are designed for use on either aluminum or copper conductor cable.

When specified, all copper crimp style connectors can be furnished. These connectors are ONLY for use on copper conductor cable and are not for use with aluminum conductor cables.

Bi-metallic connectors are constructed with a copper top and an aluminum barrel. Bi-metal connectors can be used on either aluminum or copper conductor cable and are furnished as standard with 200 Amp Loadbreak Elbows, 200 Amp Deadbreak Elbows, and PCT, 16 THG or MTG terminations with rod connectors.

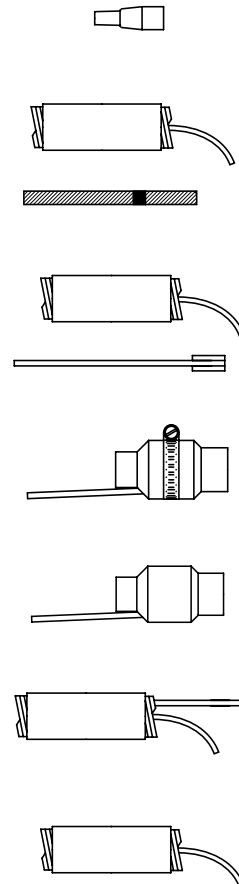
Selection and ordering the proper crimp connector requires determining information relative to the cable conductor as follows:

- Conductor size in AWG or kcmil
- Conductor type (stranded, compressed, compact or solid)
- Conductor material (aluminum or copper)

After the cable conductor information has been determined:

- Locate the X table indicated in the part number selection chart.
- Complete the ordering information by selecting and inserting the symbol (given in the X table) into the part number.

See the Ordering Example on page 30 for further information.





# WX SIZE TABLES

“W”  
INSULATION  
DIAMETER

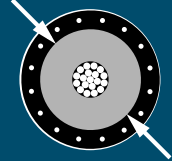


Table W1 USE FOR FOLLOWING PRODUCTS 165/166LR K151SP K151SR K151LS K151LY	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.575	.740	A
	.665	.905	B
	.830	1.060	C
	.930	1.220	D

Table W2 USE FOR FOLLOWING PRODUCTS 273/274LR 273/274RLR	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.760	.950	G
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K

Table W3 USE FOR FOLLOWING PRODUCTS 375/376LR	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K
	1.235	1.465	L

Table W4 USE FOR FOLLOWING PRODUCTS 156LR 167/168RLR 167LRT	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.640	.820	F
	.760	.950	G
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K

Table W5 USE FOR FOLLOWING PRODUCTS 167/168ELR 273/274ELR	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.665	.895	6689
	.740	.950	7495
	.880	1.100	88110
	1.090	1.310	K

Table W6 USE FOR FOLLOWING PRODUCTS 10EP 152EA 160CA* (*EB - FA Only)	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.495	.585	EB
	.525	.635	EF
	.575	.685	FA
	.625	.735	FAB
	.675	.785	FB
	.725	.835	FG
	.775	.885	GA
	.825	.935	GAB
	.875	.985	GB

Table W7 USE FOR FOLLOWING PRODUCTS K6561/CY/CH K655/656LR K655/656SR 655/656LINK K655/656LINK 655/656ETP K655/656ETP 655/656LRTP K655/656LRTP 655/656BI-LINK K655/656BI-LINK 655CA 655CK 655TCK	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.640	.820	F
	.760	.950	G
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K
	1.180	1.465	L
	1.280	1.430	LM
	1.370	1.630	M
	1.515	1.780	N
	1.725	1.935	P

Table W8 USE FOR FOLLOWING PRODUCTS 15PCJ-1 15PCJ-2	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.640	.820	F
	.760	.950	G
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K
	1.180	1.465	L
	1.280	1.430	LM
	1.370	1.630	M
	1.515	1.780	N
	1.725	1.935	P
	1.900	2.120	Q

Table W9 USE FOR FOLLOWING PRODUCTS 25PCJ-1 25PCJ-2 755/756LR 755/756LINK 755/756ETP 755/756LRTP 755/756BI-LINK 755CA 755CK 755TCK	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.760	.950	G
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K
	1.180	1.465	L
	1.280	1.430	LM
	1.370	1.630	M
	1.515	1.780	N
	1.725	1.935	P
	1.900	2.120	Q

Table W10 USE FOR FOLLOWING PRODUCTS 35PCJ-1 35PCJ-2	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K
	1.180	1.465	L
	1.280	1.430	LM
	1.370	1.630	M
	1.515	1.780	N
	1.725	1.935	P
	1.900	2.120	Q

Table W11 USE FOR FOLLOWING PRODUCTS 35MSC 35MSCI	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.495	.585	EB
	.525	.635	EF
	.575	.685	FA
	.625	.735	FAB
	.675	.785	FB
	.725	.835	FG
	.775	.885	GA
	.825	.935	GAB
	.875	.985	GB
	.930	1.040	GH
	.980	1.115	HA
	1.040	1.175	HAB
	1.095	1.240	HB
	1.160	1.305	HJ
	1.220	1.375	JA
	1.285	1.395	JAB
	1.355	1.520	JB
	1.485	1.595	KA
	1.530	1.640	KAB
	1.575	1.685	KB
	1.665	1.785	PA
	1.755	1.875	PB

Table W12 USE FOR FOLLOWING PRODUCTS 16THG 16THGS 16THGH	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.495	.585	EB
	.525	.635	EF
	.575	.685	FA
	.625	.735	FAB
	.675	.785	FB
	.725	.835	FG
	.775	.885	GA
	.825	.935	GAB
	.875	.985	GB
	.930	1.040	GH
	.980	1.115	HA

Table W13 USE FOR FOLLOWING PRODUCTS 35MTG 35MTGI 35MTCGA	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.775	.885	GA
	.825	.935	GAB
	.875	.985	GB
	.930	1.040	GH
	.980	1.115	HA
	1.040	1.175	HAB
	1.095	1.240	HB
	1.160	1.305	HJ
	1.220	1.375	JA
	1.285	1.395	JAB
	1.355	1.520	JB
	1.485	1.595	KA
	1.530	1.640	KAB
	1.575	1.685	KB
	1.665	1.785	PA
	1.755	1.875	PB

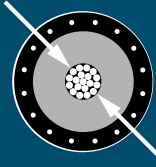


Table X1 USE FOR FOLLOWING PRODUCTS 167/168ELR 273/274ELR 156LR 165/166LR 273/274LR 167LRT 167/168RLR 273/274RLR 00400 02500 02509 02702 02800	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
#4	5200	5190	
#3	5210	5200	
#2	5220	5210	
#1	5230	5220	
1/0	5240	5230	
2/0	5250	5240	
3/0	5260	5250	
4/0	5270	5260	
250	–	5270	

Table X2 USE FOR FOLLOWING PRODUCTS 375/376LR	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
1/0	5240	5230	
2/0	5250	5240	
3/0	5260	5250	
4/0	5270	5260	

Table X3 USE FOR FOLLOWING PRODUCT 35MTG  NOTE: SEE PAGE 24 FOR DETAILED APPLICATION INFORMATION	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
#6	5	–	
#5	4	5	
#4	3	4	
#3	2	3	
#2	1	2	
#1	0	1	
1/0	10	0	
2/0	20	10	
3/0	30	20	
4/0	40	30	
250	250	40	
300	300	250	
350	350	300	
400	400	350	
450	450	–	
500	500	400	
550	550	450	
600	600	500	
650	650	550	
700	750	600	
750	750	650	
800	800	750	
900	900	800	
1000	1000	900	

Table X3A USE FOR FOLLOWING PRODUCT 35MTG  NOTE: SEE PAGE 24 FOR DETAILED APPLICATION INFORMATION	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
400	400	–	
450	450	400	
500	500	450	
550	550	500	
600	600	500	
650-700	650	550	
750	750	600	
800	750	650	
1000	1000	–	

Table X4 USE FOR FOLLOWING PRODUCT 16THGS 16CAS	Riser Conductor Size. AWG Solid	Symbol for X
	#2	2
#1	2	
1/0	10	
2/0	20	
3/0	30	
4/0	30	

Table X5 USE FOR FOLLOWING PRODUCTS K151SP K151SR K151LS K151LY	Conductor AGW or kcmil	Aluminum Conductors Symbol for X	
		Strand./Compr.	Compt./Solid.
#4	2AX	–	
#2	1AX	2AX	
#1	0AX	1AX	
1/0	10AX	0AX	
2/0	20AX	10AX	
3/0	30AX	20AX	
4/0	40AX	30AX	
250	–	40AX	
Conductor AGW or kcmil	Copper Conductors Symbol for X		
	Strand./Compr.	Compt./Solid.	
#6	3	–	
#4	2	3	
#2	1	2	
#1	0	1	
1/0	10	0	
2/0	20	10	
3/0	30	20	
4/0	40	30	
250	–	4	

Table X6 USE FOR FOLLOWING PRODUCTS 655/656LRTP K655/656LRTP 755/756LRTP K656I/Y/H K655/656LR 755/756LR K655/656SR 655/656LINK K655/656LINK 755/756LINK 655/656ETP K655/656ETP 755/756ETP 655/656BI-LINK K655/656BI-LINK 755BI-LINK 655CK 755CK 655TCK 03600 03602 03700 03702	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
1/0	240	230	
2/0	250	240	
3/0	260	250	
4/0	270	260	
250	280	270	
300	290	280	
350	300	290	
400	310	300	
450	320	310	
500	330	320	
550	340	320	
600	350	330	
650	360	340	
700	380	350	
750	380	360	
800	390	360	
900	400	380	
1000	410	400	
1250	440	420	

Table X7 USE FOR FOLLOWING PRODUCTS 15PCJ1 25PCJ1 35PCJ1 15PCJ2 25PCJ2 35PCJ2	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
#6	180	–	
#5	190	180	
#4	200	190	
#3	210	200	
#2	220	210	
#1	230	220	
1/0	240	230	
2/0	250	240	
3/0	260	250	
4/0	270	260	
250	280	270	
300	290	280	
350	300	290	
400	310	300	
450	320	310	
500	330	310	
550	340	320	
600	350	330	
650	360	340	
700	380	350	
750	380	360	
800	390	380	
900	400	380	
1000	410	400	
1250	440	420	

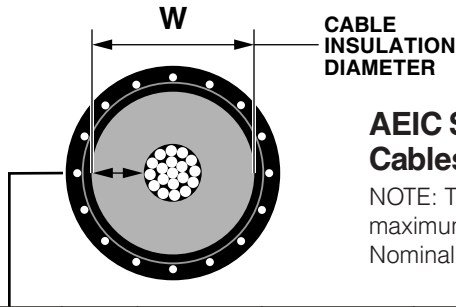
Table X8 USE FOR FOLLOWING PRODUCT 16THG 16TCA	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
#6	180	–	
#5	190	180	
#4	200	190	
#3	210	200	
#2	220	210	
#1	230	220	
1/0	240	230	
2/0	250	240	
3/0	260	250	
4/0	270	260	

Table X9 USE FOR FOLLOWING PRODUCTS PCT1 PCT2 01000 01010	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
#2	220	210	
#1	230	220	
#1	1230*	–	
1/0	240	230	
1/0	1240*	1230*	
2/0	250	240	
2/0	1250*	–	
3/0	260	250	
3/0	1260*	1250*	
4/0	270	260	
4/0	1270*	1260*	

\*For aluminum conductor only.



# AEIC CABLE INSULATION DIAMETER REFERENCE



## AEIC Standard Insulation Diameters for XLP and EPR Insulated Cables with .175, .220, .260 or .345 inch wall thickness.

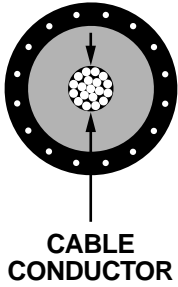
NOTE: The insulation diameters shown are nominal. Add  $\pm .030$  inch tolerance to calculate maximum and minimum diameters. Example .220 inch wall, 4/0 stranded conductor cable: Nominal Diameter = 1.030"; Maximum Diameter = 1.060"; Minimum Diameter = 1.000"

AWG or kcMil	Insulation Wall Thickness Inches	Voltage Class	w/stranded conductor	w/compressed conductor	w/compact or solid conductor
			Insulation Dia. (Inches)	Insulation Dia. (Inches)	Insulation Dia. (Inches)
#2 Solid	.175	15kV	—	—	.670
	.220	15kV	—	—	.760
	.260	25kV	—	—	—
	.345	35kV	—	—	—
#2	.175	15kV	.700	.695	.680
	.220	15kV	.790	.785	.770
	.260	25kV	—	—	—
	.345	35kV	—	—	—
#1 Solid	.175	15kV	—	—	.700
	.220	15kV	—	—	.790
	.260	25kV	—	—	.870
	.345	35kV	—	—	—
#1	.175	15kV	.740	.730	.710
	.220	15kV	.830	.820	.800
	.260	25kV	.910	.900	.880
	.345	35kV	—	—	—
1/0 Solid	.175	15kV	—	—	.735
	.220	15kV	—	—	.825
	.260	25kV	—	—	.905
	.345	35kV	—	—	1.075
1/0	.175	15kV	.785	.770	.745
	.220	15kV	.875	.860	.835
	.260	25kV	.955	.940	.915
	.345	35kV	1.125	1.110	1.085
2/0	.175	15kV	.830	.815	.785
	.220	15kV	.920	.905	.875
	.260	25kV	1.000	.985	.955
	.345	35kV	1.170	1.155	1.125
3/0	.175	15kV	.880	.865	.835
	.220	15kV	.970	.955	.925
	.260	25kV	1.050	1.035	1.005
	.345	35kV	1.220	1.205	1.175
4/0	.175	15kV	.940	.920	.885
	.220	15kV	1.030	1.010	.975
	.260	25kV	1.110	1.090	1.055
	.345	35kV	1.280	1.260	1.225
250	.175	15kV	.995	.980	.940
	.220	15kV	1.085	1.070	1.030
	.260	25kV	1.175	1.160	1.120
	.345	35kV	1.350	1.335	1.295
350	.175	15kV	1.100	1.080	1.035
	.220	15kV	1.190	1.170	1.125
	.260	25kV	1.280	1.260	1.215
	.345	35kV	1.455	1.435	1.390

AWG or kcMil	Insulation Wall Thickness Inches	Voltage Class	w/stranded conductor	w/compressed conductor	w/compact or solid conductor
			Insulation Dia. (Inches)	Insulation Dia. (Inches)	Insulation Dia. (Inches)
500	.175	15kV	1.235	1.210	1.155
	.220	15kV	1.325	1.300	1.245
	.260	25kV	1.415	1.390	1.335
	.345	35kV	1.590	1.565	1.510
600	.175	15kV	1.325	1.295	1.245
	.220	15kV	1.415	1.385	1.335
	.260	25kV	1.505	1.475	1.425
	.345	35kV	1.680	1.650	1.600
700	.175	15kV	1.395	1.365	1.305
	.220	15kV	1.485	1.455	1.395
	.260	25kV	1.575	1.545	1.485
	.345	35kV	1.750	1.720	1.660
750	.175	15kV	1.430	1.400	1.340
	.220	15kV	1.520	1.490	1.430
	.260	25kV	1.610	1.580	1.520
	.345	35kV	1.785	1.755	1.695
800	.175	15kV	1.460	1.430	1.370
	.220	15kV	1.550	1.520	1.460
	.260	25kV	1.640	1.610	1.550
	.345	35kV	1.815	1.785	1.725
900	.175	15kV	1.525	1.490	1.430
	.220	15kV	1.615	1.580	1.520
	.260	25kV	1.705	1.670	1.610
	.345	35kV	1.880	1.845	1.785
1000	.175	15kV	1.580	1.545	1.490
	.220	15kV	1.670	1.635	1.580
	.260	25kV	1.760	1.725	1.670
	.345	35kV	1.935	1.900	1.845

Note: If the cable is constructed to the new ICEA standard, refer to the cable manufacturer's spec sheet for dimensions.

# CABLE CONDUCTOR DIAMETER REFERENCE



## Conductor Diameters for Copper and Aluminum (Class B) Stranded, Compressed, Compact and Solid Cables




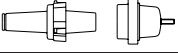

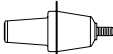


Conductor Size AWG or kcmil	No. of Strands and their Nom. Strand Dia. (in.)	Cross-sectional Area		Stranded Conductors (Inches)	Compressed Conductors (Inches)	Compact Conductors (Inches)	Solid Conductors (Inches)
		Square Inches	mm <sup>2</sup> Conversion				
14	7 x .0242	.0032	2.08	.073	—	—	.064
12	7 x .0305	.0051	3.31	.092	—	—	.081
10	7 x .0385	.0082	5.26	.116	—	—	.102
8	7 x .0486	.0130	8.37	.146	—	—	.129
6	7 x .0612	.0206	13.30	.184	—	—	.162
4	7 x .0772	.0328	21.15	.232	—	—	.204
2	7 x .0974	.0521	33.62	.292	.283	.268	.258
1	19 x .0664	.0657	42.41	.332	.322	.299	.289
1/0	19 x .0745	.0829	53.49	.373	.362	.336	.325
2/0	19 x .0837	.1054	67.43	.418	.405	.376	—
3/0	19 x .0940	.1318	85.01	.470	.456	.423	—
4/0	19 x .1055	.1662	107.2	.528	.512	.475	—
250	37 x .0822	.1964	127	.575	.558	.520	—
350	37 x .0973	.2749	177	.681	.661	.616	—
500	37 x .1162	.3924	253	.813	.789	.736	—
600	61 x .0992	.4712	304	.893	.866	.813	—
700	61 x .1071	.5498	355	.964	.935	.877	—
750	61 x .1109	.5890	380	.998	.968	.908	—
800	61 x .1145	.6283	405	1.031	1.000	.938	—
900	61 x .1215	.7069	456	1.094	1.061	.999	—
1000	61 x .1280	.7854	507	1.152	1.117	1.060	—
1100	91 x .1099	.8639	557	1.209	1.173	—	—
1200	91 x .1148	.9425	608	1.263	1.225	—	—
1250	91 x .1172	.9818	633	1.289	1.250	—	—
1300	91 x .1195	1.021	659	1.315	1.276	—	—
1400	91 x .1240	1.100	709	1.364	1.323	—	—
1500	91 x .1284	1.178	760	1.412	1.370	—	—
1600	127 x .1122	1.257	811	1.459	1.415	—	—
1700	127 x .1157	1.335	861	1.504	1.459	—	—
1750	127 x .1174	1.374	887	1.526	1.480	—	—
1800	127 x .1191	1.414	912	1.548	1.502	—	—
1900	127 x .1223	1.492	963	1.590	1.542	—	—
2000	127 x .1225	1.571	1010	1.632	1.583	—	—



# EQUIPMENT BUSHINGS

Elastimold manufactures a complete line of 200 Amp deepwell and 600 Series apparatus bushings for use on transformers, switchgear and other equipment applications. The bushings incorporate IEEE 386 standard interfaces (shown on page 3) and are constructed of molded epoxy with stainless steel flanges for mounting by welding or gasketed clamp. K1601PCC series bushings are provided with a

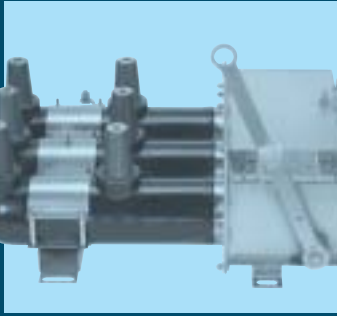
molded epoxy flange for gasketed clamp mounting only. Bushings are available for use on AIR, OIL or SF6 insulated equipment. Units are rated for submersible, padmount, indoor, outdoor and other applications. Options include hold-down bail tabs and replaceable studs for 200 Amp deepwell bushings.

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Bushing Shank Length	Notes
	Short Shank Well with bail tabs and non-replaceable well stud	15/25kV 35kV	<b>K1601PC-S1</b> <b>L1601PC-S1</b>	2 3/4"	N3,7,14
	Short Shank Well with bail tabs and with replaceable well stud	15/25kV 35kV	<b>K1601PC-S1-R</b> <b>L1601PC-S1-R</b>	2 3/4"	N1,3,7,14
	Short Shank Well without bail tabs and non-replaceable well stud	15/25kV 35kV	<b>K1601PC-S2</b> <b>L1601PC-S2</b>	2 3/4"	N3,7,14
	Short Shank Well without bail tabs and with replaceable well stud	15/25kV 35kV	<b>K1601PC-S2-R</b> <b>L1601PC-S2-R</b>	2 3/4"	N1,3,7,14
	Long Shank Well with bail tabs and non-replaceable well stud	15/25kV 35kV	<b>K1601PC-T1</b> <b>L1601PC-T1</b>	9 1/4"	N3,7,14
	Long Shank Well with bail tabs and with replaceable well stud	15/25kV 35kV	<b>K1601PC-T1-R</b> <b>L1601PC-T1-R</b>	9 1/4"	N1,3,7,14
	Long Shank Well without bail tabs and non-replaceable well stud	15/25kV 35kV	<b>K1601PC-T2</b> <b>L1601PC-T2</b>	9 1/4"	N3,7,14
	Long Shank Well without bail tabs and with replaceable well stud	15/25kV 35kV	<b>K1601PC-T2-R</b> <b>L1601PC-T2-R</b>	9 1/4"	N1,3,7,14
	Epoxy Flange Well	15/25kV	<b>K1601PCC</b>	2 3/4"	N3,7,14
	Epoxy Flange Well with replaceable well stud	15/25kV	<b>K1601PCC-R</b>	2 3/4"	N1,3,7,14
	Well w/Insert (K1601PCC-R & 1601A4)	15kV	<b>1601CABA4R</b>	2 3/4"	N1,3,8,14
	Well w/Insert (K1601PCC-R & 2701A4)	25kV	<b>2701CABA4R</b>	2 3/4"	N1,3,9,14
	200 A Deadbreak Bushing	15/25kV	<b>K180S4</b>	2 9/16"	N3,10,13
	200 A Deadbreak Bushing	15/25kV	<b>K180T4</b>	7 11/32"	
	200 A Deadbreak Bushing	15/25kV	<b>K180C4</b>	9 1/4"	
	600 A Short Shank Bushing w/stud	15/25kV	<b>K600S1</b>	2 15/16"	N2,4,11,14
	600 A Short Shank Bushing w.o./stud	15/25kV	<b>K650S1</b>		N2,5,11,14
	600 A Short Shank Bushing w.o./stud	35kV	<b>750S1</b>		N2,5,12,14
	600 A Cu Short Shank Bushing w.o./stud	15/25kV	<b>K675S1</b>		N3,5,11,14
	600 A Long Shank Bushing w/stud	15/25kV	<b>K600T1</b>	8 9/16"	N2,4,11,14
	600 A Long Shank Bushing w.o./stud	15/25kV	<b>K650T1</b>	8 9/16"	N2,5,11,14
	600 A Cu Long Shank Bushing w.o./stud	15/25kV	<b>K675T1</b>	8 9/16"	N3,5,11,14
	600 A 12" Long Shank Bushing w/stud	15/25kV	<b>K600L12</b>	12"	N2,4,11,14
	600 A Long Shank Bushing w.o./stud	35kV	<b>750T1</b>	8 9/16"	N2,5,12,14
	600 A 12" Long Shank Bushing w.o./stud	35kV	<b>750L12</b>	12"	N2,5,12,14
	600 A In-Air Long Shank Bushing w/stud	15/25kV	<b>K600TBC</b>	8 9/16"	N2,4,11,6,14
	600 A Cu In-Air Long Shank Bush. w/stud	15/25kV	<b>K675TBC</b>		N3,5,11,6,14
	Boot & Collars for K600T1 to use in air	15/25kV	<b>600BC</b>		N6

- N1. Replacement stud available separately. Specify 1601RS.
- N2. Equipped with standard aluminum conductor rod.
- N3. Equipped with copper conductor rod.
- N4. Includes 5/8-11 threaded stud at elbow end.
- N5. Includes 5/8-11 threaded hole at elbow end.
- N6. Provides increased creep and strike.
- N7. Includes 1601PPC1 shipping cap.
- N8. Includes 1601APC1 shipping cap.

- N9. Includes 2701-41 shipping cap.
- N10. Includes 180PPC shipping cap.
- N11. Includes 650PPC shipping cap.
- N12. Includes 750PPC1 shipping cap.
- N13. Parking stands for 200A deadbreak applications are available as separate items. Specify 151PS.
- N14. Parking stands for 200A loadbreak and 600A deadbreak applications are available as separate items. Specify 160PS.





**MVS**  
Molded Vacuum  
Switches



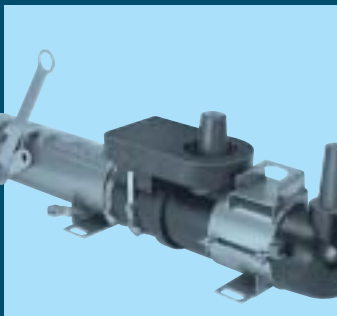
**MCAN**  
Molded Fuse Canister



**MVS -UAD**  
Underground  
Automated  
Distribution  
Controller



**MCLF**  
Molded Current Limiting  
Fuses



**MVI**  
Molded Vacuum Fault  
Interrupters



**FLR**  
15kV Fused Loadbreak  
Elbow



**MPJ**  
Molded Multi-Point  
Junctions



Voltage and Faulted  
Circuit Indicators

Information for product lines shown above is available  
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*For 5kV-35kV Distribution Systems*





# ELASTIMOLD System Planning Guide



## INTRODUCTION

Catalog SP2 provides an easy-to-use, comprehensive listing of ELASTIMOLD products for 5kV thru 35kV underground power distribution systems. Included are separable elbow connectors, cable joints, terminations, surge arresters, fused elbows and other cable accessory components. The catalog incorporates information relative to product application, ratings and selection.

ELASTIMOLD is recognized as the leading producer of premolded cable accessory components worldwide. Utilizing specially formulated materials with 100% peroxide-cured insulation and shielding, Elastimold products represent the state-of-the-art in premolded process technology. Durable, quality construction and non-degrading, high-reliability, maintenance-free performance is assured when specifying ELASTIMOLD products.

ELASTIMOLD's broad line of premolded products offer significant advantages over field-fabricated and other alternatives, including: 100% factory assurance testing prior to delivery and installation; simplified, single-piece construction with built-in insulating, shielding and sealing surfaces; ease of installation with no special skills or tools required; and compact, lightweight, durable designs for easy handling and application.

**Separable Elbow Connectors** and their related accessories are available in 200 Amp loadbreak, 200 Amp deadbreak and 600 Amp deadbreak styles. Rated for padmount, subsurface, vault, indoor, outdoor and other applications, units feature interchangeable interfaces which can be easily engaged or separated to provide a convenient method to connect or disconnect cable and equipment to the distribution system.

**Cable Joints** are available in permanently crimped or bolted (separable) connector styles. Permanently crimped units are rated the same as the cable they are connecting and are available for all applications including direct buried.

**Cable Terminations** are available in single-piece or modular designs. Rated for indoor, outdoor or padmount applications, units allow connection and transition from shielded underground cables to bare overhead conductors and live-front equipment.

**Surge Arresters** are constructed using metal oxide blocks for overvoltage protection and 200 Amp separable connector interfaces for attachment to other ELASTIMOLD accessories.

**Fused Elbows** combine replaceable current-limiting fuses for overcurrent protection and 200 Amp separable connector interfaces for attachment to other ELASTIMOLD accessories.

**Loadbreak Switches, Current Limiting Fuses, Fault Interrupters, Junctions, Faulted Circuit Indicators, Secondary Underground and Transmission Products** are shown on the back cover. For additional catalog information on these product lines, please contact your ELASTIMOLD Sales Representative.

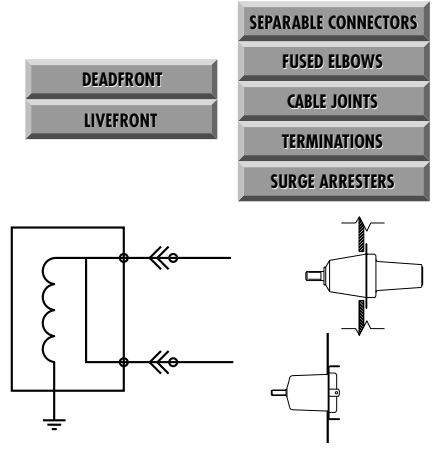
**Elastimold Special Component Services Group** provides custom products tailored to specific application requirements. Please contact the factory for further information regarding this service.

DEADFRONT	SEPARABLE CONNECTORS	200 AMP LOADBREAK	5-15kV	PART #	
LIVEFRONT	FUSED ELBOWS	200 AMP DEADBREAK	25kV		
	CABLE JOINTS	600 SERIES DEADBREAK	35kV		
	TERMINATIONS				
	SURGE ARRESTERS				

Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

## COMPONENT APPLICATION AND SELECTION

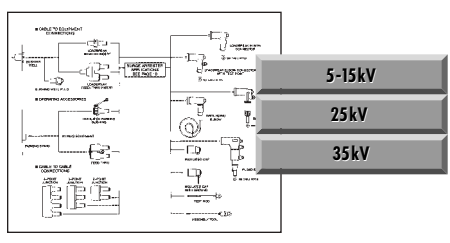
Catalog SP2 includes component group schematics, part numbers and standard ratings of ELASTIMOLD products for application on underground power distribution systems utilizing solid dielectric cable. Go directly to the product section in the table of contents or follow the decision path outlined below for component selection and application.



- Determine if the application involves **Deadfront** (shielded) or **Livefront** (unshielded) connections. Terminations are air insulated and classified as Livefront.
- Determine if the application requires **Separable Connectors, Fused Elbows, Cable Joints, Terminations** or **Surge Arresters**.
- If Separable Connectors are involved, determine the required current class: **200 Amp, 600 Amp** or **900 Amp**. This decision is based on the conductor size, loading, and system short circuit currents. The selected connector must be compatible with the mating interface on any equipment.

200 AMP LOADBREAK
200 AMP DEADBREAK
600 SERIES DEADBREAK

- 200 Amp connectors are available in **Loadbreak** and **Deadbreak** styles. Determine which style is required. 600 Series Connectors are Deadbreak only and Fused Elbows are Loadbreak only.



- Determine the part number related to the specific **Voltage Class** by utilizing the schematic layouts and product tables.

PART #	
--------	--

- If the component mates with cable, determine the cable insulation diameter, conductor size, type of cable shield and if jacket sealing is required.

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• Molded Switch, Fuse, Multi-Point Junction & Fault Interrupter Products .....	<b>Back Cover</b>
• Transmission Cable Products.....	<b>Back Cover</b>



# CERTIFIED TESTS AND PERFORMANCE

Elastimold Separable Connectors, Cable Joints, Cable Terminators, Surge Arresters, Fused Elbows and other cable accessory products have been designed and tested per applicable portions of IEEE, ANSI, NEMA and other industry standards including:

- IEEE 386™ Standard For Separable Connectors
- IEEE 404™ Standard For Cable Joints and Splices
- IEEE 48™ Standard For Cable Terminations

- IEEE C62.11™ Standard For Metal Oxide Surge Arresters
- ANSI C37.41 Standard For Current Limiting Fuses
- IEEE 592™ Standard For Exposed Semiconducting Shields
- ANSI C119.4 Standard For Copper and Aluminum Conductor Connectors
- AEIC CS6 and CS8 Standards For XLP and EPR Insulated Cables

## CABLE JOINTS, TERMINATIONS AND ARRESTER RATINGS

Refer to the pages listed below for rating information:

- PCJ Cable Joints, page 20.
- Cable Terminations, page 22
- Surge Arresters, page 26.

## SEPARABLE CONNECTOR RATINGS

Table 1 shows voltage and current ratings which apply to all Separable Connectors including 200 AMP Loadbreak, 200 AMP Deadbreak and 600 Series Deadbreak products. Table 2 shows switching and fault close ratings which only apply to 200 AMP Loadbreak Connectors.

TABLE 1	15kV Class Ratings	25kV Class Ratings	35kV Class Ratings
<ul style="list-style-type: none"> <li>• <b>OPERATING VOLTAGE</b> Maximum line-to-ground (See Application Info Note 1)</li> </ul>	8.3kV	15.2kV	21.1kV
<ul style="list-style-type: none"> <li>• <b>BIL</b> Impulse withstand 1.2 x 50 microsecond wave</li> </ul>	95kV	125kV	150kV
<ul style="list-style-type: none"> <li>• <b>WITHSTAND VOLTAGE</b> AC One Minute DC Fifteen Minute</li> </ul>	34kV 53kV	40kV 78kV	50kV 103kV
<ul style="list-style-type: none"> <li>• <b>CORONA EXTINGUISHMENT LEVEL</b> @ 3pC Sensitivity</li> </ul>	11kV	19kV	26kV
<b>200 AMP Products</b> Continuous Current: Symmetrical Momentary Current:  <b>600 Series Products</b> Continuous Current: Symmetrical Momentary Current:	200 AMP* 10kA sym, 10 cycle duration  600 and 900 AMP* 25kA sym, 10 cycle duration  * Designed for 90° C maximum continuous operating temperature		

TABLE 2	LOADMAKE/LOADBREAK SWITCHING	FAULT CLOSE
<b>15kV Class Ratings</b>	<ul style="list-style-type: none"> <li>• 1<math>\phi</math> and 3<math>\phi</math> circuits 8.3kV line to ground, 14.4kV max. across open contacts.</li> <li>• 10 loadmake/break operations at 200 Amps max. with 70 to 80% lagging power factor.</li> </ul>	1 fault close operation at 8.3kV or 14.4kV; 10,000 Amps, rms, sym. 10 cycles (0.17 sec.) 1.3 max. asym factor applies to new or used mating parts (up to maximum designated switching operations.)
<b>25kV Class Ratings</b>	<ul style="list-style-type: none"> <li>• 1<math>\phi</math> and 3<math>\phi</math> circuits 15.2kV line to ground, 26.3kV max. across open contacts.</li> <li>• 10 loadmake/break operations at 200 Amps max. with 70 to 80% lagging power factor.</li> </ul>	1 fault close operation at 15.2kV or 26.3kV; 10,000 Amps, rms, sym. 10 cycles (0.17 sec.) 1.3 max. asym factor applies to new or used mating parts (up to maximum designated switching operations.)
<b>35kV Class Ratings</b>	<ul style="list-style-type: none"> <li>• 1<math>\phi</math> and 3<math>\phi</math> circuits 21.1kV line to ground, 36.6kV max. across open contacts.</li> <li>• 10 loadmake/break operations at 200 Amps max. with 70 to 80% lagging power factor.</li> </ul>	1 fault close operation at 21.1kV or 36.6kV; 10,000 Amps, rms, sym. 10 cycles (0.17 sec.) 1.3 max. asym factor applies to new or used mating parts (up to maximum designated switching operations.)

### Application Information:

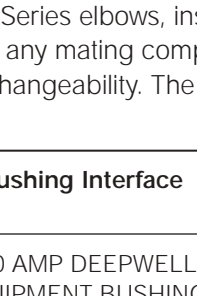
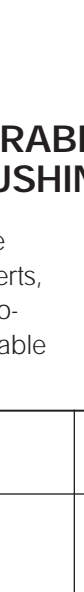
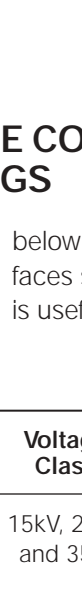
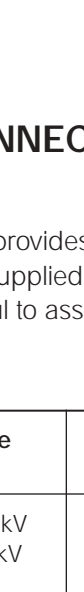
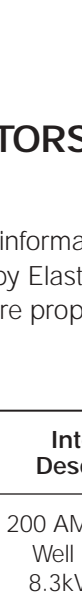


1. Loadbreak connectors are designed and rated for use on grounded WYE systems. For application on ungrounded WYE or delta systems, the next higher voltage class product is recommended. Examples: 5kV ungrounded: use 15kV class products; 15kV ungrounded: use 25kV class products; 25kV ungrounded: use 35kV class products; 35kV ungrounded: contact factory.
2. Products are designed and constructed for all applications including padmount, subsurface, vault, indoor, outdoor, direct sunlight, direct buried and continuously submerged in water.
3. Products are designed and rated for ambient temperatures of -40° C to +65° C. It is recommended that loadbreak connectors be hotstick operated at -20° C to +65° C ambient temperature range and at altitudes not exceeding 6000 feet.

# SEPARABLE CONNECTOR INTERFACES

## STANDARD INTERFACES FOR SEPARABLE CONNECTORS, COMPONENTS AND EQUIPMENT BUSHINGS

ANSI/IEEE Standard 386 defines the specific interface dimensions that 200 Amp and 600 Series elbows, inserts, junctions, equipment bushings and any mating components must conform to insure interchangeability. The table

below provides information concerning the types of interfaces supplied by Elastimold for various applications and is useful to assure proper matching of components.

Bushing Interface	Voltage Class	Interface Description	Standard No Figure No.
 <p>200 AMP DEEPWELL EQUIPMENT BUSHING</p>	15kV, 25kV and 35kV	200 AMP Bushing Well Interface 8.3kV, 15.2kV, 21.1kV	<b>A</b> IEEE 386-1995 Fig. 3
 <p>200 AMP LOADBREAK INSERT</p>	15kV	200 AMP Loadbreak 8.3kV and 8.3kV/14.4kV	<b>B</b> IEEE 386-1995 Fig. 5
 <p>200 AMP LOADBREAK INSERT</p>	25kV	200 AMP Loadbreak 15.2kV and 15.2kV/26.3kV	<b>C</b> IEEE 386-1995 Fig. 7, Note 3
 <p>200 AMP LOADBREAK INSERT</p>	35kV	200 AMP Loadbreak Interface No. 2 21.1kV and 21.1kV/36.6kV	<b>D</b> IEEE 386-1995 Fig. 7, Note 3
 <p>200 AMP DEADBREAK INSERT</p>	15kV and 25kV	200 AMP Deadbreak 8.3kV and 15.2kV	<b>E</b> IEEE 386-1995 Fig. 4
 <p>600 SERIES EQUIPMENT BUSHING</p>	15kV and 25kV	600 AMP Deadbreak Interface No.1 8.3kV and 15.2kV	<b>F</b> IEEE 386-1995 Fig.11, Note 1
 <p>600 SERIES EQUIPMENT BUSHING</p>	35kV	600 AMP Deadbreak Interface No.1 21.1kV	<b>G</b> IEEE 386-1995 Fig.13, Note 2

NOTES:

1. Was Fig. 10 in previous IEEE 386-1985 publication.
2. Was Fig. 11 in previous IEEE 386-1985 publication.
3. Elastimold uses Fig. 7 interface for both 25 and 35kV applications.



# SEPARABLE CONNECTORS 200 AMP LOADBREAK

200 Amp loadbreak connectors and accessories provide a convenient method to connect/disconnect cable and equipment on power distribution systems. Loadbreak elbows include provisions for energized operation using standard hotstick tools, allowing load-make/break operation and a visible disconnect. Components can be isolated with insulated caps, plugs and parking bushings.

Optional accessories allow system grounding, testing, bypass, lightning surge protection and current limiting fusing. Additional connecting points and taps can be provided by use of junctions or feed-thrus.



## RATINGS OVERVIEW

See page 2 for complete information including switching and fault close ratings.

### CURRENT RATINGS

200A Continuous  
10kA sym. 10 Cycles

### VOLTAGE RATINGS

**15kV Class**  
8.3kV Phase-to-Ground  
14.4kV Phase-to-Phase  
95kV BIL  
34kV AC Withstand  
53kV DC Withstand  
11kV Corona Extinction

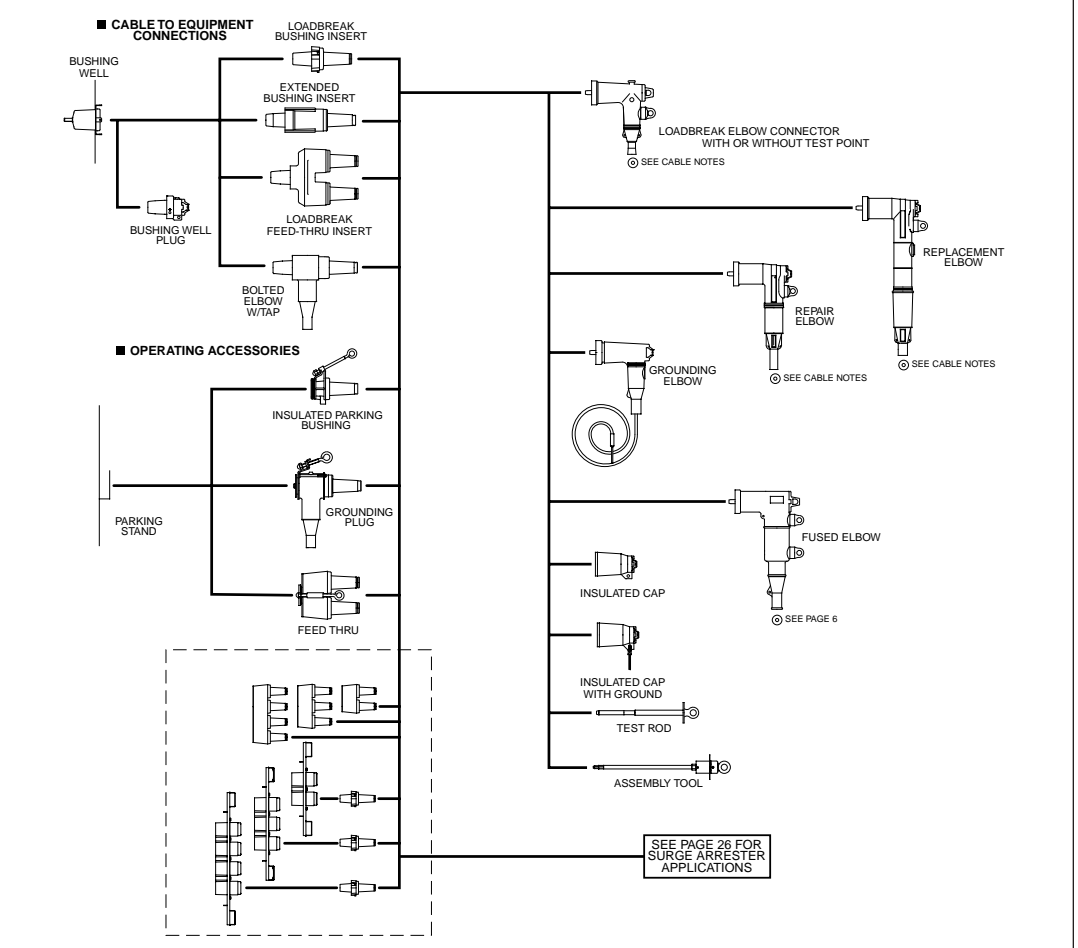
### 25kV Class

15.2kV Phase-to-Ground  
26.3kV Phase-to-Phase  
125kV BIL  
40kV AC Withstand  
78kV DC Withstand  
19kV Corona Extinction

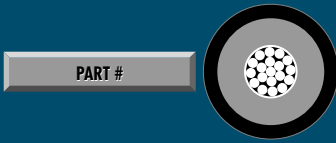
### 35kV Class

21.1kV Phase-to-Ground  
36.6kV Phase-to-Phase  
150kV BIL  
50kV AC Withstand  
103kV DC Withstand  
26kV Corona Extinction

## 200 AMP LOADBREAK SEPARABLE CONNECTOR COMPONENTS



	<b>SEPARABLE CONNECTORS</b>		
<b>DEADFRONT</b>	<b>FUSED ELBOWS</b>	<b>200 AMP LOADBREAK</b>	<b>5-15kV</b>
<b>LIVEFRONT</b>	<b>CABLE JOINTS</b>	<b>200 AMP DEADBREAK</b>	<b>25kV</b>
	<b>TERMINATIONS</b>	<b>600 SERIES DEADBREAK</b>	<b>35kV</b>
	<b>SURGE ARRESTERS</b>		



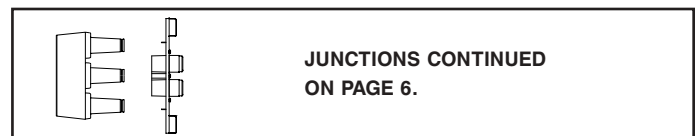
Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

**200 AMP LOADBREAK**

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Elbow Connector	15kV	<b>165LR-WX</b> Use Tables W1 and X1	N2,3,4,5
		25kV	<b>273LR-WX</b> Use Tables W2 and X1	N2,3,4,5
		35kV	<b>375LR-WX</b> Use Tables W3 and X2	N2,3, 5
	Elbow Connector w/ Test Point	15kV	<b>166LR-WX</b> Use Tables W1 and X1	N2,3,4,5
		25kV	<b>274LR-WX</b> Use Tables W2 and X1	N2,3,4,5
		35kV	<b>376LR-WX</b> Use Tables W3 and X2	N2,3, 5
	Jacket Seal Elbow Connector	15kV	<b>165LRJS-WX</b> Use Table W1 (B&C sizes only) and Table X1	N2,19
		15kV	<b>166LRJS-WX</b> Use Tables W1 (B&C sizes only) and Table X1	N2,19
	Repair Elbow Connector	15kV	<b>167ELR-WX</b> Use Tables W5 and X1	N5,10,18
		25kV	<b>273ELR-WX</b> Use Tables W5 and X1	N5,10,18
	Repair Elbow Connector w/ Test Point	15kV	<b>168ELR-WX</b> Use Tables W5 and X1	N5,10,18
		25kV	<b>274ELR-WX</b> Use Tables W5 and X1	N5,10,18
	Replacement Elbow	15kV	<b>167RLR-WX</b> Use Tables W4 and X1	N5,11,13
		25kV	<b>273RLR-WX</b> Use Tables W2 and X1	N5,11,13
	Replacement Elbow w/ Test Point	15kV	<b>168RLR-WX</b> Use Tables W4 and X1	N5,11,13
		25kV	<b>274RLR-WX</b> Use Tables W2 and X1	N5,11,13
	Fused Elbow (General Purpose Current Limiting)	15kV	<b>166FLR-WX</b> Use W and X Tables on Page 6	N5,15
	Bolted Elbow w/ Tap	15kV	<b>167LRT-WX</b> Use Tables W4 and X1	N17
	Bushing Insert	15kV	<b>1601A4</b>	N4,8
		25kV	<b>2701A4</b>	N4,8
		35kV	<b>3701A4</b>	N6
		35kV	<b>3701A3</b>	N8
	Extended Bushing Insert	15kV	<b>1601EA4</b>	N8
		25kV	<b>2701EA4</b>	N8
	Feed-Thru Insert	15kV	<b>1602A3R</b>	N16
		25kV	<b>2702A1</b>	N16
		35kV	<b>3702A1</b>	N6,16
	Insulated Cap	15kV	<b>160DR</b>	N9
	Insulated Cap w/ Ground	15kV	<b>160DRG</b>	N9
		15kV	<b>167DRG</b>	N7, 9
		25kV	<b>273DRG</b>	N7, 9
	Insulated Cap w/ Ground and Test Point	15kV	<b>375DRG</b>	N7, 9
		25kV	<b>168DRG</b>	N7
		35kV	<b>274DRG</b>	N7
	Grounding Plug (1/0 AWG x 6' Ground Lead)	15kV	<b>376DRG</b>	N7
		25kV	<b>161GP</b>	
	Grounding Elbow (1/0 AWG x 6' Ground Lead)	15kV	<b>272GP</b>	
	Grounding Elbow (1/0 AWG x 6' Ground Lead)	15kV	<b>160GLR</b>	N12
		25/35kV	<b>370GLR</b>	

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Feed-Thru	15kV	<b>164FT</b>	
		25kV	<b>274FT</b>	
	Feed-Thru Vertical	15kV	<b>164FTV</b>	
		25kV	<b>274FTV</b>	
	Feed-Thru Well	15/25kV	<b>373FTV</b>	
		15/25kV	<b>K1601WFT</b>	
	Feed-Thru Well Vertical	15/25kV	<b>K1601WFTV</b>	
		15/25kV	<b>K1601WFTV</b>	
	Insulated Parking Bushing	15kV	<b>161SOP</b>	
		25kV	<b>272SOP</b>	
		35kV	<b>372SOP</b>	
	Test Rod	ALL	<b>370TR</b>	
	Bushing Well Plug	15/25kV	<b>276BWP</b>	
		35kV	<b>M276BWP</b>	
	Assembly Tool	ALL	<b>200AT</b>	N8
	<b>Contacts:</b> Long Bi-Metal ELR Bi-Metal Copper LRT Contact RLR Contact	ALL	Use Table X1 <b>02500X</b>	
		15/25kV	<b>02509X</b>	N10
		ALL	<b>02702X</b>	N1
		15kV	<b>02800X</b>	
	Elbow Probe	15kV	<b>00400X</b>	N11
		25kV	<b>166LRF</b>	
		35kV	<b>274LRF</b>	
	Elbow Cable Entrance Insulating Plug	ALL	<b>376LRF</b>	
		ALL	<b>10EP-W</b> Use Table W6	
	Cable Size Adapter	15kV	<b>160CA-W</b> Use Table W6 EB-FA Only	N14

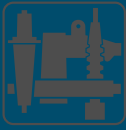
- N1. Copper lug for use on COPPER CONDUCTOR ONLY.
- N2. Includes 02500X long bi-metal compression lug as standard.
- N3. Also available as housing only. Specify: 165BLR-W; 273BLR-W; 375BLR-W; 166BLR-W; 274BLR-W; 376BLR-W.
- N4. Also available as elbow/insert combination. Specify: 165A4-WX; 273A4-WX; 166A4-WX; 274A4-WX; 375A4-WX; 376A4-WX.
- N5. Also available with 200ECS jacket seal included. Add - "S" suffix to part number.
- N6. Rated for single-phase applications only.
- N7. Equipped with insulated cuff.
- N8. Includes internal torquing feature using 200AT Assembly Tool.
- N9. Also available without probe. Specify "A" suffix - Example: 273DRGA.
- N10. Repair elbow has extended length contact and elbow housing resulting in a net gain of 3-1/4" in length.
- N11. Replacement elbow has extended length contact and elbow housing resulting in a net gain of 9-7/8" in length.
- N12. Rated for 25kV thru 35kV applications.
- N13. Includes long bi-metal contact 00400X.
- N14. 160CA Cable Size Adapter can only be used with elbow part numbers 165LR/166LR C size only.
- N15. See page 6 for WX size tables and for fuse sizes.
- N16. Fully rotatable for 360° positioning. Includes bail assembly to secure feed-thru insert to bushing well.
- N17. Includes 02800X long bi-metal contact.
- N18. Includes 02509X long bi-metal contact.
- N19. Includes built-in jacket seal. Also available as housing only—specify: 165BLRJS-W or 166BLRJS-W. Also available as elbow/insert combination—specify: 165JSA4-WX or 166JSA4-WX.



**JUNCTIONS CONTINUED ON PAGE 6.**

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# SEPARABLE CONNECTORS 200 AMP LOADBREAK

Cont'd from Pg. 5

## RATINGS OVERVIEW

See page 2 for complete information including switching and fault close ratings.

### CURRENT RATINGS

200A Continuous  
10kA sym. 10 Cycles

### VOLTAGE RATINGS

#### 15kV Class

8.3kV Phase-to-Ground  
14.4kV Phase-to-Phase  
95kV BIL  
34kV AC Withstand  
53kV DC Withstand  
11kV Corona Extinction

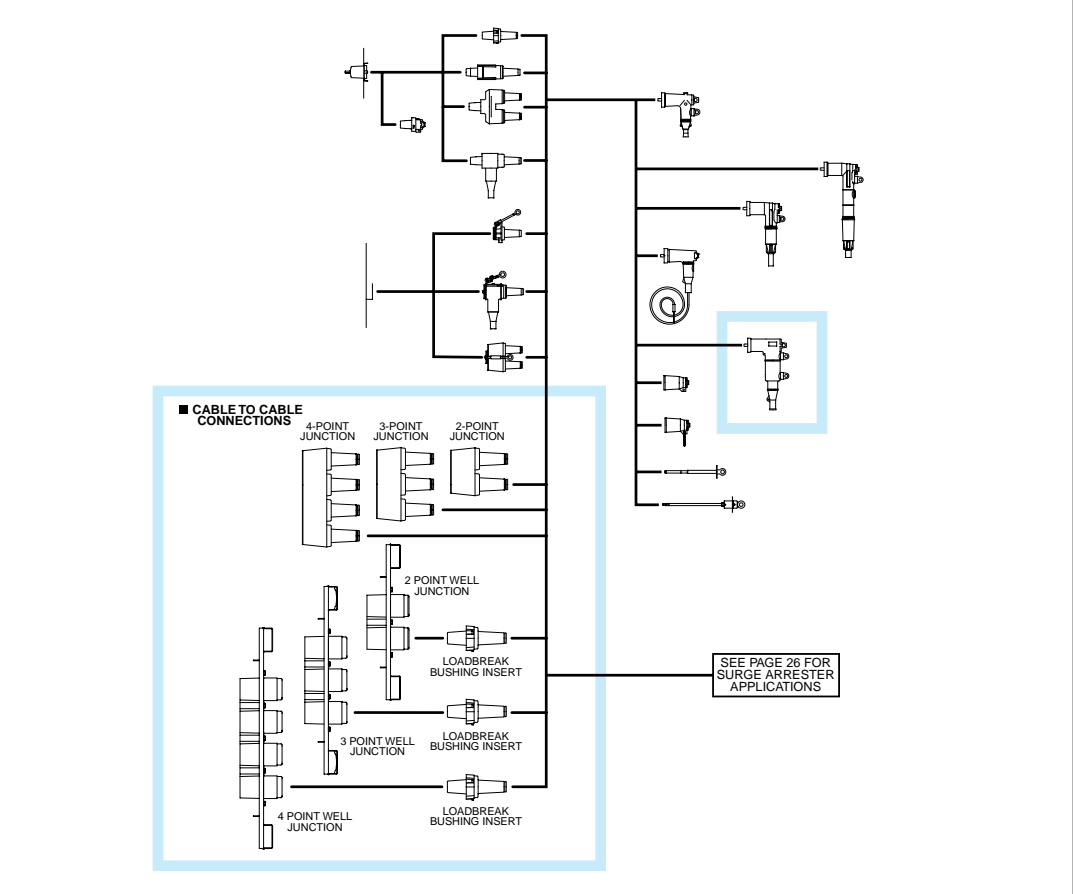
#### 25kV Class

15.2kV Phase-to-Ground  
26.3kV Phase-to-Phase  
125kV BIL  
40kV AC Withstand  
78kV DC Withstand  
19kV Corona Extinction

#### 35kV Class

21.1kV Phase-to-Ground  
36.6kV Phase-to-Phase  
150kV BIL  
50kV AC Withstand  
103kV DC Withstand  
26kV Corona Extinction

## 200 AMP LOADBREAK SEPARABLE CONNECTOR COMPONENTS



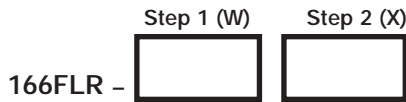
## FUSED ELBOW ORDERING INSTRUCTIONS

### Step 1 (W)

Determine the insulation diameter of the cable. Select the insulation letter code that best straddles the insulation diameter. Insert code into catalog number.

### Step 2 (X)

Choose the proper connector code according to the conductor size. Insert code into the catalog number after the insulation code.



Cable Insulation Diameter Range Inches	Symbol For W
.610 - .735	FAB
.675 - .785	FB
.725 - .835	FG
.775 - .885	GA
.825 - .935	GAB

Conductor Size* (AWG)	Symbol For X	
	Stranded/Compr.	Solid/Compact
2	0220	0210
1	0230	0220
1/0	0240	0230
2/0	0250	0240
3/0	—	0250

\*Cu or Al Conductor

## ORDERING INSTRUCTIONS FOR FUSE KIT (to be ordered separately)

Determine the ampere rating required. Insert rating into the catalog number below.

166PF8 -  

Voltage (kV)	Ampere Rating
8.3	5
	8
	12
	18
	30

For solid link, specify 166 PF8-BUSS

### The Fused Elbow kit contains the following:

- 1 - Upper elbow half
- 1 - Lower elbow half
- 1 - Upper connector
- 1 - Lower connector
- 1 - Probe
- 1 - Torque-limiting wrench
- 1 - Lubricant
- 1 - Instruction sheet

### The Fuse Kit includes the following:

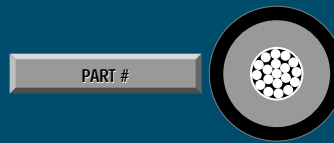
- 1 - Current limiting fuse
- 1 - Allen wrench
- 1 - Air vent rod
- 1 - Instruction sheet

### To order replacement parts, specify the following:

- For an upper elbow half, specify 166BFLR-T
- For a lower elbow half, specify 166BFLR-W
- For an upper connector, specify 166-88
- For a lower connector, specify 02600X
- For a probe, specify 166LRF



	<b>SEPARABLE CONNECTORS</b>		
<b>DEADFRONT</b>	<b>FUSED ELBOWS</b>	<b>200 AMP LOADBREAK</b>	<b>5-15kV</b>
<b>LIVEFRONT</b>	<b>CABLE JOINTS</b>	<b>200 AMP DEADBREAK</b>	<b>25kV</b>
	<b>TERMINATIONS</b>	<b>600 SERIES DEADBREAK</b>	<b>35kV</b>
	<b>SURGE ARRESTERS</b>		



Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

### 200 AMP LOADBREAK

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	2-Way Well Junction w/ s.s. Bracket	15/25kV	<b>K1601WJ2</b>	N2
	2-Way Well Junction w/ "U" Straps	15/25kV	<b>K1601WJ2-5</b>	N1, N2
	3-Way Well Junction w/ s.s. Bracket	15/25kV	<b>K1601WJ3</b>	N2
	3-Way Well Junction w/ "U" Straps	15/25kV	<b>K1601WJ3-5</b>	N1, N2
	4-Way Well Junction w/ s.s. Bracket	15/25kV	<b>K1601WJ4</b>	N2
	4-Way Well Junction w/ "U" Straps	15/25kV	<b>K1601WJ4-5</b>	N1, N2
	2-Point Junction with/stainless steel bracket	15kV 25kV 35kV	<b>164J2</b> <b>274J2</b> <b>373J2</b>	N3 N3 N3
	2-Point Junction w/"U"-straps	15kV 25kV 35kV	<b>164J2-5</b> <b>274J2-5</b> <b>373J2-5</b>	N1 N1 N1
	3-Point Junction with/stainless steel bracket	15kV 25kV 35kV	<b>164J3</b> <b>274J3</b> <b>373J3</b>	N3 N3 N3
	3-Point Junction w/"U"-straps	15kV 25kV 35kV	<b>164J3-5</b> <b>274J3-5</b> <b>373J3-5</b>	N1 N1 N1
	4-Point Junction with/stainless steel bracket	15kV 25kV 35kV	<b>164J4</b> <b>274J4</b> <b>373J4</b>	N3 N3 N3
	4-Point Junction w/"U"-straps	15kV 25kV 35kV	<b>164J4-5</b> <b>274J4-5</b> <b>373J4-5</b>	N1 N1 N1

- N1. Also available without straps. Specify suffix "-4" in place of "-5" in the part number.
- N2. Supplied with replaceable stud. Replacement stud available separately. Specify 1601RS.
- N3. Hardware packages, consisting of brackets & straps only, may be ordered separately by specifying "-6" in the part number.



# SEPARABLE CONNECTORS 200 AMP DEADBREAK

200 Amp deadbreak connectors and accessories provide a quick disconnect feature for cable and equipment connections on power distribution systems. All deadbreak connectors must be DE-ENERGIZED before operating and must be mechanically secured with bails when connected. Components can be isolated with insulated caps, plugs and parking bushings.

All deadbreak elbows are equipped with test points as standard. Optional accessories allow system grounding, bypass and lightning surge protection. Additional connecting points and taps can be provided by use of junctions or feed-thrus.



## RATINGS OVERVIEW

See page 2 for complete information.

### CURRENT RATINGS

200A Continuous  
10kA sym. 10 Cycles

### VOLTAGE RATINGS

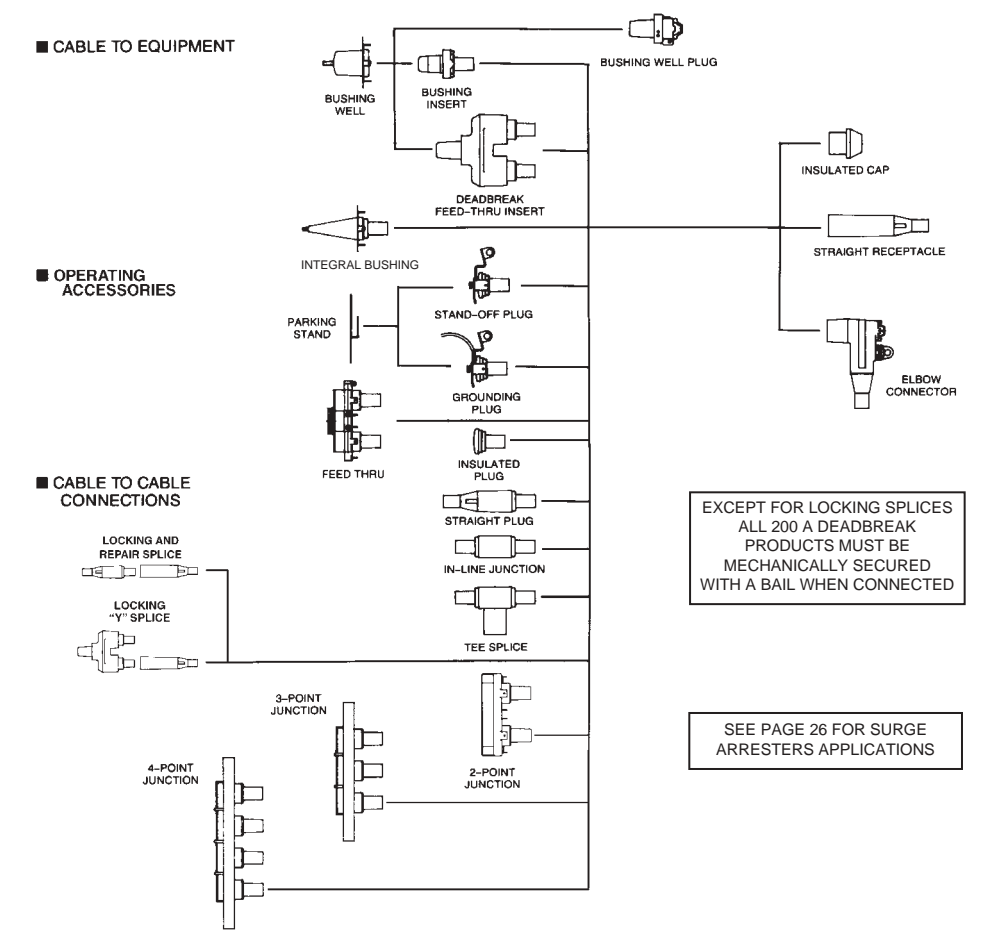
#### 15kV Class

8.3kV Phase-to-Ground  
14.4kV Phase-to-Phase  
95kV BIL  
34kV AC Withstand  
53kV DC Withstand  
11kV Corona Extinction

#### 25kV Class

15.2kV Phase-to-Ground  
26.3kV Phase-to-Phase  
125kV BIL  
40kV AC Withstand  
78kV DC Withstand  
19kV Corona Extinction

## 200 AMP DEADBREAK SEPARABLE CONNECTOR COMPONENTS



	<b>SEPARABLE CONNECTORS</b>			
<b>DEADFRONT</b>	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV	
<b>LIVEFRONT</b>	CABLE JOINTS	200 AMP DEADBREAK	25kV	<b>PART #</b>
	TERMINATIONS	600 SERIES DEADBREAK	35kV	
	SURGE ARRESTERS			



Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

## 200 AMP DEADBREAK

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Elbow Connector w/ Test Point	15/25kV	<b>156LR-WX</b> Use Tables W4 and X1	N1,2
	Bail Assembly for 156LR Elbow	15/25kV	<b>150BA</b>	
	Bushing Insert	15/25kV	<b>K1501A1</b>	N3
	Feed-thru Insert	15/25kV	<b>K1502A1</b>	N3,4
	Insulated Plug	15/25kV	<b>K150DP</b>	N3
	Insulated Cap	15/25kV	<b>K150DR</b>	N3
	Insulated Parking Bushing	15/25kV	<b>K151SOP</b>	N3
	Grounding Plug	15/25kV	<b>151GP</b>	N3
	Feed-Thru	15/25kV	<b>K1501FT</b>	N3,6
	2-Point Junction	15/25kV	<b>K1501J2-U</b>	N3,6
	3-Point Junction	15/25kV	<b>K1501J3-U</b>	N3,6,7
	4-Point Junction	15/25kV	<b>K1501J4-U</b>	N3,6,7
	Elbow Probe	15/25kV	<b>156LRF</b>	
	Straight Receptacle	15/25kV	<b>K151SR-WX</b> Use Tables W1 and X5	N3,12,13,17
	Straight Plug	15/25kV	<b>K151SP-WX</b> Use Tables W1 and X5	N3,12,13
	Tee Splice	15/25kV	<b>K150T</b>	N3
	In-Line Junction	15/25kV	<b>K150S</b>	N3
	Locking Splice/Repair Splice	15/25kV	<b>K151LS-WX</b> Use Tables W1 and X8	N8,9,13,15,16,17
	Locking "Y" Splice	15/25kV	<b>K151LY-WX</b> Use Tables W1 and X8	N8,9,13,15,17
	BAIL	15/25kV	<b>150TB1</b>	N5
	BAIL	15/25kV	<b>150TB2</b>	N5
	BAIL	15/25kV	<b>150TB3</b>	N5

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	BAIL	15/25kV	<b>150TB4</b>	N5
	BAIL	15/25kV	<b>150TB5</b>	N5
	<b>Contacts:</b> Long Bi-Metal Copper	15/25kV 15/25kV	<b>02500X</b> <b>02702X</b>	N7
	Elbow Cable Entrance Insulating Plug	15/25kV	<b>10EP-W</b> Use Table W6	N10
	Cable Entrance Insulating Plug	15/25kV	<b>152EA-W</b> Use Table W6	N11
	Cable Size Adapter	15/25kV	<b>160CA-W</b> Use Table W6 EB-FA Only	N14

- N1. Includes bail assembly.
- N2. Includes 02500X long, bi-metal compression lug as standard.
- N3. Bails are required but not included. Order separately. Consult factory for bails not listed for a specific application.
- N4. Fully rotatable for 360° positioning. Includes bail assembly to secure feed-thru insert to bushing well.
- N5. Refer to general catalog for application details.
- N6. Center-to-center spacing equals 4 inches.
- N7. Copper lug for copper cable only.
- N8. To order cable legs for different cable sizes, list each leg size "W" and "X". Example: K151LY-A240-A240-B220. See Tables W1 and X8 for sizes.
- N9. To order locking contacts for K151LS and K151LY, order 01401X (Al) or 01402X (Cu) for plug contact. Order 01301X (Al) or 01302X (Cu) for receptacle. See Table X8 for sizes.
- N10. For use with 156LR elbows.
- N11. For use with K151SR, K151SP, K151LS, K151LY receptacles, plugs and splices.
- N12. Also available as housing only. Specify K151SPH-W or K151SRH-W.
- N13. Also available in EB-FA sizes per table W6 by using 160CA cable adapter with C size plugs & receptacles.
- N14. 160CA cable adapter can only be used with C size plugs & receptacles.
- N15. Bails are not required for locking splices.
- N16. When used as a repair splice, the assembled length allows 4" for cable-replacement/repair.
- N17. Straight receptacles are also available with test point. Specify K152 part number.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.  
For cable shield adapters and jacket seals, see page 28.



# SEPARABLE CONNECTORS 600 SERIES DEADBREAK

600 Series deadbreak elbows, straight receptacles, vault stretchers and accessories are used to connect equipment and cable on primary feeder and network circuits. Designs accommodate large conductors and feature bolted connections and deadfront modular construction for maximum reliability, performance and versatility.

DE-ENERGIZED connectors can be quickly and easily connected and disconnected using standard hand tools and equipment in accordance with accepted operating practices. Optional accessories allow visible external separation, by-pass, isolation, dead-ending, grounding, and testing as well as adding taps, surge arresters and circuit protection.

Hot-stick operable and separable joint systems are shown on pages 14 thru 19.



## RATINGS OVERVIEW

See page 2 for complete information.

### CURRENT RATINGS

(Prefixes: 650, K650, K655, K656, 750, 755, 756 & 03700)

600 Amp Continuous  
25kA sym., 10 cycles

(Prefixes 675, K675, K676, 775, 776 & 03702)

900 Amp Continuous  
25kA sym., 10 cycles

NOTE: 900 Amp ratings require copper cable and copper current-carrying components.

### VOLTAGE RATINGS

15/25kV Class (5kV thru 28kV)

16.2kV Phase-to-Ground

28kV Phase-to-Phase

140kV BIL

45kV AC Withstand

84kV DC Withstand

21.5kV Corona Extinction

### 35kV Class

21.1kV Phase-to-Ground

36.6kV Phase-to-Phase

150kV BIL

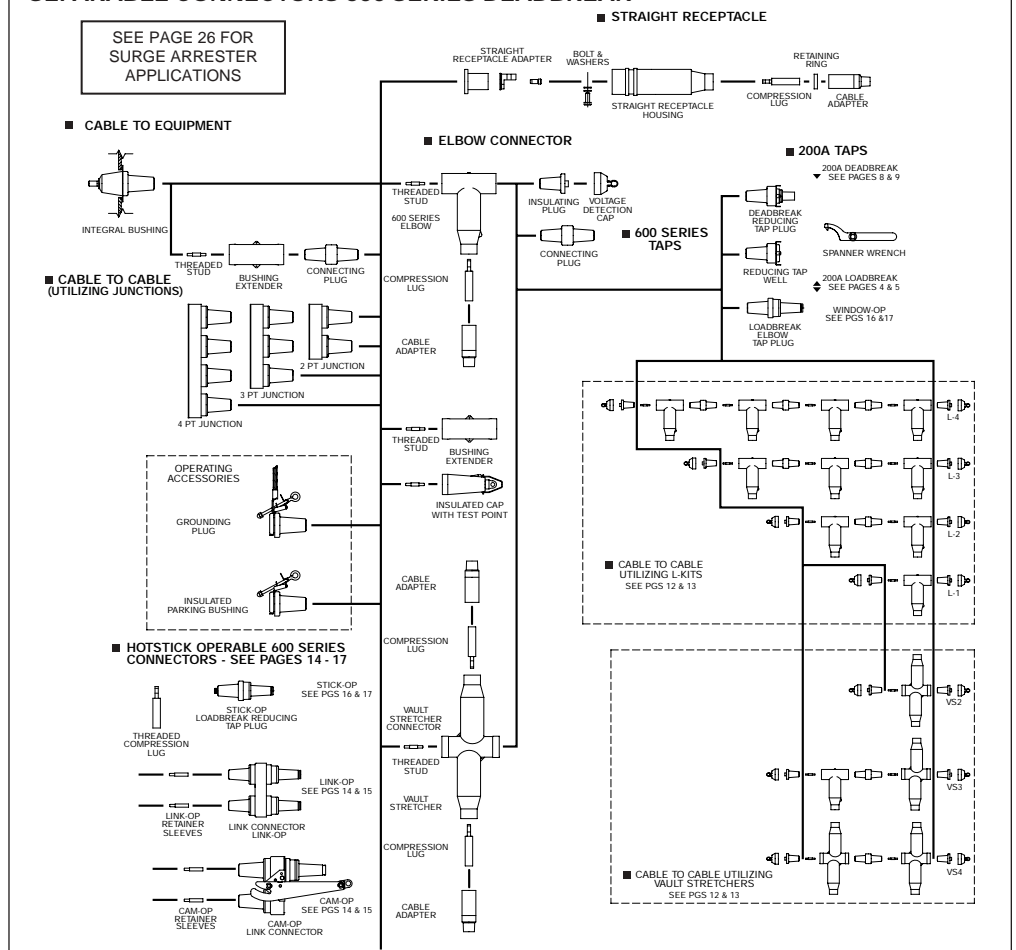
50kV AC Withstand

103kV DC Withstand

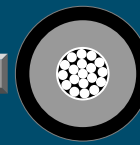
26kV Corona Extinction

Note: Elastimold has increased the IEEE Standard Production and Design Test levels for 25kV Class products to include 27kV and 28kV systems.

## SEPARABLE CONNECTORS 600 SERIES DEADBREAK



	<b>SEPARABLE CONNECTORS</b>			
<b>DEADFRONT</b>	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV	
<b>LIVEFRONT</b>	CABLE JOINTS	200 AMP DEADBREAK	25kV	<b>PART #</b>
	TERMINATIONS	600 SERIES DEADBREAK	35kV	
	SURGE ARRESTERS			



Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

### 600 SERIES DEADBREAK

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	600 Series Elbow (w/ Insul. Plug, Cap, Stud, Lug & Cable Adapter)	15/25kV 35kV	<b>K655LR-W0X</b> Use Tables W7 and X6 <b>755LR-W0X</b> Use Tables W9 and X6	N1,2 N1,2
	600 Series Elbow w/ Test Point (w/ Insul. Plug, Cap, Stud, Lug & Cable Adapter)	15/25kV 35kV	<b>K656LR-W0X</b> Use Tables W7 and X6 <b>756LR-W0X</b> Use Tables W9 and X6	N1,2 N1,2
	600 Series Elbow Housing only (w/ Stud)	15/25kV 35kV	<b>K655BLR</b> <b>755BLR</b>	N1,3 N1,3
	600 Series Elbow w/ Test Point (Housing only w/ Stud)	15/25kV 35kV	<b>K656BLR</b> <b>756BLR</b>	N1,3 N1,3
	600 Series Straight Receptacle (w/Cable Adapter, Lug & Retaining Ring)	15/25kV	<b>K655SR-W0X</b> Use Tables W7 and X6	N1,2,12
	600 Series Straight Receptacle Housing (Lug & Cable Adapter not included)	15/25kV	<b>K655BSR</b>	N1,12
	Straight Receptacle Adapter	15/25kV	<b>K650SRA</b>	N1,4
	600 Series Vault Stretcher (Housing only w/ Stud)	15/25kV 35kV	<b>K655BVS</b> <b>755BVS</b>	N1,9 N1,9
	Cable Size Adapter	15/25kV 35kV	<b>655CA-W</b> Use Table W7 <b>755CA-W</b> Use Table W9	
	Compression Lug	ALL ALL	<b>03700X</b> Use Table X6 <b>03702X</b> Use Table X6	N5 N6
	600 Series Elbow & Vault Stretcher Size Sensitive Kit (Cable Adapter & Lug)	15/25kV 35kV	<b>655CK-W0X</b> Use Tables W7 and X6 <b>755CK-W0X</b> Use Tables W9 and X6	N2 N2
	Adapter Retaining Ring	ALL	<b>650ARR-X</b> Use Table X6	
	600 Series Straight Receptacle Size Sensitive Kit (Cable Adapter, Retaining Ring & Lug)	15/25kV	<b>655CK-W0X-ARR</b> Use Tables W7 and X6	N2
	Bushing Extender (w/ Stud)	15/25kV 35kV	<b>K655BE</b> <b>755BE</b>	N1,3 N1,3
	Insulated Cap w/ Test Point (w/ Stud)	15/25kV	<b>K656DR</b>	N3,7
	Insulating Plug (w/ Cap)	15/25kV 35kV	<b>K650BIP</b> <b>750BIP</b>	N1,7,8 N1,7,8
	Grounding Plug (Ground Lead 2/0 AWG x 30")	15/25kV 35kV	<b>650GP</b> <b>750GP</b>	N1,7,8 N1,7,8
	Insulated Parking Bushing	15/25kV 35kV	<b>K650SOP</b> <b>750SOP</b>	N7,8 N7,8
	Connecting Plug	15/25kV 35kV	<b>K650CP</b> <b>750CP</b>	N1,7,8,9 N1,7,8

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Deadbreak Reducing Tap Plug	15/25kV	<b>K650RTP</b>	N1,7,8,9
	Reducing Tap Well	15/25kV	<b>K650RTW</b>	N1,7,8,9
	Loadbreak Elbow Tap Plug	15kV 25kV 35kV	<b>650ETP</b> <b>K650ETP</b> <b>750ETP</b>	N1,7,8,10,13 N1,7,8,10,13 N1,7,8,10,13
	Vault Stretcher Threaded Stud	15/25kV 35kV	<b>650VSA</b> <b>750VSA</b>	N1 N1
	600 Series Elbow Threaded Stud	15/25kV 35kV	<b>650SA</b> <b>750SA</b>	N1 N1
	Assembly Tool	ALL	<b>600AT</b>	N10
	Spanner Wrench	ALL	<b>600SW</b>	N9
	2-Point Junction	15/25kV 35kV	<b>K650J2</b> <b>750J2</b>	N1,11 N1,11
	3-Point Junction	15/25kV 35kV	<b>K650J3</b> <b>750J3</b>	N1,11 N1,11
	4-Point Junction	15/25kV 35kV	<b>K650J4</b> <b>750J4</b>	N1,11 N1,11

N1. For 900 Amp ratings, substitute 675 for 650 and 655; 676 for 656; K675 for K650 and K655; K676 for K656; 775 for 750 and 755; 776 for 756 and 2X for 0X in the part number. The 900 Amp rating requires copper current-carrying connector components and copper conductor cable.

N2. Add suffix symbol from page 29 to include cable shield grounding kit and/or cable jacket sealing kit.

N3. Available without the stud by adding "N" to the part number.

N4. Straight Receptacle Adapter is used to connect Straight Receptacles K655YBSR and K655YSR-W0X (Pg.14) to equipment bushings.

N5. Aluminum lug for use on aluminum or copper conductors. DO NOT substitute threaded 03600X lug.

N6. Copper lug for use on COPPER CONDUCTOR ONLY. DO NOT substitute threaded 03602X lug.

N7. Available with the stud factory-assembled by adding "SP" to the part number.

N8. Available with a loose stud by adding suffix "S" to the part number.

N9. 600SW spanner wrench is recommended for installation of connecting plugs, deadbreak reducing tap plugs and reducing tap wells.

N10. 600AT assembly tool is required for installation of loadbreak reducing tap plugs.

N11. Rubber junction with stainless steel mounting plate and back plate. Add "-U" for rubber junction with stainless steel mounting plate, back plate and adjustable bracket. Add "-4" for rubber junction only. Add "-5" for rubber junction, stainless steel U-straps and back plate.

N12. 600 Series Elbows and Straight Receptacles with IEEE Std. 386 capacitive test points are available by substituting 656 for 655; K656 for K655; K676 for K675; 756 for 755; 676 for 675; K676 for K675 and 776 for 775 in the part number.

N13. See page 17 for Window-Op Connector Kit.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



## SEPARABLE CONNECTORS

# 600 SERIES DEADBREAK Cont'd from Pg. 11

600 Series deadbreak elbows, straight receptacles, vault stretchers and accessories are used to connect equipment and cable on primary feeder and network circuits. Designs accommodate large conductors and feature bolted connections and deadfront modular construction for maximum reliability, performance and versatility.

DE-ENERGIZED connectors can be quickly and easily connected and disconnected using standard hand tools and equipment in accordance with accepted operating practices. Optional accessories allow visible external separation, by-pass, isolation, dead-ending, grounding, and testing as well as adding taps, surge arresters and circuit protection.

Hot-stick operable and separable joint systems are shown on pages 14 thru 19.



### RATINGS OVERVIEW

See page 2 for complete information.

#### CURRENT RATINGS

(Prefixes: **650, K650, K655, K656, 750, 755, 756 & 03700**)

600 Amp Continuous  
25kA sym., 10 cycles

(Prefixes **675, K675, K676, 775, 776 & 03702**)

900 Amp Continuous  
25kA sym., 10 cycles

NOTE: 900 Amp ratings require copper cable and copper current-carrying components.

#### VOLTAGE RATINGS

**15/25kV Class (5kV thru 28kV)**

16.2kV Phase-to-Ground

28kV Phase-to-Phase

140kV BIL

45kV AC Withstand

84kV DC Withstand

21.5kV Corona Extinction

#### 35kV Class

21.1kV Phase-to-Ground

36.6kV Phase-to-Phase

150kV BIL

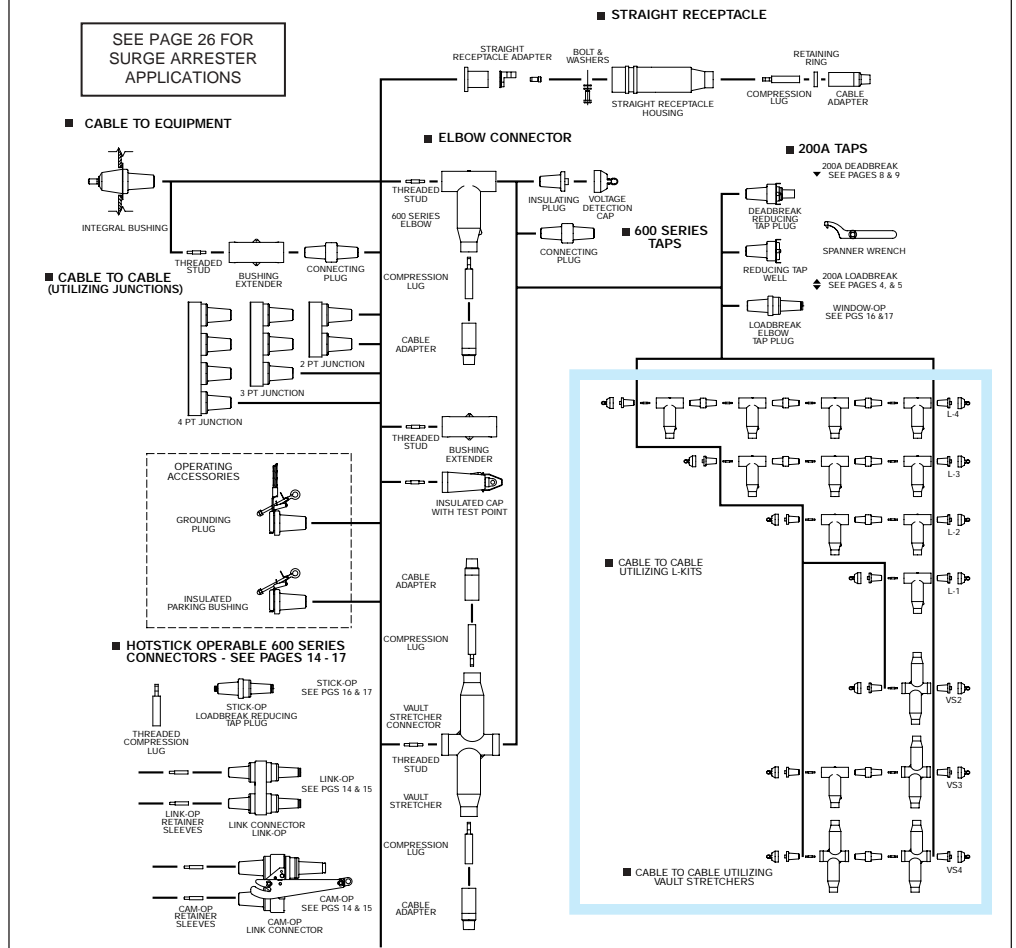
50kV AC Withstand

103kV DC Withstand

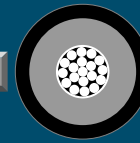
26kV Corona Extinction

Note: Elastimold has increased the IEEE Standard Production and Design Test levels for 25kV Class products to include 27kV and 28kV systems.

### SEPARABLE CONNECTORS 600 SERIES DEADBREAK



	SEPARABLE CONNECTORS			
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV	
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV	PART #
	TERMINATIONS	600 SERIES DEADBREAK	35kV	
	SURGE ARRESTERS			

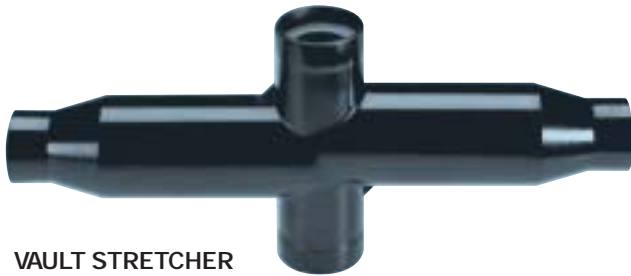


Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

### 600 SERIES DEADBREAK

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	1-way L-Kit	15/25kV 35kV	<b>K655L1</b> <b>755L1</b>	N1,2,3,4 N1,2,3,4
	2-way L-Kit	15/25kV 35kV	<b>K655L2</b> <b>755L2</b>	N1,2,3,4 N1,2,3,4
	2-way VS-Kit	15/25kV 35kV	<b>K655VSL2</b> <b>755VSL2</b>	N1,2,3 N1,2,3
	3-way L-Kit	15/25kV 35kV	<b>K655L3</b> <b>755L3</b>	N1,2,3,4 N1,2,3,4
	3-Way VS Kit	15/25kV 35kV	<b>K655VSL3</b> <b>755VSL3</b>	N1,2,3 N1,2,3
	4-Way L-Kit	15/25kV 35kV	<b>K655L4</b> <b>755L4</b>	N1,2,3,4 N1,2,3,4
	4-Way VS-Kit	15/25kV 35kV	<b>K655VSL4</b> <b>755VSL4</b>	N1,2,3 N1,2,3
	Spanner Wrench	ALL	<b>600SW</b>	N2

- N1. For 900 Amp ratings, substitute 675 for 650 and 655; 676 for 656; K675 for K650 and K655; K676 for K656; 775 for 750 and 755; 776 for 756 and 2X for 0X in the part number. The 900 Amp rating requires copper current-carrying connector components and copper conductor cable.
- N2. 600SW spanner wrench is recommended for installation of connecting plugs, deadbreak reducing tap plugs and reducing tap wells.
- N3. L-Kits and VS-Kits do not include cable adapters or compression lugs. These items must be ordered separately.
- N4. 600 Series Elbows and Straight Receptacles with IEEE Std. 386 capacitive test points are available by substituting 656 for 655; K656 for K655; K676 for K675; 756 for 755; 676 for 675; K676 for K675 and 776 for 775 in the part number.



### VAULT STRETCHER

Provides an alternate method of splicing and joining various types and styles of cables using standard 600 Series components.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# SEPARABLE CONNECTORS CAM-OP, LINK-OP 600 SERIES DEADBREAK

Elastimold's 600 Series Cam-Op™, and Link-Op™ deadbreak connector systems incorporate provisions for hotstick operation of DE-ENERGIZED primary feeder or network circuits. Configurations allow external visible break, testing, grounding and isolation. Retrofit kits allow upgrading existing equipment.

Cam-Op systems utilize pin and socket connectors. Link-Op connectors are bolted and installed using torque controlled tools. Either system can be retrofitted to existing equipment.

The Cam-Op and Link-Op connectors are unique, allowing all hotstick operations to be completed without moving the cable, an important consideration when large, stiff cables prohibit movement.

The Cam-Op connector is easily installed or removed by hotstick operation of the cam action disconnect lever.



## RATINGS OVERVIEW

See page 2 for complete information.

### CURRENT RATINGS

600 & 900 Amp Continuous  
25kA sym., 10 cycles

NOTE: 900 Amp ratings require copper cable and copper current-carrying components.

### CONTINUOUS VOLTAGE RATINGS

#### 15kV Class

8.3kV Phase-to-Ground  
14.4kV Phase-to-Phase  
95kV BIL  
34kV AC Withstand  
53kV DC Withstand  
11kV Corona Extinction

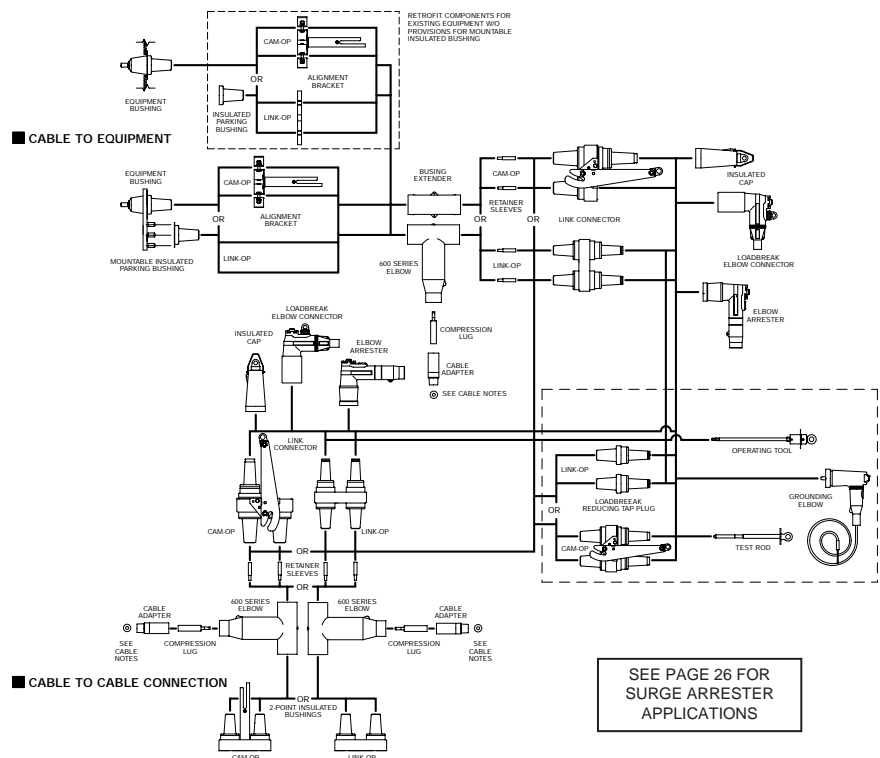
#### 25kV Class

15.2kV Phase-to-Ground  
26.3kV Phase-to-Phase  
125kV BIL  
40kV AC Withstand  
78kV DC Withstand  
19kV Corona Extinction

#### 35kV Class

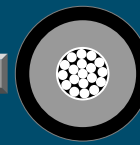
21.1kV Phase-to-Ground  
36.6kV Phase-to-Phase  
150kV BIL  
50kV AC Withstand  
103kV DC Withstand  
26kV Corona Extinction

## CAM-OP & LINK-OP SYSTEM – 600 SERIES DEADBREAK





	SEPARABLE CONNECTORS				
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV		
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV	PART #	
	TERMINATIONS	600 SERIES DEADBREAK	35kV		
	SURGE ARRESTERS				



Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

### CAM-OP™ & LINK-OP™

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	CAM-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655LINK-C-LR-WOX-B-DRG</b> Use Tables W7 and X6 <b>K655LINK-C-LR-WOX-B-DRG</b> Use Tables W7 and X6 <b>755LINK-C-LR-WOX-B-DRG</b> Use Tables W9 and X6	N1,3,11, 13,14,18 N1,3,11, 13,14,18 N1,3,11, 13,14,18
	LINK-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655LINK-B-LR-WOX-B-DRG</b> Use Tables W7 and X6 <b>K655LINK-B-LR-WOX-B-DRG</b> Use Tables W7 and X6 <b>755LINK-B-LR-WOX-B-DRG</b> Use Tables W9 and X6	N2,3,11,12 13,14,18 N2,3,11, 13,14,18 N2,3,11, 13,14,18
	Mountable Insulated Bushing	25kV 35kV	<b>K650LBM-3</b> <b>750LBM-3</b>	N3 N3
	RETROFIT CAM-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655LINK-C-LR-WOX-A-DRG</b> Use Tables W7 and X6 <b>K655LINK-C-LR-WOX-A-DRG</b> Use Tables W7 and X6 <b>755LINK-C-LR-WOX-A-DRG</b> Use Tables W9 and X6	N5,11,13 14,18 N5,11,13 14,18 N5,11,13 14,18
	RETROFIT LINK-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655LINK-B-LR-WOX-A-DRG</b> Use Tables W7 and X6 <b>K655LINK-B-LR-WOX-A-DRG</b> Use Tables W7 and X6 <b>755LINK-B-LR-WOX-A-DRG</b> Use Tables W9 and X6	N6,11,12, 13,14,18 N6,11,12, 13,14,18 N6,11,12, 13,14,18
	Insulating Plug	25kV 35kV	<b>K650LB</b> <b>750LB</b>	N4 N4
	CAM-OP Alignment Bracket	15kV 25kV 35kV	<b>650CAB</b> <b>K650CAB</b> <b>750CAB</b>	
	LINK-OP Alignment Bracket (Retrofit LINK-OP Only)	ALL ALL	<b>650AB</b> <b>650ABV</b>	N15 N15
	Compression Lug	ALL ALL	<b>03700X</b> Use Table X6 <b>03702X</b> Use Table X6	N7 N8
	CAM-OP & LINK-OP Size Sensitive Kit (Cable Adapter & Lug)	15/25kV 35kV	<b>655CK-WOX</b> Use Tables W7 and X6 <b>755CK-WOX</b> Use Tables W9 and X6	N13 N13
	CAM-OP Retaining Sleeve	ALL	<b>650RSC</b>	N11
	LINK-OP Retaining Sleeve	ALL	<b>650RS</b>	N11
	CAM-OP CABLE JOINT KIT	15kV 25kV 35kV	<b>655BI-LINK-C-LR-WOX-DRG</b> Use Tables W7 and X6 <b>K655BI-LINK-C-LR-WOX-DRG</b> Use Tables W7 and X6 <b>755BI-LINK-C-LR-WOX-DRG</b> Use Tables W9 and X6	N9,11,13 14,18 N9,11,13 14,18 N9,11,13 14,18
	LINK-OP CABLE JOINT KIT	15kV 25kV 35kV	<b>655BI-LINK-B-LR-WOX-DRG</b> Use Tables W7 and X6 <b>K655BI-LINK-B-LR-WOX-DRG</b> Use Tables W7 and X6 <b>755BI-LINK-B-LR-WOX-DRG</b> Use Tables W9 and X6	N10,11,12, 13,14,18 N10,11,12, 13,14,18 N10,11,12, 13,14,18
	CAM-OP Loadbreak Reducing Tap Plugs (Visi-Break)	15kV 25kV 35kV	<b>650LK-C-VB</b> <b>K650LK-C-VB</b> <b>750LK-C-VB</b>	
	LINK-OP Loadbreak Reducing Tap Plug	15kV 25kV 35kV	<b>650LT-B</b> <b>K650LT-B</b> <b>750LT-B</b>	N11

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Grounding Elbow (1/0 AWG x 6' Ground Lead)	15kV 25kV 35kV	<b>160GLR</b> <b>370GLR</b> <b>370GLR</b>	N19 N19
	Test Rod	ALL	<b>370TR</b>	
	Assembly Tool	ALL	<b>600AT</b>	N11
	CAM-OP OPERATING KIT	15kV 25kV 35kV	<b>650CAM-OK</b> <b>K650CAM-OK</b> <b>750CAM-OK</b>	N16 N16 N16
	LINK-OP OPERATING KIT	15kV 25kV 35kV	<b>650LINK-OK</b> <b>K650LINK-OK</b> <b>750LINK-OK</b>	N17 N17 N17

- N1. Cam-Op connector kit includes: 1- Cam-Op link; 1- elbow housing; 1- cable adapter; 1-0370 style lug; 1- bushing extender; 2- retainer sleeves; 1- insulated cap; 1- mountable insulated bushing and 1- alignment bracket.
- N2. Link-Op connector kit includes: 1- Link-Op link; 1- elbow housing; 1- cable adapter; 1-0370 style lug; 1- bushing extender; 2- retainer sleeves; 2- insulated caps; and 1- mountable insulated bushing.
- N3. Mountable insulated bushing included with Cam-Op and Link-Op connector kit. Requires 3 threaded studs on equipment faceplate for installation.
- N4. Use with the Retrofit Cam-Op and Retrofit Link-Op connector kit.
- N5. Retrofit Cam-Op connector kit includes: 1- link; 1- elbow housing; 1- cable adapter; 1-0370 style lug; 1- bushing extender; 2- retainer sleeves; 1- insulated cap; 1- insulating plug; and 1- alignment bracket.
- N6. Retrofit Link-Op connector kit includes: 1- link; 1- elbow housing; 1- cable adapter; 1-0370 style lug; 1- bushing extender; 2- retainer sleeves; 2- insulated caps; 1- insulating plug; and 1- alignment bracket.
- N7. Aluminum lug for use on aluminum or copper conductors. DO NOT substitute threaded 03600X lug.
- N8. Copper lug for use on COPPER CONDUCTOR ONLY. DO NOT substitute 03602X threaded lug.
- N9. Cam-Op Cable Joint Kit includes: 1- Cam-Op link; 1- Cam-Op BI-SOP; 2- elbow housings; 2- cable adapters; 2- 0370 style lugs; 2- retainer sleeves; 1- insulated cap.
- N10. Link-Op Cable Joint Kit includes: 1- Link-Op link; 1- Link-Op BI-SOP; 2- elbow housings; 2- cable adapters; 2- 0370 style lugs; 2- retainer sleeves; 2- insulated caps.
- N11. 600AT assembly tool required for operation and/or installation.
- N12. For 900 Amp ratings, substitute 675 for 650 and 655; 676 for 656; K675 for K650 and K655; K676 for K656; 775 for 750 and 755; 776 for 756 and 2X for 0X in the part number. The 900 Amp rating requires copper current-carrying connector components and copper conductor cable.
- N13. Add suffix symbol from page 29 to include cable shield grounding kit and/or cable jacket sealing kit.
- N14. To add elbows or arresters instead of insulating caps, replace the "DRG" with "LR-WX" for elbows (with test point) or "ESA" for elbow arresters.
- N15. The 650ABV is required when the bushing horizontal spacing on the equipment or junctions is less than 5".
- N16. Cam-Op operating kit includes accessories that enable visible break, testing, isolation and grounding functions to be performed. Kit includes: 3- Cam-Op loadbreak reducing tap plugs; 3- grounding elbows; 1- assembly tool; 1- test rod; 1- carry case; 1- lubricant; 1- instructions.
- N17. Link-Op operating kit includes accessories that enable visible break, testing, isolation and grounding functions to be performed. Kit includes: 6- Link-Op loadbreak reducing tap plugs; 3- grounding elbows; 1- assembly tool; 1- test rod; 1- carry case; 1- lubricant; 1- instructions.
- N18. 600 Series Elbows and Straight Receptacles with IEEE Std. 386 capacitive test points are available by substituting 656 for 655; K656 for K655; K676 for K675; 756 for 755; 676 for 675; K676 for K675 and 776 for 775 in the part number.
- N19. Rated for both 25kV and 35kV applications.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# SEPARABLE CONNECTORS STICK-OP, WINDOW-OP 600 SERIES DEADBREAK

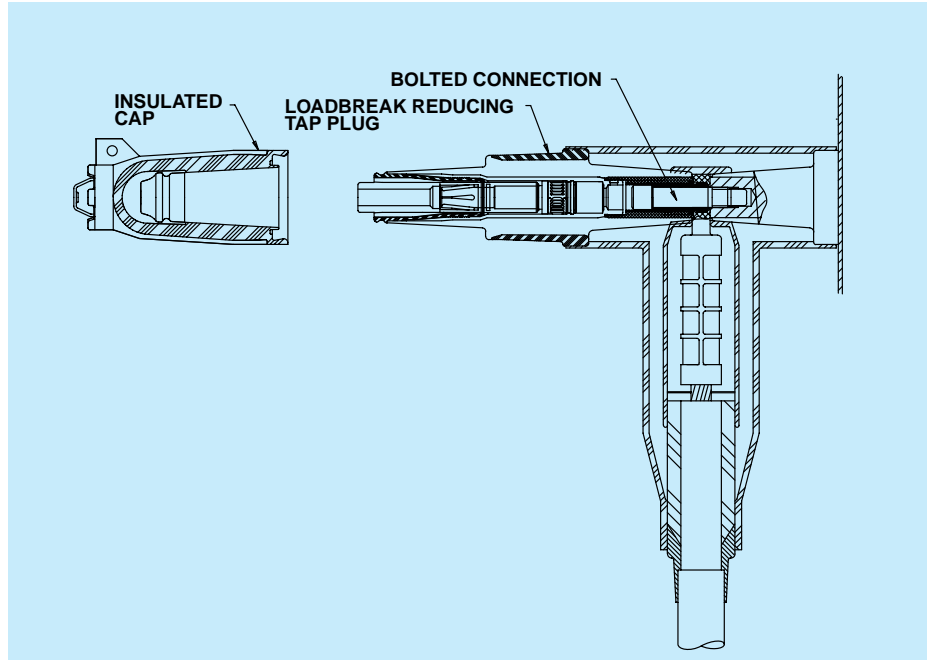
Elastimold's 600 Series Window-Op™ and Stick-Op™ deadbreak connector systems incorporate provisions for hotstick operation of DE-ENERGIZED primary feeder or network circuits.

The Window-Op and Stick-Op connectors allow direct testing and grounding with no required cable movement.

Window-Op is ideal for equipment applications which include viewing windows to provide an internal visible break that does not require hot stick removal of the elbows.

Stick-Op provides an external visible break by hot stick removal of the elbow.

Window-Op and Stick-Op connectors are bolted and installed using torque controlled tools.



## RATINGS OVERVIEW

See page 2 for complete information.

### CURRENT RATINGS

600 & 900 Amp Continuous  
25kA sym., 10 cycles

NOTE: 900 Amp ratings require copper cable and copper current-carrying components.

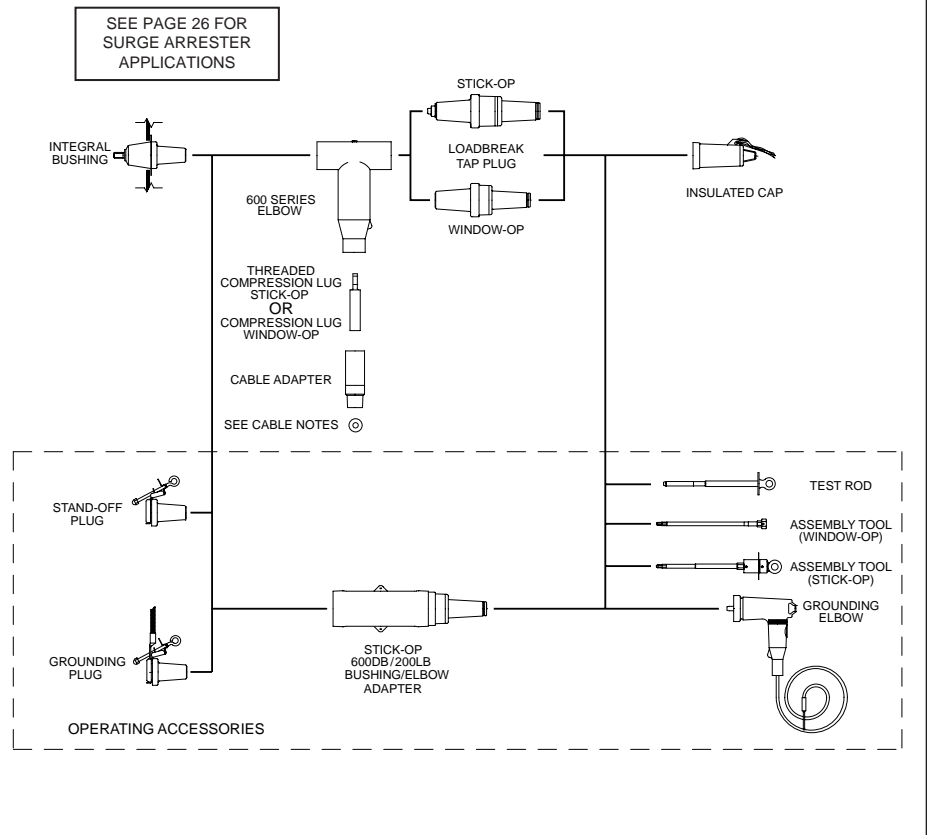
### CONTINUOUS VOLTAGE RATINGS

**15kV Class**  
8.3kV Phase-to-Ground  
14.4kV Phase-to-Phase  
95kV BIL  
34kV AC Withstand  
53kV DC Withstand  
11kV Corona Extinction

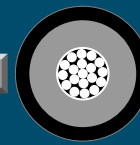
**25kV Class**  
15.2kV Phase-to-Ground  
26.3kV Phase-to-Phase  
125kV BIL  
40kV AC Withstand  
78kV DC Withstand  
19kV Corona Extinction

**35kV Class**  
21.1kV Phase-to-Ground  
36.6kV Phase-to-Phase  
150kV BIL  
50kV AC Withstand  
103kV DC Withstand  
26kV Corona Extinction

## STICK-OP & WINDOW-OP SYSTEM – 600 SERIES DEADBREAK



	<b>SEPARABLE CONNECTORS</b>			
<b>DEADFRONT</b>	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV	
<b>LIVEFRONT</b>	CABLE JOINTS	200 AMP DEADBREAK	25kV	<b>PART #</b>
	TERMINATIONS	600 SERIES DEADBREAK	35kV	
	SURGE ARRESTERS			



Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

### STICK-OP™ & WINDOW-OP™

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	WINDOW-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655ETP-W0X-DRG</b> Use Tables W7 and X6 <b>K655ETP-W0X-DRG</b> Use Tables W7 and X6 <b>755ETP-W0X-DRG</b> Use Tables W9 and X6	N1,3,4,5,6,13
	STICK-OP CONNECTOR KIT	15kV 25kV 35kV	<b>655LRTP-W0X-DRG</b> Use Tables W7 and X6 <b>K655LRTP-W0X-DRG</b> Use Tables W7 and X6 <b>755LRTP-W0X-DRG</b> Use Tables W9 and X6	N2,3,4,5,8,13
	WINDOW-OP Loadbreak Elbow Tap Plug	15kV 25kV 35kV	<b>650ETP</b> <b>K650ETP</b> <b>750ETP</b>	N4,15 N4,15 N4,15
	STICK-OP Loadbreak Reducing Tap Plug	15kV 25kV 35kV	<b>650LRTPA3</b> <b>K650LRTPA2</b> <b>750LRTPA2</b>	N3,4
	STICK-OP Bushing Adapter	15kV 25kV 35kV	<b>650BEA3</b> <b>K650BEA2</b> <b>750BEA2</b>	N3,4
	Compression Lug	ALL	<b>03700X</b> Use Tables X6	N6
	WINDOW-OP Compression Lug	ALL	<b>03702X</b> Use Tables X6	N7
	Threaded Compression Lug	ALL	<b>03600X</b> Use Tables X6	N8
	STICK-OP Threaded Compression Lug	ALL	<b>03602X</b> Use Tables X6	N9
	WINDOW-OP Size Sensitive Kit (Cable Adapter & Lug)	15/25kV 35kV	<b>655CK-W0X</b> Use Tables W7 and X6 <b>755CK-W0X</b> Use Tables W9 and X6	N5 N5
	STICK-OP Size Sensitive Kit (Cable Adapter & Threaded Lug)	15/25kV 35kV	<b>655TCK-W0X</b> Use Tables W7 and X6 <b>755TCK-W0X</b> Use Tables W9 and X6	N5 N5
	Extraction Tool	ALL	<b>650ET</b>	N3,10
	Grounding Elbow (1/0 AWG x 6' Ground Lead)	15kV 25kV 35kV	<b>160GLR</b> <b>370GLR</b> <b>370GLR</b>	N14 N14
	Test Rod	ALL	<b>370TR</b>	
	Assembly Tool (Stick-Op)	ALL	<b>600AT</b>	N3
	Assembly Tool (Window-Op)	ALL	<b>600ATM</b>	N15
	STICK-OP OPERATING KIT	15kV 25kV 35kV	<b>650STICK-OK</b> <b>K650STICK-OK</b> <b>750STICK-OK</b>	N11 N11 N11
	WINDOW-OP OPERATING KIT	15kV 25kV 35kV	<b>650WINDOW-OK</b> <b>K650WINDOW-OK</b> <b>750WINDOW-OK</b>	N12 N12 N12

- N1. Window-Op Kit includes: insulated cap; Window-Op reducing tap plug; 600 Series elbow housing; cable adapter; and 0370 style compression lug.
- N2. Stick-Op Kit includes insulated cap; Stick-Op Loadbreak reducing tap plug; 600A Elbow Housing; cable adapter; and threaded 0360 style compression lug.
- N3. 600AT assembly tool required for operation and/or installation.
- N4. For 900 Amp ratings, substitute 675 for 650 and 655; 676 for 656; K675 for K650 and K655; K676 for K656; 775 for 750 and 755; 776 for 756 and 2X for 0X in the part number. The 900 Amp rating requires copper current-carrying connector components and copper conductor cable.
- N5. Add suffix symbol from page 29 to include cable shield grounding kit and/or cable jacket sealing kit.
- N6. Aluminum lug for use on aluminum or copper conductors. DO NOT substitute threaded 03600X lug.
- N7. Copper lug for use on COPPER CONDUCTOR ONLY. DO NOT substitute 03602X threaded lug.
- N8. Threaded aluminum lug (Stick-Op only) for use on copper or aluminum conductors. DO NOT substitute unthreaded 03700X lugs. DO NOT use with 675, 676, K675, K676, 775 or 776 part numbers.
- N9. Threaded copper lug (Stick-Op only) for use on copper conductors only. DO NOT substitute unthreaded 03702X lugs.
- N10. Required to disassemble Stick-Op loadbreak reducing tap plug from the threaded compression lug and 600 Series elbow after the shear-pin is broken during assembly.
- N11. Stick-Op Operating Kit includes accessories that enable visible break direct testing, isolation, and grounding functions to be performed. Kit includes: 3-insulated parking bushings; 3-grounding elbows; 3-600DB/200LB bushing/elbow adapters; 1-assembly tool; 1-test rod; 1-carry case; 1-lubricant; 1-instructions.
- N12. Window-Op Operating Kit includes accessories that enable visible grounding and direct testing functions to be performed. Kit includes: 3-grounding elbows; 1-test rod; 1-carry case; 1-lubricant; 1-instructions.
- N13. 600 Series Elbows and Straight Receptacles with IEEE Std. 386 capacitive test points are available by substituting 656 for 655; K656 for K655; K676 for K675; 756 for 755; 676 for 675; K676 for K675 and 776 for 775 in the part number.
- N14. Rated for both 25kV and 35kV applications.
- N15. 600ATM assembly tool required for Window-Op assembly.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



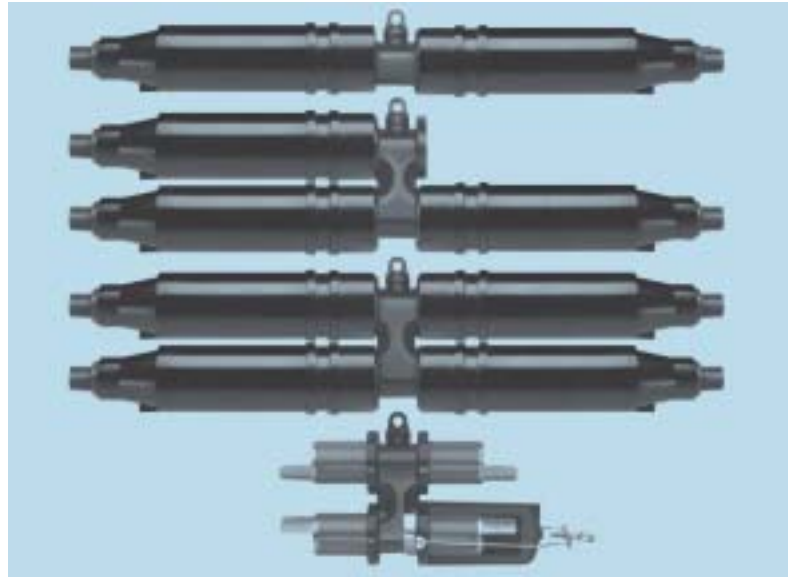
# SEPARABLE CONNECTORS CABLE JOINTS

## 600 SERIES DEADBREAK

600 Series Separable Cable Joints are available in 2, 3 and 4-way versions and include a capacitive test point as standard. Units are interchangeable, featuring bolted connections. Designs are compact and ideally suited for small vaults and manholes.

DE-ENERGIZED joints can be quickly and easily connected and disconnected using standard hand tools and equipment in accordance with accepted operating practices. Bus bars can be changed to add or remove cables from the joint.

Optional accessories include insulating and grounding caps and plugs which allow visible external separation, by-pass, isolation, dead-ending, grounding and testing.



### RATINGS OVERVIEW

See page 2 for complete information

#### CURRENT RATINGS

(Prefixes: 650, K650, K655, K656 & 03700)

600 Amp Continuous  
25kA sym., 10 cycles

(Prefixes: 675, K675, K676 & 03702)

900 Amp Continuous  
25kA sym., 10 cycles

NOTE: 900 Amp ratings require copper cable and copper current-carrying components.

#### VOLTAGE RATINGS

15/25kV Class (5kV thru 28kV)

16.2kV Phase-to-Ground

28kV Phase-to-Phase

140kV BIL

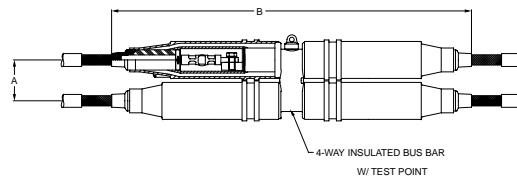
45kV AC Withstand

84kV DC Withstand

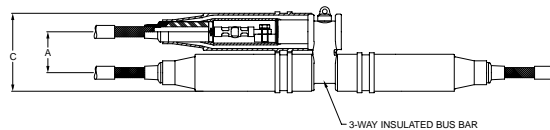
21.5kV Corona Extinction

Note: Elastimold has increased the IEEE Standard Production and Design Test levels for 25kV Class products to include 27kV and 28kV systems.

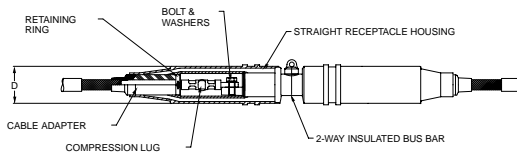
### SEPARABLE CABLE JOINTS – 600 SERIES DEADBREAK



SEPARABLE  
H-JOINT  
(4-WAY)

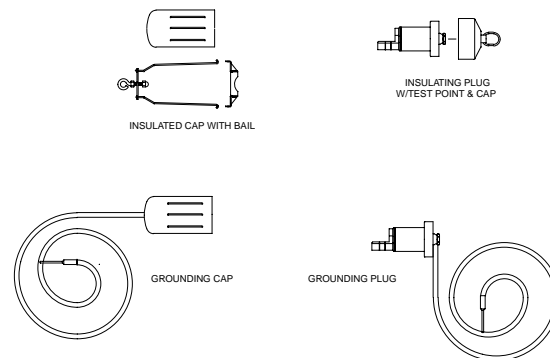


SEPARABLE  
WYE-JOINT  
(3-WAY)



SEPARABLE  
STRAIGHT JOINT  
(2-WAY)

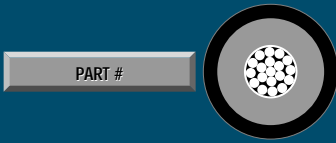
#### OPERATING ACCESSORIES



Note: The separable cable joints shown here use a special "Y" interface that may not be interchangeable with other 600 Series interfaces.

DIMENSION	INCHES
A	4 1/4
B	37 1/8
C	8 1/8
D	3 7/8

<b>DEADFRONT</b>	<b>SEPARABLE CONNECTORS</b>	<b>200 AMP LOADBREAK</b>	<b>5-15kV</b>
<b>LIVEFRONT</b>	<b>FUSED ELBOWS</b>	<b>200 AMP DEADBREAK</b>	<b>25kV</b>
	<b>CABLE JOINTS</b>	<b>600 SERIES DEADBREAK</b>	<b>35kV</b>
	<b>TERMINATIONS</b>		
	<b>SURGE ARRESTERS</b>		



Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

### 600 SERIES DEADBREAK

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Separable Straight Joint Pkg. (2-way) w/ Test Point	15/25kV	<b>K6561-W0X</b> Use Tables W7 and X6	N1,6,8
	Basic Housing Pkg. Straight Joint w/ Test Point	15/25kV	<b>K6561-HP</b>	N2,6
	Separable Wye Joint Pkg. (3-Way) w/ Test Point	15/25kV	<b>K656CY-W0X</b> Use Tables W7 and X6	N1,6,8
	Basic Housing Pkg. Wye Joint w/ Test point	15/25kV	<b>K656CY-HP</b>	N2,6
	Separable "H" Joint Pkg. (4-Way) w/ Test Point	15/25kV	<b>K656CH-W0X</b> Use Tables W7 and X6	N1,6,8
	Basic Housing Pkg. "H" Joint w/ Test Point	15/25kV	<b>K656CH-HP</b>	N2,6
	2-Way Insulated Bus Bar w/Test Point	15/25kV	<b>K6561-BUS</b>	N3,6
	3-Way Insulated Bus Bar w/Test Point	15/25kV	<b>K656CY-BUS</b>	N3,6
	4-Way Insulated Bus Bar w/Test Point	15/25kV	<b>K656CH-BUS</b>	N3,6
	Straight Receptacle	15/25kV	<b>K655YSR-W0X</b> Use Tables W7 and X6	N4,6,8
	Straight Receptacle Housing Only	15/25kV	<b>K655YBSR</b>	N5,6,10
	Insulated Cap w/ Bail	15/25kV	<b>K655YDR</b>	
	Bail Only	15/25kV	<b>650BA</b>	
	Cable Adapter	15/25kV	<b>655CA-W</b> Use Table W7	
	Adapter Retaining Ring	15/25kV	<b>650ARR-X</b> Use Table X6	
	Compression Lug	15/25kV 15/25kV	<b>03700X</b> <b>03702X</b> Use Table X6	N6,7 N6,9
	600 Series Straight Receptacle Size Sensitive Kit (Cable Adapter, Retaining Ring & Lug)	15/25kV	<b>655CK-W0X-ARR</b> Use Tables W7 and X6	N8

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Insulating Plug w/ Test Point & Cap	15/25kV	<b>K650YBIP</b>	
	Grounding Plug (4/0 AWG x 6' Ground Lead)	15/25kV	<b>650YGP</b>	
	Grounding Cap (4/0 AWG x 6' Ground Lead)	15/25kV	<b>650GYDR</b>	
	Aluminum Bolt & Washers	15/25kV	<b>650BAW</b>	N6
	Brass Bolt & Washers	15/25kV	<b>675BAW</b>	N6
	Assembly/ Disassembly Tool	ALL	<b>600YADT</b>	N11
	Assembly/ Disassembly Tool	ALL	<b>600RRT</b>	N11

- N1. Complete Joint Packages consisting of: insulated bus bar; straight receptacle housings, retaining rings, cable size adapters, lugs, bolts and washers.
- N2. Housing Packages consisting of the following non-size sensitive components of the joint: insulated bus bar, straight receptacle housings, bolts and washers.
- N3. Insulated bus bar only.
- N4. Straight Receptacle consisting of: straight receptacle housing, retaining ring, cable adapter, lug, bolt and washers.
- N5. Straight receptacle housing consisting of: straight receptacle housing, bolt and washers.
- N6. For 900 Amp ratings, substitute 675 for 650 and 655; 676 for 656; K675 for K650 and K655; K676 for K656; 775 for 750 and 755; 776 for 756 and 2X for 0X in the part number. The 900 Amp rating requires copper current-carrying connector components and copper conductor cable.
- N7. Aluminum lug for use on aluminum or copper conductors. DO NOT substitute threaded 03600X lug.
- N8. Add suffix symbol from page 29 to include cable shield grounding kit and/or cable jacket sealing kit.
- N9. Copper lug for use with COPPER CONDUCTOR ONLY. DO NOT substitute threaded 03602X lug.
- N10. Available without the bolt & washers by adding "N" to the part number.
- N11. Recommended for ease of assembly/disassembly of receptacles to Bus. 600 YADT is lever drive & 600RRT is screw drive.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.  
For cable shield adapters and jacket seals, see page 28.



# PCJ CABLE JOINTS

PCJ™ Power Cable Joints utilize permanently crimped connectors. PCJ Housings are fully insulated, shielded and sealed for direct buried, vault, submersible and other severe service applications. Units have been designed and tested per IEEE Standard 404 to assure system matched performance and ratings equal to the cable to which the splice will be installed.

PCJ Power Cable Joints are available in 2 styles:

Style 1 uses a single piece housing that is sized to accommodate a specific range of cable. Style 1 units are ideally suited for straight splicing of the same or similar cable.

Style 2 designs incorporate a universal housing with separate cable adapters to allow transition splices of different types and sizes of cable.



## ELECTRICAL RATINGS SUMMARY

The follow ratings summary is based on **IEEE Std. 404** and applies to all Elastimold PCJ Power Cable Joints.

### VOLTAGE

- A.** 15kV Class (8.7kV Phase-to-Ground)
- B.** 25kV Class (14.4kV Phase-to-Ground)
- C.** 35kV Class (20.2kV Phase-to-Ground)
- **Impulse Withstand:** A = 110kV, B = 150kV, C = 200kV BIL, 1.2 x 50 microsecond wave.
- **Corona Extinction Voltage:** A = 13kV, B = 22kV, C = 30kV minimum, 3pC sensitivity.
- **DC Withstand:** During installation: A = 56kV, B = 80kV, C = 100kV (Reference AEIC CS6 and CS8, Section L.1.)
- **DC Withstand:**  
After installation and in service for the first 5 years:  
A = 18kV, B = 25kV, C = 31kV for XLPE Insulated Cables  
and A = 45kV, B = 64kV, C = 80kV for EPR Insulated Cables.  
(Reference AEIC CS6 and CS8, Section L.2.)

### CURRENT

- Continuous rating equal to the rating of the cable.
- Short-Time rating equal to the rating of the cable up to 35kA.

### SHIELD DESIGN

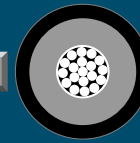
- Meets IEEE standard 592 for Exposed Semiconducting Shields on Premolded High Voltage Cable Joints and Separable Insulated Connectors.

### **Production tests include 100% tests of the premolded joints to assure:**

- **Corona Extinction Voltage:** A = 13kV, B = 22kV, C = 30kV minimum, 3pC sensitivity.
- **AC Withstand:** A = 35kV, B = 52kV, C = 69kV, 60 Hz, 1 minute.

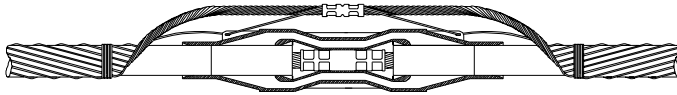
### **Design tests on production joints demonstrate compliance with IEEE 404 including:**

- **Corona Extinction Voltage:** A = 13.0kV, B = 22.0kV, C = 30.0kV minimum, 3pC sensitivity.
- **AC Withstand:** A = 35kV, B = 52kV, C = 69kV, 60 Hz 1 minute.
- **DC Withstand:** A = 70kV, B = 100kV, C = 125kV negative polarity, 15 minutes.
- **Impulse Withstand (BIL):** A = 110kV, B = 150kV, C = 200kV, 10 positive and 10 negative, 1.2 x 50 microsecond wave, at conductor temperatures of 20° and 130°C, nominal.
- **Short-Time Current:** magnitude equal to cable up to 35kA.
- **Cyclic Aging:** 30 days at: A = 26.1kV, B = 43.2kV, C = 60.6kV AC continuous, load current for 8 hours per day providing 130° conductor temperature. Joints then subjected to: A = 31kV, B = 50kV, C = 71kV for 5 hours followed by: A = 39kV, B = 65kV, C = 91kV for 5 min.
- **Load Cycle:** Connectors meet requirements of ANSI C119.4, Class A ratings.

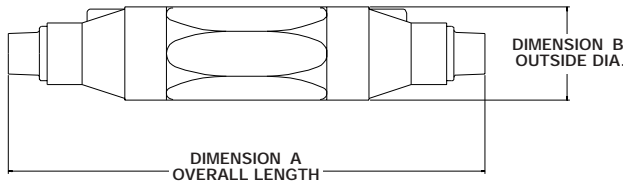
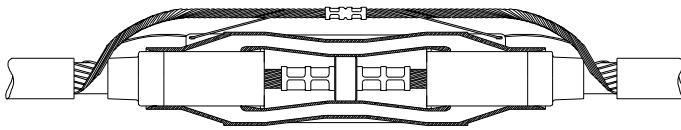


Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

### PCJ Style 1 with single-piece housing

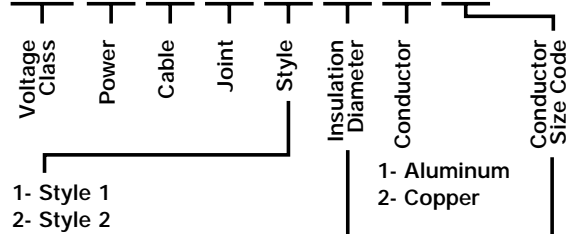


### PCJ Style 2 with universal housing and separate cable adapters that can be varied with the cable application.



### ORDERING INFORMATION

**15 P C J 1 W 1 X**



#### W SIZING INFORMATION AND SELECTION

Use Table W8 for 15PCJ  
Use Table W9 for 25PCJ  
Use Table W10 for 35PCJ

#### X SIZING INFORMATION AND SELECTION

Use Table X7 for 15PCJ, 25PCJ and 35PCJ

### DIMENSIONAL DATA

STYLE 1 PART NUMBER	A	B
	inches	inches
15PCJ1FX	10 1/4"	1 3/4"
15PCJ1GX	10 1/4"	1 3/4"
25PCJ1GX	14 3/8"	2 7/16"
15/25/35PCJ1HX	14 3/8"	2 7/16"
15/25/35PCJ1JX	14 3/8"	2 7/16"
15/25/35PCJ1KX	14 3/8"	2 25/32"
15/25/35PCJ1LX	14 3/8"	2 25/32"
15/25/35PCJ1LMX	14 3/8"	2 25/32"
15/25/35PCJ1MX	14 3/8"	2 25/32"
15/25/35PCJ1NX	15 3/4"	3 3/16"
15/25/35PCJ1PX	15 3/4"	3 3/16"
15/25/35PCJ1QX	15 3/4"	3 3/16"

STYLE 2 PART NUMBER	A	B
	inches	inches
15PCJ2EX	16 3/8"	2 25/32"
15PCJ2FX	16 3/8"	2 25/32"
15/25PCJ2GX	16 3/8"	2 25/32"
15/25/35PCJ2HX	16 3/8"	2 25/32"
15/25/35PCJ2JX	16 3/8"	2 25/32"
15/25/35PCJ2KX	21"	3 3/4"
15/25/35PCJ2LX	21"	3 3/4"
15/25/35PCJ2MX	21"	3 3/4"
15/25/35PCJ2NX	21"	3 3/4"
15/25/35PCJ2PX	21"	3 3/4"
15/25/35PCJ2QX	21"	3 3/4"

Description	Voltage Class	ELASTIMOLD Part Number	Notes
Power Cable Joint  Style 1	15kV	15PCJ1W1X	N1
	15kV	15PCJ1W2X	N2
	25kV	25PCJ1W1X	N1
	25kV	25PCJ1W2X	N2
	35kV	35PCJ1W1X	N1
	35kV	35PCJ1W2X	N2
Power Cable Joint  Style 2	15kV	15PCJ2W1X	N1
	15kV	15PCJ2W2X	N2
	25kV	25PCJ2W1X	N1
	25kV	25PCJ2W2X	N2
	35kV	35PCJ2W1X	N1
	35kV	35PCJ2W2X	N2

- N1. Kit includes aluminum compression connector suitable for splicing aluminum conductor to aluminum conductor or aluminum conductor to copper conductor.
- N2. Kit includes copper compression connector suitable for splicing copper conductor to copper conductor only.

Refer to the W and X tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# CABLE TERMINATIONS

Elastimold cable terminations are available in single piece or modular designs. Terminators allow connection and transition from shielded, underground cable to bare overhead conductors and live-front equipment. Units are designed and rated per IEEE Standard 48 for riser pole, padmount, indoor and outdoor applications. PCT1, PCT2, 16THG and 35MTG terminators provide sufficient creep, strike and weather sealing for class 1 outdoor service. PCT1 and PCT2 also include an integral cable jacket seal. The 35MTGI terminators and 35MSC stress cones are rated for class 2 and class 3 indoor service respectively. Optional mounting brackets, aerial lugs and equipment connectors are available as required.



## ELECTRICAL RATINGS SUMMARY

The following ratings summary is based on IEEE Std. 48 and applies to all the terminations on page 22 thru 25. Elastimold terminations are designed for use on three-phase systems, either 3-wire or 4-wire and the single-phase laterals of these systems.

### VOLTAGE RATINGS

#### 15kV Class

9.5kV Phase-to-Ground  
 110kV BIL 1.2 x 50 microsecond wave  
 AC Withstand:  
 50kV 1 min. – dry  
 35kV 6 hr. – dry  
 45kV 10 sec. – wet  
 13kV Corona Extinction

#### 25kV Class

16kV Phase-to-Ground  
 150kV BIL 1.2 x 50 microsecond wave  
 AC Withstand:  
 65kV 1 min. – dry  
 55kV 6 hr. – dry  
 60kV 10 sec. – wet  
 21.5kV Corona Extinction

#### 35kV Class

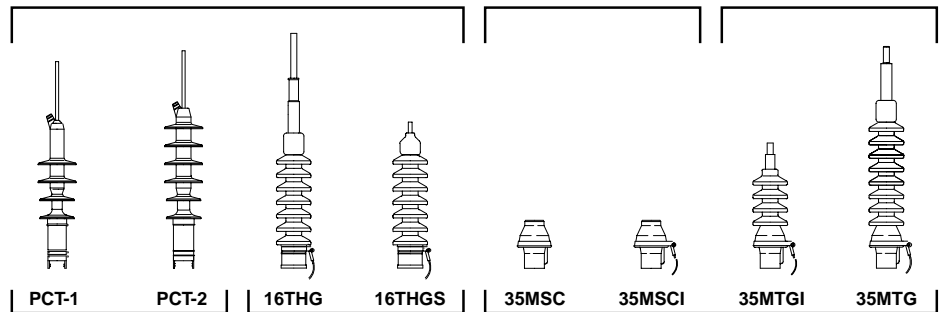
22kV Phase-to-Ground  
 200kV BIL 1.2 x 50 microsecond wave  
 AC Withstand:  
 90kV 1 min. – dry  
 75kV 6 hr. – dry  
 80kV 10 sec. – wet  
 30kV Corona Extinction

## TERMINATIONS

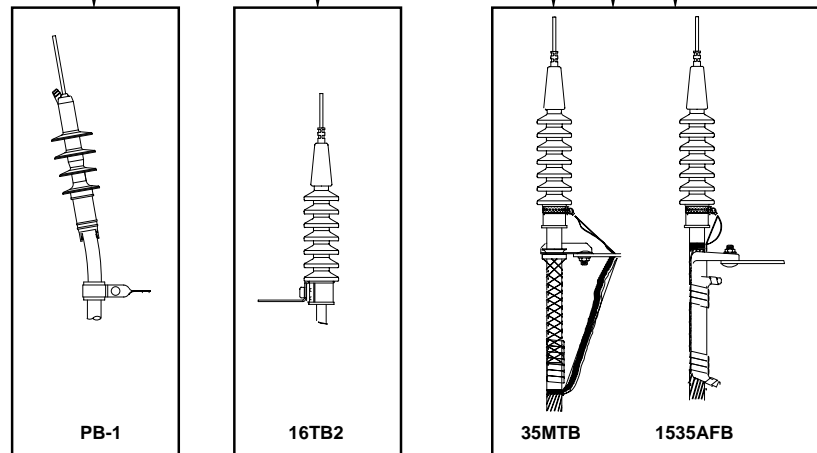
### SINGLE PIECE TERMINATORS

### STRESS CONE

### MODULAR TERMINATORS

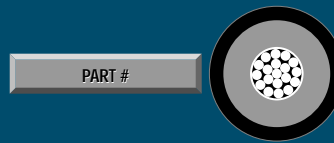


## BRACKETS





	SEPARABLE CONNECTORS		
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV
	TERMINATIONS	600 SERIES DEADBREAK	35kV
	SURGE ARRESTERS		



Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

## TERMINATIONS

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	Single-Piece Terminator (Class 1)	15kV 25kV	<b>PCT1-X-4</b> Use Table X9 <b>PCT2-X-4</b> Use Table X9	N12,14, 15, 22 N12,14, 15, 23
	Housing only	15kV 25kV	<b>PCT1-4</b> <b>PCT2-4</b>	N13, 22 N13, 23
	Single-Piece Terminator (Class 1)	15/25kV	<b>16THG-WX-4</b> Use Tables W12 and X8	N2,14 15
	Housing only	15/25kV	<b>16THGH-W</b> Use Table W12	
	Single-Piece Terminator for solid conductor only (Class 1)	15/25kV	<b>16THGS-WX</b> Use Tables W12 and X4	N3
	Stress Cone (Class 3)	ALL	<b>35MSC-W</b> Use Table W11	N17
	w/Grd. Strap	ALL	<b>35MSCI-W</b> Use Table W11	N17
	Modules only	ALL	<b>35MG-W</b> Use Table W13	N11,16
	Modular Terminator (Class 1)	15kV	<b>35MTG-WX-4-CA</b> Use Tables W13 and X3	N2,11
		25kV	<b>35MTG-WX-8-CA</b> Use Tables W13 and X3	N2,5,11
		35kV	<b>35MTG-WX-10-CA</b> Use Tables W13 and X3	N2,6,11
	Modular Terminator (Class 2) w/o Rain Cap	15kV	<b>35MTGI-W-4</b> Use Table W13	N11
		25kV	<b>35MTGI-W-6</b> Use Table W13	N11
		35kV	<b>35MTGI-W-8</b> Use Table W13	N7,11
	Rod Contact for PCT	15/25kV	<b>0070X</b> Use Table X9	N1,14, 15
	Rod Contact for 16THG	15/25kV	<b>16TCA-X</b> Use Table X8	N2, 8
	Solid Conductor Package for 16THGS	15/25kV	<b>16CAS-X</b> Use Table X4	N3, 9
	3/4"-16 Threaded Rod for MTG	ALL	<b>35MTGA-WX-1</b> Use Tables W13 and X3	N2,10,11 18, 25
	1"-14 Threaded Rod for MTG	ALL	<b>35MTGA-WX-2</b> Use Tables W13 and X3A	N2,10,11 19, 25
	Two-Hole Spade for MTG	ALL	<b>35MTGA-WX-3</b> Use Tables W13 and X3	N4,10,11 20, 25
	Two-Hole Spade for PCT	ALL	<b>0100X</b> Use Table X9	N1
	One-Hole Spade for PCT	ALL	<b>0110X</b> Use Table X9	N1
	Universal Rod for MTG	ALL	<b>35MTGA-WX-4</b> Use Tables W13 and X3	N2,10,11 21, 25
	Aerial Lugs for MTG Threaded Rod (Two-hole spade or bare wire)	ALL	<b>35AL-A</b>	N10, 24

- N1. Use with PCT1 or PCT2 Terminators.
- N2. Includes contact rod, ground strap and rain cap.
- N3. Includes crimp ring, ground strap and rain cap.
- N4. Includes spade contact, ground strap and rain cap.
- N5. For KA thru PB sizes use 35MTG-WX-6-CA.
- N6. For KA thru PB sizes use 35MTG-WX-8-CA.
- N7. For KA thru PB sizes use 35MTGI-W-6.
- N8. Use with 16THG Terminators.
- N9. Use with 16THGS Terminators.
- N10. Use with 35MTG Terminators.
- N11. Refer to page 24 for detailed ordering instructions.
- N12. Includes rod contact as standard. Specify suffix "-3" in place of "-4" for two-hole spade lug. Specify suffix "-5" in place of "-4" for one-hole spade lug.
- N13. Specify suffix "-3" or "-5" in place of "-4" for two-hole spade lug housing or one-hole spade style housing.
- N14. Use 1X for rod contact for aluminum conductors only.
- N15. Use 0X for rod contact for aluminum or copper conductors.
- N16. Available in sizes from GA thru PB & are supplied qty. 2 per package.
- N17. Available in sizes EB thru PB.
- N18. For conductors from 1/0 thru 350 kcmil.
- N19. For conductors from 400 kcmil thru 1000 kcmil.
- N20. For conductors from #2 to 1000 kcmil.
- N21. For conductors from #6 thru 4/0.
- N22. Use for insulation dia. range from .640" thru 1.070".
- N23. Use for insulation dia. range from .830" thru 1.180".
- N24. Select symbol for "A" from aerial lug ordering information on page 24.
- N25. W13 Table provides sizing for rain cap  
X10 Table provides sizing for connectors.

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



# CABLE TERMINATIONS cont'd

## ORDERING INSTRUCTIONS FOR MODULAR TERMINATORS

**35MTG - W X - N - C A**

I = Indoor  
Blank = Outdoor

Use Table W13, below

Use Table X3 or Table X3A

NOTE: Applicable table and available sizes depend upon connector style. Reference Connector Style Selection Chart and notes A through D.

### Recommended Number of Modules

	GA-JB	KA-PB
15kV	4	4
25kV	8	6
35kV	10	8

### Connector Style Selection Chart

Description	Available for Conductor Sizes	Symbol	Notes
3/4"-16 Threaded Rod	1/0 thru 350 kcmil	-1	A
1"-14 Threaded Rod	400 thru 1000 kcmil	-2	B
2-Hole Spade	#2 thru 1000 kcmil	-3	C
Universal Rod	#6 thru 4/0	-4	D

### Aerial Lugs for Threaded Rod Connectors Only

Type	Connector	Symbol
Bare Wire	3/4"-16 Rod	-11
2-Hole Spade	3/4"-16 Rod	-12
Bare Wire	1"-14 Rod	-21
2-Hole Spade	1"-14 Rod	-22

#### NOTES:

- A. Available for 1/0 through 350 conductor sizes only. Use Table X3 for size selection.
- B. Available for 400 through 1000 conductor sizes only. Use Table X3A for size selection.
- C. Available for #2 through 1000 conductor sizes only. Use Table X3 for size selection.
- D. Available for #6 through 4/0 conductor sizes only. Use Table X3 for size selection.

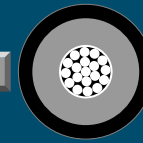
Table W13 USE FOR FOLLOWING PRODUCTS 35MTG 35MTGI	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.775	.885	GA
	.825	.935	GAB
	.875	.985	GB
	.930	1.040	GH
	.980	1.115	HA
	1.040	1.175	HAB
	1.095	1.240	HB
	1.160	1.305	HJ
	1.220	1.375	JA
	1.285	1.395	JAB
	1.355	1.520	JB
	1.485	1.595	KA
	1.530	1.640	KAB
	1.575	1.685	KB
	1.665	1.785	PA
	1.755	1.875	PB

Table X3 USE FOR FOLLOWING PRODUCT 35MTG FOR USE WITH STYLE -1,-3, & -4 CONNECTORS ONLY. SEE NOTES A, C, & D FOR APPLICATION INFORMATION	Conductor SIZE AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
	#6	5	-
	#5	4	5
	#4	3	4
	#3	2	3
	#2	1	2
	#1	0	1
	1/0	10	0
	2/0	20	10
	3/0	30	20
	4/0	40	30
	250	250	40
	300	300	250
	350	350	300
	400	400	350
	450	450	-
	500	500	400
	550	550	450
	600	600	500
	650	650	550
	700	750	600
	750	750	650
	800	800	750
	900	900	800
	1000	1000	900

Table X3A USE FOR FOLLOWING PRODUCT 35MTG FOR USE WITH STYLE -2 CONNECTORS ONLY. SEE NOTE B FOR APPLICATION INFORMATION	Conductor SIZE AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
	400	400	-
	450	450	400
	500	500	450
	550	550	500
	600	600	500
	650-700	650	550
	750	750	600
	800	750	650
	1000	1000	-

	SEPARABLE CONNECTORS		
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV
	TERMINATIONS	600 SERIES DEADBREAK	35kV
	SURGE ARRESTERS		

PART #



Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

## TERMINATIONS

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Notes
	PCT Positioning Bracket	ALL	<b>PB-1</b>	N1,12
	16THG Bracket	ALL	<b>16TB-2</b>	N6
	Bracket for crossarm mounting 16THG	ALL	<b>16TB-3</b>	N6
	Bracket for riser pole mounting 16THG	ALL	<b>16TB-4</b>	N6
	Bracket for tri-mounting 16THG	ALL	<b>16TB-5</b>	N6
	KELLUMS GRIP Bracket	ALL ALL ALL ALL	<b>35MTB1-A</b> <b>35MTB1-B</b> <b>35MTB1-C</b> <b>35MTB1-D</b>	N1,2,6,7 N1,3,6,7 N1,4,6,7 N1,5,6,7
	KELLUMS Bracket for crossarm mounting	ALL ALL ALL ALL	<b>35MTB3-A</b> <b>35MTB3-B</b> <b>35MTB3-C</b> <b>35MTB3-D</b>	N1,2,6,7 N1,3,6,7 N1,4,6,7 N1,5,6,7
	Bracket (for riser pole mounting)	ALL ALL ALL ALL	<b>35MTB4-A</b> <b>35MTB4-B</b> <b>35MTB4-C</b> <b>35MTB4-D</b>	N1,2,6,7 N1,3,6,7 N1,4,6,7 N1,5,6,7
	KELLUMS Bracket for tri-mounting	ALL ALL ALL ALL	<b>35MTB5-A</b> <b>35MTB5-B</b> <b>35MTB5-C</b> <b>35MTB5-D</b>	N1,2,6,7 N1,3,6,7 N1,4,6,7 N1,5,6,7
	ALUMA FORM Bracket	ALL	<b>1535AFB-1</b>	N1,6,7
	ALUMA FORM Bracket for Crossarm mounting	ALL	<b>1535AFB-3</b>	N1,6,7
	ALUMA FORM Bracket for riser-pole mounting	ALL	<b>1535AFB-4</b>	N1,6,7
	ALUMA FORM Bracket for tri-mounting	ALL	<b>1535AFB-5</b>	N1,6,7

- N1. Use with PCT-1 or PCT-2 Terminators.
- N2. Fits overall cable O.D. from 1.195" to 1.625".
- N3. Fits overall cable O.D. from .925" to 1.335".
- N4. Fits overall cable O.D. from .890" to 1.185".
- N5. Fits overall cable O.D. from 1.500" to 2.000".
- N6. Use with 16THG & 16THGS Terminators.
- N7. Use with MTG, MTG1 & MSC Terminators.
- N8. For conductors from 1/0 thru 350 kcmil.
- N9. For conductors from 400 kcmil thru 1000 kcmil.
- N10. For conductors from #2 to 1000 kcmil.
- N11. For conductors from #6 thru 4/0.
- N12. Fits overall cable O.D. from .750" to 1.625"

Refer to the **W** and **X** tables on pages 32 and 33 for sizing to cable insulation diameter and conductor size.

For cable shield adapters and jacket seals, see page 28.



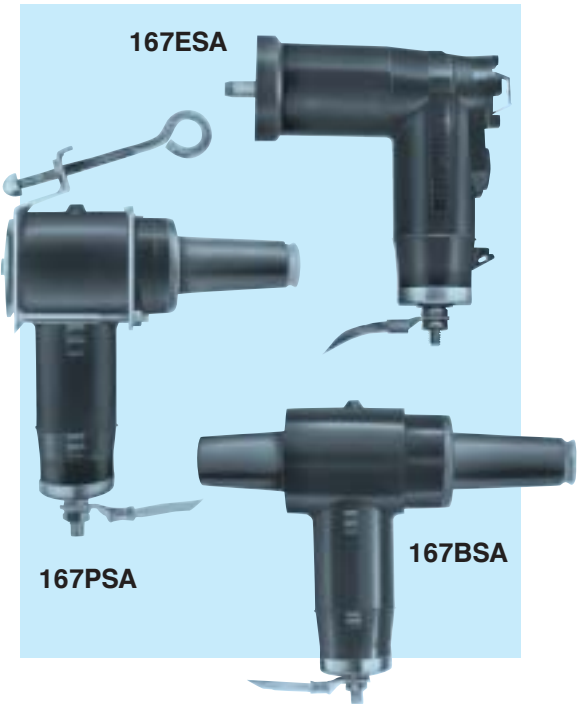
# SURGE ARRESTERS

ELASTIMOLD Metal Oxide Varistor (MOV) surge arresters are fully-shielded, fully-submersible and are equipped with IEEE 386 interfaces for convenient energized connection with other 200 Amp loadbreak components. Units are compact, allowing installation in existing cabinetry. For application ease, arresters are available in 3 styles: Elbow (ESA), Parking Stand (PSA) and Bushing (BSA). The PSA and BSA arresters permit direct connection eliminating the need for additional accessories.

Elastimold arresters provide high voltage lightning and switching surge protection of transformers, cable, equipment and other components typically located on underground power distribution systems. Proper placement, voltage selection and coordination with riser pole arresters minimizes damaging surge voltages by improving protective margins.

Typical applications include installing an arrester at the end of a radial system or at both ends of an open point on a loop system. Additional arresters can be added at strategic locations upstream from the end point for optimum protection. Request Form 2068 (Surge Protection Options For Underground Distribution) and Form 2069 (Arrester Applications – Underground Electrical Systems) for additional application and margin of protection information.

ESA Elbow Arresters are also available with a 200 Amp Deadbreak interface for mating with other Deadbreak accessories.



## ELECTRICAL RATINGS & PROTECTIVE CHARACTERISTICS

### Performance:

High Current Short Duration - All MOV Arresters withstand two discharges of 40kA crest.

Low Current Long Duration - All MOV Arresters withstand 20 surges of 75 amperes/2000 microsecond duration.

Duty Cycle Test - All MOV Arresters withstand 22 operations of 5kA crest at 8 x 20 microsecond duration while energized at rated voltage for the initial 20 operations and at maximum continuous operating voltage (MCOV) for the final two operations.

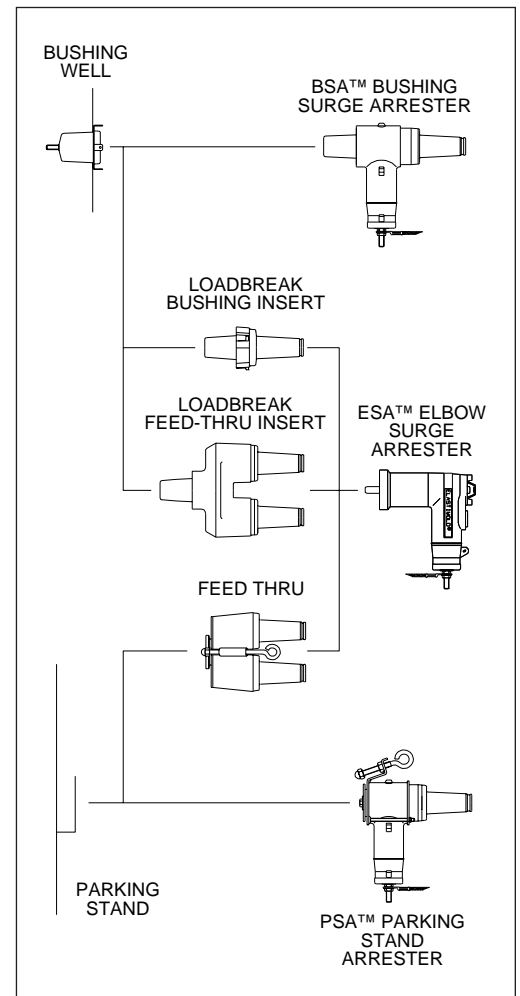
Following each of the preceding tests, MOV Arresters demonstrate thermal recovery at MCOV.

### PROTECTIVE CHARACTERISTICS:

	MCOV (kVrms) Note 1	Duty Cycle Rating (kVrms)	Maximum Discharge Voltage (kV crest) 8x20 microsecond current wave				
			1.5kA	3kA	5kA	10kA	20kA
<b>15kV CLASS</b>	2.55	3	10.5	11.0	11.5	13.0	14.5
	5.1	6	20.5	21.5	23.0	25.5	30.0
	8.4	10	30.5	32.5	34.5	38.5	43.5
	10.2	12	40.0	42.5	45.0	50.0	56.5
	12.7	15	48.0	51.0	54.0	60.0	68.0
<b>25kV CLASS</b>	15.3	18	56.5	60.0	64.0	71.0	80.5
	8.4	10	30.5	32.5	34.5	38.5	43.5
	10.2	12	40.0	42.5	45.0	50.0	56.5
	12.7	15	48.0	51.0	54.0	60.0	68.0
<b>35kV CLASS</b>	15.3	18	56.5	60.0	64.0	71.0	80.5
	17.0	21	65.5	69.5	74.0	82.5	93.0
	19.5	24	78.5	83.5	89.0	99.0	112.0
<b>35kV CLASS</b>	22.0	27	87.5	93.0	99.0	110.0	124.5
	24.4	30	95.5	101.5	108.0	120.0	136.0

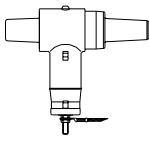
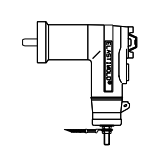
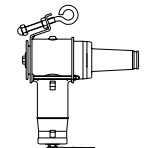
NOTES:

1. MCOV = Maximum Continuous Operating Voltage.



	SEPARABLE CONNECTORS		
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV
	TERMINATIONS	600 SERIES DEADBREAK	35kV
	SURGE ARRESTERS		

### SELECTION CHART

Illustration (not to scale)	Description	Voltage Class	Elastimold Part Number	MCOV kVrms
	BSA Bushing Surge Arrester (includes assembly tool)	15kV	<b>167BSA-3</b>	2.55
		15kV	<b>167BSA-6</b>	5.10
		15kV	<b>167BSA-10</b>	8.40
		15kV	<b>167BSA-12</b>	10.20
		15kV	<b>167BSA-15</b>	12.70
	See Notes N1, 2, 3, 4	15kV	<b>167BSA-18</b>	15.30
		25kV	<b>273BSA-10</b>	8.40
		25kV	<b>273BSA-12</b>	10.20
		25kV	<b>273BSA-15</b>	12.70
		25kV	<b>273BSA-18</b>	15.30
		25kV	<b>273BSA-21</b>	17.00
		35kV	<b>375BSA-24</b>	19.50
		35kV	<b>375BSA-27</b>	22.00
		35kV	<b>375BSA-30</b>	24.40
	ESA Elbow Surge Arrester	15kV	<b>167ESA-3</b>	2.55
		15kV	<b>167ESA-6</b>	5.10
		15kV	<b>167ESA-10</b>	8.40
		15kV	<b>167ESA-12</b>	10.20
		15kV	<b>167ESA-15</b>	12.70
	See Notes N2, 3, 5	15kV	<b>167ESA-18</b>	15.30
		25kV	<b>273ESA-10</b>	8.40
		25kV	<b>273ESA-12</b>	10.20
		25kV	<b>273ESA-15</b>	12.70
		25kV	<b>273ESA-18</b>	15.30
		25kV	<b>273ESA-21</b>	17.00
		35kV	<b>375ESA-24</b>	19.50
		35kV	<b>375ESA-27</b>	22.00
		35kV	<b>375ESA-30</b>	24.40
	PSA Parking Stand Arrester	15kV	<b>167PSA-3</b>	2.55
		15kV	<b>167PSA-6</b>	5.10
		15kV	<b>167PSA-10</b>	8.40
		15kV	<b>167PSA-12</b>	10.20
		15kV	<b>167PSA-15</b>	12.70
	See Notes N1, 2, 3	15kV	<b>167PSA-18</b>	15.30
		25kV	<b>273PSA-10</b>	8.40
		25kV	<b>273PSA-12</b>	10.20
		25kV	<b>273PSA-15</b>	12.70
		25kV	<b>273PSA-18</b>	15.30
		25kV	<b>273PSA-21</b>	17.00
		35kV	<b>375PSA-24</b>	19.50
		35kV	<b>375PSA-27</b>	22.00
		35kV	<b>375PSA-30</b>	24.40

### ARRESTER APPLICATION TABLE

	System Line-to-Line Voltage kV rms		MCOV (Max. Continuous Operating Voltage) kV rms	
	Nominal	Max.	Solidly Grounded Neutral Circuits	3-Wire Ungrounded Circuits
<b>15kV Class</b>	2.40	2.54	2.55	2.55
	4.16	4.40	2.55	5.10
	4.80	5.08	5.10	5.10
	6.90	7.26	5.10	8.40
	8.32	8.80	5.10	8.40
	12.47	13.20	8.40	15.30
	13.20	13.97	8.40	15.30
	13.80	14.50	8.40*	15.30
	13.80	14.50	10.20	15.30
	<b>25kV Class</b>	6.90	7.26	5.10
8.32		8.80	5.10	8.40
12.47		13.20	8.40	15.30
13.20		13.97	8.40	15.30
13.80		14.50	8.40*	15.30
13.80		14.50	10.20	15.30
20.78		22.00	12.70	-
20.78		22.00	15.30*	-
23.00		24.34	15.30	-
24.94		26.40	15.30	-
24.94	26.40	17.00*	-	
28.00	29.80	17.00	-	
<b>35kV Class</b>	23.00	24.34	-	22.00
	34.50	36.51	22.00*	-
	34.50	36.51	24.40	-

\* Preferred arrester MCOV for this system voltage

- N1. Elastimold PSA and BSA Arresters are equipped with a fully rated 200A switching and fault close loadbreak bushing.
- N2. Elastimold Arresters use high-strength silver epoxy bonded MOV blocks and shunted spring connections for the best circuit connection.
- N3. A 36 inch #4 AWG ground lead provided with each unit.
- N4. BSA installed by turning internal hex bolt (accessed thru the 200 Amp Bushing Interface) with 5/16" hex wrench supplied with each unit.
- N5. For 15kV and 25kV Class DEADBREAK system Elbow Arresters, use part number 156ESA with the appropriate Duty Cycle rating.

#### ORDERING INSTRUCTIONS:

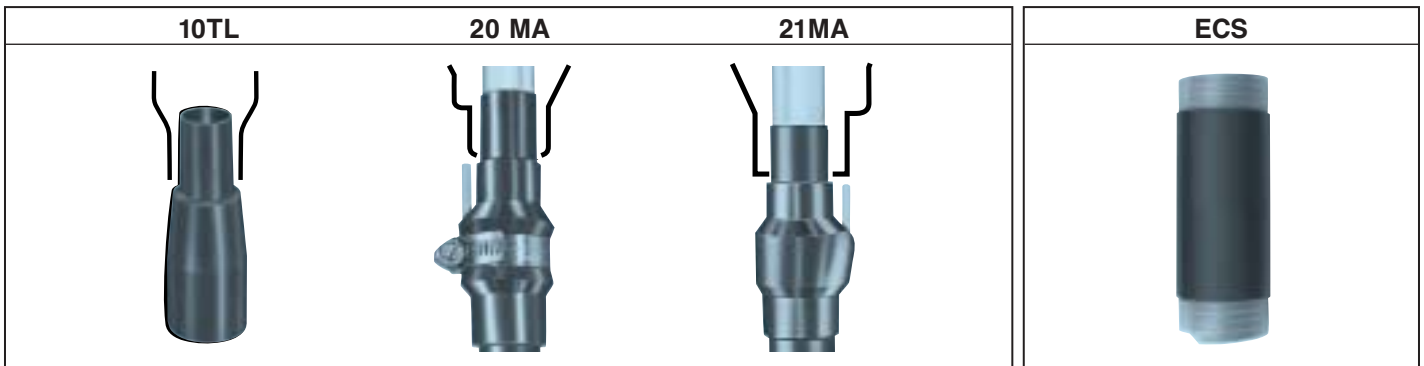
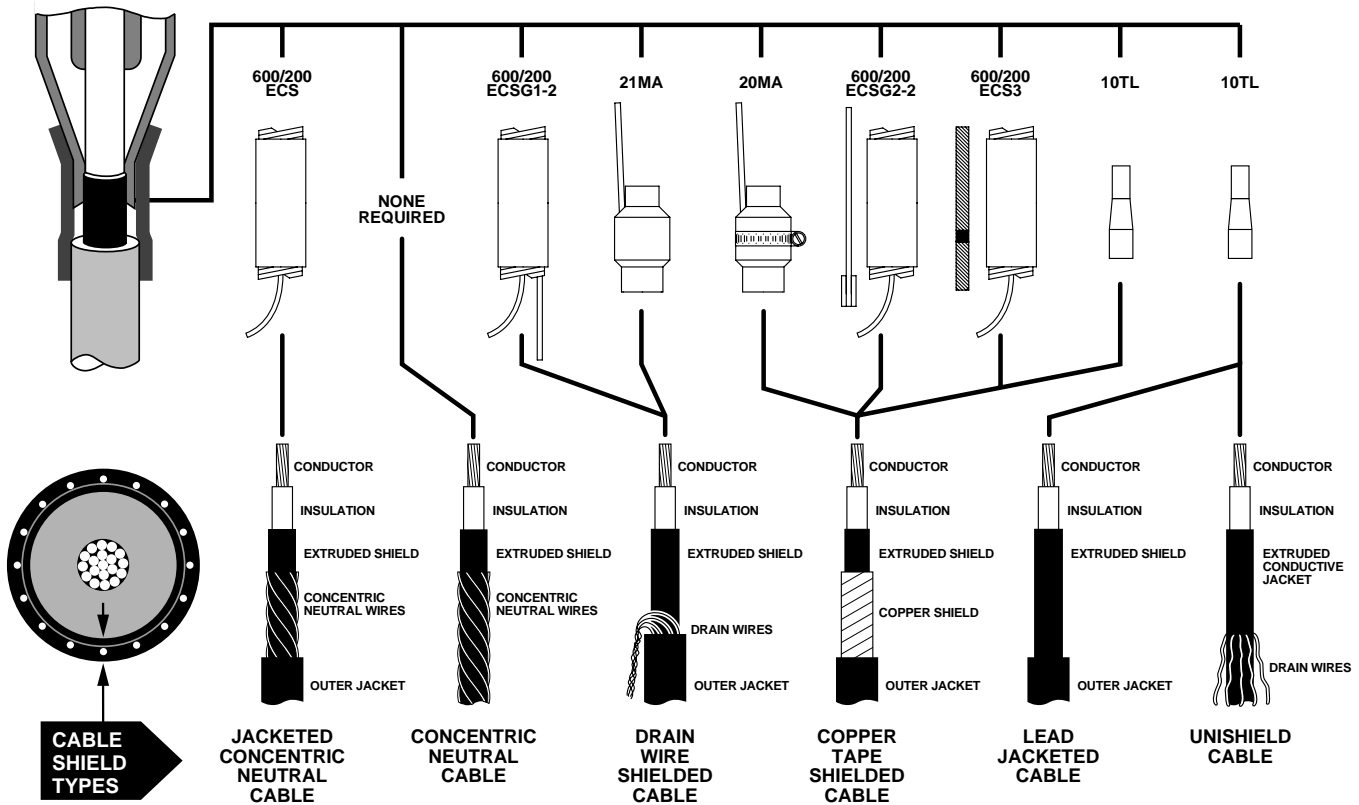
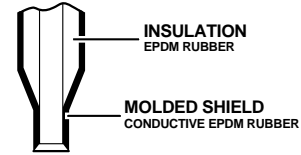
- (1.) Determine the appropriate Maximum Continuous Operating Voltage (MCOV) for your system voltage by using the ELASTIMOLD ARRESTER APPLICATION TABLE.
- (2.) Specify the appropriate ELASTIMOLD part number from the selection chart.



# SHIELD ADAPTERS, GROUNDING KITS AND JACKET SEALS

Elastimold elbows, cable joints and terminators have been designed for use on XLP, EPR or similar solid dielectric insulated power cables. These cables are available with a variety of optional shielding and jacket constructions. In order to properly mate and install the cable to an Elastimold product, the use of a shield adaptor, grounding kit or jacket seal may be required. The diagram below provides information concerning the application and selection of various shield adaptors, grounding kits and jacket seals for the most popular cable types. Consult the factory for recommendations concerning other cable constructions.

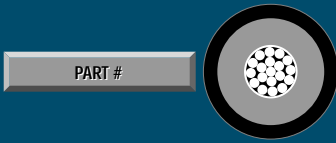
## CABLE ENTRANCE DETAIL



Cable Insulation Dia.	CABLE SHIELD ADAPTERS		
	10TL inches	20MA inches	21MA inches
min.	.495	.530	.530
max.	1.875	1.780	1.780

Jacket O.D.	JACKET SEALS	
	200ECS inches	600ECS inches
min.	.80	1.28
max.	1.50	2.30

	<b>SEPARABLE CONNECTORS</b>		
<b>DEADFRONT</b>	<b>FUSED ELBOWS</b>	<b>200 AMP LOADBREAK</b>	<b>5-15kV</b>
<b>LIVEFRONT</b>	<b>CABLE JOINTS</b>	<b>200 AMP DEADBREAK</b>	<b>25kV</b>
	<b>TERMINATIONS</b>	<b>600 SERIES DEADBREAK</b>	<b>35kV</b>
	<b>SURGE ARRESTERS</b>		



Part numbers that contain the letters **W** or **X** are size sensitive. To complete the part number, refer to the **W** or **X** tables indicated.

Illustration (not to scale)	Description	ELASTIMOLD Part Number	Suffix	Notes
	Cold Shrinkable Jacket Seal	<b>200ECS</b>	<b>-S</b>	N1,3
	Cold Shrinkable Jacket Seal	<b>600ECS</b>	<b>-S</b>	N1,4
	Metallic Tape Shield Adapter	<b>20MA-W</b> Use Table W14 for sizing	<b>-0MA</b>	N1,2
	Wire Shield Adapter	<b>21MA-W</b> Use Table W14 for sizing	<b>-1MA</b>	N1,2
	Shield Adapter	<b>10TL-W</b> Use Table W15 for sizing	<b>-TL</b>	N1,2
	Cold Shrinkable Seal w/ Copper Rod & Crimp Connector	<b>200ECSG1-2</b>	<b>-SG1</b>	N1,3
	Cold Shrinkable Seal w/ Copper Rod & Crimp Connector	<b>600ECSG1-2</b>	<b>-SG1</b>	N1,4
	Cold Shrinkable Seal w/ Copper Rod & Constant Force Spring	<b>200ECSG2-2</b>	<b>-SG2</b>	N1,3
	Cold Shrinkable Seal w/ Copper Rod & Constant Force Spring	<b>600ECSG2-2</b>	<b>-SG2</b>	N1,4
	Cold Shrinkable Seal w/ Copper Braid & Constant Force Spring	<b>200ECSG3</b>	<b>-SG3</b>	N1,3
	Cold Shrinkable Seal w/ Copper Braid & Constant Force Spring	<b>600ECSG3</b>	<b>-SG3</b>	N1,4

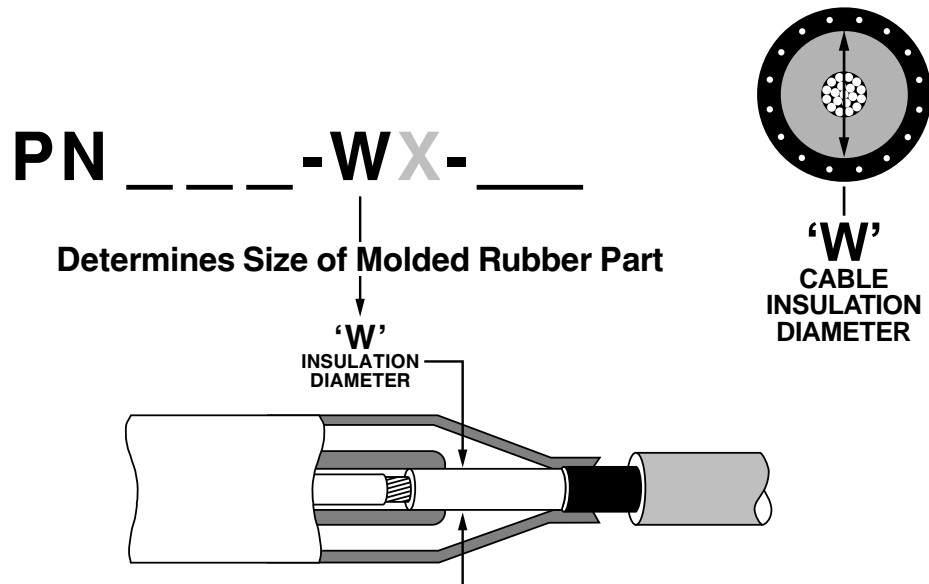
- N1. To order the kits as separate items, use the part numbers shown in the table. Example: To order a cold shrinkable tube as a separate item, use the part number 200ECS.  
To order the kits as components of other items, add the suffix to the end of the part number. Example: To order a cold shrinkable jacket seal as a component of an elbow kit, use the part number 166LR-A520-S.
- N2. Only use this suffix with part numbers that designate a "W" housing size. Sizing the main component will also size the suffix adapter.
- N3. Size range .80" to 1.50" jacket diameters. Maximum installed diameter is approx. 2".
- N4. Size range 1.28" to 2.30" jacket diameters. Maximum installed diameter is approx. 2.75".

Table W14 USE FOR 20MA 21MA	Insulation Inches		Symbol for W
	MIN.	MAX.	
	.530	.680	
.640	.820	F	
.760	.950	G	
.850	1.050	H	
.980	1.180	J	
1.090	1.310	K	
1.180	1.465	L	
1.370	1.630	M	
1.515	1.780	N	

Table W15 USE FOR 10TL	Insulation Inches		Symbol for W
	MIN.	MAX.	
	.495	.585	
.525	.635	EF	
.575	.585	FA	
.625	.735	FAB	
.675	.785	FB	
.725	.835	FG	
.775	.885	GA	
.825	.935	GAB	
.875	.985	GB	
.930	1.040	GH	
.980	1.115	HA	
1.040	1.175	HAB	
1.095	1.240	HB	
1.160	1.305	HJ	
1.220	1.375	JA	
1.285	1.395	JAB	
1.355	1.520	JB	
1.485	1.595	KA	
1.530	1.640	KAB	
1.575	1.685	KB	
1.755	1.875	PB	



# How to specify Size-Sensitive Products



## INSULATION DIAMETER SELECTION GUIDE

Elastimold Elbows, cable joints and terminations are designed for application on XLP, EPR and other solid dielectric insulated power cables. These components are constructed of molded elastomer and rely on an interference fit with the cable insulation diameter in order to maintain proper dielectric strength, creep path integrity and a water seal. Elastimold components are available in a wide range of sizes in order to accommodate a variety of cable insulation diameters.

Selection of size-sensitive components requires determining the cable insulation diameter. This can be done in several ways:

- Refer to the cable manufacturer's spec sheet for dimensions.
- Measure the cable.
- If the cable conforms to AEIC standards with a 175, 220, 260 or 345 mil wall thickness, use the table on page 34.
- If the cable is constructed to the new ICEA standard, refer to the cable manufacturer's spec sheet for dimensions.

After the cable insulation diameter has been determined:

- Locate the W table indicated in the part number selection chart.
- Complete the ordering information by selecting and inserting the symbol (given in the W table) into the part number.

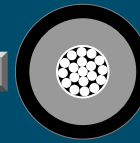
### Ordering Example

To complete the information required to order a K655LR-W0X elbow for use on standard AEIC 500 kcmil stranded aluminum cable with .220 inch thick insulation wall.

- Determine that the insulation diameter (from AEIC table on page 34) is  $1.325 \pm .030$  inches.
- For this elbow, the part number selection chart on page 11 indicates to use table W7 for elbow sizing and table X6 for connector sizing.
- From table W7 the symbol for W is L.
- From table X6 the symbol for X is 330.
- The completed part number therefore is K655LR-L0330.



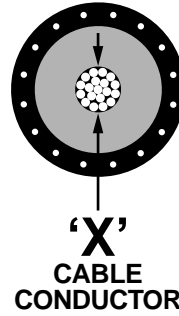
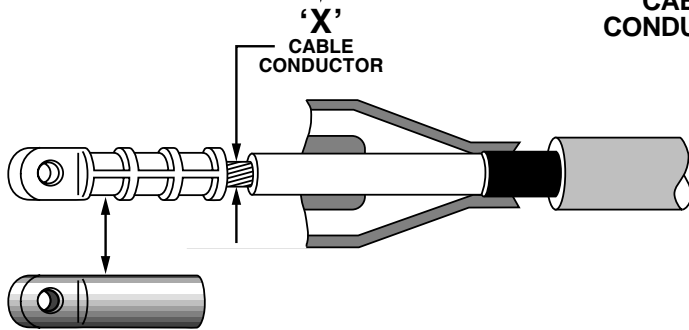
	SEPARABLE CONNECTORS			
DEADFRONT	FUSED ELBOWS	200 AMP LOADBREAK	5-15kV	PART #
LIVEFRONT	CABLE JOINTS	200 AMP DEADBREAK	25kV	
	TERMINATIONS	600 SERIES DEADBREAK	35kV	
	SURGE ARRESTERS			



Part numbers that contain the letters W or X are size sensitive. To complete the part number, refer to the W or X tables indicated.

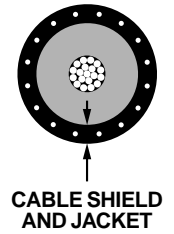
PN \_\_\_\_ -WX- \_\_\_\_

Determines Crimp Connector Size



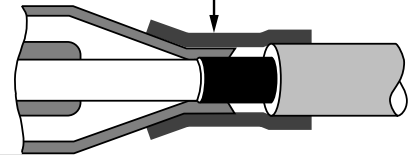
PN \_\_\_\_ -WX- \_\_\_\_

'Suffix'



Determines Required Accessories (if any)

- Cable Shield Adaptors
- Cable Grounding Kits
- Cable Jacket Seal



Reference Pages 28 & 29 for application, selection and ordering information.

## CONNECTOR SELECTION GUIDE

Elastimold elbows, cable joints and terminations are furnished with crimp style cable connectors. As standard, these connectors are constructed with a tin-plated aluminum barrel filled with an oxide inhibitor. Aluminum barrel connectors are designed for use on either aluminum or copper conductor cable.

When specified, all copper crimp style connectors can be furnished. These connectors are ONLY for use on copper conductor cable and are not for use with aluminum conductor cables.

Bi-metallic connectors are constructed with a copper top and an aluminum barrel. Bi-metal connectors can be used on either aluminum or copper conductor cable and are furnished as standard with 200 Amp Loadbreak Elbows, 200 Amp Deadbreak Elbows, and PCT, 16 THG or MTG terminations with rod connectors.

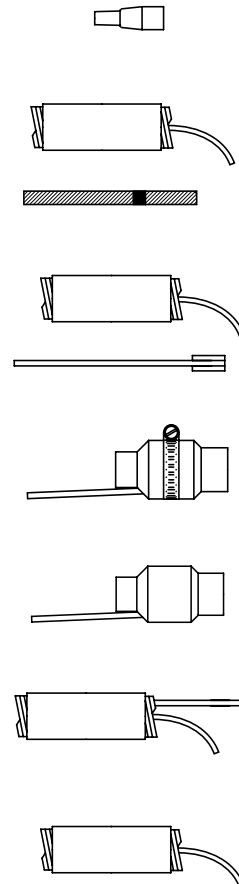
Selection and ordering the proper crimp connector requires determining information relative to the cable conductor as follows:

- Conductor size in AWG or kcmil
- Conductor type (stranded, compressed, compact or solid)
- Conductor material (aluminum or copper)

After the cable conductor information has been determined:

- Locate the X table indicated in the part number selection chart.
- Complete the ordering information by selecting and inserting the symbol (given in the X table) into the part number.

See the Ordering Example on page 30 for further information.





# WX SIZE TABLES

“W”  
INSULATION  
DIAMETER

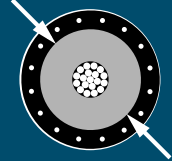


Table W1 USE FOR FOLLOWING PRODUCTS 165/166LR K151SP K151SR K151LS K151LY	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.575	.740	A
	.665	.905	B
	.830	1.060	C
	.930	1.220	D

Table W2 USE FOR FOLLOWING PRODUCTS 273/274LR 273/274RLR	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.760	.950	G
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K

Table W3 USE FOR FOLLOWING PRODUCTS 375/376LR	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K
	1.235	1.465	L

Table W4 USE FOR FOLLOWING PRODUCTS 156LR 167/168RLR 167LRT	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.640	.820	F
	.760	.950	G
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K

Table W5 USE FOR FOLLOWING PRODUCTS 167/168ELR 273/274ELR	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.665	.895	6689
	.740	.950	7495
	.880	1.100	88110
	1.090	1.310	K

Table W6 USE FOR FOLLOWING PRODUCTS 10EP 152EA 160CA* (*EB - FA Only)	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.495	.585	EB
	.525	.635	EF
	.575	.685	FA
	.625	.735	FAB
	.675	.785	FB
	.725	.835	FG
	.775	.885	GA
	.825	.935	GAB
	.875	.985	GB

Table W7 USE FOR FOLLOWING PRODUCTS K6561/CY/CH K655/656LR K655/656SR 655/656LINK K655/656LINK 655/656ETP K655/656ETP 655/656LRTP K655/656LRTP 655/656BI-LINK K655/656BI-LINK 655CA 655CK 655TCK	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.640	.820	F
	.760	.950	G
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K
	1.180	1.465	L
	1.280	1.430	LM
	1.370	1.630	M
	1.515	1.780	N
	1.725	1.935	P

Table W8 USE FOR FOLLOWING PRODUCTS 15PCJ-1 15PCJ-2	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.640	.820	F
	.760	.950	G
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K
	1.180	1.465	L
	1.280	1.430	LM
	1.370	1.630	M
	1.515	1.780	N
	1.725	1.935	P
	1.900	2.120	Q

Table W9 USE FOR FOLLOWING PRODUCTS 25PCJ-1 25PCJ-2 755/756LR 755/756LINK 755/756ETP 755/756LRTP 755/756BI-LINK 755CA 755CK 755TCK	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.760	.950	G
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K
	1.180	1.465	L
	1.280	1.430	LM
	1.370	1.630	M
	1.515	1.780	N
	1.725	1.935	P
	1.900	2.120	Q

Table W10 USE FOR FOLLOWING PRODUCTS 35PCJ-1 35PCJ-2	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.850	1.050	H
	.980	1.180	J
	1.090	1.310	K
	1.180	1.465	L
	1.280	1.430	LM
	1.370	1.630	M
	1.515	1.780	N
	1.725	1.935	P
	1.900	2.120	Q

Table W11 USE FOR FOLLOWING PRODUCTS 35MSC 35MSCI	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.495	.585	EB
	.525	.635	EF
	.575	.685	FA
	.625	.735	FAB
	.675	.785	FB
	.725	.835	FG
	.775	.885	GA
	.825	.935	GAB
	.875	.985	GB
	.930	1.040	GH
	.980	1.115	HA
	1.040	1.175	HAB
	1.095	1.240	HB
	1.160	1.305	HJ
	1.220	1.375	JA
	1.285	1.395	JAB
	1.355	1.520	JB
	1.485	1.595	KA
	1.530	1.640	KAB
	1.575	1.685	KB
	1.665	1.785	PA
	1.755	1.875	PB

Table W12 USE FOR FOLLOWING PRODUCTS 16THG 16THGS 16THGH	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.495	.585	EB
	.525	.635	EF
	.575	.685	FA
	.625	.735	FAB
	.675	.785	FB
	.725	.835	FG
	.775	.885	GA
	.825	.935	GAB
	.875	.985	GB
	.930	1.040	GH
	.980	1.115	HA

Table W13 USE FOR FOLLOWING PRODUCTS 35MTG 35MTGI 35MTCGA	Cable Insulation Diameter in Inches		Symbol for W
	MIN.	MAX.	
	.775	.885	GA
	.825	.935	GAB
	.875	.985	GB
	.930	1.040	GH
	.980	1.115	HA
	1.040	1.175	HAB
	1.095	1.240	HB
	1.160	1.305	HJ
	1.220	1.375	JA
	1.285	1.395	JAB
	1.355	1.520	JB
	1.485	1.595	KA
	1.530	1.640	KAB
	1.575	1.685	KB
	1.665	1.785	PA
	1.755	1.875	PB

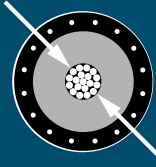


Table X1 USE FOR FOLLOWING PRODUCTS 167/168ELR 273/274ELR 156LR 165/166LR 273/274LR 167LRT 167/168RLR 273/274RLR 00400 02500 02509 02702 02800	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
#4	5200	5190	
#3	5210	5200	
#2	5220	5210	
#1	5230	5220	
1/0	5240	5230	
2/0	5250	5240	
3/0	5260	5250	
4/0	5270	5260	
250	–	5270	

Table X2 USE FOR FOLLOWING PRODUCTS 375/376LR	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
1/0	5240	5230	
2/0	5250	5240	
3/0	5260	5250	
4/0	5270	5260	

Table X3 USE FOR FOLLOWING PRODUCT 35MTG  NOTE: SEE PAGE 24 FOR DETAILED APPLICATION INFORMATION	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
#6	5	–	
#5	4	5	
#4	3	4	
#3	2	3	
#2	1	2	
#1	0	1	
1/0	10	0	
2/0	20	10	
3/0	30	20	
4/0	40	30	
250	250	40	
300	300	250	
350	350	300	
400	400	350	
450	450	–	
500	500	400	
550	550	450	
600	600	500	
650	650	550	
700	750	600	
750	750	650	
800	800	750	
900	900	800	
1000	1000	900	

Table X3A USE FOR FOLLOWING PRODUCT 35MTG  NOTE: SEE PAGE 24 FOR DETAILED APPLICATION INFORMATION	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
400	400	–	
450	450	400	
500	500	450	
550	550	500	
600	600	500	
650-700	650	550	
750	750	600	
800	750	650	
1000	1000	–	

Table X4 USE FOR FOLLOWING PRODUCT 16THGS 16CAS	Riser Conductor Size. AWG Solid	Symbol for X
	#2	2
#1	2	
1/0	10	
2/0	20	
3/0	30	
4/0	30	

Table X5 USE FOR FOLLOWING PRODUCTS K151SP K151SR K151LS K151LY	Conductor AGW or kcmil	Aluminum Conductors Symbol for X	
		Strand./Compr.	Compt./Solid.
#4	2AX	–	
#2	1AX	2AX	
#1	0AX	1AX	
1/0	10AX	0AX	
2/0	20AX	10AX	
3/0	30AX	20AX	
4/0	40AX	30AX	
250	–	40AX	
Conductor AGW or kcmil	Copper Conductors Symbol for X		
	Strand./Compr.	Compt./Solid.	
#6	3	–	
#4	2	3	
#2	1	2	
#1	0	1	
1/0	10	0	
2/0	20	10	
3/0	30	20	
4/0	40	30	
250	–	4	

Table X6 USE FOR FOLLOWING PRODUCTS 655/656LRTP K655/656LRTP 755/756LRTP K656I/Y/H K655/656LR 755/756LR K655/656SR 655/656LINK K655/656LINK 755/756LINK 655/656ETP K655/656ETP 755/756ETP 655/656BI-LINK K655/656BI-LINK 755BI-LINK 655CK 755CK 655TCK 03600 03602 03700 03702	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
1/0	240	230	
2/0	250	240	
3/0	260	250	
4/0	270	260	
250	280	270	
300	290	280	
350	300	290	
400	310	300	
450	320	310	
500	330	320	
550	340	320	
600	350	330	
650	360	340	
700	380	350	
750	380	360	
800	390	360	
900	400	380	
1000	410	400	
1250	440	420	

Table X7 USE FOR FOLLOWING PRODUCTS 15PCJ1 25PCJ1 35PCJ1 15PCJ2 25PCJ2 35PCJ2	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
#6	180	–	
#5	190	180	
#4	200	190	
#3	210	200	
#2	220	210	
#1	230	220	
1/0	240	230	
2/0	250	240	
3/0	260	250	
4/0	270	260	
250	280	270	
300	290	280	
350	300	290	
400	310	300	
450	320	310	
500	330	310	
550	340	320	
600	350	330	
650	360	340	
700	380	350	
750	380	360	
800	390	380	
900	400	380	
1000	410	400	
1250	440	420	

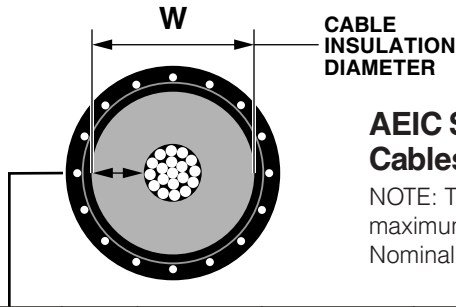
Table X8 USE FOR FOLLOWING PRODUCT 16THG 16TCA	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
#6	180	–	
#5	190	180	
#4	200	190	
#3	210	200	
#2	220	210	
#1	230	220	
1/0	240	230	
2/0	250	240	
3/0	260	250	
4/0	270	260	

Table X9 USE FOR FOLLOWING PRODUCTS PCT1 PCT2 01000 01010	Conductor Size AWG or kcmil	Symbol for X	
		Strand./Compr.	Compt./Solid.
#2	220	210	
#1	230	220	
#1	1230*	–	
1/0	240	230	
1/0	1240*	1230*	
2/0	250	240	
2/0	1250*	–	
3/0	260	250	
3/0	1260*	1250*	
4/0	270	260	
4/0	1270*	1260*	

\*For aluminum conductor only.



# AEIC CABLE INSULATION DIAMETER REFERENCE



## AEIC Standard Insulation Diameters for XLP and EPR Insulated Cables with .175, .220, .260 or .345 inch wall thickness.

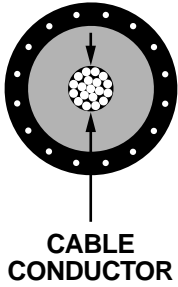
NOTE: The insulation diameters shown are nominal. Add  $\pm .030$  inch tolerance to calculate maximum and minimum diameters. Example .220 inch wall, 4/0 stranded conductor cable: Nominal Diameter = 1.030"; Maximum Diameter = 1.060"; Minimum Diameter = 1.000"

AWG or kcMil	Insulation Wall Thickness Inches	Voltage Class	w/stranded conductor	w/compressed conductor	w/compact or solid conductor
			Insulation Dia. (Inches)	Insulation Dia. (Inches)	Insulation Dia. (Inches)
#2 Solid	.175	15kV	—	—	.670
	.220	15kV	—	—	.760
	.260	25kV	—	—	—
	.345	35kV	—	—	—
#2	.175	15kV	.700	.695	.680
	.220	15kV	.790	.785	.770
	.260	25kV	—	—	—
	.345	35kV	—	—	—
#1 Solid	.175	15kV	—	—	.700
	.220	15kV	—	—	.790
	.260	25kV	—	—	.870
	.345	35kV	—	—	—
#1	.175	15kV	.740	.730	.710
	.220	15kV	.830	.820	.800
	.260	25kV	.910	.900	.880
	.345	35kV	—	—	—
1/0 Solid	.175	15kV	—	—	.735
	.220	15kV	—	—	.825
	.260	25kV	—	—	.905
	.345	35kV	—	—	1.075
1/0	.175	15kV	.785	.770	.745
	.220	15kV	.875	.860	.835
	.260	25kV	.955	.940	.915
	.345	35kV	1.125	1.110	1.085
2/0	.175	15kV	.830	.815	.785
	.220	15kV	.920	.905	.875
	.260	25kV	1.000	.985	.955
	.345	35kV	1.170	1.155	1.125
3/0	.175	15kV	.880	.865	.835
	.220	15kV	.970	.955	.925
	.260	25kV	1.050	1.035	1.005
	.345	35kV	1.220	1.205	1.175
4/0	.175	15kV	.940	.920	.885
	.220	15kV	1.030	1.010	.975
	.260	25kV	1.110	1.090	1.055
	.345	35kV	1.280	1.260	1.225
250	.175	15kV	.995	.980	.940
	.220	15kV	1.085	1.070	1.030
	.260	25kV	1.175	1.160	1.120
	.345	35kV	1.350	1.335	1.295
350	.175	15kV	1.100	1.080	1.035
	.220	15kV	1.190	1.170	1.125
	.260	25kV	1.280	1.260	1.215
	.345	35kV	1.455	1.435	1.390

AWG or kcMil	Insulation Wall Thickness Inches	Voltage Class	w/stranded conductor	w/compressed conductor	w/compact or solid conductor
			Insulation Dia. (Inches)	Insulation Dia. (Inches)	Insulation Dia. (Inches)
500	.175	15kV	1.235	1.210	1.155
	.220	15kV	1.325	1.300	1.245
	.260	25kV	1.415	1.390	1.335
	.345	35kV	1.590	1.565	1.510
600	.175	15kV	1.325	1.295	1.245
	.220	15kV	1.415	1.385	1.335
	.260	25kV	1.505	1.475	1.425
	.345	35kV	1.680	1.650	1.600
700	.175	15kV	1.395	1.365	1.305
	.220	15kV	1.485	1.455	1.395
	.260	25kV	1.575	1.545	1.485
	.345	35kV	1.750	1.720	1.660
750	.175	15kV	1.430	1.400	1.340
	.220	15kV	1.520	1.490	1.430
	.260	25kV	1.610	1.580	1.520
	.345	35kV	1.785	1.755	1.695
800	.175	15kV	1.460	1.430	1.370
	.220	15kV	1.550	1.520	1.460
	.260	25kV	1.640	1.610	1.550
	.345	35kV	1.815	1.785	1.725
900	.175	15kV	1.525	1.490	1.430
	.220	15kV	1.615	1.580	1.520
	.260	25kV	1.705	1.670	1.610
	.345	35kV	1.880	1.845	1.785
1000	.175	15kV	1.580	1.545	1.490
	.220	15kV	1.670	1.635	1.580
	.260	25kV	1.760	1.725	1.670
	.345	35kV	1.935	1.900	1.845

Note: If the cable is constructed to the new ICEA standard, refer to the cable manufacturer's spec sheet for dimensions.

# CABLE CONDUCTOR DIAMETER REFERENCE



## Conductor Diameters for Copper and Aluminum (Class B) Stranded, Compressed, Compact and Solid Cables




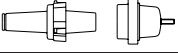

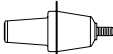


Conductor Size AWG or kcmil	No. of Strands and their Nom. Strand Dia. (in.)	Cross-sectional Area		Stranded Conductors (Inches)	Compressed Conductors (Inches)	Compact Conductors (Inches)	Solid Conductors (Inches)
		Square Inches	mm <sup>2</sup> Conversion				
14	7 x .0242	.0032	2.08	.073	—	—	.064
12	7 x .0305	.0051	3.31	.092	—	—	.081
10	7 x .0385	.0082	5.26	.116	—	—	.102
8	7 x .0486	.0130	8.37	.146	—	—	.129
6	7 x .0612	.0206	13.30	.184	—	—	.162
4	7 x .0772	.0328	21.15	.232	—	—	.204
2	7 x .0974	.0521	33.62	.292	.283	.268	.258
1	19 x .0664	.0657	42.41	.332	.322	.299	.289
1/0	19 x .0745	.0829	53.49	.373	.362	.336	.325
2/0	19 x .0837	.1054	67.43	.418	.405	.376	—
3/0	19 x .0940	.1318	85.01	.470	.456	.423	—
4/0	19 x .1055	.1662	107.2	.528	.512	.475	—
250	37 x .0822	.1964	127	.575	.558	.520	—
350	37 x .0973	.2749	177	.681	.661	.616	—
500	37 x .1162	.3924	253	.813	.789	.736	—
600	61 x .0992	.4712	304	.893	.866	.813	—
700	61 x .1071	.5498	355	.964	.935	.877	—
750	61 x .1109	.5890	380	.998	.968	.908	—
800	61 x .1145	.6283	405	1.031	1.000	.938	—
900	61 x .1215	.7069	456	1.094	1.061	.999	—
1000	61 x .1280	.7854	507	1.152	1.117	1.060	—
1100	91 x .1099	.8639	557	1.209	1.173	—	—
1200	91 x .1148	.9425	608	1.263	1.225	—	—
1250	91 x .1172	.9818	633	1.289	1.250	—	—
1300	91 x .1195	1.021	659	1.315	1.276	—	—
1400	91 x .1240	1.100	709	1.364	1.323	—	—
1500	91 x .1284	1.178	760	1.412	1.370	—	—
1600	127 x .1122	1.257	811	1.459	1.415	—	—
1700	127 x .1157	1.335	861	1.504	1.459	—	—
1750	127 x .1174	1.374	887	1.526	1.480	—	—
1800	127 x .1191	1.414	912	1.548	1.502	—	—
1900	127 x .1223	1.492	963	1.590	1.542	—	—
2000	127 x .1225	1.571	1010	1.632	1.583	—	—



# EQUIPMENT BUSHINGS

Elastimold manufactures a complete line of 200 Amp deepwell and 600 Series apparatus bushings for use on transformers, switchgear and other equipment applications. The bushings incorporate IEEE 386 standard interfaces (shown on page 3) and are constructed of molded epoxy with stainless steel flanges for mounting by welding or gasketed clamp. K1601PCC series bushings are provided with a

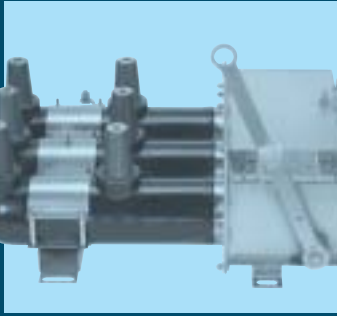
molded epoxy flange for gasketed clamp mounting only. Bushings are available for use on AIR, OIL or SF6 insulated equipment. Units are rated for submersible, padmount, indoor, outdoor and other applications. Options include hold-down bail tabs and replaceable studs for 200 Amp deepwell bushings.

Illustration (not to scale)	Description	Voltage Class	ELASTIMOLD Part Number	Bushing Shank Length	Notes
	Short Shank Well with bail tabs and non-replaceable well stud	15/25kV 35kV	<b>K1601PC-S1</b> <b>L1601PC-S1</b>	2 3/4"	N3,7,14
	Short Shank Well with bail tabs and with replaceable well stud	15/25kV 35kV	<b>K1601PC-S1-R</b> <b>L1601PC-S1-R</b>	2 3/4"	N1,3,7,14
	Short Shank Well without bail tabs and non-replaceable well stud	15/25kV 35kV	<b>K1601PC-S2</b> <b>L1601PC-S2</b>	2 3/4"	N3,7,14
	Short Shank Well without bail tabs and with replaceable well stud	15/25kV 35kV	<b>K1601PC-S2-R</b> <b>L1601PC-S2-R</b>	2 3/4"	N1,3,7,14
	Long Shank Well with bail tabs and non-replaceable well stud	15/25kV 35kV	<b>K1601PC-T1</b> <b>L1601PC-T1</b>	9 1/4"	N3,7,14
	Long Shank Well with bail tabs and with replaceable well stud	15/25kV 35kV	<b>K1601PC-T1-R</b> <b>L1601PC-T1-R</b>	9 1/4"	N1,3,7,14
	Long Shank Well without bail tabs and non-replaceable well stud	15/25kV 35kV	<b>K1601PC-T2</b> <b>L1601PC-T2</b>	9 1/4"	N3,7,14
	Long Shank Well without bail tabs and with replaceable well stud	15/25kV 35kV	<b>K1601PC-T2-R</b> <b>L1601PC-T2-R</b>	9 1/4"	N1,3,7,14
	Epoxy Flange Well	15/25kV	<b>K1601PCC</b>	2 3/4"	N3,7,14
	Epoxy Flange Well with replaceable well stud	15/25kV	<b>K1601PCC-R</b>	2 3/4"	N1,3,7,14
	Well w/Insert (K1601PCC-R & 1601A4)	15kV	<b>1601CABA4R</b>	2 3/4"	N1,3,8,14
	Well w/Insert (K1601PCC-R & 2701A4)	25kV	<b>2701CABA4R</b>	2 3/4"	N1,3,9,14
	200 A Deadbreak Bushing	15/25kV	<b>K180S4</b>	2 9/16"	N3,10,13
	200 A Deadbreak Bushing	15/25kV	<b>K180T4</b>	7 11/32"	
	200 A Deadbreak Bushing	15/25kV	<b>K180C4</b>	9 1/4"	
	600 A Short Shank Bushing w/stud	15/25kV	<b>K600S1</b>	2 15/16"	N2,4,11,14
	600 A Short Shank Bushing w.o./stud	15/25kV	<b>K650S1</b>		N2,5,11,14
	600 A Short Shank Bushing w.o./stud	35kV	<b>750S1</b>		N2,5,12,14
	600 A Cu Short Shank Bushing w.o./stud	15/25kV	<b>K675S1</b>		N3,5,11,14
	600 A Long Shank Bushing w/stud	15/25kV	<b>K600T1</b>	8 9/16"	N2,4,11,14
	600 A Long Shank Bushing w.o./stud	15/25kV	<b>K650T1</b>	8 9/16"	N2,5,11,14
	600 A Cu Long Shank Bushing w.o./stud	15/25kV	<b>K675T1</b>	8 9/16"	N3,5,11,14
	600 A 12" Long Shank Bushing w/stud	15/25kV	<b>K600L12</b>	12"	N2,4,11,14
	600 A Long Shank Bushing w.o./stud	35kV	<b>750T1</b>	8 9/16"	N2,5,12,14
	600 A 12" Long Shank Bushing w.o./stud	35kV	<b>750L12</b>	12"	N2,5,12,14
	600 A In-Air Long Shank Bushing w/stud	15/25kV	<b>K600TBC</b>	8 9/16"	N2,4,11,6,14
	600 A Cu In-Air Long Shank Bush. w/stud	15/25kV	<b>K675TBC</b>		N3,5,11,6,14
	Boot & Collars for K600T1 to use in air	15/25kV	<b>600BC</b>		N6

- N1. Replacement stud available separately. Specify 1601RS.
- N2. Equipped with standard aluminum conductor rod.
- N3. Equipped with copper conductor rod.
- N4. Includes 5/8-11 threaded stud at elbow end.
- N5. Includes 5/8-11 threaded hole at elbow end.
- N6. Provides increased creep and strike.
- N7. Includes 1601PPC1 shipping cap.
- N8. Includes 1601APC1 shipping cap.

- N9. Includes 2701-41 shipping cap.
- N10. Includes 180PPC shipping cap.
- N11. Includes 650PPC shipping cap.
- N12. Includes 750PPC1 shipping cap.
- N13. Parking stands for 200A deadbreak applications are available as separate items. Specify 151PS.
- N14. Parking stands for 200A loadbreak and 600A deadbreak applications are available as separate items. Specify 160PS.





**MVS**  
Molded Vacuum  
Switches



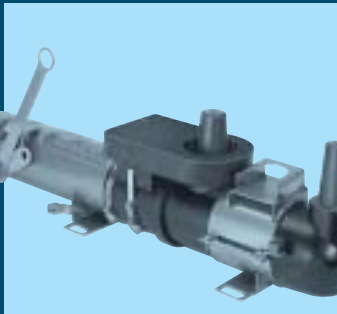
**MCAN**  
Molded Fuse Canister



**MVS -UAD**  
Underground  
Automated  
Distribution  
Controller



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Molded Current Limiting  
Fuses



**MVI**  
Molded Vacuum Fault  
Interrupters



**FLR**  
15kV Fused Loadbreak  
Elbow



**MPJ**  
Molded Multi-Point  
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