
PRODUCT SHEET

Elastimold® advanced connection system (shear bolt)



Elastimold® cable accessories

The Elastimold advanced connection system - shear bolt is the latest solution to be incorporated into the Elastimold portfolio of separable connectors. It's consistent with the system's overall purpose in providing safe, reliable and flexible separable connectors for underground cable.



01 Elastimold advanced connection system

02 Shear bolt
EACT-0750, EACT-1250

03 Shear bolt
EACT-0300, EACT-0500

Overview

Reliable solution that reduces the likelihood of human error. Bolt heads shear off at the right torque with a standard wrench. Leaves a smooth, flush finish with no protruding edges.

- Simplifies and speeds installations. Only a standard wrench is needed; no dies or pneumatic tools
- Only four range-taking shear bolt connectors are needed to accommodate multiple wire sizes #2AWG to 1250kcmil
- Applicable for 600 amp and 900 amp current rating
- Compatible with aluminum and copper conductors

Applications

Shear bolt connectors are available in a range-taking selection of four sizes, which substantially reduces the chance of accidentally installing the wrong connector.

- IEEE 386 separable connectors
- 600/900 Amp elbow connectors, vault stretchers and straight receptacles from 15kV up to 35kV
- Aluminum or copper conductors
- Cables from #2 AWG to 1250 kcmil

Installation

Installation with a standard wrench and no additional components, as well as easy shearing at the correct torque, make the Elastimold advanced connection system – shear bolt quickly installed to save time and resources.

- The circuit must be de-energized before installation
- Brush conductor to break up the oxide layer
- Fully insert conductor into barrel
- Torque bolts steadily with tool until head shears off, beginning with bolt farthest from the connector head and working up.
- Follow detailed instructions provided along the product

Benefits

Safety

- Improves installation ergonomics, eliminating the use of heavy tools

Reliability

- Meets IEEE386 latest revision
- No filing or extra components needed
- Electro tin plated
- Lubricated with special grease
- The head will always shear off at the required torque
- Special design with grooves for an optimal contact

Flexibility

- Compatible with Elastimold® T-Body, vault stretcher and straight receptacles
- Range taking in each connector
- Installation using a standard wrench and socket
- Designed and tested for use on both aluminum and copper conductors
- Self-centering rings for lower diameter conductor for each connector

Leaves a smooth finish that fits flush against the body of the connector - no sharp edges.

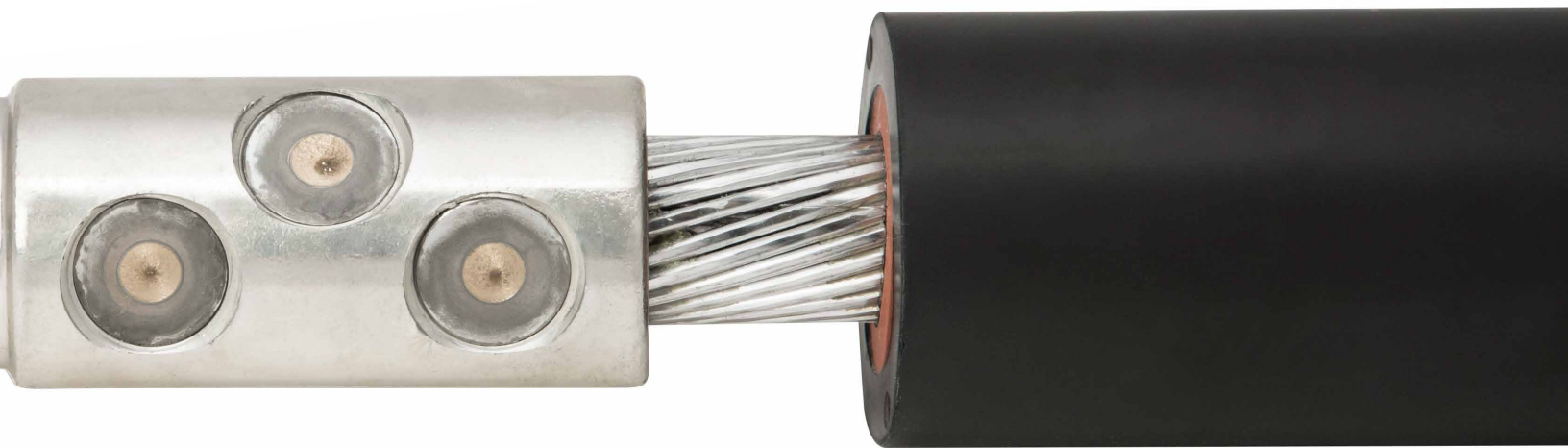




Stand alone shear bolt connectors

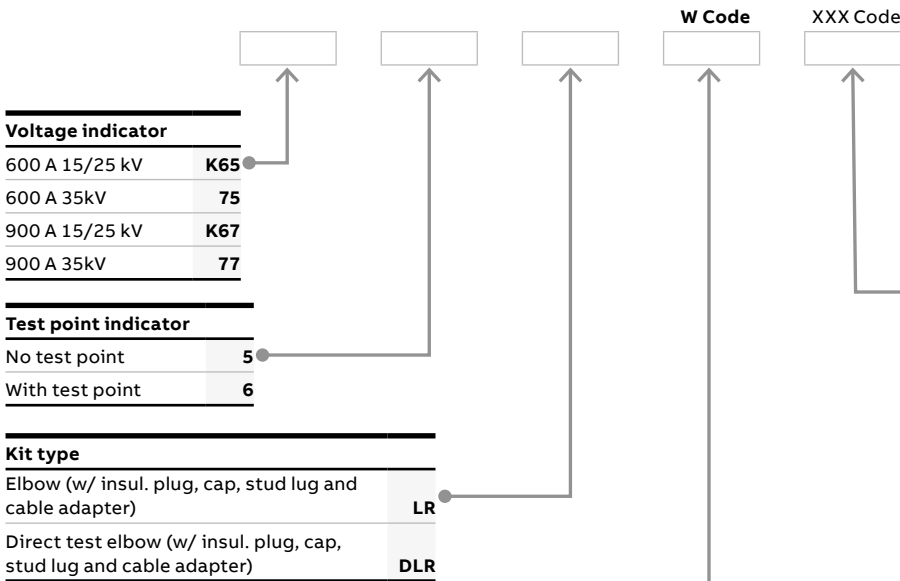
| Conductor size | A | | B | | C | | D | | Part number | Drawing |
|------------------|------|----|------|-------|------|----|-------|------|-------------|---------|
| | in | mm | in | mm | in | mm | in | mm | | |
| #2 -300 kCMIL | 1.18 | 30 | 4.13 | 105 | 1.42 | 36 | 0.689 | 17.5 | EACT-0300 | |
| 4/0 - 500 kCMIL | 1.3 | 33 | 4.67 | 118.5 | 1.42 | 36 | 0.689 | 17.5 | EACT-0500 | |
| 350 -750 kCMIL | 1.65 | 42 | 5.83 | 148 | 1.42 | 36 | 0.689 | 17.5 | EACT-0750 | |
| 750 - 1250 kCMIL | 2.05 | 52 | 6.1 | 155 | 1.38 | 35 | 0.689 | 17.5 | EACT-1250 | |

Note: To hold the connector securely in place during the shearing process, it is recommended to use the connector vise, part number CV1000.



Ordering information

Option T-Body



| Voltage indicator | |
|-------------------|------------|
| 600 A 15/25 kV | K65 |
| 600 A 35kV | 75 |
| 900 A 15/25 kV | K67 |
| 900 A 35kV | 77 |

| Test point indicator | |
|----------------------|----------|
| No test point | 5 |
| With test point | 6 |

| Kit type | |
|---|------------|
| Elbow (w/ insul. plug, cap, stud lug and cable adapter) | LR |
| Direct test elbow (w/ insul. plug, cap, stud lug and cable adapter) | DLR |

Cable adapter sizing for 15/25 kV
Table W7

| Cable insulation dia. range | | | | |
|-------------------------------------|-------|--|------|--------------|
| Cable insulation diameter in inches | | Cable insulation diameter in millimeters | | Symbol for W |
| min | max | min | max | |
| 0.42 | 0.66 | 10.7 | 16.8 | D |
| 0.53 | 0.68 | 13.5 | 17.3 | E |
| 0.64 | 0.82 | 16.3 | 20.8 | F |
| 0.76 | 0.95 | 19.3 | 24.1 | G |
| 0.85 | 1.05 | 21.6 | 26.7 | H |
| 0.98 | 1.18 | 24.9 | 4.6 | J |
| 1.09 | 1.31 | 27.7 | 33.3 | K |
| 1.18 | 1.465 | 30 | 37.2 | L |
| 1.28 | 1.43 | 32.5 | 36.3 | LM |
| 1.37 | 1.63 | 34.8 | 41.4 | M |
| 1.55 | 1.78 | 39.4 | 45.2 | N |
| 1.725 | 1.935 | 43.8 | 49.1 | P |

Cable adapter sizing for 35 kV
Table W9

| Cable insulation dia. range | | | | |
|-------------------------------------|-------|--|------|--------------|
| Cable insulation diameter in inches | | Cable insulation diameter in millimeters | | Symbol for W |
| min | max | min | max | |
| 0.76 | 0.95 | 19.3 | 24.1 | G |
| 0.85 | 1.05 | 21.6 | 26.7 | H |
| 0.98 | 1.18 | 24.9 | 30 | J |
| 1.09 | 1.31 | 27.7 | 33.3 | K |
| 1.18 | 1.465 | 30 | 37.2 | L |
| 1.37 | 1.63 | 34.8 | 41.4 | M |
| 1.515 | 1.78 | 38.5 | 45.2 | N |
| 1.725 | 1.935 | 43.8 | 49.1 | P |
| 1.9 | 2.12 | 48.3 | 53.8 | Q |
| 2.115 | 2.235 | 53.7 | 56.8 | R |



Connector sizing

| Table X | | AWG or kcmil | | Code |
|---|--|--------------|--|------|
| Stranded/ compressed/ solid/compact | | | | |
| #2 | | | | |
| #1 | | | | |
| 1/0 | | | | |
| 2/0 | | | | |
| 3/0 | | | | |
| 4/0 | | | | |
| 250 | | | | |
| 300 | | | | |
| 350 | | | | |
| 400 | | | | |
| 450 | | | | |
| 500 | | | | |
| 550 | | | | |
| 600 | | | | |
| 650 | | | | |
| 700 | | | | |
| 750 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |
| 1250 | | | | |

01
T-Body 600 amp LR kit

Catalog number selection

Step 1

- Select voltage class and ampacity
- Select the option of capacity test point (with or without)
- Select the kit type

Step 2 (W)

- According to the voltage class, select the right code for W, for 15/25kV system use table W7 and for 35kV use table W9

Step 3 (X)

- Choose the proper shear bolt lug code according to the conductor size from the conductor code table
- Insert the code into catalog number

LR and DLR Kit Contains

- 1 Elbow connector housing
- 1 Shear bolt lug
- 1 Stud
- 1 Insulated Plug w/ Cap
- 3 Tube, lubricant
- 1 Cable adapter

Ordering information

Separable cable joints

W Code XXX Code

[] - []

Voltage indicator

| | |
|----------------|-------------|
| 600 A 15/25 kV | K656 |
| 600 A 35kV | M656 |

Kit type

| | |
|--------|-----------|
| 2 Ways | I |
| 3 Ways | CY |
| 4 Ways | CH |

Spiking aid option

| | |
|-----|--------------|
| Yes | SL |
| No | blank |

Cable adapter sizing for 15/25 kV

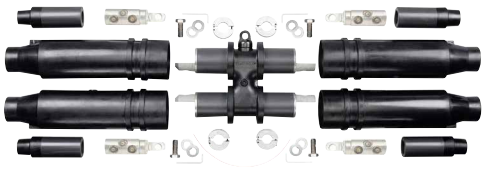
Table W7

| Cable insulation dia. range | | Cable insulation diameter in millimeters | | Symbol for W |
|-----------------------------|-------|--|------|--------------|
| min | max | min | max | |
| 0.42 | 0.66 | 10.7 | 16.8 | D |
| 0.53 | 0.68 | 13.5 | 17.3 | E |
| 0.64 | 0.82 | 16.3 | 20.8 | F |
| 0.76 | 0.95 | 19.3 | 24.1 | G |
| 0.85 | 1.05 | 21.6 | 26.7 | H |
| 0.98 | 1.18 | 24.9 | 30 | J |
| 1.09 | 1.31 | 27.7 | 33.3 | K |
| 1.18 | 1.465 | 30 | 37.2 | L |
| 1.28 | 1.43 | 32.5 | 36.3 | LM |
| 1.37 | 1.63 | 34.8 | 41.4 | M |
| 1.55 | 1.78 | 39.4 | 45.2 | N |
| 1.725 | 1.935 | 43.8 | 49.1 | P |

Cable adapter sizing for 35 kV

Table W9

| Cable insulation dia. range | | Cable insulation diameter in millimeters | | Symbol for W |
|-----------------------------|-------|--|------|--------------|
| min | max | min | max | |
| 0.76 | 0.95 | 19.3 | 24.1 | G |
| 0.85 | 1.05 | 21.6 | 26.7 | H |
| 0.98 | 1.18 | 24.9 | 30 | J |
| 1.09 | 1.31 | 27.7 | 33.3 | K |
| 1.18 | 1.465 | 30 | 37.2 | L |
| 1.37 | 1.63 | 34.8 | 41.4 | M |
| 1.515 | 1.78 | 38.5 | 45.2 | N |
| 1.725 | 1.935 | 43.8 | 49.1 | P |
| 1.9 | 2.12 | 48.3 | 53.8 | Q |
| 2.115 | 2.235 | 53.7 | 56.8 | R |



Connector sizing

Table X

| AWG or kcmil | Code |
|--------------------------------------|-------------|
| Stranded/ compressed/ solid/ compact | |
| #2 | AC01 |
| #1 | |
| 1/0 | |
| 2/0 | |
| 3/0 | AC02 |
| 4/0 | |
| 250 | |
| 300 | |
| 350 | AC03 |
| 400 | |
| 450 | |
| 500 | |
| 550 | AC04 |
| 600 | |
| 650 | |
| 700 | |
| 750 | |
| 800 | |
| 900 | |
| 1000 | |
| 1250 | |

01
4 Ways compact H shown

Catalog number selection

Step 1

- Select voltage class
- Select the kit type
- Select spiking aid option

Step 2 (W)

- According to the voltage class, select the right code for W, for 15/25kV system use table W7 and for 35kV use table W9

Step 3 (X)

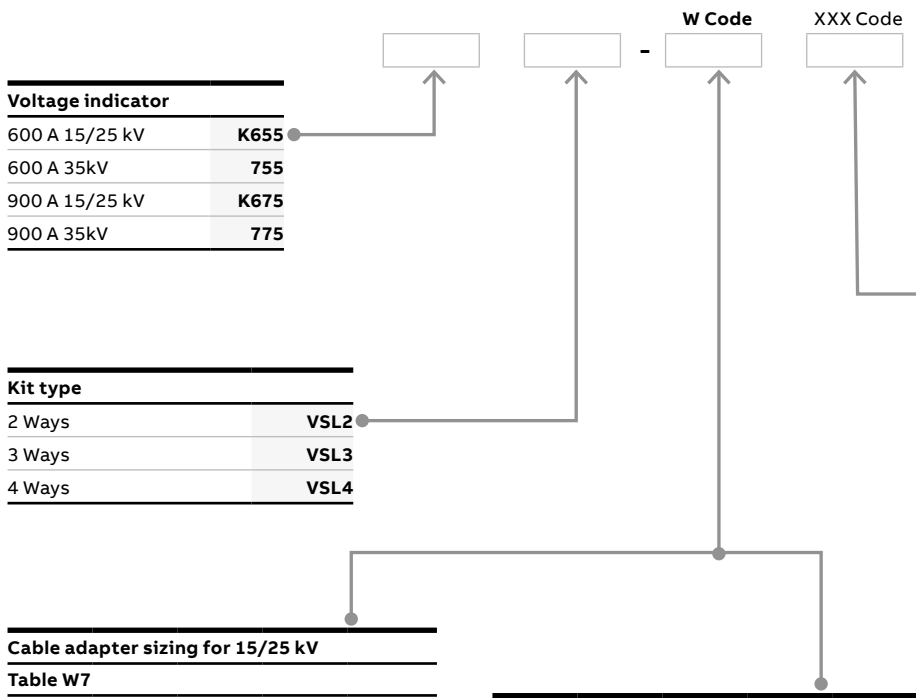
- Choose the proper shear bolt lug code according to the conductor size from the conductor size table
- Insert the code into catalog number

Each bus bar kit contains

| | 2 Ways | 3 Ways | 4 Ways |
|------------------------|--------|--------|--------|
| Bus housing | "I" | "CY" | "CH" |
| Straight receptacle | 2 | 3 | 4 |
| Aluminum shear bolt | 2 | 3 | 4 |
| Adapter retaining ring | 2 | 3 | 4 |
| Cable adapter | 2 | 3 | 4 |

Ordering information

Vault stretcher

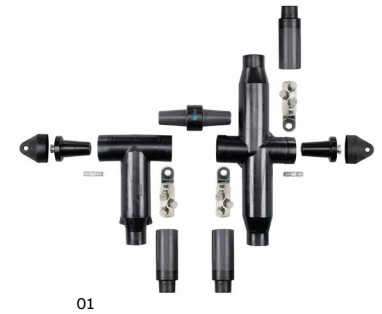


| Voltage indicator | |
|-------------------|-------------|
| 600 A 15/25 kV | K655 |
| 600 A 35kV | 755 |
| 900 A 15/25 kV | K675 |
| 900 A 35kV | 775 |

| Kit type | |
|----------|-------------|
| 2 Ways | VSL2 |
| 3 Ways | VSL3 |
| 4 Ways | VSL4 |

| Cable adapter sizing for 15/25 kV | | | | |
|-------------------------------------|-------|--|------|--------------|
| Table W7 | | | | |
| Cable insulation dia. range | | | | |
| Cable insulation diameter in inches | | Cable insulation diameter in millimeters | | Symbol for W |
| min | max | min | max | |
| 0.42 | 0.66 | 10.7 | 16.8 | D |
| 0.53 | 0.68 | 13.5 | 17.3 | E |
| 0.64 | 0.82 | 16.3 | 20.8 | F |
| 0.76 | 0.95 | 19.3 | 24.1 | G |
| 0.85 | 1.05 | 21.6 | 26.7 | H |
| 0.98 | 1.18 | 24.9 | 4.6 | J |
| 1.09 | 1.31 | 27.7 | 33.3 | K |
| 1.18 | 1.465 | 30 | 37.2 | L |
| 1.28 | 1.43 | 32.5 | 36.3 | LM |
| 1.37 | 1.63 | 34.8 | 41.4 | M |
| 1.55 | 1.78 | 39.4 | 45.2 | N |
| 1.725 | 1.935 | 43.8 | 49.1 | P |

| Cable adapter sizing for 35 kV | | | | |
|-------------------------------------|-------|--|------|--------------|
| Table W9 | | | | |
| Cable insulation dia. range | | | | |
| Cable insulation diameter in inches | | Cable insulation diameter in millimeters | | Symbol for W |
| min | max | min | max | |
| 0.76 | 0.95 | 19.3 | 24.1 | G |
| 0.85 | 1.05 | 21.6 | 26.7 | H |
| 0.98 | 1.18 | 24.9 | 30 | J |
| 1.09 | 1.31 | 27.7 | 33.3 | K |
| 1.18 | 1.465 | 30 | 37.2 | L |
| 1.37 | 1.63 | 34.8 | 41.4 | M |
| 1.515 | 1.78 | 38.5 | 45.2 | N |
| 1.725 | 1.935 | 43.8 | 49.1 | P |
| 1.9 | 2.12 | 48.3 | 53.8 | Q |
| 2.115 | 2.235 | 53.7 | 56.8 | R |



01
Stacked vault stretcher 3 ways Kit

Catalog number selection

Step 1

- Select voltage class and ampacity
- Select the kit type

Step 2 (W)

- According to the voltage class, select the right code for W, for 15/25kV system use table W7 and for 35kV use table W9

Step 3 (X)

- Choose the proper shear bolt lug code according to the conductor size from the conductor code table
- Insert the code into catalog number

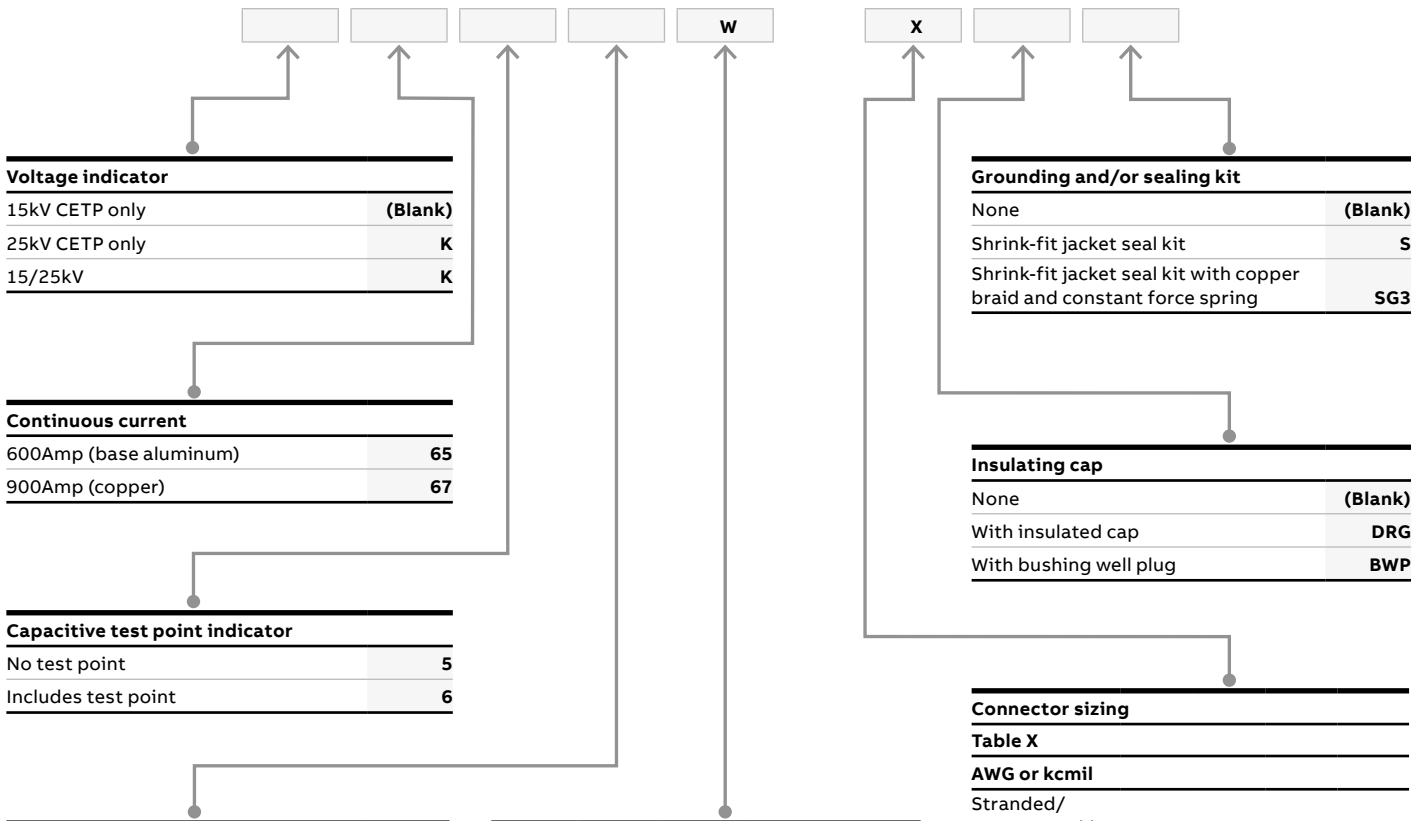
| Connector sizing | |
|---|-------------|
| Table X | |
| AWG or kcmil | |
| Stranded/ compressed/ solid/compact | Code |
| #2 | AC01 |
| #1 | |
| 1/0 | |
| 2/0 | |
| 3/0 | |
| 4/0 | AC02 |
| 250 | |
| 300 | |
| 350 | |
| 400 | |
| 450 | AC03 |
| 500 | |
| 550 | |
| 600 | |
| 650 | |
| 700 | AC04 |
| 750 | |
| 800 | |
| 900 | |
| 1000 | |
| 1250 | |

Each vault stretcher kit contains

| | 2 Ways | 3 Ways | 4 Ways |
|-------------------------|--------|--------|--------|
| Vault stretcher housing | 1 | 1 | 2 |
| T-Body housing | | 1 | |
| Aluminum shear bolt | 2 | 3 | 4 |
| Connecting plug | | 1 | 1 |
| Cable adapter | 2 | 3 | 4 |
| Insulated plug with cap | 2 | 2 | 2 |

Ordering information

Combo T



| Voltage indicator | |
|-------------------|---------|
| 15kV CETP only | (Blank) |
| 25kV CETP only | K |
| 15/25kV | K |

| Continuous current | |
|------------------------|----|
| 600Amp (base aluminum) | 65 |
| 900Amp (copper) | 67 |

| Capacitive test point indicator | |
|---------------------------------|---|
| No test point | 5 |
| Includes test point | 6 |

| Kit type | |
|--|-------|
| Basic Combo T elbow reducing tap plug with stud | BCETP |
| Combo T elbow reducing tap plug with stud, cable adapter, lug, and insulated cap kit | CETP |
| Basic Combo T connecting plug with stud | BCCP |
| Combo T connecting plug with stud, cable adapter, and lug kit | CCP |
| Basic Combo T bushing well with stud | BCBW |
| Combo T bushing well with stud, cable adapter, and lug kit | CBW |

Cable adapter sizing for 15/25 kV

| Table W7 | | | | | |
|-------------------------------------|-------------------------------------|------|--|-----|--------------|
| Cable insulation dia. range | | | | | |
| Cable insulation diameter in inches | Cable insulation diameter in inches | | Cable insulation diameter in millimeters | | Symbol for W |
| | min | max | min | max | |
| 0.42 | 0.66 | 10.7 | 16.8 | | D |
| 0.53 | 0.68 | 13.5 | 17.3 | | E |
| 0.64 | 0.82 | 16.3 | 20.8 | | F |
| 0.76 | 0.95 | 19.3 | 24.1 | | G |
| 0.85 | 1.05 | 21.6 | 26.7 | | H |
| 0.98 | 1.18 | 24.9 | 4.6 | | J |
| 1.09 | 1.31 | 27.7 | 33.3 | | K |
| 1.18 | 1.465 | 30 | 37.2 | | L |
| 1.28 | 1.43 | 32.5 | 36.3 | | LM |
| 1.37 | 1.63 | 34.8 | 41.4 | | M |
| 1.55 | 1.78 | 39.4 | 45.2 | | N |
| 1.725 | 1.935 | 43.8 | 49.1 | | P |

| Grounding and/or sealing kit | |
|--|---------|
| None | (Blank) |
| Shrink-fit jacket seal kit | S |
| Shrink-fit jacket seal kit with copper braid and constant force spring | SG3 |

| Insulating cap | |
|------------------------|---------|
| None | (Blank) |
| With insulated cap | DRG |
| With bushing well plug | BWP |

Connector sizing

| Table X | |
|---|------|
| AWG or kcmil | |
| Stranded/ compressed/ solid/ compact | Code |
| #2 | AC01 |
| #1 | |
| 1/0 | |
| 2/0 | |
| 3/0 | AC02 |
| 4/0 | |
| 250 | |
| 300 | |
| 350 | AC03 |
| 400 | |
| 450 | |
| 500 | |
| 550 | AC04 |
| 600 | |
| 650 | |
| 700 | |
| 750 | |
| 800 | |
| 900 | |
| 1000 | |
| 1250 | |

01
Elastimold advanced connection system





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