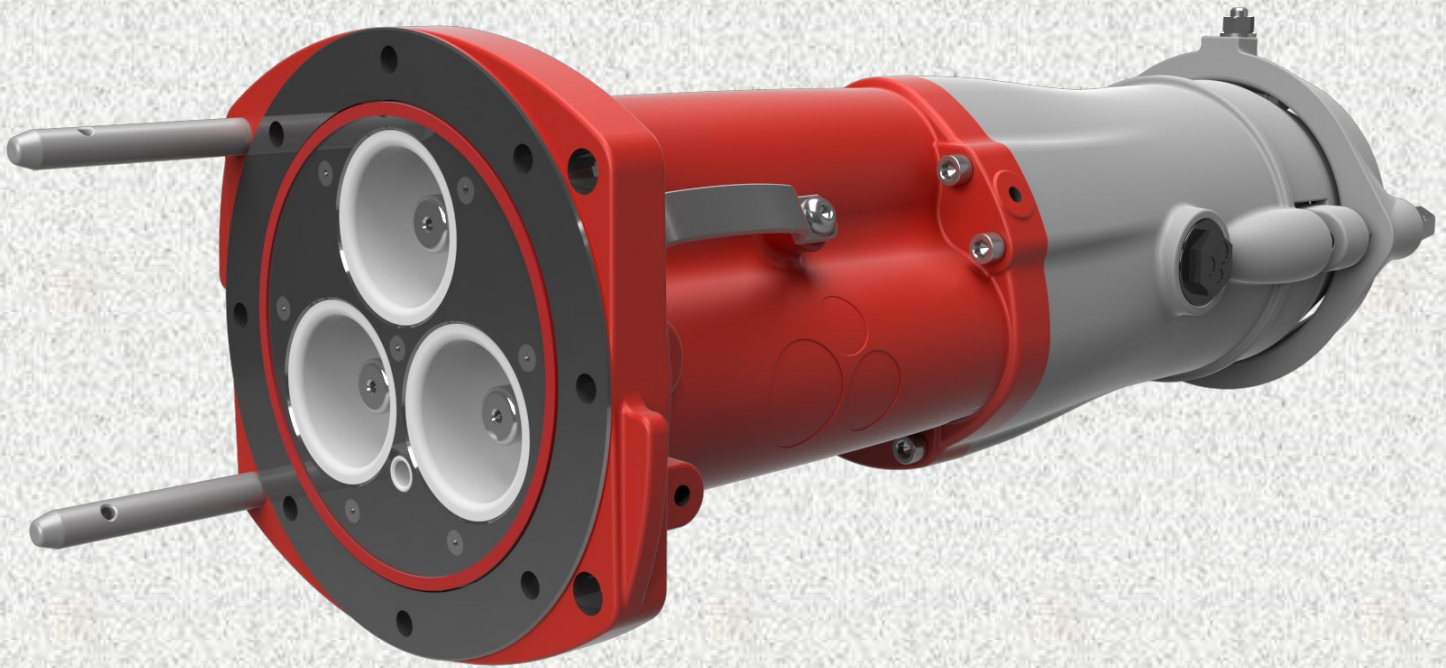




11kV 800 AMP 8 Bolt KA Style Coupler

118BKA - Range



Pioneering the Difference.

The AusProof high voltage coupler and adaptor system demonstrates state of the art technology with an innovative design which becomes homogeneous with the cable when terminated. The design offers a continued earth shield, segregating the three phases and maintains the same Symmetrical radial distribution of voltage stress, as in the cable design. This eliminates the risk of a phase to phase fault.

The face profile and silicon rubber connector expels all air when connected, eliminating condensation, dust and corona. The type tests performed were all based on high voltage, cable specification requirements, and the results prove; that the coupler is as good as the cable.

Electrical Type Test Results

11kV 800A Coupler

Through Fault Current

20kA for 0.3 Seconds
20kA for 0.3 Seconds
20kA for 1.0 Seconds
At 10 Minutes Intervals

A/C High Voltage Withstand

24kV for 1 Minute
50kV for 1 Minute
35kV for 6 Hours

Impulse Voltage

95kV - 10 POS and 10 NEG
110kV - 10 POS and 10 NEG

Partial Discharge

Prior to 6 Hour:
High Voltage Withstand: 10pC
Post 6 Hour:
High Voltage Withstand: 0.6pC

High Voltage Cable Coupler System

Technical Guide



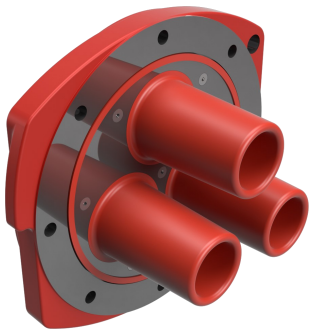
Stock No: (See Page 4 Breakdown)
Description: Half Coupler for Trailing Cable
Rating: 11kV 800A
Material: Aluminium
LOA: 665mm
Mass: 16kg
Volume: 4 litres



Stock No: (See Page 4 Breakdown)
Description: Half Coupler for Armoured Cable
Rating: 11kV 800A
Material: Aluminium
LOA: 665mm
Mass: 16kg
Volume: 4 litres



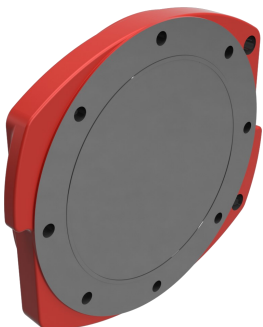
Stock No: (See Page 4 Breakdown)
Description: KA Adaptor
Rating: 11kV Adaptor
Material: Aluminium
LOA: 480mm
Mass: 16kg
Volume: 4 litres



Stock No: RS1775
Description: Insulated End Cover
Rating: 11kV
Material: Aluminium
Mass: 5kg



Stock No: RS112 (3 required per joint)
Description: Phase Connectors
Rating: 11kV 800A



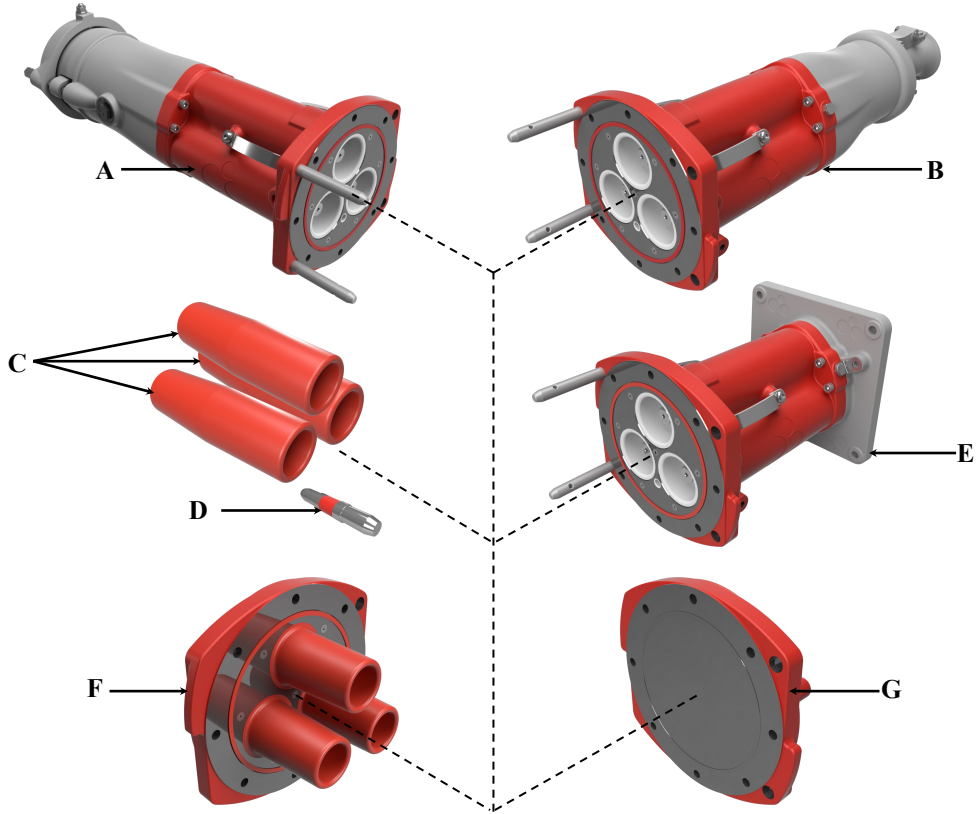
Stock No: 2511
Description: Cast Protection Cover
Rating: 11kV
Material: Aluminium
Mass: 3kg



Stock No: RS113
Description: Pilot Connector

High Voltage Cable Coupler System

Model No Selection Guide - 11kV 800A

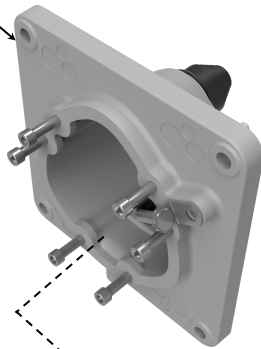


| | Description | Stock No. | Page |
|---|---------------------------------|-----------|------|
| A | Half Coupler - Armoured Cable | - | 4 |
| B | Half Coupler - Unarmoured Cable | - | 4 |
| C | 800x800 Phase Connectors | RS112 | 2 |
| D | Pilot Connector | RS113 | 2 |
| E | Adaptor | RS1773 | 8 |
| F | Insulated End Cover | RS1775 | 9 |
| G | Cast Protection Cover | 2511 | 10 |

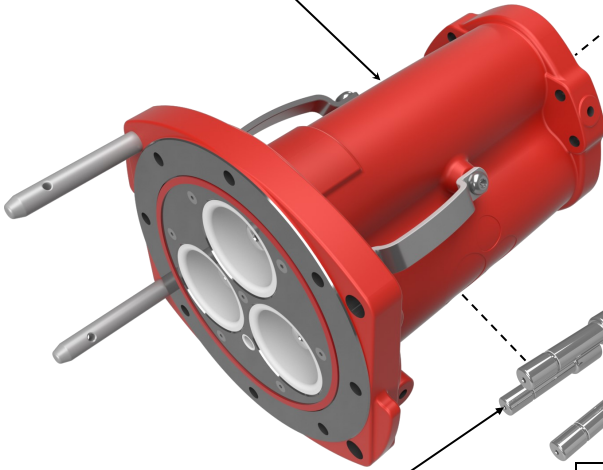
High Voltage Cable Coupler System

Stock Selection Guide - 11kV 800A

Gear Mount Flange
Stock No: RS1773



Coupler
Stock No: RS1322

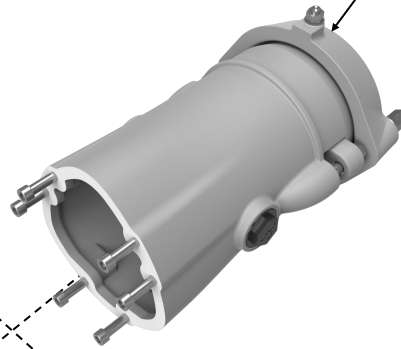


| Soldered Contact (Set of 3) | |
|-----------------------------|----------|
| Conductor | Stock No |
| 35mm sq | RS067 |
| 50mm sq | RS068 |
| 70mm sq | RS069 |
| 95mm sq | RS070 |
| 120mm sq | RS071 |
| 150mm sq | RS072 |
| 185mm sq | RS073 |
| 240mm sq | RS074 |
| 300mm sq | RS075 |

| Crimpable Contact (Set of 3) | |
|------------------------------|----------|
| Conductor | Stock No |
| 25mm sq | RS866 |
| 35mm sq | RS076 |
| 50mm sq | RS077 |
| 70mm sq | RS078 |
| 95mm sq | RS079 |
| 120mm sq | RS080 |
| 150mm sq | RS081 |
| 185mm sq | RS082 |
| 240mm sq | RS083 |
| 300mm sq | RS084 |

KAN SWA Cable Gland

| Cable OD Under Armour | Stock No | Cable OD Under Armour | Stock No |
|-----------------------|----------|-----------------------|----------|
| 105 - 110mm | RS1343 | 70 - 75mm | RS1350 |
| 100 - 105mm | RS1344 | 65 - 70mm | RS1351 |
| 95 - 100mm | RS1345 | 60 - 65mm | RS1352 |
| 90 - 95mm | RS1346 | 55 - 60mm | RS1353 |
| 85 - 90mm | RS1347 | 50 - 55mm | RS1354 |
| 80 - 85mm | RS1348 | 45 - 50mm | RS1323 |
| 75 - 80mm | RS1349 | 40 - 45mm | RS1355 |



KA Trailing Cable Gland

| Cable OD | Stock No | Cable OD | Stock No |
|----------|----------|----------|----------|
| 117mm sq | RS1867 | 80mm | RS1875 |
| 115mm sq | RS1868 | 75mm | RS1876 |
| 110mm sq | RS1869 | 70mm | RS1877 |
| 105mm sq | RS1870 | 65mm | RS1878 |
| 100mm sq | RS1871 | 60mm | RS1879 |
| 95mm sq | RS1872 | 55mm | RS1880 |
| 90mm sq | RS1873 | 50mm | RS1881 |
| 85mm sq | RS1874 | 45mm | RS1882 |

High Voltage Cable Coupler System

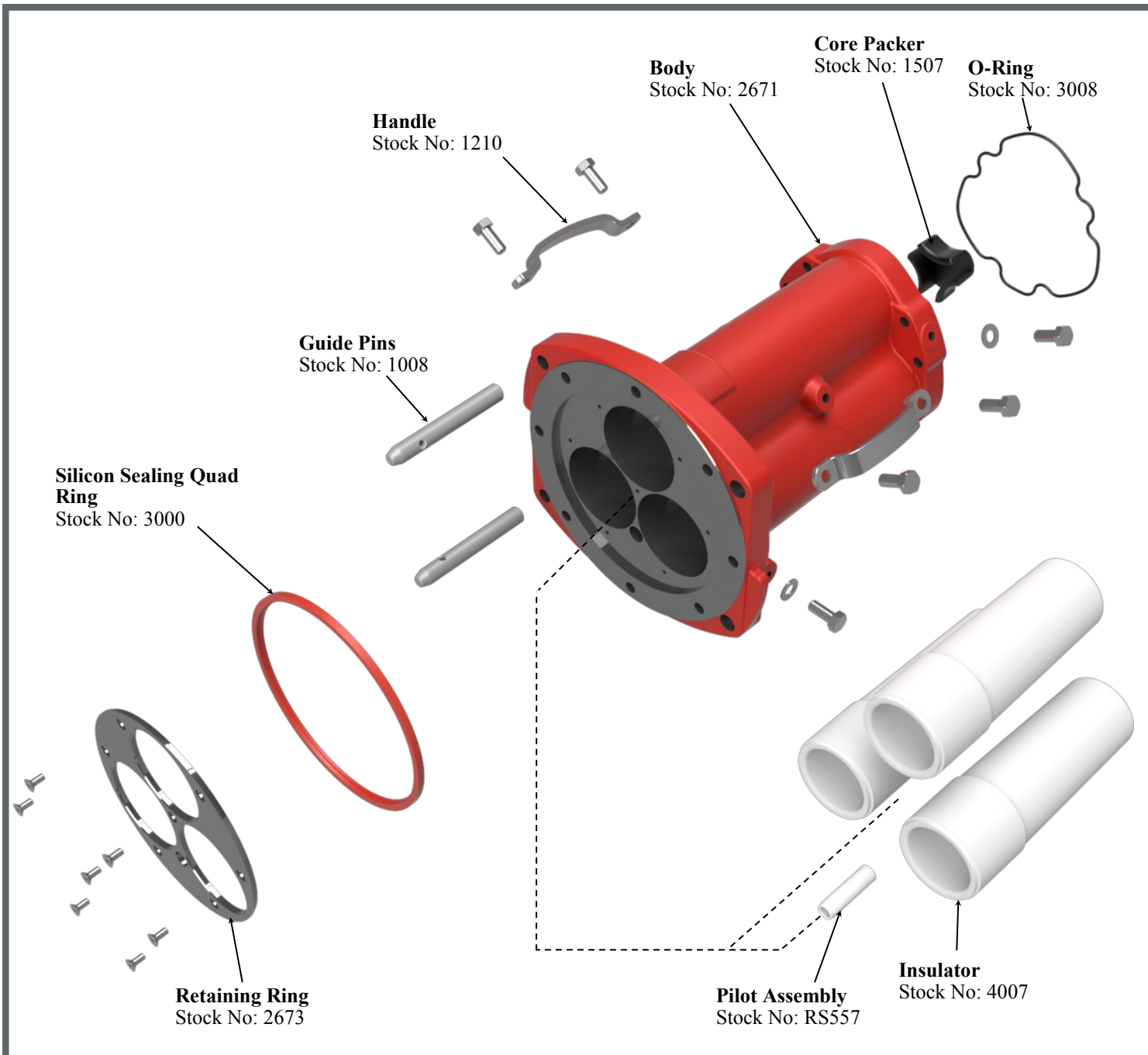
Body Assembly

Stock No: RS1322 - 11kV KA 8 Bolt Body

Amps: 800 Volume: 4 Litres

Volts: 11000 LOA: 840mm

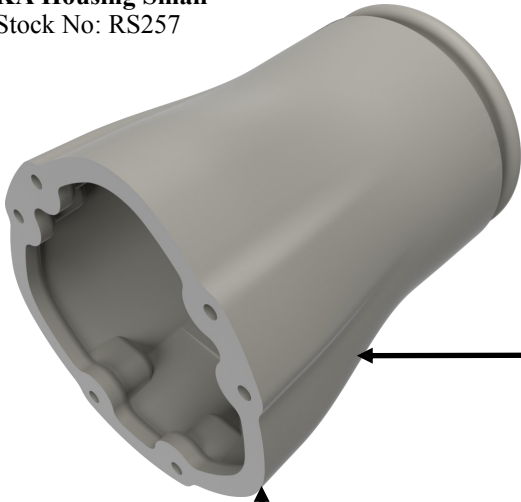
Material: Aluminium



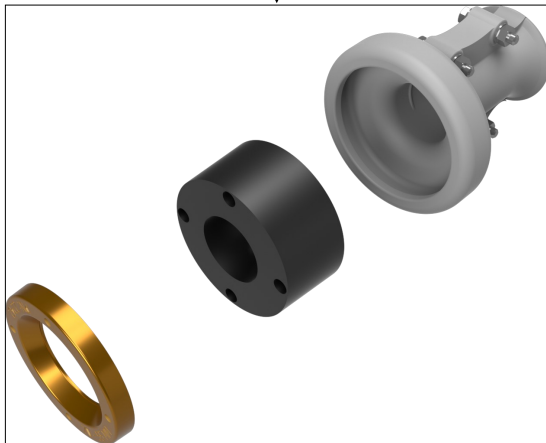
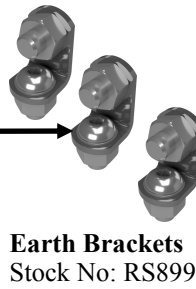
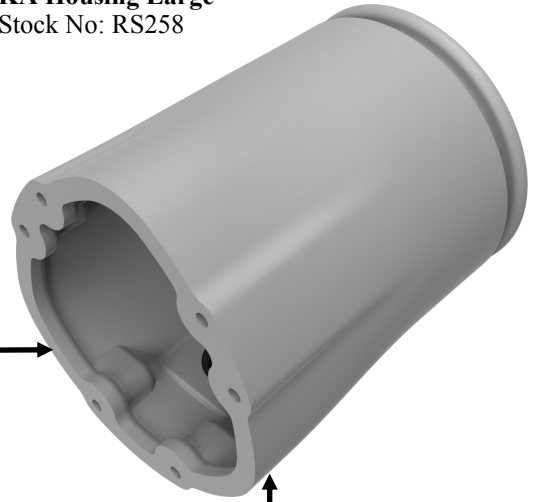
High Voltage Cable Coupler System

Unarmoured Gland Assembly

KA Housing Small
Stock No: RS257

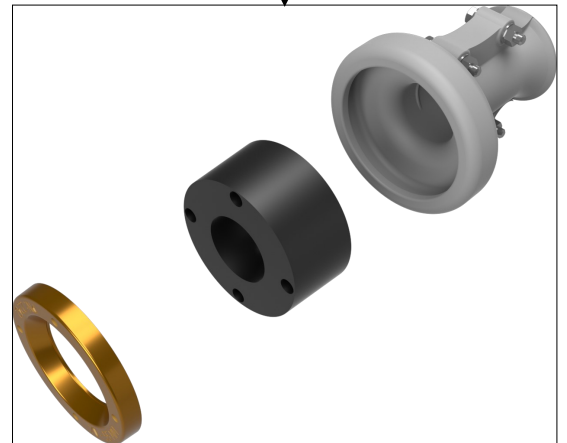


KA Housing Large
Stock No: RS258



Alum Unarmoured Compression Clamp Kit

| Cable OD | Stock No |
|----------|----------|
| 90mm | RS266 |
| 85mm | RS265 |
| 80mm | RS264 |
| 75mm | RS263 |
| 70mm | RS262 |
| 65mm | RS261 |
| 60mm | RS260 |
| 55mm | RS259 |
| 50mm | RS478 |
| 45mm | RS479 |



Alum Unarmoured Compression Clamp Kit

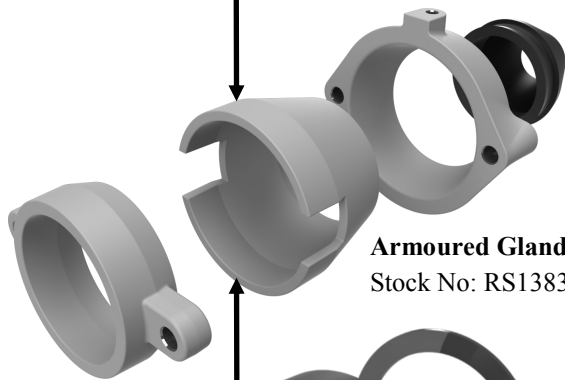
| Cable OD | Stock No |
|----------|----------|
| 95mm | RS267 |
| 100mm | RS268 |
| 105mm | RS269 |
| 110mm | RS270 |
| 115mm | RS271 |
| 117mm | RS272 |
| 125mm | RS916 |

High Voltage Cable Coupler System

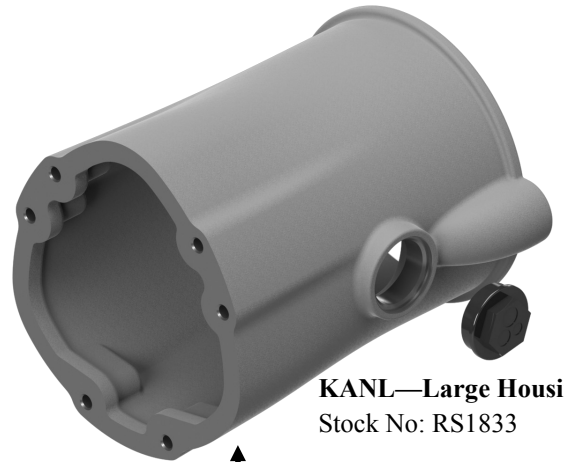
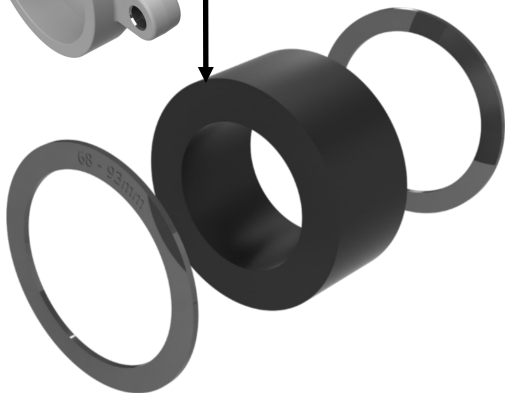
Armoured Gland Assembly



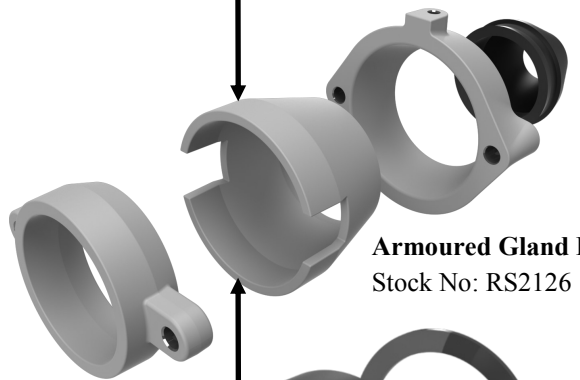
KANS—Small Housing
Stock No: RS1342



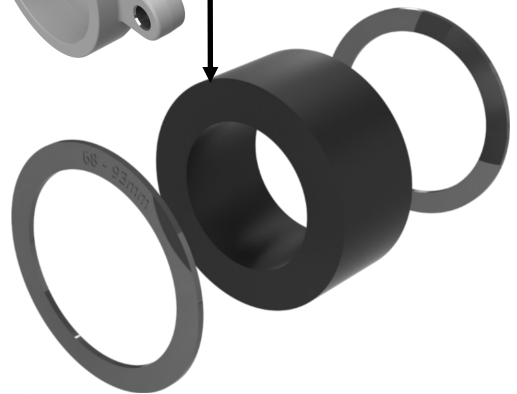
Armoured Gland Kit
Stock No: RS1383



KANL—Large Housing
Stock No: RS1833



Armoured Gland Kit
Stock No: RS2126



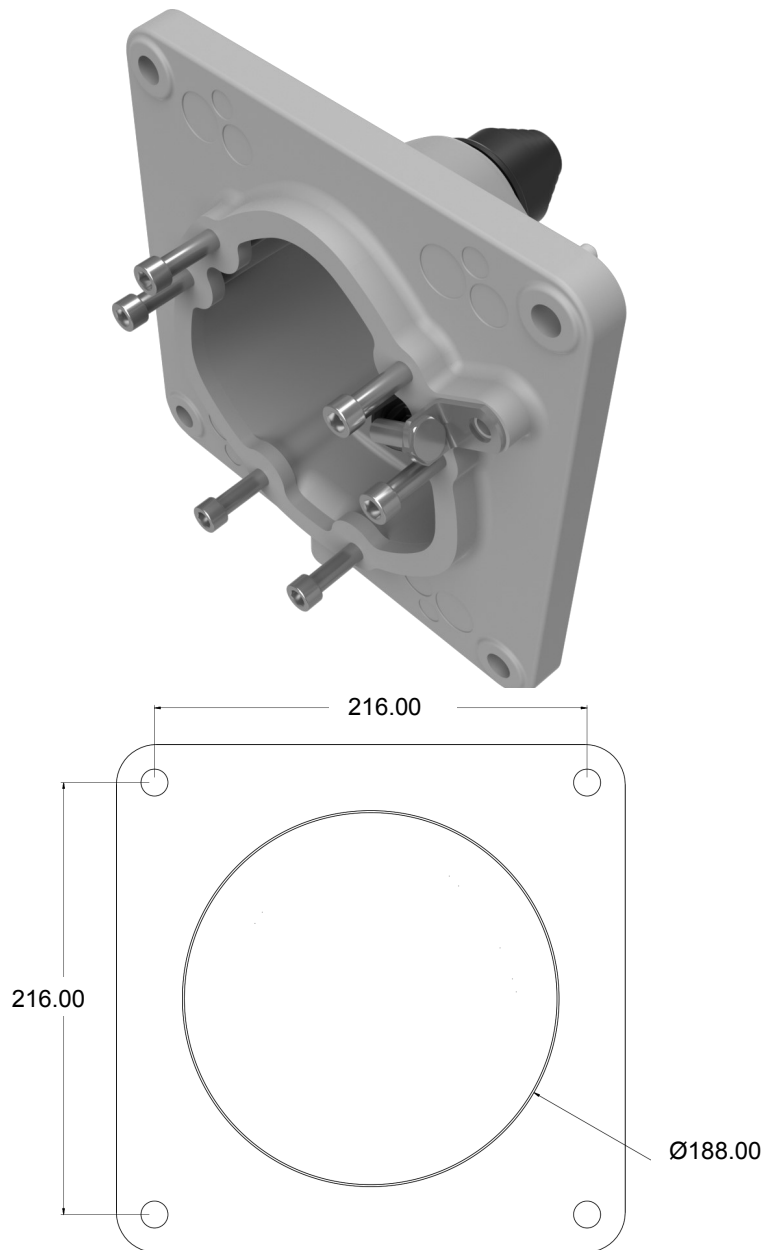
Panel Mount Adaptor Body Assembly

Stock No: RS1773 - 11kV KA Adaptor Flange

Mass: -

Volts: 11000

Material: Aluminium



Insulated End Cover Assembly

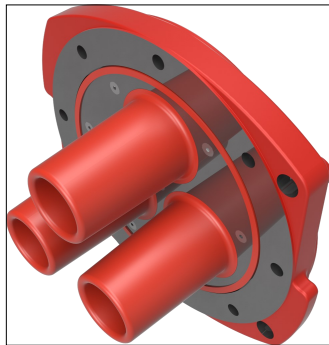
Accessories

Stock No: RS1775 - 11kV KA 8B Insul. End Cover

Mass: -

Volts: 11000

Material: Aluminium



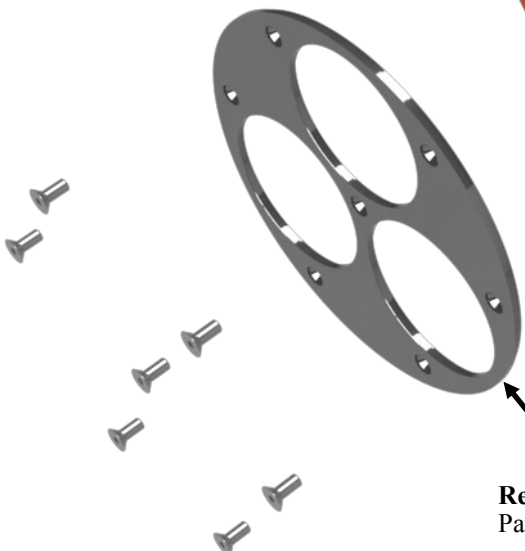
End Cover
Part No: 2512

End Cover Plug
Part No: 3001

Sealing Ring
Part No: 3000



Retaining Ring
Part No: 2513

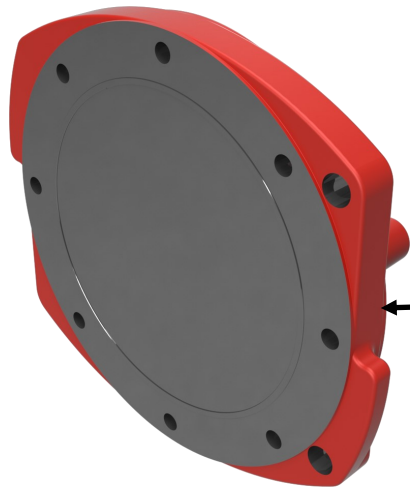


Stock No: 2511 - 11kV KA 8B Cast Pro Cover

Mass: -

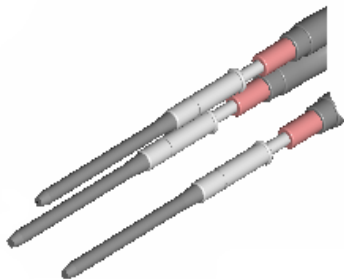
Volts: 11000

Material: Aluminium



Cast Pro Cover
Part No: 2511

RS178



Phase Guide Stick Set for Assembly
3 Included

RS177



Slide Hammer

Coupler Tool Kit (All Voltages)

Part No. RS284



1246 (Spanners) x 2

RS325 (Coupling Tool) x 1





RS177 (Slide Hammer) x 1

1278 (High Voltage Cleaning tissues) x 15





1274 (Tool Box) x 1

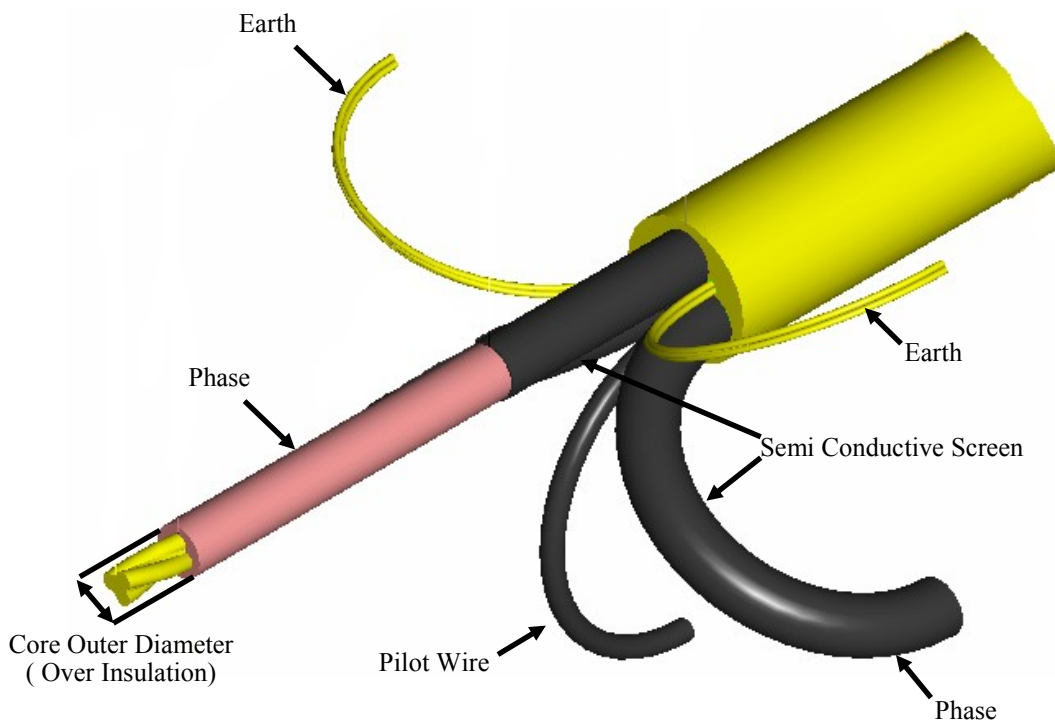
Termination Kits for Unarmoured Cable

11kV Termination Kit Large 24mm-48mm

| RS323 | |
|---|-------------|
| (To suit core outer diameter 24mm-48mm) | |
|  | 4L Compound |
|  | 3 x QT5672 |
|  | 1 x CC2 |
|  | 1 x I3 Tape |







11kV Termination Kit Small 16mm-28.5mm

| RS406 | |
|---|-------------|
| (To suit core outer diameter 16mm-28.5mm) | |
|  | 4L Compound |
|  | 3 x QT5672 |
|  | 1 x CC2 |
|  | 1 x I3 Tape |









Termination Kits for Armoured Cable







**11kV SWA Termination Kit
Large 24mm-48mm**

| RS552 | |
|--|----------------------|
| (To suit core outer diameter 24mm-48mm) | |
|  | 4L Compound |
|  | QT5672 x 3 |
|  | CC2 x 1 |
|  | I3 Tape x 1 |
|  | Heat Shrink x 1 |
|  | Steel Cable Ties x 2 |





**11kV SWA Termination Kit
Small 16mm-28.5mm**

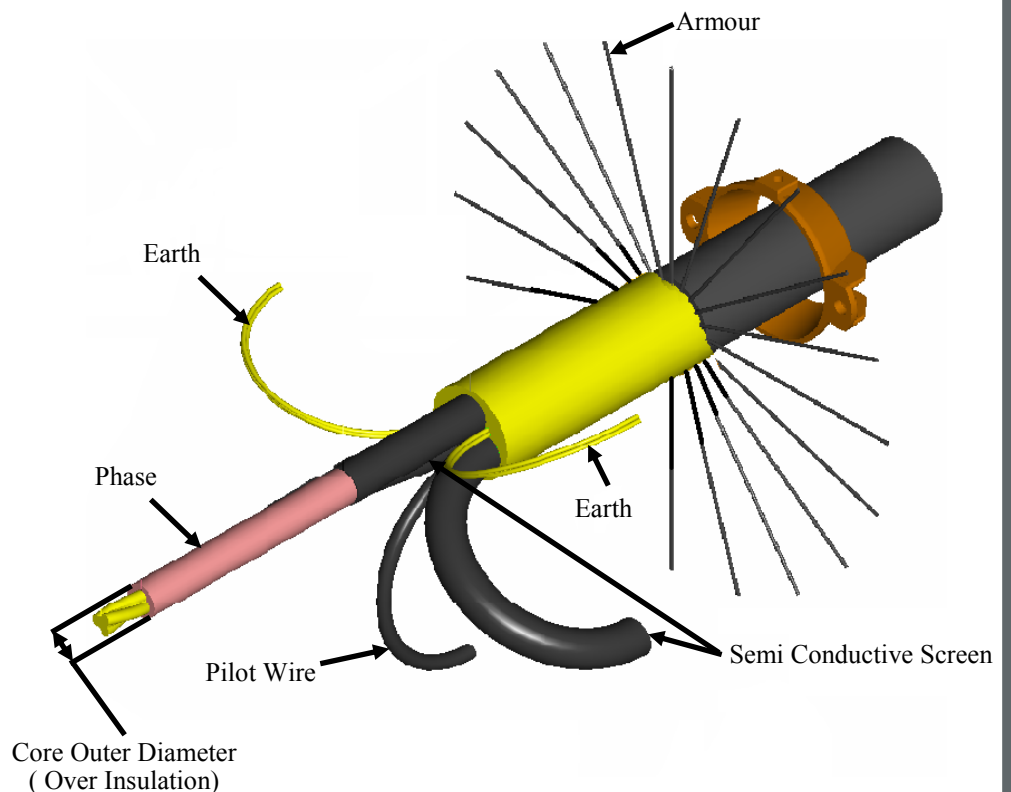
| RS551 | |
|---|----------------------|
| (To suit core outer diameter 16mm-28.5mm) | |
|  | 4L Compound |
|  | QT5671 x 3 |
|  | CC2 x 1 |
|  | I3 Tape x 1 |
|  | Heat Shrink x 1 |
|  | Steel Cable Ties x 2 |

**11kV SWA Termination Kit
Extra Small 11mm-17mm**

| RS917 | |
|---|----------------------|
| (To suit core outer diameter 11mm-17mm) | |
|  | 4L Compound |
|  | QT5662 x 3 |
|  | CC2 x 1 |
|  | I3 Tape x 1 |
|  | Heat Shrink x 1 |
|  | Steel Cable Ties x 2 |

**11kV Termination Kit PILC
24mm-48mm**

| RS687 | |
|--|----------------------|
|  | 4L Compound |
|  | 23 Tape x 2 |
|  | Heat Shrink x 1 |
|  | Steel Cable Ties x 2 |



Open Cut Bolted Coupler Skid for 11kV

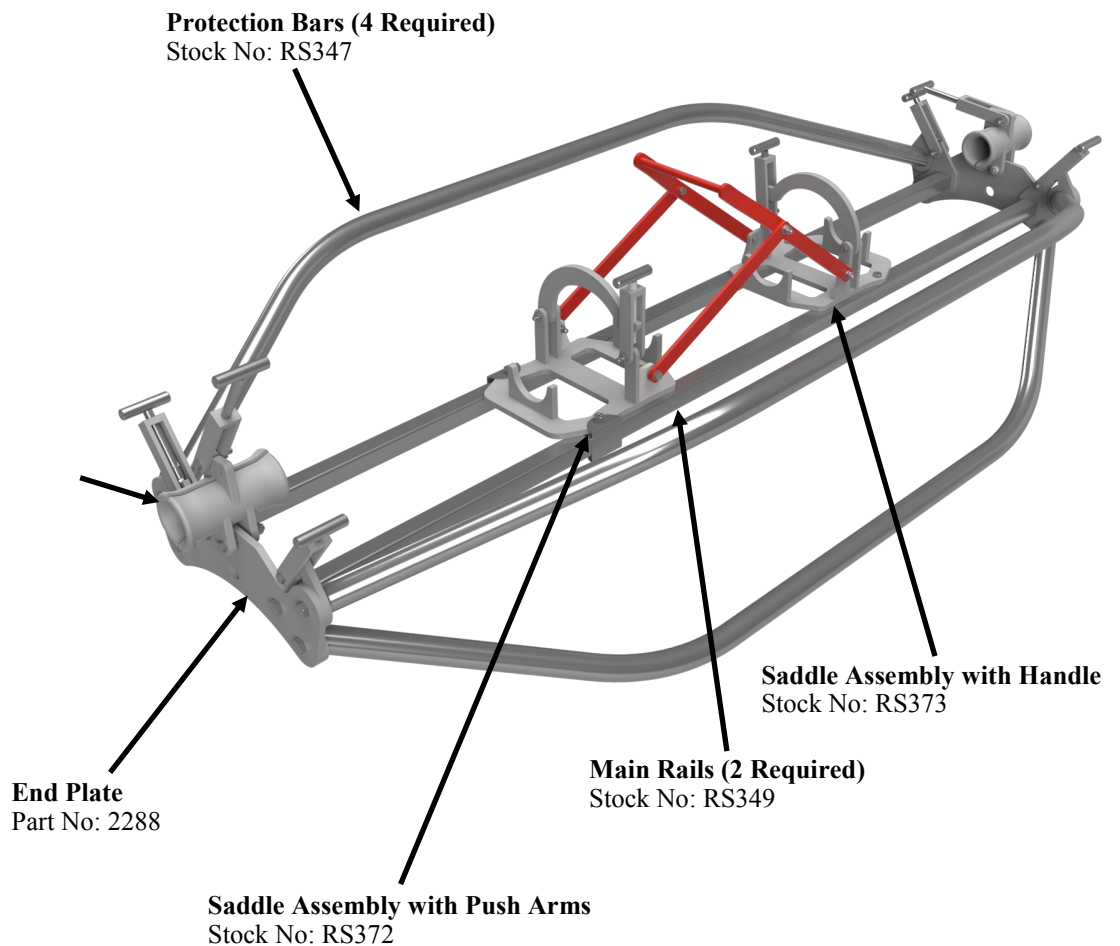
Stock No: RS188 - 11kV 8 Bolt Standard Skid

Mass: -

Volts: - 11000

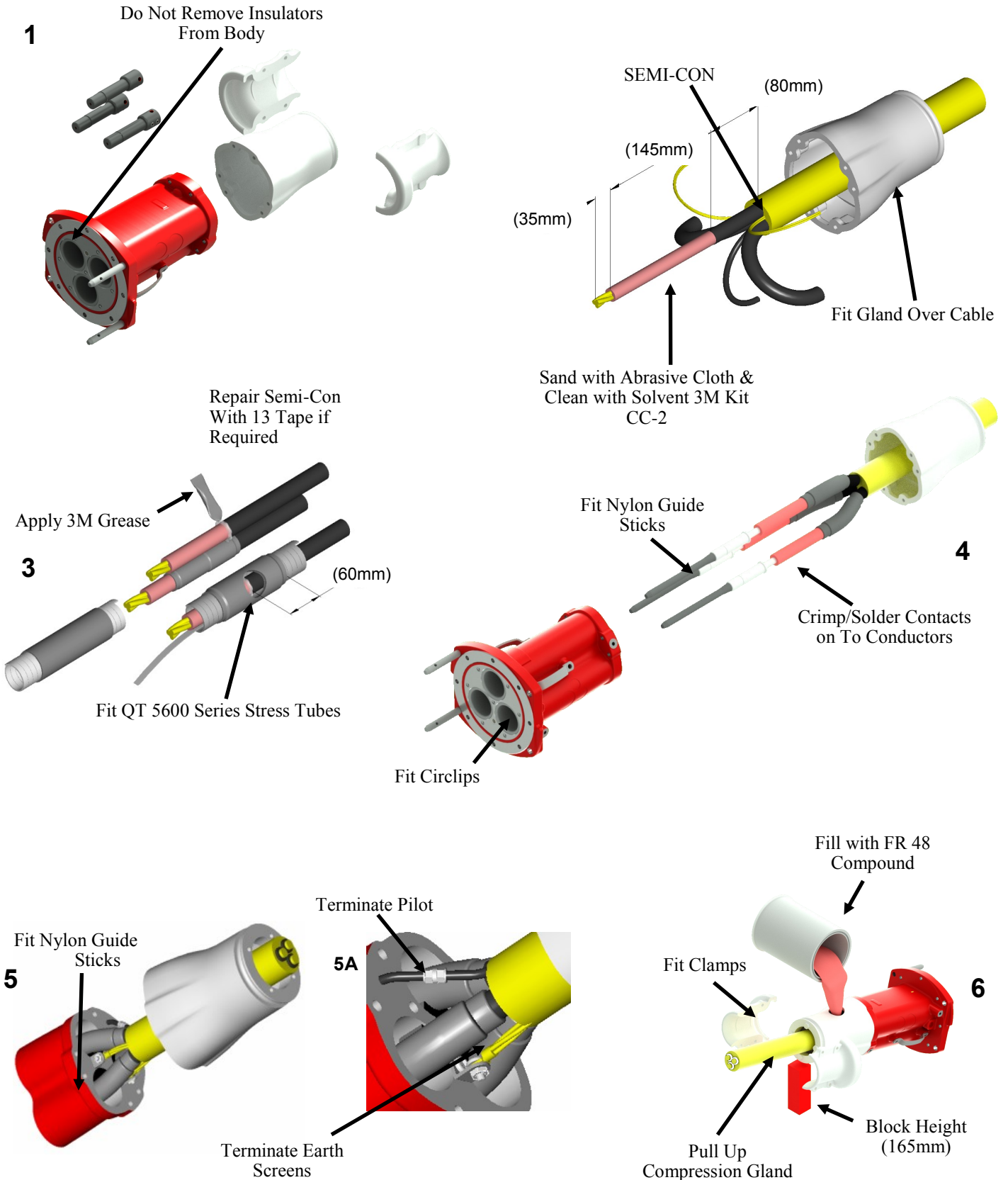
Material: - Aluminium

| Cable Clamp | |
|-------------|----------|
| ID Sizes | Stock No |
| 120mm | RS326 |
| 115mm | RS327 |
| 110mm | RS328 |
| 105mm | RS329 |
| 100mm | RS330 |
| 95mm | RS331 |
| 90mm | RS332 |
| 85mm | RS333 |
| 80mm | RS334 |
| 75mm | RS335 |
| 70mm | RS336 |
| 65mm | RS337 |
| 60mm | RS338 |
| 55mm | RS339 |
| 50mm | RS480 |
| 45mm | RS481 |



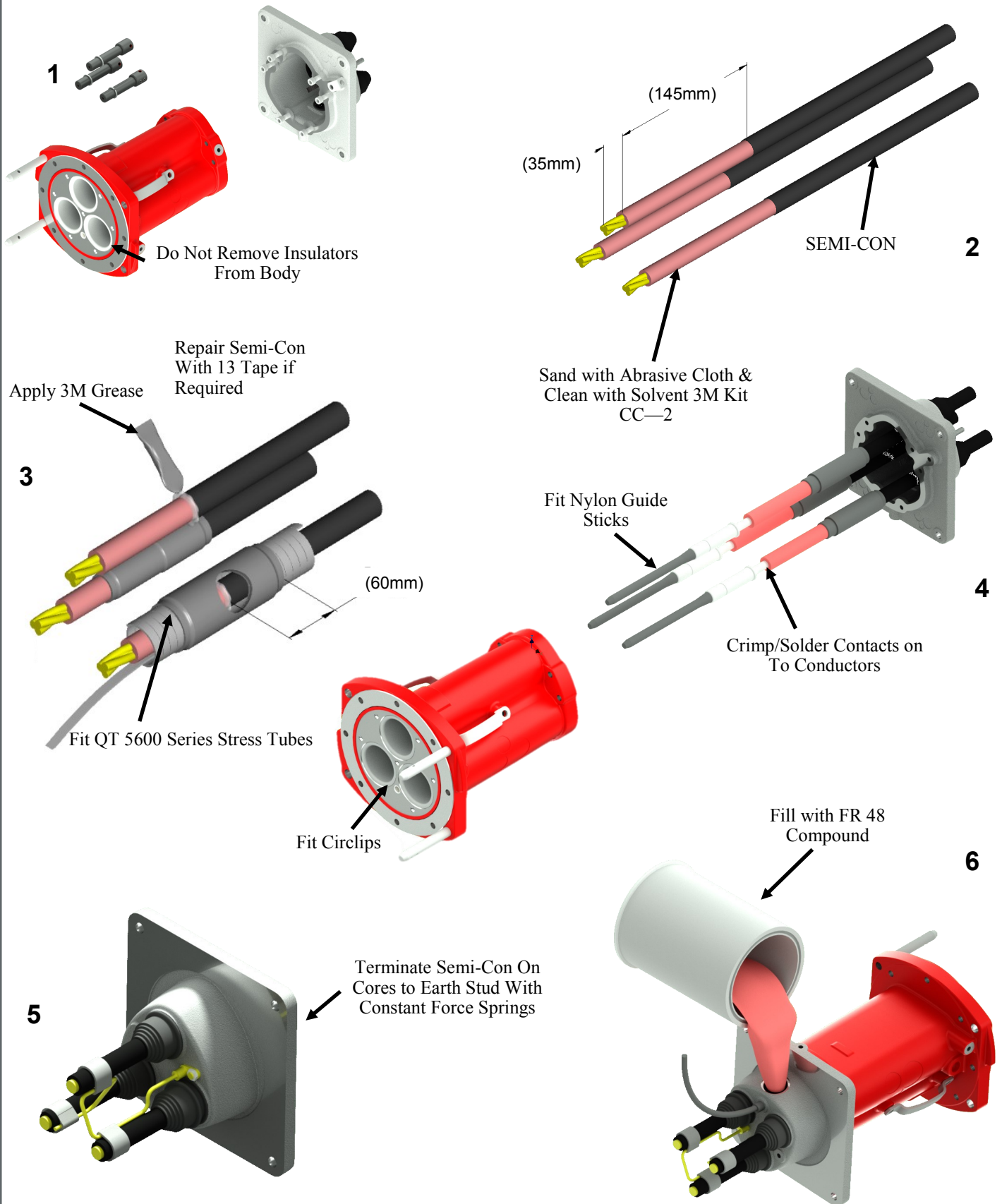
KA 11kV 800A Unarmoured

Termination Procedure



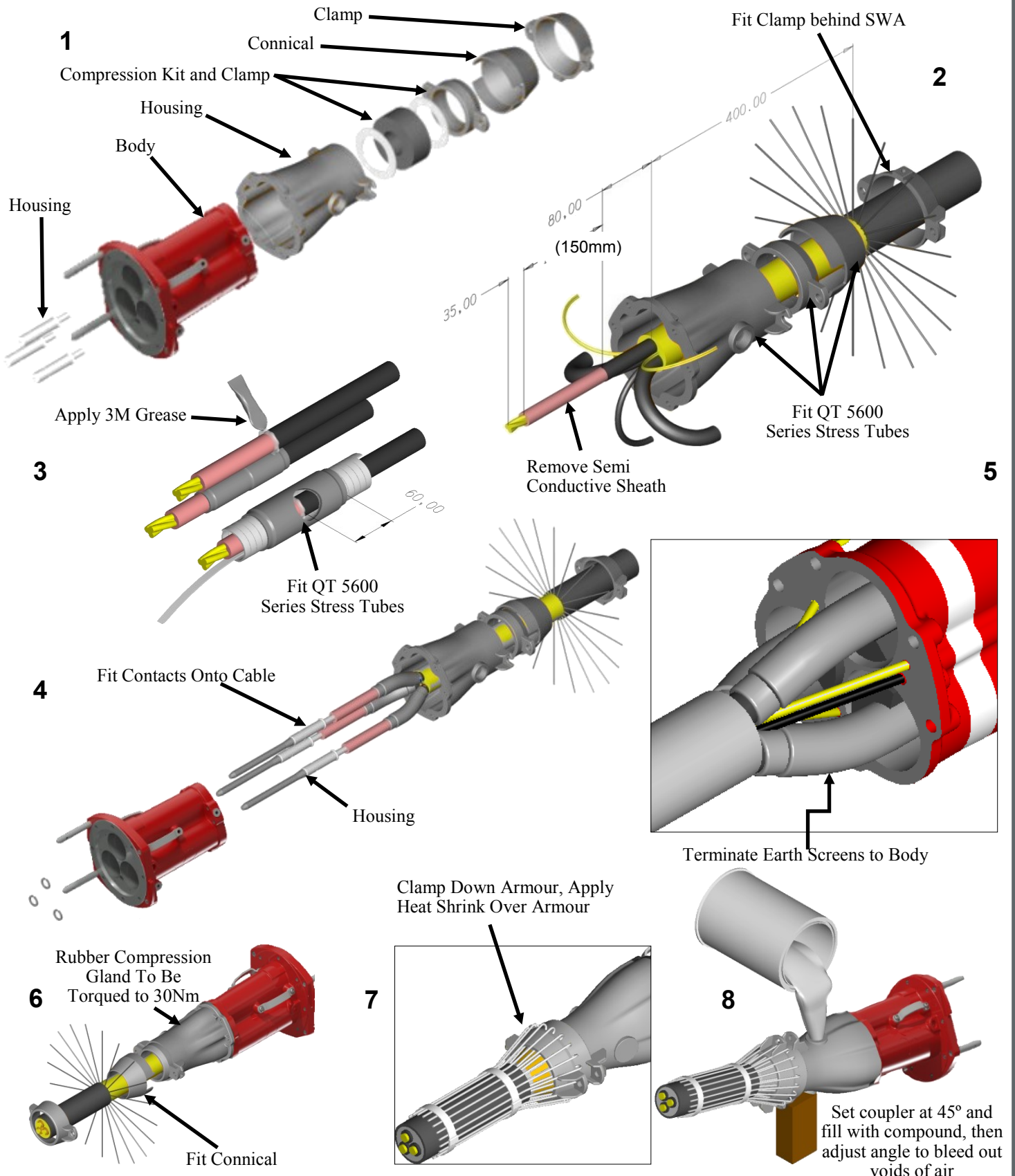
KA 11kV 800A Gear Mount Adaptor

Termination Procedure

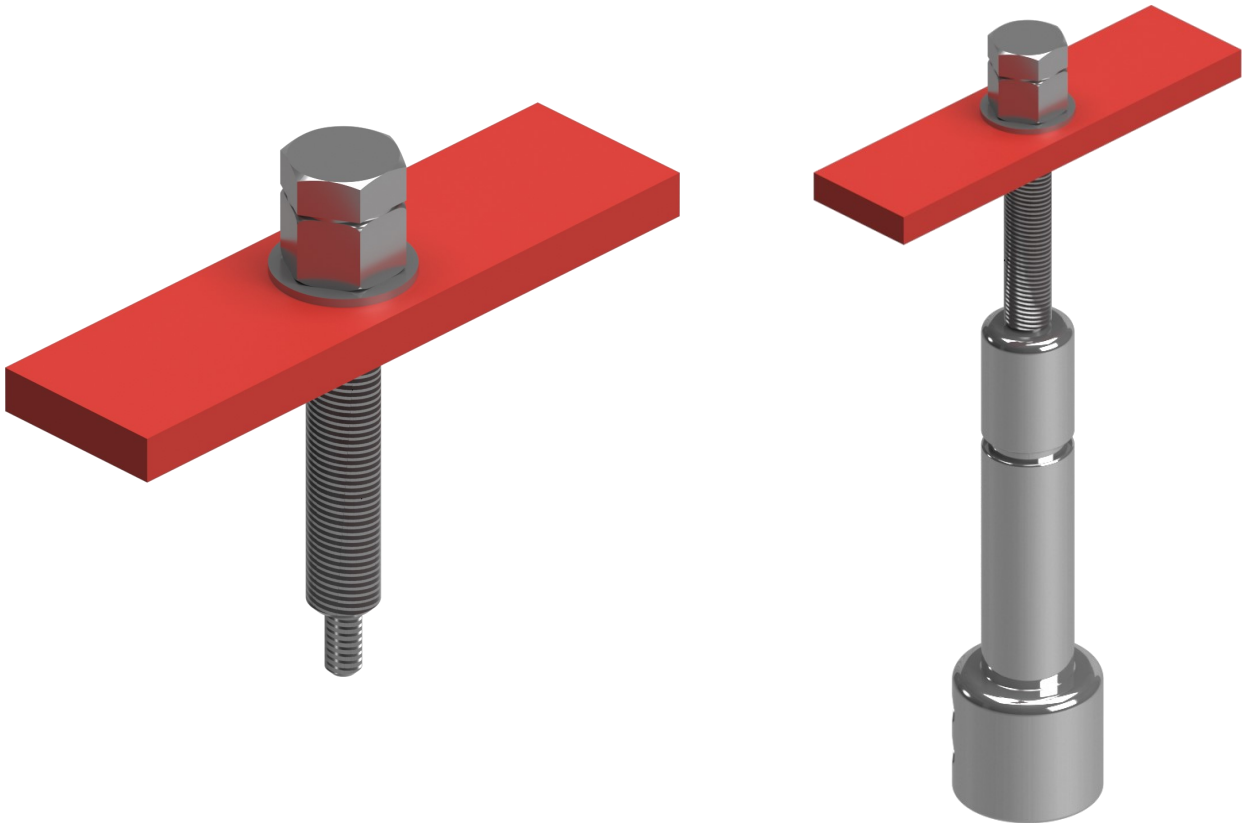


KA 11kV 800A Armoured

Termination Procedure



Contact Pulling Tool Operation



Observation

Inspect the front end of the coupler or adaptor, paying special note to the condition of the circlip on each phase. Each circlip should be sitting evenly on the contact. If more of the circlip protrudes out of one side, then the circlip needs to be replaced.

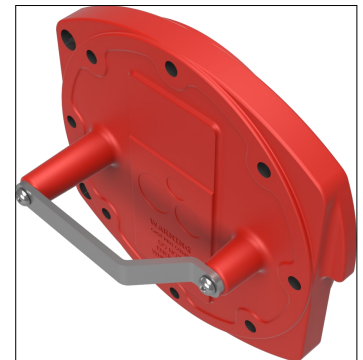
If the circlip needs to be adjusted or replaced, the following will need to be performed

- Ensure power is not connected.
- For a coupler, loosen the clamp on the gland to slightly release the grip on the cable.
- Clean out threaded hole in end of contact with air or cloth
- Place a new circlip over the end of the contact.
- Screw the bolt of the assembled pulling tool into the end of the contact
- Push the steel plate up against the face of the coupler.
- Tighten the nut and washer up to the steel plate.
- Using a spanner, tighten the nut against the steel plate to pull the contact back into place.
- Whilst in this position, replace the circlip.
- After all three contacts are satisfactory, retighten the gland.

Inserting Connectors and Coupling Operation

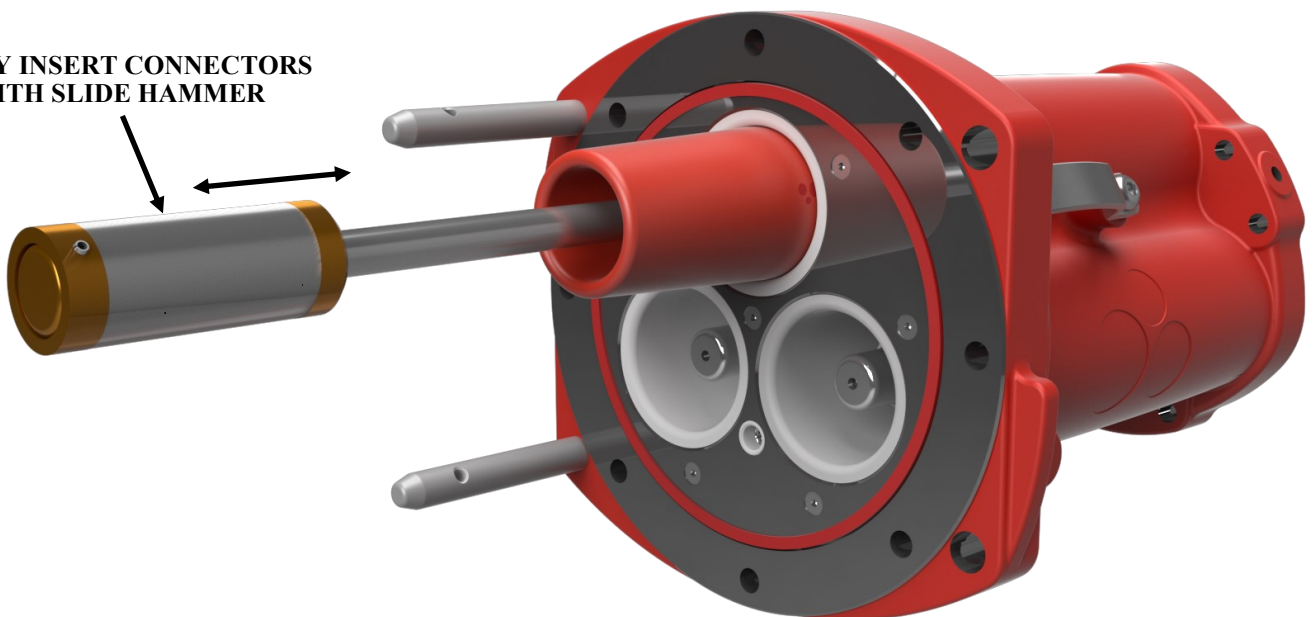
SCREW SLIDE HAMMER INTO CENTER OF CONNECTOR

Slide Hammer
PN: RS177



REMOVE PROTECTION COVER

FULLY INSERT CONNECTORS WITH SLIDE HAMMER



Offsite Checks & Testing Procedures

For 11kV Aluminium Coupler System

To compliment existing procedures and practices currently existing in cable repair workshop, the following is designed to be completed as a minimum to ensure the safe and long operation of the AusProof coupler system

Routine Checks and Inspection

- When cables are not in use or stored, ensure that a cast protection end cover is fitted that provides adequate sealing against moisture.
- Ensure that witness marks are brightly painted on the sheath, located where the cable enters the gland. This needs to be routinely inspected to check if a gap appears between the end of the gland and the witness mark.
 - A gap may indicate that the cable has been under tension and that the termination in the coupler may have moved.
- Inspect the male pin in the coupler for obvious signs of damage. Also inspect the location of the nylon locking circlip to ensure that it is evenly fitted onto the contact.
 - If the circlip appears dislocated or damaged then repairs are necessary. This event indicates that the termination in the coupler has been under tension as a result of handling.
- Ensure the tension on the gland housing compression ring is maintained. This process requires that the four compression ring bolts are tensioned.
- Check silicon seals are clean and are fully intact.
- Thoroughly clean the insulators and face of the coupler with suitably approved solvent.



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