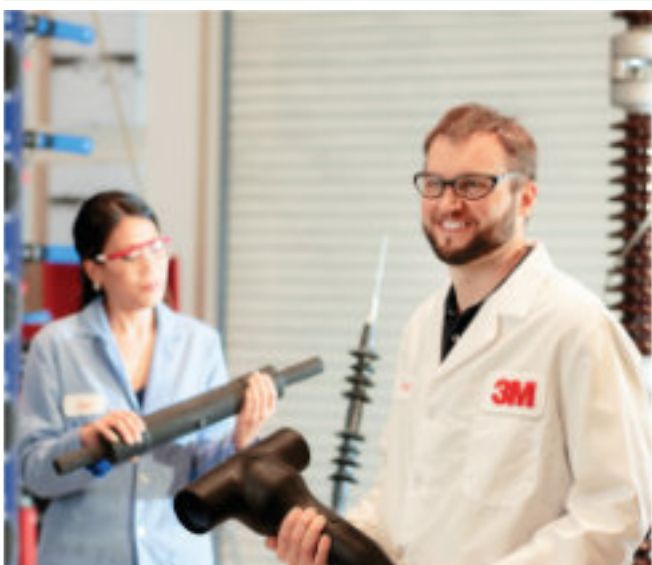


**3M** Science.  
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**Your Trusted**

**Connection**

**3M Medium Voltage  
Separable Connectors  
*Plug In Selection Guide***

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# General Product Description

3M Separable Connector or so-called Plug-In Connector is a separable cable termination, that means it can be plugged in and out. It is designed for Dead Break System, which is only able to be plugged-in or un-plugged when the circuit is de-energized (Voltage & Current can't be present).

A Separable Connector and a conventional Termination (such as QT-II and QT-III) perform the same function, by means: to terminate a power cable, either at a connection to an electrical equipment or at a junction of the power cable to the overhead system. The applications can be split into:

- ***Underground cable connected to the overhead system: these connections use Live Front Terminations, like 3M's QT-II or QT-III, which has voltage on its surface.***
- ***Cable connected to equipment (transformers, switchgears, motors...): choice of either using a Separable Connector or a Live Front Termination depends on the connection type on the equipment. A Separable Connector will connect to a bushing, while a Live Front Termination connects to a bus bar connection pad or a station post insulator.***

3M Separable Connector with EPDM insulation & shielded layer makes it having wide range of operation temperature -40°C to 65°C and able to be installed outdoor or even submersible with a proper bushing connection follows DIN EN 50180 and DIN EN 50181. It is also suitable for compact connection, short distance phase-phase, safe operation & maintenance free. Therefore, 3M Separable Connector meets the increasing demand of compact SF6 MV Switchgear Compact substation nowadays.

Each kit consists of a complete package to make one Separable Connector including the compatible connecting devices: a copper or bi-metallic or a shear-bolt cable lug, probe contact + hex key or a screw contact. A bail assembly, as extra fixing tool to hook the Separable Connector to the equipment, is also included in the kit for probe plug-in system. Besides, a cold shrink or heat shrink breakout boot is also needed for 3C cable system.



# 24 kV Deadbreak 250 A - Elbow Connector

## 93-EE-800L-24-250-ELBOW

### Application

The 3M Deadbreak Elbow connector is a fully shielded and insulated termination for connecting underground cable to transformers, switchgear and other apparatus equipped with deadbreak bushings, junctions, or other deadbreak connectors.

The 3M Deadbreak Elbow meets all the requirements of HD 629-1 & IEC 60502-4, and complies with bushing type A 250 A which follows EN-50180 & 50181, inside RMU Switchgear & on Transformer.

3M Deadbreak Elbow Connectors are molded using high precision molding technique-cured insulating and semi-conducting EPDM rubber. All insulating rubber is compounded in house, using special developed proprietary formulations. 3M Deadbreak Elbow Connector has a tin-plated copper probe combined with the bimetallic or copper compression lug, or a shear-bolt lug, which will ensure a reliable operating connection.

### Production Tests

#### Tests conducted in accordance with HD 629.1

- Minimum Corona Voltage Level -  $22 \text{ kV} < 3 \text{ pC}$
- AC 1 Minute Withstand - 60 kV
- Test Point Voltage Test

#### Tests conducted in accordance with 3M manufacturing process requirements:

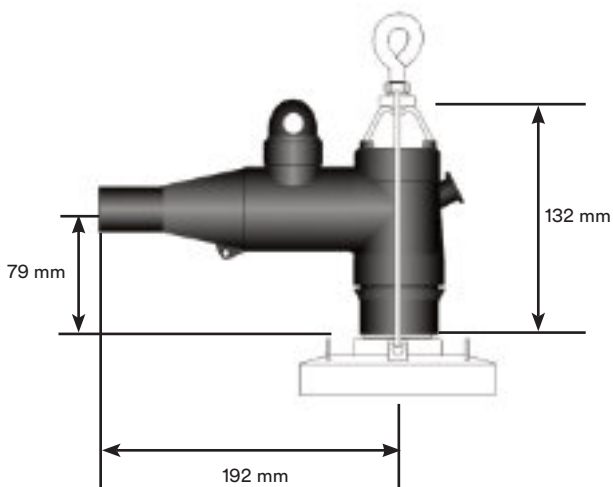
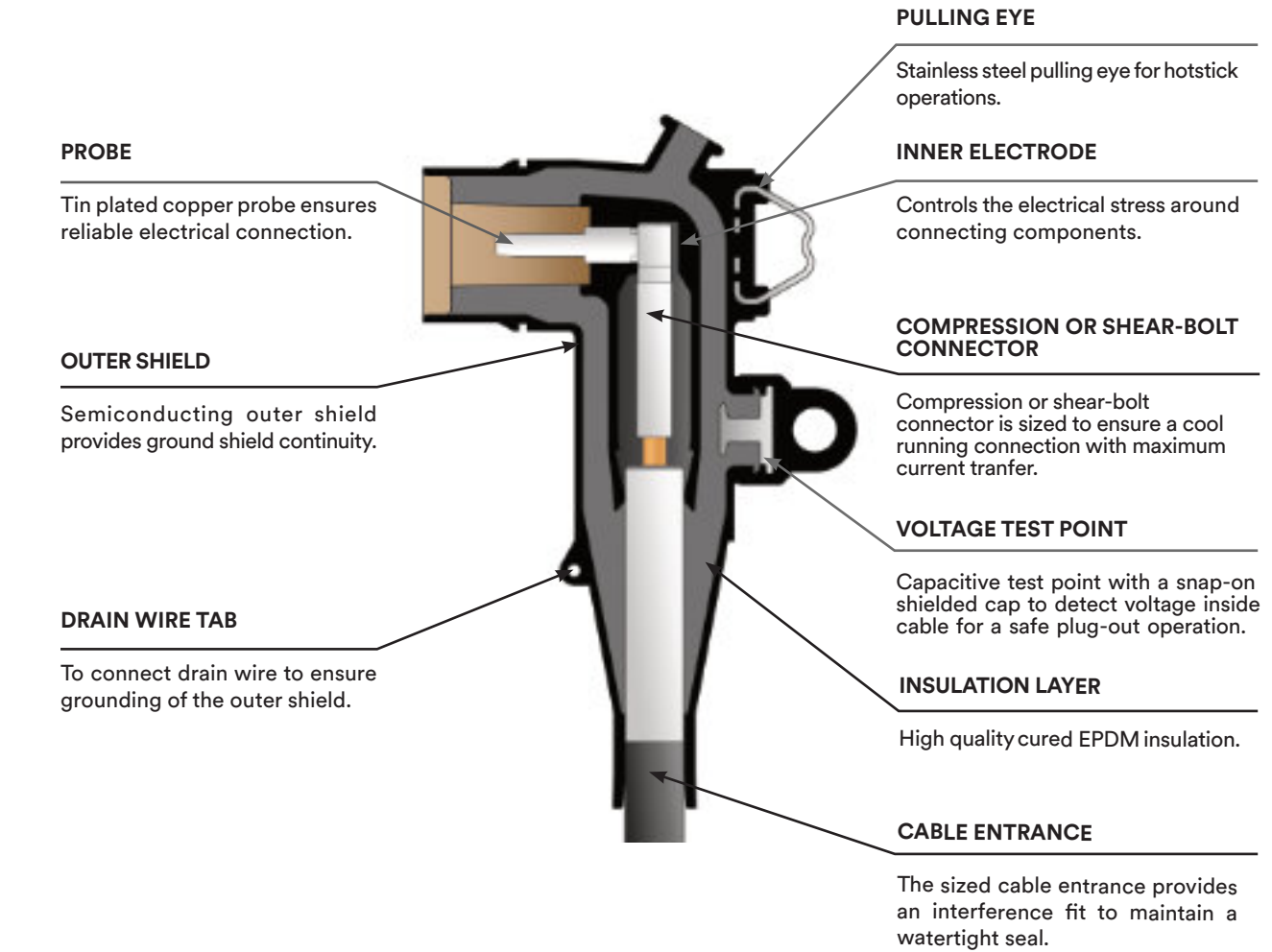
- Physical Inspection
- Periodic Dissection
- Periodic X-Ray analysis

### Product Ratings

Maximum Voltage Class (Um)	24 kV
AC 5 Minute Withstand	57 kV
DC 15 Minute Withstand	51 kV
Minimum Corona Voltage Level	$22 \text{ kV} < 5 \text{ pC}$
Impulse Voltage Withstand	125 kV
Thirty Heating cycle in Air at 32 kVAC	Passed
Thirty Heating cycle in Water at 32 kVAC	Passed
AC 15 Minute Withstand	32 kV
Continuous Current	250 A
Overload Current (8 hour maximum)	300 A



# Detailed composition of the Deadbreak Elbow Connector



# 24 kV Deadbreak 250 A - Straight Connector

## 93-EE-800I-24-250-STRAIGHT

### Application

The 3M Deadbreak Straight Connector is a fully shielded and insulated termination for connecting underground cable to transformers, switchgear and other apparatus equipped with deadbreak bushings, junctions, or other deadbreak connectors.

The 3M Deadbreak Straight meets all the requirements of HD 629-1 & IEC 60502-4, and complies with bushing type A 250 A which follows EN-50180 & 50181 inside RMU Switchgear & on Transformer.

3M Deadbreak Straight Connectors are molded using high precision molding technique-cured insulating and semi-conducting EPDM rubber. All insulating rubber is compounded in house, using special developed proprietary formulations. 3M Deadbreak Straight Connector contains a copper or bimetallic or shear bolt probe connector, which ensures a reliable operating connection.

### Production Tests

#### Tests conducted in accordance with HD 629.1

- Minimum Corona Voltage Level -  $22 \text{ kV} < 3 \text{ pC}$
- AC 1 Minute Withstand - 60 kV
- Test Point Voltage Test

#### Tests conducted in accordance with 3M manufacturing process requirements:

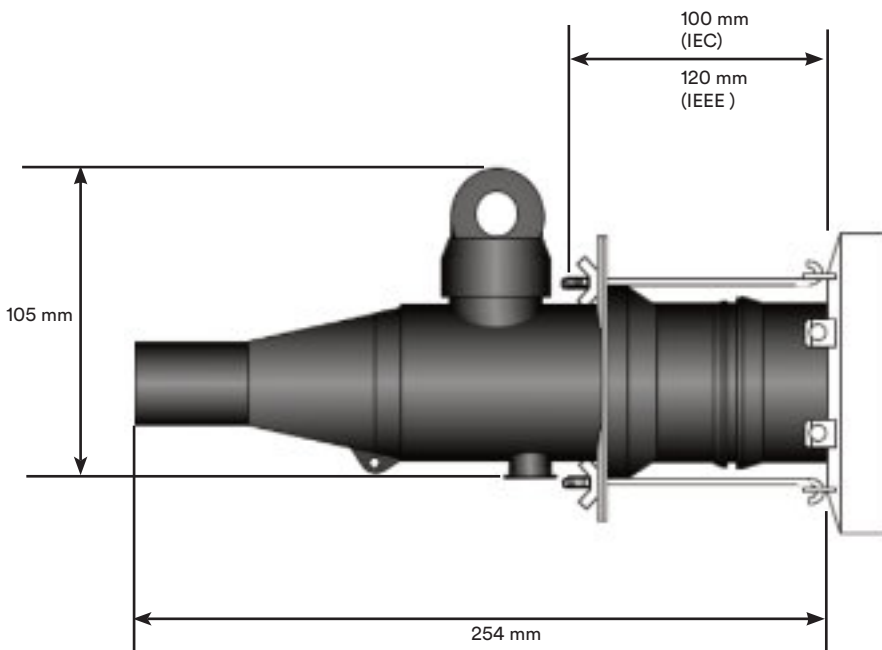
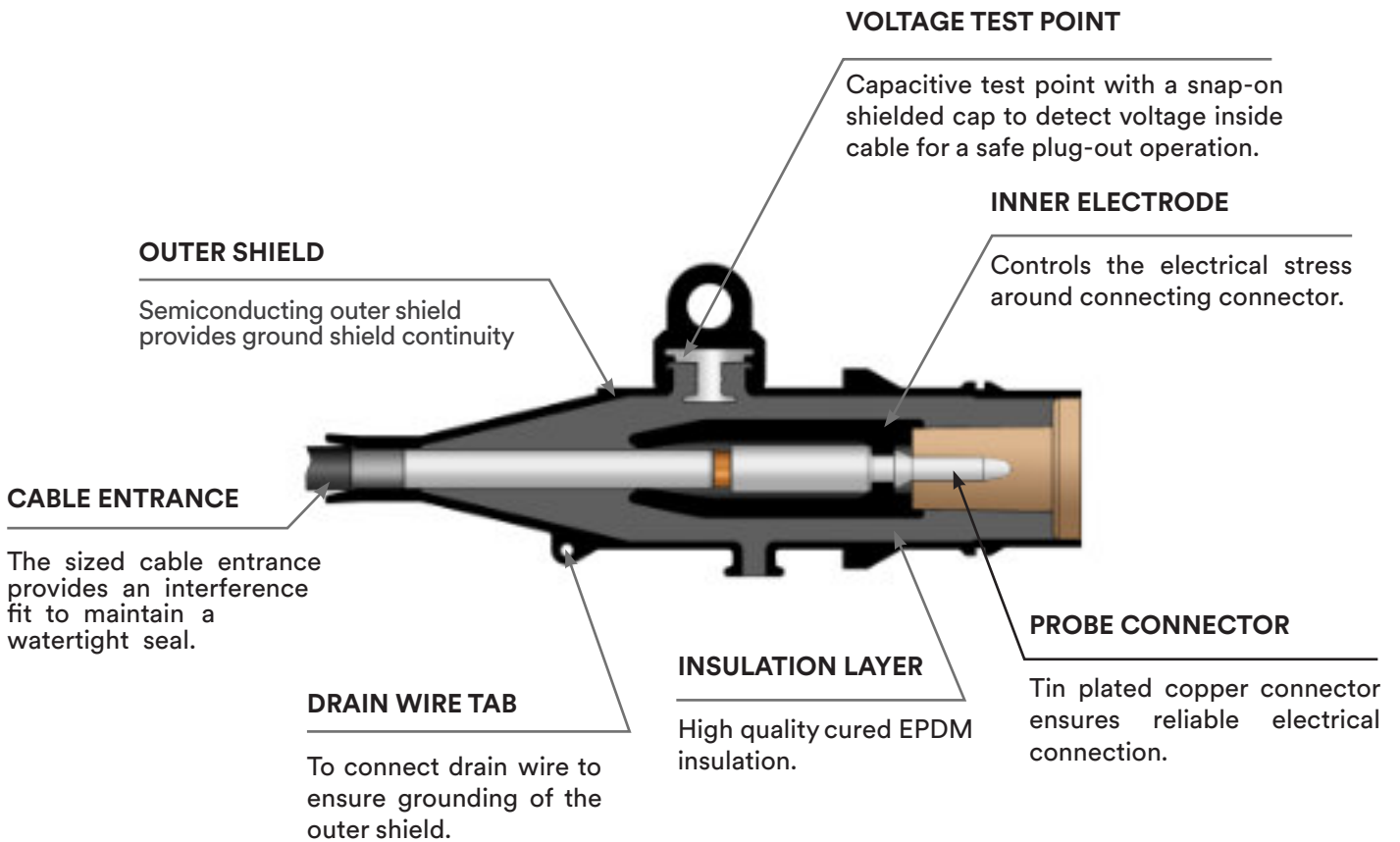
- Physical Inspection
- Periodic Dissection
- Periodic X-Ray analysis

### Product Ratings

Maximum Voltage Class (Um)	24 kV
AC 5 Minute Withstand	57 kV
DC 15 Minute Withstand	51 kV
Minimum Corona Voltage Level	$22 \text{ kV} < 5 \text{ pC}$
Impulse Voltage Withstand	125 kV
Thirty Heating cycle in Air at 32 kVAC	Passed
Thirty Heating cycle in Water at 32 kVAC	Passed
AC 15 Minute Withstand	32 kV
Continuous Current	250 A
Overload Current (8 hour maximum)	300 A



# Detailed composition of the 3M Deadbreak Straight Connector



# Separable Connectors 24 kV, 630 A

## Front Tplug / Sub (Rear) Tplug Connector

### 93-EE-900-24-630-TPLUG & SUB TPLUG / 93-EE-900-24-630- LARGE TPLUG & SUB LARGE TPLUG

## Application

These 3M Tplug connectors are used to terminate polymeric cable to dead front apparatus such as transformers, switchgear, and other equipment with voltage range from 12 kV to 24 kV. They can be used for indoor or outdoor applications and for all polymeric cable types (XLPE, EPR, etc.) with copper or aluminum conductors. Their designs are suited for harsh working environment like off-shore wind farm.

The 3M Tplug & Sub Tplug connectors meet all requirements of HD 629.1 & IEC 60502-4, and comply with bushing type C 630A which follows EN-50180 & 50181 inside MV Switchgear, and come with Compression copper lug or Bimetallic Al-Cu lug or Mechanical shearbolt lug.

## Key Features

- Provides a fully shielded and submersible connection when mated with the proper bushing or plug.
- Type "C" 630 A Interface.
- Mounting can be vertical, horizontal, or any angle in between.
- No minimum phase clearance requirements.
- 100% electrical tested at factory.
- Wide application range

## Product Ratings

Maximum Voltage Class (Um)	24 kV
AC 5 Minute Voltage Withstand	57 kV
AC 1 Minute Voltage Withstand	65 kV
DC 15 Minute Voltage Withstand	76 kV
PD test level	22 kV < 5 pC
Impluse voltage test	125/150 kV
Thermal Short Circuit (Conductor, 2sec.)	23 kA/2 s
Dynamic Short Circuit (Conductor, 10 ms.)	82 kA/10 ms
Continuous Current	630 A
Overload Current	900 A

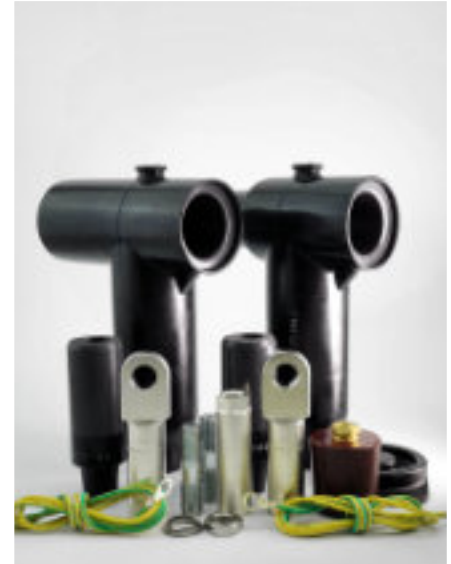
## Production Tests

### Tests conducted in accordance with IEC 60502-4

- Minimum Corona Voltage Level - 20 kV<3 pC
- AC 5 Minute Withstand - 54 kV

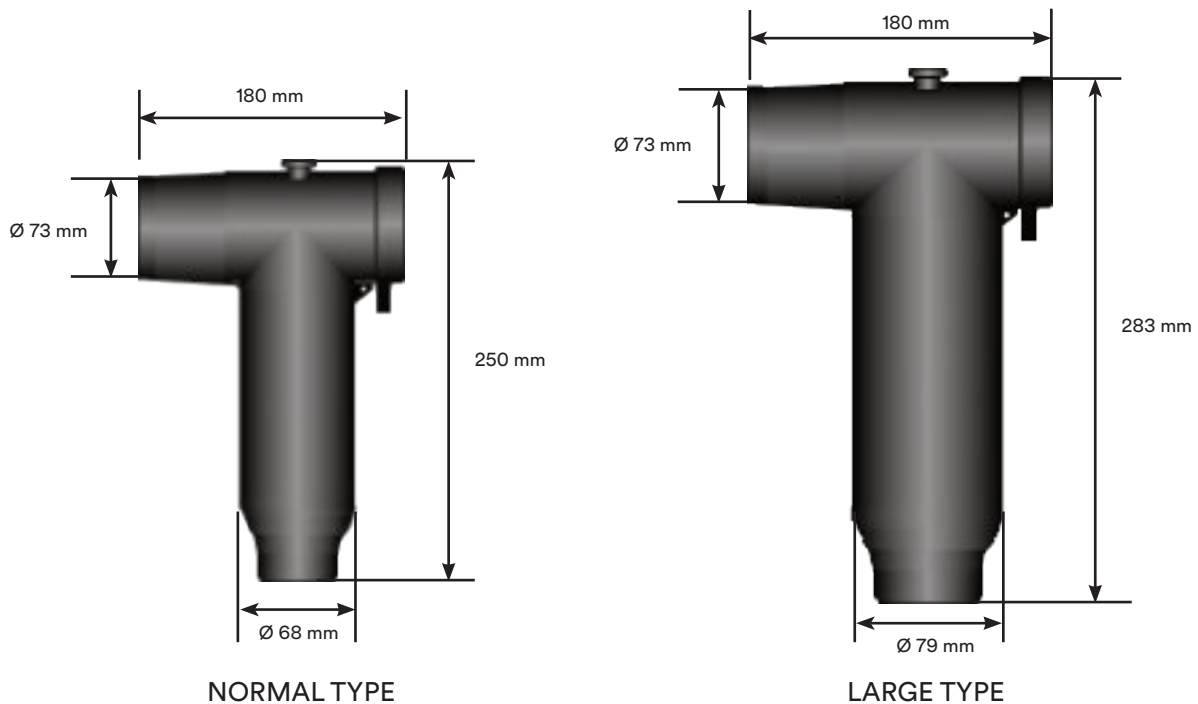
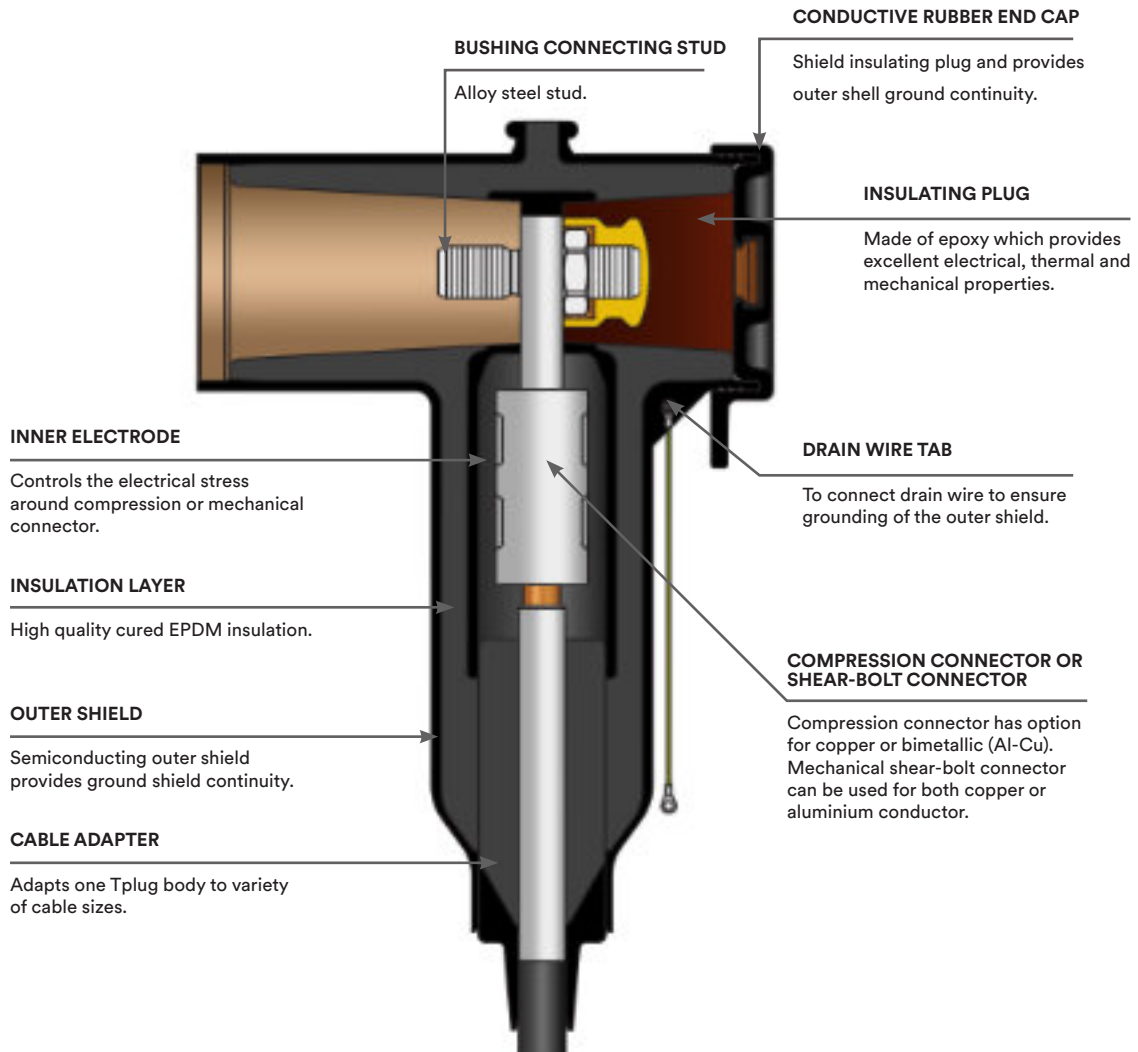
### Tests conducted in accordance with 3M manufacturing process requirements:

- Physical Inspection
- Periodic Dissection
- Periodic X-Ray analysis



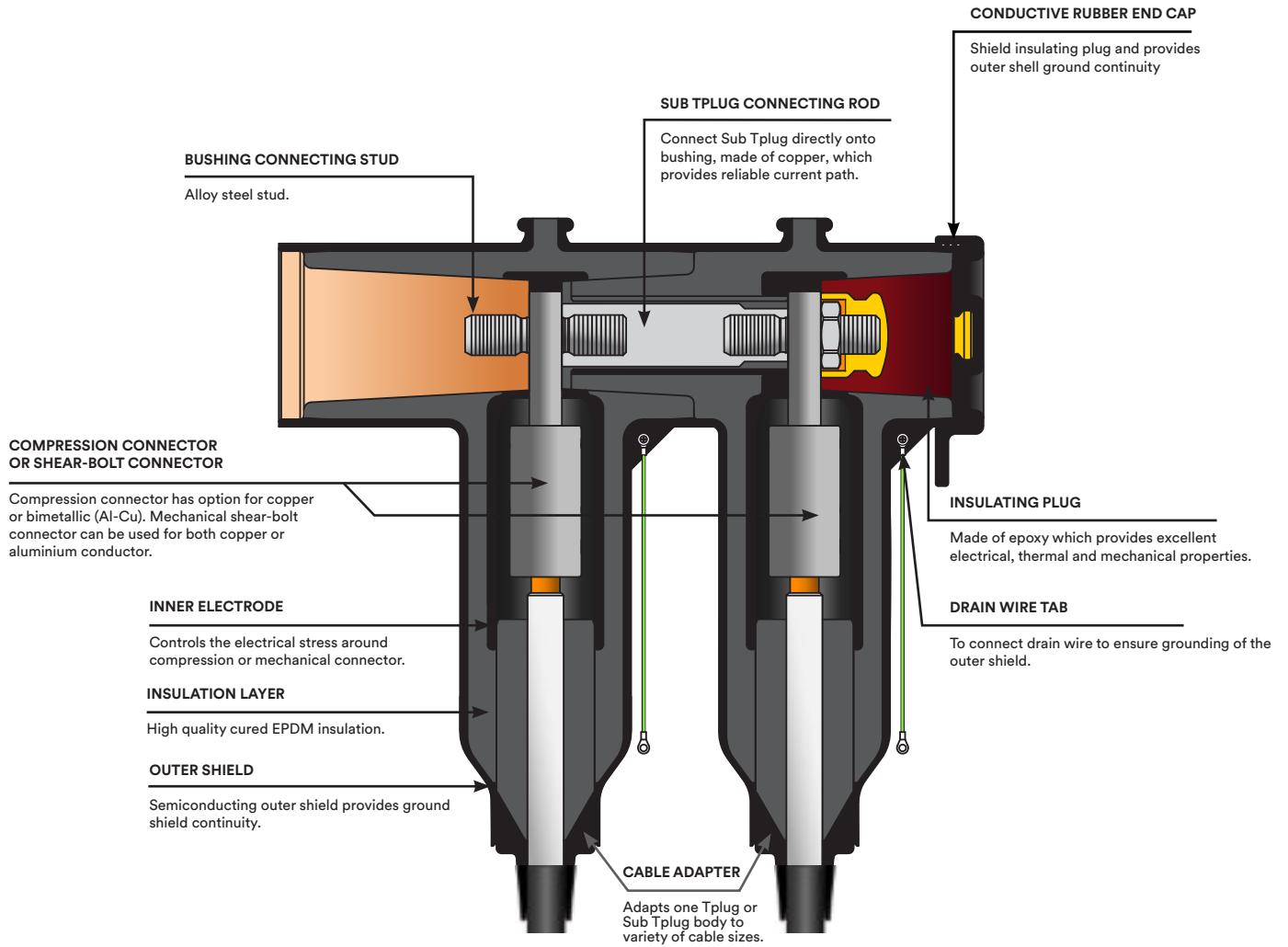


# Detailed composition of 24 kV-630 A Front Tplug Connector



**Note:** Normal type is for short compression connectors up to 400 mm<sup>2</sup>, and for shear-bolt connector up to 240 mm<sup>2</sup>. Large type is for normal compression connectors up to 500 mm<sup>2</sup>, and for shear-bolt connector up to 400 mm<sup>2</sup>.

# Detailed composition of 24 kV - 630 A Sub (Rear) Tplug Connector



NORMAL TYPE



LARGE TYPE

**Note:** Normal Sub (Rear) Tplug could be installed at the back of Large Front Tplug and vice versa.

# Separable Connectors 36 kV - 400 A Tplug Connector

## 94-EE-900-36-400-TPLUG

### Application

This 3M Tplug connector is used to terminate polymeric cable to dead front apparatus such as transformers, switchgear, and other equipment. It can be used for 36 kV 400 A applications at MV/LV end user site. This Tplug connector is suitable for indoor or outdoor applications, and can be used for all polymeric cable types (XLPE, EPR, etc.) with copper or aluminum conductors. Its design is especially suited for the harsh off-shore or wind farm environment.

This 3M Tplug connector meets all requirements of HD 629.1 & IEC 60502-4, and complies with bushing type B 400 A which follows EN-50180 & 50181 inside MV Switchgear or on Transformer, and comes with a probe connector and Compression copper or Bimetallic Al-Cu or Mechanical shearbolt thread hole cable lug.

### Key Features

- Provides a fully shielded and submersible connection when mated with the proper bushing or plug.
- Type “B” 400 A interface.
- Mounting can be vertical, horizontal, or any angle in between.
- No minimum phase clearance requirements.
- 100% electrical tested in production.
- Wide application range

### Product Ratings

Maximum Voltage Class (Um)	36 kV
AC 5 Minute Voltage Withstand	90 kV
DC 15 Minute Voltage Withstand	80 kV
Minimum Corona Voltage Level	35 kV < 10 pC
BIL and Full Wave Crest (Impluse)	170 kV
Thermal Short Circuit (Conductor, 2sec.)	23 kA
Dynamic Short Circuit	82 kA
Continuous Current	400 A

### Production Tests

#### Tests conducted in accordance with IEC 60502-4

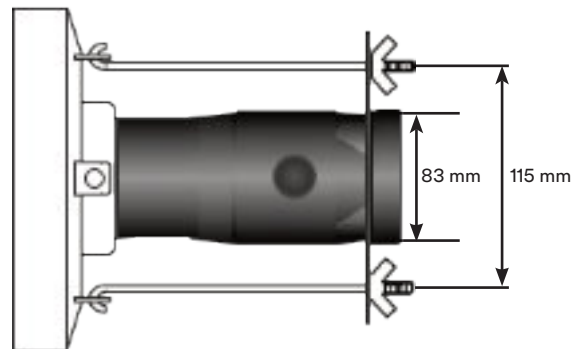
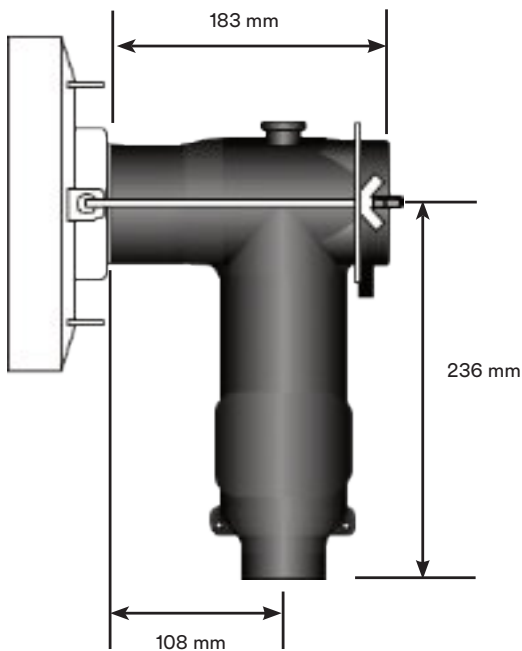
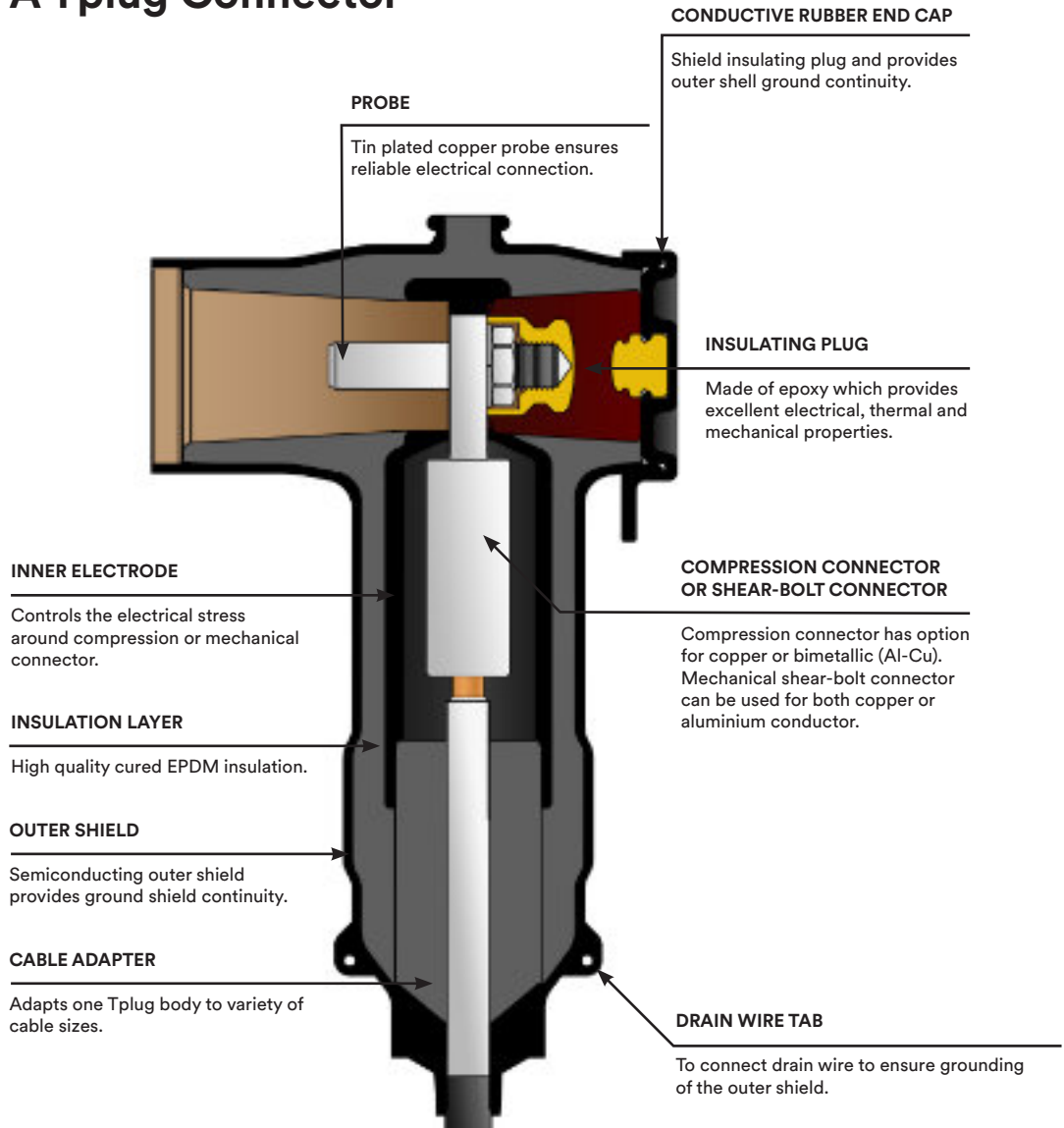
- Minimum Corona Voltage Level - 30 kV 3 pC
- AC 5 Minute Withstand - 81 kV

#### Tests conducted in accordance with 3M manufacturing process requirements:

- Physical Inspection & Periodic Dissection
- Periodic X-Ray analysis



# Detailed composition of 36 kV - 400 A Tplug Connector



# Separable Connectors 36 kV - 630 A & 42 kV - 630 A Front Tplug / Sub (Rear) Tplug Connector

94-EE-900-36-630-TPLUG & SUB TPLUG / 94-EE-900-42-630 TPLUG & SUB TPLUG

## Application

These 3M Tplug connectors are used to terminate polymeric cable to dead front apparatus such as transformers, switchgear, and other equipment. They can be used for 36 kV application with 36 kV-630 A Tplug at MV/ LV end user site and 40.5 kV application with 42 kV-630 A Tplug. These Tplug & Sub Tplug connectors are suitable for indoor or outdoor applications, and are able to be used for all polymeric cable types ( XLPE, EPR, etc.) with copper or aluminum conductors. Their designs are especially suited for the harsh off-shore or wind farm environment.

These 3M Tplug & Sub Tplug connectors meet all requirements of HD 629.1 & IEC 60502-4, and comply with bushing type C 630 A which follows EN-50180 & 50181 inside MV Switchgear, and come with Compression copper lug or Bimetallic Al-Cu lug or Mechanical shearbolt lug.

## Key Features

- Provides a fully shielded and submersible connection when mated with the proper bushing or plug.
- Type “C” 630 A interface.
- Mounting can be vertical, horizontal, or any angle in between.
- No minimum phase clearance requirements.
- 100% electrical tested in production.
- Wide application range

## Product Ratings

	36 kV 630 A Tplug	42 kV 630 A Tplug
Maximum Voltage Class (Um)	36 kV	42 kV
AC 5 Minute Voltage Withstand	90 kV	117 kV
DC 15 Minute Voltage Withstand	80 kV	125 kV
Minimum Corona Voltage Level	35 kV < 10 pC	45 kV < 10 pC
BIL and Full Wave Crest (Impluse)	170 kV	200 kV
Thermal Short Circuit (Conductor, 2sec.)	23 kA	24 kA
Dynamic Short Circuit	82 kA	86 kA
Continuous Current	630 A	630 A



## Production Tests

### Tests conducted in accordance with IEC 60502-4

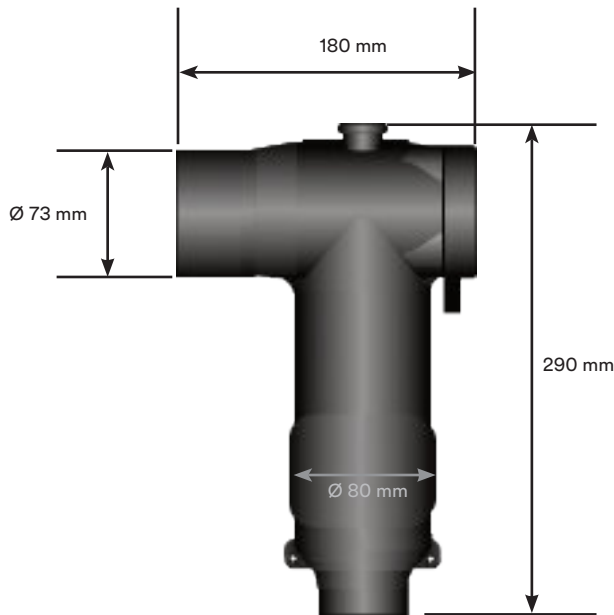
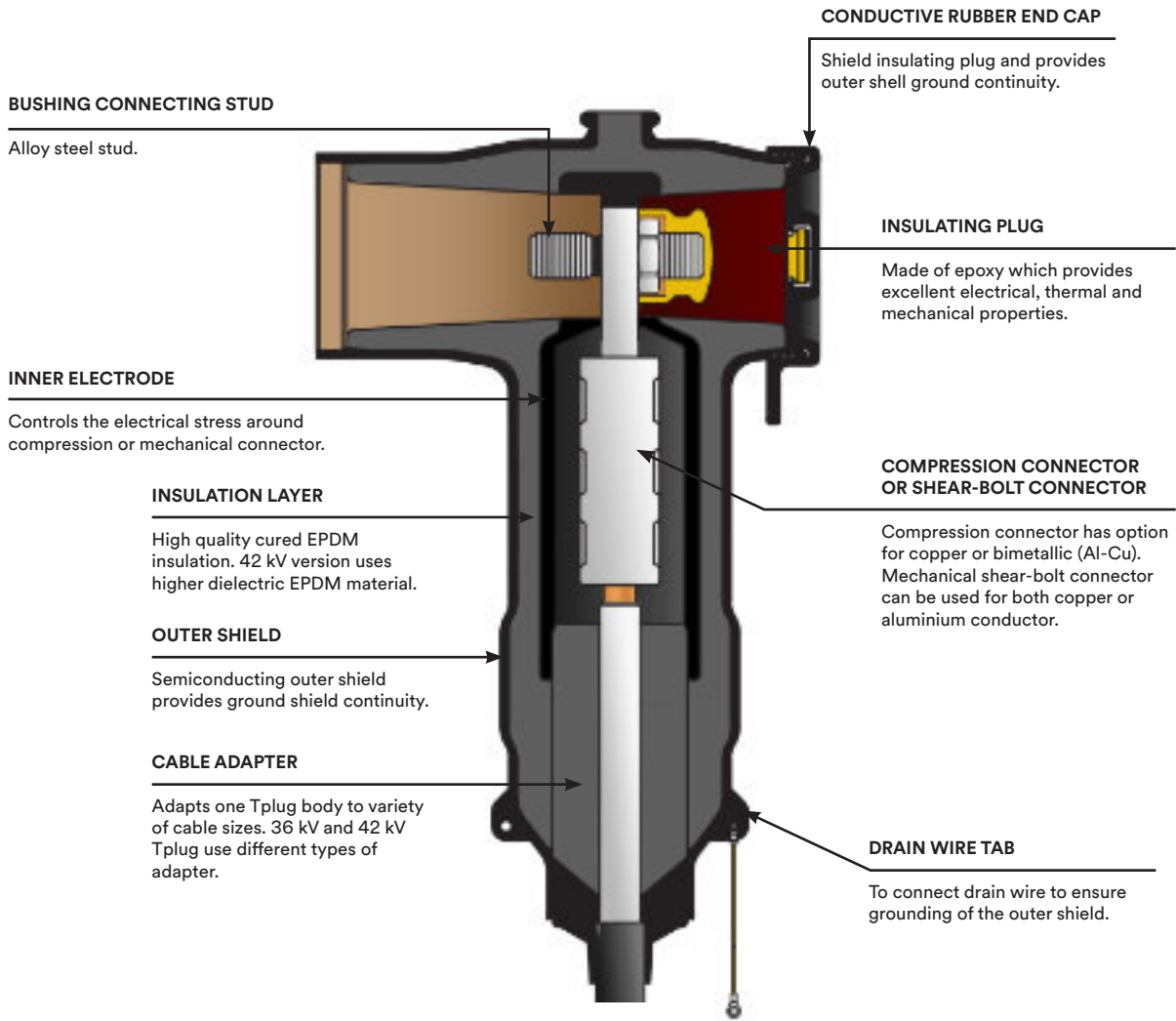
- Minimum Corona Voltage Level
- AC 5 Minute Withstand

36 kV 630 A	42 kV 630 A
30 kV < 3 pC	45 kV < 3 pC
81 kV	117 kV

### Tests conducted in accordance with 3M manufacturing process requirements:

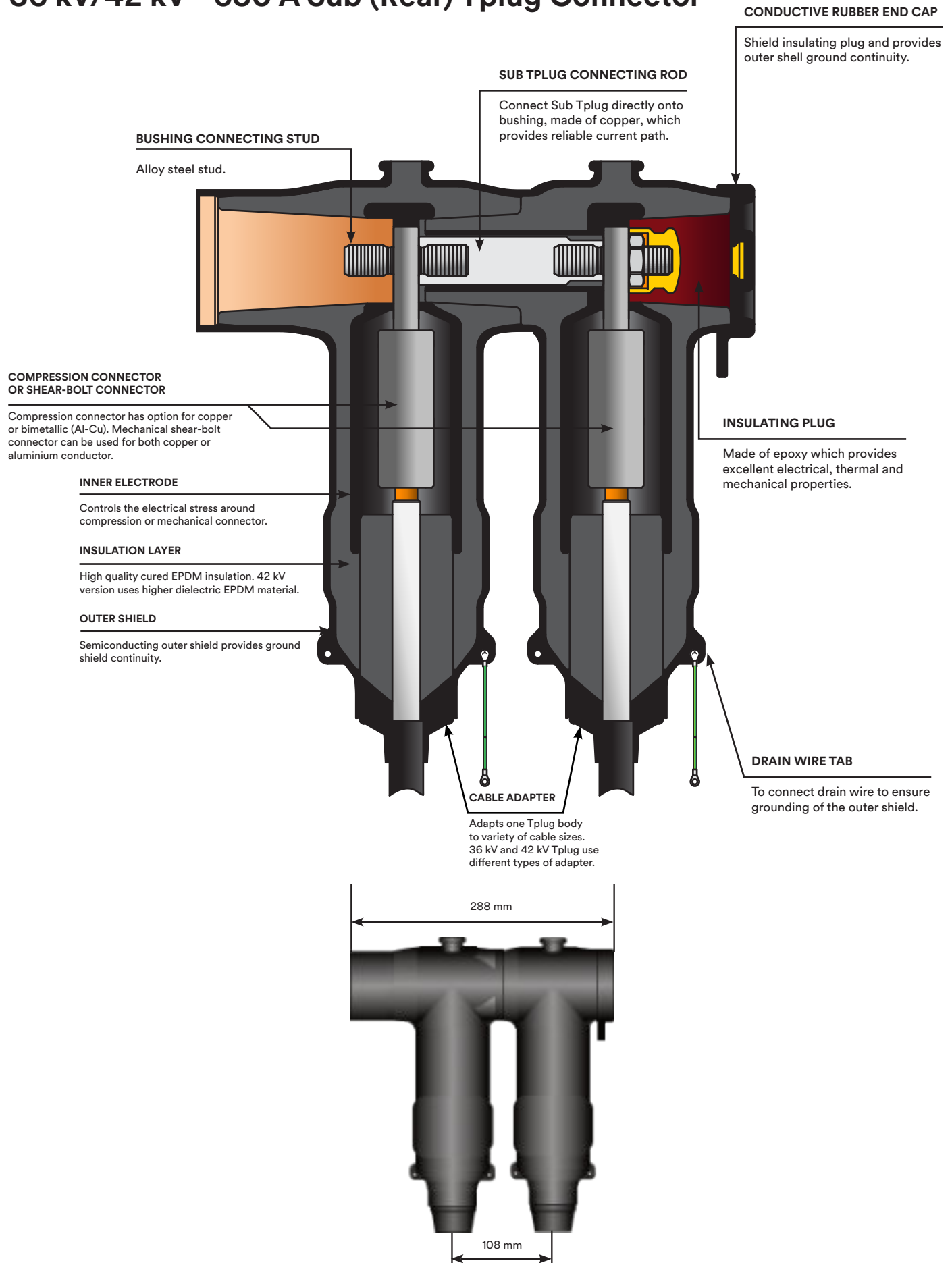
- Physical Inspection & Periodic Dissection
- Periodic X-Ray analysis

# Detailed composition of 36 kV/42 kV - 630 A Front Tplug Connector



**Note:** Even having similar application range and dimension, 42 kV 630 A Tplug adapter has higher dielectric value than 36 kV 630 A Tplug adapter. Thus, they are not interchangeable.

# Detailed composition of 36 kV/42 kV - 630 A Sub (Rear) Tplug Connector



# Separable Connectors 12 kV to 42 kV - 1250 A Front Tplug / Sub (Rear) Tplug Connector

93-EE-900-24-1250-TPLUG & SUB TPLUG / 94-EE-900-42-1250-TPLUG & SUB TPLUG

## Application

These 3M Tplug connectors used to terminate polymeric cable to dead front apparatus such as transformers, switchgear, and other equipment. They can be used for 1250 A applications under wide range of voltage: from 12 kV up to 42 kV. These Tplug & Sub Tplug connectors are suitable for indoor or outdoor applications, and are able to be used for all polymeric cable types (XLPE, EPR, etc.) with copper or aluminum conductors. Their designs are especially suited for the harsh off-shore or wind farm environment.

These 3M Tplug & Sub Tplug connectors meet all requirements of HD 629.1 & IEC 60502-4, and comply with bushing type C 1250 A which follows EN-50180 & 50181 inside MV Switchgear, and come with Compression copper lug or Bimetallic Al-Cu lug or Mechanical shearbolt lug.

## Key Features

- Provides a fully shielded and submersible connection when mated with the proper bushing or plug.
- Type “C” 1250 A interface.
- Mounting can be vertical, horizontal, or any angle in between.
- No minimum phase clearance requirements.
- 100% electrical tested in production.
- Wide application range



## Product Ratings

Maximum Voltage Class (Um)	42 kV
AC 5 Minute Voltage Withstand	117 kV
DC 15 Minute Voltage Withstand	125 kV
Minimum Corona Voltage Level	45 kV < 10 pC
BIL and Full Wave Crest (Impluse)	200 kV
Thermal Short Circuit (Conductor, 2sec.)	45 kA
Dynamic Short Circuit	100 kA
Continuous Current	1250 A

## Production Tests

### Tests conducted in accordance with IEC 60502-4

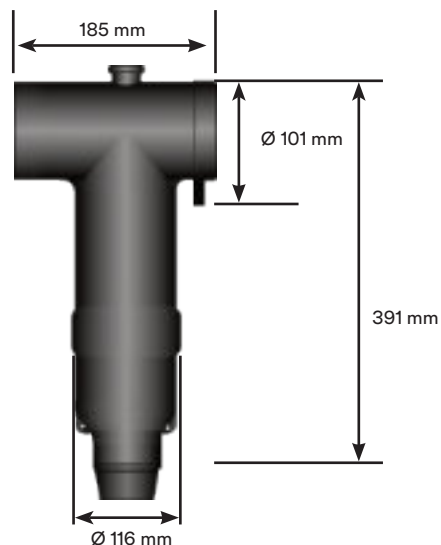
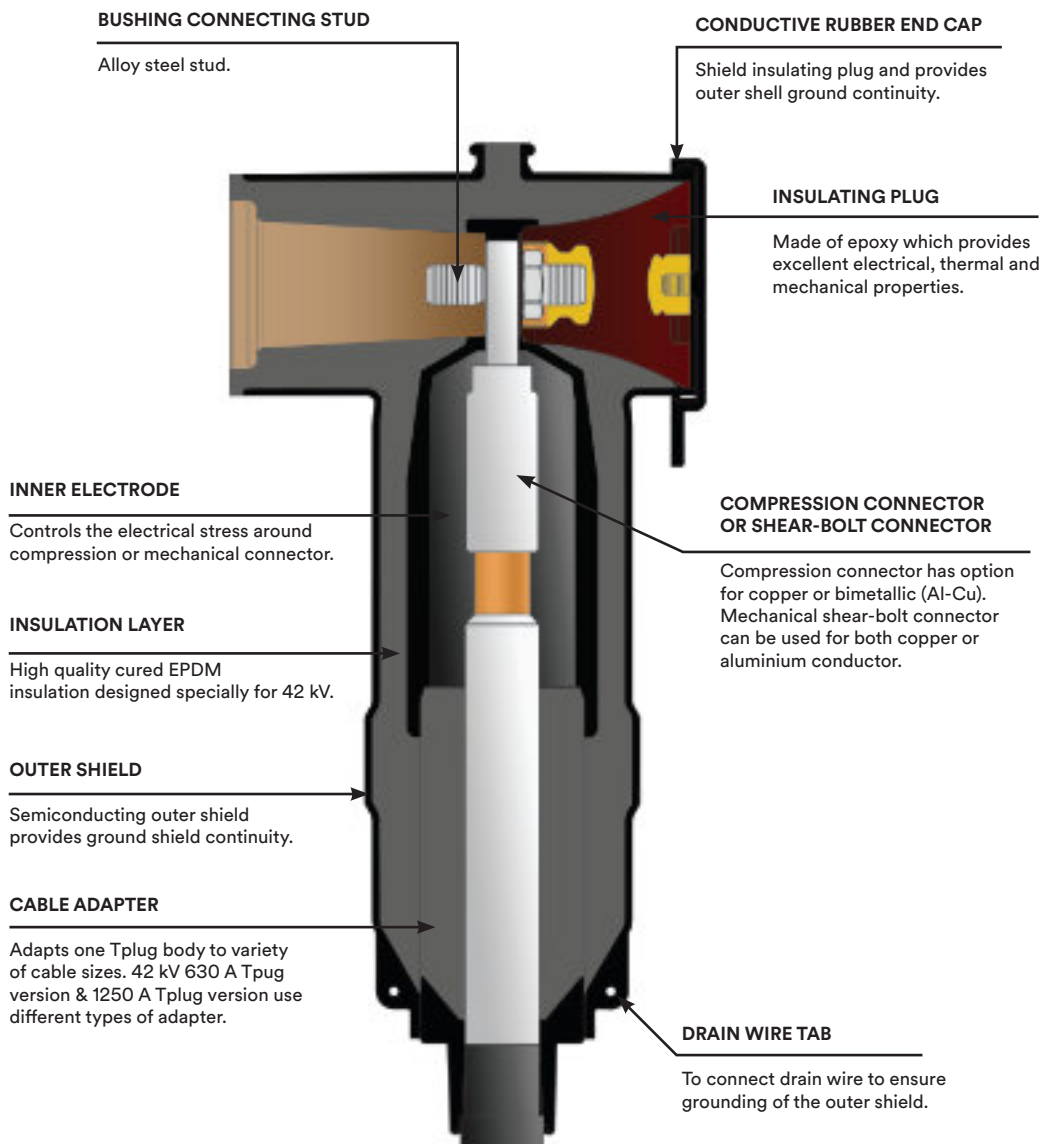
- Minimum Corona Voltage Level - 45 kV ≤ 10 pC
- AC 5 Minute Withstand -117 kV

### Tests conducted in accordance with 3M manufacturing process requirements:

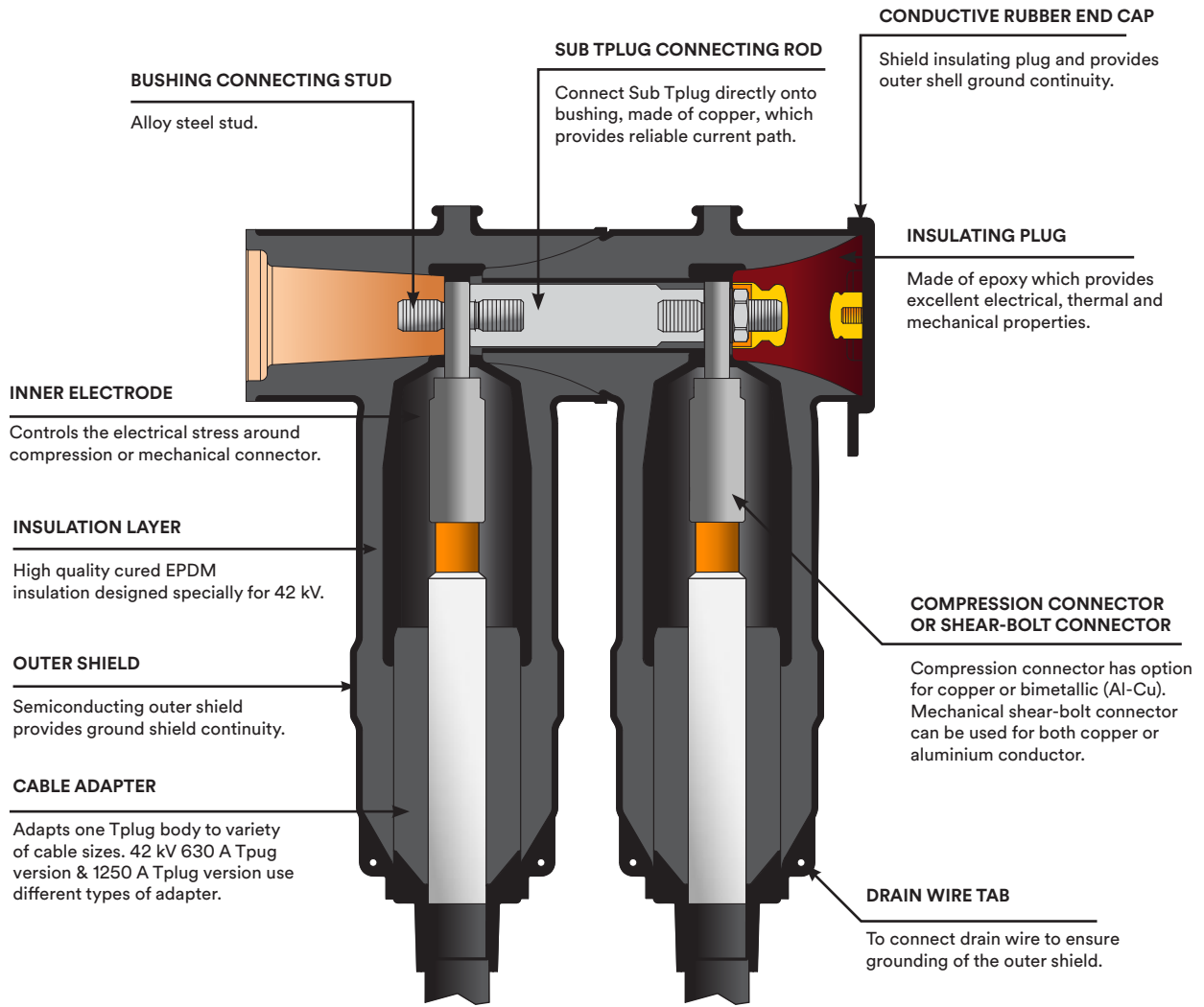
- Physical Inspection Periodic Dissection
- Periodic X-Ray analysis



# Detailed composition of 42 kV - 1250 A Front Tplug Connector



# Detailed composition of 42 kV - 1250 A Sub (Rear) Tplug Connector



**Note:** 630 A Rear Tplug body could not be installed with 1250 A Tplug body and vice versa.

# Separable Connector 26 kV / 72 kV, 34 kV / 95 kV and 51 kV / 134 kV Surge Arrester 93-EE-900-SURGE ARRESTER / 94-EE-900-SURGE ARRESTER

## Application

The 3M Separable Connector Surge Arrester is an arrester combined within a Sub (Rear) Tplug interface. It is designed to protect apparatus, including transformers, switchgear, and other equipment from high voltage surges due to lightning or switching.

## Key Features

- Provides fully shielded deadfront arrester protection.
- Metal (zinc) Oxide Varistor (MOV) gapless design.
- EPDM insulation rubber molded around MOV module.
- Mounting can be vertical, horizontal, or any angle in between.
- No minimum phase clearance requirements.
- 100% electrical tested at factory.



## Product Ratings

Rated Voltage Class (Um)	26 kV	34 kV	51 kV
Nominal Discharge Current of Arrester	10 kA	10 kA	10 kA
Residual Voltage of Nominal Discharge Current	≤ 72 kV	≤ 95 kV	≤ 134 kV
Maximum Continuous Operating Voltage	20.8 kV	27.2 kV	40.8 kV
Voltage of DC 1 mA Current	≥ 37 kV	≥ 48 kV	≥ 73 kV

## Production Tests

### Tests conducted in accordance with IEC 60099-4

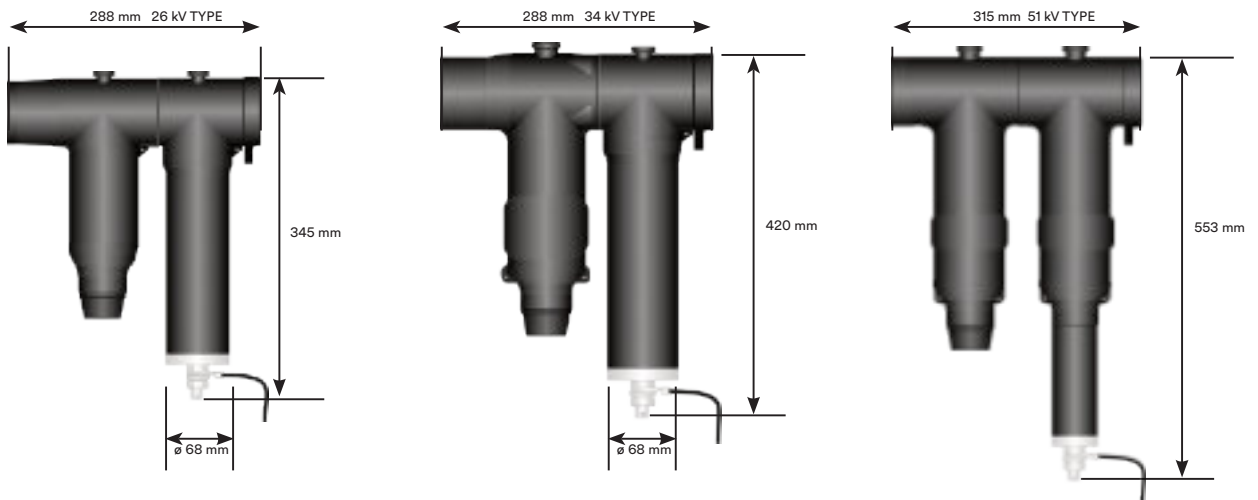
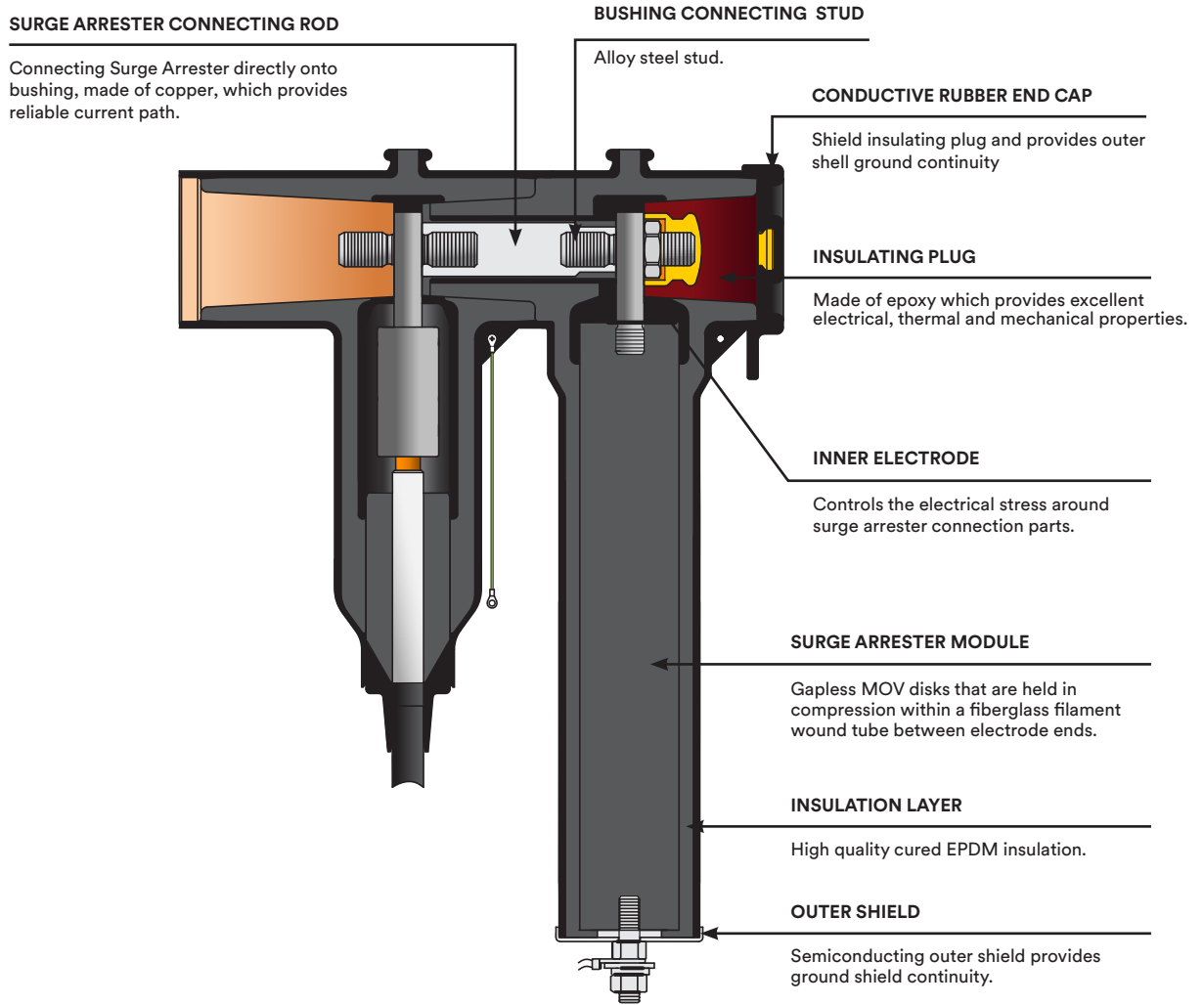
- Minimum Corona Voltage Level
- Voltage of DC 1 mA Current

<b>26 kV</b>	<b>34 kV</b>	<b>51 kV</b>
22 kV < 3 pC	29 kV < 3 pC	43 kV < 3 pC
≥ 37 kV	≥ 48 kV	≥ 73 kV

### Tests conducted in accordance with 3M manufacturing process requirements:

- Physical Inspection
- Periodic Dissection
- Periodic X-Ray analysis

# Detailed composition of the 3M Separable Connector Surge Arrester



**Note:** 26 kV Surge Arrester module could only be installed with 24 kV 630 A Tplug  
 34 kV Surge Arrester module could only be installed with 36 kV 630 A Tplug  
 51 kV Surge Arrester module could only be installed with 42 kV 1250 A Tplug

# 3M Double sides Bushing C For Tplug Splice & Branch Splice



## Application

The 3M Bushing is molded from high quality insulating epoxy material. It meets all the requirements of the DIN 47636 standard. The interface is Type C, per the specifications of standard EN 50181.

The 3M Bushing can be installed in switchgear, or other equipment, and used in conjunction with Tplug connectors and arresters to make Tplug Splice and Branch Splice. The product is fully insulated and submersible, designed to be fully functional in underwater applications.

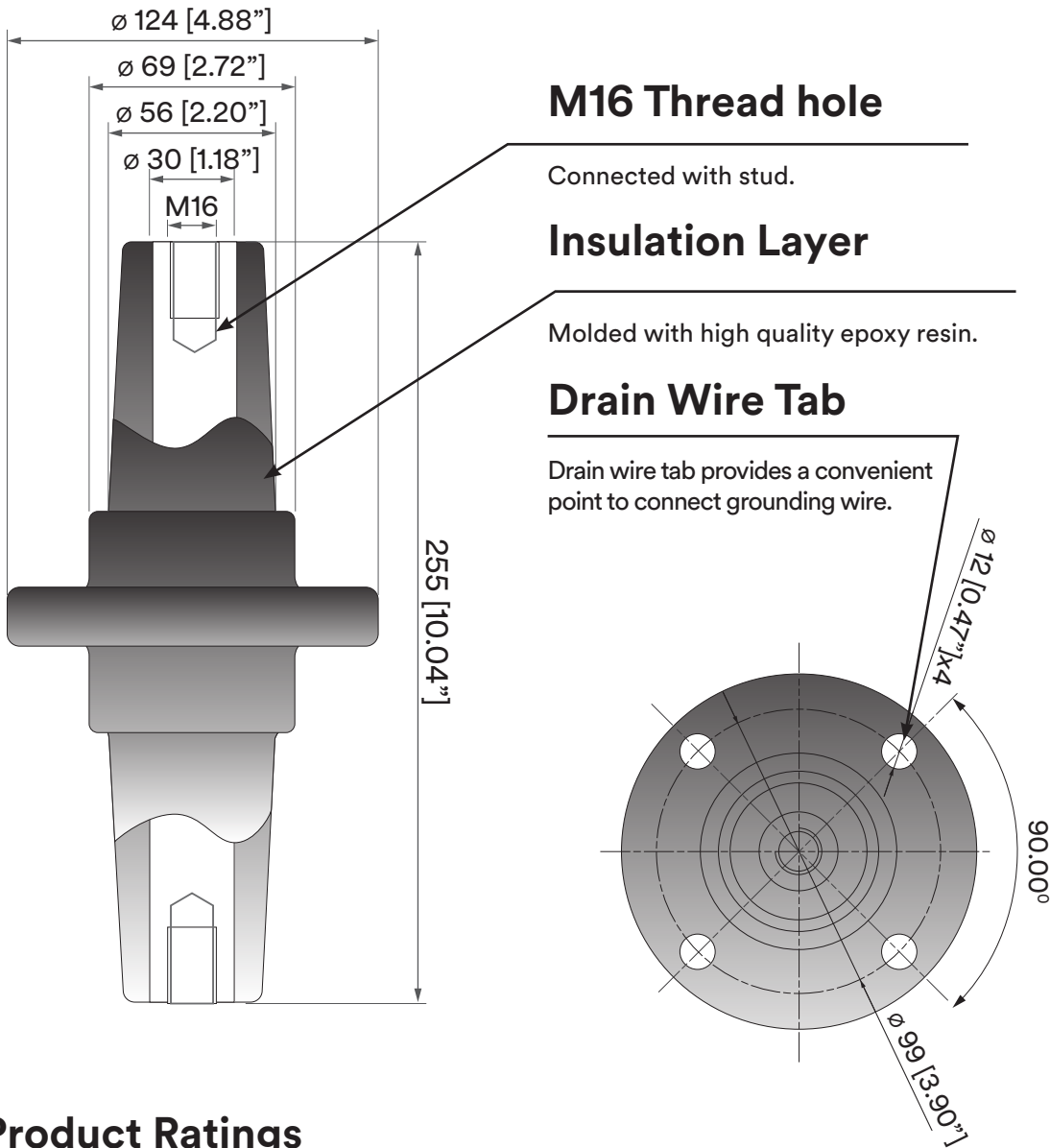


TPLUG SPLICE



BRANCH SPLICE

# Detailed composition of Double sides Bushing C



## Product Ratings

3M Double sides bushing C follows IEC 60502-4  
 Connection Interface C follows EN 50180 & 50181

Electrical Ratings	24 kV Type C 630 A	36 kV Type C 630 A	42 kV Type C 1250 A
Maximum System Voltage (Um)	24 kV	36 kV	42 kV
AC Withstand (5 min)	57 kV	81 kV	117 kV
Partial Discharge	22 kV ≤ 10 pC	30 kV ≤ 10 pC	45 kV ≤ 10 pC
Impulse	125 kV	170 kV	200 kV
Current rating	630 A	630 A	1250 A
Order code	24-DSBC-630	36-DSBC-630	42-DSBC-1250

# New Improved Design

With our deep expertise and experience in the electrical industry, 3M engineers are constantly making improvements to our products. We made changes to our stud and rod design to enhance the product installation process.

## Key features of the new design

- Can be installed in tight spaces with ease and precision
- Use standard torque ratchet wrench with hexagonal socket to install the stud and rod
- Install the separable connectors with precise torque to prevent overheating due to bad connections
- Save time and prevents workmanship errors



## Old Design:

- Requires open ended torque wrench
- Difficult to install in tight spaces
- Open ended torque wrench is not readily available and is expensive
- Don't know applied force and can overtighten, cause difficult to loose for maintenance purpose later on

## New Design:

- Requires standard torque ratchet wrench with hexagonal socket
- Install with ease in tight spaces
- Readily available tool
- Tighten with exact applied force, easy for maintenance later on

# Kit Content and Packaging Information

The 3M kits consist - for 12 kV up to 42 kV, applications - all specific parts such as connector, pin and screws to install one complete phase of Dead Break Separable Connector.

**Note:** For 1C armor cable having copper tape shield, jointer needs to supply additional Constant Force Spring to connect tinned copper braid to cable armor. 3M kit will include this additional constant force spring once process updating new stud & connecting rod completed.

250 A Elbow Series	250 A Straight Series	400 A & 630 A & 1250 A Tee Series
1 x Elbow Connector c/w grounding wire  1 x Copper or Bi-metallic cable lug 1 x Pin Contact + Hex Key  1 x Bail Assembly 1 x Test Point Cap 1 x Silicone Lubricant	1 x Straight Connector c/w grounding wire  1 x Copper or Bi-metallic cable lug  1 x Bail Assembly 1 x Test Point Cap 1 x Silicone Lubricant	1 x Tee Plug Connector c/w grounding wire 1 x Cable Adapter 1 x Copper or Bi-metallic compression lug or Shear-bolt connector 1 x Thread Stud for 630 A & 1250 A or PIN contact for 400 A 1 x Washer + Hex Nut 1 x Mechanical Wrench + handle (*) 1 x Bail Assembly for 400 A 1 x Insulating Plug + Covering Cap 1 x Silicone Lubricant
2 x Mastic Strip 1 x PVC Temflex Tape 1 x Tinned Copper Braid 1 x Constant Force Spring 1 x Rubber Tape Strip 1 x Cable Cleaning kit 1 x Comfort Grip Gloves Drawing Instructions	2 x Mastic Strip 1 x PVC Temflex Tape 1 x Tinned Copper Braid 1 x Constant Force Spring 1 x Rubber Tape Strip 1 x Cable Cleaning kit 1 x Comfort Grip Gloves Drawing Instructions	2 x Mastic Strip 1 x PVC Temflex Tape 1 x Tinned Copper Braid 1 x Constant Force Spring 1 x Rubber Tape Strip 1 x Cable Cleaning kit 1 x Comfort Grip Gloves Drawing Instructions

(\*) Note: This item would be removed once process updating new stud & connecting rod completed.

For 3 core cable, we have Cold Shrink & also Heat Shrink option for cable breakout:



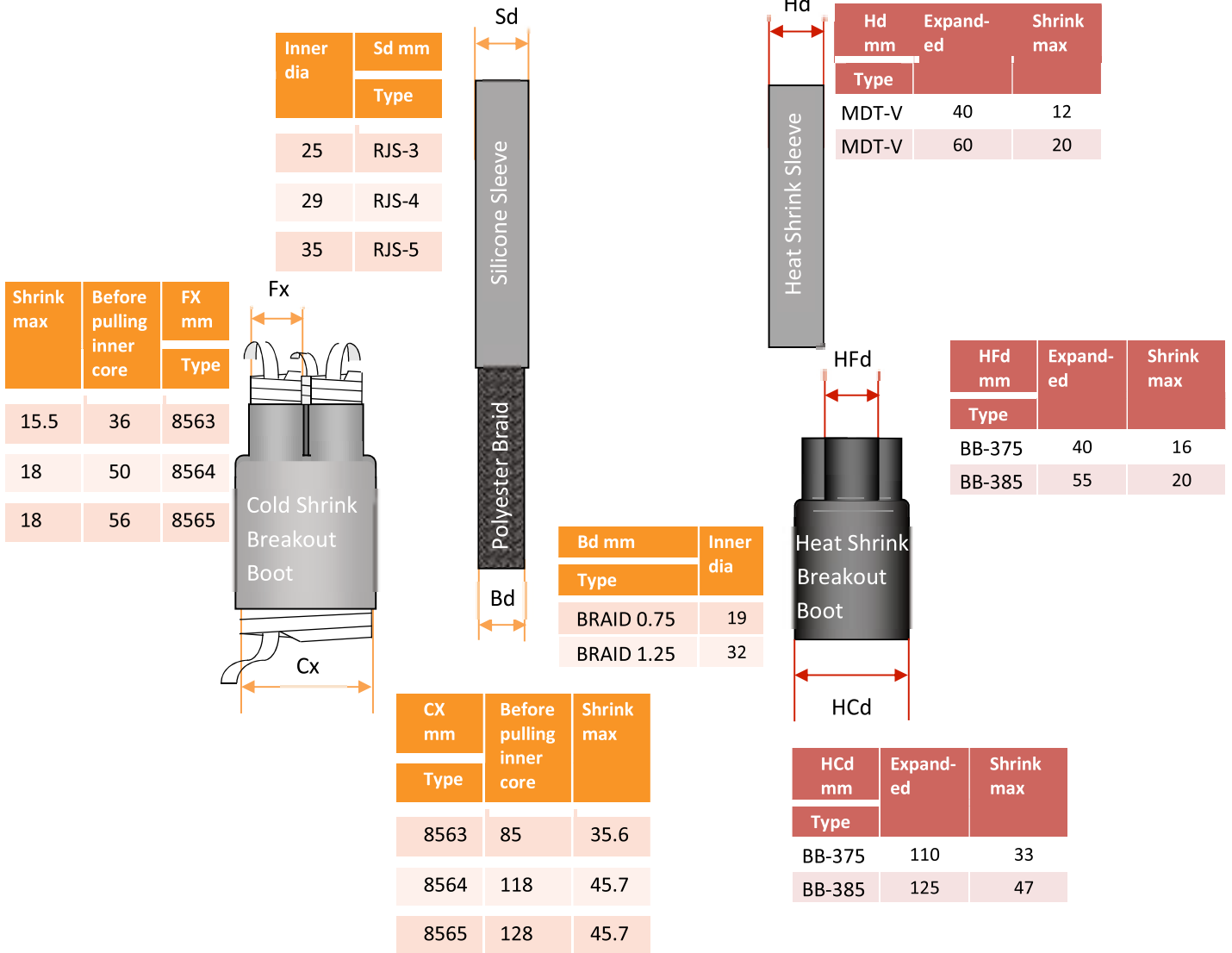
Cold Shrink Breakout Boot	Heat Shrink Breakout Boot
1 x Cold Shrink Breakout Boot	1 x Heat Shrink Breakout Boot
1 x Silicone Cable Sleeve 1500 mm	3 x Heat Shrink Cable Sleeve 1000 mm
1 x Polyester Braid 1800 mm	
1 x Constant Force Spring	1 x Constant Force Spring
1 x Comfort Grip Gloves	1 x Comfort Grip Gloves
1 x colour coding PVC tape RYB	1 x colour coding PVC tape RYB
Drawing Instruction	Drawing Instruction



# Technical parameters of breakout boot parts

## COLD SHRINK TYPE

## HEAT SHRINK TYPE



# Product Stock numbers and Application Range

**Note:** These SKUs are common configurations. For other ranges, different configurations- & voltage which don't appear in below lists, please contact 3M.

## 24 kV Voltage Class

24 kV 250 A Elbow configuration for Cu conductor with Copper Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	93-EE-800L-24-250-ELBOW-3×1Cx25	25	12.9 - 17.4
02	93-EE-800L-24-250-ELBOW-3×1Cx50	50	16.3 - 20.5
03	93-EE-800L-24-250-ELBOW-3×1Cx70	70	19.5 - 24.0
04	93-EE-800L-24-250-ELBOW-3×1Cx95	95	19.5 - 24.0
05	93-EE-800L-24-250-ELBOW-3×1Cx120	120	23.0 - 28.1

24 kV 250 A Elbow configuration for Al conductor with Bimetallic Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	93-EE-800L-24-250-ELBOW-3×1Cx50 bi	50	16.3 - 20.5
02	93-EE-800L-24-250-ELBOW-3×1Cx70 bi	70	19.5 - 24.0
03	93-EE-800L-24-250-ELBOW-3×1Cx95 bi	95	19.5 - 24.0
04	93-EE-800L-24-250-ELBOW-3×1Cx120 bi	120	23.0 - 28.1

24 kV 250 A Straight configuration for Cu conductor with Copper Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	93-EE-800I-24-250-STRAIGHT-3×1Cx50	50	16.3 - 20.5
02	93-EE-800I-24-250-STRAIGHT-3×1Cx70	70	19.5 - 24.0
03	93-EE-800I-24-250-STRAIGHT-3×1Cx95	95	19.5 - 24.0
04	93-EE-800I-24-250-STRAIGHT-3×1Cx120	120	23.0 - 28.1

24 kV 250 A Straight configuration for Al conductor with Bimetallic Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	93-EE-800I-24-250-STRAIGHT-3×1Cx50 bi	50	16.3 - 20.5
02	93-EE-800I-24-250-STRAIGHT-3×1Cx70 bi	70	19.5 - 24.0
03	93-EE-800I-24-250-STRAIGHT-3×1Cx95 bi	95	19.5 - 24.0
04	93-EE-800I-24-250-STRAIGHT-3×1Cx120 bi	120	23.0 - 28.1

24 kV 250 A Elbow configuration for both Al and Cu conductor with Mechanical Shearbolt Lug:

No.	Kit Reference	Lug range (mm <sup>2</sup> )	No. of Bolts	Diameter over Primary Insulation (mm)
01	93-EE-800L-24-250-ELBOW-3×1Cx25Cu-Al	25-50	1	12.9 .. 17.4
02	93-EE-800L-24-250-ELBOW-3×1Cx35..50 Cu-Al	25-50	1	16.3 .. 20.5
03	93-EE-800L-24-250-ELBOW-3×1Cx70..95 Cu-Al	70-95	1	19.5 .. 24.0
04	93-EE-800L-24-250-ELBOW-3×1Cx120 Cu-Al	120	1	23.0 - 28.1

24 kV 250 A Straight configuration for both Al and Cu conductor with Mechanical Shearbolt Lug:

No.	Kit Reference	Lug range (mm <sup>2</sup> )	No. of Bolts	Diameter over Primary Insulation (mm)
01	93-EE-800L-24-250-STRAIGHT-3×1Cx25 Cu-Al	25-50	1	12.9 .. 17.4
02	93-EE-800L-24-250-STRAIGHT-3×1Cx35..50 Cu-Al	25-50	1	16.3 .. 20.5
03	93-EE-800L-24-250-STRAIGHT-3×1Cx70..95 Cu-Al	70-95	1	19.5 .. 24.0
04	93-EE-800L-24-250-STRAIGHT-3×1Cx120 Cu-Al	120	1	23.0 - 28.1

24 kV 630 A / 1250 A Tee Plug configuration for Cu conductor with Copper Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	93-EE-900-24-630-TPLUG-3×1Cx35	35	15.5 .. 19.0
02	93-EE-900-24-630-TPLUG-3×1Cx50	50	18.0 .. 23.0
03	93-EE-900-24-630-TPLUG-3×1Cx70	70	18.0 .. 23.0
04	93-EE-900-24-630-TPLUG-3×1Cx95	95	22.0 .. 27.0
05	93-EE-900-24-630-TPLUG-3×1Cx120	120	22.0 .. 27.0
06	93-EE-900-24-630-TPLUG-3×1Cx150	150	22.0 .. 27.0
07	93-EE-900-24-630-TPLUG-3×1Cx185	185	26.0 .. 32.0
08	93-EE-900-24-630-TPLUG-3×1Cx240	240	26.0 .. 32.0
09	93-EE-900-24-630-TPLUG-3×1Cx300	300	31.0 .. 37.0
10	93-EE-900-24-630-TPLUG-3×1Cx400S	400	31.0 .. 37.0
11	93-EE-900-24-630-LARGE TPLUG-3×1Cx500	500	38.0 .. 42.0
12	93-EE-900-24-1250-TPLUG-3×1Cx500	500	37.7 .. 40.5
13	93-EE-900-24-1250-TPLUG-3×1Cx630	630	42.3 .. 45.3

24 kV 630 A / 1250 A Tee Plug configuration for Al conductor with Bimetallic Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	93-EE-900-24-630-TPLUG-3×1Cx50 bi	50	18.0 .. 23.0
02	93-EE-900-24-630-TPLUG-3×1Cx70 bi	70	18.0 .. 23.0
03	93-EE-900-24-630-TPLUG-3×1Cx95 bi	95	22.0 .. 27.0
04	93-EE-900-24-630-TPLUG-3×1Cx120 bi	120	22.0 .. 27.0
05	93-EE-900-24-630-TPLUG-3×1Cx150 bi	150	22.0 .. 27.0
06	93-EE-900-24-630-TPLUG-3×1Cx185 bi	185	26.0 .. 32.0
07	93-EE-900-24-630-TPLUG-3×1Cx240 bi	240	26.0 .. 32.0
08	93-EE-900-24-630-TPLUG-3×1Cx300 bi	300	31.0 .. 37.0
09	93-EE-900-24-630-TPLUG-3×1Cx400S bi	400	31.0 .. 37.0
10	93-EE-900-24-630-LARGE TPLUG-3×1Cx500 bi	500	38.0 .. 42.0
11	93-EE-900-24-1250-TPLUG-3×1Cx630 bi	630	42.3 .. 45.3

24 kV 630 A / 1250 A Sub Tplug configuration for Cu conductor with Copper Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	93-EE-900-24-630-SUB TPLUG-3×1Cx35	35	15.5 .. 19.0
02	93-EE-900-24-630-SUB TPLUG-3×1Cx50	50	18.0 .. 23.0
03	93-EE-900-24-630-SUB TPLUG-3×1Cx70	70	18.0 .. 23.0
04	93-EE-900-24-630-SUB TPLUG-3×1Cx95	95	22.0 .. 27.0
05	93-EE-900-24-630-SUB TPLUG-3×1Cx120	120	22.0 .. 27.0
06	93-EE-900-24-630-SUB TPLUG-3×1Cx150	150	22.0 .. 27.0
07	93-EE-900-24-630-SUB TPLUG-3×1Cx185	185	26.0 .. 32.0
08	93-EE-900-24-630-SUB TPLUG-3×1Cx240	240	26.0 .. 32.0
09	93-EE-900-24-630-SUB TPLUG-3×1Cx300	300	31.0 .. 37.0
10	93-EE-900-24-630-SUB TPLUG-3×1Cx400S	400	31.0 .. 37.0
11	93-EE-900-24-630-LARGE SUB TPLUG-3×1Cx500	500	38.0 .. 42.0
12	93-EE-900-24-1250-SUB TPLUG-3×1Cx500	500	34.4 .. 38.6
13	93-EE-900-24-1250-SUB TPLUG-3×1Cx630	630	42.3 .. 45.3

24 kV 630 A / 1250 A Sub Tee Plug configuration for Al conductor with Bimetallic Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	93-EE-900-24-630-SUB TPLUG-3×1Cx50 bi	50	18.0 .. 23.0
02	93-EE-900-24-630-SUB TPLUG-3×1Cx70 bi	70	18.0 .. 23.0
03	93-EE-900-24-630-SUB TPLUG-3×1Cx95 bi	95	22.0 .. 27.0
04	93-EE-900-24-630-SUB TPLUG-3×1Cx120 bi	120	22.0 .. 27.0
05	93-EE-900-24-630-SUB TPLUG-3×1Cx150 bi	150	22.0 .. 27.0
06	93-EE-900-24-630-SUB TPLUG-3×1Cx185 bi	185	26.0 .. 32.0
07	93-EE-900-24-630-SUB TPLUG-3×1Cx240 bi	240	26.0 .. 32.0
08	93-EE-900-24-630-SUB TPLUG-3×1Cx300 bi	300	31.0 .. 37.0
09	93-EE-900-24-630-SUB TPLUG-3×1Cx400 bi	400	31.0 .. 37.0
10	93-EE-900-24-630-LARGE SUB TPLUG-3×1Cx500 bi	500	38.0 .. 42.0
11	93-EE-900-24-1250-SUB TPLUG-3×1Cx630 bi	630	42.3 .. 45.3

24 kV 630 A / 1250 A Tee Plug configuration for both Al and Cu conductor with Mechanical Shearbolt Lug

No.	Kit Reference	Lug range (mm <sup>2</sup> )	No. of Bolts	Diameter over Primary Insulation (mm)
01	93-EE-900-24-630-TPLUG-3×1Cx25..35 Cu-Al	25-50	1	15.5 .. 19.0
02	93-EE-900-24-630-TPLUG-3×1Cx35..50 Cu-Al	25-50	1	18.0 .. 23.0
03	93-EE-900-24-630-TPLUG-3×1Cx70..95 Cu-Al	70-95	1	18.0 .. 23.0
04	93-EE-900-24-630-TPLUG-3×1Cx95..120 Cu-Al	70-120	2	22.0 .. 27.0
05	93-EE-900-24-630-TPLUG-3×1Cx150..185 Cu-Al	150-240	2	22.0 .. 27.0
06	93-EE-900-24-630-TPLUG-3×1Cx240 Cu-Al	150-240	2	26.0 .. 32.0
07	93-EE-900-24-630-LARGE TPLUG-3×1Cx300 Cu-Al	300-400	3	31.0 .. 34.0
08	93-EE-900-24-630-LARGE TPLUG-3×1Cx400 Cu-Al	300-400	3	33.0 .. 37.0
09	93-EE-900-24-1250-TPLUG-3×1Cx500 Cu-Al	500-630	3	37.7 .. 40.5
10	93-EE-900-24-1250-TPLUG-3×1Cx630 Cu-Al	500-630	3	42.3 .. 45.3

24 kV 630 A / 1250 A Sub Tplug configuration for both Al and Cu conductor with Mechanical Shearbolt Lugs

No.	Kit Reference	Lug range (mm <sup>2</sup> )	No. of Bolts	Diameter over Primary Insulation (mm)
01	93-EE-900-24-630-SUB TPLUG-3×1Cx25..35 Cu-Al	25-50	1	15.5 .. 19.0
02	93-EE-900-24-630-SUB TPLUG-3×1Cx50 Cu-Al	25-50	1	18.0 .. 23.0
03	93-EE-900-24-630-SUB TPLUG-3×1Cx70..95 Cu-Al	70-95	1	18.0 .. 23.0
04	93-EE-900-24-630-SUB TPLUG-3×1Cx95..120 Cu-Al	70-120	2	22.0 .. 27.0
05	93-EE-900-24-630-SUB TPLUG-3×1Cx150..185 Cu-Al	150-240	2	22.0 .. 27.0
06	93-EE-900-24-630-SUB TPLUG-3×1Cx240 Cu-Al	150-240	2	26.0 .. 32.0
07	93-EE-900-24-630-LARGE SUB TPLUG-3×1Cx300 Cu-Al	300-400	3	31.0 .. 34.0
08	93-EE-900-24-630-LARGE SUB TPLUG-3×1Cx400 Cu-Al	300-400	3	33.0 .. 37.0
09	93-EE-900-24-1250-SUB TPLUG-3×1Cx500 Cu-Al	500-630	3	37.7 .. 40.5
10	93-EE-900-24-1250-SUB TPLUG-3×1Cx630 Cu-Al	500-630	3	42.3 .. 45.3

**Note:** Other configurations and sizes at 24 kV would be available upon request.

## 36 kV Voltage Class

36 kV 400 A Tee Plug configuration for Cu conductor cable with Compression Copper Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-36-400-TPLUG-3×1Cx35	35	22.0 .. 25.0
02	94-EE-900-36-400-TPLUG-3×1Cx50	50	24.0 .. 27.0
03	94-EE-900-36-400-TPLUG-3×1Cx70	70	26.0 .. 29.0
04	94-EE-900-36-400-TPLUG-3×1Cx95	95	28.0 .. 32.0
05	94-EE-900-36-400-TPLUG-3×1Cx120	120	28.0 .. 32.0
06	94-EE-900-36-400-TPLUG-3×1Cx150	150	31.0 .. 34.0
07	94-EE-900-36-400-TPLUG-3×1Cx185	185	31.0 .. 34.0
08	94-EE-900-36-400-TPLUG-3×1Cx240	240	33.0 .. 37.0
09	94-EE-900-36-400-TPLUG-3×1Cx300	300	36.0 .. 39.0
10	94-EE-900-36-400-TPLUG-3×1Cx400	400	38.0 .. 42.0

36 kV 400 A Tee Plug configuration for Al conductor with Bimetallic Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-36-400-TPLUG-3×1Cx35 bi	35	22.0 .. 25.0
02	94-EE-900-36-400-TPLUG-3×1Cx50 bi	50	24.0 .. 27.0
03	94-EE-900-36-400-TPLUG-3×1Cx70 bi	70	26.0 .. 29.0
04	94-EE-900-36-400-TPLUG-3×1Cx95 bi	95	28.0 .. 32.0
05	94-EE-900-36-400-TPLUG-3×1Cx120 bi	120	28.0 .. 32.0
06	94-EE-900-36-400-TPLUG-3×1Cx150 bi	150	31.0 .. 34.0
07	94-EE-900-36-400-TPLUG-3×1Cx185 bi	185	31.0 .. 34.0
08	94-EE-900-36-400-TPLUG-3×1Cx240 bi	240	33.0 .. 37.0
09	94-EE-900-36-400-TPLUG-3×1Cx300 bi	300	36.0 .. 39.0
10	94-EE-900-36-400-TPLUG-3×1Cx400 bi	400	38.0 .. 42.0

36 kV 400 A Tee Plug configuration for both Al and Cu conductor with Thread Mechanical Shearbolt Lug:

No.	Kit Reference	Lug range (mm <sup>2</sup> )	No. of Bolts	Diameter over Primary Insulation (mm)
01	94-EE-900-36-400-TPLUG-3×1Cx35 Cu-Al	25-50	1	22.0 .. 25.0
02	94-EE-900-36-400-TPLUG-3×1Cx50 Cu-Al	25-50	1	24.0 .. 27.0
03	94-EE-900-36-400-TPLUG-3×1Cx70 Cu-Al	70-95	1	26.0 .. 29.0
04	94-EE-900-36-400-TPLUG-3×1Cx95 Cu-Al	70-95	1	28.0 .. 32.0
05	94-EE-900-36-400-TPLUG-3×1Cx95..120 Cu-Al	70-120	2	28.0 .. 32.0
06	94-EE-900-36-400-TPLUG-3×1Cx150..185 Cu-Al	150-240	2	31.0 .. 34.0
07	94-EE-900-36-400-TPLUG-3×1Cx240 Cu-Al	150-240	2	33.0 .. 37.0

36 kV 630 A / 1250 A Tee Plug configuration for Cu conductor cable with Compression Copper Lug

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-36-630-TPLUG-3×1Cx35	35	22.0 .. 25.0
02	94-EE-900-36-630-TPLUG-3×1Cx50	50	24.0 .. 27.0
03	94-EE-900-36-630-TPLUG-3×1Cx70	70	26.0 .. 29.0
04	94-EE-900-36-630-TPLUG-3×1Cx95	95	28.0 .. 32.0
05	94-EE-900-36-630-TPLUG-3×1Cx120	120	28.0 .. 32.0
06	94-EE-900-36-630-TPLUG-3×1Cx150	150	31.0 .. 34.0
07	94-EE-900-36-630-TPLUG-3×1Cx185	185	33.0 .. 37.0
08	94-EE-900-36-630-TPLUG-3×1Cx240	240	33.0 .. 37.0
09	94-EE-900-36-630-TPLUG-3×1Cx300	300	36.0 .. 39.0
10	94-EE-900-36-630-TPLUG-3×1Cx400	400	38.0 .. 42.0
11	94-EE-900-36-1250-TPLUG-3×1Cx500	500	42.3 .. 45.3
12	94-EE-900-36-1250-TPLUG-3×1Cx630	630	46.9 .. 49.9

36 kV 630 A / 1250 A Tee Plug configuration for Al conductor with Bimetallic Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-36-630-TPLUG-3×1Cx35 bi	35	22.0 .. 25.0
02	94-EE-900-36-630-TPLUG-3×1Cx50 bi	50	24.0 .. 27.0
03	94-EE-900-36-630-TPLUG-3×1Cx70 bi	70	26.0 .. 29.0
04	94-EE-900-36-630-TPLUG-3×1Cx95 bi	95	28.0 .. 32.0
05	94-EE-900-36-630-TPLUG-3×1Cx120 bi	120	28.0 .. 32.0
06	94-EE-900-36-630-TPLUG-3×1Cx150 bi	150	31.0 .. 34.0
07	94-EE-900-36-630-TPLUG-3×1Cx185 bi	185	33.0 .. 37.0
08	94-EE-900-36-630-TPLUG-3×1Cx240 bi	240	33.0 .. 37.0
09	94-EE-900-36-630-TPLUG-3×1Cx300 bi	300	36.0 .. 39.0
10	94-EE-900-36-630-TPLUG-3×1Cx400 bi	400	38.0 .. 42.0
11	94-EE-900-36-1250-TPLUG-3×1Cx500 bi	500	42.3 .. 45.3
12	94-EE-900-36-1250-TPLUG-3×1Cx630 bi	630	46.9 .. 49.9



36 kV 630 A / 1250 A Sub Tee Plug configuration for Cu conductor cable with Compression Copper Lug

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-36-630-TPLUG-3×1Cx35	35	22.0 .. 25.0
02	94-EE-900-36-630-TPLUG-3×1Cx50	50	24.0 .. 27.0
03	94-EE-900-36-630-TPLUG-3×1Cx70	70	26.0 .. 29.0
04	94-EE-900-36-630-TPLUG-3×1Cx95	95	28.0 .. 32.0
05	94-EE-900-36-630-TPLUG-3×1Cx120	120	28.0 .. 32.0
06	94-EE-900-36-630-TPLUG-3×1Cx150	150	31.0 .. 34.0
07	94-EE-900-36-630-TPLUG-3×1Cx185	185	33.0 .. 37.0
08	94-EE-900-36-630-TPLUG-3×1Cx240	240	33.0 .. 37.0
09	94-EE-900-36-630-TPLUG-3×1Cx300	300	36.0 .. 39.0
10	94-EE-900-36-630-TPLUG-3×1Cx400	400	38.0 .. 42.0
11	94-EE-900-36-1250-TPLUG-3×1Cx500	500	42.3 .. 45.3
12	94-EE-900-36-1250-TPLUG-3×1Cx630	630	46.9 .. 49.9

36 kV 630 A / 1250 A Sub Tee Plug configuration for Al conductor with Bimetallic Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-36-630-SUB TPLUG-3×1Cx35 bi	35	22.0 .. 25.0
02	94-EE-900-36-630-SUB TPLUG-3×1Cx50 bi	50	24.0 .. 27.0
03	94-EE-900-36-630-SUB TPLUG-3×1Cx70 bi	70	26.0 .. 29.0
04	94-EE-900-36-630-SUB TPLUG-3×1Cx95 bi	95	28.0 .. 32.0
05	94-EE-900-36-630-SUB TPLUG-3×1Cx120 bi	120	28.0 .. 32.0
06	94-EE-900-36-630-SUB TPLUG-3×1Cx150 bi	150	31.0 .. 34.0
07	94-EE-900-36-630-SUB TPLUG-3×1Cx185 bi	185	33.0 .. 37.0
08	94-EE-900-36-630-SUB TPLUG-3×1Cx240 bi	240	33.0 .. 37.0
09	94-EE-900-36-630-SUB TPLUG-3×1Cx300 bi	300	36.0 .. 39.0
10	94-EE-900-36-630-SUB TPLUG-3×1Cx400 bi	400	38.0 .. 42.0
11	94-EE-900-36-1250-SUB TPLUG-3×1Cx500 bi	500	42.3 .. 45.3
12	94-EE-900-36-1250-SUB TPLUG-3×1Cx630 bi	630	46.9 .. 49.9

36 kV 630 A / 1250 A Tee Plug configuration for both Al and Cu conductor with Mechanical Shearbolt Lug:

No.	Kit Reference	Lug range (mm <sup>2</sup> )	No. of Bolts	Diameter over Primary Insulation (mm)
01	94-EE-900-36-630-TPLUG-3×1Cx35 Cu-Al	25-50	1	22.0 .. 25.0
02	94-EE-900-36-630-TPLUG-3×1Cx50 Cu-Al	25-50	1	24.0 .. 27.0
03	94-EE-900-36-630-TPLUG-3×1Cx70 Cu-Al	70-95	1	26.0 .. 29.0
04	94-EE-900-36-630-TPLUG-3×1Cx95 Cu-Al	70-95	1	28.0 .. 32.0
05	94-EE-900-36-630-TPLUG-3×1Cx95..120 Cu-Al	70-120	2	28.0 .. 32.0
06	94-EE-900-36-630-TPLUG-3×1Cx150 Cu-Al	150-240	2	31.0 .. 34.0
07	94-EE-900-36-630-TPLUG-3×1Cx185 Cu-Al	150-240	2	33.0 .. 37.0
08	94-EE-900-36-630-TPLUG-3×1Cx240 Cu-Al	150-240	2	33.0 .. 37.0
09	94-EE-900-36-630-TPLUG-3×1Cx300 Cu-Al	300-400	3	36.0 .. 39.0
10	94-EE-900-36-630-TPLUG-3×1Cx400 Cu-Al	300-400	3	38.0 .. 42.0
11	94-EE-900-36-1250-TPLUG-3×1Cx500 Cu-Al	500-630	3	42.3 .. 45.3
12	94-EE-900-36-1250-TPLUG-3×1Cx630 Cu-Al	500-630	3	46.9 .. 49.9

36 kV 630 A / 1250 A Sub Tee Plug configuration for both Al and Cu conductor with Mechanical Shearbolt Lug:

No.	Kit Reference	Lug range (mm <sup>2</sup> )	No. of Bolts	Diameter over Primary Insulation (mm)
01	94-EE-900-36-630-SUB TPLUG-3×1Cx35 Cu-Al	25-50	1	22.0 .. 25.0
02	94-EE-900-36-630-SUB TPLUG-3×1Cx50 Cu-Al	25-50	1	24.0 .. 27.0
03	94-EE-900-36-630-SUB TPLUG-3×1Cx70 Cu-Al	70-95	1	26.0 .. 29.0
04	94-EE-900-36-630-SUB TPLUG-3×1Cx95..120 Cu-Al	70-120	2	28.0 .. 32.0
05	94-EE-900-36-630-SUB TPLUG-3×1Cx150 Cu-Al	150-240	2	31.0 .. 34.0
06	94-EE-900-36-630-SUB TPLUG-3×1Cx185..240 Cu-Al	150-240	2	33.0 .. 37.0
07	94-EE-900-36-630-SUB TPLUG-3×1Cx300 Cu-Al	300-400	3	36.0 .. 39.0
08	94-EE-900-36-630-SUB TPLUG-3×1Cx400 Cu-Al	300-400	3	38.0 .. 42.0
09	94-EE-900-36-1250-SUB TPLUG-3×1Cx500 Cu-Al	500-630	3	42.3 .. 45.3
10	94-EE-900-36-1250-SUB TPLUG-3×1Cx630 Cu-Al	500-630	3	46.9 .. 49.9

Note: Other configurations and sizes at 36 kV would be available upon request

# 42 kV Voltage Class

42 kV 400 A Tee Plug configuration for Cu conductor cable with Compression Copper Lug

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-42-400-TPLUG-3x1Cx35	35	22.0 .. 25.0
02	94-EE-900-42-400-TPLUG-3x1Cx50	50	24.0 .. 27.0
03	94-EE-900-42-400-TPLUG-3x1Cx70	70	26.0 .. 29.0
04	94-EE-900-42-400-TPLUG-3x1Cx95	95	28.0 .. 32.0
05	94-EE-900-42-400-TPLUG-3x1Cx120	120	28.0 .. 32.0
06	94-EE-900-42-400-TPLUG-3x1Cx150	150	31.0 .. 34.0
07	94-EE-900-42-400-TPLUG-3x1Cx185	185	33.0 .. 37.0
08	94-EE-900-42-400-TPLUG-3x1Cx240	240	33.0 .. 37.0
09	94-EE-900-42-400-TPLUG-3x1Cx300	300	36.0 .. 39.0
10	94-EE-900-42-400-TPLUG-3x1Cx400	400	38.0 .. 42.0

42 kV 400 A Tee Plug configuration for Al conductor with Bimetallic Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-42-400-TPLUG-3x1Cx35 bi	35	22.0 .. 25.0
02	94-EE-900-42-400-TPLUG-3x1Cx50 bi	50	24.0 .. 27.0
03	94-EE-900-42-400-TPLUG-3x1Cx70 bi	70	26.0 .. 29.0
04	94-EE-900-42-400-TPLUG-3x1Cx95 bi	95	28.0 .. 32.0
05	94-EE-900-42-400-TPLUG-3x1Cx120 bi	120	28.0 .. 32.0
06	94-EE-900-42-400-TPLUG-3x1Cx150 bi	150	31.0 .. 34.0
07	94-EE-900-42-400-TPLUG-3x1Cx185 bi	185	33.0 .. 37.0
08	94-EE-900-42-400-TPLUG-3x1Cx240 bi	240	33.0 .. 37.0
09	94-EE-900-42-400-TPLUG-3x1Cx300 bi	300	36.0 .. 39.0
10	94-EE-900-42-400-TPLUG-3x1Cx400 bi	400	38.0 .. 42.0

42 kV 400 A Tee plug configuration for both Al and Cu conductor with Threaded Mechanical Shearbolt Lug

No.	Kit Reference	Lug range (mm <sup>2</sup> )	No. of Bolts	Diameter over Primary Insulation (mm)
01	94-EE-900-42-400-TPLUG-3×1Cx35 Cu-Al	25-50	1	22.0 .. 25.0
02	94-EE-900-42-400-TPLUG-3×1Cx50 Cu-Al	25-50	1	24.0 .. 27.0
03	94-EE-900-42-400-TPLUG-3×1Cx70 Cu-Al	70-95	1	26.0 .. 29.0
04	94-EE-900-42-400-TPLUG-3×1Cx95..120 Cu-Al	70-120	2	28.0 .. 32.0
05	94-EE-900-42-400-TPLUG-3×1Cx150 Cu-Al	150-240	2	31.0 .. 34.0
06	94-EE-900-42-400-TPLUG-3×1Cx185..240 Cu-Al	150-240	2	33.0 .. 37.0

42 kV 630/1250 A Tee Plug configuration for Cu conductor cable with Compression Copper Lug

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-42-630-TPLUG-3×1Cx35	35	22.0 .. 25.0
02	94-EE-900-42-630-TPLUG-3×1Cx50	50	24.0 .. 27.0
03	94-EE-900-42-630-TPLUG-3×1Cx70	70	26.0 .. 29.0
04	94-EE-900-42-630-TPLUG-3×1Cx95	95	28.0 .. 32.0
05	94-EE-900-42-630-TPLUG-3×1Cx120	120	28.0 .. 32.0
06	94-EE-900-42-630-TPLUG-3×1Cx150	150	31.0 .. 34.0
07	94-EE-900-42-630-TPLUG-3×1Cx185	185	33.0 .. 37.0
08	94-EE-900-42-630-TPLUG-3×1Cx240	240	33.0 .. 37.0
09	94-EE-900-42-630-TPLUG-3×1Cx300	300	36.0 .. 39.0
10	94-EE-900-42-630-TPLUG-3×1Cx400	400	38.0 .. 42.0
11	94-EE-900-42-1250-TPLUG-3×1Cx500	500	44.6 .. 47.6
12	94-EE-900-42-1250-TPLUG-3×1Cx630	630	49.2 .. 52.2

42 kV 630/1250 A Tee Plug configuration for Al conductor with Bimetallic Compression Lug:

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-42-630-TPLUG-3×1Cx35 bi	35	22.0 .. 25.0
02	94-EE-900-42-630-TPLUG-3×1Cx50 bi	50	24.0 .. 27.0
03	94-EE-900-42-630-TPLUG-3×1Cx70 bi	70	26.0 .. 29.0
04	94-EE-900-42-630-TPLUG-3×1Cx95 bi	95	28.0 .. 32.0
05	94-EE-900-42-630-TPLUG-3×1Cx120 bi	120	28.0 .. 32.0
06	94-EE-900-42-630-TPLUG-3×1Cx150 bi	150	31.0 .. 34.0
07	94-EE-900-42-630-TPLUG-3×1Cx185 bi	185	33.0 .. 37.0
08	94-EE-900-42-630-TPLUG-3×1Cx240 bi	240	33.0 .. 37.0
09	94-EE-900-42-630-TPLUG-3×1Cx300 bi	300	36.0 .. 39.0
10	94-EE-900-42-630-TPLUG-3×1Cx400 bi	400	38.0 .. 42.0
11	94-EE-900-42-1250-TPLUG-3×1Cx500 bi	500	44.6 .. 47.6
12	94-EE-900-42-1250-TPLUG-3×1Cx630 bi	630	49.2 .. 52.2

42 kV 630/1250 A Sub Tee Plug configuration for Cu conductor cable with Compression Copper Lug

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-42-630-SUB TPLUG-3×1Cx35	35	22.0 .. 25.0
02	94-EE-900-42-630-SUB TPLUG-3×1Cx50	50	24.0 .. 27.0
03	94-EE-900-42-630-SUB TPLUG-3×1Cx70	70	26.0 .. 29.0
04	94-EE-900-42-630-SUB TPLUG-3×1Cx95	95	28.0 .. 32.0
05	94-EE-900-42-630-SUB TPLUG-3×1Cx120	120	28.0 .. 32.0
06	94-EE-900-42-630-SUB TPLUG-3×1Cx150	150	31.0 .. 34.0
07	94-EE-900-42-630-SUB TPLUG-3×1Cx185	185	33.0 .. 37.0
08	94-EE-900-42-630-SUB TPLUG-3×1Cx240	240	33.0 .. 37.0
09	94-EE-900-42-630-SUB TPLUG-3×1Cx300	300	36.0 .. 39.0
10	94-EE-900-42-630-SUB TPLUG-3×1Cx400	400	38.0 .. 42.0
11	94-EE-900-42-1250-SUB TPLUG-3×1Cx500	500	44.6 .. 47.6
12	94-EE-900-42-1250-SUB TPLUG-3×1Cx630	630	49.2 .. 52.2

42 kV 630/1250 A Sub Tee Plug configuration for Al conductor with Bimetallic Compression Lug

No.	Kit Reference	Cross Section (mm <sup>2</sup> )	Diameter over Primary Insulation (mm)
01	94-EE-900-42-630-SUB TPLUG-3×1Cx35 bi	35	22.0 .. 25.0
02	94-EE-900-42-630-SUB TPLUG-3×1Cx50 bi	50	24.0 .. 27.0
03	94-EE-900-42-630-SUB TPLUG-3×1Cx70 bi	70	26.0 .. 29.0
04	94-EE-900-42-630-SUB TPLUG-3×1Cx95 bi	95	28.0 .. 32.0
05	94-EE-900-42-630-SUB TPLUG-3×1Cx120 bi	120	28.0 .. 32.0
06	94-EE-900-42-630-SUB TPLUG-3×1Cx150 bi	150	31.0 .. 34.0
07	94-EE-900-42-630-SUB TPLUG-3×1Cx185 bi	185	33.0 .. 37.0
08	94-EE-900-42-630-SUB TPLUG-3×1Cx240 bi	240	33.0 .. 37.0
09	94-EE-900-42-630-SUB TPLUG-3×1Cx300 bi	300	36.0 .. 39.0
10	94-EE-900-42-630-SUB TPLUG-3×1Cx400 bi	400	38.0 .. 42.0
11	94-EE-900-42-1250-SUB TPLUG-3×1Cx500 bi	500	44.6 .. 47.6
12	94-EE-900-42-1250-SUB TPLUG-3×1Cx630 bi	630	49.2 .. 52.2

42 kV 630/1250 A Tee Plug configuration for both Al and Cu conductor with Mechanical Shearbolt Lug:

No.	Kit Reference	Lug range (mm <sup>2</sup> )	No. of Bolts	Diameter over Primary Insulation (mm)
01	94-EE-900-42-630-TPLUG-3×1Cx35 Cu-Al	25-50	1	22.0 .. 25.0
02	94-EE-900-42-630-TPLUG-3×1Cx50 Cu-Al	25-50	1	24.0 .. 27.0
03	94-EE-900-42-630-TPLUG-3×1Cx70 Cu-Al	70-95	1	26.0 .. 29.0
04	94-EE-900-42-630-TPLUG-3×1Cx95..120 Cu-Al	70-120	2	28.0 .. 32.0
05	94-EE-900-42-630-TPLUG-3×1Cx150 Cu-Al	150-240	2	31.0 .. 34.0
06	94-EE-900-42-630-TPLUG-3×1Cx185..240 Cu-Al	150-240	2	33.0 .. 37.0
07	94-EE-900-42-630-TPLUG-3×1Cx300 Cu-Al	300-400	3	36.0 .. 39.0
08	94-EE-900-42-630-TPLUG-3×1Cx400 Cu-Al	300-400	3	38.0 .. 42.0
09	94-EE-900-42-1250-TPLUG-3×1Cx500 Cu-Al	500-630	3	44.6 .. 47.6
10	94-EE-900-42-1250-TPLUG-3×1Cx630 Cu-Al	500-630	3	49.2 .. 52.2

42 kV 630/1250 A Sub Tee Plug configuration for both Al and Cu conductor with Mechanical Shearbolt Lug:

No.	Kit Reference	Lug range (mm <sup>2</sup> )	No. of Bolts	Diameter over Primary Insulation (mm)
01	94-EE-900-42-630-SUB TPLUG-3×1Cx35 Cu-Al	25-50	1	22.0 .. 25.0
02	94-EE-900-42-630-SUB TPLUG-3×1Cx50 Cu-Al	25-50	1	24.0 .. 27.0
03	94-EE-900-42-630-SUB TPLUG-3×1Cx70 Cu-Al	70-95	1	26.0 .. 29.0
04	94-EE-900-42-630-SUB TPLUG-3×1Cx95..120 Cu-Al	70-120	2	28.0 .. 32.0
05	94-EE-900-42-630-SUB TPLUG-3×1Cx150 Cu-Al	150-240	2	31.0 .. 34.0
06	94-EE-900-42-630-SUB TPLUG-3×1Cx185..240 Cu-Al	150-240	2	33.0 .. 37.0
07	94-EE-900-42-630-SUB TPLUG-3×1Cx300 Cu-Al	300-400	3	36.0 .. 39.0
08	94-EE-900-42-630-SUB TPLUG-3×1Cx400 Cu-Al	300-400	3	38.0 .. 42.0
09	94-EE-900-42-1250-SUB TPLUG-3×1Cx500 Cu-Al	500-630	3	44.6 .. 47.6
10	94-EE-900-42-1250-SUB TPLUG-3×1Cx630 Cu-Al	500-630	3	49.2 .. 52.2

Note: Other configurations and sizes at 42 kV would be available upon request

## Breakout Boot

No.	Kit Reference	For Cross Section (mm <sup>2</sup> )
01	36 kV /40.5 kV Cold Shrink Breakout Boot, 1.5m Silicone Sleeve for 3Cx50-95	50-95
02	36 kV /40.5 kV Cold Shrink Breakout Boot, 1.5m Silicone Sleeve for 3Cx120-300	120-300
03	24 kV Cold Shrink Breakout Boot, 1.5m Silicone Sleeve for 3Cx35-95	35-95
04	24 kV Cold Shrink Breakout Boot, 1.5m Silicone Sleeve for 3Cx120-185	120-185
05	24 kV Cold Shrink Breakout Boot, 1.5m Silicone Sleeve for 3Cx240-400	240-400
06	36 kV /40.5 kV Heat Shrink Breakout Boot, 0.5m HS tube per phase for 3Cx50-400	50-400
07	24 kV Heat Shrink Breakout Boot, 0.5m HS tube per phase for 3Cx35-300	35-300

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