EUROMOLD

Euromold is the leading European specialised designer, manufacturer and distributor of prefabricated cable accessories for medium voltage energy distribution. Euromold provides a complete range of accessories for underground cables: premoulded EPDM rubber connectors for cables and epoxy bushings for transformers and switchgear, as well as a large range of cold-shrinkable terminations and joints from 12 to 42 kV. Euromold is also the manufacturer of electrical components for the high voltage accessories of the Nexans group.

ISO 9001 Certificate

Since 1992, Euromold’s commitment to quality is demonstrated by its ISO 9001 certification.

International standards

All our products meet the International standards like CENELEC HD 629.1, CENELEC EN 50180, IEC 60137, IEC 60502-4… or country specifications. Official certificates, CESI, KEMA, ATEX… prove the conformity of our products. Long duration tests of existing or new products are continuously performed in our test fields.

Laboratory accreditation

Since June 2000, Euromold’s independent ELAB laboratory obtained the BELAC accreditation no.144-TEST conform with the European standards for laboratories ISO 17025 for electrical testing of low and medium voltage cable accessories according to the international standards EN 50393, IEC 60502-4, IEC 61442 and HD 629.

While every care is taken to ensure that the information contained in this publication is correct, no legal responsibility can be accepted for any inaccuracy. Nexans Network Solutions N.V. - Div. Euromold reserves the right to alter or modify the characteristics of its products described in this catalogue as standards and technology evolve.
SEPARABLE CONNECTORS AND BUSHINGS
INTERFACE D

TABLE OF CONTENTS
676LRA - tee connector
670AR-2 - equipment bushing
672T1 - equipment bushing
672TBC - in-air bushing
Accessories
Possible arrangements

INTERFACE D1 & D2
Dimensions according to European CENELEC EN 50180 and 50181 (in mm).
APPLICATION
Separable tee connector designed to connect polymeric insulated cable to equipment (transformers, switchgear, motors...). Also connects cable to cable, using the appropriate mating part.

DESIGN
Separable connector comprising:
1. Conductive EPDM insert.
2. Conductive EPDM jacket.
3. Insulating EPDM layer moulded between the insert and the jacket.
4. Type D - 1250 A interface as described by CENELEC EN 50180 and 50181.
5. Conductor connector.
6. Basic insulating plug (with VD point).
7. Cable reducer.
8. Conductive rubber cap.
10. Earthing lead.

The screen break design enables cable outer sheath testing without removing or dismantling the connector.

SPECIFICATIONS AND STANDARDS
The separable connector 676LRA meets the requirements of CENELEC HD 629.1.

<table>
<thead>
<tr>
<th>Separable connector type</th>
<th>Voltage Um (kV)</th>
<th>Current Ir (A)</th>
<th>Conductor sizes (mm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>676LRA/G K676LRA/G</td>
<td>12</td>
<td>1250</td>
<td>50 630</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>1250</td>
<td>35 630</td>
</tr>
</tbody>
</table>

TECHNICAL CHARACTERISTICS
- A thick conductive EPDM jacket provides a total safe to touch screen.
- Each separable connector is tested for AC withstand and partial discharge prior to leaving the factory.

EUROMOLD®
6/10 (12) kV 6.35/11 (12) kV 8.7/15 (17.5) kV 12/20 (24) kV 12.7/22 (24) kV
Up to 24 kV - 1250 A
KIT CONTENTS
The complete (K)676LRA tee connector kit comprises the following components:

<table>
<thead>
<tr>
<th>Connector housing</th>
<th>Threaded stud + nut</th>
<th>Conductor contact</th>
<th>Basic insulating plug + rubber cap</th>
<th>Cable reducer</th>
</tr>
</thead>
<tbody>
<tr>
<td>(K)650BLR/G</td>
<td>676SN</td>
<td>TBC-X</td>
<td>(K)676BIPA</td>
<td>611CA-W</td>
</tr>
</tbody>
</table>

ORDERING INSTRUCTIONS
Select the part number which gives the best centring to the cable core insulation diameter. Add a 'K' for use up to 24 kV.

TABLE W

<table>
<thead>
<tr>
<th>Ordering part number</th>
<th>Dia. over core insulation (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>min.</td>
</tr>
<tr>
<td>676LRA/G-15-X</td>
<td>16.0</td>
</tr>
<tr>
<td>676LRA/G-19-X</td>
<td>20.0</td>
</tr>
<tr>
<td>676LRA/G-22-X</td>
<td>23.5</td>
</tr>
<tr>
<td>676LRA/G-27-X</td>
<td>28.5</td>
</tr>
<tr>
<td>676LRA/G-32-X</td>
<td>34.0</td>
</tr>
<tr>
<td>676LRA/G-37-X</td>
<td>39.0</td>
</tr>
<tr>
<td>676LRA/G-43-X</td>
<td>45.5</td>
</tr>
</tbody>
</table>

TABLE X

<table>
<thead>
<tr>
<th>Conductor sizes (mm²)</th>
<th>Aluminium conductor</th>
<th>Copper conductor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DIN hexagonal</td>
<td>Deep indent</td>
</tr>
<tr>
<td>35</td>
<td>35(K)M-12-2</td>
<td>35KM-12-1</td>
</tr>
<tr>
<td>50</td>
<td>50(K)M-12-2</td>
<td>50KM-12-1</td>
</tr>
<tr>
<td>70</td>
<td>70(K)M-12-2</td>
<td>70KM-12-1</td>
</tr>
<tr>
<td>95</td>
<td>95(K)M-12-2</td>
<td>95KM-12-1</td>
</tr>
<tr>
<td>120</td>
<td>120(K)M-12-2</td>
<td>120KM-12-1</td>
</tr>
<tr>
<td>150</td>
<td>150(K)M-12-2</td>
<td>150KM-12-1</td>
</tr>
<tr>
<td>185</td>
<td>185(K)M-12-2</td>
<td>185KM-12-1</td>
</tr>
<tr>
<td>240</td>
<td>240(K)M-12-2</td>
<td>240KM-12-1</td>
</tr>
<tr>
<td>300</td>
<td>300(K)M-12-2</td>
<td>300KM-12-1</td>
</tr>
<tr>
<td>400</td>
<td>400(K)M-12-2</td>
<td>400KM-12-1</td>
</tr>
<tr>
<td>500</td>
<td>500(K)M-12-2</td>
<td>500KM-12-1</td>
</tr>
<tr>
<td>630</td>
<td>--</td>
<td>630KM-12-1</td>
</tr>
</tbody>
</table>

EXAMPLE:
The copper wire screened cable is 24 kV, 630 mm² stranded aluminium with a diameter over core insulation of 44.0 mm. Order a K676LRA/G-37-630KM-12-1 tee connector kit.

Components can be ordered individually.
670AR-2

APPLICATION
For use in equipment insulated with oil fluid, typically for transformers, switchgear, capacitors...

TECHNICAL CHARACTERISTICS
Each bushing is tested for AC withstand and partial discharge prior to leaving the factory.

SPECIFICATIONS AND STANDARDS
The bolted type equipment bushings 670AR-2 are moulded epoxy insulated parts and meet the requirements of CENELEC EN 50180 and IEC 60137.

ORDERING INSTRUCTIONS
To order the equipment bushing, specify the type. The bushings can be supplied with an earth jumper (/J) or an earth plate (/GS). This earth connection must be specified when ordering. E.g. K670AR-2/GS.

EUROMOLD®
Up to 24 kV - 1250 A

<table>
<thead>
<tr>
<th>Equipment bushing type</th>
<th>Voltage Um (kV)</th>
<th>Current Ir (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>670AR-2</td>
<td>12</td>
<td>1250</td>
</tr>
<tr>
<td>K670AR-2</td>
<td>24</td>
<td>1250</td>
</tr>
</tbody>
</table>
**FIXINGS FOR EQUIPMENT BUSHINGS**

**670AR-2/GS BUSHING**

![Diagram of 670AR-2/GS BUSHING](image)

**BUSHING CLAMPING KIT**

To order the bushing clamping kit, according to NF C 52-053 standards, simply specify KBC-NF-400.

Contents:
- 4 x claw clamp NF
- 1 x sealing gasket.

**FIXING DIMENSIONS**

**STANDARDS NF C 52-053**

French standards.

**670AR-2/J BUSHING**

![Diagram of 670AR-2/J BUSHING](image)

**BUSHING CLAMPING KIT**

To order the bushing clamping kit with DIN style fixing flange, simply specify KBCDS-400.

Contents:
- 1 x fixing flange DIN style
- 6 x stud clamp F DIN 42 538
- 1 x sealing gasket.

**FIXING DIMENSIONS**

In mm.
APPLICATION
For use in equipment insulated with oil fluid, typically for transformers, switchgear, capacitors...

TECHNICAL CHARACTERISTICS
Each bushing is tested for AC withstand and partial discharge prior to leaving the factory.

DESIGN
The equipment bushing is a moulded epoxy insulated part in accordance with CENELEC EN 50180.

SPECIFICATIONS AND STANDARDS
The bolted type equipment bushings 672T1 meet the requirements of IEC 60137.

ORDERING INSTRUCTIONS
To order the equipment bushing, specify the type.
For use in potentially explosive atmospheres (for 12 kV max.). Order: -/ATEX.

<table>
<thead>
<tr>
<th>Equipment bushing type</th>
<th>Voltage Um (kV)</th>
<th>Current Ir (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>672T1</td>
<td>12</td>
<td>1250</td>
</tr>
<tr>
<td>K672T1</td>
<td>24</td>
<td>1250</td>
</tr>
</tbody>
</table>

In mm.

EUROMOLD®

6/10 (12) kV
6.35/11 (12) kV
8.7/15 (17.5) kV
12/20 (24) kV
12.7/22 (24) kV

Up to 24 kV - 1250 A
**FIXINGS FOR EQUIPMENT BUSHINGS**

**672T1 BUSHING**

- bushing interface
- fixing studs and nuts M10
- fixing flange
- type: MK600-1 (antimagnetic)
- equipment
- sealing gasket

**BUSHING FIXING FLANGE**

To order the bushing fixing flange, simply specify MK600-1.

In mm.
APPLICATION
For use in equipment insulated with air, typically for transformers, switchgear, capacitors...

TECHNICAL CHARACTERISTICS
Each bushing is tested for AC withstand and partial discharge prior to leaving the factory.

DESIGN
The equipment bushing is a moulded epoxy insulated part in accordance with CENELEC EN 50181. Non-tracking insulating rubber boot and collars slip over the bushing shank.

SPECIFICATIONS AND STANDARDS
The bolted type equipment bushings 672TBC meet the requirements of IEC 60137.

ORDERING INSTRUCTIONS
To order the equipment bushing, specify the type. For use in potentially explosive atmospheres (for 12 kV max.). Order: -/ATEX.

<table>
<thead>
<tr>
<th>Equipment bushing type</th>
<th>Voltage Um (kV)</th>
<th>Current Ir (A)</th>
<th>Creepage distance A-B (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>672TBC</td>
<td>12</td>
<td>1250</td>
<td>300</td>
</tr>
<tr>
<td>K672TBC</td>
<td>24</td>
<td>1250</td>
<td>300</td>
</tr>
</tbody>
</table>

EUROMOLD®

Up to 24 kV - 1250 A

6/10 (12) kV
6.35/11 (12) kV
8.7/15 (17.5) kV
12/20 (24) kV
12.7/22 (24) kV
BUSHING FIXING FLANGE
To order the bushing fixing flange, simply specify MK600-1.

In mm.
APPLICATION
For use with connectors and bushings with an interface D as described by CENELEC EN 50180 and 50181.

TECHNICAL CHARACTERISTICS
All these products, except the earthing plug, are tested for AC withstand and partial discharge prior to leaving the factory.

606DR-TPS
DEAD-END RECEPTACLE
Fits over a bushing with a type D interface to provide ‘dead-end’ facility.
Contains a capacitive test point for checking circuit conditions.

ORDERING INSTRUCTIONS
Order 606DR-TPS for 12 kV or K606DR-TPS for 24 kV applications.
The dead-end receptacle can be supplied with an earth lead. Order: -/G.
E.g. 606DR-TPS/G.

606SOP
STAND-OFF PLUG
Is designed to support and ‘dead-end’ connectors with a type D interface when removed from equipment.

ORDERING INSTRUCTIONS
Order 606SOP for 12 kV or K606SOP for 24 kV applications.

606GP
EARTHING PLUG
Is designed to support and earth connectors with a type D interface when removed from equipment.

ORDERING INSTRUCTIONS
Order 606GP for 12 or 24 kV applications.

6/10 (12) kV
6.35/11 (12) kV
8.7/15 (17.5) kV
12/20 (24) kV
12.7/22 (24) kV

Up to 24 kV
<table>
<thead>
<tr>
<th><strong>KIT MT</strong></th>
<th><strong>EARTHING KIT FOR COPPER TAPE SCREENED CABLES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordering Instructions</strong></td>
<td>Order Kit MT for 12 kV or 24 kV applications.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Contains a tinned copper braid (25 mm² - L = 500 mm), a tinned copper wire for cleating and water sealing mastic.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>675BE</strong></th>
<th><strong>BUSHING EXTENDER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordering Instructions</strong></td>
<td>Order 675BE for 12 kV or K675BE for 24 kV applications.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Provides an extension piece to allow cables to stand away from equipment. Is used in conjunction with the 680CP connecting plug.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>676BIPA</strong></th>
<th><strong>BASIC INSULATING PLUG</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordering Instructions</strong></td>
<td>Order 676BIPA for 12 kV or K676BIPA for 24 kV applications.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Acts as a tightening nut for the 676LRA/G tee connector kits. The plug contains a voltage detection point. The conductive rubber protection cap is included.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>680CP</strong></th>
<th><strong>CONNECTING PLUG</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordering Instructions</strong></td>
<td>Order 680CP for 12 kV or K680CP for 24 kV applications. Order: -/ATEX for use in potentially explosive atmospheres (for 12 kV max.).</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>For connecting two or more connectors with a type D interface together, thus creating a separable cable joint or a multiple cable connection to equipment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>676RTPA</strong></th>
<th><strong>REDUCING TAP PLUG</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordering Instructions</strong></td>
<td>Order 676RTPA for 12 kV or K676RTPA for 24 kV applications. Order 600SW for the 'C' spanner.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Provides a type A interface to connectors with a type D interface. A 'C' spanner, 600SW, is used to tighten the reducing tap plug onto its mating part.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>676BIPA</strong></th>
<th><strong>BASIC INSULATING PLUG</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordering Instructions</strong></td>
<td>Order 676BIPA for 12 kV or K676BIPA for 24 kV applications.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Acts as a tightening nut for the 676LRA/G tee connector kits. The plug contains a voltage detection point. The conductive rubber protection cap is included.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>675BE</strong></th>
<th><strong>BUSHING EXTENDER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordering Instructions</strong></td>
<td>Order 675BE for 12 kV or K675BE for 24 kV applications.</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Provides an extension piece to allow cables to stand away from equipment. Is used in conjunction with the 680CP connecting plug.</td>
</tr>
</tbody>
</table>
**POSSIBLE ARRANGEMENTS**

**676LRA/G**
Single cable arrangement.
Order 676LRA/G for 12 kV or K676LRA/G for 24 kV applications.

**676LRA/G-P2**
Dual cable arrangement.
Order 676LRA/G-P2 for 12 kV or K676LRA/G-P2 for 24 kV applications.

**676LRA/G-P3**
Triple cable arrangement.
Order 676LRA/G-P3 for 12 kV or K676LRA/G-P3 for 24 kV applications.

**676LRA/G-P4**
Single cable arrangement with tap-off.
Order 676LRA/G-P4 for 12 kV or K676LRA/G-P4 for 24 kV applications.
**676LRA/G-P5**
Dual cable arrangement with tap-off.
Order 676LRA/G-P5 for 12 kV
or K676LRA/G-P5 for 24 kV applications.

**676LRA/G-P6**
Connector standing away from equipment.
Order 676LRA/G-P6 for 12 kV
or K676LRA/G-P6 for 24 kV applications.

**676LRA/G-L1**
Dead-ending.
Order 676LRA/G-L1 for 12 kV
or K676LRA/G-L1 for 24 kV applications.

**676LRA/G-L2**
2-way connection.
Order 676LRA/G-L2 for 12 kV
or K676LRA/G-L2 for 24 kV applications.

**676LRA/G-L3**
3-way connection.
Order 676LRA/G-L3 for 12 kV
or K676LRA/G-L3 for 24 kV applications.

**676LRA/G-L4**
4-way connection.
Order 676LRA/G-L4 for 12 kV
or K676LRA/G-L4 for 24 kV applications.

In mm.
**676LRA/G-L5**
2-way connection with tap-off.
Order 676LRA/G-L5 for 12 kV
or K676LRA/G-L5 for 24 kV
applications.

**676LRA/G-L7**
3-way connection with one tap-off.
Order 676LRA/G-L7 for 12 kV
or K676LRA/G-L7 for 24 kV
applications.

**676LRA/G-L8**
4-way connection with two tap-offs.
Order 676LRA/G-L8 for 12 kV
or K676LRA/G-L8 for 24 kV
applications.
**676LRA/G-L9**

4-way connection with one tap-off.
Order 676LRA/G-L9 for 12 kV
or K676LRA/G-L9 for 24 kV
applications.

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**CONNECTOR ON STAND-OFF PLUG**

Order 606SOP for 12 kV or
K606SOP for 24 kV applications.

**CONNECTOR ON EARTHING PLUG**

Order 606GP for 12 kV and
24 kV applications.

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In mm.