

## Elastic straight through joint

For three core polymeric cables - heatshrinkable outer protection  
Generally meets the requirements of IEC 60502-4 - CENELEC HD629.1 S2 - IEEE 404.

**elaspeed**<sup>®</sup>  
Retracfit

**Medium Voltage (MV)**  
**Up to 19/33 (36) kV**  
**MV joints**  
**Reference: RTJM-3C**



### Product Application and Design

#### Utilisation

- Coldshrink joint for polymeric insulated cables of various specifications.
- May be directly buried.
- Jointing cables laid underground, in tunnels on horizontal racks, or aerial.

#### Cables

- Three core polymeric insulation (XLPE, EPR).
- Copper or aluminum conductor.
- Metallic screen copper tape or copper wires.
- Semi-conducting screen either extruded or taped.
- Insulation voltage up to 36 kV.
- Conductor sizes: 25 to 500 mm<sup>2</sup>.
- Non-armoured or armoured.

#### Packing

Supplied as a kit for one three core joint containing all the necessary components except the ferrules (supplied on request).

Shipping weight and volume (approx) of kit :

- 12 kV →
  - 17.5 kV →
  - 24 kV →
  - 36 kV →
- 6 kg / 0.06 m<sup>3</sup>

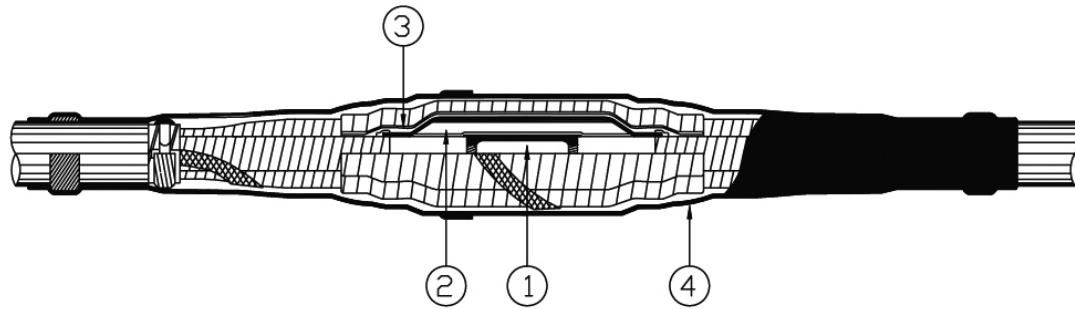
#### Other products

- Joint for 1/C polymeric cables EPJM-1C, RTJM-1C.
- Transition joint between 3/C MIND paper cables (radial or non radial) and 3C or 3 x 1/C polymeric cables.

### Installation features

- No need for special tools.
- Immediate energizing after completion of the joint.

## Description



This product is a combination of a cold-shrink insulating body with a heat shrink outer sleeve protection.

① **Conductor ferrule**

Crimped, deep indented or bolted type. For mechanical connector, please consult us.

② **Joint body**

It maintains a permanent and uniform contact pressure on the cable insulation.

Extruded EPR rubber, electrically tested in factory after extrusion. It includes:

- stress relief layer,
- insulation layer,
- outer semi-conducting layer. The joint body rebuilds three cable layers.

The outer semi-conducting layer ensures relief of electrical stress and connection to cable screens.

**Traceability label**

Each joint body is delivered with a serial lot number for full traceability.

**Removable carrier**

The joint body is pre-loaded on a single removable carrier made of two parts.

③ **Core screen**

Tubular copper mesh of adapted cross section (with additional copper braid, if necessary) connected on cable screens with constant force springs.

For wire screen: copper mesh tape and direct connection of cable screen wires.

④ **Outer protection**

Heat shrinkable tubes with hot melt coating. Ensures the mechanical protection and the watertightness of the joint.

1- Select in the table below, the kit size corresponding to the insulation voltage (in kV: 12 - 17.5 - 24 - 36) and the diameter over insulation.

Voltage Um	Min OD insulation mm	Max conductor size mm <sup>2</sup> (for guidance only)		Kit reference
		Min	Max	
12 kV	17,2	70	120	<b>RTJM-3C-12-D</b>
	19,0	95	150	<b>RTJM-3C-12-E</b>
	23,1	185	300	<b>RTJM-3C-12-F</b>
	24,4	240	400	<b>RTJM-3C-12-H</b>
	27,8	300	500	<b>RTJM-3C-12-IP</b>
17,5 kV	17,2	50	70	<b>RTJM-3C-17-D</b>
	19,0	70	120	<b>RTJM-3C-17-E</b>
	23,1	150	240	<b>RTJM-3C-17-F</b>
	24,4	185	300	<b>RTJM-3C-17-H</b>
	27,8	240	500	<b>RTJM-3C-17-IP</b>
24 kV	17,2	25	50	<b>RTJM-3C-24-D</b>
	19,0	50	95	<b>RTJM-3C-24-E</b>
	23,1	95	240	<b>RTJM-3C-24-F</b>
	24,4	120	300	<b>RTJM-3C-24-H</b>
	27,8	185	400	<b>RTJM-3C-24-IP</b>
36 kV	24,4	50	150	<b>RTJM-3C-36-H</b>
	27,8	95	300	<b>RTJM-3C-36-IP</b>

For bigger cross sections in class 24 kV and 36 kV, please contact us.

2- Specify insulation voltage Um in kV : 12 - 17 - 24 - 36.

3- Select the screen continuity device according to the type of metallic screen of cable :

Earthing Device Reference	Type of Metallic Screen of Cable
T2	Copper tape
T3	Copper wires

### Example of order

3x150 mm<sup>2</sup>, 20 kV three core polymeric cable, with copper screen, diameter over insulation 26,0 mm : **RTJM-3C-24-F-T2**.