



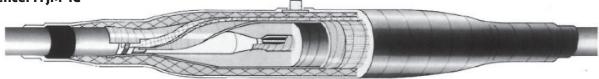
# Injected straight through joint - ITJM-1C



For single core polymeric and MIND paper insulated cables Generally meets the requirements of C 33-001 - VDE 0278 - IEC 60502 - HD 629.

Medium Voltage (MV)
Up to 36 kV
MV Joints
Reference: ITJM-1C





# **Product Application and Design**

#### **Utilisation**

- Jointing of single core polymeric cables or MIND paper insulated cables.
- Conductor sizes equal or unequal.
- May be directly buried (after curing of resin).
- Jointing cables laid underground or in tunnels on horizontal racks.
- May be used in special environmental conditions such as oil industry.

#### **Cables**

- Single core MIND paper insulation.
- Single core polymeric insulation.
- Copper or aluminium conductor.
- Metallic screen of tape, wire or polylam type.
- Semi-conducting screen either extruded or taped.
- Insulation voltage up to 36 kV.
- Conductor sizes: 16 to 300 mm<sup>2</sup> (for bigger sizes, please contact us).

#### **Packing**

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

Shipping weight and volume (approx) of kit

- 12 kV  $\rightarrow$  4 kg / 0.01 m<sup>3</sup> - 17.5 kV  $\rightarrow$  4.5 kg / 0.015 m<sup>3</sup>
- $-24 \text{ kV} \rightarrow 5 \text{ kg} / 0.015 \text{ m}^3$
- $-36 \text{ kV} \rightarrow 11.5 \text{ kg} / 0.03 \text{ m}^3$

## **Other products**

- Joint for 3/C polymeric or MIND paper insulated cables, ITJM-3C.
- Joint between 3/C polymeric or MIND paper insulated cables and three I/C cables ITJM-3x1C.
- Transition joint between 3/C polymeric and 3/C MIND paper insulated cables ITJM-3C.
- Transition joint between 3/C or 3x1/C polymeric cables and 3/C or 3x1/C (or 3/C single lead sheath) MIND paper insulated cable ITJM-1C/3C.
- Branch-joint for 1/C or 3/C polymeric cables ITBM-1C and ITBM-3C.
- Transition branch-joint between 3/C MIND paper insulated cables and polymeric cables ITBM-3C.

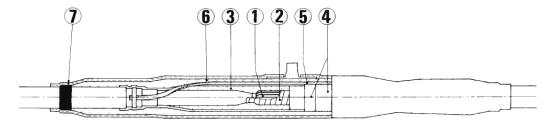




## **Installation features**

- No need for special tools or heating.
- Injection of resin with mechanical gun (not supplied) or with disposable injection device (can be supplied directly the kit in this case, letter "F" to be added at the end of the kit reference).
- Energizing of cable 30 minutes after injecting.
- Polymerization of synthetic resins at ambient temperature + 5°C to + 45°C. Other conditions on request.

## **Description**



#### **1** Conductor ferrule

# 2 Semi-conducting layer

Wrapping of selfamalgamating semi-conducting EPR tape.

#### **3** Core insulation

Wrapping of selfamalgamating insulating EPR tape.

### **4** Equipotential connection

Wrapping of selfamalgamating semi-conducting EPR tape and of tinned copper mesh tape.

#### **5** Core screen

Tinned copper braid of adapted cross section, connected on the metallic screen of cable.

#### **6** Outer protection

Plastic net tape applied in several layers with transparent enclosure tape to contain the injected resin. The resin is contained in two-component, watertight plastic bags.

#### **7** Watertightness

Rings of mastic around the outer sheath and injected resin protection.







- 1- Select in the table below, the kit model corresponding to the insulation voltage (in kV: 12 17.5 24 36) and to the highest cross section (in mm²).
- 2- Add letter "F" to the kit reference, if a disposable injection device should be supplied in the kit.

Voltage Um	Max conductor size mm <sup>2</sup> (for guidance only)	Kit reference
12 kV	50	ITJM-1C-12-50
	95	ITJM-1C-12-95
	150	ITJM-1C-12-150
	300	ITJM-1C-12-300
	630	ITJM-1C-12-630
17,5 kV	50	ITJM-1C-17-50
	95	ITJM-1C-17-95
	150	ITJM-1C-17-150
	300	ITJM-1C-17-300
	630	ITJM-1C-17-630
24 kV	50	ITJM-1C-24-50
	95	ITJM-1C-24-95
	150	ITJM-1C-24-150
	300	ITJM-1C-24-300
	630	ITJM-1C-24-630
36 kV	50	ITJM-1C-36-50
	95	ITJM-1C-36-95
	150	ITJM-1C-36-150
	300	ITJM-1C-36-300

# **Example of order**

1x120 mm², 20 kV, single core, armoured, MIND paper insulated cable, without disposable injection device : **ITJM-1C-24-150**.