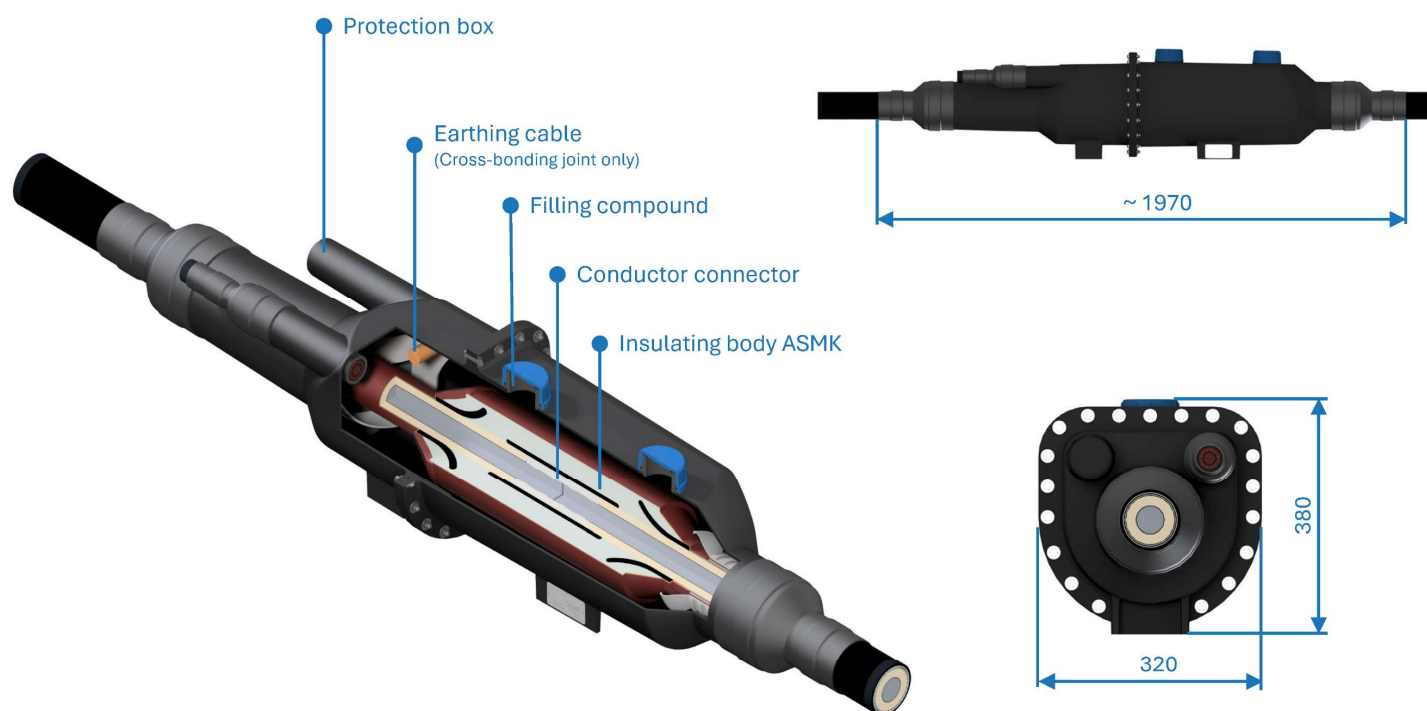


Straight-through joint | Cross-bonding joint

MPT 1.170-21 | MPT 1.170-31

Dimension in mm



Highest Voltage (Um)

170 kV



Max. Cross Section

2500 mm²



Cable Insulation Ø

56-115 mm



Short Circuit Screen

40 kA, 1 sec



Weight

172 kg

Engineered for Reliability

MPT is a compact high-voltage joint for polymeric cable systems, designed for reliable long-term operation. Its protection concept combines mechanical strength, moisture sealing and proven screen separation technology for demanding transmission networks.



Moisture Protected

GF-reinforced PE box and internal filling compound provide durable water sealing and mechanical protection.



High Performance

Proven joint design supports reliable electrical performance and long-term system stability.



Easy Installation

Compact design reduces handling effort, shortens installation time and supports consistent assembly quality.

General product data		Field control design	
Manufacturer	Brugg Kabel AG	Field control method	Geometrical
Country	Switzerland	Type	Pre-moulded
Standard	IEC 60840	Material	Silicone rubber
Rated Voltage (U)	150-161 kV	Production method	Injection moulding
Highest Voltage (Um)	170 kV	Production environment	Clean room
(U0) for determination of test voltage	87 kV		
Cable compatibility		Construction & materials	
Type	XLPE	Water barrier	PU-Resin compound
Cable screen types	-Lead sheath with/without wires -Cu/Al corrugated -Al smooth -Cu/Al laminated sheath with wires	Outer protection	GF-reinforced injection-moulded PE box
Min. insulation thickness ¹	10.5 mm	Filling compound	yes
Prepared insulation diameter	56-115 mm	Connector	Compression or bolted (max. 2500 mm ²)
Max. cable diameter	150 mm		
Max. cable cross section	2500 mm ²		
Electrical type test levels		Outer Protection acc. to Annex H	
Partial discharge test (< 5 pc at 1.5 U0)	131 kV	Water immersion test	0.1 bar rel.
Heating cycle voltage test (2 U0)	174 kV	DC voltage withstand test	25 kV, 1 min
Lightning impulse voltage test (BIL)	750 kV	Lightning impulse withstand test (screen-to-earth)	37.5 kV
Switching impulse voltage test (SIL)	n/a	Lightning impulse withstand test (screen-screen)	75 kV
Voltage test	218 kV (2,5 U0 for 30 min)		
Electrical routine test levels		Installation conditions	
Voltage test	218 kV (2,5 U0 for 15 min)	Installation temperature	+5°C / +45°C
Partial discharge test (< 5 pc at 1.5 U0)	131 kV	Personnel	Only by Brugg Cables certified installers
Each insulating body routine tested	yes	Site conditions	Clean and dry environment
Operation conditions data		Packaging information	
Max. current rating	Same as cable	Scope of supply	Material for 3 joints
Max. short circuit current conductor	Same as cable	Earthing cable	Provided by customer
Max. short circuit current screen	40 kA, 1 sec	Packaging	Export wooden boxes (ISPM15)
Min./Max. ambient temperature	-25°C / +60°C		
		Storage	
		Storage environment	Clean and dry
		Storage conditions	Refer to Q-01089-en

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1. Smaller insulation thickness upon request