

Cable Systems | High-Voltage



IXOSIL Slip-on Joints

IXOSIL slip-on joints consist almost entirely of pre-molded slip-on silicone parts. This enables the secure and efficient connection of two polymeric-insulated cables (XLPE, EPR). The proven slip-on technique ensures minimum installation time and a maximum operational reliability. The tested and applied materials comply with all electrical, mechanical and thermal requirements for rebuilding the cable insulation. IXOSIL slip-on joints are available in both one piece and three piece set up and may be used for connecting either copper or aluminum conductors. Both slip-on joints are available with many variants.









IXOSIL One-Piece Slip-on Joints

The one-piece slip-on joints are available for voltages from 72.5 kV to 300 kV. Due to the one-piece construction the joints are extremely compact in size. The space required in a joint bay therefore is reduced to a minimum. Each size of the silicone body covers a range of different insulation diameters. Up to 5 different outlets are available for efficiently sealing of fibre optic cable and/or PD sensor cables.

IXOSIL three-part Slip-on Joint

The three-part slip-on joint is available for voltages from 72.5 kV to 170 kV. The well-tried three-part construction of this joint enables cables of different types and dimensions to be connected. For example a 630 mm² EPR cable can be connected to a 500 mm² XLPE cable. This slip-on joint is also available with an outlet for a fibre optic cable.

Screen treatment		Protective housing	
XL, XK, DE  XL, XK: Screen version with bonding cable DE: Screen version with earthing tap on one side	S or R  S: Heat-shrinkable sleeve R: Fibre-glass reinforced heat-shrinkable sleeve	MS or MR  MS: Copper tube with heat-shrinkable sleeve and filling compound MR: Copper tube with fibre-glass reinforced heat-shrinkable sleeve and filling compound	
DO  Screen transition	G  Plastic housing and filling compound	MG  Copper tube with plastic housing and filling compound	

Maximum voltage U _m (kV)	Standards	Rated voltage U (kV)	Lightning impulse withstand voltage (BIL), (kV)	Partial discharge measurement (pC)	Conductor cross section (mm ²)	(AWG)	Diameter over cable insulation (prepared)	
72,5	IEC60840	60 – 69	325	< 5	150-1200	300 MCM – 4000 MCM	37 – 87	1.46 – 3.43
123	IEC60840	110 – 115	550	< 5	240-2500	500 MCM – 5000 MCM	45 – 122	1.77 – 4.8
145	IEC60840	132 – 138	650	< 5	240-2500	500 MCM – 5000 MCM	45 – 122	1.77 – 4.8
170	IEC60840	150 – 161	750	< 5	240-2500	500 MCM – 5000 MCM	45 – 122	1.77 – 4.8
245	IEC62067	220 – 230	1050	< 5	240-2500	500 MCM – 5000 MCM	69 – 122	2.719 – 4.8
300	IEC62067	275 – 287	1050	< 5	240-2500	500 MCM – 5000 MCM	69 – 122	2.719 – 4.8