



IXOSIL Slip-on Joints

IXOSIL slip-on joints mainly consist of pre-fabricated silicone rubber parts. This ensures reliable and efficient connection of two polymer insulated high voltage cables (VPE, EPR). The well proven slip-on system ensures minimum installation time and maximum operational reliability. The tested material conforms to all electrical, mechanical and thermal requirements for rebuilding cable insulation. The IXOSIL slip-on joint is available in a one-piece or a three-piece version and can be used to connect both copper and aluminium cables. Several versions of the two joint designs are available which differ in terms of the combination of screen treatment, water diffusion barrier, mechanical protective enclosure and other features as listed below.

Screen treatment

Type designation DO: Straight through connection of cable screen

Type designation DE: Straight through connection of cable screen with additional earthing

Type designation XL: Screen cross-bonding with 2 single bonding cables

Type designation XK: Screen cross bonding with 1 concentric bonding cable

Water diffusion barrier

Type designation F: Aluminium foil water diffusion barrier

Type designation M: Copper tube water diffusion barrier

Protective enclosure

Type designation S: Heat-shrinkable sleeve

Type designation R: Glass fibre-reinforced, heat-shrinkable sleeve

Type designation G: glass fibre-reinforced protection box

Fibre optics and/or PD sensor

Type designation OP: Integrated fibre optic splice box

Type designation TE: Integrated partial discharge sensor

Type designation TEOP: Integrated fibre optic splice box and partial discharge sensor

Detailed information regarding the type designation is required when placing your order.

One-piece Slip-on Joint

The one-piece MSA slip-on joint is available for voltages from 72.5 kV to 300 kV. Thanks to the one-piece design, the joints are extremely compact in size. The space required in a joint bay is therefore reduced to a minimum. Each size of silicone body covers a wide range of cable insulation diameters.

Materials:

Joint body: Silicone rubber

Conductor connection:

Compressed or screwed

Note:

The weight depends on the diameter over cable insulation and the joint design. The joints are tailored according to customer specifications; detailed technical data and dimensioned drawings are therefore available on request.



Max. operating voltage	Standards	Rated voltage	Rated lightning impulse withstand voltage (BIL)	Partial discharge measurement	Conductor cross-section area	Diameter across cable insulation (prepared)
U_m (kV)		U (kV)	(kV)	(pC)	(mm ²)	(mm)
72.5	IEC60840	60 - 69	325	< 5	150 - 2000	37 - 87
123	IEC60840	110 - 115	550	< 5	240 - 2500	46 - 122
145	IEC60840	132 - 138	650	< 5	240 - 2500	46 - 122
170	IEC60840	150 - 161	750	< 5	240 - 2500	52 - 122
245	IEC62067	220 - 230	1050	< 5	240 - 2500	69 - 122
300	IEC62067	275 - 287	1050	< 5	240 - 2500	72 - 122

Three-piece Slip-on Joint

The three-piece MSA slip-on joint is available for voltages from 72.5 kV to 170 kV. The well known and tested three-piece design 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 VPE cable.

Materials:

Joint body: Silicone rubber

Conductor connection:

Compressed or screwed

Note:

The joints are tailored according to customer specifications; detailed technical data and dimensioned drawings are therefore available on request.

Max. operating voltage	Standards	Rated voltage	Rated lightning impulse withstand voltage (BIL)	Partial discharge measurement	Conductor cross-section area	Diameter across cable insulation (prepared)
U_m (kV)		U (kV)	(kV)	(pC)	(mm ²)	(mm)
72.5	IEC60840	60 - 69	325	< 5	on request	on request
123	IEC60840	110 - 115	550	< 5	on request	on request
145	IEC60840	132 - 138	650	< 5	on request	on request
170	IEC60840	150 - 161	750	< 5	on request	on request