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 aluminum 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 TEO: 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.

<table>
<thead>
<tr>
<th>Max. operating voltage (Uc, kV)</th>
<th>Standards</th>
<th>Rated voltage (U, kV)</th>
<th>Rated lightning impulse withstand voltage (BIL) (kV)</th>
<th>Partial discharge measurement (pC)</th>
<th>Conductor cross-section area (mm²)</th>
<th>Diameter across cable insulation (prepared) (mm)</th>
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<tr>
<td>72.5</td>
<td>IEC60840</td>
<td>60 - 69</td>
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<td>240 - 2500</td>
<td>46 - 122</td>
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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.

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