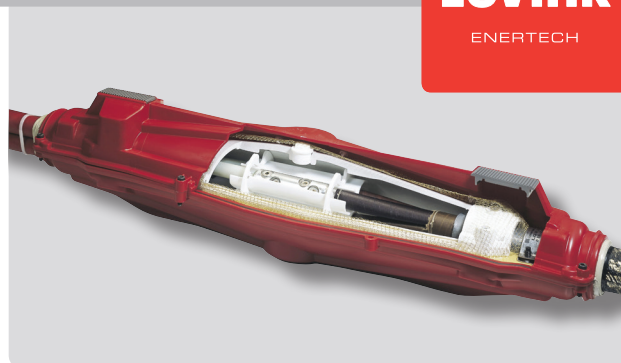


LoviSil®

Silicone –filled straight and transition joints



For paper-insulated and polymeric cables U_{max} 12 kV

Application

LoviSil® cable joints are suitable for use on paper-insulated (PILC or PICAS) and polymeric (XLPE or EPR) cables. This system is based on LoviSil® technology.

LoviSil® technology

LoviSil® joints are developed on the basis of fluid silicones. Thanks to the construction and characteristics of the silicone-based insulation material, the LoviSil® joint provides a reliable connection. It is not only the ideal transition joint, but is also often used as a universal straight through joint. Due to the universal nature of LoviSil® cable joints, many applications are possible.

Insulation

The electrical insulation is inside a polyester inner joint, provided by the combination of a polymeric tube set (primary insulation) and a high-grade silicone-based compound. This compound remains fluid, thus minimising the risk of discharge or dried out paper.

The mechanical insulation is provided by a strong ABS outer joint, filled with a two-part polyurethane resin. This resin provides long-term moisture resistance. Moreover, the good bond of polyurethane resin with the ABS outer shells provides a guaranteed seal. As a result, the earth screen is fully insulated, making it possible to perform a sheath test. A copper wire mesh serves as electrical screen.

Earth screen connection

The polyurethane resin guarantees a universal earth connection. The resin seals around all contours and provides a perfect seal towards the earth screen. This seal also ensures an optimal cable protection against corrosion.

Sealing

Whenever the silicone comes into contact with water, it reacts to form a soft and perfectly insulating rubber. This creates a seal that prevents any further ingress of moisture.

Equivalent Er value

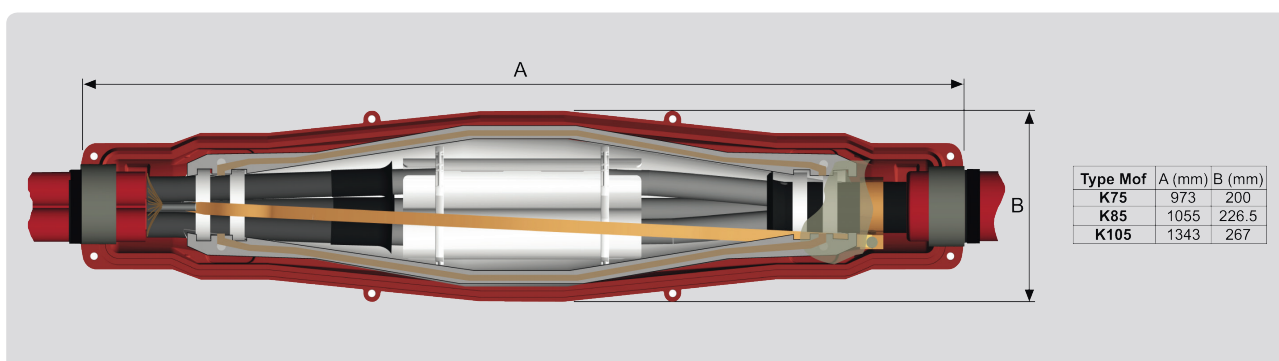
The dielectric constant (Er value) of the insulation is practically identical to that of polymeric cables (XLPE/ EPR) and it remains so even when cured. This makes for a consistently homogeneous electric field.

Protection of cables

When applied to paper-insulated cables, the silicone compound performs the same insulating function as cable grease. This guarantees the long-term quality of the connection, while minimising the risk of discharge due to dried out insulating paper.

Suitable for all connectors

LoviSil® joints are suitable for application with all types of connectors. Both mechanical and crimp connectors can be used for 12 and 24 kV without problems.



Items supplied

LoviSil® joints are ordered on the basis of a modular system. This makes the cable joint very flexible and universally applicable. From one basic concept, all cable types can be connected. Besides it is possible to combine the modules as a standard kit.

1. Basic module:

This module contains all the 'hardware' for the joint. The type of basic module is dependent on the cable sizes on the table below.

2. Resin module:

This module contains all filling compounds for the joint, including the LoviSil® liquid.

3. Cable module

This module contains additional items needed to finish the cable preparation.

4. Stop end module

With the stop end module you can make a end joint of a standard joint by replacing one of the cables by a plug.

Tests

The cable joints have been tested and approved in accordance with HD 629 (CENELEC). Moreover, the test was executed at a 2 bar water pressure.

Order specifications

To proper advise you we need to know your cable- and network details, such as cable cross-section and voltage. For this you can download a cable checklist on the website.

Complete program

Besides the LoviSil® product range consists of branch and loop joints, repair joints and crossbonding straight through joints. Visit our website or contact one of our specialists.

Type	Cable	Conductor size (mm²)*	Diameter conductor crossed conductors (mm²)	Max. diameter outer sheath (mm)
K75	Polymeric (1-core)	95 - 630	n.a.	72
	Paper (1-core)	95 - 630	n.a.	72
	Polymeric (3-core)	25 - 150	25 - 120	72
	Polymeric (3 x 1-core)	25 - 150	n.a.	33
	Paper	16 - 150	16 - 120	72
K85	Polymeric (3-core)	95 - 240	95 - 185	82
	Polymeric (3 x 1-core)	95 - 240	n.a.	38
	Paper	95 - 240	95 - 185	82
K105	Polymeric (1-core)	800 - 1.600	n.a.	105
	Polymeric (3-core)	240 - 400	240	105
	Polymeric (3 x 1-core)	240 - 400	n.a.	48
	Paper	240 - 400	240	105

* Attention: the diameter of the outer sheath of the cable and the supplied cable module is leading.



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