

**Cross-bonding joint** > Used where cross-bonding is required to reduce losses



**Application**

Underground solution to prevent compensating currents.

**Benefits**

- Reduce cable losses
- Cost savings due to less cable losses

Toepassingsgebied	Type	Kabel	Geleidedoorsnede (mm <sup>2</sup> )*	Geleidedoorsnede gekruiste aders (mm <sup>2</sup> )	Max. diameter buitenmantel (mm)
12 kV	M75	Polymeric (1-core)	95 - 630	N/A	72
	M85	Polymeric (1-core)	800 - 1.000	N/A	82
24 kV	M75	Polymeric/paper (1-core)	95 - 240	N/A	72
	M85	Polymeric (1-core)	300 - 630	N/A	82
	M105	Polymeric (1-core)	800 - 1.000	N/A	105
36 kV	M85	Polymeric (1-core)	95 - 400	N/A	82
	M105	Polymeric (1-core)	400 - 1.000	N/A	105

\* Attention: Dependent on the outer sheath diameter and selected cable module.  
The above sizes concern cables that fit into the joint. Different cables on request.

## Sustainable solutions

An important objective in the electricity sector is to utilize the cable network in a sustainable manner. This can be achieved by extending the life of aging paper cables where possible. The oil refill joint offers a perfect solution.

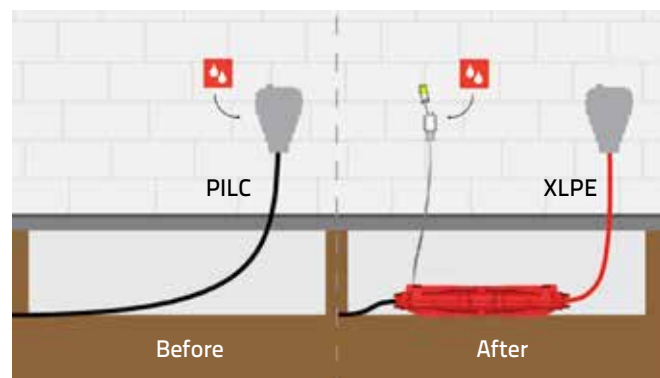
### Extending cable network life span

New network sub stations are designed around switchgear for connection to polymeric cables. This requires the installation of transition joints to allow connection to existing PILC networks. In turn, this often results in disconnection from oil supplies essential to existing paper-insulated cables, thus making them susceptible to drying out and inevitable failure. Lovink Enertech has devised a special transition joint that continuously supplies oil to these cables thus preventing them from drying out.

### Effective solution

A simple technique has been devised to remove a section of lead sheath without compromising the cores beneath.

A special manifold, which includes a non-return valve, is then positioned over the opening and secured in place. This enables connection to an oil supply suitable for the cable concerned. Utilizing a silicone tube along with traditional couplers and pipe-work, oil can be supplied from a conveniently located reservoir allowing easy maintenance.



Lovisil® oil refill joint