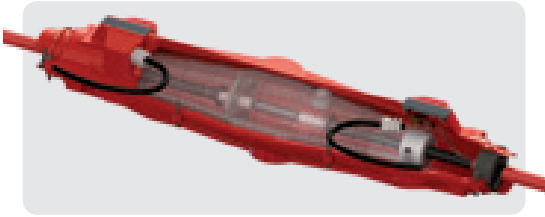


## Optional versions

**Cross-bonding splice** > 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

Voltage	Type	Cable	Conductor size	Diameter conductor crossed conductors	Max. cross section for crossed cores (inch)
15 kV	M75	Polymeric (1-core)	3/0-4/0 AWG to 750-800 kcmil	N/A	2.835
	M85	Polymeric (1-core)	1250 kcmil	N/A	3.228
	M105	Polymeric (1-core)	1500 kcmil to 2000 kcmil	N/A	4.134
25 kV	M85	Polymeric (1-core)	1250 kcmil	N/A	3.228
	M105	Polymeric (1-core)	1500 kcmil to 2000 kcmil	N/A	4.134
35 kV	M85	Polymeric (1-core)	350-400 kcmil to 750-800 kcmil	N/A	3.228
	M105	Polymeric (1-core)	1250 kcmil to 2000 kcmil	N/A	4.134

\* Attention: Dependent on the outer sheath diameter and selected cable module.  
The above sizes concern cables that fit into the splice. 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 splice offers a perfect solution.

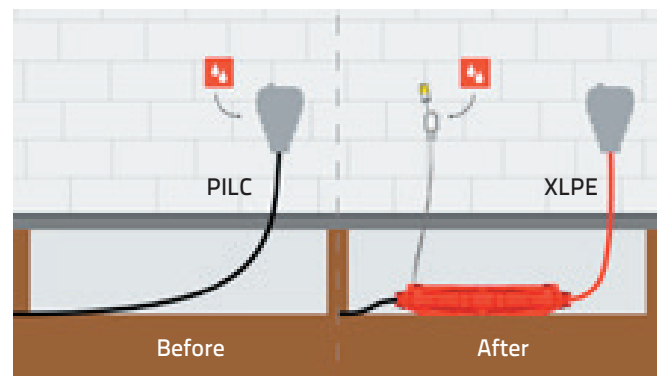
### Extending cable network life span

New network sub stations are designed around switchgear for connection to polymeric cables. This requires the installation of trifurcate splices 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 trifurcate splice 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 splice