



## IXOSIL EST SUB and IXOSIL ESF

Dry type terminations for substations

**The new oil-free and gas-free terminations for high voltage cables are environmentally friendly and reduce installation times. They are available for voltage levels ranging from 52 kV to 170 kV and conductor cross-sections up to 2500 mm<sup>2</sup>.**

IXOSIL's new generation of dry type slide-on terminations are not only easy to install, they are even cost-effective. Since the terminations do not feature liquid or gaseous insulating material, they are explosion-resistant in the event of a fault and leak-proof over the whole lifetime.

They are available in two designs:

The self-supporting **IXOSIL EST SUB** design replaces conventional oil-filled or gas-filled outdoor terminations in substations. The supporting elements can be installed separately on the substation steel structure while the termination can be fitted on the ground and then mounted in the supporting elements afterwards.

The flexible **IXOSIL ESF** design has to be mounted on a mechanically stable fixing point. It is also perfectly suited for flexible quick-installation multiple-use applications in testing or temporary site cables.

For use on high-voltage transmission towers we offer **IXOSIL EST**.

# The Data – The Details

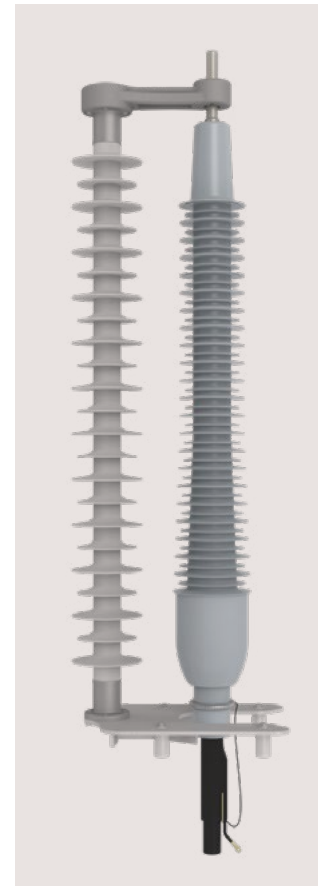
Description		ESF52	ESF72,5	ESF123/ EST 123 SUB	ESF145/ EST 145 SUB	ESF170/ EST 170 SUB
Max. operating voltage	Um [kV]	52	72.5	123	145	170
Standards		IEC 60840 IEC 60815	IEC 60840 IEC 60815	IEC 60840 IEC 60815	IEC 60840 IEC 60815	IEC 60840 IEC 60815
Rated voltage	U [kV]	45 - 47	60 - 69	110 - 115	132 - 138	150 - 161
Rated lightning impulse withstand voltage (BIL)	[kV]	250	325	550	650	750
Partial discharge measurement	[pC]	< 5	< 5	< 5	< 5	< 5
Conductor cross-section area	[mm <sup>2</sup> ]	95 - 1200	95 - 1200	150 - 2500	240 - 2500	240 - 2000
Diameter across cable insulation (prepared)	[mm]	32.5 - 64.4	32.5 - 64.4	46.0 - 115.0	46.0 - 115.5	52.0 - 115.0
Net weight approx.	[kg]	11 - 12	58 - 63	100 - 120	120 - 130	150 - 160
Minimal creepage distance	[mm]	1500 - 1813	1813 - 2248	3075 - 3813	3625 - 4495	4250 - 5270
Pollution class		-	2 - 4	2 - 4	3 - 4	3 - 4
Pollution class	[mm/kV]	28 - 34	20 - 31	20 - 31	25 - 31	25 - 31

## The Advantages

- Oil- and gas-free
- Leak-proof
- Compensation of cantilever forces
- Enables installation on the ground, no mounting frames required
- Time savings of up to 50% during cable preparation thanks to new technology
- 100% electrically routine-tested
- Low weight



ESF 52 - 170 kV



EST SUB 123 - 170 kV