

ROLLING STOCK

T/L connector Type B/C/E



ALPHA-ET

Current and voltage – our passion



General description

General

Bolted T-connectors are the standard cable termination for the connection to transformers, motors, switchgears and other components. With the appropriate mating parts it is also possible to realise a cable to cable connection. ALPHA provides different types of T/L- connectors with interfaces type B, C and E described by CENELEC EN 50180, 50181 and DIN 47636. The T-Connector is available in EPDM and silicone rubber.

Special characteristics

The T-connector itself mainly contains a stress cone, which gets slipped over the cable insulation, a cable lug with hexagonal pressing, the connector body and the insulation cone which is screwed on the connected part.

The live parts are fully insulated and total safe against contact to ensure safety for personal. The T-connectors are resistant to environmental effects and can be used for both indoor and outdoor installations. They are also maintenance free and in case of disassembling and reassembling easy to handle.

Silicone rubber:

In addition to its outstanding mechanical and electrical characteristics, our high grade silicone rubber is distinguished by its ideal properties against atmospheric pollution. It complies with the EN 45545-2 fire protection standard for railway applications which makes it ideal to use in this sector.

EPDM:

EPDM is highly elastic and has outstanding resistance to weather, ozone and UV and excellent electrical insulating properties. On the other hand, the chemical resistance to mineral oil as used in transformers is bad. The EPDM T-connector does not fully comply with the EN 45545-2 fire protection standard for railway applications, which makes it critical to use in this sector.

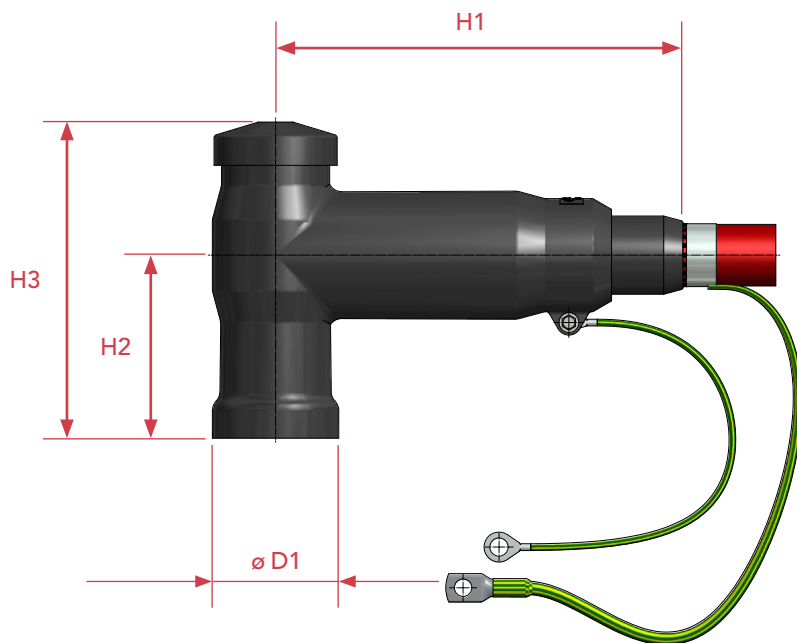
Application

The T-connector can be mounted on any polymeric cables (PE, XLPE, EPR) with copper conductors.

Benefits T/L Connector

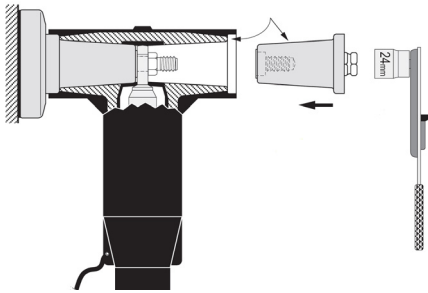
- T-connector available in silicone rubber and EPDM
- Connection Type B, C and E
- Cable cross-section 50–630mm²
- The ALPHA silicone rubber T-connector type E satisfies the requirements of the fire protection standard EN 45545-2:2013.
- Routine test of all assembled cables: AC/DC voltage withstand test according to the standard DIN EN 50124-1:2006-04 and partial discharge test according to the standard IEC 60270:2000 (<10pC for each assembled cable).
- Maintenance free T-connector guarantees low life-time costs.

Technical data



Type		silicone rubber	EPDM
Rated voltage	kV		36
Maximum operating voltage	kV	42	–
Cable cross section	mm	25–300	50–630
Rating current	A	630	630/1250
Partial discharge (per terminantion)	pC	<5 @ 72pC	<5 @ 31 pC
DC voltage test	kV	94	75
Impulse withstand voltage	kV	200	170
H1	mm		div.
H2	mm		div.
H3	mm		div.
D1	mm		div.

Highlights



Quick and easy assembly

- Connection to the transformer, motor, switchgear etc. by screwing on the insulating plug.
- Secure and maintenance free connection guaranteed.
- Easy disassembly and reassembly.



New type E T-connector in silicone rubber

Contrary to the existing T-connectors type E which are made out of EPDM the new ALPHA T-connector type E is made of silicone rubber, which lets it satisfy the EN 45545 fire protection standard for railway applications.



References

Successfully proven in several trains:

- Alstom: TTNG, EP20, K28, KZ4A, KZ8A, TGV Maroc, Coradia
- Bombardier: Twindexx SBB, Talent, Kiruna, Zefiro, ETR 1000
- Hitachi Rail: IEP, ASR, WOE
- SIEMENS: DESIRO UK
- Stadler Rail: Ee922/923



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DISCONNECTORS

