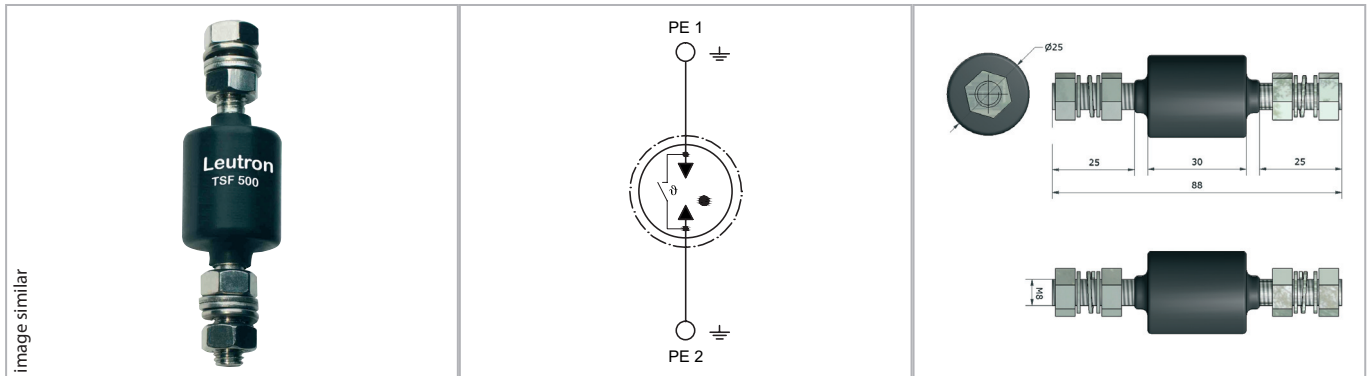


# Datasheet

## Rare-gas-filled insulation spark gaps

### Flexible mounting



A rare-gas-filled spark gap for the lightning protection equipotential bonding, the insulation of electrically separated parts and the bridging of insulating flanges of gas pipelines. For internal or similar applications.

- High-quality industrial ceramics
- Rare-gas filled, hermetically sealed
- Free from radioactive substances
- High lightning current discharge capacity of 100 kA (10/350 µs) (class H)
- High reliability, robust
- Stable performance, long service life
- Fail-safe characteristic
- Test standard DIN EN 62561-3:2018-02

Technical Data		TSF 500
IEC category		Class H
Nominal DC sparkover voltage at 100 V/s	U <sub>agN</sub>	500 ± 15% V=
Nominal AC sparkover voltage (50 Hz)	U <sub>aw</sub>	350 ± 15% V
Typical impulse sparkover voltage	U <sub>as</sub>	950 V
Max. impulse sparkover voltage	U <sub>as</sub>	1300 V
Lightning impulse current (10/350 µs) total	I <sub>total</sub>	100 kA
Nominal impulse discharge current (10 x 8/20 µs)	I <sub>n</sub>	100 kA
5x Nominal alternating discharge current at 50 Hz, 1 s, 3 min pause	I <sub>wn</sub>	100/1 A/s
Nominal alternating discharge current (50 Hz)		200/0,5 A/s
Spark-gap extinguishing conditions	V <sub>ex</sub>	<230 V / <100 A
Insulation resistance at 10 V, 100 V		>1 GΩ
Self-capacitance at 1 kHz		4 pF
Test category/climatic category		DIN IEC 60068-1 / 40/90/21
Relative humidity		10%...95% rh
Degree of protection		IP 67
Operating temperature range	TU	-40 - +80 °C
Terminals		M8 bolt/nut (NIROSTA stainless steel)
Dimensions (Ø x L)		25 x 88 mm
3x lightning impulse current (10/350 µs), long-duration current (CENELEC/BTTF 62-2)	I <sub>imp</sub>	75kA / 38 As / 1,45 MJ/Ω + 150 A/0,5 s/75 As
20x lightning impulse current (10/45 µs) half-wave (DIN 48810)		60 kA/10 As/0,1 MJ/Ω

### Order Data

Product	TSF 500
Article-No.	48 78 01