

SURGE PROTECTION

Spark gap: EXFS L

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German Cathodic Protection



Ex isolating spark gaps EXFS L are used for conductive system parts which cannot be interconnected directly in hazardous zones. This includes, for example, pipe sections supplied with a cathodic corrosion protection system.

ATEX certified EXFS L spark gaps provide approved and tested safety according to harmonised European standards.

The arc-resistant tungsten-copper electrodes ensure a long service life of the Ex spark gaps.

The approved type EXFS L with flexible conductor connection adjusts itself quickly to any application environment. The prewired spark gaps include connecting cables of different lengths with cable lugs, M10 screws and nuts. Flat or angled connection brackets (IF), which are available as accessories, allow for easy connection of the spark gap at pipeline flanges.



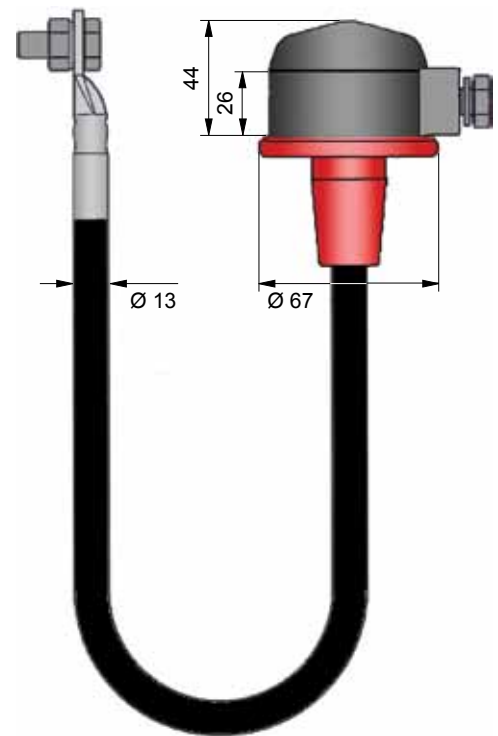
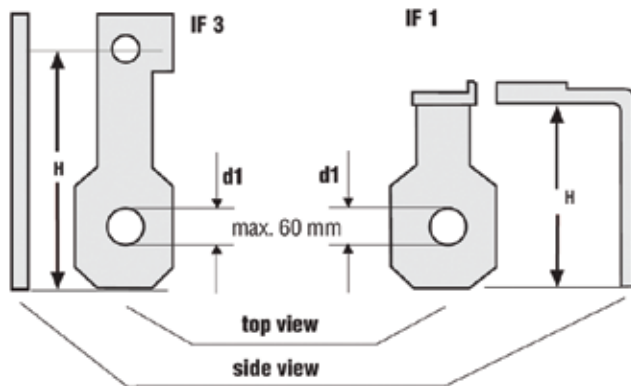
Application

An isolating spark gap makes an indirect connection between functionally separate parts of an installation, e.g. isolated earth-termination systems. It can be used to bridge insulating pieces, insulating couplings and insulating flanges on installations with cathodic corrosion protection parts of an installation, such as pipelines or tanks, or as a measure of lightning equipotential bonding according to DIN VDE 0185.

Connection bracket

Terminal height H

Size	IF 1	IF 3
1	H = 0.08 m	H = 0.10 m
2	H = 0.10 m	H = 0.12 m
3	H = 0.14 m	---



EXFS L ...: Ex isolating spark gap for above ground installation	EXFS L100	EXFS L200	EXFS L300
Lightning impulse current	50 kA	50 kA	50 kA
Classification of lightning current carrying capability acc. to EN 50164-3	N	N	N
Nominal discharge current (8/20 µs)	100 kA	100 kA	100 kA
100% lightning impulse sparkover voltage	≤ 2.5 kV	≤ 2.5 kV	≤ 2.5 kV
Power frequency sparkover voltage (50 Hz)	≤ 1.2 kV	≤ 1.2 kV	≤ 1.2 kV
Type of protection according to EN 50014, EN 50021	II 3 G EEx nC II T4	II 3 G EEx nC II T4	II 3 G EEx nC II T4
Operating temperature range [TU]	-20°C...+80°C	-20°C...+80°C	-20°C...+80°C
Degree of protection	IP 54	IP 54	IP 54
Approvals, Certifications	ZELM 03 ATEX 3192X	ZELM 03 ATEX 3192X	ZELM 03 ATEX 3192X
Length of enclosure	90 mm	90 mm	90 mm
Diameter of enclosure	63 mm	63 mm	63 mm
Enclosure material	zinc die casting, plastic	zinc die casting, plastic	zinc die casting, plastic
Connecting cable	H01N2-D 25 mm ² with cable lug and M10 screw / nut	H01N2-D 25 mm ² with cable lug and M10 screw / nut	H01N2-D 25 mm ² with cable lug and M10 screw / nut
Cable length	100 mm	200 mm	300 mm
Suitable for flange size	20 - 130 mm	120 - 230 mm	220 - 320 mm