

SURGE PROTECTION

Spark gap: EXFS L

Document No.: 14-101-R0

Sheet: 1 of 1

German Cathodic Protection



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

The spark gaps EXFS L certified by ATEX 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 with different lengths with cable lugs, M10 screws and nuts. The flat or angled connection brackets (IF), which are available as accessories, allow for easy connection of the spark gap at pipeline flanges.



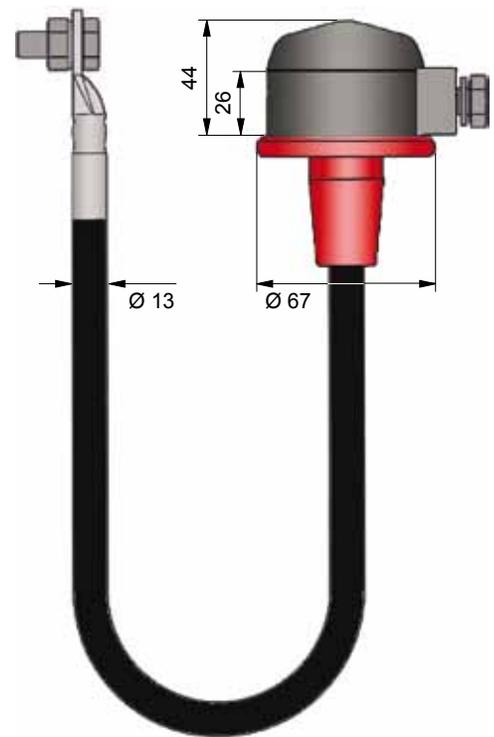
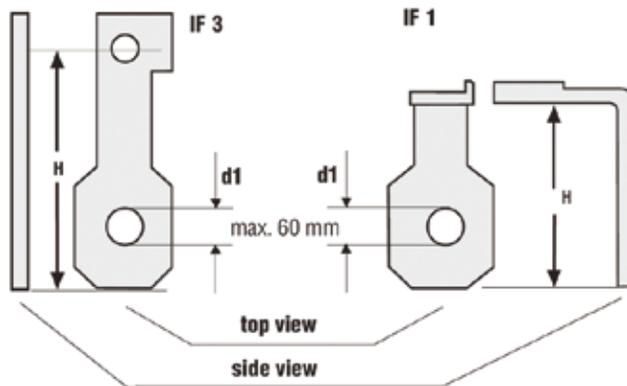
Application

An isolating spark gap connects indirectly functionally separate parts of an installation, e.g. isolated earth-termination systems. It can be used for bridging insulating pieces, insulating couplings and insulating flanges indirectly at cathodic protected parts of an installation, e.g. pipelines or tanks, 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 aboveground installation	EXFS L100	EXFS L200	EXFS L300
Lightning impulse current	50 kA	50 kA	50 kA
Classification of lightning current carrying capability acc. to prEN 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 [T _U]	-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	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