

SURGE PROTECTION

Spark gap: EXFS KU

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German Cathodic Protection



Ex isolating spark gaps EXFS KU 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.

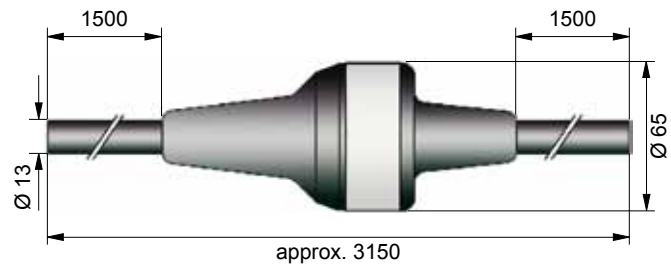
Ex isolating spark gap EXFS KU with connecting cables for aboveground and underground installation. For lightning equipotential bonding according to IEC 62305-4.

Application

Spark gaps are used in installations with cathodic corrosion protection systems. They can be used to bridge insulating flanges and insulating couplings, or for the indirect connection of the earthing system parts on installations with cathodic protection, such as pipelines or tanks.

The spark gap is to be installed in the immediate vicinity, e.g. on the pipe. Ensure that any loop formed on installation is as small as possible.

The connection to the pipe can be screwed or welded. All screwed connections should be secured with spring washers to prevent them working loose.



Maintenance and operation

The spark gap is maintenancefree.

An overload usually causes welding/short circuiting of the electrodes. Overloads detected by the potential indicator of the cathodic protection system. A defective spark gap can also be detected by a simple resistance measurement (measured value <math>< 10 \text{ k}\Omega</math>).

EXFS KU: EX isolating spark gap for installation above or below ground	EXFS KU
Lightning impulse current	50 kA
Classification of lightning current carrying capability acc. to prEN 50164-3	N
Nominal discharge current (8/20 μ s)	100 kA
100% lightning impulse sparkover voltage	$\leq 2.5 \text{ kV}$
Power frequency sparkover voltage (50 Hz)	$\leq 1.2 \text{ kV}$
Type of protection according to EN 50014, EN 50021	II 3 G EEx nC II T4
Operating temperature range [TU]	-20°C...+80°C
Degree of protection	IP 67
Approvals, Certifications	ZELM 03 ATEX 3192X
Length of enclosure	90 mm
Diameter of enclosure 63 mm 63 mm 63 mm	63 mm
Enclosure material	zinc die casting, plastic covered
Connecting cable	NY-Y-J 1 x 25 mm ²
Cable length	2 x approx. 1500 mm