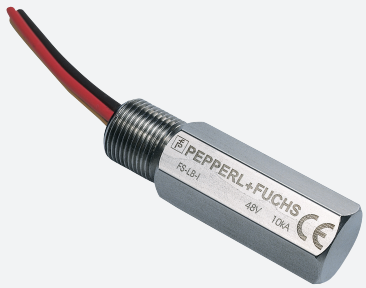


Fieldbus Surge Protector, Field Mounting (Ex ia)

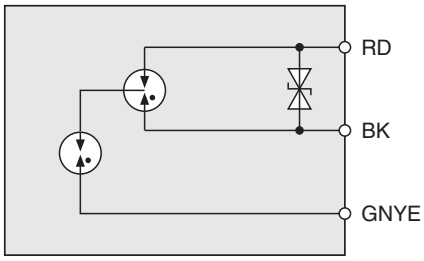
F*-LBF-I1.32

- Surge Protector in stainless steel housing
- Intrinsically safe, FISCO or Entity
- Surge protection for '+' and '-' fieldbus lead
- Choice of threads 20 mm or 1/2" NPT
- For FOUNDATION Fieldbus H1 and PROFIBUS PA

Function

F*-LBF-I1.32 are surge protection devices for fieldbus installations. They direct power surges to earth via gas discharge tubes, protecting field devices and control units from voltage surges and lightning strikes. They are in accordance with the fieldbus standard IEC 61158-2 and are certified intrinsically safe Ex ia for Zone 1, FISCO, and Entity.
FieldConnex® surge protectors for field installation enable the coordinated use in a lightning protection zone concept in accordance with IEC 61312-1. Housings are available with 20 mm ISO or ½" NPT connecting threads for easy installation on outdoor junction boxes.

Connection



Technical Data

General specifications		
Design / Mounting		Outside installation
Electrical specifications		
Rated voltage	U_r	32 V
Rated current	I_r	550 mA
Nominal discharge current (8/20 µs)	I_n	
per line		10 kA
total		10 kA
Max. surge current (8/20 µs)	I_{max}	10 kA
Voltage protection level at max. rated current		
Line/Line		58 V
Line/Earth		1700 V
Voltage protection level at 1 kV/µsec		
Line/Line		50 V

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Technical Data

Line/Earth		1.2 kV
Reaction time	t_A	
Line/Line		max. 1 ns
Line/Earth		max. 100 ns
Capacitance		
Line/Line		25 pF
Line/Earth		15 pF
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
Standard conformity		
Electromagnetic compatibility		NE 21:2006
Degree of protection		IEC/EN 60529
Fieldbus standard		IEC 61158-2
Surge protection		IEC 61643-21
Ambient conditions		
Ambient temperature		-50 ... 80 °C (-58 ... 176 °F)
Storage temperature		-50 ... 85 °C (-58 ... 185 °F)
Mechanical specifications		
Core cross section		1.3 mm²
Housing material		Stainless steel 1.4401 (AISI 316) surface all over polished
Degree of protection		IP00/IP67 if correctly installed
Mass		160 g
Mounting		screw mounting
Data for application in connection with hazardous areas		
EU-type examination certificate		KEMA 04 ATEX 1317 X
Marking		Ⓔx II 2(1)G Ex ia IIC T6...T4
Voltage	U_i	Entity 30 V , FISCO 17.5 V
Current	I_i	Entity 550 mA , FISCO 380 mA
Power	P_i	Entity 3 W , FISCO 5.32 W
Internal capacitance	C_i	negligible 0 nF
Internal inductance	L_i	negligible 0 µH
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2018 , EN 60079-11:2012
International approvals		
IECEx approval		IECEx KEM 09.0081X
Approved for		Ex ia [ia Ga] IIC T6...T4 Gb
Certificates and approvals		
Marine approval		DNV A-14038
General information		
Supplementary information		EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com.

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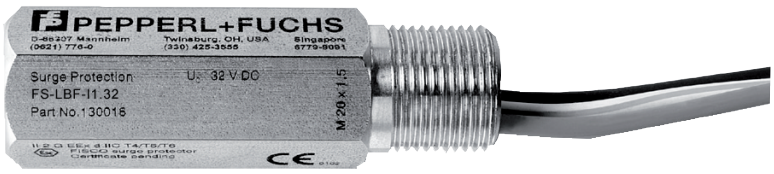
Product Photo



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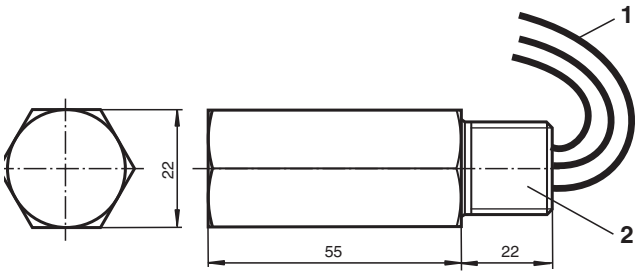
Additional Information

Note

Surge protectors must always be connected to a solid ground (large cross sections, short wiring). This is the basic requirement for an effective protection.

Dimensions and Assembly

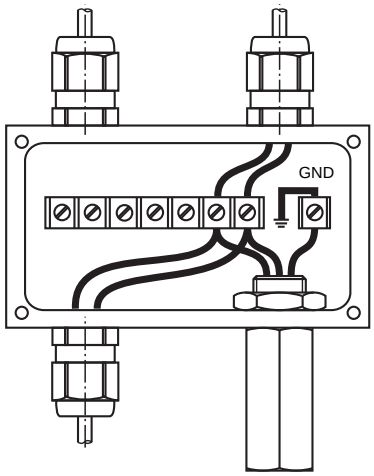


1 Cable cross sectional area 1.0 mm
Cable length 250 mm
2 FS*: M20 x 1.5 thread
FN*: 1/2"NPT thread

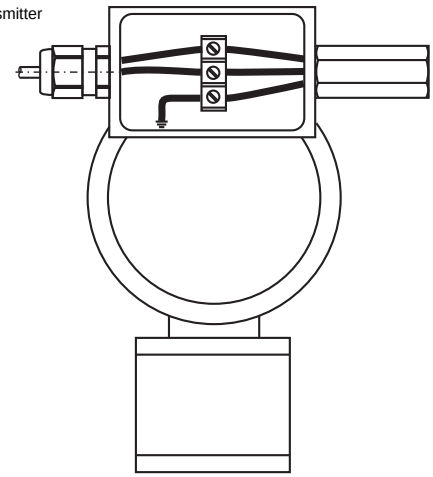
Mounting

Examples:

Terminal box



Transmitter



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