

## Fieldbus Surge Protector, Field Installation, 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

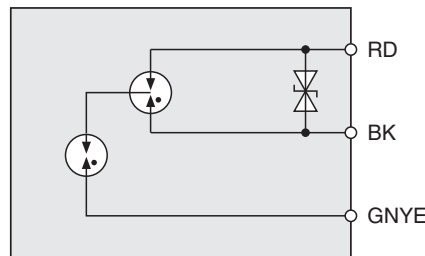


## Function

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 1/2" NPT connecting threads for easy installation on outdoor junction boxes.

## Connection



## Technical Data

### General specifications

Design / Mounting	Outside installation
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### Electrical specifications

Rated voltage	$U_r$	32 V	
Rated current	$I_r$	550 mA	
Nominal discharge current (8/20 $\mu$ s)	$I_n$	per line	10 kA
		total	10 kA
Max. surge current (8/20 $\mu$ s)	$I_{max}$	10 kA	
Voltage protection level at max. rated current			
Line/Line		58 V	
Line/Earth		1700 V	
Voltage protection level at 1 kV/ $\mu$ sec			
Line/Line		50 V	

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

## 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
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
<b>Standard conformity</b>		
Electromagnetic compatibility		
		NE 21:2006
Degree of protection		IEC/EN 60529
Fieldbus standard		IEC 61158-2
Surge protection		IEC 61643-21
<b>Ambient conditions</b>		
Ambient temperature		
		-50 ... 80 °C (-58 ... 176 °F)
Storage temperature		
		-50 ... 85 °C (-58 ... 185 °F)
<b>Mechanical specifications</b>		
Core cross-section		
		1.3 mm <sup>2</sup>
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
<b>Data for application in connection with hazardous areas</b>		
EU-Type Examination Certificate		
		KEMA 04 ATEX 1317 X
Marking		
		Ⓜ II 2(1)G Ex ia IIC T4/T5/T6
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 60079-0:2012 , EN 60079-11:2012 , EN 60079-26:2007
<b>International approvals</b>		
IECEx approval		
		IECEx KEM 09.0081X
Approved for		
		Ex ia [ia Ga] IIC T5/T6 Gb
<b>Certificates and approvals</b>		
Marine approval		
		DNV A-14038
<b>General information</b>		
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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

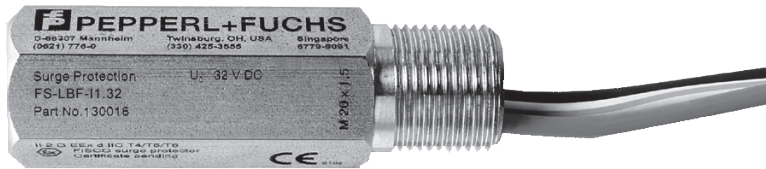
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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**PEPPERL+FUCHS**

Product Photo



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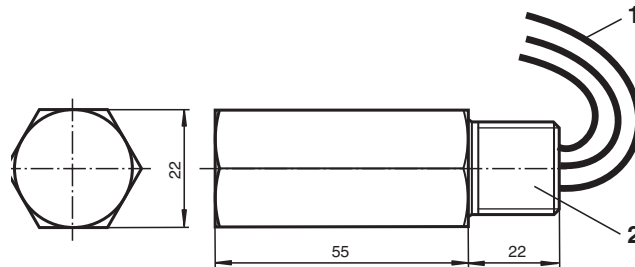
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**Additional Information**

**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.

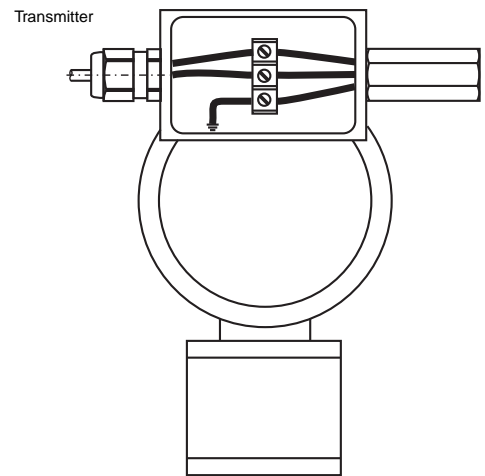
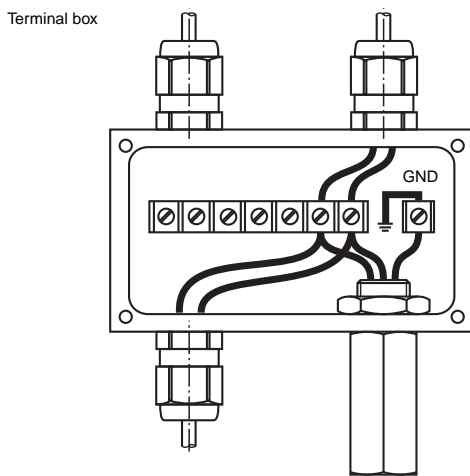
**Dimensions and Assembly**



- 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:**



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