

# Surge Protector

## FieldConnex®

### FN-LBAS-IA1



- For Ethernet-APL spur ports
- Intrinsically safe according to 2-WISE
- Stainless steel housing for field device mounting, 1/2" NPT thread

Surge protector, Ethernet-APL, field mounting, Ex ia, Ex d, Ex e, 1/2" NPT thread



**ethernet-apl™**  
advanced physical layer

## Function

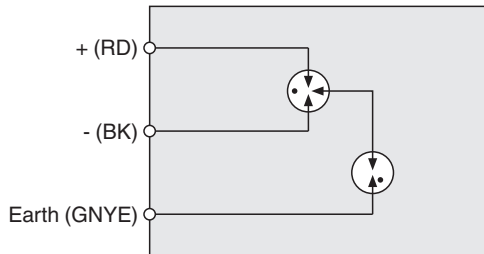
The surge protector protects spur ports of Ethernet-APL field devices.

The surge protector directs power from voltage surges and lightning to earth via gas discharge tubes.

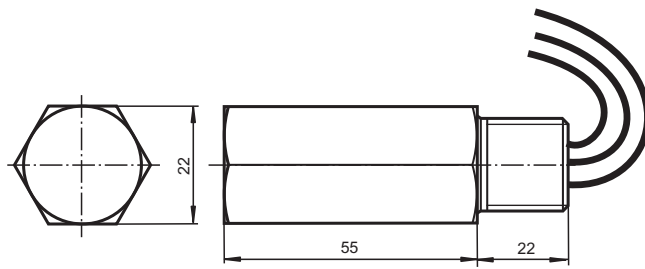
The device is certified intrinsically safe for circuits in explosion-hazardous areas Zone 0 ... 2 according to 2-WISE and FISCO. The surge protector can be installed in Zone 1 ... 2.

A 1/2" NPT mounting thread permits easy installation on field devices and fieldbus junction boxes.

## Connection



## Dimensions



## Technical Data

General specifications		
Design / Mounting		Outside installation
Installation in hazardous area		Zone 1
Ethernet Interface		
Interface type		Ethernet-APL auxiliary device
Electrical specifications		
Rated voltage	$U_r$	30 V
Rated current	$I_r$	500 mA
Impulse rating		2 kV/1 kA (category C1) per line 5 kV/2,5 kA (category C2) per line 0,5 kA (category D1) per line
Impulse discharge current (10/350 $\mu$ s)	$I_{imp}$	0.5 kA per line
Nominal discharge current (8/20 $\mu$ s)	$I_n$	
per line		2.5 kA
total		5 kA
Max. surge current (8/20 $\mu$ s)	$I_{max}$	5 kA overstressed fault mode 1 acc. to IEC 61643-21
Voltage protection level	$U_p$	
Line/Earth		max. 1800 V C1 , 1 kA per line max. 2100 V C2 , 2.5 kA per line max. 50 V C3 , 50 A per line max. 1400 V B2 , 50 A per line
Standard conformity		
Degree of protection		IEC/EN 60529
Climatic conditions		IEC 60721
Shock resistance		EN 60068-2-27
Vibration resistance		EN 60068-2-6
Surge protection		IEC 61643-21
Ethernet		Ethernet-APL , IEEE 802.3 for 10BASE-T1L
Ambient conditions		
Ambient temperature		-50 ... 80 °C (-58 ... 176 °F)
Storage temperature		-50 ... 90 °C (-58 ... 194 °F)
Shock resistance		15 g 11 ms
Vibration resistance		1 g , 10 ... 150 Hz
Mechanical specifications		
Connection type		wire ends APL + red , APL - black , protective conductor (PE) green/yellow
Core cross section		APL +, APL - 0.8 mm <sup>2</sup> , PE 1.3 mm <sup>2</sup>

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## Technical Data

Housing material	Stainless steel 1.4401/316	
Degree of protection	IP67	
Mass	200 g	
Mounting	NPT1/2 thread	
<b>Data for application in connection with hazardous areas</b>		
EU-type examination certificate	TÜV 22 ATEX 8786 X	
Marking	2-WISE auxiliary device	
Marking	Ⓢ II 2 (1) G Ex ia [ia Ga] IIC T6 Gb , Ⓢ II 2 (1) D Ex ia [ia Da] IIIC T80°C Db , Ⓢ I M2 (M1) Ex ia [ia Ma] I Mb , Ⓢ II 2 G Ex db eb mb IIC T6 Gb , Ⓢ I M2 Ex eb mb I Mb , Ⓢ II 2 (1) G Ex db [ia Ga] IIC T6 Gb	
Voltage	$U_i$	30 V
Current	$I_i$	500 mA
Internal capacitance	$C_i$	negligible 0 nF
Internal inductance	$L_i$	negligible 0 $\mu$ H
<b>Directive conformity</b>		
Directive 2014/34/EU	EN 60079-0:2018 , EN 60079-7:2015+A1:2018 , EN 60079-11:2012 , EN 60079-18:2015 , EN 60079-1:2014 , IEC TS 60079-47:2021	
<b>International approvals</b>		
IECEx approval	IECEx TUR 22.0017X	
Approved for	Ex ia [ia Ga] IIC T6 Gb , Ex ia [ia Da] IIIC T80°C Db , Ex ia [ia Ma] I Mb , Ex db eb mb IIC T6 Gb , Ex db eb mb I Mb , Ex db [ia Ga] IIC T6 Gb	
<b>General information</b>		
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .	

## Product Photo

