



# Zener Barrier

## Z728.F

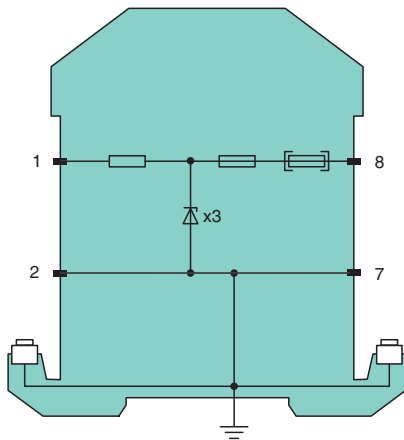
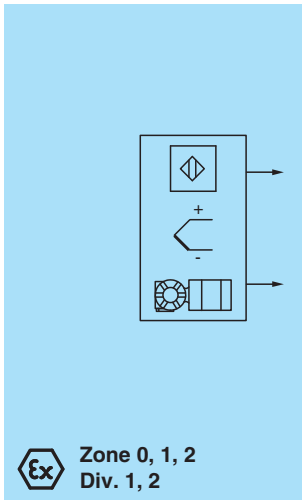
- 1-channel
- DC version, positive polarity
- Working voltage 26.5 V at 10  $\mu$ A
- Series resistance max. 341  $\Omega$
- Fuse rating 50 mA
- DIN rail mountable
- Replaceable back-up fuse



### Function

The Zener Barrier prevents the transfer of unacceptably high energy from the safe area into the hazardous area. The zener diodes in the Zener Barrier are connected in the reverse direction. The breakdown voltage of the diodes is not exceeded in normal operation. If this voltage is exceeded, due to a fault in the safe area, the diodes start to conduct, causing the fuse to blow. The Zener Barrier has a positive polarity, i. e. the anodes of the zener diodes are grounded. Additionally this Zener Barrier is equipped with a replaceable fuse.

### Connection



Zone 2  
Div. 2

### Technical Data

#### General specifications

Type DC version, positive polarity

#### Electrical specifications

Nominal resistance 300  $\Omega$

Series resistance max. 341  $\Omega$

Fuse rating 50 mA

#### Hazardous area connection

Connection terminals 1, 2

#### Safe area connection

Connection terminals 7, 8

Working voltage

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

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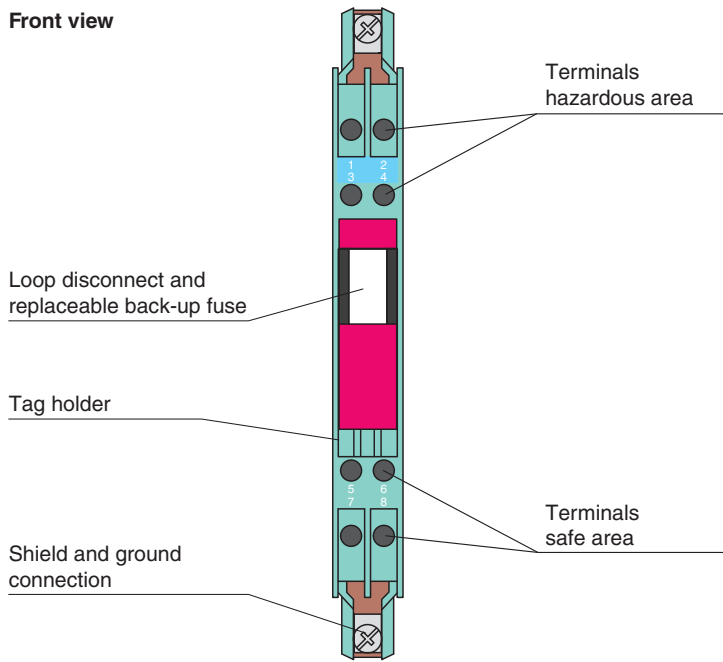
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## Technical Data

Supply loop	max. 26.9 V		
Measurement loop	max. 26.5 V at 10 $\mu$ A		
<b>Conformity</b>			
Degree of protection	IEC 60529		
<b>Ambient conditions</b>			
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)		
Storage temperature	-25 ... 70 °C (-13 ... 158 °F)		
Relative humidity	max. 75 % , without condensation		
<b>Mechanical specifications</b>			
Degree of protection	IP20		
Connection	screw terminals		
Core cross section	max. 2 x 2.5 mm <sup>2</sup>		
Mass	approx. 150 g		
Dimensions	12.5 x 115 x 116 mm (0.5 x 4.5 x 4.6 inch) (W x H x D)		
Construction type	modular terminal housing , see system description		
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001		
<b>Data for application in connection with hazardous areas</b>			
EU-type examination certificate	BAS 00 ATEX 7096		
Marking	Ⓔ II (1)G [Ex ia Ga] IIC , Ⓔ II (1)D [Ex ia Da] IIIC , Ⓔ I (M1) [Ex ia Ma] I		
Voltage	U <sub>o</sub>	28 V	
Current	I <sub>o</sub>	93 mA	
Power	P <sub>o</sub>	650 mW	
<b>Supply</b>			
Maximum safe voltage	U <sub>m</sub>	250 V	
Series resistance	min. 301 $\Omega$		
Certificate	TÜV 99 ATEX 1484 X		
Marking	Ⓔ II 3G Ex nA IIC T4 Gc		
<b>Directive conformity</b>			
Directive 2014/34/EU	EN IEC 60079-0:2018+AC:2020 , EN 60079-11:2012 , EN 60079-15:2010		
<b>International approvals</b>			
<b>FM approval</b>			
Control drawing	116-0118		
<b>UL approval</b>			
Control drawing	116-0355 (cULus)		
<b>IECEX approval</b>			
IECEX certificate	IECEX BAS 18.0033		
IECEX marking	[Ex ia Ga] IIC , [Ex ia Da] IIIC , [Ex ia Ma] I		
<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> .		

**Assembly**

Front view



**Matching System Components**

	<b>ZH-ES/LB</b>	Insertion Strip
	<b>ZH-Z.AB/NS</b>	Mounting block for DIN mounting rail
	<b>ZH-Z.AB/SS</b>	Mounting block for grounding rail
	<b>ZH-Z.AK16</b>	Connection terminal for grounding rail
	<b>ZH-Z.AR.125</b>	Spacing Roller
	<b>ZH-Z.BT</b>	Label Carrier
	<b>ZH-Z.ES</b>	Single Socket
	<b>ZH-Z.LL</b>	Ground Rail Feed
	<b>ZH-Z.NLS-Cu3/10</b>	Grounding Rail
	<b>USLKG5</b>	Terminal block for equipotential bonding

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