

**Features**

- 2-channel
- DC version, negative polarity
- Working voltage 10 V at 10  $\mu$ A
- Series resistance max. 1033  $\Omega$
- Fuse rating 50 mA
- DIN rail mounting

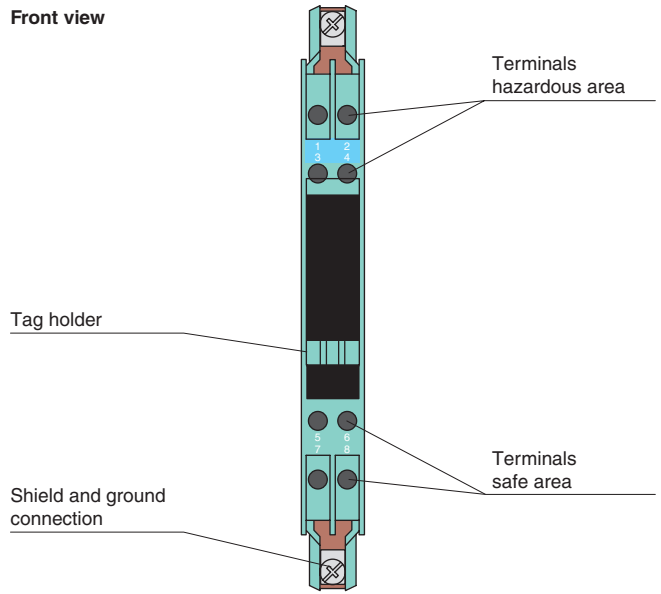
**Function**

The Zener Barrier prevents the transfer of unacceptably high energy from the safe area into the hazardous area.

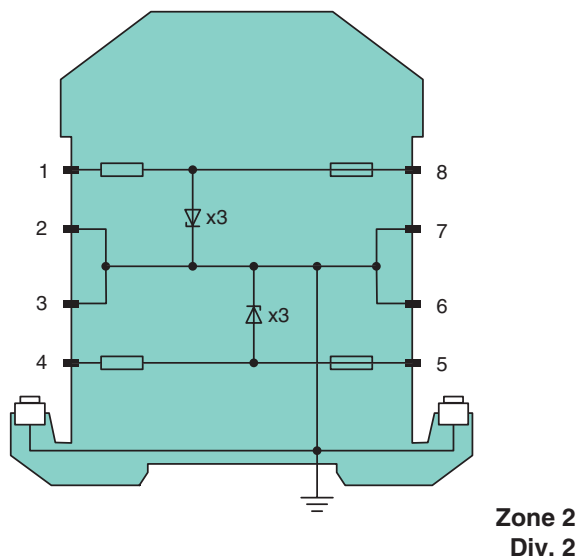
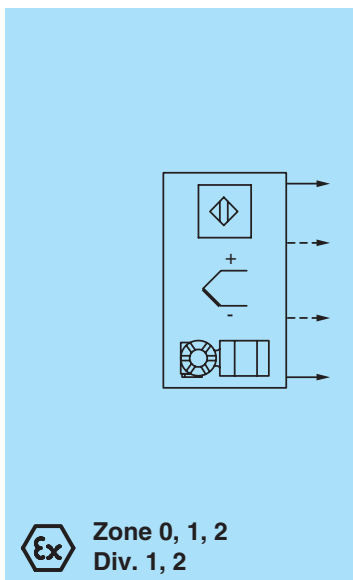
The zener diodes in the Zener Barrier are connected in the reverse direction. The breakdown voltage of the diodes is not exceeded in normal operation. If this voltage is exceeded, due to a fault in the safe area, the diodes start to conduct, causing the fuse to blow. The Zener Barrier has a negative polarity, i. e. the cathodes of the zener diodes are grounded.

Depending on the application, increased or decreased intrinsic safety parameters apply for serial or parallel connection. For the detailed parameters refer to the Zener Barrier certificate. Application examples can be found in the system description of the Zener Barriers.

**Assembly**



**Connection**



Release date 2014-11-04 10:22 Date of issue 2015-02-16 071797\_eng.xml

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

<b>General specifications</b>		
Type	DC version, negative polarity	
<b>Electrical specifications</b>		
Nominal resistance	1000 Ω	
Series resistance	max. 1033 Ω	
Fuse rating	50 mA	
<b>Hazardous area connection</b>		
Connection	terminals 1, 2; 3, 4	
<b>Safe area connection</b>		
Connection	terminals 5, 6; 7, 8	
Working voltage	max. 10.4 V , 10 V at 10 μA	
<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 moisture condensation	
<b>Mechanical specifications</b>		
Degree of protection	IP20	
Connection	self-opening connection terminals, max. core cross-section 2 x 2.5 mm <sup>2</sup>	
Mass	approx. 150 g	
Dimensions	12.5 x 115 x 110 mm (0.5 x 4.5 x 4.3 in)	
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 Ex-areas</b>		
EC-Type Examination Certificate	BAS 01 ATEX 7005 , for additional certificates see www.pepperl-fuchs.com	
Group, category, type of protection	⊕ II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I (-20 °C ≤ T <sub>amb</sub> ≤ 60 °C) [circuit(s) in zone 0/1/2]	
Voltage	U <sub>o</sub>	11.6 V
Current	I <sub>o</sub>	12 mA
Power	P <sub>o</sub>	30 mW
<b>Supply</b>		
Maximum safe voltage	U <sub>m</sub>	250 V
Series resistance	min. 980 Ω	
Permissible connection values [EEx ia]		
Statement of conformity	TÜV 99 ATEX 1484 X , observe statement of conformity	
Group, category, type of protection, temperature class	⊕ II 3G Ex nA IIC T4 Gc [device in zone 2]	
<b>Directive conformity</b>		
Directive 94/9/EC	EN 60079-0:2012, 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	116-0139	
<b>CSA approval</b>		
Control drawing	116-0119	
<b>IECEX approval</b>		
	IECEX BAS 09.0142	
<b>Approved for</b>		
	[Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I	
<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 www.pepperl-fuchs.com.	

Release date 2014-11-04 10:22 Date of issue 2015-02-16 071797\_eng.xml

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com