

**Features**

- 2-channel
- DC version, positive polarity
- Working voltage 26.5 V at 10  $\mu$ A
- Series resistance max. 327  $\Omega$
- Fuse rating 50 mA
- DIN rail mounting
- With diode return

**Function**

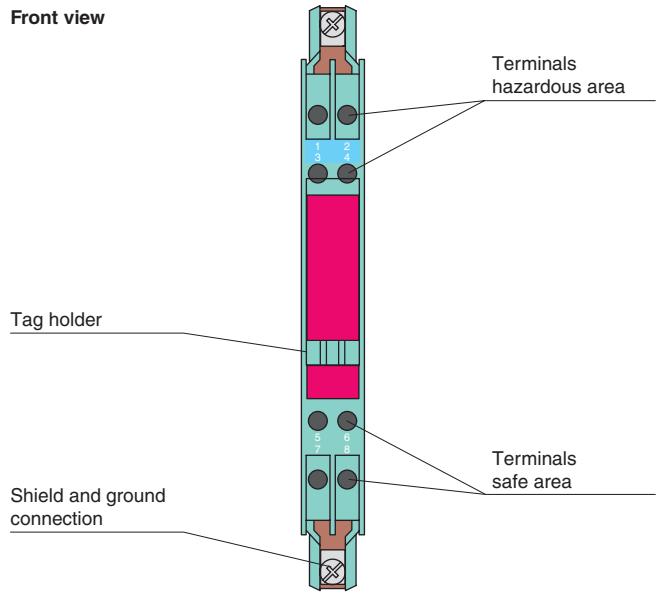
The Zener Barrier prevents the transfer of unacceptably high energy from the safe area into the hazardous area.

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.

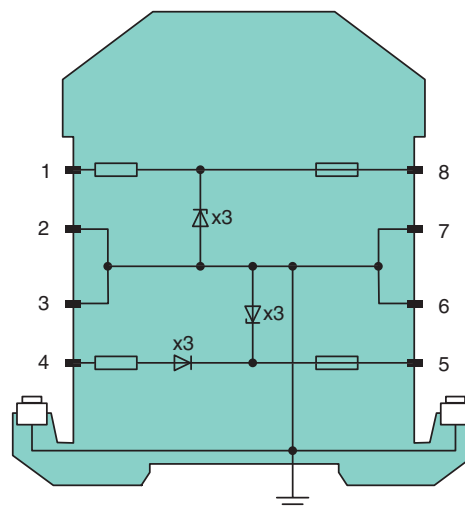
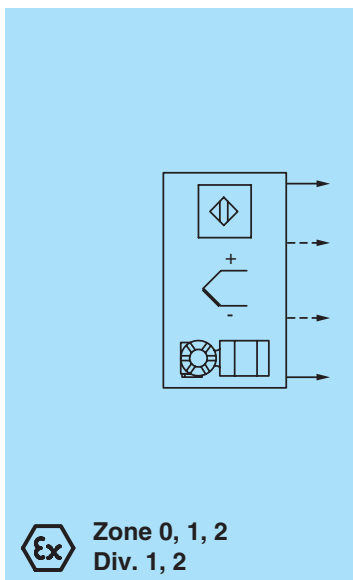
The Zener Barrier is for evaluation of signals from the hazardous area. The diodes of diode return prevent a current into the hazardous area, therefore the current assumption for intrinsic safety calculations is zero.

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**



**Zone 2**  
**Div. 2**

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<b>General specifications</b>	
Type	DC version, positive polarity
<b>Electrical specifications</b>	
Nominal resistance	300 Ω
Series resistance	terminals 1 and 8 : max. 327 Ω
Voltage drop	terminals 4 and 5 : 1.2 V + (36 Ω x signal current)
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
Rated voltage	28 V
Supply voltage	max. 28 V
Working voltage	26.5 V at 10 μA
<b>Conformity</b>	
Protection degree	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>	
Protection degree	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	mounting on 35 mm DIN mounting rail acc. to DIN EN 60715
<b>Data for application in connection with Ex-areas</b>	
EC-Type Examination Certificate	BAS 01 ATEX 7005 , for additional certificates see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a>
Group, category, type of protection	⊕ II (1)GD, I (M1) [Ex ia] IIC, [Ex iaD], [Ex ia] I (-20 °C ≤ T <sub>amb</sub> ≤ 60 °C) [circuit(s) in zone 0/1/2]
Voltage U <sub>o</sub>	28 V
Current I <sub>o</sub>	93 mA
Power P <sub>o</sub>	650 mW
Supply	
Maximum safe voltage U <sub>m</sub>	250 V
Series resistance	min. 301 Ω
Statement of conformity	TÜV 99 ATEX 1484 X , observe statement of conformity
Group, category, type of protection, temperature class	⊕ II 3G Ex nA II T4 [device in zone 2]
Directive conformity	
Directive 94/9/EC	EN 60079-0:2006, EN 60079-11:2007, EN 61241-11:2006 , EN 60079-15:2005
<b>International approvals</b>	
FM approval	
Control drawing	116-0118
UL approval	
Control drawing	116-0139
CSA approval	
Control drawing	116-0119
IECEX approval	IECEX BAS 09.0142
Approved for	[zone 0] [Ex ia] IIC, [Ex iaD], [Ex ia] 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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

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