

Features

- 2-channel
- AC version
- Working voltage 13 V at 10 μA
- Series resistance max. 115 Ω
- Fuse rating 50 mA
- DIN rail mounting
- Star connection

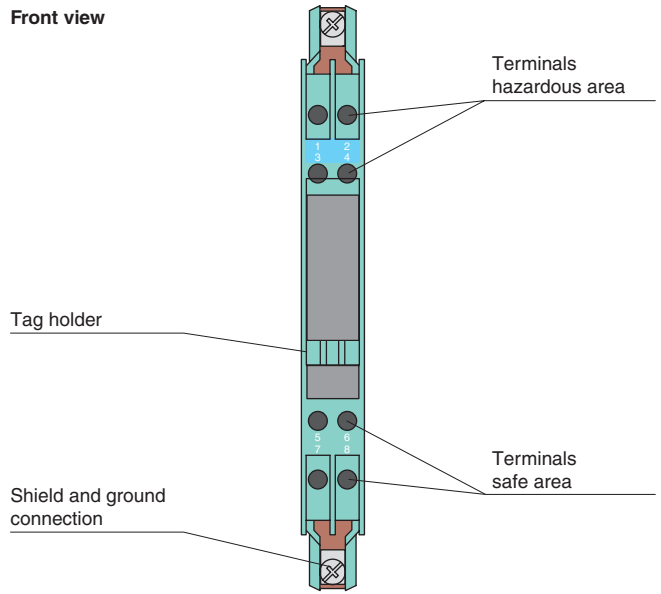
Function

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

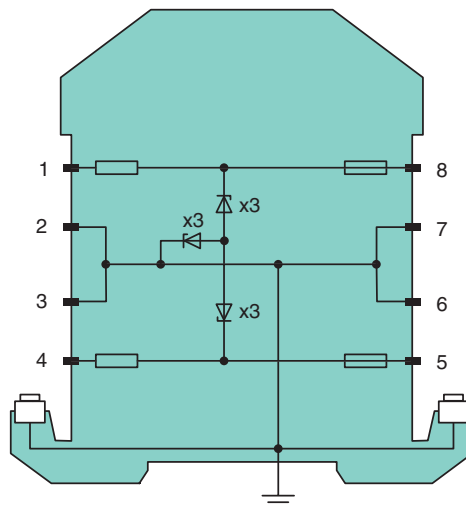
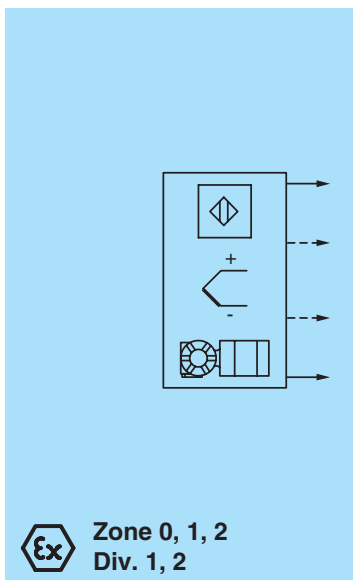
The zener diodes in the Zener Barrier are connected in the reverse direction. The breakdown voltage of the diodes is not exceeded in normal operation. If this voltage is exceeded, due to a fault in the safe area, the diodes start to conduct, causing the fuse to blow. The Zener Barrier has alternating polarities, i. e. interconnected zener diodes are employed and one side is grounded. The Zener Barrier can be used for both alternating voltage signals and direct voltage signals.

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



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

| | |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General specifications | |
| Type | AC version |
| Electrical specifications | |
| Nominal resistance | 100 Ω |
| Series resistance | max. 115 Ω |
| Fuse rating | 50 mA |
| Hazardous area connection | |
| Connection | terminals 1, 2; 3, 4 |
| Safe area connection | |
| Connection | terminals 5, 6; 7, 8 |
| Working voltage | max. 13.6 V , 13 V at 10 μA |
| Conformity | |
| Degree of protection | IEC 60529 |
| Ambient conditions | |
| Ambient temperature | -20 ... 60 °C (-4 ... 140 °F) |
| Storage temperature | -25 ... 70 °C (-13 ... 158 °F) |
| Relative humidity | max. 75 % , without moisture condensation |
| Mechanical specifications | |
| Degree of protection | IP20 |
| Connection | self-opening connection terminals, max. core cross-section 2 x 2.5 mm ² |
| 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 |
| Data for application in connection with Ex-areas | |
| 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 _{amb} ≤ 60 °C) [circuit(s) in zone 0/1/2] |
| Voltage U _o | 15 V |
| Current I _o | 153 mA |
| Power P _o | 570 mW |
| Supply | |
| Maximum safe voltage U _m | 250 V |
| Series resistance | min. 98 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] |
| Directive conformity | |
| Directive 94/9/EC | EN 60079-0:2012, EN 60079-11:2012 , EN 60079-15:2010 |
| International approvals | |
| 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 | |
| | [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I |
| General information | |
| 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 . |

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