## Features

- 2-channel
- DC version, negative polarity
- Working voltage 0.9 V at 1 µA
- Series resistance max. 18.18 Ω
- Fuse rating 250 mA
- DIN rail mounting

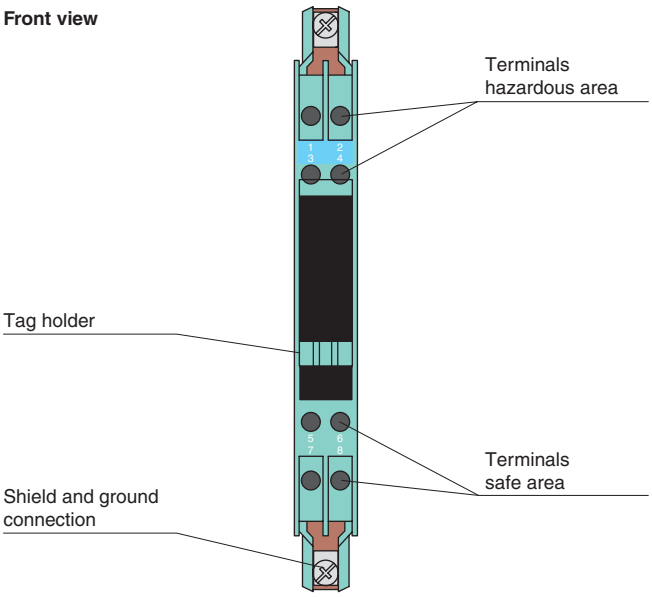
## Function

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

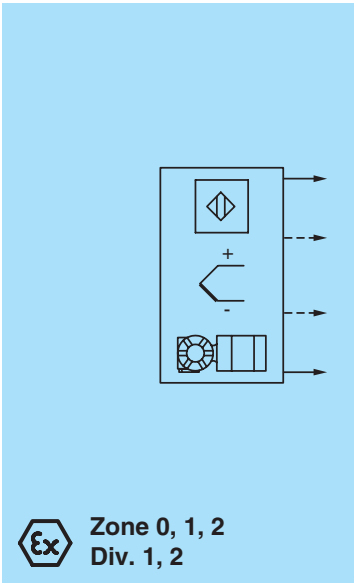
The zener diodes in the Zener Barrier are connected in the reverse direction. The breakdown voltage of the diodes is not exceeded in normal operation. If this voltage is exceeded, due to a fault in the safe area, the diodes start to conduct, causing the fuse to blow. The Zener Barrier has a negative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

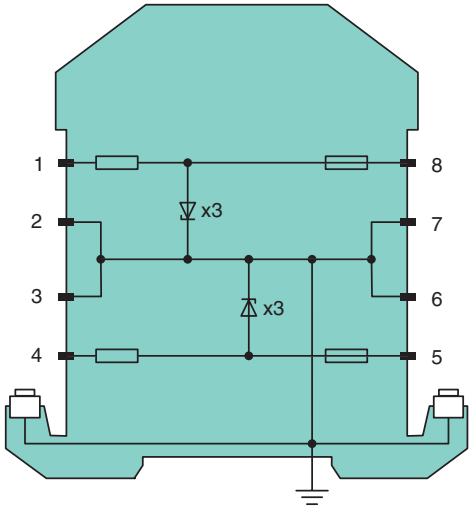
Depending on the application, increased or decreased intrinsic safety parameters apply for serial or parallel connection. For the detailed parameters refer to the Zener Barrier certificate. Application examples can be found in the system description of the Zener Barriers.

## Assembly




## Connection




Release date 2010-03-17 14:55 Date of issue 2010-03-17 071793_ENG.xml

| | |
|---|---|
| **General specifications** | |
| Type | DC version, negative polarity |
| **Electrical specifications** | |
| Nominal resistance | 10 Ω |
| Series resistance | max. 18.18 Ω |
| Fuse rating | 250 mA |
| **Hazardous area connection** | |
| Connection | terminals 1, 2; 3, 4 |
| **Safe area connection** | |
| Connection | terminals 5, 6; 7, 8 |
| Rated voltage | 5 V |
| Supply voltage | max. 4.8 V |
| Working voltage | 0.9 V at 1 µA |
| **Conformity** | |
| Protection degree | 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** | |
| Protection degree | IP20 |
| Connection | self-opening connection terminals,<br>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 | mounting on 35 mm DIN rail acc. to DIN EN 60715 |
| **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 | ⟨Ex⟩ II (1)GD [EEx ia] IIC (-20 °C ≤ $T_{amb}$ ≤ 60 °C) |
| Voltage $U_o$ | 4.94 V |
| Current $I_o$ | 504 mA |
| Power $P_o$ | 620 mW |
| Supply | |
| Maximum safe voltage $U_m$ | 250 V |
| Series resistance | min. 9.8 Ω |
| Statement of conformity | TÜV 99 ATEX 1484 X , observe statement of conformity |
| Group, category, type of protection, temperature classification | ⟨Ex⟩ II 3G EEx nA II T4 X |
| Directive conformity | |
| Directive 94/9/EC | EN 50014, EN 50020, EN 50021 |
| **International approvals** | |
| FM approval | |
| Control drawing | 116-0118 |
| UL approval | |
| Control drawing | 116-0139 |
| CSA approval | |
| Control drawing | 116-0119 |
| **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. |

Release date 2010-03-17 14:55 Date of issue 2010-03-17 071793_ENG.xml