

Features

- 2-channel
- DC version, positive polarity
- Working voltage 19 V at 2 μA
- Series resistance max. 221 Ω
- Fuse rating 32 mA
- Terminal Base or Termination Board mounting, pluggable
- Replaceable fuse

Function

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

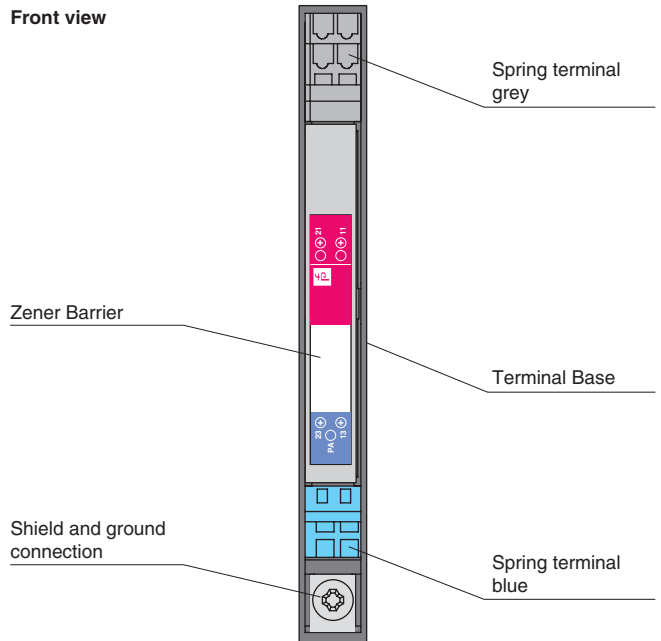
The zener diodes in the Zener Barrier are connected in the reverse direction. The breakdown voltage of the diodes is not exceeded in normal operation. If this voltage is exceeded, due to a fault in the safe area, the diodes start to conduct, causing the fuse to blow. The Zener Barrier has a positive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

Additionally this Zener Barrier is equipped with a replaceable fuse.

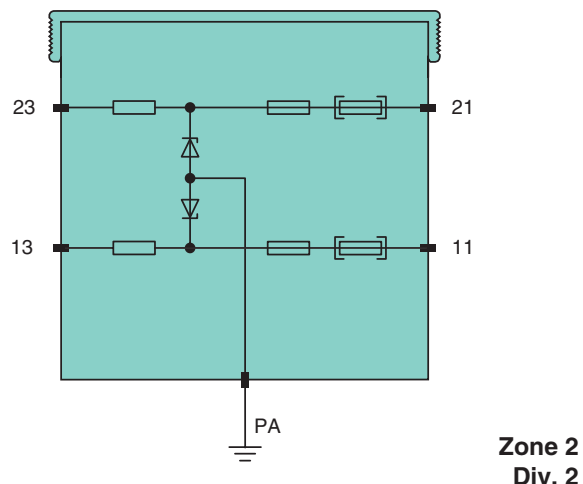
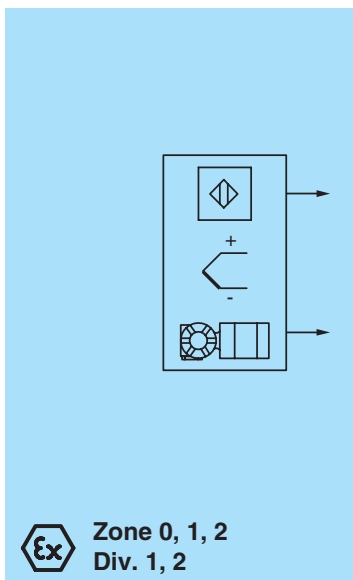
Depending on the application, increased or decreased intrinsic safety parameters apply for serial or parallel connection. For the detailed parameters refer to the Zener Barrier certificate. Application examples can be found in the system description of the Zener Barriers.

Zener Barriers will be supplied without terminal base or termination board. Please order separately (accessories see technical data).

Assembly



Connection



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

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|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| General specifications | | |
| Type | DC version, positive polarity | |
| Electrical specifications | | |
| Nominal resistance | without back-up fuse 188 Ω , with back-up fuse 204.5 Ω | |
| Series resistance | without back-up fuse max. 201 Ω , with back-up fuse max. 221 Ω | |
| Fuse rating | internal fuse 32 mA , back-up fuse 32 mA | |
| Hazardous area connection | | |
| Connection | terminals 13; 23 | |
| Safe area connection | | |
| Connection | terminals 11; 21 | |
| Working voltage | 19 V at 2 μA | |
| Conformity | | |
| Degree of protection | IEC 60529 | |
| Ambient conditions | | |
| Ambient temperature | -20 ... 60 °C (-4 ... 140 °F) | |
| Storage temperature | -40 ... 80 °C (-40 ... 176 °F) | |
| Relative humidity | < 75 % (annual mean) < 95 % (30 d/year), no moisture condensation | |
| Mechanical specifications | | |
| Degree of protection | IP20 (installed on Terminal Base or Termination Board) | |
| Connection | wiring via Terminal Base or Termination Board | |
| Mass | approx. 70 g | |
| Dimensions | 9.7 x 70.4 x 68.2 mm (0.4 x 2.8 x 2.7 in) | |
| Construction type | pluggable housing | |
| Mounting | Terminal Base or Termination Board mounting on 35 mm DIN rail acc. to DIN EN 60715 | |
| Data for application in connection with Ex-areas | | |
| EC-Type Examination Certificate | TÜV 99 ATEX 1449 X , for additional certificates see www.pepperl-fuchs.com | |
| Group, category, type of protection |  II (1) G [Ex ia] IIC  II (1) D [Ex iaD] | |
| Voltage | U _o | 22 V |
| Current | I _o | 147 mA |
| Power | P _o | 808 mW |
| Supply | | |
| Maximum safe voltage | U _m | 250 V |
| Directive conformity | | |
| Directive 94/9/EC | EN 60079-0, EN 60079-11, EN60079-26, EN 61241-0, EN 61241-11 | |
| 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 . | |
| Accessories | | |
| Designation | Terminal Base for 1 Zener Barrier: SB9101 Termination Board for 6 Zener Barriers: SB9106 Termination Board for 10 Zener Barriers: SB9100 grounding rail for 20 units: SB9220 grounding rail for 10 units: SB9221 grounding rail for 6 units: SB9222 | |

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