

Features

- 2-channel
- DC version, positive polarity
- Working voltage 5 V at 2 μ A
- Series resistance max. 50 Ω
- Fuse rating 125 mA
- Terminal Base or Termination Board mounting, pluggable

Function

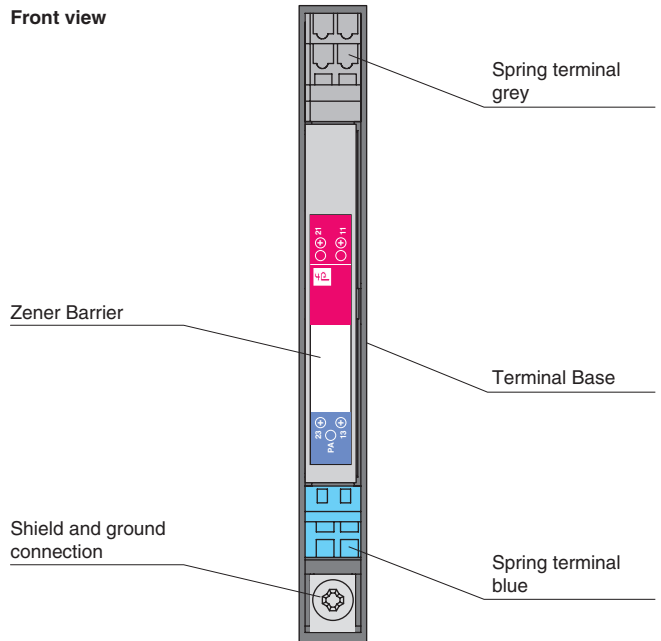
The Zener Barrier prevents the transfer of unacceptably high energy from the safe area into the hazardous area.

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.

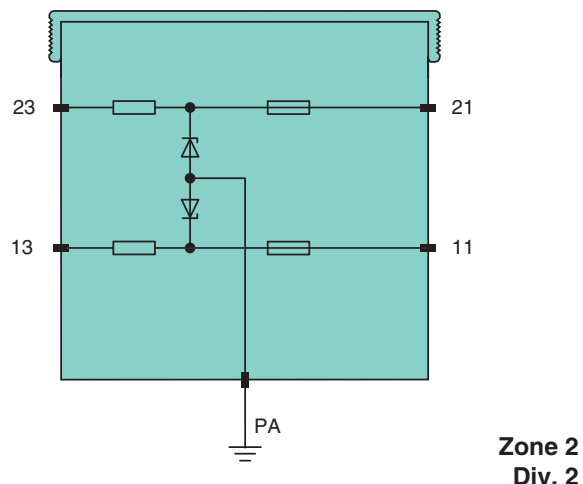
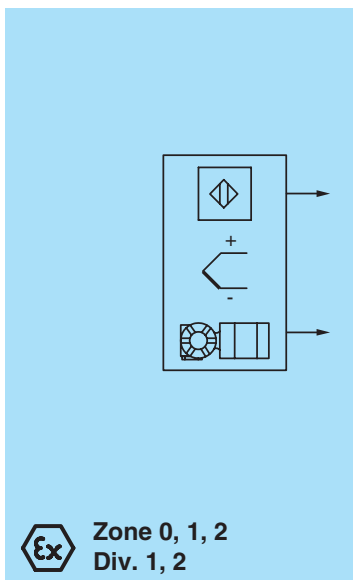
Depending on the application, increased or decreased intrinsic safety parameters apply for serial or parallel connection. For the detailed parameters refer to the Zener Barrier certificate. Application examples can be found in the system description of the Zener Barriers.

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




Assembly



Connection



Release date 2011-05-25 16:06 Date of issue 2011-05-26 545693_ENG.xml

General specifications	
Type	DC version, positive polarity
Electrical specifications	
Nominal resistance	48.5 Ω
Series resistance	max. 50 Ω
Fuse rating	125 mA
Hazardous area connection	
Connection	terminals 13; 23
Safe area connection	
Connection	terminals 11; 21
Working voltage	5 V at 2 μA
Conformity	
Protection degree	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	
Protection degree	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 5.9 V
Current	I _o 140 mA
Power	P _o 207 mW
Supply	
Maximum safe voltage	U _m 250 V
Statement of conformity	
Group, category, type of protection, temperature classification	 II 3G Ex nA IIC T4 Gc X
Directive conformity	
Directive 94/9/EC	EN 60079-0, EN 60079-11, EN60079-15, 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

Release date 2011-05-25 16:06 Date of issue 2011-05-26 545693_ENG.xml