

Features

- 1-channel
- AC version
- Working voltage 18 V at 2 μ A
- Series resistance max. 495 Ω
- Fuse rating 32 mA
- Terminal Base or Termination Board mounting, pluggable
- Replaceable fuse

Function

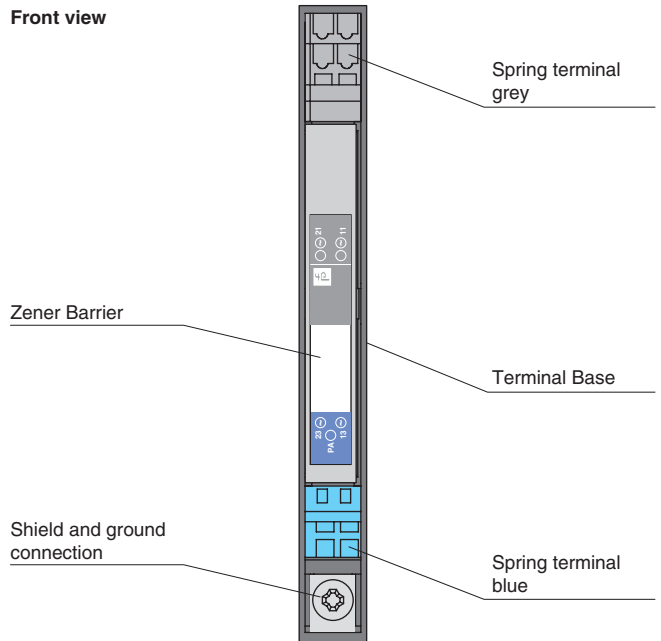
The Zener Barrier prevents the transfer of unacceptably high energy from the safe area into the hazardous area.

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 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.

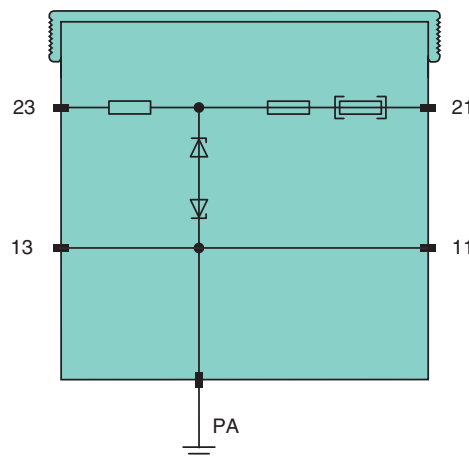
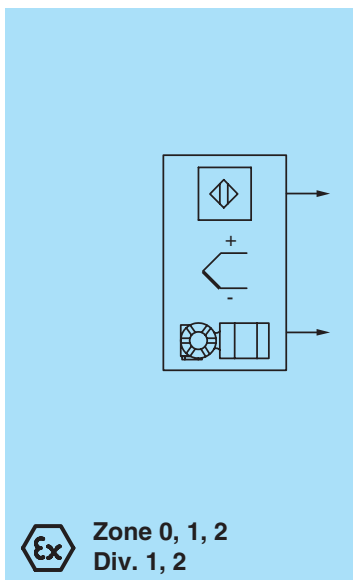
Additionally this Zener Barrier is equipped with a replaceable fuse.

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

Assembly





Connection



**Zone 2
Div. 2**

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General specifications	
Type	AC version
Electrical specifications	
Nominal resistance	without back-up fuse 449 Ω , with back-up fuse 465.5 Ω
Series resistance	without back-up fuse max. 475 Ω , with back-up fuse max. 495 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	18 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	27.1 V
Current I _o	66 mA
Power P _o	449 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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