## **Features**

- 2-channel
- · AC version
- Working voltage 19 V at 10 μA
- Series resistance max. 327  $\Omega$
- Fuse rating 50 mA
- · DIN rail mounting
- · Star connection

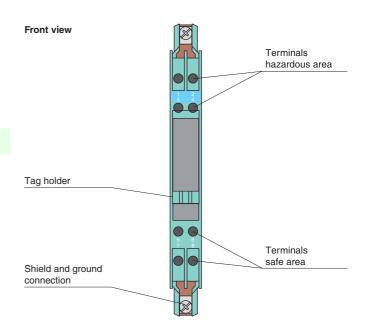
## **Function**

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.

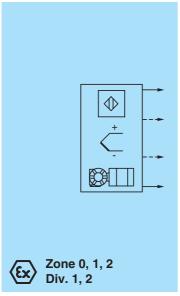
Depending on the application, increased or decreased intrinsic safety parameters apply for serial or parallel connection. For the detailed parameters refer to the Zener Barrier certificate. Application examples can be found in the system description of the Zener Barriers.

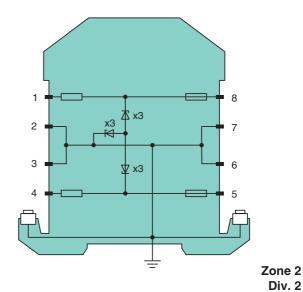
## **Assembly**





## Connection





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General specifications		
Туре		AC version
Electrical specifications		
Nominal resistance		300 Ω
Series resistance		max. $327~\Omega$
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. 19.6 V , 19 V at 10 μA
Conformity		παλ. 10.0 γ, 10 γαι 10 μτ
Degree of protection		IEC 60529
Ambient conditions		120 00020
Ambient conditions  Ambient temperature		-20 60 °C (-4 140 °F)
Storage temperature		-25 70 °C (-13 158 °F)
· · · ·		max. 75 %, without moisture condensation
Relative humidity		max. 10 /0, without moisture condensation
Mechanical specifications		IP20
Degree of protection Connection		self-opening connection terminals,
		self-opening connection terminals, max. core cross-section 2 x 2.5 mm <sup>2</sup>
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		$\textcircled{k}$ II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I (-20 °C $\leq$ T <sub>amb</sub> $\leq$ 60 °C) [circuit(s) in zone 0/1/2]
Voltage	$U_o$	22 V
Current	I <sub>o</sub>	73 mA
Power	$P_{o}$	400 mW
Supply		
Maximum safe voltage	U <sub>m</sub>	250 V
Series resistance		min. $301\Omega$
Permissible connection values [EEx ia]		
Statement of conformity		TÜV 99 ATEX 1484 X , observe statement of conformity
Group, category, type of protection, temperature class		(x) 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		
		116-0119
Control drawing 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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