Features

- 2-channel
- · AC version
- Working voltage 6.5 V at 10 μA
- Series resistance max. 64 Ω
- · Fuse rating 50 mA
- · DIN rail mounting
- · Star connection

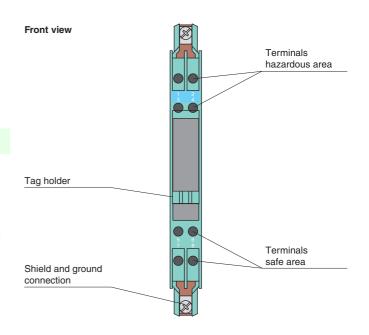
Function

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.

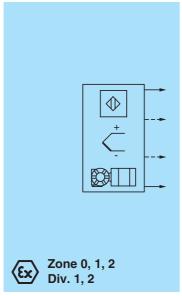
Depending on the application, increased or decreased intrinsic safety parameters apply for serial or parallel connection. For the detailed parameters refer to the Zener Barrier certificate. Application examples can be found in the system description of the Zener Barriers.

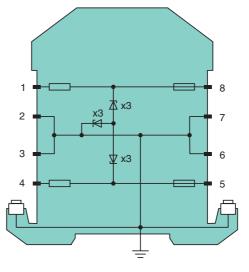
Assembly





Connection





Zone 2 Div. 2

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

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General specifications		
Туре		AC version
Electrical specifications		
Nominal resistance		50 Ω
Series resistance		max. 64Ω
Fuse rating		50 mA
Hazardous area connection	on	
Connection		terminals 1, 2; 3, 4
Safe area connection		
Connection		terminals 5, 6; 7, 8
Working voltage		max. 8.8 V , 6.5 V at 10 μA
Conformity		
Degree of protection		IEC 60529
Ambient conditions		120 00020
		-20 60 °C (-4 140 °F)
Ambient temperature		-25 70 °C (-13 158 °F)
Storage temperature		max. 75 %, without moisture condensation
Relative humidity	,	max. 10 /0 , without moisture condensation
Mechanical specifications	•	IP20
Degree of protection		
Connection		self-opening connection terminals, 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		on 35 mm DIN mounting rail acc. to EN 60715:2001
Data for application in co	nnection	
EC-Type Examination Certif	ficate	BAS 01 ATEX 7005, for additional certificates see www.pepperl-fuchs.com
Group, category, type of		$\langle x \rangle$ II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I (-20 °C \leq T _{amb} \leq 60 °C) [circuit(s) in zone 0/1/2]
Voltage	U _o	9.94 V
Current	I _o	203 mA
Power	Po	500 mW
Supply		
Maximum safe voltage	U _m	250 V
Series resistance	- 111	min. 49 Ω
Permissible connection values [EEx ia]		
Statement of conformity		TÜV 99 ATEX 1484 X , observe statement of conformity
Group, category, type of protection,		⟨ S I 3G Ex nA IIC T4 Gc [device in zone 2]
temperature class		
Directive conformity		EN 00070 0,0040 EN 00070 44,0040 EN 00070 45,0040
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		
Control drawing		116-0119
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.pepperlfuchs.com.