Features

- 2-channel
- · DC version, positive polarity
- Working voltage 24 V/18 V at 10 μ A
- Series resistance max. 340 Ω /437 Ω
- Fuse rating 50 mA
- · DIN rail mounting
- · Asymmetrical version

Function

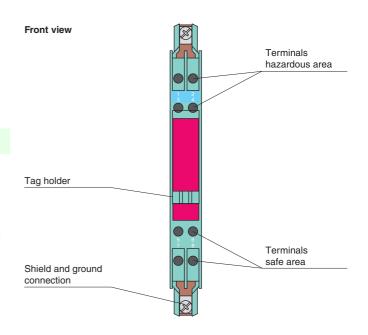
The Zener Barrier prevents the transfer of unacceptably high energy from the safe area into the hazardous area.

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.

Asymmetrical Zener Barriers are for optimization of applications which have different voltage levels regarding to ground potential.

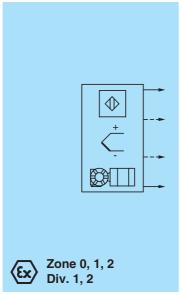
Depending on the application, increased or decreased intrinsic safety parameters apply for serial or parallel connection. For the detailed parameters refer to the Zener Barrier certificate. Application examples can be found in the system description of the Zener Barriers.

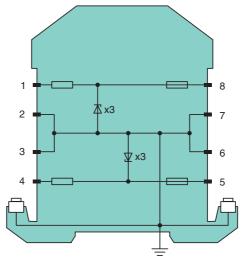
Assembly





Connection





Zone 2 Div. 2

General specifications		
Type		DC version, positive polarity
Electrical specifications		Do version, positive polarity
Nominal resistance		terminals 1, 8: 320 Ω ; terminals 4, 5: 415 Ω
Series resistance		terminals 1, 8: max. 340 Ω ; terminals 4, 5: max. 437 Ω
Fuse rating		50 mA
Hazardous area connection	on	SO THE C
Connection		terminals 1, 2; 3, 4
Safe area connection		terrimais 1, 2, 0, 4
Connection		terminals 5, 6; 7, 8
		terminals 5, 6, 7, 8 terminals 7, 8: max. 24.6 V; 24 V at 10 μA
Working voltage		terminals 7, 8. max. 24.0 V, 24 V at 10 μA terminals 5, 6: max. 19 V; 18 V at 10 μA
Conformity		
Degree of protection		IEC 60529
Ambient conditions		
Ambient temperature		-20 60 °C (-4 140 °F)
Storage temperature		-25 70 °C (-13 158 °F)
Relative humidity		max. 75 %, without moisture condensation
Mechanical specifications	s	
Degree of protection		IP20
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 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		(Ex) II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I (-20 °C ≤ T _{amb} ≤ 60 °C) [circuit(s) in zone 0/1/2]
Voltage U _o		terminals 1, 2: 26.6 V; terminals 3, 4: 20.5 V
Current	I _o	terminals 1, 2: 85 mA; terminals 3, 4: 50 mA
Power	P _o	terminals 1, 2: 560 mW; terminals 3, 4: 260 mW
Supply	Ü	
Maximum safe voltage	U _m	250 V
Series resistance		terminals 1, 2: min. 314 Ω ; terminals 3, 4: min. 407 Ω
Permissible connection values [EEx ia]		
Statement of conformity		TÜV 99 ATEX 1484 X, observe statement of conformity
Group, category, type of protection,		(Ex) II 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		440.0440
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.pepperl
		fuchs.com.

