## **Features**

- 2-channel
- · DC version, negative polarity
- Working voltage 13 V at 10 μA
- Series resistance max. 107  $\Omega$
- Fuse rating 100 mA
- · DIN rail mounting

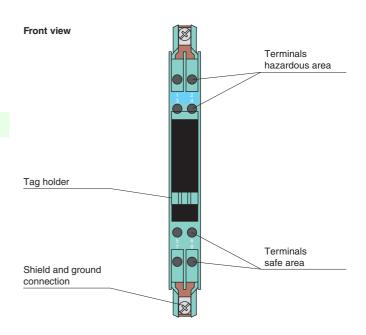
## **Function**

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 negative polarity, i. e. the cathodes of the zener diodes are grounded.

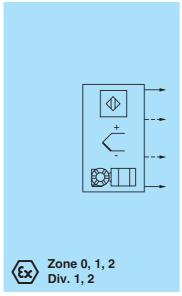
Depending on the application, increased or decreased intrinsic safety parameters apply for serial or parallel connection. For the detailed parameters refer to the Zener Barrier certificate. Application examples can be found in the system description of the Zener Barriers.

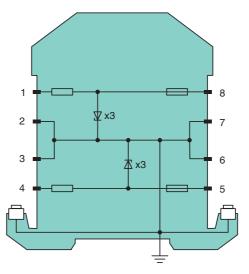
## **Assembly**





## Connection





Zone 2

Div. 2

lmy puo
071800
2015-02-16
, of ice io
.04 10:22 Dz
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Polosco data

General specifications		
Type		DC version, negative polarity
Electrical specifications		BO version, negative polarity
•		100.0
Nominal resistance		100 Ω
Series resistance		max. 107 Ω
Fuse rating		100 mA
Hazardous area connectio	n	
Connection		terminals 1, 2; 3, 4
Safe area connection		
Connection		terminals 5, 6; 7, 8
Working voltage		max. 13.3 V , 13 V at 10 $\mu$ A
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		
Degree of protection		IP20
Connection		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 con	nection	of 65 fill Divinounting fall acc. to Elv 667 15.2561
with Ex-areas	nection	
EC-Type Examination Certific	cate	BAS 01 ATEX 7005, for additional certificates see www.pepperl-fuchs.com
Group, category, type of p	rotection	(x) II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I (-20 °C ≤ T <sub>amb</sub> ≤ 60 °C) [circuit(s) in zone 0/1/2]
Voltage	$U_o$	14.7 V
Current	I <sub>o</sub>	150 mA
Power	$P_{o}$	550 mW
Supply		
Maximum safe voltage	U <sub>m</sub>	250 V
Series resistance		min. 98 $\Omega$
Permissible connection values [EEx ia]		
Statement of conformity		TÜV 99 ATEX 1484 X , observe statement of conformity
Group, category, type of protection, temperature class		(Ex) II 3G Ex nA IIC T4 Gc [device in zone 2]
- P		
Directive conformity Directive 94/9/EC		EN 60079-0:2012, EN 60079-11:2012 , EN 60079-15:2010
		LIA 00070 0.2012, LIA 00070-11.2012 , LIA 00073-13.2010
International approvals		
FM approval		440.0440
Control drawing		116-0118
UL approval		140,0400
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.