## **Features**

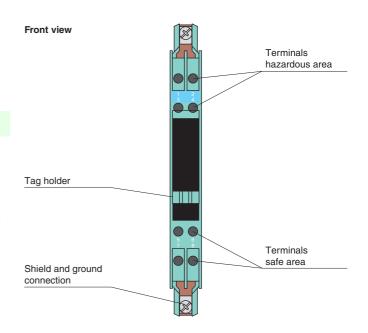
- 1-channel
- DC version, negative polarity
- Working voltage 13 V at 10 μA
- Series resistance max. 107  $\Omega$
- Fuse rating 100 mA
- · DIN rail mounting

## **Function**

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

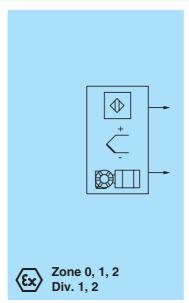
The zener diodes in the Zener Barrier are connected in the reverse direction. The breakdown voltage of the diodes is not exceeded in normal operation. If this voltage is exceeded, due to a fault in the safe area, the diodes start to conduct, causing the fuse to blow. The Zener Barrier has a negative polarity, i. e. the cathodes of the zener diodes are grounded.

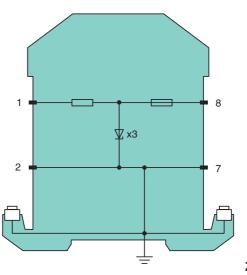
## **Assembly**





## Connection





Zone 2 Div. 2

JIV. 2

a.xml
7 en
'1777 end
07
-12
2014-02-12
2014-02-12
fissue
Date of
11:53
2013-09-24
2013
date
Release

General specifications		
Type		DC version, negative polarity
Electrical specifications		DO Version, negative polarity
•		100.0
Nominal resistance		100 Ω
Series resistance		max. 107 Ω
Fuse rating		100 mA
Hazardous area connection		
Connection		terminals 1, 2
Safe area connection		
Connection		terminals 7, 8
Working voltage		max. 13.3 V $_{1}$ 13 V at 10 $_{\mu}A$
Conformity		
Protection degree		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		
Protection degree		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 conne	ection	
with Ex-areas		
EC-Type Examination Certificate		BAS 01 ATEX 7005, for additional certificates see www.pepperl-fuchs.com
Group, category, type of prot	tection	( 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 <sub>o</sub>	550 mW
Supply	Ü	
Maximum safe voltage	U <sub>m</sub>	250 V
Series resistance	-111	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,		(Ex) II 3G Ex nA IIC T4 Gc [device in zone 2]
temperature class	Í	
Directive conformity		
Directive 94/9/EC		EN 60079-0:2009, EN 60079-11:2007, EN 61241-11:2006, 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.