**Zener Barrier Z922** 





- Usable with IEC fieldbus
- 2-channel
- Fieldbus circuit EEx ia IIC

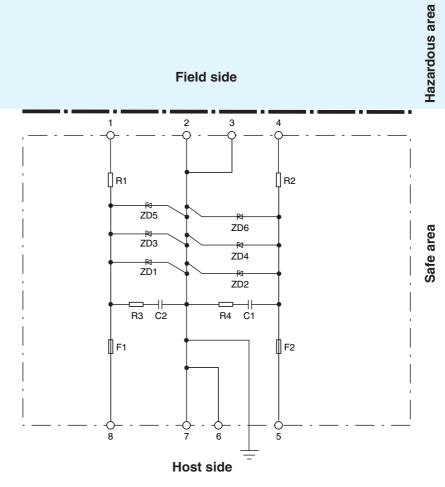
## **Z922**

# **Application**

Field buses to IEC 61158-2

## Connection





#### Composition

Mechanical specifications		
Connection		screw terminals
Core cross-section		max. 2 x 2.5 mm <sup>2</sup>
Data for application in connection with hazardous areas		
EU-Type Examination Certificate		BAS 01 ATEX 7005
Marking		$\textcircled{x}$ 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	$U_o$	11 V
Current	I <sub>o</sub>	218 mA
Power	$P_{o}$	600 mW
Supply		
Maximum safe voltage U <sub>m</sub>		250 V
Series resistance		min. $50\Omega$
Certificate		TÜV 99 ATEX 1484 X
Marking		(x) II 3G Ex nA IIC T4 Gc [device in zone 2]
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2012+A11:2013, 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 IECEX BAS 17.0091X
Approved for		[Ex ia Ga] IIC , [Ex ia Da] IIIC , [Ex ia Ma] I Ex ec IIC T4 Gc
General information		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com.

#### **Function**

The Z922 Zener barrier is provided for use with the planned IEC Field bus with 31.25 kbits/s.

The barrier satisfies the requirements of both the second edition of EN 50020 and those of the intrinsically safe bus in accordance with the IEC proposal 61158-2.

IEC 61158-2 describes a 2-wire field bus, which enables the transfer of power and data at 31.25 kbits via a 100 Ohm cable having a maximum length of 1900 m (Max. of 6 stations).

The Zener barrier Z922 enables the highest possible supply voltage to be achieved at the lowest possible series resistance. This means that the attenuation of the communication signals and the reduction of the supply voltage are minimised. The circuitry is designed such that on connecting a 100 Ohm cable between terminals 1 and 4 the impedance between terminals 5 and 8 is also 100 Ohm. If an impedance of more than 3 kOhm is connected between terminals 5 and 8, then the feedback impedance between terminals 1 and 2 is likewise 100 Ohm.