## C $\epsilon$

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


## Z922

## Application

Field buses to IEC 61158-2

## Connection

Field side


## Composition

## Mechanical specifications

| Connection | screw terminals |
| :---: | :---: |
| Core cross-section | max. $2 \times 2.5 \ldots \mathrm{~mm}^{2}$ |
| Data for application in connection with hazardous areas |  |
| EU-Type Examination Certificate | BAS 01 ATEX 7005 |
| Marking | Ex II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I $\left(-20^{\circ} \mathrm{C} \leq \mathrm{T}_{\text {amb }} \leq 60^{\circ} \mathrm{C}\right)$ [circuit(s) in zone 0/1/2] |
| Voltage $\mathrm{U}_{0}$ | 11 V |
| Current $\mathrm{I}_{0}$ | 218 mA |
| Power $\mathrm{P}_{0}$ | 600 mW |
| Supply |  |
| Maximum safe voltage $U_{m}$ | 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 <br> 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.

