

Features

- 2 channels
- Dry contact or NAMUR inputs
- Installation in Zone 2, Zone 22, or safe area
- Galvanic isolation between channels and the bus
- Positive or negative logic selectable
- Simulation mode for service operations (forcing)
- Line fault detection (LFD)
- Permanently self-monitoring
- Module can be exchanged under voltage

Function

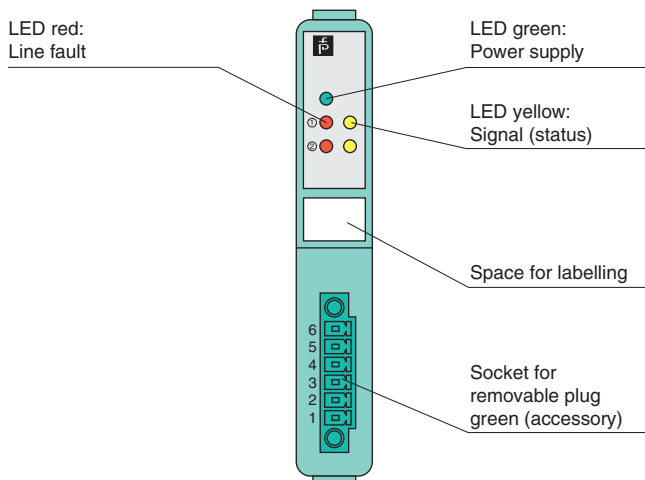
The device accepts up to 2 digital input signals of NAMUR sensors or mechanical contacts from the field.

Open or short circuit line fault alarms are detected.

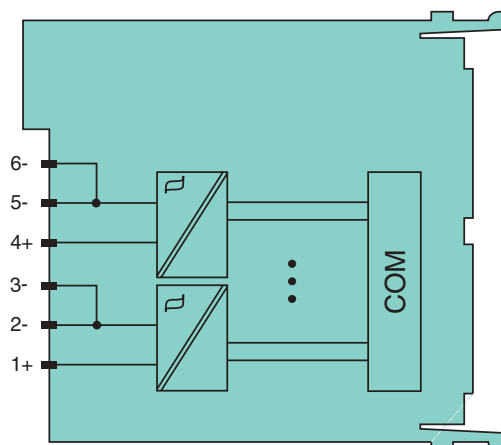
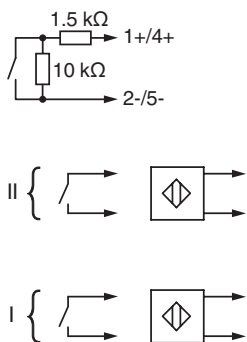
The inputs are galvanically isolated from each other, from the bus and the power supply (EN 60079-11).

Assembly

Front view



Connection



Zone 2

Release date 2015-01-30 11:51 Date of issue 2015-01-30 541924_eng.xml


Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

| | | |
|---|-------|--|
| Supply | | |
| Connection | | backplane bus |
| Rated voltage | U_n | 12 V DC , only in connection with the power supplies LB9*** |
| Power consumption | | 0.5 W |
| Internal bus | | |
| Connection | | backplane bus |
| Interface | | manufacturer-specific bus to standard com unit |
| Input | | |
| Number of channels | | 2 |
| Suitable sensors | | mechanical contacts, NAMUR proximity switches, 2-wire initiators |
| Connection | | channel I: 1+, 2/3-; channel II: 4+, 5/6- |
| Rated values | | acc. to EN 60947-5-6 (NAMUR) |
| Switching point/switching hysteresis | | 1.2 ... 2.1 mA / \pm 0.2 mA |
| Voltage | | 8.2 V |
| Internal resistor | | 1 k Ω |
| Line fault detection | | can be switched on/off for each channel via configuration tool |
| Connection | | mechanical switch with additional resistors (see connection diagram) , proximity switches without additional wiring |
| Short-circuit | | < 360 Ω |
| Open-circuit | | < 0.35 mA |
| Minimum pulse duration | | 20 ms |
| Indicators/settings | | |
| LED indicator | | LED green: supply LED red: line fault, per channel LED yellow: signal (status), per channel |
| Coding | | optional mechanical coding via front socket |
| Directive conformity | | |
| Electromagnetic compatibility | | |
| Directive 2004/108/EC | | EN 61326-1 |
| Conformity | | |
| Electromagnetic compatibility | | NE 21 |
| Degree of protection | | IEC 60529 |
| Environmental test | | EN 60068-2-14 |
| Shock resistance | | EN 60068-2-27 |
| Vibration resistance | | EN 60068-2-6 |
| Damaging gas | | EN 60068-2-42 |
| Relative humidity | | EN 60068-2-56 |
| Ambient conditions | | |
| Ambient temperature | | -20 ... 60 °C (-4 ... 140 °F) , 70 °C (non-Ex) |
| Storage temperature | | -25 ... 85 °C (-13 ... 185 °F) |
| Relative humidity | | 95 % non-condensing |
| Shock resistance | | shock type I, shock duration 11 ms, shock amplitude 50 m/s ² , number of shock directions 6, number of shocks per direction 100 |
| Vibration resistance | | frequency range 5 ... 500 Hz, amplitude 5 ... 13.2 Hz \pm 1.5 mm, 13.2 ... 100 Hz 1g, sweep rate 1 octave/min, duration 10 sweeps 5 Hz - 100 Hz - 5 Hz |
| Damaging gas | | for plugs: 21 days in 25 ppm SO ₂ , at 25 °C and 75 % rel. humidity, device G3 |
| Mechanical specifications | | |
| Degree of protection | | IP20 when mounted on backplane |
| Connection | | removable front connector with screw flange (accessory) wiring connection via spring terminals (0.14 ... 1.5 mm ²) or screw terminals (0.08 ... 1.5 mm ²) |
| Mass | | approx. 110 g |
| Dimensions | | 16 x 100 x 103 mm (0.63 x 3.9 x 4 in) |
| Data for application in connection with Ex-areas | | |
| Statement of conformity | | PF 08 CERT 1234 X |
| Group, category, type of protection | |  II 3 G Ex nA [ic] IIC T4 Gc |
| Electrical isolation | | |
| Input/power supply, internal bus | | safe electrical isolation acc. to EN 60079-11, voltage peak value 375 V |
| Directive conformity | | |
| Directive 94/9/EC | | EN 60079-0:2009 EN 60079-11:2007 EN 60079-15:2010 |
| International approvals | | |
| IECEX approval | | BVS 09.0037X |
| Approved for | | Ex nAc [ic] IIC T4 |
| General information | | |

Release date 2015-01-30 11:51 Date of issue 2015-01-30 541924_eng.xml

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

| | |
|---------------------------|--|
| System information | The module has to be mounted in appropriate backplanes (LB9***) in Zone 2 or outside hazardous areas. Here, the corresponding declaration of conformity has to be observed. For use in hazardous areas (e. g. Zone 2 or Zone 22) the module must be installed in an appropriate enclosure. |
| 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 . |

Release date 2015-01-30 11:51 Date of issue 2015-01-30 541924_eng.xml

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com