

**Features**

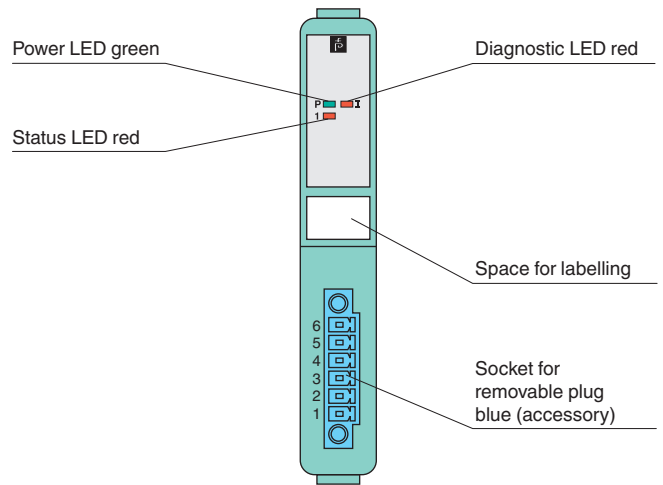
- 1-channel
- Output Ex ia
- Analog output module for 0/4 mA ... 20 mA
- Installation in Zone 2, Zone 22, Div. 2, or safe area
- Simulation mode for service operations (forcing)
- Line fault detection (LFD)
- Permanently self-monitoring
- Module can be exchanged under voltage (hot swap)

**Function**

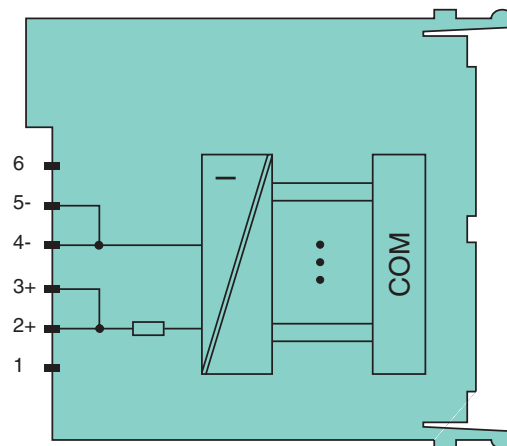
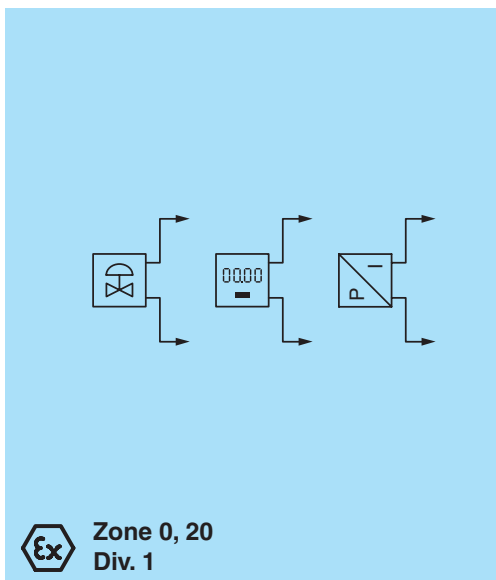
The device drives positioners, proportional valves, I/P converters, or local indicators.  
 Open and short circuit line faults are detected.  
 The output is galvanically isolated from the bus and the power supply.

**Assembly**

Front view



**Connection**



Release date 2012-12-10 11:45 Date of issue 2012-12-10 239404\_eng.xml

<b>Supply</b>		
Connection		backplane bus
Rated voltage		12 V DC , only in connection with the power supplies LB9***
Power loss		0.2 W
Power consumption		1 W
<b>Internal bus</b>		
Connection		backplane bus
Interface		manufacturer specific bus to standard Com Unit/gateway
<b>Output</b>		
Connection		terminals 2+, 3+; 4-, 5-
Current		4 ... 20 mA (0 ... 25 mA) short-circuit protected
Load		750 Ω max.
Line fault detection		min. 1 mA
Response threshold		≥ 850 Ω
Watchdog		output off 0.5 s after serious fault
<b>Transfer characteristics</b>		
Deviation		0.1 % of the input signal range at 20 °C (68 °F)
Influence of ambient temperature		0.01 %/K of the input signal range
Refresh time		approx. 100 ms
<b>Indicators/settings</b>		
LED indicator		Power LED , green: supply Diagnostic LED , red: module fault , red flashing: communication error Status LED , red: line fault
Coding		mechanical coding at the front socket , optional
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2004/108/EC		EN 61326-1:2006
<b>Conformity</b>		
Electromagnetic compatibility		NE 21:2007
Protection degree		IEC 60529:2000
Environmental test		EN 60068-2-14:2009
Shock resistance		EN 60068-2-27:2009
Vibration resistance		EN 60068-2-6:2008
Damaging gas		EN 60068-2-42:2003
Relative humidity		EN 60068-2-78:2001
<b>Ambient conditions</b>		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
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 <sup>2</sup> , number of shock directions 6, number of shocks per direction 100
Vibration resistance		frequency range 5 ... 500 Hz, amplitude 5 ... 13.2 Hz ± 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 <sub>2</sub> , at 25 °C and 75 % rel. humidity, device G3
<b>Mechanical specifications</b>		
Protection degree		IP20 (module) , mounted on backplane
Connection		device plug (accessories) - removable terminals - plug with screw flange - wiring connection: spring terminals: (0.14 ... 1.5 mm <sup>2</sup> ), screw terminals: (0.08 ... 1.5 mm <sup>2</sup> )
Mass		approx. 90 g
Dimensions		16 x 100 x 103 mm (0.63 x 3.9 x 4 in)
<b>Data for application in connection with Ex-areas</b>		
EC-Type Examination Certificate		BVS 11 ATEX E 116 X , for additional certificates see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a>
Group, category, type of protection		⊕ II 3(1) G Ex nA [ia Ga] IIC T4 Gc ⊕ I (M1) [Ex ia Ma] I ⊕ II (1)D [Ex ia Da] IIIC
<b>Output</b>		
Voltage	U <sub>o</sub>	27 V
Current	I <sub>o</sub>	87 mA
Power	P <sub>o</sub>	575 mW (linear characteristic)
<b>Electrical isolation</b>		
Output/power supply, internal bus		safe electrical isolation acc. to EN 60079-11:2007 , voltage peak value 375 V
<b>Directive conformity</b>		

Release date 2012-12-10 11:45 Date of issue 2012-12-10 239404\_eng.xml

Directive 94/9/EC	EN 60079-0:2009 , EN 60079-11:2007 , EN 60079-15:2010 , EN 60079-26:2007 , EN 61241-11:2006
<b>International approvals</b>	
IECEx approval	BVS 11.0068X
<b>General information</b>	
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, Zone 22 or Div. 2) 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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .