

Features

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

Function

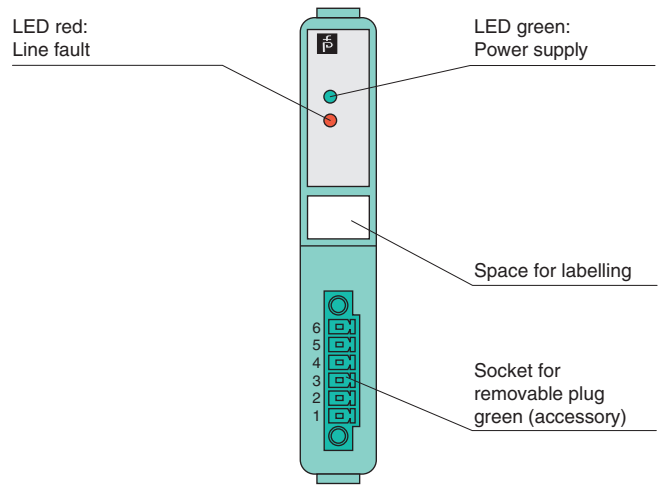
The analog output drives positioners, proportional valves, I/P converters, or local indicators.

Open circuit line fault alarms are detected.

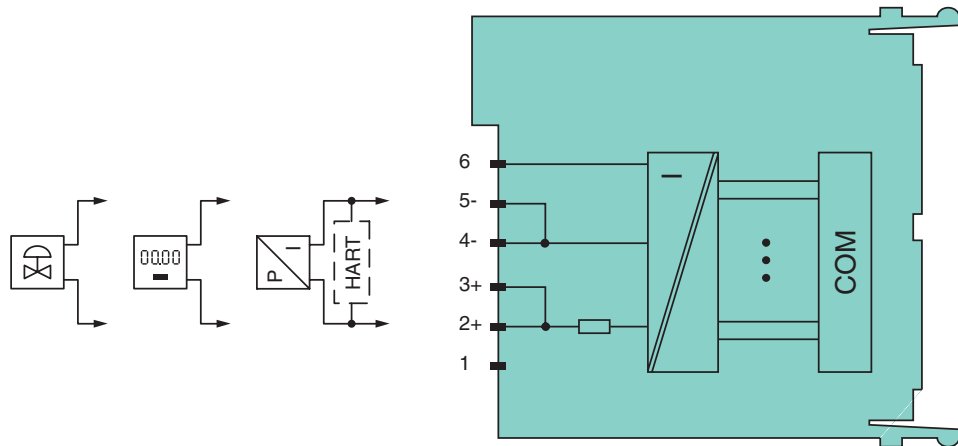
The output is galvanically isolated from the bus and the power supply (EN 60079-11).

Assembly

Front view



Connection



Zone 2

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Supply	
Connection	backplane bus
Rated voltage	12 V DC , only in connection with the power supplies LB9***
Power consumption	0.8 W
Internal bus	
Connection	backplane bus
Interface	manufacturer specific bus to standard Com Unit/gateway
Output	
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
Transfer characteristics	
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. 50 ms
Indicators/settings	
LED indicator	LED green: supply LED red: line fault
Labeling	space for labeling at the front
Coding	mechanical coding at the front socket , optional
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1
Conformity	
Electromagnetic compatibility	NE 21
Protection degree	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 ± 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	
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 ²), screw terminals: (0.08 ... 1.5 mm ²)
Mass	approx. 90 g
Dimensions	16 x 100 x 103 mm (0.63 x 3.9 x 4 in)
Data for application in connection with Ex-areas	
Declaration of conformity	PF 08 CERT 1234 X
Group, category, type of protection, temperature class	⊕ II 3G Ex nA [ic] IIC T4
Electrical isolation	
Output/power supply, internal bus	safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Directive conformity	
Directive 94/9/EC	EN 60079-0 , EN 60079-11 , EN 60079-15
International approvals	
IECEx approval	BVS 09.0037X
General information	

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System information	<p>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.</p>
Supplementary information	<p>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.</p>

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