Features

- 1-channel
- · Output Ex ia
- Device installation in suitable enclosures in Zone 1 or Zone 21
- Analog output module for 0/4 mA ... 20 mA
- · HART communication via field bus or service bus
- HART communication also for separately powered devices
- Simulation mode for service operations (forcing)
- Line fault detection (LFD)
- · Permanently self-monitoring
- Up to SIL2 acc. to IEC 61508

Function

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

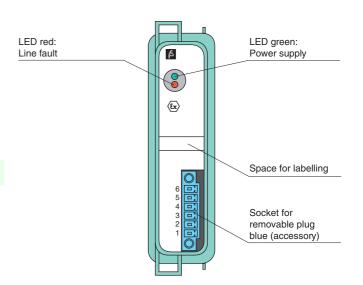
Open circuit line fault alarms are detected.

The output can be switched off via a contact. This can be used for bus-independent safety applications.

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

Assembly

Front view

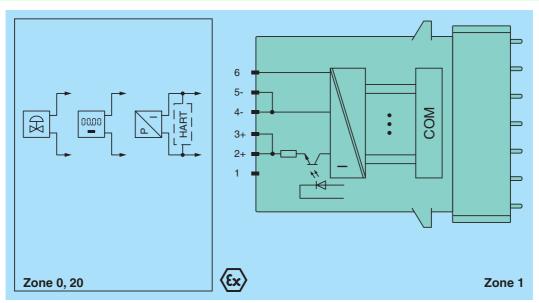








Connection



Supply backplane bus Connection backplane bus Rated voltage 12 V DC , only in connection with the power supplies FB92** Power consumption 0.73 W Internal bus Connection Connection backplane bus Interface manufacturer specific bus to standard Com Unit/gateway Output Connection 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 Output off 0.5 s after serious fault Deviation 0.1 % of the input signal range at 20 °C (68 °F) Influence of ambient temperature 0.0 °S/K of the input signal range Refresh time approx. 50 ms Influence of ambient temperature Deviation Influence of ambient temperature 1.2 pere: supply LED indicator LED green: supply LED indicator LED green: supply Leouth in fault Labeling Dir	
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Ambient conditions	
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 ² , number of shock directions 6, number of the direction 100	er of shocks
Vibration resistance frequency range 5 500 Hz, amplitude 5 13.2 Hz ± 1.5 mm, 13.2 100 Hz 1g, sweep rate 1 or duration 10 sweeps 5 Hz - 100 Hz - 5 Hz	ctave/min,
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), a separate housing is required acc. to the system description	
Connection device plug (accessories) - removable terminals - plug with screw flange - wiring connection: spring terminals: (0.14 1.5 mm²), screw terminals: (0.08 1.5 mm²)	
Mass approx. 350 g	
Dimensions 28 x 107 x 132 mm (1.1 x 4.2 x 5.2 in)	
Data for application in connection with Ex-areas	
EC-Type Examination Certificate PTB 97 ATEX 1074 U, PTB 97 ATEX 1075 (system), for additional certificates see www.pepperl-	fuchs com
Group, category, type of protection (Ex) II 2(1) G Ex d [ia] IIC , [Ex iaD]	
Output	
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0	
Power P _o 595 mW (linear characteristic)	
Electrical isolation Output/(aggregation) and a location location and to IEC/EN COO70 11 voltage productive O75 V	
Output/power supply, internal bus safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V	
Directive conformity EN COOZO O EN COOZO 11 EN COOZO 12 EN COOZO 13 EN COOZO 14 EN COOZO 15 EN COOZO	
Directive 94/9/EC EN 60079-0, EN 60079-1, EN 60079-11, EN 60079-26, EN 61241-0, EN 61241-11	
International approvals	
IECEx approval pending	

General information	
System information	The module has to be mounted in appropriate backplanes and housings (FB92**) in Zone 1, 2, 21, 22 or outside hazardous areas (gas or dust). Here, the corresponding EC-Type Examination Certificate has to be observed.
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.pepperlucks.com