

Digital Output with Shutdown Input

LB6108A



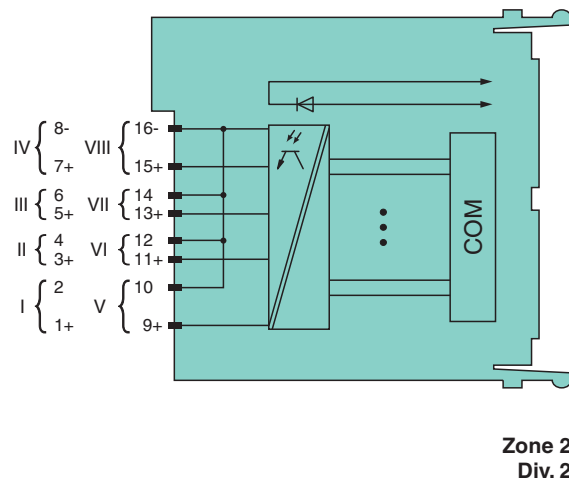
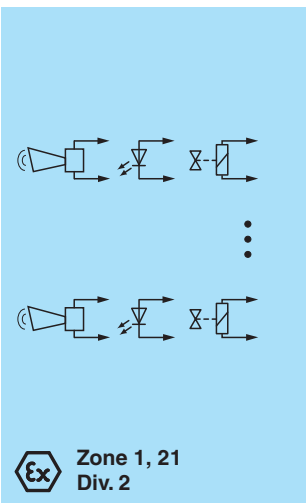
- 8-channel
- Outputs Ex ib
- Mounting in Zone 2, Class I/Div.2 or in the safe area
- Module can be exchanged under voltage
- Galvanic group isolation
- Line fault detection (LFD)
- Positive or negative logic selectable
- Simulation mode for service operations (forcing)
- Permanently self-monitoring
- Output with watchdog
- Output with bus-independent safety shutdown

CE **Ex** **SIL2**

Function

The device features 8 independent channels.
 The device can be used to drive low power solenoids, sounders, or LEDs.
 Open and short-circuit line faults are detected.
 The outputs are galvanically isolated from the bus and the power supply.
 The outputs can be switched off via a contact. This can be used for bus-independent safety applications.

Connection



Technical Data

Slots	
Occupied slots	2
Functional safety related parameters	
Safety Integrity Level (SIL)	SIL 2
Supply	
Connection	backplane bus
Rated voltage	U_r 12 V DC , only in connection with the power supplies LB9***
Power dissipation	2.35 W
Power consumption	2.35 W
Internal bus	

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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

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Technical Data

Connection		backplane bus
Interface		manufacturer-specific bus to standard com unit
Digital output		
Number of channels		8
Suitable field devices		
Field device		Solenoid Valve
Field device [2]		audible alarm
Field device [3]		visual alarm
Connection		channel I: 1+, 2-; channel II: 3+, 4-; channel III: 5+, 6-; channel IV: 7+, 8-; channel V: 9+, 10-; channel VI: 11+, 12-; channel VII: 13+, 14-; channel VIII: 15+, 16-
Current limit	I_{max}	8 mA
Open loop voltage	U_s	20 V
Line fault detection		can be switched on/off for each channel via configuration tool
Test current		0.33 mA
Short-circuit		< 300 Ω
Open-circuit		> 50 k Ω
Response time		20 ms (depending on bus cycle time)
Watchdog		within 0.5 s the device goes in safe state, e.g. after loss of communication
Indicators/settings		
LED indication		LED green: supply LED red: line fault, communication error red flashing
Coding		optional mechanical coding via front socket
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
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 60068-2-78
Ambient conditions		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Relative humidity		95 % non-condensing
Altitude		max. 2000 m
Shock resistance		shock type I, shock duration 11 ms, shock amplitude 15 g, number of shocks 18
Vibration resistance		frequency range 10 ... 150 Hz; transition frequency: 57.56 Hz, amplitude/acceleration ± 0.075 mm/1 g; 10 cycles frequency range 5 ... 100 Hz; transition frequency: 13.2 Hz amplitude/acceleration ± 1 mm/0.7 g; 90 minutes at each resonance
Damaging gas		designed for operation in environmental conditions acc. to ISA-S71.04-1985, severity level 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. 160 g
Dimensions		32.5 x 100 x 102 mm (1.28 x 3.9 x 4 inch)
Data for application in connection with hazardous areas		
EU-type examination certificate		PTB 03 ATEX 2042 X
Marking		Ⓜ II (2) G [Ex ib Gb] IIC Ⓜ II (2) D [Ex ib Db] IIIC Ⓜ I (M2) [Ex ib Mb] I

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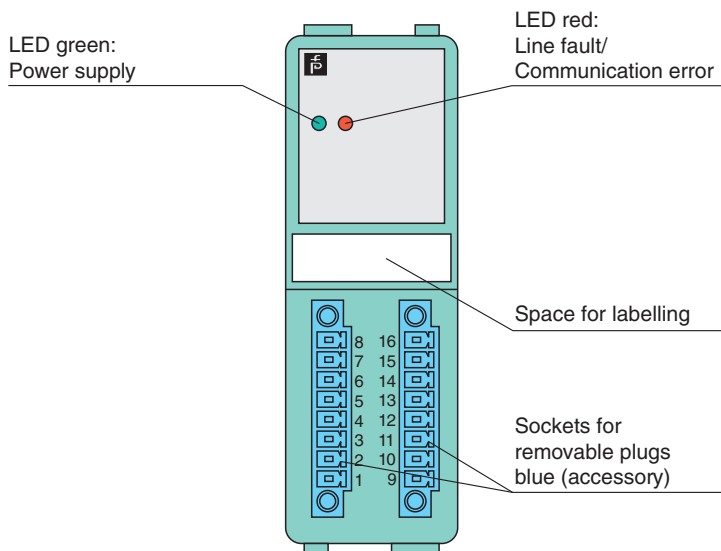
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Technical Data

Output			
Voltage	U_o	28 V	
Current	I_o	13.5 mA	
Power	P_o	376 mW (rectangular characteristic curve)	
Certificate	PF 08 CERT 1234 X		
Marking	Ⓜ II 3 G Ex nA IIC T4 Gc		
Galvanic isolation			
Output/power supply, internal bus	safe electrical isolation acc. to EN 60079-11, voltage peak value 375 V		
Directive conformity			
Directive 2014/34/EU	EN IEC 60079-0:2018+AC:2020 EN 60079-11:2012 EN 60079-15:2010		
International approvals			
ATEX approval	PF 08 CERT 1234 X PTB 03 ATEX 2042 X		
IECEX approval			
IECEX certificate	IECEX BVS 09.0037X		
IECEX marking	Ex nA [ib Gb] IIC T4 Gc [Ex ib Db] IIC [Ex ib Mb] I		
General information			
System information	The module has to be mounted in appropriate backplanes (LB9***) in Zone 2 or outside hazardous areas. Here, observe the corresponding declaration of conformity. 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 www.pepperl-fuchs.com .		

Assembly

Front view



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