

# Digital Output with Shutdown Input LB6008A



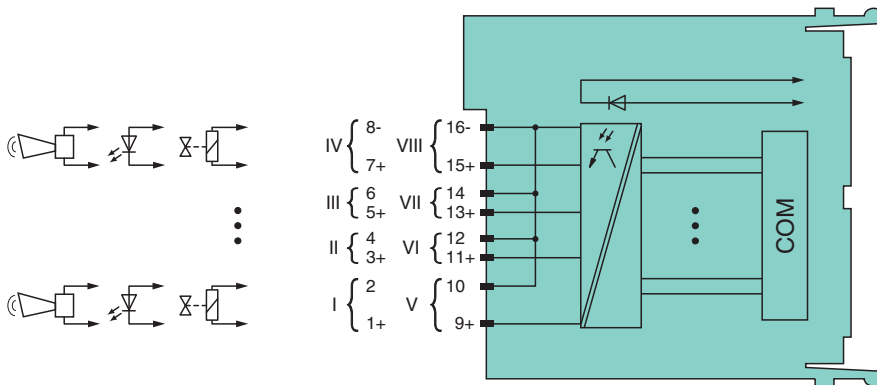
- 8-channel
- Galvanic group isolation
- Installation in Zone 2 or safe area
- Module can be exchanged under voltage
- Line fault detection (LFD)
- Positive or negative logic selectable
- Simulation mode for service operations (forcing)
- Permanently self-monitoring
- Output with watchdog
- Output with bus-independent safety shutdown



## 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



Zone 2

## Technical Data

<b>Slots</b>	
Occupied slots	2
<b>Functional safety related parameters</b>	
Safety Integrity Level (SIL)	SIL 2
<b>Supply</b>	
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
<b>Internal bus</b>	
Connection	backplane bus

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

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## Technical Data

Interface	manufacturer-specific bus to standard com unit		
<b>Digital output</b>			
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 $\Omega$		
Open-circuit	> 50 k $\Omega$		
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		
<b>Indicators/settings</b>			
LED indication	LED green: supply LED red: line fault , red flashing: communication error		
Coding	optional mechanical coding via front socket		
<b>Directive conformity</b>			
Electromagnetic compatibility			
Directive 2014/30/EU	EN 61326-1:2013		
<b>Conformity</b>			
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		
<b>Ambient conditions</b>			
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		
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 $\pm 0.075$ mm/1 g; 10 cycles frequency range 5 ... 100 Hz; transition frequency: 13.2 Hz amplitude/acceleration $\pm 1$ 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		
<b>Mechanical specifications</b>			
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 <sup>2</sup> ) or screw terminals (0.08 ... 1.5 mm <sup>2</sup> )		
Mass	approx. 160 g		
Dimensions	32.5 x 100 x 102 mm (1.28 x 3.9 x 4 inch)		
<b>Data for application in connection with hazardous areas</b>			
<b>Output</b>			
Voltage	$U_o$	28 V	
Current	$I_o$	13.5 mA	
Power	$P_o$	376 mW	

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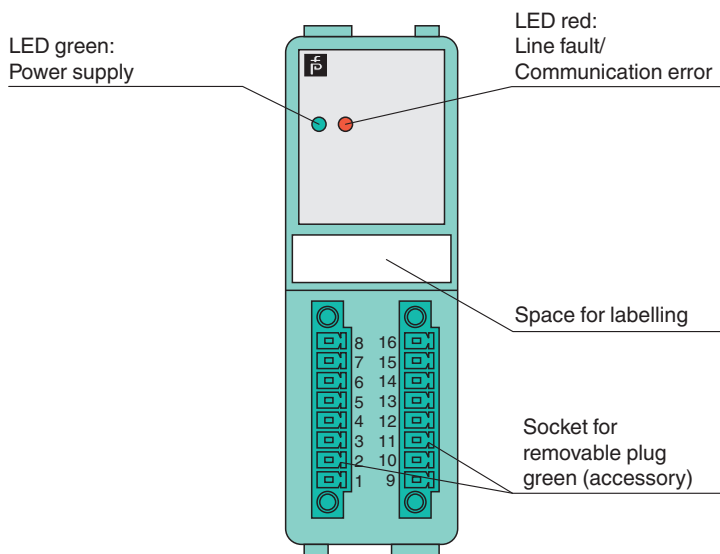
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## Technical Data

Internal capacitance	C <sub>i</sub>	3.6 nF
Internal inductance	L <sub>i</sub>	0 mH
Certificate		PF 08 CERT 1234 X
Marking		Ⓜ II 3 G Ex nA [ic] 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		
IECEX approval		
IECEX certificate		IECEX BVS 09.0037X
IECEX marking		Ex nA [ic] IIC T4 Gc
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 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 <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Assembly

### Front view



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