Gateway for PROFINET

FB8222B.1.EL

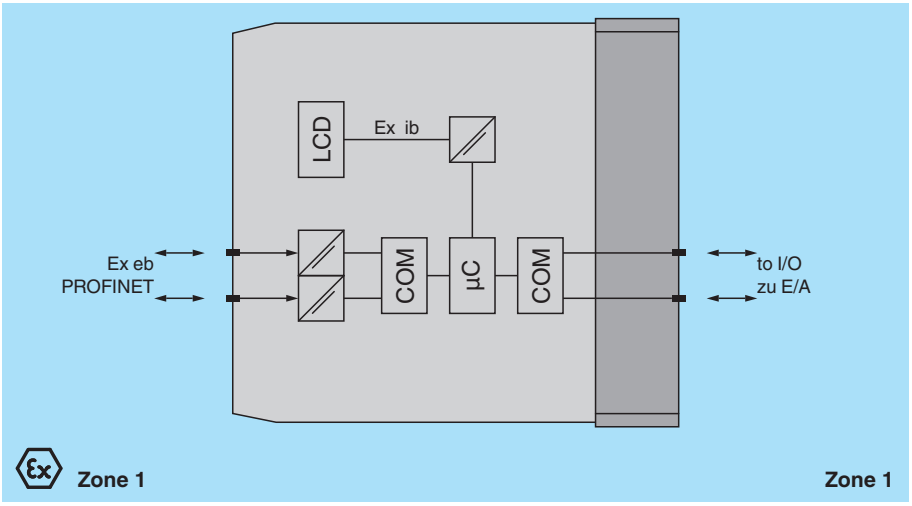
- Communication via PROFINET
- Installation in suitable enclosures in Zone 1
- Interface between the I/O modules and the PCS/PLC
- Configuration via FDT 1.2 DTM
- Non-volatile memory for configuration and parameter settings
- Permanently self-monitoring
- HART communication via HART I/P

Gateway for PROFINET

Function

The PROFINET gateway is the interface between the I/O modules on the backplane and the control system.
HART communication is via PROFINET or HART I/P.
In addition to the input/output data of the I/O modules, the HART auxiliary variables can also be accessed in the process image.

Connection



Technical Data

Supply		
Connection		backplane bus
Nominal voltage		12 V DC , only in connection with the power supplies FB92**
Power dissipation		4.24 W
Power consumption		4.24 W
Fieldbus connection		
Fieldbus type		PROFINET
Ethernet Interface		
Connection type		M12 , via front connector
Transfer rate		10BASE-T, 100BASE-TX 100 MBit/s
Station connection		directly to PCS or PLC or via hubs or switches
Cable type		SFTP in accordance with ISO/IEC 11801 for Cat 5e or better

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Technical Data

Bus length	max. 100 m per link
Addressing	DHCP or fixed IP address
Ethernet address	IP V4 address (factory standard setting: 0.0.0.0, auto IP, DHCP)
Supported I/O modules	FB1x01*…FB1x03*, FB1x08*, FB1x09*, FB2x01*...FB2x17*, FB3x01*…FB3x06*, FB4x01*, FB4x02*, FB4x04*…FB4x06*, FB5x01*, FB5x02*, FB5x04*…FB5x06*, FB6x01*, FB6x05*, FB6x06*, FB6x08*, FB6x10*…FB6x17*
HART communication	via PROFINET and HART I/P
PROFINET conformance class	CC B
Internal bus	
Connection	backplane bus
Galvanic isolation	
Ethernet/other circuits	basic insulation according to IEC/EN 61010-1, rated insulation voltage 32 V DC (SELV/PELV)
RS 485 interface/other circuits	basic insulation according to IEC/EN 61010-1, rated insulation voltage 50 V DC
Insulation voltage	1500 V AC acc. to IEEE 802.3u
Electrical isolation	
Power supply, internal bus/other circuits	basic insulation according to IEC/EN 61010-1, rated insulation voltage 30 V DC
Indicators/settings	
LED indication	See below in the front view
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1
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 60068-2-56
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 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 (module) , a separate housing is required acc. to the system description
Connection	via backplane
Mass	approx. 965 g
Dimensions	57 x 107 x 151 mm
Data for application in connection with hazardous areas	
EU-type examination certificate	PTB 19 ATEX 2007 U
Marking	⟨Ex⟩ II 2G Ex db eb ib q IIC Gb
Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-5:2015 EN 60079-7:2015 EN 60079-11:2012
International approvals	
ATEX approval	

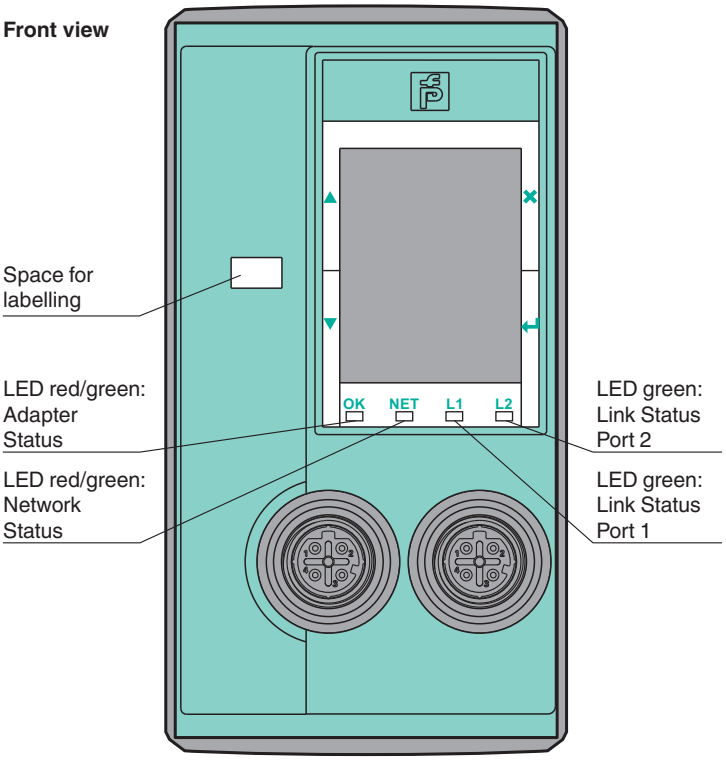
Release date: 2021-09-24 Date of issue: 2021-09-24 Filename: 286522_eng.pdf

Technical Data

ATEX certificate		PTB 19 ATEX 2007 U
IECEx approval		
IECEx certificate		IECEx PTB 19.0025U
IECEx marking		Ex db eb ib q IIC Gb
Standards		IEC 60079-0:2017 IEC 60079-1:2014 IEC 60079-5:2015 IEC 60079-7:2015 IEC 60079-11:2011
General information		
System information		The module may be installed only in the associated backplanes FB9262BP*.2 in Zone 1, Zone 2, or outside the hazardous area. Observe the corresponding EC-type examination certificate.
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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