

Flush pressure transmitter

PL-006-REA12-A-DKG/US/ /



- 1 LED
- 2 Sealing DIN EN ISO 1179-2
- 3 groove for O-ring 16.4 x 1.0
- 4 area for metal sealing



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1		
Measuring range	-1...6 bar	-14.5...87 psi	-100...600 kPa
Process connection	threaded connection G 1/2 external thread		

Application

Special feature	Gold-plated contacts		
Measuring element	ceramic-capacitive pressure measuring cell		
Temperature monitoring	yes		
Application	flush mountable for industrial applications; for industrial applications		
Media	viscous media and liquids with suspended particles; Liquids; other media on request		
Medium temperature [°C]	-25...110; (flush mount zero-leak using metal-to-metal seal. for permissible temperatures of other sealing versions, see sealing materials under "Accessories")		
Min. bursting pressure	120 bar	1740 psi	12000 kPa
Pressure rating	50 bar	725 psi	5000 kPa
Vacuum resistance [mbar]	-1000		
Type of pressure	relative pressure; vacuum		
No dead space	yes		

Electrical data

Operating voltage [V]	9.6...30 DC		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Integrated watchdog	yes		



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2-wire			
Current consumption	[mA]	3.5...21.5	
Power-on delay time	[s]	< 1	
3-wire			
Current consumption	[mA]	< 30	
Power-on delay time	[s]	< 0.5	
Inputs / outputs			
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1		
Outputs			
Total number of outputs	2		
Output signal	analogue signal; IO-Link		
Number of digital outputs	1; (IO-Link)		
Number of analogue outputs	1		
Analogue current output	[mA]	4...20; (scalable; 1:5)	
Max. load	[Ω]	(Ub - 9,6 V) / 21,5 mA; 670 Ω (Ub = 24 V)	
Short-circuit proof	yes		
Overload protection	yes		
Measuring/setting range			
Measuring range	-1...6 bar	-14.5...87 psi	-100...600 kPa
Analogue start point	-1...4.8 bar	-14.5...69.6 psi	-100...480 kPa
Analogue end point	1...6 bar	14.5...87 psi	20...600 kPa
In steps of	0.002 bar	0.1 psi	0.2 kPa
Factory setting	ASP = 0.0 bar	AEP = 6.0 bar	
	ASP = 0.0 kPa	AEP = 600kPa	
	ASP = 0.0 psi	APE = 87 psi	
Temperature monitoring			
Measuring range	-25...110 °C		-13...230 °F
Accuracy / deviations			
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,5; (linearity incl. hysteresis and repeatability, limit value setting to DIN EN IEC 62828-1)	
Linearity deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Hysteresis deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)	
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,1 (-25...85 °C) < ± 0,3 (85...110 °C)	
Temperature coefficient span	[% of the span / 10 K]	< ± 0,1 (-25...85 °C) < ± 0,3 (85...110 °C)	
Temperature monitoring			
Accuracy	[K]	± 2.5 K + (0.045 x (ambient temperature - medium temperature))	



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Response times		
Damping process value dAP	[s]	0...99.99
Damping for the analogue output dAA	[s]	0...99.99
2-wire		
Step response time analogue output	[ms]	12
3-wire		
Step response time analogue output	[ms]	3
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
Profiles	Common - I&D	Identification and Diagnosis
	Function	Measurement data, standard resolution
SIO mode	no	
Required master port type	A; (when pin 2 not connected: B)	
Min. process cycle time	[ms]	3.5
IO-Link resolution pressure	[bar]	0.002
IO-Link resolution temperature	[K]	0.2
IO-Link process data (cyclical)	function	bit length
	pressure	16
	temperature	16
	device status	4
IO-Link functions (acyclical)	application specific tag; internal temperature	
Supported DeviceIDs	Type of operation	DeviceID
	default	1434
Operating conditions		
Ambient temperature	[°C]	-25...90
Storage temperature	[°C]	-40...100
Protection	IP 67; IP 68; IP 69	
Tests / approvals		
EMC	DIN EN 61326-1	
Shock resistance	DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	427
Embedded software included	yes	
UL approval	Enclosure type	Type 1
	UL approval no.	J050
	File number UL	E174189
Mechanical data		
Weight	[g]	113.8
Housing	cylindrical	

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Dimensions	[mm]	Ø 30 / L = 63
Materials		stainless steel (316L/1.4435); stainless steel (316L/1.4404); PA; PTFE; FKM
Materials (wetted parts)		stainless steel (316L/1.4435); Al2O3 (ceramics) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; PTFE; (FKM for sealing with seal DIN EN ISO 1179-2, see operating instructions)
Min. pressure cycles		100 million
Tightening torque	[Nm]	25
Process connection		threaded connection G 1/2 external thread

Displays / operating elements

Display	operating status	2 LED, green
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Accessories

Items supplied	Gasket: G1/2, FKM DIN EN ISO1179-2 (-15...110°C), E30492
Accessories (optional)	Gasket: G1/2, FKM DIN EN ISO1179-2 (-15...110°C), E30492
	Gasket: G1/2, EPDM DIN EN ISO1179-2 (-25...110°C), E30451
	Gasket: G1/2, FFKM DIN EN ISO1179-2 (-5...110°C), E30513
	O-ring: 16,4 x 1, FKM (-15...110°C), E30510
	O-ring: 16,4 x 1, EPDM (-25...110°C), E30511
	O-ring: 16,4 x 1, FFKM (-5...110°C), E30512

Remarks

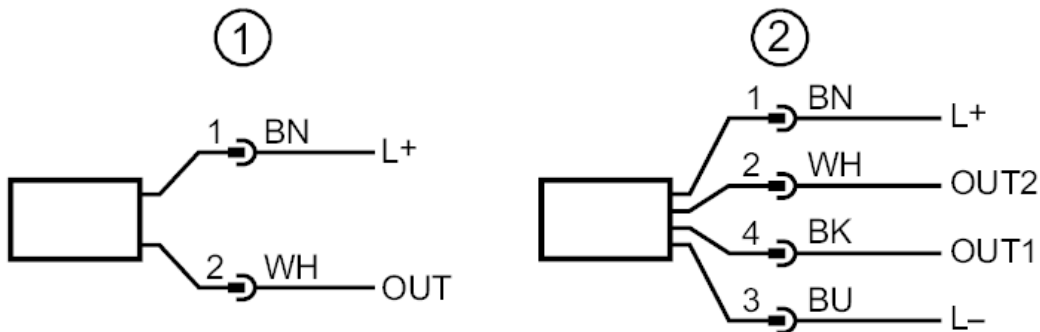
Pack quantity	1 pcs.
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Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



- 1
- 2
- connection for 2-wire operation (analogue)
connection for 3-wire operation (analogue / IO-Link)
OUT1: IO-Link
OUT2: analogue output