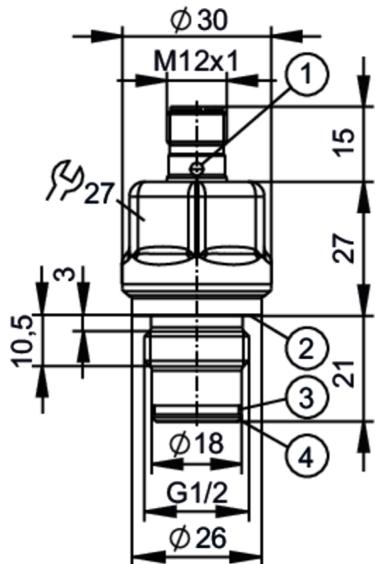


PL1504

Flush pressure transmitter

PL-010-REA12-A-DKG/US/ I



- 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...10 bar	-14.5...145 psi	-0.1...1 MPa
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	175 bar	2538 psi	17 MPa
Pressure rating	70 bar	1015 psi	7 MPa

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		

PL1504



Flush pressure transmitter

PL-010-REA12-A-DKG/US/ /

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 (configurable)			
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...10 bar	-14.5...145 psi	-0.1...1 MPa		
Analogue start point	-1...8 bar	-14.5...116 psi	-0.1...0.8 MPa		
Analogue end point	1...10 bar	14.5...145 psi	0.1...1 MPa		
In steps of	0.002 bar	0.2 psi	0.0002 MPa		
Factory setting	ASP = 0.0 bar	AEP = 10.0 bar			
	ASP = 0.0 psi	AEP = 145.0 psi			
	ASP = 0.0 MPa	AEP = 1.0 MPa			
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))				

PL1504



Flush pressure transmitter

PL-010-REA12-A-DKG/US/ /

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
Temperature monitoring		
Dynamic response T05 / T09	[s]	< 10 / < 25; (DIN EN 60751 water; > 0,9 m/s)
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9
Profiles		Smart Sensor ED2: Identification and Diagnosis (0x4000), Measurement Data Channel (0x800A)
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	1437
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
Vibration resistance		DIN EN 60068-2-6
MTTF	[years]	427
UL approval	Enclosure type	Type 1
	UL Approval no.	J050
	File number UL	E174189
Mechanical data		
Weight	[g]	85.3

PL1504



Flush pressure transmitter

PL-010-REA12-A-DKG/US/ /

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 / Rz 4; 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
---------	------------------	--------------

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

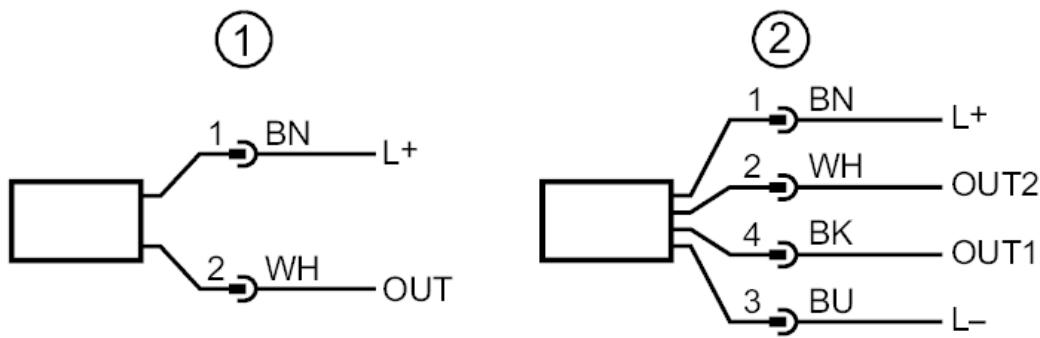
Pack quantity	1 pcs.
---------------	--------

Electrical connection

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



Connection



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