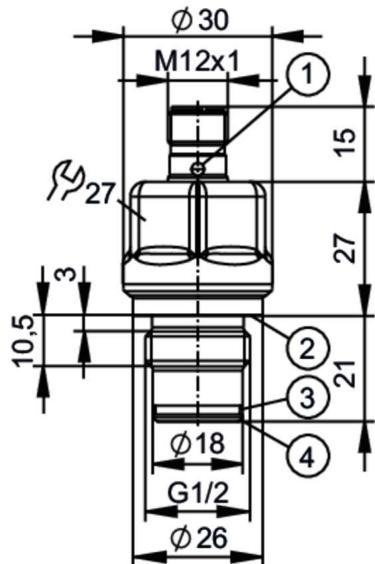


# PL1515

## Flush pressure transmitter

PL-006-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 analog outputs: 1		
Measuring range	-1...6 bar	-14.5...87 psi	-100...600 kPa
Process connection	threaded connection G 1/2 external thread		

### Application

System	gold-plated contacts		
Measuring element	ceramic-capacitive pressure measuring cell		
Temperature monitoring	yes		
Application	Industrial pressure / vacuum transmitters, flush mount, analog output   Type PL; 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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## Flush pressure transmitter

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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 analog outputs: 1
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### Outputs

Total number of outputs	2
Output signal	analog signal; IO-Link (configurable)
Number of digital outputs	1; (IO-Link)
Number of analog outputs	1
Analog 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
Analog start point	-1...4.8 bar	-14.5...69.6 psi	-100...480 kPa
Analog 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
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### 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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## Flush pressure transmitter

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Reaction times		
Damping process value dAP	[s]	0...99.99
Damping for the analog output dAA	[s]	0...99.99
2-wire		
Step response time analog output	[ms]	12
3-wire		
Step response time analog 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 class		A; (when pin 2 not connected: B)
Min. process cycle time	[ms]	3.5
IO-Link resolution pressure	[kPa]	0.002
IO-Link resolution temperature	[K]	0.2
IO-Link process data (cyclical)	<b>Function</b>	<b>bit length</b>
	pressure	16
	temperature	16
	device status	4
IO-Link functions (acyclical)	application specific tag; internal temperature	
Supported DeviceIDs	<b>Type of operation</b>	<b>DeviceID</b>
	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
Vibration resistance		DIN EN 60068-2-6
MTTF	[years]	427
UL approval	Enclosure type	Type 1
	UL approval number	J050
	File number UL	E174189
Mechanical data		
Weight	[g]	85.4

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## Flush pressure transmitter

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

Material	stainless steel (1.4435 / 316L); stainless steel (1.4404 / 316L); PA; PTFE; FKM	
Materials (wetted parts)	stainless steel (1.4435 / 316L); 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
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## Accessories

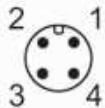
Items supplied	Gasket: G1/2, FKM DIN EN ISO1179-2 (-15...110°C), E30492
Accessories (optional)	Gasket: G1/2, FKM DIN EN ISO1179-2 (-15...110°C), E30492
	Gasket: G1/2, EPDM DIN EN ISO1179-2 (-25...110°C), E30451
	Gasket: G1/2, FFKM DIN EN ISO1179-2 (-5...110°C), E30513
	O-ring: 16,4 x 1, FKM (-15...110°C),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

## Remarks

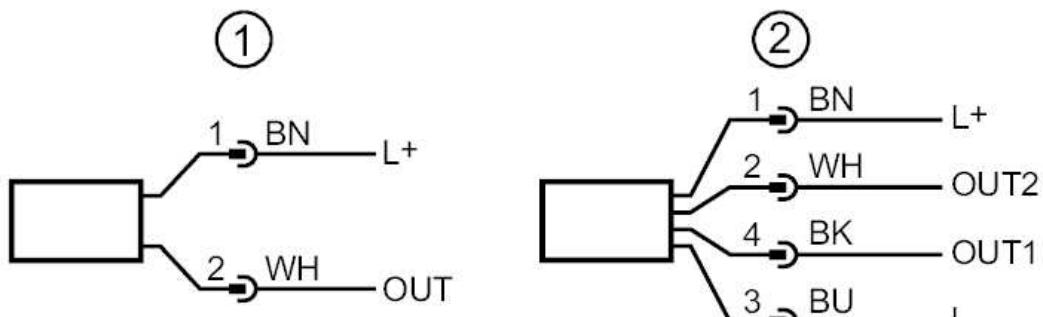
Pack quantity	1 pcs.
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## Electrical connection

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



## Connection



1 connection for 2-wire operation (analog)

2 connection for 3-wire operation (analog / IO-Link)

OUT1: IO-Link

OUT2: analog output