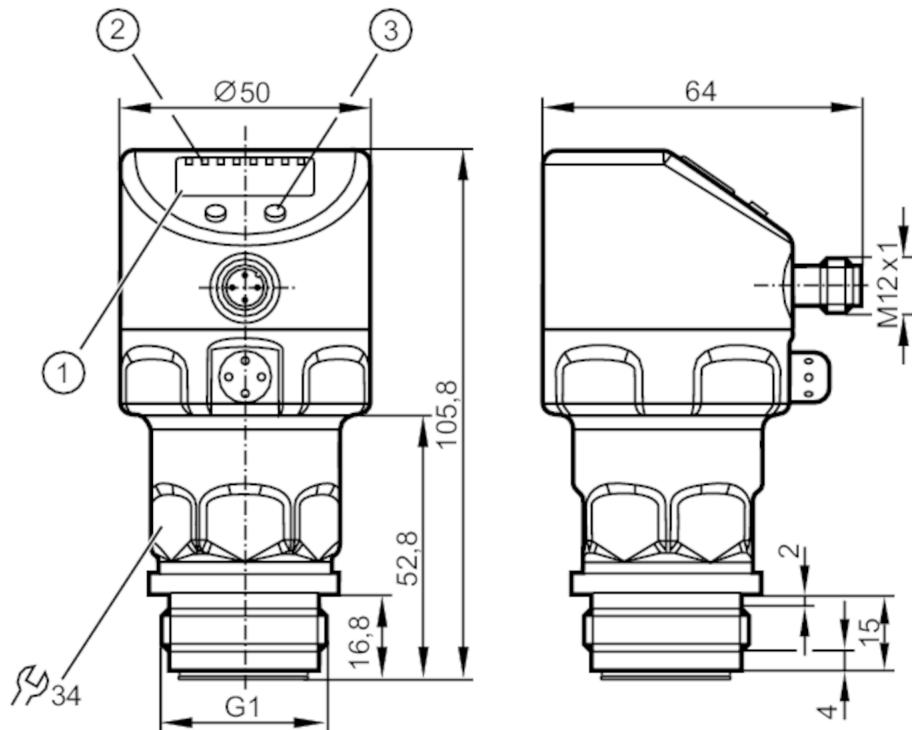


PY2795



Pressure sensor with display

PI-005-REA01-MFRKG/US/ /P



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 programming button



Product characteristics			
Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1		
Measuring range	-1...5 bar	-14.5...72.5 psi	-100...500 kPa
Process connection	threaded connection G 1 external thread Aseptoflex Vario		
Application			
Special feature	Gold-plated contacts		
Application	flush mountable for the food and beverage industry		
Media	viscous media and liquids with suspended particles; liquids and gases		
Medium temperature	-25...125; (145 max. 1h)		
Min. bursting pressure	100 bar	1450 psi	10000 kPa
Pressure rating	30 bar	435 psi	3000 kPa
Type of pressure	relative pressure		
No dead space	yes		
Electrical data			
Min. insulation resistance	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Integrated watchdog	yes		



Pressure sensor with display

PI-005-REA01-MFRKG/US/ /P

2-wire			
Operating voltage	[V]	20...32 DC	
Power-on delay time	[s]	1	
3-wire			
Operating voltage	[V]	18...32 DC	
Current consumption	[mA]	< 45	
Power-on delay time	[s]	0.5	
Inputs / outputs			
Number of inputs and outputs	Number of digital outputs: 2; Number of analogue outputs: 1		
Outputs			
Total number of outputs	2		
Output signal	switching signal; analogue signal; IO-Link; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	2		
Output function	normally open / normally closed; (parameterisable)		
Number of analogue outputs	1		
Analogue current output	[mA]	4...20, invertible; (scalable)	
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
2-wire			
Max. load	[Ω]	300	
3-wire			
Max. voltage drop switching output DC	[V]	2	
Permanent current rating of switching output DC	[mA]	250	
Switching frequency DC	[Hz]	125	
Max. load	[Ω]	(Ub - 10 V) / 20 mA	
Measuring/setting range			
Measuring range	-1...5 bar	-14.5...72.5 psi	-100...500 kPa
Set point SP	-0.99...5 bar	-14.35...72.5 psi	-99...500 kPa
Reset point rP	-1...4.99 bar	-14.5...72.35 psi	-100...499 kPa
Analogue start point	-1...3.75 bar	-14.5...54.5 psi	-100...375 kPa
Analogue end point	0.25...5 bar	3.65...72.5 psi	25...500 kPa
In steps of	0.005 bar	0.05 psi	0.5 kPa
Factory setting		SP1 = 1.250 bar	rP1 = 1.150bar
		SP2 = 3.750 bar	rP2 = 3.650 bar
		ASP = 0.000 bar	AEP = 5.000 bar
Accuracy / deviations			
Switch point accuracy	< ± 0,2; (Turn down 1:1)		
[% of the span]			
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	



Pressure sensor with display

PI-005-REA01-MFRKG/US/ IP

Characteristics deviation [% of the span]	< ± 0,2; (Turn down 1:1; 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]	< ± 0,05; (0...70 °C)	
Temperature coefficient span [% of the span / 10 K]	< ± 0,15; (0...70 °C)	
Response times		
Damping process value dAP [s]	0...30	
Damping for the analogue output dAA [s]	0.01...99.99	
2-wire		
Step response time analogue output [ms]	45	
3-wire		
Min. response time of switching output (dAP) [ms]	3	
Step response time analogue output [ms]	7	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.0	
Profiles	no profile	
Process data analogue	1	
Process data binary	2	
Min. process cycle time [ms]	2.3	
Operating conditions		
Ambient temperature [°C]	-25...80	
Storage temperature [°C]	-40...100	
Protection	IP 67; IP 68; IP 69K	
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF [years]	148.66	
Mechanical data		
Weight [g]	297.5	
Materials	stainless steel (316L/1.4404); FKM; PTFE; PBT; PEI; PFA	

PY2795



Pressure sensor with display

PI-005-REA01-MFRKG/US/ /P

Materials (wetted parts)	ceramics (99.9 % Al2O3); stainless steel (316L/1.4435); surface characteristics: Ra < 0,4 / Rz 4; PTFE
Min. pressure cycles	100 million
Tightening torque [Nm]	35; (recommended tightening torque; depends on lubrication, seal and pressure rating)
Process connection	threaded connection G 1 external thread Aseptoflex Vario

Displays / operating elements

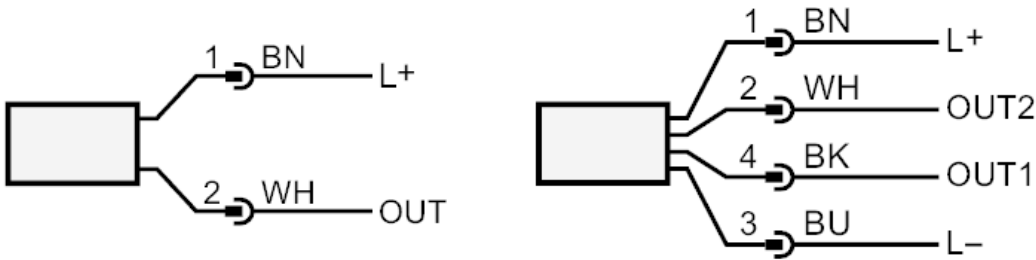
Display	Display unit	LED, green
	switching status	LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	bar; psi; kPa; % of the span	

Remarks

Pack quantity	1 pcs.
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Electrical connection

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



OUT	connection for 2-wire operation : analogue output
OUT1	connection for 3-wire operation : switching output or IO-Link
OUT2	switching output or analogue output
	colours to DIN EN 60947-5-2
	Core colours :
BK =	black
BN =	brown
BU =	blue
WH =	white