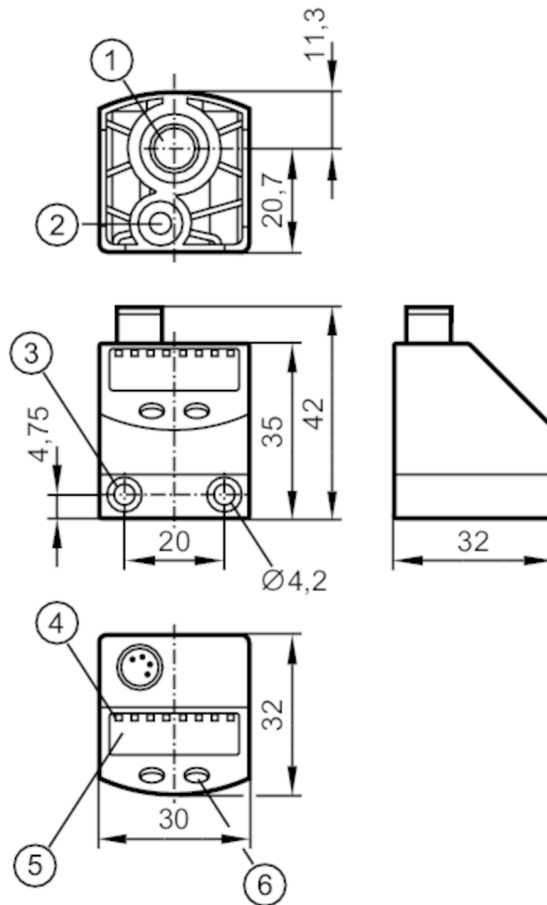


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Pressure sensor for pneumatics

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- 1 main pressure connection G 1/8 Tightening torque < 8 Nm insertion depth < 7.5 mm
- 2 auxiliary pressure connection M 5 Tightening torque < 2.5 Nm insertion depth < 7.5 mm
- 3 Tightening torque < 0.5 Nm
- 4 LEDs Display unit / switching status
- 5 alphanumeric display 4-digit
- 6 programming button



Product characteristics

Output signal	switching signal; analogue signal; IO-Link; (configurable)				
Measuring range	-1...1 bar	-1000...1000 mbar	-14.6...14.6 psi	-29.4...29.4 inHg	-100...100 kPa
Process connection	threaded connection G 1/8 internal thread internal thread:M5				

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Application					
Special feature	Gold-plated contacts				
Application	for industrial applications				
Conditionally suitable for	other media on request				
Medium temperature [°C]	0...60				
Min. bursting pressure	30 bar	435 psi	886 inHg	3000 kPa	
Note on min. burst pressure	max. overpressure on second pressure connection: 12 bar / 1200 kPa / 174 PSI / 354,4 inHg / 1,2 MPa				
Pressure rating	20 bar	290 psi	591 inHg	2000 kPa	
Vacuum resistance [mbar]	-1000				
Type of pressure	relative pressure; differential pressure; vacuum				
Electrical data					
Operating voltage [V]	18...32 DC; (according to EN 50178 SELV/PELV)				
Current consumption [mA]	< 50				
Min. insulation resistance [MΩ]	100; (500 V DC)				
Protection class	III				
Reverse polarity protection	yes				
Overvoltage protection	yes; (< 40 V)				
Power-on delay time [s]	0.5				
Integrated watchdog	yes				
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	switching signal; analogue signal; IO-Link; (configurable)				
Electrical design	PNP				
Number of digital outputs	1				
Output function	normally open / normally closed; (parameterisable)				
Max. voltage drop switching output DC [V]	2				
Permanent current rating of switching output DC [mA]	100				
Switching frequency DC [Hz]	< 100				
Number of analogue outputs	1				
Analogue current output [mA]	4...20				
Max. load [Ω]	500				
Short-circuit protection	yes				
Type of short-circuit protection	pulsed				
Measuring/setting range					
Measuring range	-1...1 bar	-1000...1000 mbar	-14.6...14.6 psi	-29.4...29.4 inHg	-100...100 kPa
Set point SP	-0.98...1 bar	-14.2...14.6 psi	-28.8...29.4 inHg	-98...100 kPa	
Reset point rP	-0.99...0.99 bar	-14.4...14.4 psi	-29.1...29.1 inHg	-99...99 kPa	
In steps of	0.01 bar	0.2 psi	0.3 inHg	1 kPa	



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Accuracy / deviations		
Switch point accuracy [% of the span]	< ± 0,5	
Repeatability [% of the span]	< ± 0,1; (with temperature fluctuations < 10 K)	
Characteristics deviation [% of the span]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)	
Hysteresis deviation [% of the span]	< ± 0,25	
Long-term stability [% of the span]	< ± 0,05; (per 6 months)	
Temperature coefficient zero point [% of the span / 10 K]	0,2; (0...60 °C)	
Temperature coefficient span [% of the span / 10 K]	0,2; (0...60 °C)	
Response times		
Response time [ms]	< 6	
Delay time programmable dS, dr [s]	0; 0,002...5	
Step response time analogue output [ms]	6	
Software / programming		
Parameter setting options	hysteresis / window; normally open / normally closed; analogue output; IO-Link; switching logic; switch-on/switch-off delay; Damping; Display unit	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9 FDIS	
Profiles	Smart Sensor: Process Data Variable; Device Identification	
SIO mode	yes	
Required master port type	A	
Process data analogue	1	
Process data binary	2	
Min. process cycle time [ms]	2.3	
Supported DeviceIDs	Type of operation	DeviceID
	Default	366
Operating conditions		
Ambient temperature [°C]	0...70	
Storage temperature [°C]	-25...85	
Protection	IP 65	

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Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
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]	437	
Pressure Equipment Directive	Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request	
Mechanical data		
Weight [g]	87	
Materials	PBT; FKM; polyester	
Materials (wetted parts)	brass; FKM; silicon (coated); PBT	
Min. pressure cycles	50 million	
Process connection	threaded connection G 1/8 internal thread internal thread:M5	
Displays / operating elements		
Display	Display unit	4 x LED, green
	switching status	1 x LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	bar; kPa; psi; inHg	
Remarks		
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M8; Contacts: gold-plated		
		

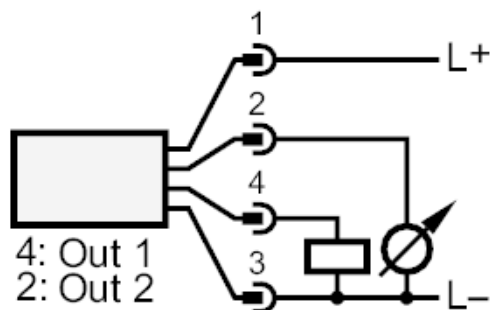
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Connection



OUT1	switching output IO-Link
OUT2	analogue output