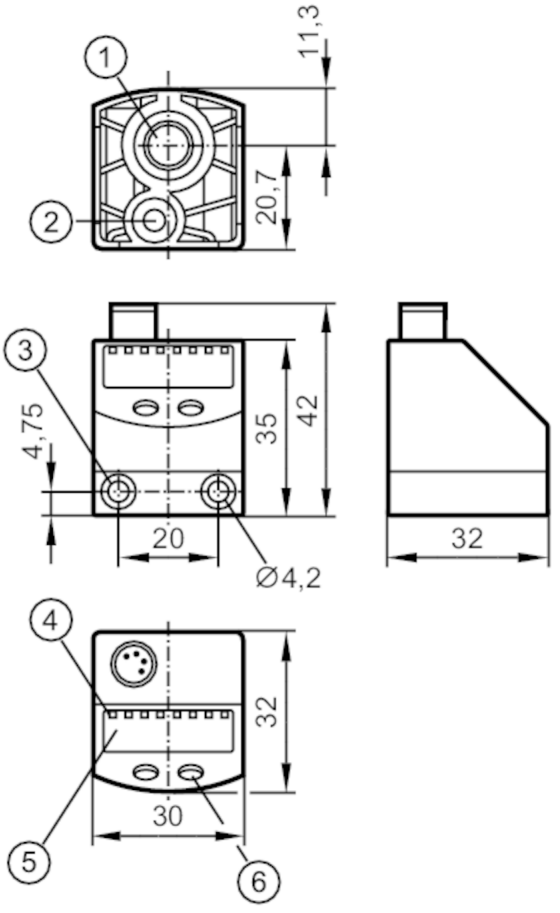
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Pressure sensor for pneumatics

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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					
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1				
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; (to 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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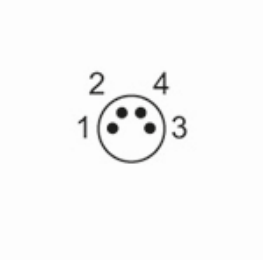
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Tests / approvals			
EMC		DIN EN 61000-6-2	
		DIN EN 61000-6-3	
Shock resistance		DIN EN 60068-2-27	50 g (11 ms)
Vibration resistance		DIN EN 60068-2-6	20 g (10...2000 Hz)
MTTF	[years]	437	
Pressure Equipment Directive		Sound engineering practice; 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; coding: A; Contacts: gold-plated

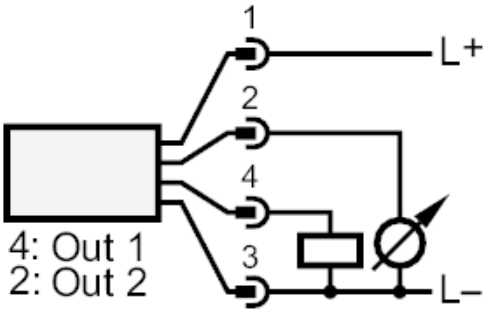


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Connection



OUT1	switching output
	IO-Link
OUT2	analogue output