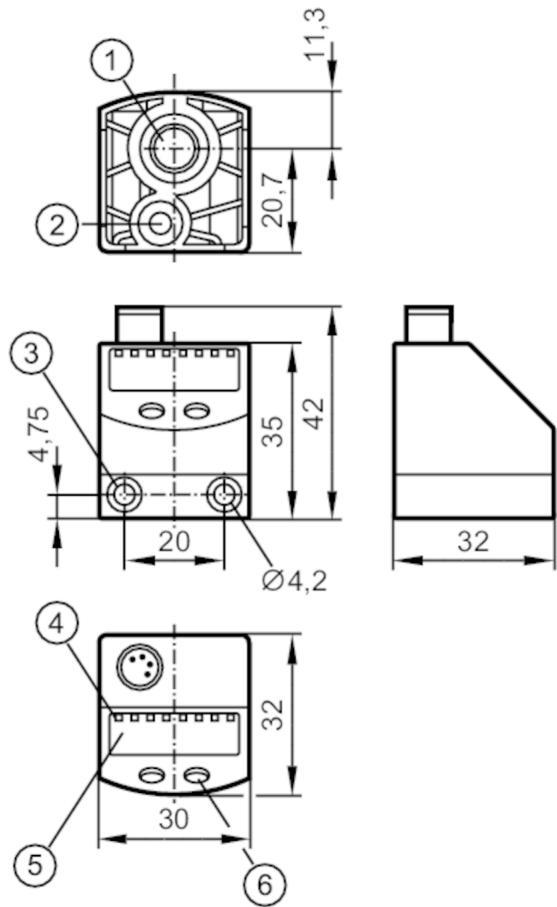


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Pressure sensor for pneumatics

PQ-010-KHR18-KFPKG/AS/



- 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 analog outputs: 1			
Measuring range	-1...10 bar	-15...145 psi	-30...296 inHg	-100...1000 kPa
Process connection	threaded connection G 1/8 Internal thread Internal thread:M5			
Application				
System	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			
Vacuum resistance [MPa]	-0.1			



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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 analog outputs: 1			
Outputs					
Total number of outputs		2			
Output signal		switching signal; analog signal; IO-Link; (configurable)			
Electrical design		PNP			
Number of digital outputs		1			
Output function		normally open / closed; (configurable)			
Max. voltage drop switching output DC	[V]	2			
Permanent current rating of switching output DC	[mA]	100			
Switching frequency DC	[Hz]	< 100			
Number of analog outputs		1			
Analog current output	[mA]	4...20			
Max. load	[Ω]	500			
Short-circuit protection		yes			
Type of short-circuit protection		yes (non-latching)			
Measuring/setting range					
Measuring range		-1...10 bar	-15...145 psi	-30...296 inHg	-100...1000 kPa
Set point SP		-0.9...10 bar	-13...145 psi	-26...296 inHg	-90...1000 kPa
Reset point rP		-0.95...9.95 bar	-14...144 psi	-28...294 inHg	-95...995 kPa
In steps of		0.05 bar	1 psi	2 inHg	5 kPa
Accuracy / deviations					
Switch point accuracy		< ± 0,5			
	[% of the span]				
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K)			
Characteristics deviation		< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)			
	[% of the span]				
Hysteresis deviation		< ± 0,25			
	[% of the span]				
Long-term stability		< ± 0,05; (per 6 months)			
	[% of the span]				
Temperature coefficient zero point		0,2; (0...60 °C)			

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[% of the span / 10 K]		
Temperature coefficient span		0,2; (0...60 °C)
[% of the span / 10 K]		
Reaction times		
Response time	[ms]	< 6
Delay time programmable dS, dr	[s]	0; 0,002...5
Step response time analog output	[ms]	6
Software / programming		
Parameter setting options	hysteresis / window; normally open / closed; analog 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 class	A	
Process data analog	1	
Process data binary	2	
Min. process cycle time	[ms]	2.3
Supported DeviceIDs	Type of operation	DeviceID
	default	367
Operating conditions		
Ambient temperature	[°C]	0...70
Storage temperature	[°C]	-25...85
Protection	IP 65	
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
Housing	rectangular	
Dimensions	[mm]	42 x 30 x 32
Material	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	

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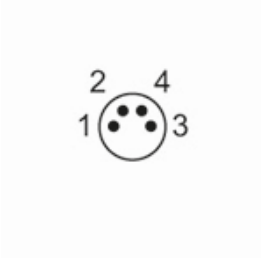
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Displays / operating elements		
Display	Display unit	4 x LED, green
	Switching status	1 x LED, yellow
	Function display	alphanumeric display, 4-digit
	Measured values	alphanumeric display, 4-digit
Display unit	bar; kPa; psi; inHg	

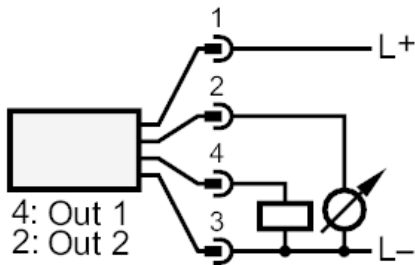
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M8; coding: A; Contacts: gold-plated



Connection



OUT1	Switching output
	IO-Link
OUT2	analog output