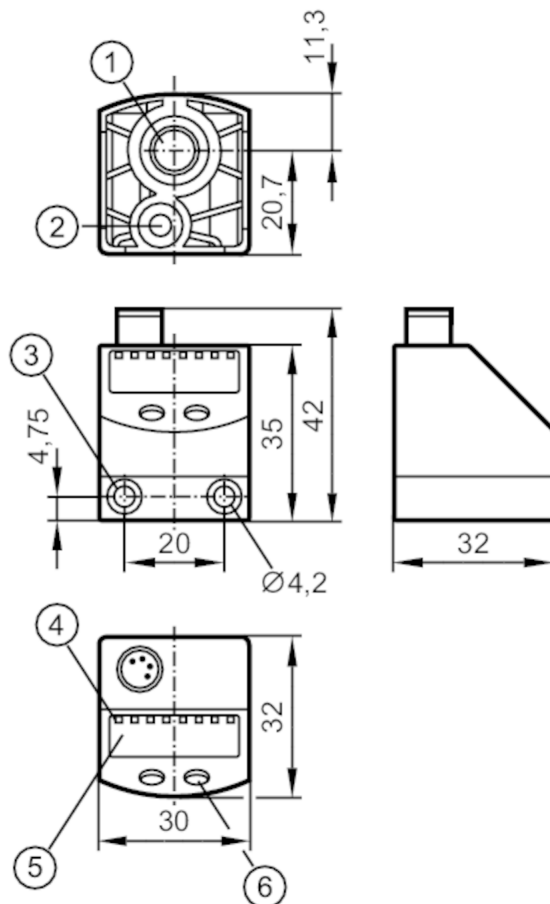


PQ3834



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 analogue 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

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			



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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...10 bar	-15...145 psi	-30...296 inHg
Set point SP		-0.9...10 bar	-13...145 psi	-26...296 inHg
Reset point rP		-0.95...9.95 bar	-14...144 psi	-28...294 inHg
In steps of		0.05 bar	1 psi	2 inHg
				5 kPa
Accuracy / deviations				
Switch point accuracy	[X21]	< ± 0,5		
Repeatability	[X21]	< ± 0,1; (with temperature fluctuations < 10 K)		
Characteristics deviation	[X21]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)		
Hysteresis deviation	[X21]	< ± 0,25		
Long-term stability	[X21]	< ± 0,05; (per 6 months)		
Temperature coefficient zero point	[X22]	0,2; (0...60 °C)		
Temperature coefficient span	[X22]	0,2; (0...60 °C)		
Response times				
Response time	[ms]	< 6		



Pressure sensor for pneumatics

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Delay time programmable dS, dr	[s]	0; 0,002...5
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Step response time analogue output	[ms]	6
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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
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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	<table> <tr> <th>Type of operation</th><th>DeviceID</th></tr> <tr> <td>default</td><td>367</td></tr> </table>	Type of operation	DeviceID	default	367
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	[ANN]	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	<table> <tr> <td>Display unit</td><td>4 x LED, green</td></tr> <tr> <td>switching status</td><td>1 x LED, yellow</td></tr> <tr> <td>function display</td><td>alphanumeric display, 4-digit</td></tr> <tr> <td>measured values</td><td>alphanumeric display, 4-digit</td></tr> </table>	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	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.
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Pressure sensor for pneumatics

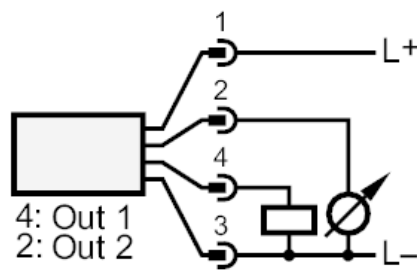
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Electrical connection

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



Connection



OUT1	switching output IO-Link
OUT2	analogue output