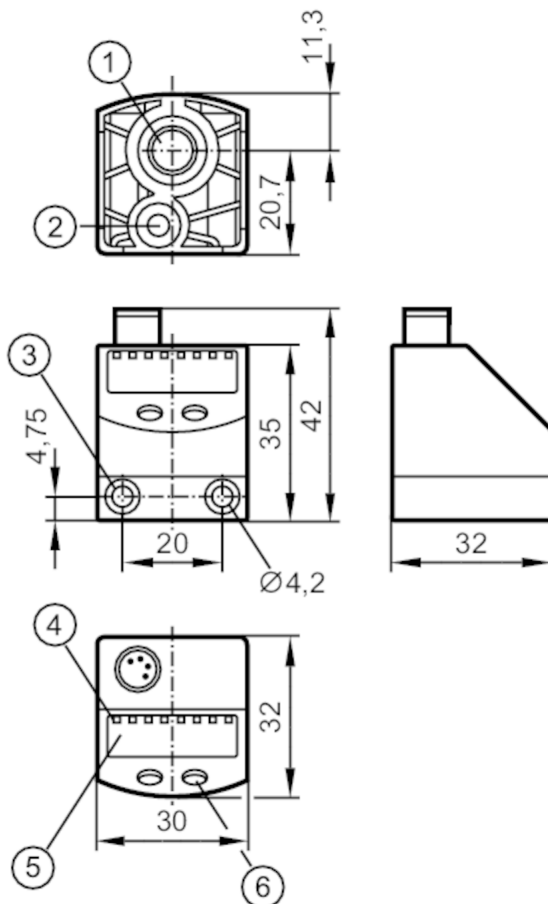


# PQ3834



## 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

Output signal	switching signal; analog signal; IO-Link; (configurable)			
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			

# PQ3834



## Pressure sensor for pneumatics

PQ-010-KHR18-KFPKG/AS/

Application				
System	gold-plated contacts			
Application	for industrial applications			
Conditionally suitable for	other media on request			
Medium temperature [°C]	0...60			
Pressure rating	20 bar	290 psi	591 inHg	2000 kPa
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			
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 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



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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)
Reaction 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 / 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
IO-Link device ID	367 d / 00 01 6F h
Profiles	Smart Sensor: Process Data Variable; Device Identification
SIO mode	yes
Required master port class	A
Process data analogue	1
Process data binary	2
Min. process cycle time [ms]	2.3
Operating conditions	
Ambient temperature [°C]	0...70
Storage temperature [°C]	-25...85
Protection	IP 65

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## Pressure sensor for pneumatics

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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
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 threadM5	
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		
		

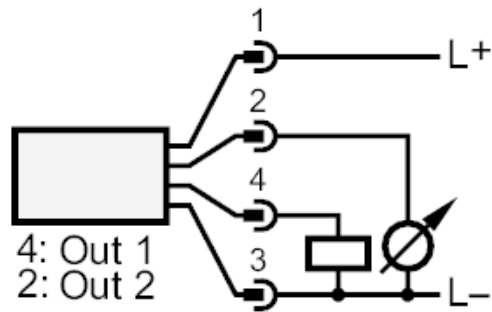
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## Pressure sensor for pneumatics

PQ-010-KHR18-KFPKG/AS/

### Connection



OUT1	Switching output
	IO-Link
OUT2	analog output