

PQ3834



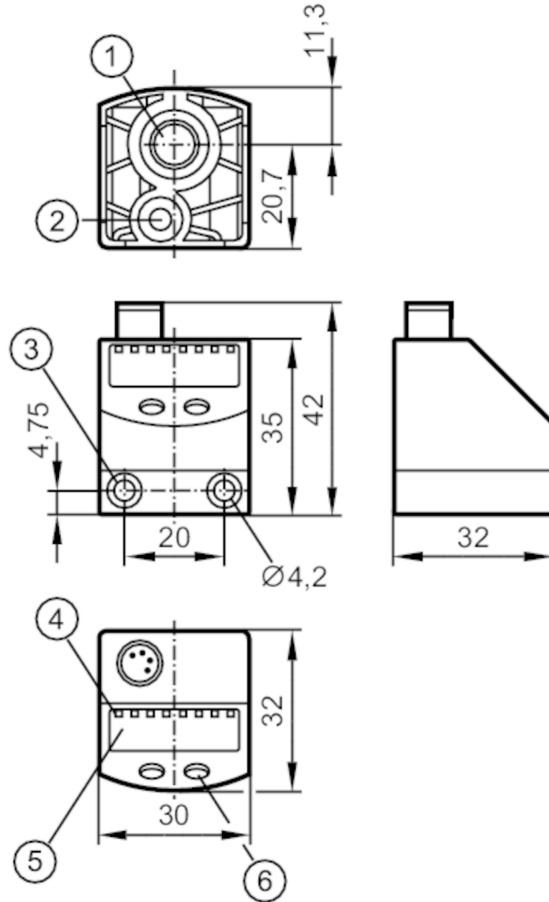
Pressure sensor for pneumatics

PQ-010-KHR18-KFPKG/AS/

Article to be discontinued

Alternative articles: PQD484 or PQD384

When selecting an alternative article and accessories please note that technical data may differ!



- 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

Special feature	gold-plated contacts			
Application	for industrial applications			
Conditionally suitable for	other media on request			
Medium temperature [°C]	0...60			
Min. burst pressure	30 bar	435 psi	886 inHg	3000 kPa

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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	-1000 mbar		-0.1 MPa	
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
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 [% 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	< ± 0,05; (per 6 months)

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	[% of the span]	
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 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
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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 - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
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

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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

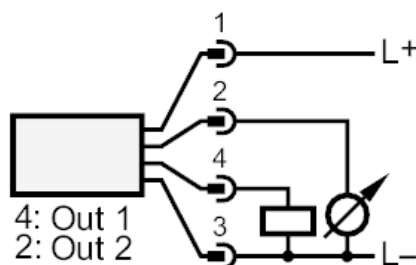
Pack quantity	1 pcs.
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Electrical connection

Connector: 1 x M8; coding: A; Contacts: 4, gold-plated



Connection



OUT1	Switching output IO-Link
OUT2	analog output