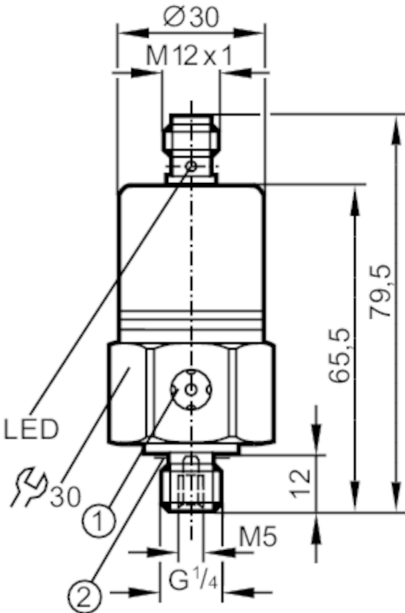


PP7554



Pressure switch with ceramic measuring cell

PP-010-RBG14-QFPKG/US/ IV



- 1 ventilation
- 2 Sealing



Application			
Media	liquids and gases		
Medium temperature [°C]	-25...90		
Pressure rating	75 bar	1087 psi	7.5 MPa
Min. bursting pressure	150 bar	2175 psi	15 MPa
Type of pressure	relative pressure		
Electrical data			
Operating voltage [V]	9.6...36 DC; (communication mode: 18...32)		
Current consumption [mA]	< 45		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Power-on delay time [s]	0.3		
Inputs / outputs			
Number of inputs and outputs	Number of digital outputs: 2		



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Outputs			
Total number of outputs	2		
Output signal	switching signal; IO-Link; (configurable)		
Electrical design	PNP		
Number of digital outputs	2		
Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	250		
Switching frequency DC [Hz]	170		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	-1...10 bar	-14.5...145 psi	-0.1...1 MPa
Set point SP	-0.9...10 bar	-13...145 psi	-0.09...1 MPa
Reset point rP	-0.95...9.95 bar	-14...144 psi	-0.095...0.995 MPa
In steps of	0.05 bar	1 psi	0.005 MPa
Factory setting		SP1 = 2.50 bar	rP1 = 2.30 bar
		SP2 = 7.50 bar	rP2 = 7.30 bar
		OUT1 = Hno	OUT2 = Hno
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]	< ± 0,1		
Long-term stability [% of the span]	< ± 0,1; (per year)		
Temperature coefficient zero point [% of the span / 10 K]	0,2; (0...80 °C)		
Temperature coefficient span [% of the span / 10 K]	0,2; (0...80 °C)		
Response times			
Response time [ms]	< 3		
Damping for the switching output dAP in steps [s]	0,003 - 0,006 - 0,010 - 0,017 - 0,060 - 0,125 - 0,250 - 0,500		



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Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.0	
IO-Link device ID	6 d / 00 00 06 h	
Profiles	no profile	
SIO mode	yes	
Required master port type	A	
Process data analogue	1	
Process data binary	2	
Min. process cycle time [ms]	2.3	
Operating conditions		
Ambient temperature [°C]	-25...85	
Storage temperature [°C]	-40...100	
Protection	IP 68; (7 days / 1 m water depth / 0.1 bar)	
Tests / approvals		
EMC	noise immunity	EN 61000-6-2
	EN 61000-4-2 ESD	4 kV contact discharge / 15 kV air discharge
	EN 61000-4-3 HF radiated	20 V/m
	EN 61000-4-4 Burst	4 kV coupling clamp
	EN 61000-4-5 Surge	0,5 kV supply / 1 kV signal for DC units
	EN 61000-4-6 HF conducted	10 V
	noise immunity	according to the automotive directive 1995/54/EC / 04/104EG / 05/83/EG
	absorber chamber test to ISO 11452-2:	80 V/m
	EN 50155	Klasse T3, C1, S1
Shock resistance	DIN IEC 60068-2-27 / DIN IEC 60068-2-29	1000 g
	DIN EN 61373	category 3
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
	DIN EN 60068-2-64	14 g
	DIN EN 61373	category 2
MTTF [years]	310	
Mechanical data		
Weight [g]	226.6	
Materials	stainless steel (1.4301 / 304); FKM; EPDM/X; PA	
Materials (wetted parts)	stainless steel (1.4305 / 303); ceramics; FKM	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1/4 external thread internal threadM5	
Displays / operating elements		
Display	operation	2 x LED, green
	switching status	2 x LED, yellow
Teach function	yes	
Remarks		
Remarks	with reference to UL: "limited voltage" with overcurrent protection in accordance with UL508	
Pack quantity	1 pcs.	

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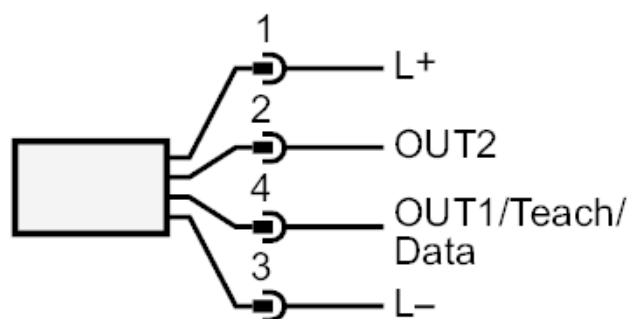
PP-010-RBG14-QFPKG/US/ IV

Electrical connection

Connector: 1 x M12



Connection



OUT1	switching output
OUT2	switching output
	Diagnostic output