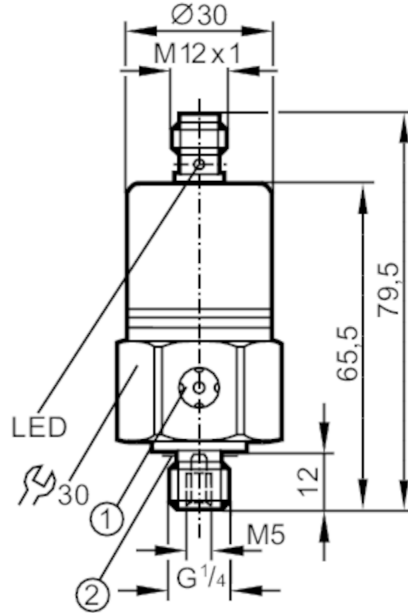


PP7553



Pressure switch with ceramic measuring cell

PP-025-RBG14-QFPKG/US/ IV



- 1 ventilation
- 2 Sealing



Application

Media	liquids and gases		
Medium temperature [°C]	-25...90		
Pressure rating	150 bar	2175 psi	15 MPa
Min. bursting pressure	350 bar	5075 psi	35 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		0...25 bar	0...363 psi
			0...2.5 MPa
Set point SP		0.2...25 bar	4...362 psi
			0.02...2.5 MPa
Reset point rP		0.1...24.9 bar	2...360 psi
			0.01...2.49 MPa
In steps of		0.1 bar	2 psi
			0.01 MPa
Factory setting			SP1 = 6.3 bar
			rP1 = 5.8 bar
			SP2 = 18.8 bar
			rP2 = 18.3 bar
			OUT1 = Hno
			OUT2 = Hno
Accuracy / deviations			
Switch point accuracy		< ± 0,5	
	[% of the span]		
Repeatability		< ± 0,1; (with temperature fluctuations < 10 K)	
	[% of the span]		
Characteristics deviation		< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)	
	[% of the span]		
Hysteresis deviation		< ± 0,1	
	[% of the span]		
Long-term stability		< ± 0,1; (per year)	
	[% of the span]		
Temperature coefficient zero point		0,2; (0...80 °C)	
	[% of the span / 10 K]		
Temperature coefficient span		0,2; (0...80 °C)	
	[% of the span / 10 K]		
Response times			
Response time		< 3	
	[ms]		
Damping for the switching output dAP in steps		0,003 - 0,006 - 0,010 - 0,017 - 0,060 - 0,125 - 0,250 - 0,500	
	[s]		

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Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.0
IO-Link device ID		5 d / 00 00 05 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
	DIN IEC 60068-2-27 / DIN IEC 60068-2-29	1000 g
Shock resistance	DIN EN 61373	category 3
	DIN IEC 68-2-6	20 g (10...2000 Hz)
Vibration resistance	DIN EN 60068-2-64	14 g
	DIN EN 61373	category 2
MTTF	[years]	310
Mechanical data		
Weight	[g]	226
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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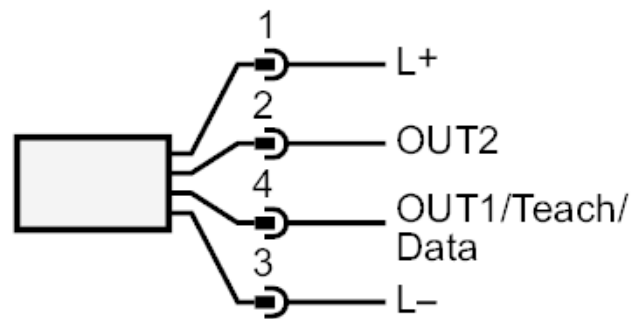
PP-025-RBG14-QFPKG/US/ IV

Electrical connection

Connector: 1 x M12



Connection



OUT1	switching output
OUT2	switching output
	Diagnostic output