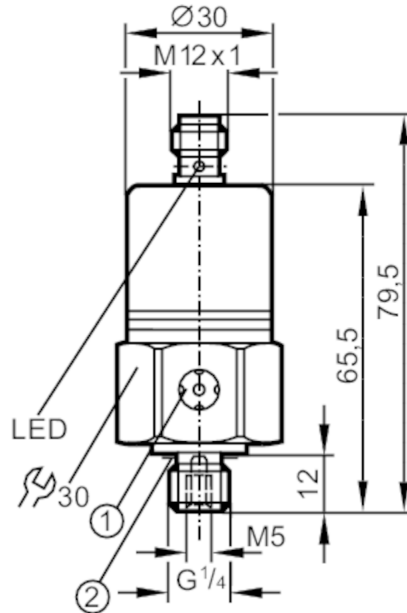


# PP7556



## Pressure switch with ceramic measuring cell

PP-2,5-RBG14-QFPKG/US/ IV



- 1 ventilation
- 2 Sealing



### Product characteristics

Output signal	switching signal; IO-Link; (configurable)			
Measuring range	0...2.5 bar	0...2500 mbar	0...36.3 psi	0...250 kPa
Process connection	threaded connection G 1/4 external thread internal thread M5			

### Application

Application	for industrial applications		
Media	liquids and gases		
Medium temperature [°C]	-25...90		
Pressure rating	20 bar	290 psi	2000 kPa
Min. bursting pressure	50 bar	725 psi	5000 kPa
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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## Pressure switch with ceramic measuring cell

PP-2,5-RBG14-QFPKG/US/ IV

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...2.5 bar	0...2500 mbar	0...36.3 psi	0...250 kPa
Set point SP	0.02...2.5 bar		0.4...36.2 psi	2...250 kPa
Reset point rP	0.01...2.49 bar		0.2...36 psi	1...249 kPa
In steps of	0.01 bar		0.2 psi	1 kPa
Factory setting			SP1 = 0.63 bar	rP1 = 0.58 bar
			SP2 = 1.88 bar	rP2 = 1.83 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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PP-2,5-RBG14-QFPKG/US/ IV

Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.0
IO-Link device ID		7 d / 00 00 07 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	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
	immunity	according to the automotive directive 1995/54/EC / 04/104EG / 05/83/EG
Shock resistance	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
Vibration resistance	DIN EN 61373	category 3
	DIN IEC 68-2-6	20 g (10...2000 Hz)
	DIN EN 60068-2-64	14 g
MTTF	[years]	310
Pressure Equipment Directive		Sound engineering practice; can be used for group 2 fluids; group 1 fluids on request
Mechanical data		
Weight	[g]	227
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
Restrictor element integrated		no (can be retrofitted)
Displays / operating elements		
Display	operation	2 x LED, green
	switching status	2 x LED, yellow
Teach function		yes

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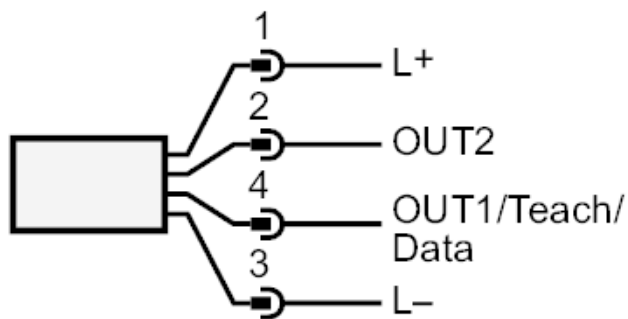
Remarks	
Remarks	with reference to UL: "limited voltage" with overcurrent protection in accordance with UL508
Pack quantity	1 pcs.

### Electrical connection

Connector: 1 x M12



### Connection



OUT1	switching output
OUT2	switching output
	Diagnostic output