

PP7544



Pressure switch with ceramic measuring cell

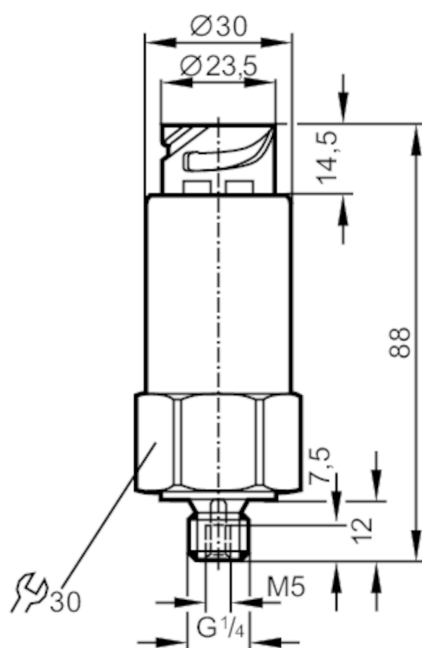
PP-010-RBG14-QFRKG/BS/ /N

Article no longer available - archive entry

Alternative articles: PP7554

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

Note: electrical connection of the replacement units via M12 socket.



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...10 bar	0...145 psi	0...1000 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; (on request: -40...90 °C)		
Min. bursting pressure	150 bar	2175 psi	15000 kPa
Pressure rating	50 bar	725 psi	5000 kPa
Type of pressure	relative pressure		

Electrical data

Operating voltage [V]	9.6...30 DC
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



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Inputs / outputs			
Number of inputs and outputs		Number of digital outputs: 2	
Outputs			
Total number of outputs		2	
Output signal		switching signal	
Electrical design		PNP/NPN	
Number of digital outputs		2	
Output function		normally open / closed; (configurable)	
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		yes (non-latching)	
Overload protection		yes	
Measuring/setting range			
Measuring range		0...10 bar	0...145 psi
Set point SP		0.1...9.99 bar	1...145 psi
Reset point rP		0.05...9.94 bar	1...144 psi
In steps of		0.01 bar	1 psi
			1 kPa
Accuracy / deviations			
Switch point accuracy [% of the span]		< ± 1,5	
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)	
Linearity deviation [% of the span]		< ± 0,5	
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]		< ± 0,3; (0...80 °C)	
Reaction times			
Response time [ms]		< 3	
Damping process value dAP [s]		0...4	
Software / programming			
Adjustment of the switch point		programming unit / teach function	



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Interfaces		
Communication interface	EPS	
Operating conditions		
Ambient temperature	[°C]	-40...90
Storage temperature	[°C]	-40...100
Protection	IP 68; (BFSL = Best Fit Straight Line; LS = limit value setting)	
Tests / approvals		
EMC	radiation of interference	according to the automotive directive 1995/54/EC
	noise immunity	according to the automotive directive 1995/54/EC annex IX
	HF radiated	150 V/m
	pulse resistance	ISO 7637
	supply	ISO 7637-2 (Pulse 1a, 1b, 2, 3a, 3b, 4, 6, 7)
	signal cables	ISO 7637-3 (Pulse a und b)
	noise immunity	EN 61000-6-2
	EN 61000-4-2 ESD	8/15 kV
	EN 61000-4-3 HF radiated	100 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
	Shock resistance	DIN IEC 60068-2-27 / DIN IEC 60068-2-29
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
Mechanical data		
Material	stainless steel (1.4301 / 304); FKM; PBT	
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 thread:M5	
Restrictor element integrated	no (can be retrofitted)	
Displays / operating elements		
Display	Power	LED, green
	Switching status	2 x LED, yellow
Teach function	yes	
Remarks		
Pack quantity	1 pcs.	

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Electrical connection

Connector: 1 x Bajonett

