



Pressure switch with ceramic measuring cell

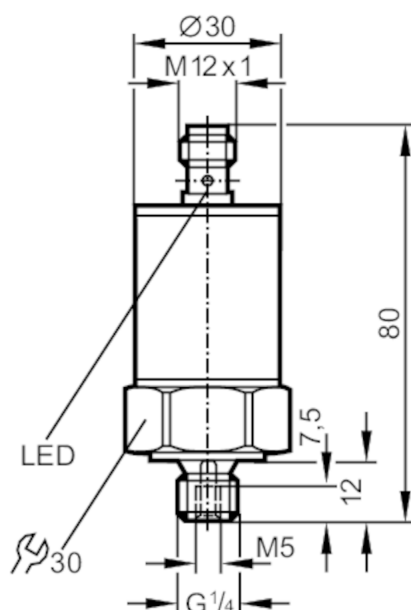
PP-100-SBG14-QFRKG/US/ IV

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Alternative articles: PP7552 or PP0522

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

PP755x = DC pnp, PP052x = DC npn



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...100 bar	0...1450 psi	0...10 MPa
Process connection	threaded connection G 1/4 external thread internal thread:M5		

Application

Special feature	Gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Conditionally suitable for	For gaseous media the application is limited to max. 25 bar.		
Medium temperature [°C]	-25...80		
Min. bursting pressure	650 bar	9400 psi	65 MPa
Pressure rating	300 bar	4350 psi	30 MPa
Type of pressure	relative pressure		

Electrical data

Operating voltage [V]	9.6...30 DC; (PP2000 with sensor: > 18)		
Current consumption [mA]	< 45		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		



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Power-on delay time	[s]	0.3	
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 / 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...100 bar	0...1450 psi 0...10 MPa
Set point SP		1...99.9 bar	10...1450 psi 0.1...0.99 MPa
Reset point rP		0.5...99.5 bar	10...1440 psi 0.05...9.95 MPa
In steps of		0.1 bar	10 psi 0.01 MPa
Accuracy / deviations			
Switch point accuracy	[X21]	< ± 1,5	
Repeatability	[X21]	< ± 0,1; (with temperature fluctuations < 10 K)	
Characteristics deviation	[X21]	< ± 0,25 (BFSL) / < ± 0,5 (LS); (BFSL = Best Fit Straight Line; LS = limit value setting)	
Linearity deviation	[X21]	< ± 0,5	
Hysteresis deviation	[X21]	< ± 0,1	
Long-term stability	[X21]	< ± 0,1; (per year)	
Temperature coefficient zero point	[X22]	< ± 0,2; (-25...80 °C)	
Temperature coefficient span	[X22]	< ± 0,3; (-25...80 °C)	
Response times			
Response time	[ms]	< 3	
Damping process value dAP	[s]	0...4	
Software / programming			
Adjustment of the switch point		programming unit / teach function	
Interfaces			
Communication interface		EPS	
Operating conditions			
Ambient temperature	[°C]	-25...80	
Storage temperature	[°C]	-40...100	
Protection		IP 67	

PP7022



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Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
Mechanical data		
Materials	stainless steel (1.4301 / 304); 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 thread:M5	
Restrictor element integrated	no (can be retrofitted)	
Displays / operating elements		
Display	operation	LED, green
	switching status	2 x LED, yellow
Teach function	yes	
Remarks		
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; coding: A; Contacts: gold-plated		
		



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Connection

