

PP7023



Pressure switch with ceramic measuring cell

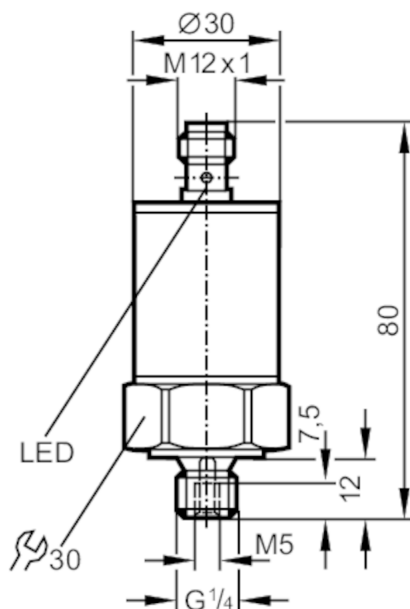
PP-025-SBG14-QFRKG/US/ IV

Article no longer available - archive entry

Alternative articles: PP7553 or PP0523

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...25 bar	0...363 psi	0...2.5 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		
Medium temperature [°C]	-25...80		
Min. bursting pressure	350 bar	5075 psi	35 MPa
Pressure rating	100 bar	1450 psi	10 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		
Power-on delay time [s]	0.3		



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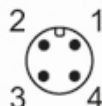
Inputs / outputs			
Number of inputs and outputs		Number of digital outputs: 2	
Outputs			
Total number of outputs		2	
Output signal		switching signal	
Electrical design		PNP/NPN	
Number of digital outputs		2	
Output function		normally open / normally closed; (parameterisable)	
Max. voltage drop switching 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 psi0...2.5 MPa
Set point SP		0.3...25 bar	4...363 psi0.03...2.5 MPa
Reset point rP		0.2...24.9 bar	2...362 psi0.02...2.49 MPa
In steps of		0.1 bar	1 psi0.01 MPa
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; (-25...80 °C)	
Temperature coefficient span [% of the span / 10 K]		< ± 0,3; (-25...80 °C)	
Response times			
Response time [ms]		< 3	
Damping for the switching output 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]	-25...80
Storage temperature	[°C]	-40...100
Protection	IP 67	
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; Contacts: gold-plated		
		



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Connection

