

PP7543



Pressure switch with ceramic measuring cell

PP-025-SBG14-QFRKG/BS/ /N

Article no longer available - archive entry

Alternative articles: PP7553

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...25 bar	0...363 psi	0...2.5 MPa
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	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		
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		



Pressure switch with ceramic measuring cell

PP-025-SBG14-QFRKG/BS/ /N

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 psi 0...2.5 MPa
Set point SP		0.3...25 bar	4...363 psi 0.03...2.5 MPa
Reset point rP		0.2...24.9 bar	2...362 psi 0.02...2.49 MPa
In steps of		0.1 bar	1 psi 0.01 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; (0...80 °C)	
Temperature coefficient span [% of the span / 10 K]		< ± 0,3; (0...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	



Pressure switch with ceramic measuring cell

PP-025-SBG14-QFRKG/BS/ /N

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
	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)
	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	1000 g
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
Mechanical data		
Materials		stainless steel (304/1.4301); FKM; PBT
Materials (wetted parts)		stainless steel (303/1.4305); 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.

Pressure switch with ceramic measuring cell

PP-025-SBG14-QFRKG/BS/ /N

Electrical connection

Connector: 1 x Bajonett

