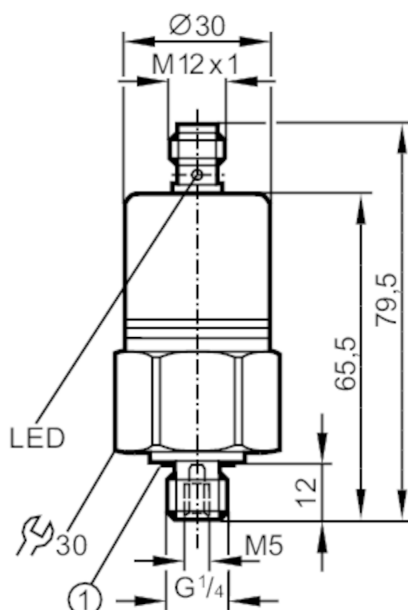


PP-100-SBG14-QFPKG/US/ IV



1 Sealing



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Pressure switch with ceramic measuring cell

PP-100-SBG14-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...100 bar	0...1450 psi	0...10 MPa	
Set point SP	1...100 bar	20...1450 psi	0.1...10 MPa	
Reset point rP	0.5...99.5 bar	10...1440 psi	0.05...9.95 MPa	
In steps of	0.5 bar	10 psi	0.05 MPa	
Factory setting		SP1 = 25.0 bar	rP1 = 23.0 bar	
		SP2 = 75.0 bar	rP2 = 73.0 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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Pressure switch with ceramic measuring cell

PP-100-SBG14-QFPKG/US/ IV

Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.0
IO-Link device ID		4 d / 00 00 04 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	noise 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
	noise immunity	according to the automotive directive 1995/54/EC / 04/104EG / 05/83/EG
	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
Shock resistance		DIN EN 61373
		category 3
Vibration resistance		DIN IEC 68-2-6
		20 g (10...2000 Hz)
		DIN EN 60068-2-64
		14 g
		DIN EN 61373
		category 2
MTTF	[years]	310
Mechanical data		
Weight	[g]	85
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
Displays / operating elements		
Display	operation	2 x LED, green
	switching status	2 x LED, yellow
Teach function		yes
Remarks		
Remarks		with reference to UL: "limited voltage" with overcurrent protection in accordance with UL508
Pack quantity		1 pcs.

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Pressure switch with ceramic measuring cell

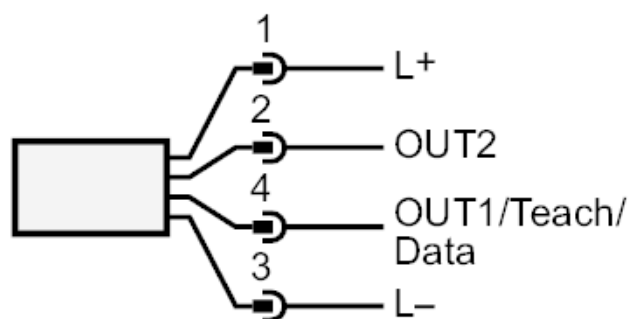
PP-100-SBG14-QFPKG/US/ IV

Electrical connection

Connector: 1 x M12



Connection



OUT1	switching output
OUT2	switching output
	Diagnostic output