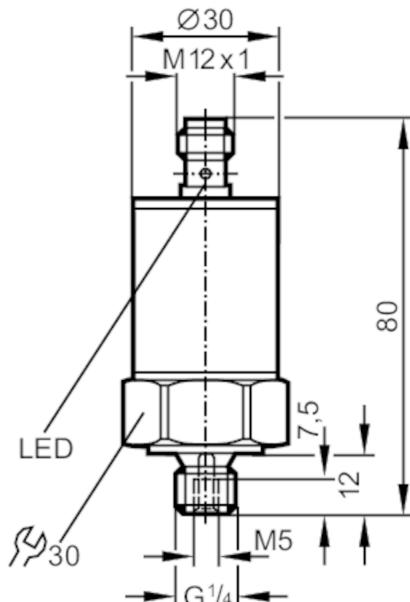


Pressure switch with ceramic measuring cell

PD-2,5-RBG14-QFRKG/US/ /E

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Product characteristics

Number of inputs and outputs	Number of digital outputs: 2		
Measuring range	0...2.5 bar	0...36.3 psi	0...250 kPa
Process connection	threaded connection G 1/4 external thread		

Application

Special feature	Gold-plated contacts		
Application	for industrial applications		
Media	liquids and gases		
Cannot be used for	oils		
Medium temperature [°C]	50	725	5000 kPa
Min. bursting pressure	20 bar	290 psi	2000 kPa
Pressure rating			
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		

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 2		
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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	
Short-circuit protection		yes	
Type of short-circuit protection		pulsed	
Overload protection		yes	
Measuring/setting range			
Measuring range	0...2.5 bar	0...36.3 psi	0...250 kPa
Set point SP	0.02...2.5 bar	0.4...36.3 psi	2...250 kPa
Reset point rP	0.01...2.49 bar	0.2...36.2 psi	1...249 kPa
In steps of	0.01 bar	0.1 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; (-25...80 °C)
Temperature coefficient span	[% of the span / 10 K]		< ± 0,3; (-25...80 °C)
Response times			
Response time	[ms]		< 3
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	

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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 (304/1.4301); PA
Materials (wetted parts)	stainless steel (303/1.4305); ceramics; EPDM
Min. pressure cycles	100 million
Process connection	threaded connection G 1/4 external thread

Displays / operating elements

Display	operation	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 M12; coding: A; Contacts: gold-plated



Connection

