

# PP7021

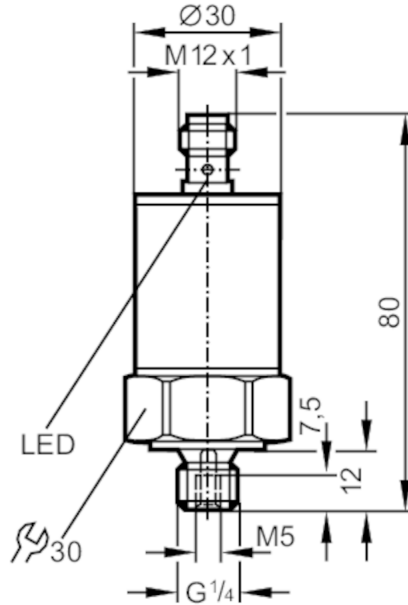


## Pressure switch with ceramic measuring cell

PP-250-SBG14-QFRKG/US / IV

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Alternative article: PP7551 or PP0521 When selecting an alternative article and accessories please note that technical data may differ!; PP755x = DC pnp, PP052x = DC npn – When selecting an alternative article and accessories please note that technical data may differ!



### Application

Media	liquids and gases		
Conditionally suitable for	For gaseous media the application is limited to max. 25 bar.		
Medium temperature [°C]	-25...80		
Pressure rating	400 bar	5800 psi	40 MPa
Min. bursting pressure	850 bar	12300 psi	85 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		

### 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 / closed; (configurable)		
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	yes (non-latching)		
Overload protection	yes		
Measuring/setting range			
Measuring range	0...250 bar	0...3630 psi	0...25 MPa
Set point SP	3...250 bar	40...3630 psi	0.3...25 MPa
Reset point rP	2...249 bar	20...3610 psi	0.2...24.9 MPa
in steps of	1 bar	10 psi	0.1 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)		
Reaction 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		
Interfaces			
Communication interface	EPS		

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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	
Material	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

Displays / operating elements		
Display	Power	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



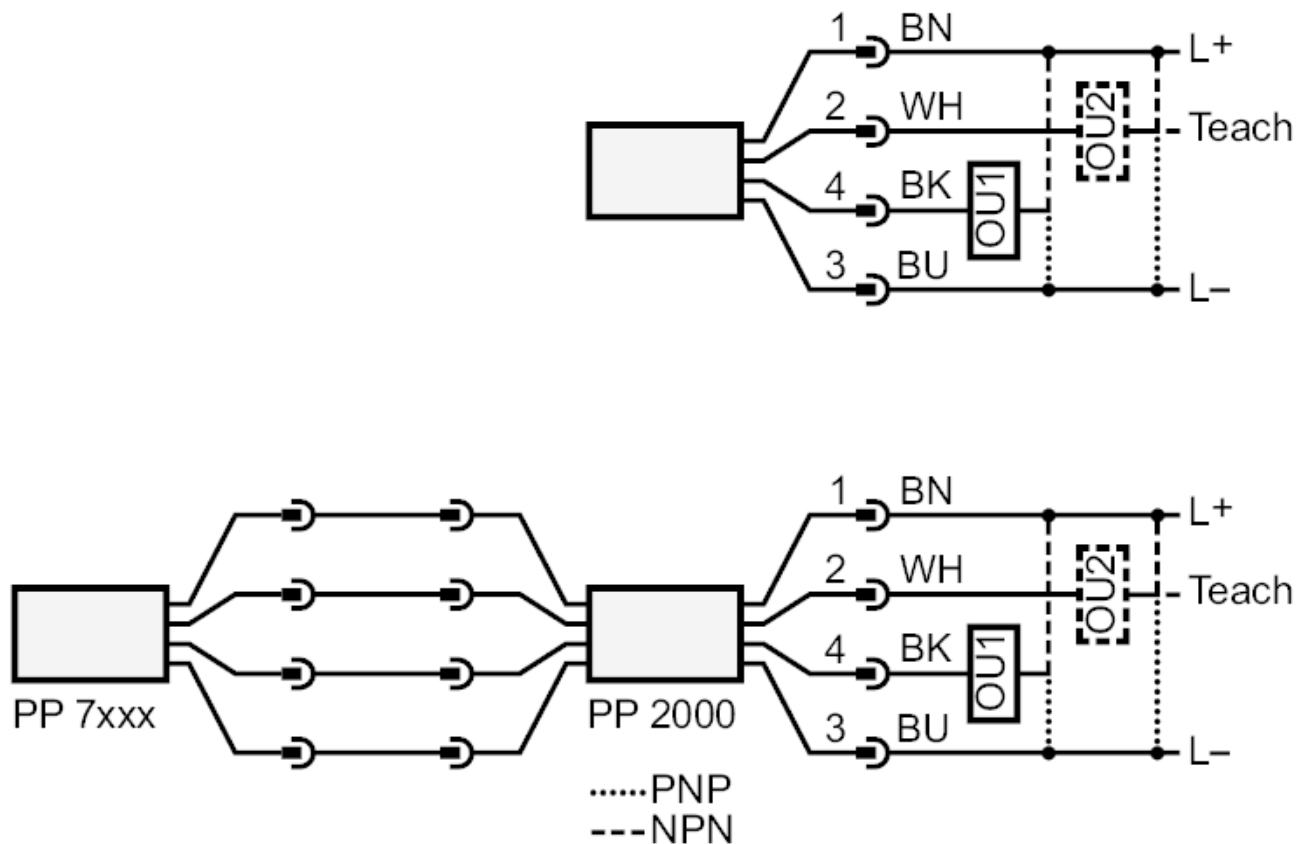
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