

no longer available - archive entry Alternative article: PP7553 or PP0523

PP755x = DC pnp

PP052x = DC npn

When selecting an alternative article and accessories please note that technical data may differ!

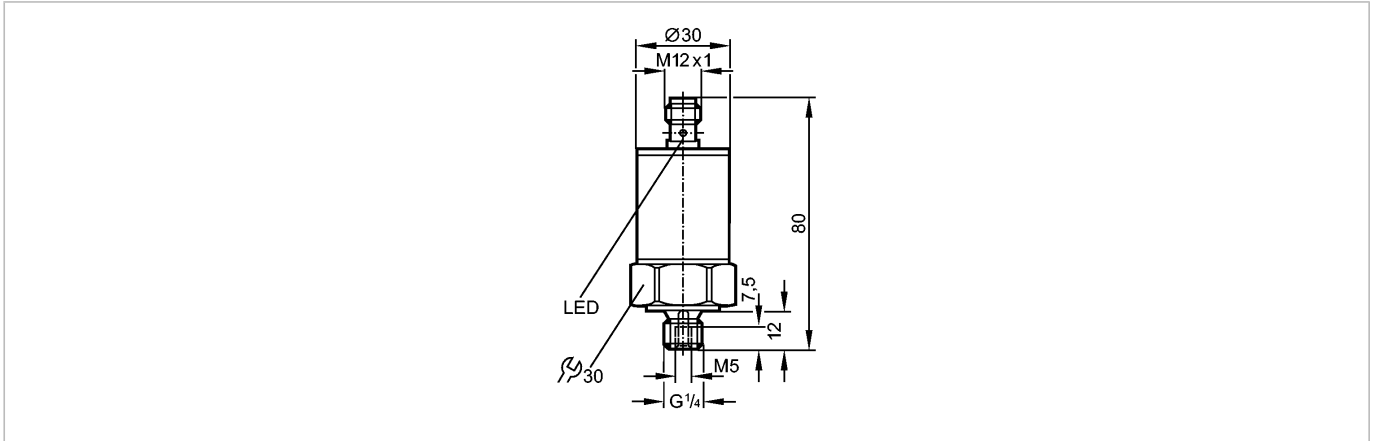
efectorsoo

PP7023



PP-025-SBG14-QFRKG/US/ IV

Pressure sensors



Product characteristics

Electronic pressure sensor

Quick disconnect

Programmable via EPS interface

Adjustment of the switch point by teach function

Process connection: G ¼ A / M5 I

2 switching outputs or
1 switching output
+ 1 teach input

Measuring range: 0...25 bar / 0...363 psi / 0...2.5 MPa

Application

Application

Type of pressure: relative pressure
Liquids and gases

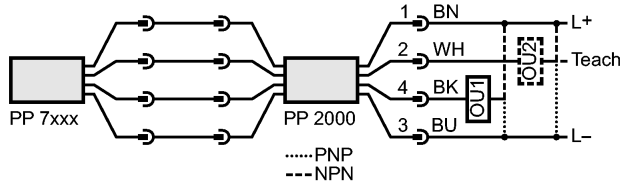
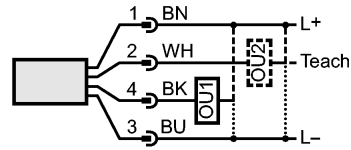
Pressure rating	100 bar	1450 psi	10 MPa
Bursting pressure min.	350 bar	5075 psi	35 MPa
Medium temperature [°C]	-25...80		
Electrical data	DC PNP/NPN		
Electrical design	9.6...30 DC 1)		
Operating voltage [V]	< 45		
Current consumption [mA]	> 100 (500 V DC)		
Insulation resistance [MΩ]	III		
Protection class	yes		
Reverse polarity protection	2 switching outputs or 1 switching output + 1 teach input		
Outputs	2 x normally open / closed programmable		
Output function	2 x 250		
Current rating [mA]	< 2		
Voltage drop [V]	yes (non-latching)		
Short-circuit protection	yes		
Overload protection	≤ 170		
Switching frequency [Hz]	0...25 bar	0...363 psi	0...2.5 MPa
Measuring / setting range			
Measuring range			

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Setting range			
Set point, SP	0.3...25.0 bar	4...363 psi	0.03...2.50 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			
Accuracy / deviations (in % of the span)			
Switch point accuracy	< ± 1.5		
Characteristics deviation *)	< ± 0.25 (BFSL) / < ± 0.5 (LS)		
Linearity	< ± 0.5		
Hysteresis	< ± 0.1		
Repeatability **)	< ± 0.1		
Long-term stability ***)	< ± 0.1		
Temperature coefficients (TEMPCO) in the temperature range -25...80° C (in % of the span per 10 K)			
Greatest TEMPCO of the zero point	< ± 0.2		
Greatest TEMPCO of the span	< ± 0.3		
Reaction times			
Power-on delay time [s]	0.3		
Min. response time switching output [ms]	3		
Damping for the switching output (dAP) [s]	0...4		
Software / programming			
Adjustment of the switch point	programming unit / teach function		
Environment			
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			
Process connection	G ¼ A / M5 I		
Materials (wetted parts)	stainless steel (303S22); ceramics; FPM (Viton)		
Housing materials	stainless steel (304S15); PA		
Switching cycles min.	100 million		
Weight [kg]	0.198		
Displays / operating elements			
Display	Power	LED green	
	Switching status	2 x LED yellow	
Electrical connection			
Connection	M12 connector; gold-plated contacts		
Wiring			

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Pin connection when delivered:
 Pin 2 = Teach input
 Pin 4 = switching output/
 communication with the
 programming unit (e.g. PP2000)



Remarks
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- 1) Operating voltage for PP2000 with sensor: min. 18 V DC
- *) BFSL = Best Fit Straight Line / LS = Limit Value Setting
- ***) with temperature fluctuations < 10 K
- ***) in % of the span per year

Pack quantity [piece]

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