

no longer available - archive entry Alternative article: PP7550 or PP0520

PP755x = DC pnp

PP052x = DC npn

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

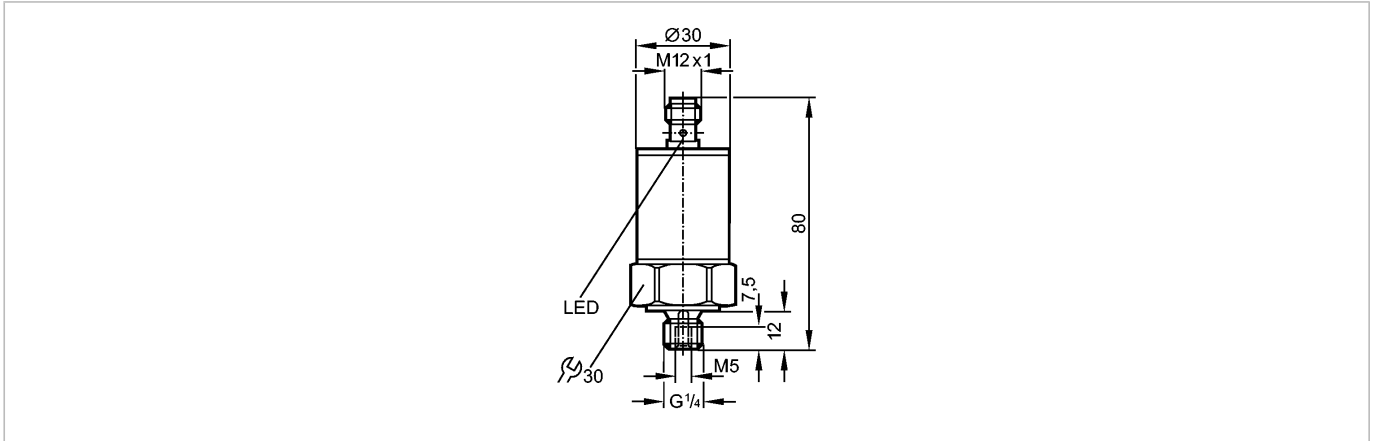
efectorsoo

PP7020



PP-400-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...400 bar / 0...5800 psi / 0...40 MPa

Application

Application

Type of pressure: relative pressure

Liquids and gases

For gaseous media the application is limited to max. 25 bar

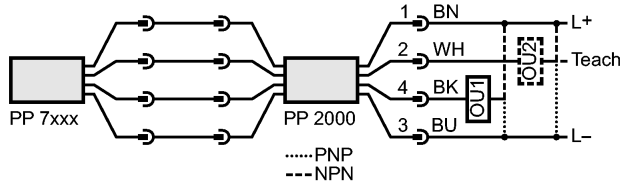
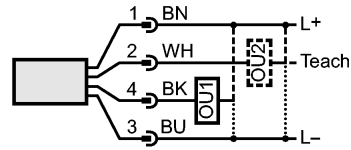
Pressure rating	600 bar	8700 psi	60 MPa
Bursting pressure min.	1000 bar	14500 psi	100 MPa
Medium temperature [°C]	-25...80		
Electrical data	DC PNP/NPN		
Electrical design	DC PNP/NPN		
Operating voltage [V]	9.6...30 DC ¹⁾		
Current consumption [mA]	< 45		
Insulation resistance [MΩ]	> 100 (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Outputs	2 switching outputs or 1 switching output + 1 teach input		
Output function	2 x normally open / closed programmable		
Current rating [mA]	2 x 250		
Voltage drop [V]	< 2		
Short-circuit protection	yes (non-latching)		
Overload protection	yes		
Switching frequency [Hz]	≤ 170		
Measuring / setting range			

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Measuring range	0...400 bar	0...5800 psi	0...40 MPa
Setting range			
Set point, SP	4...400 bar	60...5800 psi	0.4...40.0 MPa
Reset point, rP	2...398 bar	30...5770 psi	0.2...39.8 MPa
in steps of	1 bar	10 psi	0.1 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]	0.2		
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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