

no longer available - archive entry replaced by: PP7554  
 Note: electrical connection of the replacement units via M12 socket.

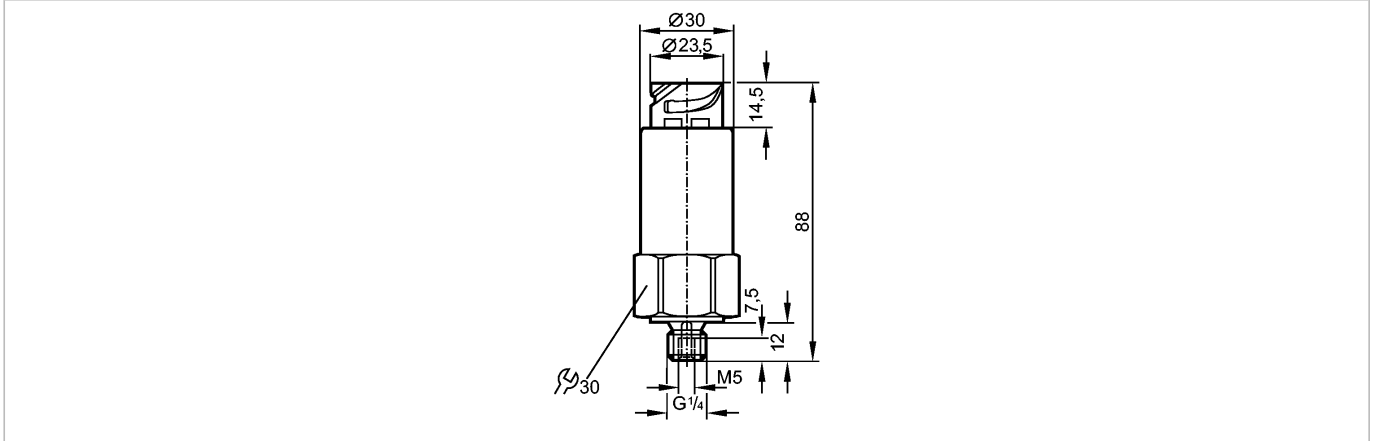
**efectorsoo**

PP7544



PP-010-RBG14-QFRKG/BS/ /N

Pressure sensors



Product characteristics

Electronic pressure sensor

Quick disconnect

Programmable via EPS interface

Adjustment of the switch point by teach function

Process connection: G 1/4 A / M5 I

2 switching outputs or

1 switching output

+ 1 teach input

Measuring range: 0...10 bar / 0...145 psi / 0...1000 kPa

Application

Application

Type of pressure: relative pressure

Liquids and gases

Pressure rating	50 bar	725 psi	5000 kPa
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Bursting pressure min.	150 bar	2175 psi	15000 kPa
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Medium temperature [°C]	-25...90****)		
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Electrical data

Electrical design

DC PNP/NPN

Operating voltage [V]	9.6...30 DC		
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Current consumption [mA]	< 45		
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Insulation resistance [MΩ]	> 100 (500 V DC)		
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Protection class	III		
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Reverse polarity protection	yes		
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Outputs

Output

2 switching outputs or

1 switching output

+ 1 teach input

Output function	2 x normally open / closed programmable		
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Current rating [mA]	2 x 250		
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Voltage drop [V]	< 2		
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Short-circuit protection	yes (non-latching)		
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Overload protection	yes		
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Switching frequency [Hz]	≤ 170		
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Measuring / setting range

Measuring range	0...10 bar	0...145 psi	0...1000 kPa
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Setting range			
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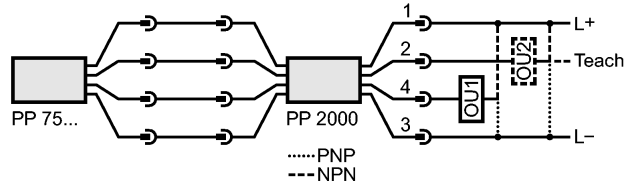
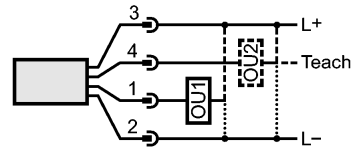
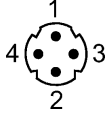
Set point, SP	0.10...9.99 bar	1...145 psi	10...999 kPa
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**PP7544 - Electronic pressure sensor - eclass: 27201302 / 27-20-13-02**

Reset point, rP	0.05...9.94 bar	1...144 psi	5...994 kPa
in steps of	0.01 bar	1 psi	1 kPa
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 0...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]	-40...90		
Storage temperature [°C]	-40...100		
Protection	IP 68 *) / IP 69K		
Tests / approvals			
EMC	radiation of interference	according to the automotive directive 95/54/EC	
	noise immunity	according to the automotive directive 95/54/EC annex IX	
	HF radiated	150 V/m	
	pulse resistance	according to ISO 7637	
	supply	according to ISO 7637-2 (pulses 1a, 1 b, 2, 3a, 3 b, 4, 6, 7)	
	signal cables	according to ISO 7637-3 (pulses a and b)	
	noise immunity	according to EN 61000-6-2	
	EN 61000-4-2 ESD:	8/15 kV	
	EN 61000-4-3 HF radiated:	100 V/m	
	EN 61000-4-4 Burst:	2 kV	
	EN 61000-4-6 HF conducted:	10 V	
Shock resistance	DIN IEC 60068-2-27 / DIN IEC 60068-2-29:	1000 g	
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); FPM (Viton); PBT		
Switching cycles min.	100 million		
Weight [kg]	0.263		
Displays / operating elements			
Display	Power	LED green	
	Switching status	2 x LED yellow	
Electrical connection			
Connection	bayonet connector DIN72585, 4 poles keyed - arrangement 1		
<b>Wiring</b>			

**PP7544 - Electronic pressure sensor - eclass: 27201302 / 27-20-13-02**

Pin connection when delivered:  
 Pin 4 = Teach input  
 Pin 1 = switching output/  
 communication with the  
 programming unit (e.g. PP2000)



Remarks  
 Remarks

- \*) 7 days / 1 m water depth / 0.1 bar
- \*) BFSL = Best Fit Straight Line / LS = Limit Value Setting
- \*\*\*) with temperature fluctuations < 10 K
- \*\*\*\*) in % of the span per year
- \*\*\*\*) -40...90 °C upon request

Pack quantity [piece]

1

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