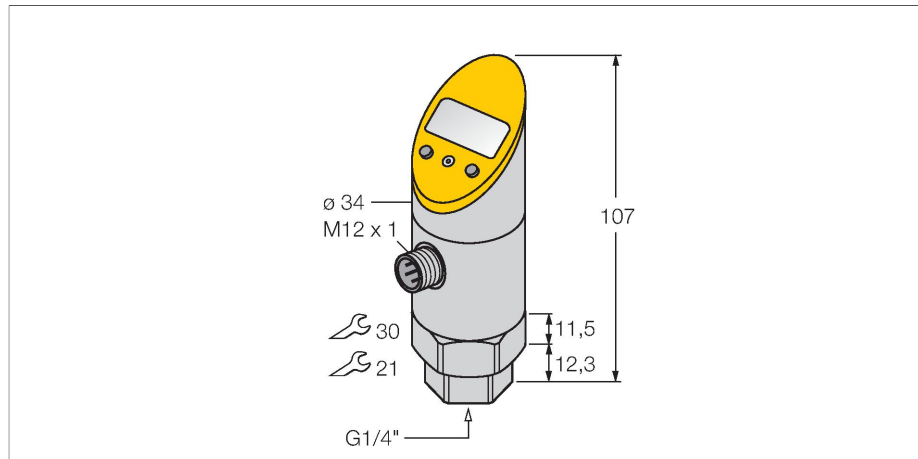


PS003R-501-2UP8X-H1141

Pressure Transmitter (Rotatable) – 2 PNP Transistor Switching Outputs



Features

- Housing is rotatable after plugging the process connection
- Reading of adjusted values without tool
- Recessed pushbutton and keylock for secure programming
- Permanent indication of pressure (bar, psi, kPa, MPa, misc)
- Peak pressure memory
- Pressure range 0...2.5 bar rel.

Wiring diagram



Technical data

Type	PS003R-501-2UP8X-H1141
ID	6831811
Pressure type	Relative pressure
Pressure range	0...2.5 bar
	0...36.26 psi
	0...0.25 MPa
Admissible overpressure	≤ 7 bar
Burst pressure	≥ 7 bar
Response time	< 3 ms
Power supply	
Operating voltage U_B	18...30 VDC
Current consumption	≤ 50 mA
Voltage drop at I_B	≤ 2 V
Protective measure	SELV; PELV according to EN 50178
Short-circuit/reverse polarity protection	yes / yes
Protection class	IP67 IP69K
Insulation class	III
Outputs	
Output 1	Switching output
Output 2	Switching output
Switching output	
Output function	NO/NC, PNP
Rated operational current	0.2 A
Switching frequency	≤ 180 Hz

Functional principle

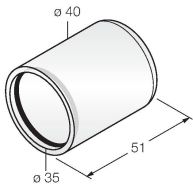
The pressure sensors in the PS product series operate with ceramic measuring cells. As a result of the pressure acting on the ceramic substrate, a signal that is proportional to the pressure is generated and processed electronically. The processed signal is available either as a switching or an analog output signal, depending on the sensor type used. Maximum flexibility thanks to a rigid or rotatable sensor body, a variety of thread types, front-flush or dead-space-free pressure membranes and an accuracy of 0.5 % of full scale guarantee a safe connection to the process.

Technical data

Switching point distance	≥ 0.5 %
Switch point:	(Min. + 0.005 × range)...100 % of full scale
Release point(s)	min up to (SP - 0.005 x range)
Switching cycles	≥ 100 mil.
Temperature behaviour	
Medium temperature	-40...+85 °C
Temperature coefficient zero point TK ₀	± 0.15 % of full scale/10 K
Temperature coefficient range TK _s	± 0.15 % of full scale/10 K
Environmental conditions	
Ambient temperature	-40...+80 °C
Storage temperature	-40...+80 °C
Vibration resistance	20 g (9...2000 Hz), according to IEC 68-2-6
Shock resistance	50 g (11 ms) acc. to IEC 68-2-27
EMV	EN 61000-4-2 ESD: 4 kV CD / 8 kV AD EN 61000-4-3 HF radiated: 15 V/m EN 61000-4-4 Burst: 2 kV EN 61000-4-5 Surge: 1000 V, 42 Ohm EN 61000-4-6 HF cable bound: 10 V
Mechanical data	
Housing material	Stainless-steel/Plastic, 1.4305 (AISI 303)
Pressure connection material	Stainless steel 1.4305 (AISI 303)
Material pressure transducer	Ceramic Al ₂ O ₃
Sealing material	FPM spez.
Process connection	G 1/4" female thread
Wrench size pressure connection / coupling nut	21/ 30
Electrical connection	Connector, M12 × 1
Max. tightening torque of housing nut	35 Nm
Reference conditions acc. to IEC 61298-1	
Temperature	15...+25 °C
Atmospheric pressure	860...1060 hPa abs.
Humidity	45...75 % rel.
Auxiliary power	24 VDC
Display	4-digit 7-segment display, rotatable by 180°, with switch-off function
Switching state	2 × LEDs, Yellow
Unit display	5 x LEDs green (bar, psi, kPa, MPa, misc)
Programming options	switch/release point, hysteresis/window mode, NO/NC contact, muting, unit of display, peak pressure memory

Accessories

PTS-COVER	A9350
Protective housing	



Accessories

Dimension drawing	Type	ID	
	WKC4.4T-2/TEL	6625025	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-2/TEL	6625013	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-2/TXL	6625503	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2/TXL	6625515	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	RKC4.4T-P7X2-10/TXL	6626184	Connection cable, M12 female connector, straight, 4-pin, LED, cable length: 10 m, jacket material: PUR, black; cULus approval