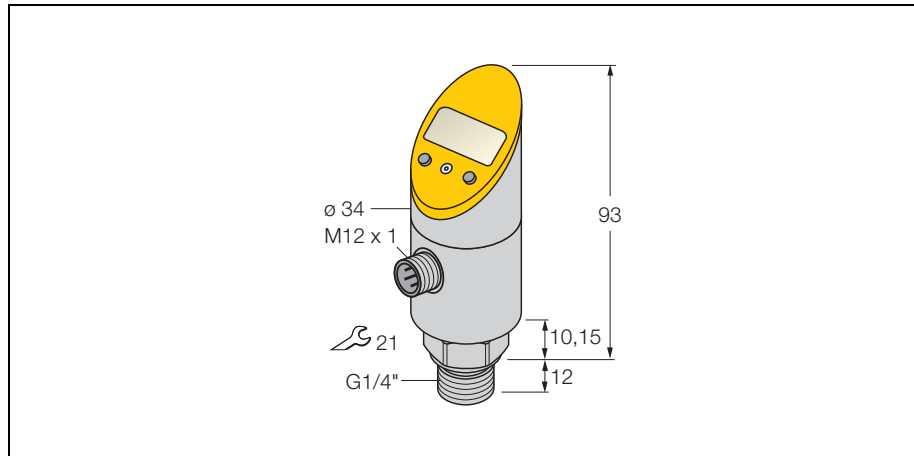
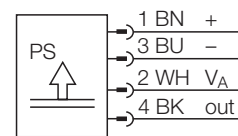


Pressure sensor (rigid)
1 transistor switching output pnp/npn and 1 analogue voltage output
PS001V-404-LUUPN8X-H1141



- rigid process connection- sensor not rotatable
- reading of the set values without tools
- programming protection via recessed push button and lock function
- permanent display of the pressure unit (bar, psi, kPa, MPa, misc...)
- peak pressure memory
- pressure range -1...1 bar

Wiring diagram



Type	PS001V-404-LUUPN8X-H1141
Ident-No.	6832564
Operating range	-1... 1bar
Admissible overpressure	≤ 3bar
Power supply	
Operating voltage	18... 30VDC
No-load current I ₀	≤ 50mA
Protective measure	SELV; PELV according to EN 50178
Short-circuit/reverse polarity protection	yes/ yes
Degree of protection and class	IP67/ III
Outputs	
Output 1 (PIN 4)	switching output
Output 2 (PIN 2)	analogue output
Switching output	
Output function	normally open / normally closed, PNP/NPN
Switching point accuracy	≤ ± 0.5% of full scale
Repeatability	≤ ± 0.1% of full scale
Voltage drop at I _e	≤ 2V
Rated operational current	0.2A
Switching frequency	≤ 180 Hz
Switching point distance	≥ 0.5%
Switch point:	1...100 % of full scale
Release point(s)	0.5...99.5 % of full scale
Analogue output	
Voltage output, programmable	0...10 V/0...5 V/1...6 V/10...0 V/5...0 V/6...1 V
Load	≥ 2kΩ
Accuracy (Lin. + Hys. + Rep.)	< ± 0.5% of full scale
Response time	< 3ms
Temperature behaviour	
Temperature coefficient zero point T _{k0}	≤ ± 0.15% of full scale / 10 K
Temperature coefficient span T _{kS}	≤ ± 0.15% of full scale / 10 K

general description

The pressure sensors of the PS series operate with piezo-resistive ceramic measuring cells. The pressure exerted on the ceramic carrier generates a pressure proportional signal which is then electronically processed. Depending on the sensor version, the processed signal is converted either into a switching or an analogue output. Maximum flexibility provided by a rigid or a rotatable sensor, numerous thread types, front-flush or dead-zone free pressure membrane and an accuracy of 0.5% of full scale guarantee a safe process connection

Ambient conditions	
Medium temperature	-40... 85°C
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) , according to IEC 61508

Pressure sensor (rigid) 1 transistor switching output pnp/npn and 1 analogue voltage output PS001V-404-LUUPN8X-H1141

Housing

Housing material	stainless-steel/plastic, 1.4305 (AISI 303)/PC
Pressure connection material	stainless steel A2 1.4305 (AISI 303)
Pressure transducer material	ceramic Al ₂ O ₃
Sealing material	FPM
Mechanical connection	G 1/4" male thread
Wrench size pressure connection / coupling nut	21
Connection	connectors, M12 x 1

Display

Display	4-digit 7-segment display, rotatable by 180°C, disengageable
Display switch state	LED yellow
Programming options	start/end value analogue output, switch/release points, PNP/NPN; N.O./N.C.; hysteresis/window mode, damping; pressure unit, peak pressure memory
Unit display	5 x LEDs green (bar, psi, kPa, MPa, misc)

EMC

EN 61000-4-2 ESD:4 kV CD / 8 kV AD
EN 61000-4-3 HF gestrahlt:15 V/m
EN 61000-4-4 Burst:2 kV
EN 61000-4-5 Surge: 500 V, 12 Ohm
EN 61000-4-6 HF conducted:10 V