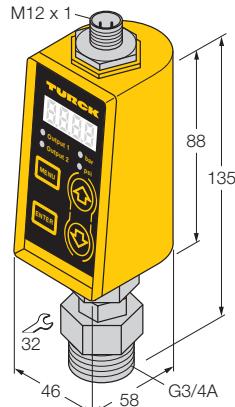


Pressure sensor with two transistor outputs

PC010-G3/4A1M-2APN8X-H1141



Type	PC010-G3/4A1M-2APN8X-H1141
Ident-No.	6831302

Operating range	0... 10 bar
Permitted overpressure	≤ 40 bar
Switch point SP1	0,7...10
Release point rP1	0,5...9,8
Hysteresis (switching distance)	2... 95 %
Switch point accuracy	≤ ± 2% of f.v.
Repeat accuracy	≤ ± 0,5% of f.v.
Zero shift	≤ 0,1% of f.v.
Medium temperature	-15... 80 °C
Operating temperature	-25 ...+ 80 °C

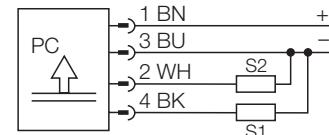
Rated operational voltage (DC) U_B	17... 33 VDC
No-load current I_0	≤ 80 mA
Switching frequency	≤ 50 Hz
Output function	PNP/NPN, programmable
Rated operational current (DC) I_e	0,2 A
Switching cycles	≥10 Mio.
Degree of protection	IP67

Housing material	metal/plastic, ZNAL4
Material pressure transducer	ceramic Al_2O_3
Material diaphragm	stainless steel A4 1.4571 (AISI 316 T)
Material diaphragm membrane	stainless steel A4 1.4435 (AISI 316 L)
Filling liquid diaphragm	white oil (FDA approval)
Reference temperature diaphragm	+20 °C
Mechanical connection	G3/4 external thread
Vibration resistance	5g(25...200Hz) / 35g(60...2000Hz); IEC 68-2-6
Shock	50 × g (11 ms), acc. according to IEC 68-2-27
Wiring	connector, M12 x 1

Measuring value/programming	LED, 4-digit 7-segment display
Indication unit	LEDs for indication of the output status and chosen pressure unit (bar/PSI)
Reaction time of the display type	3 modes: slow (1 % of f.v.); normal (0,5 % of f.v.); fast (update every 10 ms)

- robust metal housing with fitted pressure membrane
- Pressure membrane with G3/4 external thread
- peak pressure memory
- switch-off delay 5...500 ms
- sensor diagnostic function
- Short-circuit/reverse polarity protection
- pressure range 0...10 bar

Wiring diagram



Function principles

Electronic pressure sensors from TURCK work with piezo-resistive ceramic measuring cells. The deformation, which is caused by the pressure exerted on the measuring cell, is transferred to the thick-film resistors. Consequently, the resistance values of the resistors, which are integrated into a Wheatstone measuring bridge, change. This change in resistance is then processed electronically and displayed as a signal proportional to the pressure.