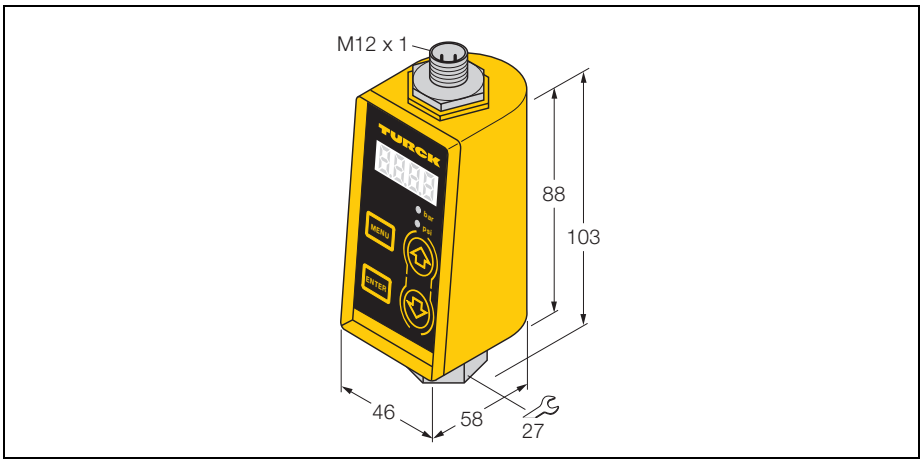
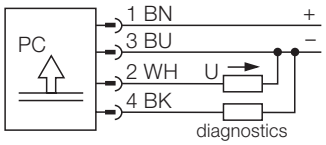
Pressure sensor
with analogue output 0...10 V
PC010-Gi1/4A1M-LU8X-H1141



Type	PC010-Gi1/4A1M-LU8X-H1141
Ident-No.	6831016
Operating range	0... 10 bar
Permitted overpressure	≤ 40 bar
Burst pressure	≥ 60 bar
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
Output function	analogue output
Voltage output	0... 10 V
Load	≤ 1 kΩ
Switching cycles	≥10 Mio.
Degree of protection	IP67
Housing material	metal, ZNAL4
Material pressure connection	stainless steel 1.4305 (AISI 303)
Material pressure transducer	ceramic Al_2O_3
Mechanical connection	G 1/4 interior thread
Vibration resistance	5g(25...200Hz) / 35g(60...2000Hz);IEC 68-2-6
Shock	50 x g (11 ms) , acc.ording 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 choosen 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**
- **peak pressure memory**
- **switch-off delay 5...500 ms**
- **sensor diagnostic function**
- **Short-circuit/reverse polarity protection**
- **UL and CSA approval**
- **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.

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