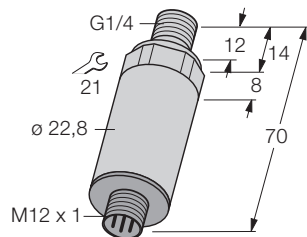
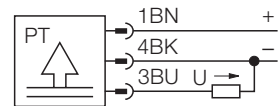


Pressure sensor pressure transmitter with voltage output PT100R-14-LU2-H1131



- compact and robust construction
- pressure connection with integrated peak pressure aperture
- minimum temperature influence on the accuracy across the entire temperature range -40...85°C
- excellent EMC properties
- Patented medium stop system to prevent medium leakage when the burst pressure is exceeded
- pressure range 0...100 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.

Type	PT100R-14-LU2-H1131
Ident-No.	6831427
Operating range	0... 100 bar
Permitted overpressure	≤ 250 bar
Accuracy (lin. + hys. + rep.)	< ± 0,3 % of f. v.
Adjustm. accuracy zero point/full scale	< ± 0,3 % of f. v.
Response time	< 2 ms
Temperature coefficient zero point T_{k0}	≤ ± 0,15 % of f. v./10 K
Temperature coefficient span T_{kS}	≤ ± 0,15 % of f. v./10 K
Medium temperature	-40... 85 °C
Ambient temperature	-40... 85 °C
Rated operational voltage (DC) U_B	8... 33 VDC
No-load current I_0	≤ 4 mA
Output function	analogue output
Voltage output	0... 10 V
Load	≥ 10 kΩ
Degree of protection	IP67
Housing material	metal, A2 1.4305 (AISI 303)
Material pressure connection	stainless steel 1.4305 (AISI 303)
Material pressure transducer	ceramic Al_2O_3
Seal	fluor caoutchouc
Mechanical connection	G1/4 external thread
Pressure connection spanner size	SW 21
Vibration resistance	20 x g (9...200 Hz, 2...9 Hz with amplit ±/-15 mm), according to IEC 68-2-6
Shock	75 x g (11 ms), acc.ording to IEC 68-2-27
Wiring	connector, M12 x 1