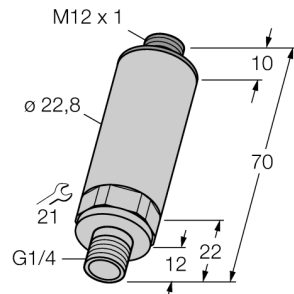
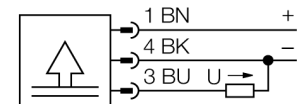


## Pressure transmitter with voltage output (3-wire) PT100R-14-LU2-H1131



- Compact and robust design
- Pressure connection with integrated peak pressure aperture
- Minimum influence of temperature on accuracy within the entire temperature range of  $-40\dots+125^{\circ}\text{C}$
- Excellent EMC properties
- Patented medium stop system, leakage protection in case of a burst
- Pressure range  $0\dots100$  bar

### Wiring diagram



### Functional principle

The pressure transmitters of the PT...-1 series operate with piezo-resistive ceramic measuring cells. The ceramic diaphragm is unbalanced in proportion to the pressure applied. Depending on the sensor type used, the processed signal is provided as an analog output signal  $4\dots20\text{mA}$  (2-wire) or  $0\dots10\text{V}$  (3-wire).

<b>Type code</b>	PT100R-14-LU2-H1131
Ident no.	6831427
<b>Relative pressure</b>	$0\dots100\text{bar rel.}$
Operating range	$0\dots1450\text{psi}$
Operating range	$0\dots10\text{MPa}$
Admissible overpressure	$\leq 250$ bar
Burst pressure	$\geq 1200$ bar
<b>Power supply</b>	
Operating voltage	$11.4\dots33\text{VDC}$
Protective measure	SELV according to EN 50178
Short-circuit/reverse polarity protection	yes/ yes
Protection type and class	IP67/ III
MTTF	760 years acc. to SN 29500 (Ed. 99) $40^{\circ}\text{C}$
<b>Outputs</b>	
Output 1	analog output
<b>Analogue output</b>	
Voltage output	$\geq 0\dots\leq 10\text{V}$
Operating range	$0\dots10$ V (3-wire)
Load	$\geq 10$ k $\Omega$
Accuracy LHR analog output	$\pm 0.3$ % of final value BSL
Calibration accuracy 0-point	0.3 % of final value
Calibration accuracy, of final value	0.3 % of final value
Response time	$< 3$ ms
<b>Temperature behaviour</b>	
Medium temperature	$-40\dots125^{\circ}\text{C}$
Temperature coefficient zero point $T_{s0}$	$\pm 0.15$ % of full scale / 10 K
Temperature coefficient span $T_{s\Delta}$	$\pm 0.15$ % of full scale / 10 K
<b>Ambient conditions</b>	
Ambient temperature	$-40\dots85^{\circ}\text{C}$
Storage temperature	$-40\dots+85^{\circ}\text{C}$
Vibration resistance	$20 \times g$ ( $9\dots2000$ Hz, $2\dots9$ Hz with an amplitude $\pm 15$ mm), acc. to IEC 68-2-6
Shock resistance	$100$ g (11 ms) , according to IEC 61508
<b>Housing</b>	
Housing material	stainless-steel/plastic, V2A (1.4305)
material pressure connection	stainless steel A2 1.4305 (AISI 303)
material pressure element	ceramics $\text{Al}_2\text{O}_3$
Sealing material	FPM
Process connection	G $\frac{1}{4}$ " male thread
Wrench size pressure connection / coupling nut	SW 21
Connection	male, M12 x 1

**Pressure transmitter  
with voltage output (3-wire)  
PT100R-14-LU2-H1131**

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**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

**Pressure transmitter  
with voltage output (3-wire)  
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**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	
WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	
RKC4.4T-2/TXL	6625503	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	
WKC4.4T-2/TXL	6625515	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	