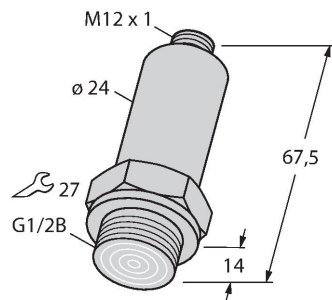


PT160R-29-LI3-H1140

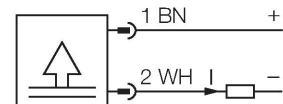
Pressure Transmitter, Front-Flush – With Current Output (2-Wire)



Features

- Compact and robust design
- Pressure connection with front-flush mounted stainless steel diaphragm
- Accuracy hardly affected by temperature within entire range
- Excellent EMC properties
- Pressure range 0...160 bar rel.

Wiring diagram



Technical data

Type	PT160R-29-LI3-H1140
ID	6831560
Pressure type	Relative pressure
Pressure range	0...160 bar
	0...2320.6 psi
	0...16 MPa
Admissible overpressure	≤ 320 bar
Burst pressure	≥ 640 bar
Response time	1 ms
Power supply	
Operating voltage U_B	9...30 VDC
Current consumption	≤ 4 mA
Protective measure	SELV according to EN 50178
Short-circuit/reverse polarity protection	yes / yes
Protection class	IP67
Insulation class	III
Outputs	
Output 1	Analog output
Output function	Analog output current
Analog output	
Current output	4...20 mA
Load	≤ 1.2 kΩ
Accuracy LHR	± 0.5 % FS BSL
Temperature behaviour	
Medium temperature	-25...+85 °C

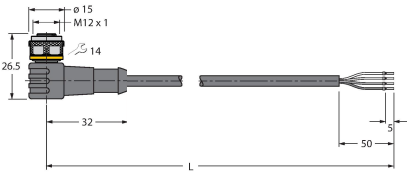
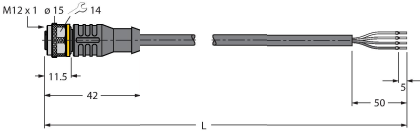
Functional principle

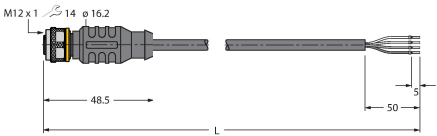
The pressure sensors of the PT ...-2 series operate with a thin-film measuring cell. The thin-film sensor is welded directly to the pressure connection, just like the housing. The processed signal is made available as analog output of 4...20 mA (2-wire).

Technical data

Temperature coefficient zero point TK ₀	± 0.3 % of full scale/10 K
Temperature coefficient range TK _s	± 0.3 % of full scale/10 K
Environmental conditions	
Ambient temperature	-25...+85 °C
Storage temperature	-25...+85 °C
Vibration resistance	3 x g (5-500-5 Hz, 10 cycles per axis, 1 oct/min), acc. to IEC 68-2-6
Shock resistance	30 g (11 ms) acc. to IEC 68-2-27
Mechanical data	
Housing material	Stainless steel, 1.4435 (AISI 316L)
Pressure connection material	Stainless steel 1.4435 (AISI 316L)
Material pressure transducer	Stainless steel 1.4548 (AISI 630)
Process connection	G 1/2" front-flush
Wrench size pressure connection / coupling nut	SW27
Electrical connection	Connector, M12 × 1
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
MTTF	acc. to SN 29500 (Ed. 99) 40 °C

Accessories

Dimension drawing	Type	ID	
	WKC4.4T-2/TEL	6625025	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-2/TEL	6625013	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

Dimension drawing	Type	ID	
	RKC4.4T-2/TXL	6625503	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2/TXL	6625515	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	RKC4.4T-P7X2-10/TXL	6626184	Connection cable, M12 female connector, straight, 4-pin, LED, cable length: 10 m, jacket material: PUR, black; cULus approval