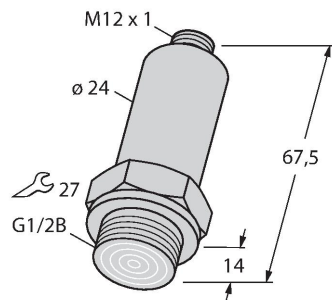


# PT400R-29-LI3-H1140

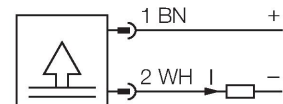
## Pressure Transmitter, Front-Flush – With Current Output (2-Wire)



### 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...400 bar rel.

### Wiring diagram



### Technical data

|                                           |                            |
|-------------------------------------------|----------------------------|
| Type                                      | PT400R-29-LI3-H1140        |
| ID                                        | 6831562                    |
| Pressure type                             | Relative pressure          |
| Pressure range                            | 0...400 bar                |
|                                           | 0...5801.51 psi            |
|                                           | 0...40 MPa                 |
| Admissible overpressure                   | ≤ 600 bar                  |
| Burst pressure                            | ≥ 1200 bar                 |
| Response time                             | 1 ms                       |
| <b>Power supply</b>                       |                            |
| 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                        |
| <b>Outputs</b>                            |                            |
| Output 1                                  | Analog output              |
| Output function                           | Analog output current      |
| <b>Analog output</b>                      |                            |
| Current output                            | 4...20 mA                  |
| Load                                      | ≤ 1.2 kΩ                   |
| Accuracy LHR                              | ± 0.5 % FS BSL             |
| <b>Temperature behaviour</b>              |                            |
| Medium temperature                        | -25...+85 °C               |

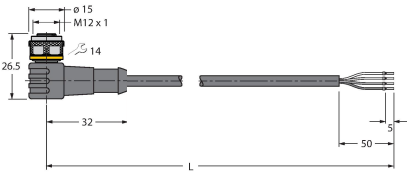
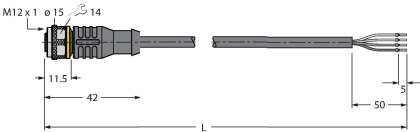
### Functional principle

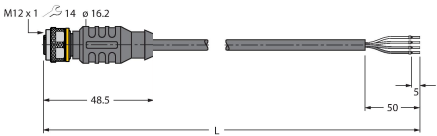
The pressure sensors of the PT ...-2 series operate with a thin-film measuring cell. The thin-film sensor is welded directly to the pressure connection, just like the housing. The processed signal is made available as analog output of 4...20 mA (2-wire).

Technical data

|                                                    |                                                                       |
|----------------------------------------------------|-----------------------------------------------------------------------|
| Temperature coefficient zero point TK <sub>0</sub> | ± 0.3 % of full scale/10 K                                            |
| Temperature coefficient range TK <sub>s</sub>      | ± 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 |