

New benchmark for precision even with turndown and temperature changes Pressure, level and volume transmitter L3

L3 Neo: new standards in accuracy

- Accuracy <0,10% and temperature effect <0,03%/10°C of the calibrated range
- Integrated tank linearization and density compensation
- Simple installation & operation through programming via display, on-site configuration, and Smart Replace Design

With its exceptional performance characteristics, the L3 is particularly suitable for **level and volume measurement**. This applies specifically for **smaller vessels or for high and changing process temperatures** for which pressure sensors were previously not considered precise enough.

- High accuracy: **Tank linearization with density compensation** for precise output of volume or mass (kg, l, %...)
- Compact & modular: **Simple, flexible installation** due to small size & on-site component replacement
- Flexible: Optional separate version with remote display for **optimum installation and easy monitoring even at inaccessible measuring points**
- Simple: **User-friendly display programming** for commissioning, configuration and maintenance

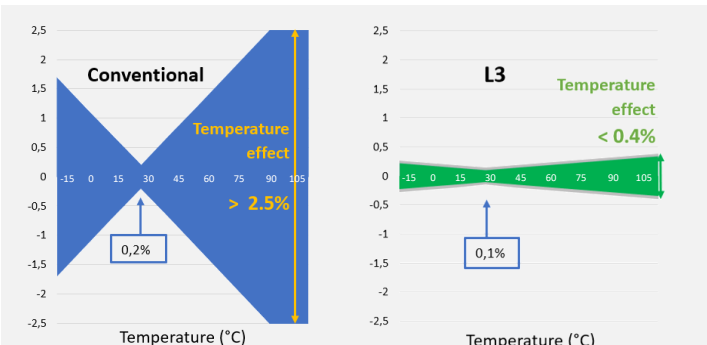
Measurement accuracy:

The accuracy of the L3 remains at 0.1% (5:1 turndown) or 0.15% (10:1 turndown).

Temperature effect:

Conventional sensors show a temperature drift of up to 0.4% per 10°C. At 110 °C, the **temperature effect is over 2.5%!**

The L3 shows a temperature drift of 0.03% per 10°C . At 110°C the **temperature effect is below 0.4%!**



Remote Version

Technical specifications at a glance

- High-precision hydrostatic level measurement in vessels and process pressure measurement in pipes
- Measuring range 0...0.4 | -1...2 | -1...7 | -1...35 bar, with selectable calibration range
- Range with Turndown 1:10 up to 0...0.04 bar
- Pressure measurement in tanks and pipes up to 110 °C; CIP / SIP cleaning up to 135° for max. 60 min.
- Protection class IP69K for highest reliability
- **Smart Replace Design:** easy replacement of all components just by plug and screw connections
- Now with IO-Link in Flex-Hybrid Technology

Customer experience / applications

- Hygienic pressure and level monitoring for processes in breweries, dairies and in the food and beverage industry
- Storage tank monitoring for CIP/SIP systems

Order code of fully assembled sensor

L3A Sensor assembled

- S** Standard Stem (AISI 316L, $R_a \leq 0.64 \mu\text{m} / 25 \mu\text{in}$)
- P** Pharmaceutical Stem (AISI 316L, $R_a \leq 0.2 \mu\text{m} / 8 \mu\text{in}$) with 3.1 inspection certificate and calibration certificate

URL

- 5** 0...6 psi, 0...0.4 bar, 0...166" w.c.
- 6** 30 "Hg/0/30 psi, -1...2 bar, -400...830" w.c.
- 7** 30 "Hg/0/100 psi, -1...7 bar, -400...2 770" w.c.
- 8** 30 "Hg/0/500 psi, -1...35 bar, -400...13 850" w.c.

3-A compliant fittings

- 002** Tri-Clamp® 3/4"
- 004** Tri-Clamp® 1½"
- 005** Tri-Clamp® 2"
- 006** Tri-Clamp® 2½"
- 007** Tri-Clamp® 3"
- 123** CPM Fitting*
- 088** Anderson Flush Mount Short (71060-A4, A6, A8)
- 089** Anderson Flush Mount Long (71060-A3, A5, A7, A9)
- 092** King Gage Flush Mount Long (1777-3)
- 093** King Gage Flush Mount Medium (1777-1, -6 Standard)
- 094** King Gage Flush Mount Short (1777-2 non-insulated)
- 141** Rosemount/Foxboro Sanitary Spud - short
- 142** Rosemount/Foxboro Sanitary Spud - long
- 154** Endress+Hauser Universal Adaptor - short
- 155** Endress+Hauser Universal Adaptor - long

Fittings not 3-A compliant

- 160** Flexibel thread G1", hygienic CLEANadapt
- 059** 1½" NPT
- 182** Fixed thread G1", hygienic CLEANadapt
- 109** 38 mm SMS Liner (female)
- 110** 51 mm SMS Liner (female)
- 115** Dairy flange DIN 11851 DN40
- 124** Dairy flange DIN 11851 DN50
- 180** M38x1.5
- 181** DRD flange 65 mm

*) Sensor is 3-A compliant when installed in a 3-A compliant instrument tee

Capillary fill

- 1** Mineral oil
- 5** Neobee® M-20

Sensor type

- 0** Integral (Compact version)
- A** Remote with 1.5 m = 5' cable
- B** Remote with 3.0 m = 10' cable
- C** Remote with 4.5 m = 15' cable
- D** Remote with 6.0 m = 20' cable
- E** Remote with 7.5 m = 25' cable
- F** Remote with 15 m = 50' cable

Output

- A** Analog and IO-Link
- G** Analog and HART

Cap

- 2** Clear
- 3** Stainless steel

Enclosure orientation

- 1** Vertical
- 2** Horizontal

Electrical connection

- A** M12 QDR
- C** Cable gland
- N** 1/2" NPTF Adaptor

Engineering units

- P** psi
- B** bar
- W** inches of water
- L** mbar

Calibration range

- 000** Full range of stem URL
- 999** Custom range
- XXX** see calibration range table

L3A S 5 004 1 0 A 2 1 A P 000