



Hygienic Pressure Measurement

Alfa Laval Pressure Transmitters

Application

The Alfa Laval pressure transmitter is designed to fulfill the demands of pressure measurement in sanitary and pharmaceutical production. It is suitable in filtration systems, pump systems, pressure vessels, valve matrices etc.

Main features:

- Long Term stability
- High overload capacity
- Good accuracy, 0.35 % of FS
- 4-20 mA output (3 or 2 wire)

Standard range

The Alfa Laval pressure transmitter range can be used with all media that are compatible with stainless steel W 1.4435 (AISI 316L). For usage with high media temperature a cooling element can be added thus media temperatures up to 300° C can be achieved. The flushable process connection is oil filled with FDA approved Oil and delivered in either Clamp DN 38 (ISO2852) / Clamp DN 40 (DIN32676) or Clamp DN 50 (ISO2852) / Clamp DN 51 (DIN32676). Optionally the Alfa Laval Pressure transmitter is suited for explosive area (zone 0 or 1).

Working principle

The Alfa Laval pressure transmitter builds on a piezoresistive stainless steel sensor, which features small thermal effect and excellent linearity, making it possible to meet accuracy demands up to 0.1 % FSO (IEC 60770).

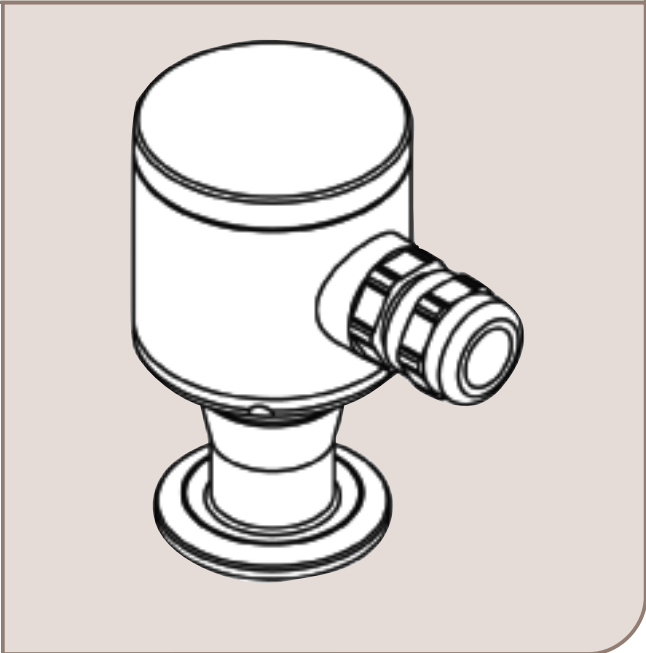
Technical data

Measuring ranges:

- 1 to 0 bar
- 0 to 1 bar
- 0 to 1.6 bar
- 0 to 2.5 bar
- 0 to 4 bar
- 0 to 6 bar
- 0 to 10 bar
- 0 to 16 bar
- 0 to 25 bar
- 0 to 40 bar

Accuracy

- Nominal pressure >0.4 bar :accuracy <=0.35 % of FS
- Nominal Pressure <=0.4 bar:accuracy <=0.5% of FS
- Nominal pressure >0.4 bar:accuracy <= 0.1 % of FS
(option)
- Compensated temperature range:0 to 70 °C



Pressure overload on diaphragm:

Measuring Range	Permissible Overload
-1 to 0 bar	3 bar
0 to 1 bar	3 bar
0 to 2.5 bar	6 bar
0 to 4.0 bar	20 bar
0 to 6 bar	20 bar
0 to 10 bar	60 bar
0 to 16 bar	60 bar
1 to 25 bar	60 bar
1 to 40 bar	100 bar

Mechanical data

Process connections:

Clamp DN 38 (ISO2852)/Clamp DN 40 (DIN32676)

Clamp DN 50 (ISO2852)/Clamp DN 51 (DIN32676)

Flange DN40/PN40

Materials

Wetted parts: AISI 316 or hasteloy coated diaphragm (option)

Casing: AISI 304

Fieldhousing: AISI 303 (option)

Filling: FDA approved silicone oil

Operating temperature

Wetted parts: -25 to 125 °C (150 °C for 30 minutes with a max. ambient temperature of 50 °C).

-25 to 300°C (with cooling tower option)

Note: Except:
TE67E111111130 (-1 to 0 barg): 0- 70 °C

Ambient temperature: -25 to 85 °C.

Operating temperature EX version (TE67Exxxxxxx5)

Wetted parts: -25 to 125 °C

Ambient temperature: Zone 0: -20 to 60 °C.

Ambient temperature: Zone 1: -25 to 70 °C.

Protection Class

M12 plug and fieldhousing: IP67

Cable outlet: IP68/69K

Weight

Pressure transmitter with diaphragm: . . min 500 gr.

Electrical data

The electronics is as standard short circuit protected and equipped with reverse polarity protection.

Power supply: 12-36 Vdc

Power supply: EX version
(TE67Exxxxxxx5): 14-28 Vdc

Output: 4-20 mA, 2 wire or 3 wire

Output EX version (TE67Exxxxxxx5): . . 4-20 mA, 2 wire

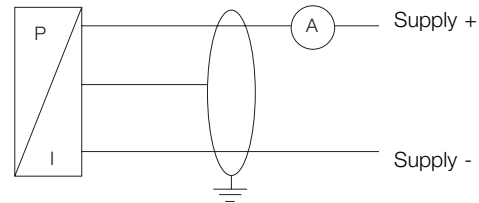
Connection: cable outlet, M12 plug or cable gland M20 (only with fieldhousing option)

Response time: <10 ms

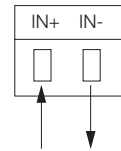
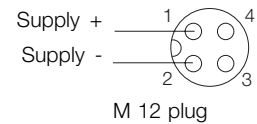
Certificates

- CE marked
- 5 point calibration certificate (option)
- 3.1 certificate (option)
- FDA conformity declaration (option)
- ATEX (option)

Electrical connections



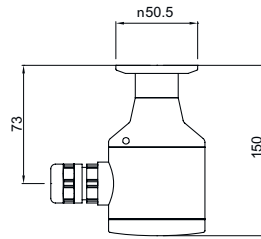
2 wire system



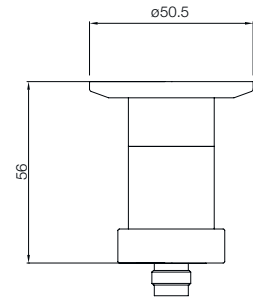
4-20 mA

Connector fieldhousing

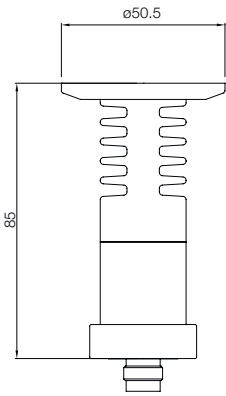
Dimensions (mm)



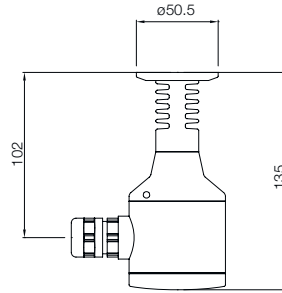
Pressure transmitter with fieldhousing



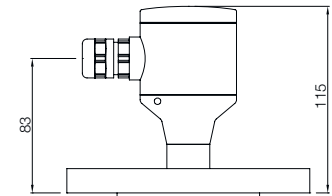
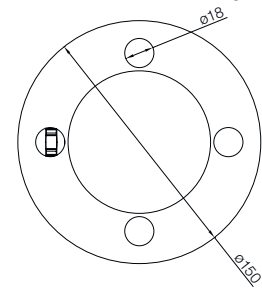
Pressure transmitter with M12 plug connector



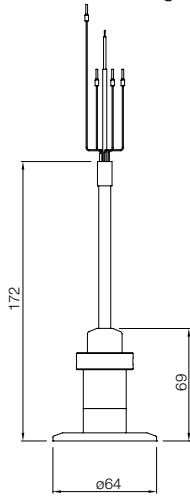
Pressure transmitter with M12 plug connector and cooling tower



Pressure transmitter with fieldhousing and cooling tower



Pressure transmitter with fieldhousing and flange



Pressure transmitter with cable outlet

ESE01608EN 1001

The information contained herein is correct at the time of issue,
but may be subject to change without prior notice.

How to contact Alfa Laval

Contact details for all countries
are continually updated on our website.
Please visit www.alfalaval.com to
access the information direct.