



The level switch for sanitary use

Alfa Laval Level Switch

Application

The Alfa Laval level switch is designed to fulfill the demands for precise level indication in the Sanitary and pharmaceutical production.

Main features are:

- Wetted parts in AISI 316L, stainless steel and PEEK
- Compact, and hygienic design
- Process temperature -40...200°C
- LED indicator integrated into the field housing
- Not influenced by foam
- Ideal for media registration through registration of changes in product dielectricity
- Quick teach option for difficult medias
- Maintenance free

Standard range

The Alfa Laval level transmitter is ideal for measurements in liquids such as water and beer as well as viscous, sticky fluids, such as honey, yoghurt and toothpaste. Even dry medias can be measured, eg. sugar or flour.

The integrated electronics provide a digital logic signal and has incorporated automatic compensation of foam, bubbles and condensate as well as sticky media.

Due to the high temperature limit the Alfa Laval level switch is well suitable for CIP and SIP processes.

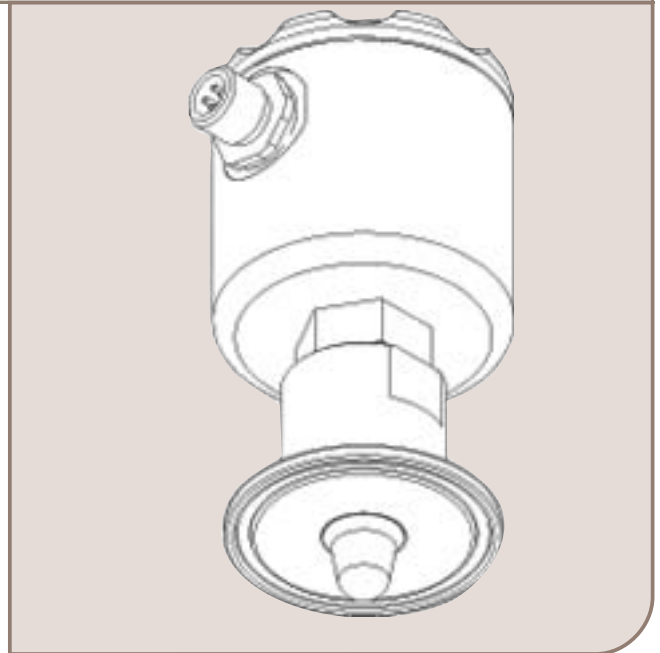
The hygienic installation is guaranteed by using the hygienic Clamp DN 38 (ISO2852) / Clamp DN 40 (DIN32676) connection.

Working principle

The Alfa Laval level switch uses a high frequency signal sweep which is radiated from the sensor tip into the tank. The media will act as a virtual capacitor which, together with a coil in the sensor head, will form a circuit creating the switch point signal. This virtual capacity will depend on the di-electric value of the media which is well defined for most medias

Technical data

Accuracy repeatability: ±1 mm.
 Hysteresis: ±1 mm
 Measures values with dielectric values : .>1.5



Mechanical data

Process connections

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

Materials

Wetted parts: AISI 316 and PEEK
 Fieldhousing AISI 304

Operating temperature

Wetted parts: -40 to 85°C (140°C < 1 hour)
 With cooling tower: -40 to 200°C (option)
 Field house: -40 to 115 °C.

Protection class IP67
 Max media pressure: 40 bar

Weight

Sensor: approx 500 gr.

Certificates

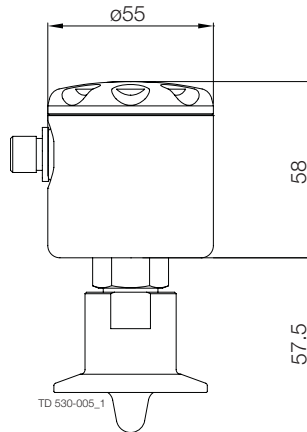
- CE marked
- 3A (option)
- 3.1B certificate (option)
- ATEX certificate (option)

Electrical data

The integrated electronics features short circuit and high temperature protection.

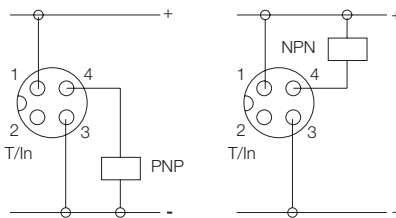
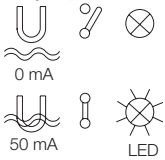
Power supply: 18-36 Vdc
 Power consumption max: 70 mA
 Output: logic, either digital, PNP or NPN
 Max output current: 50 mA
 Electrical connection: M12 or M16 cable gland
 Response time: <0.1 sec

Dimensions (mm)

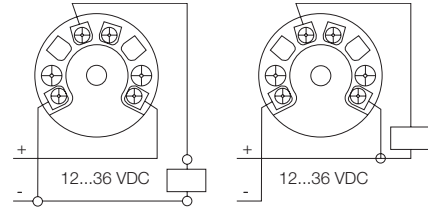


Electrical connections

Normally Open



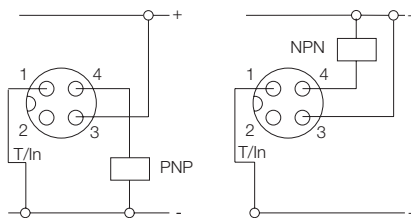
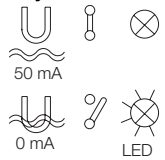
PNP Output
Normally Open
50 mA max.



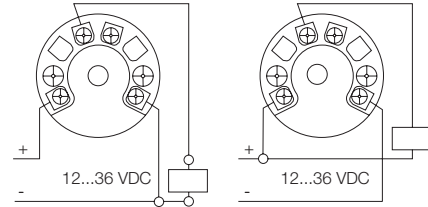
NPN Output
Normally Open
50 mA max.

M12 plug: 1: Brown
 2: White
 3: Blue
 4: Black

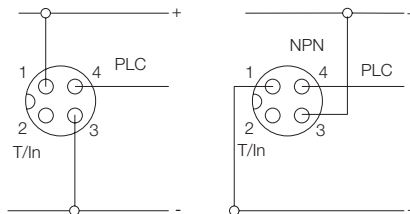
Normally Closed



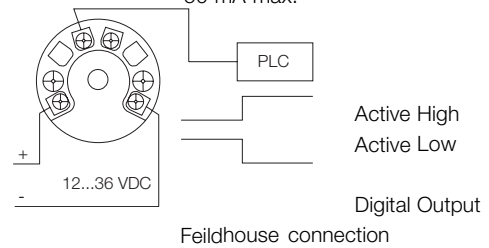
PNP Output
Normally Closed
50 mA max.



NPN Output
Normally Closed
50 mA max.



M12 connections



Digital Output
Fieldhouse connection

ESE01581EN 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.