



The level switch for sanitary use

Level Switch

Application

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

- Wetted parts in AISI 316L, stainless steel and PEEK
- Compact, and hygienic design
- Process temperature -40 to 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-in option for difficult medias
- Maintenance free

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 w. dielectric values: >1.5
Protection class: IP67
Max media pressure: 40 bar

Electrical data

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

Standard range

The Alfa Laval level switch is ideal for measurements in liquids 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, condensate as well as sticky media. Due to the high temperature limit the Alfa Laval level switch is also suitable for CIP and SIP processes. The hygienic installation is guaranteed by using one of the hygienic welding adapters offering a full flush able connection in the tank.

PHYSICAL DATA

Materials

Wetted parts: AISI 316L and PEEK
Fieldhousing: AISI 304

Operating temperature

Wetted parts: -40 to 85°C (140°C $<$ 1 hour)
With sliding connection: -40 to 200°C
Field house: -40 to 115°C.

Weight

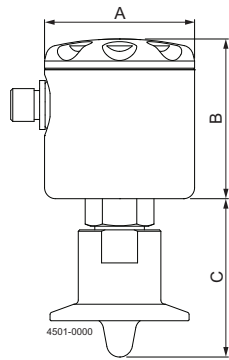
Sensor: Approx. 500 gr.

Process connection

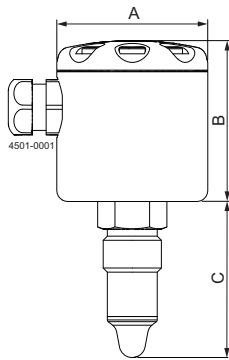
- Clamp DN38 (ISO2852)/Clamp DN40 (DIN32676)
- FFC (Full flushable connection)
- G1/2"
- G1/2" sliding connection 100 mm
- G1/2" sliding connection 250 mm
- DN25 (DIN11851)
- DN40 (DIN11851)
- DN50 (DIN11851)

Certificate:

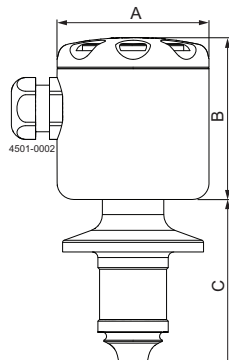
3.1 (Option) (FDA conformaty declaration for Peek materials included)



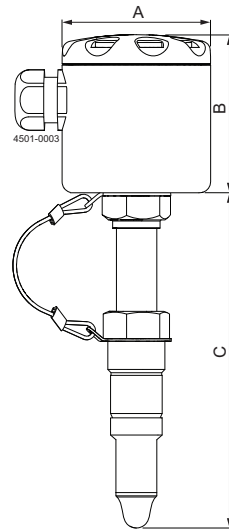
Clamp 1½"
TE670x2xxxxxxx



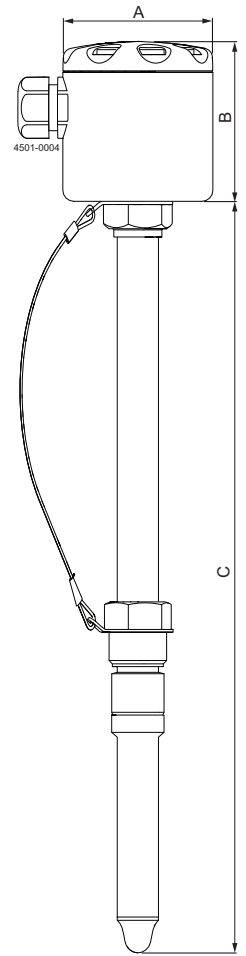
½" (ISO228)
TE670x4xxxxxxx



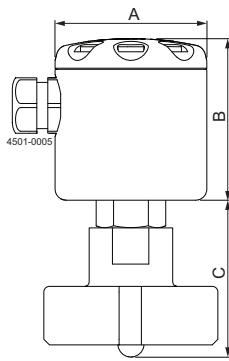
Clamp HTC
TE670xDxxxxxxx



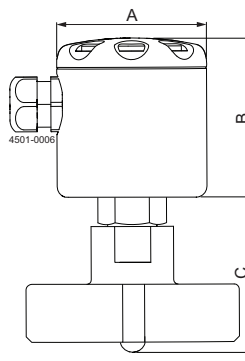
½" (ISO228)
TE670xExxxxxxx



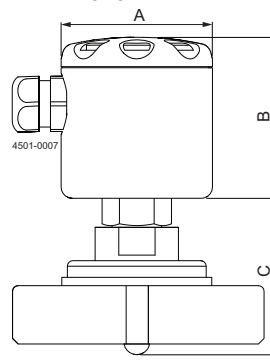
½" (ISO228)
TE670xFxxxxxxx



Clamp DN25 (DIN11851)
TE670xAxxxxxxx



Clamp DN40 (DIN11851)
TE670xBxxxxxxx

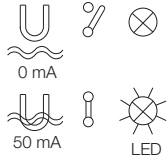


Clamp DN50 (DIN11851)
TE670xCxxxxxxx

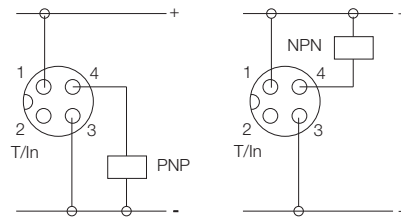
Dimensions (mm)	A	B	C
TE670x2xxxxxxx	ø55	58	57.5
TE670x4xxxxxxx	ø55	58	57.5
TE670xDxxxxxxx	ø55	58	57.5
TE670xExxxxxxx	ø55	58	100
TE670xAxxxxxxx	ø55	58	57.5
TE670xBxxxxxxx	ø55	58	57.5
TE670xCxxxxxxx	ø55	58	57.5
TE670xFxxxxxxx	ø55	58	250

Electrical connections

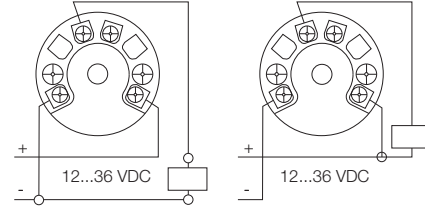
Normally Open



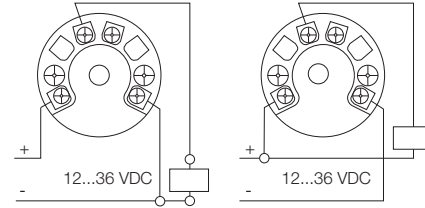
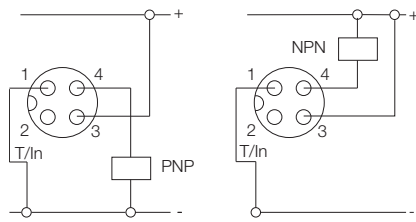
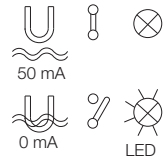
M12 plug



Cable gland



Normally Closed



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

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