



Alfa Laval Conductivity Transmitter

The conductivity sensor for hygienic use

Application

- CIP: control concentrate dosing of chemicals, such as acid or caustic substances.
- CIP to control the CIP process steps efficiently between cleaning with detergents and water. The fast temperature compensation and the fast and accurate communication to the PLC helps to optimize the CIP process and save water, product and chemicals.
- Product safety control to detect any contamination in the final product.

Features

The Alfa Laval conductivity transmitter is designed to fulfill the demands of conductivity transmitters in hygienic production. The main features are:

- Wetted parts in PEEK
- Compact, food compatible, hygienic design
- Process temperature -20 to 140°C
- 4 configurable measuring ranges
- Adjustable, active and very fast temperature compensation
- Insensitive to polarization, adhesion and solids
- Built-in graphical display and touch screen
- Compatible with Alfa Laval In-line instrumentation system
- 4-20 mA output for conductivity and temperature

TECHNICAL DATA

Conductivity

Measuring range: 50 μ S/cm to 1 S/cm

Accuracy:

0-500 μ S/cm ≤ 1.5 %

0-1/0-500 μ S/cm ≤ 1.0 %

0-1 μ S/cm ≤ 1.5 %

Temperature

Measuring range: -20 to 140°C (150°C up to 1 hour)

Resolution: 0.1°C

Accuracy: < 0.4 %

Repeatability: 0.2% of FS

Protection class: IP67

Max media pressure: 10 bar

Electrical data

Power supply: 15-35 Vdc

Power consumption max: 180 mA

Output conductivity: 4-20 mA, max. load 500 Ohm,

Output temperature: 4-20 mA, max. load 500 Ohm,

Connection: M12 plug or M16 cable gland

Response time: < 3 ms

Ambient temperature

Without display -40 - 85°C

With display -30 - 80°C



PHYSICAL DATA

Sensor length (L): Short or Long

Housing ($\varnothing$): 80 mm

Materials

Wetted parts (Short): PEEK

Wetted parts (Long): PEEK

Fieldhouse: AISI 304

Surface finish: Ra < 0.8 μ m

Operating temperature

Wetted parts: -20 to 140°C (150°C < 1 hour)

Field house: -20 to 80°C

Weight

Conductivity sensor: Approx. 1500 gr.

Process connection

- Clamp DN38 (ISO2852)/clamp DN40 (DIN32676)
- Clamp DN50 (ISO2852)/clamp DN51 (DIN32676)
- G1" (ISO228)
- DN32 (DIN11851)
- DN40 (DIN11851)
- DN50 (DIN11851)

Certificates

-3.1 (Option) (FDA conformity declaration for Peek materials included)

-Calibration certificate (Option)

