

Compact conductivity device Smartec CLD18

Toroidal conductivity measuring system for hygienic applications



More information and current pricing:

www.es.endress.com/CLD18

Benefits:

- Unique hygienic design avoids contamination
- 3-A approval
- Compliant with EG 2023/2006 and 1935/2004
- Suitable for cleaning-in-place (CIP)
- Smart and easy integration into your plant infrastructure thanks to optional IO-Link protocol
- Compact design permits installation in small tubes without restricting the flow

Specs at a glance

- **Measurement range** 200 $\mu\text{S}/\text{cm}$ to 1000 mS/cm Cell constant k: 11.0 $1/\text{cm}$
- **Process temperature** $-10\text{ }^{\circ}\text{C}$ to $110\text{ }^{\circ}\text{C}$ ($14\text{ }^{\circ}\text{F}$ to $230\text{ }^{\circ}\text{F}$)
Sterilization: max. $130\text{ }^{\circ}\text{C}$ at 6 bar abs up to 60 min (Max. $266\text{ }^{\circ}\text{F}$ at 87 psi up to 60 min)
- **Process pressure** 13 bar abs up to $50\text{ }^{\circ}\text{C}$ (188.5 psi up to $122\text{ }^{\circ}\text{F}$)
7.75 bar abs at $110\text{ }^{\circ}\text{C}$ (112 psi at $230\text{ }^{\circ}\text{F}$) 6.0 bar abs at $130\text{ }^{\circ}\text{C}$ for max. 60 minutes (87 psi at $266\text{ }^{\circ}\text{F}$ for max. 60 minutes)

Field of application: Smartec CLD18 is the cost-effective solution for all applications in beverage plants where small tubes are used and where the toroidal measurement is used as a switch function. The combination of a transmitter and a sensor is interference-free, easy-to-use and features a hygienic design that protects your products and processes from contamination. Smartec CLD18 ensures the Overall Equipment Effectiveness (OEE) of your plant thanks to fast and reliable CIP and optional IO-Link protocol.

Features and specifications

Conductivity

Measuring principle

Inductive

Application

Food and beverage industries

Characteristic

Specifically intended for use in beverage industry applications and especially suitable for:

Phase separation, control of CIP, concentration control, product monitoring, leakage monitoring

Measurement range

200 $\mu\text{S}/\text{cm}$ to 1000 mS/cm

Cell constant k: 11.0 $1/\text{cm}$

Measuring principle

Inductive conductivity measurement

Design

Hygienic design with FDA certified virgin PEEK

Material

Sensor: PEEK

Process connection 1.4435 (316L)

Seal: EPDM

Process temperature

-10 °C to 110 °C (14 °F to 230 °F)

Sterilization: max. 130 °C at 6 bar abs up to 60 min

(Max. 266 °F at 87 psi up to 60 min)

Process pressure

13 bar abs up to 50 °C (188.5 psi up to 122 °F)

7.75 bar abs at 110 °C (112 psi at 230 °F)

6.0 bar abs at 130 °C for max. 60 minutes

(87 psi at 266 °F for max. 60 minutes)

Conductivity

Temperature sensor

Pt 1000 (class B)

Connection

Dairy pipe, aseptic-fitting DN40 and DN50, Clamp 2"
ISO 2852, SMS-2", Varivent N DN 40-125
Thread G1 1/2 SS, G1 1/2 PVC , Union nut 2 1/4 Inch PVC

Ingres protection

IP69

Output / communication

0/4...20mA
IO-Link (option)

Additional certifications

3A, FDA, EHEDG
EC Regulation No. 1935/2004

More information www.es.endress.com/CLD18