

Compact conductivity device Smartec CLD18

Toroidal conductivity measuring system for hygienic applications



More information and current pricing:

www.be.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)
- 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 phase separation measurements.

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.be.endress.com/CLD18