

Analog conductivity sensor

Indumax CLS54

Toroidal conductivity sensor for hygienic and sterile applications



More information and current pricing:

www.de.endress.com/CLS54

Benefits:

- Unique hygienic design avoids contamination
- With all hygienic certificates required in hygienic applications
- Food grade virgin PEEK body without joints nor crevices
- Certified biocompatibility according to USP class VI
- Suitable for cleaning-in-place (CIP) and sterilization-in-place (SIP)
- Compliant with EG 2023/2006 and 1935/2004

Specs at a glance

- **Measurement range** 100 $\mu\text{S}/\text{cm}$ - 2000 mS/cm Cell constant k: 6,3 1/cm
- **Process temperature** Process temperature: -10°C - $+125^{\circ}\text{C}$ (14°F - 257°F) Sterilisation: $150^{\circ}\text{C}/5$ bar (max. 60 min.) (302°F / 72.5 psi)
- **Process pressure** 12 bar(174 psi)/ 20°C (68°F) 8 bar(116 psi)/ 125°C (257°F)

Field of application: The Indumax CLS54 inductive conductivity sensor protects all of your products and processes that must meet the strictest hygienic and sterile demands. Its outstanding performance combined with a unique hygienic design ensures highest safety and quality of your products.

Features and specifications

Conductivity

Measuring principle

Inductive

Conductivity

Application

Food, beverage and pharmaceutical industries and in biotechnology.

Characteristic

Specifically intended for use in hygienic applications and especially suitable for following applications:

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

Measurement range

100 μ S/cm - 2000 mS/cm Cell constant k: 6,3 1/cm

Measuring principle

Inductive conductivity measurement

Design

Hygienic design with food-grade virgin PEEK body in jointless and creviceless design including all hygienic certifications.

Material

In contact with medium: Virgin PEEK

Surface roughness: Ra<0.9 μ m

Process temperature

Process temperature: -10°C - +125°C
(14°F - 257°F)

Sterilisation: 150°C/5 bar (max. 60 min.)
(302°F / 72.5 psi)

Process pressure

12 bar(174 psi)/20°C(68°F)

8 bar(116 psi)/125°C(257°F)

Temperature sensor

Pt1000 (class A)with a temperature response time T90 < 27s.

Conductivity

Ex certification

ATEX II G EEx ia IIc T3/T4/T6
FM/CSA IS NI CL.I,II,III,Div.1&2 group A-G in connection with the transmitter CM42.

Connection

Dairy pipe, Aseptic-fitting, Clamp ISO 2852, SMS-2", Varivent N DN 40-125, Neumo Biocontrol D50.

Ingres protection

IP68/NEMA6P

Additional certifications

FDA, EHEDG, 3-A, Biological reactivity (USP class VI part 87 and 88)

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