

# Analog conductivity sensor Indumax CLS50

## Toroidal conductivity sensor for chemical applications



More information and current pricing:

[www.be.endress.com/CLS50](http://www.be.endress.com/CLS50)

### Benefits:

- High durability and chemical resistance even under harsh conditions
- Dirt-repellent materials and large sensor opening avoid soiling
- Wide temperature range and highly resistant materials make the sensor suitable for virtual any application
- Robust design for outstanding long operating life
- Approved for hazardous area use

### Specs at a glance

- **Measurement range** 2 $\mu$ S/cm - 2000 mS/cm
- **Process temperature** max. 180°C (PEEK) (356°F) max. 125°C (PFA) (254°F)
- **Process pressure** max. 20 bar (PEEK) (290 psi) max. 16 bar (PFA) (233 psi)

**Field of application:** Indumax CLS50 is an inductive conductivity sensor for standard, hazardous and high-temperature applications. Benefit from high chemical resistance and long durability thanks to robust materials (PFA, PEEK). Moreover, it is insensitive to soiling and performs reliable and repeatable even in harsh and aggressive media. The wide temperature range of -20 to +180 °C leaves nothing to be desired.

## Features and specifications

Conductivity

Measuring principle

Inductive

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## Conductivity

**Application**

Waste water, process

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**Characteristic**

Inductive conductivity cell made of highly resistant material for conductivity and concentration measurements in process applications.

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**Measurement range**

2 $\mu$ S/cm - 2000 mS/cm

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**Measuring principle**

Inductive conductivity measurement

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**Design**

- No direct contact with the media because of the sensor coating made of highly resistant material.

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**Material**

PEEK or PFA

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**Dimension**

Electrode: outside diameter: appr. 47 mm inside diameter: appr. 15 mm

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**Process temperature**

max. 180°C (PEEK)  
(356°F) max. 125°C (PFA)  
(254°F)

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**Process pressure**

max. 20 bar (PEEK)  
(290 psi) max. 16 bar (PFA)  
(233 psi)

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**Temperature sensor**

Integrated Pt100

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**Ex certification**

ATEX

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## Conductivity

### Connection

Process connection: NPT1", DN50, ANSI, JIScale: fixed cable connection.

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### Ingres protection

IP67

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### Additional certifications

Calibration certification of the cell constant.

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