

# Digital conductivity sensor Indumax CLS50D

## Memosens toroidal conductivity sensor for chemical applications



More information and current pricing:

[www.es.endress.com/CLS50D](http://www.es.endress.com/CLS50D)

### 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
- Reliable values thanks to active connection monitoring
- Easy wiring over long distances without impact on the measurement accuracy
- Logging of sensor-specific data for easy traceability
- Approved for hazardous area use

### Specs at a glance

- **Measurement range** 2 $\mu$ S/cm to 2000 mS/cm
- **Process temperature** PEEK: max. 125°C (max. 260 °F) PFA: max. 110°C (max. 230 °F)
- **Process pressure** PEEK: max. 21 bar (max. 304.5 psi) PFA: max. 17 bar (max. 246.5 psi)

**Field of application:** Indumax CLS50D is a digital 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. Thanks to Memosens, CLS50D combines maximum process and data integrity with simple operation. It resists corrosion and moisture and facilitates predictive maintenance.

### Features and specifications

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## Conductivity

**Measuring principle**

Inductive

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**Application**

Chemical industry, process

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**Characteristic**

Analog or digital, inductive conductivity sensor for standard, Ex and high-temperature applications

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**Measurement range**

2  $\mu$ S/cm to 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: 47.5 mm (1.87 inch)

Inside diameter: 15 mm (0.59 inch)

Inside diameter (PEEK version): 15.5 mm (0.61 inch)

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**Process temperature**

PEEK: max. 125°C (max. 260 °F)

PFA: max. 110°C (max. 230 °F)

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**Process pressure**

PEEK: max. 21 bar (max. 304.5 psi)

PFA: max. 17 bar (max. 246.5 psi)

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**Temperature sensor**

Integrated Pt1000

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## Conductivity

### Ex certification

ATEX, IECEx, NEPSI, FM, CSA, TIIS, EAC

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### Connection

Process connection: NPT1", DN50, ANSI, JIScable: fixed cable connection

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### Ingres protection

IP 68 / NEMA type 6

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### Additional certifications

Calibration certification of the cell constant

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