

Technical Information

Condumax W CLS15 and CLS15D

Conductivity sensors, analog or digital with Memosens technology,
Cell constant $k = 0.01 \text{ cm}^{-1}$ or $k = 0.1 \text{ cm}^{-1}$



Application

Measurement in pure and ultrapure water:

- Monitoring ion exchangers
- Reverse osmosis
- Distillation
- Chip cleaning

The measuring range of the sensors depends on the cell constant k :

- $k = 0.01 \text{ cm}^{-1}$: 0.04 to 20 $\mu\text{S}/\text{cm}$
- $k = 0.1 \text{ cm}^{-1}$: 0.1 to 200 $\mu\text{S}/\text{cm}$

Sensors with a temperature sensor are used together with conductivity transmitters equipped with automatic temperature compensation:

- Liquiline M CM42
- Mycom S CLM153
- Liquisys M CLM223/253

For measurement of resistivity, $\text{M}\Omega \cdot \text{cm}$ measuring ranges are available in the menus of these transmitters.

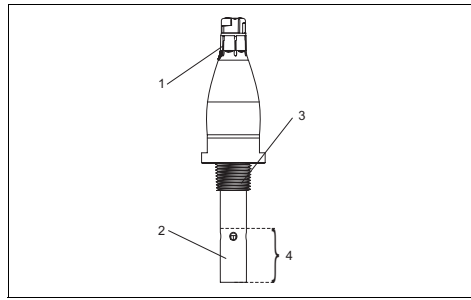
Your benefits

- High measuring accuracy as cell constant is individually measured
- Installation in pipes or flow chambers
- Compact design
- Available with plug-in head or fixed cable
- Easy to clean thanks to polished measuring surfaces
- Can be sterilized up to max. 140°C (284°F)
- Stainless steel 1.4435 (AISI 316L)
- Quality certificate stating the individual cell constant
- Available with inspection certificate according to EN 10204 3.1

Further benefits offered by Memosens technology

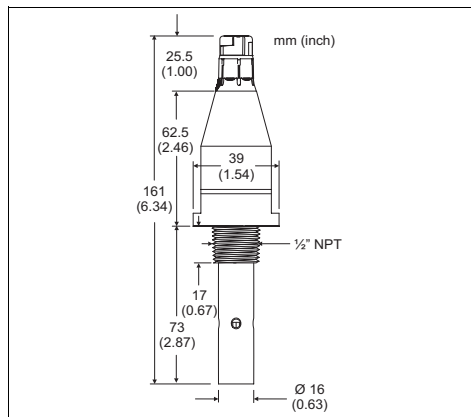
- Maximum process safety through contactless inductive signal transmission
- Data safety through digital data transmission
- Easy handling thanks to storage of sensor-specific data
- Predictive maintenance possible thanks to registration of sensor load data

Design, dimensions CLS15D

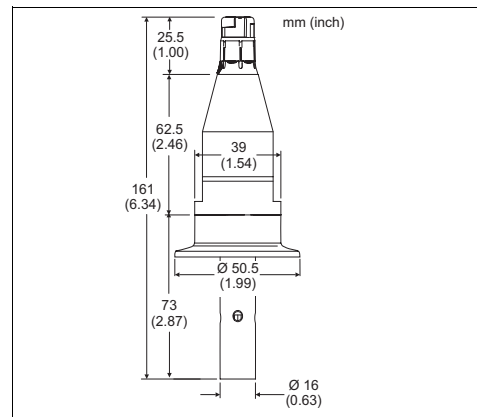


Version with thread NPT 1/2"

- 1 Memosens plug-in head
- 2 Coaxial measuring electrode
- 3 NPT 1/2" thread
- 4 Minimum immersion depth



Dimensions of version with NPT thread



Dimensions of version with clamp

Weight Depending on version, approx. 0.3 kg (0.7 lb.)

Materials
 Electrodes: polished, stainless steel 1.4435 (AISI 316L)
 Sensor shaft: polyethersulfone (PES-GF20)
 O-ring, in contact with medium (clamp version only): EPDM

Surface roughness
 $R_a \leq 0.8 \mu\text{m}$
 ($R_a \leq 0.4 \mu\text{m}$ available under TSP C-LS020130-02)

Process connection
 CLS15
 Fixed-cable versions: Thread NPT 3/4", clamp 1-1/2" acc. to ISO 2852
 Plug-in head versions: Thread NPT 1/2", clamp 1-1/2" acc. to ISO 2852
 CLS15D: Thread NPT 1/2" and 3/4", clamp 1-1/2" acc. to ISO 2852

Certificates and approvals

Ex approval¹⁾
 ■ ATEX II 1G EEx ia IIC T3 / T4 / T6
 ■ FM/CSA in combination with the Liquiline M CM42 and Mycom S CLM153 transmitters

For all product versions listed in the product structure (see Ordering Information)



Note!
 Ex versions of digital sensors with Memosens technology are indicated by an orange-red ring in the plug-in head.

1) Approval for CLS15D pending