

Conductivity Measurement

Reliable in multiple applications



Conductivity is a well recognized and often indispensable parameter of state-of-the-art water, wastewater and industrial process analysis. Continuous measuring systems are employed to monitor the salt load of the influent in wastewater treatment plants, to control quality of drinking water and ultra-pure water or to determine non-specific contaminants in industrial processes.

Fields of application:

- Municipal and Industrial Wastewater
- Water Treatment
- Surface Waters
- Sea Water, Brackish Water, Fishfarming
- Boiler Feed Water
- Demineralization
- Industrial Process Fluids

see also <https://www.xylymanalytics.com/en/parameters/conductivity-and-salinity>



TetraCon® 4-electrode Design

Compared to the 2-electrode conductivity sensors, the 4 electrode version of the TetraCon® series provides a very large measuring range. For several years now, the proven technique guarantees smooth operation, especially in the area of higher conductivities. Further on, the 4 electrode cell is very resistant against contamination and provides a fast temperature compensation by its integrated temperature sensor. A pressure resistance of up to 10 bar enables the installation in pipes.



TetraCon® 700 IQ



- Highest linearity with 4 electrode measuring cell
- Extremely robust and durable
- Large measuring range (1 µS/cm ... 2 S/cm) with only one single cell
- Highly resistant to fouling



TD D2.04, D3.06, D4.03

Digital

To be connected to the digital, modular, and expandable IQ SENSOR NET as well as to the single parameter controller 281.



TetraCon® 700 IQ

for the IQ SENSOR NET



TetraCon® 700 IQ SW

for use in corrosive media



Ordering Information

| Model | Description | Order No. |
|---------------------|--|-----------|
| TetraCon® 700 IQ | Digital 4 electrode conductivity measuring cell for highly contaminated wastewater | 302500 |
| TetraCon® 700 IQ SW | Like TetraCon® 700 IQ, but as a sea water model | 302501 |



For technical data please see datasheet D2.04

Alternatives and accessories see brochure "Product Details" and website

Information about IQ SENSOR NET system see from page 48

Analog conductivity measuring cells see from page 20

Analog

To be operated with analog transmitters.

TetraCon® 700-7

especially developed submersible sensor assembly for use in wastewater treatment plants



TetraCon® 700-7 EX

Version for explosive areas of zone 1, to be connected to the Stratos Pro A 201 X Cond controllers.



TetraCon® 325

Suitable for universal applications



TetraCon® DU/T

flow measuring cell for standard industrial applications



LRD 325

for installation in pipes



Ordering Information

| Model | Description | Order No. |
|---------------------------|--|-----------|
| TetraCon® 700-7 | Universal 4 electrode conductivity cell especially for wastewater treatment plants, 7 m (23 ft) cable | 302316 |
| TetraCon® 700-7 EX | Analog 4 electrodes conductivity measuring cell with integrated temperature sensor and 7 m cable with open wires | 302316EX |
| TetraCon® 325 | 4 electrodes measuring cell, with integrated temperature sensor, cell constant $K=0.475 \text{ cm}^{-1}$, cable length 1.5m | 301960 |
| TetraCon® DU/T | 4 electrodes flow measuring cell, with integrated temperature sensor, cell constant: $K=0.0778 \text{ cm}^{-1}$ | 301252 |
| LRD 325-7 | 4 electrodes measuring cell to be screwed into pipe, with integrated temperature sensor, cable length 7 m | 302229 |



For technical data please see datasheets D3.06 and D4.03

Alternatives and accessories see brochure "Product Details" and website

Analog monitors see from page 62



Controllers / isolated amplifier for EX area see from page 67

2-electrode Measuring Cells

Pipe installation, drinking water, ultra-pure water and trace measurements – the right cell for any application. The reliable 2 electrode cell provides high resolution and accuracy.



- The right solution for any application
- High operational safety by robust workmanship

Analog

To be operated with analog transmitters.



LRD 01 

for installation in pipes



LR 325/01

for ultra-pure water applications



LR 325/001

for trace measurement in both aqueous and non-aqueous or partially aqueous media



LR ML 

for drinking water and connection to LF 298 or MULTILINE 1000



Ordering Information

| Model | Description | Order No. |
|------------|--|-----------|
| LRD 01-7 | 2 electrodes measuring cell to be screwed into pipe, with integrated temperature sensor, cable length 7 m | 302222 |
| LR 325/01 | Conductivity measuring cell for ultrapure water, with integrated temperature sensor, cell constant K=0.1cm ⁻¹ , Glass flow cell | 301961 |
| LR 325/001 | as above, but for trace measurement, Stainless steel flow cell | 301962 |
| LR ML | Conductivity cell, with 1 m fixed cable, 2 graphite electrodes; - 5-80°C; range 100 µS/cm - 20 mS/cm; temperature measurement with Pt 1000, PG 13.5 screw thread | 301150 |



For technical data please see datasheet D3.06

Alternatives and accessories see brochure "Product Details" and website

Analog monitors see from page 62

Digital conductivity measuring cells see from page 19