Conductivity cells

Depending on the application, we provide electrodes made of graphite or stainless steel to ensure that they do not chemically react with the measured sample.

Four electrode conductivity cells

- Universal application area due to wide measuring range between 1 µS/cm and 2000 mS/cm
- Only one calibration point required due to linearity over the entire measuring range
- Measuring cells in different designs for almost all applications
- Highest accuracy through high-precision manufacturing
- Large application range in aqueous solutions through unique electrode technology

Two electrode measuring cells made of stainless steel

- Optimised measuring cells, especially for use in ultra-pure water measurement
- No disturbances due to CO_2 introduction with stainless steel measuring cells with flow-through vessels
- Precise measurement in the lower measuring range due to optimised geometry
- Suitable for ultra-pure water measurement according to pharmacopoeia

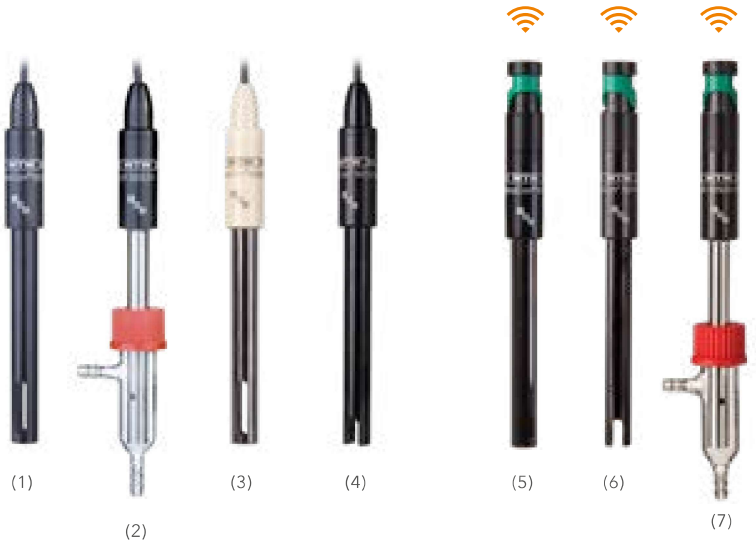
Two electrode measuring cell made of graphite

- Robust measuring cell for simple measurements and in teaching and training
- Robust design with durable epoxy shaft
- For all aqueous samples
- For all current conductivity meters

IDS Conductivity cells – digital

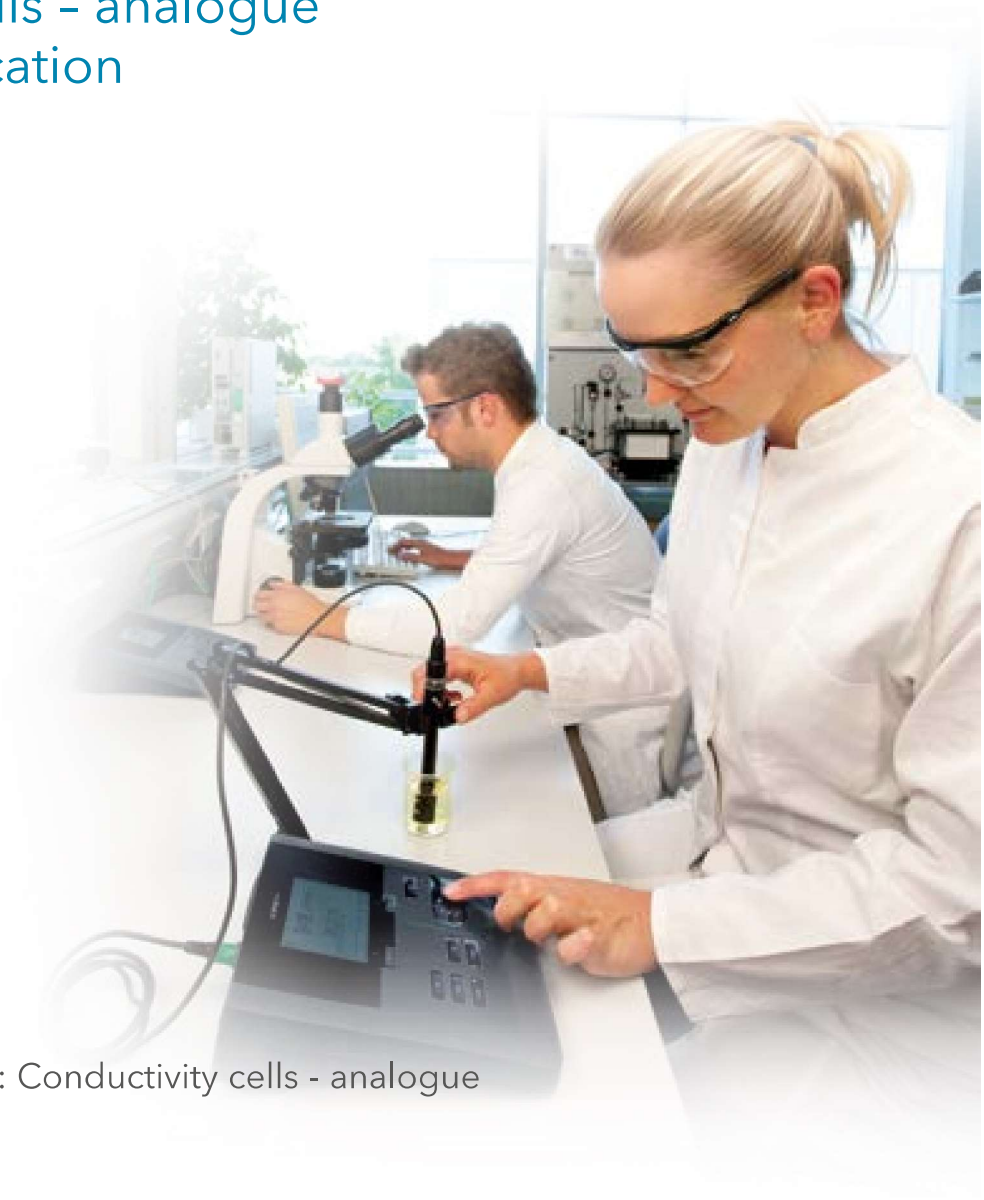
A selection of two electrode and four electrode conductivity cells for covering a wide range of applications, from ultra-pure water to viscous samples can be found in the chapter “Multi-parameter measurement”.

see page 34



from left to right: the digital IDS sensors (1) TetraCon® 925, (2) LR 925/01, (3) TetraCon® 925 / C, (4) TetraCon® 925 / LV; the wireless ready IDS plug head electrodes (5) TetraCon® 925-P, (6) TetraCon® 925 / LV-P, (7) LR 925/01-P

Conductivity cells – analogue
For every application



Technical specifications: Conductivity cells - analogue

Universal applications

	TetraCon® 325	TetraCon® 325-3	TetraCon® 325-6	TetraCon® 325-10	TetraCon® 325-15	TetraCon® 325-20
Order no.	301960	301970	301971	301972	301973	301974
Type	4 electrode	4 electrode	4 electrode	4 electrode	4 electrode	4 electrode
Electrode material	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
Flow-through vessel	-	-	-	-	-	-
Shaft material	Epoxy	Epoxy	Epoxy	Epoxy	Epoxy	Epoxy
Shaft length	120 mm	120 mm	120 mm	120 mm	120 mm	120 mm
Cell constant	0.475 cm^{-1}	0.475 cm^{-1}	0.475 cm^{-1}	0.475 cm^{-1}	0.475 cm^{-1}	0.475 cm^{-1}
Diameter	15.3 mm	15.3 mm	15.3 mm	15.3 mm	15.3 mm	15.3 mm
Cable length	1.5 m	3 m	6 m	10 m	15 m	20 m
Measuring range	1 µS/cm to 2000 mS/cm	1 µS/cm to 2000 mS/cm	1 µS/cm to 2000 mS/cm	1 µS/cm to 2000 mS/cm	1 µS/cm to 2000 mS/cm	1 µS/cm to 2000 mS/cm
Temperature sensor	0 to 100 °C	0 to 100 °C	0 to 100 °C	0 to 100 °C	0 to 100 °C	0 to 100 °C
min./max. immersion depth	36/120 mm	36/120 mm	36/120 mm	36/120 mm	36/120 mm	36/120 mm

WTW a xylem brand
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www.WTW.com

Special applications

	TetraCon® 325/C	TetraCon® 325/S
Order no.	301900	301602
Type	4 electrode	4 electrode
Electrode material	Graphite	Graphite
Shaft material	Epoxy	Epoxy
Shaft length	120 mm	120 mm
Cell constant	0.475 cm^{-1}	0.491 cm^{-1}
Diameter	15.3 mm	15.3 mm
Cable length	1.5 m	1.5 m
Measuring range	1 µS/cm ... 2000 mS/cm	1 µS/cm ... 2000 mS/cm
Temperature range	0 ... 100 °C	0 ... 100 °C
Temperature probe	NTC 30 kOhm	NTC 30 kOhm
min./max. immersion depth	36/120 mm	40/120 mm

Low conductivities

	LR 325/01	LR 325/001
Order no.	301961	301963
Electrode material	Stainless steel	Stainless steel
Flow-through vessel	Glass	Stainless steel
Shaft material	Stainless steel	Stainless steel
Shaft length	120 mm	120 mm
Cell constant	0.1 cm^{-1}	0.01 cm^{-1}
Diameter	12 mm	20 mm
Cable length	1.5 m	1.5 m
Measuring range	0.001 ... 200 µS/cm	0.0001 µS ... 30 µS/cm
Temperature range	0 ... + 100 °C	0 ... + 100 °C
Temperature probe	NTC 30 kOhm	NTC 30 kOhm
Filling volume	17 ml (without sensor)	Approx. 10 ml (without sensor)
min./max. immersion depth	30/120 mm	40/120 mm

Simple applications and flow-through measurement in the laboratory

	KLE 325	TetraCon® DU/T or DU/TH
Order no.	301995	301252 or 301254
Type	2 electrode	4 electrode
Electrode material	Graphite	Graphite
Flow-through vessel	-	Epoxy
Shaft material	Epoxy	-
Shaft length	120 mm	-
Cell constant	0.84 cm^{-1}	0.778 cm^{-1}
Diameter	15.3 mm	-
Cable length	1.5 m	-
Measuring range	1 µS/cm to 20 mS/cm	10 µs/cm to 1000 mS/cm
Temperature range	0 to 80 °C	0 to 60 °C
Temperature probe	NTC 30 kOhm	NTC 30 kOhm
min./max. immersion depth	36/120 mm	-

Four-electrode conductivity cells

TetraCon® 325

TetraCon® S

TetraCon® 325/C

Graphite measuring cells for universal use

- TetraCon® 325

Suitable for almost all conductivity measurements in aqueous samples; for outdoor use available with cable lengths up to 20 m.

Graphite measuring cells for special applications

- TetraCon® 325 S

With shovel-shaped electrode holder, especially suitable for measuring in pasty samples.

Graphite measuring cells for special applications

- TetraCon® 325/C

This measuring cell is designed for measurement in acidic samples.

Flow-through measuring cells in the laboratory

- TetraCon® 325 DU

Four-electrode flow-through conductivity cell, (also with Hansen connector, DU / TH), for standard applications. Requires separate connection cable KKDU 325.

TetraCon® DU, DU/TH

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Two-electrode conductivity cells with stainless steel and graphite electrodes

LR 325/01

LR 325/001

KLE 325

Two electrodes ultra-pure water measuring cells

- LR 325/01

Two electrode measuring cell with concentric stainless steel electrodes and glass flow-through vessel for measuring low conductivities up to 200 µS/cm.

Two electrodes pure-water measuring cells

- LR 325/001

Two electrode measuring cell with concentric stainless steel electrodes and glass flow-through vessel for measuring trace conductivities up to 30 µS/cm.

Simple two electrode graphite LF measuring cell

- KLE 325

Graphite-based two-electrode measuring cell for medium measuring ranges up to 20 mS/cm for simple applications, also in training and education.