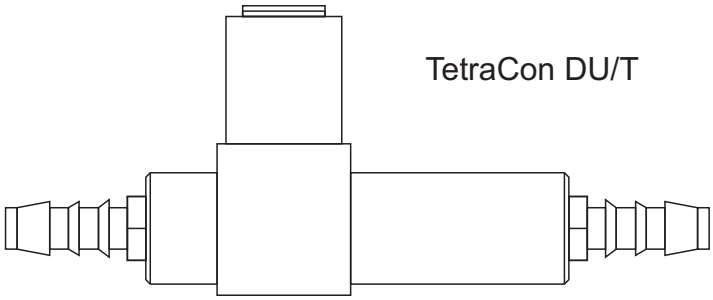
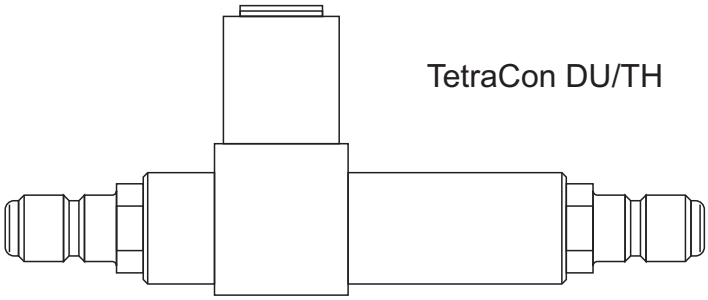
OPERATION MANUAL

ba77127e01 03/2015



TetraCon DU/T



TetraCon DU/TH

TetraCon® DU/T
TetraCon® DU/TH

CONDUCTIVITY FLOW-THROUGH MEASURING CELL

WTW

a xylem brand

General instructions



CAUTION
Contact with the sample can lead to danger to the user! Depending on the type of sample, suitable protective measures must be taken (protective clothing, protective goggles, etc.).

Connect measuring cells only to instruments which are designed for 4-electrode measuring technique. Consider the instruction manual of the used instrument.

Measuring

- Connect connection cable KKDU 325 with instrument and measuring cell.
- Adjust exact cell constant (refer to value indicated an the cell) at the instrument (approx. 0.778 cm^{-1}).
- Adjust right temperature coefficient (depending on the sample).
- Air bubbles in the measuring cell may cause wrog measuring values.

Application in the dialysis

Please consider that the measuring cell must not be used for patients measurements because we don't have any information from the supplier concerning the unobjectionable physiological requirements of the material.

Aging

Normally, the conductivity measuring cell does not age.

NOTE
Special measuring mediums (e.g. strong acids and bases, organic solvents) or temperatures that are too high may considerably reduce its lifetime or lead to damage.
No warranty claims can be made for mechanical damage or any failure caused by these types of measuring mediums.

Cleaning

If the sensor is heavily contaminated, this can affect the measuring accuracy. Therefore, we recommend to clean the sensor regularly after to visual checks. Thorough cleaning

of the sensor is particularly recommended before measuring lower values of conductivity, as well as before adjusting the measured value.

Contamination	Cleaning agents	Reaction time at room temperature
Water-soluble substances	Tap water	Any
Fats and oils	Warm water and household detergent;	Any
	In the case of heavy contamination: Methylated spirits	max. 5 minutes
Lime and hydroxide deposits	Acetic acid (10 %)	max. 5 minutes

Replacement parts and accessories

Description	Model	Order no.
Conductivity flow-through measuring cell (without connector cable)	TetraCon DU/T TetraCon DU/TH	301252 301524
Connector cable (1 m)	KKDU 325	301963
Calibration set for conductivity measurement 6 bottles with 50 ml calibration control standard each, KCl 0.01 mol/l, traceable to PTB/NIST.	E-SET Trace	300572

Technical Data

Parameters	Conductivity, temperature
Measuring principle	4-electrode system
Measuring range	10 µS/cm ... 1000 mS/cm
Accuracy	tolerance < 0.2 K in stationary state, in the agent 37 °C, air 20 °C (in case of flow-through > 150 ml/min)
Cell constant	approx. 0.778/cm (refer to value indicated on the cell)
Temperature sensor	NTC 30 kOhm
Response time for temperature measurement	t_{99} < 60 sec (in case of flow-through > 500 ml/min)
Temperature range	0 ... 60 °C (32 ... 140 °F)

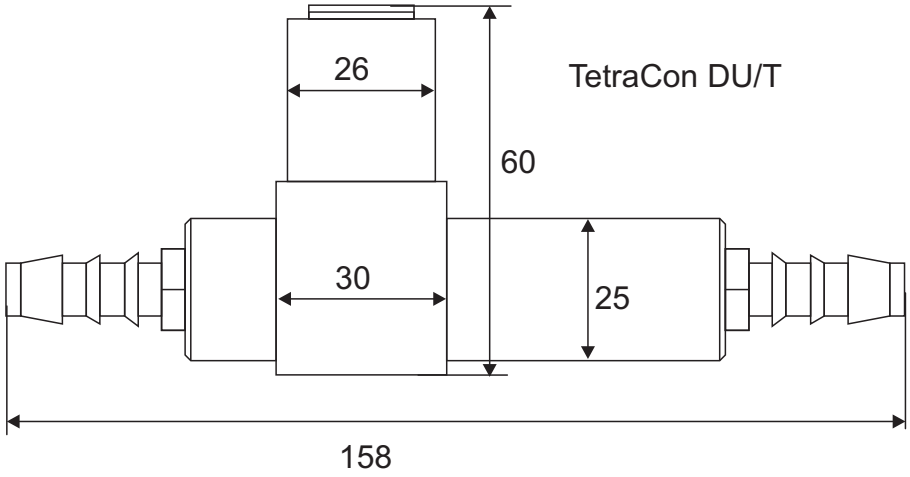
Material

TetraCon DU/T	Graphite Epoxy Steel 1.4571 (V4A) POM
TetraCon DU/TH	Graphite Epoxy Steel 1.4571 (V4A) POM

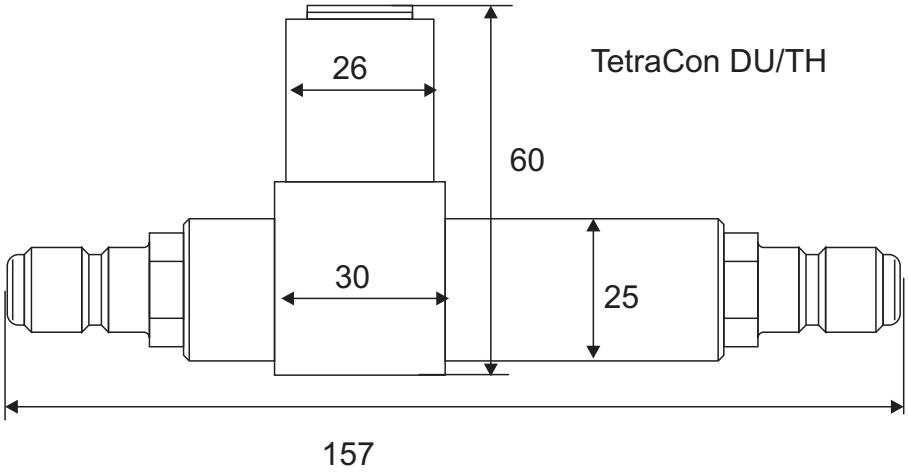
Pressure resistance	2 bar (2 x 10^5 Pa)
Total volume	TetraCon DU/T: 7.5 ml TetraCon DU/TH: 6.5 ml
Connector	TetraCon OU/T: tube connector GES 10 TetraCon OU/TH: connector "Hansen"-type
Connection	8-pole socket for connection cable model KKDU 325

Type of protection IP 65 in plugged condition

Dimensions (mm)



TetraCon DU/T



TetraCon DU/TH

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1) The tissue in plants that brings water upward from the roots;
2) a leading global water technology company.

We're 12,500 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

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