

CONDUCTIVITY CELLS ECF-1, ECF-1t

ECF-1 and **ECF-1t** are cells for immersible or in flow measurements. Wide measuring range (0 ÷ 400 mS/cm) enables using it in many applications. The cells are recommended for conductivity measurements in sewage, liquids with sediments, containing grease, oil, acids or alkalis, natural water, tap water etc.. This cells can also be used for measurements in water paints.

ECF-1t is equipped with a built-in temperature sensor.



ECF-1 / ECF-1t cell



Metal electrodes



Flow cell

Metal electrodes are easy to clean and resistant to mechanical damage. The housing is equipped with electrode cover, which may be screwed off easily to clean the electrodes.

In case of measurements of ultra pure water the cell should be used only for this purpose, not for any other measurements. The measurements should be done in flow with use of a special flow vessel put on the cell. The measurement without contact with air is more accurate, as gases contained in air may penetrate into the liquid and significantly change the reading. As additional equipment, we offer a glass flow-through vessel put on the bottom of the electrode. The water is flowing directly from a distiller or a pipeline through the valve and runs through the hose to the inlet at the bottom part of the vessel. The liquid outflowing through the vessel is directed to the sewage system or a container provided by the user. The cell may also be mounted in the **GPX-01** flow head which is made of plastic.

The main advantages of the cells are: accuracy, easy cleaning, resistivity of the electrodes to corrosion and affordable price.

The cells may cooperate with all conductivity meters made by Elmetron after the 2002 year.

For the liquids with conductivity below $10 \mu\text{S}/\text{cm}$ we recommend using an EC-201 cell with the constant $K = 0.1\text{cm}^{-1}$ placed in a flow vessel. European norm EN 27888 recommends such way of measurement.

For measurements of liquids with conductivity higher than $400 \text{mS}/\text{cm}$ we offer the EC-210 cell with constant $K = 10\text{cm}^{-1}$.

TECHNICAL DATA

Range:	0 ÷ 400 mS/cm
K constant:	$0.45 \text{cm}^{-1} \pm 0.05$
Temperature range:	0 ÷ 60 °C
Minimal immersion level:	20 mm
Diameter:	$12.0 \pm 0.5 \text{mm}$
Length	$20 \text{mm} \pm 5 \text{mm}$
Cable length	1 m
Body material	PVC
Connector	BNC-50
Temperature sensor (ECF-1t)	Pt-1000B (ECF-1t)

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