

## CMK50 CELL – INDUCTIVE MEASUREMENT of CONDUCTIVITY



The CMK50 cell uses the inductive working principle to perform conductivity measurements of liquids, up to 500 mS/cm.

The cell can be installed in immersion or in a flow-through probe-holder. Moreover, mounting (PP or steel) accessories for in-line installation.

Principle of operation: the cell is built with two internal electrical coils, transmitter and receiver. When the transmitter winding is solicited by a suitable electric current, it generates a magnetic field, which create an electric current in the liquid, proportional to the specific conductivity of the measured fluid. This current is detected by the receiver winding. Furthermore, a specific inbuilt sensor detects the liquid temperature and automatically thermo-compensates readings, providing the final actual value of the fluid conductivity.



The cell is used combined with a special signal transmitter (CTI-01 series), available in a waterproof housing for wall installation or with support for mounting on a DIN rail, 4-20 mA output, different power supply options and / or full scale values.

### TECHNICAL DATA

Cell Body	PEEK
Installation	½" G connection; immersion or down-flow probe holder
Thermo-compensation	automatic, through inbuilt sensor
Working Temperature	max 120°C
Cable	10 m
Connection	via proper signal transmitter (CTI-01 series)

Item	Description	Part No.
CMK50	Inductive conductivity cell with PEEK body, inbuilt temperature sensor, ½" threading for mounting in probe-holder, and 10 m cable	80280000
CMK-AS	AISI304 stainless steel fitting, DN50, for in-line installation	80280010
CMK-ADAS	Adapter for mounting the CMK50 cell on CMK-AS	80280020
CMK-PP	PP fitting, connections ½" GF, for in-line installation, max. 80°C	80280011
CMK-ADPP	Adapter for mounting the CMK50 cell on CMK-PP	80280021
CTI-01 (mounting on DIN rail)	Signal transmitter, 230V~, output 4-20 mA, range up to 5 mS/cm	80282010
	Signal transmitter, 230V~, output 4-20 mA, range up to 10 mS/cm	80282011
	Signal transmitter, 230V~, output 4-20 mA, range up to 20 mS/cm	80282012
	Signal transmitter, 230V~, output 4-20 mA, range up to 50 mS/cm	80282013
	Signal transmitter, 230V~, output 4-20 mA, range up to 100 mS/cm	80282015
	Signal transmitter, 230V~, output 4-20 mA, range up to 200 mS/cm	80282016
	Signal transmitter, 230V~, output 4-20 mA, range up to 500 mS/cm	80282017
CTI-01/S (housing IP56, wall installation)	Signal transmitter, 230V~, output 4-20 mA, range up to 5 mS/cm	80281010
	Signal transmitter, 230V~, output 4-20 mA, range up to 10 mS/cm	80281011
	Signal transmitter, 230V~, output 4-20 mA, range up to 20 mS/cm	80281012
	Signal transmitter, 230V~, output 4-20 mA, range up to 50 mS/cm	80281013
	Signal transmitter, 230V~, output 4-20 mA, range up to 100 mS/cm	80281015
	Signal transmitter, 230V~, output 4-20 mA, range up to 200 mS/cm	80281016
	Signal transmitter, 230V~, output 4-20 mA, range up to 500 mS/cm	80281017

**Note:** On request, transmitters with 24 V ac/dc power supply are also available.