0022.0400 Conductivity Transducers

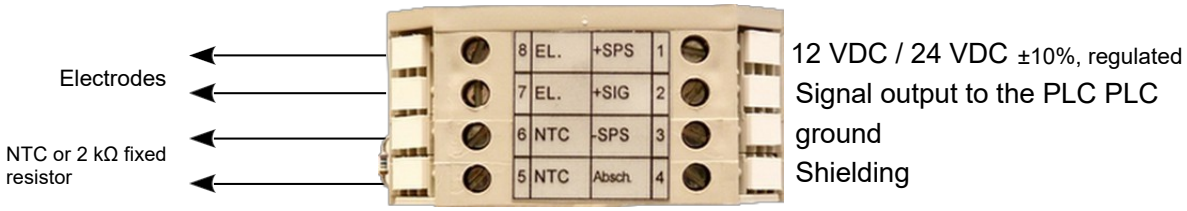
in a DIN rail enclosure with automatic temperature compensation and galvanic isolation.

The device converts the conductivity of the measurement solution into a low-impedance output signal of 0(4)..20 mA or 10 V.

ZK stands for cell constant

Technical Data: (Subject to change)

Conductivity measurement input All values are in /cm	0.01 µS...1000 mS at cc 0.01...cc 1 16 selectable measurement ranges 0...F
Output	0(4)...20 mA / 10 V Adjustable via jumper
Accuracy / Linearity	±1%, Cable length from **A = 20 mS** ≤ 6 m, and then 0.34 / 0.5 mm² recommended.
Temperature sensor input for temperature compensation	NTC 2 kΩ all LF measuring cells LMN
Temperature compensation	approx. 2.2%/°C in natural water
Reference temperature	25°C
Operating voltage	12 VDC / 24 VDC ±10%, regulated As specified on the nameplate
Current consumption	max. 50 mA
Ambient temperature	0...60°C
Protection rating	IP20
Dimensions (H x W x D)	75 x 60 x 30 mm
Weight	70 grams



The NTC is required for temperature compensation of the measurement solution.

For temperature-compensated LF measurement, the NTC should be connected when the medium temperature deviates from approximately 25°C.

In this case, the 2 kΩ fixed resistor must be removed.

The fixed resistor can remain installed if the LF measurement is performed at a medium temperature of approximately 25°C, or if an uncompensated measurement is to be taken.

Terminals 5 and 6 must be connected in all cases, either via the NTC or the fixed resistor.

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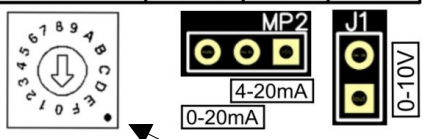
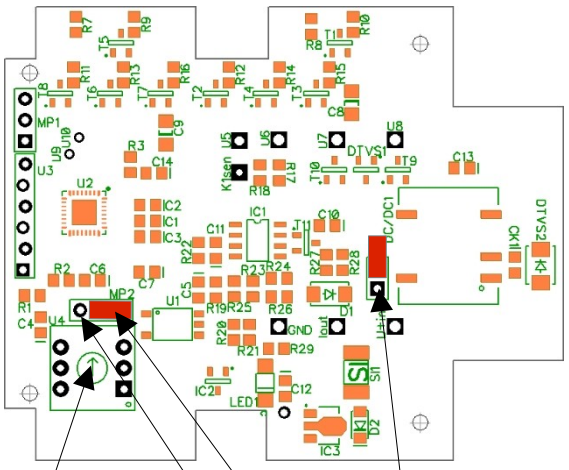
After opening the housing cover, the jumpers and the rotary switch are accessible.

The device is shipped with the switch set to position 6 and with a 4...20 mA output.

Recommended sensor combinations, ZK stands for cell constant CC

Messbereiche:	ZK 1	ZK 0.1	ZK 0.01
Schalterstellung			
0		1 µS	100 nS
1		2 µS	200 nS
2		5 µS	500 nS
3	100 µS	10 µS	1 µS
4	200 µS	20 µS	2 µS
5	500 µS	50 µS	5 µS
6	1 mS	100 µS	10 µS
7	2 mS	200 µS	20 µS
8	5 mS	500 µS	50 µS
9	10 mS	1 mS	100 µS
A	20 mS	2 mS	200 µS
B	50 mS	5 mS	500 µS
C	100 mS	10 mS	
D	200 mS	20 mS	
E	500 mS		
F	1000 mS		





Jumper 0–10 V

Jumper 0 / 4–20 mA

Rotary switch 0...F