

MEASURING INSTRUMENTS

Con 6 *m*

Conductivity meter



Illustration: 2-wire-version

Measuring device for all conductivity applications in the trace range

In the basic version, the measuring transducer **Con 6 m** has one channel for continuous monitoring of direct conductivity or acid conductivity after a strongly acidic cation filter. Via easy-to-install measuring modules, the unit can be retrofitted to work as a differential conductivity meter.

The calculation of the pH-value is effected through the determination of differential conductivity in accordance with the VGB standard and provides a low-maintenance and reliable alternative in contrast to the conventional determination of the pH-value by means of a glass electrode. Furthermore, the measuring transducer **Con 6 m** offers the option of integrating a flow measurement for monitoring the sample flow within the framework of the representative and VGB-compliant sample analysis. For a flexible use, the measuring transducer could be equipped with a broad-range mains adapter at the factory (4 wire principle). Alternatively, there is also a 2-wire-version available where separate auxiliary voltage is not required.

Necessary preconditions for the validity of the pH-value calculation:

- use of just one alkalisating medium
- main contamination of NaCl
- pH-values >8
- low phosphate concentration (< 0.5 mg/l)

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TECHNICAL FEATURES

- Easily scalable 1- or 2-channel conductivity meter in 2- or 4-wire version
- Calculation of pH-value in the range of pH 7.5 to 10.5 in the 2-channel version
- Simultaneous measuring of conductivities, temperature and monitoring of sample flow
- User selectable linear and non-linear temperature compensation for various contaminations of high-purity water
- Two analogue outputs with HART protocol
- Freely usable digital contacts in the 4-wire-version (washing contact, alarm, 2x limit value)



TECHNICAL DATA

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Device	Con 6 <i>m</i> 1-channel	Con 6 <i>m</i> 2-channel
Display	graphic display, backlit by means of colour-change status display	
Operation	menu-led entry with 7 operating keys	
Ambient temperature	0 ... +55 °C transport and storage temperature -30 ... +70 °C relative humidity 10 ... 95 % non-condensing	
Operating parameter medium	0...+60 °C	
Conductivity electrode	LS 06 with fixed cable	2x LS 06 with fixed cable
Measuring range	conductivity 0.001 ... 1,000 µS/cm	2x conductivity 0.001 ... 1,000 µS/cm calculation of the pH-value of 7.5-10.5
Accuracy	<1% of the measuring value + 0.01 µS/cm	
Sample quantity	display in l/h with digital flow sensor	
Data interface	RS 485, HART	
Alarm outputs	four relays as washing contact, alarm, 2x limit value (4-wire version)	
Analogue outputs	one or two 0(4)...20 mA, galvanically isolated	
Power supply	2-wire without auxiliary voltage 4-wire 80 V ... 230 VAC; ≤ 10 W; 45 ... 65 Hz 24 V ... 60 VDC; 10 W	
Protection system	IP 67 and NEMA 4x	
Weight	1,2 kg	
Dimensions	148 x 148 x 117 mm (HxWxD)	

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Subject to technical alterations.

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