Dr. Thiedig

MEASURING INSTRUMENTS

Con 6 *m*

Conductivity meter

Illustration: 1-channel-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 alkalising medium
- main contamination of NaCl
- pH-values >8
- low phosphate concentration (< 0.5 mg/l)

Con 6 *m*

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 (alarm, 3x limit value)**

TECHNICAL DATA

MEASURING INSTRUMENTS

Con 6*m*

Device	**Con 6 m** 1-channel	**Con 6 m** 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 or Profibus DP (optional)	
Alarm outputs	four relays, alarm, 3x 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)	

Subject to technical alterations.

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