### **MEASURING INSTRUMENTS**

# CatCon 6 delta



## Measuring device for differential conductivity and pH-value determination

The analyser consists of the measuring transducer **Con 6 m** and the intelligent cation filter **CatControl 6**. It is used for continuous conductivity measurement before and after a strongly acidic cation exchanger.

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 can 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. The standardly integrated ventilation of the **CatControl 6** ensures a bubble-free sample flow even in the start-up phase.

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.

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)

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#### **TECHNICAL FEATURES**

- Calculation of pH-value in the range of pH 7.5 to 10.5
- Simultaneous measuring of both 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

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Device	CatCon 6 delta
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	2x LS 06 with fixed cable
Measuring range	2x conductivity 0.001 1,000 $\mu$ S/cm calculation of the pH-value of 7.5 – 10.5
Accuracy	<1% of the measuring value + 0.01 $\mu$ S/cm
Cation filter	1.5 I exchanger resin with colour indicator and integrated flow sensor
Sample quantity	display in I/h with digital flow sensor
Data interface	RS 485, HART
Alarm outputs	four relays, alarm, 3x limit value (4-wire)
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	1000 x 300 x 117 mm (HxWxD)

## **Dr. Thiedig**

Subject to technical alterations.

