

7-pole Conductivity Sensor

The new 7-pole-cell conductivity sensor has been developed for interfacing to submersible probe systems and above all to avoid troubles caused by electric fields and magnetic effects. Another advantage of this conductivity cell is the absolutely linear slope within the whole measuring range.

The sensor is useful for long time monitoring measurements. But nevertheless cleaning and calibration is recommended in regular intervals to avoid precipitations at the electrode surfaces. A multi-core sea-cable is necessary for the power supply and for data transmission.

The sensor consists of the parts pressure tube, 7-pole conductivity cell, cap, underwater connector and electronic device.

The material of the housing is corrosion-resistant (titanium). The minimum pressure resistance of 600 dbar is guaranted.

Further technical details:

- quartz glass cell for high quality measurements
- independent from electrical fields and magnetic effects
- 4 measuring channels, 1 input, 2 grounds
- measuring ranges: 0...1, 0...6 and 0...60 mS/cm
- dimensions: diameter of the housing: 30.0 (-0.5) mm total length: approx. 270 mm
- weight in air: approx. 300 g
- housing: titanium
- for depths of up to 6,000 m
- output: 0...2,5 or 0...5 V DC
 - (standard, others like current output on request
- necessary voltage: 9-18 V DC (others on request)
- 20 mA current uptake
- Subconn-connector (others possible)



fig.: OEM conductivity sensor for probe systems