

# Conductivity Sensor TCon

80S400000 · 80S400010



Digital sensor to measure conductive conductivity especially in pure media, for operation on TriBox controllers and HS100 DIN rail module. The digital technology ensures secure and interference-free signal transmission from the sensor to the controller. TCon is available with a 10 m or a 2 m fixed cable.

## Benefits

- Reliable conductivity measurement with two conductive graphite electrodes and temperature compensation
- PVC sensor housing and graphite electrodes
- No mechanically moving parts
- Immediate installation and easy maintenance
- Modbus RTU digital communication protocol

## Applications

- Measurement of conductivity in the outflow of wastewater treatment plants
- Measurement of conductivity in industrial and water circuits

## Accessories

- Cable: Extension cables of 0.3 m, 2 m, 10 m, 25 m
- Controller: TriBox3, TriBox Mini, HS100
- Fittings: FlowCell

## Technical Specifications

<b>Measurement technology</b>	conductive with 2 graphite electrodes	
<b>Measurement principle</b>	Conductometry	
<b>Parameter</b>	Conductivity, temperature	
<b>Measuring range</b>	0...20000 µS	
<b>Measurement accuracy</b>	± 1 µS	
<b>Temperature compensation</b>	Pt1000	
<b>Response time</b>	95 % of value in 10 sec	
<b>T100 response time</b>	10 s	
<b>Measurement interval</b>	5 s	
<b>Housing material</b>	PPS / PET / NBR	
<b>Dimensions (L x Ø)</b>	180 x 27 mm	~ 7.1" x 1.1"
<b>Interface</b>	RS-485, Modbus RTU	
<b>Power consumption</b>	0.2 W	
<b>Power supply</b>	12...24 VDC (± 10 %)	
<b>Connector</b>	8-pin M12-plug	

<b>Maintenance effort</b>	≤ 0.5 h/month (typical)	
<b>Calibration/maintenance interval</b>	4 weeks	
<b>System compatibility</b>	Modbus RTU	
<b>Warranty</b>	1 Year (EU: 2 years) on electronics; All wearing parts are not included in the warranty	
<b>Max. pressure</b>	3 bar	~ 43.5 psig
<b>Protection type</b>	IP68	NEMA 6P
<b>Sample temperature</b>	0...+70 °C	~ +32 °F... +158 °F
<b>Ambient temperature</b>	0...+70 °C	~ +32 °F... +158 °F
<b>Inflow velocity</b>	0.1 m/s	~ 0.33 fps