

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

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

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