

Conductivity sensor

90S430100 · 90S430130



Digital conductive conductivity sensor, especially for pure media, for operation on TriBox controllers and HS100 DIN G2 rail module. The digital technology ensures secure and interference-free signal transmission from the sensor to the controller.

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

Technical Specifications

OPERATION AND SYSTEM CONFIGURATION

Measurement principle	Conductive with 2 graphite electrodes
Measuring method	Conductometry

AUXILIARY POWER

Electrical connection	8-pin M12 plug
Power supply	12-24 V
Power consumption	2 W

INPUT PARAMETERS

Measuring ranges	0.00 to 20000 µS
Cable specification	black PUR (halogen free), shielded, M12 plug

OUTPUT SIZES

Temperature compensation	RS-485, Modbus RTU
Accuracy	± 1 µS
Data interface	RS-485, Modbus RTU

PERFORMANCE CHARACTERISTICS

Response time	90% of the value in less than 60 seconds
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AMBIENT CONDITIONS

Protection type	IP68
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PROCESS CONDITIONS

Process temperature	-10...+45 °C
Process pressure	10 bar

STRUCTURAL DESIGN

Dimensions	220 mm x 33 mm
Materials	PVC body, graphite electrodes
Thread	1" GAS BSP

CERTIFICATES AND APPROVALS

CE Manufacturer's Declaration	2014/30/EC EMC Directive (EN 61326-1:2013)
Work certificates	Yes

SCOPE OF DELIVERY

value only lead Manual	Yes
CE Manufacturer's Declaration	Yes
Test certificate	Yes

ACCESSORIES

Fittings	Flow unit
Cables	Extension cables: 0.3 m, 2 m, 10 m, 25 m
Measuring transducer	TriBox3, TriBox Mini, HS100, TriBox flex
Validation/calibration	Conductivity standard 1413 µS/cm, Basic Line