Economy Conductivity Sensor with Modbus output MBRTU-EC-CT25

Introduction

MBRTU-EC-CT25 is an economy type 2-electrode Conductivity sensor, to measure small range of conductivity. It has cell constant 0.1 and 1.0. Affordable ABS body housing with standard 12mm diameter and 120mm length. Integral temperature sensor for automatic temperature compensation (ATC). Output is Modbus RTU for easily integrating with any PLC, controller, SCADA, BMS or IoT gateway.

- 2-electrode design for small range;

- Automatic temperature compensation;

- Cell constant 0.1 and 1.0;

- Standard ModbusRTU output;

Typical Applications

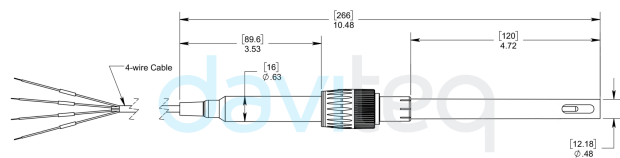MBRTU-EC-CT25 is used in monitoring of electrical conductivity or salinity in:

- Portable water;

- Aquaculture;

- Process liquids;

- …

ECONOMY CONDUCTIVITY SENSOR WITH MODBUS OUTPUT MBRTU-EC-CT25

MBRTU-EC-CT25-H1.PNG

DIMENSION DRAWING OF MBRTU-EC-CT25
(Unit: [mm]/in)

MBRTU-EC-CT25-H2.PNG

MEASURING EC IN WATER	**EC TRANSMITTER, DIN-RAIL MOUNT**
MBRTU-EC-CT25-H3.PNG	MBRTU-EC-CT25 MBRTU-EC-CT25-H4.PNG

Specification

EC SENSOR SPECIFICATION	
Sensing Technology	2-electrode measurement with temperature sensor
Measuring range	0 - 20.000 uS/cm for K=1 0 - 1.000 us/cm for K=0.1
Resolution	1 uS
Accuracy	+/- 1 uS
Response Time	T90 < 30s
Working process temperature	0 .. 80 oC (compensated)
Working process pressure	0 .. 15 psig
Process connection	12mm OD flush (no process connection)
Probe material	ABS body
Sensor Cable	3m
Rating	IP68
Sensor Dimension	D12 x 266 (mm)
Sensor net weight	< 150 grams
EC TRANSMITTER SPECIFICATION	
Inputs	2-electrode Conductivity sensor
Output	RS485, ModbusRTU protocol, max 19200 baud
Power supply	9..36VDC, avg. < 200mA
Mounting	DIN Rail

Working temperature	-40 .. 85 oC
Working humidity	0 .. 95% RH, non-condensing
Housing	Engineered Plastic
Ingress Protection	IP20
Dimension	93 x 40 (mm)
Net weight	<200 grams

Ordering Code

Item code	Descriptions
MBRTU-EC-CT25-P001	CONDUCTIVITY-SALINITY SENSOR, 2-ELECTRODES CARBON TYPE 12MM PROBE, K=1, 3M SENSOR CABLE, C/W DIN RAIL MOUNT TRANSMITTER, MODBUSRTU RS485 OUTPUT, 9-36VDC
MBRTU-EC-CT25-P002	CONDUCTIVITY-SALINITY SENSOR, 2-ELECTRODES CARBON TYPE 12MM PROBE, K=0.1, 3M SENSOR CABLE, C/W DIN RAIL MOUNT TRANSMITTER, MODBUSRTU RS485 OUTPUT, 9-36VDC
Accessories	
RS485-FM12-USB-1	RS485 FEMALE M12 4-PIN, CODING A TO USB CABLE WITH POWER ADAPTER 12VDC/2.0A FOR CONFIGURATION

* Configuration cable for pH sensor, Windows' software is free. Contact our sales for more information.

⚠ Link to download datasheet: https://filerun.daviteq.com/wl/?id=qL6jQruJB5YSFsuemkHpoHD4ChjtLg0Z

⚠ Link for manual: