



Description

AquaMetrix conductivity sensors have earned a reputation for over four decades of being field proven in some of the most hostile and mission-critical applications. Our three lines of sensors cover every conceivable environment from ultra-pure water to wastewater.

Now our most popular conductivity sensor line, the AS series, is available in a direct, 4-20 mA version. The AS-TX line encloses the working circuitry of the 2250 TX transmitter into a package small enough to fit into a 1" CPVC body.

The AS-TX retains the programmability of the 2250 TX so that you can program into the probe the cell constant, temperature compensation, calibration and 4-20 mA output.

Each sensor is individually factory calibrated so there is no programming required. You can expect accurate readings right out of the box.

Five cell constants from 0.01 to 50 are available to cover any water sample. Integral automatic temperature compensation Pt1000Ω RTD is standard on all types and provides compensation to 25 °C. The temperature element is in close thermal contact with the

liquid being measured to ensure fast response to changing temperature.

Flow-through mounting incorporates a special compression fitting which allows adjustable insertion length in 1.5-inch NPT fitting or in the side of a tank. This design avoids the nuisance of disconnecting the cell cable when installing or removing the cell for cleaning.

Submersion mounting is achieved via the AM-ARM-5 mounting hardware. Mounting hardware is available which includes a 4 foot length of CPVC pipe and a simple but versatile adjustable bracket for hanging on the rim of the tank.

A hot tap ball valve mounting assembly permits removal of the cell from process piping or from tanks without shutting down the system.

Those who already have an AS series probe can purchase the blind transmitter in a separate NEMA 4X package.

The AS-TX is just one of many 4-20 mA output sensors that work with the AM-2300 web-enabled controller or virtually any PLC.

Features

- Integral 4-20mA transmitter can be fed directly to a PLC
- Configurable through RS-485. Modbus coming.
- Five Cell Constants: 0.01, 0.1, 1, 10 and 50
- Electrodes: 316 SS (0.1 and 1) or Graphite (0.01, 10 and 50)
- Pt 1000 Ω RTD for automatic temperature compensation
- Factory calibrated conductivity, temperature and 4-20 mA output.
- Separate transmitter available to convert existing AS probes to direct output.

Applications

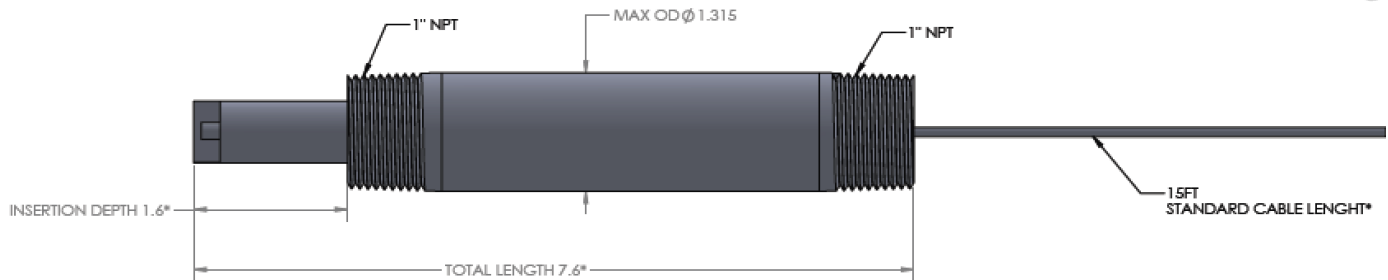
- Cooling towers
- High purity water applications
- Pharmaceutical Applications
- Reverse osmosis systems
- Food and Beverage
- Aquaculture
- Agriculture

AquaMetrix AS-TX 4-20mA Conductivity Sensor

Technical Data

Cell Constant	Choice of 0.01, 0.1, 1, 10 and 50	Temperature Compensation	Default 2%/°C. Adjustable from 0 to 10%/°C
Wetted Materials	CPVC and 316 SS (0.1 and 1) CPVC and Graphite (0.01, 10 and 50)	Factory Calibration	Conductivity, Temperature, 4-20 mA output
Resistance Range	100 - 5000 Ω	Accuracy	Conductivity: ±5% or better Temperature: ± 1°C
Temperature Element	Pt 1000 Ω RTD.	Stability	Conductivity: ±1% Temperature: ±0.1°C
Temperature Range	-20 to 90°C (-4 to 195°F)	Cable	4 Conductor (2 analog, 2 digital). Default length 4.6 m (15 ft)
Maximum Pressure	200 psig non-shock at 25°C	Transmission Distance	Nominally 650 m (2000 ft)
Power Input	16-32 VDC (loop powered)	Certification	TUV pending, CE
Analog Output	4-20 mA loop powered		
Digital Output	RS 485 (Modbus RTU coming)		

Dimensions



Dimensions for ASM-TX-1 (cell constant 1). Insertion depth and total length different for other cell constants.

Related Products

ANALYZERS

AM-2300 Web-enabled, multi-input controller

ACCESORIES

AM-JB1 NEMA 4X junction box
 AM-HTA-R5 Ball Valve assembly for Hot-Tap insertion
 AM-ARM-5 Submersion mounting kit
 AM-SFL-5 1-1/2" Sanitary flange for AS sensor
 AM-TEE-5 1" Union Tee with 3/4" adapter
 AM-CBL-AS Extension cable

CALIBRATION SOLUTIONS

AM-C010U-1P 10μS/cm, 1 pint (500 mL)
 AM-C100U-1P 100μS/cm, 1 pint (500 mL)
 AM-C001M-1P 1mS/cm, 1 pint (500 mL)

Ordering Information

ASG001TX-015	4-20 mA Output Conductivity Probe; CPVC, Graphite electrodes 1" MNPT both ends Cell constant 0.01
ASM01TX-015	4-20 mA Output Conductivity Probe; CPVC, 316 SS electrodes 1" MNPT both ends Cell constant 0.1
ASM1TX-015	4-20 mA Output Conductivity Probe; CPVC, 316 SS electrodes 1" MNPT both ends Cell constant 1
ASG10TX-015	4-20 mA Output Conductivity Probe; CPVC, Graphite electrodes 1" MNPT both ends Cell constant 10
ASG50TX-015	4-20 mA Output Conductivity Probe; CPVC, Graphite electrodes 1" MNPT both ends Cell constant 50
ASGTX-BT	Blind transmitter housed in an external NEMA 4X enclosure. Mates to any AS or AM probe with a Pt1000Ω RTD..