



Water Monitoring Solutions

Conductivity Cells, Holders, and Analyzers

Key Benefits

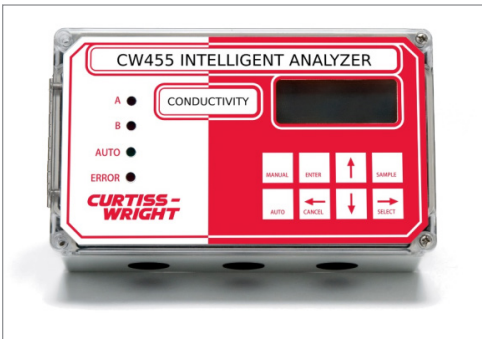
- Designed and manufactured under CSA N285 and N299.1 QA Program
- OEM replacement and new installation designs
- All cell models are compatible with the CWNC Conductivity Analyzer CW455
- Directly mountable to hot tap valve or within system

Curtiss-Wright manufactures and provides a wide variety of conductivity solutions for any requirements within your nuclear power plant. Previously manufactured by Lisle-Metrix, Curtiss-Wright has been manufacturing conductivity cells and holders at our Newmarket, ON location since 2012. In addition, Curtiss-Wright offers a qualified digital conductivity analyzer that is compatible with every conductivity cell we offer.

Design includes two measuring circuits, the first comprised of two electrodes spaced at a pre-determined distance apart, based on the application for which the cell is being used. The second circuit is a temperature sensor, which is temperature compensated due to electrolytic conductivity sensitivity. For example, a one-degree change in temperature will cause the conductivity to change by 2%. The cells are designed to withstand values exceeding 2100psi(g) and 100°C.

Cell holders are engineered and manufactured to the same rigorous quality as the cells themselves. The holders are permanently installed in-line and the cell is installed in it. One benefit of mounting the cell in-line is service can be performed on the cell during normal operation and while the line is under pressure.

Curtiss-Wright also offers the CW455, a digital conductivity analyzer that is compatible with all models of conductivity cells. This transmitter offers the greatest flexibility regardless of plant-application, with 2 programmable outputs (4 to 20 mA and 0 to 5 VDC) and programmable alarms.



Transmitter Operational Data

Property	Characteristic
Accuracy	Conductivity $\pm 2\%$ of measured range Temperature $\pm 0.1^\circ\text{C}$
Precision	Conductivity $\pm 0.1\%$ or 2 digits, whichever is greater. Temperature ± 1 digit (0.1°C)
Response Time	90% within 5s (default), function of flow and temperature. Damping adjustment: 3s to 99s
Cell Constant Range	0.001/cm to 100.0/cm
Relays	Two independent relays, programmable, fail safe NO/NC. Relays are configurable as either alarm contracts or auto-range BCD range indicators for output 1. Relays are SDPT, Form C, rated 10 A 115 V/5 A 230 V
Outputs	Two continuous, assignable, programmable outputs. Output 1: 4 mA to 20 mA, isolated, max. load 600 ohm Output 2: 0.0 VDC to 5.0 VDC, isolated

Conductivity Cell Specifications

Item	Part Number	Cell Constant (K)	Description
1	MSJ418	N/A	Conductivity Cell Holder, 1-1/2" 300# L.T. Flange; 316 SS; Flange Mounted
2	MSJ852A	-	Conductivity Cell, 316SS, 1-1/4 MNPT, Range: 0-0.5 mS/m, Nuclear Class 3
3	MSJ852B	0.5	Conductivity Cell, 1-1/4 MNPT, Range: 0-100 mS/m
4	MS001J1168	0.01	Conductivity Cell, K=0.01, 1-1/4" NPT Process Connection, ASME Sect. III Class 3, Stainless Steel, Polypropylene, Nitrile, Built-in Temperature Compensation
5	MSJ1146A	0.01	Cell Conductivity, Range: 0-0.5 mS/m, Cell Constant 0.01, Maximum Pressure 1.65 MPA, Maximum Temperature 94°C, Temperature Compensation, Cell Thread L-L/4" MNPT
6	MSJ1146B	0.5	Probe Conductivity, Thread Size 1 1/4" NPTM, Range: 0-100 mS/M, Cell Constant 0.5, pH Range 5.0-7.0
7	MSJ1149	2	Conductivity Cell, 0 to 2000 mS/m; 2/cm; 316 SS; C/W 7 Meter Cable Length; NC1
8	MSJ1180	0.5	Cell, Conductivity, Sensor, 0.5/cm Cell Constant, SA-479 Type 304SS Cell, SA-479 Type 304SS Electrode, ASME III, Class 1
9	MS005J1157A	0.05	Conductivity Cell, 1-1/4 MNPT, Range: 0 to 50 uS/cm, ASME
Please Contact Curtiss-Wright For Other Models			

For More Information

Scan the QR code below to contact our team.



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