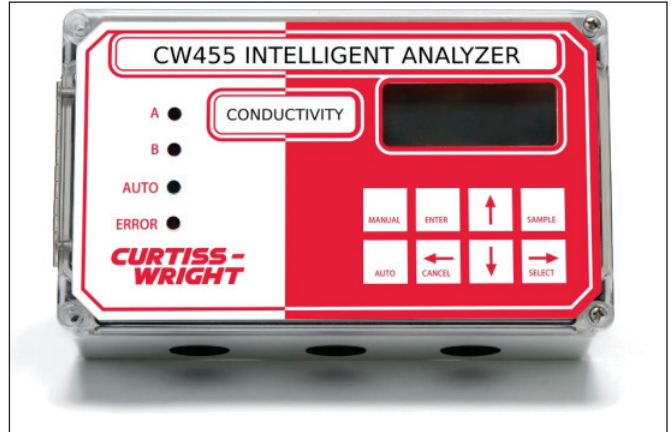


In-Line Process & Water Monitoring Solutions

Conductivity Cells, Holders & Analyzers

**CURTISS -
WRIGHT**

Nuclear Power Products and Services



About Conductivity Cells, Holders and Conductivity Transmitters

Curtiss-Wright Nuclear Canada (CWNC) manufactures and provides a wide variety of conductivity solutions for any requirements within your nuclear power plant. Previously manufactured by Lisle-Metrix, CWNC has been manufacturing conductivity cells and holders since 2012. In addition, CWNC offers a qualified digital conductivity analyzer that is compatible with every conductivity cell that 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.

CWNC 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 (CW455)

Property	Characteristic
Accuracy	Conductivity: $\pm 0.2\%$ 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 contacts 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

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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

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-1/4" 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 CWNC For Other Models



CONTACT INFORMATION:

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