

# Corrosion Sensor

## LPR Corrosion Sensor for WCT900 and Intuition-9 Series Controllers

Cost effective and reliable solution to your corrosion monitoring and controlling needs.



Each card provides two **Linear Polarization Resistance (LPR) sensor Inputs** to measure or control the corrosion rate and corrosion imbalance (pitting) of two different alloys in the cooling tower.

The sensor uses standard 5 cm<sup>2</sup> surface area electrodes.

### KEY BENEFITS

- Reliable 4-wire design
- Corrosion rate and imbalance
- Dual corrosion sensor input
- Automatically measures conductivity and compensates for it each cycle
- Able to set a control delay during the initial stabilization time
- Automatic electrode replacement reminder
- Self-Diagnostics eliminates the need for Test Probe Simulator
- Disturbance Control Algorithms that take advantage of the corrosion signal
  - Target PPM mode with Disturbance
  - Adjusts the target PPM higher if corrosion increases
- On/Off Disturbance mode
  - Adjusts the inhibitor (PTSA) concentration higher if corrosion increases

### About Us

Walchem integrates its advanced sensing, instrumentation, fluid pumping and communications technologies to deliver reliable and innovative solutions to the global water treatment market. Our in-house engineering is driven by quality, technology and innovation. For more information on the entire Walchem product line, visit: [www.walchem.com](http://www.walchem.com).

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**W A L C H E M**

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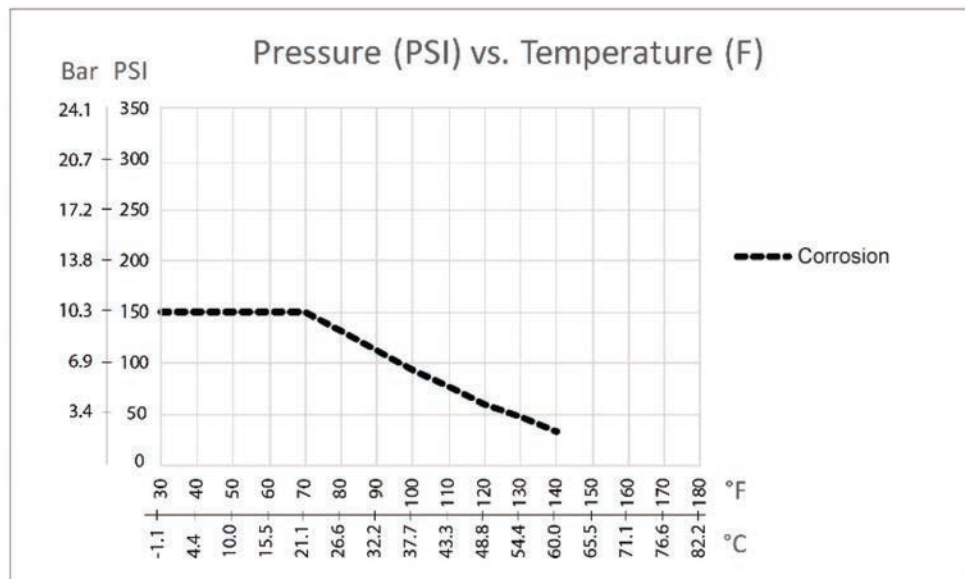
## SPECIFICATIONS

### MEASUREMENT PERFORMANCE

| Range                | Resolution           |
|----------------------|----------------------|
| 0-2 mpy or mm/year   | 0.001 mpy or mm/year |
| 0-20 mpy or mm/year  | 0.01 mpy or mm/year  |
| 0-200 mpy or mm/year | 0.1 mpy or mm/year   |

### MECHANICAL

|                            |                                       |               |
|----------------------------|---------------------------------------|---------------|
| Pressure (see graph)       | 0-150 psi (0-10 bar)                  |               |
| Temperature (see graph)    | 32-158°F (0-70 °C)                    |               |
| Fitting Process Connection | 3/4" NPTM mounting fitting            |               |
| Electrode Material         | Sold separately                       |               |
| Body Material              | Glass filled reinforced Polypropylene |               |
| O-Ring Material            | FKM                                   |               |
| Maximum Cable length       | 100 feet (30 m)                       |               |
| Standard Cable length      | 3 feet (1m)                           | 20 feet (6 m) |



### ORDERING INFORMATION

- 191951-06 Sensor/Mounting Fitting, Corrosion, 6 ft.
- 191951-20 Sensor/Mounting Fitting, Corrosion, 20 ft.
- 191935-06 Sensor, Corrosion, 6 FT
- 191935-20 Sensor, Corrosion, 20 FT
- 104203 Mounting Fitting, Corrosion, 3/4"
- 103787 Corrosion electrode tips, carbon steel (pair)
- 103788 Corrosion electrode tips, copper (pair)
- 103789 Corrosion electrode tips, brass (pair)

Refer to the W900 or Intuition-9 brochure for the model codes that include the dual corrosion sensor input card and sensor options O and R (single and dual sensors, electrode tips purchased separately).

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