



LPR Corrosion Sensor for WCT900 Series Controllers

Walchem's LPR corrosion sensors, in combination with the WCT900 Series controllers, offer a 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 cm² surface area electrodes.



Summary of 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
- 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

SPECIFICATIONS

Measurement Performance

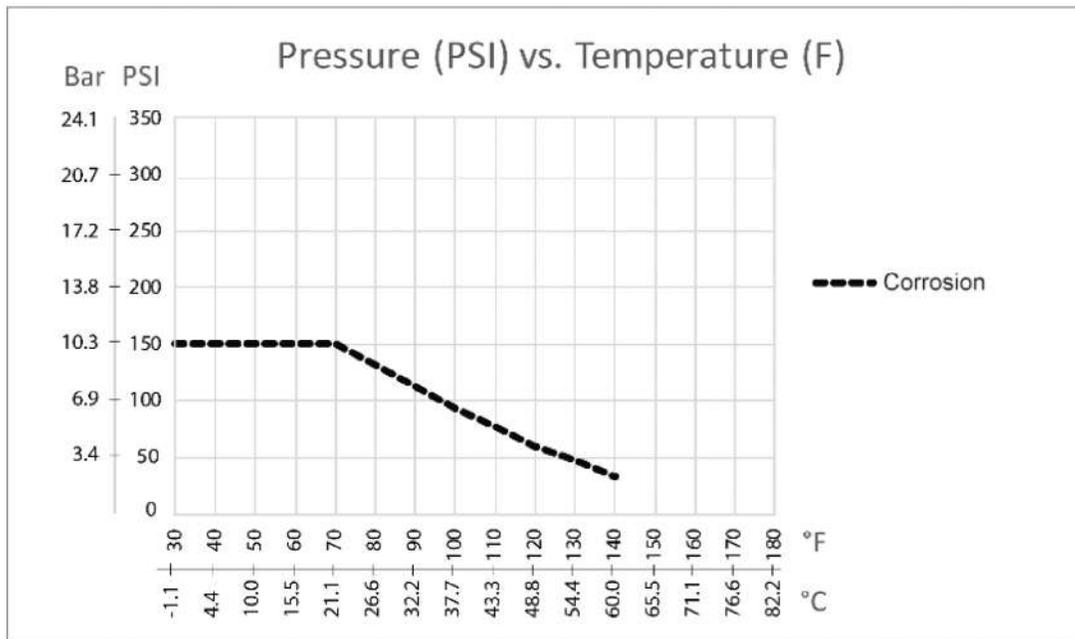
| Range | Resolution |
|----------------------|----------------------|
| 0-2 mpy or mm/year | 0.001 mpy or mm/year |
| 0-20 mpy or mm/year | 0.01 mpy or mm/year |
| 0-200 mpy or mm/year | 0.1 mpy or mm/year |

Corrosion Sensor



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) |



ORDER 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 brochure for the WCT900 Series model codes that include the dual corrosion sensor input card and sensor options O and R (single and dual sensors, electrode tips purchased separately).



180727.A November 2018



Walchem, Iwaki America Inc.
 Five Boynton Road Hopping Brook Park
 Holliston, MA 01746 USA
 Phone: 508-429-1110 www.walchem.com