Overview

Walchem's WDS Series differential pH and ORP sensors are designed for industrial applications to be long-lasting and reliable.

The differential measurement technique uses two electrodes, one for the process measurement and the other for the reference measurement. Each electrode is measured differentially with respect to a third metal electrode. The reference electrode is constructed from pH glass and is embedded in pH 7 buffer within the sensor behind a porous, replaceable salt bridge.

If the reference solution becomes contaminated, or the salt bridge becomes clogged, it is easily replaced. The glass electrode is not prone to chemical attack like a silver/silver chloride reference can be, adding to the reliability of the sensor.



WDS Series

Conventional or WEL-Style Differential pH and ORP Sensors

Summary of Benefits

- Replaceable salt bridge for long life
- Field proven differential design
- Transmits signal 3,000 feet (915 meters)
- Walchem preamplifier models are compatible with Walchem controllers
- Conventional preamplifier models are compatible with GLI and Aquametrix (Lisle Metrix) controllers
- Resistant to ground loop problems

WALCHEM



Specifications

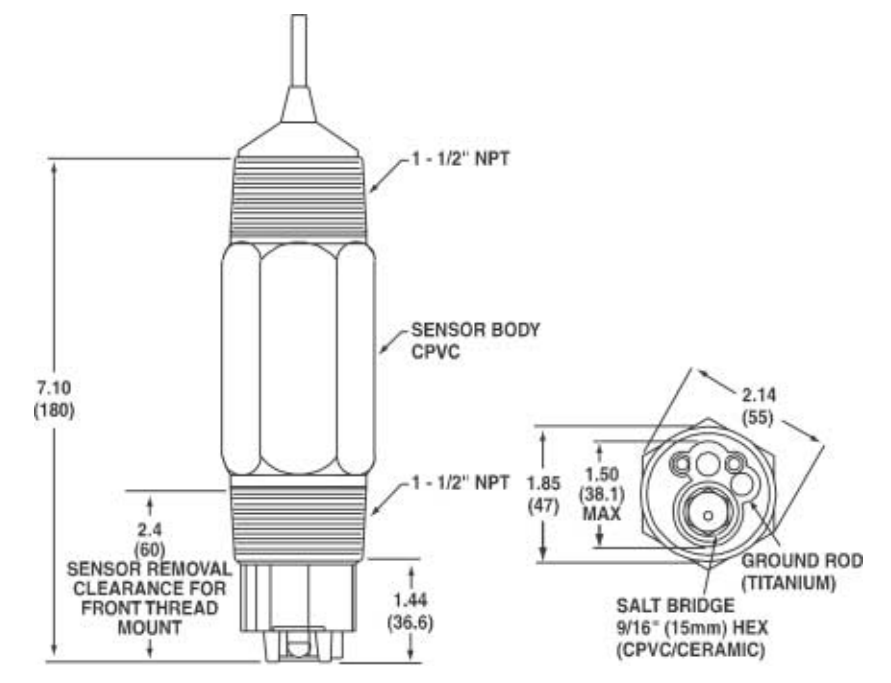
MEASUREMENT PERFORMANCE

Range	0 - 14 pH -2000 to 2000 mV (ORP)
Sensitivity	0.001 pH 0.1 mV
Stability	0.03 pH per day, non-cumulative 2 mV per day, non-cumulative
Temperature	-5 to 95°C (23 to 203°F)

MECHANICAL

Wetted Materials	CPVC, Ceramic, Glass, EPDM, Platinum (ORP only) and Titanium Palladium alloy
Cable (Walchem Preamp)	3 twisted pair shielded
Cable (Conv. Preamp)	5 conductor shielded
Cable length	4.6 meters (15 feet)
Maximum cable length	900 meters (3,000 feet)
Temperature Limit	-5 to 95°C (23 to 203°F)
Pressure Limit	0.7 MPa (100 psi) @65°C (149°F)

DIMENSIONS



ORDERING INFORMATION

WDS - ☐ ☐

Sensor Preamp

Type of Sensor
PH = pH sensor
MV = ORP sensor

Type of Preamplifier
W = Walchem preamplifier
C = Conventional preamplifier

AGENCY CERTIFICATION

WALCHEM PREAMPLIFIER MODELS ONLY (Model numbers WDS-W)**
CE EMC EN 61326

Walchem designs and manufactures an integrated line of analytical control, sensing and feed devices.

Our in-house engineering is driven by quality, technology and innovation.

For more information on the entire Walchem product line, visit : **www.walchem.com**



WEBMASTER GENERAL INDUSTRIAL CONTROLLER



WEBMASTER COOLING TOWER AND BOILER CONTROLLER



METERING PUMPS AND ACCESSORIES



WEBALERT REMOTE MONITORING & DATALOGGING

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