

5-WIRE DIFFERENTIAL pH AND ORP SENSORS



Extended electrode lifetime with minimal maintenance

Simple upkeep with replaceable reference cell junction

Superior accuracy through elimination of ground loops

Buffered reference cell solution resists contamination

Flexible deployment options with longer cable lengths

Suitable for rapidly fluctuating temperature conditions

The SD7000CD and SD7000CD-ORP pH & ORP sensors are a reliable, low maintenance solution for online process control. By employing differential sensor technology, these products offer advantages over conventional combination sensors. The differential design employs two glass electrodes, which record pH or ORP measurements differentially with respect to a third metal electrode. Using a second glass electrode to create a standard reference cell permits the use of a known buffer solution, which resists pH change. Consequently, the reference cell is less susceptible to contamination, which might otherwise lead to additional maintenance and downtime. This technique also provides unsurpassed accuracy by virtually eliminating ground loops. In environments with rapid temperature changes, the SD7000 series ensures measurement accuracy through built-in quick response automatic temperature compensation (ATC). Extended sensor lifetime can be achieved by replacing the sensor reference (salt bridge), a feature that is impossible for conventional combination models. The benefits of differential sensor technology make the SD7000 series an excellent solution for difficult applications, including high temperature and high pressure process control.

RECOMMENDED APPLICATIONS:

- **Wastewater Treatment**
- **Drinking Water Treatment**
 - **Odor Scrubbers**
 - **Pharmaceutical**
 - **Food Processing**
 - **Metal Finishing**
 - **Pulp and Paper**
 - **Steel**

DIRECT FIT COMPATIBILITY:

- **Hach® 6028PO**
- **Hach® 6022PO**
- **Water Analytics® P60C-8**

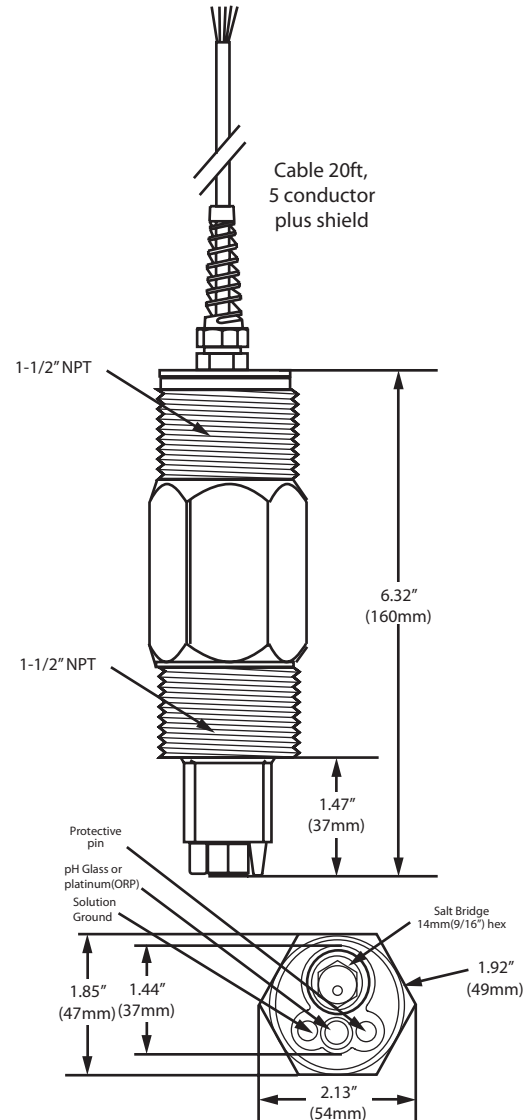
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DESIGNED AND ASSEMBLED IN CALIFORNIA, USA

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OUTLINE AND DIMENSIONS



SPECIFICATIONS

pH Measurement Range:	0 to 14
ORP Measurement Range	-2000mV to 2000mV
pH Stability	0.03pH per 24 hours, non-cumulative
Wetted Materials	PPS body and salt bridge, PVDF & ceramic junction, Viton o-rings, titanium solution ground, pH glass or ORP - platinum band
Transmission Distance:	3000ft (914m)
Temperature Compensation:	300 Ohm NTC
Temperature Range:	0-95°C(32-203°F)
Pressure Maximum:	100psig @ 40°C (104°F)- for PVC tee/ fitting 100psig @ 60°C (140°F)- for CPVC tee/fitting 100psig @ 95°C (203°F)- for stainless steel tee/ fitting
Flow Rate	10ft/sec maximum (3 meters/sec)
Sensor Cable	5 conductor plus shield, 22AWG, , 20ft (6.1m)

ORDERING INFORMATION

Part Number	Description
SD7000CD	Differential pH sensor with replaceable salt bridge, 20ft cable, tinned leads, 1.5" NPT mounting
SD7000CD-ORP	Differential ORP sensor with replaceable salt bridge, 20ft cable, tinned leads, 1.5" NPT mounting
SDA-7001	Salt bridge for SD7000CD & SD7000CD-ORP, 1 each
SDA-7003	Salt bridge for SD7000CD & SD7000CD-ORP, 3 each
SDA-7010	Salt bridge for SD7000CD & SD7000CD-ORP, 10 each
SDS-7015	Standard cell refill solution, 125mL

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