



Contacting Conductivity Digital Sensor, 0.05 Cell Constant, Compression Fitting Style

Product #: D3422A1
ZAR Price: Contact Hach
Ships within 1 week

Ultimate accuracy from ultra-pure to high-conductivity applications.

Nominal Cell Constant (K) = 0.05, 1/2 inch NPT PVDF Compression Fitting, 7m (23 ft) Digital Cable, Titanium Electrode

High Performance Design

These enhanced performance sensors are manufactured to exacting tolerances using high quality, rugged materials for demanding applications including ultra-pure water, clean-in-place (CIP), and boiler/condensate monitoring. Each sensor is tested to determine its unique, absolute four-digit cell constant. Also, each sensor has a Pt 1000 RTD temperature element built into its tip for exceptionally fast response to changes in temperature with $\pm 0.1^\circ\text{C}$ accuracy.

Resistivity and Conductivity Measurement Capability

These enhanced performance sensors measure from $0.057\ \mu\text{S}/\text{cm}$ or $18.2\ \text{M}\Omega$ (theoretically pure water) up to $200,000\ \mu\text{S}/\text{cm}$.

Versatile Mounting Styles

Compression Fitting Sensors--

Feature titanium electrodes and a compression fitting for universal installation with up to 4 inches (102 mm) insertion depth. The 1/2-inch or 3/4-inch male NPT compression fitting are offered in PVDF or 316 stainless steel. A longer version of this sensor is available for use with a 316 stainless steel ball valve hardware assembly to insert/retract the sensor from the process without stopping the flow. The longer version can also be used for insertion through a compression fitting. Maximum insertion depth is 7 inches (178 mm).

Non-Metallic General Purpose Sensors--

Have graphite electrodes and 3/4-inch male NPT threaded PPS bodies. Mount into a standard 3/4-inch pipe tee, 1-1/2-inch Hach union hardware (for 10 Cell Constant sensor only), or fasten onto the end of the pipe.

High Pressure and High Temperature Sensors--

Are designed for monitoring boiler water and condensate in return lines. They have 316 stainless steel electrodes and threaded bodies (3/4-inch male NPT). They can be fastened into a boiler wall using a 3/4-inch weldolet or mounted into a process line using a standard 3/4-inch stainless pipe tee.

Sanitary Clean-in-Place (CIP) Style Sensors--

Have 316 stainless steel electrodes and an integral 1-1/2-inch or 2-inch flange. These sensors can be installed using standard sanitary mounting hardware.

Specifications

Accuracy:	$\pm 2\%$ of reading above $200\ \mu\text{S}/\text{cm}$
Cable Length:	7 m (23 ft.)
Cell constant k:	0.05 cm ⁻¹
Digital Gateway:	Integral Digital Gateway

Electrode Material:	Titanium
Flow:	0 - 3 m/s (0–10 ft./s), maximum, fully immersed
Installation Kit:	1/2" NPT
Installation Requirement:	PVDF
Installation style:	Compression
Length:	7 mm
Measuring range:	0 - 100 µS/cm
Operating temperature range:	-20 - 200 °C
Pressure Range:	0 - 300 psi (20.7 bar)
Repeatability:	± 0.5 of reading
Response time:	90 % of reading within 30 seconds of step change
Sensitivity:	± .05 % of reading
Sensor Cable:	Digital: PUR (polyethylene) 5-conductor, shielded, rated to 150°C (302°F)
Sensor Type :	Digital
Temperature Compensation:	Temperature Compensator: Pt 1000 RTD
Temperature Measurement:	-20 - 200 °C (-4 - 392°F)
Transmission Distance:	100 m (328 ft.), maximum
Transmission Distance 2:	1000 m (3280 ft.), maximum when used with a termination box
Warranty:	12 months
What's included?:	Includes: sensor with cable and manual

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