



# 3725 Inductive Conductivity Sensor, Convertible, Polypropylene Body Material

Product #: 3725E2T

AED Price: Contact Hach

Ships within 2 weeks

Sensor with convertible body style, Polypropylene, immersion or flow-through probe works with analogue controller or optional with SC controller by AD3700 digital gateway.

#### For highly contaminated fluids

Hach's Inductive Conductivity Sensors measure 200 up to 2,000,000 microSiemens/cm. A built-in Pt 1000 RTD compensates the measured conductivity for changes in process temperature.

#### Factory calibrated

The inductive sensor design eliminates polarization and electrode coating problems that commonly affect conventional contacting electrodetype conductivity sensors.

#### Available in different materials and mounting kits

Sensors can be installed using a choice of four mounting styles—immersion, insertion, union, and sanitary.

#### **Principal of Operation**

Inductive conductivity sensors induce a low current in a closed loop of solution, then measure the magnitude of this current to determine the solution's conductivity. The conductivity analyzer drives Toroid A, inducing an alternating current in the solution. This current signal flows

in a closed loop through the sensor bore and surrounding solution. Toroid B senses the magnitude of the induced current which is proportional to the conductance of the solution. The analyzer processes this signal and displays the corresponding reading.

#### Withstands Harsh Environments

The inductive sensor is available in sanitary (CIP) flange style and convertible styles in PFA®, polypropylene, PEEK®, and PVDF material. Select sensors can withstand high pressures and temperatures.

### **Specifications**

Accuracy: 0.01 % of reading, all ranges

Body Material: Polypropylene

Cable length: 6 m 20
Cell constant: 4.44 cm<sup>-1</sup>

Flow: Rate 3 m (10 ft.) per second, maximum

Housing material: Polypropylene

Immersion depth: 79.2 mm
Length: 127 mm

Material: Polypropylene (PP)

Measuring range:  $200 \mu S/cm - 2000000 mS/cm$ 

Mounting: Convertible

Operating temperature range: -10 - 100 °C (Sensor - limited by body material)

Pressure range: 6.9 bar at 100 °C

Sensor cable: Polypropylene and PVDF Sensors:

5 conductor (plus two isolated shields) cable with XLPE (cross-linked polyethylene) jacket; rated

to 150 °C (302°F); 6 m (20 ft.) long

Sensor type: Analog

Temperature sensor: Temperature Compensator Pt 1000 Pt1000 RTD

Warranty: 24 months

Wetted Materials: Polypropylene, PVDF, PEEK® or PFA®

What's included?: Includes: sensor with 6 m (20 ft) cable and manual

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