



3705 sc Digital Inductive conductivity sensor, sanitary style, PP body

Product #:

D3705E2T.99

AED Price:

Contact Hach

The non-contact sensor is suitable for conductivity measurement in contaminated water and turbid fluids as well as in beverage or food industries due to conformity of hygienic equipment design.

The low-maintenance design eliminates polarisation or coating electrodes problems connected with electrode-type conductivity sensors. A built-in Pt1000 thermometer compensates for in process temperature changes.

The measuring principle is based on inducing a low current in a closed loop of solution and measuring the magnitude of the current to determinate the solution's conductivity. The variety of materials for the sensor body

(here polypropylene) enables measuring in almost every medium. The sanitary style conforms to 3-A Sanitary Standards. The sensor runs with digital controllers and can be easily combined with other sensors.

Wide Measuring Range

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.

Low Maintenance Design

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

Versatile Mounting Styles

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

Cable length:	6 m fixed cable + 1 m digital cable
Cell constant:	4.44 cm ⁻¹
Flow:	Max. 3 m/s

Immersion depth:	69.85 mm
Length:	127 mm
Material:	Polypropylene (PP)
Measuring range:	200 µS/cm - 2000 mS/cm
Mounting:	Sanitary
Operating temperature range:	-10 - 100 °C (Sensor)
Pressure range:	6.9 bar at 100 °C
Process connection:	2 " flange design, suitable for CIP/SIP, with special cap and EPDM compound gasket
Sensor type :	Digital
Special notes:	Composition:
	AD 3700 Digital Gateway
	3705E2T analog inductive conductivity sensor
	1 m digital cable
Temperature sensor:	Temperature Compensator Pt1000 RTD
Warranty:	24 months
Wetted Materials:	Polypropylene (PP)
What's included?:	Includes: sensor with cable, digital gateway, extension cable and manual

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Required Accessories

- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 100-240 VAC, without power cord (Item LXV525.99A11551)
- SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 100-240 VAC, without power cord (Item LXV525.99A11501)
- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 24 VDC, without plug (Item LXV525.99Z11551)