

FCL502, FCL505 AND FCL510 FREE CHLORINE SENSORS

PRODUCT SPECIFICATION SHEET

FCL502, FCL505
& FCL510 SENSORS



FC72 FLOW CELL



OPTIONAL
FM001
FLOW METER



Amperometric Sensor Technology

Ranges 0-2, 0-5 and 0-10ppm

4-20mA output or Modbus RS485 digital communication

Built-In Temperature Compensation

Large Electrolyte Reservoir

Replaceable Membrane and Electrolyte

The FCL series (free chlorine sensors) feature amperometric measurement technology. Designed for disinfection applications in water treatment, for use with chlorine dioxide, pools, etc., these sensors are available in two ranges for detecting ppm level of chlorine dioxide. Choose the FCL502 for 0-2ppm and FCL505 for 0-5ppm and FCL510 for 0-10ppm of free chlorine.

Typical applications include:

- Industrial wastewater
- Cooling water
- Bottle Rinsing
- Irrigation water in agriculture

Sensors output a 4-20mA signal or Modbus RS485 digital communication. Scaled to 0-2, 0-5, or 0-10ppm. Membrane cap and fill solution are easily replaceable to maximize sensor life.

Sensors should be used in new installations with Sensorex flow cell.

An optional flow meter (FM001) is available to ensure regulated flow between 0.2 to 0.6gpm for optimum sensor accuracy.

SPECIFICATIONS

Measuring Range	0-2 (FCL502), 0-5 (FCL505), 0-10ppm (FCL510)
pH Range	4-11
Body Material	PVC
Membrane Cap Material	PVC housing, Proprietary Membrane
Temperature Range	0-45 Degrees C
Maximum Pressure	14.7 psig (1 Bar)
Temp Comp	Integrated
Cable Length	10 feet 2 conductors, tinned leads
Process Connection	flow cell 1/4 inch FNPT threads
Output	4-20mA or Modbus RS485 digital communication
Flow Range	Min 0.2 gpm (45 l/hr), Max 0.6 gpm (135 l/hr)
Supply Voltage	12-24V DC, 250 mA minimum
Cross Sensitivity	Ozone, monochloramine

PARTS COVERED BY THIS PRODUCT DATA SHEET INCLUDE:
FCL502-MA, FCL505-MA, FCL510-MA, FCL502-MB, FCL505-MB, FCL510-MB, FCLA-5015 THRU FCLA-5018, FC72, FM001

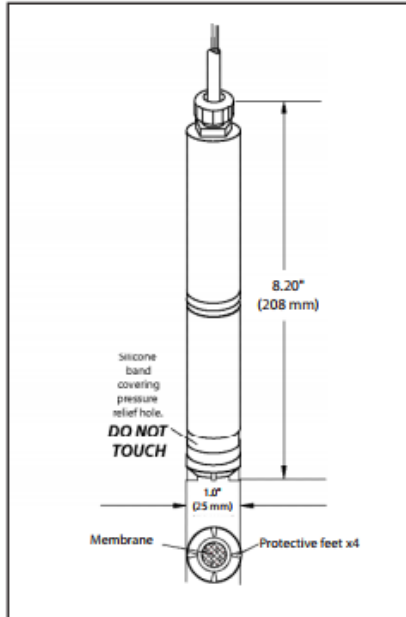
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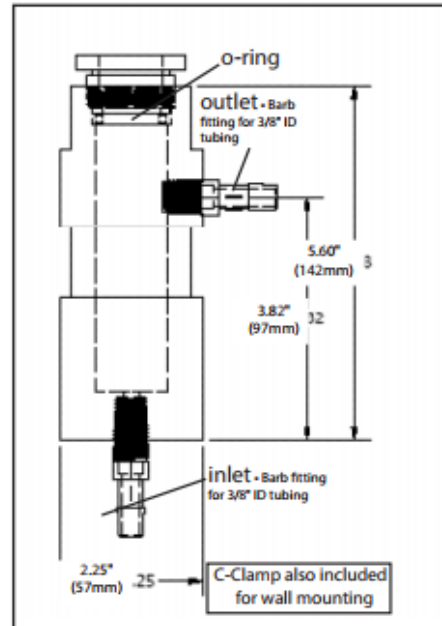
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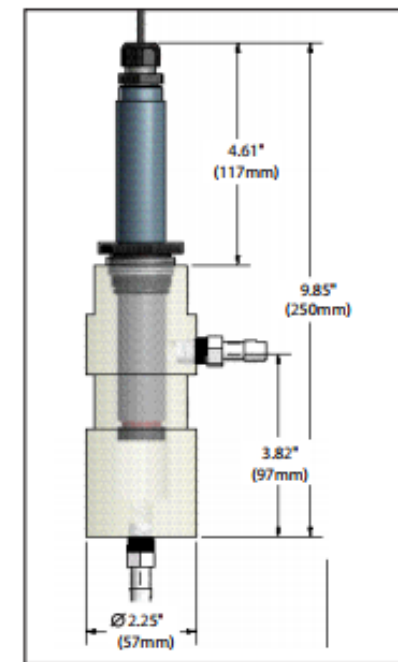
SENSOR DIMENSIONS



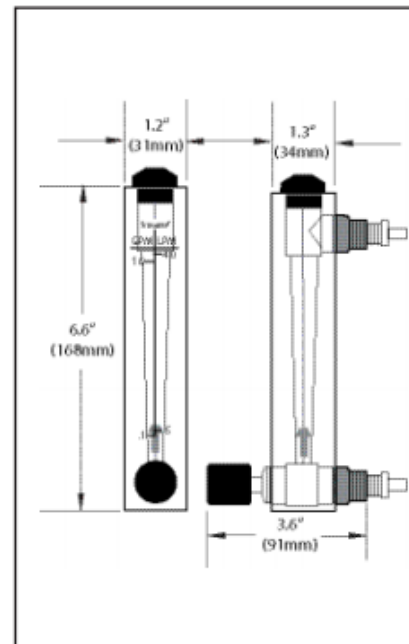
FC72 FLOW CELL DIMENSIONS



**SENSOR AND FLOW CELL
INSTALLATION DIMENSIONS**



FLOW METER FM001 DIMENSIONS





FCL502, FCL505 AND FCL510 FREE CHLORINE SENSORS

ORDERING INFORMATION

Part Number	Description
FCL502-MA	0-2 ppm Free Chlorine 4-20mA sensor, includes 2 replacement cap, 2 each 30 mL refill 3 each cathode polishing squares & 2 each pressure relief band
FCL505-MA	0-5 ppm Free Chlorine 4-20mA sensor, includes 2 replacement cap, 2 each 30mL refill 3 each cathode polishing squares & 2 each pressure relief band.
FCL510-MA	0-10 ppm Free Chlorine 4-20mA sensor, includes 2 replacement cap, 2 each 30mL refill 3 each cathode polishing squares & 2 each pressure relief band.
FCL502-MB	0-2 ppm Free Chlorine Modbus RS485 digital communication sensor, includes 2 replacement cap, 2 each 30 mL refill 3 each cathode polishing squares & 2 each pressure relief band, requires 24VDC power
FCL505-MB	0-5 ppm Free Chlorine Modbus RS485 digital communication sensor, includes 2 replacement cap, 2 each 30 mL refill 3 each cathode polishing squares & 2 each pressure relief band, requires 24VDC power
FCL510-MB	0-10ppm Free Chlorine Modbus 485 digital communication sensor, includes 2 replacement cap, 2 each 30 mL refill 3 each cathode polishing squares & 2 each pressure relief band, requires 24VDC power
FC72	Flow cell, 1/4" FNPT inlet and outlet, includes 2 each 1/4" NPT barbed tube fittings for 3/8" ID tubing
FCLA-5015	FCL fill solution, 30mL, 2 each
FCLA-5016	FCL sensor replacement membrane cap, 1 each, pressure relief band, 1 each
FCLA-5017	3 each cathode polishing squares
FCLA-5018	Maintenance kit for FCL series sensors includes: 1 replacement cap, 2 each 30mL refill, 3 each cathode polishing squares & 1 each pressure relief band

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