

**Type:**  
**C5.02**



FLS CHEMX3 C5.02 Conductivity Monitors and Controllers are designed to satisfy a broad range of application requirements. A complete choice of input/output options, together with manual or automatic temperature compensation, guarantee customized setups for any process to be controlled.

The C5.02 can be easily configured via a user friendly software and can show also temperature value on the display (for TC sensor version).

C5.02 monitor will be able to control both Pt100 and Pt1000 temperature sensor.

## Main Features

- Temperature value on the display.
- Range from 0,02  $\mu$ S to 0,2 S.
- Auto range.
- Backlit alphanumeric LCD.
- Cell constant selectable freely.
- Measurement in TDS and in Ohm selectable
- Two programmable relays for external device control.
- Programmable alarms.
- Easy-to-use software.
- Removable terminals.
- Special correlation conductivity/temperature for ultra-pure water.

## Applications

- RO and DI Water Systems.
- Water quality monitoring.
- Desalination process
- Mineral water.
- Leak detections.
- Cooling tower.
- Scrubber control.
- Surface finishing.
- Textile industry.
- Pulp and Paper industry.

## Technical Features

Conductivity Monitor and Controller	Part No.	Power Supply	Associated Electrode	4-20 mA Output	Relay Output	Mounting
	C5.02.P1	24 VAC/DC	Conductivity, Temperature	1	2 - low, high, blinking prop. pulse, continuing prop. pulse, off	Panel Mounting
	C5.02.W1	24 VAC/DC	Conductivity, Temperature	1	2 - low, high, blinking prop. pulse, continuing prop. pulse, off	Wall Mounting
	C5.02.W2	110-230 VAC	Conductivity, Temperature	1	2 - low, high, blinking prop. pulse, continuing prop. pulse, off	Wall Mounting

## Connections to CHEMX3 sensors

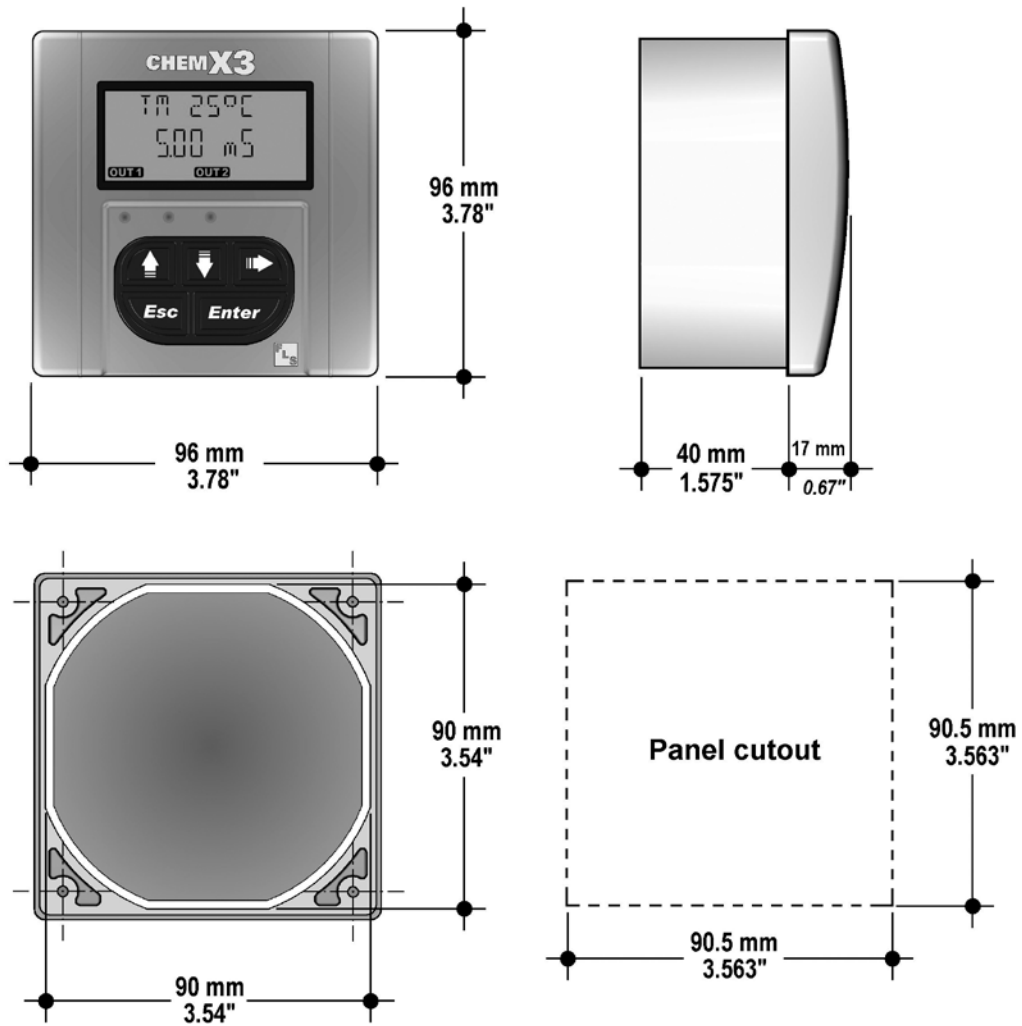
### Conductivity Sensors

C100, C150, C200, C300 series

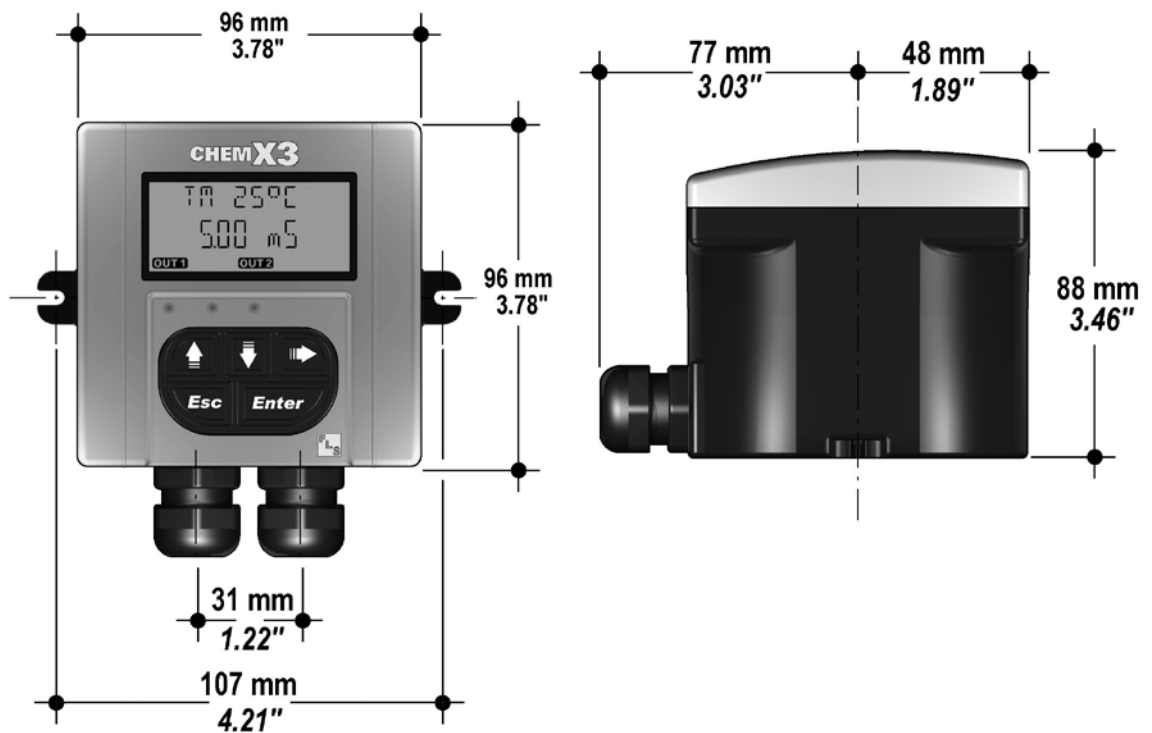
Please refer to individual sections for more information.

# CONDUCTIVITY

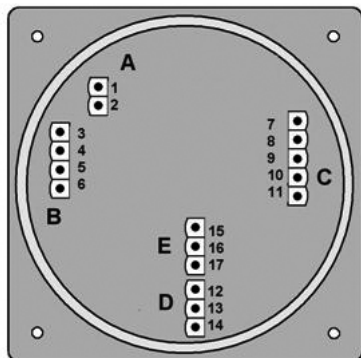
## Dimensions Panel mount



## Wall mount



## Rear Terminal View



1	+ Vac/dc	A
2	- Vac/dc	
3	+ HOLD	B
4	- HOLD	
5	+ LOOP	
6	- LOOP	
7	Pt100/ Pt1000	C
8		
9		
10	+ IN	D
11	- IN	
12	NC	E
13	COM	
14	NO	
15	NC	E
16	COM	
17	NO	

## Technical Data

### General

- Materials:
  - Case: PC
  - Panel gasket: Neoprene
  - Wall gasket: EPDM
  - Keypad: 5-button silicone rubber.
- Display:
  - 3 line LCD: 2 x 12 alphanumeric lines + 1 icon line
  - Update rate: 1 second
  - Contrast: User adjustable with 5 levels.
- Enclosure: IP65 front

### Conductivity

- Sensor Input range:
  - 0,002÷200µS with probe cell Constant = 0.01
  - 0,02÷2000µS with probe cell Constant = 0.1
  - 0,2÷20000µS with probe cell Constant = 1.0
  - 2÷200000µS with probe cell Constant = 10.0
- Accuracy: ± 0.1 % F.S.
- Temperature Range: 0÷100°C with Pt100/Pt1000 three wires.
- Temperature Accuracy: ± 1°C.
- Temperature Resolution: 0.15°C
- Special correlation conductivity/temperature for ultra-pure water selectable.

### Electrical

- Supply Voltage: 24 VAC/DC ± 20%.
- Current output:
  - 4...20 mA (±0.05%, ±0.01mA), isolated, fully adjustable and reversible
  - Max loop impedance: 500 Ω.
- Relay output:
  - Mechanical SPDT contact
  - Contact 10A 250V.
- Input Voltage for Hold Function: 15÷30 VAC/DC Optically isolated
- Protection Fuse: 150 mA (Regenerate)

### Environmental

- Operating temperature: -10 to +60°C (14 to 158°F).
- Storage temperature: -15 to +80°C (5 to 176°F).
- Relative humidity: 0 to 95% non condensing

### Standards & Approvals

- Manufactured under ISO 9001 (Quality).
- Manufactured under ISO 14000 (Environmental Management).
- CE.

## Ordering Data

### CHEM3X Conductivity Controllers and Transmitters

Part No.	Description	Power Supply	Input	Output	Weight (gr.)
C5.02	Conductivity monitor and transmitter	24 VAC/DC	Conductivity, Temperature	1 (4-20mA) 2 (Relay)	550
C5.02.P1	Panel mounting conductivity monitor and transmitter	24 VAC/DC	Conductivity, Temperature	1 (4-20mA) 2 (Relay)	550
C5.02.W1	Wall mounting conductivity monitor and transmitter	24 VAC/DC	Conductivity, Temperature	1 (4-20mA) 2 (Relay)	650
C5.02.W2	Wall mounting conductivity monitor and transmitter	110-230 VAC	Conductivity, Temperature	1 (4-20mA) 2 (Relay)	750