

98CONC Conductivity/Concentration Transmitter

- Large LCD backlight display
- Friendly interface
- Robust enclosure
- Easy to use menus
- Multiple mounting methods
- 2 analog and 3 relay outputs
- Auto-cleaning function



LECOL 98 series was designed with the user in mind. Measurement information is easily read on the large liquid crystal display (LCD).

The graphic LCD screen can display multiple parameters simultaneously, including conductivity value, concentration value, mA output signals, temperature, Ω -cm, and smart function keys.

98 series transmitter's interface is user friendly. The smart function keys can be used to navigate through the three submenus: "calibrate", "output", and "configure".

The "calibrate" submenu is for sensor and output signal calibration. During calibration, output signals can be paused in "Output". All measuring parameters can be set through "Configure".

4-electrode conductivity/concentration transmitter can be configured as :

Conductivity

0~2,000,000 μ S/cm

Concentration

0~15% Sodium Hydroxide - NaOH

0~20% Sodium Chloride - NaCl

0~18% Hydrochloric Acid - HCl

0~20% Sulfuric Acid - H₂SO₄

User-defined concentration

Enclosure

The powder coated alloy housing meets NEMA 4X and IP65 requirements for use in harsh, industrial environments. The metal housing suppresses noise and prevents the interference caused by electromagnetic environment.

Mounting Methods

Pipe, wall, and panel mounting options are available to provide flexibility in different installation scenarios..

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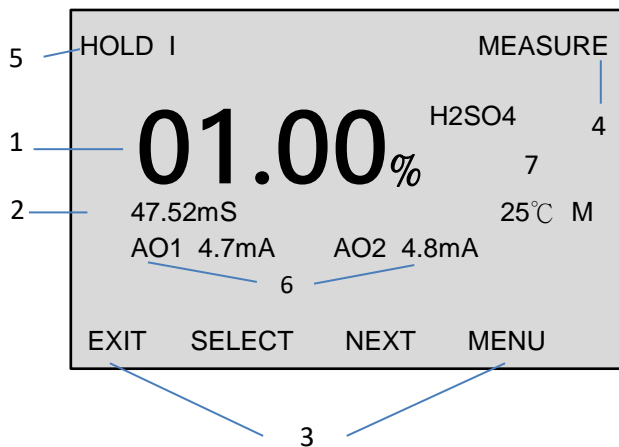
Calibration

Calibration is the process of adjusting the analyzer for accurate measurement. It can be conducted by two methods - comparison with a laboratory instrument or calibration of the sensor in a liquid standard.

Slope adjustments are easily made through a one point calibration using commonly available liquid conductivity standards.

The calibration mode of 98CONC transmitter provides the ability to calibrate the sensor input, temperature input, and transmitter outputs. These functions, referred to as calibrate states, include Process Variable calibration, temperature calibration, edit calibration, reset calibration, and output calibration.

Main screen displays



- 1. **Main display** – Display of primary measurement
- 2. **Minor display** – Additional measurements
- 3. **Function keys** – Select submenus:
Calibrate
Output
Configure
- 4. **Current mode** – Mode in use
- 5. **Hold Output** – Manual hold output at a specific value.
- 6. **Analog Output** – Analog output 1 & Analog output 2
- 7. **Solution type** – Solution type

Selection Keys

There are four selection keys under the screen – EXIT, SELECT, NEXT, MENU. Use the selection keys to:

- 1. EXIT: To quit, cancel the function
- 2. SELECT: To select measurement function
- 3. NEXT: To continue the setting process
- 4. MENU: To select different measurement modes: calibration mode, output mode, and configuration mode



EXIT



SELECT



NEXT



MENU



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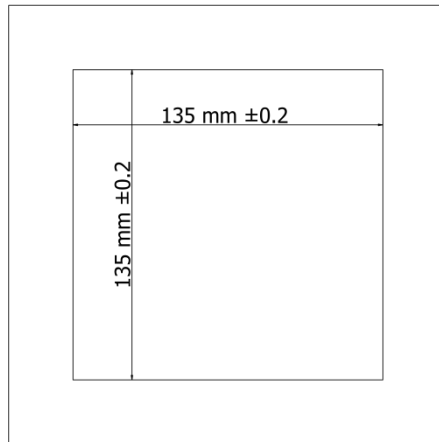
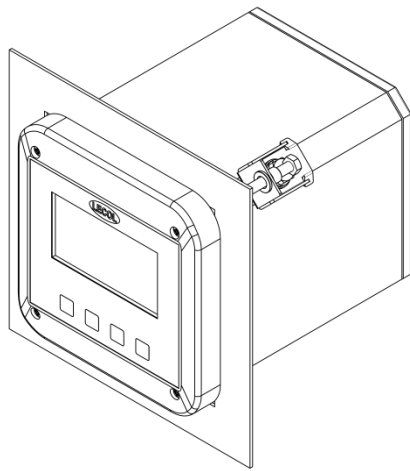
Specifications

Type	Four-Wire conductivity/concentration transmitter	Relay outputs	3 relay contacts SPDT, N.O. and N.C. (user programmable)
Display	240*128 dots graphic LCD display	Maximum contact ratings	100VAC, 250 VAC, 3A
Supply voltage	100~240 VAC, 50/60 Hz	Set points range	0.000~2000mS/cm, 0~100 °C
Power consumption	Less than 15 W	Dead band	99.99 counts, 10 °C
Input range	0~2,000,000 μ S/cm 0~15% NaOH 0~20% NaCl 0~18% HCl 0~20% H ₂ SO ₄ User-defined concentration	Time delay range	0.0~99.9 minutes
Resolution	1 μ S/cm, 0.1%, 1 minimum display unit	Cleaner setting (Relay 3 only)	Cycle time range : 0.00 ~ 99.99 hours On time range : 0.00 ~ 99.99 minutes Recovery time range : 0.00 ~ 99.99 minutes
Accuracy	+/- 2% of F.S. +/- 1 °C	Lower display	Temperature, resistivity(conductivity), current output
Temperature compensation	Manual, Automatic STD KCl, 0~15% NaOH, 0~20% NaCl, 0~18% HCl, 0~20% H ₂ SO ₄	Environmental	Operating temperature : -10 ~ 50 °C Storage temperature : -20 ~ 70 °C Operating humidity : 95% RH Storage humidity : 95% RH
Temperature sensor types	3k Ω Balco / PT100 / PT1000	Enclosure	NEMA 4X and IP65 Aluminum alloy with polyester powder coating
Analog outputs	Two isolated 4~20mA current outputs (user programmable)	Mounting	Panel, wall, pipe, and pipe mounting with weather shield
Configurable conductivity range	0~2,000,000 μ S/cm	Dimensions	Size : 144*144*177 mm (H*W*D) Panel cut : 135*135 (\pm 0.2) mm
Configurable concentration range	Any type of concentration range	Weight	2.2 kg 3 kg with pipe mounting kits
Minimum span	100 μ S/cm for conductivity 1% of concentration range		

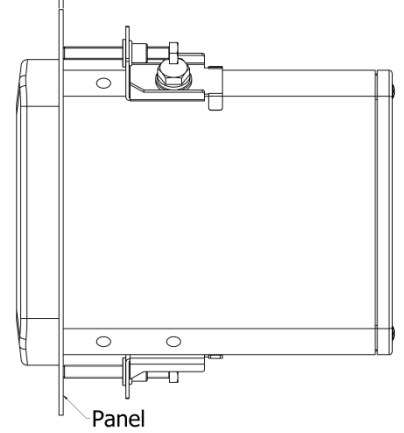
The logo for LECOL, featuring the word "LECOL" in white, bold, uppercase letters inside a blue oval.

Mounting types

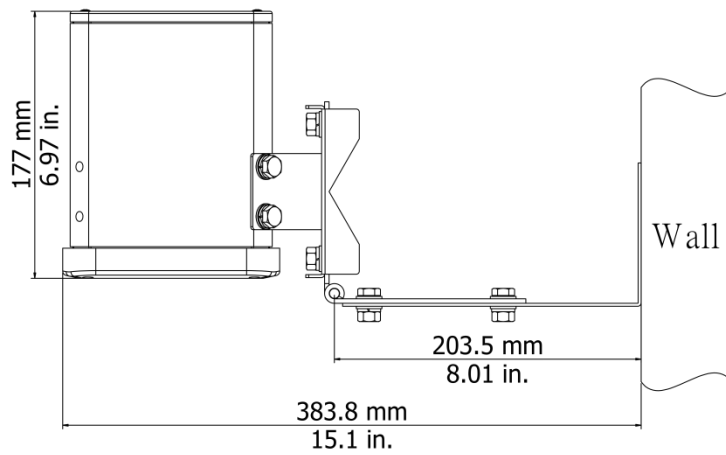
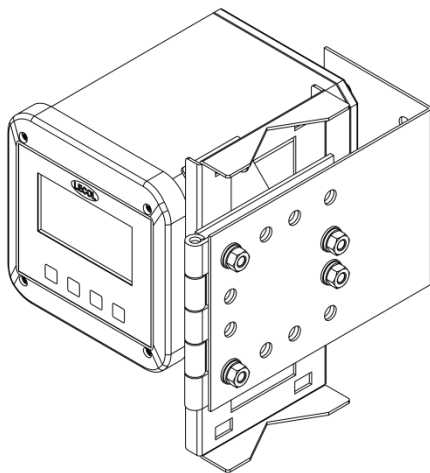
Panel mounting



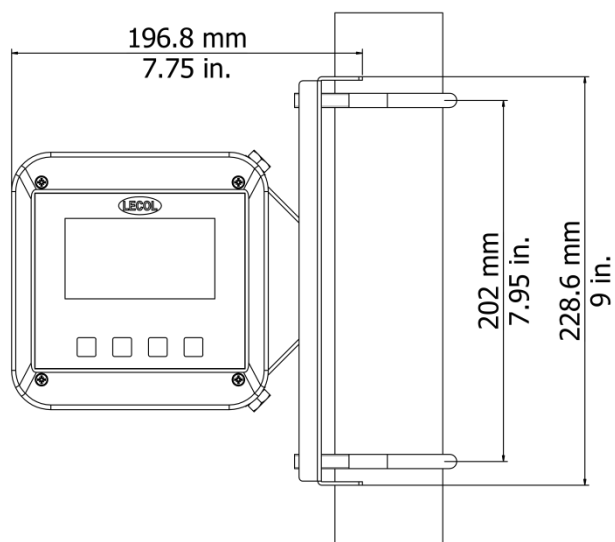
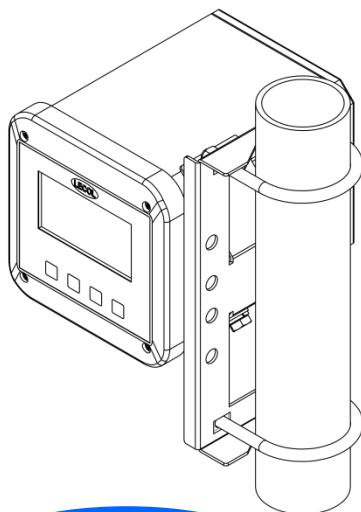
20mm(0.79 in.) max. panel thickness



Wall mounting

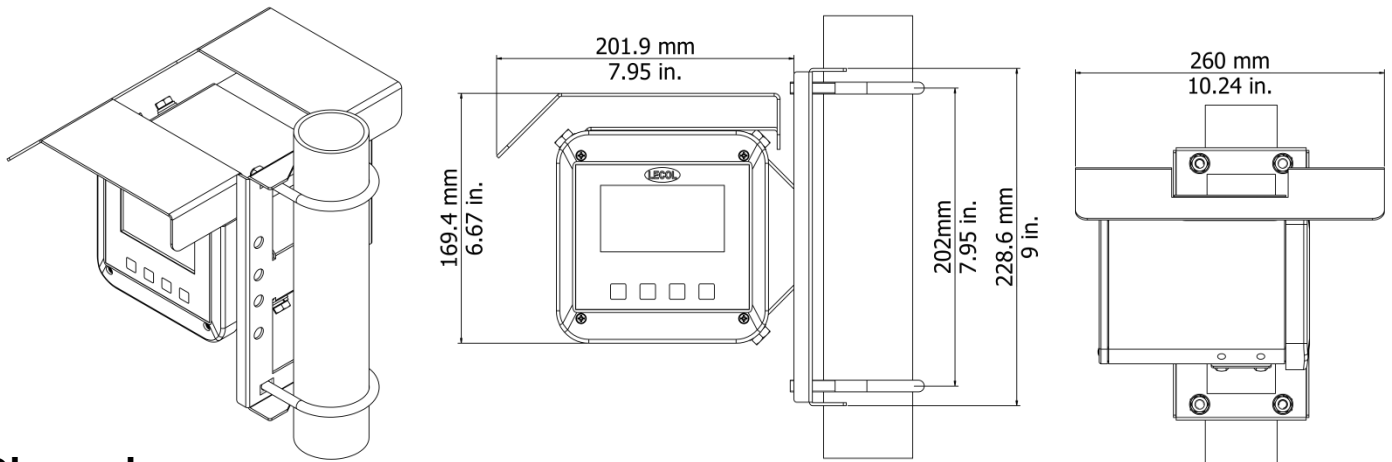


Pipe mounting

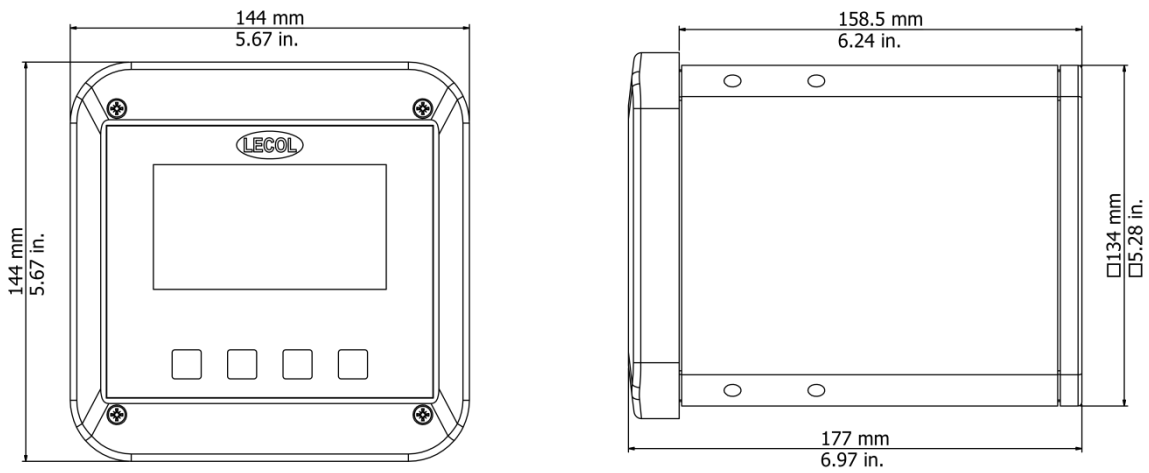


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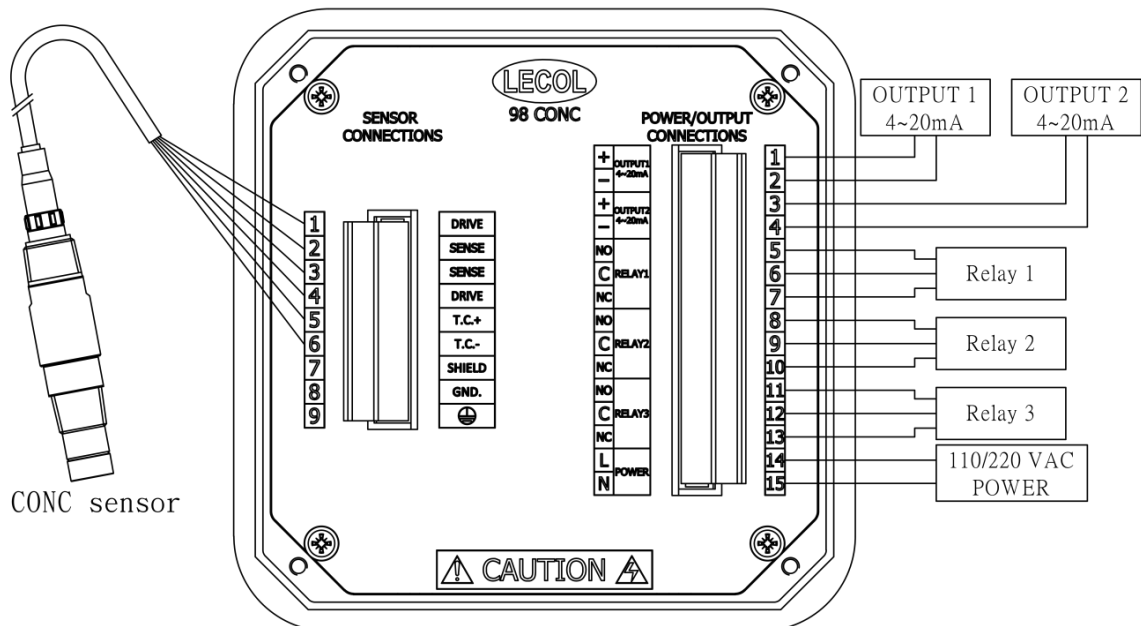
Pipe mounting with weather shield



Dimensions



Electrical & sensor wiring



Ordering information

Four-Wire Conductivity/Concentration Transmitter Model : 98 CONC	(-)	(-)	(-)	(-)	(-)
A Programming options 0 Basic 1 Advanced	(A)				
B Mounting type 0 Panel mounting 1 Wall mounting 2 Pipe mounting 3 Pipe mounting with weather shield		(B)			
C Instruction manual 0 Chinese (traditional) 1 English			(C)		
D Others 0 None 1 Cable glands 2 S.S. electrical adaptor -1/2" NPT				(D)	
E Identification Tag 0 None 1 Stainless Steel					(E)

*LECOL reserve the right to make technical changes or modify the contents of this document without prior notice.



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