

DATASHEET

MODEL FC80 FREE CHLORINE ANALYZER



FEATURES

- **Panel Mounted System**, Easy Installation
- **Plumb and Play Design**, Ready to Use
- **Automatic pH Compensation**, No Expensive Reagents to mix or spill with convenient sample port
- **Automatic Flow Control**, Eliminates Pressure Regulators and Rotameters
- **T80 Transmitter Capability**, Dual Measurements, 24VDC or 110/220 VAC Power, Graphical Plots
- **Compliant with EPA Method 334.0**



SPECIFICATIONS

SENSORS AND FLOW TRAIN

Chlorine Sensor:

Polarographic, Gold cathode/Silver-Silver chloride anode, PTFE membrane

pH Sensor:

Digital S80 protocol, 316L stainless steel body with replaceable electrode cartridge

Measurement Range:

Chlorine: 0.05 to 20 ppm (High Range)

0.01 to 5.00 ppm (Low Range)

pH: 0 to 14 pH

Operating Temperature:

0° C to 50° C (32° F to 122° F)

Min/Max Flow:

38 L/hr. to 300 L/hr. (10 gal/hr. to 80 gal/hr.)

Wetted Materials:

PVC, PP, PVDF, PTFE, Glass, 316 SS

Process Connections:

Input ¼" FNPT with barb fitting, Drain ¾" FNPT

Response Time:

T90 in 2 minutes

Electrolyte Life:

Up to 12 months



FC80 ANALYZER

Measurements:

Chlorine: 0.00 ppb to 20.00 ppm (color inverted screen above 20.00 ppm to the limit of the sensor)

pH: 0.00 to 14.00 pH

pH Compensation of Free Chlorine:

pH 5 - 10 (accuracy degrades rapidly above 9 pH)

Display:

128 x 64 pixels (2.75" x 1.5") LCD, Black on Grey background, Blue on White background with LED backlight on 100-250 VAC and 24 VDC powered instruments

Outputs:

(1) 4-20 mA for Free Chlorine set to Sensors Range

(1) 4-20 mA for pH (Optional) set 0-14 pH

Modbus RTU (standard)

Alarm Relay Ratings:

Three (3) SPDT, 1 form C, 250 VAC, 10 Amp resistive maximum, relays, user configurable as Hi/Lo alarms with expiration timer, Periodic Timers or Fault alarms

Input Power

Code -1 24 VDC (18-36 VDC @ 250 mW minimum)

Code -2 100-240 VAC, 50/60 Hz, 4W, protected with 250V, 1A, Slow Blow fuse

Enclosure:

Beige Polycarbonate, IP65, weatherproof, ½ DIN, (L x W x D) 5.7" X 5.7" X 3.5" (14.4cm X 14.4cm X 9.0cm)

Environmental Conditions:

Outdoor use (IP65)

Ambient Temperature -20°C - 70°C (24 VDC Models)

-20°C - 60°C (100-240 VAC Models)

Storage Temperature -30°C - 85°C

Relative Humidity 0 – 80%, up to 31°C

Decreasing linearly to 50% RH at 40°C

Altitude Up to 2000 m (6500 ft)

Mains Supply Voltage Fluctuations up to ±10% of the nominal voltage

Transient over voltages: CAT II

Pollution Degree: 2