RC7200 REMOTE CONTROLLER STATION

FOR MILTON ROY STREAMING CURRENT DETECTORS

DESCRIPTION

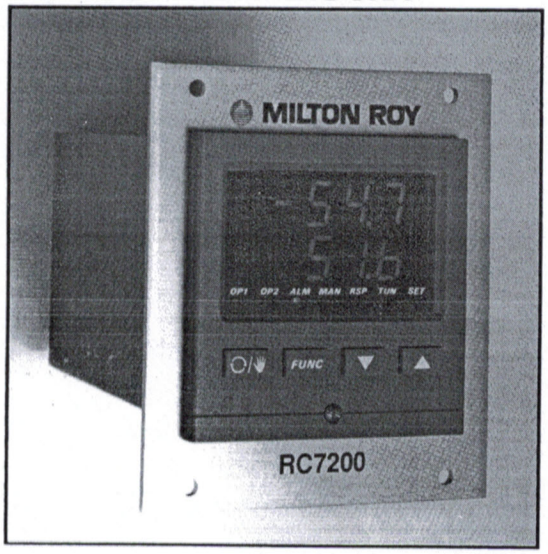
The Milton Roy RC7200 Remote Controller Station is a self-contained Proportional+Integral+Derivative (PID) controller that provides remote indication, configuration, and automatic control functions for the SC2200 or SC4200 Streaming Current Detectors. The RC7200 communicates with the SC2200 or SC4200 via a 4–20 mA signal and allows closed loop, automatic control of the coagulation process.

Once installed, the operator can select a Streaming Current setpoint and the RC7200 will automatically adjust the chemical dose to maintain the desired water quality. The RC7200 provides a 4–20 mA process control signal for controlling a metering pump, control valve, or other chemical dosing device. All connections for output signals and alarm contacts are within the RC7200. The 4–20 mA communications allow up to 3000 feet of separation between the RC7200 and SC2200 or metering device.

The RC7200 provides simple start-up with a unique continuous auto-tune program. Once the set point is established, the unit continuously analyzes its response to changes and adjusts the PID bands accordingly. The operator does not need to configure any control parameters other than set point.

The RC7200 is available in both wall and panel mount versions. This allows the plant personnel to install it in an existing panel or anywhere else in the plant that is convenient for the operators.

RC7200 PANEL MOUNT



RC7200 WALL MOUNT

FEATURES

- A complete Proportional+Integral+Derivative (PID) process controller
- Used with the SC2200 or SC4200 to provide automatic control of the coagulant dosing process
- Digital LED display, –100 to +100 Streaming Current Units & Set Point
- 4–20 mA process control signal output; Alarm contacts
- Continuous PID auto-tune
- Microprocessor based with self diagnostics
- Automatic and Manual mode selectable
- Available in panel mount or NEMA 4X enclosure
- Can be mounted up to 3000 feet from the SCD or metering pump
- RS-485 optional for direct serial computer link to process controller

RC7200 MODEL SELECTION GUIDE

RC7200 — □ □ □

Output Signal
4 = 4–20 mA
X = Other (specify)

Operating Voltage
D = 115 VAC, 50/60 hz
E = 230 VAC, 50 hz

Mounting
P = Panel Mount
W = Wall Mount (NEMA 4X)

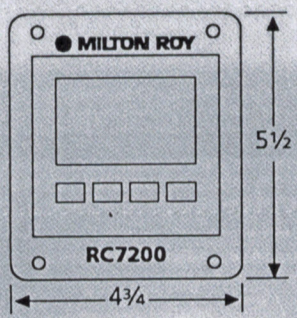
RC7200

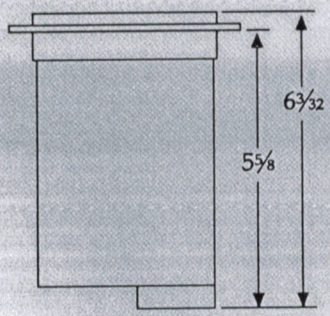
PD 1072 SC
Effective 9/15/93

MILTON ROY

RC7200 DIMENSIONS

RC7200 Panel Mount

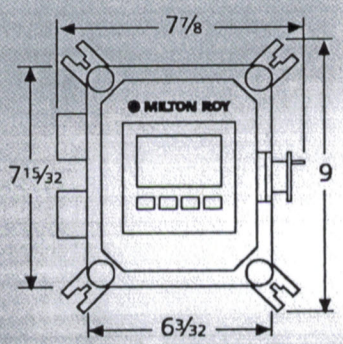


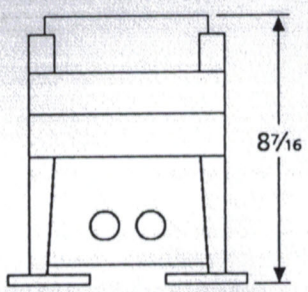


Mounting Hole Dimensions
Slide in:
3⅝" high X 3⅝" wide cutout
(No holes required)
Bolt on:
4²⁹⁄₃₂" high X 3¹⁷⁄₃₂" wide
⁷⁄₃₂" diameter mounting holes
4½" high X 4" wide panel cutout

102-1843-000

RC7200 NEMA 4X Wall Mount





Mounting Hole Dimensions
7¹⁵⁄₃₂" high X 6³⁄₃₂" wide
¼" diameter mounting holes

102-1833-000

RC7200 SPECIFICATIONS

Power Required ..... 115 VAC, 50/60 hz (standard)
230 VAC, 50 hz (optional)

Instrument Input ..... 4–20 mA Streaming Current Signal from SC2200 or SC4200

Instrument Output .... 4–20 mA process control signal (500 OHM load max.)

Communications ..... RS-485 (optional)

Control Functions ..... Single loop Proportional+Integral+Derivative (PID); Continuous auto-tune; Microprocessor based with self diagnostics; Auto & Manual mode selectable

System Accuracy ..... 1% of full scale

Response Time ..... Less than 5 seconds

Meter Readout ..... Dual Digital Meters: –100 to +100 Streaming Current Units and Process Set Point

Operating Temp. ..... 32°F to 120°F (0°C to 50°C)

Alarms ..... Band type; deviation from set point
Relays: SPDT, 2 amps at 115/230 VAC

Enclosure ..... NEMA 4X, Polycarbonate (wall mount only)

Weight ..... Wall mount = 6 lbs.
Panel mount = 2 lbs.

Control Wiring ..... 2 wire, twisted pair, 22 AWG, shielded (max. 3000 ft. separation from SC2200 or SC4200)

hout notice.

Milton Roy Company
Flow Control Division
A Sundstrand Subsidiary

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