



Series RPH-250 Residual Chlorine Analyzer

- Amperometric Probe-Style Residual Analyzer (Free or Total Chlorine)
- Available with pH & temperature compensation without buffer chemicals for Free Chlorine
- Includes complete PID control program (standard)
- Provides four analog outputs (selectable between residual, pH/ORP, Temperature, Turbidity, and control signals) and four alarm relays
- Optional Data Logger
- Adjustable measurement range
- Continuous Measurement/Fast Response
- 2 line x 20 character LCD Display
- Open flow cell with bubble trap
- Modbus RS-485 Two-way communication



DESCRIPTION:

The Series RPH-250 Analyzer makes use of the Amperometric method to determine residual levels in the sample water. The measurement is continuous, not relying on sample and hold methods, thereby allowing for better process control. The measurement probes offer easily replaceable membrane caps.

The Series RPH-250 Chlorine Analyzer is optionally available with pH compensation performed in software. This analyzer includes a complete PID control program as a standard feature.

Because Chlorine residual measurement probes are sensitive to pressure and flow fluctuations, the RPH-250 includes an open flow cell with bubble trap to maintain constant low pressure, stable flow and avoid bubbles.



Basic Specifications:

MEASUREMENT

| | |
|-------------------------|--|
| Sample Water Flow Rate: | 15-30 l/hr (8-26 gal/h) |
| Sample Pressure: | 5 PSI (0.3 bar) maximum at inlet |
| Sample Supply: | Continuous. Note: Probes with a membrane cap must be kept wet. |
| Speed of Response: | T ₉₀ : Approx. 30 sec. |
| Resolution: | 0.01 ppm or +/-1% of range, whichever is larger. |

ELECTRICAL

| | |
|---------------------|---|
| Power Requirements: | 120VAC, 50/60 Hz or 240VAC, 50/60 Hz, single phase |
| 4 Analog Outputs: | (4) isolated 4-20 mA (residual, pH/ORP, Temperature, Turbidity, or control) |
| 4 Relay Contacts: | 10 Amps @ 120 VAC or 24 VDC, resistive load, 5 Amps @ 240 VAC, resistive load |
| P&ID Input Signal: | 4-20 mA (flow) |
| Modbus: | RS-485 Two-way communication |
| Data Logger: | Optional data logging writes data on a removable MicroSD card |

RPH-250 Residual Analyzer Ordering Information

Model: RPH-250—A—B—C

| Position | Feature | Description |
|----------------|---------|--|
| A. Measurement | - | Select probe and enter Probe No. (See Tables I, II, III and IV) |
| B. pH Probe | 0 | None |
| | 1 | Included |
| C. Data Logger | 0 | None |
| | 1 | Included |

TABLE I

| Probe Information | Range | Probe No. |
|--|------------|-----------|
| Free Chlorine, F1 (6-8 pH, 0-45°C / 0-113°F) Membrane-covered, amperometric 2-electrode | 0-0.50 PPM | F1-05 |
| | 0-2.00 PPM | F1-2 |
| | 0-5.00 PPM | F1-5 |
| | 0-10.0 PPM | F1-10 |
| | 0-20.0 PPM | F1-20 |

TABLE II

| Probe Information | Range | Probe No. |
|--|-------------|-----------|
| Free Chlorine, F2 (4-9 pH, 0-45°C / 0-113°F) Membrane-covered, amperometric 3-electrode | 0.5-200 PPM | F2-200 |

TABLE III

| Probe Information | Range | Probe No. |
|--|------------|-----------|
| Free Chlorine, F3 (5-9 pH, 0-50°C / 0-122°F) Open measurement (i.e. does not use a membrane cap), potentiostatic 3-electrode | 0-1.00 PPM | F3-1 |
| | 0-2.00 PPM | F3-2 |
| | 0-5.00 PPM | F3-5 |
| | 0-10.0 PPM | F3-10 |
| | 0-20.0 PPM | F3-20 |

TABLE IV

| Probe Information | Range | Probe No. |
|--|------------|-----------|
| Total Chlorine, T1 (4-12 pH, 0-45°C / 0-113°F) Membrane-covered, amperometric 3-electrode | 0-0.50 PPM | T1-05 |
| | 0-2.00 PPM | T1-2 |
| | 0-5.00 PPM | T1-5 |
| | 0-10.0 PPM | T1-10 |
| | 0-20.0 PPM | T1-20 |



INSTRUMENTS

