

HI 8410

Dissolved Oxygen Controller with Extended Range and Analog Output

- Extended range to 50 mg/L (ppm)
- Manual single point calibration
- Selectable 0-20 or 4-20 mA output
- Low maintenance Galvanic DO probe
- Backlit LCD
- Operational mode LED indicators
- Transparent splash-proof cover included

The HI 8410 is a panel mounted dissolved oxygen controller that is used to maintain and monitor the concentration of DO in a wide range of industrial process applications. The HI 8410 uses a Galvanic probe that typically requires less maintenance than a Polarographic style making it ideal for long term monitoring.

The set point for controlling the activation of a relay is adjusted manually by the user. An alarm relay is also manually adjustable and is based upon a tolerance from the programmed set point. Calibration is single set point and can be done in zero oxygen solution.

The dosage mode: automatic, continuous ON or OFF and over dosage control by setting the overtime dosage trimmer. If the dosing relay remains continuously activated for more than the selected dosing time, the alarm relay is activated, the alarm LED will start blinking and the dosing relay will be deactivated. A jumper found on the rear panel can disable the "over time dosage" function.

"Automatic/Off/manual" dosing selection switch and LED on the front panel. In Automatic mode all the relays are controlled based on the measurement set point and alarm values. In OFF mode the dosing and alarm relays are always deactivated. The dosing LED is OFF (as relay status) and the ALARM LED is in accordance with the instrument set point, input reading, and ALARM. In ON (Manual) mode the dosing relay is always on. The alarm relay is still enabled. If an alarm occurs the dosing relay remains activated. If the over dose time exceeds the setting during manual mode, the alarm relay remains activated.

The D.O. probe is provided with a membrane covering the galvanic sensor and a built-in thermistor for temperature measurement and compensation.

Other features include: recorder output in 0-20 mA or 4-20 mA configuration, LED indicators which identify whether the controller is in operation mode or setup selection mode, overtime control function and hysteresis setting.

Order Information:

The HI 8410 is supplied complete with mounting brackets and instructions.

0.0 to $50.0\ mg/L$ (ppm) O_2

Range 0 to 600 % O₂

-5.0 to 50.0 °C

Resolution 0.1 mg/L or 1% (O₂) / 0.1 °C **Accuracy @ 20°C** $\pm 1\%$ of reading (O₂) / ± 0.2 °C **Calibration** manual, one point, in saturated air

Temperature

Compensation automatic, from -5 to 50°C (23 to 122 °F)

Salinity Compensation 0 to 51 g/L (resolution 1 g/L)

Probe (not included) HI 76410/4 with 4 m (13.1') cable or HI 76410/10 with 10 m (32.8') cable

Recorder Output 0 to 20 mA or 4 to 20 mA (isolated)

Setpoint and

1, isolated, 2A, max. 240V, resistive load, 1,000,000 strokes

Setpoint Range 1 to 600 % O₂; 0.1 to 50.0 mg/L (ppm) O₂

Dosing Control OFF/AUTO/ON with selection switch

Over Dosing Control adjustable, from 5 min to 60 min with knob or disable by wire strap - on rear panel

Backlight continuous on

Power Supply 115 VAC ±10% or 230 VAC ±10%; 50/60 Hz

Enclosure flame retardant ABS body and front panel; transparent splash-proof front cover

Environment -10 to 50°C (14 to 122°F); RH max 95% non-conndensing

Panel Cutout 141 x 69 mm (5.6 x 2.7")

Weight 1 kg (2.2 lb.)