



EZETROL® PLUS CONTROLLER FOR MEASUREMENT OF FREE CHLORINE, PH AND TEMPERATURE

INTRODUCTION

The Ezetrol® plus controller has been especially designed for all types of swimming pools, spas and water features that are dosed with chlorine. The Ezetrol plus controller has a very flexible approach to measurement input options offering parameters of free chlorine, pH and temperature as standard. Other parameter combinations such as dual chlorine inputs and pH measurement or the measurement of free chlorine, pH and redox are also available. In addition the Ezetrol plus controller controls chlorine and pH with metering pumps or with an electric positioner. The development of this practical, cost-effective measurement system stems from over three decades of expertise in the use of measurement and control technology in swimming pools.

GENERAL

Disinfection of swimming pools is achieved through the addition of chlorine, normally sodium hypochlorite or calcium hypochlorite. Of prime importance is maintaining the dosing of these chemicals according to the recommended standard values. Offering a free chlorine range of 0-10.00 mg/l, from a uniquely robust and maintenance friendly amperometric potentiostatic free chlorine sensor, the Ezetrol plus controller has the flexibility to work with all types of pools and spas, both indoor or outdoor, even with the low chlorine levels as found with our Barrier® M ultraviolet disinfection systems.

STANDARDISED BOARD MOUNT ASSEMBLY

The Ezetrol plus controller is available as a complete unit with sensors for the measurement of free chlorine and pH values as well as an optional additional sensor for the measurement of redox potential.

The Ezetrol plus controller offers configurable 0-20mA outputs for BMS or chart recorders, as standard, as well as an on-board print manager and RS 485 connections, for the optional Wallace & Tiernan® Process Monitoring System.

Key Benefits

- User friendly menu structure
- Advanced diagnostics and calibration review menus
- Dosing time monitoring
- Dosing delay after circulation start
- Display and compensation of temperature
- Automatic adaptation of control parameters
- Adjustable limit contacts
- Configurable limit contacts
- 0-20 mA BMS outputs
- Flow control valve and hydromechanical electrode cleaning by quartz grit for stable measurement

DATA MANAGEMENT

The Process Monitoring System can be used as a simple data acquisition and visualisation solution. Four levels are used to permit access to the operating data. The archived data is saved in CSV format (comma separated values) and can be downloaded at the click of a mouse and imported into Excel or other databases.

- Smartphone capable via Wi-Fi of Internet
- No special operating software / no software licence required
- Integrated, battery-buffered real-time clock
- Appealing visualisation using web trend charts
- User-friendly web interface with four user levels
- Independent system for reliable operation

EZETROL® PLUS ELECTRONIC MODULE

Measuring range:

Free chlorine (Cl₂): 0-10.00 mg/l
 pH value: pH 4.00-pH 9.00
 Redox: 400-900 mV (optional)
 Temperature: 0-50 °C
 Flashing display when measuring range limits are exceeded

Measurement inputs:

3-electrode chlorine sensor
 Combined measuring and reference pH electrode to DIN
 Combined measuring and reference redox electrode to DIN
 Pt 1000 for temperature
 All measurement inputs electrically isolated up to 50 V to earth.

Digital inputs:

3 volt-free contacts (sample water monitoring, external stop, singlesupply-tank-empty signal) electrically isolated up to 50 V to earth

Switching outputs:

4 x dosing outputs
 (2 relay contacts for each, chlorine and pH dosing)
 2 x limit contacts / alarm contacts
 Max. 1250 VA at 250 V AC
 Max. 150 W at 220 V DC
 Switching contact condition LED

Analogue output:

3 x 0/4-20 mA, load ≤ 600 Ohm electrically isolated up to 50 V to earth

Interfaces:

RS 485 for connection to Process Monitoring System or RS 232 for direct connection of a protocol printer

Display:

Back-lit LCD text display 2 x 16 characters

Power supply:

115 V/230 V ± 10 %, 50 - 60 Hz, 14 W

Ambient temperature:

0-50 °C

Enclosure:

IP 66

Testing and marking:

Conforms to CE (89/336/EWG)
 EMC tests to EN 61326
 Electric safety to EN 61010

Dimensions:

(W x H x D): 320 x 310 x 175 mm

Weight:

Approx. 5 kg

Ezetrol plus Flow Cell Module

Transparent flow cell body with Multi-Sensor for temperature measurement, flow rate monitoring, sample water earthing and for accommodation of up to three sensors: Cl₂, pH and redox electrodes, pressurised (Sample water return possible).

Required operating water flow rate:

30 l/h

Sample pressure at measuring cell inlet:

Min. 0.2 bar, max. 4 bar

Back-pressure at measuring cell outlet:

Max. 1.5 bar

Sample Connections:

Push fit for 5/16" OD Nylon Hose

Weight:

Approx. 2 kg

Dimensions:

(W x H x D): 215 x 375 x 155 mm

EZETROL PLUS SYSTEM (COMPLETE PANEL MOUNTED)

Dimensions:

(W x H): 600 x 400 mm

Weight:

Approx. 15 kg



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