

Water Treatment



NEXUS 7000

MULTIPARAMETER INSTRUMENTS



Main characteristics

- Compact and easy to use controller, allows the measurement of the following parameters: pH / Rx, Free Chlorine, Temperature, 2 inputs for chemicals level probes
- 4 digital outputs
- IP65 protection
- 3 relays with power supply for dosing pumps
- 2 dry contact relay for the alarm state
- 2 current outputs (4 to 20 mA)
- 2 frequency channels "open collectors"
- RS485 serial port with Modbus RTU communication protocol
- Alphanumeric display, 4 lines and 20 characters
- High measuring definition

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Measuring Range

Ph: $0 \div 14$

ORP: ± 1500 mV

CD: $1 \div 200 - 10 \div 2000 - 100 \div 20000 - 200 \div 50000$ μ S

CL(amperometric-potenziostatic)/CL DIOXIDE (potenziostatic probe): $0 \div 0.50 - 0 \div 1.00 - 0 \div 2.00 - 0 \div 5.00 - 0 \div 10.0 - 0 \div 20.0 - 0 \div 200$ ppm

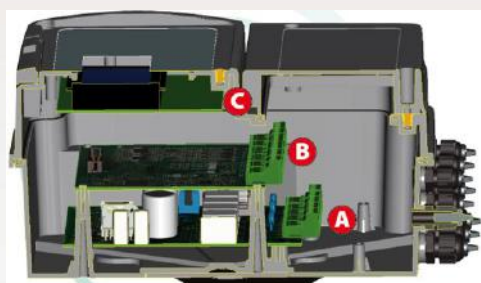
T°: $0 \div 100^{\circ}\text{C}$ with PT100

Models: CL- PH/CL_{free}-PH/CL_{free}/RX-PH/CL_{free}/CL tot

Versione doppio parametro: PH-Cloro

Alimentazione: $100 \div 240$ Vac 50/60 Hz

Components



Power supply circuit

Control circuit

Display circuit

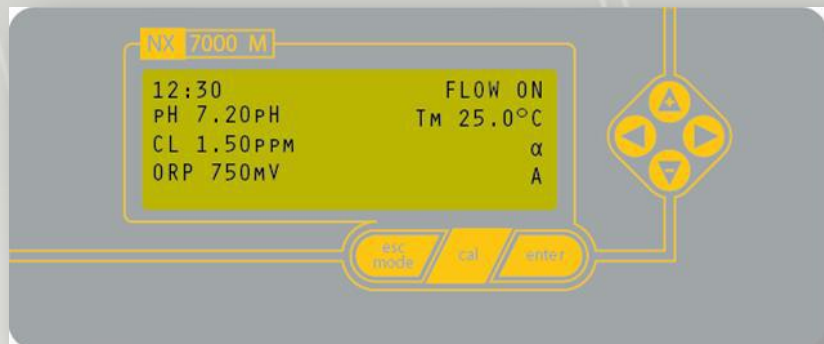


Huge space for connection terminal, block, accessible by taking out the cover.



Wall mounting
supporting bracket

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Control panel

Esc/mode

Cal

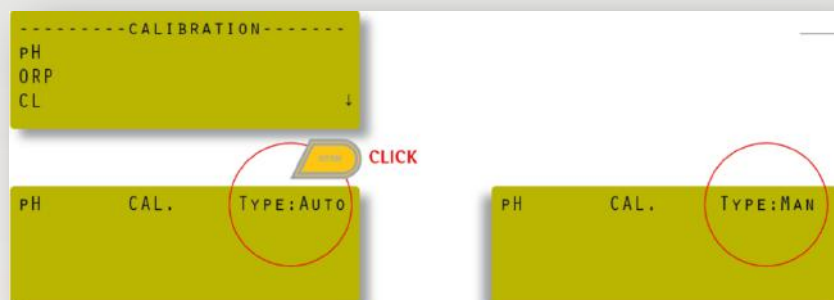
Enter

«Esc+Enter» programme

Keypad controls

Display (4 lines and 20 characters)

Ph calibration menu

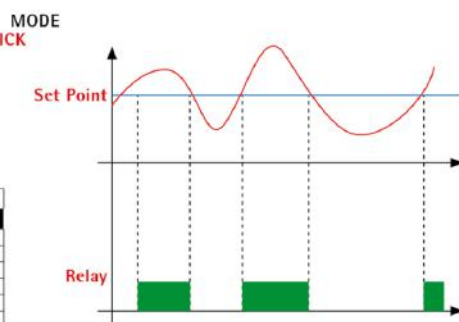
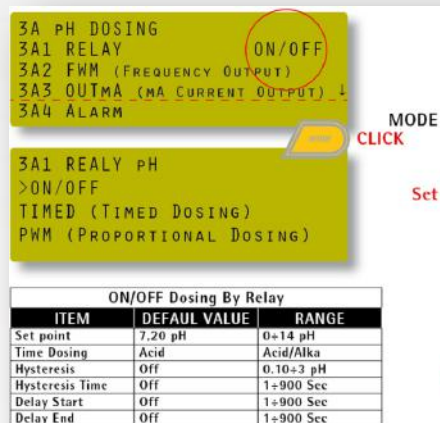


AUTOMATIC CALIBRATION

It uses only standard buffer solutions

MANUAL CALIBRATION

It uses costumed buffer solutions
The control supplies information about the probe quality status



Set point setting menu

Through the relay menu it is possible to control the analog dosing pump

In the following example, the pump is dosing in relay mode

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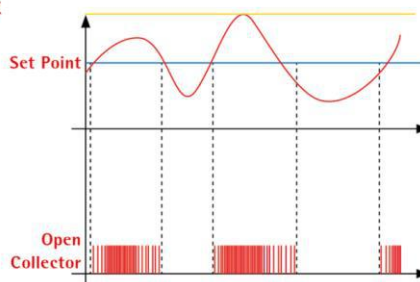


3A PH DOSING
3A1 RELAY
3A2 FWM (FREQUENCY OUTPUT)
3A3 OUTMA (mA CURRENT OUTPUT)
3A4 ALARM

3A2 FWM pH
SET POINT: 7.20pH
TIPO DOSAGGIO: ACIDO
PULSE: 20/MIN
PROP. BAND 0.30pH

PROPORTIONAL DOSING By Frequency Output		
ITEM	DEFAULT VALUE	RANGE
Set point	7.20 pH	0÷14 pH
Time Dosing	Acid	Acid/Alka
Pulse	20	20÷120 pulse/min
Proportional Band	0.30	0.30÷3 pH

CLICK



Set point setting menu (2)

The digital dosing pump can be controlled by the FWM «Frequency Signal Output» menu

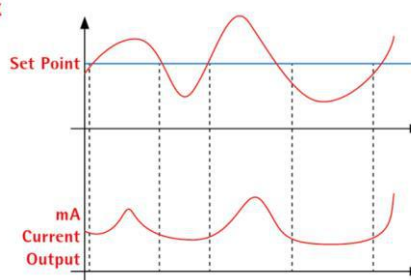
In the following example, we can see a proportional dosing

3A PH DOSING
3A1 RELAY ON/OFF
3A2 FWM (FREQUENCY OUTPUT)
3A3 OUTMA (mA CURRENT OUTPUT)
3A4 ALARM

3A3 OUT MA PH
RANGE: 4-20mA
START(4): 0.00pH
END(20): 14.00pH
HOLD mA 4.00 mA

PROPORTIONAL DOSING By mA Current Output		
ITEM	DEFAULT VALUE	RANGE
Range 0/4÷20mA	4÷20 mA	0/4÷20 mA
Start (4 mA)	0.00 pH	0.00÷14.00 pH
End (20 mA)	14.00 pH	14.00÷0.00 pH
Hold mA	4.00 mA	0.00÷20.00 mA

CLICK



Set point setting menu (3)

Through the «mA Current Output» menu is possible to control the proportional dosing pump

In the following example, we can see a proportional dosing

Applications/Use

- Potable water: free chlorine measurement
- Osmosis systems: measurement and control
- Industrial and waste water treatment
- Swimming pool