Measuring and control equipment





PC DYNAMICS pH/Rx bromine with dinodos Easy on wall mounting plate with filter/heating control

Art. no.: 0133-215-92

Description

Microprocessor-controlled measuring and control device, optionally for redox / pH or Poolcare (time-controlled) / pH, in splash-proof plastic housing, wired ready for connection 230V/50Hz. Display of measuring values on backlit graphical display with alphanumeric characters. Menu navigation via clear text display with selection of the desired language. Operating status, warning and alarm messages in clear text via the status bar on the display.

Compact measuring and control device for the measuring options:

- ORP, pH, temperature and sample water deficiency
- Poolcare (time-controlled), pH, temperature and sample water deficiency

Free switching between measurement options.

By adding the "potentiostatic measuring board for the Poolcontrol DYNAMICS", it is possible to implement additional measuring options.

Characteristics of system unit in wall-mounted case for disinfection and dosing equipment:

- · Microprocessor-controlled measuring and control device
- IP 65
- Clear graphics display
- Logical menu structure for an easy adjustment of setpoints, limit values and parameters
- · Configuration menu for selection of measurement technology and other functions
- Password protection to prevent unauthorized operation
- Multilingual system / language selection
- Measuring input for measurement of ORP
- Measuring input for measurement of pH
- Measuring input temperature measurement
- Integrated standard controls for disinfection, pH correction
- pH reduce and pH raise can be connected simultaneously
- Control of pH raise or flocculant dosing optional
- Automatic switch-on delay
- Sample water monitoring
- Dosing time monitoring
- Empty warning contact for container fill level

- Integrated alarm relay
- · Interfaces for connection to dinowin and dinotecNET+
- Analog output for output of hygiene parameters

Closed, pressure-proof compact measuring cell made of transparent plastic on white PVC plate, for measurement of redox and pH.

The measuring cell includes a sample water monitoring feature. The measuring water supply is controlled via an additional ball valve. Integrated flow control monitoring module for connection to the measuring device. Return of the sample water into the water circulation is planned.

The fiber filter is used to retain impurities in the sample water to prevent entry in the measuring cell.

Fiber filter with transparent filter cup and cleanable strainer, small mesh size, standardized connections for installation in front of a measuring cell.

Measuring accessories for measurement of the parameters redox and pH. This includes:

- 1x redox measuring probe without reference system
- 1x pH measuring probe
- 1 x cleaning material liquid
- 1 x special cleaning paste
- 1 x calibration solution pH 4.0/50 ml
- 1 x calibration solution pH 7.0/50 ml

Microprocessor-controlled peristaltic dosing pump for an automatic addition of any kind of liquid media. With gear motor, ball bearing rotor axis and infinitely variable digital speed control. Continuous operation with applied mains voltage.

The delivery rate is adjustable via the speed control and by means of different pump hose sizes. With integrated dosing pump hose and hose connector.

System housing:	Plastic housing, protection class: IP 65
Dimensions system housing:	260 x 260 x 85 mm (w x h x d)
Weight:	approx. 1.5 kg
Mains voltage:	115 / 230V/AC, 48-63Hz
Power consumption:	10 VA (w/o dosing equipment)
Display:	via large graphical display 100 x 30 mm
Operation:	Clear text menu with keys
Language:	Language selection
Working temperature:	5 to +40 °C
Storage temperature:	-20 to +65 C
Rel. humidity:	max. 90 % at 40 °C (non-condensing)
Safety management:	<ul> <li>Dosing stop input (e.g. flow sensor)</li> <li>Monitoring of sample water flow</li> <li>Common alarm / alarm relay</li> <li>Display of alarms as clear text</li> <li>Flashing display illumination to signal an alarm condition</li> <li>Dosing time monitoring</li> </ul>

#### Interfaces

RS 485:	for connection to dinowin / Profibus
	Gateway / etc.
dinotecNET+:	for connection to dinotecNET+ as field
	device

# Redox measuring amplifier

Measuring range:	-1500 mV to +1500 mV
Resolution:	1 mV
Ambient temperature influence:	50 ppm/K (12 mV)
Reference temperature:	23° C
Input resistance:	> 10 <sup>12</sup> ohm
Redox measurement:	via combination electrode without reference system
Calibration:	not required

# pH measuring amplifier

Measuring range:	-1500 mV to +1500 mV
Resolution:	0.01 pH or 1 mV
Ambient temperature influence:	50 ppm/K (12 mV)
Reference temperature:	23° C
Input resistance:	10 <sup>12</sup> ohm
Calibration pH:	optional single-point or two-point calibration
Electrode check:	automatically after calibration
Temperature compensation of pH value:	automatic via PT1000 or manually adjustable

#### Temperature

Temperature input for measuring sensor: Measuring range:

# Inputs/outputs, control response

Type of control:	P, PI, or PID control optionally
Control:	optionally 1-position or 2-position controller
Binary outputs:	4 potential-free output relays for chlorine, pH reduce and pH raise (pulse length, pulse frequency, On/Off), alarm
Alternative to pH raise:	Flocculant dosing On/Off
Maximum contact load (230V/AC):	370 W (inductive), 500 W (Ohm resistive load)

PT1000

0 to +60 °C (+/-1%)

Max. switching current:	30V/10A, 115V/0,3A, 230V/0,12A
Digital inputs:	Empty signal chlorine, pH reduce, dosing stop
Analog output:	0(4) - 20mA for individual measuring values (optional)
Cable cross section of connection terminal	0.25 - 2.5mm²

#### Flow valve

Threaded connection for measuring probes: PG 13.5

Flow monitoring module:	Reed contact with 2-wire cable connection
Min. initial pressure:	0.2 bar
Max. counter pressure:	1 bar
Sample water requirements:	120 l/h
Connection supply and drain:	sample water hose 6/8mm
Material:	Acrylic glass, clear, with wall mount
Dimensions (mm):	70 x 290 x 75 (wxhxd)

#### Fibre filter

Holder made of	PP black
Filter cup made of	PA transparent
Inlet/outlet	¼" inside
Operating pressure	max. 8 bar
Operating temperature	min. 0°C to max. 50°C
Mesh size	0.25mm
Dimensions:	58 x 58 x135mm (wxdxh)
Weight	Approx. 0.15 kg

#### Measuring accessories

Operating temperature:	0 to +45°C
Storage temperature:	+20 to +65°C
Rel. humidity:	max. 90% at 40°C, non-condensing

## dinodos EASY

Mains voltage:	230V +/-10 %, 50/60Hz
Power consumption:	approx. 5 VA max.
Protection class:	IP 65
Dimensions housing (w x h x d):	approx. 135 x 65 x 85 mm
Weight:	approx. 0.6 kg
Permissible ambient temperature:	+10 to +50 °C
Drive:	Gear motor
Pump hose:	compl. with connection pieces for suction
	line D4
Capacity max.:	approx. 0.25-4.5 l/h (infinitely variable), at a
	counterpressure of max. 1.5 bar
Suction lift max.:	1.80 m
Operation:	Capacity adjustable via potentiometer

# Application

For water treatment in swimming pools, hot tubs and the like.



#### 0101-120-00

Fiber filter 3/4", connection 8/6 mm with screen tube 0.5mm, hose connection 8/6 mm on both sides



0101-139-00 Calibration solution pH 4.0, 50 ml



0101-140-00 Calibration solution pH 7.0, 50 ml



<u>0101-158-00</u>

Connection fitting GRP 1/4" x 8/6 mm Straight version, for sample water, with union nut



0111-103-00 Redox electrode without reference system for dsc compact systems and Poolcontrol 1000/S/avant



<u>0161-101-01</u>

pH combination electrode (standard), WE/S for all measuring and control devices



0181-178-01 Ball valve R 1/4" male/female in PVC for water sampling etc.



0181-184-01 Special liquid cleaner for all measuring electrodes



0181-185-00 Special cleaning paste for the precious metal ring of electrodes



0284-025-00 Injection valve, DN 4, R 1/4", 30 mm, PVC Hose connection 4/6 mm



## 0284-098-00

Suction line, flexible, with lid screw MÜ 61 Without float switch, ball check valve and plug Hose 6/4mm, DN 4 1.5m, for dinodos Easy, START, Concept pumps

### dinotec GmbH

Water and Pool Technology Philipp-Reis-Str. 28 D-61130 Nidderau/Germany

Tel: +49 (6187) 41379-0 Fax: +49 (6187) 41379-90 Hotline: +49 (6187) 41379-72 E-Mail: mail@dinotec.de Internet: www.dinotec.de Subject to technical changes. Errors excepted. Photos of items may are different. Do you have any questions? Our hotline will be happy to help.

Status: 26.04.2023

Simply enjoy the best water!