# **Product information**

Measuring and control equipment





PC DYNAMICS Poolcare/pH (measured, controlled) with dinodos Easy on wall mounting plate with filter/heating control

Art. no.: 0133-240-92

### **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

Compact measuring cell universal fm 4/2 for 2 probes incl. flow measurement/restriction for sample water return or free drain.

Pressure-resistant compact measuring cell for a potentiostatic probe (such as Cl2, Cl02, O3 or Poolcare), a pH or a redox probe and a PT1000 temperature sensor.

Integrated turbine for recording the sample water flow and for a flow compensation of the potentiostatic measurement. The maximum flow is limited by means of a flow restrictor. The counter electrode required for potentiostatic measurement is pre-assembled in the compact measuring cell. A sampling valve is integrated in the measuring cup which can be easily unscrewed. The compact measurement cell can be operated under pressure or depressurized.

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 Poolcare and pH. This includes:

- 1 x Poolcare measuring probe
- 1x pH measuring probe
- 1 x measuring cable for potentiostatic measuring probe 1.2m
- 1 x measuring cable for redox, pH 1.2m
- 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.

| _   |        |           |     |
|-----|--------|-----------|-----|
| 100 | hnical | 63        |     |
|     | 107-   | M o L o I | 100 |

| 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)   |
| <u> </u>                                | via large graphical display 100 x 30 mm  |
| Display:                                |  |
| Operation:                              | Clear text menu with keys  |
| Language:                               | Language selection  5 to +40 °C  |
| Working temperature:                    |  |
| 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<br>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: | PT1000   |
| Measuring range:                        | 0 to +60 °C (+/-1%)  |
| 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, phreduce 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)  |

| mpty signal chlorine, pH reduce, dosing top  (4) - 20mA for individual measuring value optional) .25 - 2.5mm²  x PG 13.5  112 x 1 .5 bar at 20 °C  0 l/h - 120 l/h 20 l/h 40 l/h ample water turbine with Hall-effect enerator 0.3 bar ample water hose 6/8mm P tainless steel V4A 50 x 240 x 110 (wxhxd) |
|---|
| x PG 13.5  112 x 1 .5 bar at 20 °C  0 l/h - 120 l/h  20 l/h  40 l/h ample water turbine with Hall-effect enerator  0.3 bar ample water hose 6/8mm  P tainless steel V4A  50 x 240 x 110 (wxhxd)   |
| x PG 13.5  112 x 1  .5 bar at 20 °C  0°C  0 l/h - 120 l/h  20 l/h  40 l/h  ample water turbine with Hall-effect enerator  0.3 bar  ample water hose 6/8mm  P  tainless steel V4A  50 x 240 x 110 (wxhxd)  |
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| .5 bar at 20 °C  0 °C  0 I/h - 120 I/h  20 I/h  40 I/h  ample water turbine with Hall-effect enerator  0.3 bar  ample water hose 6/8mm  P  tainless steel V4A  50 x 240 x 110 (wxhxd)   |
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| 0°C 0 I/h - 120 I/h 20 I/h 40 I/h ample water turbine with Hall-effect enerator 0.3 bar ample water hose 6/8mm P tainless steel V4A 50 x 240 x 110 (wxhxd)  |
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| 20 l/h 40 l/h ample water turbine with Hall-effect enerator 0.3 bar ample water hose 6/8mm P tainless steel V4A 50 x 240 x 110 (wxhxd)  |
| 40 l/h ample water turbine with Hall-effect enerator 0.3 bar ample water hose 6/8mm P tainless steel V4A 50 x 240 x 110 (wxhxd)   |
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| P<br>tainless steel V4A<br>50 x 240 x 110 (wxhxd)   |
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| 50 x 240 x 110 (wxhxd)  |
|   |
| P black   |
| P black   |
|   |
| A transparent   |
| " inside  |
| nax. 8 bar  |
| nin. 0°C to max. 50°C   |
| .25mm   |
| 8 x 58 x135mm (wxdxh)   |
| pprox. 0.15 kg  |
|   |
| to +45°C  |
| 20 to +65°C   |
| nax. 90% at 40°C, non-condensing  |
|   |
| 30V +/-10 %, 50/60Hz  |
| pprox. 5 VA max.  |
| P 65  |
| pprox. 135 x 65 x 85 mm   |
| pprox. 0.6 kg   |
| 10 to +50 °C  |
| ear motor   |
| ompl. with connection pieces for suction  |
| ne D4   |
|   |
| pprox. 0.25-4.5 l/h (infinitely variable), at   |
| pprox. 0.25-4.5 l/h (infinitely variable), at ounterpressure of max. 1.5 bar  |
|   |

Capacity adjustable via potentiometer

Operation:



#### 0101-014-00

Reed contact float, yellow for Poolcare system, yellow



### 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



### 0101-158-00

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



### 0131-105-01

Poolcare electrode, potentiostatic, WE/S for measurement of Poolcare Ring in platinum



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

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



# 0181-109-00

Measuring cable for measuring electrodes (standard) pH and redox, length: 1.2 m



# 0181-109-05

Measuring cable with integrated reference cable for pot. measurements (chlorine, ozone, Poolcare), with plug, length 1.2 m



# <u>0181-178-01</u>

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



# 0181-184-01

Special liquid cleaner for all measuring electrodes





# <u>0181-185-00</u>

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

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Subject to technical changes. Errors excepted.

Photos of items may are different.

Do you have any questions? Our hotline will be happy to help.

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Simply enjoy the best water!