

# 11 DOSING

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We offer solutions in made to measure dosing, adapted to each customer. Our services range from dosing products via a constant flow membrane pump or high technology dosing panels that can be used to control dosing of the product via online platforms.

Chlorine dosing panel controller with pH control (according to model)



Constant or proportional flow dosing pumps



Filter cartridge of 5" 60 µ

Platinum/copper amperometric probe model A-11 or A-02 (according to model).



## MANUAL MODEL (FCE)

- Membrane dosing pump.
- Manual flow regulation of 0-100%.
- IP65 protection.



Constant dosing mode.



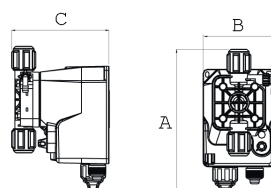
Power Supply:  
230 Vac / 50-60 Hz.



Pump body  
in polypropylene.



Manual ON/ OFF switch  
with status LED



| CODE     | MODEL                            | PRODUCT TO BE DOSED | DOSING      | COUPLING | MEASUREMENTS<br>A x B x C mm | WEIGHT<br>Kg |
|----------|----------------------------------|---------------------|-------------|----------|------------------------------|--------------|
| D-000197 | Constant dosing pump FCE 05.03 V | Acid                | 3 l/h-5 bar | 4 x 6 mm | 179 x 62 x 160               | 1.5          |
| D-400000 | Constant dosing pump FCE 05.03 D | Alkaline            | 3 l/h-5 bar | 4 x 6 mm | 179 x 62 x 160               | 1.5          |

## TN MODEL

- Membrane electromagnetic dosing pump.
- Manual flow regulation of 0-100% on digital display.
- Impulse, alarm and power supply LED.



Constant dosing mode.



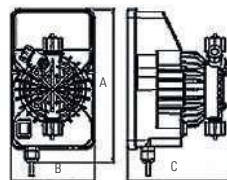
Power Supply:  
230 Vac / 50-60 Hz.



Pump body in fibreglass  
reinforced polyester



Manual ON/ OFF switch  
with status LED



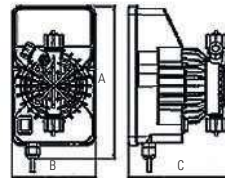
| CODE     | MODEL | DOSING (l/h) | MAX. PRES-SURE (bar) | COUPLING | PROTECTION | LEVEL PROBE COUPLING | MEASUREMENTS<br>A x B x C mm | WEIGHT<br>Kg |
|----------|-------|--------------|----------------------|----------|------------|----------------------|------------------------------|--------------|
| D-000200 | TN    | 2 l/h        | 10                   | 4-6 mm   | IP65       | NO                   | 185 x 97 x 112               | 1.4          |

## PCI MODEL

- Backlit graphic display.
- 2 proportional dosing modes:
  - n:m — directly selecting the number of impulses of the meter and the number of injections from the pump.
  - 4-20 mA— automatic regulation of dosing frequency (the pump automatically changes the flow).
- Inlet for level probe.



2 dosing modes:  
constant or proportional



| CODE     | MODEL | DOSING (l/h) | MAX. PRESSURE (bar) | COUPLING | PROTECTION | LEVEL PROBE COUPLING | MEASUREMENTS A x B x C mm | WEIGHT Kg |
|----------|-------|--------------|---------------------|----------|------------|----------------------|---------------------------|-----------|
| D-000201 | PCI   | 2            | 10                  | 4-6 mm   | IP65       | YES                  | 225 x 125 x 153           | 2.3       |

## PSA MODEL

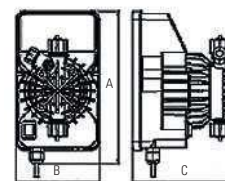
- Backlit graphic display.
- pH /Redox (mV) /Free chlorine/Conductivity (increase) version selectable by user.
- Measurement range:
  - pH: 0-14.00 pH
  - Redox (mV): 0-1999 mV
  - Free chlorine: 0-10.00 ppm
  - Conductivity: 0-1,000 mS



Constant dosing mode.



START/ STOP key



| CODE     | MODEL | DOSING (l/h) | MAX. PRES-SURE (bar) | COUPLING | PROTECTION | LEVEL PROBE COUPLING | MEASUREMENTS A x B x C mm | WEIGHT Kg |
|----------|-------|--------------|----------------------|----------|------------|----------------------|---------------------------|-----------|
| D-000202 | PSA   | 2            | 10                   | 4-6 mm   | IP65       | YES                  | 225 x 125 x 153           | 2.3       |

## ACCESSORIES AND SPARE PARTS

| CODE     | MODEL  | UNIT<br>per box |
|----------|--|-----------------|
| C-000200 | PP pump head series TN/PSI/PSA 1 l/h 15bar   | 1               |
| C-000201 | PP pump head series TN/PSI/PSA 2 l/h 10bar   | 1               |
| C-000202 | PP pump head series TN/PSI/PSA 5 l/h 7bar    | 1               |
| C-000203 | PVDF pump head series TN/PSI/PSA 1 l/h 15bar | 1               |
| C-000204 | PVDF pump head series TN/PSI/PSA 2 l/h 10bar | 1               |
| C-000205 | PVDF pump head series TN/PSI/PSA 5 l/h 7bar  | 1               |
| C-000206 | PSA pump PH electrode                        | 1               |
| C-000207 | PSA pump Redox electrode                     | 1               |
| C-000208 | PSA pump chlorine electrode                  | 1               |
| C-000209 | PSA pump conductivity electrode              | 1               |



PP head



PVDF head



Electrode

## CEA-19

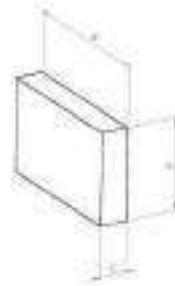
- Panel for measuring chlorine in ppm.
- Laminated panel that complies with standards EN 438 and ISO 4586. Platinum/copper amperometric probe model A-11.
- Pumps with constant dosing TN 5 lt/h 7 bar with level probe option.



Temperature probe 0-60 °C.



SF flow sensor, included in probe support.



| CODE     | MODEL  | DOSING (l/h) | MAX. PRES-SURE (bar) | PROTECTION | LEVEL PROBE | MEASUREMENTS A x B x C mm | WEIGHT Kg |
|----------|--------|--------------|----------------------|------------|-------------|---------------------------|-----------|
| A-000200 | CEA-19 | 5            | 7                    | IP65       | NO          | 460 x 500 x 165           | 10.5      |

## CEA-22

- Panel M05 PH-CL (or Bromine) for measuring and controlling pH and chlorine (or Bromine).
- Laminated panel that complies with standards EN 438 and ISO 4586.
- PH/Cl regulator. Platinum/copper amperometric probe model A-02.
- 2 pumps with constant dosing TN 5 lt/h 7 bar with level probe option.



Temperature probe 0-60 °C.



SF flow sensor, included in probe support.



| CODE     | MODEL  | DOSING (l/h) | MAX. PRES-SURE (bar) | PROTECTION | LEVEL PROBE | MEASUREMENTS A x B x C mm | WEIGHT Kg |
|----------|--------|--------------|----------------------|------------|-------------|---------------------------|-----------|
| A-000201 | CEA-22 | 5            | 7                    | IP65       | YES         | 460 x 500 x 165           | 10.5      |

## ACCESSORIES AND SPARE PARTS

| CODE     | MODEL  | UNIT per box |
|----------|--|--------------|
| C-714202 | Dosing pump protection level probe (2 metre cable) | 1            |
| C-000211 | Amperometric probe CEA-19                          | 1            |
| C-000212 | Amperometric probe CEA-22                          | 1            |
| D-000193 | Dosing pump TN 5l/7bar                             | 1            |
| C-320008 | PP polypropylene cartridge 05" 20 µ                | 1            |
| A-830001 | Recirculation kit 5*                               | 1            |
| A-830003 | Recirculation kit 20*                              | 1            |
| A-830004 | Recirculation kit 50*                              | 1            |
| A-830005 | Recirculation kit 100*                             | 1            |
| A-830006 | Recirculation kit 150*                             | 1            |



Safety level probe



Amperometric probe



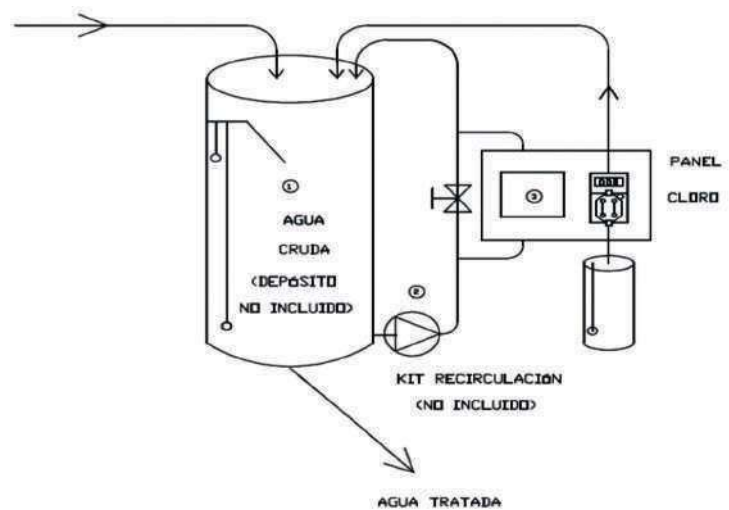
Dosing pump



Polypropylene cartridge

\* Recirculation kit made up of:

- Recirculation pump.
- Electrical safety panel for pump with timer.
- Level probe.

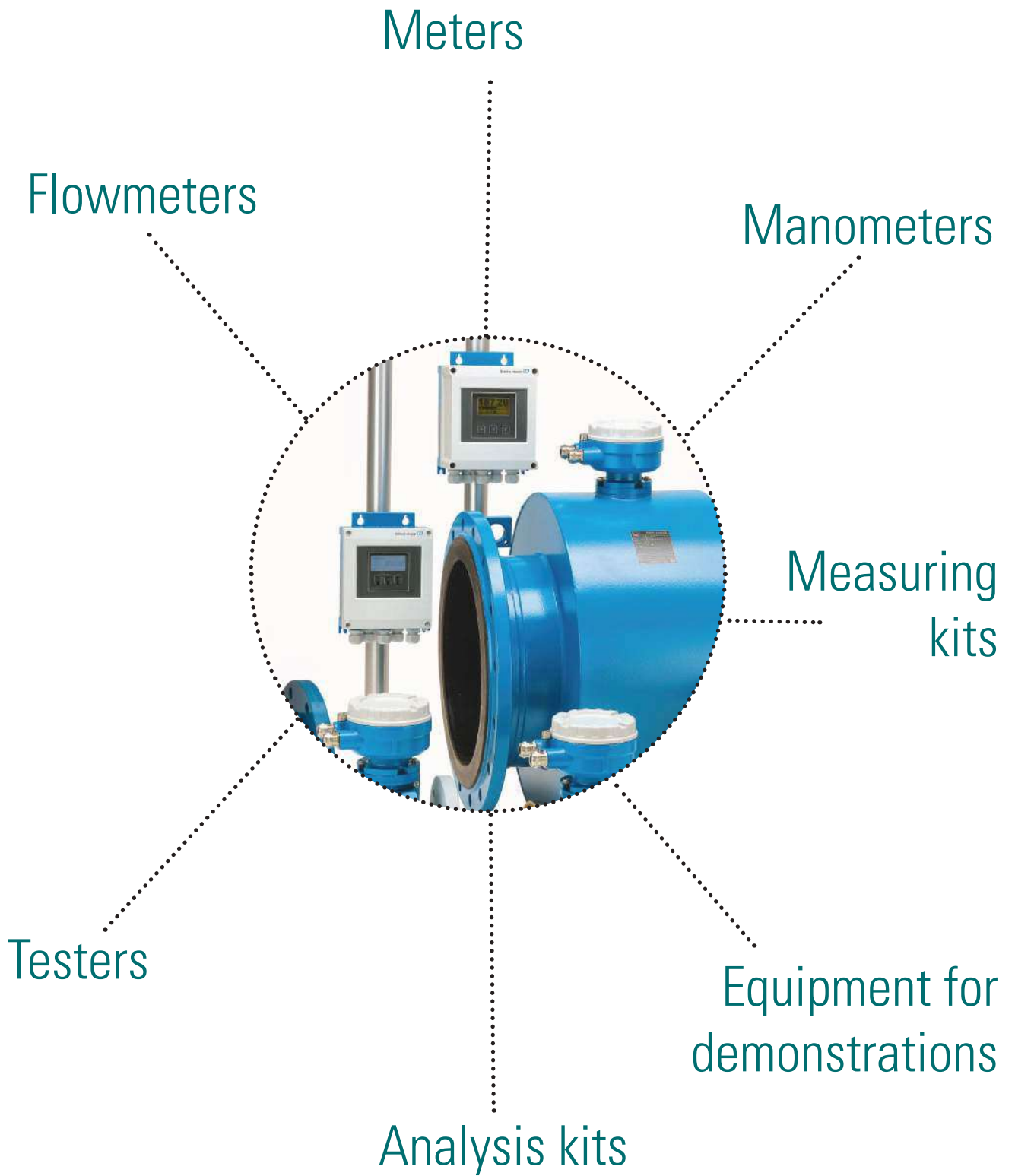






# 12 MEASURING EQUIPMENT, INSTRUMENTATION AND DEMONSTRATION

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## FLOWMETER Z-500

- PC casing and PVC couplings.
- AISI 316 stainless steel guide
- AISI 304 stainless steel float.
- Precision  $\pm 5\%$ .



Operating temperature from 0 to 80 °C.



Maximum operating pressure 6 bar.



| CODE     | MODEL  | FLOW max. (L/min) | COUPLING | MEASUREMENTS D x L mm | WEIGHT Kg |
|----------|--------|-------------------|----------|-----------------------|-----------|
| D-000086 | Z-5008 | 0.5 - 4           | ½" NPT M | 170 x 42              | 0.15      |
| D-000087 | Z-5008 | 1 - 7             | ½" NPT M | 170 x 42              | 0.15      |
| D-000088 | Z-5008 | 1.8 - 18          | ½" NPT M | 170 x 42              | 0.15      |
| D-000094 | Z-5015 | 3 - 30            | ½" NPT M | 210 x 50              | 0.2       |
| D-000095 | Z-5025 | 3 - 30            | ¾" NPT M | 250 x 59              | 0.4       |
| D-000106 | Z-5025 | 3 - 30            | ¾" NPT H | 225 x 59              | 0.4       |
| D-000096 | Z-5025 | 4 - 40            | ¾" NPT M | 250 x 59              | 0.4       |



## FLOWMETER PANEL Z-500 ELBOW

- Flowmeter for panel
- PC casing and PVC couplings.
- AISI 304 stainless steel float.
- AISI 316 stainless steel guide
- Precision  $\pm 5\%$ .



Operating temperature from 0 to 80 °C.



Maximum operating pressure 6 bar.



| CODE     | MODEL        | FLOW max. (L/min) | COUPLING | MEASUREMENTS D x L mm | WEIGHT Kg |
|----------|--------------|-------------------|----------|-----------------------|-----------|
| D-000061 | Z-5008 elbow | 1.8 - 18          | ½" NPT M | 150 x 42              | 0.15      |
| D-000063 | Z-5008 elbow | 0.5 - 4           | ½" NPT M | 150 x 42              | 0.15      |
| D-000053 | Z-5025 elbow | 4 - 40            | ¾" NPT M | 270 x 59              | 0.4       |
| D-000051 | Z-5032 elbow | 8 - 80            | 1" NPT M | 325 x 72              | 0.65      |



## FLOWMETER PANEL Z-300

- Flowmeter for panel
- PMMA casing.
- AISI 304 stainless steel guide
- AISI 304 stainless steel float.
- Precision  $\pm 4\%$ .



Operating temperature  
from 0 to 60 °C.



Maximum operating  
pressure 6 bar.



| CODE     | MODEL  | FLOW<br>max. (L/min) | COUPLING | MEASURE-<br>MENTS<br>D x E x F mm | WEIGHT<br>Kg |
|----------|--------|----------------------|----------|-----------------------------------|--------------|
| D-000021 | Z-3000 | 0.1 - 1.4            | G ½" M   | 70 x 165 x 20                     | 0.4          |
| D-000020 | Z-3001 | 1 - 7                | G ½" M   | 70 x 165 x 20                     | 0.4          |
| D-000019 | Z-3002 | 1.8 - 18             | G ½" M   | 70 x 165 x 20                     | 0.4          |
| D-000018 | Z-3003 | 8 - 40               | G ¾" M   | 93 x 165 x 33                     | 0.6          |
| D-000017 | Z-3004 | 4 - 60               | G ¾" M   | 93 x 165 x 33                     | 0.6          |
| D-000016 | Z-3005 | 10 - 100             | G 1" M   | 98 x 175 x 33                     | 0.7          |
| D-000015 | Z-3006 | 10 - 130             | G 1" M   | 98 x 175 x 33                     | 0.7          |



## DIGITAL FLOWMETER

- Digital flowmeters
- Digital display according to model
- With 4-20 mA output signal
- Selection of model according to nominal flow of tubing.



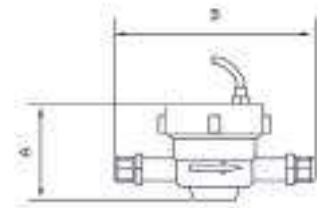
## WATER METER WM-R

- Meter for hot or cold water from single or multiple jet, and with wet or dry dial.
- Casing and head on brass (model 50 mm 2" of varnished iron)
- Operating temperature: cold water up to 30°C, hot water up to 90°C.
- 2 m long cable (RG 58), equipped with BN coupling.
- Reed type impulse transmitter (4 imp./litre) with flow reader.
- Threaded coupling to tubing.

Note: For hot water consult with Sales Dept.



| CODE<br>COLD<br>WATER | HOT<br>WATER | MODEL  | COUPLING | MEASURE-<br>MENTS<br>A x B mm | WEIGHT<br>Kg |
|-----------------------|--------------|--------|----------|-------------------------------|--------------|
| D-000135              | D-000147     | DCI 15 | 1/2"     | 90 x 110                      | 0.6          |
| D-000134              | D-000146     | DCI 20 | 3/4"     | 90 x 130                      | 0.85         |
| D-000133              | D-000145     | DCI 25 | 1"       | 120 x 160                     | 2.04         |
| D-000132              | D-000144     | DCI 30 | 1 1/4"   | 120 x 160                     | 2.11         |
| D-000131              | D-000143     | DCI 40 | 1 1/2"   | 130 x 200                     | 4.58         |
| D-000130              | D-000142     | DCI 50 | 2"       | 200 x 300                     | 7.25         |



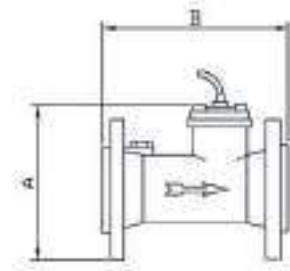
## WATER METER WM-F

- Dry dial meters.
- Woltmann type meter for hot or cold water of 2"
- Rotary meter for horizontal and vertical mounting.
- Externally varnished iron casing. - Operating temperature: cold water up to 50°C, hot water up to 90°C.
- Meters without pulse generator available.
- Flanged coupling to tubing.

Note: For hot water consult with Sales Dept.



| CODE<br>COLD<br>WATER | HOT<br>WATER | MODEL   | COUPLING | MEASURE-<br>MENTS<br>A x B mm | WEIGHT<br>Kg |
|-----------------------|--------------|---------|----------|-------------------------------|--------------|
| D-000141              | D-000168     | DWI 50  | DN 50    | 247 x 200                     | 12.5         |
| D-000140              | D-000167     | DWI 65  | DN 65    | 258 x 200                     | 14           |
| D-000139              | D-000166     | DWI 80  | DN 80    | 265 x 200                     | 15           |
| D-000138              | D-000165     | DWI 100 | DN 100   | 272 x 250                     | 18           |
| D-000137              | D-000163     | DWI 150 | DN 150   | 302 x 300                     | 31.5         |



## INSERTION TURBINES METER

- Insertion turbines with Hall effect pulse generator.
- PVC casing.
- Output 4 - 20 mA.
- Speeds from 0.15 to 10 m/s.



| CODE     | MODEL | ASSEMBLY  | WEIGHT<br>Kg  |
|----------|-------|-----------|---------------|
| D-000107 | DN15  | T         | 0.215 + T     |
| D-000108 | DN20  | T         | 0.215 + T     |
| D-000109 | DN25  | T         | 0.215 + T     |
| D-000110 | DN32  | T         | 0.215 + T     |
| D-000112 | DN50  | PVC clamp | 0.215 + Clamp |
| D-000115 | DN63  | PVC clamp | 0.215 + Clamp |
| D-000117 | DN75  | PVC clamp | 0.215 + Clamp |
| D-000119 | DN90  | PVC clamp | 0.215 + Clamp |
| D-000121 | DN110 | PVC clamp | 0.215 + Clamp |

## MANOMETERS

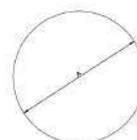
- Glycerine panel manometer.
- Chrome casing.
- Precision  $\pm 5\%$ .



Operating temperature  
from 0 to 80 °C.



Measurement  
from 0 to 150 bar



| CODE       | MODEL                     | COUPLING | MEASUREMENTS<br>A x B mm |
|------------|---------------------------|----------|--------------------------|
| C-202009   | Brass 0-25 bar            | 1/4"     | 64 x 60                  |
| C-202009-B | Brass 0-10 bar            | 1/4"     | 64 x 60                  |
| C-202533   | Stainless steel 0-10 bar  | 1/4"     | 64 x 60                  |
| C-202946   | Stainless steel 0-60 bar  | 1/4"     | 64 x 60                  |
| C-202846   | Stainless steel 0-150 bar | 1/4"     | 64 x 60                  |

## PENCIL TYPE CONDUCTIVITY TESTERS

- Small portable apparatuses for on-site measurement of different water parameters, such as pH, redox, conductivity, TDS, salinity, dissolved oxygen.
- These are very robust, resistant and long-lasting devices because they enable the electrode to be replaced when it has expired, without having to change the entire device when the useful life of the electrode has ended.



Meters

| CODE     | MODEL                              | UNIT per box |
|----------|------------------------------------|--------------|
| D-714021 | Meter + pH sensor                  | 1            |
| D-714022 | pH sensor replacement              | 1            |
| D-714025 | Conductivity/TDS/salinity meter    | 1            |
| D-714026 | Conductivity sensor replacement    | 1            |
| A-714060 | Buffer solution pH 7               | 1            |
| A-714061 | Buffer solution pH 4               | 1            |
| C-603001 | TDS meter from 0 to 9,999 ppm      | 1            |
| C-603004 | pH meter                           | 1            |
| C-604009 | Conductivity pattern 1.413 $\mu$ S | 1            |
| C-604017 | Conductivity pattern 84 $\mu$ S    | 1            |



Solutions

## HARDNESS MEASURING KIT

- Water hardness measuring kit using complexometric method.
- The hardness measuring systems are sold with 2 reagents.

| CODE     | MODEL  | CONTAINER |
|----------|--|-----------|
| A-600000 | TH-metre/Hardness meter (2 reagents)         | 1 case    |
| A-600001 | TH-metre/Hardness meter (2 reagents) blister | 1 case    |



Th-metre blister

## CONSUMABLES

| CODE     | MODEL                    | USE             | CONTAINER    |
|----------|--------------------------|-----------------|--------------|
| B-600003 | A TH-metre reagent 20 ml | Colouring agent | 20 ml bottle |
| B-600004 | B TH-metre reagent 50 ml | Assessment      | 50 ml bottle |
| B-900020 | A TH-metre reagent 1 L.  | Colouring agent | 1 L bottle   |
| B-900021 | B TH-metre reagent 1 L.  | Assessment      | 1 L bottle   |

## pH /CHLORINE MEASUREMENT

- Combined pH and colorimetric chlorine measurement kit.
- DPD method.

| CODE      | MODEL                             | CONTAINER   |
|-----------|-----------------------------------|-------------|
| A-604010  | pH/chlorine meter                 | 1 case      |
| C-900600  | Tablets for chlorine measurement  | 250 tablets |
| C-900599  | Tablets for pH measurement        | 250 tablets |
| A-604010P | Chlorine meter for drinking water | 1 case      |



## ANALYSIS KIT

- Easy to use assessment kits, for fast or on-site measurements, without having to send a sample to a laboratory.
- Other kits available to measure other chemical parameters. Contact our technical service for more information.

| CODE     | MODEL   |
|----------|---|
| D-714013 | Alkalinity analysis kit                                     |
| D-714015 | Bromine analysis kit  |
| D-714014 | Chlorides analysis kit                                      |
| A-714054 | Phosphates analysis kit (100 strips)                        |
| A-714051 | Iron analysis kit (100 strips)                              |
| D-714017 | Manganese analysis kit                                      |
| D-714054 | Monopersulfate analysis kit (50 strips)                     |
| A-714052 | Nitrate/nitrite analysis kit (100 strips)                   |
| A-714053 | Hydrogen peroxide analysis kit (Active Oxygen) (100 strips) |
| D-714018 | Sulphites analysis kit                                      |
| D-714019 | Zinc analysis kit   |
| D-714007 | Kalaphos Kit 402 (30 vials)                                 |
| D-714006 | Kalaphos BioCea RO-5/RO-20 Kit (100 strips)                 |
| D-714005 | Kalaphos BioClean Kit (100 strips)                          |
| D-714016 | Bromine tablets replacements (50 units)                     |
| A-850318 | Manganese kit reagent replacement (4 reagents)              |
| A-850319 | Zinc kit reagent replacement                                |





## DESCALANT DEMONSTRATION CASE

| CODE     | MODEL   | UNIT per box |
|----------|---|--------------|
| A-603001 | Grey canvas softening demonstration case        | 1            |
| B-900024 | 1 litre bottle of water hardness testing liquid | 1            |
| B-900025 | 1 litre bottle of reagent A lime precipitator   | 1            |
| B-900026 | 1 litre bottle of reagent B lime precipitator   | 1            |
| B-605004 | 1 litre bottle of orthotodiline                 | 1            |
| C-253169 | Pressure gauge                                  | 1            |
| C-602014 | Methacrylate test tube holder                   | 1            |

Note: The case supplied may look different from the one that appears in the image.



## OSMOSIS DEMONSTRATION CASE

| CODE     | MODEL                      | UNIT per box |
|----------|----------------------------|--------------|
| A-602050 | Osmosis demonstration case | 1            |

Note: The case supplied may look different from the one that appears in the image.



## DOMESTIC OSMOSIS DEMONSTRATION

| CODE     | MODEL                             | UNIT per box |
|----------|-----------------------------------|--------------|
| A-601000 | 230 VAC electrolysis precipitator | 1            |
| C-601001 | Precipitator vessel               | 1            |
| C-601005 | Aluminium electrode               | 1            |
| C-601006 | Iron electrode                    | 1            |





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