

# Residual Chlorine Meter Model RC-24P



# A portable, easy to use solution for field-measurement of Residual Chlorine

## Features

### No Reagents Required

Measurement operations can be carried out easily without the need for reagent treatment and management. More stable measurements without the human errors associated with colorimetric measurements.

### Low Running Costs

No reagents means lower running costs and excellent cost of ownership advantages.

### Waterproof Construction

Meter is constructed to IP 67 (JIS C0920) standards and can withstand complete immersion into water.

### Correlation with DPD Method

The electrode coefficient is saved automatically when the electrode is connected enabling correlation with DPD method.

### ISO Validation Functions

The instrument includes time functions and internal storage of 300 measurements. Date, time and measurement are continuously displayed in real time.

### Built in Calibration Data in Sensor

Model type, Serial No., calibration history and Coefficient data are stored into the sensor itself.

### RS232/Printer Output

Stored data can be printed using a separately available printer or data can be sent to other peripherals such as personal computers etc. for further statistical manipulation.

## Container and Float Sensor Versions

Measurement is performed after collecting sample in the container or by tossing the float type sensor into the water and commences after the START button is pressed. The use of an optional special sensor assembly with bead cleaning system allows continuous measurements to be performed (Contact DKK-TOA with details of your application for this option).



### Product codes

RC24PDP-0-1: Standard Model for potable (drinking) water, swimming pool or reservoir tanks

RC24PDP-0-9: Special applications (consult DKK-TOA)

## Flowing Sensor Version

The water to be sampled flows continuously through the sampling cell. An orifice outlet controls the flow rate across the sensor at a constant rate (excess flow overflows out of the top of the cell). Measurement commences after the START button is pressed.



### Product codes

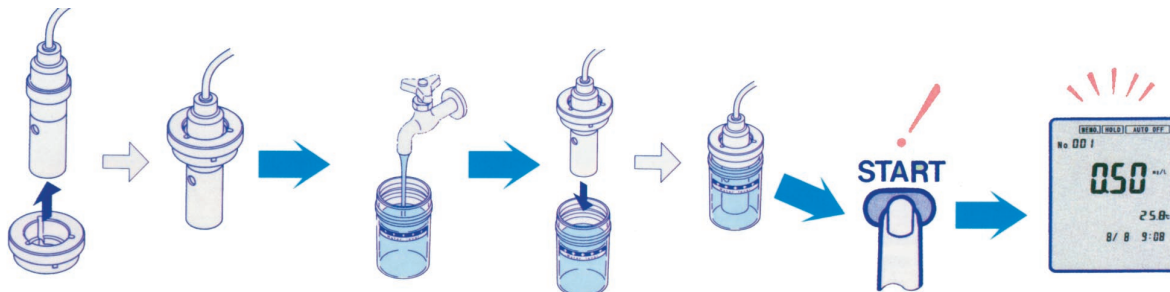
RC24PQ-0-1: Standard Model for tap water sampling

RC24PQ-0-9: Special applications (consult DKK-TOA)

# How to use

## Container Sensor Version

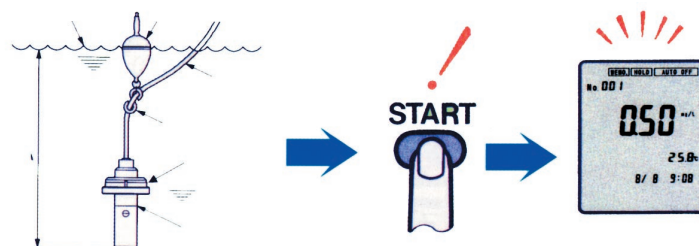
- 1) Set the lid to the electrode
- 2) Take the sample
- 3) Set the electrode with the lid to the measuring container
- 4) Press the START key
- 5) Measurement result is displayed (< 90 sec.)



## Throw-in Measurement Method

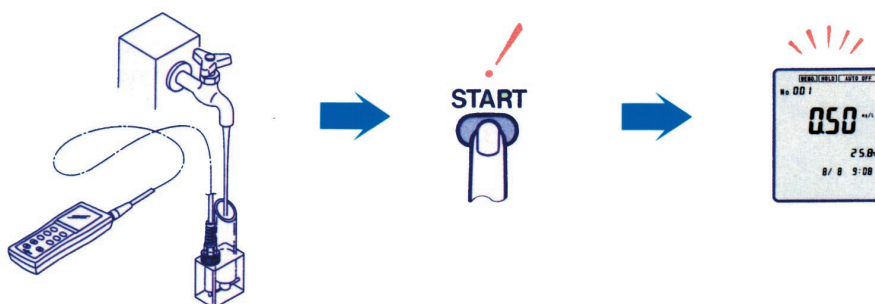
- 1) Put the electrode into the pool, storage tank or bucket.
- 2) Attach the float to the cable when it is necessary.

\* Attachment of float ASSY permits measurement at a constant depth of water.



## Tap Water Measurement Method

- 1) Set the measuring cell below the tap, loosen the tap slightly and put the sample water into the receiving tube
- 2) Press the START key
- 3) The measured value is displayed in real time



## Applications & Product Codes

Application	Product Code	Main body	Electrode	Sample		Options
				City water	Pool water	
Container or throw-in type	RC-24P-DP	RC-24P	FCL-221BA*	●	●	Continuous measurement kit (01L00005)
Flowing tap water	RC-24P-Q	RC-24P	CLS-221AA	●	---	---

\* When measuring swimming pool water that uses dichloroisocyanuric acid for disinfection or a sample containing many combined chlorides, we recommend using a platinum electrode (Model code FCL - 221AA).

# Specifications

Applications	Container sampling, throw-in measurement	Tap water measurement
Product code	RC-24P-DP	RC-24P-Q
Measuring method	Polarograph method	
Meas. Object	Free residual chlorine	
Sample water (water conditions)	City water & pool water (pH: 5.8~8.0, conductivity: 8mS/m (80μS/cm or more)	Water from the tap (pH: 5.8~8.0, conductivity: 8mS/m (80μS/cm) or more
Measuring range	0~2.00mg/L	
Repeatability	± 0.05mg/L or less (at 25°C)	
Sample temperature	0~45°C	
Ambient temperature	0~45°C	
Response time	Within 90 seconds (at 25°C)	
Electrode	FCL-221BA	CLS-221AA
Materials	Main body: ABS Sensor ABS, polyvinyl chloride, silicon, gold & silver	Main body: ABS, Detector section (sensor measuring cell): polyvinyl chloride, silicon, gold, silver & acrylic resin
Lead length	1m (3m option)	
Calibration method	Electrode coefficient input method/alignment function to other analyzed values	
External output	RS-232C interface equipped as standard/printer (option)	
Power source	Dry battery LR6 (AA size) x 2pcs. Or AC adapter (option)	
Dimensions	Main body: approx. 187.5 (v) x 37.5 (h) x 75 (w) mm, Sensor: approx. 34 (max. dia.) x 111 (length) mm	Main body: approx. 187.5 (v) x 37.5 (h) x 75 (w) mm, Detection section (sensor & measuring cell): approx. 60(v) x 140(h) x 60(w)mm
Weight	Main body: approx. 320g (inc. dry battery), Sensor: approx. 130g	Main body: approx. 320g (inc. dry battery). Detecting section approx. 510g
Display	LCD	
Temperature compensation	Automatic (0~45°C)	
Waterproof construction	JIS C 0920, protection class 7 (immersion proof, IP67: 1m depth)	
Other functions	Key lock, auto-power off, interval measurement	
Life of dry battery	Alkaline battery continuous 20h (approx.)	Alkaline battery continuous 70h (approx.)
Standard accessories	Residual chloride sensor FCL-221BA x 1, Measuring container (ODG00003) x 1, Cathode polishing paper (OLAAZ00001) x 1, Cathode wiper (OLZ00002) x 1, Float ass'y (628888OK) x 1, Hand strap x 1, Exclusive driver x 1, Vinyl case x 1, Instruction manual x 1, Dry battery (for test) x 2.	Residual chlorine sensor CLS-221AA x 1, Measuring cell (ODG00004) x 1, Cathode polishing paper (OLA00001) x 1, Hand strap Exclusive driver x 1, Vinyl case x 1, Instruction manual x 1, Dry battery (for test) x 2.

Note: We do not recommend using this instrument with strong acid or alkali samples, sewage or high temperature boiler feed water. If in doubt consult DKK-TOA before purchase.

## Options

### Simplified continuous measurement set

(for FCL-221BA), used for continuous measuring polishing beads)

### Maintenance kit (6288300K)

DPD check set & electrode cleaning agent

### Platinum electrode (FCL-240AA)

For pool water using dichloroisocyanuric acid or sample including many combined chlorides

### External printer (EPS-G)

60mm width printer using normal paper.

Spare parts: printer paper (20 rolls/pack), Ink ribbon (1pc.)

### RS-232C cable

Lead length: 2m, Connector at PC side: (D-sub9P)

### AC adapter (0GC00006)

### Carrying case (0DA00001)

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