## water purification cylinders & accessories



# The exchange cylinder concept

If you require purified water with low expenditure, then the SUEZ Cylinder Exchange Service is for you.

Simply purchase the required cylinder for your purified water needs. When the cylinder is exhausted, fax or e-mail your purchase order or pre-paid voucher to SUEZ.

Our carrier will then collect your exhausted cylinder and return it to us. We then regenerate your cylinder and return it to you. The whole process takes approximately 7 working days, however your cylinder can be prioritised by ordering on a gold service, at an additional cost.

If you cannot be without a cylinder during the exchange process, we recommend you have a stand-by cylinder in place to minimise down-time to your process.

#### easy to use

Cylinders can be supplied with all the fittings necessary for easy connection to a mains or process water supply. All models have been designed for ease of use including:

- Colour coded cylinder heads for easy identification.
- Quick and easy release system making cylinder connection simple.
- Transit plugs to ensure that ports are kept clean and there is no spillage during transport.
- Air bleed valve to purge cylinders prior to use.
- High efficiency internal pipework for maximum capacity.



#### quality accreditation

SUEZ is an ISO 9001:2008 design and manufacturing accredited company and the output from our central on-site, ion-exchange, reprocessing facility is subject to strict controls ensuring consistent high quality of all regenerated resin.

All cylinders are cleaned and pressure tested in our factory.

We can also offer a full traceable inspection report.

## low capital costs and reduced maintenance

SUEZ has invested in a central cylinder processing facility, taking on almost all capital costs so that you can obtain pure water with minimal outlay. The efficiency of the facility allows us to give you excellent quality pure water with great value.

We take care of everything. This includes the collection, delivery, regeneration and return of the cylinders.

## carbon cylinders

Two types of carbon media are available for a variety of water treatment applications.

#### AC - pre-treatment carbon cylinder

A pre-treatment cylinder with a highly absorbent carbon media to efficiently reduce contaminants such as colloidal organics, metal oxides and free chlorine in a single pass. Typically used to pre-condition water prior to treatment by reverse osmosis.



#### **CC** - Polishing carbon cylinder

A cylinder to polish already purified water. The cylinder contains high purity granular activated carbon, selected specifically to reduce residual dissolved organics,TOC, (Total Organic Carbon) to very low levels. It is also effective at removing detergents / cleaning agents from rinse water applications.

## deionising cylinders

Two types are available: a general deionising cylinder (DC) containing exchangeable regenerated resin to supply water up to 10 M $\Omega$ .cm, and a nuclear grade deionising cylinder (NC) to provide ultrapure water up to 18.2 M $\Omega$ .cm.

#### DC - general deionising cylinder

A single pass deioniser filled with mixed bed ion exchange resin capable of removing up to 99% of dissolved mineral impurities from a mains or process water supply. This cylinder is ideally suited to the following applications: surface finishing, pcb de-fluxing and cleaning, ultrasonic cleaning, humidifier supply, laboratory glass rinsing, laboratory reagent make-up, boiler feed, printing solutions, or wherever water of up to 10 MΩ.cm is required.



#### NC - nuclear grade deionising cylinder

A deioniser filled with single use high purity resin able to provide ultrapure water up to 18.2 M $\Omega$ .cm. Applications include: semiconductor, cosmetics and pharmaceutical production. For maximum performance NC cylinders are typically pre-fed with water that has already been pre-purified by reverse osmosis or passed through a DC deionising cylinder.





#### accessories

#### meters

A range of meters is available to monitor the condition of deionising cylinders, so you know exactly when to order a replacement.

**RM1 Indicator:** an economical battery powered water quality indicator with a coloured dual LED band that measures across a scale of  $0.05 - 20 \ \mu$ S/cm and  $0 - 18 \ M\Omega$ .cm.

- Battery powered.
- Can be mounted on a wall bracket or cylinder head when used with fixing kit.
- Graduated water quality scale.



**CM2A Meter:** A press to read conductivity meter for 0 – 19.9 µS/cm.

CM2B Meter: A press to read conductivity meter reading across a scale of 0 – 199.9  $\mu$ S/cm.

Both meters are:

- Battery powered.
- Easily installed.
- Supplied with a 1.5 metre line cell sensor lead.
- Wall mounted to save space.
- Digital display.

**CM3 Meter:** A conductivity meter reading across a scale of 0 – 19.99  $\mu$ S/cm with 1, 5 & 10  $\mu$ S/cm set points.

**RM3 Meter:** A resistivity meter reading across a scale of 0.1-18.2 M $\Omega$ .cm with 1, 2, 5 & 10 M $\Omega$ .cm set points.

Both meters have the following features:

- Red and green alarm lights give a visual indication of water quality.
- Mains powered with 1 metre lead for line cell sensor.
- Wall mounted to save space.
- Rear keyhole slots for easy installation.
- Additional output for beacon or inlet shut-off valve.
- Digital display.



#### fittings

A choice of fittings and range of sizes for ease of connection are available. The fittings are colour coded to match the cylinder:

Blue - DC/NC deionising cylinder Black - AC/CC activated carbon cylinder

Water inlet/outlet fittings range in size from: 8mm plain push fit to ½" to 1" hose type connection.

The outlet fittings are available as either plain push fit type connections (8mm only) or complete with integral conductivity or resistivity line cells.

For the "L" series high flow cylinders the inlet/outlet connections are only available in 1" plastic pipework.

#### dispensing kits

A choice of kits that incorporate dispensing options along with the fittings required to connect the cylinder to the water inlet and outlet.

#### 1/2" Line cell Sensor Fitting Kit

The fitting kit incorporates:

- Line cell sensor for use with water quality indicator RM1.
- 4 metre coil for dispensing water into containers.
- Fittings for 1/2" inlet and outlet connections.



#### dispensing gun and coil kit

The dispensing gun and coil kit incorporates:

- 5 metre coil for dispensing water into containers.
- Dispensing gun with a 6mm gun nozzle allowing the accurate dispensing of purified water.
- Fittings for 1/2" inlet and outlet connections.

## Water purification cylinders - specifications

Carbon cylinders technical data							
	Max flowrate (l/hr)	Min flowrate (l/hr)	Max pressure* (bar)	Pressure drop @ max flow (bar)	Max operating temperature* (°C)		
AC7	280	110	6	0.5	66		
CC7	1000						
AC8	480	220	6	0.5	66		
CC8	1000	220					
AC9	840	200	6	1.2	66		
CC9	2000	390					
AC10	1300	(15	6/3*	1.6	66		
CC10	2500	615					
CC10L	3800	(00	6/3*	0.2	50		
CC11	4200	600					

'L' denotes a high flow cylinder For 'L' type cylinders: Max pressure 6 bar up to 35°C and 3 bar 35-50°C For non 'L' type cylinders: Max pressure 6 bar up to 66°C and 3 bar 50-66°C

Deionising cylinders technical data								
	Max flowrate (l/hr)	Min flowrate (l/hr)	Max pressure* (bar)	Pressure drop @ max flow (bar)	Max operating temperature* (°C)	Capacity per l mg/ltr tds** (m³)		
DC7	650	110	6	0.5	66	300		
NC7	730	110				448		
DC8	750	220	6	0.5	66	450		
NC8	850	220				704		
DC9	1500	390	6	1.2	66	880		
NC9	1700					1248		
DC10	1900	(15	6/3*	1.6	66	1340		
NC10	2100	615				2016		
DC10L	3800	(00	6/3*	0.1	50	1340		
NC10L	4200	600				1480		
DC11L	3800	600	6/3*	0.1	50	2076		
NC11L	4200	000				2290		

\*\*total dissolved solids 'L' denotes a high flow cylinder For 'L' type cylinders: Max pressure 6 bar up to 35°C and 3 bar 35-50°C For non 'L' type cylinders: Max pressure 6 bar up to 66°C and 3 bar 50-66°C

Cylinder dimensions								
		Diameter (mm)	Height (mm)	Approx shipping weight (kg)	Approx working weight (kg)			
AC/CC	7L	205	760	10	16			
DC/NC	/L			12	19			
AC/CC		205	1060	19	26			
DC/NC	δL			20	28			
AC/CC	9L	265	1060	33	49			
DC/NC	9L			32	51			
AC/CC	10L	320	1190	52	77			
DC/NC	IUL			57	81			
CC	10L	320	1140	52	80			
DC/NC	IUL			57	83			
CC	11L	320	1596	60	110			
DC/NC	IIL IIL			95	113			

## 24/7 service

Total lifetime support is a vital element in the services that we provide to all our customers, from a small laboratory with a single benchtop unit, to a major healthcare or industrial organisation with multiple systems or a complex high volume water purification plant.

Our customer support services include system design and build, installation and commissioning, plus 24/7 long-term maintenance contracts to optimise efficiency and minimise through-life costs.

We also hold extensive stocks of consumables and spare or replacement parts that are available as and when required.

Our team of experienced and regionally based engineers provide dedicated applications and telephone support - both by phone and onsite - including consultancy, trouble-shooting and product training.



## **Global support**

We are part of SUEZ, a world leader in water and waste resources management.

Being part of this wider infrastructure gives us access to an extensive network of global resources, plus the people that possess the experience, skills and knowledge that make our business better.

We offer dedicated resources through a comprehensive network of over 50 distribution channels, encompassing North America, Asia, Europe, Africa and Australasia. Our complete and innovative range is supported by an approved local distributor, ensuring a secure and cost-effective service, a supply of critical equipment and ultimately – peace of mind.

Every day we turn this to our customers' advantage, delivering ideas, solutions and support that improve water quality, system performance and return on investment.

#### contact

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Errors and Omissions excluded. SUEZ reserves the right to change the specification in accordance with our program of continual improvement.

#### Installation guide

View our installation guide videos on your smart device by scanning the QR code.



