



by CHMLAB Group

CHM AQUA RO

Reverse Osmosis System

System for general laboratory water requirements

Advanced Design Features Include:

Performance

Up to 38 l/h production capacity.

Integral Pump

Provides consistent operation and flow rates.

Automatic Back-Flush

RO membranes and modules are automatically back-flushed with RO permeate water each time the system shuts down to prevent scale buildup.

Rejection Monitor

Filter exchange indicator : programmable by 2 steps, indicates membrane performance, alerting the operator if problems exist in order to maintain water quality.

Features

- * 16 X 2 characters backlight digital display
- * Programmable by 2 steps for the filter exchanges to maintain water quality
- * Built -in ROM, RAM, CPU microprocessor
- * Very simple to exchange the filter-pack
- * Auto-drain when the system produces lower than setting value



Product Profile

CHM AQUA RO is a compact reverse osmosis system designed to produce up to 38 liters per hour. The unit is capable of removing up to 99% of ionized¹ impurities and 99.9% of bacteria² and organic compounds³.

Applications

AQUA-RO low-maintenance systems produce consistently high-purity water for general lab use such as glassware washing, or for feed water to Ultra Pure AQUA systems. Ideal for central lab loop systems producing 18 to 38 L/hr of water, AQUA-RO Plus systems meet daily demands from 100 L/day to thousands of L/day.

- * General Laboratory tests.
- * Preparation of stock solution.
- * Washing and rinsing of glassware
- * Feed water for ultrapure system

Automatic Control

1. Self test : self -test for diagnosing operating conditions. (Internal/External)
2. Auto drain : auto drain for 30 sec, when it turns ON (power ON)
3. Auto flushing : for the membrane washing, automatically Flushing time: 1 to 99 min. Pedal cycle: 1 to 99 hrs. Controller functions
4. Manual flushing : enable to cleaning the filters
5. Time elapse Indicator: cursor blinking
6. Built - in ROM, RAM, CPU (one chip) microprocessor
7. Filter exchange indicator: programmable by 2 steps as below; (1) 1 St alert message: 1 St reminder for filter exchange 4) 2 nd alert message: The filter must be exchanged

Specifications

Dimensions

40 cm width, 56 cm depth,
50 cm height

System weight

15.9 kg (35.0 lb)

Electrical power requirements

230 V AC 50–60 Hz, 60W

Feed Water Requirements

Minimum inlet pressure 1kg/cm² – 3kg/cm²

Maximum inlet pressure 4kg/cm² – 6kg/cm²

Temperature 2–40°C max.

pH 3–11

TDS (max ppm CaCO₃) 1 800

Silt Density Index <5%

Free Chlorine 0.1 ppm

Langlier Saturation Index Negative

Hardness (max ppm CaCO₃) 200 ppm

Turbidity <1 NTU

Iron (Total as Fe) <0.1 ppm

Rejection Rates

Monovalent Ions 95–99%

Polyvalent Ions 98–99%

Particles 99%

Micro-organisms 99%

Organics 99%

Pyrogen 99%

Product Flow Rate⁴

QRO180 18 l/h

QRO280 28 l/h

QRO380 38 l/h

Maximum Recovery Rate

approx. 55% (Depends on feed water quality and temperature)

Spare parts and accessories

Consumables

(Each system is delivered with all the cartridge needed)

CHM10PF 10" Prefilter

CHM14AC 14" Pre A/C filter

QRO180P AQUA RO Pack I

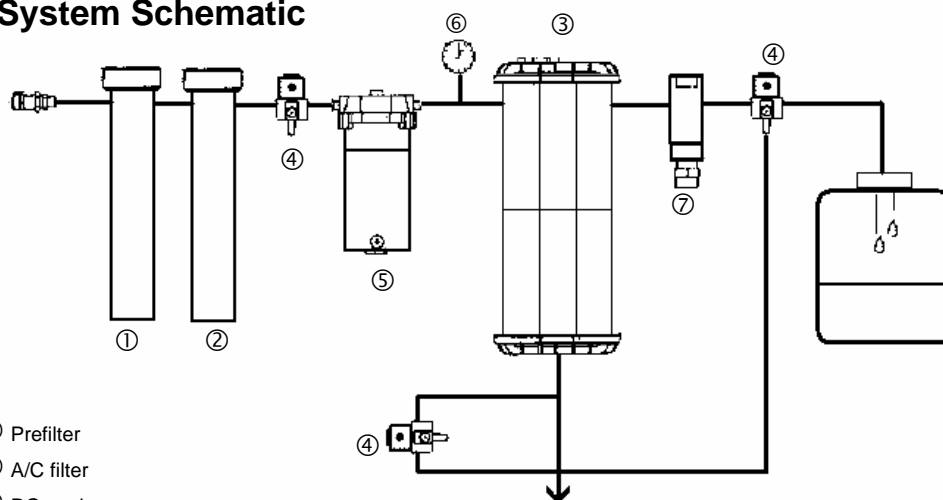
QRO280P AQUA RO Pack II

QRO380P AQUA RO Pack III

Accessories

Pretreatment system

RO System Schematic



- ① Prefilter
- ② A/C filter
- ③ RO pack
- ④ Solenoid valve
- ⑤ Pump
- ⑥ Pressure gauge
- ⑦ Conductivity meter



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