

arium® RO 61316

Reverse Osmosis System



Description

The compact arium® RO 61316 laboratory water purification system is designed to produce RO-Water for general laboratory applications.

With production volumes up to 16 l/h and up to 99% rejection rate of ions, bacteria, organics and viruses, automated RO-membrane back-flushing, and a constant flow rate, the arium® 61316 is the ideal choice for daily laboratory applications.

The efficient RO-membranes reduce water wastage and provide excellent product water quality, whilst ensuring high retention rates of the water impurities.

By the use of an optional closed pressurized tank (30, 70, 100 liter) the RO product water will be distributed with up to 3.5 bar to the point of use. This unique feature provides a pressurized product-water flow for all your lab applications. There is no need for an additional distribution pump.

Applications

- Feed water for ultrapure water systems
- Rinsing glassware and laboratory vessels
- Feed water for humidifiers, autoclaves and dish washer

Features

- Four line alphanumeric display
- Simple menu navigation
- Displaying conductivity, rejection rate, tank-level, temperature etc.
- Typical conductivity < 20 µS/cm
- Production capacity up to 380 liter per day
- Easy to change pre-treatment cartridge and RO-modules
- Automatic RO-membrane-back-flush with RO-permeate
- Constant flow rate
- Several alarm functions
- Product water storage in open gravity or closed pressurized tank
- Serial interface RS-232
- PLC interface for external communication

Specifications

Unit Dimensions

Width:	43 cm (16.85")
Height:	48 cm (19")
Depth:	33.4 cm (13.15")

System Weight

14 kg (31 lbs)

Operation Weight

20 kg (44 lbs)

Electrical Power Requirements

100-240 V AC 50-60 Hz single phase

Inlet Feed Water Requirements

Potable tap water feed only (feed water to meet drinking water standards of the U.S., European Union or Japan)

Minimum inlet pressure:	1 bar 15 psi
Maximum inlet pressure:	6.8 bar 100 psi
Temperature:	5°C–30°C (41°F–86°F)
Hardness (max CaCO ₃):	360 ppm or softened water
Silt density index:	< 3
Free chlorine:	0.1 ppm
Turbidity:	< 1 NTU
Iron (total as Fe):	< 0.1 ppm

Ambient Temperature & Humidity

Operation:	5°C–30°C (41°F–86°F) 80% relative humidity
Storage:	5°C–45°C (41°F–113°F) 80% relative humidity

Laboratory Water Systems

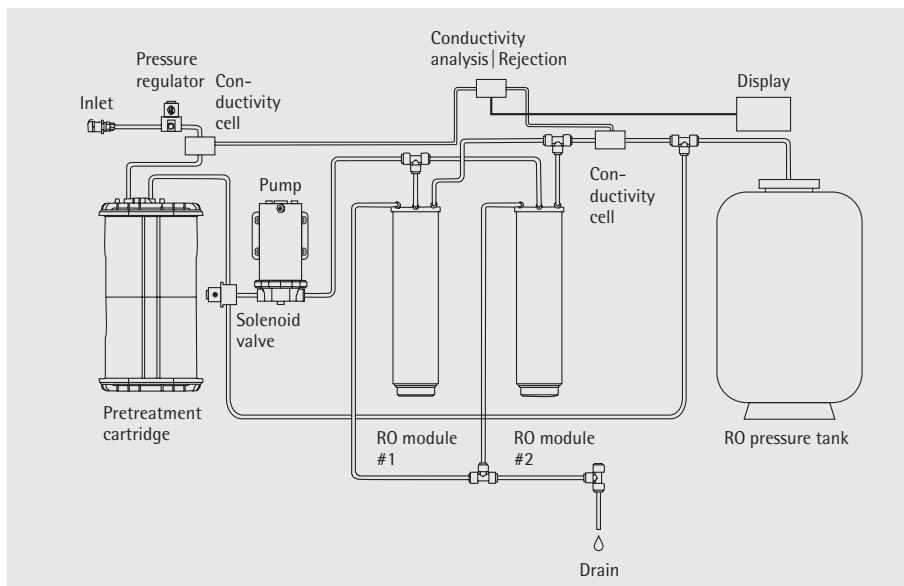
Product Water Quality

Rejection rates

Monovalent ions:	Up to 98%
Polyvalent ions:	Up to 99%
Particles:	> 99%
Microorganisms:	> 99%
Dissolved organics (>300 MW):	> 99%
Product flow rate [l/h]* (± 20% at 25°C)	16
Maximum recovery rate*	Approx. 55%

* Depends on feed water quality and temperature

RO System Schematic



Ordering Information

61316	arium® RO system
613CPF05-----V	2 × pretreatment cartridges
613CPM2-----V	2 × RO modules
611CDS2	Sanitization kit for the tank (2 syringes)
61316CDS2	Sanitization kit for the RO modules (2 syringes)
613AMDG1	Dispense gun for tank
613APV31	30-liter tank**
613APV70	70-liter tank**
613APV100	100-liter tank**
61316030F05M1A	Complete Reverse Osmosis System with a tank capacity of 30 liter** (includes arium® 61316, tank, 2 × RO modules, 2 pretreatment cartridges + sanitizing syringes for RO modules & tank).
61316070F05M1A	Complete Reverse Osmosis System with a tank capacity of 70 liter** (includes arium® 61316, tank, 2 × RO modules, 2 pretreatment cartridges + sanitizing syringes for RO modules & tank).
61316100F05M1A	Complete Reverse Osmosis System with a tank capacity of 100 liter** (includes arium® 61316, tank, 2 × RO modules, 2 pretreatment cartridges + sanitizing syringes for RO modules & tank).

** at 2.5 bar inlet pressure

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Specifications subject to change without notice.
Printed in Germany on paper that has been bleached without any use of chlorine.
W/sart-000 · G
Publication No.: SLG2041-e06111
Order No.: 85030-532-42