



# 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, 50, 70, 100 liter) the RO product water will be distributed with up to 3 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:	1.2 bar   15 psi
Maximum inlet pressure:	6.8 bar   100 psi
Temperature:	5°C–35°C (41°F–95°F)
Hardness (max CaCO <sub>3</sub> ):	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–35°C (41°F–95°F) 80% relative humidity
Storage:	5°C–45°C (41°F–113°F) 80% relative humidity

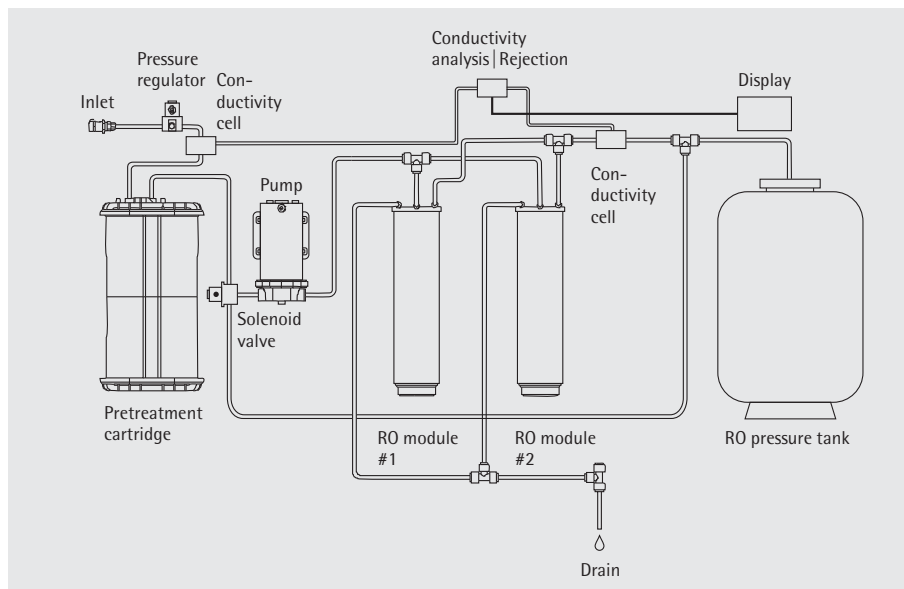
## Product Water Quality

### 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
613CPM4-----V	2× RO modules
611CDS2	Sanitization kit for the tank (2 syringes)
612CDS2	Sanitization kit for the RO modules (2 syringes)
613AMDG1	Dispense gun for tank
613APV31	30-liter tank**
613APV50	50-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).
61316050F05M1A	Complete Reverse Osmosis System with a tank capacity of 50 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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