

Pico[™] Type 3 Reverse Osmosis System



Overview

 $Pico^{TM}$ is a complete all-in-one water system which provides Type 3 water with many unique features. It has low energy consumption, creates minimal water waste and maximizes the use of your laboratory space.

Applied Pressure Semipermeable Membrane Direction of Water Flow

Features & Benefits

- Tap to Type 3 Water.
- Production Rate of 10lph or 20lph.
- Low cost, one box solution.
- · Small footprint.
- Energy consumption <60w.
- Touchscreen interface.
- Automatic flushing cycle to ensure longer life of reverse osmosis membranes.
- Unique disposable RO module and pretreatment cartridge.
- · Benchtop, or wall mounting option available.
- Built in 35 liter reservoir.
- · Minimal water waste
- Simple cartridge replacement.
- First consumables are included with unit.
- Mercury-free UV option available.
- Built-in automatic self-cleaning/sanitization.







Pico[™] Type 3 Reverse Osmosis System

Specifications

UNIT SPECIFICATIONS

Part Number:

- 7120-3000-310 10L / Hour
- 7120-3000-315 UV 10L / Hour
- 7120-3000-320 20L / Hour
- 7120-3000-325 UV 20L / Hour

Unit Dimensions:

Overall Size

- 18.90 in. W x 13.00 in. D x 19.50 in. H
 480 mm W x 330 mm D x 495 mm H
- Operating Weight: 132 lb (60 kg)

Power Supply

• 100-240 VAC; 50/60 Hz

Water Quality

• Organics and Particulate Rejection: >99%

Feed Water Requirements

- Water Quality: Potable Tap Water
- · Water Needs: 60I/hr
- Flow Rate at Pressure: 1.0 lpm @ 10 kPa, 0.1 bar (0.27 gpm @ 1.5 psi) minimum
- Inlet pressure: 1.5 psi (10 kPa, 0.1 bar) minimum to 87 psi (600 kPa, 6.00 bar) maximum (NOTE: Minimum pressure must be maintained at the flow rate specified above)
- Temperature: 41°F to 95°F (5°C to 35°C)
- Free Chlorine: <0.1 mg/l
- Minimum Feed Water Pressure: 1.5 psi (0.1 bar)
- Maximum Feed Water Pressure: 87 psi (6 bar)
- pH: 3.0-9.0
- Total Dissolved Solids: 800 ppm maximum
- Conductivity: <1400μS
- Chlorine concentration tolerance: <0.1 ppm max

Waste Water Drain Requirements

- 1/4 in. tube and 3/8 in. tube connection to 1-1/2 in. (38 mm) pipe minimum, with a minimum safety distance of 3/4 in. between tube end and waste water drain
- Floor level drain not to exceed 6.56 pipe feet (2000 mm) of the RO drain outlet

All specifications are subject to change without notice.

Operation

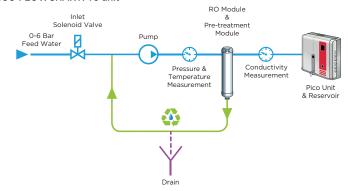
The Pico utilizes well established water purification technologies which you can trust to provide you with the quality of water you require, on demand.

Water can be drawn from the dispensing tap on the front of the machine to obtain the concise water quality needed.

The unique Reverse Osmosis (RO) cartridges have in-built pre-treatment which only requires changing once per year. This means the water is always in optimum condition as there is no deterioration of quality from an RO which is several years old. The high recovery rate of 50% means the cost of waste water is also kept to a minimum.

Pico will take potable water to Type 3 at a rate of 10 or 20 liters per hour which can be dispensed from the 35 liter reservoir. The optional UV photo-oxidation cell provides bacterial control for more sensitive applications.

PICO FLOWCHART: T3 unit



Application

The Pico is able to create primary grade, Type 3 water for several different applications, including higher purity water systems, final rinse glass washers, steam/humidity generators and growth/stability chambers. This is the most economical method of removing up to 99% of feed water contaminants

In water purification, external pressure is applied to the more concentrated side of the membrane to reverse the natural osmotic flow. This forces the feed water through the semipermeable membrane. The impurities are deposited on the membrane surface and flushed to drain. The pure water passing the membrane is referred to as the permeate.

Pico Model	RO Make-up Rate (@15°C)	Inorganics Rejection Rate	Organics Rejection Rate	Bacteria Rejection Rate	Daily Usage (Maximum)
PICO10T3	3 10 lph	98%	>99%	99%	60 lpd
PICO20T	3 20 lph	98%	>99%	99%	120 lpd









