NorthBay
EQUIPMENT
SERVICE & SALES

Reverse Osmosis Systems

FRO Series



Making a positive impact on our environment
for today and future generations.

FRO Series

Freshwater Reverse Osmosis Systems

THE FRESHWATER REVERSE OSMOSIS SYSTEM EFFICIENTLY REMOVES CONTAMINANTS WITH A MULTI PRE-FILTER PROCESS AND SPIRAL WOUND MEMBRANES. IT IS CUSTOMIZABLE AND CAN TREAT UP TO 2000 GALLONS OF WATER PER DAY.



FRO-2000-0M10

CUSTOM BUILT UNITS ARE AVAILABLE.
CONSULT DEALER FOR MORE INFORMATION.

FEATURES

- Powder coated steel frame
- PLC controls for automated operation
- Reverse osmosis pump
- Low feed pressure shutdown
- Multiple spiral wound membranes
- Sediment pre-filter
- ETL listed NEMA-4 rated corrosion-proof control panel

MODEL NUMBER	GPM @ PSI	PERMEATE FLOW	REVERSE OSMOSIS PUMP	POWER REQUIREMENTS	AMP DRAW	FRAME DIMENSIONS (LxWxH)	SHIP WT.
FRO-1000-0M10	2.0 @ 200	0.7-0.8 GPM	1/2 HP	120V, 1Ø, 15.0A	8.0A	38x24x60in.	240 lb.
FRO-2000-0M10	4.0 @ 200	1.4-1.5 GPM	3/4 HP	120V, 1Ø, 15.0A	12.0A	38x24x60in.	270 lb.

ACCESSORIES:

PART NUMBER	DESCRIPTION	FITS MODELS
19-0216	**20-inch, replacement 20-micron pleated filter –** Removes sediment	All models
19-0302	**20-inch, replacement 10-micron filter –** Removes sediment	All models
19-0303	**20-inch, replacement 5-micron carbon filter –** Removes sediment and chlorine	All models
19-0304	**20-inch, replacement anti-scale filter –** Protects membranes from scaling from hardwater	All models
19-0305	**10-inch, replacement 5-micron cartridge filter –** Removes sediment	All models
19-0306	**40-inch, replacement membranes**	All models
19-0311	**10-inch, 1 micron pleated filter –** Removes sediment	All models
19-0312	**20-inch, 1 micron pleated filter –** Removes sediment	All models
19-0313	**20-inch, 5 micron pleated filter –** Removes sediment	All models
19-0633	**10-inch filter housing –** Housing for 19-0305 filter	All models
19-0634	**20-inch filter housing –** Housing for any 20-inch filter	All models
58-0023	**10-inch storage cartridge –** Protects membranes while being stored	All models
58-0024	**10-inch, membrane cleaning cartridge, acid –** Cleans bacteria and scale from membranes	All models
58-0025	**10-inch, membrane cleaning cartridge, alkaline –** Cleans bacteria and sediment from membranes	All models
58-0026	**5-oz. o-ring lubricant for membranes**	All models
RC-0009-0001	**Single filter housing –** Filter before pressure washer, includes single filter housing, mounting bracket and filter wrench, Fits 1 – 20-micron filter, mounting bracket and wrench	All models
RC-0009-0002	**Double filter housing –** Filters before pressure washer, includes double filter housing, mounting bracket and filter wrench, Fits 2 – 20-micron filters, mounting bracket and wrench	All models
RC-0009-0003	**Triple filter housing –** Filters before pressure washer, includes triple filter housing, mounting bracket and filter wrench, Fits 3 – 20-micron filters, mounting bracket and wrench	All models

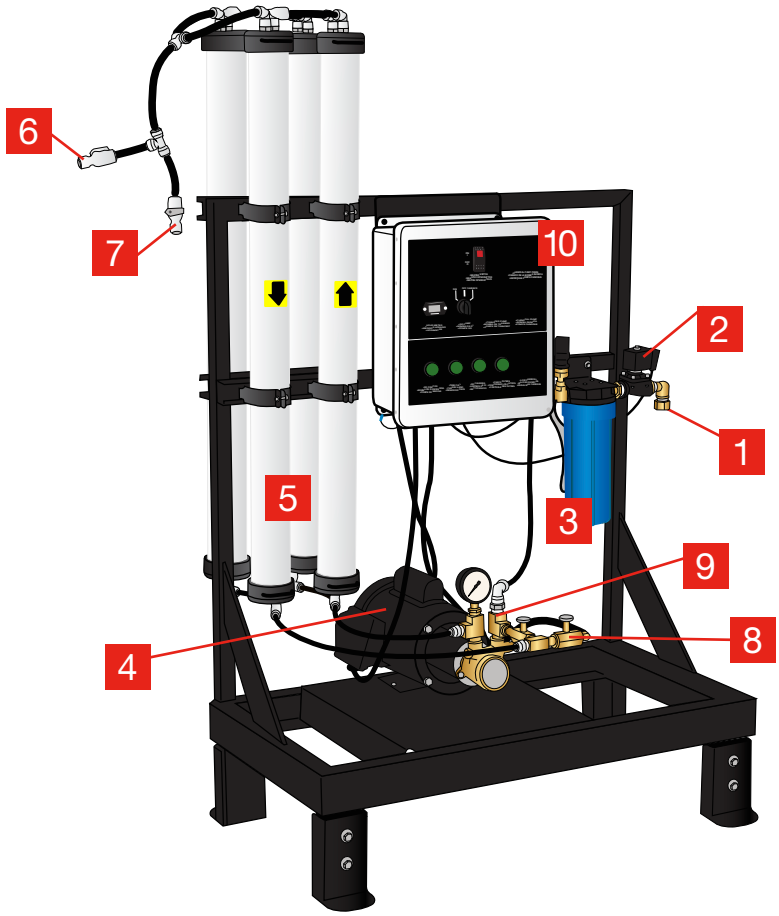


30-micron pleated filter, 19-0216



Anti-scale filter, 19-0304

FRO Series
Process & Flow Description



1. INLET CONNECTION – Connect the reverse osmosis system using the ¾-inch female garden hose fitting to a clean pressurized water source of at least 20-PSI.

2. INLET SOLENOID – The inlet solenoid opens to allow water into the system and shuts the flow of water off when the system shuts off.

3. PRE-FILTER HOUSING – The small housing fits 1 or 5 micron pre-filter to screen out sediment and also is used for the cleaning and storage cartridges.

4. REVERSE OSMOSIS PUMP – Increases water pressure to 200-PSI to efficiently push the water molecules through the reverse osmosis membranes.

5. FRESHWATER REVERSE OSMOSIS MEMBRANES – 2 or 4 spiral wound membranes allow purified water (permeate) through while contaminants remain in the concentrate to be passed to a drain.

6. PERMEATE OUTLET – The permeate comes out the top center of the membranes, it is connected to a tank to store the purified water for use.

7. SAMPLING PORT – Use the sampling port to test permeate quality and flow.

8. CONCENTRATE VALVE – Concentrate rejected from the membranes passes through the concentrate valve to the drain. The concentrate valve is also used to set pressure on the reverse osmosis pump.

9. RECYCLE VALVE – The recycle valve can be used to direct some of the concentrate back to the inlet of the pump to save on water usage.

10. CONTROL PANEL – ETL listed NEMA-4 rated corrosion-proof control panel for safe and reliable operation.

FRO Series

Freshwater Reverse Osmosis Systems

RECOMMENDED APPLICATIONS:

- Rental Yards
- Golf Courses
- Heavy Equipment Dealers
- Trucking Facilities
- Military Bases
- Truck Rental Fleets
- Diesel Repair Facilities
- Forklift Washing Operations
- Aircraft Maintenance and Restoration
- Shipyards
- Municipalities/State DOTs
- Oil Fields
- Engine Rebuilders and Manufacturers

THE IMPORTANCE OF A PROPER PIT SYSTEM:

Once equipment is washed, the untreated wash water flows into your pit system. A proper pit system for your application is the first step in proper wash water treatment and a critical element in any wash water recycle system.

Consult your dealer to determine the pit system configuration that works best for your application.



Control panel



Pre-filter housing with inlet solenoid and inlet connection



Freshwater reverse osmosis membranes with permeate outlet and sampling port

NorthBay EQUIPMENT SERVICE & SALES

3647 Standish Avenue | Santa Rosa, CA 95407
(707) 585-0100 | www.northbayequipment.com

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

Made in USA with Globally Sourced Components