

# Pharm40 Series RO Systems

Flow Rates from 7 to 28 gpm



Pharm40 Series Reverse Osmosis (RO) Systems were designed for pharmaceutical, biotech and cosmetic applications. These systems can remove from 97 to 99% of salts<sup>1</sup>. Units are pre-assembled, pre-wired and hydrostatically tested at the factory. Control systems are comprised of a control panel and skid-mounted wiring.

- System is mounted on a polyurethane coated structural steel NEMA-12 frame
- Product piping is sanitary stainless steel or sanitary polypropylene
- Pump discharge piping is constructed of Schedule 10 butt welded 304L stainless steel
- Product samples valves are located on the outlet of each vessel for quick and easy control
- Easy, continuous control through Allen-Bradley™ PLC
- Inputs and outputs are installed to communicate with pretreatment/post-treatment equipment
- Capable of full cleaning and chemical sanitizing for advanced microbial control
- Comprehensive controls and documentation facilitate easy, thorough validation requirements.

<sup>1</sup>Based on the RO performance projection.

### SYSTEM SPECIFICATIONS\*

Model Number	Polypropylene***	67/P43PP-06S*	67/P43PP-09S*	67/P43PP-12S*	67/P44PP-16S*	67/P44PP-20S*	67/P44PP-24S*
Model Number	Stainless Steel***	67/P43SS-06S*	67/P43SS-09S*	67/P43SS-12S*	67/P44SS-16S*	67/P44SS-20S*	67/P44SS-24S*
Initial Production Capacity . . . . .	6 gpm	9 gpm	12 gpm	16 gpm	20 gpm	24 gpm	
Operating Pressure @ 8 gpm . . . . .	212 psig	212 psig	212 psig	212 psig	212 psig	212 psig	212 psig
Projected System Rejection Rates . . . . .	> 98%	> 98%	> 98%	> 98%	> 98%	> 98%	> 98%
Maximum Recovery . . . . .	75%	75%	75%	75%	75%	75%	75%
Vessel Array . . . . .	1:1	1:1:1	2:1:1	2:1:1	2:2:1	2:2:1	3:2:1
<b>System Dimensions</b>							
H x W x D							
inches . . . . .	72x30x136	72x30x136	72x30x136	72x30x172	72x30x172	72x30x172	72x30x172
cm . . . . .	103x76x345	103x76x345	103x76x345	103x76x437	103x76x437	103x76x437	103x76x437
Shipping Weight lb. (kg.) . . . . .	1,300 (590)	1,400 (636)	1,500 (681)	1,600 (726)	1,700 (772)	1,700 (772)	1,800 (817)
<b>Electrical Requirements</b>							
Power kW (HP) . . . . .	6.5 (5)	6.5 (5)	6.5 (5)	13 (10)	13 (10)	13 (10)	13 (10)
<b>Membranes**</b>							
Size . . . . . (inches)	4x40	4x40	4x40	4x40	4x40	4x40	4x40
Quantity . . . . .	6	9	12	16	24	24	28

\*S - Denotes RO system equipped with MicroLogix™ 1000 Controller

Replacement Membranes . . . . . CDRC 4x40L

\*Capacities are based on a feed water stream of well or softened water. RO projections should be run to calculate actual system performance.

\*\*RO membranes are included with each system.

\*\*\*Sanitary product piping.

### Feedwater Requirements

Maximum Silt Density Index . . . . .	<3
Minimum Silt Density Index . . . . .	<0
Maximum Free Chlorine . . . . .	< 0.1 ppm
Operating Temperature Range . . . . .	15-40°C (60-113°F)
Operating pH Range . . . . .	2-11
Prefiltration . . . . .	5 micron
Total Dissolved Solids . . . . .	<1,000 ppm

### ORDERING INFORMATION

Pharm40 Series RO Systems have extensive option packages. For additional product or ordering information, please contact Technical Support at 800.875.7873 ext. 5000.