# Series K - 28,800 to 460,000 GPD RO Systems

Designed to produce low dissolved solids water from tap or well water, these systems use high efficiency reverse osmosis membranes. The product water is used in applications such as semiconductor, boiler feed, pharmaceutical, municipal, water reuse, food processing, bottling, and a wide variety of other applications.

Series K systems use 8" Diameter, 40" long membrane elements. Pressure vessels contain multiple elements and are mounted in a horizontal position.





## **Key Features**

- 38 years of experience is reflected in our quality
- Heavy duty powder coated frame
- SS High pressure components, SS Pump
- Microprocessor Controlled Operation
- Conservatively engineered for reliable long term performance
- Factory tested to ensure trouble-free operation

















#### **Standard Equipment**

- Thin Film Composite Membranes
- Stainless steel multi-stage centrifugal pump
- FRP pressure vessels
- Polypropylene 5M filter housing for K-48B & K-68C, 316SS housing for larger models
- 316SS high pressure piping and Sch. 80 PVC low pressure piping
- Motorized automatic inlet feed valve
- Feed pump throttling valve, SS, or VFD Drive
- Panel mounted SS flow control valves
- Automatic membrane feed flush with permeate flush option
- Low inlet pressure switch
- High pressure switch
- 4) Panel mounted liquid filled pressure gauges: Filter in/out, pump, concentrate
- Panel mounted flowmeters: product & concentrate
- Product TDS (or Conductivity) with digital display readout
- Cleaning ports
- System on/off with 2-level tank floats
- Heavy duty powder coated steel frame

#### Microprocessor Controller for Automatic Operation

### **Monitors and/or Controls:**

- Inlet valve
- Delayed start-up of high pressure pump
- Feed water flush at system shut-down
- Low pressure and high pressure switches
- On/Off with storage tank level
- Pre-treatment backwash/lockout
- Permeate TDS (or conductivity)
- Feed TDS (or conductivity) & percent rejection
- Water Temperature
- Operating hours
- RO tank full override
- Auxiliary pump or valve control (optional)

#### **Controller Features:**

- Backlit LED Display or optional Touchscreen
- Multi-function keypad or optional Touchscreen
- Alarm notification
- Programmable time delays, set-points and flush mode
- Visual indicator alarm light



I-ROC150S Controller



PLC Controller

# Optional Equipment

- Stainless steel boost or repressurization pump
- pH monitor for feed or for permeate
- Chemical injection
- Pre-treatment: Softener, carbon, media
- VFD Drives

- ORP monitor/controller
- Filter housing upgrade to SS
- Turbidity monitor
- Permeate divert to drain
- UV system, feed or permeate
- FRP membrane housings
- Low energy membranes
- Clean-in-place doubles as a permeate flush system
- PLC with 10" Touchscreen

#### **Ordering Information**

Model No.	System Capacity			Manahama	Line Sizes (NPT, Inches)			System Dimensions (in/cm)			Approx.
	GPM	GPD	m³/hr	Membrane Elements	Inlet	Perm.	Conc.	Length	Depth	Height	Shipping Weight (Lb/Kg)
K-48B	20	28,800	4.5	4	2	11/2	11/2	120/305	44/112	75/191	1,310/594
K-68C	30	43,200	7	6	2	11/2	11/2	154/391	44/112	75/191	1,425/646
K-98C	40	57,600	9	9	2	11/2	11/2	154/391	44/112	75/191	1,735/787
K-128D	55	79,200	13	12	3	2	2	194/493	44/112	76/193	2,005/909
K-168D	75	108,000	17	16	3	2	2	194/493	44/112	76/193	2,275/1,032
K-208D	95	136,800	22	20	3	3	2	194/493	44/112	76/193	2,645/1,200
K-248D	115	165,600	26	24	4	3	2	194/493	60/152	76/193	2,910/1,320
K-288D	135	194,400	31	28	4	3	2	194/493	60/152	76/193	3,280/1,488
K-368F	175	252,000	40	36	4	3	2	288/731	60/152	76/193	3,795/1,721
K-428F	200	288,000	45	42	4	3	2	288/731	60/152	76/193	5,275/2,392
K-488F	225	324,000	51	48	4	3	2	288/731	60/152	76/193	5,660/2,567
K-548F	250	360,000	57	54	6	4	3	custom	custom	custom	7,140/3,245
K-608F	275	396,000	63	60	6	4	3	custom	custom	custom	8,680/3,945
K-668F	300	432,000	68	66	6	4	3	custom	custom	custom	10,285/4,675
K-728F	325	460,000	74	72	6	4	3	custom	custom	custom	11,890/5,404

## Notes and Voltage/ Ordering Information

- Systems rated at 77°F (25°C) using 2000 ppm feed water and approx. 225 psi (16 kg/cm²) pressure. System capacity changes significantly with water temperature and feed TDS. For higher TDS, a water analysis must be supplied and could result in modifications to the system.
- Chlorine must be removed with a carbon filter or with chemical injection prior to the RO System, if present in the feed water.
- Water must be pretreated by softener or antiscalant to avoid scaling the membranes. All dimensions and weights are approximate. <u>Please add our voltage codes to the end of the model number when ordering:</u> Example: J-84B-236 = 220/230v/3 ph/60 Hz

Voltage Codes:

- **236** = 220 or 230v/ 3ph/ 60hz
- **436** = 460 or 480v/ 3ph/ 60 Hz
- 235 = 220 v/3 ph/50 hz• 335 = 380 v/3 ph/50 Hz

Single Phase Not Available















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