Norland INTERNATIONAL

Discover the Norland Advantage:
• Innovative Equipment • Expert Advice • Exceptional Service

RO Systems, Series J – 11,500 - 28,800 GPD

Designed to produce low dissolved solids water from tap or well water, these systems use highly efficient RO Membranes. The product water is used in applications such as rinse water, pharmaceutical, food processing, bottled water, hotels, beverage, hospitals, and a wide variety of other applications.

Series J Systems use 4”×40” membrane elements. Pressure vessels contain one or two membrane elements each and are mounted in a horizontal position.

Key Features:

- **Over 25 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**

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STANDARD EQUIPMENT

- Thin Film Composite Membranes
- Stainless steel multi-stage centrifugal pump
- Stainless steel membrane pressure vessels
- Powder coated carbon steel skid
- Sediment filter with 5 micron filters
- 304SS high pressure piping and Sch. 80 PVC low pressure piping
- Motorized automatic inlet feed valve
- Feed pump throttling valve, SS
- Concentrate & recycle panel mounted flow control valves, SS
- Automatic membrane feed flush
- Low inlet pressure switch
- High pressure switch
- 4) Panel mounted liquid filled pressure gauges: Filter in/out, pump, concentrate
- 3) Panel mounted flowmeters: Product, reject and recycle
- Product TDS (or Conductivity) with digital display readout
- Cleaning ports

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) and percent rejection
- Water Temperature
- Operating hours
- RO tank full override
- Auxiliary pump or valve control (optional)

Features:

- Backlit LED Display
- Multi-function keypad
- Visual and audible alarm & silence key
- Programmable time delays, set-points and flush mode
- Visual indicator alarm light
- Low pressure automatic restart

Controller: I-ROC150S

LED Display:

- Permeate TDS
- Feed TDS with % Rejection
- Water Temperature
- Operating Hours
- Operating status
- Alarm condition

OPTIONAL EQUIPMENT

- Stainless steel Boost or repressurization pump
- pH monitor for feed or for permeate
- Chemical injection
- * Pre-treatment: Softener, carbon, media
- Clean-in-place ***doubles as a permeate flush system***
- ORP monitor/controller
- Filter housing upgrade to SS
- 2nd filter housing
- Turbidity monitor
- Permeate divert to drain
- UV system, feed or permeate
- FRP membrane housings
- Low energy membranes
- * Float Tree for Storage Tank
- Pressurized storage tank controls
- PLC Control – with optional touch screen

Model	GPM	Capacity GPD	m^3/hr	No. of Elements	Line Sizes (Inches) Inlet	Perm.	Conc.	Dimensions (In/cm) Length	Width	Height	Approx Weight (lb/kg)
J-74A	8	11,500	1.8	7	1	¾	¾	54/137	30/76	72/183	1,275/578
J-84B	9	13,000	2.0	8	1	¾	¾	100/254	35/89	72/183	1,410/640
J-104B	10	14,400	2.3	10	1	¾	¾	100/254	35/89	72/183	1,530/694
J-124B	12	17,300	2.7	12	1½	1	¾	100/254	35/89	72/183	1,610/776
J-144B	14	20,000	3.2	14	1½	1	¾	100/254	35/89	72/183	1,830/830
J-164B	16	23,000	3.6	16	1½	1	¾	100/254	35/89	72/183	1,950/885
J-184B	18	26,000	4.1	18	1½	1½	¾	100/254	35/89	72/183	2,070/939
J-204B	20	28,800	4.5	20	1½	1½	¾	100/254	35/89	72/183	2,190/993

NOTES: All dimensions and weights are approximate. Capacity Basis: 24 hrs/day. Systems rated at: 77°F (25°C) using 2000 ppm sodium chloride solution operating at approx. 225-250 psi pressure. Minimum feed pressure to RO System: 40-60 PSI. System capacity changes significantly with water temperature. For higher TDS a water analysis must be supplied and could result in modifications to the system. Chlorine must be removed if present in feed water prior to RO with a carbon filter or with chemical injection. Pretreatment for water hardness using a softener or antiscalant injection should be added to avoid scaling the membranes. Feed water turbidity: Less than 1 NTU ; Feed water silt density index (SDI): 3 maximum. If exceeded, pretreatment with media filter recommended. and SDI test kits are available from Applied Membranes.

Please add our voltage codes to the end of the model number when ordering: Example: J-84B-236 =

Voltage Codes: **236** = 220 or 230v/ 3ph/ 60hz **235** = 220v/3ph/50hz **215**

All pretreatment equipment

ph/60 Hz
= 220v/1 ph/50hz
= 220v/1 ph/60 Hz