

Standard RO Specifications

Model	P1-25	P1-50	P1-75	P1-100	P1-150	P1-200	P1-250	P1-300	P1-500
Design Capacity *	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass	Single Pass
Nominal Product Flow Range (gpm)	20 - 30	40-60	60 - 90	80 -120	120 - 180	160 - 240	200 - 300	240 - 360	400 - 600
RO Design Recovery (%)	80	80	80	80	80	80	80	80	80
w/Conc Recovery Option (%) **	up to 90	up to 90	up to 90	up to 90	up to 90	up to 90	up to 90	up to 90	up to 90
Salt Rejection (%)	up to 99	up to 99	up to 99	up to 99	up to 99	up to 99	up to 99	up to 99	up to 99
Operating Parameters***									
Operating Temperature (°F)	50-80	50-80	50-80	50-80	50-80	50-80	50-80	50-80	50-80
Max. Operating Pressure (psig)	300	300	300	300	300	300	300	300	300
Operating pH Range (pH units)	5-9	5-9	5-9	5-9	5-9	5-9	5-9	5-9	5-9
Nominal Feed Water Flow (gpm)	31	62	94	125	188	250	313	375	625
Membrane Elements									
Membrane Surface Area (ft ²)	400	400	400	400	400	400	400	400	400
Vessel Length (membrane/vessel)	3	4	3	4	6	6	6	6	6
Vessel Array	1:1	2:1	3:2:1	3:2:1	4:2	5:3	6:4	8:4	14:6
Membrane Quantity	6	12	18	24	36	48	60	72	120
Pumps - Vertical Multistage Centrifugal Pumps									
Motor (HP)	10 HP	15 HP	20 HP	25 HP	40 HP	50 HP	60 HP	75 HP	125 HP
Plumbing Connections									
Feed (in)	2" Flange	2" Flange	3" Flange	3" Flange	4" Flange	4" Flange	6" Flange	6" Flange	6" Flange
Reject (in)	3/4" Flange	1.5" Flange	1.5" Flange	1.5" Flange	2" Flange	3" Flange	3" Flange	3" Flange	4" Flange
Product (in)	1.5" Flange	2" Flange	2" Flange	3" Flange	3" Flange	4" Flange	4" Flange	4" Flange	6" Flange
Pneumatic (in)	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Electrical / Pneumatic									
High Voltage (Pumps and Motors)****	460VAC 3PH 60Hz Single Power Drop (Control Power Transformer Included)								
Low Voltage (Control Panel)****									
Amp Draw	22	28	35	42	72	88	103	127	201
Instrument Air @ 80psi (scfm)	2	2	2	2	2	2	2	2	2
System Dimensions									
Length (in)	154	193	154	195	274	274	274	274	280
Width (in)	39	38	39	39	39	62	62	62	94
Height (in)	68	70	92	92	92	98	98	98	109
Est. Dry Shipping Weight (lbs.)	2,467	2,515	3,814	3,967	4,847	5,143	5,411	5,735	11,119
Est. Operating Weight (lbs.)	2,962	3,505	3,952	5,948	7,819	9,106	10,364	11,679	21,025

*Treatment ability of the RO system is dependent on feed water quality.

** Concentrate Recovery option is dependent on feed water chemistry and antiscalant concentration limitations

*** Feed Water Source Requirements

**** Consult Puretec Engineering for other voltage options

° System is based on municipal feed water

° Temperature: 50 - 80°F

° Supply pressure: 30 - 75 (psig)

° NTU <1

° SDI <3

° TOC <3 ppm

° Free Chlorine 0.1 ppm

° Silica < 10 ppm

° TDS <500 ppm

° Iron/Manganese <0.05 ppm

° Oil & Grease <0.05 ppm

° Aluminum <0.5 ppm

° CO₂ < 12 ppm

Higher TDS and/or lower temperatures will reduce product flow. Puretec's Application Engineering team can provide recommendations and sizing for other feed water conditions.