



PRODUCTOS POLO, S.A. de C.V.

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# SERIES OMEGA-8A

INDUSTRIAL  
REVERSE OSMOSIS  
18 - 108 GPM

**Omega-8A Reverse Osmosis systems are the solution for the increasing demand of high quality water with applications in the food and beverage, pharmaceutical, agriculture, municipal, power, mining and microelectronic industries.**

## Key Features:

- Engineering design, prevents water hammer issues.
- High efficiency 8x40" Toray TMG20D membranes offer 99.7% of salt rejection, one of the highest in the market.
- Non-stop production. We installed extra valves at the inlet and outlet of every vessel to avoid maintenance shutdowns.
- Enveloping steel frame for extra protection.
- Permeate flowmeters per vessel. It eases flux regulation and fouling issues detection.
- Concentrate recirculation to achieve optimal operation.

## Opciones:

- Stainless steel frame
- Stainless steel high-pressure piping.
- High production membranes with 440 ft<sup>2</sup> of filtration area.
- High rejection Toray TM720D membranes with 99.8% of salt rejection.
- 316 Stainless steel multistage pump.
- Electronic flow and pressure meters.
- In-line water quality monitoring devices: Conductivity, TDS, pH, ORP and Resistivity.
- Controller for automatic operation with actuated feed valve, flushing, level switches, low pressure protection and chemical dosing.
- Control options: Industrial button station, Microprocessor PICROS5 and PLC.
- Private cover label.
- LCD 2x16 screen or Touchscreen display.
- Full pre-treatment.
- Antiscalant dosing.
- Membrane cleaning system (CIP).
- Storage tanks.
- Feed pumps.



Big  
Industries



99.7%  
Nominal  
salt  
rejection



Energy  
savings

## Standard Benefits:

- All of our models are designed under Toray design guidelines using Toray DS2 software.
- Enveloping industrial coated carbon steel frame.
- High efficiency 8x40" Toray TMG20D membranes with 99.7% of salt rejection.
- Protec 300 psi fiberglass reinforced plastic membrane vessels.
- 304 Stainless steel multistage pump with TEFC motor 220/440V-3Ø.
- Polypropylene bag housing with 1 micron filter bag.
- Flowmeters in permeate, recirculation and concentrate lines.
- Piping in PVC Sch. 80 and Sch. 40.
- Sample valves in main lines and per vessel.
- Production regulation per product line.
- Systems are factory tested.

Powered by:



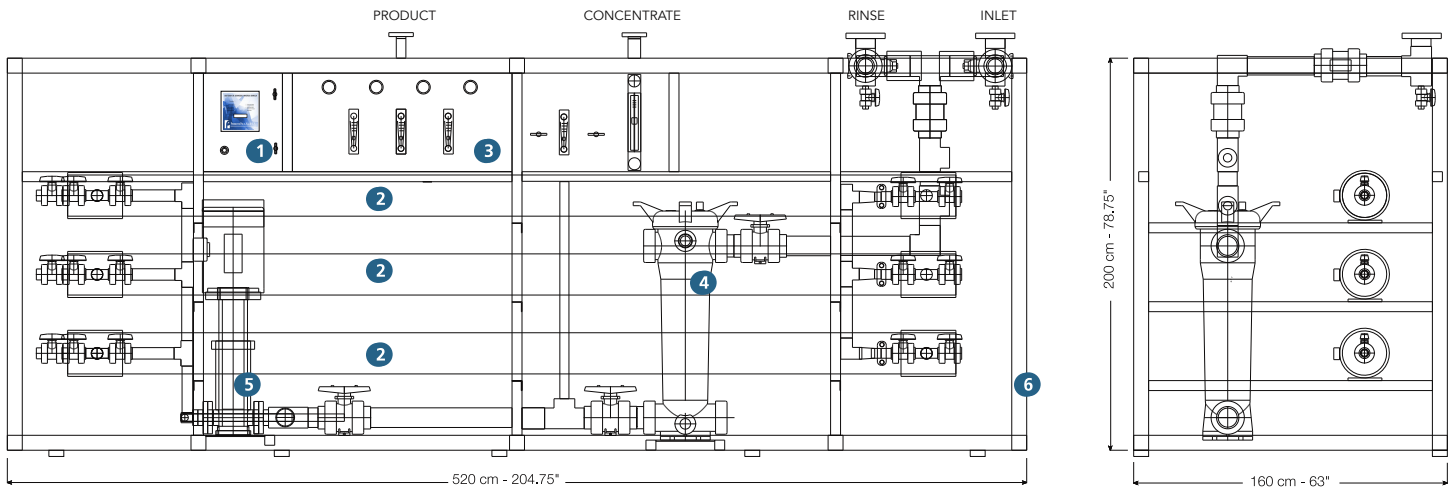
### Product Capacity Specifications

Membrane Quantity	Product Flow Rate		Vessel Quantity	Vessel Arrange	Power (HP)	Filter Housing	Connection (FNPT)			Dimensions cm	Shipping weight (kg)
	GPM	m <sup>3</sup> /day					Feed	Product	Reject		
3 *	13.5	75	1	1	5	3 - 4.5x20"	1.5"	1"	1"	520x160x200	995
4	18	100	1	1	5	3 - 4.5x20"	1.5"	1"	1"	520x160x200	1,010
6 *	27	150	2	2	7.5	7x16"	2"	2"	1.5"	520x160x200	1,516
8	36	200	2	2	7.5	7x16"	2"	2"	1.5"	520x160x200	1,341
9 *	40.5	220	3	3	10	7x32"	3"	2"	2"	520x160x200	1,685
12	54	300	3	3	10	7x32"	3"	2"	2"	520x160x200	2,095
16	72	400	4	2:2	15	7x32"	3"	2.5"	2"	520x250x200	2,291
20	90	500	5	3:2	15	7x32"	4"	3"	2"	520x250x200	2,637
24	108	600	6	3:3	20	7x32"	4"	3"	2.5"	520x250x200	3,047

Under a standard design with TMG20D membranes at 3 years of operation with a recovery of 60-70% using well water properly pretreated with 1,500 ppm of total dissolved solids at 25°C. \* Integral upgrade with one membrane empty space per housing.

### Automatic features

Features	Plain	Standard	Plus	Basic PLC	Premium PLC
Controller	Industrial button station	PICROS 3, Controller	PICROS 5, Controller	PLC	PLC
Inputs / Outputs	0/1	3/3	5/5	5/6	14/6
Actuated Valves	-	Yes (2)	Yes (3)	Yes (3)	Yes (3)
Flushing	-	Yes	Yes	Yes	Yes
Sound alarm	-	Yes	Yes	Yes	Yes
Level Switch	-	Yes (2)	Yes (3)	Yes (Digital)	Yes (Digital)
Low pressure switch	-	Yes	Yes	Yes	Yes
Display	-	2x16	2x16	7" (Touch)	7" (Touch)
Private cover label	-	Yes	Yes	Yes	Yes
Electronic flow meter	-	-	-	Optional	Yes (3)



### Construction materials

- 1 PICROS Controller
- 2 Membrane housing
- 2 Membrane
- 3 Instruments panel
- 4 Pre-Filter
- 5 High pressure pump
- 6 Carbon steel frame

Frame	Carbon steel
Membrane Housing	FRP, Protec
Piping	PVC schedule 80 / 40
Filter Housing	Polypropylene