

REVERSE OSMOSIS

GAMA SERIES

Applied for water where classical purification systems become insufficient (seawater, well water with high conductivity etc.), separating all undesirable minerals from water, membrane filtration transaction devoted to pure water provision is called REVERSE OSMOSIS.



GAMA 4880



GAMA 3080



GAMA 2580

OPERATING PRINCIPLE OF REVERSE OSMOSIS SYSTEM

Reverse osmosis (RO) is a filtration method that removes many types of large molecules and ions from solutions by applying pressure to the solution on one side of a selective membrane forcing only the small water molecules through the membrane becoming purified or permeate water.

Membrane surface is always kept clean and unplugged by 'Cross Flow' operation that happens inside membrane element. By means of 'Cross Flow', while some liquids (element water) pass through membrane, some liquid (intensive water) move parallel to membrane surface, so protect others to stick to membrane. This process enables much more qualified water compared with other filtration systems.



MORE INFO



REVERSE OSMOSIS GAMA SERIES

MODEL	CAPACITY (mch)	MEMBRANE QTY	VESSEL QTY	REC. (%)	HPP MODEL (GRUNDFOS)	HPP POWER (kW)	CARTRIDGE FILTER	CIP TANK VOLUME (L)	IP PUMP MODEL (EBARA)	CIP PUMP POWER (kW)
GAMA180	1	1	1	50	CR5-22	4	PVC520	500	CDXL 200/25	1,85
GAMA280	2	2	1	50	CR5-24	4	PVC520	500	CDXL 200/25	1,85
GAMA380	3	3	1	60	CR5-29	4	PVC520	500	CDXL 200/25	1,85
GAMA480	4	4	2	60	CR10-12	4	PVC520	500	CDXL 200/25	1,85
GAMA680	6	6	2	60	CR10-16	5,5	PVC520	1000	CDXL 200/25	1,85
GAMA880	8	8	2	70	CR15-10	11	PVC530	1000	CDXL 200/25	1,85
GAMA1080	10	10	2	70	CR15-12	11	PVC530	1000	CDXL 200/25	1,85
GAMA1280	12	12	2	75	CR15-14	11	PVC540	1000	CDXL 200/25	1,85
GAMA1580	15	15	3	75	CR20-12	15	PVC540	2000	3LM 40-160/3	3
GAMA1880	18	18	3	75	CR20-12	15	PVC930	2000	3LM 40-160/3	3
GAMA2480	24	24	4	75	CR32-11-2	22	PVC940	2000	3LM 40-160/4	4
GAMA3080	30	30	5	75	CR45-6	22	ACF1240	2000	3LM 40-160/4	4
GAMA3680	36	36	6	75	CR45-6	22	ACF1240	3000	3LM 50-160/5,5	5,5
GAMA4280	42	42	7	75	CR64-6	37	ACF1640	3000	3LM 50-160/5,5	5,5
GAMA4880	48	48	8	75	CR64-7-2	37	ACF1640	3000	3LM 50-160/7,5	7,5
GAMA5480	54	54	9	75	CR95-5	37	ACF2740	5000	3LM 50-160/7,5	7,5
GAMA6080	60	60	10	75	CR95-5	37	ACF2740	5000	3LM 65-160/9,2	9,2
GAMA6680	66	66	11	75	CR95-6	45	ACF2740	5000	3LM 65-160/9,2	9,2
GAMA7280	72	72	12	75	CR95-6	45	ACF2740	5000	3LM 65-160/11	11
GAMA7880	78	78	13	75	CR125-5	55	ACF2740	5000	3LM 65-160/11	11
GAMA8480	84	84	14	75	CR125-5	55	STYRE-3PCS	7500	3LM 65-160/11	11
GAMA9080	90	90	15	75	CR125-5	55	STYRE-3PCS	7500	3LM 65-160/15	15
GAMA9680	96	96	16	75	CR125-5	55	STYRE-3PCS	7500	3LM 65-160/15	15

STANDARD FEATURES

- Membranes - LG BW 400 ES-8040
- 8" FRP membrane vessels 300 psi- Aqualine
- Hpp - Grundfos AISI304 st. Steel
- Low piping - PVC
- High pressure piping - AISI304 st. Steel
- Control panel - Plc & touchscreen
- Automatic rinsing-manual cip is included
- Skid frame - AISI 304 st. Steel
- CIP pump - Ebara AISI316 st. Steel.
- Automatic valves are electrical actuated
- Flow regulation valves at pump outlet and drain lines
- Low and high pressure switch
- Inline flow meters at product and drain water lines
- Glycerin type manometers
- Conductivity meter at product water line
- Autoflush system
- ASC dosage system is not included.

RECOMMENDED FEED WATER LIMITS

Feed water TDS : 0-2,000 ppm

Feed water pressure : 2 to 5 bar

Feed water pH range : 6-8

Silica (SiO₂) tolerance : 25 ppm max.

Max. Iron (Fe) tolerance :
0.05 ppm (without ASC dosing)
0,2 ppm (with ASC dosing)

Min. and max. feed water temperature
(10° C - 30°C)

Hydrogen Sulfide should be removed

Turbidity should be removed (NTU <1)

Oil-Grase should be removed

SDI < 5

Microbiological contamination should be removed