

## Reverse Osmosis (RO)

REVERSE OSMOSIS packaged systems  
The MemPAK RO® and MemPAK SWRO® series, suitable for the most demanding applications, are designed for industrial, brackish and sea water applications.

The MemPAK RO® and MemPAK SWRO® systems remove salts, organic materials, impurities and other contaminants from water. They are also capable of rejecting bacteria, sugars, proteins, particles, dyes, and other constituents that have a molecular weight of greater than 150-250 Daltons. The MemPAK RO® and MemPAK SWRO® systems are engineered using 3D computer modelling and process design and can be completely customised to best suit your needs.



- ~ Turbidity must be removed
- ~ 20-80 psi feed water pressure.
- ~ Note: a suitable feed pump can be supplied
- ~ Max 0.05 ppm iron tolerance
- ~ 0-1000 ppm feed water TDS. The MemPAK RO® can be designed for higher levels
- ~ 3-11 pH range
- ~ 25 ppm Silica tolerance @ 60% recovery

### MemPAK SWRO® Industrial Sea Water Reverse Osmosis Packaged

- ~ Systems
- ~ Standard features
- ~ 8" TFC spiral wound membranes
- ~ Powder coated, welded steel frame
- ~ 5 micron pre-filter
- ~ 415V 3 phase power supply
- ~ PLC based control panel
- ~ Ampco ZC-2 feed pump. 3 phase Sea water resistant 2205 S/S
- ~ Danfoss high pressure piston pump, 2205 S/S
- ~ Siemens S7-200 PLC based control panel & VFD
- ~ Permeate TDS monitor
- ~ Stainless steel high pressure piping
- ~ Low / high pressure switches
- ~ Permeate conductivity monitor
- ~ Permeate & concentrate flow meters
- ~ Clean-in-place (CIP) system (HDPE tank, cartridge filter, pump and control panel)

### MemPAK RO® Industrial Brackish Reverse Osmosis Packaged Systems

#### Standard features

- ~ 8" TFC spiral wound membranes
- ~ Powder coated, welded steel frame
- ~ Stainless steel multistage pump
- ~ 5 micron pre-filter
- ~ 415V 3 phase power supply
- ~ PLC based control panel
- ~ Programmable time delay and set points
- ~ NEMA 12 enclosure with disconnect and interlocking rotary handle
- ~ High and low pressure switches
- ~ Grundfos stainless steel multi-stage pump
- ~ Permeate conductivity monitor
- ~ Permeate & concentrate flow meters
- ~ Clean-in-place (CIP) system (HDPE tank, cartridge filter, pump and control panel)

#### Operation specifications

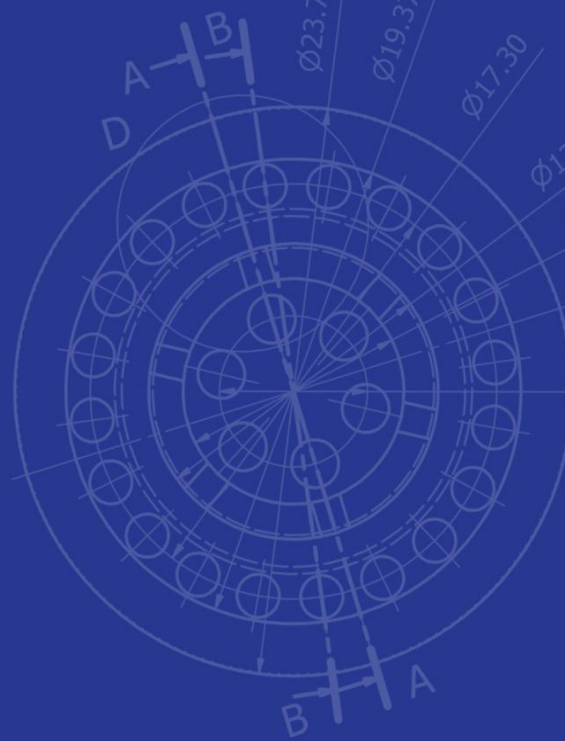
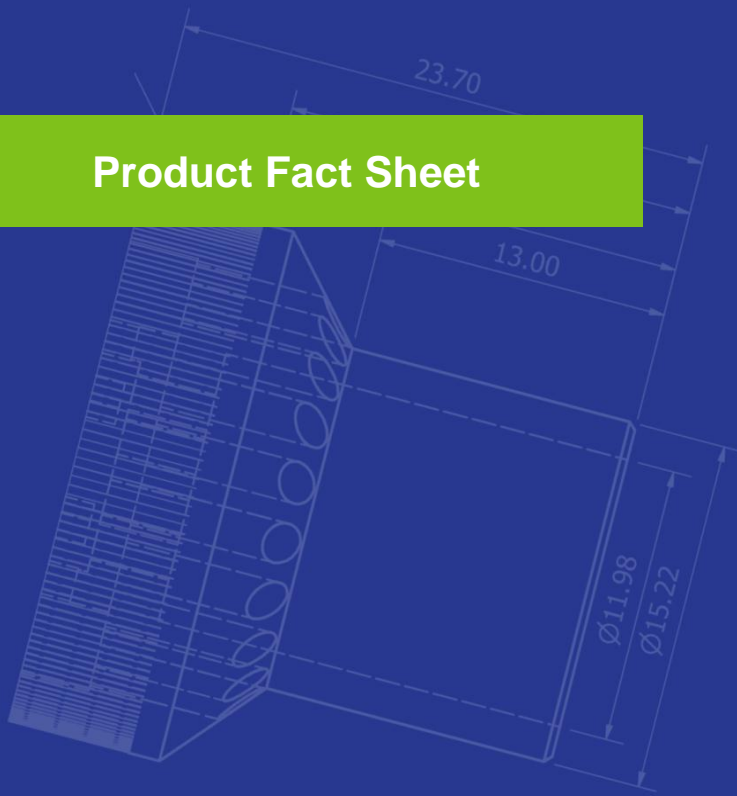
- ~ Max 42°C feed water temperature
- ~ Hydrogen Sulphide must be removed

## › MemPAK RO® & SWRO® specifications

MODEL	PERMEATE OUTPUT (m <sup>3</sup> /day)	QTY OF MEMBRANES	MOTOR HP	APPROXIMATE DIMENSIONS (mm)			APPROXIMATE WEIGHT (kg)
				Length	Width	Height	
MemPAK RO-15	15	3 x 4"	1.5	534	635	1397	90
MemPAK RO-30	30	6 x 4"	2	534	762	1397	130
MemPAK RO-50	50	9 x 4"	3	3454	1092	1524	340
MemPAK RO-85	85	15 x 4"	5	3454	1092	1524	409
MemPAK RO-100	100	18 x 4"	7.5	3454	1092	1727	460
MemPAK RO-135	135	5 x 8"	10	4320	840	1475	1090
MemPAK RO-160	160	6 x 8"	15	5335	915	1475	1135
MemPAK RO-215	215	8 x 8"	15	6350	915	1475	1185
MemPAK RO-275	275	10 x 8"	20	5335	915	1475	1230
MemPAK RO-330	330	12 x 8"	20	4320	1220	1680	1275
MemPAK RO-400	400	15 x 8"	25	5335	1220	1680	1455
MemPAK RO-480	480	18 x 8"	25	6350	1575	1680	1590
MemPAK RO-540	540	20 x 8"	25	5335	1575	1680	1900
MemPAK RO-650	650	24 x 8"	25	6350	1575	1680	2160
MemPAK RO-750	750	28 x 8"	30	8890	1830	2030	2045
MemPAK RO-850	850	30 x 8"	30	8890	1830	2030	2045
MemPAK RO-1000	1000	36 x 8"	40	8890	1830	2030	2230
MemPAK RO-1200	1200	42 x 8"	40	8890	1830	2030	2360

MODEL	PERMEATE OUTPUT (m <sup>3</sup> /day)	QTY OF 8" MEMBRANES	MOTOR HP	APPROXIMATE DIMENSIONS (mm)			APPROXIMATE WEIGHT (kg)
				Length	Width	Height	
MemPAK SWRO-30	30	2	15	3050	1070	1830	1180
MemPAK SWRO-45	45	3	25	4065	1070	1830	1180
MemPAK SWRO-60	60	4	30	4065	1524	1830	1227
MemPAK SWRO-90	90	6	45	4950	1524	1830	1454
MemPAK SWRO-120	120	8	65	4950	1830	1830	1910
MemPAK SWRO-180	180	12	80	4950	1830	1830	2545
MemPAK SWRO-240	240	16	95	7112	1830	1830	2954
MemPAK SWRO-360	360	24	100	7112	1830	2034	5910
MemPAK SWRO-420	420	28	110	7112	1830	2034	6363
MemPAK SWRO-515	515	30	120	8890	1830	2034	6820
MemPAK SWRO-635	635	42	130	8890	1830	2034	7954
MemPAK SWRO-740	740	49	150	8890	1830	2034	7954
MemPAK SWRO-850	850	56	175	8890	1830	2034	7954
MemPAK SWRO-950	950	63	190	8890	1830	2034	8180
MemPAK SWRO-1060	1060	70	190	8890	1830	2034	8636
MemPAK SWRO-1200	1200	84	290	8890	2159	2034	9545
MemPAK SWRO-1600	1600	105	320	8890	2159	2034	9990
MemPAK SWRO-1900	1900	126	320	8890	2159	2058	11000

## Product Fact Sheet



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