

REVERSE OSMOSIS SYSTEMS PRODUCE HIGH PURITY PERMEATE WATER WHILE REMOVING UP TO 99% OF DISSOLVED INORGANICS, ORGANICS, COLLOIDS AND SOLID PARTICLES



**TECHNICAL PERFORMANCES**

**SYSTEM DETAILS**

MODEL		RO-5	RO-7	RO-10	RO-15	RO-20	RO-25	RO-30	RO-40	RO-50	RO-80	RO-90	RO-120	RO-140
FEED* (MAX)	m <sup>3</sup> /hr	6	9	13	19	25	31	38	56	67	106	112	160	168
PERMEATE* (MAX)	m <sup>3</sup> /hr	5	7	10	15	20	25	30	46	55	87	92	131	138
RECOVERY*	%	80	80	80	80	80	80	80	70-82	70-82	70-82	70-82	70-82	70-82
INSTALLED POWER	kW	7.5	11	11	15	18.5	22	22	30	37	37	55	110	110

\* Flowrates and recovery are feed water quality dependant, please enquire with your local Veolia representative



**Feed flow rates from 6 to 168 m<sup>3</sup>/hr**



**FEATURES & BENEFITS**

- Short lead-time: quick installation and start-up
- Robust: pre-filter for membrane protection, dry-run and high pressure protection, epoxy coated Carbon steel skid frame
- Cost-effective: lower CAPEX and OPEX
- Energy savings due to variable frequency drive (VFD)
- Compact and modular design: can be easily integrated into new or existing systems
- Proven and reliable technology: pre-assembled and Factory Acceptance Tested (FAT) in workshop
- Fully automated and easy to operate: integrated PLC and HMI; no compressors required; separate dosing section
- High treatment efficiency: feed water salinity 100 to 5000mg/L TDS; typical salt rejection from 96 to 98%



**APPLICATIONS**

TOURISM	DW
MUNICIPAL	DW
AGRICULTURE	PW
PULP & PAPER	PW
FOOD & BEV	PW
COSMETICS	PW
PHARMA	PW
POWER	PW
MINING	PW

DW: Drinking Water - PW : Process Water - WW: Wastewater



**HYDREX CHEMICALS**

Hydrex water treatment chemicals from Veolia should be used for optimal operation. (see page 49 for further details.)



**RELATED SERVICES**

Local after-sales service and support teams offer preventative and corrective maintenance programs to ensure a long-term and efficient operation.

**FEED WATER REQUIREMENTS**

Feed Water should be free from organic materials, chlorine and suspended solids.

A softened water supply is normally required.

For specific design treatment requirements, membrane selection and process options based on client requirements; please contact your local Veolia representative.

**OPTIONS**

A	Permeate Flush / CIP System (Integrated)
B	Cleaning-In-Place (External Skid)
C	Cleaning-In-Place System (Heating)
D	Analytical Monitoring (Feed: pH, ORP, Conductivity, Temperature, Permeate: pH)
E	Feed pH Adjustment
F	Permeate Off Spec Divert
G	Motorised Valves
H	Antiscalant Dosing

**SYSTEM DIMENSIONS**

MODEL		RO-5	RO-7	RO-10	RO-15	RO-20	RO-25	RO-30	RO-40	RO-50	RO-80	RO-90	RO-120	RO-140
LENGTH	mm	4150	4150	5000	5000	5000	6000	6000	8000	8000	7000	8000	7000	8000
DEPTH	mm	950	950	1000	1000	1000	1000	1000	1000	1000	1500	1500	2000	2000
HEIGHT*	mm	1750	1850	1850	1850	2200	2400	2400	2500	2700	2800	2800	3100	3100
DRY WEIGHT	kg	1438	1500	1565.5	1625	1816.5	2250	2375	2875	3000	6250	6500	8750	9000
OPERATING WEIGHT**	kg	2500	2688	2750	2875	3375	3750	3875	5125	51250	11250	11250	15000	15000

\*Heights indicated are installed heights not transport heights, all skids to be transported in standard shipping containers.

**UTILITY REQUIREMENTS**

VOLTAGE	400V – 3 phase 50Hz
INSTRUMENT AIR	Dry, Oil Free, 6 – 7 bar

**MATERIALS OF CONSTRUCTION**

PRE FILTER	Stainless Steel / Polypropylene
PUMPS	Stainless Steel Impeller and Casing
RO PRESSURE VESSELS	FRP
PIPING	uPVC Class 12 / 304 or 316 Stainless Steel