

REVERSE OSMOSIS SYSTEM WATEX WRO200 PLUS and WRO400 PLUS TECHNICAL DATA
Advantages: compact, plug & play, high quality, competitive price

Technical parameters	Unit	Model	Model
		WRO200 PLUS	WRO400 PLUS
Flow rate Q _{nom}	liters/hour	200	400
Flow rate Q _{max}	liters/day	4000	8000
Water supply flow rate Q _{max}	liters/hour	3000	3000
Grundfos second lift pump		SBA 3-35 A	SBA 3-35 A
Recovery max.	%	70	70
Operating pressure max.	bar	15	15
System dimensions (Length x Width x Height)	m	0.84 x 0.70 x 1.66	1.45 x 0.68 x 2.10
Electricity connection	V	1 x 220-240	1 x 220-240
Power consumption	kW	1.5	1.5
Membrane model & quantity		CSM RE4040-BLN x2	CSM RE4040-BLN x2
Connection (in,out,drain)	inches	¾", ¾", ¾"	¾", ¾", ¾"
	mm	20,20,20	20,20,20
Weight	kg	100	100
Water reservoir	liters	500	1000
System frame	Stainless steel AISI304		
High pressure pump	MWG		
Quality control	Electrical conductivity 0 - 500 µs/cm, alarm system		
Control system	Pressure switches, manometers, flow meters, regulating valve		
Piping system	John Guest pipes and PVC-U fittings PN16		
Inlet filter	PP 5 micron cartridge		



WRO200 PLUS



WRO400 PLUS

Notes:

- ✓ Data based on following parameters: 1500 mg/l NaCl solution at 10 bars, 10 °C, Salt rejection 99.2%, SDI<3 brackish and low-mineralized water.
- ✓ Pretreatment required: mechanical filtration, iron removal, softening or antiscalant dosing, adsorption by activated carbon (if chlorine presence).

REVERSE OSMOSIS FILTER DESCRIPTION

Reverse osmosis (RO) is the water treatment technology applied for water demineralization and desalination. Due to high pressure of raw water input, water molecules pass through semipermeable membrane from more concentrated solution to less concentrated. The salts, heavy metals, organic compounds and microorganisms, dissolved in water are not capable to penetrate through a membrane and are drained as concentrate. Reverse osmosis technology allows to remove up to 99.2 % of all dissolved salts, depending on water composition, used type of membranes and the scheme of plant.

REVERSE OSMOSIS DESIGN:

- Stainless steel frame AISI304;
- Mechanical filter 5 microns;
- Operation controller MANITRONICA;
- Flow control system;
- Automatic flushing system;
- Recirculation regulation system;
- Pressure gauges 4 pieces;
- Low and high pressure switches;
- MWG high pressure pump and Grundfos SBA 3-35 A second lift pump;
- Water reservoir 1000L;
- On-line water conductivity meter 0-500 microS/cm;
- Full tank switch (float system);

REVERSE OSMOSIS OPTIONS:

- Antiscalant dosing equipment;
- Leakage alarm;
- High pressure soft starter;
- Integrated CIP - Membrane chemical cleaning systems;
- PLC controller to connect to SCADA;
- Process visualization;
- System parameter monitoring;
- Additional conductivity meters;
- Additional pressure safety switches;
- Electromagnetic flow meters;
- Temperature safety switches;
- Frequency converter for high pressure pump control and regulation.