ROTEC L

Reverse Osmosis Unit

The ROTEC L series consists of reverse osmosis systems covering a broad spectrum of applications with large water volumes from 3.5 m³/h to 30 m³/h.

Properties:

- low energy input at high output
- fully automatic reverse osmosis
- highly efficient membrane system
- completely pre-assembled
- reliable operation with integrated product conductivity monitoring
- easy commissioning

Components:

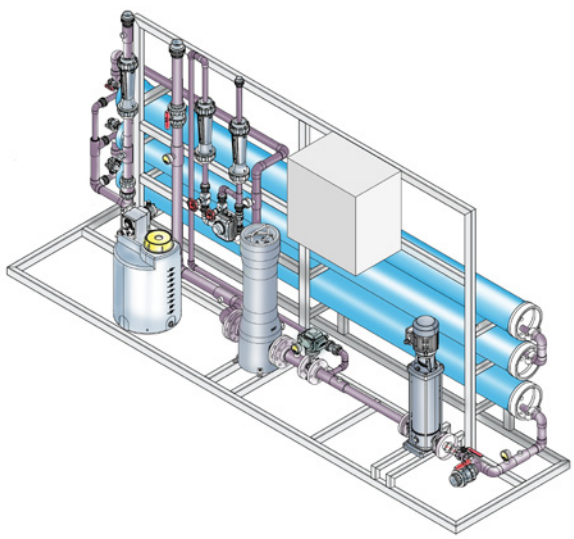
- stainless steel frame
- 5 µm fine filter
- multistage, vertical high pressure pump
- GFRP pressure vessels
- reverse osmosis membrane
- conductivity monitoring
- microprocessor control
- all fittings and measuring instruments necessary for the installation of the plant and monitoring the hydraulic parameters

Operating Conditions:

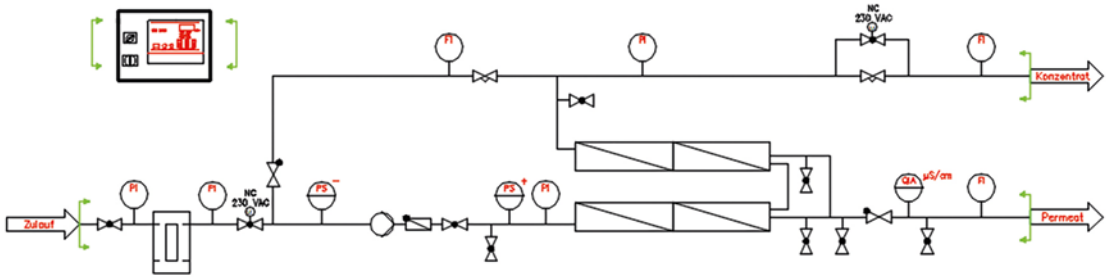
Hereinafter, the requirements for the inlet water:

Inlet pressure	2-6 bar
Temperature range	5-40° C
pH range	2-11 constant
	1-12 during cleansing
Colloid index (SDI 15)	< 3
Permeate counterpressure	max. 0.3 bar at standstill
Free chlorine (Cl_2)	< 0.5 mg/l
Iron (Fe)	max. 0.1 mg/l
Manganese (Mn)	max. 0.05 mg/l

Further requirements are listed in the obligatory operating conditions for reverse osmosis systems.



Process diagram



sample scheme

Technical Data:

Type		ROTEC L5000	ROTEC L7500	ROTEC L10000	ROTEC L15000	ROTEC L20000	ROTEC L25000	ROTEC L30000
Permeate volume**	m³/h	5	7.5	10	15	20	25	30
Feed flow	m³/h	6.25	9.4	12.5	18.75	25	31.25	37.5
Concentrate volume**	m³/h	1.25	1.9	2.5	3.75	5	6.25	7.5
Operating mode		Reverse Osmosis						
Output	%	75						
Salt rejection*	%	> 96						
Operating pressure*	bar	14						
Electric connection		400V 50Hz 5.5kW		400V 50Hz 11kW		400V 50Hz 15kW		400V 50Hz 22kW
Membrane type*		BW30 HRLE 440						
Membrane quantity		4	6	9	12	18	22	25
Circuit		1:1	1:1	1:1:1	2:1	2:1:1	3:2:1	3:2
Connection	Inlet Permeate Concentrate	DN40 DN40 DN25		DN50 DN40 DN25		DN80 DN65 DN32		
Dimensions	Length (mm) Width (mm) Height (mm)	2 400 750 1 900	3 400 750 1 900		4 400 750 1 900			5 400 750 1 900

*all specifications are approximate

**under standard conditions