



## ROTEC MV

### Reverse Osmosis Unit

The ROTEC MV series is our vertical equivalent to the ROTEC M series with water volumes of 500 – 3 500 l/h. Vertically-mounted pressure vessels have smaller footprints and thus require smaller installation areas.

#### 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:

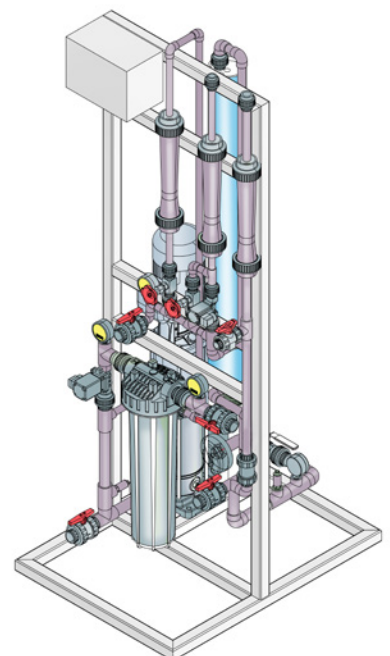
- stainless steel frame
- 5 µm fine filter
- multistage, vertical high pressure pump
- GFRP pressure vessels
- reverse osmosis membrane
- conductivity monitoring
- microprocessor control
- all fittings and measuring instruments necessary for the installation of the plant and monitoring the hydraulic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

#### Operating Conditions:

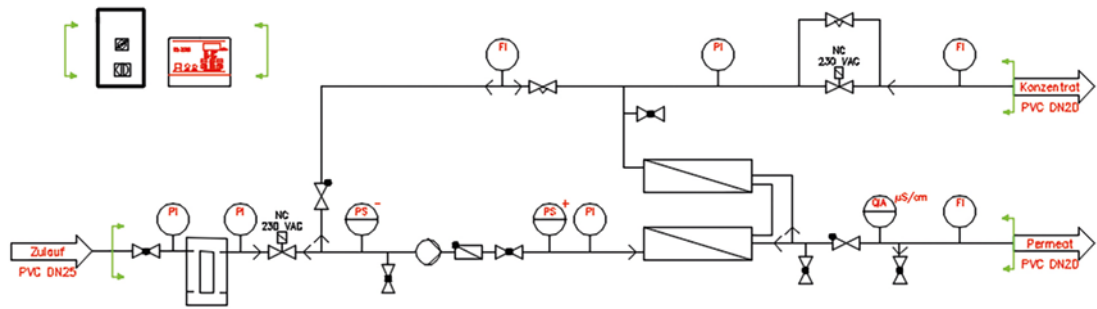
Hereinafter, the requirements for the inlet water:

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 <sub>2</sub> )	< 0.05 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:

Typ		ROTEC M500 V	ROTEC M750 V	ROTEC M1000 V	ROTEC M1500 V	ROTEC M2000 V
Permeate volume**	l/h	500	750	1 000	1 500	2 000
Feed flow	l/h	630	940	1 250.5	1 880	2 500
Concentrate volume**	l/h	130	190	250	380	500
Operating mode		Reverse Osmosis				
Output	%	75-80				
Salt rejection*	%	>96				
Operating pressure*	bar	12				
Electric connection	mm	400V, 50Hz, 1,5kW			400V, 50Hz, 3kW	
Membrane type*	mm	LC LE 4040				
Membrane quantity		2	3	4	6	8
Circuit		1:1	1:1:1	1:1:1:1	1:1:1:1:1:1	1:1:1:1:1:1:1:1
Connection	Inlet Permeate Concentrate	DN25 DN20 DN20				DN25 DN25 DN20
Dimensions	Length (mm) Width (mm) Height (mm)	1 200 500 1 800			2 200 550 1 800	

\*all specifications are approximate

\*\*under standard conditions