

## LENNRO SERIES

Tap / low brackish water  
Reverse Osmosis systems



500l/h  
750l/h  
1000l/h



## General data

### • Application

Lenntech small reverse osmosis systems provide low conductivity water from tap water and low brackish quality water.

Lenntech is designing ready-to-use packages, skid mounted, easy to operate systems.

The desalination core process is reverse osmosis. Semi-permeable membranes are used to separate brine from fresh water.

### • Operating conditions

Permeate flow:	500L/h	750 L/h	1000 L/h
Total dissolved solids		Max. 1000 ppm	
pH value continuously:		2-11	
pH short time during cleaning:		1-12	
Dissolved iron concentration in feed:		Max 0.05 ppm	
Dissolved manganese concentration in feed:		Max 0.05 ppm	
Oil and grease		0 ppm	
Silt Density Index SDI ( 15 min )		< 3	
Temperature		Min. 5°C - max. 30°C	
Feed pressure		Min. 2 bar - max. 6 bar	

### • Summary

- ✓ Stainless steel skid mounted.
- ✓ Compact design, low energy demand and high recovery.
- ✓ Fully automatic system, microprocessor controlled.

### • This system includes

- ✓ 5-micron cartridge filter
- ✓ High pressure pump
- ✓ Permeate conductivity display on permeate line
- ✓ High performance Dow membranes
- ✓ Glass-fiber Pressure vessels
- ✓ Flow meters and pressure indicators
- ✓ Low pressure switch
- ✓ Control cabinet fully automatic
- ✓ CIP connections
- ✓ PVC piping
- ✓ Needlevalves, high pressure throttlevalve, high pressure checkvalve en membranevalves in stainless steel.

### • Options

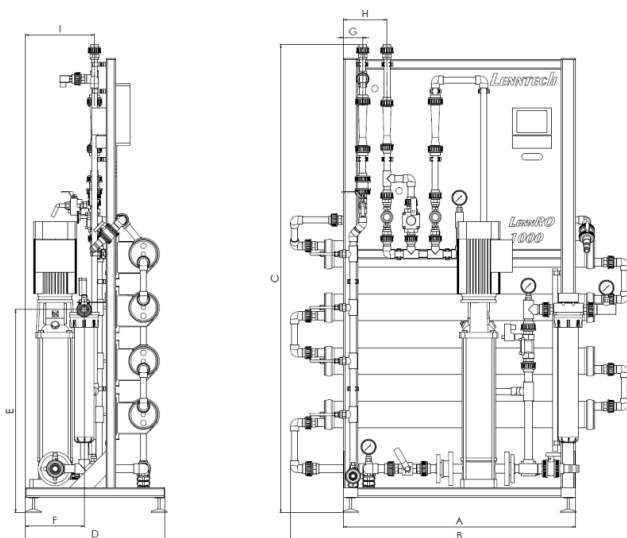
- ✓ Antiscalant dosing system
- ✓ Softener
- ✓ CIP station

### Technical Data

LenRO	500	750	1000
Perm. flow m <sup>3</sup> /h	0.5	0.75	1.0
Feed flow m <sup>3</sup> /h	0.67	1	1.33
Recirc. flow m <sup>3</sup> /h	0.6	0.5	0.4
Recovery	75%	75%	75%
Permeate conductivity µS/cm *	25	20	20
Array (# Vessels)	1 / 1	1 / 1 / 1	1 / 1 / 1 / 1
Pump power	2.2kW	2.2 kW	2.2 kW
Feed	DN25	DN25	DN25
Permeate	DN20	DN20	DN20
Concentrate	DN20	DN20	DN20
CIP connections	Yes	Yes	Yes

\*at 20°C, tap water

Permeate conductivity and high pressure depend on feed water quality and temperature. These values will be provided on request.



LenRO weight	Empty (KG)	Full (KG)
500	123	156
750	128	169
1000	133	184

LenRO dimensions (mm)	500	750	1000
A	960	960	960
B	1397	1397	1397
C	1924	1924	1924
D	576	576	576
E	835	835	835
F	243	243	243
G	80	80	80
H	180	180	180
I	286	286	286

Skid legs are adjustable. This way the skid can be about 30mm lower. System can be set level even on an uneven floor.

These data are given for information purpose only. They are subject to modifications depending on the water quality.

Reverse Osmosis units often required pre-treatment for the following parameters:

- Suspended solids
- TOC, COD/BOD, oil and grease
- Iron and manganese
- Hardness

Lenntech provides all kinds of pre and post treatment required before and after your RO, according to your water analysis and process requirements.

Please contact us for further information.