

# RO-C SERIES

The RO-C series osmosis systems are medium and high production equipment for low salinity water designed for use in purification applications, service water and especially for industrial processes.

The RO-C series osmosis systems output ranges from 8.000 L/h to 28.000 L/h. For higher flow rates, please consult.



MAIN COMPONENTS

- 1. 5 micron microfiltration
- 2. Minimum pressure switch
- 3. Maximum pressure switch
- 4. Vertical centrifugal high pressure pump in 316 stainless steel
- 5. 8" reverse osmosis membrane depending on the selected model
- 6. Pneumatic automatic butterfly valve type *wafer* at the entrance
- 7. 316 Stainless Steel Pneumatic Automatic Flushing Ball Valve
- 8. Microfiltration inlet pressure gauge
- 9. Microfiltration salt pressure gauge
- 10. Pump pressure gauge
- 11. Interstage pressure gauge
- 12. Rejection pressure gauge
- 13. Back pressure gauge
- 14. Permeate flowmeter
- 15. Rejection flowmeter
- 16. Recirculation flow meter (depending on model)
- 17. Conductivity meter on permeate line
- 18. Rejection regulating punch valve
- 19. Recirculation regulating punch valve (depending on model)
- 20. PLC HW programmable controller
- 21. Flushing / CIP tank
- 22. Protected carbon steel structure.

VERSIONS

- **ST** : with soft starter for high pressure pump control
- **ST+** : with speed variator for control high pressure pump
- **LS**: - with speed variator for control high pressure pump
  - digital flow meter
- **LX** : - with speed variator for control high pressure pump
  - digital flow meter
  - pressure transmitters
  - GRUNDFOSS bomb
  - PLC SIEMENS

REQUIREMENTS

- Electrical voltage: 380 - 400 VAC – 50 Hz
- Supply pressure: 3 – 5 Bar
- Design temperature: 20°C
- Maximum input TDS: 2.000 ppm
- The equipment requires compressed air supply for its operation.

OPTIONS

- Mixing system
- Raw water conductivity meter
- Raw water Redox potential meter
- Raw water pH meter
- SIEMENS PLC for ST, ST+ and LS versions
- GRUNDFOSS pump in ST, ST+ and LS versions
- 304 stainless steel structure

## HIGH SALT REJECTION MEMBRANE

| MODEL       | PRODUCTION |      | FEEDING | RECOVERY* | MEMBRANES |    | POWER | DIMENSIONS (mm) |       |       |
|-------------|------------|------|---------|-----------|-----------|----|-------|-----------------|-------|-------|
|             | L/h        | m³/d | L/H     | %         | TYPE      | Nº | kW    | LONG            | DEPTH | HIGH  |
| RO-C980-HR  | 8.000      | 192  | 10.700  | 75        | 8040      | 9  | 11    | 4.000           | 1.400 | 2.300 |
| RO-C1280-HR | 11.000     | 264  | 14.700  | 75        | 8040      | 12 | 15    | 5.000           | 1.400 | 2.300 |
| RO-C1580-HR | 14.000     | 336  | 18.700  | 75        | 8040      | 15 | 15    | 6.000           | 1.400 | 2.300 |
| RO-C1880-HR | 17.000     | 408  | 22.700  | 75        | 8040      | 18 | 18,5  | 7.000           | 1.500 | 2.300 |
| RO-C2580-HR | 23.000     | 552  | 30.700  | 75        | 8040      | 25 | 22    | 6.000           | 1.900 | 2.300 |
| RO-C3080-HR | 28.000     | 672  | 37.333  | 75        | 8040      | 30 | 30    | 7.000           | 1.900 | 2.300 |
| RO-C3680-HR | 34.000     | 816  | 45.333  | 75        | 8040      | 36 | 37    | 7.000           | 1.900 | 2.300 |

## LOW PRESSURE MEMBRANE

| MODEL       | PRODUCTION |      | FEEDING | RECOVERY* | MEMBRANES |    | POWER | DIMENSIONS (mm) |       |       |
|-------------|------------|------|---------|-----------|-----------|----|-------|-----------------|-------|-------|
|             | L/ h       | m³/d | L/ h    | %         | TYPE      | Nº | kW    | LONG            | DEPTH | HIGH  |
| RO-C980-LE  | 8.000      | 192  | 10.700  | 75        | 8040      | 9  | 11    | 4.000           | 1.400 | 2.300 |
| RO-C1280-LE | 11.000     | 264  | 14.700  | 75        | 8040      | 12 | 11    | 5.000           | 1.400 | 2.300 |
| RO-C1580-LE | 14.000     | 336  | 18.700  | 75        | 8040      | 15 | 11    | 6.000           | 1.400 | 2.300 |
| RO-C1880-LE | 17.000     | 408  | 22.700  | 75        | 8040      | 18 | 15    | 7.000           | 1.500 | 2.300 |
| RO-C2580-LE | 23.000     | 552  | 30.700  | 75        | 8040      | 25 | 18,5  | 6.000           | 1.900 | 2.300 |
| RO-C3080-LE | 28.000     | 672  | 37.333  | 75        | 8040      | 30 | 22    | 7.000           | 1.900 | 2.300 |
| RO-C3680-LE | 34.000     | 816  | 45.333  | 75        | 8040      | 36 | 30    | 7.000           | 1.900 | 2.300 |

## LOW PRESSURE AND HIGH PRODUCTION MEMBRANE

| MODEL         | PRODUCTION |      | FEEDING | RECOVERY* | MEMBRANES |    | POWER | DIMENSIONS (mm) |       |       |
|---------------|------------|------|---------|-----------|-----------|----|-------|-----------------|-------|-------|
|               | L/ h       | m³/d | L/ h    | %         | TYPE      | Nº | kW    | LONG            | DEPTH | HIGH  |
| RO-C980-LEHF  | 9.000      | 216  | 12.000  | 75        | 8040      | 9  | 11    | 4.000           | 1.400 | 2.300 |
| RO-C1280-LEHF | 12.000     | 288  | 16.000  | 75        | 8040      | 12 | 11    | 5.000           | 1.400 | 2.300 |
| RO-C1580-LEHF | 15.000     | 360  | 20.000  | 75        | 8040      | 15 | 15    | 6.000           | 1.400 | 2.300 |
| RO-C1880-LEHF | 18.000     | 432  | 24.000  | 75        | 8040      | 18 | 18,5  | 7.000           | 1.500 | 2.300 |
| RO-C2580-LEHF | 25.000     | 600  | 33.333  | 75        | 8040      | 25 | 22    | 6.000           | 1.900 | 2.300 |
| RO-C3080-LEHF | 30.000     | 720  | 40.000  | 75        | 8040      | 30 | 30    | 7.000           | 1.900 | 2.300 |
| RO-C3680-LEHF | 36.000     | 864  | 48.000  | 75        | 8040      | 36 | 30    | 7.000           | 1.900 | 2.300 |

## OPTIONS

| CODE       | MODEL                                             |
|------------|---------------------------------------------------|
| OP-0404-20 | Mixing system option                              |
| OP-0404-18 | Raw water CD meter option                         |
| OP-0404-12 | Raw water redox meter option                      |
| OP-0404-14 | Raw water pH meter option                         |
| OP-0404-50 | SIEMENS PLC option for ST, ST+ and LS versions    |
| OP-0404-52 | Option structure in 304 stainless steel           |
| OP-0404-54 | GRUNDFOSS pump option for ST, ST+ and LS versions |

All RO-C Series osmosis systems require adequate pretreatment, which will depend on the origin and quality of the water to be treated. Likewise, depending on the application of the treated water, post-treatment may be necessary. For water with a TDS greater than 2000 ppm and/or higher production flows, contact our technical department.

\* Conversion may vary depending on the analysis of the incoming water.  
For higher production flow rates and/or salinities, please consult our technical department.