# ARCTON Standard ULP 2500
# industrial reverse osmosis system

type: AS-ULP-2500

**GENERAL FEATURES:**

- EuroClear controller, type: ROC-2210
  - LCD display
  - Low feed water protection
  - Low pressure protection
  - High pressure protection
  - Conductivity over limit alarm
  - Pure water level control
  - Timed membrane flushing
- High pressure pump, type: Grundfos CM 5-13
- Membranes, type: Vontron ULP-21-4040
- 0,5 micron sediment filter, type: FCPPS-20B005
- Fiberglass pressure vessels
- Carbon steel frame

**FEED WATER REQUIREMENTS:**

- Raw water temperature: +5...+40 °C
- Residual chlorine: max. 0,1 mg/L
- Water hardness: max. 8,4 °dH (3 meq/L ; 150 mg/L $CaCO_3$)
- Iron: max. 0,1 mg/L
- Manganese: max. 0,05 mg/L
- Silicate: max. 20 mg/L
- Chemical oxygen demand: max. 4,0 mg $O_2$/L
- Hydrogen sulfide: none
- SDI: max. 3
- Raw water pressure: 2-4 bar
- TDS: max. 1500 mg/l

The limitations may be exceeded if using antiscalant, oxygen scavenger, or other RO pretreatment (e.g. water softener).

**PHYSICAL PARAMETERS:**

- Inlet water connection: G 1 ”
- Outlet water connection: G 1 ”
- Drain connection: G 1 ”
- Dimensions (H x W x D): 1510mm x 910 mm x 790 mm

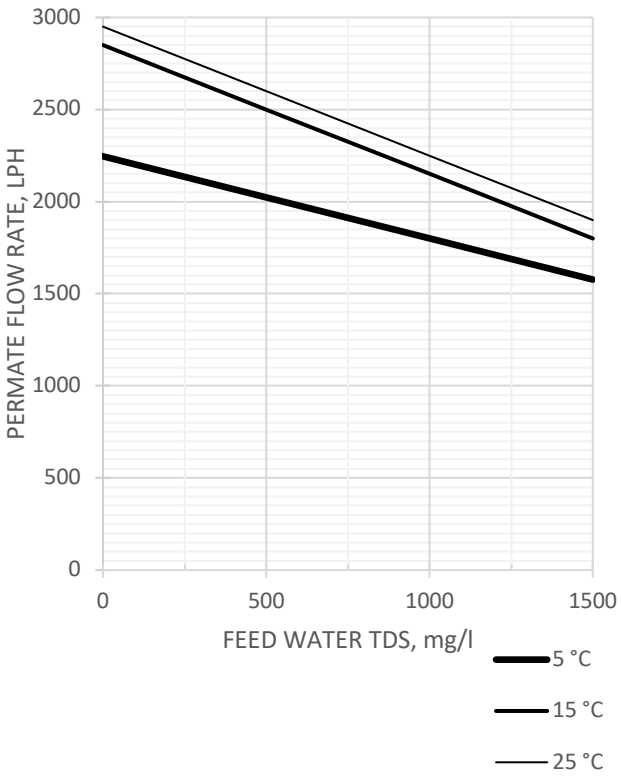
## TECHNICAL SPECIFICATION:

| | |
|---|---|
| Permeate capacity: [1] | 2500 l/h |
| Permeate recovery: [2] | 75 % |
| Electrical requirements: | 400V,50Hz |
| Electrical power: | 3 kW |
| Operating pressure: | 10 – 14 bar |
| Max. pressure: | 15 bar |
| Prefilter rate: | 0,5 µm |

[1] depend on raw water TDS, SDI, temp., pressure, permeate recovery, low scaling water

[2] depend on raw water TDS, SDI, temp., pressure, permeate capacity, low scaling water

## AS-ULP-2500 FLOW RATE CHART




## PIPES AND INSTRUMENTS DIAGRAM:

| BC-RO-2500 | | |
|---|---|---|
| 1 | d15 | Flexible pipe |
| 2 | d20 | PVC pipe |
| 3 | d25 | PVC pipe |
| 4 | d32 | PVC pipe |
| 5 | BC-FH-12 | Filter housing |
| 6 | MV-10-240V | Raw water magnetic valve |
| 7 | ES-18O | Pressure switch |
| 8 | MM-63/H | Pressure gauge |
| 9 | CM-5-13 | High pressure pump |
| 10 | SG-10 | Acid resistant ball valve |
| 11 | BNSS4040/ABS | Membrane housing |
| 12 | RM-PM20 | Rotameter |
| 13 | RM-PMV5 | Rotameter - Adjustable |
| 14 | MV-10-240V | Flushing magnetic valve |
| 15 | RX-CV-12 | Check valve |
| 16 | CM-230A(CCT-3320T) | Conductivity meter |

