

# Pallas<sup>®</sup> *Alfa*

A COMPACT & RELIABLE SOLUTION  
FOR PROCESS WATER TREATMENT



# Pallas<sup>®</sup>

## Alfa

Pallas Alfa is a compact and reliable reverse osmosis unit for your process water treatment. Applied where other filtration systems become insufficient to achieve pure water for your needs. Pallas Alfa is **plug and play** and available in different flow rates.

### Advantages

①

#### Convenience

- Compact and reliable water treatment system
- Easy to install, low maintenance
- Pure water with high rejection membranes

②

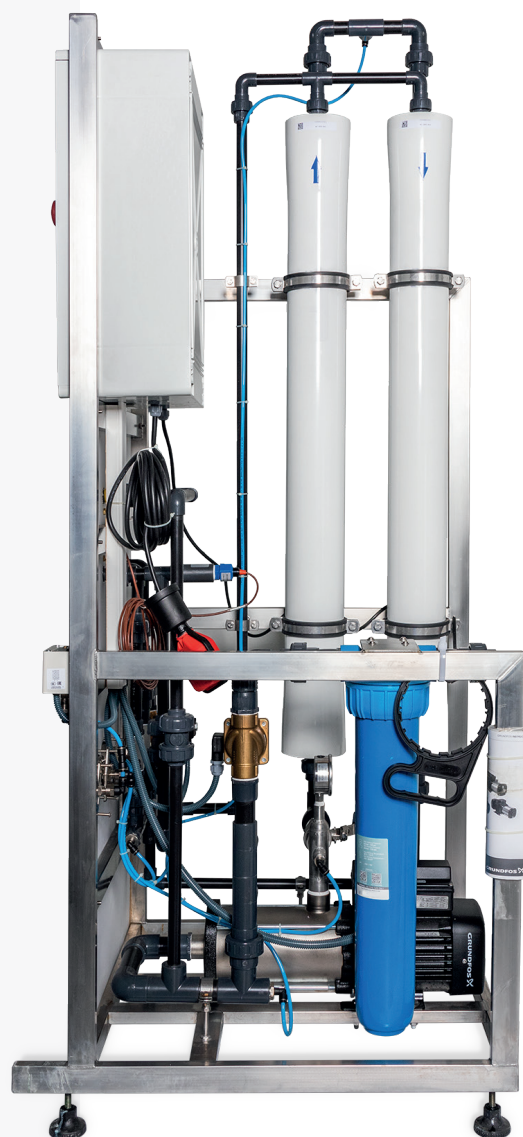
#### Quality

- AISI 304 Skid with FRP pressure vessels
- High quality components (Grundfos HP pump, Bürkert solenoid valves, Danfoss pressure switches)
- Pollet Water Group in-house manufacturing

③

#### Availability

- Standard models available from stock
- Special models on demand



Pallas Alfa 240



## Recommended Feedwater limits

|                                      |                                                            |
|--------------------------------------|------------------------------------------------------------|
| Feedwater TDS                        | 0 - 3000 ppm                                               |
| Feedwater pressure                   | 2 to 5 bar                                                 |
| Feedwater pH range                   | 6 - 8                                                      |
| Silica (SiO <sub>2</sub> ) tolerance | 25 ppm max.                                                |
| Min. - max.<br>feedwater temperature | 10° C - 30° C                                              |
| Max. Iron (Fe) tolerance             | 0,05 ppm (without ASC dosing)<br>0,2 ppm (with ASC dosing) |

## Features

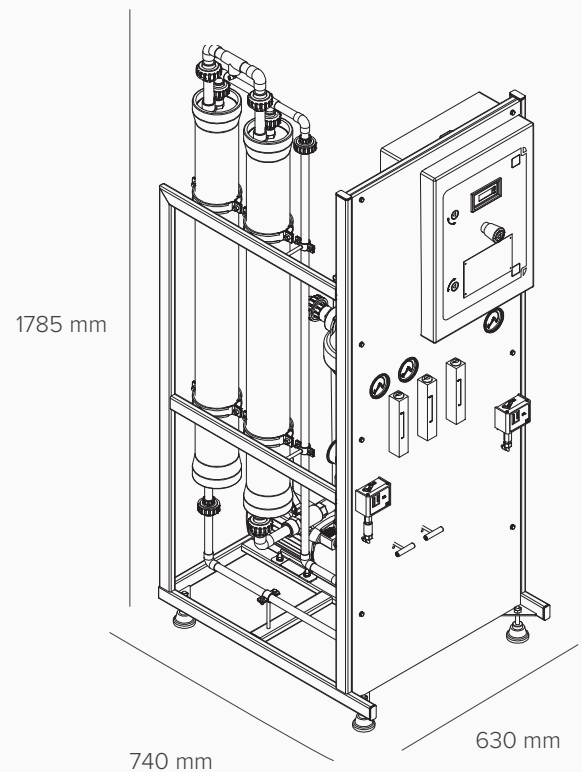
- Membrane vessels FRP
- SS304 stainless steel
- 20" BB 5 Micron PP cartridge filter
- Low and high pressure pipings U-PVC (PN16)
- Solenoid valves (Inlet and autoflush)
- Manual valves (after HP pump, drain line and recirculation line)
- Low and high pressure switches
- Permeate and concentrate flowmeters (rotameters)
- Recirculation flowmeters
- Product water conductivity meter (possibility to set an alarm for low/high conductivity)
- Autoflush system
- RO Electronic control card, alarm & position indicators
- 220 V/50Hz/1ph (ALFA 140 - 240)
- 380 V/50Hz/3ph (ALFA 440 - 540 - 640)
- Antiscalant dosing and CIP inlet points as standard, dosage system and CIP are optional

## Industrial solutions

- Water purification for food & beverage
- Water treatment for cooling towers, boilers & turbines
- Desalination of brackish water
- Deionized water for pre-EDI at Laboratory
- Car wash, aquariums, textile painting, ....

## Dimensions

630 W x 1785 H x 740 D



## Technical overview

| MODEL PALLAS ALFA         | 140                                   | 240                                   | 440                                | 540                                | 640                                |
|---------------------------|---------------------------------------|---------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Permeate flow rate (l/h)* | 250                                   | 500                                   | 1000                               | 1250                               | 1500                               |
| Max. feedwater TDS (ppm)  | 2000                                  | 3000                                  | 3000                               | 3000                               | 3000                               |
| Feedwater °C              | 15° C                                 | 15° C                                 | 15° C                              | 15° C                              | 15° C                              |
| Min. feedwater pressure   | 2 bar                                 | 2 bar                                 | 2 bar                              | 2 bar                              | 2 bar                              |
| Recovery                  | 75 %                                  | 75 %                                  | 75 %                               | 75 %                               | 75 %                               |
| Recirculation line        | Yes                                   | Yes                                   | Yes                                | Yes                                | Yes                                |
| Auto flush                | Yes                                   | Yes                                   | Yes                                | Yes                                | Yes                                |
| Skid material             | SS 304 (not polished)                 |                                       |                                    |                                    |                                    |
| Controller                | Micro processor                       |                                       |                                    |                                    |                                    |
| Pump                      | Grundfos<br>CM 1-10<br>(single phase) | Grundfos<br>CM 1-10<br>(single phase) | Grundfos<br>CM 3-14<br>(tri phase) | Grundfos<br>CM 3-14<br>(tri phase) | Grundfos<br>CM 3-14<br>(tri phase) |
| Rated voltage - power     | 220V -<br>0,67 kW                     | 220V -<br>0,67 kW                     | 3 x 220/380V<br>- 2,2 kW           | 3 x 220/380V<br>- 2,2 kW           | 3 x 220/380V<br>- 2,2 kW           |
| Membranes**               | 1 x LG BW<br>4040 UES                 | 2 x LG BW<br>4040 UES                 | 4 x LG BW<br>4040 UES              | 5 x LG BW<br>4040 UES              | 6 x LG BW<br>4040 UES              |
| Flowmeters                | 3                                     | 3                                     | 3                                  | 3                                  | 3                                  |
| Manometers                | 3                                     | 4                                     | 6                                  | 5                                  | 5                                  |
| Low pressure switch       | Yes (Danfoss) x 1                     |                                       |                                    |                                    |                                    |
| High pressure switch      | Yes (Danfoss) x 1                     |                                       |                                    |                                    |                                    |
| Floater                   | Yes                                   | Yes                                   | Yes                                | Yes                                | Yes                                |
| Adjustable feet           | Yes                                   | Yes                                   | Yes                                | Yes                                | Yes                                |
| Emergency stop            | Yes                                   | Yes                                   | Yes                                | Yes                                | Yes                                |
| Wood cage                 | Yes included                          | Yes included                          | Yes included                       | Yes included                       | Yes included                       |
| AX nr                     | 5113010062                            | 5113010063                            | 5113010064                         | 5113010066                         | 5113010067                         |