



PHARMA SYSTEM

20 – 45 – 80 - 120

Technical Sheet



PHARMA is a device that produces ultra-pure water, designed and conceived to satisfy the most demanding applications while providing a simple but complete management of the system.

It brings together the characteristics of safety, compactness, transportability and quietness that, added to the constantly high quality of the water produced, make this the ideal system for advanced applications.

Sequence of treatments:

- Filtration.
- Pressurization with high-pressure pump.
- Reverse osmosis desalination on membrane.
- Total demineralisation on mixed-bed resin (consisting of 2 sections, 1 in complete reserve).
- Product water quality continuous control (with conductivity control commutation; osmotized water-demineralised water).
- Computer control and plant operation automatic program with audio-visual alarm for after-sales demand.

Raw water characteristics

(max. admissible values)

- TDS : 1000-1500 ppm (accordingly to the chemical composition)
- Total hardness : 35°f
- Iron : 0.1 ppm
- Manganese : 0.05 ppm
- Chlorine : 0.4-0.5 ppm
- Temperature : 5-30 °C
- Feed pressure : >1.5 bar
- Available feed flow : >200 l/h

Characteristics of the system:

- Product flow rate : 35 l/h
- Recovery ratio : 20-25%
- Installed power of the High Pressure pump : 0.245 kW
- Operating pressure : 10 bar
- Product residual salinity after the osmosis section: 4-6% of the initial value
- Exchange capacity for the demineralisation section: 220 g CaCO₃
- Demineralised water conductivity : 5 MΩ

PHARMA System 20

Overall dimensions

- Length : 380 mm
- Depth : 440 mm
- Total height : 920 mm
- Shipping weight : 80 kg

PHARMA System 45

Overall dimensions

- Length : 500 mm
- Depth : 500 mm
- Total height : 1450 mm
- Shipping weight : 123 kg

Raw water characteristics

(max. admissible values)

- TDS : $\leq 1000-1500$ ppm
(accordingly to the chemical composition)
- Total hardness : $\leq 35 - 40$ °f
- Iron : ≤ 0.1 ppm
- Manganese : ≤ 0.05 ppm
- Chlorine : $\leq 0.4-0.5$ ppm
- Temperature : $\leq 5-30$ °C
- Feed pressure : >1.5 bar
- Available feed flow : >500 l/h

Characteristics of the system:

- Product flow rate : 80 l/h
- Recovery ratio : 20-25%
- Installed power of the High Pressure pump : 0.42 kW
- Operating pressure : 13-14 bar
- Product residual salinity after the osmosis section: 4-6% of the initial value
- Exchange capacity for the demineralisation section: 220 g CaCO₃
- Demineralised water conductivity : 5 MΩ

PHARMA System 80

Overall dimensions

- Length : 500 mm
- Depth : 500 mm
- Total height : 1450 mm
- Shipping weight: 130 kg

Raw water characteristics

(max. admissible values)

- TDS : $\leq 1000-1500$ ppm
(accordingly to the chemical composition)
- Total hardness : $\leq 35 - 40$ °f
- Iron : ≤ 0.1 ppm
- Manganese : ≤ 0.05 ppm
- Chlorine : $\leq 0.4-0.5$ ppm
- Temperature : $\leq 5-30$ °C
- Feed pressure : >1.5 bar
- Available feed flow : >500 l/h

Characteristics of the system:

- Product flow rate : 120 l/h
- Recovery ratio : 20-25%
- Installed power of the High Pressure pump : 0.42 kW
- Operating pressure : 13-14 bar
- Product residual salinity after the osmosis section : 4-6% of the initial value
- Exchange capacity for the demineralisation section: 220 g CaCO₃
- Demineralised water conductivity : 5 MΩ

PHARMA System 120

Overall dimensions

- Length : 500 mm
- Depth : 500 mm
- Total height : 1450 mm
- Shipping weight : 140 kg

Raw water characteristics

(max. admissible values)

- TDS : $\leq 1000-1500$ ppm
(accordingly to the chemical composition)
- Total hardness : $\leq 35 - 40$ °f
- Iron : ≤ 0.1 ppm
- Manganese : ≤ 0.05 ppm
- Chlorine : $\leq 0.4-0.5$ ppm
- Temperature : $\leq 5-30$ °C
- Feed pressure : >1.5 bar
- Available feed flow : >500 l/h

Characteristics of the system:

- Product flow rate : 160 l/h
- Recovery ratio : 20-25%
- Installed power of the High Pressure pump : 0.42 kW
- Operating pressure : 13-14 bar
- Product residual salinity after the osmosis section: 4-6% of the initial value
- Exchange capacity for the demineralisation section : 220 g CaCO₃
- Demineralised water conductivity : 5 MΩ