

PROHS®

Horizontal Steam Sterilizer FJ

CE 1639 MDD
1155 PED

PROHS Equipamento Hospitalar
e Serviços Associados, S.A.

Rua do Castanhal 316
Zona Industrial Maia I, sector II
4475-122 Maia, Portugal

| T | +351 229 059 170
| F | +351 229 015 900
| E | prohs@prohs.pt
| W | www.prohs.pt



Horizontal Steam Sterilizer FJ

PROHS horizontal steam sterilizer is manufactured to address demanding sterilization needs of Hospital CSSD's, Operating Theatres and Medical Centres, produced using high quality components it is a reliable, durable and efficient solution that follows the stricter international health standards.

Products that can be sterilized

Metallic instruments; Rubber items (not thermal-sensitive); Textiles; Glasses and Growth Medium

Available Programs

The Sterilizer is defined to operate in two specific sterilization temperatures - 121°C and 134°C. It has 5 standard validated programs and 2 test programs (Bowie & Dick, Leakage test). Up to 100 new (and fully configurable) Sterilization cycles can be created.

Technical Characteristics

Materials - Chamber, jacket and doors built in AISI 316L stainless steel, highly resistant to corrosion. External panels in AISI 304 stainless steel. The sterilizer's body is sustained by a heavy structure in AISI 304 stainless steel.

Thermal Insulation - is achieved through the use of mineral wool, coated with an external protection in aluminum. The temperature on the surface of the external panels in stainless steel AISI 304 and doors never exceeds 45°C at a room temperature of 23°C.

Doors - Automatic vertical sliding doors, pneumatically operated and equipped with a safety device in accordance to EN285.

Safety Features

- Safety system stops the door from closing if there is interposition of objects.
- The sterilization program does not start when doors are open.
- Doors do not open simultaneously.
- Doors do not open when the Sterilizer is under pressure.
- Self-diagnostic reports through visual and acoustic indications.

Components Characteristics

Microprocessor - The Sterilizer is fully controller by the PLC (Programmable Logic Controller), according to the operating program selected by the user.

Safety Valve - Operates as a security system to avoid excessive pressure inside the chamber, being duly certified.

Pneumatic Valves - Operate in the steam and condensates circuit, automatically controlled by the microprocessor.

Pressure Sensors - Used in the equipment (chamber and Jacket), ranging from -1 to 3 bar (0 KPa to 400 KPa).

Temperature Probes - 2 Platinum resistance type according to Class A from EN 60751, in the chamber.

Gasket - Produced in silicon, and specifically designed to withstand high temperatures.

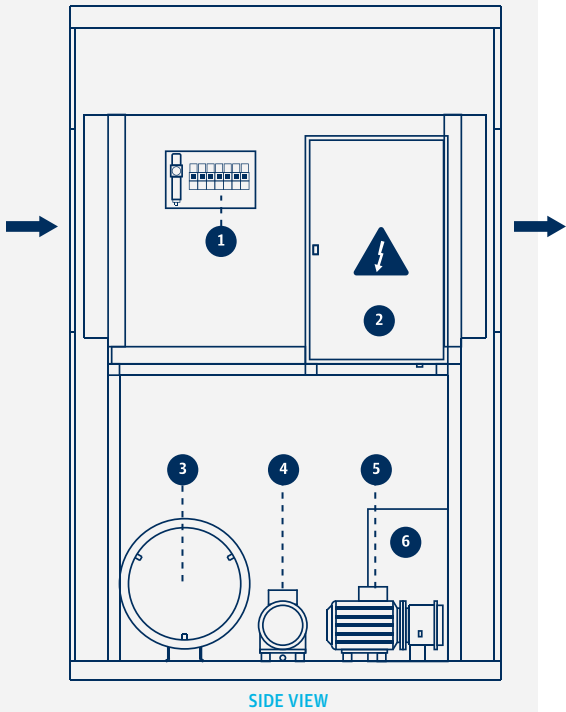
Bacteriological Filter - The air entrance for the required equalization of the pressures in the Sterilizer is achieved through a filter which retains microorganisms, bacteria, particles, etc. (retention efficiency \geq 99,995% for particles bigger than 0,2 μm)

Fluid Circuit - All pipes and connections used to distribute steam and condensates through the sterilizer, are made of copper and brass. Optionally, they can be provided in stainless steel.



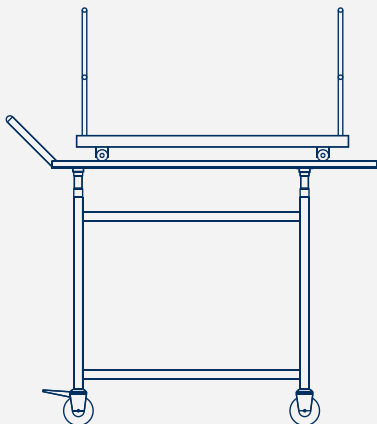
PROHS FJ-250L 2PD GV

The selection of high quality and certified components and spare parts, allows for an increased longevity, thus reducing the effective cost of the machine over the time.

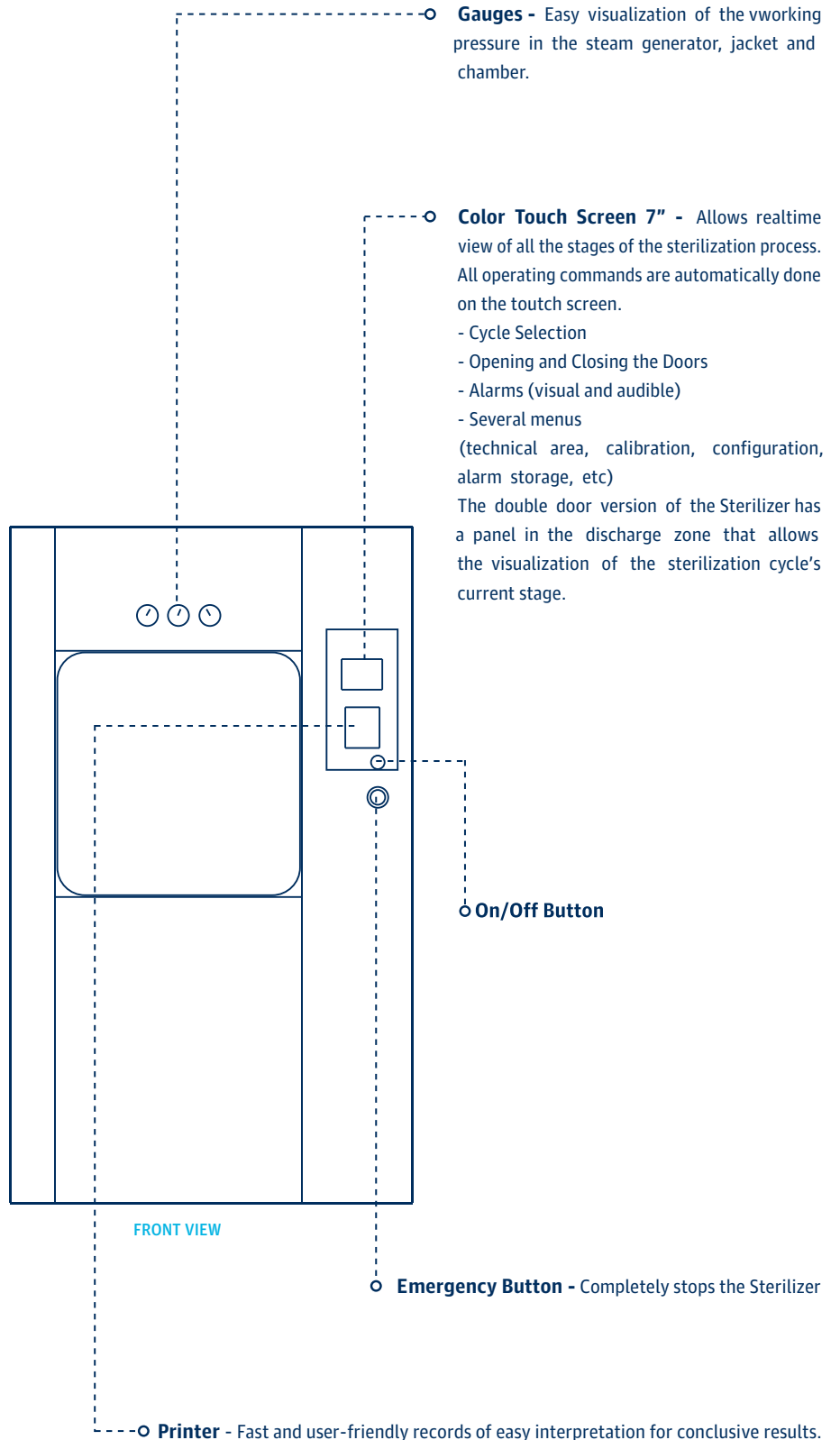


SIDE VIEW

- 1 **Pneumatic Valves Island** - Controls the operation of the pneumatic valves.
- 2 **Electric Box** - Consists of highly reliable control and power components. The equipment operates an energy saving system to achieve optimal energy efficiency.
- 3 **Steam Generator** - To supply steam the sterilizer. Fully built in AISI 316L stainless steel composed of heaters in incoloy.
- 4 **Water Pump** - Used to efficiently inject water into the system.
- 5 **Vacuum Pump** - Liquid ring type, reduces the cycle time and increase its performance.
- 6 **Water Saving System** - Special water deposit, designed to reduce the overall water consumption of the equipment.



Side view for Loading Car and Platform



FRONT VIEW

Gauges - Easy visualization of the vworking pressure in the steam generator, jacket and chamber.

Color Touch Screen 7" - Allows realtime view of all the stages of the sterilization process. All operating commands are automatically done on the touch screen.

- Cycle Selection
- Opening and Closing the Doors
- Alarms (visual and audible)
- Several menus (technical area, calibration, configuration, alarm storage, etc)

The double door version of the Sterilizer has a panel in the discharge zone that allows the visualization of the sterilization cycle's current stage.

On/Off Button

Emergency Button - Completely stops the Sterilizer

Printer - Fast and user-friendly records of easy interpretation for conclusive results.

Technical Characteristics

Model	Useful Dimensions	External Dimensions	Energy	Water Consumption	Weight	Useful Space
PROHS FJ-70L	32x32x70	170x77x92	14KW 1,3KW	110	260	1
PROHS FJ-110L	40x40x70	180x84x96	21KW 1,3KW	120	495	1
PROHS FJ-175L	50x50x70	180x94x96	21KW 1,3KW	130	570	1
PROHS FJ-250L	50x50x100	180x94x127	32KW 2,1KW	145	685	1
PROHS FJ-340L	70x70x70	195x116x96	32KW 2,1KW	170	750	4
PROHS FJ-360L	60x60x100	180x106x127	32KW 2,1KW	170	800	1
PROHS FJ-490L	70x70x100	195x116x127	42KW 2,1KW	200	830	6
PROHS FJ-640L	70x70x130	195x116x157	53KW 2,8KW	225	1000	8
PROHS FJ-780L	70x70x160	195x116x187	53KW 2,8KW	225	1200	10
PROHS FJ-930L	70x70x190	195x116x217	68KW 2,8KW	225	1400	12

/litres capacity /cm height x width x depth /cm height x width x depth /WITH Generator Steam /WITHOUT Generator Steam /litres (per cycle) /Kg (approximate, with steam generator) /STU

Options and Accessories

- The Sterilizer is available with **one** or two **doors**
- **Car and Load/Unload Platform** in stainless steel
- **Sterilization Baskets** in stainless steel
- **Independent Data Recorder**
- **SD card and Process Software** (stores the cycle's data)
- **Steam Generator** (integrated or external)
- **Silent Air Compressor** (oil-free)
- **Water Softener**
- **Color Touch Screen** in unloading area
- **Double PLC** (Master-Slave)
- **Air Detector**

Programs

(Possibility to create up to a 100 new programs)

Pre Heating Program

- Textiles
- Rubbers
- Flash
- Instruments
- Containers
- Prions
- Bowie & Dick Test
- Air Leakage Test

Sterilization Duration

(minutes)

-
- 4m
- 15m
- 3m
- 4m
- 4m
- 18m
- 3m30s
-

Types of Drying

- High Vacuum Drying
- High Vacuum and Air Pulses Drying (instruments)
- High Vacuum and Steam Pulses Drying (containers)

External Connections

Power Supply: 400V ~3ph - 50/60 Hz
 Water: 3/4"
 Sewer: DN50
 Compressed Air: 3/8"

Certificates

Directive 93/42/EEC
 Directive 2014/68/UE
 EN 285

Due to product improvement and development, PROHS reserves the right to make changes without notice.

