

**AUTOCLAVE VAPOR MATIC WITH  
OFFICIAL PHARMACOPOEIA CYCLE**

**MOD. 770/A WITHOUT PRINTER  
COD. 29960014**

**MOD. 770/B  
WITH ELECTRONIC PRINTER  
COD. 29960015**



## DESCRIPTION

The Vapor Matic Mod. 770 is an autoclave with thermodynamic vacuum, suitable for sterilization of cell culture media, glass and medical or laboratory waste. Products vertical loading, sterilization cycle completely automatic, thermoregulated and controlled by a microprocessor.

Microprocessor with HMOS high rejection, that permits the programming of time and temperature and includes the two more common sterilization phases:

phase 1=121°C ( $\pm 1^\circ\text{C}$ ) – 1 bar ( $\pm 0.1$  bar) per 20'; phase 2=134°C ( $\pm 1^\circ\text{C}$ ) – 2 bar ( $\pm 0.1$  bar) per 20', and the "official pharmacopoeia cycle" 30-60 minutes (F.U cycle key).

These cycles can be memorized and called up by the pressing of single key, so the setting of the autoclave is immediate.

After the start of the working cycle, a valve provides the elimination of air and condensation contained inside the boiler. Once the pre-set temperature has been reached, the valve stops automatically, the display unit shows the decreasing time which lacks to the end of the process which is indicated by a sound alarm signal.

**In case of temporary power failure, the sterilisation cycle is automatically restored from the point at which it was interrupted (phase 1 and 2). In case of a longer power failure (3 °C difference from the defined temperature value), the entire sterilisation time shall automatically be enable and the cycle shall be restarted (phase 1 and 2).**

In case of temporary power failure, during the "official pharmacopoeia cycle" you can see on the display "bo" (black out) and you must restarted the cycle.

Optional connection through a port to a protocol printer (accessory on request).

Asal s.r.l. declares that the autoclave model 770 complies with Directive 97/23/CE (PED) on pressure equipment for Category I, Annex II, Part A, sterilization chamber internal volume 19.2 liters (self-certification by the manufacturer)

**WARNING: do not use distilled water, only deionized or descaled water, to prevent the limestone formation and incrustations.**

## OPERATING FEATURES

- ◆ Outer casing in powdered painted steel acids resistant.
- ◆ Sterilization chamber made of stainless steel X5CrNi 18-10 AISI 304, internal surface electro polished
- ◆ Vertical autoclave with one door
- ◆ Resistance with protection on the bottom.
- ◆ Inner chamber temperature >80°C orange signal lamp
- ◆ Lack of water red signal lamp with indication on display (h2o).
- ◆ Closing cover insulated with fiberglass, anti-sunburn, with sealing and central closing handwheel with safety lock.
- ◆ Sterilization temperature variable from 100 °C to 134 °C ( $\pm 1$  °C) with max pressure of 2 bar.
- ◆ Opportunity to select “official pharmacopoeia cycle” 121°C 30-60 minutes (F.U cycle Key).  
**The “official pharmacopoeia cycle” set the autoclave for sterilization in this mode:**
  - If you push 1 time F.U cycle: the display show 60 (time of sterilization). If you push 2 times F.U cycle the display show 30 (time of sterilization)
  - up to 100 °C and settle for 10 minutes.
  - up to 121 °C in 20 minutes, and settle for 60 or 30 minutes.
  - down to 100 °C in 40 minutes, and environment temperature.
- ◆ Probe for temperature measurement PT 100.
- ◆ Safety valve PED certified and setted to 2.5 bar positioned inside the appropriate case.
- ◆ Air and condensation let out valve.
- ◆ Cock for complete boiler water drain.
- ◆ Manometer for the check of the pressure during operation.
- ◆ Sterilisation time to set between 1 and 99 minutes.
- ◆ Power main switch bright.

## TECHNICAL SPECIFICATIONS

- ◆ Sterilization chamber capacity 19.2 liters, Ø 245 x 408 h mm.
- ◆ Water volume for a cycle about 3 litres
- ◆ Working pressure from 0 to 2 bar ( $\pm 0.1$  bar)
- ◆ Project pressure 2.6 bar
- ◆ Hydraulic test pressure 5 bar
- ◆ Sterilization temperature variable from 100 °C to 134 °C ( $\pm 1$  °C)
- ◆ Operating temperature ranging from 5 °C above ambient to 140 °C ( $\pm 1$  °C)
- ◆ Project temperature 160 °C
- ◆ Sterilization time from 0 to 99 minutes
- ◆ Heating time 30 minutes

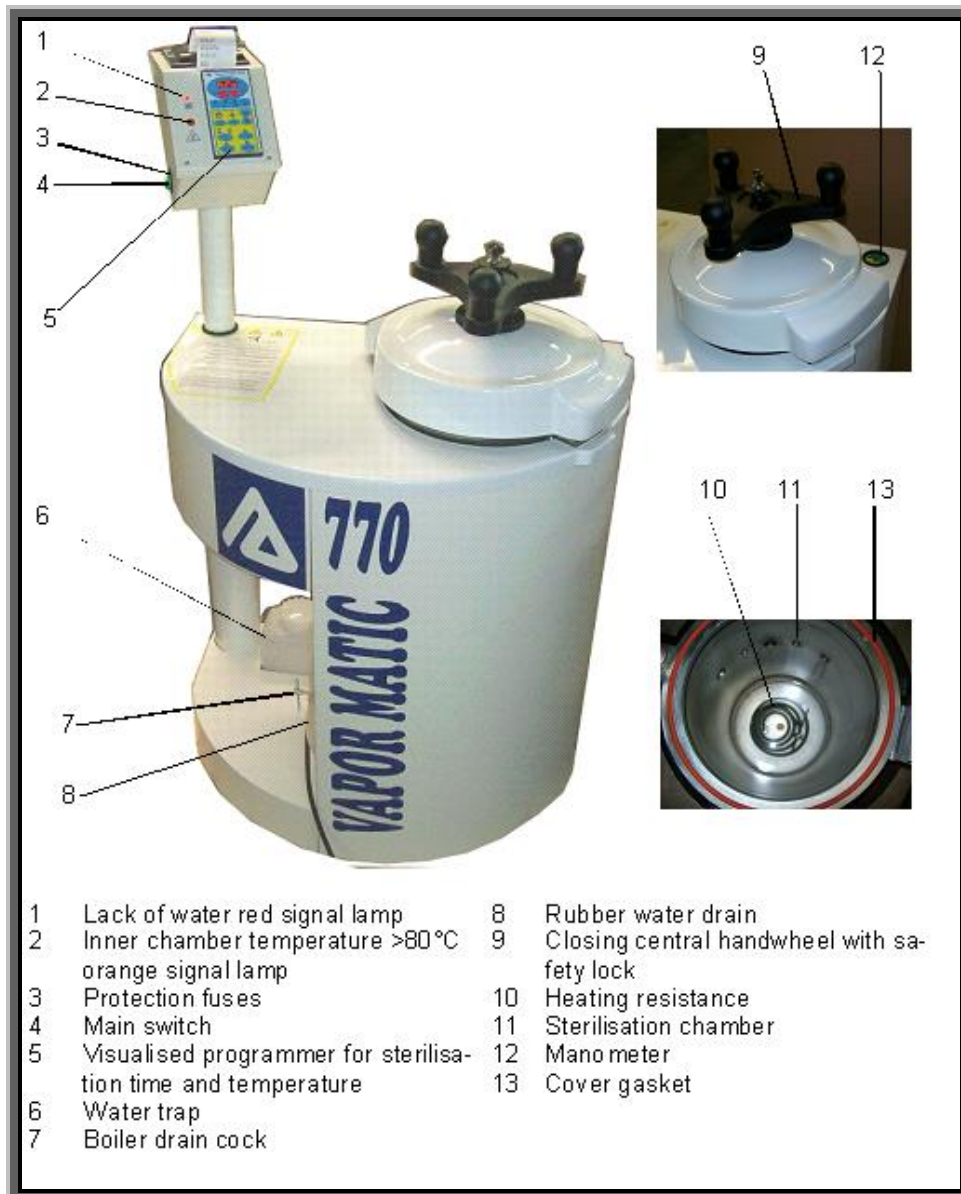
Overall dimensions:

- ◆ Height: 1210 mm
- ◆ Depth: 580 mm
- ◆ Width: 720 mm
- ◆ Weight: 52 Kg

## ELECTRICAL SPECIFICATIONS

- ◆ Power supply: 230 V - 50 Hz.
- ◆ Electrical input: 2200 W
- ◆ Overload fuses: 2 x 16 AF (6 x 32) mm.
- ◆ Connection outlet: 16 A

## PARTS LIST



## ACCESSORIES



- ◆ 2 closed stainless steel baskets (Ø 240 x 165 h. mm.)
- ◆ 1 perforated stainless steel basket (Ø 240 x 350 h. mm.)
- ◆ Heat proof bags 360 x 750 ht.mm. 500 pieces packet (transparent polypropylene and autoclavable)
- ◆ 4 wheels kit.

### VAPORMATIC 770 OPTIONAL PRINTER

Necessary to validate the sterilization process. Distinctive features of the PCFH190 printer:

- ◆ Centronics parallel device
- ◆ Jet print on 24 columns
- ◆ Changeable printing-ink tape
- ◆ Normal paper roll of 57.5 mm.
- ◆ Internal clock with datary

#### Codes for spare parts order:


- ◆ paper roll: RCN57X50
- ◆ Printing-ink tape: ERC 09 – Black





PAPER REPORT EXAMPLE, PRINTER OPTIONAL FOR AUTOCLAVE 770

CYCLE 121°C / CYCLE 134°C

134°C TEMP. ATTUALE  
09:40 FINE CICLO


134°C TEMP. ATTUALE  
09:20  INIZIO STERIL.

120°C TEMP. ATTUALE  
09:15 INIZIO CICLO



 134 °C  
 020 min.  
PROGRAMMA:


-- Data 08-06-16 --  
 VAPORMATIC 770

120°C TEMP. ATTUALE  
09:14 FINE CICLO

120°C TEMP. ATTUALE  
08:54  INIZIO STERIL.


028°C TEMP. ATTUALE  
08:30 INIZIO CICLO


 120 °C  
 020 min.  
PROGRAMMA:


-- Data 08-06-16 --  
 VAPORMATIC 770

OFFICIAL PHARMACOPOEIA CYCLE 121°C  
(F.U CYCLE KEY)

102°C TEMP. ATTUALE  
09:37 FINE CICLO



121°C TEMP. ATTUALE  
Raffr. 0.5°C/min.  
08:57  FINE STERIL.

121°C TEMP. ATTUALE  
07:57  INIZIO STERIL.

100°C TEMP. ATTUALE  
07:37  Rampa 1°C/min.

099°C TEMP. ATTUALE  
07:27  Staz. 10 min

025°C TEMP. ATTUALE  
07:09 INIZIO CICLO

Ciclo sterilizz. F.U.  
 121 °C  
 060 min.  
PROGRAMMA:

-- Data 28-06-16 --  
 VAPORMATIC 770