

Series **F 10** Sterilizing universal autoclaves

colussi



Series

F10

CE
0051



Download side, pass-through version

colussi

CSQ
MED
ISO 13485

ESQ
ISO 9001

IQNet
THE INTERNATIONAL CERTIFICATION NETWORK

General Characteristics

Among the peculiarities of these autoclaves we underline:

- single door models with a sterilisation capacity 12, 24 and 36 units;
- double door models (pass-through) with a sterilization capacity 12, 24 and 36 units for installation in the wall between sterile and non sterile area;
- completely insulated chamber with a rectangular section to minimize steam, water and power consumption and to simplify cleaning operations;
- models with sterilisation chamber embedded in the floor in order to simplify the uploading/downloading operations (in-hollow version);
- on the floor models (out-of-hollow version) for special installations requirements;
- sterilization cycle controlled by a double digital microprocessor, interfaced by a panel with 6" transilluminated touch-screen colour display, which shows the phase of the operating cycle, the cycle parameters (chamber temperature and pressure and jacket temperature) both through numerical and trend ways, possible anomalies or breakdowns, the story of technical interventions, the conditions of the components, etc.

The sterilization cycle is printed in a graphic and/or alphanumeric form by a 112 mm printer in conformity with the UNI EN 285 technical rule;

- double computer: the first one controls the sterilisation process and records the characteristic parameters of the sterilization cycle, while the second and independent one only records the characteristic parameters of every cycle; the system is in conformity with UNI EN 285 technical rule, paragraph 6;
- possible control and self-diagnosis of all functions on the interactive control panel;
- programmable cycles allow to modify the parameters (a confidential code protects the access to the programming system).

Building Characteristics

- Load bearing structure made of carbon steel with outer covering panels of AISI 304 stainless steel and “scotch-brite” finish;
- sterilization chamber with jacket obtained from AISI 316 or AISI 316 Ti stainless steel, welded in inert gas atmosphere, 8 mm thickness, “scotch brite” finish;
- automatic, horizontal sliding doors, made of AISI 316 or AISI 316 Ti stainless steel, “scotch brite” finish, equipped with anti-crushing device according to IEC EN 61010-1 and IEC EN 61010-2-041 security rules. The doors slide thanks to chain gearmotors provided with a double safety control;
- autoclave seal given by a silicon gasket seated in a hollow, which is obtained through precision works by a ring soldered on the body, pushed towards the door through steam injection;
- fractioned vacuum sterilizing process according to UNI EN 285 rules, with high vacuum pump with liquid ring, protected against direct steam injections and equipped with heat-exchanger in order to optimise its performances and to reduce water consumption;
- hydraulic circuit with stainless steel pipes, brass pipe-fittings and bronze valves with mechanic seal;
- fluids control through pneumatic valves settled with mechanic seal fittings;
- tank to recover water, which both allows to save water and avoids that the temperature values at the download phase are too high;
- all the pipes into which steam and hot water flow are insulated. The temperatures of the internal accessible parts are in conformity with IEC EN 61010-1 and IEC EN 61010-2-041 safety rules and with UNI EN 285 technical rule;
- steam production through autonomous and completely insulated steam generator with electronic level control (in indirect steam models);
- possibility to open the doors if the control system stops and possibility to manually open the doors if power lacks;
- sleeves corresponding to the UNI EN 285 technical rule for the plugging in of further drills and for the connections of the instruments necessary to qualify the physic performance according to the UNI EN 554 technical rule.

Technical Characteristics

- The autoclaves of this serie allow to develop twenty programmes (productive + functional ones and/or tests) totally automatic and perfectly reproducible, which allow to set the following parameters: lasting of the pre-heating, number of vacuum changes or of the steam injections, lasting of the pre-vacuum, temperature and lasting of the sterilization speed of the exhaust chamber, drying time, steam injection speed, cooling time, etc. further programmes are free and can be completely configured by the customer.
- The standard configured equipment allows the treatment of the following materials:
 - 134°C for porous material in general: clothes, fabrics, fibres, etc.;
 - 134°C for surgical instruments;
 - 121°C for gum material: gloves, catheters, dummies, etc.;
 - 134°C for porous material and instruments packed in bags;
 - vacuum Test programme;
 - bowie & Dick programme;
- all the messages are visualised and printed in perfectly readable writings;
- the equipment could be configured, at the construction, to treat liquids in open or also hermetically sealed containers*.

* Non-standard version

Control Devices

On the autoclaves there are:

- general keylock switch;
- trans-illuminated “touch screen” display for insertion/visualisation of the parameters/data of the sterilization cycle;
- push-buttons for the doors closing/opening;
- analogical manovacuummeter to show the pressure/vacuum inside the chamber;
- analogical manometer to show the pressure in jacket/generator;
- 112 mm graphic printer.

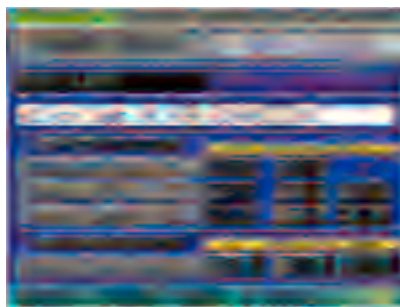
Security Devices

The autoclave is provided with several securities, which avoid:

- programme start with a door not perfectly closed;
- heating start without water in the generator;
- pressure raising in the generator/jacket and in the chamber over the exercise value;
- passage to a next phase of the programme if the operative parameters of the last phase haven't regularly developed;
- doors opening under pressure/vacuum inside chamber;
- door opening on the sterile side following test cycles or cycles with negative results (pass-through version).



Synoptic diagram of the equipment



Visualisation of the several phases of the cycle



Graphic visualisation of the pressure and temperature values recorded by the control and recording system

Fittings

The autoclaves could be equipped by the following fittings:

- automatic water softener;
- silenced engine-compressor;
- loading and unloading trolleys and automatic systems;
- measure of the death-rate of the process - Fo;
- STERICOLUSSI LT supervision programme: allows the remote supervision of the sterilizer and allows the recording and the visualisation on PC of temperature and pressure parameters connected to every sterilization load, pointed out by the 2 computers seated on the machine. For every sterilization cycle there is a file in a compressed and crypted format, therefore not tamperable. It includes all the parameters relative to the sterilization cycle (also the temperature and pressures values pointed out by the control system and the independent recording system). This file could be used for the paper-less running of the traceability of the sterilizing cycle according to the law in force;
- STERICOLUSSI managerial programme: further than all the functions of the STERICOLUSSI LT programme, it also allows the control of all the processes connected to the sterilization by drawing and storing all the responsibilities regarding the process itself (according to the law in force) and the labelling of the sterilized devices as per the 93/42/EEC rule.

The programme manages a system of passwords and selective access permissions, which allows the recording of all the responsibilities related to the productive cycle of sterile devices.

The programme allows the integration of the sterilizer in an integrated system for the sterilization of medical devices.

This system is divided in: admittance, washing, packaging, sterilization, check certification, labelling, issue, delivery, set-patient linking, etc.

The machines are projected and realized according to the 93/42/EEC and 97/23/EC directives; complying with the UNI EN 285, IEC EN 61010-1 and IEC EN 61010-2-041 technical rules.

The information included in this booklet can be whenever, and without prior notice, modified by the builder. We therefore recommend not to use this information for dimensioning, projects, etc. If necessary, please ask directly the builder for the installation manual and schemes.



STERICOLUSSI managerial system: visualisation of the sterilizers state on the PC



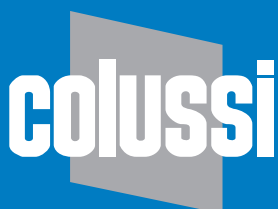
STERICOLUSSI managerial system: orders planning through PC or optical scanners

F10

MODEL	Doors number	Chamber dimensions (WxHxD) mm	Chamber volume		Overall dimensions (WxHxD) mm
			liters (total)	S. u. (available)	
F101N-V	1	1050x1450x850	1200	12	2700x2200x1555
F101P-V	2	1050x1450x890	1245	12	2700x2200x1625
F102N-V	1	1050x1450x1550	2100	24	2700x2200x2325
F102P-V	2	1050x1450x1590	2308	24	2700x2200x2355
F103N-V	1	1050x1450x2250	3328	36	2700x2200x2995
F103P-V	2	1050x1450x2290	3370	36	2700x2200x3025
F101N-I	1	1050x1450x850	1200	12	2700x2200x1555
F101P-I	2	1050x1450x890	1245	12	2700x2200x1625
F102N-I	1	1050x1450x1550	2100	24	2700x2200x2255
F102P-I	2	1050x1450x1590	2308	24	2700x2200x2325
F103N-I	1	1050x1450x2550	3328	36	2700x2200x2955
F103P-I	2	1050x1450x2290	3370	36	2700x2200x3025

	F101N-V F101P-V	F102N-V F102P-V	F103N-V F103P-V	F101N-I F101P-I	F102N-I F102P-I	F103N-I F103P-I
FEED	direct steam	direct steam	direct steam	indirect steam	indirect steam	indirect steam
ELECTRIC POWER [kW]	4	6	6	4	6	6
STEAM CONSUMPTION [kg/h]	160	180	200	180	200	200
WATER CONSUMPTION [l/min]	30	30	30	30	30	30
WEIGHT [kg]	3100	3450	4050	3100	3450	4050
AVERAGE STANDARD OF ACOUSTIC POWER (weighted A) [dB]	In compliance with the UNI EN 285, IEC EN 61010-1 and IEC EN 61010-2-041 technical rules.					

Recognition symbols	
N	Appliance with one door for loading
P	Appliance with one door for loading and one for unloading
I	Steam production by heating the water container in a heat exchanger (incorporated) by means of steam coming from a centralized plant
V	Steam produced by an external generator



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