

N E W

# ES

RECORDER

english



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For you who love to surround yourself with beautiful things, even when you're working. For you who hate complications. For you who put safety before everything else. For you who love well made things that last over time. For you who want only the best... the new E9 Recorder is born.

# Built to last and be adm



The new E9 Recorder is born to be admired. With its strong appeal and solid and compact shape, it catches your eye at first glance and, thanks to the neat and streamline design, you will love it more day after day. Even the more strictly operational details are characterised by an extremely eye-catching design.



● Focus on the topic

➤

- VALVES BLOCK
- MODULAR STRUCTURE
- COOLING SYSTEM

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One touch is all you need to appreciate the quality of the materials and the way they blend together so perfectly. Every detail of the new E9 Recorder has been conceived to last a lifetime and make it practical and efficient to use. Like the new front ventilation system, without side air vents, which means the autoclave can be recessed and flush-mounted on walls, guaranteeing almost silent operations.

# Simple and user-friendly

Everything about the new E9 Recorder is designed to make your job easier. The new E9 Recorder is the first autoclave in the world to have a luminous progress bar on the handle compartment, which is not only attractive and useful for highlighting the handle, but it also changes throughout the sterilisation cycle so users can check the procedure at a glance.



● Focus on the topic

- **E-TOUCH AND E-HELP**

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# y at a touch of a finger



The clearest example of its user-friendly features is E9 Recorder's large E-Touch display; it is extremely easy to use, thanks to the innovative touch-screen technology, and to understand, thanks to instantly comprehensible icons. You can also use the exclusive E-Help function that helps you select the right cycle according to load type.

# The best Class B sterilis





# ation

The excellent state-of-the-art technology installed on the new E9 Recorder guarantees flawless sterilising of all the instruments, ensuring total safety for you and your patients. All the sterilising cycles are type B, in accordance with all EN13060 Standard requirements. Moreover, the new E9 Recorder guarantees optimisation of water and electricity consumptions and allows you to exploit each cycle to the most providing five trays and three containers to choose from.



- Focus on the topic
- **DIRT CONTROL SYSTEM**
- **INSTANT STEAM GENERATOR**
- **AIR - WATER SEPARATOR**

pages 17 - 18

The new E9 Recorder boasts the genes of its ancestor, born and appreciated worldwide for its on-board integrated traceability system. Thanks to the adhesive labels printer, the new E9 Recorder allows you to track the entire sterilisation cycle, providing you with all the information required by law at the click of a button.



● Focus on the topic

- **ON BOARD TRACEABILITY**

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# Recorder by name and



The practical SD card holder, mounted on the side of the new E9 Recorder, allows you to easily transfer sterilisation data from the autoclave and store them on a PC to maintain track of all the operations performed. The new E9 Recorder also has PC serial connection and Ethernet connection ports.



Focus on the topic

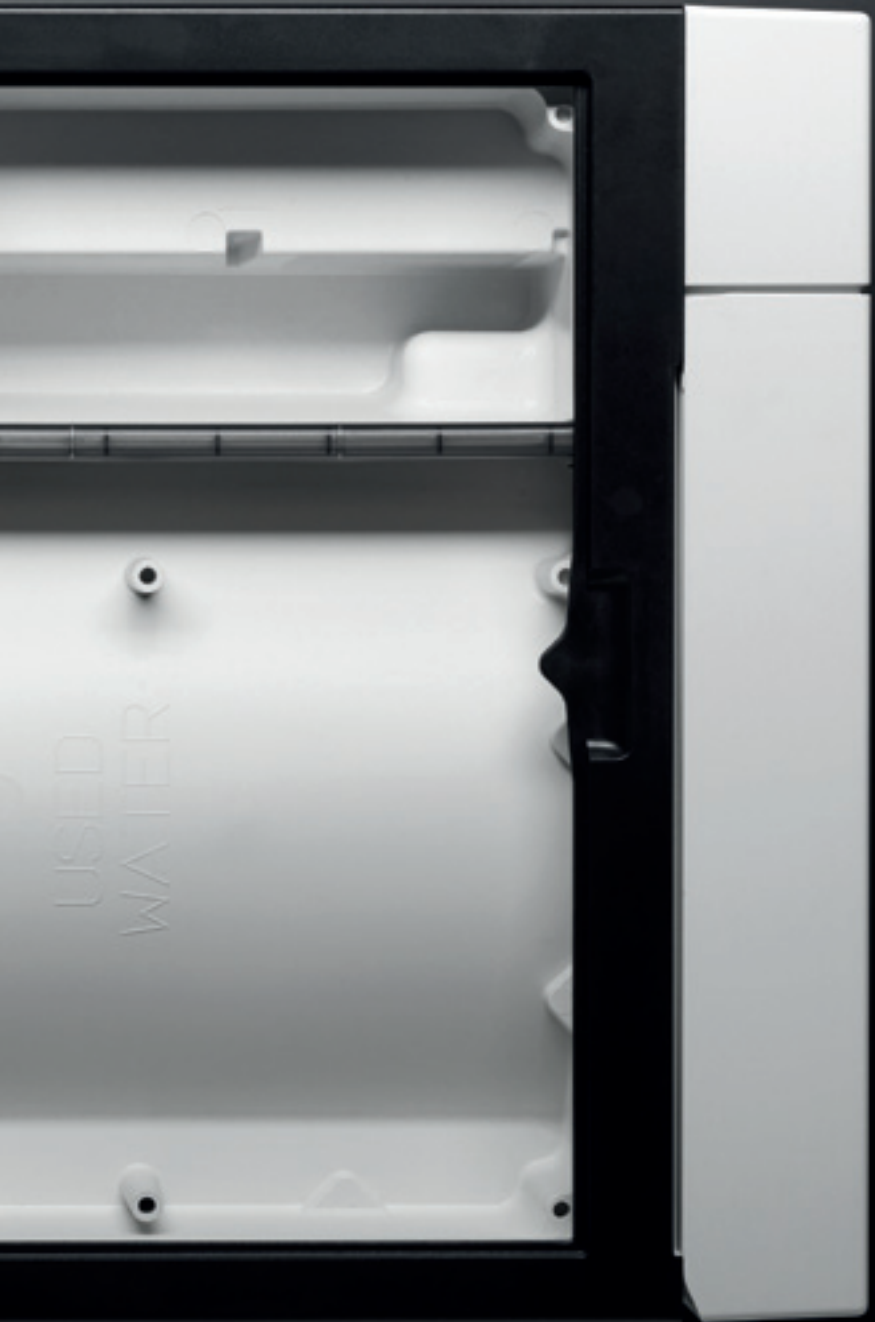
- INSPECTION® SYSTEM

page 18



Ever since Euronda first invented the completely inspectable tank, it has continued to evolve the inspectability concept. The new E9 Recorder is proof of just that. The system used to open and access the tank compartment is extremely quick and easy, making cleaning operations quick and easy even for novices, whilst guaranteeing safe sterilisation that remains effective over time.

# Evolution of inspectio



nability

# Sterilisation cycles

## STERILISATION CYCLES

### B 134

CYCLE FOR SOLID PACKED AND UNPACKED MATERIAL

	18 L	24 L
TEMPERATURE	135,5° C	
PRESSURE	2,16 bar	
STERILISATION PHASE TIME	4'	4'
DRYING PHASE TIME	13'	16'
TOTAL STANDARD LOAD TIME*	28'	33'
MAXIMUM SOLID/POROUS LOAD	4,5 kg / 1,5 kg	6 kg / 2 kg

### B 121

CYCLE FOR SOLID OR POROUS MATERIAL, PACKED AND UNPACKED, PARTICULARLY SUITED FOR THE STERILISATION OF PLASTIC MATERIALS, TURBINES AND WANDS

	18 L	24 L
TEMPERATURE	122,5° C	
PRESSURE	1,16 bar	
STERILISATION PHASE TIME	20'	20'
DRYING PHASE TIME	14'	16'
TOTAL STANDARD LOAD TIME*	40'	48'
MAXIMUM SOLID/POROUS LOAD	4,5 kg / 1,5 kg	6 kg / 2 kg

### B 134 PRION

PRION CYCLE FOR SOLID PACKED AND UNPACKED MATERIALS

	18 L	24 L
TEMPERATURE	135,5° C	
PRESSURE	2,16 bar	
STERILISATION PHASE TIME	18'	18'
DRYING PHASE TIME	14'	15'
TOTAL STANDARD LOAD TIME*	42'	52'
MAXIMUM SOLID/POROUS LOAD	4,5 kg / 1,5 kg	6 kg / 2 kg

### B 134 ⚡

RAPID CYCLE FOR SOLID UNPACKED INSTRUMENTS

	18 L	24 L
TEMPERATURE	135,5° C	
PRESSURE	2,16 bar	
STERILISATION PHASE TIME	3'5"	3'5"
DRYING PHASE TIME	8'	8'
TOTAL STANDARD LOAD TIME*	20'	26'
MAXIMUM SOLID/POROUS LOAD	0,6 kg / 0,2 kg	0,6 kg / 0,2 kg

### B 134 PRION ⚡

RAPID PRION CYCLE FOR SOLID UNPACKED INSTRUMENTS

	18 L	24 L
TEMPERATURE	135,5° C	
PRESSURE	2,16 bar	
STERILISATION PHASE TIME	18'	18'
DRYING PHASE TIME	8'	8'
TOTAL STANDARD LOAD TIME*	34'	40'
MAXIMUM SOLID/POROUS LOAD	0,6 kg / 0,2 kg	0,6 kg / 0,2 kg

\*The times are understood to be without the dry phase.

# Accessories

## ACCESSORIES



### AQUAFILTER

DEVICE FOR PRODUCING DEIONISED WATER IN ACCORDANCE WITH EN 13060 STANDARD REQUIREMENTS ( $<15 \mu\text{S}/\text{CM}$ ). REDUCING THE SALTS PREVENTS THE FORMATION OF ENCRUSTATION BOTH INSIDE THE CHAMBER AND ON THE INSTRUMENTS.  
IT CONNECTS DIRECTLY TO THE WATER SUPPLY AND CAN CHANNEL WATER TO TWO E9 AUTOCLAVES AND THE WATER GUN AT THE SAME TIME.  
IT DEIONISES 1 LITRE OF WATER A MINUTE.  
DIMENSIONS: 320X420X180 MM (LxHxD).



### AQUADIST

WATER DISTILLER THAT BOILS WATER AND CONDENSES THE STEAM TO OBTAIN DISTILLED WATER.  
IT DISTILLS 0.7 LITRES OF WATER AN HOUR.  
4 LITRE CAPACITY. PASSES ALL SAFETY TESTS, COMPLYING WITH ALL ELECTROMAGNETIC COMPATIBILITY STANDARD (2004/108/CE) AND LOW VOLTAGE STANDARD (2006/95/CE) REQUIREMENTS.

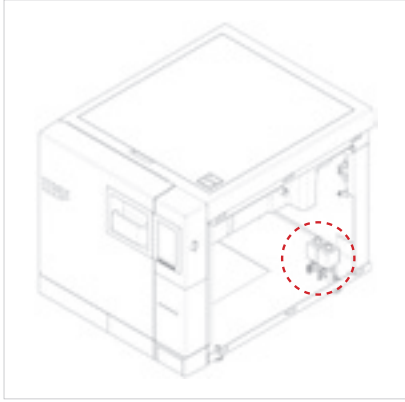


### STERILIZATION TEST

TO GUARANTEE THAT THE STERILISATION CYCLE HAS BEEN CORRECTLY CARRIED OUT, EURONDA RECOMMENDS YOU RUN THE CHECK TEST TO VERIFY:

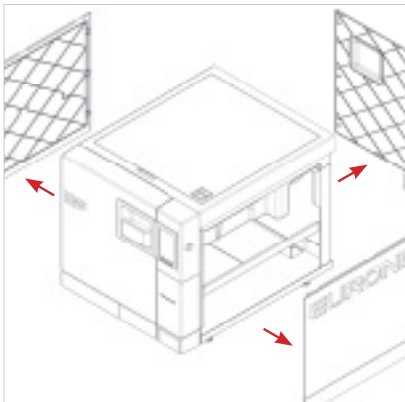
- THE STEAM PENETRATION CAPACITY DURING HOLLOW LOADS (HELIX, DAILY)
- POROUS LOADS (BOWIE & DICK, MONTHLY) AND THE MAINTAINING OF PRESSURE VESSEL PERFORMANCE (VACUUM, DAILY)
- STEAM PENETRATION CAPACITY DURING POROUS LOADS (BOWIE & DICK, MONTHLY)
- MAINTAINING OF PRESSURE VESSEL AND HYDRAULIC CIRCUIT PRESSURE (VACUUM, DAILY).





## VALVES BLOCK

THE NEW E9 RECORDER IS DESIGNED TO MINIMISE THE COST OF ROUTINE AND EXTRAORDINARY MAINTENANCE, NOT ONLY THANKS TO THE SPECIAL COMPONENTS, BUT ALSO THANKS TO THE RAPID TECHNICAL ASSISTANCE AVAILABLE WHENEVER THE AUTOCLAVE MALFUNCTIONS. THANKS TO THE MODERN TECHNOLOGIES USED WHEN DESIGNING THE NEW E9 RECORDER, ALL ITS INTERNAL COMPONENTS ARE EASILY ACCESSED MINIMISING THE TECHNICAL RESPONSE TIMES. THE NEW E9 RECORDER IS THEREFORE READY FOR USE WHENEVER NEEDED. THE UNIFIED VALVES SYSTEM GENERATES SUBSTANTIAL SAVINGS OF TIME AND CONSUMPTIONS, MAKING THE MACHINE EVEN MORE ECO-FRIENDLY AND ATTENTIVE TO THE REQUIREMENTS OF INDIVIDUAL SURGERIES.



## MODULAR STRUCTURE

THE NEW E9 RECORDER IS MADE FROM A MODULAR STRUCTURE THAT ALLOWS EASY AND QUICK ACCESS TO ALL INTERNAL MACHINE COMPONENTS. THIS IS BECAUSE EVERY PART OF THE MACHINE MUST BE EASY TO CLEAN AND MAINTAIN, IN ACCORDANCE WITH THE MOST ADVANCED PRODUCT DESIGN STANDARDS. THE UPPER TANKS CAN BE OPENED COMPLETELY TO BE INSPECTED, THE LATEST GENERATION PLASTIC SIDE PANELS ARE ALSO EASY TO OPEN. THE REAR PANEL IS FASTENED TO THE UNIT IN A FEW STRATEGIC POINTS MAKING THE NEW E9 RECORDER EASY FOR OPERATORS OR OTHERS TO INSPECT AND ACCESS AS NEEDED. THE COMPONENTS INSIDE THE MACHINE ARE ARRANGED IN A LOGICAL ORDER WHICH IS INSTANTLY RECOGNISABLE. THE LARGER AIR CIRCULATION SPACE, VITAL FOR PROPER FUNCTIONING OF THE MACHINE, GUARANTEES LONGER SERVICE OVER TIME.



## AIR VENTILATION COOLING SYSTEM

THE NEW E9 RECORDER IS FITTED WITH AN INNOVATIVE AIR VENTILATION SYSTEM THAT REDUCES NOISE TO A MERE WHISPER. NEW E9 RECORDER SUCKS AIR IN FROM BELOW AND THEN EXPELS IT FROM THE FRONT THROUGH TWO SPECIFICALLY DESIGNED SLOTS. THIS MAKES IT POSSIBLE TO RECESS THE MACHINE WITHOUT HAVING TO ACCOUNT FOR REAR VENTILATION REQUIREMENTS.





## E-TOUCH AND E-HELP

THE NEW E9 RECORDER IS FITTED WITH A LATEST GENERATION 65,000 COLOUR TOUCH SCREEN DISPLAY, OF OPTIMUM SIZE TO ALLOW EASY VIEWING OF INFORMATION: E-TOUCH. THE NEW E-TOUCH HAS A USER-FRIENDLY INTERFACE THAT HELPS THE OPERATOR DURING HIS DAILY STERILISATION OPERATIONS; IT HAS A SEQUENCE OF EASY TO UNDERSTAND ICONS THAT GUIDE THE USER THROUGHOUT THE STERILIZATION AND TEST CYCLE SELECTION PROCESS. E-HELP IS THE INNOVATIVE GUIDE SYSTEM THAT HELPS THE OPERATOR SELECT THE CORRECT STERILISATION CYCLE. THANKS TO E-HELP, THE NEW E9 RECORDER DISPLAYS THE CONTENT THAT WILL BE INSERTED INSIDE THE CHAMBER ON THE E-TOUCH DISPLAY USING EASILY RECOGNISABLE ICONS. OPERATORS CAN SELECT THE MOST SUITABLE STERILISATION CYCLE WITHOUT POSSIBILITY OF ERROR.



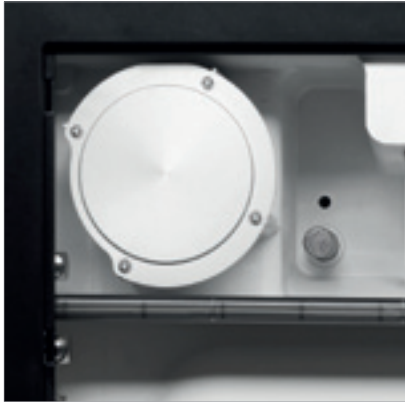
## DIRT CONTROL SYSTEM

THE TECHNOLOGIES USED ON THE NEW E9 RECORDER BOOST PERFORMANCE WHILST CUTTING CONSUMPTIONS AND COSTS. THE DIRT CONTROL SYSTEM IS A NEW DIRT MANAGEMENT SYSTEM THAT ALLOWS USE OF THE NEW E9 RECORDER EVEN WHEN OPERATING CONDITIONS ARE NOT IDEAL. THE NEW INTERNAL DEVICES ARE ABLE TO MANAGE ANY DIRT WITHIN THE WATER SYSTEM, WITH DISTINCT SEPARATION OF CLEAN AND DIRTY WATER FLOWS AND TREAT THE DIRT AS A "NORMAL" COMPONENT WITHIN THE CIRCUIT. THE DIRT CONTROL SYSTEM ALLOWS THE DIRT TO FLOW OUT OF THE HYDRAULIC SYSTEM AND DRAIN INTO THE USED WATER TANK, THIS ALLOWS THE MACHINE TO OPERATE EVEN WHEN THERE IS DIRT IN THE HYDRAULIC CIRCUIT OR DRAIN SYSTEM, EXTENDING ITS WORKING LIFE.



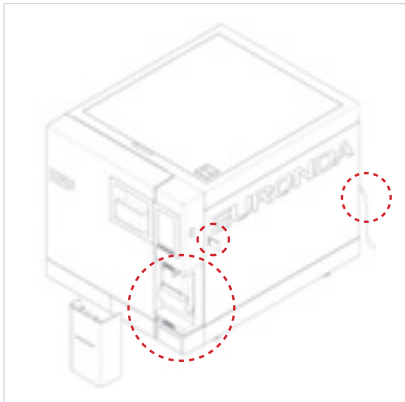
## INSTANT STEAM GENERATOR

THE NEW E9 RECORDER STEAM GENERATOR WORKS INSTANTLY, PRODUCING STEAM AS SOON AS THE STERILISATION CYCLE REQUIRES IT. THE NEW E9 RECORDER STEAM GENERATOR, ALREADY USED FOR INDUSTRIAL PROCESSES, IS FITTED EXTERNALLY TO ENSURE STERILISATION CYCLES WITH A HIGHER QUALITY OF STEAM. IT INSTANTLY PRODUCES STEAM THAT IS CHANNELLED INTO THE STERILISATION CHAMBER, OPTIMISING WATER CONSUMPTIONS ACCORDING TO THE LOAD, REDUCING STERILISATION TIMES AND BOOSTING THE QUALITY OF THE GENERATED STEAM.



## AIR - WATER SEPARATOR

THE SEPARATOR DEVICE, DESIGNED AND BUILT INTO THE TANK UNIT, IS A REAL "LIFE SAVER" FOR THE VACUUM PUMP. THE PUMPS USED ON MACHINES OF THIS LEVEL ARE ESSENTIAL TO ACHIEVE PROPER STERILISATION, BUT ARE VERY DELICATE AS THEY ARE IN CONSTANT CONTACT WITH FLOWS CONTAINING HIGH TEMPERATURE STEAM, AIR, DIRT AND CHEMICAL WASTE FROM LUBRICATING OILS FOUND ON INSTRUMENTS BEING STERILISED (WANDS, TURBINES,..). THESE STREAMS ARE CHANNELLED INTO THE SEPARATOR DEVICE WHICH SEPARATES THE AIR FROM THE OTHER COMPONENTS BEFORE THEY ENTER THE VACUUM PUMP. THIS PHASE ALLOWS THE PUMP TO OPERATE IN IDEAL WORKING CONDITIONS, PRESERVING THE EFFICIENCY OF THIS DEVICE WHICH IS SO IMPORTANT FOR THE OVERALL OPERATION OF THE SYSTEM AND TO GUARANTEE A LONG WORKING LIFE.



## ON BOARD TRACEABILITY

THE NEW E9 RECORDER IS FITTED WITH A COMPLETE ON BOARD TRACEABILITY SYSTEM; THANKS TO THE BUILT-IN ADHESIVE LABEL PRINTER, AFTER EVERY NEW CYCLE THE RECORDER PRINTS THE NUMBER OF LABELS REQUIRED BY EN 13060 STANDARD ALONG WITH THE REPORT ISSUED BY THE AUTOCLAVE ON THE COMPLETED CYCLE. MOREOVER, THE ADHESIVE LABELS CAN BE POSITIONED ON THE STERILISED BAGS TO GUARANTEE TRACEABILITY OF THE STERILISED INSTRUMENTS FROM EACH INDIVIDUAL BAG USED ON PATIENTS. FURTHER TO THE BUILT-IN LABEL PRINTER, THE NEW E9 RECORDER ALSO HAS AN SD CARD DATA STORAGE SYSTEM THAT ALLOWS THE TRANSFER OF DATA FROM THE SD CARD DIRECTLY TO THE COMPUTER WITHOUT CONNECTING OTHER DEVICES; SIMPLY REMOVE THE SD CARD FROM THE NEW E9 RECORDER AND INSERT IT IN THE PC. THE NEW E9 RECORDER ALSO HAS AN ETHERNET CONNECTION SOCKET THAT ALLOWS OPERATORS TO CONNECT THE AUTOCLAVE TO THE SURGERY'S INTERNAL NETWORK TO ENSURE INSTANT ARCHIVING OF STERILISATION CYCLE DATA.

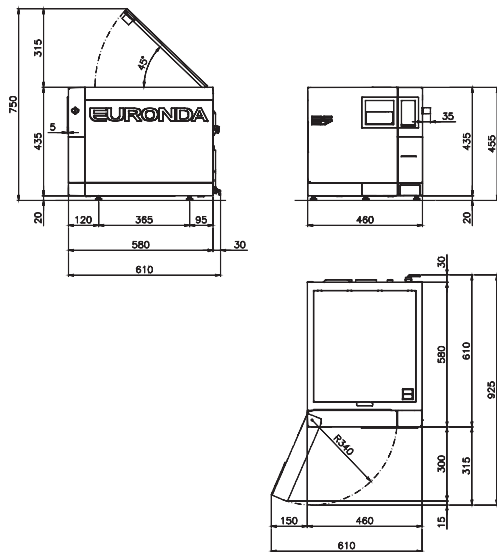


## INSPECTION® SYSTEM

THE NEW E9 RECORDER COMES WITH AN INSPECTION® SYSTEM, TANK UNIT SLOTTED INTO THE TOP OF THE MACHINE, IN FULL COMPLIANCE WITH EN 13060 STANDARD REQUIREMENTS. THE INSPECTION® SYSTEM CONSISTS OF NEW GENERATION PLASTIC TANKS, HIGH TEMPERATURE, STEAM AND VACUUM TESTED. THE HIGH-TECH POLYMER TOP COVER IS FIXED IN PLACE BY A MAGNETIC SYSTEM WHICH MAKES IT EASY TO OPEN AND CLEAN INSIDE WITHOUT ANY NEED FOR SPECIAL ACCESS TOOLS. THE SEPARATE CLEAN WATER AND USED WATER TANKS ARE EASILY IDENTIFIED.

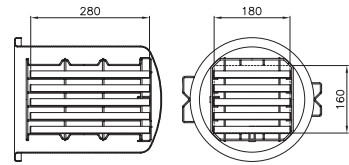
# TECHNICAL SPECIFICATIONS specifications

## OVERALL REQUIRED SPACE

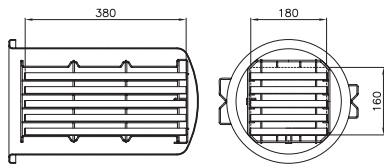


## USEFUL SPACE

### 18 LITRES



### 24 LITRES



## TECHNICAL DATA

	E9 RECORDER - 18 L	E9 RECORDER - 24 L
OVERALL DIMENSIONS	460 x 455 x 610 mm (L x H x D)	
WEIGHT (machine empty with basket and trays)	43 kg	46 kg
POWER SUPPLY	230 V 50/60 Hz	
ABSORBED CURRENT (output)	2300 W 10A	2400 W 10A
OPERATING TEMPERATURE	+5 - +40°C	
OPERATING ALTITUDE (leaving the loading cap free)	≤ 2000 m s.l.m	
MINIMUM DEPTH OF THE SUPPORT SURFACE	500 mm	
MINIMUM WIDTH OF THE SUPPORT SURFACE	460 mm	
MINIMUM SPACE ABOVE THE TANK	0 mm leaving the loading cap free	
NOISE LEVEL	50 dB	
WEIGHT PER SUPPORT AREA (tank full and chamber with maximum load)	43 kg +9 kg = 52 kg Load on each foot : 10,4 kg	46 kg +9 kg = 55 kg Load on each foot : 11 kg
OPERATING RANGE	Indoor use Relative humidity 85% Maximum line-voltage deviation ±10% Installation category II Pollution level 2	
CHAMBER MEASUREMENTS AND VOLUME	250x340 mm ØxD	250x440 mm ØxD
DIMENSION AND VOLUME	180x280x160 mm LxDxH	180x380x160 mm LxDxH
WATER CONSUMPTION VOLUME	300 ml	
TANK CAPACITY (clean water and used water)	4 litres	

## SAFETY DEVICES

- Short-circuit protections
- Overheating protections
- Overpressure protection
- Accidental door opening protections
- Process appraisal system
- Real-time self-diagnostic system

## DOCUMENTATION

- User Manual
- Declaration of conformity Chamber
- Declaration of conformity autoclave
- Warranty Certificate 2 years or 1,500 cycles
- Installation chart

## COMPLIANCE WITH HARMONISED STANDARDS

- EN 13060
- EN ISO 14971
- EN 61010-1
- EN 61010-2-040
- EN 61326
- EN 13445

## CERTIFICATION INFORMATION

- E9 Recorder Autoclave compliant with Directive 93/42/EC and addenda.
- Class IIb device
- Chamber compliant with PED Directive 97/23/EC
- Company certification: ISO 9001 ISO 13485



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