

11. Cleanroom, Cleaning and sterilisation

Steam sterilisers - Autoclaves/Instruments

CertoClav Essential



Autoclave for sterilisation at 121 °C (15 Min. holding period). Microprocessor controlled with automatic process control and fractioned venting. Available in 12 or 18 litre volume. Printer port for CertoClav receipt printer (Cat. No. 9.842 033).

Type	Capacity Litres	Diam. mm	Int. height mm	PK	Cat. No.
Essential	12	240	260	1	9.842 019 1
Essential	18	240	400	1	9.842 027 2



CertoClav 12L/18L tabletop autoclave

CertoClav table top autoclaves are the complete autoclaving solution for small laboratories or a flexible addition to the large volume autoclave. Due to their space saving design they can be placed directly on the laboratory bench. Ideal for culture media preparation, sterilisation of equipment and waste, and quality tests, such as the HAST test.

All models: TÜV certified. CE marked. No water connection required. 230 V, 50-60 Hz. Venting procedure: stream process. Actual appearance may deviate from picture. Made in Austria.

3 CertoClav Classic



The robust, time-tested laboratory autoclave for more than 50 years. Controlled via a precision valve and a thermostat. Includes timer. Standard model with alternatively 125 °C/140 °C.; Alternative model with 115 °C/121 °C.

Type	Capacity Litres	Diam. mm	Int. height mm	PK	Cat. No.
Classic 115 °C/ 140 °C	18	260	350	1	9.842 028
Classic 115 °C/121 °C	18	260	350	1	9.842 029



4 CERTOCLAV-EL 12 L/18 L tabletop autoclave

The CertoClav EL laboratory autoclave is ready to start after only a few moments thanks to its simple operation. Its versatility and compact construction make the CertoClav-EL laboratory autoclave almost indispensable for research, development and medical applications.

Control and operation

It would be difficult to imagine a workplace without a CertoClav-EL after just a few days thanks to its single-button operation and its reliability. The thermostat and the 2-stage control valve ensure that operations and processes are precise. Culture media preparations, quality checks and autoclave processes can be carried out simply and quickly. The precision thermometer and precision pressure gauge with maximum indicator ensures faultless results for all applications. The sterilisations chamber is easy to open and close, simply turn the cover and remove.

For your safety

The CertoClav 4-fold safety system: the overpressure valve, the safety interlock preventing opening under pressure, the safety control valve and the overpressure safety opening enable operation without any hazards.

Standards and conformity marks

GS from TÜV Rheinland in accordance with EN 61010 - 1:2001, EN 61010 - 2:040:2005
Expert reports on microbiological and germicidal effectiveness

Including accessories

Stable instrument panel, with 3 feeds and minimum water level indicator



Operating temperature/pressure:	maximum 3 bar Stage 1: 125 °C = 1.4 bar/Stage 2: 140 °C = 2.7 bar Stage 1*: 115 °C = 0.7 bar/Stage2*: 121 °C = 1.1 bar
Heater:	integrated in floor/not exposed
Water connection:	no water connection necessary
Housing:	Aluminium
Air evacuation:	free steam flow process
Thermal output:	1900 W
Mains connection:	230 V ±10 %/50 - 60 Hz

Type	Capacity Litres	Diam. mm	Int. height mm	PK	Cat. No.
EL 12L GS	12	240	260	1	9.842 013
EL 18L GS	18	240	400	1	9.842 014

* Special valve: CertoClav EL 12 and CertoClav EL 18L delivery with valve temperature 125/140°C or 115°/121C. Please regard by your order.

1 CERTOCLAV MultiControl 12 L /18 L tabletop autoclaves ALU



Practical, maintenance-free microprocessor-controlled laboratory autoclave with fractionated venting process. Its versatility and compact construction make the CertoClav MC laboratory autoclave almost indispensable for research, development and medical applications.

CertoClav

- Free programmable autoclave
- Aluminium chamber
- Precision pressure gauge
- Steam release cock
- Electronic process control by PT100 sensor
- Printer port
- PC-connection (USB)
- 6 programs pre-installed
- Multi-step programs only with PC-software Pro

Included: Autoclave, base plate, mains cable, controller

For your safety

The CertoClav 4-fold safety system: the overpressure valve, the safety interlock preventing opening under pressure, safety control valve and the overpressure safety opening enable operation without any hazards.

Standards and conformity marks

GS from TÜV Rheinland in accordance with EN 61010 - 1:2001, EN 61010 - 2:040:2005
Expert reports on microbiological and germicidal effectiveness

Temperature:	from 20 °C up to 140 °C free programmable
Thermal output:	220-240 Vac, 50 Hz
Heater:	integrated in floor/not exposed
Mains connection:	2.7 bar (39psi)
Operating pressure:	1900 W
Venting:	fractionated venting process
Water connection:	no water connection necessary
Housing:	Aluminium

Type	Capacity Litres	Diam. mm	Int. height mm	PK	Cat. No.
CertoClav MultiControl	12	240	260	1	9.842 018
CertoClav MultiControl	18	240	390	1	9.842 017

Accessories for portable autoclave CertoClav

Service kit 1: with lid gasket, vavle gasket, gasket for exhaust cock and manometer, steam valve

Service kit 2: with lid gasket, control valve gasket, seals for exhaust cock and pressure gauge, steam valve and safety valve

For	Description	PK	Cat. No.
MultiControl2 and Essential	Printer	1	9.842 033
CertoClav EL, MultiControl, Essential	Wire basket with handle, Ø 23 x 17 cm	1	9.842 025
Classic, MultiControl, Connect and CultureMedia	Wire basket with handle, Ø 25 x 23 cm	1	9.842 035
MultiControl 2	Software Professional License	1	9.842 038
CertoClav EL, MultiControl, Essential	Service-Set 1	1	9.842 036
Classic, MultiControl 2, Connect, CultureMedia	Service-Set 2	1	9.842 020

2 CertoClav MultiControl 2

NEW
CertoClav



9.842 030

Autoclave with freely programmable controller (room temperature to 140 °C). Standard programs for sterilisation pre-installed. Controller unit has a printer port for the CertoClav receipt printer (Cat. No. 9.842 033) and a USB port for PC connection. Basic version of PC software for data monitoring included (professional license required for advanced programming functions).

CertoClav MultiControl 2 Touch: Like model CertoClav MultiControl 2, but with high-res touch screen. All user tasks are explained with videos on the machine. Virtually no training requirements for new users. Easy compliance with GLP documentation requirements possible via CertoCloud, where all user information and cycle data is safely stored for 10 years and can be accessed from any web browser. 6 month free CertoCloud trial period included with purchase.



6.268 833

Type	Capacity Litres	Diam. mm	Int. height mm	PK	Cat. No.
MultiControl 2	18	260	350	1	9.842 030 2
MultiControl 2 Touch	18	260	350	1	6.268 833 3

11. Cleanroom, Cleaning and sterilisation

Steam sterilisers - Autoclaves/Instruments

1 CertoClav Connect



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Fully automatic laboratory autoclave with 7 inch high-res touch screen and intuitive user interface. Max 140 °C sterilisation temperature. All user tasks are explained with videos on the machine. Virtually no training requirements for new users. Easy compliance with GLP documentation requirements possible via CertoCloud, where all user information and cycle data is safely stored for 10 years and can be accessed from any web browser. 6 month free CertoCloud trial period included with purchase. Integration in laboratory data management systems possible. Construction corresponds to a class N and class S (liquids) autoclave according to EN 13060.

- Fully automatic laboratory autoclave with Cloud connection
- Electromechanical safety lock for liquids sterilization
- Electronic pressure valve
- Splash-proof 7" touch screen
- Wi-Fi, LAN, Bluetooth, SD card, USB, Sound
- Integrated condensation tank
- Optional media sensor for liquids sterilization
- Video step-by-step assistant
- Free programmable via touch screen (1 minute to 14 days)



Included: Autoclave, base plate, mains cable, touch screen

Specifications

Temperature: from 20 °C up to 140 °C free programmable
 Pressure: 2.7 bar (39 psi)
 Thermal output: 1300 W
 Power supply: 220-240 Vac, 50 Hz
 Dimensions: 450 x 440 x 450 mm

Type	Capacity	Diam.	Int. height	PK	Cat. No.
	Litres	mm	mm		
Connect	18	250	350	1	9.842 031
Media sensor, PT100				1	9.842 037

Digital horizontal autoclave Type AH

This autoclave is microprocessor controlled and monitored with 10 sterilisation programmes of which 4 are fixed and 6 are freely selectable.

Raypa

- Operating temperature range 100 °C to 134 °C
- On request also available with B Class
- RS 232 interface
- Fully automatic functions
- With water reservoir, pre-vacuum and drying
- Case and lid shrouding are AISI 304 stainless steel
- Sterilisation chamber, lid and sealing system are AISI 316 stainless steel
- Electrical heating with protected heating elements
- Safety pressure valve
- Safety thermostat
- Automatic steam controlled by Touch Screen microprocessor
- Manual valves for emptying the sterilisation chamber and for draining steam
- Equipped with mesh stand on the chamber base and trays
- Supply requirements: 230 V/16 A single phase

Type	Capacity	Chamber diam. x depth	Width	Length	Height	Rating	PK	Cat. No.
	Litres	mm	mm	mm	mm	W		
AH-21 L	21	250 x 430	680	590	425	2000	1	9.851 898
AHS-50 DRY	50	400 x 400	760	780	630	2000	1	6.267 579 2
AHS-75 DRY	75	400 x 600	760	980	630	3200	1	9.851 888

On request also available counter-pressure, steam generator or without vacuum and drying.

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6.267 579

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9.851 894

Digital vertical autoclaves, AES series

These autoclaves are microprocessor controlled and monitored with 10 sterilisation programmes of which 4 are fixed and 6 are freely selectable.

Raypa

- Operating temperature range 100 °C to 134 °C
- On request also available with with vacuum pump and steam generator
- Agar modus (40 °C to 80 °C)
- RS 232 interface
- Timer
- Programmable auto-start (24 h)
- Fully automatic functions
- Case and lid shrouding are AISI 304 stainless steel
- Sterilisation chamber, lid and sealing system are AISI 316 stainless steel
- Electrical heating with protected heating elements in the interior of the chamber
- Safety pressure valve
- Safety thermostat
- Automatic steam controlled by microprocessor
- Manual valves for emptying the sterilisation chamber and for draining steam

- Supply requirements:

AES-12 and AES-75: 230 V 16 A single phase

AES-110 and AES-150: 400 V + Neutral (3-phase)

Type	Capacity Litres	Chamber diam. x depth mm	Width mm	Length mm	Height mm	Rating W	PK	Cat. No.
AES-12	12	250 x 270	490	500	650	1000	1	9.851 893
AES-28	28	300 x 400	510	560	1120	2000	1	9.851 894 1
AES-50	50	300 x 700	510	560	1300	3200	1	6.267 578
AES-75	75	400 x 600	620	730	1190	3200	1	9.851 895
AES-110	110	400 x 850	620	730	1440	4500	1	9.851 896
AES-150	150	500 x 750	760	850	1400	6000	1	9.851 897

On request also available with vacuum and drying, counter-pressure or steam generator.

Thermoprinter for Automatic autoclaves AH/AES series

NEW

Two Thermoprinter for Autoclaves AH and AES.

Raypa

Built-in printer IT: Prints program number, cycle number, temperature, date and error message. Must be installed ex factory, please order with autoclave.

Table top printer ITS: Print program number, cycle number, temperature, date and hour of the run. Error messages are also printed. With RS 232 interface. Only for AES-12/AES-28/AES-50/AES-75/AES-110/AES-150/DRY

Type	PK	Cat. No.
Thermoprinter IT	1	6.265 153 2
Thermoprinter ITS	1	6.270 012 3

2


6.265 153

3


6.270 012

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6.261 937

Accessory baskets for Digital vertical autoclaves, AES series

Type	For	Diam. mm	Height mm	Baskets per autoclave	PK	Cat. No.
Mesh basket	AES 12	220	200	1	1	6.268 955
Mesh basket	AES 28 - 50	270	200	2 / 3	1	6.270 951
Mesh basket	AES 75 - 110	370	280	2 / 3	1	6.261 937 4
Mesh basket	AES 150	470	250	2	1	6.260 676
Solid basket	AES 28 - 50	280	200	2 / 3	1	9.851 876
Solid basket	AES 75 - 110	380	260	2 / 3	1	9.851 877
Solid basket	AES 150	475	360	2	1	9.851 879

1 Laboratory autoclaves D-line

Tuttnauer

The features of the laboratory autoclave line are specifically designed for most common laboratory applications and can be used for the sterilization of liquids, instruments, glass, waste and for the preparation of nutrient media.

- EL = horizontal loading
- ELV = vertical loading
- EL-CGD and ELV-CGD = with integrated steam generator and rapid cooling
- Stores the last 200 cycles in built-in memory
- Option: second flexible Pt 100 probe
- 30 Identification Codes and Passwords for access level control
- The controller and software comply with the 21 CFR part 11 standard
- Filter replacement notifications based on the number of cycles
- Data archiving via USB interface
- Double sterilization time monitoring
- In/Out test (enables technicians to check each system component separately)
- Sterilization temperature range up 105 °C to 137 °C
- Optional Disinfection/Isothermal Temperature range from 60 °C to 105 °C
- 7 standard sterilisation programs

Options available

- Fast cooling technology and ventilator to reduce cooling time additionally
- Vacuum pump to evacuate residual air
- Exhaust air filtration
- Lifting device to elevate/to lower heavy sterilization goods
- Printer to document the performed cycle (Please order separately)
- R.P.C.R software allows complete control and monitoring of the autoclave



Type	Capacity litres	Dimensions (W x D x H) mm	Chamber diam. x depth mm	PK	Cat. No.
2840 EL-D	28	530 x 630 x 440	280 x 400	1	6.285 588
2840 EL-CGD	28	530 x 760 x 440	280 x 400	1	9.842 802
2840 ELV-D	31	540 x 440 x 980	280 x 460	1	6.283 606
3840 EL-D	52	720 x 765 x 540	380 x 400	1	6.285 589
3840 ELV-D	52	730 x 540 x 1000	380 x 400	1	6.285 594
3850 EL-D	65	720 x 765 x 540	380 x 500	1	6.285 590
3850 EL-CGD	72	730 x 1190 x 1366	380 x 490	1	9.842 805
3850 ELV-D	65	730 x 540 x 1000	380 x 500	1	6.285 595
3850 ELV-CGD	72	730 x 700 x 1000	380 x 490	1	9.842 816
3870 EL-D	85	720 x 940 x 540	380 x 690	1	6.285 591
3870 EL-CGD	94	730 x 1190 x 1366	380 x 690	1	9.842 807
3870 ELV-D	85	730 x 540 x 1000	380 x 690	1	6.282 880
3870 ELV-CGD	94	730 x 700 x 1000	380 x 690	1	9.842 818
5050 EL-D	110	860 x 890 x 740	500 x 500	1	6.285 592
5050 EL-CGD	110	870 x 1578 x 1175	500 x 500	1	6.286 179
5050 ELV-D	110	870 x 770 x 860	500 x 500	1	6.285 598
5075 EL-D	160	860 x 1120 x 740	500 x 750	1	6.285 593
5075 EL-CGD	160	870 x 1175 x 1578	500 x 750	1	9.842 810
5075 ELV-D	160	870 x 770 x 1090	500 x 750	1	6.282 374
5075 ELV-CGD	160	870 x 770 x 1090	500 x 750	1	9.842 821

2 Benchtop-Autoclave HMT 232N

HMC-EUROPE

The HMT 232N is an easy-to-use, semi-automatic autoclave with high rating, reliability and safety.

- For use in non medical laboratories for sterilizing liquids, objects, etc. The chamber consists of easy-to-clean stainless steel.
- Different programs to choose from.
- Temperatures available: 121°C and 134 °C, sterilization pressure adjustable from 0.9 to 2.1 bar.
- For sterilization the following settings are available: 4 minutes/15 min/30 min.
- Equipped with digital sterilisation cyler recorder (SD and USB).
- Automatic control by the end of the sterilization process, the entire sterilization process is microprocessor controlled and monitored.
- The chamber is filled manually with feedwater from the integrated water tank and the water is returned manually in the chamber.

Safety:

- It features a low water protection, safety and venting valve, pressure switch and over-temperature protection.
- Cover-impact backup
- Each element is equipped with an independent thermal overload switch.
- CE certified



Type	Capacity Litres	Chamber diam. x depth mm	Width mm	Length mm	Height mm	Rating kW	PK	Cat. No.
HMT 232N	16	230 x 390	501	537	406	1.5	1	6.266 840

1 Steam sterilizers (autoclaves), HV series

Sterilizing simply and well.

HMC-EUROPE

Single-wall, vertical steam sterilizers, equipped with a newly developed safety lock. Fully automatic, microprocessor controlled. Programmable. Preset programs, simplest available, programmable, parameters (temperature, time, exhaust) variable. Liquid program according to TRB 402 and EN61010-2 (flex sensor required).

AGAR program warming cycle. Night program: feed in the evening and found sterilized at the next morning. Steam condenser as standard.

Mounted on castors. No connection to water/steam supply or disposal necessary. Power supply: 230 V, 50/60 Hz

Type	Capacity	External dimensions (W x D x H) mm	Internal dimensions (Ø x H) mm	Rating	Working Temp. range °C	Weight	PK	Cat. No.
	Litres			W		kg		
HV-L25	25	480 x 950 x 460	240 x 550	1500	105 to 126	41	1	7.980 025
HV-L50	50	510 x 1040 x 530	300 x 710	2000	105 to 135	57	1	6.232 481
HV-L85	85	660 x 1000 x 650	420 x 615	3000	105 to 128	71	1	9.842 418
HV-L110	110	660 x 1000 x 650	420 x 795	4000	105 to 123	81	1	6.254 337



2 Accessories for HV series steam sterilisers

HMC-EUROPE

Description	Dimensions (dia. x H)	Baskets per autoclave	PK	Cat. No.
	mm			
Flexible temperature sensor			1	7.980 024
Integrated printer			1	9.842 427
Air cooling			1	9.842 428
Exhaust-air filtration			1	9.842 429
Stainless steel sterilising basket for HV-25	225 x 250	2	1	7.980 027
Stainless steel sterilising basket with bottom for HV-25	225 x 250	2	1	9.842 430
Stainless steel sterilising can for HV-25	210 x 255	2	1	9.842 431
Stainless steel sterilising basket for HV-50	280 x 225	3	1	6.232 482
Stainless steel sterilising basket with bottom for HV-50	280 x 225	3	1	9.842 432
Stainless steel sterilising can for HV-50	270 x 220	3	1	9.842 433

Further accessories for Models HV-85 and HV-110 available on request.



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Steam sterilisers - Autoclaves/Instruments

Benchtop-Autoclaves HMT FA/-MA and -MB series



HMC-EUROPE

Innovative and versatile autoclave, which combines compact and elegant design with high performance, reliability and safety

- Auto dry function: To offer the good dry result
- Microprocessor control system: Fully automatic controls from adding water to sterilisation, to drying.
- Double water level check device: One for water tank, and one for chamber water level check
- Pressure door auto-lock device
- Door close indication: All functions stopped and the door light is on, if the door isn't closed completely.
- Cycle complete indication: Auto-check each working steps condition. The "COMPLETE" indicator will light up, after correct completion of the batch.
- Low water alarm and indication: If there isn't enough water, the "LOW-WATER" indicator will light up, and alarm you.
- Pre-heating program: Pre-heating by dry heater, which not only keeps the chamber temperature in balance, but also offers the perfect dry function.
- Chamber pressure with double protection: The chamber is protected by a pressure switch and steam pressure safety valve.
- Vacuum/Pressure release key: Pushing this key, will cut-off the power supply and exhaust the chamber pressure or release the chamber vacuum, at the same time.
- Safety functions such as door lock, over heat protection, water tank level sensor, chamber water level sensor are equipped as standard.
- Power supply: 230 V, 50/60 Hz
- Inclusive bottom plate

HMT 230FA/HMT 260FA

- Installed 8 programs and special programs for Liquid sterilisation for your selection
- Sterilisation temperature: 105 °C to 135 °C
- HMT 230 FA-R and HMT 260 FA-R are certified according to Medical Device Directive as N-class autoclaves

HMT 230MA/260MA/300MA

- Pre-vacuum function: Offer the excellent sterilisation result.
- Dry-vacuum function: To offer the perfect dry result.
- 24 Installed programs and special programs for Prion sterilisation, Liquid sterilisation, Bowie-Dick test, Pump test programs for your selection.
- Sterilisation temperature: 121 °C to 134 °C
- HMT 230MA-R/HMT 260MA-R/HMT 300MA-R are certified according to Medical Device Directive as S-class autoclaves

HMT 260MB Klasse-B

- Pre-vacuum function: Offer the excellent sterilisation result.
- Dry-vacuum function: To offer the perfect dry result.
- 10 installed programs: 5 sterilisation programs, 1 customized program for your selection, 3 test programs, drying program
- Sterilisation temperature: 105 °C to 135 °C
- HMT 260MB is certified according to Medical Device Directive as B-class autoclaves

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4.655 166

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Type	Capacity	Chamber diam. x depth	Width	Length	Height	Rating	PK	Cat. No.
	Litres							
HMT 230FA	16	230 x 410	522	594	410	1.9	1	6.237 578
HMT 230FA-R*	16	230 x 410	522	594	410	1.9	1	4.655 158
HMT 260FA	24	260 x 450	533	655	442	2.4	1	7.980 101 1
HMT 260FA-R*	24	260 x 450	533	655	442	2.4	1	4.655 159
HMT 230 MA	16	230 x 410	522	594	410	1.9	1	4.655 160
HMT 230 MA-R*	16	230 x 410	522	594	410	1.9	1	4.655 161
HMT 260 MA	24	260 x 450	533	655	442	2.4	1	4.655 162 2
HMT 260 MA-R*	24	260 x 450	533	655	442	2.4	1	4.655 163
HMT 300 MA	40	300 x 570	620	900	489	3.2	1	4.655 164 3
HMT 300 MA-R*	40	300 x 570	620	900	489	3.2	1	4.655 165
HMT 260MB	24	260 x 450	553	665	440	2.7	1	4.655 166 4
HMT 300MB	40	300 x 570	620	766	489	2.3	1	6.287 544 5
HMT 300MB with sensor	40	300 x 570	620	766	489	2.3	1	6.287 545

*with recorder

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9.842 412

Steam sterilizers (autoclaves), HG series

HMC-EUROPE

- fully automatic, microprocessor controlled
- 12 standard programmes installed
- timer-controlled, night programme
- overnight sterilization does not heat up the laboratory
- agar programme with thermostatic heating for agar production
- liquids programme with removal temperature of 95 °C
- low feed water consumption
- electronic pressure switch, pressure and temperature control
- exhaust reservoir for condensate, this prevents fogging and unpleasant odours
- drain valve for easy cleaning of sterilization chamber
- bottom plate for baskets and cans
- air-cooling at the press of a button
- lid-opening and lid-closing by press-button
- mounted on wheels, cleaning is possible even under the autoclave
- safety: electromechanical safety sealing system, relief vent, low water switch, overpressure safety device, overheat protection power supply cut-out, audible and visual error alarms.
- with USB port
- Loadmaster lifting device available on request

Models with special equipment:

HGS 113/HGS 133: steam generator, automatic water feeding, water cooling

HGD 113/HGD 133: steam generator, automatic water feeding, water cooling, vacuum pump

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9.842 416

Specifications

Automatic start:	1 minute to 7 days, Night programme
Time of sterilization:	1 to 300 mins.
Power supply:	220-240 V a.c.
Sealing:	at the push of a button, fully automatic
Boiler material:	SUS304 (rust resistant, stainless steel)

Type	Capacity	External dimensions (W x D x H) mm	Chamber Dimensions (diam. x H) mm	Rating W	Working Temp. range °C	Pressure bar	Weight kg	PK	Cat. No.
	Litres								
HG 50	50	455 x 691 x 890	364 x 482	3000	105 to 135	2.5	62	1	9.842 410
HG 80	80	455 x 691 x 1030	364 x 730	3800	105 to 135	2.5	73	1	9.842 411
HG 113	108	686 x 870 x 930	500 x 552	4700	105 to 135	2.5	137	1	9.842 412 1
HG 133	129	686 x 870 x 1034	500 x 656	6200	105 to 135	2.5	145	1	9.842 413
HGS 113	113	686 x 870 x 930	500 x 576	6800	105 to 135	2.5	153	1	9.842 414
HGS 133	133	686 x 870 x 1034	500 x 680	7100	105 to 135	2.5	161	1	9.842 415
HGD 113	113	686 x 870 x 930	500 x 576	8400	105 to 135	2.5	184	1	9.842 416 2
HGD 133	133	686 x 870 x 1034	500 x 680	8700	105 to 135	2.5	192	1	9.842 417

Accessories for HG series steam sterilisers

HMC-EUROPE

Description	Dimensions (dia. x H) mm	PK	Cat. No.
Charging basket A for HG 113/133	470 x 219	1	6.266 417
Charging basket A for HG 113/133, closed bottom	470 x 219	1	6.259 903
Charging basket B for HG 113/133	470 x 269	1	6.266 418
Charging basket B for HG 113/133, closed bottom	470 x 269	1	6.266 419
Charging basket C for HG 113/133	470 x 314	1	7.980 484
Charging basket C for HG 113/133, closed bottom	470 x 314	1	7.980 485
Lifting equipment Loadmaster for HG 113/133		1	6.266 420
Built-in printer HG		1	6.251 590
Flexible temperature sensor		1	9.842 420
Automatic water supply		1	9.842 421
Exhaust air filter for sterilisation		1	9.842 422
Stainless steel sterilising basket	338 x 220	1	9.842 423 3
Stainless steel sterilising basket with bottom	338 x 220	1	9.842 424 4
Stainless steel sterilising can	330 x 185	1	9.842 425 5
Process documentation software, Segosoft®		1	9.842 426

Further accessories for models 113 and 133 available on request.

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9.842 423

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1 Autoclave thermometer



Bel-Art Products

Durable bi-metal thermometer with a maximum registering pointer (red), moved up by the temperature measuring pointer, (black), to indicate the highest temperature achieved, and remains there until it is manually reset.

- Traceable to NIST Standard
- Threaded connection (1/4" NPT), screws directly into in-line processes, can be used to mount thermometer on included stand
- Waterproof and pressurised, withstands autoclave cycles and has a removable protective silicone sleeve to prevent moisture from making contact with the dial
- Constructed from 304 stainless steel with a glass lens; withstands pressure, high temperatures and rust
- Tested and inspected in the USA
- Includes a multi-language (English, French, German, Italian, Portuguese, and Spanish) Statement of Accuracy and instructions
- Available as an option with an individual Thermometer Calibration Report

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Specifications

Measuring range: -20 to +150 °C
 Probe length: 50 mm

Description	PK	Cat. No.
Autoclave thermometer	1	6.287 577

2 Biological Indicators Attest™ for control of steam autoclaves



3M Deutschland

Biological control involves the use of indicators, which check whether all microorganisms were killed during the sterilisation process. The bio-indicators are unique, as they directly indicate how many microbial spores have actually been killed. Thanks to the reliability and quality of the information, the regular use of a bio-indicator can lead to an improvement in the performance of the sterilization process and thus to better results.

Features:

- No external laboratory is required for performance evaluation
- Easy handling
- Reasonable to use after repairs or maintenance of autoclaves

Application:

- Program 3.5 minutes, holding time at 121 °C or 134 °C
- After sterilization, break the vial in order to bring the nutrient solution into contact with the spore strip
- Results in 48 hours
- Meets EN ISO 11138 standard

2



Type	PK	Cat. No.
Biological Indicators Attest™ for steam autoclaves	100	6.089 578

3 4 Screw Cap GL 45 with temperature probe holder, DURAN®

DURAN Group

The DURAN® temperature probe holder GL 45 consists of a stainless steel holder that is permanently fitted into a blue DURAN® polypropylene GL 45 cap. The holder will accept the 6.0 mm metal temperature measuring probes that are commonly used in laboratory autoclaves and sterilizers.

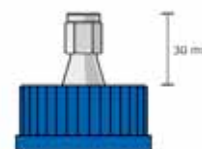
Applications:

- Routine sterilization /autoclave cycles
- "Loaded Chamber heat penetration" tests during Performance Qualification (PQ)
- Performance tests after autoclave maintenance or repair

Features:

- Usable with DURAN® original GL 45 laboratory bottles (1000 ml or less).
- The depth of the probe can be adjusted to suit the bottle size
- Adjustable ferrule suitable for 6.0 mm diameter probes
- Retrace code for product traceability and downloadable certificate
- Easy positioning of the sensor in the middle of the bottle

3



4



Type	PK	Cat. No.
Screw Cap GL 45	1	9.072 178



1 2 Screw Cap GL 45 thermocouple holder, DURAN® NEW

The DURAN® Screw Cap GL 45 thermocouple holder consists of a holder fitted into a blue DURAN® polypropylene GL 45 cap that accepts up to three separate thermocouple wires used in autoclaves or sterilizers.

DURAN Group

Applications

- "Loaded Chamber heat penetration" tests during Performance Qualification (PQ)
- Routine sterilization /autoclave cycles
- Performance tests after autoclave maintenance or repair

Features

- Usable with DURAN® original GL 45 laboratory bottles (1000 ml or less).
- The 240 mm PTFE tube may be cut to length
- Suitable for holding up to three separate thermocouple wires (Conductor sizes 1/0.3 mm, 1/0.5 mm or 7/0.2 mm)
- Retrace code for product traceability and downloadable certificate

Description	PK	Cat. No.
Screw Cap GL 45 thermocouple holder	1	9.072 179



3 Autoclave deodorant Anabac® interscience

Laboratories are very concerned about hygiene, cleanliness and comfort in the workplace. Try Anabac® autoclave deodorant balls to improve the working environment in the laboratory. These autoclave deodorant balls bring a discrete scent that speaks of cleanliness.

Type	Description	PK	Cat. No.
Classic	Mint and eucalyptus fragrance	100	6.228 599
Poma	Apple fragrance	100	6.231 161
Citrus	Lemon fragrance	100	6.231 720
Floral	Flower fragrance	100	7.626 764
Peach	Peach fragrance	100	7.626 766



4 Indicator tape for steam, hot air and gas sterilisation

Crepe paper, adhesive. With indicator. Colour changes according to DIN EN ISO 11140-1. Rolls of 50 m.

With	colour change	Width mm	Figure	PK	Cat. No.
Steam indicator, lead free	green / black	18	a	1	9.140 787
Steam indicator, lead free	green / black	24	a	1	9.140 788
Steam indicator	white / brown	19	b	1	9.140 784
Steam indicator	white / black	25	b	1	9.140 789
Steam indicator, strongly adhesive, for non-woven fabric	white / black	19	c	1	9.140 790
Steam indicator, strongly adhesive, for non-woven fabric	white / black	25	c	1	9.140 791
Ethylene oxide indicator	red / green	19	d	1	9.140 792
Hot air indicator	green / brown	19	e	1	6.240 223

➔ Disposal bags - please see page 244.