

STERILISATION

DESINFECTION

PROTECTION



Dear customers and business partners,

I am pleased to present our new general catalogue for laboratory equipment. Our product range includes a wide selection of high-quality equipment and systems that meet the highest standards of reliability, precision and safety. Whether you run a small laboratory or are part of a large research team, you will find the right solutions to meet your requirements.

We are specialists in steam sterilisers, which we have been developing and producing ourselves for over 40 years under the brand name VARIOKLAV®. These devices meet the highest requirements for the sterilisation of laboratory materials and are available in various sizes and designs.

In addition, we also offer BioVanguard® brand safety cabinets and DCX® disinfection devices for aerogenic room air and surface disinfection. Our products are characterised by the highest quality and effectiveness and help to ensure that your laboratory can work safely and hygienically.

Of course, we also offer comprehensive maintenance and service for all types of equipment to ensure that your equipment is always in perfect condition and is available to you reliably and for the long term. A comprehensive range of accessories and consumables completes our offering.

We are proud to offer you top products and services for laboratory hygiene, safety, sterilisation and disinfection.

Our team of experienced professionals is available to assist you in choosing the right equipment and to help you with any questions or problems you may have.

We thank you for your interest in our products and look forward to providing you with high quality solutions for your laboratory needs.



Axel Haschkamp  
Managing Director



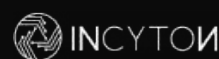
## HP TECHNOLOGY GROUP

The companies of the HP TECHNOLOGY GROUP develop and produce medical devices and laboratory technology for microbiological laboratories, food manufacturers, pharmaceutical companies, research institutes and educational institutions or military organisations.

The group of companies bundles experience and competence and offers complete solutions at the highest quality level. Thanks to knowledge exchange and technology transfer, VARIOKLAV sterilisers are among the best-selling sterilisers in Germany and the AEMP systems are unique worldwide.



HP TECHNOLOGY GROUP



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**Experience since 1979**



**Quality Made in Germany**

Long durability



**Sustainable**

by DIN EN ISO 9001 / 14001

# BASICS OF STEAM STERILISATION

## GENERAL TERMS

**CONTAMINATION:**

Products or items that are not sterile

**DISINFECT:**

Killing pathogens

**STERILISATION:**

Complete sterilisation, killing of micro-organisms including their dormant state

**INACTIVATION:**

Complete destruction of the biological activities of microorganisms (microbiological entity capable of reproducing or transferring genetic material).

**STEAM STERILISATION:**

Steam sterilisation is a very effective, environmentally friendly method that can be used for almost all goods to kill microorganisms using steam above atmospheric pressure.

Usually, a temperature of 121 °C is used with an exposure time of 20 minutes.

Very dangerous or thermoresistant germs are killed at 134 °C and an exposure time of 15 minutes.



## PROCEEDINGS

**AUTOClave:**

Apparatus in which materials, utensils and equipment are exposed to steam above atmospheric pressure and thereby sterilised.

**GRAVITY PROCESS:**

The air in the sterilisation chamber is displaced by the incoming steam downwards out of the chamber via a valve, generally in the liquid programme.

**PRESSURE CHANGE METHOD:**

The sterilisation chamber is filled with steam several times until the specified operating pressure is reached, on standard models in the instruments / waste programme.

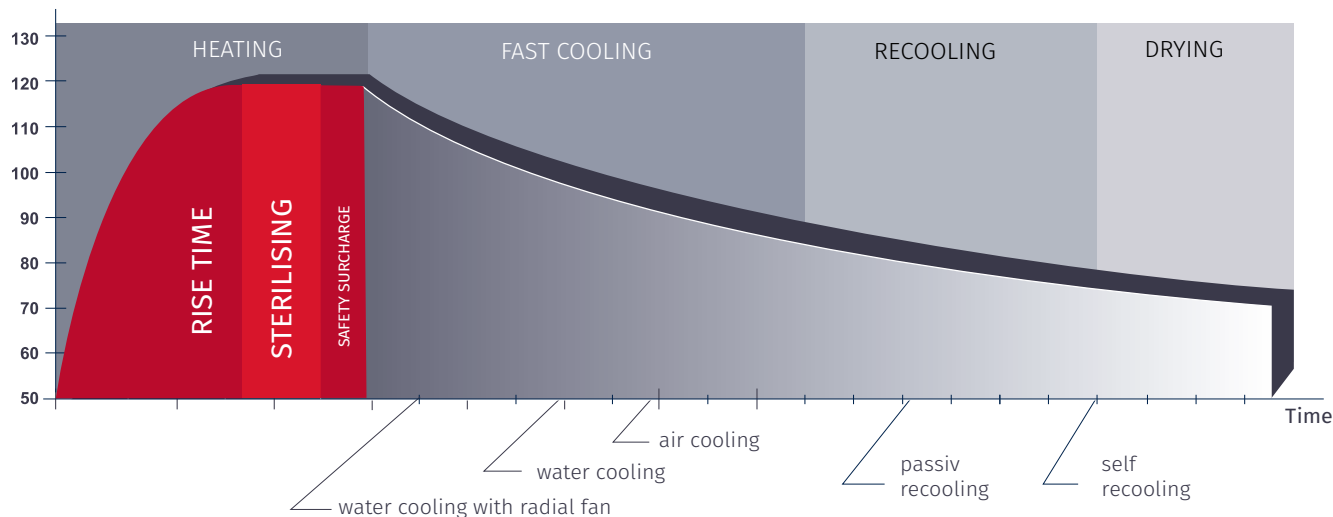
**VACUUM METHOD:**

The sterilisation chamber is evacuated and filled with steam until the working pressure is reached.

**VACUUM WITH DRYING:**

The sterilisation chamber is evacuated and heat is supplied via the chamber jacket at the same time.

Media temperature in C°



## PROGRAMMES

### LIQUIDS I

For liquid laboratory waste, forced cooling

### LIQUIDS II

Low-loss, for larger liquid volumes

### INSTRUMENTS

For instruments, glass, devices

### WASTE

For mixed loads, laboratory waste with low liquid content

### EMPTYING PROGRAMME

For cleaning the steam generator (BlueLine only)

### PREHEATING PROGRAMME

for constant operational readiness (BlueLine only)



## AREAS OF APPLICATION

### MICROBIOLOGY LABORATORY:

- Sterilisation of liquids
- Production of culture media
- Sterilisation of infectious laboratory waste
- Sterilisation of genetically modified substances

### PRODUCTION

- Production of sterile medical and pharmaceutical products

### INDUSTRY

- Pressurised climate chamber for long-term tests



## Powerful autoclaves for laboratories, medical practices and clinics

The VARIOKLAV® BlueLine offers high-quality steam sterilisers that are ideally equipped for all routine tasks in a microbiology laboratory:

Autoclaving liquids, solids or culture media safely, precisely, validatably and reproducibly.

Our steam sterilisers work quickly and reliably and offer plenty of space for instruments and bulky sterilisation items.

## Free-standing units

Our solid VARIOKLAV® floor-standing units offer the largest possible usable volume with the smallest footprint. The low working height allows the user to load and unload the autoclave comfortably from above.

The separate steam generator prevents contamination of the feed water by condensate, waste or media. The sterilisation chamber is therefore free of heating elements and feed water.

The compressed air supply for the seal control circuit, safety interlock and pneumatic control valves is completely self-sufficient.

## All advantages at a glance

- Separate steam generation
- Thermal barrier for liquids
- Self-sufficient compressed air supply
- Low feed water consumption despite high flow rate
- Easy-to-clean sterilisation chamber without internal heating elements and feed water
- Slim design
- Can optionally be equipped with lift, vacuum, cooling, drying, filtration, documentation and media temperature control modules
- All components of our sterilisers are optimised for the longest possible durability

## Table-top devices

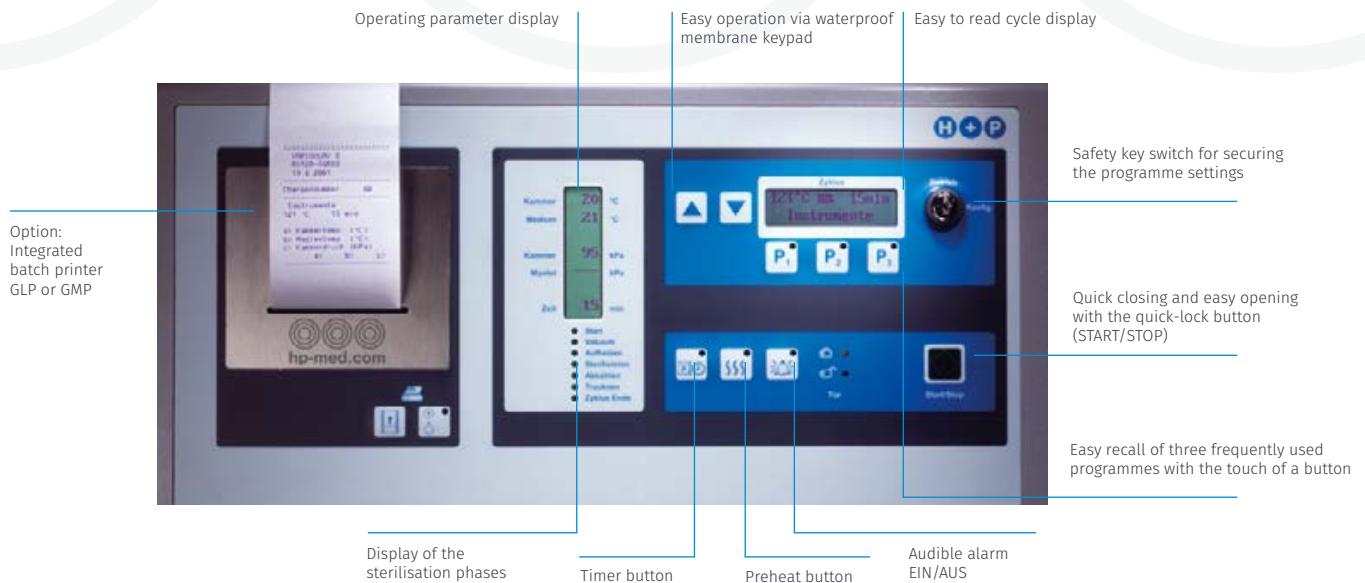
VARIOKLAV® table-top autoclaves impress with their outstanding capacity on a very small footprint: Our compact table-top autoclaves are equipped with space-saving swing doors. Thanks to the particularly space-saving design, there are neither heating elements nor feed water inside the chamber, which makes cleaning the chamber particularly easy.

The table-top autoclave can be installed at almost any height allowing comfortable loading and unloading of the chamber at any height, and unloading of the chamber is possible at any height.



Floor-standing units  
with capacities from  
75 to 175 litres

Table-top units with  
capacities from  
25 to 195 litres



\*\*\*NEW\*\*\*  
TOUCH DISPLAY  
CONTROL UNIT  
AVAILABLE FROM 2024  
\*\*\*NEW\*\*\*



## Touch-display control unit

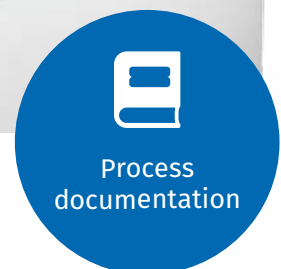
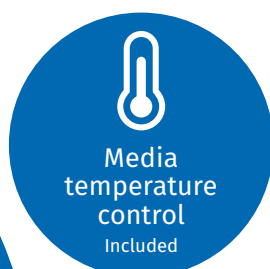
Operation via the new touch display is intuitive and convenient. Clear and simple icons, pre-configured sterilisation programmes or individually adapted programme sequences enable a validated sterilisation process.

- 10-inch multi-touch display
- 16 programmes incl. F0 value calculation
- Remote maintenance
- User administration
- Internal device memory (1 GB)

## Module options

The BlueLine autoclaves can be equipped with numerous module options. Choose between modules for recooling and rapid recooling, vacuum and vacuum drying, emission-free sterilisation, process documentation and media temperature and media temperature control to adapt your autoclave optimally to your routine work.

### VARIOKLAV MODULES



# VARIOKLAV®

## BlueLine.



### Media temperature control

#### Media temperature control

No overheating, higher media quality, exact sterilisation.

The media temperature is controlled via a flexible temperature sensor, directly in the reference vessel. This module option thus guarantees efficient and precise autoclaving by automatically triggering the sterilisation time via the media temperature.

##### Media temperature control MT

###### Temperature-controlled high-precision sterilisation

- Flexible temperature sensor directly in reference vessel ensures precise, temperature-controlled sterilisation
- Set temperature is reliably reached
- Rapid cooling integrated in the RM and RG cooling module



### Documentation

#### Traceability of the sterilisation process

Integrated printers and the SegoSoft® software log the compliant documentation the sterilisation process parameters of the autoclaves.



### Process documentation

##### GLP Batch Printer

###### Conformity through data recording of process data

- Documents batch no. with date, process steps, starting from start to stop, e.g. chamber temperature, chamber pressure and possible alarm messages, filter count
- Recommended for safety level 2

##### IMS GMP batch printer

###### For complete documentation of release information

- Like GLP printer with documentation of batch number, date and process steps
- In addition, temperature and pressure data from control-independent reference sensors calibrated to ISO 9000 are recorded and shown on the display
- Suitable for protection class 3

### Emission-free sterilisation

#### With condensate sterilisation, for safe sterilisation of hazardous substances

Exhaust air filtration with condensate sterilisation enables safe, emission-free sterilisation of hazardous biological materials and media, including pathogens, infectious material and genetically modified samples. The environment and the wastewater system are protected from contamination.



### Emission-free sterilisation

##### FA Module exhaust air filtration

###### For safe sterilisation of hazardous substances

- Aerosols in the exhaust air are already retained by a filter during the heating phase
- Simultaneous sterilisation of chamber contents, condensate and filter housing including filter
- Sterilisation chamber and floor or rear wall are heated with steam from the outside on all sides
- Dead space-free drain valve in the chamber floor ensures contamination-free disposal of the condensate





# Modules

The modular design of our steam sterilisers also offers you the option of equipping your unit individually for a wide range of requirements.



## Recooling for liquids

### Fast cooling

#### Sterilisation of liquids and culture media with high throughput

The cooling modules significantly reduce the cooling time of the autoclaves. This enables a higher throughput in batch processing. Depending on the process and loading of the autoclave, cooling times between 5 and 80 minutes are achieved.

#### RM cooling module for fast cooling

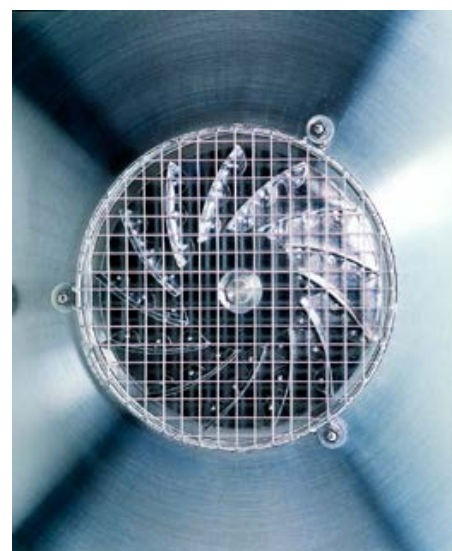
For sterilisation of liquids in open vessels

- Stainless steel water cooling jacket integrated in sterilisation chamber without limiting the loading capacity of the autoclave
- Media temperature control MT incl. media temperature sensor
- Up to 40% shorter cooling time
- Advantageous for thermolabile culture media, adjustable removal temperature, sterile ventilation

#### RG cooling module for rapid cooling

For liquids in open and pressure-tight sealed vessels

- RM cooling module - extended by a powerful radial blower and support pressure system with sterile compressed air
- Ideal for temperature-sensitive media



## Pre-vacuum and vacuum drying

Sterilisation of waste, solids and porous materials

A pre-vacuum module for VARIOKLAV autoclaves ensures the safe sterilisation of porous materials and items that are difficult to vent. An additional vacuum drying module enables the removal of dry, sterile-ventilated materials.



## Pre-vacuum and vacuum drying

#### VF module fractionated pre-vacuum

For thorough air removal before sterilisation

- Single pre-vacuum or fractionated pre-vacuum cycle for complete air removal. Improves steam penetration into porous materials and thus the quality of sterilisation
- Adjustable vacuum depth and number of pressure cycles allow economical processes for complete steam penetration

#### VT module vacuum drying

Prevents contamination of the sterile material after the drying phase

- VF module extended by drying in pulsed deep vacuum with powerful steam heating integrated in the double jacket, eliminates residual moisture



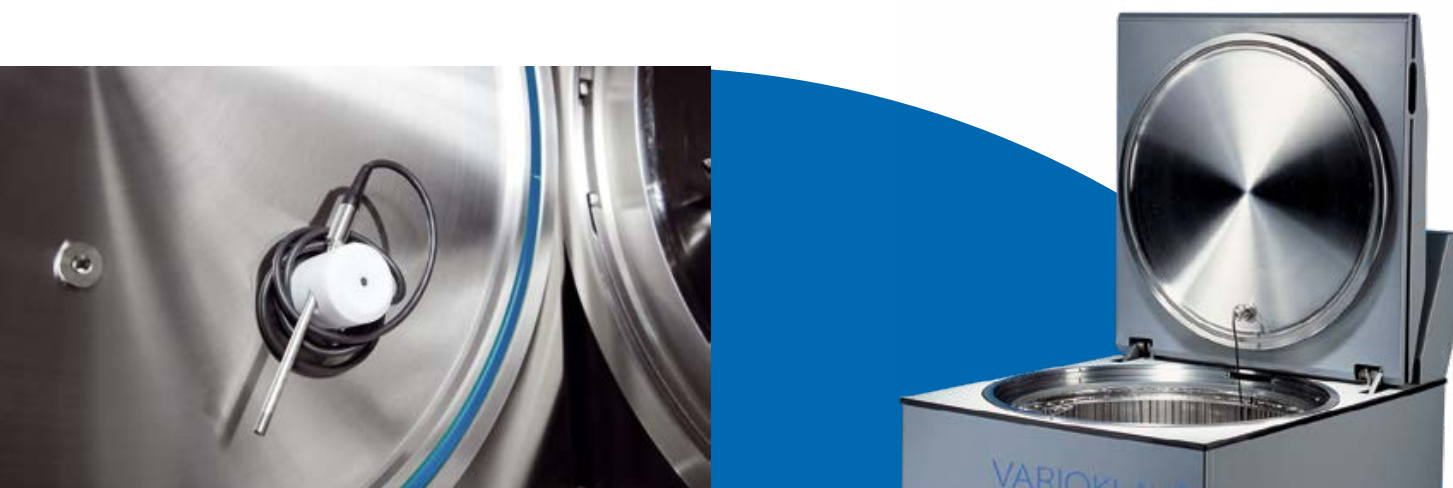
# VARIOKLAV<sup>®</sup>

## BlueLine.

Art.No.	VARIOKLAV BlueLine 75 S   100 S	
51024301	<b>BlueLine 75 S</b>	Steam steriliser, floor standing - basic version, usable space 75 litres, (ØxL) 400x600 mm, 4,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding
51902900	<b>BlueLine 100 S</b>	Steam steriliser, stand-alone basic version, usable space 100 litres, (ØxL) 400x800 mm, 4,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding

	DEVICE OPTIONS	
51900825	<b>Enclosure made of stainless steel</b>	Autoclave enclosure made of stainless steel, finely polished, instead of powder coating
51900826	<b>Validation port 6-fold</b>	For up to 6 temperature sensors PT 100, conforming to standards
51900851	<b>Set of castors with parking brake</b>	Castors with parking brake, for portable installation of freestanding units, 1 kit = 4 pieces

	MODULE OPTIONS	
51900818	<b>MT module - media temperature control</b>	Control via temperature of liquids or media, for retrofitting
51900801	<b>RM module - fast cooling</b>	Fast cooling for liquids in open vessels, direct jacket cooling with demineralised water, including MT module - media temperature control and sterile ventilation
51900803	<b>RG module - fast cooling</b>	Fast cooling for liquids in open vessels, including RM cooling module, additionally with sterile support pressure and radial fan for steam circulation, external compressed air connection required
51900805	<b>VF module - fractionated pre-vacuum</b>	For hard-to-vent solid and porous materials in particular hollow bodies and trash in bags, including program for simple pre-vacuum
51900807	<b>VT module - vacuum drying</b>	Including VF module, post-drying with vacuum, double jacket steam-heated, for all solid and porous materials, including sterile ventilation, recommended drying time 15 to 60 min
51900809	<b>FA module - exhaust air filtration</b>	Air filtration with condensate sterilization, for all contaminated sterile goods, recommended for security level L1 (S1), required from security level L2 (S2) by surveillance authority
51900810	<b>GLP batch printer</b>	Integrated, for direct documentation of chamber and media temperature as well as chamber pressure
51900811	<b>GMP batch printer</b>	Integrated, for independent documentation of chamber temperature, media temperature and chamber pressure as well as separate process documentation via double sensors, including calibration certificates according to ISO 9000, GMP compliant
51900827	<b>Sterile air ventilation</b>	Sterile ventilation of the chamber at the end of the sterilization process



Art.No.	VARIOKLAV BlueLine 75 S   100 S
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	SPECIAL PROGRAMS	
51900812	Steam pot program	Including media temperature control
51900813	Durham tube program	Bouillon program, possible from RM module
51900815	Sterilization temperature increase	Sterilization temperature increase to 140°C In saturated steam, for all programs, to 140°C adjustable setpoint

	ACCESSORIES	
50095875	Lifting hoist	For easy loading and unloading, powder-coated, stroke 900 mm, load capacity 40 kg
50097753	Lifting hoist	For easy loading and unloading, stainless steel, stroke 900 mm, load capacity 40 kg
50091747	Wire basket round	(ØxH) 385x260 mm, stackable, max. 2 baskets per device possible
50110034	Wire basket round	(ØxH) 385x248 mm, stackable, max. 2 baskets per device possible, special size
50091196	Wire basket round, with drip tray	(ØxH) 385x260 mm, stackable, tray height 50 mm, max. 2 baskets per device possible
50092106	Metal bucket round	(ØxH) 390x280 mm, stackable, max. 2 buckets per device
50095759	Metal bucket round, with rotating lid	(ØxH) 390x280 mm, not stackable, max. 1 bucket per device
50094348	Desalination cartridge	For water desalination, type 2800, with conductivity meter and hose set
50094349	Desalination cartridge	For water desalination, type 2800, replacement cartridge for alternating operation
50085029	Aquastop	Aquastop, for up to 3 water supply lines leading, completely ready, continuous operation
50107364	Magnetic stirrer	Magnetic stirrer with one stirring point, including stirring bar and external control unit, pressure-tight encapsulated, integrated in the sterilizer, max. 40 litres stirring volume
607430	SegoSoft, SegoSerial module	Digital cycle and process documentation, software and SegoSerial module, RS-232/USB-interface, digital signature according to signature law, incl. cable 3m
609496	SegoSoft, SegoConnect module	Digital cycle and process documentation, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m
609592	SegoSoft, FDA - CFR Part 11	Digital cycle and process documentation FDA conform, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m



# VARIOKLAV®

## BlueLine.

Art.No.	VARIOKLAV BlueLine 135 S   155 S   175 S	
51024302	<b>BlueLine 135 S</b>	Steam steriliser, floor standing - basic version, usable space 135 litres, (ØxL) 500x700 mm, 7,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding
51902901	<b>BlueLine 155 S</b>	Steam steriliser, floor standing - basic version, usable space 155 litres, (ØxL) 500x800 mm, 7,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding
51902902	<b>BlueLine 175 S</b>	Steam steriliser, floor standing - basic version, usable space 175 litres, (ØxL) 500x900 mm, 7,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding

	DEVICE OPTIONS	
51900825	<b>Enclosure made of stainless steel</b>	Autoclave enclosure made of stainless steel, finely polished, instead of powder coating
51900826	<b>Validation port 6-fold</b>	For up to 6 temperature sensors PT 100, conforming to standards
51900851	<b>Set of castors with parking brake</b>	Castors with parking brake, for portable installation of freestanding units, 1 kit = 4 pieces

	MODULE OPTIONS	
51900818	<b>MT module - media temperature control</b>	Control via temperature of liquids or media, for retrofitting
51900801	<b>RM module - fast cooling</b>	Fast cooling for liquids in open vessels, direct jacket cooling with demineralised water, including MT module - media temperature control and sterile ventilation
51900803	<b>RG module - fast cooling</b>	Fast cooling for liquids in open vessels, including RM cooling module, additionally with sterile support pressure and radial fan for steam circulation, external compressed air connection required
51900805	<b>VF module - fractionated pre-vacuum</b>	For hard-to-vent solid and porous materials in particular hollow bodies and trash in bags, including program for simple pre-vacuum
51900807	<b>VT module - vacuum drying</b>	Including VF module, post-drying with vacuum, double jacket steam-heated, for all solid and porous materials, including sterile ventilation, recommended drying time 15 to 60 min
51900809	<b>FA module - exhaust air filtration</b>	Air filtration with condensate sterilization, for all contaminated sterile goods, recommended for security level L1 (S1), required from security level L2 (S2) by surveillance authority
51900810	<b>GLP batch printer</b>	Integrated, for direct documentation of chamber and media temperature as well as chamber pressure
51900811	<b>GMP batch printer</b>	Integrated, for independent documentation of chamber temperature, media temperature and chamber pressure as well as separate process documentation via double sensors, including calibration certificates according to ISO 9000, GMP compliant
51900827	<b>Sterile air ventilation</b>	Sterile ventilation of the chamber at the end of the sterilization process





Art.No.	VARIOKLAV BlueLine 135 S   155 S   175 S
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	SPECIAL PROGRAMS	
51900812	Steam pot program	Including media temperature control
51900813	Durham tube program	Bouillon program, possible from RM module
51900815	Sterilization temperature increase	Sterilization temperature increase to 140°C In saturated steam, for all programs, to 140°C adjustable setpoint
606985	C-waste disinfection	certified procedure (RKI), required module options: VF + RG + FA + GMP, programs for c-waste solid and C-waste liquid

	ACCESSORIES	
50095876	Lifting hoist	For easy loading and unloading, powder-coated, stroke 900 mm, load capacity 40 kg
50097752	Lifting hoist	For easy loading and unloading, stainless steel, stroke 900 mm, load capacity 40 kg
50091748	Wire basket round	(ØxH) 485x200 mm, stackable, max. 3 baskets per device
50099633	Wire basket round	(ØxH) 485x240 mm, stackable, max. 2 baskets per device possible, special size
50092114	Wire basket round	(ØxH) 485x320 mm, stackable, max. 2 baskets per device possible
50092112	Wire basket round, with drip tray round	(ØxH) 485x320 mm, stackable, tray height 50 mm, max. 2 baskets per device possible
50090683	Hanging tray for sterilization baskets	Ø 470 mm, including 4 mounting brackets for further loading level in the basket
50099824	Metal bucket round	(ØxH) 470x310 mm, stackable, max. 2 buckets per device
50095753	Metal bucket round, with rotating lid	(ØxH) 490x345 mm, not stackable, max. 1 bucket per device
50094348	Desalination cartridge	For water desalination, type 2800, with conductivity meter and hose set
50094349	Desalination cartridge	For water desalination, type 2800, replacement cartridge for alternating operation
50085029	Aquastop	Aquastop, for up to 3 water supply lines leading, completely ready, continuous operation
50107364	Magnetic stirrer	Magnetic stirrer with one stirring point, including stirring bar and external control unit, pressure-tight encapsulated, integrated in the sterilizer, max. 40 litres stirring volume
607430	SegoSoft, SegoSerial module	Digital cycle and process documentation, software and SegoSerial module, RS-232/USB-interface, digital signature according to signature law, incl. cable 3m
609496	SegoSoft, SegoConnect module	Digital cycle and process documentation, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m
609592	SegoSoft, FDA - CFR Part 11	Digital cycle and process documentation FDA conform, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m





# VARIOKLAV<sup>®</sup>

## BlueLine.

Art.No.	VARIOKLAV BlueLine 75 T   100 T	
51024303	<b>BlueLine 75 T</b>	Steam steriliser, table-top unit - basic version, usable space 75 litres, (ØxL) 400x600 mm, 4,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding
51902903	<b>BlueLine 100 T</b>	Steam steriliser, tabletop unit - basic version, usable space 100 litres, (ØxL) 400x800 mm, 4,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding

	DEVICE OPTIONS	
51900825	<b>Enclosure made of stainless steel</b>	Autoclave enclosure made of stainless steel, finely polished, instead of powder coating
51900826	<b>Validation port 6-fold</b>	For up to 6 temperature sensors PT 100, conforming to standards

	MODULE OPTIONS	
51900818	<b>MT module - media temperature control</b>	Control via temperature of liquids or media, for retrofitting
51900801	<b>RM module - fast cooling</b>	Fast cooling for liquids in open vessels, direct jacket cooling with demineralised water, including MT module - media temperature control and sterile ventilation
51900803	<b>RG module - fast cooling</b>	Fast cooling for liquids in open vessels, including RM cooling module, additionally with sterile support pressure and radial fan for steam circulation, external compressed air connection required
51900805	<b>VF module - fractionated pre-vacuum</b>	For hard-to-vent solid and porous materials in particular hollow bodies and trash in bags, including program for simple pre-vacuum
51900807	<b>VT module - vacuum drying</b>	Including VF module, post-drying with vacuum, double jacket steam-heated, for all solid and porous materials, including sterile ventilation, recommended drying time 15 to 60 min
51900809	<b>FA module - exhaust air filtration</b>	Air filtration with condensate sterilization, for all contaminated sterile goods, recommended for security level L1 (S1), required from security level L2 (S2) by surveillance authority
51900810	<b>GLP batch printer</b>	Integrated, for direct documentation of chamber and media temperature as well as chamber pressure
51900811	<b>GMP batch printer</b>	Integrated, for independent documentation of chamber temperature, media temperature and chamber pressure as well as separate process documentation via double sensors, including calibration certificates according to ISO 9000, GMP compliant
51900827	<b>Sterile air ventilation</b>	Sterile ventilation of the chamber at the end of the sterilization process

VARIOKLAV<sup>®</sup>  
EXCELLENCE IN AUTOCLAVES



Art.No.	VARIOKLAV BlueLine 75 T   100 T
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	SPECIAL PROGRAMS	
51900813	<b>Durham tube program</b>	Bouillon program, possible from RM module
51900815	<b>Sterilization temperature increase</b>	Sterilization temperature increase to 140°C In saturated steam, for all programs, to 140°C adjustable setpoint

	ACCESSORIES	
50098202	<b>Undercarriage for 75 T</b>	(WxHxD) 532x805x708 mm, with additional shelf, extensible, 2 casters on the back, stainless steel, max. load capacity 300 kg
604791	<b>Undercarriage for 100 T</b>	(WxHxD) 532x805x908 mm, with additional shelf, extensible, 2 casters on the back, stainless steel, max. load capacity 300 kg
51900834	<b>Center shelf</b>	(WxHxD) 360x15x580 mm   (WxHxD) 360x15x580 mm, stainless steel, loading level height adjustable in four positions
50101326	<b>Wire basket cubic</b>	(WxHxD) 300x120x535 mm, stackable, max. 2 buckets per device
50101323	<b>Metal tub cubic</b>	(WxHxD) 350x80x335 mm, stackable, 2 tubs per device
50094348	<b>Desalination cartridge</b>	For water desalination, type 2800, with conductivity meter and hose set
50094349	<b>Desalination cartridge</b>	For water desalination, type 2800, replacement cartridge for alternating operation
50085029	<b>Aquastop</b>	Aquastop, for up to 3 water supply lines leading, completely ready, continuous operation
50107364	<b>Magnetic stirrer</b>	Magnetic stirrer with one stirring point, including stirring bar and external control unit, pressure-tight encapsulated, integrated in the sterilizer, max. 40 litres stirring volume
607430	<b>SegoSoft, SegoSerial module</b>	Digital cycle and process documentation, software and SegoSerial module, RS-232/USB-interface, digital signature according to signature law, incl. cable 3m
609496	<b>SegoSoft, SegoConnect module</b>	Digital cycle and process documentation, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m
609592	<b>SegoSoft, FDA - CFR Part 11</b>	Digital cycle and process documentation FDA conform, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m



Art.No.	VARIOKLAV BlueLine 135 T   155 T   175 T   195 T	
51024304	<b>BlueLine 135 T</b>	Steam steriliser, tabletop unit - basic version, usable space 135 litres, (ØxL) 500x700 mm, 7,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding
51902904	<b>BlueLine 155 T</b>	Steam steriliser, tabletop unit - basic version, usable space 155 litres, (ØxL) 500x800 mm, 7,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding
51902905	<b>BlueLine 175 T</b>	Steam steriliser, tabletop unit - basic version, usable space 175 litres, (ØxL) 500x900 mm, 7,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding
51902906	<b>BlueLine 195 T</b>	Steam steriliser, table-top unit - basic version, usable space 195 litres, (ØxL) 500x1,000 mm, 7,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, integrated ADI exhaust steam condenser, hot-dip galvanised and powder-coated cladding

	DEVICE OPTIONS	
51900825	<b>Enclosure made of stainless steel</b>	Autoclave enclosure made of stainless steel, finely polished, instead of powder coating
51900826	<b>Validation port 6-fold</b>	For up to 6 temperature sensors PT 100, conforming to standards

	MODULE OPTIONS	
51900818	<b>MT module - media temperature control</b>	Control via temperature of liquids or media, for retrofitting
51900801	<b>RM module - fast cooling</b>	Fast cooling for liquids in open vessels, direct jacket cooling with demineralised water, including MT module - media temperature control and sterile ventilation
51900803	<b>RG module - fast cooling</b>	Fast cooling for liquids in open vessels, including RM cooling module, additionally with sterile support pressure and radial fan for steam circulation, external compressed air connection required
51900805	<b>VF module - fractionated pre-vacuum</b>	For hard-to-vent solid and porous materials in particular hollow bodies and trash in bags, including program for simple pre-vacuum
51900807	<b>VT module - vacuum drying</b>	Including VF module, post-drying with vacuum, double jacket steam-heated, for all solid and porous materials, including sterile ventilation, recommended drying time 15 to 60 min
51900809	<b>FA module - exhaust air filtration</b>	Air filtration with condensate sterilization, for all contaminated sterile goods, recommended for security level L1 (S1), required from security level L2 (S2) by surveillance authority
51900810	<b>GLP batch printer</b>	Integrated, for direct documentation of chamber and media temperature as well as chamber pressure
51900811	<b>GMP batch printer</b>	Integrated, for independent documentation of chamber temperature, media temperature and chamber pressure as well as separate process documentation via double sensors, including calibration certificates according to ISO 9000, GMP compliant
51900827	<b>Sterile air ventilation</b>	Sterile ventilation of the chamber at the end of the sterilization process

Art.No.	VARIOKLAV BlueLine 135 T   155 T   175 T   195 T
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	SPECIAL PROGRAMS	
51900813	<b>Durham tube program</b>	Bouillon program, possible from RM module
51900815	<b>Sterilization temperature increase</b>	Sterilization temperature increase to 140°C In saturated steam, for all programs, to 140°C adjustable setpoint

	ACCESSORIES	
50098207	<b>Undercarriage for 135 T</b>	Stainless steel, (WxHxD) 632x800x788 mm, with additional shelf, 2 casters on the back, max. load capacity 300 kg
50101130	<b>Undercarriage for 155 T</b>	Stainless steel, (WxHxD) 632x800x888 mm, with additional shelf, 2 casters on the back, max. load capacity 300 kg
607134	<b>Undercarriage for 175 T</b>	Stainless steel, (WxHxD) 632x800x988 mm, with additional shelf, 2 casters on the back, max. load capacity 300 kg
607131	<b>Undercarriage for 195 T</b>	Stainless steel, (WxHxD) 632x800x1088 mm, with additional shelf, 2 casters on the back, max. load capacity 300 kg
51900835	<b>Center shelf</b>	(WxHxD) 460x15x645 mm   160x15x745 mm   460x15x845 mm   460x15x945 mm, loading level height adjustable in four positions, stainless steel
50101327	<b>Wire basket cubic</b>	(WxHxD) 345x170x335 mm, stackable, max. 4 baskets per device
50101325	<b>Metal tub cubic</b>	(WxHxD) 350x80x335 mm, stackable, 4 tubs per device
50094348	<b>Desalination cartridge</b>	For water desalination, type 2800, with conductivity meter and hose set
50094349	<b>Desalination cartridge</b>	For water desalination, type 2800, replacement cartridge for alternating operation
50085029	<b>Aquastop</b>	Aquastop, for up to 3 water supply lines leading, completely ready, continuous operation
50107364	<b>Magnetic stirrer</b>	Magnetic stirrer with one stirring point, including stirring bar and external control unit, pressure-tight encapsulated, integrated in the sterilizer, max. 40 litres stirring volume
607430	<b>SegoSoft, SegoSerial module</b>	Digital cycle and process documentation, software and SegoSerial module, RS-232/USB-interface, digital signature according to signature law, incl. cable 3m
609496	<b>SegoSoft, SegoConnect module</b>	Digital cycle and process documentation, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m
609592	<b>SegoSoft, FDA - CFR Part 11</b>	Digital cycle and process documentation FDA conform, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m



# VARIOKLAV®

## BlueLine.

Art.No.	VARIOKLAV BlueLine 65 T	
51024307	BlueLine 65 T	Steam steriliser, tabletop unit - basic version, usable space 65 litres, (WxHxD) 330x330x630 mm, 9,3 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, hot-dip galvanised and powder-coated cladding, integrated ADI exhaust steam condenser

	MODULE OPTIONS	
51900818	MT module - media temperature control	Control via temperature of liquids or media, for retrofitting
51900801	RM module - fast cooling	Fast cooling for liquids in open vessels, direct jacket cooling with demineralised water, including MT module - media temperature control and sterile ventilation
51900803	RG module - fast cooling	Fast cooling for liquids in open vessels, including RM cooling module, additionally with sterile support pressure and radial fan for steam circulation, external compressed air connection required
51900805	VF module - fractionated pre-vacuum	For hard-to-vent solid and porous materials in particular hollow bodies and trash in bags, including program for simple pre-vacuum
51900807	VT module - vacuum drying	Including VF module, post-drying with vacuum, double jacket steam-heated, for all solid and porous materials, including sterile ventilation, recommended drying time 15 to 60 min
51900809	FA module - exhaust air filtration	Air filtration with condensate sterilization, for all contaminated sterile goods, recommended for security level L1 (S1), required from security level L2 (S2) by surveillance authority
51900810	GLP batch printer	Integrated, for direct documentation of chamber and media temperature as well as chamber pressure
51900811	GMP batch printer	Integrated, for independent documentation of chamber temperature, media temperature and chamber pressure as well as separate process documentation via double sensors, including calibration certificates according to ISO 9000, GMP compliant
51900827	Sterile air ventilation	Sterile ventilation of the chamber at the end of the sterilization process
51900826	Validation port 6-fold	Port for up to 6 temperature sensors PT 100, conforming to standards

	ACCESSORIES	
50085023	Undercarriage 65 T	With additional shelf, 2 castors on the rear side, stainless steel, max. load 300 kg
50085024	Center shelf	(WxHxD) 320x20x600 mm, loading level height adjustable in four positions
50101326	Wire basket cubic	(WxHxD) 300x120x535 mm, stackable, max. 2 baskets per device
50101323	Metal tub cubic	(WxHxD) 290x80x535 mm, stackable, max. 2 tubs per device
607430	SegoSoft, SegoSerial module	Digital cycle and process documentation, software and SegoSerial module, RS-232/USB-interface, digital signature according to signature law, incl. cable 3m
609496	SegoSoft, SegoConnect module	Digital cycle and process documentation, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m
609592	SegoSoft FDA - CFR Part 11	Digital cycle and process documentation FDA conform, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m






Art.No.	VARIOKLAV BlueLine 25 TV	
609469	<b>BlueLine 25 TV</b>	Steam steriliser, table-top unit, usable volume 25 litres, certified pre-owned, (ØxL) 255x490 mm, 3.3 kW, 230V/16A, powerful pre- and post-vacuum, GLP printer, flexible temperature sensor, incl. condensate collection container and trays
609776	<b>BlueLine 25 TV FA</b>	Steam steriliser, table-top unit, usable volume 25 litres, certified pre-owned, (ØxL) 255x490 mm, 3.3 kW, 230V/16A, powerful pre- and post-vacuum, GLP printer, air filtration, flexible temperature sensor, incl. condensate collection container and trays, Safety level 2 capable
	ACCESSORIES	
51900825	<b>Chamber insert tray</b>	Including 1 metal tub, for up to 4 metal tubs
51900826	<b>Metal tub cubic</b>	(WxHxD) 190x30x425 mm, suitable for insert tray order no. 50091319, 3 pieces
50103083	<b>Condensate collector</b>	For waste steam and condensate, 20 litres, made of PE plastic, with stainless steel immersion tube and quick coupling as well as hose set
607430	<b>SegoSoft, SegoSerial module</b>	Digital cycle and process documentation, software and SegoSerial module, RS-232/USB-interface, digital signature according to signature law, incl. cable 3m
609496	<b>SegoSoft, SegoConnect module</b>	Digital cycle and process documentation, software and SegoConnect module, RS-232/ethernet-interface, digital signature according to signature law, incl. cable 3m

VARIOKLAV®  
MedLine



Art.No.	VARIOKLAV MedLine 65 TC	
51024308	<b>VARIOKLAV MedLine 65 TC</b>	<p>Medical device 65 TC, tabletop model, 1 StE, complete, according to EN 285:2009, 65 litres chamber, (WxHxD) 330x330x630 mm, 9.3 kW, 3N~400Vx16A, stainless steel cladding for instruments, textiles, hollow bodies and pharmaceutical products, GMP batch printer, VT modul, sterile air ventilation</p> 

# BlueLine - Lite Complete.

## All the advantages of the BlueLine in a new complete package!

The new, flexible Lite Complete product line offers flexible application options, it is location-independent and immediately ready for use thanks to the integrated supply of operating materials. Compact, space-saving steam sterilizers of 75, 135 or 155 liters, for fast and reliable sterilization of instruments, liquids and waste.

- completely ready for connection
- short delivery times
- low loading height
- space-saving design
- fast loading/unloading

## All advantages at a glance

- free-standing units with 75, 135 and 155 liters capacity
- Sterilization chamber with steam generation in separate raised floor
- hot galvanized and powder coated cladding
- completely equipped and ready for operation with:
  - feed water tank
  - condensate collector
  - wire basket
  - wire basket with collecting tray
- standard programs for liquids, waste and instruments
- no on-site water connection required
- connection to VE water line possible
- exhaust air filtration available for the S2 laboratory



Art.No.	VARIOKLAV BlueLine 75 S LC   135 S LC   155 S LC	
51024305	BlueLine 75 S LC	<p>Steam sterilizer, free-standing unit - basic version, usable volume 75 liters, (ØxL) 400x600 mm, 4,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, hot-dip galvanized and powder-coated cladding.</p> <p>Completely ready for connection with feed water tank, condensate collector, wire basket and wire basket with drip tray.</p>
51902904	BlueLine 135 S LC	<p>Steam sterilizer, free-standing unit - basic version, usable volume 135 Liter, (ØxL) 500x700 mm, 7,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, hot-dip galvanized and powder-coated cladding.</p> <p>Completely ready for connection with feed water tank, condensate collector, wire basket and wire basket with drip tray.</p>
51902905	BlueLine 175 S LC	<p>Steam sterilizer, free-standing unit - basic version, usable volume 155 Liter, (ØxL) 500x800 mm, 7,8 kW, 3N/400V/16A, separate steam generator, media temperature control with flexible temperature sensor, hot-dip galvanized and powder-coated cladding.</p> <p>Completely ready for connection with feed water tank, condensate collector, wire basket and wire basket with drip tray.</p>

Completely ready for connection with feed water tank, condensate collector, wire basket and wire basket with drip tray.



## Advantages

- Long service life due to low-wear fittings
- A large usable volume on a small footprint and a low overall height
- No on-site connections - except for power
- Problem-free installation and fast commissioning
- Simplest handling and operation
- Available module options such as cooling and exhaust air filtration with condensate sterilization

## Safety

- All fittings are found inside the stainless steel cladding
- End plate made of heat-insulating plastic, no risk of injury from hot components
- Central lock with 6 massive locking levers, opening under pressure is completely impossible
- Lid can be opened laterally, no risk of scalding due to rising steam
- Floor-standing units heated from the outside.
- TÜV-approved overheating protection prevents overloading of the heating

## Data recording

- As proof of a successfully completed sterilization process within the scope of quality assurance, the data of the sterilization process can be read out via a separate USB stick.

# GreenLine

## High quality technology

- 100% safety in the elimination of germs
- Pressure vessels are TÜV-tested and manufactured according to the pressure vessel regulation and other European regulations
- CE mark according to the Low Voltage Directive
- Back rotation lock as mechanically acting safety against opening under pressure
- Additional pressure monitoring







## Flexible control unit

- Optimized deaeration process
- Exact set temperature control
- Separate control and safety circuit
- Temperature evaluation in three-wire technology
- Configuring, blocking and enabling sterilization programs
- Data recording via standard USB interface
- Media temperature controlled processes

## Air jacket cooling

- Simple, inexpensive and effective recooling through air flow channels on the outside of the tank
- Cooling time shortened compared to self cooling: even with large vessels by at least 40%
- No additional on-site connections
- No cooling water required

## Exhaust air filtration

- For safe and emission-free sterilization of contaminated, highly infectious or pathogenic materials and media, the exhaust air can be passed through a filter system.
- Any condensate is fed back into the sterilizer.
- The condensate and the filter system are autoclaved.

## Sustainability

- Pressure vessel made of high-quality electropolished stainless steel, also long-lasting when handling aggressive media
- 5 years warranty on the pressure vessel
- Durable heating elements (3 years warranty)
- Very easy exchange of components
- Simple and cost-effective maintenance
- Low resource consumption
- Cardanic locking suspension, thus long durability of the seal
- Long service life due to low-wear fittings



## VARIOKLAV MODULE



Media  
temperature  
control  
included



Fast cooling  
for  
liquids



Exhaust  
steam  
condensator



Emission-free  
sterilisation



Process  
documentation  
included



# VARIOKLAV®

## GreenLine.

Art.No.	VARIOKLAV GreenLine 80 S	
608379	<b>GreenLine 80 S</b>	Steam sterilizer, floor model, basic unit, usable volume 80 litres, (ØxL) 400x600 mm, feed water volume 5 litres, MT module - media temperature control with flexible temperature probe, max. operating pressure -1 (vakuum fixed) up to 2.5 bar, hot galvanized and powder coated cladding

	MODULE OPTIONS	
51900802	<b>RL module - fast cooling</b>	Fast cooling for liquids in open vessels, effective recooling through air flow ducts on the outside of the vessel, no additional on-site connections, no cooling water required
604790	<b>FA module - exhaust air filtration</b>	Air filtration with condensate sterilization, for all contaminated sterile goods, recommended for security level L1 (S1), required from security level L2 (S2) by surveillance authority
608787	<b>ADI - Steam spent condenser</b>	Condensate cooling with tap water, on-site water connection required
50103738	<b>Set of castors with parking brake</b>	For portable installation of freestanding units, 1 kit = 4 pieces

	ACCESSORIES	
609520	<b>Lifting hoist</b>	For easy loading and unloading, stainless steel, stroke 900 mm, load capacity 40 kg
50091747	<b>Wire basket round</b>	(ØxH) 385x260 mm, stackable, max. 2 baskets per device
50110034	<b>Wire basket round</b>	(ØxH) 385x248 mm, stackable, max. 2 baskets per device, special size
50091196	<b>Wire basket round, with drip tray round</b>	(ØxH) 385x260 mm, stackable, tray height 50 mm, max. 2 baskets per device
50092106	<b>Metal bucket round</b>	(ØxH) 390x280 mm, stackable, max. 2 baskets per device
50095759	<b>Metal bucket round, with rotating lid</b>	(ØxH) 390x280 mm, not stackable, max. 1 bucket per device
50089353	<b>Condensate collector</b>	For waste steam and condensate, 20 litres, made of PE plastic, with stainless steel immersion tube and quick coupling as well as hose set
50107364	<b>Magnetic stirrer</b>	One stirring point, including stirring bar and external control unit, pressure-tight encapsulated, integrated in the sterilizer, max. 40 litres stirring volume



VARIOKLAV®  
EXCELLENCE IN AUTOCLAVES

Art.No.	VARIOKLAV GreenLine 140 S   160 S   180 S	
608931	<b>GreenLine 140 S</b>	Steam Sterilizer floor model, basic unit, usable volume 140 litres, (ØxL) 500x700 mm, feed water volume 7 litres, MT module - media temperature control with flexible temperature probe, max. operating pressure -1 (vakuum fixed) up to 2.5 bar hot galvanized and powder coated cladding
608943	<b>GreenLine 160 S</b>	Steam Sterilizer floor model, basic unit, usable volume 160 litres, (ØxL) 500x800 mm, feed water volume 7 litres, MT module - media temperature control with flexible temperature probe, max. operating pressure -1 (vakuum fixed) up to 2.5 bar, hot galvanized and powder coated cladding
608944	<b>GreenLine 180 S</b>	Steam Sterilizer floor model, basic unit, usable volume 180 litres, (ØxL) 500x900 mm, feed water volume 7 litres, MT module - media temperature control with flexible temperature probe, max. operating pressure -1 (vakuum fixed) up to 2.5 bar, hot galvanized and powder coated cladding

	MODULE OPTIONS	
51900802	<b>RL module - fast cooling</b>	Fast cooling for liquids in open vessels, effective recooling through air flow ducts on the outside of the vessel, no additional on-site connections, no cooling water required
604790	<b>FA module - exhaust air filtration</b>	Air filtration with condensate sterilization, for all contaminated sterile goods, recommended for security level L1 (S1), required from security level L2 (S2) by surveillance authority
608787	<b>ADI - Steam spent condenser</b>	Condensate cooling with tap water, on-site water connection required
50103739	<b>Set of castors with parking brake</b>	For portable installation of freestanding units, 1 kit = 4 pieces

	ACCESSORIES	
609367	<b>Lifting hoist</b>	For easy loading and unloading, stainless steel, stroke 900 mm, load capacity 40 kg
50091748	<b>Wire basket round</b>	(ØxH) 485x200 mm, stackable, max. 3 baskets per device
50099633	<b>Wire basket round</b>	(ØxH) 485x240 mm, stackable, max. 2 baskets per device, special size
50092114	<b>Wire basket round</b>	(ØxH) 485x320 mm, stackable, max. 2 baskets per device
50092112	<b>Wire basket round, with drip tray round</b>	(ØxH) 485x320 mm, stackable, tray height 50 mm, max. 2 baskets per device
50090683	<b>Hanging tray for sterilization baskets</b>	(Ø) 470 mm, including 4 mounting brackets for further loading level in the basket
50099824	<b>Metal bucket round</b>	(ØxH) 470x310 mm, stackable, max. 2 buckets per device
50095753	<b>Metal bucket round, with rotating lid</b>	(ØxH) 490x345 mm, not stackable, max. 1 bucket per device
50089353	<b>Condensate collector</b>	For waste steam and condensate, 20 litres, made of PE plastic, with stainless steel immersion tube and quick coupling as well as hose set
50107364	<b>Magnetic stirrer</b>	One stirring point, including stirring bar and external control unit, pressure-tight encapsulated, integrated in the sterilizer, max. 40 litres stirring volume



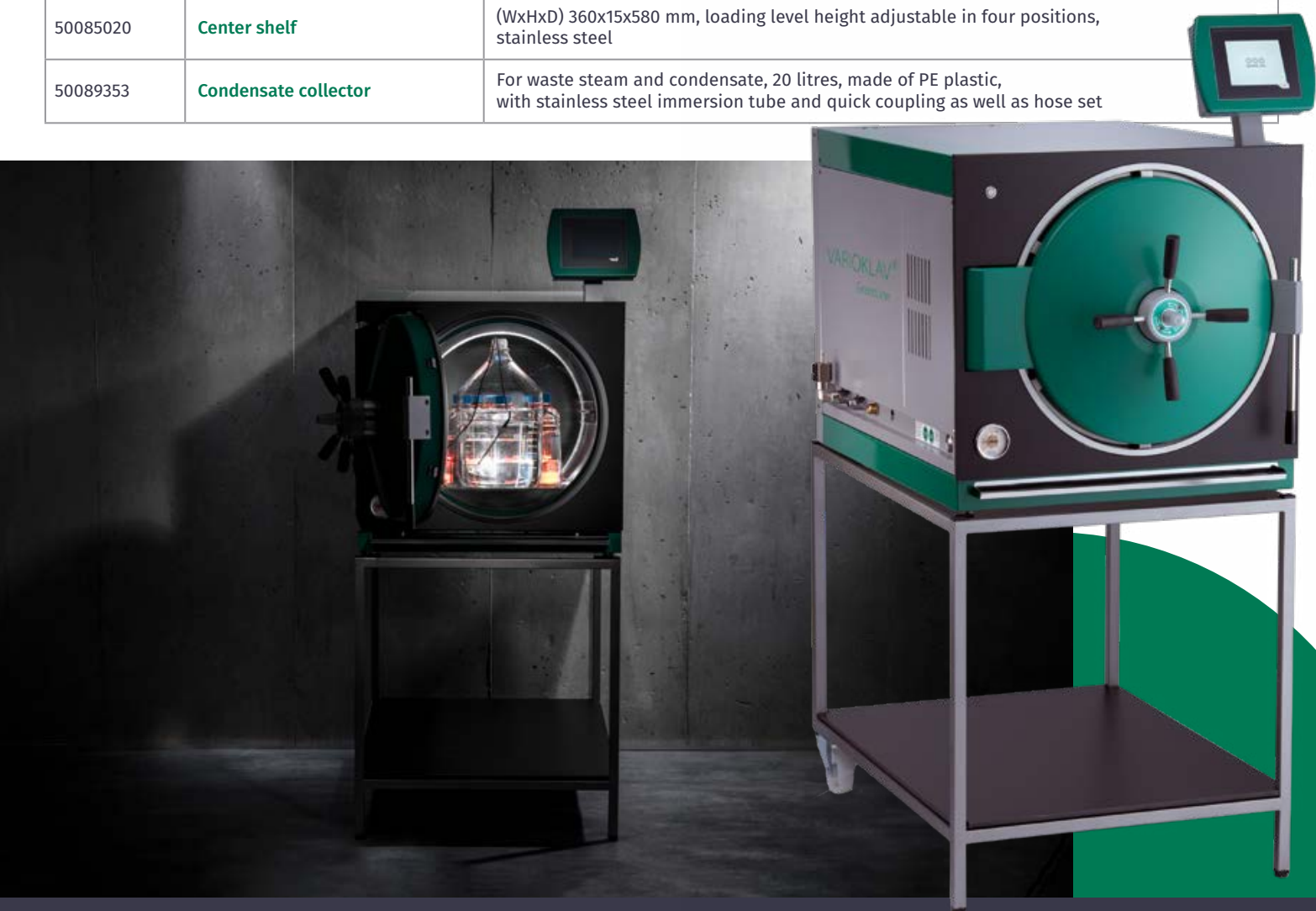
# VARIOKLAV®

## GreenLine.

Art.No.	VARIOKLAV GreenLine 80 T	
608930	<b>GreenLine 80 T</b>	Steam Sterilizer tabletop model, basic unit, usable volume 80 litres, (ØxL) 400x625 mm, feed water volume 5 litres, MT module - media temperature control with flexible temperature probe, max. operating pressure -1 (vakuum fixed) up to 2.5 bar, hot galvanized and powder coated cladding

	MODULE OPTIONS	
51900802	<b>RL module - fast cooling</b>	Fast cooling for liquids in open vessels, effective recooling through air flow ducts on the outside of the vessel, no additional on-site connections, no cooling water required
604790	<b>FA module - exhaust air filtration</b>	Air filtration with condensate sterilization, for all contaminated sterile goods, recommended for security level L1 (S1), required from security level L2 (S2) by surveillance authority
608787	<b>ADI - Steam spent condenser</b>	Condensate cooling with tap water, on-site water connection required

	ACCESSORIES	
609328	<b>Undercarriage 80 T</b>	(BxHxT) 60x80x73 mm, with additional shelf, 2 casters on the back, stainless steel, max. load capacity 300 kg
50101326	<b>Wire basket cubic</b>	(WxHxD) 300x120x535 mm, stackable, max. 2 baskets per device
50085013	<b>Metal tub cubic</b>	(WxHxD) 290x80x535 mm, stackable, max. 2 tubs per device
50085020	<b>Center shelf</b>	(WxHxD) 360x15x580 mm, loading level height adjustable in four positions, stainless steel
50089353	<b>Condensate collector</b>	For waste steam and condensate, 20 litres, made of PE plastic, with stainless steel immersion tube and quick coupling as well as hose set



Art.No.	VARIOKLAV GreenLine 140 T   160 T   180 T   200 T	
608932	<b>GreenLine 140 T</b>	Steam Sterilizer tabletop model, basic unit, usable volume 140 litres, (ØxL) 500x725 mm, feed water volume 8 litres, MT module - media temperature control with flexible temperature probe, max. operating pressure -1 (vakuum fixed) up to 2.5 bar, hot galvanized and powder coated cladding
608946	<b>GreenLine 160 T</b>	Steam Sterilizer tabletop model, basic unit, usable volume 160 litres, (ØxL) 500x825 mm, feed water volume 10 litres, MT module - media temperature control with flexible temperature probe, max. operating pressure -1 (vakuum fixed) up to 2.5 bar, hot galvanized and powder coated cladding
608947	<b>GreenLine 180 T</b>	Steam Sterilizer tabletop model, basic unit, usable volume 180 litres, (ØxL) 500x925 mm, feed water volume 12 litres, MT module - media temperature control with flexible temperature probe, max. operating pressure -1 (vakuum fixed) up to 2.5 bar, hot galvanized and powder coated cladding
608948	<b>GreenLine 200 T</b>	Steam Sterilizer tabletop model, basic unit, usable volume 200 litres, (ØxL) 500x1025 mm, feed water volume 14 litres, MT module - media temperature control with flexible temperature probe, max. operating pressure -1 (vakuum fixed) up to 2.5 bar, hot galvanized and powder coated cladding

	MODULE OPTIONS	
51900802	<b>RL module - fast cooling</b>	Fast cooling for liquids in open vessels, effective recooling through air flow ducts on the outside of the vessel, no additional on-site connections, no cooling water required
604790	<b>FA module - exhaust air filtration</b>	Air filtration with condensate sterilization, for all contaminated sterile goods, recommended for security level L1 (S1), required from security level L2 (S2) by surveillance authority
608787	<b>ADI - Steam spent condenser</b>	Condensate cooling with tap water, on-site water connection required

	ACCESSORIES	
609329	<b>Undercarriage 140 T</b>	(WxHxD) 632x800x790 mm, with additional shelf, 2 casters on the back, stainless steel, max. load capacity 300 kg
609351	<b>Undercarriage 160 T</b>	(WxHxD) 632x800x890 mm, with additional shelf, 2 casters on the back, stainless steel, max. load capacity 300 kg
609352	<b>Undercarriage 180 T</b>	(WxHxD) 632x800x990 mm, with additional shelf, 2 casters on the back, stainless steel, max. load capacity 300 kg
609353	<b>Undercarriage 200 T</b>	(WxHxD) 632x800x1090 mm, with additional shelf, 2 casters on the back, stainless steel, max. load capacity 300 kg
50101327	<b>Wire basket cubic</b>	(WxHxD) 350x170x335 mm, stackable, 4 baskets per device
50101325	<b>Metal tub cubic</b>	(WxHxD) 350x80x335 mm, stackable, 4 tubs per device
50085021	<b>Center shelf</b>	(WxHxD) 360x15x580 mm, loading level height adjustable in four positions, stainless steel
50089353	<b>Condensate collector</b>	For waste steam and condensate, 20 litres, made of PE plastic, with stainless steel immersion tube and quick coupling as well as hose set





## Applications

In the fields of medicine and biology, reliable steamers are considered basic equipment for every laboratory.

They are used for heating, keeping warm and pressureless steaming of all kinds of growth media and are used for testing components, rubber goods and ceramics.

## Control unit

The OrangeLine steamer can be operated unattended with no problems and will signal when the programme has been successfully completed by emitting a removal signal. For unattended operation up to the withdrawal signal with continuously adjustable holding temperatures from 40° to 98 °C or fixed temperature at 98 °C.



VARIOKLAV steam pots are available in two sizes - 95 or 175 litres usable volume

## Structure

- Steam chamber: square usable space, with stainless steel floor support, low loading height, very narrow design, space-saving dimensions.
- Lid: lateral impact prevents scalding by steam, lid inclination to the front allows condensate to drain to the lower edge of the lid.
- Stainless steel lid made of 1.4301 stainless steel



## All advantages at a glance

- Robust and rustproof square steam chamber made of 1.4301 stainless steel
- Chamber volumes of 95 and 175 litres
- Relative humidity of between 10 and 100%
- Infinitely variable temperature setting between 40 and 98 degrees Celsius
- Low working heights starting at 750 millimetres for comfortable loading and unloading of the steam chamber
- Narrow and space-saving design – also suitable for smaller laboratories and practices
- Drainage of the condensate towards the edge of the cover
- No cooling water required for cooling the periphery
- Strategic ventilation in the lowest part of the chamber prevents the formation of air pockets
- In case of insufficient water, the steamer emits visual and audible malfunction signals
- Thermal lock in accordance with TRB 402 for fully automatic switching off of the heating system if there is a lack of water, thus preventing the base from overheating



Art.No.	VARIOKLAV OrangeLine 95 S und 175 S	
51024987	OrangeLine 95 S	Steam pot, floor model, for warming, heating and pressureless steaming of nutrient media, usable volume 95 litres, 3,4 kW, heat holding temperature from 40 °C - 98 °C, incl. radial fan, media temperature control, condensate discharge program
51024989	OrangeLine 175 S	Steam pot, floor model, for warming, heating and pressureless steaming of nutrient media, usable volume 175 litres, 6,2 kW, heat holding temperature from 40 °C - 98 °C, incl. radial fan, media temperature control, condensate discharge program

	MODULE OPTIONS	
51901845	Automatic water supply	With level monitoring

	ACCESSORIES	
50091747	Wire basket round	(ØxH) 385x260 mm, stackable, max. 2 baskets per device
50107364	Magnetic stirrer	Magnetic stirrer with one stirring point, including stirring bar and external control unit, pressure-tight encapsulated, max. 40 litres stirring volume

## Feed water and energy supply

Due to the special design of the radiators, only a feed water supply of less than 0.5 liters is required for each 1 kW of heating capacity. The filling quantity is approx. 8 liters.

This means that work can be carried out over a working day without refilling. Energy consumption for steaming is minimal, as only a small amount of heating power is switched on after the heating phase.

## Heating and cooling

The chamber is heated electrically from the outside by means of contact heating elements. Rising steam heats the articles to be decontaminated. The floor is flat and easy to clean. Heating elements no longer come into contact with aggressive feed water.

The feed water needed to cover the heating surface is kept to a minimum. No cooling water needed for boundary cooling. Deaeration in the lowest part of the chamber prevents the forming of air pockets.

## Radial fan inside the chamber

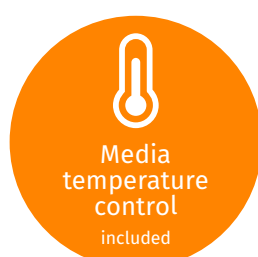
In the heating phase and during tempering, the steam-air mixture is swirled. This avoids different temperatures (hot at the top, cooler at the bottom). The heat transfer into the medium is improved, and the heating time is significantly reduced.

## Dry run protection

The heated surface is equipped with a TÜV approved temperature monitor. In case of water shortage or before overheating of the floor the heating switches off automatically.

Overtemperature protection on each radiator prevents overloading of the heating system. With visual and acoustic malfunction indicator in case of water shortage.

## VARIOKLAV MODULE



# VARIOKLAV<sup>®</sup>

## TECHNICAL DATA

BlueLine free-standing units		75 S	100 S	135 S	155 S	175 S
Usable volume	l	75	100	135	155	175
Usable dimensions (Ø/L)	mm	400/600	400/800	500/700	500/800	500/900
Outer dimensions (W/D/H)	mm	500/650/1000	500/650/1200	600/750/1050	600/750/1150	600/750/1250
Weight of basic unit	kg	140	160	170	190	210
Operating temperature	°C	98° - 135° optional 140°				
Max. Operating overpressure/vacuum	bar	4,0/-1				
Steam generator volume	l	6,0		8,0		
Housing		powder-coated				
Heating capacity	kW	4,5		7,5		
Article number		51024301	51902900	51024302	51902901	51902902

BlueLine table-top units		65 T	75 T	100 T	135 T	155 T	175 T	195 T
Usable volume	l	65	75	100	135	155	175	195
Usable dimensions (Ø/L)	mm	330/630	400/600	400/800	500/700	500/800	500/900	500/1.000
Outer dimensions (W/D/H)	mm	520/700/850	540/810/780	540/1.010/780	640/890/880	640/990/880	640/1.090/880	640/1.190/880
Weight of basic unit	kg	150	150	170	180	205	210	220
Operating temperature	°C	134°	98° - 135° optional 140°					
Max. Operating overpressure/ vacuum	bar	-1/3	4,0/-1					
Steam generator volume	l	6,4	6,4	6,4	8,2	8,2	8,2	8,2
Housing		powder-coated						
Heating capacity	kW	6,4	4,5	4,5	7,5	7,5	7,5	7,5
Article number		51024307	51024303	51902903	51024304	51902904	51902905	51902906

OrangeLine free-standing units		95 S	175 S
Temperature	°C	40° - 98°	40° - 98°
External dimensions (W/H/D)	mm	500/800/620	600/900/720
Loading height	mm	750	850
Usable space dimensions	mm	400 x 400	500 x 500
Usable depth	mm	600	700
usable volume	Liter	95	175
Connected load	kW	3,4	6,2
Voltage / Frequency	V/Hz	230 / 50	3N ~ 400 / 50
Article number		51024987	51024989

GreenLine free-standing units		80 S	100 S	160 S	180 S
Usabe volume	l	75	140	160	180
Feed water volume	l	5	7	7	7
Usable dimensions (Ø/L)	mm	400/600	500/700	500/800	500/900
External dimensions (W/D/H)	mm	600/500/1030	700/600/1130	700/600/1230	700/600/1330
Weight of basic unit	kg	120	160	170	180
Operating temperature	°C	98° - 134°			
Operating overpressure	bar	2,5			
Heat output	kW	3,0	6,0		
Power consumption	kW	3,2	6,2		
Heat dissipation to environment	%	8 - 15 % (% of heat output)			
Design		DIN EN 58951-2			
Protection class		1			
Mains connection		~ 230 V	3N~400 V		
Frequency		50 Hz			
Standards		IP 22			
Article number		608379	608931	608943	608944

GreenLine table-top units		80 T	140 T	160 T	180 T	200 T
Usabe volume	l	72	136	154	172	190
Feed water volume	l	5	8	10	12	14
Usable dimensions (Ø/L)	mm	400/625	500/725	500/825	500/925	500/1025
External dimensions (W/D/H)	mm	600/800/580	700/900/680	700/1000/680	700/1100/680	700/1180/680
Weight of basic unit	kg	120	160	170	180	190
Operating temperature	°C	98° - 134°				
Operating overpressure	bar	2,5				
Heat output	kW	5,0	6,0			
Power consumption	kW	5,2	6,2			
Heat dissipation to environment	%	8 - 15 % (% of heat output)				
Design		DIN EN 58951-2				
Protection class		1				
Mains connection		3N~400 V				
Frequency		50 Hz				
Standards		IP 22				
Article number		608930	608932	608946	608947	608948

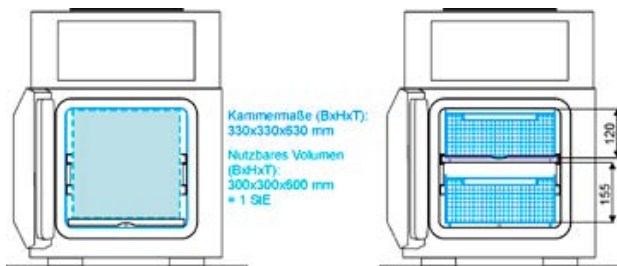
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## LOADING CAPACITIES

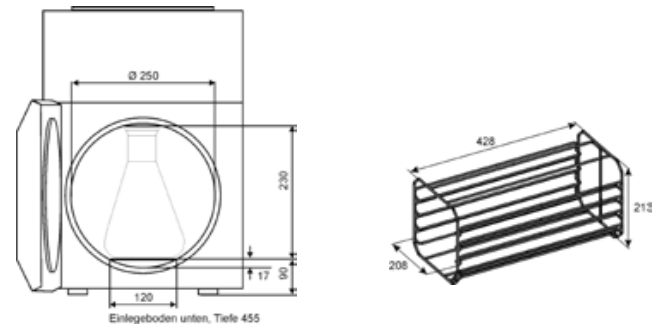
Type	Useful volume (l)	Laboratory flasks					Erlenmeyer-flask (1.000 ml)	Waste Solids (kg)
		Round (500 ml)	Round (1.000 ml)	Round (2.000 ml)	Square (250 ml)	Square (500 ml)		
BlueLine free-standing unit								
BlueLine 75 S	75	45	18	10	80	28	10	≥ 25
BlueLine 100 S	100	60	27	10	100	36	15	≥ 30
BlueLine 135 S	135	66	45	16	140	66	24	≥ 30
BlueLine 155 S	155	66	45	16	140	66	24	≥ 30
BlueLine 175 S	175	≥ 66	≥ 45	≥ 16	≥ 140	≥ 66	≥ 24	≥ 30
BlueLine table-top unit								
BlueLine 25 T	25	6	4	-	14	12	3	≥ 5
BlueLine 65 T	65	21	18	8	90	24	8 - 10	≥ 30
BlueLine 75 T	75	28	15	8	72	28	8 - 12	≥ 25
BlueLine 100 T	100	28	15	8	72	28		≥ 30
BlueLine 135 T	135	64	27	10	100	64	15	≥ 30
BlueLine 155 T	155	64	27	10	100	64	18	≥ 30
BlueLine 175 T	175	≥ 64	≥ 27	≥ 10	≥ 100	≥ 64	21	≥ 30
BlueLine 195 T	195	≥ 64	≥ 27	≥ 10	≥ 100	≥ 64	24	≥ 30



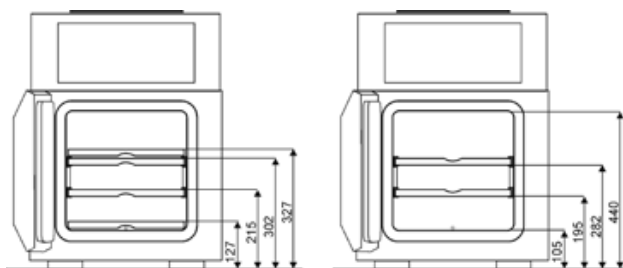




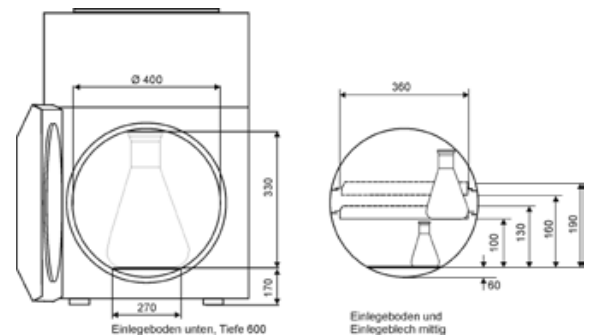
BlueLine 65 T: Use of mesh insert baskets, cubic [mm]



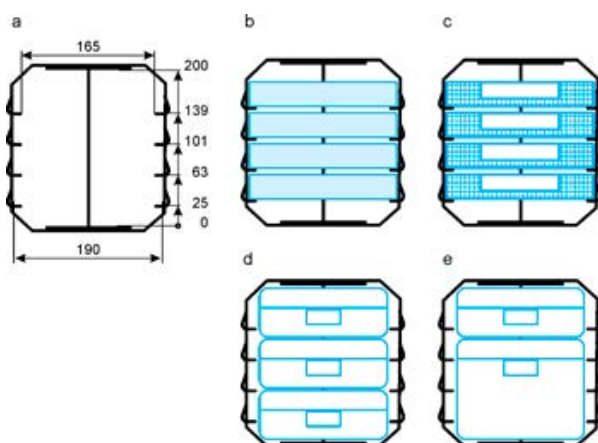
BlueLine 25 T: Capacity (left) and chamber insertion system (right)



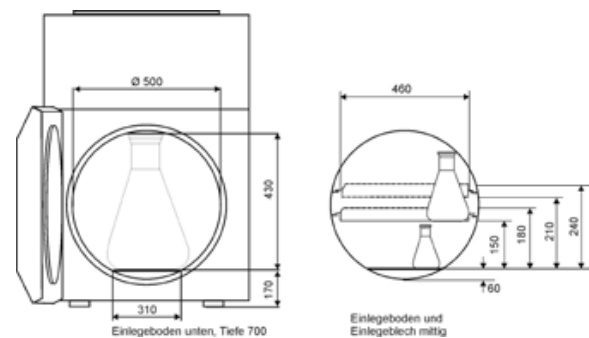
BlueLine 65 T: Loading heights [mm], various insertion options for the shelves



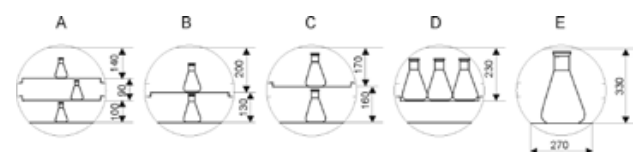
BlueLine 75 T: Loading heights [mm], four insertion options for central insert tray



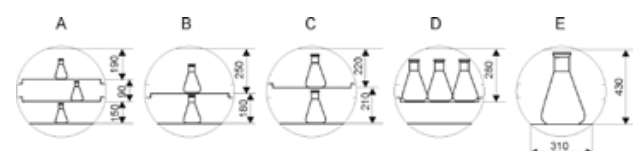
BlueLine 25 TV: Chamber insertion system  
a: rail heights [mm],  
b: with up to 4 insert trays (190 x 425 x 30 mm)  
c: with up to 4 wire mesh trays (186 x 425 x 30 mm)  
d: with up to 3 flat sterilisation containers (162 x 425 x 60 mm)  
e: with one medium-height (162 x 425 x 120 mm) and one shallow and one flat sterilisation load container (162 x 425 x 60 mm).



BlueLine 135 T: Loading heights [mm], four insertion options for central shelf



BlueLine 75 T: Loading heights [mm], various loading schemes



BueLine type 135 T: Loading heights [mm], various loading schemes

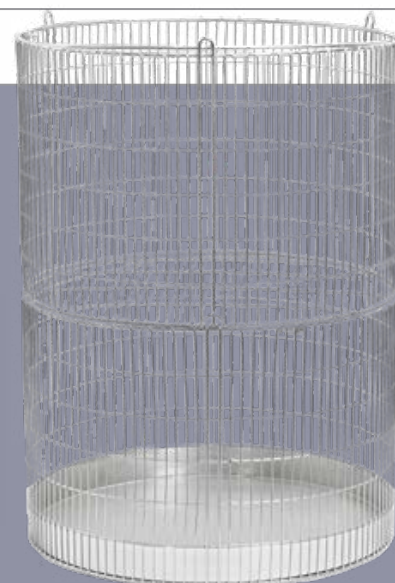
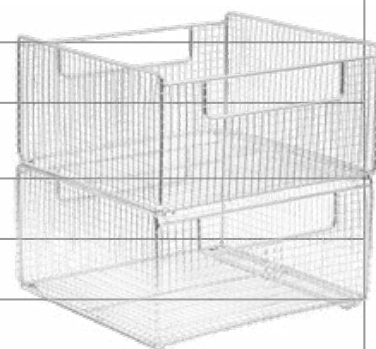
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## ACCESSORIES

Art.No.	Baskets and insert trays for table-top devices	
50101326	Wire basket cubic	(BxHxT) 300x120x535 mm, stackable, max. 2 baskets per unit possible
50101323	Metal tub cubic	(BxHxT) 290x80x535 mm, stackable, max. 2 tubs per unit possible
50101327	Wire basket cubic	(BxHxT) 345x170x335 mm, stackable, max. 4 baskets per unit possible
50101325	Metal tub cubic	(BxHxT) 350x80x335 mm, stackable, max. 4 tubs per unit possible



Art.No.	Baskets and insert trays for floor-standing units	
50091747	Wire basket round	(ØxH) 385x260 mm, stackable
50110034	Wire basket round	(ØxH) 385x248 mm, stackable, special size
50091196	Wire basket round, with drip tray	(ØxH) 385x260 mm, stackable, shell height 50 mm
50092106	Metal bucket round	(ØxH) 390x280 mm, stackable
50095759	Metal bucket round, with rotating lid	(ØxH) 390x280 mm, not stackable
50091748	Wire basket round,	(ØxH) 485x200 mm, stackable
50099633	Wire basket round	(ØxH) 485x240 mm, stackable, special size
50092112	Wire basket round, with drip tray round	(ØxH) 485x320 mm, stackable, shell height 50 mm
50092114	Wire basket round	(ØxH) 485x320 mm, stackable
50099824	Metal bucket round	(ØxH) 470x310 mm, stackable
50095753	Metal bucket round, with rotating lid	(ØxH) 490x345 mm, not stackable



Art.No.	Insert systems and shelves	
50085024	Center shelf	For 65 T, stainless steel, electropolished, loading level adjustable in four positions
51900834	Center shelf	For 75 T   100 T, stainless steel, electropolished, loading level adjustable in four positions
51900835	Center shelf	For 135 T   155 T   175 T   195 T, stainless steel, electropolished, loading level adjustable in four positions
50085020	Center shelf	For 80 T, stainless steel, electropolished, loading level adjustable in four positions
50085021	Center shelf	For 140 T   160 T   180 T   200 T, stainless steel, electropolished, loading level adjustable in four positions
50090683	Suspension device	For mesh insert baskets (Ø) 470 mm, four fastening brackets for additional level in the basket

Art.No.	Loading trolley	
50095735	Loading trolley	for table-top units

Art.No.	Desalination cartridge	
50094348	Desalination cartridge	For water desalination, type 2800, with conductivity meter and hose set
50094349	Desalination cartridge	Replacement cartridge for alternating operation

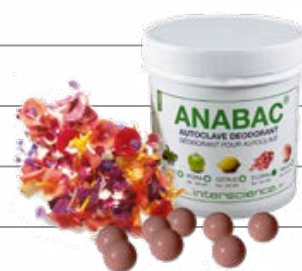
Art.No.	Compressor	
50095723	Air compressor	240V/50Hz, oil-free, for BlueLine module RG without on-site compressed air connection

Art.No.	Lifts	
50095875	Lift BlueLine	for 75 S, for easy loading and unloading, powder coated, stroke 900 mm, max. load capacity 40 kg
50095876	Lift BlueLine	for 150 S   155 S   175 S, for easy loading and unloading, powder coated, stroke 900 mm, max. load capacity 40 kg
609520	Lift GreenLine	for 80 S, for easy loading and unloading, powder coated, stroke 900 mm, max. load capacity 40 kg
609367	Lift GreenLine	for 140 S   160 S   180 S, for easy loading and unloading, powder coated, stroke 900 mm, max. load capacity 40 kg



Art.No.	Flasks	
609761	DURAN YOUTILITY Flask	GL45, clear, screw cap, pouring ring and bottle tag, 1000 ml

Art.No.	Autoclave Deodorant	
6318004	Autoclave Deodorant Anabac	Natural Coconut, PU = 50
6318005	Autoclave Deodorant Anabac	Natural Vanilla, PU = 50
6318006	Autoclave Deodorant Anabac	Natural Mimosa, PU = 50
6228599	Autoclave Deodorant Anabac	Classic, based on eucalyptus extracts, PU = 100
6231161	Autoclave Deodorant Anabac	Poma, based on apple extract, PU = 100
6231720	Autoclave Deodorant Anabac	Citrus, based on lemon extract, PU = 100
7626766	Autoclave Deodorant Anabac	Peach, based on peach extract, PU = 100
6313709	Autoclave Deodorant Anabac	Classic Berry, based on berry fruit, PU = 100



Art.No.	Disposal bag	
6285813	LLG-Disposal bag	500x600 mm, PP, red, 50µm, with Biohazard imprint and sterile indicator, PU = 200
6285814	LLG-Disposal bag	630x890 mm, PP, red, 50µm, with Biohazard imprint and sterile indicator, PU = 200
6285815	LLG-Disposal bag	910x1150 mm, PP, red, 50µm, with Biohazard imprint and sterile indicator, PU = 200

Art.No.	Destruction bag	
9404099	LLG-Destruction bag	200x300mm, standard, PP, 50 µm, PU = 100
9404221	LLG-Destruction bag	400x780mm, standard, PP, 50 µm, PU = 250
9404222	LLG-Destruction bag	500x780mm, standard, PP, 50 µm, PU = 250
9404224	LLG-Destruction bag	700x1100mm, standard, PP, 50 µm, PU = 250
9404020	LLG-Destruction bag	200x300mm, highly transparent, PP, 50 µm, PU = 100
9404100	LLG-Destruction bag	300x500mm, 6 l, highly transparent, PP, 50 µm, PU = 500
9404101	LLG-Destruction bag	400x780mm, 22 l, highly transparent, PP, 50 µm, PU = 500
9404102	LLG-Destruction bag	600x800mm, 32 l, highly transparent, PP, 50 µm, PU = 500
9404104	LLG-Destruction bag	700x1100mm, 72 l, highly transparent, PP, 50 µm, PU = 350





Art.No.	Sterilization tape	
9140783	<b>Comply sterilization tape</b>	For dry sterilization (hot air) 19 mmx55 m
9140786	<b>Comply indicator tape</b>	For steam, lead-free indicator tape (steam), 18 mmx55 m

Art.No.	Indicators and indicator tape	
6089578	<b>Attest biological indicators</b>	For steam, PU = 100
6272290	<b>Bowie-Dick-Test,</b>	4 kg, PU = 48
6272291	<b>Bowie-Dick-Test,</b>	7 kg, PU = 24
9140788	<b>Indicator adhesive tape</b>	With lead-free steam indicator self-adhesive, for steam sterilization, 24 mm wide, 50 m per roll
9140784	<b>Indicator adhesive tape</b>	With steam indicator self-adhesive, for steam sterilization, 19 mm wide, 50 m per roll
9140789	<b>Indicator adhesive tape</b>	With steam indicator self-adhesive, for hot air sterilization 25 mm wide, 50 m per roll
9140790	<b>Indicator adhesive tape</b>	With steam indicator strongly adhesive, well suited for non-woven, blue, 19 mm wide, 50 m per roll
9140791	<b>Indicator adhesive tape</b>	With steam indicator strongly adhesive, well suited for non-woven, blue, 25 mm wide, 50 m per roll
9140792	<b>Indicator adhesive tape</b>	With ethylene oxide indica self-adhesive, 19 mm wide, 50 m per roll



Art.No.	Gloves	
9414660	<b>Protective glove</b>	K-Basic Extra 6658 ca.22-27 cm, Gr. 8, type 60179, Kevlar, yellow, pair
9414661	<b>Protective glove</b>	K-Basic Extra 6658 ca.22-27 cm, Gr. 10, type 60179, Kevlar, yellow, pair
9414662	<b>Protective glove</b>	K-Basic Extra 6658 ca.22-27 cm, Gr. 12, type 60179, Kevlar, yellow, pair
9005260	<b>Heat protection gloves</b>	Nomex without closure, knitted, with forearm cuff, pair
9005250	<b>Heat protection gloves</b>	Nomex without closure, knitted, normal, size 9/10, pair



# HP LAB ACADEMY.

- Product training for laboratory autoclaves
- Technical safety training for users of laboratory autoclaves
- Technical training for our laboratory autoclaves (not freely bookable)
- We offer all training modules in German and English

The trainings are conducted by our product experts at your site or in our training rooms in Oberschleissheim ( Greater Munich area) and Rotgau ( Greater Frankfurt area).

Our courses each consist of a theory and a practical part. Practical learning is important, for example, possible error scenarios are simulated on the machine and are to be corrected by the course participants with the help of the trainer.



HP LAB<sup>®</sup>  
ACADEMY



TECHNOLOGY



SAFETY



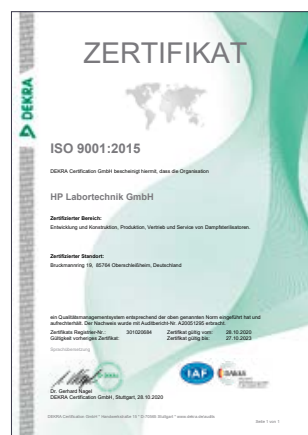
PRODUCT

## OUR TRAINING MODULES

Individual customer or group courses on request

## Quality and environmental policy

- We develop and produce products and services that always meet the needs and expectations of our customers.
- We ensure that we constantly develop our products, services and processes further.
- The motivation, enthusiasm and satisfaction of our employees is important to us.
- The continuous improvement of environmental protection is an important concern for us.
- We always keep in mind the fulfilment of the relevant legal requirements and binding obligations.



## Warranty

1 year on material and manufacturing defects  
3 years on heaters  
5 years on pressure vessels

## Customer satisfaction survey

In September 2020, the satisfaction with our factory customer service was determined within the scope of a survey of approx. 100 maintenance contract customers. with our factory customer service.



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EXCELLENCE IN AUTOCLAVES

DCXplus  
AEROGENE DESINFEKTION

CLEANAIR  
by BAKER



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