

LABORTOPS

valid until 30.09.2022

Spectrophotometer LLG-uniSPEC 1

- For quality control and training
- Automatic wavelength adjustment
- Cost-efficient high quality



NEW

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Inverted Routine microscope for live cell inspection, AE2000



- Inverted microscopes for cell culture
- Fixed-Koehler illumination
- Interchangeable light source (HAL/LED)
- 4-fold revolving nosepiece

Classic cell culture microscope for daily work in the laboratory.

- Infinity Optics [CCIS®]
- Observation Tube Siedentopf Type, Binocular -/Phototube 45°, F.N. 20
- Interpupillary Distance 48 mm-75 mm
- Eyepieces High-Eyepoint N-WF 10x/20 mm provide dioptre adjustment for both eyes
- Side facing quadruple nosepiece
- Objectives CCIS Plan Achromat PL 4x, LWD PL 40x
- CCIS Plan Achromat Phase PL Ph10x, LWD PL Ph20x
- Plain stage 200 mm x 239 mm surface with metal & glass stage inserts
- Condensor ELWD N.A. 0.3 with phase slider (Ph1, BF)
- Illumination 6V/30W halogen with intensity control and sleeping mode
- Universal power supply 100 V-240 V (CE)
- Ø 45 mm blue, green interference and neutral density filters with filter slider, centering telescope, power cord, Allen hexagonal key, vinyl dust cover



Motic
MORE THAN MICROSCOPY

Type	Description	PK	Cat. No.
AE2000	Binocular	1	9727030*LLG
AE2000	Trinocular	1	9727031*LLG

Microscope slide boxes, PP



Heathrow Scientific
design | function | innovation

Colour-coded for easy identification. Slide boxes are perfect for storage or transportation of standard size slides (76 mm x 26 mm). With cork lining. Stackable. Each 100-place box is secured with a rust-resistant nickel-plated clasp and hinge pin. Each slot is numbered to correspond to the slide inventory sheet on the inside cover of the box.

Dimensions (W x D x H) mm	To hold microscope slides	Colour	PK	Cat. No.
208 x 175 x 34	100	Red	12	6322215*LLG
208 x 175 x 34	100	Green	12	6322214*LLG
208 x 175 x 34	100	Blue	12	6322213*LLG
208 x 175 x 34	100	White	12	6322217*LLG
208 x 175 x 34	100	Yellow	12	6322216*LLG
208 x 175 x 34	100	Black	12	6322218*LLG

Microscope Cleaning Kit



Motic
MORE THAN MICROSCOPY

Content: 1 power blower, cotton swabs, cleaning liquid, cleaning cloth, lens cleaning paper, brush

Type	PK	Cat. No.
Microscope Cleaning Kit	1	6280087*LLG

LLG-Cuvettes, glass



LLG-Cuvettes have two clear windows, two side walls and they are available as optical glass or in quartz variants. The walls and the base are polished inside and frosted outside. The thickness of the windows and the base is 1.25 mm. The overall height of standard type cells is 45 mm or 48 mm. Each cuvette is supplied with a PTFE lid.

- Optical Glass: 335 to 2500 nm
- Quartz: 200 to 2700 nm

Type	Volume ml	Path length mm	PK	Cat. No.
quartz glass	3.5	10	2	4681513*LLG
quartz glass	17.5	50	2	4681514*LLG
optical glass	3.5	10	4	4681515*LLG
optical glass	17.5	50	4	4681516*LLG

LLG-Disposable plastic cells, PS

- Cavity sorted
- Glass clear polystyrene (PS)
- Very low variation of extinction values
- Overall dimensions
12.5 mm x 12.5 mm x 45 mm
- Styrofoam racks: 100 cuvettes in a styrofoam box with cover



Description	Capacity ml	Path length mm	Operating range nm	PK	Cat. No.
Macro	4.0	10	340 to 900	100	9406011*LLG
Semi-micro	1.6	10	340 to 900	100	9406012*LLG

LLG-Cuvette rack, PP



Ideal for storing up to 16 cuvettes with 10 mm width.

- Numbered positions
- Autoclavable at 121 °C

Length mm	Width mm	Height mm	PK	Cat. No.
210	70	35	1	4682061*LLG

Spectrophotometer LLG-uniSPEC 1



- For routine analysis
- Stand alone device



LLG-uniSPEC 1 UV/VIS spectrophotometer is the ideal device for various routine laboratory applications including quality control, basic research and education.

LLG-uniSPEC 1 enables without software the measuring of absorption, transmission as well as concentration, and factor determination via standard curves. It can save 200 groups of data and display wavelength, absorbance and transmittance.

- Stand-alone unit with large 2.5" LCD Display
- Automatic wavelength setting
- Easy creation of standard curves for concentration determination
- USB and parallel port
- Large storage capacity of up to 200 groups of test results

Scope of supply: Spectrophotometer, dust cover, manual, 4 glass cuvettes, 2 quartz cuvettes

Specifications

Optical system:	Single beam, grating 1200 lines/mm
Wavelength range:	190 ... 1000 nm
Bandwidth:	2 nm
Wavelength accuracy:	±2 nm
Wavelength repeatability:	0.5 nm
Photometric range:	-0.3 ... 3 A, 0 ... 200 % T, 0 ... 9999 C
Stray light:	≤0.1 % T
Photometric stability:	≤0.002 A/30 min
Display:	LCD, 128 x 64 Dots
Detector:	Silicon photodiode
Light source:	Tungsten and deuterium lamp
Dimension (W x D x H):	420 x 280 x 180 mm
Weight:	12 kg
Power supply:	110 ... 250 V

Type	Plug type	PK	Cat. No.
LLG-uniSPEC 1	EU	1	6263636*LLG
LLG-uniSPEC 1	UK	1	6263637*LLG

Draining rack, PS



Kartell

Wall mounting, with wide draining trough. Pegs can be inserted as required. Supplied with 72 pegs (15mm diameter, 95mm long), 11 small pegs (6mm diameter, 95mm long) drain tubing and fittings for wall mounting.
Dimensions (L x W x H):
450 x 110 x 630 mm

Description	PK	Cat. No.
Draining rack	1	9003240*LLG

Laboratory Trolley clax Mobil comfort with Box



Topseller



Stable, multi-use trolley with parking brake. Push-button collapsing/unfolding. Made in Germany.

Load capacity

Total:	60 kg
Upper shelf:	20 kg
Lower shelf:	40 kg

Dimensions and weight

unfolded (L x W x H):	900 x 580 x 1020 mm
collapsed (L x W x H):	710 x 550 x 190 mm
Weight without box:	6.9 kg

Folding box dimensions

Inner dimensions (W x D x H):	335 x 495 x 258 mm
Outer dimensions (W x D x H):	350 x 500 x 260 mm

Type	PK	Cat. No.
Laboratory Trolley clax Mobil comfort, incl. 1 clax folding box, 46 litres	1	9148100*LLG

LLG-Test tube racks, wire/nylon



Made of wire with white nylon coating. Suitable for safe storage and transport of test tubes and centrifuge tubes. Opening size 18 x 18 mm.

Length	Width	Height	Array	PK	Cat. No.
mm	mm	mm			
248	55	70	2 x 12	1	6286411*LLG
248	73	70	3 x 12	1	6286412*LLG
248	94	70	4 x 12	1	6286414*LLG

LLG-Test tubes, round bottom, Soda-lime glass



Heavy wall. Rimless, with round bottom.

Diam.	Length	PK	Cat. No.
mm	mm		
12	75	100	9400009*LLG
14	130	100	9400030*LLG
16	100	100	9400022*LLG
16	160	100	9400040*LLG
18	180	100	9400050*LLG

BOD sensor system

Measuring systems for the reliable determination of 90 to 999 ppm BOD. Complete with sensor heads and multi-position magnetic stirrer.



- Automatic storage of 5 results in 24-hour intervals
- Measured readings in mg/l (ppm) can be read directly on the sensor at any time

Scope of supply BOD sensor system 6:

6-position magnetic stirrer, each 6 BOD sensors incl. batteries, 500 ml brown glass bottles, KOH reservoirs and magnetic stirring rods

Scope of supply BOD sensor system 10:

10-position magnetic stirrer, each 10 BOD sensors incl. batteries, 500 ml brown glass bottles, KOH reservoirs and magnetic stirring rods



Specifications

BOD range: 90 ... 999 ppm
Display: LED (3 digits)
IP code: IP 54

Type	Description	PK	Cat. No.
BOD sensor system 6	6 positions	1	6317212*LLG
BOD sensor system 10	10 positions	1	6317213*LLG
BOD sensor set	500 ml brown glass bottle with BOD sensor, KOH reservoir, stirring rod	1	4666791*LLG
BOD sensor	Single sensor	1	4666790*LLG

Thermostatic cabinets



The cabinets are equipped with sockets in the interior for connecting stirrers.

- Temperature range 2 °C to 40 °C, continuously adjustable in steps of 0.1 °C
- Illuminated LED display of preset and current temperatures
- Ideal for BOD determination at 20 °C
- With Standard door or glass door

Specifications

Fan: Axial, delivery rate 320m³/h
Power supply: 220-230V/50Hz

Capacity l	External dimensions (W x D x H) mm	PK	Cat. No.
135	600 x 600 x 850	1	9699142*LLG
255	600 x 610 x 1640	1	9699144*LLG
445	750 x 730 x 1640	1	9699145*LLG
140	600 x 600 x 850*	1	9699146*LLG
256	600 x 610 x 1640*	1	9699147*LLG

* With glass door

Photometer PrimeLab 2.0 starter-kit

WATER-I.D.
WATER TESTING EQUIPMENT



- A new level of water analysis!
- Large Touch display
- More than 140 parameters



The photometer with 18 different wavelengths (3 sensors with 6 wavelengths) covers the full VIS-spectrum as well as key parts of UV and IR spectrum. LEDs are set up at 180° as well as at 90° to enable NTU-Turbidity, PTSA and Fluorescein measurements as well.

- 5.5" colour HD touch-display
- More than 140 different parameter methods (paid activation required)
- Please order reagents separately
- Can be used with 1 ml, 16 mm and 24 mm cuvettes
- Data management with free software (LabCOM)/app in free cloud including individual accounts and reporting system

Scope of supply: Multitest Photometer PrimeLab 2.0, carrying case, 4 x 24 mm/10 ml glass cuvettes with lid, light-shield, 24 mm cuvette adapter, stirring rod, 10 ml plastic syringe, cleaning brush, battery-charger with USB-cable (type C)

You can find further accessories and standards in our Online Shop.

Specifications

Spectral range: 390 ... 950 nm, 18 wavelengths
Ambient temperature: 5 ... 45 °C
Rel. humidity: 30 ... 90 %
Internal memory: 150000 measurements
Datatransfer: WiFi, GSM
Software: LabCOM software, LabCOM App, LabCOM Cloud
Power supply: 8500 mA Li-Io battery, 5 V power supply with adapters
Dimensions (W x D x H): 100 x 255 x 59 mm
Weight: 715 g
Protection class: IP54

Type	PK	Cat. No.
PrimeLab 2.0 Starter-Kit	1	4683785*LLG

Eluent SafetyCaps, GL 45



Suitable for solvent extraction. The integrated air valve blocks hazardous solvent vapours and filters the incoming air via a PTFE membrane. All unused capillary positions must be closed with a blind fitting.

- With timestrip sticker
- Closures and fittings made of PP
- Body made of PTFE

Description	PK	Cat. No.
with 2 PP fittings (3.2 mm OD)	1	SC000126.1*LE
with 3 PP-Fittings (3.2 mm OD)	1	SC000127.1*LE
with 1 PP-Fitting (3.2 mm OD)	1	SC000125.1*LE

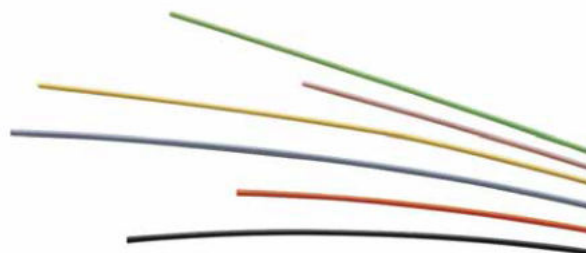
Air valves Generation 2.0 for SafetyCaps



- Thread size UNF 1/4" 28G
- Luer Lock adapter
- PTFE Filter
- Valve membrane blocks vapours and opens at negative pressure
- It is recommended to replace the valve every 6 months

Type	Flow rate amount ml/min	PK	Cat. No.
refill pack of 8	400	8	6318227*LLG
refill pack of 10	400	10	4669376*LLG
refill pack of 50	400	50	4669377*LLG

PEEK Tubing for HPLC



For use in LC, LCMS and automation technology. They are inert to most commonly used solvents. Exceptions are very caustic reagents, strong acids and bases.

- Smooth inner surface
- Good chemical resistance
- Bio-inert and biocompatible
- Operating temperature up to max. 100 °C
- Pressure stable up to 483 bar (7000 psi, 48000 kPa)

Int. diam. mm	Ext. diam. mm	Length m	Colour	PK	Cat. No.
0.13	1.6	1.5	red	1	4662782*LLG
0.18	1.6	1.5	yellow	1	4662783*LLG
0.25	1.6	1.5	blue	1	4662784*LLG
0.13	1.6	3	red	1	4662785*LLG
0.18	1.6	3	yellow	1	4662786*LLG
0.25	1.6	3	blue	1	4662787*LLG

Fingertight fittings for PEEK Tubing



Type	Pressure max. bar	PK	Cat. No.
1/16" ... 10-32 UNF	345	10	4664157*LLG

Syringeless filters SEPARA



SEPARA integrates in one single device auto-sampler vial, filtration membrane, plunger, and cap/septa. Fast and simple to use. Reducing sample loss. The pre-slit cap ensures easy and clean transfer of sample. 5 different septa material, PP vial with Ø 12 x 33 mm, Filtering capacity 0.48 ml, dead volume <30 µl, maximum operating temperature 50 °C.



Membrane	Pore size µm	Colour	PK	Cat. No.
Nylon	0.22	light blue	100	6287339*LLG
PTFE	0.22	pink	100	6287340*LLG
Regen. Cellulose	0.22	grey	100	6287341*LLG
PVDF	0.22	yellow	100	6287342*LLG
PES	0.22	light green	100	6287343*LLG
Nylon	0.45	blue	100	6287344*LLG
PTFE	0.45	red	100	6287345*LLG
Regen. Cellulose	0.45	black	100	6287346*LLG
PVDF	0.45	orange	100	6287347*LLG
PES	0.45	green	100	6287348*LLG

Evaporating flasks with conical ground joint, DURAN®



Lenz
Laborglas GmbH & Co. KG

Especially for rotary evaporators, with center neck and conical joint, pear-shaped, material: DURAN®

Nominal capacity ml	Socket NS	Flask diam. mm	PK	Cat. No.
50	29/32	56	1	9196020*LLG
100	29/32	60	1	9196024*LLG
250	29/32	81	1	9196036*LLG
500	29/32	101	1	9196044*LLG
1000	29/32	126	1	9196054*LLG
2000	29/32	158	1	9196063*LLG

Receiving flasks, DURAN®



Lenz
Laborglas GmbH & Co. KG

Especially for rotary evaporators, with spherical joint socket S 35, with and without transparent PUR coating, autoclavable, uncoated, material: DURAN®.

Nominal capacity ml	Socket NS	Flask diam. mm	PK	Cat. No.
100	35	64	1	9196224*LLG
250	35	85	1	9196236*LLG
500	35	105	1	9196244*LLG
1000	35	131	1	9196254*LLG
2000	35	166	1	9196263*LLG

LLG-Fork clamps for spherical joints, stainless steel



LLG
LABWARE

Made of stainless steel 304.
For spherical ground joint connections. With set screw.

Size	PK	Cat. No.
S13	5	6314003*LLG
S19	5	6314005*LLG
S29	5	6314004*LLG
S35	5	6314006*LLG

Rotary Evaporators Hei-VAP Core, with hand lift

heidolph
research made easy



- Clear display
- Residual heat warning
- Ergonomic handles

Direct access to the basic parameters of rotation speed and heating bath temperature at any time.

- Clear digital display for showing the current values and button for displaying the set values
- Lock function for the values to prevent unintentional adjustment or overtemperature
- Residual heat warning at > 50 °C
- Standby button stops all functions
- Ergonomic handles for a secure grip, also when pouring out
- Simple adjustment of the immersion depth up to 155 mm and the angle of inclination of the evaporator flask from 20° to 80°.
- Thanks to the optional cable extension, the control panel can also be mounted outside closed fume cupboards

Scope of supply: Hei-VAP Core with Flask clamp Easy-Clip, vapour tube, ventilation cap, heating bath, 1-l receiving flask, 1-l evaporating flask. Supplied condensor as indicated.

Specifications

Drive

Speed range:	10 ... 280 rpm
Speed display:	Digital
Stroke displacement:	155 mm
Protection class:	IP 20

Heating bath

Bath volume:	4.5 L
Temperature range:	Ambient ... 210 °C
Power input:	1300 W
Protection class:	IP 67

General data

Max. size evaporating flask:	5 L
Condensing surface:	1400 cm²
Condensing surface XL condenser:	2200 cm²
Power supply:	230 V

Description	Glassware set	Plug type	PK	Cat. No.
G3 Vertical condenser	standard	EU	1	4666086*LLG
G3B Vertical condenser	coated	EU	1	4666091*LLG

LLG-Dual-Timer, 2-channel



The LLG-Dual-Timer offers two separate timers in one instrument. One fixed time can be stored per channel.

- Big 6-digit LCD display
- Digital stopwatch (counting up)
- Short timer (counting down)
- With memory function
- Stopwatch with tenths of a second
- Stopwatch and countdown up to 99 h 59 min. 59 sec
- Optical (red LED) and acoustic alarm (2 volume levels), when timer expires
- Incl. magnet for mounting, hanging bracket and stand (fold-out)

Dimensions (W x H x D):	97 x 79 x 21 mm
Weight (with battery):	95 g
Power supply:	2 x AAA 1.5 V (not included)
Warranty:	12 months

Type	PK	Cat. No.
LLG-Dual-Timer	1	6311350*LLG

Stopwatch, digital



1/100 seconds, split time, clock, date with weekday, hourly chime, alarm with snooze function, lanyard.
Measuring range:
Time up to 23 h, 59 min, 59 sec.
Dimensions (W x H x D): 65 x 79 x 21 mm, weight: 50 g, incl. 1x 1.5 V LR44 battery, EK-EL

Type	PK	Cat. No.
Stopwatch	1	9851018*LLG

LLG-Timer Triple pro



The LLG-Timer Triple pro offers three separate timers in one instrument. One time can be stored per channel. This Timer can be used simultaneously as real time clock and timer. The countdown timer also runs when time is visible.

- Big 6-digit LCD display
- Digital stopwatch (counting up)
- Short timer (counting down)
- With memory function
- Stopwatch and countdown up to 23 h 59 min. 59 sec.
- Optical and acoustic alarm when timer expires
- Incl. magnet for mounting, hanging bracket and stand (fold-out)

Dimensions (W x H x D):	68 x 88.7 x 16.2 mm
Weight (with battery):	87 g
Power supply:	2 x AAA 1.5 V (not included)
Warranty:	12 months

Type	PK	Cat. No.
LLG-Timer Triple pro	1	6313417*LLG

Electronic timer clock



Count down/count up timer with loud alarm signal at end of timed period. With Clock, Stopwatch and Memory functions. Timer up to 24 hours. Fittings: magnet, stand and clip. With battery.

Dimensions (W x H x D):	68 x 53 x 20 mm
-------------------------	-----------------

Type	PK	Cat. No.
Electronic Timer Clock	1	9235145*LLG

Energizer® Alkaline Batteries



Best performance for industrial, medical and laboratory applications.

Type	Volt	PK	Cat. No.
LR03/EN92/AAA/Micro	1.5	10	9012944*LLG

LLG-Floating pellets, PP



Pellets with 20 mm diameter. Can cover 0.1 m².
Protect against evaporation and rapid temperature loss.
Decreases hazardous vapors. Resistant against most acids, bases, solvents and mineral oils.
Temperature stable up to 100 °C.

Description	PK	Cat. No.
Floating pellets	250	6266611*LLG

LLG-Weighing rings, lead, vinyl-coated



To stabilise glassware in water or oil baths. The vinyl coating prevents vessels and apparatus from being scratched or marked.

For flasks ml	Int. diam. mm	PK	Cat. No.
100 ... 500	48	1	4682062*LLG
250 ... 1000	56	1	4682063*LLG
500 ... 2000	61	1	4682064*LLG
1000 ... 4000	74	1	4682065*LLG

Erlenmeyer flasks, narrow neck, DURAN®



DIN ISO 1773. With graduation and beaded rim. With retrace code (batch identification), certificate via internet. The conical shape makes it ideal for mixing liquids. Glass type 1/neutral glass according to USP/EP and JP.

Capacity ml	Neck diam. mm	Bottom diam. mm	Height mm	PK	Cat. No.
25**	22	42	75	1	212161407*SCHOTT
50	22	51	90	1	212161707*SCHOTT
100	22	64	105	1	212162403*SCHOTT
200*	34	79	131	1	212163202*SCHOTT
250	34	85	145	1	212163605*SCHOTT
300*	34	87	156	1	212163905*SCHOTT
500	34	105	180	1	212164404*SCHOTT
1000	42	131	220	1	212165409*SCHOTT
2000	50	166	280	1	212166302*SCHOTT

* Not to DIN.

**without retrace code

Shaking water baths LSB Aqua Pro



- High quality
- Good temperature stability



- Reliable linear shaking mechanism for consistent results
- Excellent temperature stability and uniformity of ± 0.1 °C
- Simple controls, clear, bright display
- Set and Forget™ technology, fast heat-up accurate temperature control
- Extensive choice of trays for a wide variety of vessels. Trays sold separately
- Discreet magnetically coupled shaking mechanism maximises working area
- Advanced dry start/run dry protection, prevents costly service repairs
- Universal frame and polycarbonate lid included

Accessory polypropylene spheres or a lid must be used at temperatures between +60 °C and +99 °C. Accessory cooling is required for temperatures below ambient.

Please order PP spheres separately.

Specifications

Minimum working depth:	60mm
Temperature range:	ambient +5 to 99 °C
Display:	LED
Linear shaking speed:	20 to 200 rpm (depending on load)
Shaking speed display resolution:	1 rpm
Linear shaking stroke length:	20 mm
Timer:	1 to 999 min
Drain tap:	yes
Supply voltage:	220-230 V

Type	Capacity of the bath litres	Dimensions Shaking trays (D x W) mm	PK	Cat. No.
LSB12	12	240 x 235	1	6264684*LLG
LSB18	18	420 x 235	1	6264685*LLG

Trays for shaking water baths, Stainless steel



Type	For	PK	Cat. No.
Universal tray TU12	LSB12	1	6264687*LLG
Universal tray TU18	LSB18	1	6264688*LLG

Thermocycler MultiGene™ OptiMax



Programming is intuitive via the large display and several pre-programmed templates supplied with the unit. The OptiMax comes with 2-step, temperature optimisation, touchdown and time step protocols built in as standard, which can be easily adapted to suit cycle requirements.

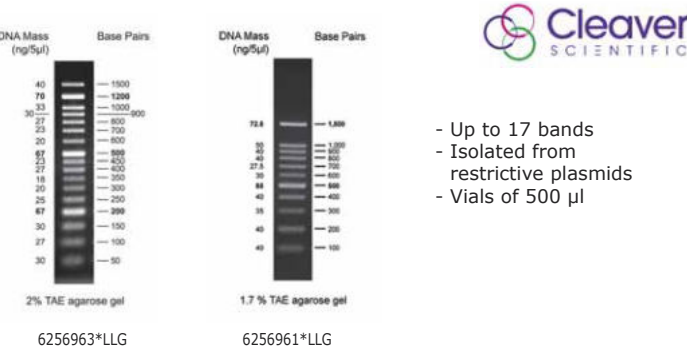
- Flexible programming with FlexTemp™ technology
- Individual temperature setting for each block
- With USB and RS232 interface

Specifications

Sample capacity:	1 x 96 well plate, 12 x strip tubes (8 x 0.2 ml), 96 x 0.2 ml tubes
Programmable temperature range:	4 °C ... 99.9 °C
Temperature accuracy/uniformity:	±0.5 °C/±0.5 °C
Heating/cooling method:	Peltier
Max. heating/cooling rate:	±5 °C/±3.5 °C per second
Programmable lid temperature:	60 °C ... 65 °C, 100 °C ... 115 °C
Program memory:	200 complete programs
Dimensions (W x D x H):	240 x 420 x 250 mm
Weight:	9 kg
Supply requirements:	230 V, 50/60 Hz

Type	PK	Cat. No.
MultiGene™ OptiMax	1	9595319*LLG

DNA Markers for Gel Electrophoresis



- Up to 17 bands
- Isolated from restrictive plasmids
- Vials of 500 µl

Size	Bands	Reference bands	PK	Cat. No.
50 bp - 1500 bp	17	200 bp, 500 bp	1	6256963*LLG
100 bp - 1500 bp	11	500 bp, 1500 bp	1	6256961*LLG
100 bp - 3000 bp	12	500 bp, 1500 bp	1	6256960*LLG
100 bp - 10 Kb	13	1 Kb, 3 Kb	1	4669511*LLG

Blue light LED transilluminators runVIEW MINI



Allows electrophoresis observation in real-time

Mini blue light transilluminator for placement under electrophoresis chambers the same size as multiSUB MINI and MIDI instruments. The viewing window with orange filter, allows real-time viewing of DNA in electrophoresis chambers, enabling rapid checking of PCR accuracy and restriction digestion results.

- High intensity blue LED illuminator allows visualization of a wide range of fluorescent gel stains
- Compatible with runSAFE, commercial safe stains and ethidium bromide

Scope of supply: Transilluminator, filter (orange)

Specifications

Wavelength:	470 nm
Viewing size:	112 x 75 mm
Dimensions (W x D x H):	86 x 170 x 25 mm
Weight:	338 g
Power supply:	DC 12 V, 2 A

Type	PK	Cat. No.
runVIEW MINI	1	6313471*LLG

LLG-Agarose Standard



- Very good dissolution and rapid gel formation
- High gel strength even at low agarose concentrations
- Suitable for agarose concentrations from 0.75 up to 2 %
- Good separation efficiency for nucleic acid fragments between 250 bp and 23 kb
- Free of DNase and RNase

Appearance:	White powder
Clarity (NTU):	≤4 (1.5 % gel)
Gelling point:	36 ±1.5 °C (1.5 % gel)
Melting point:	88 ±1.5 °C (1.5 % gel)
Gel strength:	≥1000 g/cm² (1 % gel)
Sulphate:	≤0.15 %

Capacity	PK	Cat. No.
g		
100	1	4681511*LLG
500	1	4681512*LLG

Water bath MH8517 for paraffin sections



The Paraffin Section Flotation Bath is designed to assist with the handling of paraffin wax samples in histology and pathology laboratories. It is essentially a hot distilled water floating bath that allows for the meticulous manipulation and location of sections onto glass slides. This Apparatus achieves a stable 45 °C using 2.25 litres of water within 40 minutes. The stability and accuracy have been improved due to the change of control which now also allows the user to set the temperature as opposed to the arbitrary power, thereby reducing the risk of overheating sections. It has a PTFE black interior and powder-coated aluminium exterior, which makes it virtually maintenance-free, extremely easy to clean and allows for improved visibility of floating sections.

The lid is not included and can be ordered separately.

Specifications

Capacity:	2.5 l
Temperature:	30 to 70 °C
Temperature Stability:	±0.5 °C
Bath material:	Aluminium base with PTFE coated interior
Dimensions (D x W x H)	330 x 330 x 140 mm
Weight:	2.7 kg
Heater Power:	240 W

Type	PK	Cat. No.
MH8517	1	6268889*LLG
Lid for MH8517	1	6289180*LLG

PARAPLAST® Tissue-embedding wax



Granules for embedding tissue. PARAPLAST PLUS® additionally contains dimethyl sulphoxide (DMSO) which improves speed and penetration into tissue samples. Melting point: 55 - 57 °C.

Type	Capacity	PK	Cat. No.
	kg		
PARAPLAST®	1	1	9170015*LLG
PARAPLAST PLUS®	1	1	9170020*LLG

Microscope slide drying bench MH 6616



- For up to 50 slides (26 x 76 mm)
- To speed up the preparation of microscope slides



Slide Drying Bench aids in the preparation of microscope slides at the specimen mounting stage. It complements both the Paraffin Wax Dispenser and the Paraffin Section Flotation Bath to provide a complete set of paraffin wax sampling equipment for the modern laboratory. Accepting up to 50 slides (26 x 76 mm), it has the facility for drying slides in different orientations- across the drying support bars, angled from the bars, or flat without the bars.

- Up to 50 slides capacity
- Slides can be arranged on the bench in different orientations
- Built-in energy regulator controlling temperature up to 100 °C

Material:	Base and top powder-coated aluminium
Max Element Temperature:	100 °C
Dimensions (D x W x H)	180 x 390 x 95 mm
Weight	1.8 kg
Electric Requirement	230 V, 50/60Hz, 150 W

Type	PK	Cat. No.
MH 6616	1	9770106*LLG

Dissecting set for students, 7-piece



- 1 scalpel handle no. 3
- 5 sterile scalpel blades no. 10
- 5 sterile scalpel blades no. 15
- 1 preparation scissors
- 1 fine, sharp forceps
- 1 lancet dissection needle
- 1 dissection needle

Type	PK	Cat. No.
HSO 130-00	1	9160200*LLG

Graduated pipettes, AR-GLAS®, class AS, blue graduation



All BLAUBRAND® graduated pipettes are supplied with batch number and one batch certificate per packing unit.

- BLAUBRAND®
- Type 2 (nominal volume at top)
- Type 3 (zero at top)
- DIN EN ISO 835
- DE-M marking
- Ring mark and inscriptions in high contrast, blue enamel
- Calibrated to deliver (Ex)
- Waiting time 5 sec.
- Cotton plugged

Type	Volume ml	Tolerance ± ml	Length (± 10mm) mm	PK	Cat. No.
2	5	0.03	360	12	6322137*LLG
2	10	0.05	360	12	6322138*LLG
2	25	0.10	450	6	6322139*LLG
3	5	0.03	360	12	6322134*LLG
3	10	0.05	360	12	6322135*LLG
3	25	0.10	450	6	6322136*LLG

Measuring cylinders, borosilicate glass 3.3, low form, class B, amber graduations



- SILBERBRAND Eterna
- DIN EN ISO 4788
- With spout and hexagonal foot
- Graduations and inscriptions in Eterna permanent amber stain
- Calibrated to contain IN

Capacity ml	Grad. ml	Height mm	Tolerance ± ml	PK	Cat. No.
1000	20	285	10	1	9274662*LLG
10	1	90	0.3	2	6316477*LLG
25	1	115	0.5	2	6316478*LLG
50	2	145	1	2	6316481*LLG
100	2	165	1	2	6316482*LLG
250	5	195	2	2	6316483*LLG
500	10	250	5	2	6316484*LLG

Volumetric pipettes, class AS, AR-glass®, 1 marking, blue or brown graduation



All BLAUBRAND® volumetric pipettes are supplied with batch number and one batch certificate per manufacturer's outer pack.

- BLAUBRAND®
- DIN EN ISO 648
- DE-M marking
- Graduations and inscriptions in highly contrasting enamel
- Calibrated to deliver (EX)

Nominal capacity ml	Tolerance ± ml	Overall length ± 10 mm	Colour	PK	Cat. No.
10	0.02	440	blue	6	6322140*LLG
25	0.03	520	blue	6	6322141*LLG
50	0.05	540	blue	6	6322142*LLG
10	0.02	440	brown	6	6322143*LLG
25	0.03	520	brown	6	6322144*LLG
50	0.05	540	brown	6	6322145*LLG

Volumetric flasks, DURAN®, class A, blue graduation, with PE stoppers

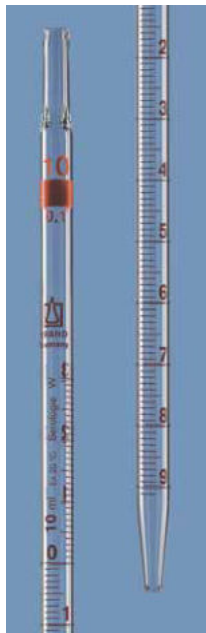


IN (TD) calibrated. With dated batch identification. Declaration of conformity acc. to DIN 12600. With NS ground joint and polystopper. Ring mark and graduation in durable blue enamel, acc. to DIN EN ISO 1042.

Capacity ml	Tolerance ± ml	Height mm	Joint size (NS)	PK	Cat. No.
50	0.06	140	12/21	2	4679560*LLG
50*	0.08	140	14/23	2	4679561*LLG
100	0.1	170	12/21	2	4679556*LLG
100	0.1	170	14/23	2	4679557*LLG
200	0.15	210	14/23	2	4679558*LLG
250	0.15	220	14/23	2	4679559*LLG
500	0.25	260	19/26	2	4679562*LLG
1000	0.4	300	24/29	1	9276695*LLG
1000*	0.6	300	29/32	1	9276694*LLG
2000	0.6	370	29/32	1	9276696*LLG

* Wide neck.

Graduated pipettes, serological, AR-GLAS®, amber graduations



All BLAUBRAND® graduated pipettes are supplied with batch number and one batch certificate per packing unit.

- SILBERBRAND ETERNA
- Graduations and inscriptions in ETERNA amber stain
- Large tip diameter
- Tip diam. (5, 10 and 25 ml): approx. 3 mm
- Calibrated to deliver (TD, Ex)
- With cotton plug upper end

Capacity	Graduation	Length	PK	Cat. No.
ml		mm		
5	0.1	360	12	6322131*LLG
10	0.1	360	12	6322132*LLG
25	0.1	450	6	6322133*LLG

Reagent Reservoirs, PS, white



Disposable Reagent Reservoirs with a V-shaped bottom to ensure that all the reagent is accessible and can be easily aspirated.

- Graduation markings allow for measurement of the liquid
- With pour-off spouts on all corners
- Sterile versions are sealed in bags, electron beam sterilised and DNase, RNase and pyrogen-free

Capacity	Sterile	Package contents	PK	Cat. No.
ml				
25	+	40 bags of 5	200	4666439*LLG
25	+	100 bags of 1	100	4666440*LLG
25	-	1 bag of 100	100	4666441*LLG
50	+	40 bags of 5	200	4666442*LLG
50	+	100 bags of 1	100	4666443*LLG
50	-	1 bag of 100	100	4666444*LLG
100	+	40 bags of 5	200	4666447*LLG
100	+	100 bags of 1	100	4666448*LLG
100	-	1 bag of 100	100	4666449*LLG

Pipette controller accu-jet® S



- **Precise volume adjustment**
- **Integrated parking position**

For precise pipetting of large and small volumes. The adjustable motor speed allows to switch between free flow and rapid blow-out of the liquid.

- One-hand operation
- For glass and plastic pipettes from 0.1 to 200 ml
- Precise volume setting
- Integrated rest position
- Valve system for exhaust liquid vapours
- Membrane filter and safety valve to protect against fluid penetration
- Robust, powerful motor for fast filling times (25 ml in 3 seconds)
- 8 hours of continuous pipetting with a 10 ml pipette without recharging
- Two-colour battery charge indicator
- Service-friendly and sustainable

Environmental benefits:

Sustainable packaging: Cardboard with approx 90 % recycled content
Renewable energy: Production using 100 % eco-friendly energy from certified hydro-electric power plants and energy generated on the premises as surplus from a cogeneration unit

Scope of supply:

Pipette controller accu-jet® S, nickel-metal hydride battery, universal adapter (100 - 240 V, 50/60 Hz), wall support, 2 sterile spare membrane filters (0.2 µm)

Colour	PK	Cat. No.
anthracite	1	4682331*LLG
berry	1	4682332*LLG
petrol	1	4682333*LLG
amethyst	1	4682334*LLG

Macropipette controllers



The handwheel allows precise suction of the liquid into the pipette with one hand.

For	PK	Cat. No.
Pipette volume up to 2 ml	1	4008322*LLG
Pipette volume up to 10 ml	1	4008323*LLG
Pipette volume up to 25 ml	1	4008324*LLG

Pump drive Hei-FLOW Core 600



This pump drive is only suitable for use with single-channel pump heads. Feed pump for standard applications. The speed is adjustable with the analog control knob and stays constant even under changing loads.

- Smooth start operation prevents from spills and splashing media
- Feed direction reversible
- For safety in unattended continuous operation, the motor will be switched off in case of an overload situation to prevent overheating

The pump head is not included. Please order separately.



Specifications

Speed range:	50 ... 600 rpm
Flow rates single-channel pumps:	4.0 ... 4151 ml/min
Control accuracy motor:	±2 %
Flow rate accuracy (water without counterpressure):	±5 %
Motor power:	100 W
Permissible ambient conditions:	5 ... 31 °C
Permissible rel. humidity:	80 %
Dimensions (W x D x H):	166 x 256 x 225 mm
Weight:	7.6 kg
Protection class DIN EN 60529:	IP 55

Type	PK	Cat. No.
Hei-FLOW Core 600	1	9829241*LLG

Solvent pump, foot operated



For filling off high purity liquids such as solvents. Due to the barrel screw joint and the stopcock, the container and the pump can be hermetically sealed.

- Medium-contacting parts made of stainless steel (1.4301) and PTFE
- For barrels up to 220 litres, immersion tube can be steplessly adjusted to the barrel depth
- Suitable for steel barrels with R 2" thread

Description	Immersion depth mm	Flow rate L / min.	PK	Cat. No.
Foot pump with rigid angled tube	950	30	1	9001134*LLG
Foot pump with flexible tubing	950	30	1	6236800*LLG

Single-channel Pump Heads SP standard and SP vario for Pump drives Hei-FLOW



SP standard

- Recommended for standard applications
- Rollers made of stainless steel and polyamide
- For tubes with a 1.6 mm or 2.5 mm wall thickness (wt)
- Depending on drive and tubing, the flow rate ranges from 2.0 to 4151 ml per minute

SP vario

- Suitable for most Heidolph tubing due to adjustable roller spacing
- Rollers made of stainless steel and aluminum
- Depending on drive and tubing, the flow rate ranges from 2.0 to 4151 ml per minute

You can find further accessories in our online shop.

Type	Tubing wall thickness	Flow rate ml/min.	PK	Cat. No.
SP standard 1.6*	1.6	0.5 to 3644	1	9829254*LLG
SP standard 2.5*	2.5	0.5 to 3644	1	9829255*LLG
SP vario**	var.	0.5 to 3644	1	9829256*LLG

* for simple flow requirements.

** rotor with adjustable roller distance.

OTAL Hand pumps



For jerry cans and balloons up to 60 l capacity. Universal bungs for container openings of 30 to 70 mm diameter.
PP: weak acids, caustic solutions and detergents
PVDF: suitable for acids and alkalis, chlorine bleaching, not for strongly oxidizing acids and caustic solutions
Stainless steel: solvents and liquids of VbF Hazard Class AIII (not easily flammable)

Diam. mm	Immersion depth mm	Flow rate L / min.	Material	PK	Cat. No.
10	450	4	PP*	1	9001210*LLG
12	700	14	PP	1	9001112*LLG
15	700	20	PP	1	9001115*LLG
18	700	26	PP	1	9001118*LLG
16	700	20	PVDF	1	9001135*LLG
18	900	26	Stainless steel tubing	1	9001137*LLG
12	700	12	PP / PVC dispensing tube	1	9001138*LLG

*Miniature pump for container openings 20 to 36 mm.

Laboratory mixer, BagMixer® 400



For sample preparation with easily adjustable paddle system. Thanks to their unique adjustable paddle system the blending chamber can be adjusted to the sample volume. All BagMixer® units are fitted with a timer. Constructed in stainless steel. The fully opening door enables easy cleaning.

BagMixer® 400 P with stainless steel door.
BagMixer® 400 CC with glass door.

Click & clean® System (only BagMixer® 400 CC): removable and autoclavable paddles.

All units have a 3-year warranty and life guarantee for shock absorbers and window door.

Type	Volume ml	Dimensions (W x D x H) mm	PK	Cat. No.
BagMixer® 400 P	50 ... 400	260 x 390 x 290	1	6204551*LLG
BagMixer® 400 CC	50 ... 400	260 x 420 x 265	1	9570098*LLG

Blender bags, BagSystem®



These gamma-ray sterilized bags have a high mechanical stability and ensure safety for the samples. The filters inserted in the bags filter the liquid during sample preparation (washing process) and retain sample particles.

BagLight®: Bag without filter, for all microbiological laboratory applications.

BagPage®+: Homogenizer bag with a micro-perforated filter that extends over the entire width of the sample bag (full-size filter).

BagFilter® P: Bag with non-woven filter (side filter).
Removal of the filtered solvent with BagPipet®.
With pre-cut for pipetting.

Type	Description	Pore size µm	PK	Cat. No.
BagLight® PolySilk 100	plain bag, sleeve 25		500	9570075*LLG
BagLight® PolySilk 3500	plain bag, sleeve 25		500	9570077*LLG
BagPage® + 400	full-size filter bag, sleeve 25	280	500	9570081*LLG
BagFilter® P 400	side filter bag, sleeve 25	250	500	9570078*LLG
BagOpen® 400	bag opener/holder		1	9570084*LLG

Homogenisers T 25 easy clean digital and control



- **Electronic speed control from 3000 -25000 rpm**
- **Working volume from 1 - 2000 ml**

High-performance disperser with electronic speed control.

- Quick and easy cleaning of the dispersing tools, no disassembling required
- Brushless motor guarantees dust-free and silent operation
- USB interface for control and documentation via labworldsoft®
- Timer/counter function
- Increased safety through tool recognition and IP-Code

T 25 easy clean control, additionally:

- Integrated temperature measurement for permanent monitoring of the medium temperature
- Remote control with WiCo

Dispersing heads must be ordered separately.
All existing S 25 dispersing elements are compatible with T 25 easy clean digital.



Specifications

Motor rating input/output:	500/400 W
Working volume range (H ₂ O):	1 ... 2000 ml
Viscosity max.:	5000 mPas
Speed range:	3000 ... 25000 rpm
Speed display:	LED
Speed control:	stepless
Noise without element:	70 dB(A)
Extension arm diam.:	13 mm
Dimensions (W x D x H):	89 x 161 x 270 mm
Weight:	3.0 kg
Power supply:	220 ... 240 V, 50 ... 60 Hz
Protection class DIN EN 60529:	IP 30

Type	PK	Cat. No.
T 25 easy clean digital	1	6291623*LLG
T 25 easy clean control	1	4665087*LLG

Dispersing heads for T 25 easy clean digital and control

Easy to clean dispersing head made of stainless steel (AISI 316) and ceramic. Ultimate fineness: emulsions 1µm to 10 µm and suspensions 10 µm to 50 µm, sterilisable by all methods.

S 25 EC-T-C-18G ST, S 25 EC-T-C-25G-ST, S 25 EC-T-C-25F with integrated temperature sensor.

Type	Diam. rotor / stator mm	PK	Cat. No.
S 25 EC-C-18 G-ST	13,4 / 18	1	6291623*LLG
S 25 EC-C-25 F	18 / 25	1	4672775*LLG
S 25 EC-T-C-25 F	20 / 25	1	4672777*LLG
S 25 EC-C-25 G-ST	20 / 25	1	4672774*LLG
S 25 EC-T-C-25 G-ST	20 / 25	1	4672776*LLG

Orbital shaker for CO₂ Incubators



Orbital shaker for experiments with tissue cultures and cultivations of eukaryotic cells in CO₂ Incubators.

- Different platforms are available, **please be ordered separately**
- With remote controller for protection of the electronics
- Brushless motor with a guaranteed life time of 35000 hours

Specifications

Type of movement:	orbital
Orbit:	20 mm
Max. Load:	3.0 kg
Speed range:	50 ... 250 rpm
Timer range:	1 min ... 96 h or non-stop
Dimensions (W x D x H):	255 x 255 x 100 mm
Weight:	3.4 kg
Power supply:	100 ... 240 V, 50/60 Hz

Type	Description	PK	Cat. No.
CPS-20	Orbital shaker	1	4684290*LLG
Bio PP-4	Flat platform, working area 230 x 230 mm	1	9721018*LLG
PUP-12	Universal platform, working area 270 x 195 mm	1	9721021*LLG

Shaking incubator ES-20/80

Bench-top orbital shaker/incubator for mixing and incubation of samples in a variety of flasks and vessels.

- Different platforms are available, **please be ordered separately**
- Touchscreen display for quick parameter setting
- Bluetooth® connectivity to PC for data management, data logging, parameter control and profiling
- Stackable up to 3 units
- Heat resistant brushless fan
- Timer alarm
- Chamber made of stainless steel



Specifications

Type of movement:	orbital
Speed range:	50 ... 400 rpm
Temperature range:	25 ... 80 °C
Orbit diameter:	20 mm
Max. load:	10.6 kg
Timer range:	1 min ... 96 h/non-stop
Overall dimensions (W x D x H):	620 x 530 x 510 mm
Chamber dimensions (W x D x H):	460 x 400 x 310 mm
Weight:	48 kg
Power supply:	230 V, 50/60 Hz

Type	PK	Cat. No.
ES-20/80	1	4684295*LLG
Platform for 100 ml flasks	1	4684299*LLG
Platform for 250 ml flasks	1	4684302*LLG
Platform for 500 ml flasks	1	4684301*LLG
Platform for 1000 ml flasks	1	4684300*LLG
Stacking kit 2 x ES-20/80	1	4684296*LLG
Stacking kit 3 x ES-20/80	1	4684297*LLG

Magnetic stirrer with heating LLG-uniSTIRRER 7, complete set



- **Complete set**
- **HOT display**
- **Large illuminated display**



Universal magnetic stirrer with outstanding price-performance ratio. High safety due to "Hot" display with continued stirring function until the plate temperature has dropped below 50 °C, even when the unit is switched off. Integrated control function for precise control of the media temperature by means of a connected PT1000.

- Maintenance-free brushless motor
- Stainless steel plate with glass ceramic coating
- Digital setting, backlit display
- RS 232 for control of the stirrer and display of all parameters via PC
- Display for hot surfaces, even when the unit is switched off
- Connection for PT1000, integrated controller function

Scope of delivery: magnetic stirrer complete with PT1000, stand rod, holder

Specifications

Max. stirring quantity (H ₂ O):	20 l
Speed range:	100 ... 1500 rpm
Accuracy:	±1 rpm
Display:	LCD
Heating plate:	184 x 184 mm
Permissible ambient temperature:	5 ... 40 °C
Temperature range:	ambient ... 550 °C
Setting accuracy:	±0.1 °C
Control accuracy:	±0.2 °C
Dimensions (W x D x H):	215 x 360 x 112 mm
Weight:	5.3 kg
Power supply:	200 ... 240 V, 50/60 Hz
IP code:	IP 21

Type	Plug type	PK	Cat. No.
LLG-uniSTIRRER 7	EU	1	6263450*LLG
LLG-uniSTIRRER 7	UK	1	6263451*LLG

LLG-Universal reaction block system for magnetic stirrers



- Universally usable
- For e.g. LIG-Labware, Heidolph and IKA



Magnetic stirring hotplate Hei-Tec, LIG-Premium Line, incl. support material + Pt1000



Proven high quality



Universal alternative to oil bath

The reaction block allows syntheses to be carried out in round flasks at temperatures of up to 250 °C. As a result, with this system, oil as a heat transfer media is made redundant and your lab is a safer place. The reaction block ensures safety at work and prevents oil baths and heating mantles from overheating in your lab. The messy oil clean-ups that results from changing oil or removing flasks from an oil bath will be eliminated. Injuries and burns from hot oil will never happen again. Uniform mixing is also guaranteed because there is no interference to the magnetic field from the aluminium blocks. This system ensures optimal heat transfer from the heating plate directly into the medium.

- Universal model

- For round plates of 135 to 145 mm diameter

- Also suitable for Heidolph Hei-TEC, LIG-Premium line
- Reaction blocks are available in six standard sizes
- Delivered adapter allows the use with either IKA or Heidolph magnetic stirrers
- Syntheses in round flasks without oil bath up to 250 °C
- Uniform and constant mixing
- High-precision thermal conduction directly into the reaction block
- Safe and clean working
- Made in Germany

Description	PK	Cat. No.
LLG-Universal reaction block system 50 ml	1	9728890*LLG
LLG-Universal reaction block system 100 ml	1	9728891*LLG
LLG-Universal reaction block system 250 ml	1	9728892*LLG
LLG-Universal reaction block system 500 ml	1	9728893*LLG
LLG-Universal reaction block system 1000 ml	1	9728897*LLG
LLG-Universal reaction block system 2000 ml	1	9728898*LLG



The LIG-Premium Line is our best selection of high-quality and proven equipment from our top suppliers.

- The anodised aluminium surface is resistant to chemicals and scratches
- The Kera-Disk® installation surface enables the fastest heating time
- Accurate setting of the desired heating plate temperature
- Fast and precise temperature control without overshoot via two selectable heating modes (FAST/PRECISE) and the temperature sensor Pt1000
- If the heating plate fails, the stirring process is NOT interrupted and overheating of the sample is prevented
- In case of short-circuit, sensor breakage of the temperature sensor and in case of a processor malfunction, the unit switches off completely
- An independent second safety circuit automatically switches off the heating plate in case of an unintended temperature rise
- External sensor monitoring automatically switches off the heating if the sensor is not immersed in the medium

Specifications

Stirring quantity (H ₂ O):	20 l
Speed range:	100 ... 1400 rpm
Heating power:	800 W
Temperature range:	20 ... 300 °C
Permissible ambient temperature:	5 ... 31 °C
Permissible relative moisture:	80 %
Plate Dimensions (Ø):	145 mm
Dimensions (W x D x H):	173 x 277 x 94 mm
Weight:	2.9 kg
Power supply:	230 V
IP code:	IP 32
Warranty:	3 years

Type	PK	Cat. No.
Hei-Tec, LIG Premium line	1	6319733*LLG

Digital Vortexer LLG-uniTEXER 4



- High speed up to 4200 rpm
- Infinitely variable speed control
- Robust and non-slip!



Compact vortexer with brushless motor and infinitely variable speed control up to 4200 rpm for optimal mixing results. The digital display alternately shows the set speed and time.

- Programmable Pulse mode
- 3-way switch (on/off/touch)
- Timer adjustable from 1 min up to 999 min

Scope of supply: Vortexer, conical tube attachment, round disk attachment, universal plug

Specifications

Type of movement:	Orbital
Orbital diameter:	4 mm
Speed range:	300 ... 4200 rpm
Dimensions (W x D x H):	205 x 136 x 138.5 mm
Weight:	2.8 kg
Power supply:	110 ... 240 V, 50/60 Hz
IP code:	IP 42

Type	PK	Cat. No.
LLG-uniTEXER 4	1	6263500*LLG

Tube roller RM 2



- Smooth tilting and rolling movement
- For all common tube sizes and bottles



Robust roller mixer with smooth tilting and rolling motion. Suitable for all vessels with a diameter of up to 80 mm.

- Gentle start-up for optimum development of cell cultures
- Minimal heat emission, thus no influence on the ambient conditions
- Can be used at CO₂ concentrations up to 5 %
- Easy setting of speed and time via LED display
- Drip tray and plastic rollers can be removed for easy cleaning

Scope of delivery: basic unit including 6 removable plastic rollers and drip tray

Specifications

Type of movement:	rocking and rolling
Amplitude/angle:	15 mm, 3° fixed
Speed:	5 ... 80 rpm
Max. load:	2 kg
Number of rollers:	6
Timer:	0 ... 99 h 59 min/continuous
Temperature range:	5 ... 45 °C
Max. CO ₂ range:	5 %
Max. humidity:	85 %, not condensing
Dimensions (W x D x H):	244 x 465 x 115 mm
Roller size (l x Ø):	300 x 32 mm
Weight:	7.3 kg
Power supply:	100 ... 240 V, 50/60 Hz
Protection class:	IP 21

Type	PK	Cat. No.
RM 2	1	4663359*LLG

Rocking shaker 35 EZ



Rocker shakers with large capacity. The shakers have a 5-year warranty. Thus, a double platform can be fully loaded without changing the speed. Available in single and double platform models.

Scope of delivery: shaker, non-slip ribbed rubber mat



- Large platform
- Long life time



Specifications

Type of movement:	rocking
Rocking angle:	adjustable, ±20°
Max. Load (incl. attachment):	5 kg
Timer:	10 to 120 min or continuous
Speed range:	10 to 120 rpm
Power:	6 W
Dimensions (W x D x H)	360 x 360 x 170 mm/
single/double platform:	360 x 360 x 260 mm
Weight single/double platform:	6.5 kg/7.8 kg
Power supply:	230 V, 50/60 Hz

Type	Description	Plug type	PK	Cat. No.
35 EZ	with single platform	EU/UK	1	6283296*LLG
35 EZ	with double platform	EU/UK	1	6283298*LLG

SONOREX PLUS ultrasonic baths

BANDELIN



- Intensive, thorough, gentle
- Oscillating tank capacity from 0.9 to 28.0 litres



These devices work at 35 kHz and have transducers for maximum cleaning power. SweepTec® for permanent sound field oscillation ensures even and gentle cleaning. Available with heating with adjustable temperature range from 30 to 80 °C . Power information: High ultrasonic peak power and nominal ultrasonic power 230 V, 50/60 Hz. All models are spill-proof with stainless steel tanks (RK 102H hard-chromium plated) and outer cases, drip proof (IP32).

Type H with heating adjustable from 30 to 80 °C

Type	Capacity of the bath litres	PK	Cat. No.
RK 31 H	0.9	1	6200370*LLG
RK 31	0.9	1	9877021*LLG
RK 52	1.8	1	9877052*LLG
RK 52 H	1.8	1	9877051*LLG
RK 100	3.0	1	9877100*LLG
RK 100 H	3.0	1	9877101*LLG
RK 102 H	3.0	1	9877103*LLG
RK 103 H	4.0	1	9877114*LLG
RK 156 BH	9.0	1	9877155*LLG
RK 255 H	5.5	1	9877256*LLG
RK 510	9.7	1	9877510*LLG
RK 510 H	9.7	1	9877511*LLG
RK 1028 H	28.0	1	9877529*LLG

Lids for SONOREX PLUS ultrasonic baths



Stainless steel.
For covering bath tanks, as outlined below.

Type	For bath type	PK	Cat. No.
D 52	RK 52 / 52 H	1	9877601*LLG
D 100	RK 100 H / 102 H / 103 H	1	9877603*LLG
D 510	RK 510 / 510 H	1	9877610*LLG
D 1028	RK 1028 H	1	9877607*LLG

Suspension baskets for SONOREX PLUS ultrasonic baths

Stainless steel. Optimal ultrasonic wave transmission. Items to be cleaned should not be placed on the bottom of the tank.



You can find insert baskets in our online shop.

Type	For bath type	PK	Cat. No.
K 1 C	RK 52 / 52 H	1	9877631*LLG
K 3 C	RK 100 / 100 H / 102 H	1	9877633*LLG
K 10	RK 510 / 510 H	1	9877697*LLG
K 28	RK 1028 H	1	9877698*LLG

LLG-Laboratory and hygienic tissues, 2-ply, 150 wipes



Laboratory and hygienic tissues in dispenser box
- Contains 150 white, double-ply tissues, 210 mm x 220 mm
- Highly absorbent and ultra-soft
- For sensitive application areas
- Matching acrylic wall mount can be ordered separately (6.286 594)



Package contents	PK	Cat. No.
Carton of 30 boxes with 150 wipes	30	9413220*LLG

Safety Eyeshields SecureFit™ 500



The 3M™ SecureFit™ 500 safety goggles are characterised by a modern design and can be individually adapted to the shape of the face. Choose from models with anti-scratch/anti-fog (AS/AF) or optional 3M™ Scotchgard™ Anti-Fog/Anti-Scratch Coatings (SGAF).

- Adjustable ratcheting temples
- 3M™ Pressure Diffusion Temple Technology
- Removable foam-lined gasket
- Slim standout style
- Polycarbonate lenses
- Protection against UV radiation up to 400 nm
- Meets the impact-rated protector requirement of the EN 166:2001 Standard

Colour	Lens	PK	Cat. No.
black	clear, 2C-1.2, UV, AS/AF	1	4685020*LLG
black	clear, 2C-1.2, UV, SGAF	1	4685021*LLG
black, with foamframe	clear, 2C-1.2, UV, SGAF	1	4685022*LLG
green	clear, 2C-1.2, UV, SGAF	1	4685023*LLG
red	clear, 2C-1.2, UV, SGAF	1	4685024*LLG

LLG-Dispenserbox,
Acrylic Glass



With hinged lid. For storage of laboratory tools, e.g. laboratory goggles, gloves or other small items. Wall mounting possible (mounting material included). For about 12 goggles.

Description	Dimensions (W x D x H) mm	PK	Cat. No.
LLG-Dispenserbox	216 x 216 x 200	1	6286593*LLG

Aura™ 9332+ Folding Masks



Particle masks Series 3M™ Aura™ 9300+ offer effective respiratory protection in industrial applications where workers are exposed to dust and/or non-volatile liquid particles.

- Clear vision: Embossed top panel helps reduce fogging of eyewear
- Low breathing resistance filter technology combines the benefits of 3M's electret particulate filter material with advanced low breathing resistance filter technology
- 3M™ Cool Flow™ Valve effectively removes heat build up to provide a cooler and more comfortable wear
- Innovative chin tab improves ease of donning and adjustment to help achieve a comfortable fit
- Ingenious 3-Panel design fits a wide range of face shapes and sizes to accommodate your facial movements
- Flat-fold; easy to store when not in use
- Hygienic individual packaging helps protect the respirator from contamination before use
- With Cool-Flow valve

Authorization: EU construction test
Testing standards: EN 149:2001 + A1:2009

Type	Protection-level	PK	Cat. No.
Aura™ 9332+	FFP3	10	9005675*LLG

Men laboratory coats Type 81996,
100 % cotton



Reversible collar, concealed buttons, 1 outside breast pocket left, 1 inside breast pocket right, 2 side pockets with diagonal access with light grey piping, 2 short side slits, straight, untapered back, straight sleeve seam, Öko-Tex Standard 100

Material: 100 % cotton
Colour: White
Weight: approx. 240 g/m²
Length: approx. 96 cm

Size	PK	Cat. No.
44/46	1	9414371*LLG
48/50	1	9414373*LLG
52/54	1	9414375*LLG
56/58	1	9414377*LLG
60/62	1	9414379*LLG

LLG-Disposable Gloves *ergo*, Nitrile, Powder-Free

EN ISO 374-1
Type B

EN ISO 374-5 EN 420



KPT



VIRUS



Disposable protective glove made of nitrile, which combines the pleasant wearing properties and high tactile sensitivity of latex with the protective function of nitrile. No allergy risk! The ideal glove for all applications where good tactile sensitivity and protection against chemicals is desired.

- Thin - very comfortable to wear!

- Very good tactile sensitivity - comparable to latex
- Proven quality product made of nitrile - excellent resistance to skin-irritating substances in foodstuffs
- Higher durability due to special formulation
- Free of phthalates/plasticisers and allergenic latex proteins
- Easy to put on and particularly skin-friendly due to special after-treatment
- Suitable for all areas subject to HACCP standards

- **Cat. III against low chemical hazard. AQL 1.5.**

According to EN ISO 374-1:2016/Type B, EN ISO 374-5:2016, EN 420 Food safe.

Glove shape:

flat with rolled edge
(ambidextrous)

Material:

nitrile

Colour:

lavender blue

Outside:

textured fingers

Inside:

powder-free halogenated

Size:

XS, S, M, L, XL

Thickness (measured in double layer): **0.12 mm**

Size	PK	Cat. No.
XS	200	9006370*LLG
S	200	9006371*LLG
M	200	9006372*LLG
L	200	9006373*LLG
XL	180	9006374*LLG

Disposable face masks *activaMask*®



- Three layers of protection, polypropylene
- Integrated nose clip
- Bacterial filtration efficiency >98 %
- Latex free, glass fibre free
- EN 14683 Type II R

Colour	Width	Length	PK	Cat. No.
Blue/white	mm	mm		
	95	175	50	6316787*LLG

Disposable Gloves *NeoTouch*®, Neoprene

EN ISO 374-1
Type B

EN ISO 374-5

EN 421

EN 420



KPT



VIRUS



- Natural latex free, to protect against type I allergies
- Excellent protection against acids, bases and alcohols
- The NeoTouch® gloves' PU inner coating ensures easy on/off. Their textured fingertips provide a secure dry and wet grip. The rolled cuff ensures a secure fit
- **Cat. III against low chemical hazard. AQL 1.5**

According to EN ISO 374-1:2016/Type B, EN ISO 374-5:2016, EN 421, EN 420

Size	Length	PK	Cat. No.
	mm		
S	240	100	6229608*LLG
M	240	100	6229607*LLG
L	240	100	6229606*LLG
XL	240	100	6239416*LLG

LLG-Glove dispenser for 1 or 3 boxes, acrylic glass



High-quality, sturdy design. Mounting material included. The wall mount for 1 box (6286594*LLG) is also suitable for **LLG-Laboratory and hygienic tissues** (9.413 220).

Description	For	PK	Cat. No.
side slot, sturdy material	1 Box	1	6286594*LLG
front insert, flexible material	3 Boxen	1	9405373*LLG
side slot, sturdy material	3 Boxen	1	9405374*LLG

LLG-Aspirator Bottles, narrow neck, HDPE, with stopcock



With carrying handle and 3/4" stopcock. Thread and opening for stopcock provided. Suitable for food. With gasket in the screw cap for a very tight seal. Screw cap can be attached to the bottle using the integrated loops. The bottles can be used by temperature from -40 °C to +80 °C. Please use only in upright position.

Capacity	Body diam.	Height	PK	Cat. No.
l	mm	mm		
5	160	350	1	9139933*LLG
10	210	430	1	9139934*LLG
25	270	570	1	9139935*LLG
50	350	690	1	9139936*LLG

LLG-Sample containers, PS/PP, with tamper-evident cap, LDPE/PP



White. Sturdy containers made of PS or PP. The tamper-evident closure enables a safe transport of samples.

- Food safe
- No-leak-proof

Nominal capacity	Ø with Cover	Height	Material	Material Lid	PK	Cat. No.
ml	mm	mm				
40	36	52	PS	LDPE	10	9402350*LLG
100	58	58	PP	PP	10	9402353*LLG
250	64	95	PS	LDPE	10	9402356*LLG
1000	116	116	PP	PP	5	9402359*LLG

Wide mouth jars, PET, with screw cap, PP



Transparent with white polypropylene cap. Food-safe. Round, except 2000 ml which are square.

Nominal capacity	Ext. diam.	Ø Cover	Height	PK	Cat. No.
ml	mm	mm	mm		
100	74	69	37	10	9103136*LLG
250	81	69	72	10	9103137*LLG
500	88	81	108	10	9103138*LLG
2000	118	100	186	10	9103140*LLG

Cylindrical jars with ribbed cap, HDPE



Complete with inner closure and cap. Suitable for food according to EC standard 1935/2004 and EC standard 10/2011.

Nominal capacity	Ext. diam.	Neck i. d.	Height	PK	Cat. No.
ml	mm	mm	mm		
70	50	36	60	10	4672397*LLG
120	56	36	71	10	4672394*LLG
250	69	50	94	10	4672395*LLG
500	86	70	107	10	4672396*LLG
1000	111	85	128	10	4672393*LLG
1500	111	87	182	10	9073444*LLG
2000	111	87	235	10	9073446*LLG

Buckets with spout, PP



Transparent. With division into 1 L segment. With stable handle and spout. Highly resistant to chemicals. Food-safe product according to regulation (EU) No. 10/2011.

Capacity	Diam.	Height	PK	Cat. No.
Litres	mm	mm		
12	310	330	1	9040022*LLG
15	310	370	1	9040025*LLG

Disposable sample spatula, PS



White. The sampling spatula can be used to apply, distribute or evenly spread viscous media such as pastes and creams. The spatula is suitable for scraping out bowls, removing residue or wiping off volumetric and dosing spoons. The dimensionally stable long edge is ideal for cutting viscous media.

- Cleanroom manufactured (cleanroom class 7)
- Food safe

Description	Dimensions (D x W) mm	Colour	PK	Cat. No.
large package	20 x 192	white	100	4680860*LLG
sterilised, packaged individually	20 x 192	white	100	4680859*LLG

Sampling lance milky, stainless steel V4A, acc. to EN ISO 707



Universal powder and granules sampler collector made of AISI 316 stainless steel. Conforms to standards of DIN and IDF (Int. Dairy Federation). Autoclavable.

Capacity	Length	Imm. depth	Ext. diam.	PK	Cat. No.
ml	cm	mm	mm		
150	48	385	28	1	6051629*LLG

ChemoSampler, PP



Grey. For sampling aggressive liquids, e.g. acids, alkalis, detergents. The samples are drawn directly into the screw-on original sampling bottle. The tamperproof bottle closure of these bottles with original safety ring ensures unadulterated sample transport.

- Resistant to acids and alkalis
- Incl. sample bottle 1000 ml

Length	PK	Cat. No.
1000	1	9303940*LLG

PowderDispo disposable sampler for solids, HDPE



For cross-sectional samples of powdery or slightly cohesive substances. In many areas, rapid and absolutely contamination-free sampling is essential. Manufactured in a clean room, individually packed. Optionally gamma-ray sterilised.

Capacity	Length	Sterile	PK	Cat. No.
ml	mm			
60	300	+	20	6282453*LLG
60	300	-	20	6282452*LLG
100	500	+	20	6259428*LLG
100	500	-	20	9303736*LLG

3M™ Sponge-Stick



Sponges and swabs specifically designed for microbial surface sampling. 3M™ Sponge-Stick, in wet and dry versions, allows sampling without directly touching the sponge.



Type	Package contents	PK	Cat. No.
Sponge stick, 1.5 x 3 sponge with 10 ml buffered peptone water broth	4 bags of 25	100	6238511*LLG
Sponge stick moistened with 10 ml neutralization buffer	1 bag of 100	100	6266542*LLG
Sponge stick	5 bags of 20	100	7970470*LLG

Vertical Steam Autoclaves Type AES



AES-28

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

- Operating temperature range 100 °C to 134 °C
- On request also available 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

Type	Capacity Litres	Chamber diam. x depth mm	PK	Cat. No.
AES-28	28	300 x 400	1	9851894*LLG
AES-50	50	300 x 700	1	6267578*LLG
AES-75	75	400 x 600	1	9851895*LLG

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.
Poma	Apple fragrance	100	6231161*LLG
Citrus	Lemon fragrance	100	6231720*LLG
Berry	Berry fragrance	100	6313709*LLG

Self-Seal Sterilization Pouches



Self-seal sterilization pouches are pre-folded and assure accurate and fast closing without the requirement of a heat sealing device. The self-seal sterilization pouches are constructed from transparent PET/PP multi-layer copolymer film, medical grade paper and adhesive strip which provides excellent resistance to over-exposure of steam and clean opening. Water based, non-toxic process indicators for steam and ethyleneoxide sterilization complying with ISO 11140-1 are applied on the paper surface and help to differentiate between processed and unprocessed packages.

- Reinforced film to avoid tearing during opening
- Clean and accurate indicator color change
- Tear, fibre-free opening and aseptic presentation
- Triple band seal for higher package integrity

Dimensions	PK	Cat. No.
mm		
75 x 200	200	6272280*LLG
90 x 230	200	6272281*LLG
90 x 270	200	6272282*LLG
130 x 290	200	6272283*LLG
190 x 340	200	6272284*LLG
300 x 430	200	6272285*LLG

Indicator tape for steam, hot air and gas sterilization



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

With	colour change	Width	Figure	PK	Cat. No.
		mm			
Steam indicator, lead free	green / black	24	a	1	9140788*LLG
Steam indicator	green / black	19	b	1	9140784*LLG
Steam indicator	white / black	25	b	1	9140789*LLG
Steam indicator, strongly adhesive, for non-woven fabric	white / black	19	c	1	9140790*LLG
Steam indicator, strongly adhesive, for non-woven fabric	white / black	25	c	1	9140791*LLG
Ethylene oxide indicator	red / green	19	d	1	9140792*LLG
Hot air indicator	green / brown	19	e	1	6240223*LLG

Second sterilisers STERI

Keller
swiss wellness company



The STERI second sterilisers permit instant disinfection and sterilization of all small instruments directly at the workplace. Biological investigations and tests prove that the 250 °C temperature maintained in the glass bead container guarantees complete destruction of all micro-organisms and spores within a few seconds. The one part of the instrument which is inserted into the STERI glass beads is sterilized. The STERI 250 and 350 are two versions of the same quality apparatus, with a stainless steel container, high-performance heating element, reduced heating time, high precision thermostat, temperature limiter and built-in thermometer.

- For perfect hygiene directly at the workplace
- A guaranteed Swiss quality product

STERI 250: Steriliser incl. plain metal cover, glass-cup and glassbeads (150 g). Suitable for small instruments, as well as for short and medium length instruments (scissors, tweezers, forceps, knives, blades, spatulas, etc.).

STERI 350: Steriliser incl. plain metal cover and glassbeads (300 g). Especially suitable for medium sized and longer instruments.

Type	Filling quantity g	External dimensions (W x D x H) mm	Plug type	PK	Cat. No.
STERI 250	150	125 x 140 x 145	EU	1	6286282*LLG
STERI 250	150	125 x 140 x 145	CH	1	6285884*LLG
STERI 250	150	125 x 140 x 145	UK	1	6286283*LLG
STERI 350	300	125 x 140 x 205	EU	1	6286284*LLG
STERI 350	300	125 x 140 x 205	CH	1	6285885*LLG
STERI 350	300	125 x 140 x 205	UK	1	6286285*LLG

Loop Sterilizer schuett solaris

schuett^{biotec}.de



Sterilization with light. Sterilization of inoculating loops, tweezers and small instruments within seconds.

- Sturdy and maintenance-free
- No gas, no open flame - Works with standard electrical power
- Intuitive, easy to use
- Instant, ready-to-use, no warm-up time, no waiting
- Sterilization temperature: 900 to 1300 °C
- Touch-free START, with IR- sensor and adjustable timer (5 to 7 seconds)
- For use in Laminar Flow Cabinets
- Ideal for mobile operation in the field

The schuett solaris is the perfect solution if an open flame should be avoided or gas cartridges etc. are not available. Used with standard electrical power. Reaches the safe working temperature of 900 to 1300 °C within a split second. No excess heat, no energy consumption between work cycles. START is generated by an infra-red sensor, which allows for efficient one-handed operation. Pathogenic material is kept inside the sterilization chamber. No spreading, no splashing. Working angle adjustment (4-steps).

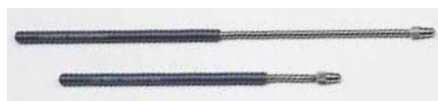
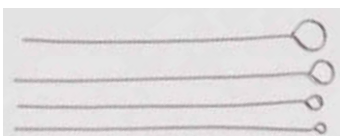
Scope of supply: schuett solaris inoculation loop sterilizer, 2 x quartz glass tubes, 1 x inoculation loop holder with inoculation loop (sample)

Specifications

Dimensions (W x D x H): 152 x 195 x 210 mm
Weight: approx. 2500 g

Type	PK	Cat. No.
Loop Sterilizer schuett solaris, 230 V	1	9018741*LLG

Inoculating loops and inoculating loop holder



schuett^{biotec}.de

Inoculation loops made from stainless steel, special stainless steel wire or platinum-iridium wire (90/10). Can be heated to red heat. Length: 60 mm. Wire diameter: 0.5 mm.

Inoculation loop holder according to Kolle for 0.3 to 0.7 mm wire diameter. Stainless steel with handle. Fixed by union nut.

Type	Loop diam. mm	PK	Cat. No.
E 1	1	10	9520170*LLG
E 2	2	10	9520171*LLG
E 3	3	10	9520172*LLG
E 5	5	10	9520174*LLG
Inoculation loop holder, 160 mm long		1	9520178*LLG
Inoculation loop holder 2 based on Kolle, 240 mm long		1	9520179*LLG

Burettes, with straight stopcock, borosilicate glass 3.3, class AS



ISOLAB
Laborgeräte GmbH

With class AS, conformity certified, with batch identification, blue graduations, DIN EN ISO 385. PTFE spindle.

Description	Capacity	Grad.	PK	Cat. No.
	ml	ml		
with Schellbach line	10	0.02	1	4008311*LLG
with Schellbach line	25	0.05	1	9270100*LLG
with Schellbach line	50	0.10	1	9270101*LLG
without Schellbach line	10	0.02	1	9270102*LLG
without Schellbach line	25	0.05	1	9270103*LLG
without Schellbach line	50	0.10	1	9270104*LLG

Automatic burettes, glass, Schilling pattern, borosilicate glass 3.3/HDPE, class B



SILBERBRAND

SILBERBRAND. Tolerances to class B, DIN EN ISO 385. Borosilicate glass 3.3 burette. PVC filling tube and silicone outlet tubing. HDPE reservoir bottle with HDPE base. Brass/PP micrometer screw. Graduations and inscriptions are in highly contrasting black enamel. With Schellbach stripes. Fine titration is easy using the micrometer screw. Narrower divisions. Calibrated to deliver (EX).

Capacity	Grad.	Capacity	Height	PK	Cat. No.
ml	ml	ml	mm		
10	0.05	500	530	1	9271053*LLG
15	0.1	500	510	1	9271055*LLG
25	0.1	1000	620	1	9271056*LLG
50	0.1	1000	830	1	9271058*LLG

Motor-driven piston burette Titronic® 300



- **Motor-driven piston burette for manual titration**
- **For high-precision dosing**

SI Analytics



Motor-driven piston burette with 50ml dosing unit. For manual titrations and highly precise dosing tasks. The TITRONIC® 300 can be completely controlled from a PC via the USB- or RS-232-interface.

T 300/50 M1: Basic unit without magnetic stirrer with ready-to-use ready-to-use 50 ml dosing unit TZ 3160 with hoses, screw connections and titration tip, manual probe TZ 3880, titration clamp Z 305, stand rod TZ 1748 and power supply 100-240 V

T 300/50 M2: as T 300/50 M1, additionally with magnetic stirrer TM 50

Specifications

Interfaces:	USB A and B, 2x RS 232
Stirrer connection:	TM 50 power supply directly through piston burette
Display:	graphics-capable TFT display
Volume indicator:	000.005 to 9999.999 ml
Display resolution:	0.005
Fill time:	30 secs. to 999 secs. adjustable (time depends on cylinder volume)
Burette resolution:	8000
Dispensing accuracy:	0.15 % system measurement deviation, 0.05 % accidental measurement deviation determined in accordance with EN ISO 8665, Part 3
Supply requirements:	230 V, 50/60 Hz
Conformity:	ISO 8665, Part 6
CE mark:	EMC: 2004/108/EG; safety EG- Directive 2006/95

Type	PK	Cat. No.
T 300/50 M1	1	9863181*LLG
T 300/50 M2	1	9863183*LLG

Analytical volumetric solutions

Reagecon



Suitable for manual and automatic titrations. Stability is proven (either opened or unopened) for the entire shelf life. Tested acc. to ISO17025. Accuracy(±):0.1 %. Capacity: 1000 ml.

You can find more solutions online.

Type	Shelf life	PK	Cat. No.
	Year		
EDTA 0.05 M (0.10 N)	2	1	ED20051*REA
EDTA 0.1 M (0.2 N)	1	1	ED20111*REA
Hydrochloric Acid 0.1 M (0.1 N)	2	1	H20101*REA
Iodine 0.05 M (0.1 N)	1	1	I2005F*REA
Sodium Hydroxide 0.1 M (0.1 N)	2	1	S20101*REA
Sulphuric Acid 0.05 M (0.1 N)	2	1	SU20051*REA
Sodium Thiosulphate 0.1 M (0.1 N)	2	1	T20101*REA

LLG-pH electrodes with gel electrolyte



Low maintenance combination electrode with integrated temperature sensor, robust plastic shaft and gel electrolyte.

Specifications

Temperature range:	0 ... 80 °C
pH range:	0 ... 14
Temperature sensor:	NTC 30 kΩ
Electrolyte:	Gel
Length/Ø:	120/12 mm
Cable length:	1 m

Plug type	Diaphragm type	PK	Cat. No.
DIN + 4 mm Banana	Fibre	1	4681924*LLG
BNC + 3 mm Cinch	Ceramic	1	6263602*LLG

LLG-pH-Buffer solutions with colour coding in twin-neck dispensing bottles



The ready-to-use buffer solutions offer excellent quality, precision and advantages in use. The calibration vessel, integrated into the twin-neck dispensing bottles, allows the particularly economical dispensing of solution and prevents contamination.

- Accuracy ± 0.01 , tested and certified at 25 °C
- Temperature dependence data table printed on the label
- Traceable to NIST
- Shelf-life: 24 months (pH 7 and 10) or 36 months (pH 4)
- Colour-coded

pH-value at 25 °C	Colour	Capacity ml	PK	Cat. No.
4.00	Red	250	1	9040868*LLG
7.00	Yellow	250	1	9040869*LLG
10.00	Blue	250	1	9040871*LLG

Multi-Parameter meter Eutech™ PCTestr 35



- Large LCD display
- Combination electrode for measuring all parameters



Versatile multi-parameter meter for measuring pH, conductivity and temperature. Waterproof, with user-replaceable sensor.

- Multi-sensor for pH, conductivity and temperature
- Simply toggle the parameters
- Up to 5 calibration points for pH and 3 calibration points for conductivity
- Water- and dustproof housing
- Big LCD Display

Specifications

pH range:	0.0 ... 14.0
Resolution:	0.1 pH
Accuracy:	0.1 pH
mV range:	0 ... 1999 µS/cm/2.00 ... 20.00 mS/cm
Resolution:	1 µS/cm/0.01 mS/cm
Accuracy:	± 1 % (full scale)
Temperature range:	0 ... 50 °C
Resolution:	0.1 °C
Accuracy:	0.5 °C
IP code:	IP 67
Power supply:	4 x 1.5 V A76 batteries

Type	PK	Cat. No.
PCTestr 35	1	6258988*LLG

Thermohygrometer testo 608



- Long-term stable humidity sensor
- Temperature measurement accuracy of 0.5 °C
- Calculation and display of the dew point



testo 608-H1

Continuous monitoring of indoor climate

The economic thermohygrometer testo 608-H1 measures humidity, temperature and dewpoint continuously.

The accurate testo 608-H2 alarm hygrometer reliably indicates when humidity and temperature limits have been exceeded, for example in greenhouses, warehouses, cleanrooms, museums, laboratories etc.

- Continuous display of temperature and humidity or dewpoint
- With dew point calculation and max/min display
- Battery monitoring

Additional features testo 608 H2:

- LED alarm, warns if limits are exceeded
- High accuracy ± 2 %rH

Specifications

Measuring rate:

Power supply:

Dimensions:

Housing:

Display:

Sensor type NTC

Measuring range:

Accuracy (at 25 °C):

Resolution:

Sensor type testo humidity

sensor capacitive

Measuring range:

Accuracy (at 25 °C):

Resolution:

Operating temperature:

testo 608-H1 // testo 608-H2

18 sec

9 V block battery

111 x 90 x 40 mm

ABS

LCD, 2 lines

0 ... 50 °C // -10 ... 70 °C

± 0.5 °C (± 1 digit)

0.1 °C

10 ... 95 % rH // 2 ... 98 % rH

± 3 % rH // ± 2 % rH

0.1 % rH

0 ... 50 °C // -10 ... 70 °C

Type	PK	Cat. No.
testo 608-H1	1	9726964*LLG
testo 608-H2	1	9726965*LLG

Sedimentation cone, plastic, SAN



Imhoff pattern. DIN 12672.
Transparent SAN (Styrene acrylonitrile).
With screw cap for draining the contents. Temperature-resistant up to max. 85 °C.

Graduations, ml:

0 to 2

2 to 10

10 to 100

100 to 300

300 to 1000

Subdivisions, ml

0.1

0.5

1.5

10

50

Type	PK	Cat. No.
With screw cap	1	9304280*LLG

Sedimentation cones, accessory stand, Acrylic/PP



Acrylic/PP. To hold two Imhoff sedimentation cones. Compact and easy to transport even when fully loaded.

Width	Length	Height	PK	Cat. No.
mm	mm	mm		
150	300	294	1	9304281*LLG

Secchi Disk



For determining the depth of visibility and light permeability of water. Lead weight for better lowering. The approx. 15 cm high rod is fitted with an eyelet for fastening the lowering engine. The lowering line is marked in intervals of 100 cm with figures from 1 to 10 and in between additionally with line markings each 50 cm for better reading of the depth of visibility while the disk is being lowered.

Lowering line, please order separately.

Description	PK	Cat. No.
Secchi Disk, diam. 250 mm, 4 areas (2 x black, 2 x white)	1	6267808*LLG
Secchi Disk, diam. 250 mm with eyelet without bottom line	1	7072323*LLG
Lowering line, 10 m, marked in intervals of 50 cm and 100 cm	1	7072324*LLG

Core thermometer Testo 106 kit



- For food controls
- For quick and accurate measurement of core temperature
- Prick holes hardly visible

Particularly suitable for quick, uncomplicated core temperature checks. Automatic end value detection (auto-hold). Incl. protective probe cap and battery. Calibration certificates on request.

Scope of delivery: testo 106-T1, TopSafe protective case, holster clip for belt or wall.

Specifications

Temperature range (°C):	-50 to 275
Accuracy ±1 digit (°C):	±1 % of measurement value (100 to 275) ±0.5 (-30 to 99.9) ±1 (-50 to -30.1)
Resolution (°C):	0.1
Power supply:	Lithium (CR2032)

Type	PK	Cat. No.
Testo 106-T1 Kit	1	9718209*LLG

Temperature/Humidity data logger LOG 210

- PDF data logger with display
- Memory for 100.000 data sets
- Usable without software (pre-programmed 5 minute measuring interval)
- Automatic output as PDF file
- Measurement interval adjustable (10 seconds to 24 hours)
- Max-Min values in the display (resettable)
- Battery life approx. 4 years (with measuring interval >15 minutes)
- Wall bracket included
- Status and alarm LEDs with signal tone (buzzer)
- Free software available for download



Specifications

Temperature	
Measuring range:	-40 to +70 °C
Accuracy:	0.1 °C
Precision:	±0.5 °C (0 to +60 °C), otherwise ±1.0 °C
Humidity	
Measuring range:	0 to 100 % R.H.
Resolution:	0.1 % R.H.
Accuracy:	±3 % R.H. (40 to 60 %), ±3.5 % R.H. (20 to 40 % and 60 to 80 %), otherwise ±5 % R.H.
Dimensions:	91.5 x 42 x 20 mm
Weight:	approx. 70 g

Type	PK	Cat. No.
LOG210	1	6284758*LLG

LLG-Min./Max. Thermometer with outdoor sensor



Digital thermometer with outdoor sensor.

- Two-tier LCD display
- Measuring temperature range -50 °C to 70 °C, can be switched to °F
- Display resolution 0.1 °C
- Accuracy ±1 °C
- AAA 1.5 V battery included
- Length of the cable 190 cm

Type	PK	Cat. No.
LLG Min./Max. Thermometer with outdoor sensor	1	9243165*LLG

Combination Infrared and Penetration Thermometer TLC 750i



Handy, waterproof infrared thermometer with retractable insertion probe. Compliant with HACCP and DIN EN 13485, with battery and factory calibration certificate. -Display with backlight for reading in dark environments.

- Display can be upside down for reading from both sides
- Double laser pointer



Specifications

Measurement range:	-50 to +250 °C
Accuracy infrared:	±1.5 °C (-18 to -0.1 °C) ±1.0 °C (0 to +65 °C)
Accuracy penetration probe:	±0.5 °C (-30 to +99 °C) otherwise ±1 °C (1 %), larger value applies
Resolution:	0.1 °C
Operating temperature:	-25 to +50 °C
Dimensions (L x W x H):	169.5 x 44 x 23 mm
Weight:	approx. 140 g
Power supply:	2 x AAA (Micro), replaceable
IP code:	IP 65

Type	PK	Cat. No.
TLC 750i	1	6289927*LLG

Mini centrifuge LLG-uniCFUGE 5 with timer and digital display



Fixed angle rotor with lid, made of aluminium for 12 x 1.5/2 ml tubes with optimised aerodynamics which minimize heat and noise during operation. Operation in RPM or RCF mode possible by simple switching. Short-Spin mode with selectable RZB and RPM values. **Large LCD (3.9") display** with intuitive interface. **Integrated imbalance-detection** with automatic shutdown. Wide suction feet provide a stable base. The centrifuge can be controlled via computer by using the included software that can store up to 99 user-defined programmes. Operational record output to Excel.

The following types of vessel can be used:

- 12 x 0.2 ml PCR tubes
- 12 x 0.4 ml centrifuge tubes
- 12 x 0.5 ml centrifuge tubes
- 12 x 1.5 ml centrifuge tubes
- 12 x 2.0 ml centrifuge tubes

Scope of supply: Centrifuge with rotor for 12 x 1.5/2 ml tubes, power supply with USB cable, 12 Adapters for 0.4/0.5 ml tubes, 12 Adapters for 0.2 ml tubes, Allen wrench with T handle, Software CD

Specifications

Max. RCF:	15595 x g
Max. speed:	variable from 500 ... 15000 rpm
Motor:	brushless DC motor
Max. load:	12 x 2 ml PCR tubes
Timer:	0 ... 999 min
Dimensions (W x D x H):	262 x 230 x 131 mm
Weight:	4 kg
Power supply:	100 ... 240 V, 50/60 Hz

Type	Plug type	PK	Cat. No.
LLG-uniCFUGE 5	EU	1	6263530*LLG
LLG-uniCFUGE 5	UK	1	6263531*LLG

Centrifuge CVP-2

3 devices in one!

The CVP-2 offers 3 types of equipment in one: centrifuge with vortex function, PCR plate centrifuge and PCR plate shaker.

- Independent timers for the vortexer and centrifuge function with up to 999 cycles
- Adjustable speed or 4 programmable presets
- Uniform and continuous processing of up to 192 samples
- For PCR plates of all frame types

Specifications

Max. RCF:	245 x g
Max. speed Centrifuge/Vortexer:	300 ... 1500 rpm/300 ... 1200 rpm
Max. capacity:	2 PCR plates
Timer Centrifuge/Vortexer:	0 ... 30 min/0 ... 60 sec
Power consumption:	24 W
Dimensions (W x D x H):	285 x 350 x 190 mm
Weight:	approx. 6 kg
Power supply:	100 ... 240 V, 50/60 Hz
Input voltage:	24 V

Type	PK	Cat. No.
CVP-2	1	6269768*LLG

Mini Centrifuge C1601

Ideal for microfiltrations or simple separations.

- Quick release rotor system, no tools needed to exchange rotors
- Electronic braking, for rapid deceleration
- Dual lid switch
- Compact, rugged design

Scope of supply:

Mini Centrifuge C1601, Rotor for 8 x 1.5/2.0 ml tubes, Rotor for 4 x 8-strip tubes, individual adapters for 0.2 ml, 0.25 ml and 0.5 ml tubes, fits in rotor 6770-RT, power adapter 24V

Specifications

Max. RCF:	2000 x g
Max. speed:	6000 rpm
Max. capacity:	8 x 1.5/2.0 ml or 4 x 0.2 ml strips
Dimensions (W x D x H):	172 x 147 x 122 mm
Power supply:	100 ... 240 V, 50/60 Hz

Type	PK	Cat. No.
C1601-B, blue lid	1	4676121*LLG

Halogen moisture analyser DLB 160-3A



Moisture analyser with 6 direct keys for rapid access to the main functions.

- Halogen quartz glass heater 400 W
- Backlit LCD display
- Automatic taring when starting a measurement by closing the lid
- The last value measured remains on the display until it is replaced by a new measurement

Scope of supply:

Moisture analyser DLB,
10 sample plates,
protective working cover

You can find weighing boats in our online shop.



Specifications

Readability:	0.001 g/0.01 %
Weighing range max.:	160 g
Reproducibility weight of sample 2 g:	0.15 %
Reproducibility weight of sample 10 g:	0.05 %
Temperature range:	35 ... 160 °C in steps of 1 °C
Data interface:	RS-232
Dimensions (W x D x H):	215 x 345 x 235 mm
Weight:	4.7 kg
Power supply:	230 V AC, 50 Hz

Type	PK	Cat. No.
DLB 160-3A	1	6261150*LLG

Pocket balances TGC Series



TGC 1K-3

Slim pocket balance with large stainless steel weighing plate and practical tare pan.

- High-resolution
- Particularly rapid reaction and stabilisation time
- Cover made of shock proof plastic, can also be used as a weighing pan
- Stainless steel weighing plate
- LCD display

Specifications

Total dimension (W x D x H):	100 x 130 x 18 mm
Weight:	200 g
Temperature range:	0 ... 40 °C
Power supply:	Batteries 2 x CR2032
Operating time:	33 h

Type	Capacity	Readability	Plate diam.	PK	Cat. No.
	g	g	mm		
TGC 150-2	150	0.01	81	1	4671678*LLG
TGC 500-1	500	0.1	81	1	4671679*LLG
TGC 1K-3	1000	1.0	81	1	4671680*LLG

Analytical balances ALJ-A



- Large glass draught shield with 3 sliding doors
- Short settling time

Analytical balances with large weighing ranges.

- Automatic internal adjustment in the case of a change in temperature > 1.2 °C
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- Percentage determination: makes it possible to store a given weight value (100 %) and to determine deviations from this target value
- Backlit LCD display, digit height 17 mm
- Weighing plate made of stainless steel

Specifications

Overall dimensions, incl. draught shield (W x D x H):	210 x 340 x 330 mm
Weighing space (W x D x H):	160 x 140 x 205 mm
Net weight:	approx. 7 kg
Permissible ambient temperature:	5 °C/35 °C

Type	Weighing range	Plate diam.	PK	Cat. No.
	g	mm		
ALJ 250-4A	250	80	1	6257891*LLG
ALJ 200-5DA	82 / 220	80	1	4660773*LLG



LABORTOPS

Screw pumps VACUU-PURE[®] 10/VACUU-PURE[®] 10C (chemically resistant)

vacuubrand

Powerful vacuum pumps for dry and hydrocarbon-free operation. Due to their unique operating principle, they generate ultra-pure vacuum as well as contamination-free exhaust air and work abrasion-free. They have been specially developed for processes down to the 10^{-3} mbar range, but can also be used without any problems at working pressures above 1 mbar.

The chemical-resistant version VACUU-PURE[®] 10C is protected against corrosion due to chemically resistant polymers on all wetted parts. A thick-walled PEEK encapsulation protects the spindles and stator inside the pumping chamber, providing high chemical resistance. An integrated sealing gas supply prevents the bearings from chemical attack. Due to the design-related high condensate compatibility, no gas ballast is required, even with high vapor loads.

- For ultra-clean processes and pure products
- 100 % oil-free due to cantilevered spindles
- Abrasion-free due to contact-free operating principle
- No wear parts
- Quick drying after high condensate load
- Suitable for continuous operation
- With air cooling
- Rotatable inlet
- With Modbus RTU interface



- **10^{-3} mbar Vacuum range**
- **100 % oil-free**
- **No abrasion**
- **No wear parts**



Specifications

Final pressure:	5×10^{-3} mbar
Max. overpressure:	15 mbar
Permissible ambient temperature:	10 ... 40 °C
Suction/pressure connection:	KF DN 25
Noise emission:	55 dBA
Motor power:	700 W
Dimensions (W x D x H):	269 x 507 x 413 mm
Weight:	21.1 kg
Power supply:	230 V, 50/60 Hz
IP code:	IP 20

Type	Flow rate L / min.	Plug type	PK	Cat. No.
VACUU-PURE [®] 10	167	EU	1	4679577*LLG
VACUU-PURE [®] 10	167	CH	1	4679578*LLG
VACUU-PURE [®] 10	167	UK	1	4679579*LLG
VACUU-PURE [®] 10C	150	EU	1	4679583*LLG
VACUU-PURE [®] 10C	150	CH	1	4679584*LLG
VACUU-PURE [®] 10C	150	UK	1	4679585*LLG