

LABORTOPS

4/2022



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NEW

LLG-Pipette controller easy



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Single channel microliter pipettes LLG-proMLP



- Quality Made in France
- Fatigue-free pipetting
- Adjustable tip eject button

- High quality **Made in France**
- Extremely light weight while the robustness still remains
- Perfect ergonomics for highest comfort
- Colour-coded push-button for quick operation
- Extremely low pipetting forces
- **Built-in volume locking** for error-free results
- **Tip ejector button*, adjustable for right- and left-handed users**
- Completely autoclavable at 121 °C
- Including individual calibration certificate (according to EN ISO 8655)

*not available for 5 ml and 10 ml pipettes

Scope of supply: microliter pipette, calibration tool



Capacity	Increments	Accuracy max. vol. (± R%)	Precision max. vol. (≤ CV%)	Colour code	PK	Cat. No.
µl	µl					
0.2-2	0.002	1.65	0.75	dark orange	1	LLG06270420
0.5-10	0.02	1.10	0.44	red	1	LLG06270421
2-20	0.02	1.00	0.33	light yellow	1	LLG06270422
10-100	0.2	0.80	0.17	light orange	1	LLG06270423
20-200	0.2	0.80	0.17	dark yellow	1	LLG06270424
100-1000	2	0.80	0.17	dark blue	1	LLG06270425
500-5000	2	0.66	0.18	purple	1	LLG06270426
1000-10000	20	0.60	0.18	light blue	1	LLG06270427

LLG-Pipette carousel, ABS

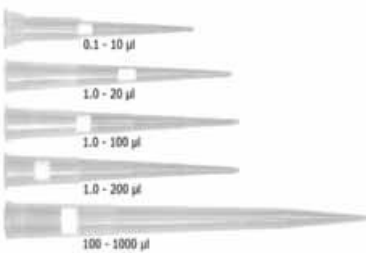


LLG-Pipette carousel made of ABS for safe and comfortable storage of microlitre pipettes. Rotating stand allows quick access to the desired pipette.

- Space-saving storage of up to 6 single channel or multi-channel pipettes
- Suitable for common pipette brands of BRAND, GILSON®, Eppendorf®, Thermo Fisher Scientific and RAININ
- Easy to clean

Description	PK	Cat. No.
LLG-Pipette carousel	1	LLG06490522

LLG-Filter tips 2.0 Low Retention, PP



The new generation of LLG Labware filter tips with low liquid retention. Available in easy-to-open boxes with color coded racks. Compatible with all common pipette brands. You can find the appropriate compatibility list on www.llg-labware.com in the Downloads section.

- Improved optical clarity and pipette fit
- Colored coded rack inserts for easy identification
- Graduated
- Sterile
- DNase and RNase free

Colour	Capacity µl	Package contents	PK	Cat. No.
Clear	0.1 ... 10	10 x 96	960	LLG04668784
Clear	0.1 ... 10 *	10 x 96	960	LLG04668785
Clear	1 ... 20	10 x 96	960	LLG04668786
Clear	1 ... 100	10 x 96	960	LLG04668787
Clear	1 ... 200	10 x 96	960	LLG04668788
Clear	100 ... 1000	8 x 96	768	LLG04668789

* Tip XL

LLG-Pipette controller easy



- **Intuitive operation**
- **Autoclavable cone tip**
- **Eco-friendly rechargeable NiMH batteries**



The LLG-Pipette controller *easy* enables fast and exact pipetting with glass and plastic pipettes.

- Ergonomic and lightweight construction for constant ease of use over prolonged usage
- Unique nose cone angle for enhanced flexibility in operation e.g. in fume hoods
- Eco-friendly rechargeable NiMH batteries, offering up to 8 hours of continuous working
- Easily replaceable batteries
- Autoclavable tip cone for avoiding cross-contamination

Scope of supply: Pipette controller, manual, charger, wall-mount, desktop stand



Description	Plug type	PK	Cat. No.
LLG-Pipette controller <i>easy</i>	EU	1	LLG06263683
LLG-Pipette controller <i>easy</i>	UK	1	LLG06263684

LLG-Serological pipettes, PS, sterile



All LLG serological pipettes are plugged, sterile, pyrogen-free and have an increased volume capacity through extra graduations.

- 1 ml, 5 ml, 10 ml, 25 ml and 50 ml pipettes contain a bi-directional secondary graduation scale for precise dosing
- Colour coded ringmark for easy volume identification
- Single packed in easy-to-open plastic/paper packaging

Volume	Grad.	Colour code	Negative graduations	PK	Cat. No.
ml	ml				
1	1/100	yellow	0.3	500	LLG09380440
2	1/50	green	0.6	500	LLG09380441
5	1/10	blue	3	200	LLG07930401
10	1/10	orange	3	200	LLG06268240
10	1/10	orange (wide mouth)	3	200	LLG09380442
25	2/10	red	8	150	LLG07930403
50	5/10	purple	10	100	LLG09380443

Pipette stand, vertical, PP



The pipette carousel can be rotated 360° and can hold up to 94 pipettes.

Type	PK	Cat. No.
Pipette stand, vertical	1	LLG09273895

Pipette tray, PVC



PVC. Tidy tray. With 4 long compartments for approx. 30 graduated pipettes (1 ml to 20 ml).

Width	Length	Height	PK	Cat. No.
mm	mm	mm		
300	426	30	1	LLG09200394

Aluminium bottles, with UN approval



The aluminium bottle is particularly suited for storing, transport or sending substances and reference samples which have to be stored completely unaltered.

- With UN approval
- Pure aluminium (AL 99.5 material)
- PP screw cap with internal aluminium seal included

Description	Capacity	Diam.	Height	PK	Cat. No.
	ml	mm	mm		
Bottle	60	40	88	10	LLG06291403
Bottle	120	57	97	10	LLG06291404
Bottle	300	57	160	10	LLG06291405
Bottle	600	74	192	10	LLG06291406
Bottle	1200	88	248	10	LLG06291407

Laboratory bottles, Borosilicate glass 3.3, GL45, with retrace code



DIN 168 - 1. EN ISO 4796-1. With graduations and retrace code, pouring ring, PP screw cap with ISO thread. Certificates are available on request.

Capacity	Ext. diam.	Height	PK	Cat. No.
ml	mm	mm		
100	56	100	10	LLG09072331
250	70	138	10	LLG09072332
500	86	176	10	LLG09072334
1000	101	225	10	LLG09072335
2000	136	260	10	LLG09072336

Pressure atomizer LaboPlast®, HDPE



The pressure sprayer is ideal to spray a wide range of liquids uniformly. The pressurised spray has a working pressure of 4 bar. Extension for spray lance 30 cm available as accessory.

- Wetted parts PE, PP, glass-fibre reinforced PA, V2A, FKM
- Bottle made of HDPE
- With short spray nozzle
- Left-handed and right-handed pistol control
- Adjustable spray jet
- Graduation up to 1500 ml
- Temperature max. 30 °C

Capacity	Ext. diam.	Neck diam.	Height	PK	Cat. No.
ml	mm	mm	mm		
1500	142	45	315	1	LLG09223162

Jars, PP with PP screw cap



White, complete with red PP screw cap, in safe pack with certificate of analysis.

Nominal capacity	Ø with Cover	Height	PK	Cat. No.
ml	mm	mm		
25	34	40	25	LLG07077661
60	41	56	25	LLG06254446
90	56	52	25	LLG07077852
125	56	68	25	LLG07085372
250	73	79	20	LLG07053933
625	96	113	6	LLG07051092
1000	112	129	3	LLG07052895
1250	112	159	3	LLG07053930

Automatic burettes with splinter protection, Schilling pattern, Borosilicate glass 3.3



Burette according to Dr. Schilling with splinter protection, with Schellbach stripes, automatic zero point extraction and Bürkle dosing device. The dosing device allows precise dosage via the pushbutton or via the micro-screw as well as precise dispensing via a fine spout tip.

- With splinter protection
- Adjusted to Ex
- Shatterproof, resistant to chemicals
- Exact spout tip, fine droplet formation
- Parts in contact with the medium: PE, natural rubber, PP, Borosilicate glass



Capacity	Grad.	Tolerance	Height	PK	Cat. No.
ml	ml	± ml	mm		
15	0.1	0,045	520	1	LLG06280403
25	0.1	0,075	650	1	LLG06280404
50	0.1	0,075	920	1	LLG06280405

Burettes with straight cock, Borosilicate glass 3.3, class AS, DE-M marking



BLAUBRAND®, DE-M marking, removable PTFE stopcock. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Burette tube with Schellbach stripe, stopcock with precision tip. Incl. one batch certificate.



Capacity	Grad.	Length	Tolerance	PK	Cat. No.
ml	ml	mm	± ml		
10	0.02	795	0.02	1	LLG04000014
25	0.05	800	0.03	1	LLG07617437
50	0.1	800	0.05	1	LLG04000015

Bottletop Dispenser LLG-uniTOPDISPENS 2



- Springless PTFE valve, PTFE piston with chemically resistant ETP
- O-ring enables **high chemical compatibility**
- Glass cylinder from borosilicate glass 3.3
- Re-circulation valve enables easy priming and bubble free dispensing
- 360° rotation possible due to specially designed bottle adapter
- Flexible and adjustable delivery nozzle provides **dispensing angle flexibility** to the user
- Specially designed volume adjustment knob for quick and easy volume setting
- **The telescopic extractable intake tube can be easily adjusted to varying bottle heights**
- Five bottle adaptors included (28 mm, 32 mm, 37 mm, 40 mm and 45 mm). Standard thread: 30 mm.
- Fully autoclavable at 121 °C, 15 psi for 10 to 15 min
- Individually calibrated in accordance with ISO 8655 standards and each unit is supplied with an individual calibration certificate
- You can find the appropriate compatibility list on www.llg-labware.com in the Downloads section



Volume	Graduations	Accuracy max. vol. (± R%)	Precision max. vol. (≤ CV%)	PK	Cat. No.
ml	ml				
0.25 - 2.5	0.05	0.6	0.2	1	LLG06282275
0.5 - 5	0.1	0.6	0.2	1	LLG06282276
1 - 10	0.2	0.6	0.2	1	LLG06282277
2.5 - 30	0.5	0.6	0.2	1	LLG06282278
5 - 60	1.0	0.6	0.2	1	LLG06282279
10 - 100	2.0	0.6	0.2	1	LLG06282280

LLG-Surface protector DescProtect



DescProtect is a durable paper which quickly absorbs liquid spills. The PE-coated base layer stops liquids reaching the work surface.

- Stays flat, does not ripple or curl to de-stabilise vessels
- White surface can be written on using pens or pencils
- Rapid absorption of liquid spills

Type	Size	PK	Cat. No.
Sheets	460 mm x 570 mm	50	LLG09160270
Spool	400 mm x 50 m	1	LLG09160271

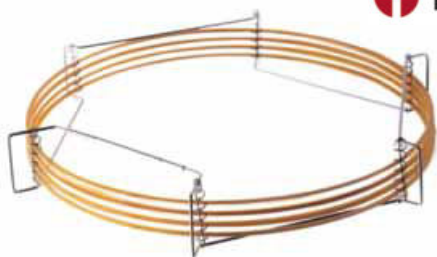
LLG-2in1 KITs with Short Thread Vials ND9 (wide opening)



2in1 KITs contain 100 vials (1.5 ml) and 100 closures in an orange PP-Box. As both components are always required at the same time, 2in1 KITs are a convenient way to obtain and store all required items for analysis. All advantages of the individual components (cleanroom packaging of the vials, recloseability of the packaging, etc.) remain unchanged.

Description	Cover type	PK	Cat. No.
clear	Short Thread Cap, blue, hole, Silicon white / PTFE red	100	LLG09003560
clear	Short Thread Cap, blue, hole, Silicon white / PTFE blue, slitted	100	LLG07621765
clear	Short Thread Cap, transparent, hole, Silicon white / PTFE red	100	LLG09003561
clear, labelling field	UltraClean Short Thread Cap, blue, hole, Silicon white / PTFE red	100	LLG07970892

Capillary columns



BP5MS

5 % Phenyl Polysilphenylene-siloxane. For 5 % GC-MS analysis and general purpose MS analysis. Suitable replacement for: DB-5ms, ZB-5ms, Rxi-5Sil MS, VF-5ms, CP-Sil 8 CB.

Int. diam.	Length	Film thickness	Temp. range	PK	Cat. No.
mm	m	µm	°C		
0.25	30	0.25	-40 ... 330 / 350	1	LLG04676266

HT8/Fast PCB

8 % Phenyl Polycarborene-siloxane. Ultra high temperature columns for polychlorinated biphenyl compounds (PCB), nitro-substituted aromatics, polynuclear aromatic hydrocarbons, pesticides and herbicides.

Int. diam.	Length	Film thickness	Temp. range	Type	PK	Cat. No.
mm	m	µm	°C			
0.10	10	0.10	-20 ... 360 / 370	Fast PCB	1	LLG06233627
0.22	25	0.25	-20 ... 360 / 370	HT8	1	LLG06205318
0.25	30	0.25	-20 ... 360 / 370	HT8	1	LLG06207027
0.25	60	0.25	-20 ... 360 / 370	HT8-PCB GC	1	LLG04676265

HPLC Starter Kits Generation 2.0, GL 45



Complete set for one HPLC system with up to 4 solvent reservoirs
 - Price advantage compared to ordering piece by piece
 - Suitable for all current HPLC systems
 - Use the supplied blind plugs to tighten connectors which are temporarily inactive or not in use

Contents of the different sets:

HPLC SafetySet 1: 3 x SafetyCaps I (V 2.0), 1 x SafetyCap II (V 2.0), 1 x blind plug UNF 1/4" 28G, 4 x air valve

HPLC SafetySet 2: 4 x SafetyCaps II (V 2.0), 4 x blind plug UNF 1/4" 28G, 4 x air valve

HPLC SafetySet 3: 4 x SafetyCaps III (V 2.0), 8 x blind plug UNF 1/4" 28G, 12 x fitting 1.6 mm, 12 x fitting 2.3 mm, 12 x fitting 3.2 mm, 4 x air valve, 8 x insertion label

Type	PK	Cat. No.
HPLC safety set 1	1	LLG04669378
HPLC safety set 2	1	LLG04669379
HPLC safety set 3	1	LLG04678694

Ferrules for Agilent GC and Perkin-Elmer GC



for Agilent GC



for Perkin-Elmer GC

High quality ferrules made of 100 % Graphite or 15 % Graphite/ 85 % Vespel.

Type A: 15 % Graphite/85 % Vespel

Type B: 15 % Graphite/85 % Vespel

Type C: 100 % Graphite

Type	Column ID mm	Ferrule ID mm	For	PK	Cat. No.
A	0.1 - 0.25	0.4	Agilent GC	10	LLG06223558
A	0.32	0.5	Agilent GC	10	LLG09221278
B	0.1 - 0.25	0.4	Agilent GC	10	LLG06088109
B	0.32	0.5	Agilent GC	10	LLG06059976
B	0.53	0.8	Agilent GC	10	LLG06059977
C	0.1 - 0.32	0.5	Agilent GC	10	LLG07652355
C	0.45 - 0.53	0.8	Agilent GC	10	LLG09221280
C	0.1 - 0.32	0.5	Perkin-Elmer GC	10	LLG09221284
C	0.45 - 0.53	0.8	Perkin-Elmer GC	10	LLG09221285

LLG-Syringe filters *SPHEROS*, PVDF



Hydrophilic membrane for aqueous polar and light unpolar solutions. Very low protein binding, suitable for high flow rates. Ideal for use with biological macromolecules, water soluble oligomers and polymers. With female Luer-Lock inlet and male Luer-Slip outlet. Sterile products in individual hard blister packaging and dispenser box.

Filter diam. mm	Pore size µm	Housing	Sterile	PK	Cat. No.
13	0.22	PP, blue	-	100	LLG04685651
13	0.45	PP, blue	-	100	LLG04685652
25	0.22	PP, blue	-	50	LLG04685653
25	0.45	PP, blue	-	50	LLG04685660
13	0.22	PP, blue	+	100	LLG04685654
13	0.45	PP, blue	+	100	LLG04685655
25	0.22	PP, blue	+	45	LLG04685656
25	0.45	PP, blue	+	45	LLG04685657

Syringe filter Minisart® RC



SARTORIUS

Male Luer Slip. Housing PP. Regenerated cellulose (RC). Ready-to-use units with a hydrophilic, solvent-resistant membrane made of regenerated cellulose, making sample preparation quick and easy. Suitable for aqueous/organic solutions.

Filter diam. mm	Pore size µm	Colour	Sterile	PK	Cat. No.
25	0.20	White, Printed	+	50	LLG07076270
25	0.20	White, Printed	-	50	LLG09049094
25	0.20	White, Printed	-	500	LLG09049095
25	0.45	White, Printed	-	50	LLG09049097
25	0.45	White, Printed	-	500	LLG09049098
15	0.20	White, Printed	+	50	LLG07075954
15	0.20	White, Printed	-	500	LLG09049088
15	0.45	White, Printed	-	50	LLG09049091
4	0.20	Blue Tray	-	50	LLG09049081
4	0.45	Yellow Tray	-	50	LLG09049084

LLG-Disposable syringes, 3-parts, PP, non-sterile, bulk



- Barrel: PP, Plunger: PP and Polyisoprene rubber
- Latex-free, pyrogen-free, DEHP-free, non-toxic
- Suitable for all syringe filters with Luer connection
- Non-sterile, bulk packed in box of 500
- Luer-Lock according to DIN EN 1707
- Luer-Slip according to DIN EN 20594-1

Capacity ml	Nozzle type	PK	Cat. No.
2	Luer-Slip	500	LLG06267267
5	Luer-Slip	500	LLG06267268
10	Luer-Slip	500	LLG06267269
20	Luer-Slip	500	LLG06267270
2	Luer-Lock	500	LLG06286616
5	Luer-Lock	500	LLG06286617
10	Luer-Lock	500	LLG06286618
20	Luer-Lock	500	LLG06286619

LLG-Inline filters, PTFE



LLG-Inline filters with PP housing. The PTFE membrane is particularly suitable for filtration of aggressive chemicals, including acids and non-aqueous solutions. Also ideal for clarifying filtration of organic solutions, sterile filtration of gases, as well as sterile aeration and deaeration.

- Multiple autoclavable at 121 °C for 20 minutes at 2 bar, max. 3 cycles
- High throughput with low pressure drop
- For air and gases in both directions

Diam. mm	Pore size µm	PK	Cat. No.
50	0.45	20	LLG04685659



The 50 mm inline filter with its ultra pure Polypropylene housing (ultrasonic welded) is designed to contain 47 mm membranes. The filter comes with 6-12 mm hose connectors (tapered) at the inlet and the outlet side.

- Hydrophobic PTFE diaphragm, polypropylene housing.
- Autoclavable at 121 °C for 20 minutes at 2 bar, max. 3 cycles
- Stepped tubing olive of 6-10 mm on both sides
- For air and gases in both directions
- Max. operating pressure 4.0 bar

Diam. mm	Pore size µm	PK	Cat. No.
50	0.2	5	LLG09059513

AccuSeal Semi-Automated Plate Sealer



- Accepts a wide range of microplates and heat seals
- User-friendly control system
- Large digital display shows all operating parameters
- Adjustable sealing temperature: 100 °C to 190 °C, or no heat
- Precise temperature, timing and pressure for consistent sealing

Specifications

Dimensions (W x D x H):	171 x 324 x 362 mm
Weight:	12 kg
Sealing Temperature:	Off, 100 to 190 °C (increments of 1.0 °C)
Temperature Accuracy:	±1.0 °C
Temperature Uniformity:	±1.0 °C
Sealing Time:	0.5 to 10 sec (increments of 0.1 sec)
Compatible Plate Materials:	PP (Polypropylene), PS (Polystyrene), PE (Polyethylene)
Compatible Plate Types:	Standard Assay Plates, Deep-Well Storage plates, PCR Plates (Non-Skirted, Semi-Skirted, Full-Skirted)
Maximum Plate Height:	45 mm
Compatible Sealing Film Types:	Foil Polypropylene laminate, Clear Polyester-polypropylene laminate, Clear polymer, Thin clear polymer, Foil-laminate, Foil

Type	Description	PK	Cat. No.
AccuSeal	includes adapters for standard and deepwell microplates, 230 V	1	LLG09595290
AccuSeal	adapter for sealing PCR plates	1	LLG09595291

LLG-96-well PCR Plates, PP



- Clear well bottom for sample visibility, with V-Bottom
- Compatible with thermocyclers of all leading brands
- Consistent wall thickness for uniform heat transfer
- Holes in the skirt for easy handling
- Virgin polypropylene, certified RNase-, DNase- and Endotoxin-free

Description	Capacity	PK	Cat. No.
	µl		
96 Well Plate, skirted	200	50	LLG06313409
96 Well Plate, non-skirted	200	100	LLG06313408
96 Well Plate, half skirted	200	50	LLG06313394

Gel Documentation Workflow Kit gelLITE



The starter package for working with agarose gels in the laboratory. It includes everything necessary from gel loading to gel documentation and quantification.

- Gel documentation system **gelLITE** with pre-focused camera and blue light converter screen. Acquisition and analysis software is already included licence-free
- Electrophoresis tank **multiSUB Midi** is an injection-moulded tank for up to 100 samples and each platinum electrode is recessed in a removable cassette to protect it from damage
- Power supply **PowerPro** can be operated in constant mode or programmed. Stores preset protocols for each Cleaver Scientific gel tank

Scope of supply: Gel documentation system gelLITE, electrophoresis tank multiSUB Midi DUO, power supply PowerPro 300, UV to blue light converter (21 x 26 cm), UV fluorescent ruler, UV gel scoop, agarose (100 g), DNA ladder (100 bp to 10 Kb), DNA staining reagent runSAFE (50 bp to 20 Kb), TAE running buffer (1 l)

Description	PK	Cat. No.
Gel Documentation Workflow Kit gelLITE	1	LLG04671801

Plasmid Purification-Kits Hi-Speed MINI/MIDI Fast Ion

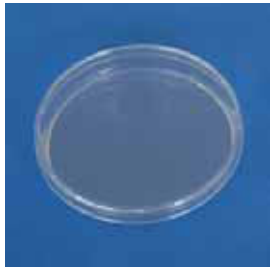


For rapid and efficient extraction of plasmid DNA from bacterial cells. The method is based on a combination of alkaline lysis and RNase treatment to obtain a clear lysate with minimal genomic DNA and RNA contamination. The bound plasmid DNA is washed and finally eluted by adding a buffer.

Specifications		Hi-Speed MINI/MIDI Fast Ion	
Method:	Spin column // Anion-Exchange		
Sample size:	1 - 5 ml // 50 ml high-copy plasmid/ 100 ml low-copy plasmid		
Binding capacity:	30 µg // 800 µg		
Fragment size:	1 - 15 kb // 1 - 20 kb		
Typical yield:	10- 30 µg // 200 - 800 µg		
Operation Time:	<15 min. // <120 min.		

Type	Description	For	PK	Cat. No.
Hi-Speed MINI	Spin column	100 preps	1	LLG04661765
Hi-Speed MINI	Spin column	300 preps	1	LLG04661767
MIDI Fast Ion	Gravity flow	25 preps	1	LLG04661763

LLG-Petri dishes, PS



Produced under aseptic conditions in an ISO 6 cleanroom.

- With a smooth surface for an optimal distribution of the transport medium
- Stackable
- With or without vents
- Packed in sleeves of 10 dishes or 20 dishes (90 mm diam. dishes)

Ext. diam. mm	Description	Height approx. mm	PK	Cat. No.
90	with triple vents, aseptic	16	480	LLG06285823
90	without vents, aseptic	16	480	LLG06285824
90	with triple vents, sterile	16	480	LLG06285816
90	without vents, sterile	16	480	LLG06285817
60	with triple vents, sterile	14	1080	LLG04678371
60	without vents, sterile	14	1080	LLG04678372

LLG-Drigalski spatula, PS, sterile



For easy plating. Individually packed.

Diam. mm	Width mm	Length mm	PK	Cat. No.
4	51.5	174	100	LLG06251768

Inoculating Turntable



The manually operated turntable allows smooth and even rotation in both directions for easy and fast distribution of bacteria on the Petri dish surface. Due to the double-sided design, the turntable can accommodate Petri dishes from 60 to 150 mm in diameter. Non-slip stand.

Description	PK	Cat. No.
Inoculating Turntable	1	LLG06286850

Incubator Lovibond® DI 10



Designed for the reliable incubation of dipslides in laboratories and field work.

- Low voltage, in-car operation possible
- Holds up to 12 dipslides or 10 quanti-discs
- Programmable incubation period setting
- Rapid heating times for fast testing

Scope of supply: Incubator incl. external 12 V universal power supply, set of leads (UK, EU, US), 12 V in-car power adapter

Temperature range:	ambient +5 ... +40 °C (±0.5 °C)
Dimensions (W x D x H):	246 x 215 x 162 mm
Weight:	1.7 kg
Power supply:	110/220-240 V or 12 V

Type	PK	Cat. No.
Lovibond® DI 10	1	LLG06291192
Dipslide-Holder	1	LLG06274399

Microbiological rapid tests Lovibond® Dipslides



The Lovibond® Dipslides are designed to test liquids as well as surfaces. These dual-sided Dipslides are available in a wide range of different media types. They are ideal for use in many applications including evaporative cooling towers, closed water circuits, cutting fluids, food testing, and many more.

Description	PK	Cat. No.
TTC/TTC for total viable count (TVC)	10	LLG06282520
TTC/MALT for Yeast, Moulds, Fungi, TVC	10	LLG06282521
TTC/ROSE for Yeast, Moulds, Fungi, TVC	10	LLG06282522
TTC/MAC for coliforms, TVC	10	LLG06282523
TTC/E.COLI for E. coli/coliforms, TVC	10	LLG06282524
PDM/MAC for Pseudomonas species, coliforms	10	LLG06282525
TTC/PDM for Pseudomonas species, TVC	10	LLG06282526
SRB for Sulphate reducing bacteria	10	LLG06282527
RZA/RZA - TTC for testing of potable water	10	LLG06282529

Disposable liquid samplers, HDPE



They are cleanroom-manufactured, individually-packed and always ready-to-use.
For high viscosity-media up to 100000 mPas.

Type	Description	Capacity	Length	PK	Cat. No.
		ml	mm		
ViscoDispo	non-sterile	100	500	20	LLG09303732
ViscoDispo	non-sterile	200	1000	20	LLG09303734

LLG-Sample containers, PS, with screw cap, sterile



With PE or /PP screw cap. Ideal for many applications as sample collection, transportation or storage.

- Non-cytotoxic
- EO sterilized
- 30 ml container with conical skirted bottom
- Ideal for small volume samples
- Leakproof-tested
- Unique leak tight cap ensures exceptional leak proof seal
- With plain label

Nominal capacity	Ø with Cover	Height	Material Lid	PK	Cat. No.
ml	mm	mm			
7	22	48	PP	700	LLG06265646
30	30	90	PP	50	LLG06265647
60	43	58	PE	60	LLG06265648

Sampler ViscoSampler, PTFE/FEP



Highly transparent. Ultra-pure sampler with powerful suction for viscousmedia. Specially developed for viscous substances, such as slurries, silt, wet clay and soil samples, sediments, oils, emulsions and creams.
The suction flask sucks up and discharges the material. All surfaces are non-porous and crevice-free, preventing dirt accumulation. Only round-profile threads, suitable for food hygiene applications, are used. Allow easy dismantling and cleaning.

Nominal capacity	Length	Diam.	Material	PK	Cat. No.
ml	mm	mm			
160	600	32	PTFE/FEP	1	LLG06803102
300	1000	32	PTFE/FEP	1	LLG09303960
650	2000	32	PTFE/FEP	1	LLG09303961

Tubes, culture, Soda-lime glass, screw cap



Autoclavable. For culture growth, transport and storage. Complete with aluminium or plastic screw cap and rubber sealing gasket. The 5 ml size has a frosted marking area.

Further sizes available on request.

Diam.	Nominal capacity	Length	PK	Cat. No.
mm	ml	mm		
12	3	35	100	LLG09010608
14	5	50	100	LLG09010602
27	15	45	100	LLG06266815
27	20	50	100	LLG06264629
27	30	75	100	LLG06266816
14	5	50	100	LLG09010603
27	15	45	100	LLG09010610
27	20	50	100	LLG09010611
27	30	75	100	LLG09010601

Spatula set, 14-pieces

Hammacher
Instrumente



In zipper case, spatula attached with loops.

Containing:

- 2 Spoon spatula, 150, 180 mm
- 3 Micro-spatula, spoon 5 x 7 mm, 100, 150, 185 mm
- 3 Double spatula, rigid, 130, 150, 185 mm
- Micro-powder spatula, flexible, 150 mm
- Pharmacist spoon, double-ended, 170 mm
- Chemical spoon, double-sided, 150 mm
- Weighing spatula, 170 mm
- 2 Micro-double spatula, spoon-shaped, 130, 150 mm

Type	PK	Cat. No.
HSO 132-00	1	LLG06312442

Spatulas, PS



BRAND

Impact resistant polystyrol.

Available as double-ended flat spatula or one end flat and the other with spoon.

Type	Length mm	PK	Cat. No.
Double-ended	150	10	LLG06323098
Double-ended	180	10	LLG06323099
With spoon	180	10	LLG06323100
With spoon	210	10	LLG06323101

Chemist's large instrument set, 13-pieces

Hammacher
Instrumente



In zipper case, instruments attached with loops.

Containing:

- 2 Micro-double spatula, flexible, 150 mm
- Spoon spatula, 150 mm
- Micro-spatula, 150 mm, spoon 5 x 7 mm
- Weighing spatula, 170 mm
- Micro-powder spatula, flexible, 150 mm
- Dissecting needle with plastic handle, 140 mm
- Pharmacist spoon, 150 mm
- Splinter forceps, curved, 105 mm
- Forceps, anatomical, 145 mm
- Forceps, pointed, 105 mm
- Scissors, pointed/pointed, 145 mm
- Microscope scissors, 115 mm

Type	PK	Cat. No.
HSO 131-00	1	LLG06312441

Forceps, stainless steel, anti-magnetic, anti-acid



LLG04668564

LLG04668572

Form	Length mm	PK	Cat. No.
Straight, strong, fine	110	1	LLG04668564
Curved, fine	120	1	LLG04668562
Curved, very fine	120	1	LLG04668572
Straight, fine, blunt	150	1	LLG04668571
Straight, strong, fine, Nickel plated, with guide-pin	155	1	LLG04668563

Measuring jugs with handle, stainless steel, heavy duty

LABORBEDARF
BOCHEM
LAB SUPPLY



LLG06072687



LLG09275850



LLG09275860

18/10 steel. Graduated 200 ml. With spout and handle, straight* or conical shape.

Nominal capacity ml	Ext. diam. mm	Height mm	foot	PK	Cat. No.
500	90	125	-	1	LLG06072687
1000 *	100	140	-	1	LLG09275850
1000	125	140	-	1	LLG07400857
2000 *	130	170	-	1	LLG09275852
2000	140	170	-	1	LLG06204504
500	115	115	+	1	LLG09275860
1000	140	160	+	1	LLG09275861
1500	150	160	+	1	LLG09275862
2000	160	185	+	1	LLG09275863

Chemical protective gloves AlphaTec® 58-128

EN ISO 374-1
Type A
EN ISO 374-5
VIRUS

Ansell



- Chemical protection glove with ergonomics certificate
- Palm with profile for better grip
- Anatomical fit for natural movements
- Good finger dexterity and touch sensitivity
- Excellent mechanical resistance
- Support material made of a flexible, open knit fabric with an elastic nitrile coating
- Pack of 1 pair

Length: 320 - 328 mm
Thickness: 0.175 mm
Colour: grey/green

Size	PK	Cat. No.
7	1	LLG06318070
8	1	LLG06318071
9	1	LLG06318072
10	1	LLG06318073
11	1	LLG06318074

Chemical Protection Glove Ultranitrile 492, Nitrile

EN ISO 374-1
Type A
EN ISO 374-5
VIRUS

MAPA
PROFESSIONAL



Green nitrile glove with cotton flock liner. Anatomical shape. Good grip finish on palm and fingers. High mechanical resistance. Excellent chemical protection against alcohols, oils, greases and hydrocarbons. Thin material for increased dexterity. Comfort, due to the quality of the flock-lining. Cat. III

Specifications

Length: 320 mm
Thickness: 0.38 mm
Colour: green

Size	PK	Cat. No.
XS (6)	10	LLG04686092
S (7)	10	LLG04686093
M (8)	10	LLG04686094
L (9)	10	LLG04686095
XL (10)	10	LLG04686091

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

EN ISO 374-1
Type B
EN ISO 374-5
VIRUS

LLG
LABWARE



Disposable protective gloves 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	LLG09006370
S	200	LLG09006371
M	200	LLG09006372
L	200	LLG09006373
XL	180	LLG09006374

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

LLG
LABWARE



High-quality, sturdy design.
Mounting material included.

Description	For	PK	Cat. No.
side slot, sturdy material	1 Box	1	LLG06286594
front insert, flexible material	3 Boxen	1	LLG09405373
side slot, sturdy material	3 Boxen	1	LLG09405374

Basket mask with valve

uvex



Particle-filtering mask with valve

- Protection class FFP3 NR D
- EN149:2001+A1:2009
- Metal free
- Textile headband for a comfortable and secure fit, adjustable
- Preformed nose area
- Soft sealing lip (PVC foam) for more comfort
- Mask fulfils the requirements of the dolomite dust test (D)

Description	Protection-level	PK	Cat. No.
Basket mask with valve	FFP3	10	LLG06316169

Eye-Wash Bottle, Barikos KS

BARTELS
RIEGER



According to DIN EN 15154-4. The water fillings have a shelf life of at least 2 years when sealed. With protective cap and tilt valve suitable for use with upright as well as downward spray head.

- pH-neutral water-based eye wash without chemical additives
- Ergonomically shaped eye recess

Description	PK	Cat. No.
Barikos KS, 620 ml, filled	1	LLG09005009
Mini Barikos KS, 175 ml, filled	1	LLG09005008

LLG-Safety Eyeshields lady

LLG
LABWARE



LLG09006009



LLG09006007



LLG09006008

- CE approved to EN 166 and EN 170
- Panoramic wrapping lens
- 180° visual field
- Frame made of tested hypo-allergenic material
- Temples with rubber tips, adjustable in length and inclination
- Nosepad and terminal tips made from soft, moldable material for optimal comfort and individual customisation
- 100 % UV protection (up to 400 nm)
- Weighs only 25 g

Lens	PK	Cat. No.
clear, AF+, AS+, 2C-1.2 U 1 FT KN CE	1	LLG09006007
clear, AF+, AS+, 2C-1.2 U 1 FT KN CE	1	LLG09006008
clear, AF, AS, 2C-1.2 U 1 FT CE	1	LLG09006009

LLG-Dispenserbox, Acrylic Glass

LLG
LABWARE



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	LLG06286593

PU Coated Gloves, nylon



The PU-coated nylon gloves are processed on the cuffs in a fraying preventing way.

- Very flexible
- Lint-free
- Palm PU-coated
- Particularly handy and suitable for handling smooth and slippery objects
- Colour coding of the cuffs
- Pack of 10 pairs

Size	Colour	PK	Cat. No.
S	white	10	LLG04659030
M	green	10	LLG04659029
L	grey	10	LLG04659028
XL	brown	10	LLG04659027

Adhesive Mats Sticky Mat



The Sticky Mat provides a fast, convenient, reliable way to clean shoe soles or other items before entering a clean and sanitary area. Sticky Mats significantly reduce traffic-borne contaminants.

Ergomat White Sticky Mats are produced in an 46 x 114 cm sheet, sold in pads of 30 sheets, with 10 pads per box (300 sheets total.)

Description	Colour	PK	Cat. No.
Frame for Cleanroom mats Sticky Mat	grey	1	LLG06272245
1 mat of 30 sheets	white	10	LLG06272241
1 mat of 30 sheets	blue	10	LLG06272242
Set of 10 mats of 30 sheets + 1 frame	white	1	LLG06272243
Set of 10 mats of 30 sheets + 1 frame	blue	1	LLG06272244

Cleanroom Gloves AdvanTech 529, nitrile

EN ISO 374-1
Type B



EN ISO 374-5



EN 421



Reinforced mechanical resistance for short-term operations. Manufacturing process guarantees a very low level of contaminants: rates of particles, powder-free, non-volatile residue, extractables; compatible with ISO 5 class (Class M3.5 for International system). 100 % nitrile formula enables anti-static properties. Protection against accidental chemical splashes. Recommended for people who are sensitive to the proteins in natural latex. Thickness: 0.1 mm. Packaging: 100 gloves/bag

- **Cat. III**

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

Size	Length	PK	Cat. No.
	mm		
6	300	100	LLG06270501
7	300	100	LLG06270502
8	300	100	LLG06270503
9	300	100	LLG06270504
10	300	100	LLG06270505

Cleanroom Wipes Sontara® MicroPure, polyester/cellulose



Specially designed for use in cleanrooms. The fleece combines the absorbency of natural fibres with the purity and strength of a synthetic material. Neither binders nor chemicals are used in the production process.

Type	Dimensions	Cleanroom Class ISO	PK	Cat. No.
	mm			
Sontara® MicroPure 100	305 x 305	5 + 6	150	LLG09390185
Sontara® MicroPure 100	224 x 224	5 + 6	300	LLG09390186
Sontara® MicroPure AP	305 x 305	6 - 9	150	LLG09390187
Sontara® MicroPure AP	224 x 224	6 - 9	300	LLG09390188
Sontara® MicroPure SV	305 x 305	7 - 9	250	LLG09390189
Sontara® MicroPure SV	224 x 224	7 - 9	500	LLG09390190

Hand brush, PP



- Soft bristles
- To remove fine particles
- Food-safe
- For colour coding
- Autoclavable

Bristle length mm	Overall length mm	Width mm	Height mm	Colour	PK	Cat. No.
50	330	35	110	green	1	LLG04666176
50	330	35	110	blue	1	LLG04666177
50	330	35	110	red	1	LLG04666178
50	330	35	110	white	1	LLG04666179
50	330	35	110	yellow	1	LLG04666180

Dustpan, PP



- Ergonomically designed
- Food-safe
- For colour coding
- Autoclavable

Length mm	Colour	PK	Cat. No.
330	green	1	LLG04666171
330	blue	1	LLG04666172
330	red	1	LLG04666173
330	white	1	LLG04666174
330	yellow	1	LLG04666175

Wipes Multiclean®, 3-ply



Handy cleaning cloths, resistant and with high wet strength they are ideal for light and coarse dirt work.

Width mm	Length mm	Weight g / m ²	Package contents	PK	Cat. No.
220	380	60	2 rolls with 500 tears	2	LLG07618013
360	380	54	2 rolls with 500 tears	2	LLG07618212
360	380	54	Roll with 1000 tears	1	LLG07671903

Roll holders



LLG06266990



LLG06266991

Description	PK	Cat. No.
Floor stand with waste bag holder for rolls up to 42 cm width	1	LLG06266990
Wall bracket with waste bag holder for rolls up to 42 cm width*	1	LLG06266991
* incl. mounting material		

Overhead stirrer LLG-uniSTIRRER OH2, digital



Laboratory stirrer designed for simple stirring tasks for quantities up to 20 l (H₂O). Automatic speed adjustment in the range between 50 and 2200 rpm via microprocessor-controlled technology. Safety circuits ensure automatic cut-off in an anti-stall or overload situation. Actual and set speed are constantly monitored ensuring no undesired speed variations, even if the sample viscosity changes.

- Brushless, maintenance-free motor
- Digital speed display
- **Display for speed or torque changeable**
- Infinitely adjustable speed
- **Overload protection**
- Non-slippery mat
- Slim casing
- Quiet operation
- Error code display
- RS232 port

Stand: Stainless steel stand incl. boss head, dimension (W x D x H): 200 x 310 x 780 mm, non-slippery mat
Stirrer: 4-blade propeller stirrer, stainless steel, shaft length 400 mm, stirrer diameter 50 mm

Scope of supply: Overhead stirrer LLG-uniSTIRRER OH2, stand, non-slippery mat and 4-blade-propeller stirrer



Specifications

Max. stirring quantity (H ₂ O):	20 l
Speed range:	50 ... 2.200 rpm
Max. viscosity:	10.000 mPaS
Motor rating input/output:	60/50 W
Speed display accuracy:	±3 rpm
Max. torque at stirring shaft:	40 Ncm
Display:	LCD
Chuck range:	0.5 ... 10 mm
Dimensions (W x D x H):	83 x 186 x 220 mm
Power supply:	110 ... 240 V, 50/60 Hz
IP code:	IP 21

Type	Plug type	PK	Cat. No.
LLG-uniSTIRRER OH2	EU	1	LLG06263455
LLG-uniSTIRRER OH2	UK	1	LLG06263456

LLG-Magnetic Stirring Bar Retrievers, PTFE



PTFE-encapsulated stirring bar retriever with strong permanent magnet (Alnico 5), universal chemical resistance.

Diam.	Length	PK	Cat. No.
mm	mm		
8	150	1	LLG09197717
8	250	1	LLG09197725
8	270	1	LLG04008501
8	350	1	LLG09197735

4-Position-Magnetic Stirrer LLG-uniSTIRRER 1/M4



An **Ultra-flat** inductive magnetic stirrer without heating with timer. The modern magnet coil technology consists only of non-moving parts and therefore guarantees a wear-free drive.

For a better mixing of samples it is possible to change the direction of rotation every 30 seconds.

- Max. stirring quantity per stirring position 400 ml
- **Timer** (1 to 99 min, infinitely)
- 100 % wear- and maintenance-free inductive drive
- LED-display for an exact adjustment of the rotation speed
- Digital regulated rotation speed
- Alteration of the stirring direction
- High Protection class IP 65
- Stainless steel surface

Scope of supply: magnetic stirrer, 1 mains adapter each US, AUS, UK, 1 stirring rod 25 x 8 mm

Specifications

Stirring positions:	4
Distance between Stirring positions:	95 mm
Max. Stirring quantity (H ₂ O):	4 x 0.4 l = 1.6 l
Speed range:	15 ... 1200 rpm
Permissible ambient temperature:	5 ... 40 °C
Magnetic bar:	max. 25 mm
Display:	LED
Heating plate (W x D):	122 x 385 mm
Dimensions (W x D x H):	126 x 457 x 13.5 mm
Weight:	1.9 kg
Power supply:	100 ... 240 V, 50/60 Hz
IP code:	IP 65

Type	Plug type	PK	Cat. No.
LLG-uniSTIRRER 1/M4	EU	1	LLG06263425
LLG-uniSTIRRER 1/M4	UK	1	LLG06263426

LLG-Magnetic stirring bars, cylindrical, PTFE, eco pack



Circular, smooth and PTFE-coated.

Diam.	Length	PK	Cat. No.
mm	mm		
6	10	10	LLG09198910
3	12	10	LLG09198766
6	15	10	LLG09198919
6	20	10	LLG09198920
6	25	10	LLG09198925
8	25	10	LLG09198767
6	30	10	LLG09198930
6	35	10	LLG09198935
8	40	10	LLG09198940
8	45	10	LLG09198945
8	50	10	LLG09198950
9	60	10	LLG09198960
9	70	10	LLG09198970
9	80	10	LLG09198980

Magnetic stirrer TWISTER



Without heating. The TWISTER is a universal and particularly compact mixing device with magnetic drive, which can be expanded into a multi-position magnetic stirrer with a wide range of applications by connecting up to 30 devices in series. The stirring points can be controlled either separately or simultaneously (leader-follower principle).

- Intuitive 360° LED glass display for conveying all information without alpha-numerical display
- Integrated beaker detection
- Significant improvement of the mixing result with samples that are difficult to mix by changing the direction of rotation at definable time intervals (reverse function)
- Display of speed or power required for stirring for observation and percentage display of viscosity change
- Suitable for operation in incubators up to 40 °C
- Cleaning under the tap possible

Set 1 Scope of delivery: 1 x TWISTER magnetic stirrer,
1 x plug-in power supply unit with adapter,
1 x IKAFLON 25 round magnetic stirring bar

Set 2 Scope of delivery: 2 x magnetic stirrers TWISTER,
1 x plug-in power supply unit with adapter,
2 x magnetic stirring bars IKAFLON 25 round

Set 3 Scope of delivery: 3 x TWISTER magnetic stirrers,
1 x plug-in power supply unit with adapter,
3 x IKAFLON 25 round magnetic stirring bars

Set 4 Scope of delivery: 4 x TWISTER magnetic stirrers,
1 x plug-in power supply unit with adapter,
4 x IKAFLON 25 round magnetic stirring bars

Specifications

Max. stirred volume per position:	5 l
Speed range:	100 ... 3000 rpm
Permissible ambient temperature:	5 ... 40 °C
Permissible relative humidity:	80 %
Material Top plate:	Glass
Dimensions Top plate (W x D):	124 x 124 mm
Dimensions (W x D x H):	135 x 135 x 24 mm
Weight:	0.6 kg
Power supply:	100 ... 240 V, 50/60 Hz
IP code:	IP 66

Type	Stirring capacity	PK	Cat. No.
	l		
TWISTER Set 1	5	1	LLG04685997
TWISTER Set 2	10	1	LLG04685998
TWISTER Set 3	15	1	LLG04685999
TWISTER Set 4	20	1	LLG04686000

LLG-Magnetic stirrer RCT standard 2.0, Set



The next generation of our top-selling IKA/LLG-Labware co-branded LLG-RCT Standard magnetic stirrer. New design, new features! Trusted and reliable quality!

- Digital controlled speed and temperature
- Clearly arranged LED display
- Digital display of set safety temperature limit
- Hot top indicator, hot surface warning to prevent burns
- Adjustable safety circuit of heating plate temperature
- Digital error code display
- Connection for external PT1000 temperature probe
- Aluminium hotplate for optimal heat transfer
- Enhanced safety due to improved heat control technology
- USB interface
- Powerful motor
- Improved magnetic coupling
- Supplied with housing protection cover
- Tested acc. to DIN EN IEC 61010-1

Scope of supply: Magnetic stirrer, contact thermometer ETS-D5, temperature probe PT1000, housing protection cover, stand accessories

Specifications

Max. stirring quantity (H ₂ O):	20 l
Speed range:	50 ... 1500 rpm
Heating plate	Ø 135 mm
Temperature range:	RT + device self-heating ... 310 °C
Heat output:	600 W
Safety temperature range:	50 ... 360 °C
Dimensions (W x D x H):	160 x 270 x 85 mm
Weight:	2.4 kg
Power supply:	220 ... 230/115/100 V, 50/60 Hz
IP code:	IP 42

Description	Plug type	PK	Cat. No.
LLG magnetic stirrer RCT standard 2.0, set	EU	1	LLG06320411
LLG magnetic stirrer RCT standard 2.0, set	CH	1	LLG06322748
LLG magnetic stirrer RCT standard 2.0, set	UK	1	LLG06322749

Thermo shaker
LLG-uniTHERMIX 1 pro and 2 pro



The LLG-uniTHERMIX pro is ideal for shaking and temperature control of a variety of tubes or plates (depending on the block used).

- Easy and quick change of heating blocks due to magnetic fastening
- Precise temperature control system
- Efficient mixing up to 1500 rpm (depending on the heating block)
- Up to 9 storable programs

LLG-uniTHERMIX 1 pro: with shaking and heating function,
Temperature range: RT + 5 °C ... approx. 100 °C

LLG-uniTHERMIX 2 pro: with shaking, cooling and heating function,
Temperature range: 15 °C below RT ... approx. 100 °C

Blocks must be ordered separately.

Scope of supply: thermal shaker, 4 suction feet

Specifications

Temperature range	
LLG-uniTHERMIX 1 pro:	RT + 5 °C ... approx. 100 °C
LLG-uniTHERMIX 2 pro:	15 °C below RT ... approx. 100 °C
Temperature control:	±0.5 °C (at 20 ... 45 °C)
Uniformity:	±0.5 °C (at 20 ... 45 °C)
Max. heating rate:	5.5 °C/min
Max. cooling rate	5 °C/min (100 °C ... RT)
(LLG-uniTHERMIX 2 pro only):	0.5 °C/min (below RT)
Electrical heating/cooling power:	200 W
Speed range:	300 ... 1500 rpm
Orbit:	3 mm
Display:	LCD
Programs:	6 stages, 9 programs
Timer:	1 ... 99 hours or continuous
Capacity:	1 exchangeable block
Dimensions (W x D x H):	200 x 235 x 120 mm
Weight:	7.3 kg
Power supply:	220 ... 240 V, 50/60 Hz

Type	Plug type	PK	Cat. No.
LLG-uniTHERMIX 1 pro	EU	1	LLG06263482
LLG-uniTHERMIX 1 pro	UK	1	LLG06263483
LLG-uniTHERMIX 2 pro	EU	1	LLG06263484
LLG-uniTHERMIX 2 pro	UK	1	LLG06263485

Heating blocks for Thermo shaker
LLG-uniTHERMIX 1 and 2 pro



For	PK	Cat. No.
24 tubes, 1.5 ml	1	LLG06263487
24 tubes, 2 ml	1	LLG06263494
8 tubes, 5 ml	1	LLG06263495
8 tubes, 15 ml	1	LLG06263496
4 tubes, 50 ml	1	LLG06263497
96 well PCR plates, 0.2 ml tubes	1	LLG06263498
96/384 microplate	1	LLG06263499

Benchtop Shaking Incubator 222DS



- Useable in cold rooms
- Easy changeable platforms



The Benchtop Shaking Incubator is a combination of a shaker and a temperature chamber, designed for shaking and heat treatment of sensitive samples. It replaces two devices, reduces time and space needed. It is very suitable for biochemistry, microbiology and medicine laboratories in which thermal and shaking treatment of samples is a daily used routine.

- Can be used in cold rooms too
- Digital readout of all parameters - read temporary or preset RPM, temperature, time, acceleration
- HOLD and STEP time function with 1 minute resolution

Universal attachment and non-slip mat please order separately.

Specifications

Temperature range:	Ambient +5 °C ... 70 °C
Precision:	±0.5 °C
Speed range:	20 ... 300 rpm
Timer:	1 min - 99 hours or continuous
Platform size:	300 x 300 mm
Supply requirements:	230 V, 50 Hz

Type	PK	Cat. No.
222DS	1	LLG06259079

Accessories for Benchtop Shaking Incubator 222DS

Description	PK	Cat. No.
Universal platform 30 x 30 cm	1	LLG06259080
Non-slip mat	2	LLG06259082

LLG-Test tube rack, PP



Made of PP. Stackable. The LLG racks are supplied in three parts and are easy to put together. With alphanumeric position marking for quick and easy identification of samples. Autoclavable.

For tubes diam.	Colour	Dimensions (W x D x H)	Array	PK	Cat. No.
mm		mm			
16	white	251 x 106 x 71	60	1	LLG06286169
16	blue	251 x 106 x 71	60	1	LLG06286170
16	red	251 x 106 x 71	60	1	LLG06286171
20	white	252 x 108 x 72	40	1	LLG06286172
20	blue	252 x 108 x 72	40	1	LLG06286173
20	red	252 x 108 x 72	40	1	LLG06286174
30	white	252 x 107 x 71	21	1	LLG06286175
30	blue	252 x 107 x 71	21	1	LLG06286176
30	red	252 x 107 x 71	21	1	LLG06286177

LLG-Centrifuge Tubes economy, PP



- With flat PE caps
- With conical bottom (15 and 50 ml) or with self-standing bottom (50 ml)
- Easy-to-read black volume graduations
- With a large frosted writing area
- Engraved graduation at the conical bottom of each tube
- Max. rotate speed up to 12000 x g for conical bottom tubes and 6000 x g for self-standing tubes
- Autoclavable at 121 °C and freezable to -80 °C
- Leak-proof
- Free of heavy metals, pyrogens and endotoxins
- DNase/RNase-free
- Aseptically or sterile

Capacity	Description	Form	PK	Cat. No.
ml				
15	Sterile, in bag of 25 pieces	conical	500	LLG04668482
50	Sterile, in bag of 25 pieces	conical	500	LLG04668483
50	Sterile, in bag of 25 pieces	with rim	500	LLG04668486
15	Aseptically, bulk pack	conical	500	LLG06270403
50	Aseptically, bulk pack	conical	500	LLG06270404
50	Aseptically, bulk pack	with rim	500	LLG06270405

Vortex mixers WIZARD with IR sensor



- Touchless start due to infrared sensor
- Safe stand due to non-slip feet
- High chemical and corrosion resistance



Vortexers with patented IR sensor for sample recognition: the shaking process starts automatically when the sample tube approaches the mixing cup head. This enables fatigue-free working, as the sample doesn't have to be pressed on the device.

- For IR sensor and continuous operation
- Electronic speed control
- Adjustable shaking speeds up to 3000 rpm
- Very good chemical resistance
- Broad range of accessories available

Scope of delivery: Vortex mixer with mixing head

Specifications

Type of movement:	orbital
Orbital diameter:	4.5 mm
Speed range:	0 ... 3000 rpm
Input power:	15 W
IP code:	IP 42
Power supply:	100 ... 240 V, 50 ... 60 Hz
Warranty:	3 years

Type	Plug type	PK	Cat. No.
WIZARD	EU	1	LLG04666536

LLG-Centrifuge tubes, 5 ml, PP



The LLG-Centrifuge tubes, 5ml, represent the perfect solution for all laboratory applications requiring incubation, centrifugation and sample handling in an intermediate volume range.

- Max. 25000 x g, suitable for high speed centrifugation
- Graduations every 0.25 ml for easy volume estimation
- A flat, frosted cap and large writing pad for sample labeling and identification
- Autoclavable
- Fits all rotors and racks that hold 15 ml conical tubes, no adapters needed
- Certified free of RNase and DNase

Description	Package contents	PK	Cat. No.
Clear	1 bag of 250 pieces	250	LLG06281113
Amber	1 bag of 250 pieces	250	LLG06281115

Refrigerated circulators CORIO™ CP

With insulated stainless steel bath tanks, flexible performance and an operating temperature range of up to 200 °C.

- Suitable for internal and external applications
- Stainless steel bath tanks
- External pump connections M16x1
- Early warning system for low level
- Simple switchover between internal and external circulation
- Powerful, infinitely variable pump
- Natural refrigerant
- USB connection
- RS232 interface
- Class III (FL) according to DIN 12876-1

Scope of supply: Refrigerated circulator, mains power cable, connection box, bath cover, connecting cable, refrigerator, hose connectors 8 and 12 mm

Specifications

Setting accuracy:	0.01 °C
Temperature range:	30 ... 200 °C
Temperature uniformity:	±0.03 °C
Pump output:	8 ... 27 l/min
Pump pressure:	0.1 ... 0.7 bar
Heat output:	2 kW
Timer:	0 ... 999 min
Hose connector inner width:	8/12 mm
Permissible ambient temperature:	5 ... 40 °C
Power supply:	230 V/50 Hz

Type	Capacity of the bath litres	Cooling capacity kW at 20/0/-20°C	PK	Cat. No.
CP-310F	4	0,3 / 0,27 / 0,12	1	JUL09013713.N1
CP-450F	4	0,44 / 0,37 / 0,16	1	JUL09013714.N1

Digital water baths JB Nova

General-purpose water baths with stable temperature control and fast heating rate. Base tray and lid included as standard.

- Ambient +5 °C to 95 °C
- Unique Set and Forget™ technology, fast reliable temperature control
- Drain tap on 12 L, 18 L and 26 L baths
- Practical front panel lock, deactivated OPERATING UNIT
- 3-year warranty

Accessory polypropylene spheres or a lid must be used at temperatures between +60 °C and +99 °C.

Please order PP spheres separately.

Type	Capacity of the bath litres	External dimensions (W x D x H) mm	PK	Cat. No.
JBN5	5	335 x 215 x 200	1	LLG09905870
JBN12	12	360 x 380 x 225	1	LLG09905871
JBN18	18	335 x 590 x 275	1	LLG09905872
JBN26	26	335 x 590 x 275	1	LLG09905873

Digital dry bath LLG-uniBLOCKTHERM



Suitable for use in microbiological, histological, clinical, industrial and environmental laboratories.

- Digital control with LED display
- Can be used up to 120 °C
- For timer and continuous operation
- 1 x block unit
- With overheating protection

Scope of supply: LLG-uniBLOCKTHERM, removal tool, lid

Please order heating blocks separately.

Specifications

Temperature range:	RT ... 120 °C
Temperature uniformity:	±0.5 °C
Temperature accuracy:	±0.5 °C
Timer:	0 ... 99:59:00 min
Block material:	Aluminium
Dimensions (W x D x H):	175 x 290 x 85 mm
Weight:	3 kg
Power supply:	220 ... 240 V, 50/60 Hz

Type	Plug type	PK	Cat. No.
LLG-uniBLOCKTHERM	EU	1	LLG06263460
LLG-uniBLOCKTHERM	UK	1	LLG06263461

Heating blocks for LLG-uniBLOCKTHERM

Dimensions Heating blocks (W x D x H): 95 x 150 x 50 mm

Description	Diam. mm	PK	Cat. No.
54 x 0.2 ml	6.4	1	LLG06263462
40 x 1.5 ml	11	1	LLG06263464
40 x 2.0 ml	11	1	LLG06263465
28 x 5/15 ml	17	1	LLG06263466
8 x 50 ml	29.8	1	LLG06263467
for 96/384 Microplate	-	1	LLG06263468
for each 18 x 0.2 ml, 0.5 ml and 1.5/2.0 ml	-	1	LLG06263469

LLG- Floating pellets, PP



Pellets with 20 mm diameter. Can cover 0.1 m². Temperature stable up to 100 °C.

Description	PK	Cat. No.
Floating pellets	250	LLG06266611

Rotary vane pump CRVpro 2



Specifications

Ultimate pressure without gas ballast partial:	3×10^{-4} mbar
Ultimate pressure without gas ballast total:	3×10^{-3} mbar
Ultimate pressure with gas ballast total:	9×10^{-2} mbar
Connection:	DN 16 KF
Motor rating 50/60Hz:	0.29/0.3 kW
Nominal speed 50/60Hz:	1440/1720 rpm
Dimensions (L x W x H):	384 x 138 x 211 mm
Weight:	15 kg

Type	Suction rate (50/60Hz) L / min.	Oil capacity ml	Plug type	PK	Cat. No.
CRVpro 2	38/47	450	EU, UK	1	LLG06313234

Diaphragm vacuum pump LABOPORT® N820G, chemically-resistant

For very aggressive corrosive gases/vapours



For rotary evaporation, distillation, gel drying, degassing as well as the use with vacuum ovens and vacuum concentrators. Due to the manual rotational speed control, the pumps are quiet, very energy efficient, and can be optimally adjusted in accordance with the application.

- Easy-to-clean surface
- Adjustable in flow rate due to manual rotational speed control
- Combination of PTFE pump head and PTFE-coated diaphragm makes the pump ideal for extremely aggressive/corrosive gases and vapors
- High level of compatibility with vapor and condensation
- Integrated gas ballast valve
- 3-color status display: In operation/ Stand-by/Error
- ATEX-compliant in accordance with II 2/-G IIB+H2 T3 internal atmosphere only
- 100 % oil-free transfer



Specifications

Ultimate vacuum (abs.):	6 mbar
Operating pressure:	0.1 bar
Connectors for tube:	ID 9/10 mm
Permissible ambient temperature:	5 ... 40 °C
Pump head:	TFM™ PTFE
Diaphragm:	PTFE-beschichtet
Valves:	FFPM

Type	Flow rate L / min.	Dimensions (W x D x H) mm	PK	Cat. No.
N820G	20	163 x 259 x 220	1	LLG04672375

Rotary vane pump CRVpro 4/6/8



The CRVpro pumps are powerful, two-stage vacuum pumps. They impress with their long service life, reliability and low maintenance requirements.

- Lower oil consumption due to low heat generation during operation.
- Corrosion protection through coating of the inner surface of the oil housing
- Low maintenance costs due to extended oil change intervals

Scope of delivery: Each pump is supplied with vacuum pump oil, centring rings, clamping rings and motor overload protection.

Specifications

Ultimate pressure without gas ballast partial:	5×10^{-4} mbar
Ultimate pressure without gas ballast total:	2×10^{-3} mbar
Ultimate pressure with gas ballast total:	7×10^{-2} mbar
Connection:	DN 16 KF
Motor rating 50/60Hz:	0.37/0.4 kW
Nominal speed 50/60Hz:	1450/1740 rpm
Dimensions (L x W x H):	463 x 157 x 230 mm

Type	Suction rate (50/60Hz) L / min.	Oil capacity ml	Plug type	PK	Cat. No.
CRVpro 4	63/77	1150	EU, UK	1	LLG06290993
CRVpro 6	85/122	1150	EU, UK	1	LLG06290994
CRVpro 8	122/143	1000	EU, UK	1	LLG06290995

Vacuum tubing, rubber (NR)



DEUTSCH & NEUMANN

Red. Durometer 45 Shore A.
Charge per metre.

Int. diam. mm	Wall thickness mm	PK	Cat. No.
4	4	10	LLG04679011
5	5	10	LLG09205811
6	5	10	LLG09205812
7	4	10	LLG04679012
7	5	10	LLG09205813
8	5	10	LLG09205814

Hand Refractometer LLG-uniREFRACTO 5 pro



LLG-uniREFRACTO 5 pro is a compact digital 3-scale handheld refractometer for measuring, e.g. Brix and refractive index of liquids. Two scales are pre-set to 0 - 95 % Brix and 1.33 - 1.54 RI, the third scale can be freely selected from more than 45 different scales, including Brix, refractive index, AdBlue®, °Baume, °Butyro, Ethylene Glycol %, Calcium Chloride % and specific gravity. All three scales can be freely selected and changed. The operation is quick and easy, calibration can simply be done with distilled water. The waterproof housing (IP 65) allows cleaning under running water.

- Easy switching between the three scales
- 4-digit LCD display
- Automatic temperature correction
- Sample plate made of stainless steel

Scope of supply: Refractometer, protective cover

Specifications

Resolution:	0.1 % Brix/0.0001 RI
Accuracy:	±0.2 % Brix/±0.0003 RI
Operating temperature:	5 ... 40 °C
Measuring temperature sample:	5 ... 80 °C
Rel. Humidity:	< 95 %
Dimensions (W x D x H):	120 x 55 x 35 mm
Weight:	180 g
Power supply:	2 x AAA/LR03
IP code:	IP 65

Type	PK	Cat. No.
LLG-uniREFRACTO 5 pro	1	LLG06263632

Sucrose (Brix) Standards



- Certified stabilized Sucrose (Brix) Standards.
- ISO 17025 accredited
 - Uncertainty of measurement of 0.11 % for all Brix values at 20 °C
 - Equivalent Nominal Refractive Index values from ICUMSA published tables reported on Certificate of Analysis
 - Compatible with any brand of Refractometer
 - 12 month shelf life
 - Provided in high quality HDPE 15 ml dropper bottles

Brix	Refractive Index at 20 °C	PK	Cat. No.
%			
0	1.332986 nD	1	LLG06264212
5	1.340264 nD	1	LLG06265876
10	1.347824 nD	1	LLG06257923
14.9	1.355519 nD	1	LLG06290413
15	1.355679 nD	1	LLG06263260
20	1.363842 nD	1	LLG06264889
30	1.381149 nD	1	LLG06258368
40	1.399860 nD	1	LLG07660408
50	1.420087 nD	1	LLG06258369
60	1.441928 nD	1	LLG06265875
67.5	1.459290 nD	1	LLG06264213

Gloss meter TG 268



Versatile, portable gloss meter designed for fast and accurate measurement of low, medium or high gloss levels of coatings, plastics and related materials. The device is also suitable for large-scale uniformity checks in continuity mode.

- Basic, statistical and continuous measurement methods
- Display of 5 data rows including storage capacity of more than 5000 data sets
- TFT 3.5 inch, capacitive touchscreen
- Intuitive, integrated software with icon guide
- USB and RS 232 interfaces
- Supports ASTM D523, ASTM C584, ASTM D2457, BS3900 D5, DIN 67530, DIN EN ISO 2813, EN ISO 7668 and JI Z 8741 standards

Scope of supply: Gloss meter, OnGloss software (PC), calibration plate, USB cable, external DC power supply, user manual (USB stick), carrying case, battery

Specifications

Measuring angle:	20°/60°/85°
Measuring range:	20°: 0 ... 2000 GU xA; 60°: 0 ... 1000 GU xA; 85°: 0 ... 160 GU
Resolution:	0.1 GU
Storage:	Basic Mode: 1000 xA; Statistical Mode: 5000 xA; Continuous Mode: 5000
Environmental conditions:	0 ... 40 °C, 85 % RH
Dimensions (W x D x H):	160 x 75 x 90 mm
Weight:	350 g
Power supply:	3200 mAh Li-ion battery

Description	PK	Cat. No.
TG 268	1	LLG04672490

Cells W600



Cells made of optical glass or Borosilicate glass 3.3, 21 mm x 40 mm, for instrument Models Fs, PFXi/PFX195, 880, 950 and 995. (Note: PFXi/PFX-195 max. path length 50 mm).

W600/OG/xx for unheated samples (up to 40 °C)
W600/B/xx for heated samples (up to max. 100 °C)

Type	Path length	Material	PK	Cat. No.
	mm			
W600/OG/10	10	optical glass	1	LLG06207120
W600/OG/1"	25.4	optical glass	1	LLG09947342
W600/OG/33	33	optical glass	1	LLG06093322
W600/OG/50	50	optical glass	1	LLG06207119
W600/OG/100	100	optical glass	1	LLG06235055
W600/OG/5/4"	133.35	optical glass	1	LLG09947343
W600/B/100	100	Borosilicate glass 3.3	1	LLG06253940
W600/B/5/4"	133.35	Borosilicate glass 3.3	1	LLG09947345

Microscopes B1 Elite



- High performing laboratory microscope
- Quadruple revolving nosepiece
- Widefield eyepieces

The B1 Elite series covers a wide range of the daily work for schools and laboratories.

- Binocular head 45°, trinocular head 30°, 360° rotating
- Widefield eyepieces WF 10X/18 mm
- Quadruple revolving nosepiece
- Semi-Plan objectives SP 4X, 10X, 40X S
- Diopter adjustment on both eyepiece sockets
- Coaxial coarse and fine focusing system with tension adjustment
- Built-in low position coaxial rackless mechanical stage
- Focusable 1.25 N.A. Abbe condenser with iris diaphragm
- LED illumination 3 W with intensity control
- Mains supply: 110 ... 240 V



Scope of supply: Microscope, dust cover

Type	Description	PK	Cat. No.
B1-220E-SP	Binocular	1	LLG04685486
B1-223E-SP	Trinocular	1	LLG04685487

LLG-Slide dispenser



Slide dispenser can dispense 91 slides, individually. By turning the knob, one slide is dispensed. Only dry slides should be inserted into the storage magazine. With transparent, removable upper section for easy viewing of remaining slides and clean storage. For microscope slides with dimensions 75 x 25 mm and 76 x 26 mm.

Type	PK	Cat. No.
LLG dispenser for slides	1	LLG09161000

Microscope Camera MOTICAM S3



- Fast frame rates with large viewing field
- For applications with low light output
- Extremely quiet background noise



The next generation of Moticams offers solutions for a wide variety of applications in digital microscopy. Compact and robust, equipped with high-quality sCMOS sensors with many different resolutions and fast USB 3.1 connection.

Resolution	Sensor format	PK	Cat. No.
3 MP (max. 2448 x 1536 px)	1/2.8" sCMOS	1	LLG04672119

C-Mount camera adapter for B1-223E-SP



Description	PK	Cat. No.
C-Mount camera adapter 0.5X for 1/3"	1	LLG06237216

LLG-Slide mailers



Manufactured from high density polypropylene, for shipping, storing or staining slides. Flat mailers can hold 1, 2, 3 or 5 standard (up to 76 mm x 26 mm) slides securely.

- Light weight and flat
- With marking area and "Top" printed on top surface
- With large, easy-to secure snaps
- Slotted channels inside mailer keep slides safely separated

To hold microscope slides	PK	Cat. No.
1	10	LLG09161291
2	10	LLG09161292
3	10	LLG09161293
5	10	LLG09161294

Density meters DMA 35



- Only 2 ml sample liquid needed
- Quick filling due to built-in pump/syringe



Portable, digital measuring device for the determination of density, relative density and concentration. DMA 35 EX and DMA 35 EX Petrol are certified according to ATEX for applications in hazardous environments.

- Oscillator principle (borosilicate glass oscillator)
- Viscosity correction for measurements also on highly viscous samples
- Measuring of density, relative density, alcohol concentration, sugar/extraction concentration, API functions, H₂SO₄ concentration, ten programmable custom-specific measuring units
- Robust case with exchangeable cell
- 3 years warranty

Scope of supply: Density meter, filling tube, adapter for syringe filling, syringes, transportation case, rubber protection for measuring cell, 3 x batteries, allen key, instructions.

Specification	
Density range:	0 ... 3 g/cm ³
Resolution:	0.0001 g/cm ³
Accuracy:	±0.001 g/cm ³
Sample temperature range:	0 ... 100 °C
Temperature measurement range:	0 ... 40 °C
Resolution:	0.1 °C
Accuracy:	±0.2 °C
Reproducibility standard deviation (acc. to ISO 5725):	0.0007 g/cm ³
Sample volume:	2 ml
Data memory:	1024 measurement results, 250 sample IDs, 30 measuring methods
Display:	coloured LCD, self-rotating
Interfaces:	Bluetooth®, RFID
Dimensions (W x D x H):	103 x 245 x 126 mm
Weight:	660 g
Power supply:	3 x Mignon alkaline batteries, 1.5 V LR06 AA
IP code:	IP 54

Type	PK	Cat. No.
DMA 35 Standard	1	LLG06313803
DMA 35 EX	1	LLG06313804
DMA 35 EX Petrol	1	LLG06313805

Turbidity meter TB350



The mobile turbidimeters are characterised by the use of Multipath 90° BLAC® technology. Here, samples with low and high turbidity can be analysed purely nephelometrically with the highest accuracy over the entire measuring range up to 4000 NTU.

- elimination of stray light by light-absorbing traps (BLAC®)
- Data logger for 250 measurements plus all calibrations,
- 3 different modes: single, signal average, fast setting
- USB-C interface
- Optional operation with battery pack or mains connection

TB350 IR: With infra red LED light source (860 nm), acc. to ISO 7027. Incl. Turbidity standards with 5, 20, 800 and 4000 NTU.

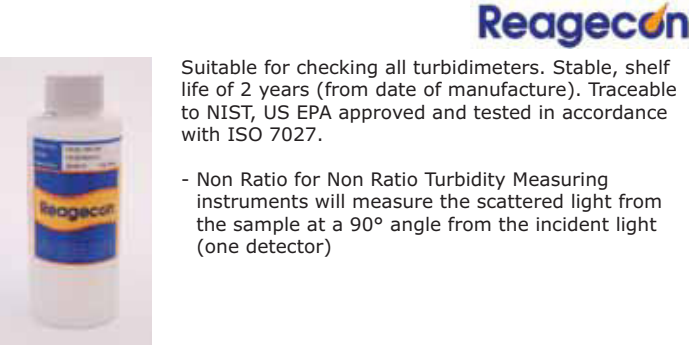
TB350 WL: With white light LED light source, acc. to EPA (pending). Incl. Turbidity standards with 5, 20, 800, 2000 and 4000 NTU

Scope of delivery: Instrument, carrying case with plastic insert, T-CAL® calibration and verification standards, silicone oil, sample vials with black lids, cleaning cloth, brush for sample vials, screwdriver, AA batteries

Specifications	TB350 IR TB350 WL
Measuring range:	0 ... 4000 NTU
Resolution:	0.01 NTU
Accuracy:	±1.8 % + <0.014 NTU
Reproducibility:	<1 %, ±0.01 NTU
Dimensions (W x D x H):	155 x 225 x 83 mm
Weight:	898 g
Power supply:	100 ... 240 V, 50/60 Hz, 4 x AA batteries 4 x AA batteries
IP code:	IP 67

Type	PK	Cat. No.
TB350 IR	1	LLG06322835
TB350 WL	1	LLG06321184

Turbidity Standards



Suitable for checking all turbidimeters. Stable, shelf life of 2 years (from date of manufacture). Traceable to NIST, US EPA approved and tested in accordance with ISO 7027.

- Non Ratio for Non Ratio Turbidity Measuring instruments will measure the scattered light from the sample at a 90° angle from the incident light (one detector)

Description	Volume	PK	Cat. No.
	ml		
Non Ratio 0.0 NTU	100	1	LLG06233961
Non Ratio 0.1 NTU	100	1	LLG06075473
Non Ratio 20 NTU	100	1	LLG06233962
Non Ratio 200 NTU	100	1	LLG04012096
Non Ratio 800 NTU	100	1	LLG04012099

Chemical Oxygen Demand (COD) Standards



These standards are ideal for use as control standards to verify that correct analysis for COD has taken place. Extensive range (10 to 60000 ppm), NIST traceable, 2 years shelf-life. HDPE bottle of 500 ml.

Type	Measuring range mg / l	PK	Cat. No.
COD50	50	1	LLG06234998
COD100	100	1	LLG06234999
COD200	200	1	LLG06206516
COD500	500	1	LLG06234552
COD600	600	1	LLG06206517
COD1000	1000	1	LLG06232202
COD1500	1500	1	LLG06238379
COD5000	5000	1	LLG04012236
COD10M	10000	1	LLG06233809

Cryoscope standards



Compatible for use on all Cryoscopes compliant to International Reference Standard ISO5764/IDF108 for the determination of Freezing Point in milk. High accuracy, 1 year shelf-life (from Date of Manufacturing). Supplied in 250 and 100 ml HDPE bottle and a convenient cap with collapsible filling nozzle

Type	Measuring range	Capacity ml	PK	Cat. No.
MTR01025	0.000 °C	250	1	LLG04012189
MTR02025	-0.408 °C, 422 m°H	250	1	LLG04012190
MTR020X	-0.408 °C, 422 m°H	100	1	LLG06286186
MTR03025	-0.512 °C, 530 m°H	250	1	LLG04012191
MTR030X	-0.512 °C, 530 m°H	100	1	LLG06286187
MTR03525	-0.557 °C, 577 m°H	250	1	LLG04012192
MTR04025	-0.600 °C, 621 m°H	250	1	LLG04012193
MTR040x	-0.600 °C, 621 m°H	100	1	LLG06286188

Osmolality standards



Osmolality Standards for calibration and control, compatible with all types of osmometers. Extensive range: 50 to 3000 mOsmol/kg H₂O, ISO 17025 certified. Values from 100 to 700 mOsmol/kg H₂O according to European Pharmacopoeia 2.2.35 and US Pharmacopoeia 785. 12 ampoules of 5 ml each.

Type	Description	PK	Cat. No.
RE-OSM-100	100 mOsmol/kg H ₂ O	12	LLG06286324
RE-OSM-200	200 mOsmol/kg H ₂ O	12	LLG06286325
RE-OSM-300	300 mOsmol/kg H ₂ O	12	LLG06284310
RE-OSM-400	400 mOsmol/kg H ₂ O	12	LLG07970554
RE-OSM-500	500 mOsmol/kg H ₂ O	12	LLG06270201
RE-OSM-600	600 mOsmol/kg H ₂ O	12	LLG06286327
RE-OSM-700	700 mOsmol/kg H ₂ O	12	LLG06286328
RE-OSM-900	900 mOsmol/kg H ₂ O	12	LLG06286335

LLG-Conductivity Solutions



- Values stated at 25 °C: Accuracy ±1 %
- Directly traceable to NIST
- Certificate including actual value, expiration date and uncertainty of measurement

Type	Capacity ml	PK	Cat. No.
84 µS/cm	500	1	LLG09040861
147 µS/cm	500	1	LLG09040862
1.413 µS/cm	500	1	LLG09040863
12.880 µS/cm	500	1	LLG09040864

Ultra pure water system OmniaTap xs^{touch} 8 Sets



stakpure

- Display of all operating parameters in real time
- Extremely compact design
- Resource saving and completely independent



For pure and ultrapure water type I + II. OmniaTap is the ideal system when both pure and ultrapure water are required in small quantities for analytical and life science applications in the laboratory. The system can be connected directly to the drinking water line. With the standard OptiFilltouch operating and monitoring unit, type I ultrapure water is drawn off and can be conveniently and precisely filled into laboratory vessels. The integrated 7 l tank with recirculation keeps the water quality permanently at type II.

Scope of supply: Ultra pure water system, RO cartridges, ultra pure water cartridges, sterile filter capsule (0.2 µm), sterile overflow, sterile vent filter

Specifications

Pure water type II:

Pure water output (at 15 °C): 8 l/h
Resistivity: 15 ... 10 MΩ x cm
Conductivity: 0.067 ... 0.1 µS/cm

Ultra pure water type I:

Ultra pure water output: Up to 2 l/min
Dispensing volume: 0.05 ... 25 l
Resistivity: 18.2 MΩ x cm
Conductivity: 0.055 µS/cm
Bacteria (with filter): <0.01 CFU/ml
Particles (with filter): <1/ml
RNase (with UF module): <1 ng/ml
DNase (with UF module): <5 pg/µl
Proteases (with UF module): <0.15 µg/l
Feed water requirements: Drinking water acc. to DIN 2000
Dimensions incl. OptiFill^{touch} dispenser (W x D x H): 253 x 520 x 530 mm
Weight incl. OptiFill^{touch} dispenser: 19 kg
Power supply: 90 ... 240 V, 50 ... 60 Hz

Type	TOC value	Endotoxins	PK	Cat. No.
	ppb	EU/ml		
OmniaTap xs ^{touch} 8 UV-TOC Set	<2	-	1	LLG06490550
OmniaTap xs ^{touch} 8 UV-TOC/UF Set	<5	<0,001	1	LLG06490551

Distilled water

DR. WEIGERT



Deionized and UV irradiated. Acc to DIN 43530/EN 385. In plastic canister.

Specifications

pH value: <7.0
Conductivity: <5 µS/cm
Hardness: <0.02 mmol/l
Chlorine content: <2 mg/l

Capacity	PK	Cat. No.
L		
10	1	LLG06273852
20	1	LLG06280900

Water, nuclease-free

chemlab



Nuclease-free water is pure, quality-tested water suitable for use in all experiments that require nuclease-free water, including molecular biology applications. Nuclease-free water is prepared in a proprietary process, which yields DNase, RNase, and nuclease-free, deionized water without the use of chemical additives, such as diethylpyrocarbonate (DEPC).

Type	Nominal capacity ml	PK	Cat. No.
Water, nuclease-free	1000	1	LLG04675029

Water, ultra pure

chemlab



Water for a variety of applications in analytical chemistry.
H₂O - LF < 1 µS/cm - 0.4 µm,
UV filtrated.

Type	Nominal capacity ml	PK	Cat. No.
Water, ultra pure	5000	1	LLG04675028

Digital thermometer testo 915i Set



The testo 915i temperature measuring instrument is suitable for wireless temperature measurements in various applications. With the free testo Smart App, all measurement data can be logged and results sent as PDF or CSV files.

- 1 measuring channel
- Automatic Bluetooth® connection to smartphones, tablets or testo measuring devices
- Secure fixation of the pluggable measuring probes

Scope of supply: Thermometer 915i, air probe, immersion/penetration probe, surface probe, storage bag testo Smart Case, batteries, calibration protocol

Temperature range

Immersion/penetration probe: -50 ... 400 °C

Air probe: -50 ... 400 °C

Surface probe: -50 ... 350 °C

Accuracy

Immersion/penetration probe: ± 1.0 °C (-50 ... 100 °C), ± 1 % of measurement value (remaining range)

Air probe: ± 1.0 °C (-50 ... 100 °C), ± 1 % of measurement value (remaining range)

Surface probe: ± 1.0 °C + 1 % of measurement value

Resolution: 0.1 °C

Sensor: Type K (NiCr-Ni)

Power supply: 3 x AAA

Description	PK	Cat. No.
testo 915i Set	1	LLG04681906

Infrared thermometer, DualTemp Pro, with penetration probe



- Waterproof
- Non-contact measurement and core temperature measurement in one device
- Double display: both measured values in view
- Large temperature range:
- Infrared: -33 to 250 °C
- Insertion probe: -55 to 250 °C
- Max, min, hold function
- Incl. calibration certificate

Resolution: 0.2 °C

Accuracy (IR): -33 °C to 0 °C ± 1.0 °C $\pm 0.1/1$ °C

Accuracy (penetration probe): 0 °C to +65 °C ± 1.0 °C

+65 °C to +200 °C ± 1.5 %

below -5 °C ± 1.0 °C

-5 °C to +65 °C ± 0.5 °C

above +65 °C ± 1 %

Operating temperature: 0 to 50 °C

Power supply: Lithium cell CR2032

Type	PK	Cat. No.
DualTemp Pro	1	LLG09851023

Thermometer testo 440 Laboratory kit



Laboratory kit with Pt100 probe for reliable and precise temperature measurement and documentation. Particularly suitable for use in corrosive media due to the laboratory probe, whose coating is made of the tried-and-tested DURAN® laboratory glass.

- Internal data storage and USB port for flexible data export
- Parallel connection of up to three probes possible: one Bluetooth® probe, one wired probe and one temperature probe with thermocouple type K connection
- Versatile, expandable with an extensive selection of digital probes

Scope of supply: Measuring instruments, 3x AA batteries, USB cable and calibration protocol, glass-coated digital Pt100 laboratory probe, basic case for testo 440 and 1 probe

Specifications

Temperature measuring range: -50 ... +400 °C

(NTC): ± 0.3 °C (-50 ... 300 °C)

Accuracy: ± 0.4 °C (300.01 ... 400 °C)

Resolution: 0.01 °C

Memory: 7500 measurement protocols

testo 440

Operating/storage temperature: -20 ... +50 °C

Power supply: 3 x Mignon, Type AA

Pt100 probe

Operating/storage temperature: -5 ... 45 °C/-20 ... 60 °C

Cable length: 1.6 m

Dimensions (L x Ø): 200 x 6 mm

Type	PK	Cat. No.
testo 440 Laboratory kit	1	LLG06314325

LLG-Digital pocket thermometer Type 12050



Measuring range -50 to +150 °C, accuracy ± 1 °C. Probe made of stainless steel, 120 x 3.5 mm, with protective plastic sleeve and clip, with battery 1 x 1.5 V (LR44).

Type	PK	Cat. No.
LLG-Digital pocket thermometer Type 12050	1	LLG09236706

pH meter FiveEasy™ pH F20/ FiveEasy Plus™ pH FP20



- **Intuitive and ergonomic at an attractive price**
- **Compact design**



F20-Standard Kit

FiveEasy™ and FiveEasy™ Plus benchtop meters provide high quality pH/mV measurements with the simple click of a button.

- Large, easy to read and easy to understand display with all information visible at a glance
- Five self-explanatory buttons making operation simple and easy
- Fast and easy connectivity for simple and secure data transfer (FP only)

Scope of supply:

F20-Meter: Meter with CD operating instructions, QuickGuide, declaration of conformity, test certificate, power supply

FP20-Meter Standard Kit: Meter with CD operating instructions, QuickGuide, declaration of conformity, test certificate, power supply plus plastic LE438 3-in-1 pH electrode, 1 each x 4.01 pH, 7.00 pH, 9.21 pH buffer sachets

FP20-Bio: as FP20 Standard-Kit, plus glass LE410 3-in-1 pH electrode, 1 each x 4.01 pH, 7.00 pH, 9.21 pH buffer sachets

Specifications

Measuring range (Accuracy)

pH F20/FP20: 0.00 ... 14.00 pH/-2.00 ... 16.00 pH (± 0.01 pH)
mV: -2000 ... 2000 mV (± 1 mV)

Temperature F20/FP20: 0 ... 100 °C (0.5 °C)/-5 ... 105 °C (0.3 °C)
Input: BNC, Cinch (NTC 30 k Ω)

Temperature compensation: ATC and MTC
Power supply: 100 ... 240 V/50 ... 60 Hz/12 V DC
Calibration F20: 3 points, linear, 4 predefined buffer groups
Calibration FP20: 5 points, linear/segmented, 4 predefined buffer groups

FP20 only

Memory: 200 measurements
Interface: RS232, USB, Reference input

Type	PK	Cat. No.
F20-Standard Kit	1	LLG06280101
FP20-Standard Kit	1	LLG06280103
FP20-Bio	1	LLG06280104

LLG-Indicator paper sticks



For pH determination. Box of 100 indicator paper sticks of 80 mm length.

Range	PK	Cat. No.
pH		
5.5 ... 9	100	LLG06322832
0 ... 6	100	LLG06322833

Pocket tester Eutech™ pHTestr 30, waterproof

Waterproof, rugged pH testers with one hand operation for general and industrial purposes.



- Large LCD display
- Replaceable, rugged sensor
- Double junction sensor
- Push-Button calibration with up to 3 points and Auto-Buffer recognition
- Hold function, the last measured value remains on the display
- Up to 500 hours operation time with single battery set



Specifications

pH calibration points: 3 points
Temperature range: 0 ... 50 °C
Resolution: 0.1 °C
Accuracy: ± 0.5 °C
Operating temperature: 0 ... 50 °C
Temperature compensation: ATC
Power supply: 4 x 1.5 V
A76 batteries
IP code: IP 67

Type	PK	Cat. No.
pHTestr 30	1	LLG06222767

LLG pH electrode



Low maintenance combination electrode with integrated temperature sensor. Robust design with plastic shaft, protective basket and fixed cable connection. Made in Germany.

*Basic pH combination electrode with plastic shaft, gel reference system and temperature sensor.
Suitable for all pH meters with DIN plug and 4-mm banana plug.

Specifications

Temperature range: 0 ... 80 °C
Temperature sensor: NTC 30 k Ω
pH range: 0 ... 14
Diaphragm: 2 x ceramic || *Fibre
Membrane shape: Cylindrical
Electrolyte: Gel, 3M
Min. immersion depth: 15 mm
Cable length: 1 m
Length/ $\varnothing$: 120/12 mm
Electrode connection: BNC
Temperature sensor connection: Cinch 3 mm

Type	PK	Cat. No.
LLG pH electrode	1	LLG06263602
LLG-pH electrode with gel electrolyte*	1	LLG04681924

Conductivity meter ProfiLine Cond 3310



Convenient and versatile conductivity meter with built-in time-controlled data logger. With backlit graphic display. Waterproof and robust. For measuring conductivity, resistivity, salinity and TDS. Large selection of connectable measuring cells, extended cell constant selection, automatic and manual temperature compensation (can also be switched off) with linear and non-linear function for ultrapure water and natural water according to EN 27 888.

Specifications:

Measuring ranges/Resolution

Conductivity: 0.00 $\mu\text{S}/\text{cm}$... 19.99 $\mu\text{S}/\text{cm}$ (when $K=0.1 \text{ cm}^{-1}$)
0.000 $\mu\text{S}/\text{cm}$... 1.999 $\mu\text{S}/\text{cm}$ (when $K=0.01 \text{ cm}^{-1}$)
TDS: 0 ... 1999 mg/l, 0.0 ... 199.9 g/l
Spec. resistance: 0.0 ... 999 M Ω/cm
Memory: 5000 records (measured value, temperature, date, time, ID)

Type	Description	PK	Cat. No.
Cond 3310	Meter only	1	LLG09774409
Cond 3310 Set 1	Case set including TetraCon 325 and accessories	1	LLG09774400

Conductivity meter inoLab® Cond 7310



Cond 7310

Conductivity measurement with reliable documentation, also with built-in printer on request. The inoLab® Cond 7310 can be connected to a wide range of standard and special conductivity measuring cells and has automatic and manual temperature compensation (can also be switched off for measurements according to pharmacopoeia) with linear and non-linear functions for ultrapure water and natural water according to EN 27 888. The scope of delivery includes the device, stand, data transmission cable and plug-in power supply unit.

Specifications

Ranges: All values ± 1 digit
Conductivity additional: 0.00 ... 1000 mS/cm ± 0.5 % of measured value
0.000 ... 1.999 $\mu\text{S}/\text{cm}$, $K=0.01 \text{ cm}^{-1}$
0.00 ... 19.99 $\mu\text{S}/\text{cm}$, $K=0.1 \text{ cm}^{-1}$
Specific resistance: 0.00 ... 20 M Ω/cm
Salinity: 0.0 ... 70.0 (acc. IOT)
TDS: 1 ... 1999 mg/l, 0 ... 199.9 g/l
Temperature: -5.0 ... 105.0 $^{\circ}\text{C} \pm 0.1$ $^{\circ}\text{C}$
Cell constants: Fix 0.01 cm^{-1} , calibratable 0.450...0.500 cm^{-1} , 0.800 ... 0.880 cm^{-1} , calibratable
0.09 ... 0.110 cm^{-1} , 0.250 ... 25.0 cm^{-1}
Calibration: 1 point
 T_{ref} : 20 $^{\circ}\text{C}/25$ $^{\circ}\text{C}$
Calibration memory: Up to 10 calibrations recallable
Display: LCD Graphic, backlit
Memory: Manual 200/5000 automatic
Logger: Manual/time controlled
Interface: Mini USB-B
Power supply: Universal power supply, 100V ... 240 V, 50/60 Hz, 4 x 1.5 V AA or 4 x 1.2 V NiMH

Type	Description	PK	Cat. No.
Cond 7310	Meter incl. accessories	1	LLG09920114
Cond 7310 Set 1	Meter incl. TetraCon® 325 and accessories	1	LLG09920115
Cond 7310P	Meter with built-in printer and accessories	1	LLG09920117

Conductivity meter SD 325 CON



The portable instrument with data logger is ideal for determining electrical conductivity in aqueous media.

- Automatic recognition of conductivity standards
- Auto hold function
- Selectable reference temperature (20 $^{\circ}\text{C}/25$ $^{\circ}\text{C}$)
- Automatic temperature compensation
- Data transfer and evaluation via software possible

Specifications

Conductivity: 0.000 ... 1000.0 mS/cm
Temperature: -5.0 ... 100.0 $^{\circ}\text{C}$
TDS: 0.000 ... 5000 mg/l
Resistance: 0.000 ... 50.0 M Ω/cm
Salinity: 0.0 ... 70.0 PSU
Datalogger: 10000 Data sets automatically
1000 Data sets manually
Interface: USB
Dimensions (W x D x H): 100 x 164 x 37 mm
Weight: 302 g
Power supply: 2 x AAA batteries (incl.)
IP code: IP 67



Scope of supply:

SD 325 CON (Set 1): Conductivity meter, protective covering, transport case, 4-pol graphite electrode (diam. 12 mm, < 200 mS/cm)

SD 325 CON (Set 2): as set 1 but with, 4-pol graphite electrode (diam. 16 mm, < 1000 mS/cm), conductivity standards, batteries, manual

SD 325 CON (Set 3): as set 1 but with, 2-pol stainless steel electrode (diam. 10 mm, < 200 $\mu\text{S}/\text{cm}$, pure water), flow through cell for pure water

Type	PK	Cat. No.
SD 325 CON (Set 1)	1	LLG04678226
SD 325 CON (Set 2)	1	LLG04678227
SD 325 CON (Set 3)	1	LLG04678228

Analytical balance ABP



This new generation of analytical balances combines the highest level of precision with large weighing capacities. Thanks to the new Single-Cell Generation, the weighing result is displayed in a fraction of the time with comparable models. Together with the intuitively structured menu, this means that you can work efficiently and rapidly.

- OLED display
- Navigation pad for super quick navigating through the menus
- Automatic internal adjustment in the case of a change in temperature $\geq 1^\circ\text{C}$ or timecontrolled every 4 h, guarantees high degree of accuracy and makes the balance independent of its location of use
- The minimum weight of sample can be manually stored in the balance or automatically calculated, with warning message when the weighing is below this value
- Dosage aid: High-stability mode and other filter settings can be selected
- Simple recipe weighing and documenting with a combined tare/print function
- Menu language DE, GB
- Automatic data output to the PC/printer each time the balance is steady
- USB data interfaces and RS-232
- Large glass draught shield with 3 sliding doors for easy access to the items being weighed
- Incl. protective working cover

Specifications

Overall dimensions, incl. draught shield (W x D x H): 213 x 407 x 344 mm
 Weighing space (W x D x H): 166 x 156 x 220 mm
 Net weight: 8 kg
 Power supply: 220 ... 240 V AC, 50 Hz

Type	Weighing range	Readability	Plate diam.	PK	Cat. No.
	g	mg	mm		
ABP 100-5M	135	0.01	91	1	LLG06321067
ABP 200-5M	220	0.01	91	1	LLG06321068
ABP 100-4M	120	0.1	91	1	LLG04667748
ABP 200-4M	220	0.1	91	1	LLG04667749

LLG-Sample dishes, Aluminium



High quality aluminium sample dishes, for moisture determination.

Description	Diam.	Height	PK	Cat. No.
	mm	mm		
Sample dishes	90	7	80	LLG06282670
Sample dishes	100	7	80	LLG06265408
Sample dishes with rim	100	7	80	LLG06281537

Portable Balances, Scout® SKX



- Very robust due to integrated overload protection
- Space-saving design



- Superior overload protection and practical stackable design for convenient storage
- Bright backlit LCD and 4 button operation make the new scout easy to see and use
- Fast weighing speed and high resolution delivers repeatable and reliable results
- Communication: Optional RS232, USB host, USB device, Bluetooth or Ethernet
- Construction: ABS housing, stainless steel pan, replaceable in-use cover
- Design Features: Fast stabilization time, menu lock switch, stackable design, security slot, integral weigh below hook for below balance weighing applications, transportation lock, removable stainless steel weighing platform, stability indicator, overload and underload indicators, low battery indicator, auto shut-off

Type	Capacity	Readability	Plate dimensions	PK	Cat. No.
	g	g	mm		
SKX123	120	0.001	diam. 93	1	LLG06281344
SKX222	220	0.01	diam.120	1	LLG06281345
SKX422	420	0.01	diam. 120	1	LLG06281346
SKX622	620	0.01	diam. 120	1	LLG06281347
SKX1202	1200	0.01	170 x 140	1	LLG06281348
SKX2202	2200	0.01	170 x 140	1	LLG06281349
SKX2201	2200	0.1	170 x 140	1	LLG06281352
SKX8200	8200	1	170 x 140	1	LLG06281354

Calibration weights, class E2, compact shape



Stainless steel, polished. Plastic boxes with internal foam support or wooden boxes and internationally recognised DAKS certificates are available separately.



Weight	Accuracy	PK	Cat. No.
g	± mg		
1	0.03	1	LLG06233989
2	0.04	1	LLG06234003
5	0.05	1	LLG07639008
10	0.06	1	LLG07653221
20	0.08	1	LLG07653222
50	0.10	1	LLG06233196
100	0.16	1	LLG06233990
200	0.30	1	LLG06233991
500	0.80	1	LLG06233992
1000	1.60	1	LLG04652699
2000	3.00	1	LLG07653223
5000	8.00	1	LLG07671083

Universal centrifuge Z 307



The small universal centrifuge Z 307 is suitable for use in clinical, research and industrial laboratories.

- Maintenance-free induction drive
- Microprocessor control with LCD display
- "Quick" key for short runs
- Memory for 99 complete runs, incl. rotor type
- Lid lock
- Automatic rotor identification system with overspeed protection
- Active imbalance identification and cut-off (rotor-specific)
- Audible signal at the end of each run
- Imbalance tolerant drive
- Manufactured according to international safety regulations, e.g. IEC 61010
- Easy rotor change
- Air cooling
- Stainless steel chamber

Please order rotors separately.

Specifications

Max. RCF:	18624 x g
Max. speed:	14000 rpm
Max. capacity:	4 x 200 ml
Timer:	59 min 50 sec, 10 sec increments/ 99 h 59 min, 1 min increments
Dimensions (W x D x H):	355 x 474 x 330 mm
Weight:	30 kg
Type of auxiliary energy:	230 V, 50 ... 60 Hz

Type	PK	Cat. No.
Z 307	1	LLG06321971

Rotors for Centrifuges Z 307



Type	PK	Cat. No.
Angle rotor for max. 24 x 1.5/2.0 ml, aerosol tight	1	LLG04665882
Angle rotor for max. 30 x 15 ml (round bottom) or 20 x 15 ml (conical)	1	LLG09945940
Angle rotor for 12 x 5 ml, with lid	1	LLG09945945
Angle rotor for max. 12 x 15 ml	1	LLG09945950
Angle rotor for max. 6 x 50 ml	1	LLG09945951

Microlitre centrifuges, Heraeus™ Pico™ and Fresco™



- Acceleration of up to 17,000 x g in only 12 sec
- Small footprint
- Aerosol-tight



- High Productivity - Fast acceleration and deceleration time (12 seconds) means you can process more samples in less time
- User-friendly - fast and simple changes of rotors and tubes by a new user friendly design
- Safe - singular "Click CLOSE" - cap system for aerosol-tight inclusion of the biological substances guarantees the security of the user
- Comfortable - simple fast attitude of the run parameters and a clearly arranged display
- Multifunctional - selecting it from a broad pallet of rotors, which includes a Biocontainment rotor, a PCR rotor and a micro litre rotor with high sample capacity
- incl. 24 x 1.5/2.0 ml rotor

Type	Max. rcf x g	Max. speed rpm	Dimensions (W x D x H) mm	PK	Cat. No.
Pico™ 17	17000	13300	243 x 352 x 225	1	LLG09945100
Fresco™ 17	17000	13300	295 x 445 x 330	1	LLG09945101

Air purifier ap360

grant^o



- **Destroys DNA and RNA in bacteria and viruses by UV air sterilisation.**
- **Removes aerosols, pollen, dust and other particles**

The Air purifier ap360 protects from airborne infection by removing aerosols and also cleans the air from dust, pollen and many other allergens. Suitable for personal protection in laboratories, medical settings and production rooms.

- Efficient 360° air recycling of a 90 m³ room four times in an hour, eliminating 99.95 % of known viruses (including coronaviruses)
- With a medical grade, high capacity HEPA13 filter (acc. to EN 14644)
- 2 powerful UVC lamps for destroying bacteria and viruses by damaging their RNA and DNA, which avoids replication
- Ozone free
- Low noise level
- With lockable castors for safe and easy handling

Specifications

Filters:	Pre-filter H13 (EN 1822)
UV radiation source:	2 UV lamps, 55 W bactericidal, TU PL-L 55W UV-C
UV irradiance:	156 uW/cm ² /s at 1 m (Philips)
Radiation type:	UV ($\lambda = 253.7$ nm)
UV lamp service life	9000 h
Air flow:	360 m ³ /h
D90 dose:	280 J/m ²
Timer:	1 min ... 24 h, continuous
Noise level:	max. 66 db
Dimensions (W x D x H):	350 x 350 x 1050 mm
Weight:	13.4 kg
Power supply:	120/230 V, 50/60 Hz



Type	PK	Cat. No.
ap360	1	LLG04679869

Service Pack (Cat. No. 6.323 287) for replacing HEPA filters and UV lamps can be found online.



www.carloerbareagents.com



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