

Centrifuge Frontier™ Multi FC5707+R05

- Compact
- 10 Acceleration and Deceleration Rates
- Incl. Rotor for 8 x 15 ml Tubes



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Label printer DYMO® Rhino™ 6200+ Set



- New in our Assortment
- Portable
- 20 Languages Selectable
- 5 Lines per Label



The sturdy and portable Rhino™ 6000+ features practical quick access buttons. Thanks to PC connectivity, complex label layouts can be created, saved, and printed on the computer using DYMO® ID software.

- Barcode printing: Code 39, Code 128, Codabar, EAN 13, EAN 8, UPC-A, UPC-E, PDF 417, Code 39 Mod 43 variant, QR code
- Internal memory for last printed labels and space for up to 200 customised labels
- Automatic tape cutter
- One-touch cassette eject system
- Prints up to five lines per label
- 20 languages selectable
- Thermal transfer printing with 180 dpi resolution
- Meets ANSI and TIA/EIA-606-B industrial labelling standards
- PC connection via USB interface
- ABC keyboard

Scope of supply: Label printer, label tape vinyl black on white (9 mm x 5.5 m), label tape nylon black on white (24 mm x 3.5 m), Li-Ion rechargeable battery, power adapter optionally with plug adapter UK, quick start guide, case

Label width: 6 ... 24 mm
Print speed: 10 mm/s
Power supply: 6 x AA batteries, Li-Ion rechargeable battery or power adapter

Type	External dimensions (W x D x H) mm	Weight g	PK	Cat. No.
6000+ Set	137 x 246 x 75	1810	1	4687588*LLG
6000+ Set UK	137 x 246 x 75	1810	1	6325216*LLG

IND label tapes for label printers DYMO® Rhino™, Vinyl

The label tape with industrial adhesive is suitable for versatile labelling applications and withstands UV light, extreme temperatures, chemicals, and moisture.

- Colour: black on yellow
- External ribbon cartridges made from 100 % recycled material
- UL recognized as a component to UL 969
- Meet OSHA, ANSI, and ISO standards
- REACH and RoHS compliant
- Temperature resistant from -40 to 80 °C



Width mm	Length m	PK	Cat. No.
12	5.5	1	4687545*LLG
19	5.5	1	4687546*LLG
9	5.5	1	4687547*LLG
12	5.5	1	4687548*LLG
19	5.5	1	4687549*LLG
24	5.5	1	4687559*LLG
24	5.5	1	4687560*LLG

Safety bottle carrier, PP



Bottle carrier for safe transport of bottles in laboratories.

- Centring ring stabilises the bottle in the centre of the carrier
- With labelling field for easy identification

For bottles ml	Colour	Height mm	Diam. mm	PK	Cat. No.
1500	Red	165	114	1	4688196*LLG
1500	Black	165	114	1	4688197*LLG
1500	Blue	165	114	1	4688198*LLG
1500	Green	165	114	1	4688199*LLG
4500	Red	267	183	1	4688192*LLG
4500	Black	267	183	1	4688193*LLG
4500	Blue	267	183	1	4688194*LLG
4500	Green	267	183	1	4688195*LLG

Disposable weighing boats, PS, white



Deep vessel made of PS with sturdy handle and notched spout. Ideal for weighing and controlled pouring of liquids.

- Flat bottom ensures stability and prevents tipping
- Biologically inert and resistant to dilute and weak acids, aqueous solutions, bases, and alcohols
- Manufactured in an ISO Class 8 clean room
- Temperature range 0... 40 °C

Nominal capacity ml	Dimensions (W x D x H) mm	PK	Cat. No.
50	40 x 92 x 43	200	4688189*LLG
100	90 x 107 x 48	200	4688190*LLG
200	117 x 148 x 51	200	4688191*LLG

Centrifuge Frontier™ Multi FC5707+R05



- **Universal Centrifuge**
- **Fast spin for small measurement runs**
- **Incl. Rotor for 8 x 15 ml Tubes**

Compact multifunctional centrifuge for general laboratory applications, with splash-proof control panel and touch-wheel control. The pre-installed 8x15 ml angle rotor is suitable for round-bottom and conical tubes, as well as for conventional blood tubes.

- Backlit, two-lined LCD display
- 10 acceleration and deceleration rates
- Fast spin for small measurement runs
- Memory for up to 99 parameters
- Lid locking system
- Imbalance sensor

Scope of supply: Centrifuge, 8x15 ml angle rotor

Specifications

Max. rcf:	4445 x g
Speed:	200 ... 6800 rpm
Runtime/timer H:Min:Sec	00:00:10 ... 99:59:59
Noise level:	60 db(A)
Dimensions (WxDxH):	277 x 356 x 236 mm
Weight:	10 kg
Rated capacity:	50 W
Power supply:	230 V, 50/60 Hz
IP code:	IP 44

Type	Plug type	PK	Cat. No.
FC5707+R05	EU/UK	1	6313561*LLG

LLG-Microcentrifuge tubes, PP, with Safe-Lock lid



NEW

With tight-fitting Safe-Lock lid, which prevents unintentional opening of the lid during centrifugation.

- Frosted labelling area on the lid
- Lid membrane can be easily pierced
- Easy opening and closing with one hand
- Graduation lines for visual volume control
- RNase- and DNase-free

Volume ml	Form	Max. rcf x g	Temp. range °C	PK	Cat. No.
1.5	Conical	1500	-86 ... 121	1000	6490852*LLG
2.0	Round	1500	-86 ... 121	1000	6490853*LLG

Mini centrifuge LLG-uniCFUGE 2



Compact and reasonably priced mini centrifuges with two rotor types. Speed can be adjusted to 4000 rpm or 6000 rpm. Powerful motor for fast starting. Quick stop when the lid is opened.

LLG-uniCFUGE 2 with **Universal rotor** for 6 x 1.5/2.0 ml and 6 x 0.5 ml tubes and 2 times 8 x 0.2 ml PCR-strips.

Scope of supply: Centrifuge, mains cable

Specifications

Max. RCF:	1200 x g and 2000 x g
Max. speed:	4000 rpm and 6000 rpm
Motor:	brushless DC motor
Max. load:	6 x 0.5/1.5/2 ml and 2 x 8-tube PCR strips (0.2 ml)
Dimensions (diam. x H):	140 x 120 mm
Power supply:	100 ... 240 V, 50/60 Hz

Description	Plug type	PK	Cat. No.
LLG-uniCFUGE 2 with universal rotor	EU	1	6263510*LLG
LLG-uniCFUGE 2 with universal rotor	UK	1	6263511*LLG

LLG-Microtube racks, PP, 80-well



Large Colour Selection



Designed to hold 1.5 ml/2.0 ml microtubes (5 x 16 arrays) in a temperature range from -80 to 121 °C. Molded numbers on the surface for easy samples identification. Suitable for autoclaving at 121 °C.

Colour	PK	Cat. No.
yellow, red, blue, orange, green	5	4672062*LLG
yellow	5	4672063*LLG
red	5	4672064*LLG
blue	5	4672065*LLG
orange	5	4672067*LLG
green	5	4672068*LLG



New Assortment



LLG-Two-neck round bottom flasks with standard ground joint, borosilicate glass 3.3, angled side neck



Side neck at 20° angle to the middle neck. With white inscription. Acc. to DIN 12394.

Nominal capacity ml	Dimensions (dia. x H) mm	Centre neck NS	Side necks NS	PK	Cat. No.
50*	51 x 92	14/23	14/23	1	4686152*LLG
100*	64 x 107	14/23	14/23	1	4686153*LLG
100	64 x 107	29/32	14/23	1	4686154*LLG
250*	85 x 142	14/23	14/23	1	4686155*LLG
250*	85 x 142	29/32	14/23	1	4686156*LLG
500*	105 x 165	29/32	14/23	1	4686157*LLG
1000*	131 x 203	29/32	14/23	1	4686158*LLG

* DIN 12394

LLG-Three-neck round bottom flasks with standard ground joint, borosilicate glass 3.3, angled side necks



Side necks at 20° angle to the middle neck. With white inscription. Acc. to DIN 12394.

Nominal capacity ml	Height mm	Centre neck NS	Lateral neck	PK	Cat. No.
250*	140	29/32	NS14/23	1	4686159*LLG
250	140	29/32	NS29/32	1	4686160*LLG
500*	163	29/32	NS14/23	1	4686161*LLG
500	163	29/32	NS29/32	1	4686162*LLG
1000*	200	29/32	NS14/23	1	4686163*LLG
1000	200	29/32	NS29/32	1	4686164*LLG
2000	240	29/32	NS29/32	1	4686165*LLG

* DIN 12394

LLG-Condenser acc. to Dimroth, borosilicate glass 3.3



Water connection with with glass olives or PP olives. With standard ground cone and socket. Acc. to DIN 12576.

Description	Effective length mm	Cone NS	Socket NS	PK	Cat. No.
Glass olive	250	29/32	29/32	1	4686190*LLG
Glass olive	400	29/32	29/32	1	4686191*LLG
PP olive	250	29/32	29/32	1	4686192*LLG
PP olive	400	29/32	29/32	1	4686193*LLG

LLG-Separating funnel acc. to Squibb, borosilicate glass 3.3



Separating funnel acc. to Squibb with PTFE stopcock.

- DIN ISO 4800
- With standard ground joint and stopper
- White graduation

Nominal capacity ml	Bore mm	Ground size NS	PK	Cat. No.
50	2.5	19/26	1	4686263*LLG
100	2.5	19/26	1	4686264*LLG
250	4	29/32	1	4686265*LLG
500	4	29/32	1	4686266*LLG
1000	6	29/32	1	4686267*LLG
2000	6	29/32	1	4686268*LLG

Disposable spoon spatula LaboPlast®/SteriPlast®, PS



White. The spoon spatula is a double spatula with spoon 0.5 ml and spatula blade 17 mm. Chemical-resistant and corrosion-proof.

- SteriPlast®: Individually packed, additionally gamma-sterilized
- Production, assembly and packaging according to Cleanroom class 7 (10000)
- According to EU food and FDA guidelines

Type	Length	Sterile	PK	Cat. No.
	mm			
LaboPlast®	178	-	100	6284543*LLG
SteriPlast®	178	+	100	6284544*LLG

Disposable double scoop spatula LaboPlast®/SteriPlast®, PS



White. Contents 1.0 and 0.25 ml, spatula width on one side 11 mm, on the other 5.7 mm.

- SteriPlast®: Individually packed, additionally gamma-sterilized
- Production, assembly and packaging according to Cleanroom class 7 (10000)
- According to EU food and FDA guidelines

Type	Length	Sterile	PK	Cat. No.
	mm			
LaboPlast®	180	-	100	6284545*LLG
SteriPlast®	180	+	100	6284546*LLG

Chemistry scoop, PP, with rod handle



For aggressive liquids, complete with strong handle made of polypropylene.

Capacity	Stem diam.	Stem	PK	Cat. No.
ml	mm	mm		
250	20	1000	1	9303840*LLG
600	20	1000	1	9303842*LLG
1000	20	1000	1	9303844*LLG

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



Universal powder and granulate collector, made of stainless steel V4A. Standardised, according to DIN and IDF. Autoclavable.

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

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



Ideal for sample collection and storage. Made of virgin polystyrene. All materials are non-cytotoxic. The metal cap with inert PVC-Liner ensures leak proof seal.

Nominal capacity ml	Ø with Cover mm	Height mm	PK	Cat. No.
60	43	60	300	9070321*LLG
100	49	75	200	9070322*LLG
250	63	121	50	9070323*LLG

VITgrip™ lab bottles, PP, GL 45



Allround lab bottle made of polypropylene, with GL 45 thread and supplied with tamper-evident closure (PP).

- Excellent grip due to innovative design. The slim and waisted shape of the VITgrip™ makes it much easier to handle compared to conventional laboratory bottles
- Leakproof due to optimised sealing system of the bottle thread and the screw cap with ergonomic design
- With tamper-evident closure that reliably signals, if the bottle is still sealed

Capacity ml	Height* mm	Bottom diam. mm	PK	Cat. No.
125	103	54	6	6270627*LLG
250	149	64	6	6270628*LLG
500	192	77	6	6270629*LLG
1000	234	97	6	6270630*LLG
2000	278	126	1	6270631*LLG

* Height without screw cap

Space-saving jerrycans, HDPE, electrically conductive



Black. For use in explosion-protected areas.

- Antistatic
- Surface resistance < 10⁵ Ohm
- With or without threaded connector 3/4"
- Space-saving due to its narrow width
- Grounding by means of antistatic set (available as accessory)
- Electrically conductive stopcock StopCock PA (available as accessory)

Nominal capacity ml	Description	Width mm	PK	Cat. No.
5000	Space-saving jerrycans without threaded connector	65	1	4665330*LLG
5000	Compact jerrycan set, with StopCock PA	65	1	4665322*LLG
10000	Space-saving jerrycans without threaded connector	125	1	4665331*LLG
10000	Compact jerrycan set, with StopCock PA	125	1	4665329*LLG

Wide-mouth bottles, PE, graduated



Will withstand considerable pressure before rupturing. Secured by tagging points on bottle and PP cap. Confidential notes can be placed in the space between insert sealing plug and cap. Food-safe according to EC Regulation 1935/2004 and EC Regulation 10/2011.

Capacity ml	Grad. ml	Ext. diam. mm	Int. diam. mm	Height mm	PK	Cat. No.
50	10	40	24.0	77	10	4672391*LLG
100	20	48	24.0	89	10	4672387*LLG
250	25	61	34.5	126	10	4672390*LLG
500	50	75	34.5	158	10	4672392*LLG
1000	100	93	45.0	200	10	4672388*LLG
2000	100	115	45.0	247	10	4672389*LLG

Pump drive Hei-FLOW Precision 06



- For Dosing and Transferring
- Made in Germany



Dosing and Feeding pumps for reproducible results. This pump drive is only suitable for use with single-channel pump heads.

- Digital read-out of Speed, Tubing diameter, Flow rate, Dosing volume, Interval dosing, Pause function
- With buttons for selecting all process parameters
- Pump heads with convex rollers for cell protection are available for use in cell biology

The pump head is not included. Please order separately.

Specifications

Speed range:	24 ... 600 rpm
Flow rates single-channel pumps:	2.0 ... 4056 ml/min
Flow rate accuracy (water without counter pressure):	±2 %
Control accuracy motor:	±0,5 %
Motor power:	100 W
Volume dosing:	0:001 ... 9999 ml
Interval dosing:	0.001 ... 9999 ml in breaks 0.1 s ... 750 h
Permissible ambient conditions:	5 ... 31 °C
Permissible rel. humidity:	80 %
Dimensions (W x D x H):	166 x 256 x 225 mm
Protection class DIN EN 60529:	IP 55
Weight:	7.3 kg

Type	Plug type	PK	Cat. No.
Hei-FLOW Precision 600	EU	1	9829245*LLG
Hei-FLOW Precision 600	UK	1	6255898*LLG

Single-channel Pump Heads SP quick for Pump drives Hei-FLOW



- Fast and convenient tube changes
- Low pulsation due to 5 roller system
- Pump head features ball bearings
- Rollers made of stainless steel
- For tubes with a 1.6 mm or 2.5 mm wall thickness (wt)
- Depending on drive and tubing, the flow rate ranges from 0.38 to 3436 ml per minute

Tubing wall thickness	Flow rate ml/min.	PK	Cat. No.
1.6	0.38 ... 3436	1	9829250*LLG
2.5	0.38 ... 3436	1	9829251*LLG

Hand pumps Otal



For jerry cans and balloons up to 60 l capacity. Universal bungs for container openings of 30 to 70mm 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 36mm.

LLG-Surface protector DescProtect



- 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
- Excellent fluid protection
- No contamination of work surfaces or laboratory cabinets
- Suitable for school laboratories, wet chemistry, industry

Type	Size	PK	Cat. No.
Sheets	460 mm x 570 mm	50	9160270*LLG
Spool	400 mm x 50 m	1	9160271*LLG



Single channel microliter pipettes LLG-proMLP



Proven Quality

- 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)

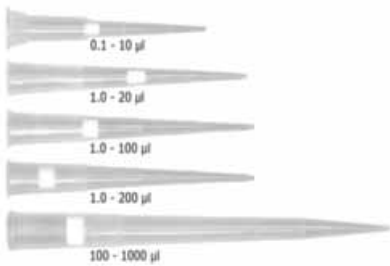
*not available for 5 ml and 10 ml pipettes

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	6270420*LLG
0.5-10	0.02	1.10	0.44	red	1	6270421*LLG
2-20	0.02	1.00	0.33	light yellow	1	6270422*LLG
10-100	0.2	0.80	0.17	light orange	1	6270423*LLG
20-200	0.2	0.80	0.17	dark yellow	1	6270424*LLG
100-1000	2	0.80	0.17	dark blue	1	6270425*LLG
500-5000	2	0.66	0.18	purple	1	6270426*LLG
1000-10000	20	0.60	0.18	light blue	1	6270427*LLG

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

Capacity	Package contents	PK	Cat. No.
µl			
0.1 ... 10	10 x 96	960	4668784*LLG
0.1 ... 10*	10 x 96	960	4668785*LLG
1 ... 20	10 x 96	960	4668786*LLG
1 ... 100	10 x 96	960	4668787*LLG
1 ... 200	10 x 96	960	4668788*LLG
100 ... 1000	8 x 96	768	4668789*LLG

* Tip XL

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	6490522*LLG



Transferpette® electronic are produced in Germany with 100% green electricity from certified hydropower plants and self-generated electricity from an efficient combined heat and power plant. BRAND GMBH + CO KG has been successfully participating in the sustainability ranking of the EcoVadis evaluation platform since 2022 and was awarded silver status for it.



Single channel microliter pipettes, Transferpette® electronic, variable



• Ergonomic • Environmentally Friendly Production

- Motor-driven, to reduce the risk of RSI and imprecision/inaccuracy caused by operator variability
- Five operating modes: Pipetting mode, Reverse pipetting, Mixing, Dispensing, Gel-electrophoresis modes
- Easy Calibration function for rapid adjustment of the unit without tools
- Extremely fast pipetting speed
- NiMH rechargeable battery pack and battery regeneration-mode
- Optionally, the Transferpette® can also be charged via the 3-fold charging stand

Items supplied: Transferpette® electronic, DE-M marking, with performance certificate, battery, power supply, silicone grease.



Multichannel microliter pipettes Transferpette® -8/-12 electronic, variable



• Ergonomic • Environmentally Friendly Production • New: 1250 µl Volume Multichannel Pipettes



The effortless ease of operation and its unique ergonomic shape make working with the Transferpette® -8/-12 piston-operated pipette so comfortable.

- Individual shafts and seals can easily be replaced in the laboratory, for long instrument life
- Easy Calibration Technique: Calibration and adjustments are done in seconds without tools
- Autoclavable lower housing (121°C), freely rotatable over 360°
- Colored tip ejector caps indicate appropriate tips to use
- Corrosion resistant design

For research and development only.

Scope of supply:

Transferpette® electronic 8 or 12 channel, DE-M marking, with performance certificate, battery, power supply, 1 stand, 1 reagent reservoir, silicone grease, 1 extra set of sealing rings made of FKM and assembling aid

Capacity	Increments	Accuracy max. vol. (± R%)	Precision max. vol. (≤ CV%)	Plug type	PK	Cat. No.
µl	µl					
0,5 - 10	0.01	1.0	0.4	EU	1	9280113*LLG
2 - 20	0.02	1.0	0.4	EU	1	9280100*LLG
10 - 200	0.2	0.8	0.2	EU	1	9280101*LLG
50 - 1000	1.0	0.6	0.2	EU	1	9280102*LLG
250 - 5000	5.0	0.6	0.2	EU	1	9280114*LLG

LLG-Disposable Reagent reservoirs economy, PS



Made from polystyrol. Designed for use with multi-channel pipettes and can accommodate up to 12-channel standard pipettes. Available as sterile and non-sterile versions.

- DNase-, RNase- and pyrogen-free certified

Description	Capacity	PK	Cat. No.
	ml		
non-sterile, bulk	25	100	6282144*LLG
sterile, single packed	25	100	6282145*LLG
non-sterile, bulk	50	100	6282146*LLG
sterile, single packed	50	100	6282147*LLG

Channels	Capacity	Increments	Accuracy max. vol. (± R%)	Precision max. vol. (≤ CV%)	Connector	PK	Cat. No.
	µl	µl					
8	0,5 - 10	0,01	1,2	0,8	EU	1	9280117*LLG
8	50 - 1250	1,0	1,0	0,25	Uni	1	6491810*LLG
8	1 - 20	0,02	1,0	0,5	EU	1	9280107*LLG
8	5 - 100	0,1	0,8	0,25	EU	1	9280108*LLG
12	50 - 1250	1,0	1,0	0,25	Uni	1	6491811*LLG
8	10 - 200	0,2	0,8	0,25	EU	1	9280118*LLG
8	15 - 300	0,5	0,6	0,25	EU	1	9280109*LLG
12	0,5 - 10	0,01	1,2	0,8	EU	1	9280119*LLG
12	1 - 20	0,02	1,0	0,5	EU	1	9280110*LLG
12	5 - 100	0,1	0,8	0,25	EU	1	9280111*LLG
12	10 - 200	0,2	0,8	0,25	EU	1	9280128*LLG
12	15 - 300	0,5	0,6	0,25	EU	1	9280112*LLG

Colony counter, Scan® 50

interscience



- **Easy Handling**
- **Light Signal for Counted Colonies**



Manual colony counter for Petri dishes (from Ø 55 to 90 mm). Counting is done by a simple touch pressure and is subsequently recorded. The export of the counting results via USB to a computer ensures the traceability of the data.

- LCD screen
- Counting buttons on both sides, for left- or right-handers
- With inclined counting surface and hand rest
- Light signal for each colony counted
- 9 different sounds and headphone jack
- Dark field 2, high-contrast, indirect LED illumination
- Counting range 0 - 1999

Scope of delivery:
Scan 50 colony counter, mains cable, USB cable, black pen, manual.

Dimensions (WxDxH): 273 x 295 x 151 mm
Power supply: 100 ... 240 V, 50/60 Hz
IP code: IP 20
Warranty: 3 years

Type	Plug type	PK	Cat. No.
Scan® 50	EU	1	4688030*LLG
Scan® 50	UK	1	6325238*LLG

Filter funnel, Biosart® 250

SARTORIUS



For microbiological and analytical quality assurance in industry. 250 ml sterile plastic funnels reduce process time in colony and particle analysis. For use with Sartorius membrane filters and Sartorius cardboard culture plates.

Type	PK	Cat. No.
BioSart®250 disposable funnel, sterile	50	9049340*LLG

Manifolds Microsart®, stainless steel



SARTORIUS



For microbiological quality control. Quick connectors at both sides of the manifolds enable fast connections of either tubing, another manifold or end caps.

- Full autoclavability without disassembly
- Sterile venting
- Reduced risk of secondary contamination
- Low working height
- Rubber feets providing better stability at the workplace
- 3 branch
- Dimensions (W x D x H): 474 x 98 x 120 mm (without funnels and tubing)

Scope of supply:

Microsart® Manifolds for Microsart® funnels and filters:

Manifold, filter base support with sinter frit, blind coupling, 20 cm tubing and venting filter

Microsart® Manifolds for Biosart® 250 funnels:

Manifold, filter base support with sinter frit, blind coupling, 20 cm tubing and plug for venting holes

Microsart® Manifolds including stainless steel funnels (100/500 ml):

Manifold, filter base support with sinter frit, blind coupling, 20 cm tubing and plug for venting holes

Type	PK	Cat. No.
Microsart® Manifolds for Microsart® funnels and filters	1	4669472*LLG
Microsart® Manifolds for Biosart® 250 funnels	1	4669479*LLG
Microsart® Manifolds including stainless steel funnels 500 ml	1	4669485*LLG

Plastic Funnels, Microsart®, PP



SARTORIUS



Fully Autoclavable



The sterile plastic funnels with 47 mm diameter allow quick performance of the filtrations required in the routine testing of water, food and beverages, pharmaceutical and cosmetic products.

- Click-Fit closure for optimum sealing
- Graduation with markings for exact volume dosing

Volume	PK	Cat. No.
ml		
100	100	7659614*LLG
250	96	7671690*LLG

Disposable Erlenmeyer Flasks Nalgene™ with vented closure, PETG, sterile

thermo
scientific

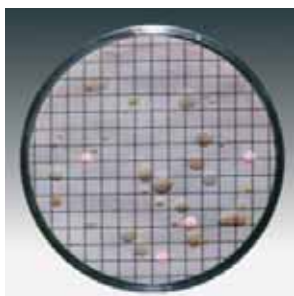


Blue closure made of HDPE with 0.2 µm hydrophobic PTFE membrane allowing sterile gas exchange. Individually packed. Planner bottom.

Capacity	Cover type	PK	Cat. No.
ml			
125	38-430	24	6234530*LLG
250	38-430	12	6231087*LLG
500	45-430	12	9141304*LLG
1000	45-430	6	9141305*LLG
2000	45-430	4	9141306*LLG
2800	70	4	9141307*LLG

Nutrient pads, diam. 50 mm

SARTORIUS



Sterile dry culture media with membrane filter. Sterile dry culture media in Petri dishes with matching membrane filter for economical and time-saving microbiological quality control. Individually sterile packed in climate-proof aluminium foil. Further culture media on request.

Pore size µm	Type	For	Colour	PK	Cat. No.
0.45	Endo	E. coli + Coliforms	white / green	100	9055008*LLG
0.45	Caso	Colony count	green / green	100	9055017*LLG
0.45	Standard TTC	Colony count	green / green	100	9055010*LLG
0.65	Wort	Yeasts + moulds	grey / white	100	9055013*LLG
0.45	Glucose-Tryptone	thermophilic spore formers, mesophilic bacteria	white / green	100	9055020*LLG
0.65	Sabouraud	Yeast + moulds	grey / green	100	9055023*LLG

Orbital shaker Solaris™ 2000 Set

thermo
scientific



- Complete Set
- Incl. Platform and Brackets

Robust orbital shaker with high capacity.

- For timer and continuous operation
- 99 individual programmes can be stored
- Large, easy-to-read touchscreen display with indication of speed and run time
- USB and Ethernet connection for data output and device monitoring

Scope of delivery: Orbital shaker, universal platform, clamps, mains cable, platform screws, operating instructions

Specifications

Type of movement:	orbital
Shaking stroke:	25 mm
Speed:	15 ... 525 rpm
Max. loading capacity:	25 kg
Moving table (WxD):	356 x 305 mm
Dimensions (WxDxH):	364 x 469 x 141 mm
Weight:	20.9 kg
Rated capacity:	60 W
Power supply:	100 ... 240 V, 50/60 Hz
IP code:	IP 20

Type	PK	Cat. No.
Solaris™ 2000 Set	1	6325128*LLG

LLG-Microbiological Media



- Made in EU
- Wide Selection



For numerous micro- and molecular biological applications. The safety data sheets of these products are available under www.llg-labware.com/en/zertifikate.

Description	Capacity	PK	Cat. No.
	g		
Luria Bertani (Miller), Powder	500	1	6271000*LLG
Luria Bertani (Lennox), Powder	500	1	6271010*LLG
Terrific Broth, Powder	500	1	6271007*LLG
2xYT Broth, Powder	500	1	6271001*LLG
Bact. Agar, Powder	500	1	6271003*LLG
Luria Bertani Agar (Miller), Powder	500	1	6271009*LLG
Luria Bertani Agar (Lennox), Powder	500	1	6271008*LLG
YPD Broth, Powder	500	1	6271002*LLG
Yeast Extract, Powder	500	1	6271004*LLG
Tryptone, Powder	500	1	6271005*LLG
Casein Peptone, Powder	500	1	6271011*LLG
Tryptic Soya Agar (Caso-Agar), Powder	500	1	6271006*LLG
Trypticasein Soy Broth (TSB-media), Powder	500	1	6271018*LLG

LLG-Pipette controller easy



Convenient Handling



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
- 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 easy	EU	1	6263683*LLG
LLG-Pipette controller easy	UK	1	6263684*LLG

LLG-Serological pipettes, PS, sterile



Proven Quality



Serological pipettes from LLG are ideally suited for sterile serological and cell culture applications. Easy to read graduation scales facilitate volume measurement and dosing. All LLG serological pipettes are plugged, sterile, pyrogen-free and have an increased volume capacity through extra graduations.

- Also available as short-pipettes (5 ml, 10 ml and 25 ml) or wide-mouth pipette (10 ml)
- 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 ml	Grad. ml	Colour code	Negative graduations	PK	Cat. No.
1	1/100	yellow	0.3	500	9380440*LLG
2	1/50	green	0.6	500	9380441*LLG
5	1/10	blue	3	200	7930401*LLG
10	1/10	orange	3	200	6268240*LLG
10	1/10	orange (wide mouth)	3	200	9380442*LLG
25	2/10	red	8	150	7930403*LLG
50	5/10	purple	10	100	9380443*LLG
5	1/10	blue (short form)	3	200	6265881*LLG
10	2/10	orange (short form)	10	150	6265882*LLG
25	5/10	red (short form)	9	100	6265883*LLG

Cell Culture Tubes Nunc™, PS, sterile



The surface of the tubes is coated with Thermo Scientific™ Nunclon™ Δ and designed for the cultivation of adherent cell cultures. With cap made of PE.

- Tubes with flat side provide 5.5 cm² culture surface
- Suitable for microscopy, use of cover glasses possible
- Leakproof

Working volume	Diam. mm	Height mm	Base	Cover type	PK	Cat. No.
3	16	110	flat side	screw cap	450	6510332*LLG
7	14	100	round	screw cap	600	9407230*LLG
7	13	100	round	push-on lid	600	4008816*LLG

Cell Scrapers Rotatable®, sterile



Free rotating blade to twist easily to the desired direction. Easy changes of the blade angle by slight pressure on the handle. Material blades PE and handle ABS.

- Small raised knobs on the handle for better grip
- Sterilized by gamma irradiation
- Individually wrapped
- DNase/RNase-free
- Pyrogen-free

Description	Length mm	PK	Cat. No.
Scraper, 12.5 mm	230	150	4672556*LLG
Scraper, 12.5 mm	300	150	4672557*LLG
Scraper, 19.5 mm	230	150	4672558*LLG
Scraper, 19.5 mm	300	150	4672559*LLG



New Assortment



Basic embedding moulds, stainless steel



- Sizes are suitable for many embedding cassettes
- Robust
- Excellent heat exchange
- Rounded corners

Dimensions (W x D x H) mm	PK	Cat. No.
10 x 10 x 5	10	4688501*LLG
24 x 24 x 5	10	4688502*LLG
30 x 24 x 9	10	4688503*LLG
30 x 24 x 9	10	4688504*LLG

Embedding agent Histoplast, paraffin



Package: 8 x 1 kg

Type	Description	PK	Cat. No.
Histoplast-PE	Infiltration/embedding, melting point: 56 °C	1	4688493*LLG
Histoplast-IM	Infiltration, with DMSO, melting point: 56 °C	1	4688494*LLG
Histoplast-LP	Against torsion, melting point: 55 ... 54 °C	1	4688495*LLG

Blades for Microtomes and Cryostats



Compatible with most common microtomes and cryostats.

- Low profile
- Cutting angle 34°

Type	Description	Width mm	Length mm	Thickness mm	PK	Cat. No.
MX35 Premier™	Routine histology	8	80	0.25	50	4688509*LLG
MB35 Premier™	Thin sections	8	80	0.5	50	4688508*LLG
MX35 Ultra™	Frozen sections	8	80	0.25	50	4688511*LLG
MX35 Premier+™	Hard tissue	8	80	0.25	50	4688510*LLG

Embedding cassettes PrintMate, Plastic, pore style round or slotted



For routine specimens, with loose lid. The embedding cassettes are comprehensively validated for print quality, processing quality and reliability during embedding and cutting.

- Opening and closing forces have been carefully adjusted
- The colour spectrum was selected for reliability during scanning
- Lid hinge on both sides

Package: 1 bag of 1000.

Colour	Dimensions (W x D x H) mm	Pore style	PK	Cat. No.
Blue	28,3 x 41 x 7	round	1000	4688417*LLG
Green	28,3 x 41 x 7	round	1000	4688418*LLG
Pink	28,3 x 41 x 7	round	1000	4688419*LLG
White	28,3 x 41 x 7	round	1000	4688420*LLG
Blue	28,3 x 41 x 7	slotted	1000	4688425*LLG
Green	28,3 x 41 x 7	slotted	1000	4688426*LLG
Pink	28,3 x 41 x 7	slotted	1000	4688427*LLG
White	28,3 x 41 x 7	slotted	1000	4688428*LLG

Biopsy bags, nylon



Biopsy bags made of blue, antistatic monofilament nylon, which allows optimal fluid circulation around the tissue and offers easy sample identification due to its blue colour.

Dimensions (D x W) mm	PK	Cat. No.
31 x 43	1000	4688546*LLG
45 x 65	1000	4688547*LLG
75 x 85	500	4688548*LLG

Muffle furnaces up to 1100 °C



Muffle furnaces with fibre-insulated chambers and ceramic heating plates. Suitable for thermal treatments in industry, science and medicine.

- Side, top or down-opening door depending on model
- Outer casing made of powder-coated sheet metal
- Ceramic bottom plate
- Control panel in the lower part of the oven
- Incl. door safety switch
- Fast heating time
- Good stability and temperature distribution
- Low power consumption
- With Omron E5CC controller

Nom. capacity	Door opening	External dimensions (W x D x H) mm	Plug type	PK	Cat. No.
L					
3	Top	345 x 470 x 430	EU	1	4669202*LLG
3	Top	345 x 470 x 430	UK	1	4686509*LLG
8	Top	445 x 660 x 495	EU	1	4669203*LLG
8	Top	445 x 660 x 495	UK	1	4686510*LLG
8	Side	440 x 530 x 495	EU	1	4669204*LLG
8	Side	440 x 530 x 495	UK	1	4686511*LLG
8	Down	440 x 530 x 495	EU	1	4669205*LLG
8	Down	440 x 530 x 495	UK	1	4686512*LLG
13	Top	505 x 685 x 555	EU	1	4669206*LLG
13	Top	505 x 685 x 555	UK	1	4686513*LLG

LLG-Heat/Cold hand protector "TempHand", silicone rubber



Gripper made of red silicone rubber to protect hands when handling hot or cold vessels. Suitable for temperatures from -50 up to 250 °C. Two grip openings for quick and easy use. One size fits all, can be used on both sides. With non-slip grip surface.

Description	PK	Cat. No.
LLG-Heat/Cold hand protector "TempHand"	1	6322889*LLG

Stirring heating mantles LabHEAT® KM-MER series





 Incl. Magnetic Stirrer



LabHEAT® - Heating mantles for flasks, With built-in, separately switchable magnetic stirrer (infinitely variable speed up to 1600 rpm, stirring power 20 W) Control lamps for stirring and heating operation, max. heating conductor temperature 450 °C, 1.5 m mains connection cable with safety plug and personal protection switch, rated voltage 230 V AC.

Capacity	Flask diam.	Rating	Heating zones	PK	Cat. No.
ml	mm	W			
100	64	100	1	1	9642545*LLG
250	85	150	2	1	9642546*LLG
500	105	200	2	1	9642547*LLG
1000	131	300	2	1	9642548*LLG

Safety Gloves, Heat Protection up to 1000 °C

EN 388 EN 407
 
1542 423444



- 5-finger glove
- Protection against contact heat short term up to 1000 °C
- Made of aramide fabric with special insulation
- Usable on both sides
- Abrasion resistant
- 1 pair per pack

Length:	400mm	
EN:	388, 407	
Description	PK	Cat. No.
Heat Protection, 5 finger	1	4652475*LLG

Circulator bath RC 2 lite/HRC 2 lite

For External Applications

IKA®



RC 2 lite: Powerful recirculating chiller for external cooling tasks down to -10 °C.

HRC 2 lite: Compact peripheral device designed for simple tempering tasks from -10 to 100 °C.

- Natural refrigerant R290
- Easy-to-clean stainless steel mesh filter
- Interfaces: RS 232, USB

Scope of supply RC 2 lite: Circulator bath, 2 x olive for DN 8 hoses
Scope of supply HRC 2 lite: Circulator bath, 2 x olive for DN 8 hoses, USB A-B cable

Specifications

Safety class:	RC 2 lite // HRC 2 lite
Cooling power (at 20 °C):	I (NFL) // II (FL)
Heat output HRC 2 lite:	400 W
Working temperature range:	1000 W
	-10 °C ... RT //
	-10 °C ... 100 °C

Temperature stability in accordance with DIN 12876:	±0.5 K
Filling volume:	1 ... 3.5 l
Pump power pressure side/suction side:	0.35 bar/0.15 bar
Max. flow rate:	18 l/min
Permissible ambient temperature:	5 ... 32 °C
Permissible relative humidity:	80 %
Dimensions (W x D x H):	225 x 430 x 385 mm
Weight:	24.5 kg // 24.9 kg
Power supply:	230 V, 50/60 Hz
IP code:	IP 21

Type	Plug type	PK	Cat. No.
RC 2 lite	EU	1	6319710*LLG
RC 2 lite	UK	1	4684868*LLG
RC 2 lite	CH	1	4684869*LLG
HRC 2 lite	EU	1	6491839*LLG
HRC 2 lite	UK	1	6325256*LLG
HRC 2 lite	CH	1	6325257*LLG

Refrigerated circulators CORIO™ CP

Julabo

For Internal and External Applications

NEW



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 R290
- 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 uniformity:	±0.03 °C
Temperature range:	-30 ... 200 °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	Plug type	PK	Cat. No.
CP-310F	4	0,3 / 0,27 / 0,12	EU	1	4685630*LLG
CP-310F	4	0,3 / 0,27 / 0,12	UK	1	6325219*LLG
CP-450F	4	0,44 / 0,37 / 0,16	EU	1	4685632*LLG
CP-450F	4	0,44 / 0,37 / 0,16	UK	1	6325220*LLG

Digital water baths JB Nova

grant

With Lid



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 12L, 18L and 26L 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.

Type	Capacity of the bath litres	External dimensions (W x D x H) mm	Plug type	PK	Cat. No.
JBN5	5	335 x 215 x 200	EU	1	9905870*LLG
JBN12	12	360 x 380 x 225	EU	1	9905871*LLG
JBN18	18	335 x 590 x 275	EU	1	9905872*LLG
JBN26	26	335 x 590 x 275	EU	1	9905873*LLG

Ultrasonic sieve-bath
SONOREX SUPER RK 106

BANDELIN



Ultrasonic bath for cleaning of 1 test sieve with 200 mm diameter.
Please order sieve holder SH 7 separately.

- Stainless steel tank and housing
- Drip water protected
- With integral tank drain tap G 4 for easy emptying
- Radio shielded

Specifications
HF-Frequency: 35 kHz, SweepTec®
Temperature range: 30 ... 80 °C
Timer: 1 ... 15 min or continuous
Power supply: 230 V~, 50/60 Hz
IP code: IP 32

Type	Capacity of the bath litres	Plug type	PK	Cat. No.
RK 106	5.6	EU	1	9877106*LLG
RK 106	5.6	UK	1	9877105*LLG
RK 106	5.6	CH	1	9877107*LLG

Test sieve holder for
Sonorex ultrasonic baths



Sieve holder for test sieve 200 mm diameter.

Type	For bath type	PK	Cat. No.
SH 7	RK/DT 106	1	9877784*LLG

Ear Defender uvex K1

uvex



Soft memory foam cushions are light and extremely comfortable to wear.

- Easy length adjustment
- Padded headband for optimal comfort
- Wearer comfort is ensured through soft surface

Sound protection (SNR): 28 dB(A)

Type	PK	Cat. No.
uvex K1	1	6270939*LLG

Ear Plugs



Non-allergenic, comfortable polyurethane. Smooth surface, dirt-repellent and hygienic. Conical shape expands to fill the ear canal. Meets EN 352-2 requirements. Available with, or without, connecting cord.

Sound protection (SNR): 37 dB(A)

Type	PK	Cat. No.
Without cord	200	9005046*LLG
With cord	100	9005047*LLG

Ultra centrifugal mill ZM 300



- **Very Short Grinding Time**
- **Extensive Accessories**

The ultra centrifugal mill is used for high-speed size reduction of soft to medium-hard, as well as temperature-sensitive or fibrous materials. Thanks to the Push-Fit system and the patented cassette principle, the accessory components can be changed without tools.

- Touch display with rotary knob
- Integrated temperature sensor
- Very short grinding time
- Prevention of overloads by feeding the sample too quickly
- Two-stage pre- and fine grinding in one working run

Scope of supply: Ultra-centrifugal mill ZM 300, 900 ml cassette

Please order rotors and sieves separately.

Feed size:	< 10 mm
Final fineness:	< 40 µm
Speed range:	6000 ... 23000 rpm
Rotor diameter:	99 mm
Dimensions (W x D x H):	452 x 426 x 431 mm
Weight:	38 kg
IP code:	IP 20



Type	Supply requirements	PK	Cat. No.
ZM 300	200 ... 240 V, 50/60 Hz	1	4685119*LLG



Cyclones for ZM 300

Cyclones incl. cassette bottom, with outlet and holder.

Description	PK	Cat. No.
With filter bag and sample jars 0.25 l and 0.5 l	1	4685135*LLG
With filter bag and collecting vessel 3 l	1	4685133*LLG
With filter bag and collecting vessel 5 l	1	4685132*LLG
With connection for hoover and sample jars 0.25 l and 0.5 l	1	4685134*LLG
With connection for hoover and collecting vessel 3 l	1	4685131*LLG
With connection for hoover and collecting vessel 5 l	1	4685130*LLG



Rotors for ZM 300

Description	PK	Cat. No.
Rotor, stainless steel, 6 teeth	1	9739064*LLG
Rotor, stainless steel, 12 teeth	1	9739065*LLG
Rotor, stainless steel, 24 teeth	1	9739066*LLG
Further Ring sieves and rotors available on request.		

Ring sieves, stainless steel

For Ultra Centrifugal Mill ZM 300. With reinforced rim.

Description	Aperture size mm	PK	Cat. No.
Trapezoidal perforation	0,50	1	4685085*LLG
Trapezoidal perforation	1,00	1	4685087*LLG

pH Tester LLG-pH Pen



Cost efficient pH tester, ideal for testing small amounts of liquid and in narrow vessels.

- ATC from 0 °C to 50 °C
- Large, easy-to-read LCD display
- **3-point calibration**

Scope of supply: pH meter

Specifications

pH Measuring range:	0 ... 14
pH Accuracy:	±0.1
pH resolution:	±0.1
Dimensions with electrode (W x D x H):	36 x 20 x 210 mm
Dimensions electrode (diam. x L):	12 x 110 mm
Weight:	72 g
Power supply:	2 x 3 V CR2032 button cell
IP code:	IP 65
Warranty:	2 years

Type	PK	Cat. No.
LLG-pH Pen	1	6263690*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) from date of production
- Colour-coded
- pH 10 is borax-free

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	6324541*LLG

Multiparameter meters ProfiLine pH/Cond 3320



Professional pH and redox meter for mobile measurements. The pH/Cond 3320 has a robust, waterproof housing (IP67) and is equipped with a memory as well as a data logger with an adjustable interval between 1 s and 60 min. All entries contain GLP-supporting data, like the date, time and ID number. The modern, waterproof USB interface is used for easy and quick data transfers.

- Two inputs for the simultaneous measurement of pH/mV/ISE/redox potential and conductivity
- Backlit graphic display for the parallel display of the measured values
- Perfect for monitoring process applications
- Waterproof USB interface

Scope of supply pH/Cond 3320 Set:

Meter in transport case with SenTix® 41, TetraCon® 325, buffer solution STP 4 and STP 7, conductivity standard 0.01 mol/l KCl, manual, stand, beaker, CD-ROM, driver software for USB, batteries, cable



Specifications

Measuring range/Resolution	
pH:	-2.000 ... 19.999 ±0.005 pH
mV:	-2500 ... +2500 ±1 mV
ISE (mg/l, µmol/l, mg/kg, ppm, %):	0.000 ... 999999
Conductivity:	0.000 µS/cm ... 1000 mS/cm
Salinity:	0.0 ... 70.0
TDS:	0 mg ... 199.9 g/l
Temp.:	-5.0 ... 105.0 °C ±0.1 °C
Memory:	Manually 200/5000 automatically
Power supply:	4 x 1.5 V AA or 4 x 1.2 V NiMH battery
IP code:	IP 67

Type	PK	Cat. No.
pH/Cond 3320 Set	1	6262509*LLG

LLG-Indicator paper sticks



Additional Measuring Ranges

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



Range	Package contents	PK	Cat. No.
pH			
0 ... 14	100 sticks per pack	100	9129807*LLG
5.5 ... 9	100 sticks per pack	100	6322832*LLG
0 ... 6	100 sticks per pack	100	6322833*LLG

Multiparameter meters MultiLine® 3510 IDS



Professional digital multiparameter meters for mobile measurement. Sequential multi-parameter measurement. All WTW IDS pH, ORP, dissolved oxygen sensors, conductivity cells and turbidity sensors can be connected to the universal channel, either with cable or wireless module. Data transfer to PC with MultiLab® Importer. With Mini USB-B interface and black/white display.

Multi 3510 IDS:

Single meter in a carrying case with buffer 4, 7, KCl 3 mol/l, conductivity standard, batteries, USB cable

Multi 3510 IDS SET:

Meter in a carrying case with optical oxygen sensor FDO® 925, batteries, USB cable



Specifications

Memory:	manual: 500 data records automatic: 4500 data records
Dimensions (W x D x H):	approx. 180 x 80 x 55 mm
Weight:	400 g
Power supply:	4 alkaline batteries, USB
IP code:	IP 67

Type	Description	PK	Cat. No.
Multi 3510	1 channel, meter only	1	6282979*LLG
Multi 3510 SET	1 channel, with FDO® 925	1	6270393*LLG

pH electrodes InLab® Expert Pro



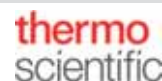
pH-combination electrode with chemically resistant PEEK shaft, ARGENTAL™ reference system. Fixed BNC/RCA (Cinch) cable. InLab® Expert Pro ISM for SevenCompact and SevenExcellence.

Specifications

Temperature range:	0 ... 100 °C
pH range:	0 ... 14 pH
Temperature sensor:	NTC 30 kΩ
Length/Diam.:	120 mm/12 mm
Electrolyte:	XEROLYT® polymer
Diaphragm:	open junction
Membrane resistance at 25 °C:	< 250 MΩ

Type	Connector	Cable	PK	Cat. No.
InLab® Expert Pro-ISM	BNC/RCA	1.2 m	1	9041508*LLG
InLab® Expert Pro	BNC/RCA	1.2 m	1	9041506*LLG

pH/mV meter Orion™ Lab Star PH111



- Compact Tabletop Meter
- Up to 5-point pH Calibration



Compact pH/mV benchtop meter for simple pH analyses in the laboratory.

- Simultaneous measurement and display of pH, mV, and temperature
- Large 5" LCD display with backlighting
- 1 to 5-point pH calibration and 1-point ORP calibration
- Calibration with automatic buffer recognition or manual entry within the same calibration
- Stabilisation and ready indicators signal when measurements are complete
- Electrode icon on the display shows the status of the pH electrode
- Memory for up to 500 data points
- Easy data export with the supplied PC cable
- With electrode stand for easy positioning of the probe in the sample
- Logs with date and time stamp for GLP-compliant work

Scope of supply: pH/mV meter, electrode stand, refillable pH/ATC electrode, pH buffer and solution kit, PC cable, universal power supply with plug adapter EU and UK

Specifications

pH range:	-2.000 ... 18.000
Resolution:	0.1/0.01/0.001
Accuracy:	±0.005 pH ±1 lowest digit
Calibration points:	Up to 5 points
mV range:	±2000 mV
Resolution:	0.1 mV
Accuracy:	±0.2 mV or ±0.05 % of the measured value - the higher value applies in each case
Calibration points:	1 point
Temperature range:	-5 ... 105 °C
Resolution:	0.1 °C
Accuracy:	±0.3 °C
Calibration points:	1 point
Dimensions (W x D x H):	155 x 198 x 62 mm
Weight:	0.7 kg
Power supply:	100 ... 240 V, 50 ... 60 H
IP code:	IP 54

Type	PK	Cat. No.
Lab Star PH111	1	6491802*LLG

Conductivity meters FiveEasy™ F30/FiveEasy™ Plus FP30



F30-Standard Kit

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

- Large, easy to read and easy to understand display with all information visible at a glance
- Electrode arm extension pole included

Scope of supply:

F30/FP30-Meter: Meter with CD operating instructions, QuickGuide, declaration of conformity, test certificate, universal power supply with plug adapter EU and UK

F30/FP30-Standard: as F30/FP30-Meter, plus LE703 conductivity sensor, 1 each x 1413 µS/cm and 12.88 mS/cm standard sachets

Specifications

Measuring range (Accuracy)

Conductivity F30/FP30: 0.01 µS/cm ... 200 mS/cm/

0.01 µS/cm ... 500 mS/cm
(±0.5 % of measured value)

TDS F30/FP30: 0.01 mg/l ... 200g/l/0.01 mg/l ... 300 g/l

Temperature F30/FP30: 0 ... 100 °C (0.5 °C)/-5 ... 105 °C (0.3 °C)

Calibration: 1 point, 3 predefined standards

Temperature compensation: Linear: 0.00 %/°C ... 10.00 %/°C

Reference temperature: 20 °C and 25 °C

Power supply: 100 ... 240 V/50 ... 60 Hz/12 V DC

FP30 only

Salinity: 0.00 ... 42 psu

Memory: 200 measurements

Interface: RS232, USB

Type	PK	Cat. No.
F30-Meter	1	6280107*LLG
F30-Standard Kit	1	6280108*LLG
FP30-Meter	1	6280109*LLG
FP30-Standard Kit	1	6280110*LLG

Conductivity testers Expert CTS

For accurate measurement of conductivity, TDS, and salinity in one single instrument.

thermo
scientific

- Large 4 digit double line display
- Display of battery life, status and re-calibration
- Automatic temperature compensation (ATC)
- Auto conductivity buffer recognition and calibration
- Selectable TDS factor: 0.40 to 1.00



Specifications

Conductivity range:	0.00 ... 20.00 mS/cm
Accuracy:	±2 % full scale ±1 LSD
TDS range:	0 ... 20000 ppm
Accuracy:	±2% full scale ±1 LSD
Salinity range:	0 ... 10000 ppm
Accuracy:	±2 % of full scale ±1 LSD
Temperature range:	0 ... 50 °C
Resolution:	0.1 °C
Operating temperature:	5 ... 45 °C
Dimensions (W x L x H):	45 x 170 x 30 mm
Power supply:	Incl. 4 batteries (A76 or LR44 equivalent)
IP code:	IP 67
Warranty:	1 year

Type	PK	Cat. No.
Expert CTS	1	6284906*LLG

Conductivity Standards



Reagecon

Conductivity standards tested and ISO 17025 certified at 25 °C. Uncertainty of measurement of ±1%. Directly traceable to N.I.S.T. Temperature dependence data is printed on the label as are lot numbers and expiry dates. HDPE bottles.

Type	Capacity	PK	Cat. No.
µS/cm	ml		
1.3*	250	1	CSKC13*REA
5	500	1	CSKC5*REA
10	500	1	CSKC10*REA
20	500	1	CSKC20*REA
50	500	1	CSKC50*REA
100	500	1	CSKC100*REA
500	500	1	CSKC500*REA
1000	500	1	CSKC1000*REA

*1.25 - 1.35 µS/cm at 25 °C.

LLG-Conductivity Solutions



LLG
LABWARE

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

Type	Capacity	PK	Cat. No.
	ml		
84 µS/cm	500	1	9040861*LLG
147 µS/cm	500	1	9040862*LLG
1.413 µS/cm	500	1	9040863*LLG
12.880 µS/cm	500	1	9040864*LLG

Infra-red thermometers, testo 830-T1



Infrared thermometer for non-contact measurement of surface temperatures. Laser measurement point marker and large optics for exact measurement even at medium distances.

- Fast recording of measurement values at 2 measurements per second
- Adjustable emissivity
- 2 adjustable alarm limit values
- Hold function and display of min./max. values

Scope of supply: Thermometer, batteries, works calibration certificate

Specifications

Measuring range:	-30 ... +400 °C
Accuracy:	±1.5 °C or 1.5 % of measured value (+0.1 ... +400 °C) ±2 °C or ±2 % of measured value (-30 ... 0 °C) larger value counts
Resolution:	0.1 °C
Measuring spot marking:	1-point-laser
Distance to measured spot:	10:1
Dimensions (W x D x H):	38 x 75 x 190 mm
Weight:	200 g
Power supply:	9 V block batterie

Type	PK	Cat. No.
testo 830-T1	1	9718418*LLG

Precision thermometers ACCU-SAFE, stem shape



Precision thermometer for temperature measurement for daily laboratory use.

- White enameled, round capillary
- Stem shape
- Environmentally friendly, blue filling
- Tolerance ±0.2 °C

Measuring range:	-20 °C ... 102 °C
Division:	0.2 °C
Length:	435 mm
Diameter:	6 ... 7 mm
Immersion depth:	total

Description	PK	Cat. No.
calibratable, without certificate	1	6324925*LLG

Combi infrared and insertion thermometer TLC 750i-V2



Handy infrared thermometer for non-contact measurement of surface temperature or core temperature with the foldable insertion probe. Ideal for time-saving, precise temperature measurements during goods receipt, as well as during storage and transport of goods and foodstuffs.

- Practical pocket size for daily use
- Simplified operation
- Backlit display allows reading in dark environment
- Rotating display makes it easy to read the measured value
- Double laser pointer
- Optics 8:1
- HACCP and DIN EN 13485 compliant, incl. calibration certificate
- Waterproof housing (IP 65)

Specifications

Temperature infrared:	-50 ... 250 °C
Resolution infrared:	0.1 °C
Accuracy sensor:	±0.5 °C (-30 ... 99 °C)
Accuracy infrared:	±1.0 °C (0 ... 65 °C)
Dimensions (WxDxH):	44 x 170 x 23 mm
Weight:	140 g

Type	PK	Cat. No.
TLC 750i-V2	1	6491695*LLG

LLG-General purpose thermometers economy



Solid stem, with loop, capillary yellow enameled, graduation resistant against acids and alkalis. Red filling environmentally friendly filling.

Measuring range °C	Graduations °C	Length mm	Diam. mm	PK	Cat. No.
-10 ... 50	1	300	6	10	4679534*LLG
-10 ... 100	1	300	6	10	4679530*LLG
-10 ... 150	1	300	6	10	4679531*LLG
-10 ... 200	1	300	6	10	4679532*LLG
-10 ... 250	1	300	6	10	4679533*LLG

Respirators Aura™ 9300+ Series, Folding Masks



Individually Packed

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.

Features and advantages of the Aura™ 9300+ series

- Clear vision: Embossed top panel helps reduce fogging of eyewear
- Barely perceptible breathing resistance
- 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
- Coloured headbands
- Flat-fold; easy to store when not in use
- Hygienic individual packaging helps protect the respirator from contamination before use

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

Type	Protection-level	PK	Cat. No.
Aura™ 9322+	FFP2	10	9005673*LLG
Aura™ 9332+	FFP3	10	9005675*LLG

LLG-Disposable Protective Suits, PP



White PP non-woven 30 g/m², with hood and zipper, elastic band on the hood and on the wrists and ankles, latex-free

Size	PK	Cat. No.
L	10	6282791*LLG
XL	10	6282792*LLG
XXL	10	6282793*LLG

Working and Chemical Protective Apron SIERRA



The SIERRA apron is suitable for usage in chemical industries and engineering. It is a reusable protective clothing against accidental spills (Type PB[6]) of some liquid chemical products and against chemical permeation and jet liquid (Type PB[3]), especially NaOH soda at 40 %, H2SO4 sulfuric acid at 40 %, butan-1-ol and o-xylene. The SIERRA apron resists water spray or oil spray to 180 °C.

- With brass eyelets and discs in nickel-free finish
- This apron is consistent with the requirements of European Directive 89/686/EEC.
- NF EN 340: 2003, NF EN 13034 + A1 2009 Type PB [6], NF EN 14605 + A1 2009 Type PB [3]
- Apron in accordance with Article 33 of the REACH Regulation N°1907/2006 on products containing SVHC and its amendments.
- Does not contain phthalate, silicone (and silicone derivatives), or bisphenols.

Material: Vinyl on polyester support
Thickness: 630 µm (±20)
Weight: 750 g/m²

Width	Length	Colour	PK	Cat. No.
mm	mm			
900	1200	white	10	6291678*LLG
900	1200	brown	10	6291679*LLG

Skin Protection Cream LINDESA® PROFESSIONAL with Beeswax



Proven Quality



Slightly greasy, quickly absorbed.
Smoothes and nourishes without lasting greasiness.

Capacity	PK	Cat. No.
ml		
50	10	4665408*LLG
100	10	4665407*LLG

Disposable Gloves Format, Nitrile

EN ISO 374-1
Type C

EN ISO 374-5

EN 420

K

VIRUS



Non-sterile, powder-free, hypoallergenic, with beaded cuff and microroughened surface.

EN 455 T 1-3, CE. Type examination test acc. EN 374.

Cat. III Low Chemical resistant.

Supplied in dispenser box containing 100 gloves.

According to EN ISO 374-1:2016/Type C,

EN ISO 374-5:2016, EN 420

Size	PK	Cat. No.
XS (5 to 6)	100	9005344*LLG
S (6 to 7)	100	9005345*LLG
M (7 to 8)	100	9005346*LLG
L (8 to 9)	100	9005347*LLG
XL (9 to 10)	100	9005348*LLG

Disposable gloves MICROFLEX® 94-242, nitrile

EN ISO 374-1
Type B

EN ISO 374-5

EN 16350:2014

JKPT

VIRUS



- With Carrying Case
- For Infrared or White Light

Static dissipative glove

- Exceptional protection from electrostatic discharge
- Low vertical resistivity: below $10^8 \Omega$
- TNT™ Chemical Splash Resistance Technology
- Ambidextrous
- Textured fingers
- Rolled edge
- Powder free

According to EN ISO 374-1:2016/Type B (JKPT), EN ISO 374-5:2016 (VIRUS), EN 16350, Food-safe

Length: 245 mm

Thickness: 0.12 mm

Colour: black

Interior finish: chlorinated

AQL: 1.5

Size	PK	Cat. No.
S (6.5 - 7)	100	4688603*LLG
M (7.5 - 8)	100	4688604*LLG
L (8.5 - 9)	100	4688605*LLG
XL (9.5 - 10)	100	4688606*LLG
XXL (10.5 - 11)	100	4688607*LLG

LLG-Disposable Gloves classic, Latex

EN ISO 374-1
Type C

EN ISO 374-5

EN 420

K P

VIRUS



The ideal glove for all applications which require a high tactile sensitivity.

- Skin-friendly
- Powder-free
- Excellent tactile sensitivity
- High durability due to special formulation
- **Cat. III Low Chemical resistant.** AQL 1.5.
- Thiuram free, reduced risk of contact eczemas

According to EN ISO 374-1:2016/Type C, EN ISO 374-5:2016, EN 420 Suitable for food handling.

You can find the appropriate compatibility list on www.llg-labware.com in the Downloads section.

Glove shape: flat with rolled edge, ambidextrous

Material: natural latex

Colour: natural white

Outside: textured fingers

Inside: powder free

Size/Length: S, M, L, XL/med. 240 mm

Thickness (measured in double layer): 0.20 mm

Size	PK	Cat. No.
S	100	9006383*LLG
M	100	9006384*LLG
L	100	9006385*LLG
XL	90	9006386*LLG

Universal Holder DRACULA



The holder is used to hold dispenser boxes up to 140 mm in size.

- Dispenser holders made of polystyrene with two adhesive strips on the back for mounting on smooth, non-porous surfaces
- The dispenser holders are also provided with two screw holes for permanent installation
- To insert box, push top of holder upwards with the box
- The teeth will clamp down on box and hold it securely in place

Dimensions (W x D x H) mm	PK	Cat. No.
100 x 20 x 190	1	4688613*LLG

LLG-Safety Eyeshields *lady*



- 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)
- Weight only 25 g

Colour	Lens	PK	Cat. No.
white/green	clear, AF+, AS+, 2C-1.2 U 1 FT KN CE	1	9006007*LLG
white/pink	clear, AF+, AS+, 2C-1.2 U 1 FT KN CE	1	9006008*LLG
black/green	clear, AF, AS, 2C-1.2 U 1 FT CE	1	9006009*LLG

LLG-Disposable Protective Visors



- Transparent visor made of acetate
- With anti-fog coating
- Head holder made of TPU-foam with elastic
- Ideal as a disposable protection, for example, for visitors
- Can be worn over prescription glasses and protective masks
- Weight: 22 g

Description	PK	Cat. No.
LLG-Disposable Protective Visors	20	6284812*LLG

Working and Chemical Protective Apron AlphaTec®, PVC



- PVC fabric: Protection from acids, bases, punctures, and abrasion
- Sealed grommets with adjustable ties (122 cm): Easy adjustment with no tear-out

Colour	Width	Length	Thickness	PK	Cat. No.
	mm	mm	mm		
Green	838	1118	0.46	1	4688610*LLG
White	838	1118	0.46	1	4688611*LLG

Chemical Protection Glove Ultranitrile 492, Nitrile

EN ISO 374-1

Type A



AJKOPT

EN ISO 374-5



VIRUS

EN 388



3101X



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
Packing with 10 pair.

Length: 320 mm
Thickness: 0.38 mm
Colour: green

Size	PK	Cat. No.
XS (6)	10	4686092*LLG
S (7)	10	4686093*LLG
M (8)	10	4686094*LLG
L (9)	10	4686095*LLG
XL (10)	10	4686091*LLG

Overshoe dispenser HYGOMAT COMFORT/CLEANROOM



franz
mensch
HYGIENE –
natürlich von Mensch

- No electrical power needed
- Easy to use, no need for bending over
- Easy and quick handling
- With handrail for extra comfort
- Capacity: two packs of overshoes
- With window for easy control of rest capacity
- Refilled with overshoes within seconds
- Weight: 21 kg

Description	PK	Cat. No.
COMFORT, 740 x 300 x 730 mm	1	6257283*LLG
CLEANROOM, stainless steel, 740 x 300 x 730 mm	1	6269779*LLG

Adhesive Mats ASPURE, MDPE



Removes dust and dirt from shoe soles in different adhesive levels with a thickness of 35 µm per layer.
If the top adhesive mat is soiled, you can simply remove this layer and work directly on the next one of the stack.
The number of remaining mats on the stack is indicated by the number in the corner.
Medium adhesive, 30 layers. 1 carton with 10 mats, 30 layers.

Dimensions (D x W)	Thickness	Colour	PK	Cat. No.
mm	µm			
450 x 900	35	blue	10	4659087*LLG
600 x 900	35	blue	10	4659088*LLG
600 x 1200	35	blue	10	4659089*LLG
450 x 900	35	white	10	4659092*LLG
600 x 900	35	white	10	4659090*LLG
600 x 1200	35	white	10	4659091*LLG

Overshoes for dispenser HYGOMAT



franz
mensch
HYGIENE –
natürlich von Mensch

6257285*LLG:

- Polypropylene nonwoven, CPE coated, white
- Waterproof sole
- Very slip resistant
- Perfect for smooth surface

6257286*LLG:

- PP overshoe with CPE sole, blue
- Polypropylene nonwoven
- At the top nonwoven, at the bottom strong waterproof CPE sole
- Very tearproof and slip resistant

6257287*LLG:

- CPE (Cast Polyethylene), blue
- Strong quality, approx. 60 micron
- Light protection against liquids

6257288*LLG:

- Polypropylene nonwoven, blue
- At the bottom structure made of CPE
- Permeable to air and light slip resistant
- For dry areas

Length	PK	Cat. No.
mm		
440	80	6257285*LLG
440	70	6257286*LLG
470	110	6257287*LLG
460	100	6257288*LLG

Cleanroom WipesKIMTECH® Pure*W4



Kimberly-Clark
PROFESSIONAL

Exceptional
Workplaces

- 100 % Polypropylene white base sheets
- Dry wiping of critical equipment and surfaces in pharmaceutical
- Acid-, base-, and solvent resistant
- Thermally bonded with no glue or binding and straight
- Knife-cut edges
- Minimises lint

Type	Cleanroom Class	Dimensions	PK	Cat. No.
		mm		
KIMTECH® Pure* W4	ISO 4	228 x 228	5	6241504*LLG

Capillary columns



HT8/Fast PCB

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



Int. diam. mm	Length m	Film thickness µm	Temp. range °C	Type	PK	Cat. No.
0.10	10	0.10	-20 °C... 360 / 370 °C	Fast PCB	1	6233627*LLG
0.25	30	0.25	-20 °C... 360 / 370 °C	HT8	1	6207027*LLG

GC BPX5

5 % Phenyl Polysilphenylene-siloxane. General purpose GC column for routine gas chromatographic analysis. Suitable replacement for: DB-5, DB-5ms, DB-5.625, XTI-5, Rtx-5ms, Ultra-2, HP-5, HP-5MS, HP5-TA, SPB-5, MDN-5S, CP-Sil8CB, Rxt-Sil 5MS, AT-5ms, VB-5, ZB-5, VF-5ms.

Int. diam. mm	Length m	Film thickness µm	Temp. range °C	PK	Cat. No.
0.25	30	0.25	-40 °C... 360 / 370 °C	1	6089900*LLG
0.32	12	1.00	-40 °C... 360 / 370 °C	1	7635438*LLG
0.53	25	0.25	-40 °C... 360 / 370 °C	1	6313876*LLG

GC BP5

5 % Phenyl/95 % Dimethyl Polysiloxane. Low bleed. General purpose GC column for all routine analyses such as aromatics, pesticides, herbicides, hydrocarbons. Suitable replacement for: DB-5, Rtx-5, HP-5, Ultra-2, PTE-5, SPB-5, MDN-5, CP-Sil 8CB, VB-5, ZB-5, VF-5ms.

Int. diam. mm	Length m	Film thickness µm	Temp. range °C	PK	Cat. No.
0.53	30	5	-60 °C... 280 / 300 °C	1	6319574*LLG

HT5

5 % Phenyl Polycarborane siloxane. Ultra-high temperature columns for simulated distillation applications, general hydrocarbon profiles, pesticides, herbicides and for GCMS applications.

Int. diam. mm	Length m	Film thickness µm	Temp. range °C	PK	Cat. No.
0.22	25	0.1	10 °C... 380 / 400 °C	1	4667654*LLG

GC BPX90

90 % Cyanopropyl Polysilphenylene-siloxane. For the fast separation of fragrances, aromatics, pesticides, PCB, isomers of fatty acid methyl esters.

Int. diam. mm	Length m	Film thickness µm	Temp. range °C	PK	Cat. No.
0.25	60	0.25	80 °C... 260 / 280 °C	1	6225162*LLG

Exhaust filters V3.0, GL 14

The exhaust air filters are equipped with three different activated carbon layers, which bind acids and alkalis and adsorb organic solvent vapours. Depending on the required capacity, filter with different service lives are available.

- Filter media with a very high performance spectrum for acids and alkalis
- Optimised for binding buffer solutions and solvent vapours
- With splash guard
- 1500 m²/g adsorption surface area



Filter size	Life time	PK	Cat. No.
S	3 months	4	4681461*LLG
M	6 months	2	4681458*LLG
L	12 months	1	4681462*LLG

b.safe-Caps, GL45, PPS

Screw cap for thread GL 45 made of PPS, freely turnable distributor body made of PTFE with female threads for connecting capillary tubing (O. D. 3.2 mm) or a b.safe air valve.

Scope of supply:

- Cap A:** 2 x connections, 1 x fitting (PFA), 1 x air valve
- Cap B:** 3 x connections, 2 x fittings (PFA), 1 x blind fitting (PFA), 1 x air valve
- Cap C:** 4 x connections, 3 x fittings (PFA), 2 x blind fittings (PFA), 1 x air valve



Type	PK	Cat. No.
A	1	6313834*LLG
B	1	6313835*LLG
C	1	6313836*LLG

Turbidity meter TB350 IR and TB350 WL



TB350 IR



TB350 WL



- With
- Carrying Case For Infrared or White Light

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. By eliminating stray light, highly accurate results are achieved at low turbidity down to 0.01 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.

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.

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	6322835*LLG
TB350 WL	1	6321184*LLG

Spectrophotometer LLG-uniSPEC 1



- Universally Applicable
- 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.

- Standalone unit with large 2.5" LCD Display
- Automatic wavelength setting
- Easy creation of standard curves for concentration determination

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 setting:	Auto
Photometric accuracy:	±0.5 % T
Photometric repeatability:	≤0.2 % T
Photometric range:	-0.3 ... 3 A, 0 ... 200 % T, 0 ... 9999 C
Photometric mode:	T, A, C, F
Stray light:	≤0.1 % T
Display:	LCD, 128 x 64 Dots
Light source:	Tungsten and deuterium lamp
Output:	USB port, parallel port
Dimension (W x D x H):	420 x 280 x 180 mm
Weight:	12 kg
Power supply:	85 ... 250 V

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

Disposable cuvettes



Disposable cuvettes for spectroscopy made of PS or PMMA for optimum transmission when using wavelengths from 340 to 800 nm (PS) or from 280 to 800 nm (PMMA). Measurement tolerance of ±1 %. Layer thickness: 10 mm.

Description	Capacity	Material	PK	Cat. No.
	ml			
Standard cuvettes	4.5	PS	100	9406431*LLG
Semi-micro cuvettes, low form	1.5	PS	100	9406432*LLG
Semi-micro cuvettes, high form	2.5	PS	100	9406433*LLG
Standard cuvettes, 4 clear faces	4.5	PS	100	9406434*LLG
Standard cuvettes	4.5	PMMA	100	9406435*LLG
Semi-micro cuvettes, high form	2.5	PMMA	100	9406436*LLG
Semi-micro cuvettes, low form	1.5	PMMA	100	9406437*LLG
Standard cuvettes, 4 clear faces	4.5	PMMA	100	9406438*LLG

Analytical balances ABP/ABP-A



Internal Adjustment

KERN

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. The multifunctional weighing plate (only for models with readability 0.01 mg) minimises the effect of air currents in the weighing chamber and therefore significantly improves the stabilisation time and repeatability. In addition samples, sample paper, PCR tubes and microcentrifuge tubes can be easily fixed and weighed.



- OLED display
- Navigation pad for super quick navigating through the menus
- Automatic internal adjustment in the case of a change in temperature ≥ 1 °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 (ABP)
- With three automatic sliding doors, which can be opened and closed using sensors (ABP-A)
- Integrated ioniser (ABP-A)

Scope of supply: Analytical balance, protective working cover, universal mains adapter

Specifications

Overall dimensions, incl. draught shield ABP (W x D x H):	213 x 407 x 344 mm
Overall dimensions, incl. draught shield ABP-A (W x D x H):	220 x 370 x 350 mm
Plug type:	EU/UK/CH/US/AUS
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	6321067*LLG
ABP-A 100-5AM	135	0.01	91	1	6325002*LLG
ABP 200-4M	220	0.1	91	1	4667749*LLG
ABP-A 200-4AM	220	0.1	91	1	6325003*LLG

Balance brush



Oval.

Type	Size	Diam.	PK	Cat. No.
		mm		
Brush	1	5	1	6320168*LLG
Brush	2	6	1	6320169*LLG
Brush	4	9	1	6320171*LLG
Brush	6	12	1	6320170*LLG
Brush set*	2, 4, 6		1	6266825*LLG
Brush	6	12	1	6266808*LLG

*consisting of one brush each size 2/6 mm, size 4/9 mm and size 6/12 mm

Precision balances Pioneer® PX



- Large LCD Display
- For GxP Documentation



Powerful, economical scales with high accuracy and repeatability. For weighing, piece counting, percentage weighing, dynamic weighing and density determination.

- 2 line, backlit LCD display
- USB and RS 232 interface for data exchange with PCs and PLCs
- Real time clock with GLP/GMP data
- Integrated weigh-below-hook
- Auto-tare
- 4 menu languages

Please note:

Models with extra code /E with external calibration, all other models with internal calibration, models with extra code M are approved instruments according to EN 45501; OIML R76.

Specifications

Permissible ambient temperature:	10 ... 30 °C
Weighing plate (Ø):	180 mm
Height in draftshield:	235 mm
Dimensions (W x D x H):	209 x 321 x 98 mm
Weight:	3.5 kg
Power supply:	100 ... 240 V, 50/60 Hz
Plug type:	EU/UK

Type	Weighing range	Readability	PK	Cat. No.
	g	g		
PX3202/E*	3200	0,01	1	4663338*LLG
PX3202M**	3200	0,01	1	4663340*LLG
PX4201	4200	0,1	1	4663345*LLG
PX4201/E*	4200	0,1	1	4663344*LLG
PX4201M**	4200	0,1	1	4663346*LLG
PX6202/E*	6200	0,1	1	4681175*LLG
PX6202	6200	0,1	1	4681176*LLG
PX6202M**	6200	0,1	1	4685014*LLG

*external calibration

**approved acc. to EN 45501; OIML R76

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	6282670*LLG
Sample dishes	100	7	80	6265408*LLG
Sample dishes with rim	100	7	80	6281537*LLG

Vacuum pump systems LABOPORT® SR 820 G/SR 840 G



Vacuum pump systems, consisting of chemically resistant diaphragm vacuum pump, base plate and two separators on suction and pressure side, for titrations, degassings, liquid aspirations, centrifugal concentrations and vacuum furnaces. The PTFE pump head and PTFE-coated diaphragm make the vacuum systems suitable for aggressive/corrosive gases and vapours.

- 100 % oil-free delivery
- High steam and condensate compatibility
- Integrated gas ballast valve
- Three-colour status display (in operation/stand-by/fault)
- Integrated speed control
- Start-up against ultimate vacuum of the pump
- Modularly expandable

Specifications

Tube connections:	Inlet: ID 8 ... 9.5 mm Outlet: ID 10 mm
Operating pressure:	0.1 bar
Permissible ambient temperature:	5 ... 40 °C
IP Code:	IP30
Ultimate vacuum:	6.0 mbar (abs).

Type	Rated capacity	Plug type	PK	Cat. No.
	W			
SR 820 G	60	EU/UK/CH	1	4684031*LLG
SR 840 G	100	EU/UK/CH	1	4684032*LLG

Diaphragm pumps chemistry design, ME 1C



Due to their user-friendly functionality, compactness and high performance, ME 1C diaphragm pumps are perfect partners for single filtration and multiple suction devices. Single-stage diaphragm pumps are ideal for continuous, oil-free pumping of gases with low vacuum requirements. In chemical diaphragm pumps ("C"), the pumped gases and vapours only come into contact with chemical-resistant fluoroplastics. An optional vacuum fine adjustment head with manual control valve and pressure gauge allows infinitely variable adjustment of the effective pumping speed and the final vacuum. Gas ballast for reliable pumping performance.

Flow rate (50/60Hz) L / min.	Ultimate vacuum without / with gas ballast mbar	Connector	PK	Cat. No.
11.66 / 14.16	100	EU	1	9880934*LLG
11.66 / 14.16	100	CH	1	9880935*LLG
11.66 / 14.16	100	UK	1	9880936*LLG

LLG-Vacuum measuring instrument DVR 2 pro



Versatile vacuum gauge for vacuum measurement between atmospheric pressure and 1 mbar.

- Mains independent due to battery operation
- Large display
- With support rod
- All parts in contact with media are made of chemically resistant materials

Scope of supply: Vacuum measuring instrument with connections for small flange D16, compression fitting and tubing nozzle for tubing with 6 to 10 mm ID.



Specifications

Measuring range:	1080 to 1mbar (hPa), 810 to 1 Torr
Measuring accuracy:	< 1mbar (0.75 Torr) ±1 digit
Power supply/battery:	9V battery
Dimensions (W x D x H):	115 x 115 x 66 mm
Weight:	0.40 kg

Type	PK	Cat. No.
DVR 2 pro	1	6263582*LLG

Stirring and Shaking

Microplate shaker MultiPlate Genie®



For Vortexing up to 4 Microplates

NEW



Shaker for vigorous, uniform vortex mixing of up to 4 microplates.

- Variable adjustable speed
- Timer or continuous operation
- Programmable pulse function: 0.1 sec to 99 min
- Can be used in cold rooms and incubators (except CO₂ incubators)

Specifications

Type of movement:	orbital
Shaking stroke:	1 mm
Speed:	500 ... 2700 rpm
Runtime/timer H:Min:Sec	00:01:00 ... 00:99:00
No. of plates	4
Permitted ambient conditions:	0 ... 38 °C , 95 % RH
Dimensions (WxDxH):	250 x 380 x 150 mm
Weight:	6 kg
Power supply:	230 V, 50 Hz

Type	Plug type	PK	Cat. No.
MultiPlate Genie®	EU	1	4688684*LLG
MultiPlate Genie®	UK	1	4688685*LLG
MultiPlate Genie®	CH	1	4688686*LLG

LLG-Centrifuge Tubes economy, PP



- With additional graduation in the cone base
- Max. rotate speed up to 12000 x g and 6000 x g for self-standing tubes
- Autoclavable at 121 °C and freezable to -80 °C
- Pyrogen free
- DNase/RNase-free
- Aseptically, bulk pack



Capacity	Form	Height	Diam.	PK	Cat. No.
ml		mm	mm		
15	conical	119.6	17	500	6270403*LLG
50	conical	113.9	30	500	6270404*LLG
50	with rim	116.5	30	500	6270405*LLG

Vortex mixers ZX4/WIZARD/TX4 with IR sensor



Fatigue-free Working



ZX4



WIZARD



TX4

Vortexers with patented IR sensor for sample recognition: the shaking process starts automatically when the sample tube approaches the mixing cup head.

- For IR sensor and continuous operation
- Electronic speed control
- Adjustable shaking speeds up to 3000 rpm

ZX4: Analog vortex mixer

WIZARD: Compact, analog vortex mixer

TX4: Digital vortex mixer with timer and LCD display

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	Net weight	Plug type	PK	Cat. No.
	kg			
ZX4	2.7	EU	1	7971461*LLG
ZX4	2.7	UK	1	6325233*LLG
ZX4*	2.7	EU	1	4666714*LLG
ZX4*	2.7	UK	1	6325234*LLG
WIZARD	2.2	EU	1	4666536*LLG
WIZARD	2.7	UK	1	6325235*LLG
TX4	2.7	EU	1	4666537*LLG
TX4	2.7	UK	1	6325236*LLG

* with foam stands

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



Incl. Magnetic Stirring Bars



An **Ultra-flat** inductive magnetic stirrer with timer.
 - 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, 4 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
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	6263425*LLG
LLG-uniSTIRRER 1/M4	UK	1	6263426*LLG

Beakers glass, DURAN®, low form



DIN 12331. ISO 3819. With graduation and spout. With retrace code (batch identification), except 5, 10 and 25 ml. Certificate via internet. Glass type 1/neutral glass according to USP/EP and JP. Autoclavable.

Nominal capacity ml	Diam. mm	Height mm	PK	Cat. No.
25	34	50	1	211061406*SCHOTT
50	42	60	1	211061706*SCHOTT
100	50	70	1	211062402*SCHOTT
150	60	80	1	211062908*SCHOTT
250	70	95	1	211063604*SCHOTT
400	80	110	1	211064103*SCHOTT
600	90	125	1	211064806*SCHOTT
800	100	135	1	211065305*SCHOTT
1000	105	145	1	211065408*SCHOTT

LLG-Magnetic stirrer RCT standard 2.0, Set



• **Complete Set**
 • **Made in Germany**



The next generation of our top-selling IKA/LLG-Labware co-branded LLG-RCT Standard magnetic stirrer.

- Digitally controlled speed and temperature
- Clear LED display
- Hot Top Indicator: Hot surface warning to protect against burns!
- Aluminium heating plate for optimum heat transfer
- USB interface
- Tested according 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
Warranty:	3 years

Description	Plug type	PK	Cat. No.
LLG magnetic stirrer RCT standard 2.0, set	EU	1	6320411*LLG
LLG magnetic stirrer RCT standard 2.0, set	CH	1	6322748*LLG
LLG magnetic stirrer RCT standard 2.0, set	UK	1	6322749*LLG

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

Circular, smooth and PTFE-coated.
 Packaging size: 10 pieces



Diam. mm	Length mm	PK	Cat. No.
6	10	10	9198910*LLG
3	12	10	9198766*LLG
6	15	10	9198919*LLG
6	20	10	9198920*LLG
6	25	10	9198925*LLG
8	25	10	9198767*LLG
6	30	10	9198930*LLG
6	35	10	9198935*LLG
8	40	10	9198940*LLG
8	45	10	9198945*LLG
8	50	10	9198950*LLG
9	60	10	9198960*LLG
9	70	10	9198970*LLG
9	80	10	9198980*LLG

LABORTOPS

Mini cooling incubator LLG-uni^{INC}U 20 cool



- With Peltier-Cooling
- Uniform Temperature Distribution
- Internal Socket



Digital mini incubator with cooling and heating function for cultivation of biological samples in small-volume vessels. With internal power outlet for positioning small shakers, mixers, or other devices in the inner chamber. Due to its small footprint, the LLG-uni^{INC}U 20 cool is ideal for small laboratories and educational institutions.

Scope of delivery: incubator, 1 shelf, 1 power supply unit, 1 power cable, operating instructions

- Good temperature stability of the set temperature (up to 15 °C below ambient temperature) in the inner chamber of the cooling incubator
- Large inner chamber with 22 l capacity
- Fast heating and homogeneous temperature
- With built-in calibration function of up to ±5 °C

Specifications

Temperature range:	Ambient - 15 °C ... 60 °C
Temperature accuracy:	±0.5 °C (at 37 °C)
Temperature uniformity:	±1.5 °C (at 37 °C)
External dimensions (WxDxH):	340 x 410 x 480 mm
Internal dimensions (WxDxH):	235 x 260 x 360 mm
Weight:	7.5 kg
Power supply:	100 ... 240 V, 50 ... 60 Hz

Type	Plug type	PK	Cat. No.
LLG-uni ^{INC} U 20 cool	EU	1	6263572*LLG
LLG-uni ^{INC} U 20 cool	UK	1	6263573*LLG