

Miele

ExploreLine PG 8504 Lab Washer

Miele Professional. Immer Besser.



125
Years

Time to Change:

Convincing benefits of machine-based cleaning of laboratory glassware and equipment.

Glitch-free and fast experiments and analyses are a quality feature in any laboratory. Reliably cleaned laboratory glassware is a prerequisite: Only this approach is able to guarantee reproducibly good results. Manual cleaning, however, is hardly able to ensure consistently good results in the reprocessing of glassware. And there are numerous other downsides. Only machine-based reprocessing ensuring analytical levels of quality guarantee the consistency and precision required in everyday laboratory life.

Change from manual glass cleaning to machine-based cleaning

Switching from manual cleaning to using a laboratory glasswasher results in higher productivity and reduces the use of valuable resources such as time, water, energy and process chemicals.



Up to 63%* less water

The efficient and precisely metered use of water saves valuable resources.



Up to 59%* less time

Professional lab washers achieve the desired results in a shorter time.



Up to 150%* greater performance

Compared with manual cleaning, a laboratory glasswasher is able to reprocess more laboratory glassware and utensils in the same space of time.



Learn more about the benefits of machine-based glass washing.

* Savings with PG 8504, heating: 8.5 kW (3N AC 400V 50Hz), connection to cold water and demineralised water (15°C). Other technical conditions may result in different values.



Greater safety

- A commercial lab washer limits the health risks to employees thanks to a reduction in the amount of aerosols inhaled, exposure to chemicals and the risk of injury through broken glass. This reduces levels of sick leave among staff caused by illness and accidents.
- Automated cleaning guarantees standardised, reproducible processes and dispenses with uncertainty with respect to factors such as
 - Detergent dispensing
 - Geometry of dishwashing brush
 - Duration of cleaning and pressure applied

Lower costs

- Reduced consumption of energy, water and detergents.
- Extended service life of laboratory glassware thanks to a reduced risk of damage and gentler treatment.
- An investment in a lab washer can pay its way in less than two years.

Integrated expertise

- Thanks to decades of experience, we are industry experts when it comes to your laboratory technology requirements.
- Miele 360PRO offers numerous advantages:
 - Special programmes
 - Tailored detergents
 - First-class after-sales service

Improved efficiency.

- More economically designed processes centred on the use of a lab washer as employees can devote themselves to other tasks rather than manually cleaning laboratory glassware.
- First-class and safe cleaning producing consistent and validatable results.
- Faster reprocessing using machine-based systems v. manual cleaning: 60 glasses in 24 minutes v. 1 glass per minute.
- Ergonomic and simple cleaning thanks to simple and fast loading options with versatile EasyLoad inserts.



ExploreLine PG 8504 Lab Washer

The lab washer solution for the simple, safe and cost-effective cleaning of laboratory glassware.

Our **ExploreLine** lab washer represents the effective and economical reprocessing solution for small laboratories, e.g. in schools, universities and small businesses (e.g. water analysis laboratories) and, in fact, anywhere requiring simple reprocessing solutions.





Greater capacity

Up to 64 injector nozzles when using two laboratory glassware modules. Optimised chamber dimensions and a completely overhauled load carrier programme saves time, storage space and costs.



Two levels

Use of two EasyLoad modules on one level. Use of second level for baskets and inserts. This ensures maximum flexibility in, for example, reprocessing beakers.



Short cycles

60 glasses cleaned in 24 minutes in standard programme. This increases throughput and speeds up reprocessing during peak periods.



Greater flexibility

The modular approach to baskets offers a large number of combination options for intuitive operation. Reduction in number of load carriers needed saves both on investments and storage space.



Greater purity

Excellent cleaning performance and the efficient use of resources thanks to variable-speed heater pump. For perfect spray pressure in all programme phases.



Greater Hygiene

Laser technology is used to weld the chamber, resulting in a finish without nooks or crannies where soil can accumulate. The relocation of heater elements to outside the chamber guarantees even greater hygiene.



PG 8504 Lab Washer

ExploreLine

Machine overview



Lab washers	PG 8504	PG 8504
Machine colour	Stainless steel	White
Width	600	600
Height, depth [mm]	835 (820 ¹), 600	835 (820 ¹), 600
Shortest cycle ² [mins]	19	19
Capacity: Lab bottles	64	64
Capacity: Mixed load consisting of laboratory glassware and phials	130	130
Thermal disinfection	–	–
Drying	–	–
Conductivity monitoring	–	–
Powder dispensing	◆	◆
Connection of external dispenser module	◆	◆
Electrical connection 3N AC 400 V, 50 Hz	◆	◆
Total rated load [kW]	9.2	9.2

¹ Undercounter units

² Short programme

Designation	Casing	Unit width	Electrical connection	Mat. no.	Art. no.	EAN

Technical data

Technical data	PG 8504
Undercounter/freestanding unit with lid	◆
Controls/programmes	
Vacant programme slots [No.]	2
TouchControl with 6 programmes	◆
Max. wash temperature	70°C
Max. number of injector modules with EasyLoad	2
Shortest cycle	19 min.
Water connections	
1 x cold water, 2.0–10 bar flow pressure (200–1000 kPa)	◆
1 x demineralised water, 2.0–10 bar flow pressure (200–1000 kPa)	◆
ADP version: connection for hose with 13 mm interior diameter	Optional
1x hot water	–
No. of inlet hoses, 1/2" with 3/4" threaded union, l = approx. 2.0 m	2 (1 on ADP version)
Drain pump Ø 22, Max. delivery head: 100 cm	◆
Dispensing systems	
1 door dispenser for powder detergent	◆
1 door dispenser for rinse aid/neutralising agent	◆
External dispenser module	
DOS G 80 flex or DOS G 80/1 flex for liquid dispensing	1
Water softener	
For hot and cold water, max 65°C	◆
Other features	
Variable-speed heater pump	◆
Buzzer, acoustic signal at end of programme	◆
Serial interface for process documentation	–
Dimensions/Weight	
External dimensions H/W/D (without lid H 820 mm) [mm]	835/600/600
Chamber dimensions H/W/D [mm]:	522/536/top=518, bottom=523
Weight [kg]	74
Compliance with standards	
EU Machinery Directive, EN 61010-2-40, EN 61326-1	◆
Test certificates and quality label	
VDE, VDE-EMC, IP 21, CE	◆
Made in Germany	◆

Please note that no applications are possible that require cleaning temperatures > 70°C.

Programmes, cycle times, consumption

PG 8504	Washing					Drying	
	Cycle time [mins.]	CW [l]	HW [l]	AD [l]	Energy [kWh]	Cycle time [mins.]	Energy [kWh]
Short	19	10.0	-	9.0	1.5	-	-
Medium	24	18.0	-	9.0	1.6	-	-
Long	30	27.0	-	9.0	2.0	-	-

Heating: 8.5 kW (3N AC 400V 50Hz), connection to cold water (15°C), and demineralised water (15°C)



Components

Baskets

EasyLoad

Inserts and other components

Upper/Lower Baskets

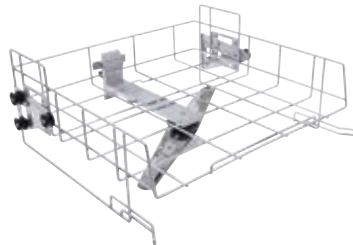


A 100

Upper basket, for injector modules or inserts.

- Upper basket with two docking pipes
- For loading up to 2 injector modules or inserts
- Automatic sealing of connections when not in use
- Vertical clearance on module with plastic supports: 190 mm
- Clearances: width 489, length 440 mm
- H 141, W 528, D 525 mm

Mat. no. 9862320

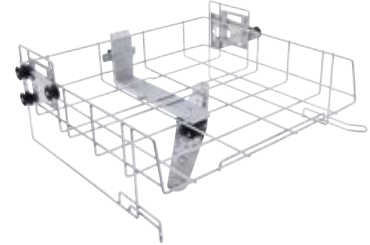


A 101

Upper basket, height adjustable, for inserts.

- Loading HWD 160 +/- 30 mm, 475 mm, 443 mm
- With integrated spray arm
- H 206, W 528, D 527 mm

Mat. no. 9862340



A 102

Upper basket, height adjustable, for inserts.

- Loading HWD 205 +/- 30 mm, 475 mm, 443 mm
- With integrated spray arm
- H 206, W 528, D 527 mm

Mat. no. 9862360



A 150

Lower basket, for injector modules or inserts.

- Lower basket with two docking ports
- For loading up to 2 injector modules or inserts
- Automatic sealing of connections when not in use
- Clearances H 235, (with A 100 upper basket)
W 494, D 440 mm
- H 154, W 529, D 546 mm

Mat. no. 9862400



A 151

Upper basket, for various standard DIN mesh trays and inserts.

- Vertical clearance dependent on upper basket
- Loading dimensions
H with A 100: 235 mm
H with A 101: 275 +/- 40 mm
H with A 102: 230 +/- 30 mm
H with A 103: 305 mm
H without upper basket 495
W 490, D 489 mm
- H 88, W 529, D 522 mm

Mat. no. 9862410

EasyLoad – Fast and Efficient Loading System for Laboratory Glassware

Innovation for optimum loading

With EasyLoad, Miele Professional has reinvented the loading of lab washers. The innovative system makes loading faster and more reliable as expensive load items are automatically and properly positioned in the load carrier. Newly developed injector nozzles guarantee the thorough cleaning of internal surfaces – even the surfaces which rest on the tips of nozzles. In addition to this, much more efficient use is made of the space in the chamber. EasyLoad allows configurations to suit individual needs – and can be retrofitted with ease at any time.

- New injector system for all common injector modules and a wide range of further load carriers
- Optimum use of available chamber height
- Particularly fast and simple arrangement of load items
- Thorough internal cleaning of glassware of all shapes and sizes
- Secure hold and first-class material protection during wash cycle

Find out more about EasyLoad:



Optimum use of space

- New design of racks for greater vertical clearance
- Secure hold thanks to wider supports



Safe wash results

- Reliable cleaning results, even on glassware not placed over nozzles



Fast and simple loading

- No manual height adjustment required thanks to intelligent design of nozzles and holder racks
- Correct and automatic positioning of glassware thanks to flexible holder racks

Max. two injector modules per machine possible.



A 300/3

Injector module for optimum loading of laboratory glassware – equipped with 8 nozzles.

- Suitable for laboratory glassware, incl. Erlenmeyer and round flasks (250 - 1000 ml).
- Equipped with 4 A 840 nozzles and 4 A 841 nozzles
- Part of the EasyLoad system
- Nozzle spacing 118 mm across the width, 118 mm across the depth
- H 228, W 208, D 479 mm

Companion pack:

- A 840, injector nozzle Ø 6 mm, length 130 mm [qty]: 4
- A 841, injector nozzle Ø 6 mm, length 210 mm [qty]: 4

Mat. no. 11116900



A 301/5

Injector module for optimum loading of laboratory glassware – equipped with 18 nozzles.

- Suitable for laboratory glassware, incl. Erlenmeyer and round flasks (50 - 250 ml).
- Equipped with 9 A 842 nozzles and 9 A 843 nozzles
- Part of the EasyLoad system
- Nozzle spacing 78 mm across the width, 78 mm across the depth
- H 203, W 232, D 479 mm

Companion pack:

- A 842, injector nozzle Ø 4 mm, length 90 mm [qty]: 9
- A 843, injector nozzle Ø 4 mm, length 185 mm [qty]: 9

Mat. no. 11116950



A 302/3

Injector module for optimum loading of laboratory glassware – equipped with 32 nozzles.

- Suitable for laboratory glassware, incl. Erlenmeyer and round flasks (25 - 100 ml).
- Equipped with 16 A 844 nozzles and 16 A 845 nozzles
- Part of the EasyLoad system
- Nozzle spacing 60 mm across the width, 57 mm across the depth
- H 143, W 238, D 479 mm

Companion pack:

- A 844, injector nozzle Ø 2.5 mm, length 80 mm [qty]: 16
- A 845, injector nozzle Ø 2.5 mm, length 125 mm [qty]: 16

Mat. no. 11116960

Holder racks for injector modules A 300/x, A 301/x and A 302/x



A 860

Holder rack for A 300/2 and A 300/3 injector module

- Grid: 2 x 4 compartments
- For use on A 300/2 and A 300/3 injector modules
- For the optimum positioning of laboratory glassware
- Part of the EasyLoad system

Mat. no. 11056800

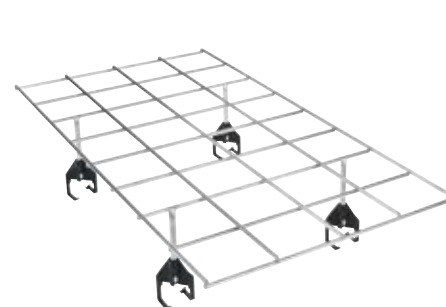


A 861

Holder rack for A 301/4 and A 301/5 injector module

- Grid: 3 x 6 compartments
- For use on A 301/4 and A 301/5 injector modules
- For the optimum positioning of laboratory glassware
- Part of the EasyLoad system

Mat. no. 11056810



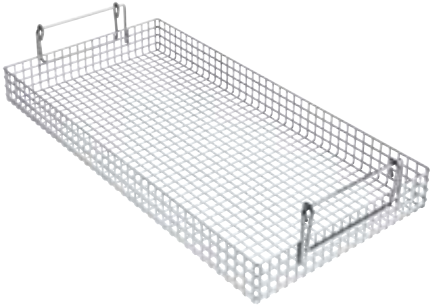
A 862

Holder rack for A 302/2 and A 302/3 injector module

- Grid: 4 x 8 compartments
- For use on A 302/2 and A 302/3 injector modules
- For the optimum positioning of laboratory glassware
- Plastic-coated

Mat. no. 11056820

Inserts for Test Tubes, Funnels, Beakers, Wide-Necked Glassware, Measuring Cylinders

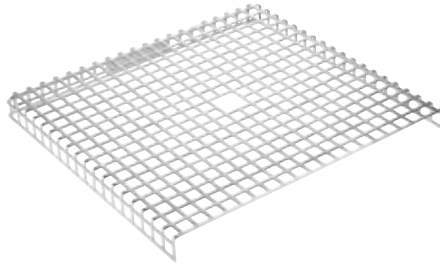


AK 12/1

Insert, for various utensils

- Suitable for beakers, funnels
- With flexible handles
- Suitable for many upper and lower baskets as well as load carriers
- Not for PG 8536
- H 120, W 229, D 427 mm

Mat. no. 11131690

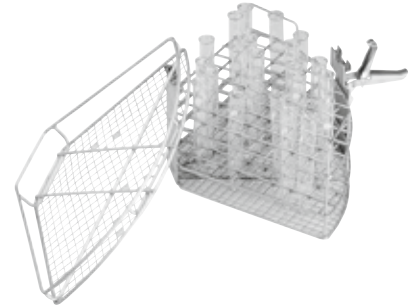


A 14/1

Lid, for securing delicate load items.

- Stainless-steel lid
- 8 x 8 mm perforations, 3 mm edge
- Covers half of AK 12/1 insert
- Not for use in PG 8536
- H 19, W 207, D 224 mm

Mat. no. 11131560

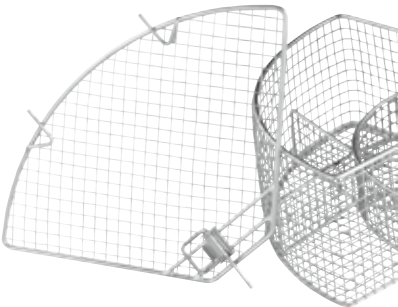


E 149

Insert, for max. 80 test tubes, 16 x 105 mm.

- Suitable for 80 test tubes, max. 16 x 105 mm
- Additionally equipped with A 13 lid
- 80 compartments, 18 x 18 mm
- Mesh size on base 8 x 8 mm
- H 152, W 200, D 320 mm

Mat. no. 3808800



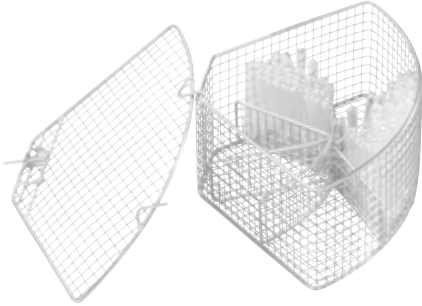
A 13

Lid, for securing delicate load items.

- Stainless-steel lid
- 1 mm wire mesh, 8 mm mesh gauge, 4 mm all-round frame
- As replacement for E103, E104, E105 and E139 inserts
- H 20, W 200, D 320 mm

Mat. no. 3810200

Inserts for Test Tubes, Funnels, Beakers, Wide-Necked Glassware, Measuring Cylinders



E 103/1

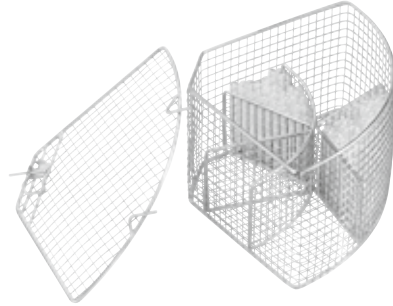
Insert, for test tubes, 12 x 75 mm.

- Suitable for approx. 200 test tubes, (max. 12 x 75 mm)
- 6 compartments
- Mesh width: 8 x 8 mm
- Incl. A 13 lid
- H 122, W 200, D 320 mm

Companion pack:

- A 13 lid, for securing delicate load items [qty]: 1

Mat. no. 6907630



E 104/1

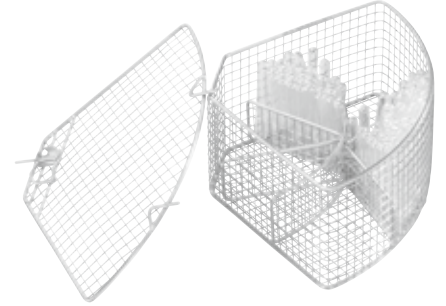
Insert, for test tubes, 12 x 105 mm.

- Suitable for approx. 200 test tubes, (max. 12 x 105 mm)
- Incl. A 13 lid
- Mesh width: 8 x 8 mm
- H 152, W 200, D 320 mm

Companion pack:

- A 13 lid, for securing delicate load items [qty]: 1

Mat. no. 6907640



E 105/1

Insert, for test tubes, 12 x 165 mm.

- Suitable for approx. 200 test tubes, (max. 12 x 165 mm)
- Incl. A 13 lid
- Mesh width: 9 x 9 mm
- H 212, W 200, D 320 mm

Companion pack:

- A 13 lid, for securing delicate load items [qty]: 1

Mat. no. 6907650



E 139/1

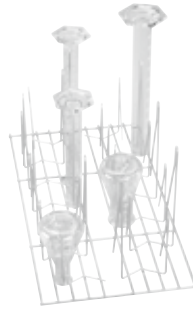
Insert, for test tubes, 12 x 200 mm.

- Suitable for test tubes, max. 12 x 200 mm
- 6 compartments
- Mesh size 9 x 9 mm
- For use in lower basket
- Incl. A 13 lid
- H 243, W 200, D 320 mm

Companion pack:

- A 13 lid, for securing delicate load items [qty]: 1

Mat. no. 6907660



E 106

Insert, for wide-necked glassware, measuring cylinders, etc.

- Equipped with 10 spring hooks x 175 mm, and 16 x 105 mm
- The distance between the spring hooks is approx. 60 mm
- H 181, W 220, D 445 mm

Mat. no. 3808310



E 106/1

Insert, for wide-necked glassware, measuring cylinders, etc.

- Equipped with 26 small spring hooks x 105 mm height
- The distance between the spring hooks is approx. 60 mm
- H 116, W 220, D 445 mm

Mat. no. 3808320

Inserts for Test Tubes, Funnels, Beakers, Wide-Necked Glassware, Measuring Cylinders

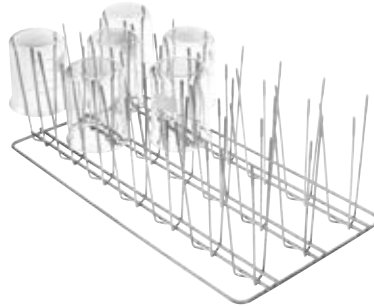


E 106/2

Insert, for wide-necked glassware, measuring cylinders, etc.

- Equipped with 13 x 175 mm large spring hooks
- The distance between the spring hooks is approx. 85 mm
- H 186, W 220, D 445 mm

Mat. no. 3808330

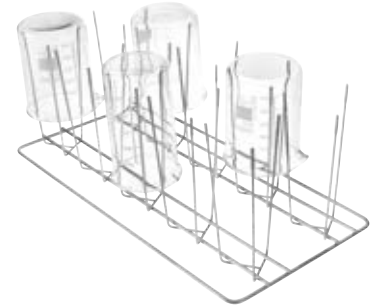


E 109

Insert, for beakers, max. 250 ml.

- Suitable for 21 glass beakers, max. 250 ml
- Equipped with 21 x 3 stay bars
- For use in upper and lower basket
- H 155, W 230, D 460 mm

Mat. no. 3808360

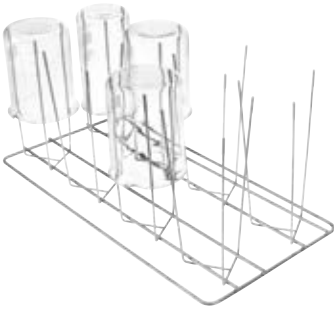


E 110

Insert, for beakers, max. 250 – 600 ml.

- Suitable for 10 glass beakers, 250 - 600 ml
- Equipped with 10 x 3 stay bars
- For use in lower basket
- H 175, W 230, D 460 mm

Mat. no. 3808390

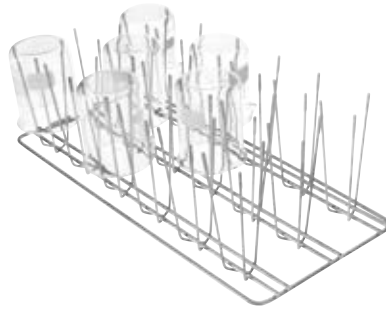


E 111

Insert, for beakers, max. 600 – 1000 ml.

- Suitable for 8 glass beakers, 600 - 1000 ml
- Equipped with 8 x 3 stay bars
- For use in lower basket
- H 205, W 230, D 460 mm

Mat. no. 3808420



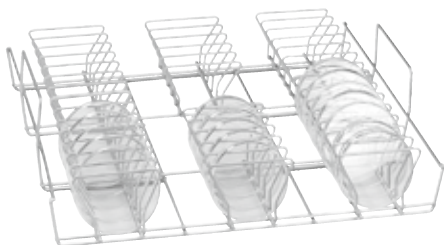
E 144

Insert, for max. 18 beakers, max. 250 ml.

- Suitable for 18 glass beakers
- Equipped with 18 x 3 stay bars
- For use in upper and lower basket
- H 131, W 200, D 445 mm

Mat. no. 3808710

Inserts for Petri Dishes, Watch Glasses, Microtiter Plates

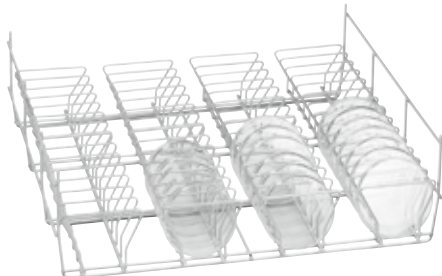


E 118

Insert, for half petri dishes.

- Suitable for 38 half petri dishes, Ø 100 mm
- Equipped with 38 holders, height 70 mm, spacing approx. 26 mm
- For use in upper basket
- H 120, W 460, D 445 mm

Mat. no. 3830270



E 136

Insert, for 56 half petri dishes.

- Suitable for 56 half petri dishes, Ø 100 mm
- Equipped with 56 holders, height 70 mm, spacing approx. 26 mm
- For use in lower basket
- The capacity can be doubled with insert E 137
- H 145, W 485, D 445 mm

Mat. no. 3830280



E 137

Insert, for 56 half petri dishes.

- Suitable for 56 half petri dishes, Ø 100 mm
- Equipped with 56 holders, height 70 mm, spacing approx. 26 mm
- For use in lower basket
- For use with insert E 136
- H 95, W 485, D 445 mm

Mat. no. 3830290



E 402

Insert, for max. 44 watch glasses.

- Suitable for 44 watch glasses, Ø 80 - 125 mm
- Equipped with 23 bars spaced 15 mm apart
- H 53, W 200, D 445 mm

Mat. no. 3830420



E 403

Insert, for max. 105 watch glasses.

- Suitable for 105 watch glasses, Ø 50 - 60 mm
- Equipped with 36 bars spaced 9 mm apart
- H 35, W 200, D 445 mm

Mat. no. 3830430



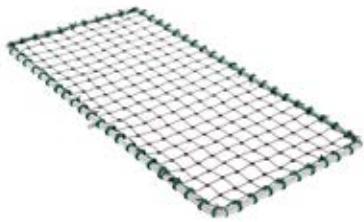
E 134

Insert, for 210 slides.

- Suitable for 210 slides
- 26 compartments, 26 x 11 mm, wire thickness 3 mm
- H 73, W 200, D 445 mm

Mat. no. 3808600

Further Components

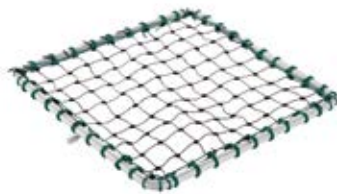


A 2

Cover net, for securing delicate load items.

- Suitable for 1/2 inserts
- Plastic-coated metal frame with plastic netting
- Dimensions: 216 x 456 mm

Mat. no. 3830460

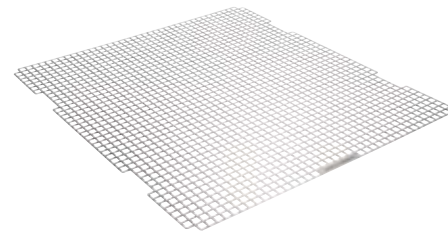


A 3

Cover net, for securing light-weight items in inserts.

- Plastic-coated metal frame with plastic netting
- Suitable for 1/4 inserts
- 206 x 206 mm

Mat. no. 3830470

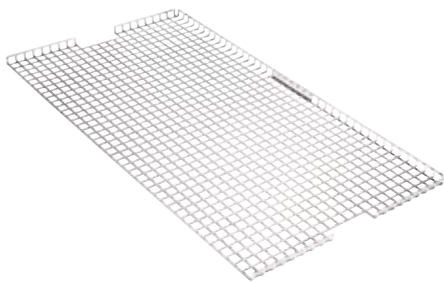


A 11/2

Insert, for gentle cleaning of delicate load items by softening the impact of the spray jet.

- With 8 x 8 mm perforations
- For use in upper and lower basket
- Not for use in PG 8536
- H 1, W 476, D 443 mm

Mat. no. 11239130



A 12/2

Insert, for gentle cleaning of delicate load items by softening the impact of the spray jet.

- With 8 x 8 mm perforations
- For use in upper and lower basket
- Covers half of basket
- Not for use in PG 8536
- H 10, W 237, D 449 mm

Mat. no. 11238030



A 802

Nozzle, for rinsing dispenser compartment.

- For use in laboratory washer-disinfectors with powder dispenser
- For use with injector modules
- Suitable for removing powder residues from dispenser compartment
- H 187, W 30, D 15 mm

Mat. no. 9863070

ProCare Lab – Detergents

Product overview



ProCare Lab 11 MA - 10 kg

Powder detergent, mildly alkaline, 10 kg, for laboratory utensils.

- Foam damping effect, free from oxidants
- Suitable for the reprocessing phases in washer-disinfectors
- Suitable for all types of materials
- pH value 11.7–11.9

Mat. no. 10266720



ProCare Lab 11 AP - 10 kg

Powder detergent, alkaline, 10 kg, for laboratory utensils.

- Free from phosphorous compounds, oxidising effect
- Specially developed for Miele Professional
- Suitable for all types of materials
- pH value 11.5–11.7

Mat. no. 10266540



ProCare Universal 61 - 6 kg

Reactivation salt, 3 x 2 kg, for regeneration of the integrated softener

- Prevents scaling and protects loads

Mat. no. 9195780



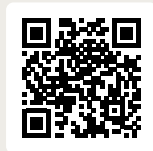
ProCare Lab 30 C - 5 l

Acidic neutralisation agent, 5 l, based on citric acid.

- Free from surfactants, phosphorus compounds and oxidation agents
- Specially developed for Miele Professional
- Suitable for all types of materials
- To be used as neutralising agent or acid pre-cleaner
- pH value 2.6–3.0

Mat. no. 10266670

The entire **ProCare Lab range** is available from the Miele online shop.



Miele PROtect combines comprehensive services, maximum cost control and the easy availability of spare parts. Our specially trained technicians perform and document service work according to Miele standards and templates and in full compliance with legal requirements. This guarantees process security and preserves the value of your machines in the long term. We provide transparent advice specific to your industry, coordinate appointments and guarantee the availability of suitable spare parts – even 15 years after machine production ceases. Our comprehensive service network protects your machines and your business, giving you total peace of mind.

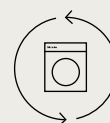


Our pledges for the planet



Growing fleet with electric vehicles:

We intend to reduce our CO₂ emissions by at least 30% by 2030 – above all through the gradual conversion of our vehicle fleet to alternative drive systems such as electric and hydrogen.



Make sustainability happen at every step



Our service solutions

Our goal is to deal with downtimes as fast as possible. And, to prevent faults occurring in the first place, preventative maintenance is indispensable. Opt for our PROtect service solutions and profit from our protection of your lab washer and your business.

More on PROtect and matching services for your lab washer:



Provide link to your local service page



www.miele.xy/pro/service

Routine service for your machines

- Preserves the value of investments
- Fixed costs and accurate future planning
- Secure consistently good cleaning results
- Extend machine uptime through preventative maintenance
- High-level productivity thanks to reduced downtimes
- Compliance with regulations and legal requirements
- Predictable costs
- Extended machine service life



Produce machines that leave no traces



Avoid waste by giving products a new lease of life



Miele

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