Miele
PROFESSIONAL

Lab washer PG 8504
Analytical-grade reprocessing of laboratory glassware

System4Lab

PG 8504

Lab washers from Miele Professional represent a commercial-grade solution for laboratory glassware for analytical experiments. This approach is particularly gentle on materials and is recommended by leading manufacturers of laboratory glassware such as the DURAN Group.

DESIGN AWARD 2015

Greater capacity

- High capacity (e.g. up to 64 injector nozzles when using two modules for laboratory glassware), achieved through optimised chamber dimensions and a completely redesigned range of load carriers, saves time, storage space and costs
- Rear basket docking enables full use of space in load carriers
- Laboratory glassware turnaround is increased and work is speeded up at peak hours

Greater purity

- Excellent cleaning performance
- Variable-speed pump for perfect spray pressure in all programme phases
- Laser technology is used to weld the chamber sections to give a perfectly smooth, crevice-free finish for the ultimate in hygiene
- No more heater elements in the wash chamber
- Multi-stage filtration system is highly efficient in removing particulate soil from water in circulation

Greater flexibility

- A new, modular basket concept offers maximum flexibility and intuitive operation as modules can be used in different combinations and can easily be reconfigured.
- Wide range of combination options guarantees flexibility in catering for different loads
- Reduction in number of load carriers needed saves both on investments and storage space
- In addition to a selection of standard programmes, client-specific programmes ensure that reprocessing suits the type of soil and the type and quantity of laboratory glassware

Sample configuration

PG 8504 lab washer Sample Setup
1x A 101 upper basket/open front
1x A 150 lower basket for modules
2x A 300 modules/laboratory glassware 2 x 4
1x A 802 rinse nozzle for powder dispenser
2x AK 12 half insert basket

PG 8504 controls and programmes

Programme	When to use	Pre-rinse	
		1	2
(Free memory)	Programmable program for special applications; programming by arrangement with Miele Service.		
(Free memory)	Programmable program for special applications; programming by arrangement with Miele Service.		
Normal	For removing contamination that is easily soluble in water. Not suitable for denatured or acid-soluble residues such as proteins, metal salts and amines. For low levels of soiling and low rinsing requirements.		
Regular	For removing contamination that is easily soluble in water. Not suitable for denatured or acid-soluble residues such as proteins, metal salts and amines. For low levels of soiling and medium rinsing requirements.		
Extended	For removing organic residues (e.g. proteins, oils and fats) and some inorganic residues. For low to medium levels of soiling and medium rinsing requirements.		
Demineralized rinse	Rinse with fully demineralized water.	CW 1 Min	
Rinse	For flushing out saline solution (see “Water softener/Adding salt”), rinsing heavily soiled loads, e.g. for pre-rinsing soiling, residual agent, or to prevent items drying out and to prevent incrustation before running a full load.		
Drain	For draining chamber wash solution e.g. after a program cancellation (see “Water softener/Canceling a program”).		

CW = cold water, DI = fully demineralized water, Min = Holding time in minutes, * = Optional program block, DOS 1 = process chemicals, DOS 2 = neutralizer or rinse aid

Program selection depending on the accessories used

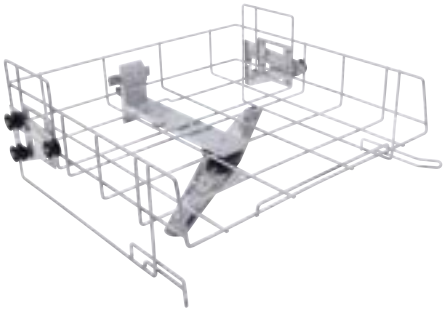
Upper basket		Lower basket		Amount of water	Program		
Basket with spray arm for various inserts	2 injector modules	Basket for various inserts	2 injector modules		Normal	Regular	Extended
			•		OK	OK	OK
•		•			OK	OK	OK
•			•	+ 50 oz./1.5 l	OK	OK	OK
	•	•			OK	OK	OK
	•		•		Not permitted	Not permitted	Not permitted

Program cycle

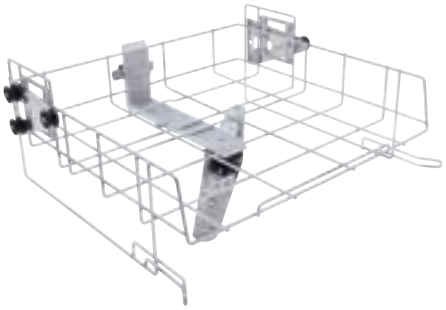
	Wash		Interim rinse				Final rinse	
3	**1**	**2**	**1**	**2***	**3**	**4**	**1**	**2**
	CW 140°F/60° DOS 1 3Min			CW DOS 2 2 Min			DI 158°F/70°C 1 Min	
	CW 149°F/65° DOS 1 3Min		CW DOS 2 2 Min	CW 1 Min			DI 158°F/70°C 1 Min	
	CW 158°F/70° DOS 1 3Min		CW DOS 2 2 Min	CW 1 Min			DI 158°F/70°C 1 Min	
			DI					
			CW					

Upper and lower baskets

A 100 upper basket for modules
- Upper basket with two docking pipes
- For the connection of up to two injector modules or inserts
- Automatically self-sealing docking valves
- Usable space: H 235, W 485, D 435 mm
- H 141, W 528, D 525 mm



A 101 upper basket/open front
- Open front
- For various inserts
- Height-adjustable
- Built-in spray arm
- Usable space: H 160 +/- 30, W 475, D 443 mm
- H 206, W 528, D 527 mm



A 102 upper basket/open front
- Open front
- For various inserts
- Height-adjustable
- Built-in spray arm
- Usable space: H 205 +/-30 mm, W 475 mm, D 443 mm
- H 206, W 528, D 527 mm

A 150 lower basket for modules
- Lower basket with two docking pipes
- For the connection of up to two injector modules or inserts
- Automatically self-sealing docking valves
- Usable space: W 490, D 435 mm
- Usable height dependent on upper basket:
  A 100: 235 mm
  A 101: 275 +/- 30 mm
  A 102: 230 +/- 30 mm
- H 154, W 529, D 546 mm

A 151 lower basket/open front
- For various inserts
- Usable space: H 495, W 490, D 498 mm
- Usable height dependent on upper basket:
  A 100: 235 mm
  A 101: 275 +/- 30 mm
  A 102: 230 +/- 30 mm
- H 88, W 529, D 522 mm

A 802 rinse nozzle
- For use with injector modules to rinse out powder residue from door dispenser
- H 187, W 30, D 15 mm

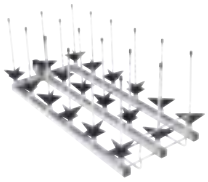
Injector modules for laboratory glassware For use with A 100 upper basket and A 151 lower basket

A 300 module
for laboratory glassware 2 x 4
- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 8 x E 352 injector nozzles (6 x 220 mm)
- 8 x E 354 spring clips for nozzles
- Usable height:
  in A 100: 165 mm
  in A 150 without upper basket: 425 mm
  in A 150 with A 100: 165 mm
  in A 150 with A 101: 205 +/- 30 mm
  in A 150 with A 102: 160 +/- 30 mm
- H 241, W 200, D 479 mm

A 300/1 module
for laboratory glassware 2 x 4
- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 8 x ID 220 injector nozzle with plastic support (6 x 220 mm)
- Usable height:
  in A 100: 186 mm
  in A 150 without upper basket: 446 mm
  in A 150 with A 100: 186 mm
  in A 150 with A 101: 226 +/- 30 mm
  in A 150 with A 102: 181 +/- 30 mm
- H 242, W 178, D 479 mm

A 301 module
for laboratory glassware 3 x 6
- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 6 x ID 110 injector nozzles with plastic supports (2.5 x 110 mm)
- 6 x E 351 injector nozzles (4 x 160 mm)
- 6 x E 353 nozzle supports
- 6 x E 352 injector nozzles (6 x 220 mm)
- 6 x nozzle supports for E 354
- Usable height: in A 100: 165 mm
  in A 150 without upper basket: 425 mm
  in A 150 with A 100: 165 mm
  in A 150 with A 101: 205 +/- 30 mm
  in A 150 with A 102: 160 +/- 30 mm
- H 241, W 232, D 471 mm

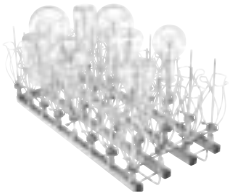
A 301/1 module
for laboratory glassware 3 x 6
- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 18 x E 351 injector nozzles (4 x 160 mm)
- 18 x nozzle supports for E 353
- Usable height:
  in A 100: 160 mm
  in A 150 without upper basket: 420 mm
  in A 150 with A 100: 160 mm
  in A 150 with A 101: 200 +/- 30 mm
  in A 150 with A 102: 155 +/- 30 mm
- H 181, W 216, D 479 mm



A 301/2 module
for laboratory glassware 3 x 6
- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 18 x ID 160 injector nozzle with plastic support (4 x 160 mm)
- Usable height:
  in A 100: 186 mm
  in A 150 without upper basket: 446 mm
  in A 150 with A 100: 186 mm
  in A 150 with A 101: 226 +/- 30 mm
  in A 150 with A 102: 181 +/- 30 mm
- H 181, W 220, D 479 mm

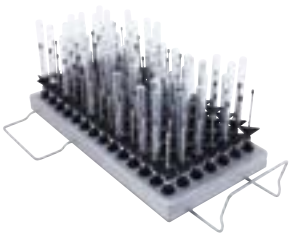
A 302 module
for laboratory glassware 4 x 8

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 32 x ID 110 injector nozzles with plastic supports (2.5 x 110 mm)
- Usable height:
  in A 100: 191 mm
  in A 150 without upper basket: 451 mm
  in A 150 with A 100: 191 mm
  in A 150 with A 101: 231 +/- 30 mm
  in A 150 with A 102: 186 +/- 30 mm
- H 181, W 235, D 479 mm



A 302/1 module
for laboratory glassware 4 x 8

- For laboratory glassware, e.g. Erlenmeyer flasks, round flasks, laboratory bottles, measuring flasks and measuring cylinders
- 32 x E 351 injector nozzles (4 x 160 mm)
- 32 x nozzle supports for E 353
- Usable height:
  in A 100: 160 mm
  in A 150 without upper basket: 420 mm
  in A 150 with A 100: 160 mm
  in A 150 with A 101: 200 +/- 30 mm
  in A 150 with A 102: 155 +/- 30 mm
- H 181, W 235, D 479 mm



A 304 module for phials

- For 98 tubes, e.g. centrifuge tubes, phials, test tubes or autosampler tubes
- Usable height:
  in A 100: 172 mm
  in A 150 without upper basket: 428 mm
  in A 150 with A 100: 172 mm
  in A 150 with A 101: 212 +/- 30 mm
  in A 150 with A 102: 167 +/- 30 mm
- H 130, W 222, D 471 mm

A 306 module for measuring cylinders

- For laboratory glassware, in particular large measuring cylinders
- Capacity for four 1-2 l measuring cylinders
- Contact surfaces plastic coated
- H 418, W 235, D 471 mm

Inserts

E 106 Insert 1/2
- With 28 large and small spring clips
- For lower basket

E 106/1 Insert 1/2
- With 28 x 105 mm small spring clips
- For upper or lower basket

E 106/2 Insert 1/2
- With 15 x 175 mm large spring clips
- For lower basket

E 109 Insert 1/2
- For 21 beakers up to 250 ml, round and conical flasks etc.
- For lower basket

E 110 Insert 1/2
- For 10 beakers 250–600 ml.
- For lower basket

E 111 Insert 1/2
- For 8 beakers 600–1000 ml.
- For lower basket

E 144 Insert 1/2
- For 18 beakers up to 250 ml.
- For upper or lower basket

E 118 Insert 1/1
- For 38 Petri dishes
- For upper or lower basket

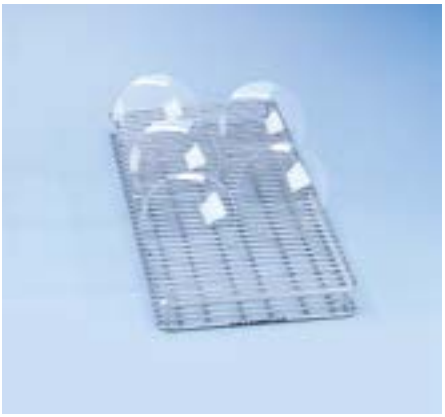
E 136 Insert 1/1
- For 56 Petri dishes
- For lower basket

E 137 Insert 1/1
- For 56 Petri dishes
- For use with E 136

E 134 Insert 1/2
- For 210 slides
- For upper or lower basket

A2 Cover net 1/2
- 216 x 456 mm plastic coated metal frame with plastic netting for half inserts

A3 Cover net 1/4
- 206 x 206 mm plastic coated metal frame with plastic netting for quarter inserts



E 403 Insert 1/2
- For 105 Petri dishes, 50–60 mm Ø
- For upper or lower basket

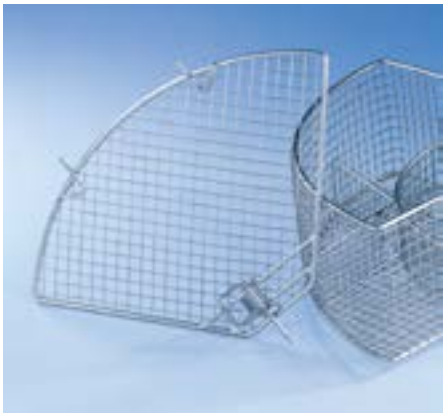
E 402 Insert 1/2
- For 44 Petri dishes, 80–125 mm Ø
- For upper or lower basket

Segment inserts 103/1 Insert 1/4
- For approx. 200 x 75 mm long test tubes
- For upper or lower basket

E 104/1 Insert 1/4
- For approx. 200 x 105 mm long test tubes
- For upper or lower basket

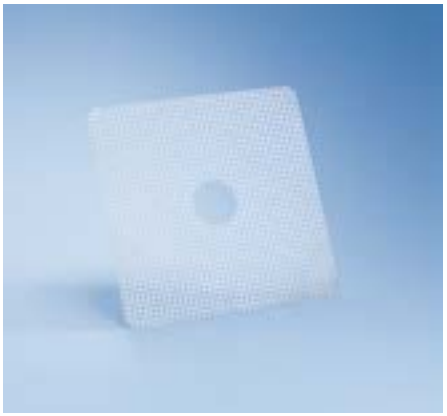
E 105/1 Insert 1/4
- For approx. 200 x 165 mm long test tubes
- For lower basket

E 139/1 Insert 1/4
- For approx. 200 x 200 mm long test tubes
- For lower basket



A 13 Lid
- For inserts E 103/1, E 104/1, E 105/1 and E 139/1
- Stainless steel

E 149 Insert 1/4
- For approx. 80 x 105 mm long test tubes
- For upper or lower basket



A 11 Insert 1/1
- Stainless steel mesh underlay 450 x 450 mm
- For upper or lower basket

A 12 Insert 1/2
- Stainless steel mesh underlay 450 x 225 mm
- For upper or lower basket

AK 12 Insert 1/2
- Mesh basket for funnels, beakers, wide-necked vessels, etc.
- For upper or lower basket

A 14 Lid
- For insert AK 12
- 210 x 210 mm
- Stainless steel

Accessories

UG 30-60/60-85 plinth
- Stainless-steel plinth, bolted to machine
- H 300, W 600, D 600 mm

DOS G 80 dispenser module
- For liquid products such as alkaline detergents, chemical disinfectants and neutralisers
- Peristaltic pump, adjustable via machine's electronic controls
- Long siphon (300 mm) for 5 l and 10 l canisters
- Optional Conversion kit available: Part no. 5458034, for siphon (10-30 l containers) available from Spares Parts*

* Please contact your sales representative or local agent.

DOS G 80/1 dispenser module
- As DOS G 80, with 200 mm siphon for 5 l canisters only

Technical data

Lab washer	PG 8504
Undercounter/freestanding unit with lid	•
Circulation pump [Qmax. l/min.]	500
Controls/Programmes	
TouchControl/7 programmes	•
AutoClose - Automatic door lock	-
Buzzer, acoustic signal at end of programme	•
Ethernet module/RS 232 module for process documentation	-
Water connections	
1 x cold water, 2.0–10 bar flow pressure (200–1000 kPa) (protection against backsiphoning according to EN 1717)	•
1 x demineralised water, 2.0–10 bar flow pressure (200–1000 kPa) (protection against backsiphoning according to EN 1717) (optional ADP version: connection for hose with 13 mm interior diameter)	•
No. of inlet hoses, ½" with ¾" threaded union, l = approx. 2.0 m	1
Drain pump Ø 22,. Max. head height: 100 cm	•
WaterProof System (WPS)	•
Electrical connection	
AC 230 V 50 Hz, supply lead, approx. 2.0 m, 5 x 2.5 mm² incl. plug	•
Heating [kW]	1.8kW
Circulation pump [kW]	0.7
Total rated load [kW]	2.5kW
Fuse rating [A]	13
Dispenser systems	
1 door dispenser for powder detergent	•
1 door dispenser for rinse aid/neutralising agent	•
Connection options	
DOS G 80 or DOS G 80/1 for liquid dispensing	1
Water softeners	
For hot and cold water, max 65°C	•
Steam condenser	
Aerosol	-
Drying unit/Radial fan	
Fan	-
Heater bank [kW]	-
Total rated load [kW]	-
Air throughput [m³/h]	-
Temperature selection in 1° increments [°C]	-
Time selection in 1-minute increments [min]	-
Particulate filter/HEPA filter/filter rating (DIN EN 1822)/filter life	-
Dimensions/Weight	
External dimensions H/W/D (without lid H 820 mm) [mm]	835/600/600
Cabinet dimensions H/W/D [mm]:	522/536/top=518, bottom=523
Weight [kg]	74
Casing	
Stainless steel (AE)	•

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Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct.
If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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