

GLASSWARE WASHER GW1160

GW1160 is a glassware washer designed to work on either one or two independent and flexible washing levels. The washing chamber measures 530x510x620 mm (168l gross). Possibility for washing and thermic disinfection (up to 95°C).



LM20

UNIVERSAL WASHING SOLUTION FOR NARROW-NECKED GLASSWARE - 24 POSITIONS



KP200

TWO-LEVELS WASHING SOLUTIONS FOR TEST TUBES



SB28

WASHING SOLUTION FOR BEAKERS AND FLASKS FROM 250ML TO 1000ML. TO BE PLACED ON CS1-1 AND CS2



PB50

WASHING SOLUTION 50ML WIDE-NECKED BOTTLES. TO BE POSITIONED ON CS2



LPV40

WASHING SOLUTION FOR 40 PIPETTE -
H. MAX 49CM



LB4B

WASHING SOLUTION FOR BOTTLES OF LARGE
DIMENSIONS



SL18

WASHING SOLUTION FOR CHROMATOGRAPHIC
PLATES

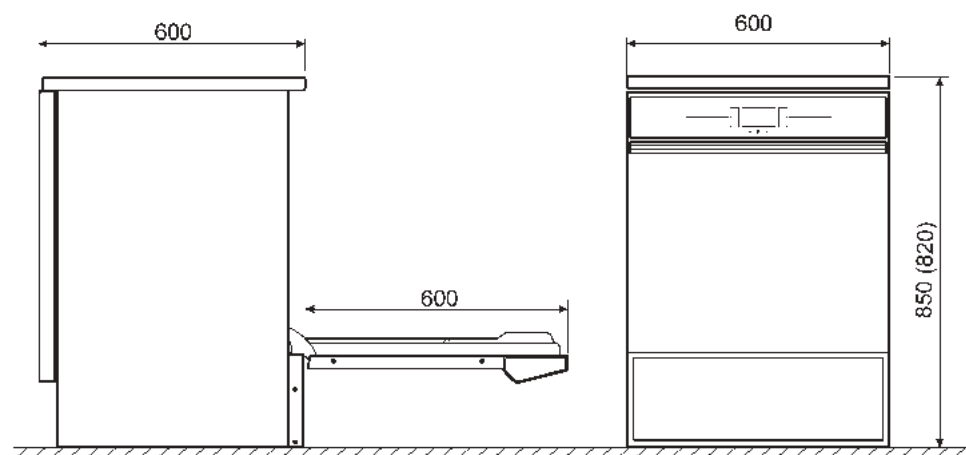


LR4

WASHING SOLUTION FOR REACTORS



GW1160 TECHNICAL FEATURES		All versions
Electronic control		microprocessor
Standard programs stored		9
Customisable programs		6
Display with segments and communication		yes, 4 digits
Clock and calendar		yes
Tank internal temperature		from room temperature to 95°C
Accuracy		0,1°C
Temperature sensors in tank		n° 1 x PT 1000 CLASS B IEC 60751
Detergent and agents dosing system		max. 1 powder dispenser, 1 pump for neutralizing agent and 2 other pumps as optional
Detergent level sensor		optional
Safety lock		yes, with electromagnetic release and automatic opening
Safety devices		safety thermostats, door interlock
Alarm display		30
Troubleshooting menu		yes, using PC connection
Programme editing		yes, using 6 customisable programs
AUXILIARY FUNCTIONS		
Storage of data for 250 most recently run programs		yes
RS232 serial port for PC connection		yes
RS232 serial port for printer		yes
Cycle storage		yes
Cycle file download		yes
WATER SUPPLY (PRESSURE 1,5-5 BAR)		
Cold water inlet		yes, hardness max 42°f
Demineralized water inlet		yes, < 30 µS/cm
Demineralized water booster pump		optional
Water softener incorporated		yes
Recirculation pump		400 l/min
WATER HEATING		
Electrical		6,3 kW on three-phase version, 2,3 kW on single-phase version
STEAM CONDENSER		optional
DIMENSIONS LxDxH mm		
Outside (with built-in top)		600x605x850 (830)
Inside (gross)		530x510x620
Net weight (Kg)		74
STAINLESS STEEL		
Wash tank		AISI 316L
Exterior covering		AISI 304
ELECTRICAL POWER SUPPLY		
Max. voltage/power		1/N/PE 230V ~ 50Hz 2,8 kW 3/N/PE 400V - 50 Hz 7,0 kW
NOISE LEVEL		max 50 dB



COMPATIBLE
GW0160
GW2145
GW1160
GW4060
GW4190
GW3060
GW4090



D-CS1

UPPER LEVEL BASKET

Basic upper basket with sprayer for the GW2145 series. Suitable for glassware treatment

D-CS2

LOWER LEVEL BASKET

Basic lower basket with sprayer for the GW2145 series. Suitable for glassware treatment



CS1-1

UPPER LEVEL BASKET

Basic upper basket with sprayer. Suitable for glassware treatment

CS2

LOWER LEVEL BASKET

Basic lower basket. Suitable for glassware treatment.



COMPATIBLE
GW0160
GW2145
GW1160
GW4060
GW4190
GW3060
GW4090



SB9

9 POSITION INSERT

Made of stainless steel, it is suitable for washing beakers and cylinders of max. 100 ml and funnels. Occupies 1/2 of the D-CS1/D-CS2 baskets.

Dimensions: W x D x H = 420 x 145 x 160 mm

An insert for 14 positions is also available (**SB14**).

Dimensions: W x D x H = 422 x 146 x 184 mm

SB15

15 POSITION INSERT

Made of stainless steel, it is suitable for washing beakers and flasks. For use in combination with standard CS1-1 and CS2 baskets of 16 items and is made of stainless steel.

Recommended for flasks with a capacity of up to 1000 ml.

Dimensions: W x D x H = 400 x 195 x 115 mm



SB28

28 POSITION INSERT

Made of stainless steel, it is suitable for washing beakers and flasks. For use in combination with standard CS1-1 and CS2 baskets and IM20 insert.

It has a capacity for 16 items and is made of stainless steel.

Recommended for flasks with a capacity of up to 1000 ml.

Dimensions: W x D x H = 400 x 195 x 185 mm

SB30

30 POSITION INSERT

Made of stainless steel, it is suitable for washing beakers of any size. For use in combination with standard CS1-1 and CS2 baskets and IM20 insert.

It has a capacity of 30 items and is made of stainless steel.

Recommended for flasks with a capacity of up to 500ml.

Dimensions: W x D x H = 400 x 195 x 150 mm

An insert for 25 positions is also available (**SB25**).



COMPATIBLE
WITH ALL
GLASSWASHERS



CSK1

1-LEVEL SMALL GLASSES
AND OBJECTS INSERT

It is suitable for washing
glasses and objects of small
dimensions.level

Dimensions: L x D x H 450 x 450 x 55mm, mesh 5 x 5mm
Space needed: entire washer

CSK2

½ LEVEL SMALL GLASSES
AND OBJECTS INSERT

It is suitable for washing glasses and objects of
small dimensions.

Dimensions : L x D x H 450 x 225 x
55mm, mesh 5 x 5mm
Space needed: half of a washer level



SERIE "CP"

¼ LEVEL TEST TUBE INSERT

Compartment suitable for test tubes up to 160. Accessory
composed by 3 compartments and a lid. Different sizes
depending on the test tubes model.
Space needed: 1/4 of a washer level

CP105: test tubes up to 75 mm in height
CP132: test tubes up to 105 mm in height
CP192: test tubes up to 165 mm in height
CP222: test tubes up to 200 mm in height

BOTTLE INSERT

COMPATIBLE

GW0160
GW1160
GW4060
GW4190
GW3060
GW4090



PB50

BOTTLE INSERT

Suitable for holding 56 50 ml wide-necked bottles (screw cap GL32 ISO4796 or ground cap DIN 12038 or non-standard cap).
Max. bottle size: diam. 46 mm - h 87 mm.

PB100 (not in photo) suitable for holding 32 100 ml wide-necked bottles (screw cap GL45 ISO4796 or ground cap DIN 12038 or non-standard cap).
Max. bottle size: diam. 56 mm - h 100 mm.

PB500

BOTTLE INSERT

Suitable for holding 21 500 ml wide-necked bottles (screw cap GL32 ISO4796 or ground cap DIN 12038 or non-standard cap).
Max. bottle size: diam. 86 mm - h 177 mm.

PB250 (not in photo) suitable for holding 25 250 ml wide-necked bottles (screw cap GL45 ISO4796 or ground cap DIN 12038 or non-standard cap).
Max. bottle size: diam. 70 mm - h 138 mm.



PB1000

BOTTLE INSERT

Suitable for holding 16 1000 ml wide-necked bottles (screw cap GL45 ISO4796 or ground cap DIN 12038 or non-standard cap).
Max. bottle size: diam. 101 mm - h 225 mm.

COMPATIBLE
WITH ALL
GLASSWASHERS



PV105

SLIDES INSERT

Microscope slide insert made of stainless steel. Suitable for positioning 105 standard microscope slides.

Dimensions l x d x h = 220x143x60 mm.

SL6

PLATE INSERT

It is suitable for washing up to Olympus-type plate for optical recognition of the blood unit. Hinged lid included.

Dimensions l x d x h = 485x145x80 mm.



SL9

CHROMATOGRAPHIC PLATES INSERT

Made of stainless steel, it is suitable for washing chromatographic plates. Capacity of 9 items. It takes up 1/2 the space of a standard basket.

SL18

CHROMATOGRAPHIC PLATES
INSERT

Made of stainless steel, suitable for washing 20x20 standard chromatographic plates. Capacity of 18 items. The guides are shaped in such a way that the support points are outside the working surface.



COMPATIBLE
WITH ALL
GLASSWASHERS

SERIE "PD"

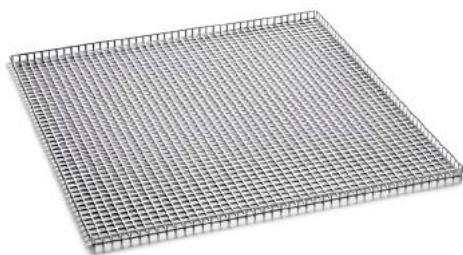
DIFFERENT DIMENSIONS PETRI DISH INSERT

PD70S - 40 items, 50-70 mm positioned on the upper level CS1-1.

PD100S - 38 items, 70-120 mm positioned on the upper level CS1-1.

PD70I 40 items, 50-70 mm positioned on the lower level CS2.

PD100I - 38 items, 70-120 mm positioned on the lower level CS2.



SERIE "PF"

DIFFERENT DIMENSIONS
MESHES

PF1/2, PF1/2, 1/2 space of CS2 or CS1-1

PF1, whole CS1-1

PF2, whole CS2

D-PF1, whole D-CS1-1

D-PF2, whole D-CS2

SA3

DIFFERENT
DIMENSIONS
HOLDING NETS

RC1 net covering a whole carrier,

RC1/2 net covering 1/2 carrier,

RC1/4 net covering 1/4 carrier



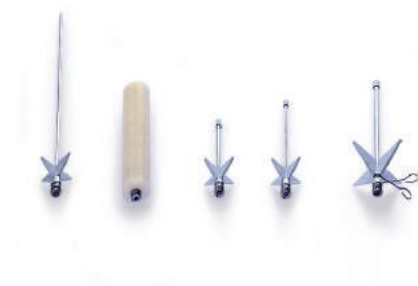
SERIE "U"

SPIGOTS OF DIFFERENT
DIMENSIONS

Injection spigots available in the following versions:

- spigot for 6% and 12% butyrometers
- Nylon spigot for pipettes
- Spigots for glassware with the following heights: 90, 110, 140, 160, 180, 220, 240, 260 mm.

Suitable as spare parts on carriers already in use or to equip customizable carriers.



INJECTION CARRIER FOR NARROW-NECKED GLASSWARE

COMPATIBLE

GW0160
GW1160
GW4060
GW4190
GW3060
GW4090



LM20DS

UNIVERSAL FLASK WASHING CARRIER

Stainless steel carrier for washing and drying narrow-necked glassware up to 490 mm in height. Fitted with 20 nozzles and half the carrier space is free for mixed glassware suitable for a 1/2 basket accessory. Positioned on the lower level.

LM20 (not shown in the photo): version without drying system connection.

LM40DS

UNIVERSAL NARROW-NECKED GLASSWARE WASHING CARRIER

Stainless-steel carrier for washing and drying narrow-necked glassware up to 490 mm in height, flasks, round-bottom flasks and graduated cylinders of various sizes. Positioned on the lower level.

LM40 (not shown in the photo): version without drying system connection.



LM40SDS

UNIVERSAL NARROW-NECKED GLASSWARE WASHING CARRIER

Stainless-steel carrier for washing narrow-necked glassware up to 225 mm in height. Carrier with 40 spigots with the same height. Positioned on the upper level.

LM40S (not shown in the photo): version without drying system connection.



LM80DS

UNIVERSAL NARROW-NECKED GLASSWARE WASHING CARRIER

Stainless-steel carrier for washing narrow-necked glassware up to 225 mm in height. Carrier with 80 spigots with the same height. Positioned on two levels.

LM80 (not shown in the photo): version without drying system connection.



N.B. The models with drying system connection (DS versions) are specific for GW4090, GW4190 and GW4060 glassware washers.

BOTTLE WASHING CARRIER

COMPATIBLE

GW0160
GW1160
GW4060
GW4190
GW3060
GW4090



LB4BDS

BOTTLE WASHING CARRIER

Stainless steel trolley for washing large glass items with drying system connection. Suitable for washing 2 x 10 L bottles or 4 x 5 L bottles. Fitted with 8 special spigots. Positioned on the lower level.

LB4 (not shown in the photo): version without drying system connection

LBT5DS

BOTTLE WASHING CARRIER

Stainless steel carrier for large glass items washing with drying system connection.

Suitable for washing and drying of five 5-litre bottles (diam. 180 x h.500mm, max neck diameter 80 mm).

Fitted with 5 special spigots. Positioned on the lower level.

LBT5 (not shown in the photo). Version without drying system connection.



LB8DS

BOTTLE WASHING CARRIER

Stainless steel carrier for washing large glass items with drying system connection. Suitable for washing 8 bottles of maximum 50 cm in height. Fitted with 8 U6260 spigots and 8 special spigots.

Positioned on the lower level.

LB8 (not shown in the photo): version without drying system connection.



LB16DS

BOTTLE WASHING CARRIER

Stainless steel carrier for washing 16 narrow or wide-necked bottles of 250-1000 ml (max. diam. 101 mm, h 450mm) or graduated cylinders (diam. max. 101 mm - h 495 mm).

Positioned on the lower level.

LB16 (not shown in the photo): version without drying system connection.



N.B. The models with drying system connection (DS versions) are specific for GW4090, GW4190 and GW4060 glassware washers.

COMPATIBLE

GW0160

GW1160

GW4060

GW4190

GW3060

GW4090



LB16SDS

BOTTLE WASHING CARRIER

Stainless steel carrier for washing 16 narrow or wide-necked bottles of 250-1000 ml (max. diam. 101 mm, h 250mm). Positioned on the upper level.

LB16SDS (Not shown in the photo): version without drying system connection. LB16I code: same carrier for the lower level

LB32DS

BOTTLE WASHING CARRIER

Stainless steel carrier for washing large glass items with drying system connection. Suitable for washing 32 narrow or wide-necked bottles of 250-1000 ml, max. diam. 101 mm, H.245 mm.

Positioned on 2 levels.

LB32 (not shown in the photo): version without drying system connection.



LB1-20DS

WASHING CARRIER FOR BOTTLE OR DRUM

Stainless steel carrier for washing universal large glass items and suitable for washing one large bottle and/or drum with drying system connection. Bottle maximum dimensions diameter 300 x h. 350 mm. Positioned on lower level.



N.B. The models with drying system connection (DS versions) are specific for GW4090, GW4190 and GW4060 glassware washers.

COMPATIBLE

GW0160
GW1160
GW4060
GW4190
GW3060
GW4090



LPM2010DS

MIXED INJECTION CARRIER FOR FLASKS, PIPETTES AND TEST TUBES

Stainless steel carrier for washing flasks, pipettes and test tubes with drying system connection. Suitable for washing and drying of 10 pipettes up to 55 cm + 20 narrow-necked glass items + ¼ free space to be filled with a CP series test tube basket.

Positioned on the lower level.

LMP2010 (not shown in the photo): version without drying system connection.

LPM2020DS

MIXED INJECTION CARRIER FOR FLASKS AND PIPETTES

Stainless steel carrier for mixed washing of flasks and pipettes with drying system connection.

Suitable for washing and drying 20 pipettes up to 550 mm in height and 20 narrow-necked glassware with a maximum height of 49 cm. Positioned on the lower level.

LPM20/20 (not shown in the photo): version without drying system connection.



LR4DS

REACTORS WASHING CARRIER

Stainless steel trolley for washing and drying four 3/5-way reactors of maximum 3 litres or up to 12 narrow-necked glass items. Fitted with 20 U6260 nozzles.

Positioned on the lower level.

LR4 (not shown in the photo): version without drying system connection.

LT20DS

WASHING CARRIER FOR FISCHER BOTTLES

Stainless steel carrier with drying system connection for washing and drying of 12 Fischer bottles and graduated cylinders with a maximum height of 55 cm. 6 positions for injection washing of narrow-necked glassware. Fitted with 18 spigots. Positioned on the lower level.

LT20 (not shown in the photo): version without drying system connection.



N.B. The models with drying system connection (DS versions) are specific for GW4090, GW4190 and GW4060 glassware washers.

COMPATIBLE

GW0160
GW1160
GW4060
GW4190
GW3060
GW4090



LPV40DS

PIPETTES WASHING CARRIER

Stainless steel carrier for washing and drying volumetric pipettes up to 55 cm in length. 20 positions for pipettes of 55 cm in height and 20 positions for pipettes and/or flasks of 45-49 cm in height.

LPV40 (not shown in the photo): version without drying system connection.

LPT100DS

PIPETTES WASHING CARRIER

Stainless steel carrier for washing and drying 100 pipettes with a capacity of 1 to 20 ml and a height up to 450 mm. The pipette washing disc is fitted into the carrier to allow fast loading and unloading access.

LPT100 (not shown in the photo): version without drying system connection.



KP100DS

TAPERED AND CYLINDRICAL TEST TUBE CARRIER

Stainless steel carrier with drying system connection for washing of tapered and cylindrical test tubes by internal injection. It has a maximum capacity of 100 test tubes. Positioned on the upper washing level.

KP200DS (not shown in the photo): same carrier on two washing levels with a maximum capacity of 200 test tubes.

KP100 (not shown in the photo): version without drying system connection.

KP200 (not shown in the photo): version without drying system connection.



LB40DS

BUTYROMETER WASHING CARRIER

Stainless steel carrier for butyrometer washing with drying system connection. Suitable for washing and drying of 40 butyrometers. Specify the type of butyrometer in the order. Positioned on the upper level.

LB40 (not shown in the photo): version without drying system connection.



N.B. The models with drying system connection (DS versions) are specific for GW4090, GW4190 and GW4060 glassware washers.

POSSIBLE CONFIGURATION

COMPATIBLE

GW0160
GW1160
GW4060
GW4190
GW3060
GW4090



TWO SPRAYING LEVELS

This configuration has two washing levels with spray arms for different types of glassware.

Photo:

CS1-1 upper basket: it is fitted with RC1/2 net in the right side for the support of various glass items. On the left side: test tube accessory.

CS2 lower basket: SB28 insert on the right and SB30 on the left for washing beakers, flasks, plates and various other materials.

ONE MIXED INJECTION LEVEL

This configuration has one mixed injection washing level suitable for washing narrow-necked glassware and pipettes.

Photo:

Carrier LPM2020: this system allows simultaneously washing narrow-necked glassware (flasks, beakers, round-bottom flasks) and 20 pipettes. Specific carriers for laboratories which clean many different types of glassware at the same time.



ONE INJECTION LEVEL

This configuration has one injection washing level suitable for washing narrow-necked glassware.

Photo:

LM40 carrier: universal injection carrier as it optimises washing of narrow-necked glassware of different sizes.

It has a capacity of 40 items and can wash both large items and small flasks or bottles.

