

ULTIMA SERIES 810 – 815 LX
INSTALLATION MANUAL



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GENERAL INFORMATION

INTRODUCTION TO THE INSTALLATION INSTRUCTIONS

These instructions are provided to help you with your electrical wiring and plumbing installation prior to receiving your washer. Follow them closely, they have been written with your best interests in mind.

This document also indicates the dimensions of the washer so that you can check the access to the area where the machine will be installed.

COPYRIGHT

All rights reserved.

GETINGE LANCER pays close attention to all technical developments and continuously seeks to improve its products and services in order to provide an adequate response to the needs of its clients. GETINGE LANCER therefore reserves the right to modify its documentation without prior notice.

PRODUCT LIABILITY

This washer must be used under normal operating conditions as indicated in the GETINGE LANCER user manual supplied with the machine.

Failure to follow these recommendations may result in material damage or personal injury and will render null and void any warranty or liability on GETINGE LANCER part.

Liability will not be accepted in the event of incorrect use or modification of the washer without the prior agreement of GETINGE LANCER.

SYMBOLS

This manual contains some extremely important warnings, instructions and notices, so the following symbols have been used to draw your attention to them.



SAFETY WARNING FOR PERSONS AND EQUIPMENT



ELECTRICAL DANGER

SHIPPING PACKAGE AND HANDLING

PACKING

Applicable only to washers delivered in GETINGE LANCER supplied packaging.

Packing of a washer consists of a cardboard box and a wooden pallet.

The washer is wrapped with a plastic film, bolted to the pallet, and covered with a cardboard box.

TRANSPORT

Transport indicators :

- Label « FRAGILE »
- Label « HAUT AND BAS » - « UP AND DOWN »

For machines transported by air or by sea, packaging has a tilt indicator (« TIP AND TELL ») that provides a visual indication if the machine has not remained upright during transit.

HANDLING



DO NOT USE A FORKLIFT TO PUSH THE PACKAGE

USE A FORK LIFT OR PALLET JACK TO MOVE THE WASHER



BEFORE MOVING THE WASHER, CHECK THAT THE FORK LIFT AND/OR PALLET JACK ARE CAPABLE OF RAISING THE LOAD (THE WEIGHT IS WRITTEN ON THE PACKAGE OR THE SHIPPING DOCUMENTATION).

STORAGE

The washer must be stocked in a dry, sheltered area whose room temperature will not be lower than 0°C (32°F) and not exceed 50°C (122°F).



IF THE WASHER IS NOT USED FOR A PERIOD OF 3 WEEKS OR MORE, IT IS RECOMMENDED TO REMOVE THE CHEMICAL CONTAINERS AND FLUSH THE CHEMICAL LINES WITH WATER. CONTACT GETINGE LANCER FOR ASSISTANCE.

CONDITIONS OF USE / ENVIRONMENT

OPERATING ENVIRONMENT

The washer is designed to be used in the following operating environment:

- an indoor environment.
- at a maximum elevation of 2,000 meters (6,562 ft).
- at temperatures between 5°C and 40°C (41°F and 104°F).
- at a maximum of relative humidity of 80% up to 31°C (88°F) with a linear drop of 50% at 40°C (104°F).
- mains voltage fluctuations must not be greater than $\pm 10\%$ of the rated voltage.
- normal level of transient overvoltages in the mains supply: category II of IEC 60364-4-443.

AFTER INSTALLATION, MAKE SURE :

- all parts have been installed as per the installation instructions
- all screws have been fully tightened.
- the parts have no sharp edges that could injure users.
- all hoses, pipes, and connections are complete and fault-free.
- all of the device's features are operating correctly. Adjust them as required.

SAFETY SYMBOLS



Mandatory use of safety glasses or goggles



Mandatory use of safety gloves

UNPACKAGING AND SETTING IN PLACE

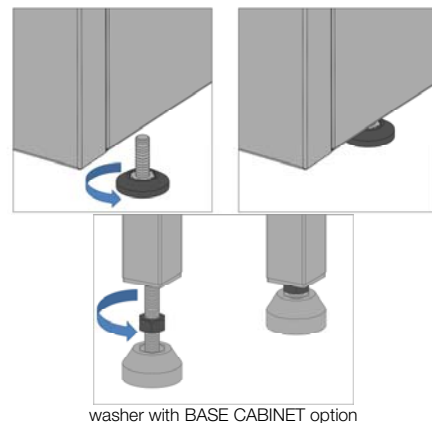


THIS MACHINE MUST BE INSTALLED AND USED ACCORDING TO THE INSTRUCTIONS CONTAINED WITHIN THIS DOCUMENT. INCORRECT INSTALLATION OR USAGE MAY CAUSE THE PROTECTION PROVIDED BY THIS EQUIPMENT TO BE IMPAIRED.



IT IS RECOMMENDNED TO CONTACT GETINGE LANCER TO PERFORM THE FIRST TIME START UP.

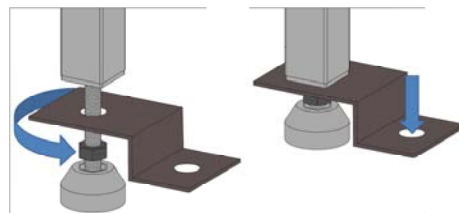
- Remove the box and the plastic film from around the washer.
- Move the washer to dedicated area.
- Remove the leveling feet, hoses and manuals from the wash chamber or in the chemical drawer.
- Level the washer by adjusting the height adjustable feet.



To secure the washer to the floor (kit 90010271)

The rear feet should be mounted with plate and screwed to the ground (according to the drawing aside).

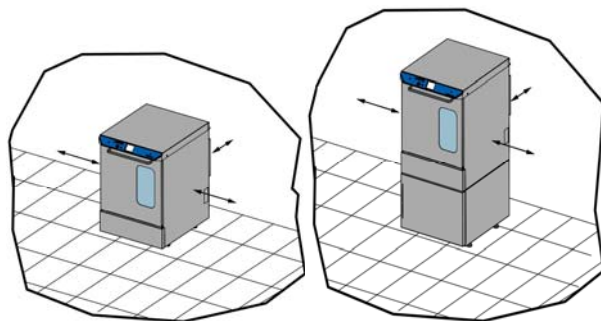
(For seismic solution, it is necessary to follow local legislation, we advise you to contact certified organization to validate such device)



Installation area

The washer must be installed in the room allow sufficient space for easy replacement and periodic inspections

Minimum distance of 460mm (18.11")



washer with BASE CABINET option

CHARACTERISTICS

Heat loss : 600 Kcal/h (2380 BTU/h)

Noise level : 63 dBA according to Machinery Directive 2006/42/EC

WASHER DIMENSIONS STANDARD

Overall dimensions

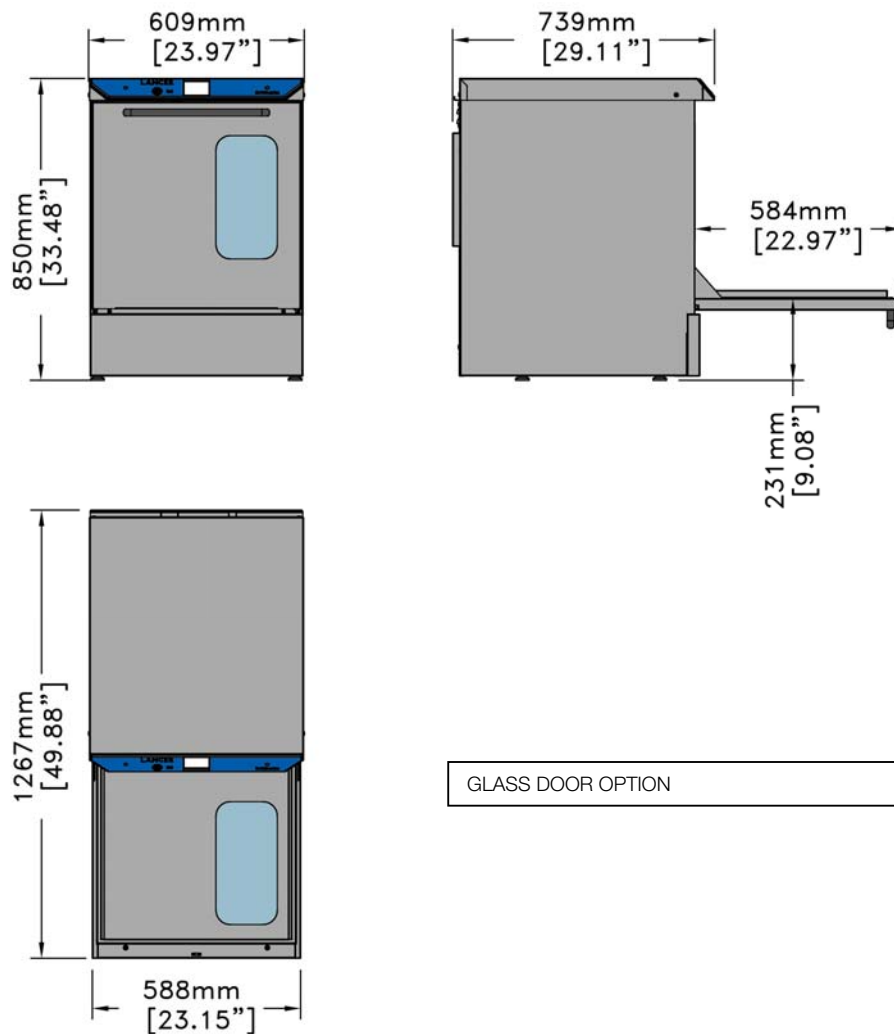
Height 850 mm (33.46 ")
 Width 609 mm (23.97")
 Depth 739 mm (29.09")

Weight 85kg (187 lbs)

Chamber dimensions

Height 498 mm (19.60")
 Width 535 mm (21.06")
 Depth 520 mm (20.47")

Dimensions tolerances : +/- 5mm (+/- 0.2")



WASHER DIMENSIONS WATER INLET WITH VALVE OPTION

(90010533)

Overall dimensions

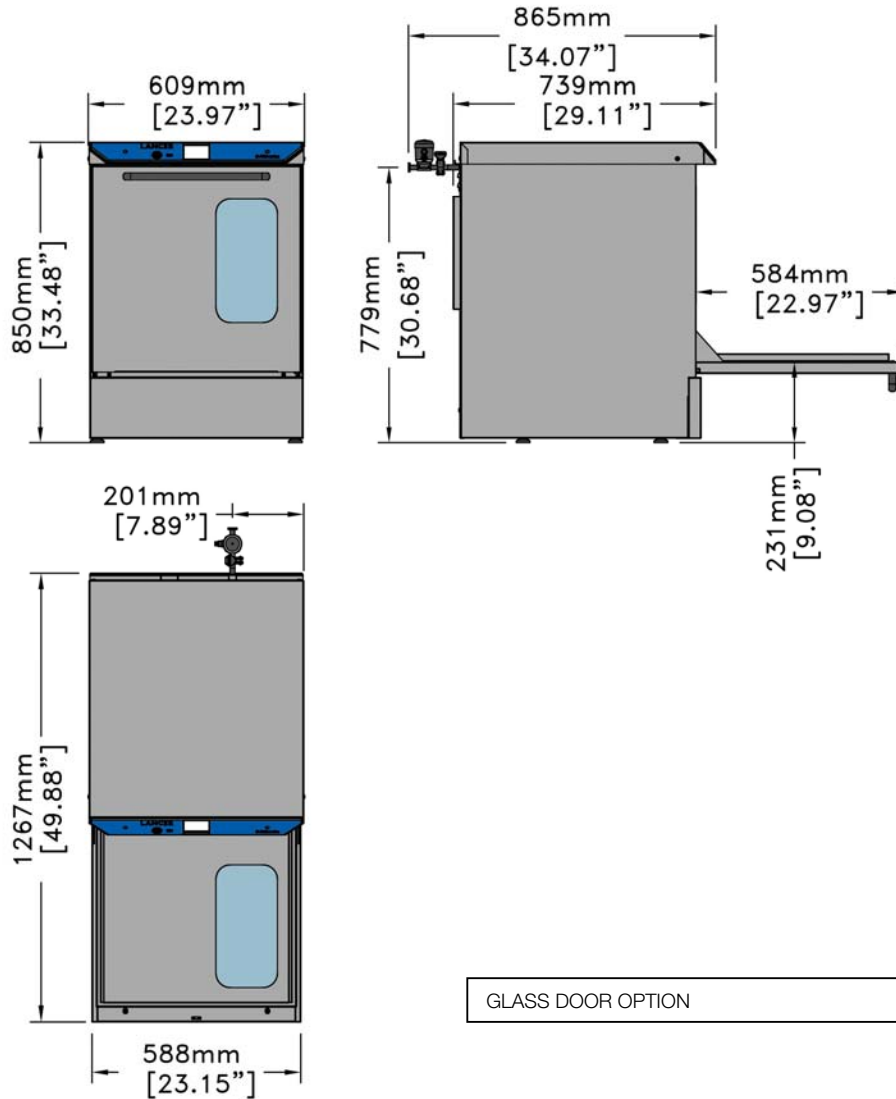
Height	850 mm (33.46")
Width	609 mm (23.97")
Depth	865 mm (34.05")

Weight 85kg (187 lbs)

Chamber dimensions

Height	498 mm (19.60")
Width	535 mm (21.06")
Depth	520 mm (20.47")

Dimensions tolerances : +/- 5mm (+/- 0.2")



WASHER DIMENSIONS WATER INLET WITHOUT VALVE OPTION

(90010531)

Overall dimensions

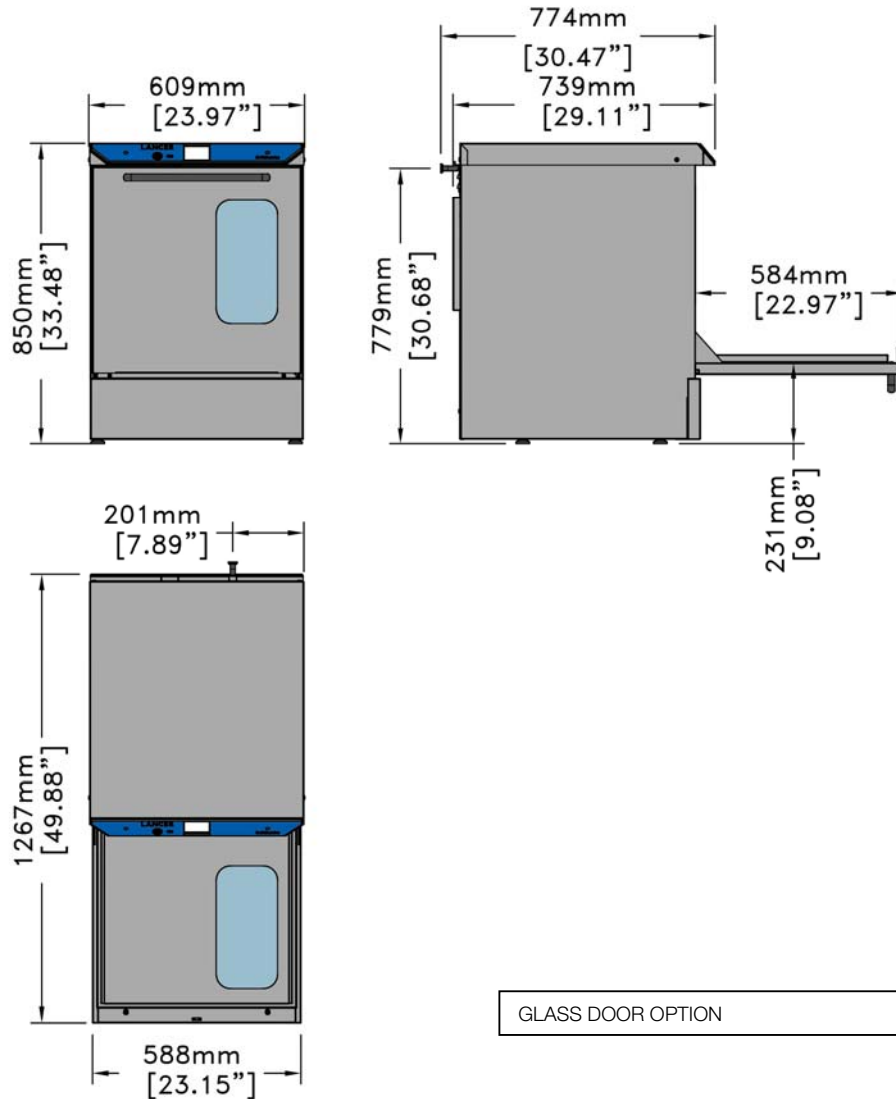
Height	850 mm (33.46")
Width	609 mm (23.97")
Depth	774 mm (30.47")

Weight	85kg (187 lbs)
--------	----------------

Chamber dimensions

Height	498 mm (19.60")
Width	535 mm (21.06")
Depth	520 mm (20.47")

Dimensions tolerances : +/- 5mm (+/- 0.2")



GLASS DOOR OPTION

WASHER DIMENSIONS BASE CABINET OPTION (90010196)

Overall dimensions

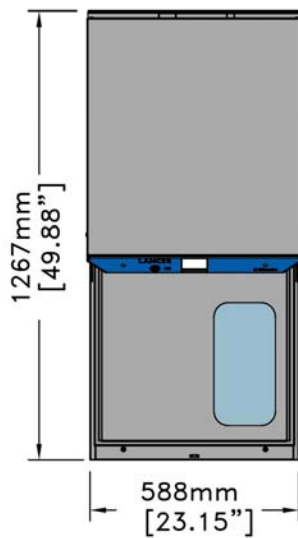
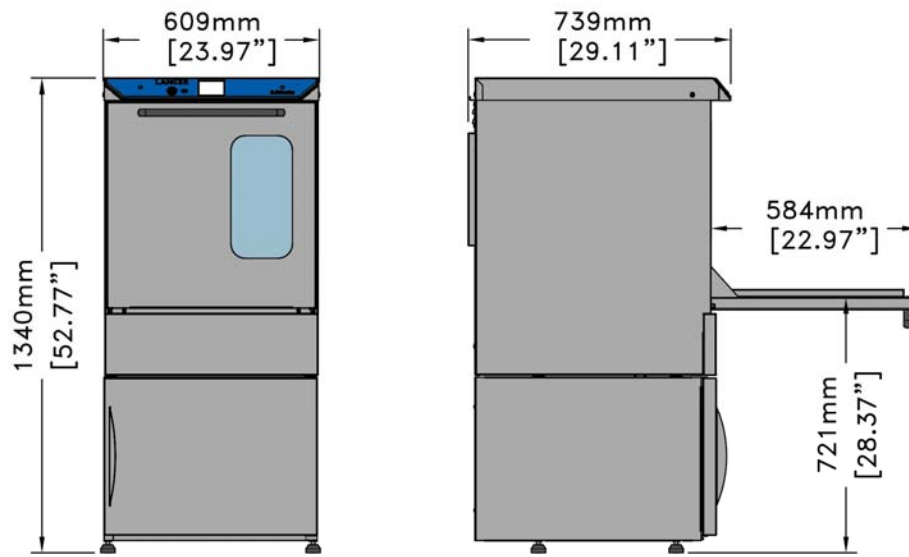
Height	1340 mm (52.77 ")
Width	609 mm (23.97")
Depth	739 mm (29.09")

Weight 85kg (187 lbs)

Chamber dimensions

Height	498 mm (19.60")
Width	535 mm (21.06")
Depth	520 mm (20.47")

Dimensions tolerances : +/- 5mm (+/- 0.2")



GLASS DOOR OPTION

**WASHER DIMENSIONS BASE CABINET OPTION + WATER INLET
WITH VALVE OPTION (90010196 + 90010533)**

Overall dimensions

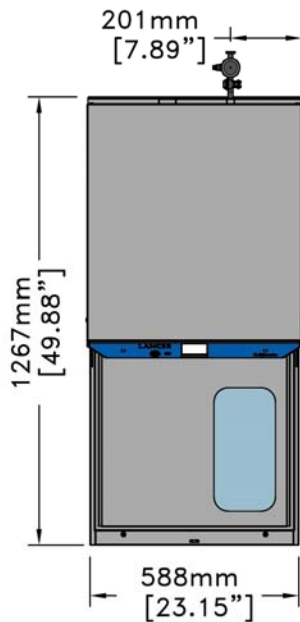
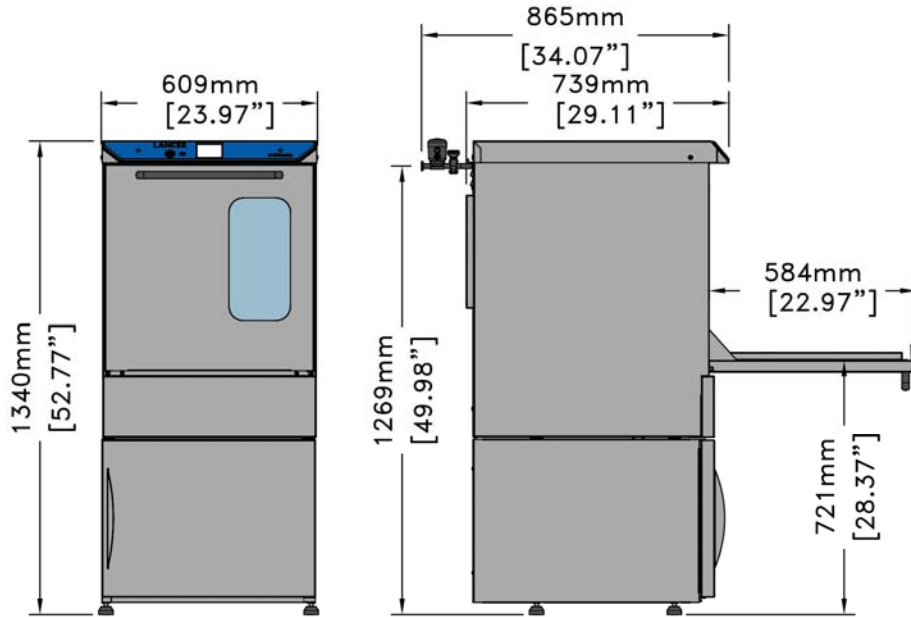
Height 1340 mm (52.77 ")
 Width 609 mm (23.97")
 Depth 865 mm (34.05")

Weight 85kg (187 lbs)

Chamber dimensions

Height 498 mm (19.60")
 Width 535 mm (21.06")
 Depth 520 mm (20.47")

Dimensions tolerances : +/- 5mm (+/- 0.2")



GLASS DOOR OPTION

**WASHER DIMENSIONS BASE CABINET OPTION + WATER INLET
WITHOUT VALVE OPTION (90010196 + 90010531)**

Overall dimensions

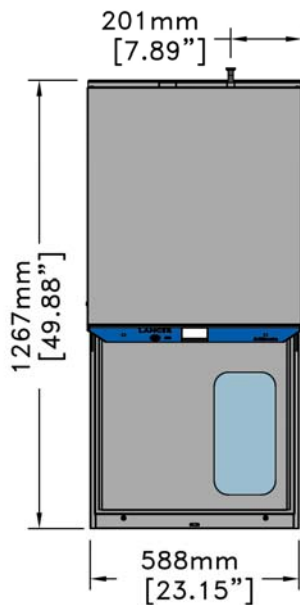
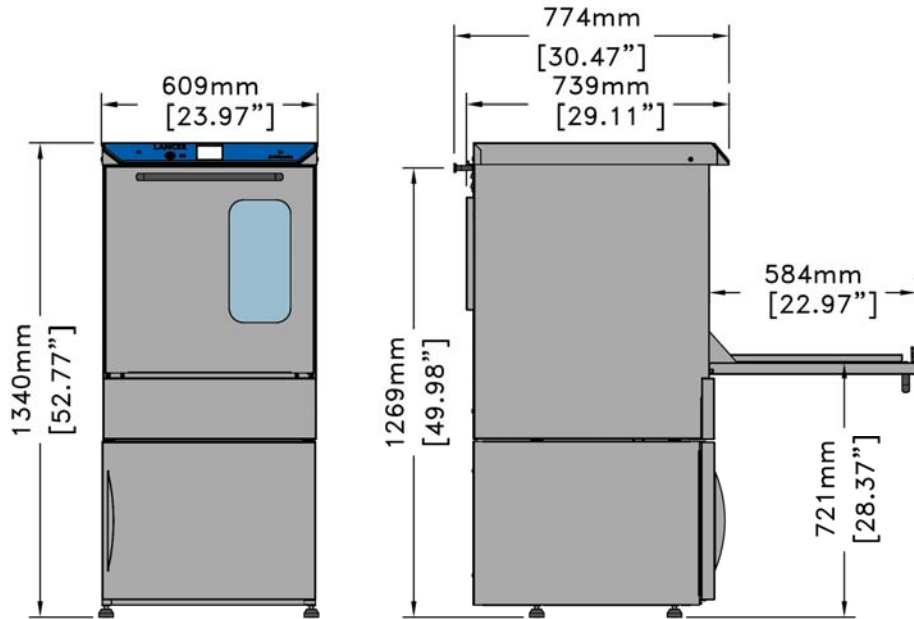
Height 1340 mm (52.77 ")
 Width 609 mm (23.97")
 Depth 774 mm (30.47")

Weight 85kg (187 lbs)

Chamber dimensions

Height 498 mm (19.60")
 Width 535 mm (21.06")
 Depth 520 mm (20.47")

Dimensions tolerances : +/- 5mm (+/- 0.2")



GLASS DOOR OPTION

HYDRAULIC CONNECTIONS

WATER CONNECTIONS

Flush water supply lines prior to connecting to the washer. Turn off water supply valves and drain the water supply hoses.

The water supply hoses required to connect the washer to the various water inlets are provided with the machine.

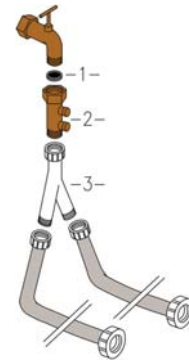
The maximum length of all connecting lines is 2,000mm (78.73") and a color-code identification label is attached to each water supply hose.

WASHER WITH CE MARKING

The cold water inlet is equipped with backflow prevention devices which must be connected to the water supply.

Make the connections by fitting the strainer filters between the backflow prevention device and the threaded connection at the water supply hose.

- 1- STRAINER FILTER
- 2- BACKFLOW PREVENTION DEVICE
- 3- CONNECTING Y

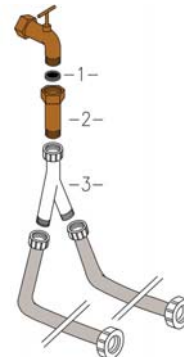


WASHER WITH UL MARKING

The cold water inlets is equipped with thread size adapters which must be connected to the water supply.

Make the connections by fitting the strainer filters between the thread size adapter and the threaded connection at the water supply hose.

- 1- STRAINER FILTER
- 2- THREAD SIZE ADAPTER (IF NECESSARY)
- 3- CONNECTING Y



All connection are made on the back of the washer and are marked with identification labels.

In order to help you during the hydraulic connections of your washer/dryer, you will find in sections hereafter, the different colors of labels present on different connecting hoses and connecting fittings located on the bodywork of the washer/dryer.

The water supply valves must be located within the area shown on the drawing on page 19.

COLD WATER :*STANDARD*

A valve with a male threaded nozzle, 20/27 diameter, (3/4" hose thread) is required.

Flow rate :	20 l/mn (5.3GPM) mini.
Pressure :	200 kPa (2 bars or 29 PSI) mini. and 600 kPa (6 bars or 87 PSI) maxi.
Temperature :	10°C - 25°C (50 °F - 77°F)
pH :	6.5 - 9
Hardness :	25 °f maxi.
	14 °d maxi.
	14 gpg maxi
	250 ppm maxi

IF CONDENSER - OPTION ON 810 LX / STANDARD ON 815 LX

Cold water source temperature should be less than 25°C (77°F).

A valve with a threaded male nozzle, 20/27 diameter (3/4" hose thread) is required.

Flow rate :	20 l/mn (5.3GPM) mini.
Pressure :	200 kPa (2 bars or 29 PSI) mini. and 600 kPa (6 bars or 87 PSI) maxi.
Temperature :	10°C - 25°C (50 °F - 77°F)
pH :	6.5 - 9
Hardness :	25 °f maxi.
	14 °d maxi.
	14 gpg maxi
	250 ppm maxi

PURIFIED WATER :*STANDARD*

A valve with a threaded male nozzle, 20/27 diameter (3/4" hose thread) is required.

Flow rate :	20 l/mn (5.3GPM) mini.	
Pressure :	200 kPa (2 bars or 29 PSI) mini. and 600 kPa (6 bars or 87 PSI) maxi.	
Temperature :	10°C - 50°C (50 °F - 122°F)	
pH :	5 – 7.5	
Hardness :	4 °f < softened water < 8 °f	Purified water < 4 °f
	2 °d < softened water < 4 °d	Purified water < 2 °d
	14 gpg < softened w. < 28 gpg	Purified water < 14 gpg
	40 ppm < softened w. < 80 ppm	Purified water < 40 ppm

INTERMEDIATE PRESSURE PURIFIED SUPPLY OPTION

A valve with a threaded male nozzle, 20/27 diameter (3/4" hose thread) is required.

Flow rate :	20 l/mn (5.3GPM) mini.	
Pressure :	200 kPa (2 bars ou 29 PSI) maxi.	
Temperature :	10°C - 50°C (50 °F - 122°F)	
pH :	5 – 7.5	
Hardness :	4 °f < softened water < 8 °f	Purified water < 4 °f
	2 °d < softened water < 4 °d	Purified water < 2 °d
	14 gpg < softened w. < 28 gpg	Purified water < 14 gpg
	40 ppm < softened w. < 80 ppm	Purified water < 40 ppm

DIRECT PURIFIED WATER INLET WITH VALVE OPTION (90010533)

Located on washer, tri-clamp connection ISO.

	Tube diameter	Clamp diameter
TRI CLAMP	13.5 mm (0.53")	25 mm (0.98")

Water inlet hose with 13.5 mm ISO triclamp fitting to be provided by Others.

Flow rate :	20 l/mn (5.3GPM) mini.	
Pressure :	200 kPa (2 bars or 29 PSI) mini. and 600 kPa (6 bars or 87 PSI) maxi.	
Temperature :	10°C - 50°C (50 °F - 122°F)	
pH :	5 – 7.5	
Hardness :	4 °f < softened water < 8 °f	Purified water < 4 °f
	2 °d < softened water < 4 °d	Purified water < 2 °d
	14 gpg < softened w. < 28 gpg	Purified water < 14 gpg
	40 ppm < softened w. < 80 ppm	Purified water < 40 ppm

DIRECT PURIFIED WATER INLET WITHOUT VALVE OPTION (90010531)

Located on washer, tri-clamp connection ISO + dry contact to control valve loop

	Tube diameter	Clamp diameter
TRI CLAMP	13.5 mm (0.53")	25 mm (0.98")

Provide, by Others, a stop valve close to the washer.

Water inlet hose to be provided by Others

The time of opening and closing the valve must be less than one second, for proper operation of the washer.

Water inlet hose with 13.5 mm ISO triclamp fitting to be provided by Others.

Flow rate : 20 l/min (5.3 GPM) under minimum pressure of 200 kPa (2 bar or 29 PSI) and maximum 600 kPa (6 bar or 87 PSI).

Flow rate :	20 l/mn (5.3GPM) mini.	
Pressure :	200 kPa (2 bars or 29 PSI) mini. and 600 kPa (6 bars or 87 PSI) maxi.	
Temperature :	10°C - 50°C (50 °F - 122°F)	
pH :	5 – 7.5	
Hardness :	4 °f < softened water < 8 °f	Purified water < 4 °f
	2 °d < softened water < 4 °d	Purified water < 2 °d
	14 gpg < softened w. < 28 gpg	Purified water < 14 gpg
	40 ppm < softened w. < 80 ppm	Purified water < 40 ppm

COMPRESSED AIR CONNECTION

A disconnecting device to remove the pressure in the hoses is required. This device must be clearly identify and lockable to guaranty the disconnection to any technician during the maintenance.

WASHER WITH CE MARKING

DIRECT WATER INLET WITH VALVE OPTION (90010533)

The machine is fitted with a compressed air tube, length ~ 1.50m (59") with female threaded connection, diam. 20/27, (3/4").

A valve with a threaded male nozzle, 20/27 diameter (3/4" hose thread) is required.

A minimum pressure of 500 kPa (5 bar or 72.5 PSI) and maximum 700 kPa (7 bar or 101.5 PSI).

This compressed air allows the piloting of the valve. The consumption is minimal.

WASHER WITH UL MARKING

DIRECT WATER INLET WITH VALVE OPTION (90010533)

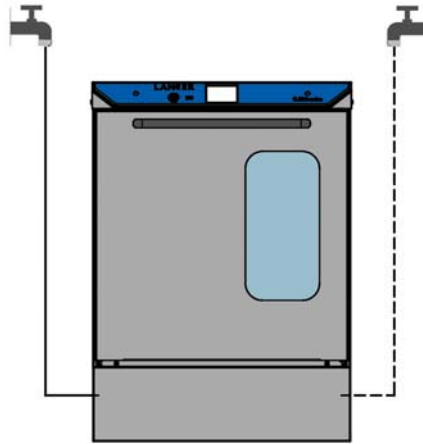
The machine is fitted with a 10mm (3/8") ID compressed air hose, length ~ 1.50m (59").

A valve with a 10mm (3/8") hose barb fitting is required.

A minimum pressure of 500 kPa (5 bar or 72.5 PSI) and maximum 700 kPa (7 bar or 101.5 PSI).

This compressed air allows the piloting of the valve. The consumption is minimal.

WATERS LOCATION



Maximal distance available

500 mm (19.68")

WATERS

Maximal distance available

800 mm (31.49")

WATERS MUST BE LOCATED IN THIS AREA.

Services can be installed to the left, to the right or behind the machine

Only one connection point is required



DO NOT BEND OR CONSTRICT THE TUBE AS THIS COULD STOP OR SLOW DOWN THE FLOW OF WATER.

CHECK THAT THE SCREWS AT BOTH ENDS OF THE TUBE ARE TIGHTENED CORRECTLY TO PREVENT WATER LEAKAGE.



ENSURE THAT THE MINIMUM CLEARANCE REQUIREMENT IS MAINTAINED BETWEEN THE WASHER AND UTILITY CONNECTION POINT.

ELECTRICAL CONNECTION



BEFORE CARRYING OUT ANY WORK ON THE WASHER, MAKE SURE IT IS SWITCHED OFF AT THE ELECTRICAL DISCONNECT SWITCH.



ELECTRICAL SUPPLY :

CHECK FOR CORRECT VOLTAGE SUPPLY AT THE ELECTRICAL PANEL BEFORE MAKING ANY ELECTRICAL CONNECTIONS.



BEFORE ANY TEST, CHECK THE ROTATION DIRECTION OF THE RECYCLING PUMP.

WASHER WITH CE MARKING



ELECTRICAL DISCONNECT SWITCH :

THE FOLLOWING EQUIPMENT MUST BE EASILY AND QUICKLY ACCESSIBLE NEAR THE WASHER : A DISCONNECTING SWITCH LOCKABLE IN THE OPEN (OFF) POSITION AND A DIFFERENTIAL MAGNETIC-THERMAL CIRCUIT-BREAKER WITH TYPE D TRIPPING CURVE.

Total power to be supplied	Supply voltage	Consumption	Overcurrent protective device size
7 kW	400V Tri+N+T / 50Hz	11 A / phase	16 A / phase
7 kW	220-240V Tri +T / 50Hz	18 A / phase	20 A / phase
7 kW	200-208V Tri +T / 50Hz	21 A / phase	25 A / phase
7 kW	220-240 Mono+T / 50Hz	31 A / phase	40 A / phase

WASHER WITH UL MARKING

**ELECTRICAL SUPPLY CABLE CONNECTION AND ROUTING :**

THE ELECTRICAL CONNECTION IS MADE AT THE SCREW-TYPE TERMINAL BLOCK LOCATED BEHIND THE LOWER FRONT PANEL OF THE MACHINE USING WIRE SUITABLE FOR AT LEAST 75°C. THE TERMINALS MUST BE SECURELY TIGHTENED TO THE POWER SUPPLY WIRES.

THE POWER SUPPLY CABLE SHOULD ENTER THROUGH THE COMPRESSION GLAND ON LEFT-HAND SIDE OF THE WASHER.

CARE MUST BE TAKEN TO PREVENT THE WIRE FROM CONTACTING ANY MOVING COMPONENTS WITHIN THE MACHINE.

**ELECTRICAL PROTECTION DEVICE :**

A CIRCUIT BREAKER OR FUSES MUST PROVIDE PROTECTION FROM OVERCURRENT ELECTRICAL CONDITIONS. THE CIRCUIT BREAKER OR FUSES MUST BE LABELLED AS THE PROTECTION DEVICE FOR THE GETINGE LANCER WASHER. THE OVERCURRENT PROTECTIVE DEVICE SIZE REQUIRED FOR THIS MACHINE IS SPECIFIED BELOW OR MUST MEET LOCAL ELECTRICAL CODES.

Total power to be supplied	Supply voltage	Consumption	Overcurrent protective device size
7 kW	220-240V Tri +T / 60Hz	18 A / phase	20 A / phase
7 kW	200-208V Tri +T / 60Hz	20 A / phase	25 A / phase
7 kW	220-240V Mono +T / 60Hz	31 A / phase	35 A / phase
7 kW	200-208V Mono +T / 60Hz	34 A / phase	40 A / phase
2 kW	120V Mono +T / 60Hz	17 A / phase	20 A / phase
2.4 kW	120V Mono +T / 60Hz 4 heaters configuration	20 A / phase	25 A / phase

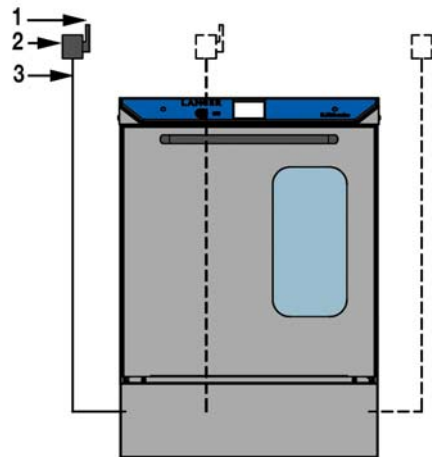
DISCONNECT SWITCH LOCATION

WASHER WITH CE MARKING



ELECTRICAL DISCONNECT SWITCH :

THE FOLLOWING EQUIPMENT MUST BE EASILY AND QUICKLY ACCESSIBLE NEAR THE WASHER : A DISCONNECTING SWITCH LOCKABLE IN THE OPEN (OFF) POSITION AND A DIFFERENTIAL MAGNETIC-THERMAL CIRCUIT-BREAKER WITH TYPE D TRIPPING CURVE.



- 1- ELECTRICAL DISCONNECT SWITCH (*PROVIDED BY OTHERS*)
- 2- CIRCUIT BREAKER OR FUSES (*PROVIDED BY OTHERS*)
- 3- ELECTRICAL CABLE (*PRESTATION GETINGE LANCER*)

Maximal distance available

500 mm (19.68")

Maximal distance available

800 mm (31.49")

DISCONNECT SWITCH MUST BE LOCATED IN THE AREA.

Disconnect switch can be installed to the left, to the right or behind the machine

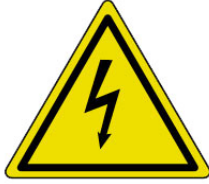
Only one connection point is required

Note : A plug connection is preferred for ease of servicing.



ENSURE THAT THE MINIMUM CLEARANCE REQUIREMENT IS MAINTAINED BETWEEN THE WASHER AND UTILITY CONNECTION POINT.

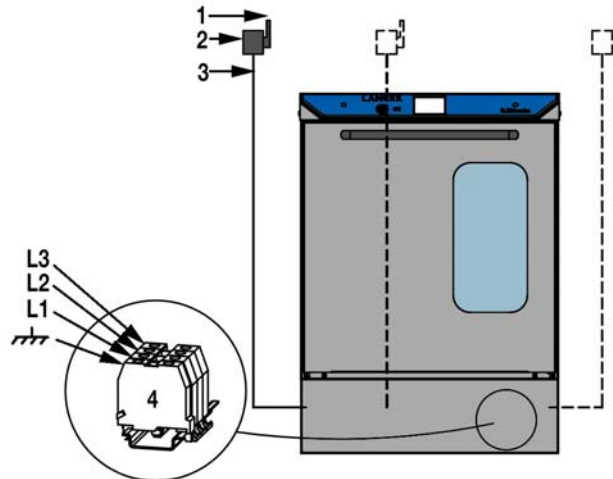
WASHER WITH UL MARKING

**ELECTRICAL DISCONNECT SWITCH :**

THE FOLLOWING EQUIPMENT MUST BE EASILY AND QUICKLY ACCESSIBLE NEAR THE WASHER : A DISCONNECTING SWITCH LOCKABLE IN THE OPEN (OFF) POSITION.



DURING THE INSTALLATION, YOU WILL SEE BLUE WIRES IN THE ELECTRICAL HARNESS IN THE MACHINE. THESE WIRES ARE NOT APPROPRIATE TO THE UL / CSA STANDARDS AND CANNOT BE USED UNDER THESE LABELS.



- | | |
|---|--|
| 1 | ELECTRICAL DISCONNECT SWITCH (<i>PROVIDED BY OTHERS</i>) |
| 2 | CIRCUIT BREAKER OR FUSES (<i>PROVIDED BY OTHERS</i>) |
| 3 | ELECTRICAL CABLE (<i>PROVIDED BY OTHERS</i>) |
| 4 | TERMINAL BLOCK (L3 ONLY ON THREE PHASE MACHINE) |



ENSURE THAT THE MINIMUM CLEARANCE REQUIREMENT IS MAINTAINED BETWEEN THE WASHER AND UTILITY CONNECTION POINT.

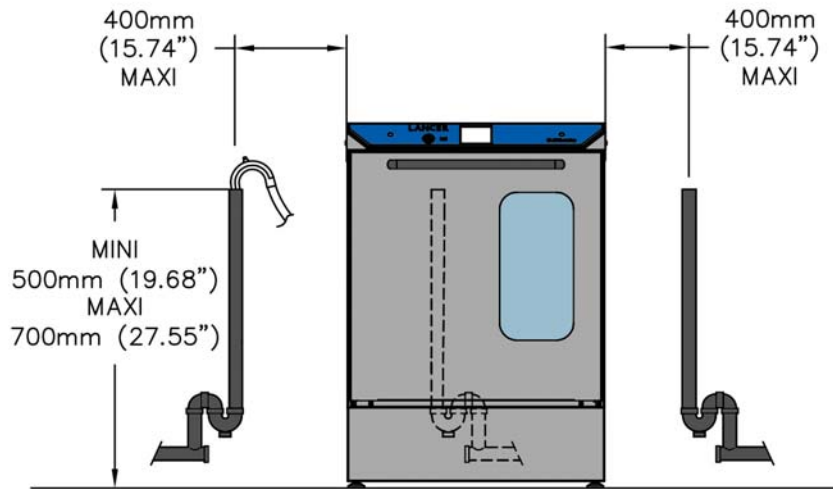
DISCHARGE OF WASTE WATERS

STANDARD 810 LX

DRAINING

Provide a fixed standpipe and plumbing trap with :

- Height above floor level : from 500 mm (19.68") minimum to 700 mm (27.55") maximum.
- Temperature up to 95°C (203°F).
- With inner tube \varnothing 40mm (1.6") and capable of accepting a flow of 40 l/min (10.6 GPM).



Maximal distance available

400 mm (15.75")

DRAINING

Maximal distance available

400 mm (15.74")

THE DISCHARGE TUBE MUST BE LOACATED IN THIS AREA.

The discharge tube can be installed to the left, to the right or behind the machine

Only one connection point is required



DO NOT BEND OR CONSTRICT THE TUBE AS THIS COULD STOP OR SLOW DOWN THE FLOW OF WATER.



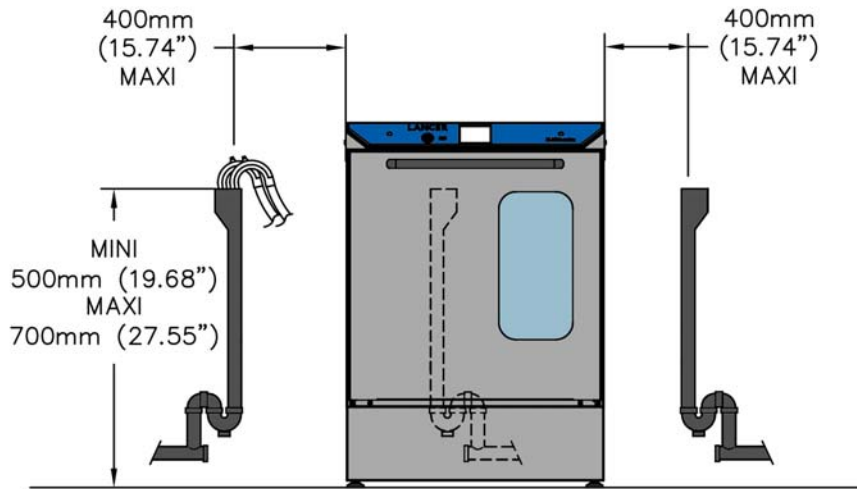
ENSURE THAT THE MINIMUM CLEARANCE REQUIREMENT IS MAINTAINED BETWEEN THE WASHER AND UTILITY CONNECTION POINT.

STANDARD 815 LX OR 810 LX CONDENSER OPTION

DRAINING

Provide 2 fixed standpipes and plumbing trap with :

- Height above floor level : from 500 mm (19.68") minimum to 700 mm (27.55") maximum.
- Temperature up to 95°C (203°F).
- With inner tube Ø 40mm (1.6") and capable of accepting a flow of 40 l/min (10.6 GPM).



Maximal distance available

Maximal distance available

400 mm (15.75")

DRAINING

400 mm (15.74")

THE DISCHARGE TUBE MUST BE LOACATED IN THIS AREA.

The discharge tube can be installed to the left, to the right or behind the machine

Only one connection point is required



DO NOT BEND OR CONSTRICT THE TUBE AS THIS COULD STOP OR SLOW DOWN THE FLOW OF WATER.

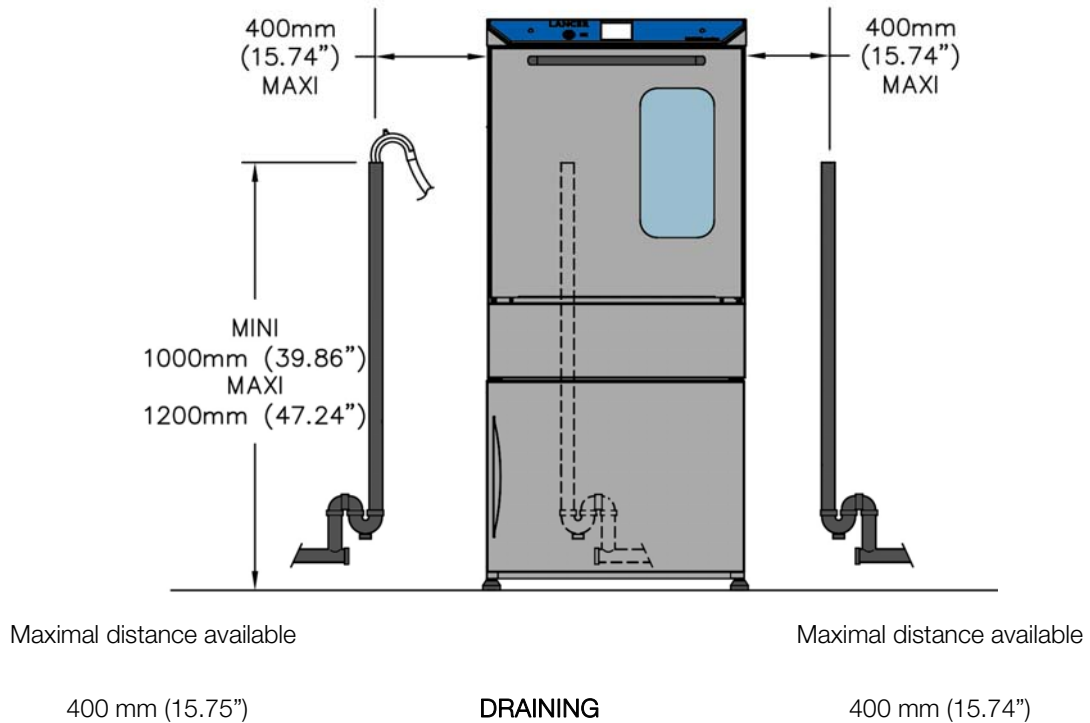


ENSURE THAT THE MINIMUM CLEARANCE REQUIREMENT IS MAINTAINED BETWEEN THE WASHER AND UTILITY CONNECTION POINT.

*810 LX BASE CABINET OPTION (90010196)***DRAINING**

Provide a fixed standpipe and plumbing trap with :

- Height above floor level : from 1000 mm (39.36") minimum to 1200 mm (47.24") maximum.
- Temperature up to 95°C (203°F).
- With inner tube Ø 40mm (1.6") and capable of accepting a flow of 40 l/min (10.6 GPM).



THE DISCHARGE TUBE MUST BE LOACATED IN THIS AREA.

The discharge tube can be installed to the left, to the right or behind the machine
Only one connection point is required



DO NOT BEND OR CONSTRICT THE TUBE AS THIS COULD STOP OR SLOW DOWN THE FLOW OF WATER.



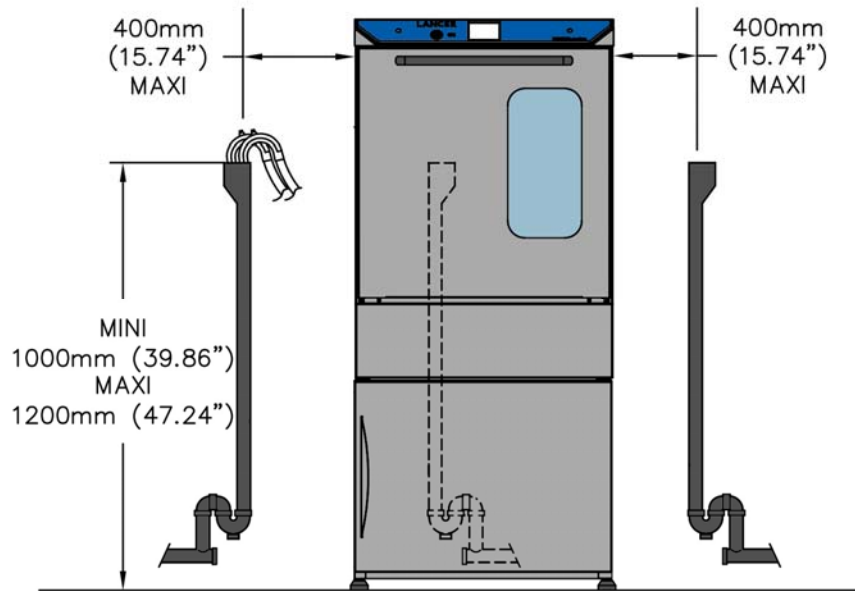
ENSURE THAT THE MINIMUM CLEARANCE REQUIREMENT IS MAINTAINED BETWEEN THE WASHER AND UTILITY CONNECTION POINT.

815 LX BASE CABINET OPTION (90010196) OR 810 LX BASE CABINET OPTION (90010196) + CONDENSER OPTION

DRAINING

Provide 2 fixed standpipes and plumbing trap with :

- Height above floor level : from 1000 mm (39.36") minimum to 1200 mm (47.24") maximum.
- Temperature up to 95°C (203°F).
- With inner tube Ø 40mm (1.6") and capable of accepting a flow of 40 l/min (10.6 GPM).



Maximal distance available

400 mm (15.75")

DRAINING

Maximal distance available

400 mm (15.74")

THE DISCHARGE TUBE MUST BE LOACATED IN THIS AREA.

The discharge tube can be installed to the left, to the right or behind the machine

Only one connection point is required



DO NOT BEND OR CONSTRICT THE TUBE AS THIS COULD STOP OR SLOW DOWN THE FLOW OF WATER.



ENSURE THAT THE MINIMUM CLEARANCE REQUIREMENT IS MAINTAINED BETWEEN THE WASHER AND UTILITY CONNECTION POINT.

DISCHARGE OF EXHAUST VAPOR

The machine discharges hot moist air, causing condensation in the exhaust. Horizontal sections of exhaust ducting will require drains at the lowest points.

The machine is equipped with an exhaust fan.



TO AVOID PRESSURE PROBLEMS IN THE CHAMBER, DO NOT BLOCK THE HOT MOIST AIR EXHAUST TUBE.

A DIRECT (HARD PIPE) CONNECTION BETWEEN THE WASHER'S EXHAUST TUBE AND BUILDING EXHAUST SYSTEM IS NOT ALLOWED FOR SAFETY REASONS.

810 LX

Characteristics:

- Air flow : 60 m³/H (35 CFM)
- Maximum temperature : 95°C (203°F)
- Maximum relative humidity : 85%

815 LX OU 810 LX CONDENSER OPTION

Characteristics:

- Air flow : 60 m³/H (35 CFM)
- Maximum temperature : 60°C (140°F)
- Maximum relative humidity : 70%

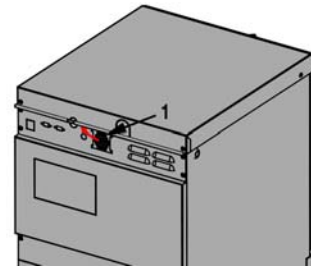
Two solutions are available to extract hot moist air:

EXTRACTION DIRECTLY INTO THE ROOM

The room must be well ventilated.

Air exhaust tube -1- must be turned as shown.

-1- Hot moist air exhaust tube



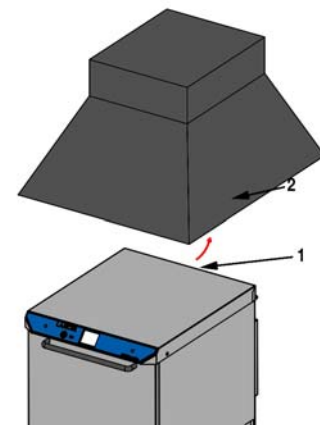
EXTRACTION WITH AN EXHAUST HOOD

Provide, by others, an exhaust hood placed between 300mm (12 ") minimum and 1000mm (40") maximum above the washer exhaust tube.

Air exhaust tube -1- must be turned as shown.

-1- Hot moist air exhaust tube

2- Exhaust hood



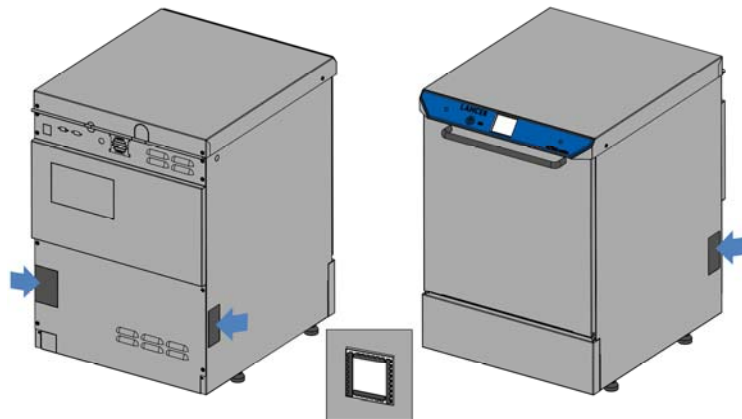
CONNECTIONS ON THE WASHER

Remove the rear washer bodywork to extricate hoses and cable.

Cut pre-cut plates for the passage of connections, areas indicated by blue arrows.

Place the protection around the cutouts to protect hoses and cables.

Then switch to water hoses, drain and electrical cable to connect to the services.

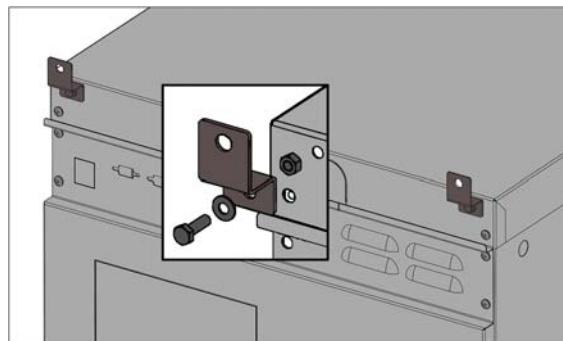


WALL FIXATION *OPTION (90010196)*

If your washer is equipped with a base cabinet, it is recommended to fix the washer against the wall. You can choose, according to the space available around the washer, the location of the fixing plate to the wall : on the side or on top of the cover .

MOUNTING OF THE PLATES :

- Take the two fixing plates out of the chamber,
- Install the plates on the cover
- Fix the plates to the wall.



WASHING PRODUCTS

The washing and operational performance of the washer has been validated with the GETINGE LANCER line of cleaning chemicals. The use of GETINGE LANCER cleaning chemicals guarantees good results and long life of your machine.

WASHER WITH CE MARKING

LANCER L.L.L DETERGENT

LANCER LLL DETERGENT is particularly adapted to the washing of laboratory glass-ware

- Use in machine Specially formulated for use in all disciplines within laboratories
- Producing high quality and analytically clean results
- Phosphate free and fully biodegradable
- Without risk over the aluminium, the plastic and the rubber
- Available in container of 10 liters
- Ref: L.L.L.
- Dose of 6-10 ml per liter (water hardness values between 200 and 400 ppm)



LANCER N.L.L. NEUTRALISANT

LANCER NLL NEUTRALISANT is particularly adapted to the final rinse of laboratory glass-ware.

- Use in machine. For the final rinse of the glass-ware
- Mostly used with laboratory washers
- Acetic acid based
- Available in container of 10 liters
- Ref: NLL
- Dose of 5 ml per liter



WASHER WITH UL MARKING

LANCER LCD DETERGENT

LANCERCLEAN Detergents are available in three solutions:

LCD-P:

Our most popular detergent, LCD-P is a potassium hydroxide based solution. LCD-P provides excellent cleaning results for all types of contaminants and standard laboratory soils and is recommended for use in all glassware washers.



LCD-S:

A sodium hydroxide based solution; LCD-S is specifically formulated to provide exceptional cleaning for the most difficult types of contaminants. LCD-S is used for petroleum applications, "baked-on" organic residues and other hard to clean soils that require a more powerful cleaning agent. LCD-S is recommended for use in all glassware washers.



LCD-H:

A low pH detergent; LCD-H is comprised of a sodium silicate solution. LCD-H is best used for surgical instruments, metals and soils that require a low pH detergent. LCD-H is recommended for use in all glassware washers.



LANCER LCA NEUTRALISANT

LANCERACID Rinses are available in three solutions:

LCA-A:

Our most commonly used rinsing agent; LCA-A is used in the rinse cycle subsequent to our LANCERCLEAN Detergents. This acetic acid based neutralizer provides an excellent rinse on all standard laboratory soils and contaminants. LCA-A is recommended for use in all glassware washers.



LCA-C:

An excellent rinsing agent; LCA-C is used in the rinse cycle subsequently to our LANCERCLEAN Detergents. This citric acid based neutralizer provides an excellent rinse for organics and pharmaceutical based contaminants. LCA-C is recommended for use in all glassware washers.



LCA-P:

An exceptional rinsing agent; LCA-P is used in the rinse cycle subsequently to our LANCERCLEAN Detergents. This phosphoric acid based solution works excellently for dealing with petroleum and other difficult soils. LCA-P is recommended for use in all glassware washers.



Please do not hesitate to consult GETINGE LANCER for application specific solutions.

INSTALLATION OF THE WASHING PRODUCTS

The chemical suction diptubes are identified by the following labels :

NON-FOAMING DETERGENT

Place a container of NON-FOAMING LIQUID DETERGENT next to the washer at a maximum height of 150 mm (6") above floor level. Remove the cap from the detergent container and insert the detergent suction tube into the detergent container. Tighten the cap.

IT IS STRICTLY PROHIBITED TO USE SOLVENTS AS DETERGENT.

PLEASE REFER TO SUPPLIERS MATERIAL SAFETY DATA SHEET FOR SPECIFIC INFORMATION REGARDING THE DETERGENT TO BE USED IN THIS MACHINE.

NEUTRALIZING ACID

Place a container of NEUTRALIZING ACID next to the washer at a maximum height of 150 mm (6") above floor level. Remove the cap from the acid container and insert the acid suction tube into the acid container. Tighten the cap.

THE USE OF NITRIC AND CHLORHYDRIC ACID IS PROHIBITED. ONLY DILUTE PHOSPHORIC, ACETIC AND CITRIC ACIDS CAN BE USED.

PLEASE REFER TO SUPPLIERS MATERIAL SAFETY DATA SHEET FOR SPECIFIC INFORMATION REGARDING THE ACID TO BE USED IN THIS MACHINE.

WASHER WITH CE MARKING

GETINGE LANCER supply,

LIQUID DETERGENT reference "L.L.L." in container of 10 liters.

LIQUID NEUTRALISANT reference "N.L.L." in container of 10 liters.

Dimensions of 10 liters containers : 200 x 230 x 320 mm.

WASHER WITH UL MARKING

Dimensions of 2.5 gal. containers : 14.5 x 6.5 x 9 in.



BEFORE CARRYING OUT ANY WORK ON THE WASHER,
MAKE SURE IT IS SWITCHED OFF AT THE DISCONNECTING
SWITCH.

PRECAUTIONS BEFORE USING YOUR WASHER



NEVER USE YOU WASHER WITHOUT PRIOR TRAINING.

Your washer is now properly positioned and installed.

You must read user manual in order to learn how the washer operates.

All personnel using the washer (users and technicians) must have received complete training on use and maintenance.

This training must be carried out on a regular basis and always before the washer is used for the first time.

A record of this training must be stored as evidence that the users attended and understood the contents of the course.

Training should include:

- How the washer functions
- How to load items on the baskets
- The use of the different processing programs
- Review of alarms and the procedure to follow in case of alarm
- Everyday maintenance of the washer (cleaning of external parts, filters...)
- Knowledge of the chemical products utilized
- Management of consumables (change of paper, product containers...)
- The different levels of traceability (if applicable)

LANCER
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GETINGE GROUP

Getinge Group is a leading global provider of products and systems that contribute to quality enhancement and cost efficiency within healthcare and life sciences. We operate under the three brands of ArjoHuntleigh, Getinge and Maquet. ArjoHuntleigh focuses on patient mobility and wound management solutions. Getinge provides solutions for infection control within healthcare and contamination prevention within life sciences. Maquet specializes in solutions, therapies and products for surgical interventions, interventional cardiology and intensive care.
