

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
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Владикавказ (8672)28-90-48
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Вологда (8172)26-41-59
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Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
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Казань (843)206-01-48
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Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
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Красноярск (391)204-63-61
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Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
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Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
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Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
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Тверь (4822)63-31-35
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Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

www.getinge.nt-rt.ru | | gtw@nt-rt.ru

Технические характеристики на лабораторные стиральные машины, загрузочное оборудование для лабораторных моек Lancer Ultima компании **GETINGE**

Виды товаров: лабораторные стиральные машины для установки под столешницу, отдельностоящие лабораторные стиральные машины, загрузочное оборудование для лабораторных моек, инжекторные стойки для узких деталей, базовые стойки для стаканов, универсальные стеллажи для смешанных грузов, корзины, форсунки, крышки, тележки и др.

Getinge Lancer Ultima labware washing systems

Freestanding series

This document is intended to provide information to an international audience outside of the US.

Professional cleaning results – integrated systems, repeatable results

From quality control to general laboratory research, Getinge Lancer Ultima series washers meet space and budget requirements in laboratories performing a range of critical applications where clean labware is essential.

Typical applications include analytical chemistry, quality control, pharmaceutical and environmental science laboratories, wastewater treatment, food and beverage analysis, public health and consumer product testing facilities.

The exclusive Prolux programmable microprocessor controller commands a full range of prewash, wash, rinse and drying functions through simple touchscreen menus on all Ultima series washers. The convenience of five preset programs for light to heavy loads simplifies operation, while more complex programs can be customized whenever needed to meet specific applications.



Getinge Lancer Ultima model 1300 LX freestanding labware washer, shown with accessory loading rack, sold separately.



Quiet Operation
Noise reduction design minimizes sound for quiet operation.



Cool Surface
High-performance insulation contains heat and limits energy consumption.



Prolux programmable microprocessor controller with intuitive touchscreen user interface.

Control screen shows actual cycle performance, alarm events. Data is captured for documentation and communication.

Preset or user programmed cycles are fully adjustable to permit multiple combinations of prewash, wash, rinse, acid rinse, purified final rinse, HEPA filtered forced air drying, controlled duration, temperature and more.

High efficiency powerful fluid circulation with direct fluid path and rear manifold connections deliver optimal pressure and flow rates.

Chamber walls made in durable AISI 316L stainless steel material.

Injector jet performance provides inside out wash and rinse functions.

Stainless steel top and bottom spray arms and multiple levels of injection washing ensure thorough spray coverage.

Two integrated automatic chemical dosing pumps are standard on all models. Convenient on-board chemical storage beneath chamber saves space.



View-In-Process Window

An optional View-In-Process (VIP) window includes an interior LED light for visual verification of the interior load during the cycle.

Meeting a variety of laboratory needs

The Getinge Lancer Ultima series freestanding washers include six high-performance models that offer a range of labware loading options using baskets, injector racks or combination racks for the best high capacity processing of multiple labware types in the industry.



910 LX / 1300 LX / 1400 LX features	1400 LXP / 1600 LXP features
Prolux control interface	Prolux Plus control interface
Manual fold down door	Manual fold down door
Forced-air drying, injectors, HEPA filtered	Forced-air drying, injectors, HEPA filtered

Capacity comparison					
Model	Volume	Interior (W x H x D)	Positions	Wash levels	Configurations
910 LX	160 L (5.7 cu. ft.)	535 x 544 x 520 mm (21.1" x 21.4" x 20.5")	3	2	3
1300 LX	180 L (6.4 cu. ft.)	535 x 644 x 520 mm (21.1" x 25.4" x 20.5")	4	3	5
1400 LX / 1400 LXP	304 L (10.7 cu. ft.)	626 x 773 x 629 mm (24.6" x 30.4" x 24.8")	4	3	6
1600 LXP	408 L (14.4 cu. ft.)	703 x 858 x 678 mm (27.7" x 33.8" x 26.7")	5	4	12
1600 LXP/HE	528 L (18.6 cu. ft.)	703 x 1108 x 678 mm (27.7" x 43.6" x 26.7")	5	4	12

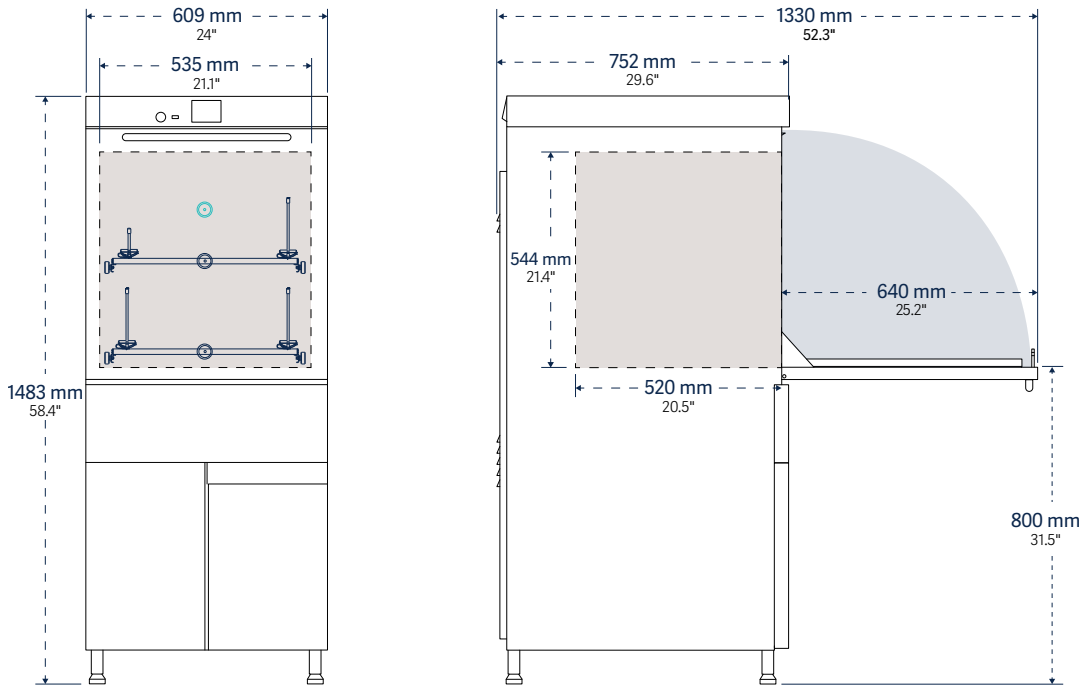
Models shown (left to right) 910 LX, 1300 LX, 1400 LX, 1400 LXP, 1600 LXP and 1600 LXP/HE. View-In-Process (VIP) window is an optional feature.

Getinge Lancer Ultima model 1400 LXP freestanding labware washer, shown with accessory loading rack, sold separately.

Small spaces, impressive capacity

910 LX

Drawings display front and side of unit, with door swing allowance.



Model	Interior dimensions W x H x D	Exterior dimensions W x H x D	Water per fill* L (gal)	Programs	
				presets	custom
910 LX	535 x 544 x 520 mm 21.1" x 21.4" x 20.5"	609 x 1483 x 752 mm 24" x 58.4" x 29.6"	13 (3.4)	5	35

* Total water consumption per fill based on reservoir sump and all fluid path fill volumes, care should be taken when evaluating comparative water consumption claims.

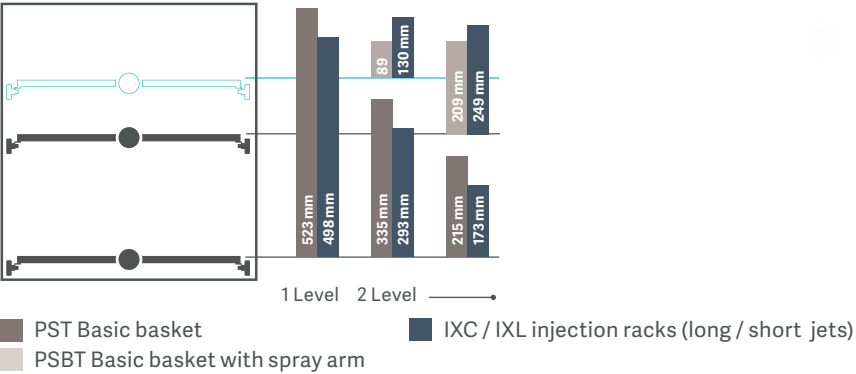


3.5"
910 LX
3.5" Prolux Control Interface,
Standard Monitoring.



Stainless steel top and bottom spray arms on all models ensure complete washing and rinsing of glassware exterior and interior of large mouthed glassware.

910 LX
Wash load configurations



Sound Level
<60 dB(A)

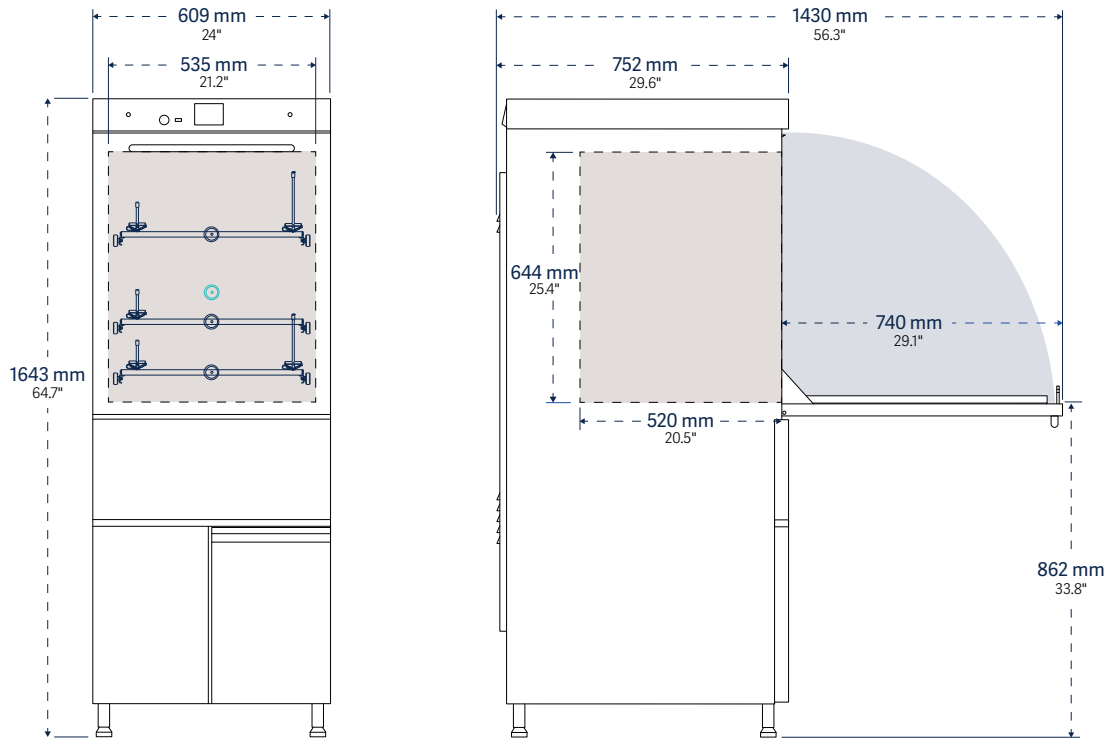
Model	Wash temp. max. °C (°F)	Cycle function		Drying	Chemical dosing				Net weight Empty kg (lb)
		Rinse purified water	Rinse acid		Automatic pumps	On-Board chemical storage	Level sensors	Water softener	
910 LX	95°C (203°F)	■	■	Forced-air chamber and in- jectors; HEPA filtered	2 (max 3)	■	2 (max 3)	□	143 (315)

■ / □ Standard / optional features

Compact footprint, lasting impression

1300 LX

Drawings display front and side of unit, with door swing allowance.



Model	Interior dimensions W x H x D	Exterior dimensions W x H x D	Water per fill* L (gal)	Programs	
				presets	custom
1300 LX	535 x 644 x 520 mm 21.1" x 25.4" x 20.5"	609 x 1643 x 752 mm 24" x 64.7" x 29.6"	15 (4)	5	35

* Total water consumption per fill based on reservoir sump and all fluid path fill volumes, care should be taken when evaluating comparative water consumption claims.

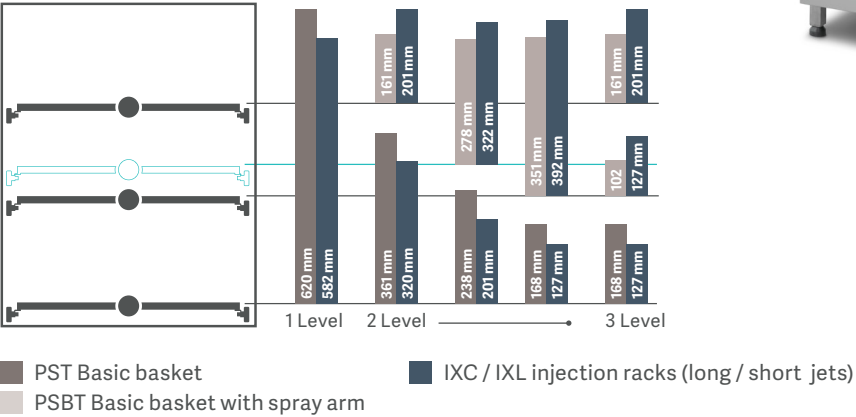


3.5"
3.5" Prolux Control Interface,
Standard Monitoring.



For maximum connectivity, all Ultima series washers include a USB port, conveniently located on the front panel for easy access and transfer of cleaning process documentation, including cycle parameters, cycle number, date and time, phase duration, temperature for each phase, and detergent and acid intake.

1300 LX
Wash load configurations



Sound Level
<60 dB(A)

Model	Wash temp. max. °C (°F)	Cycle function			Chemical dosing				Net weight Empty kg (lb)
		Rinse purified water	Rinse acid	Drying	Automatic pumps	On-Board chemical storage	Level sensors	Water softener	
1300 LX	95°C (203°F)	■	■	Forced-air chamber and in- jectors; HEPA filtered	2 (max 3)	■	2 (max 3)	□	145 (319)

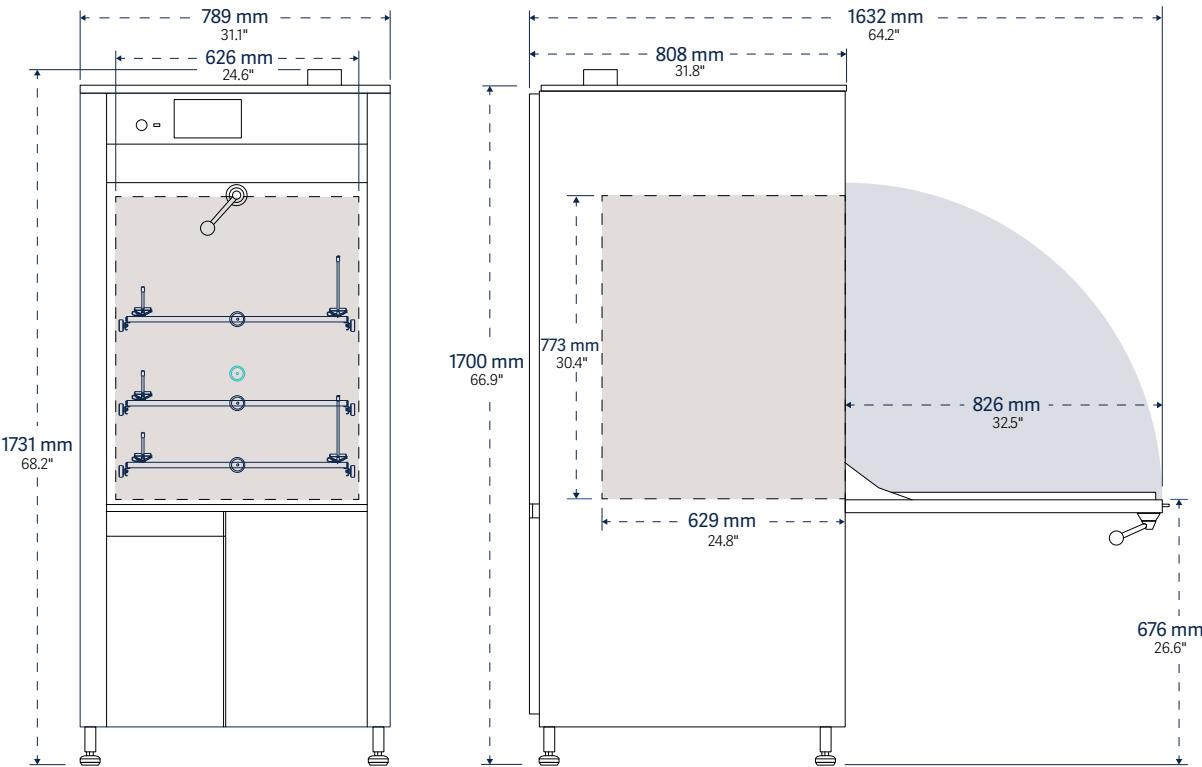
■ / □ Standard / optional features



Space efficiency, multi-level loading

1400 LX / 1400 LXP

Drawings display front and side of unit, with door swing allowance.



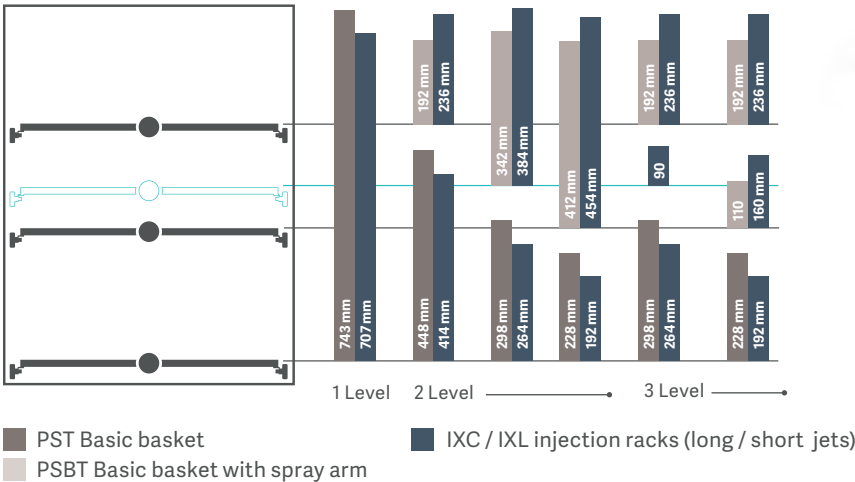
Model	Interior dimensions W x H x D	Exterior dimensions W x H x D	Water per fill* L (gal)	Programs presets	custom
1400 LX 1400 LXP	626 x 773 x 629 mm 24.6" x 30.4" x 24.8"	789 x 1731 x 808 mm 31.1" x 68.2" x 31.8"	20-25 (5.2-6.6)	5	35

* Total water consumption per fill based on reservoir sump and all fluid path fill volumes, care should be taken when evaluating comparative water consumption claims.

- 1400 LX**
3.5" Prolux Control Interface,
Standard Monitoring.
- 1400 LXP**
7" Prolux Plus Control Interface,
Enhanced Monitoring.

All Ultima series labware washers feature telescopic runners with advanced design for smooth and easy function as well as innovative rack stops for safety and ergonomics.

1400 LX / 1400 LXP
Wash load configurations



Sound Level
<60 dB(A)

Model	Cycle function				Chemical dosing				Net weight
	Wash temp. max. °C (°F)	Rinse purified water	Rinse acid	Drying	Automatic pumps	On-Board chemical storage	Level sensors	Water softener	Empty kg (lb)
1400 LX 1400 LXP	95°C (203°F)	■	■	Forced-air chamber and in- jectors; HEPA filtered	2 (max 3) 2 (max 4)	■	2 (max 3) 2 (max 4)	□	213 (469)

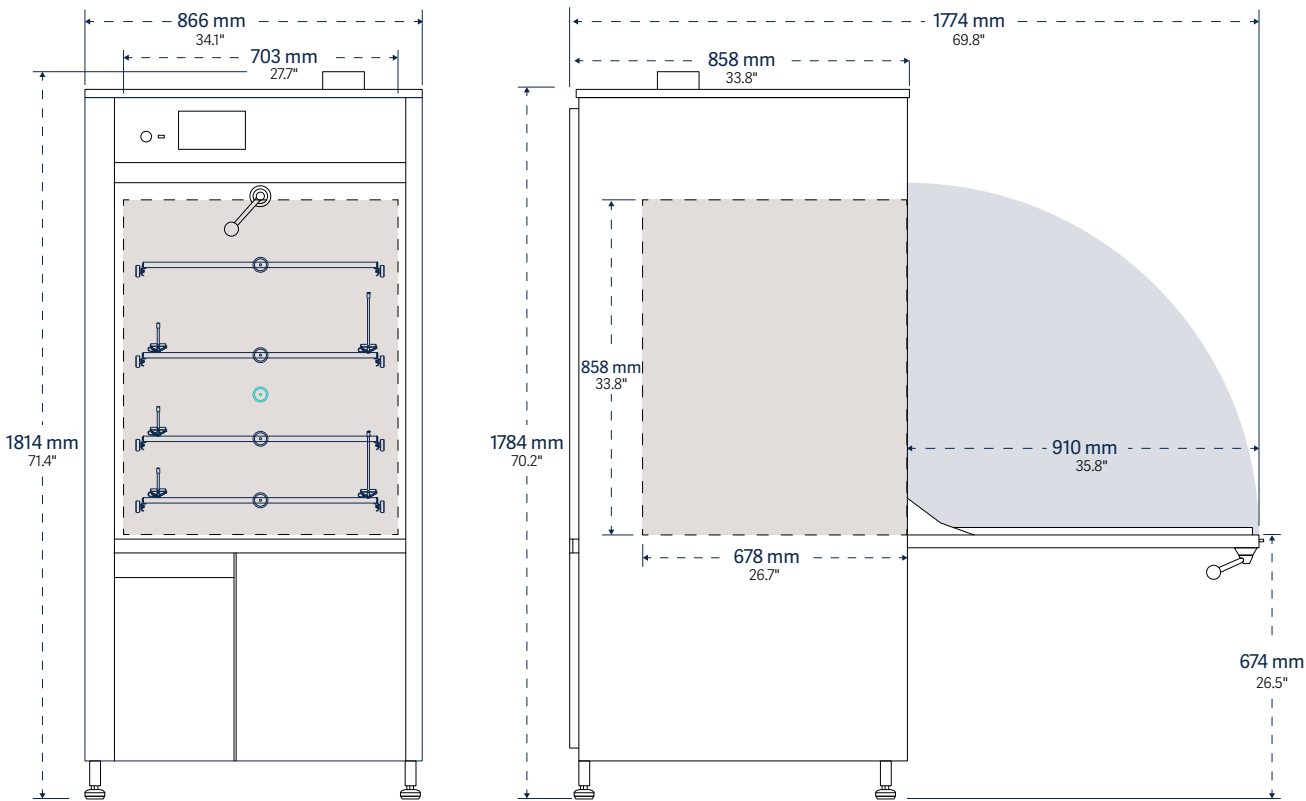
■ / □ Standard / optional features



Maximum flexibility

1600 LXP

Drawings display front and side of unit, with door swing allowance.



Model	Interior dimensions W x H x D	Exterior dimensions W x H x D	Water per fill* L (gal)	Programs	
				presets	custom
1600 LXP	703 x 858 x 678 mm 27.7" x 33.8" x 26.7"	866 x 1814 x 858 mm 34.1" x 71.4" x 33.8"	30-35 (7.9-9.2)	5	35

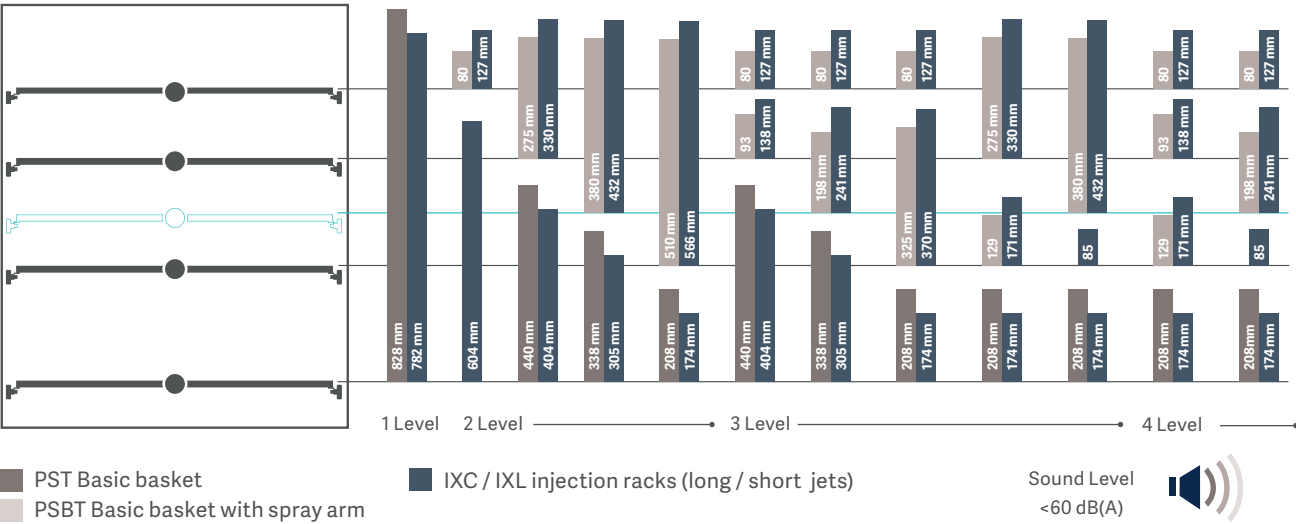
* Total water consumption per fill based on reservoir sump and all fluid path fill volumes, care should be taken when evaluating comparative water consumption claims.



1600 LXP
7" Prolux Plus Control Interface,
Enhanced Monitoring.



1600 LXP
Wash load configurations.



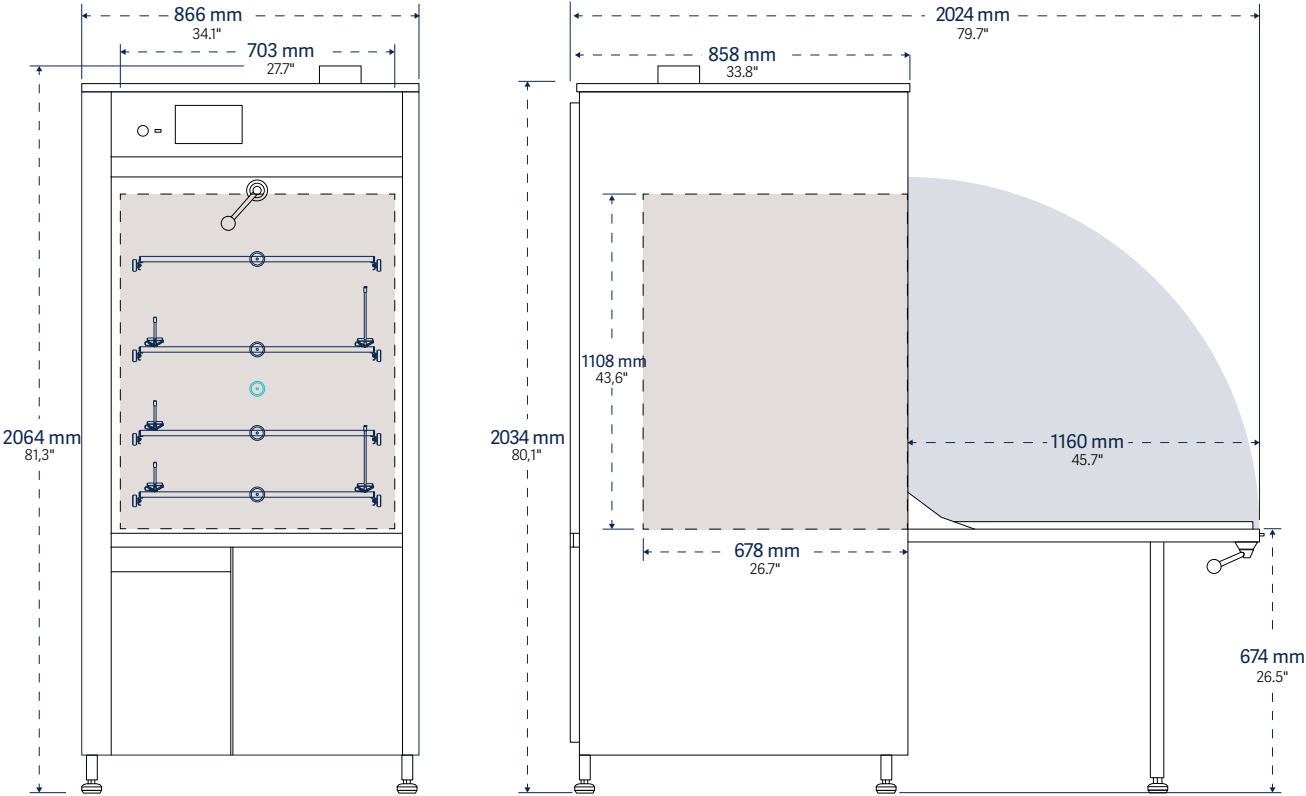
Model	Wash temp. max. °C (°F)	Cycle function			Chemical dosing				Net weight Empty kg (lb)
		Rinse purified water	Rinse acid	Drying	Automatic pumps	On-Board chemical storage	Level sensors	Water softener	
1600 LXP	95°C (203°F)	■	■	Forced-air chamber and injectors; HEPA filtered	2 (max 4)	■	2 (max 4)	□	215 (474)

■ / □ Standard / optional features

High throughput

1600 LXP/HE

Drawings display front and side of unit, with door swing allowance.



Model	Interior dimensions W x H x D	Exterior dimensions W x H x D	Water per fill* L (gal)	Programs	
				presets	custom
1600 LXP/HE	703 x 1108 x 678 mm 27.7" x 43.6" x 26.7"	866 x 2064 x 858 mm 34.1" x 81.3" x 33.8"	30-35 (7.9-9.2)	5	35

* Total water consumption per fill based on reservoir sump and all fluid path fill volumes, care should be taken when evaluating comparative water consumption claims.



7" 1600 LXP/HE

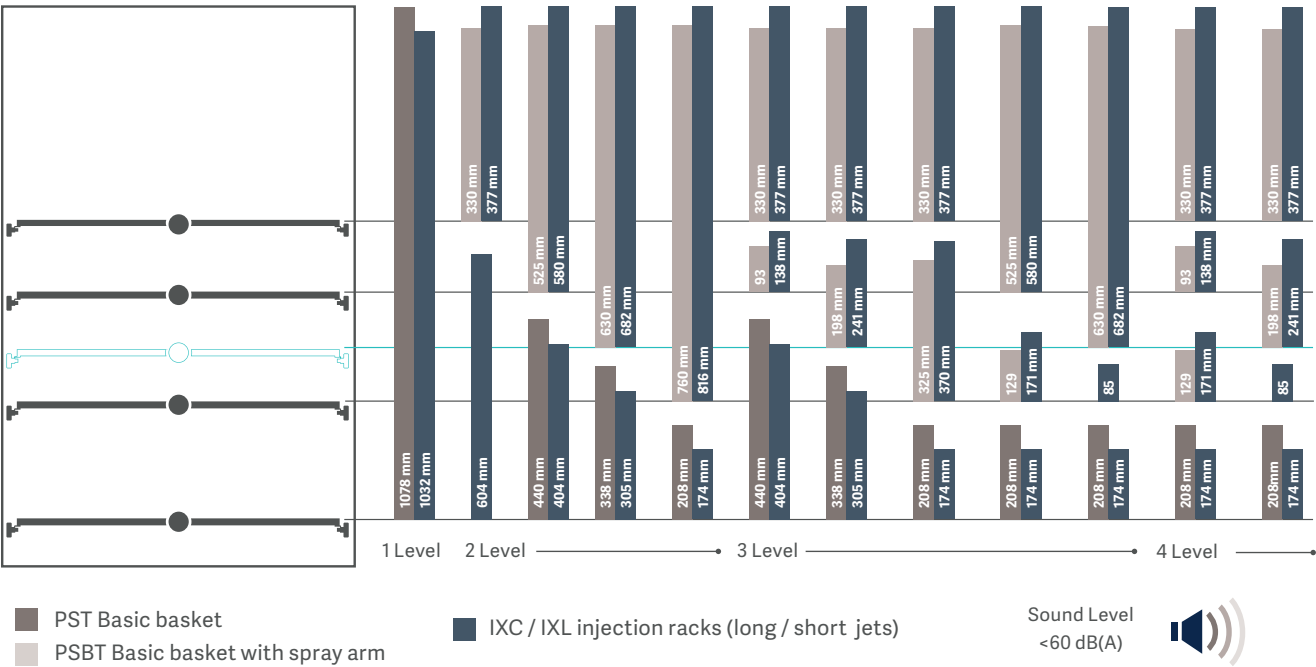


High throughput chamber with a total loading capacity of 528 liters (18,6 cu.ft)

Include door jacks for safe loading and unloading

1600 LXP/HE

Wash load configurations.



Model	Cycle function				Chemical dosing				Net weight Empty kg (lb)
	Wash temp. max. °C (°F)	Rinse purified water	Rinse acid	Drying	Automatic pumps	On-Board chemical storage	Level sensors	Water softener	
1600 LXP/HE	95°C (203°F)	■	■	Forced-air chamber and injectors; HEPA filtered	2 (max 4)	■	2 (max 4)	□	215 (474)

■ / □ Standard / optional features

Repeatable results

– with reliability, safety and high throughput

Ergonomic loading configurations.

Unlike oversized washers with less efficient loading patterns, Getinge Lancer Ultima series freestanding labware washers are designed for high-density loading and the most effective use of available interior space. This efficiency maximizes throughput and reduces capital investments, operating costs and the amount of dedicated lab space needed.

- Telescoping load-bearing rails permit extension of racks for easy loading with or without an optional trolley.
- All racks are interchangeable between wash levels thereby minimizing the need for additional accessories.
- Racks for Getinge Lancer Ultima series undercounter models and freestanding models 910 LX, 1300 LX are interchangeable.
- The fold-down door creates a platform for proper rack positioning and more comfortable loading and unloading.

Cleaning performance and safety.

Operating systems are designed for performance, efficiency and high throughput.

- An automatic door lock prevents door opening during active cycles and protects the user from heat and chemical exposure.
- Top and bottom stainless steel spray arms are pressurized to provide exterior coverage to the labware.
- Injector rack manifold connections are located at the rear for proper alignment and the most efficient pressure and flow.
- Washing temperature can be set to a maximum of 95°C (203°F) if required for more difficult soils.
- Automatic Peristaltic pumps are self-contained for accurate and repeatable dosing of detergents or acids required by each cycle.
- Multiple DI rinses can be programmed to eliminate interior and exterior spotting.



The front-loading door folds down to create an ergonomically stable platform for proper rack positioning and easier loading, eliminating the need for a trolley to load or unload glassware.

Alarms and monitoring

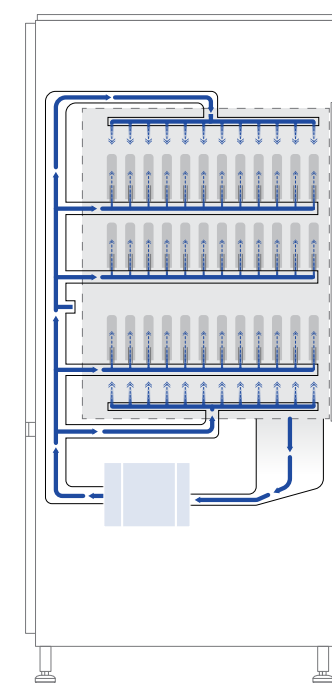
- The high resolution touchscreen color display is easy to read from a distance.
- The intuitive graphic user interface creates a series of visual performance indicators such as active program, time remaining, warning, alarm and cycle completed functions.
- Five preset programs permit one touch operation. Additional cycles are programmed from the graphic user interface.
- An integrated USB port allows easy front panel access for process tracking and data logging. Optional process record printouts available through USB or Ethernet ports are managed by the Prolux controller.

Construction

The sump, spray arms, interior chamber walls and door are fabricated from 316L stainless steel to resist aggressive chemicals and residues.

- Exterior 304L stainless steel panels resist corrosion, simplify cleaning and protect electrical and plumbing components.
- Double-wall insulated assembly confines heat loss and minimizes noise.
- Easy access stainless steel chamber filters extend washer life by protecting pumps and interior plumbing from debris.
- A compact liquid sump and direct fluid path minimizes water volume per fill, lowers overall consumption per cycle and improves sustainability throughout the useful life.

Hydraulic design



The Getinge Lancer Ultima hydraulic design optimizes pressure and flow for efficient performance at all wash levels.

The combination of a high-performance recirculation pump, straight-line fluid path and center-mounted rack interface assures maximum water flow through spray arms and injectors.

Washer pump is protected from debris by a stainless steel sump screen. The screen lifts out without tools for easy cleaning.

Model 1400 LXP, waterflow.

View-In-Process



An optional dual pane View-In-Process (VIP) window includes an interior LED light for visual verification of the interior load during the cycle. The light is activated by the On/Off switch through the Prolux controller. Tempered safety glass provides excellent sound and heat abatement and enhances operator safety. Factory installed, specify when ordering.

Model 910 LX:
348 mm (13.7") H x 173 mm (6.8") W
Models 1300 LX / 1400 LX
1400 LXP / 1600 LXP:
508 mm (20") H x 173 mm (6.8") W

* VIP window not available on model 1600LXP/HE.

Simple, flexible, documented, trusted.

Prolux controller.

The all new 3.5" Prolux and 7" Prolux Plus controllers are based on a high-performance PLC microprocessor designed for simplicity, one-touch start, real-time status indicators and intuitive programming options that permit customization over the range of washer operations.

Both the Prolux and Prolux Plus controller integrate a suite of menu screens that support digital functions from cycle selection, process monitoring, warning advisories, audible and visual alarms, system communications and data capture.

Operation

- Screen menus and graphic user interfaces are designed to simplify setup and operations including active programs, remaining time, warnings, alarms and cycle complete notifications.
- Five preset programs are factory loaded for one-touch control of most routine applications.
- When additional cycle programs are desired, parameters can be changed through secure access to the administration screen where an intuitive graphic user interface displays all options.

Communication and connectivity

- A front-panel USB port simplifies direct connection to peripheral devices for cycle tracking and data capture. The port is covered by a protective hood.
- A real-time process record is printed if optional printer is installed.
- Multiple data ports include Ethernet and RS422 connectors.
- Optional printer documents cycle performance, warnings and alarms.



The Prolux and Prolux Plus (above) controllers include a touch-screen interface with a common icon directory that permits scrolling access to primary screens from the same menu. A set of sub-menu screens display additional icon directories specific to the screen functions.

910 LX / 1300 LX / 1400 LX

- 3.5" Prolux color touchscreen interface
- 320 x 240 pixel resolution display
- Five presets
- Additional custom program options

1400 LXP / 1600 LXP / 1600 LXP/HE

- 7" Prolux Plus color touchscreen interface
- 800 x 480 pixel resolution display
- Five presets
- Additional custom program options



The Prolux control interface features an intuitive menu of primary and secondary screens, configured with icons, to simplify access to all functions. The touchscreen is easily managed with a gloved hand.

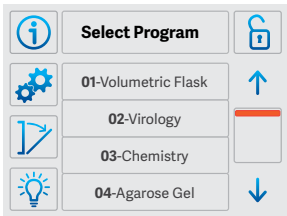
Programming

Programmable cycle parameter selections include:

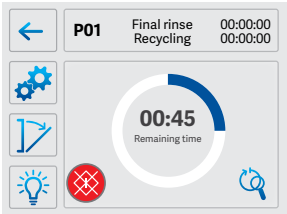
- **Prewash.** Up to 3 prewashes, 0 to 30 minutes each, temperatures up to 95°C (203°F), chemical dosing as desired.
- **Wash.** 0 to 30 minutes, temperatures up to 95°C (203°F), chemical dosing as desired.
- **Acid rinse.** 0 to 30 minutes, chemical dosing, temperatures up to 95°C (203°F).
- **Running water rinses.** One or more short rinse sequences after the wash or rinse cycle purge the hydraulic circuit of residual detergent and rinsing agents.
- **Rinse, DI.** Up to 4 rinses, 0 to 30 minutes each. Ambient to 95°C (203°F).
- **Final rinse, DI.** 0 to 30 minutes, temperatures up to 95°C (203°F).
- **Drying.** Up to 90 minutes, adjustable. Temperature, ambient to 110°C (230°F), Prolux Plus models; ambient to 85°C (185°F), Prolux models.
- **Cooling.** 0 to 30 minutes, adjustable.

Display screens

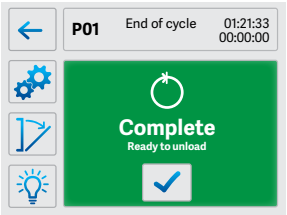
Featured display screens are 3.5" screen. Displays for 7" screens are identical.



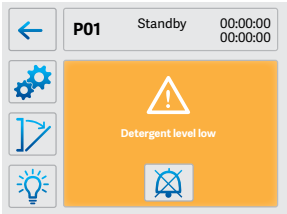
Program Selection. The Program Selection screen lists the five factory presets, as well as additional presets added through administrator access.



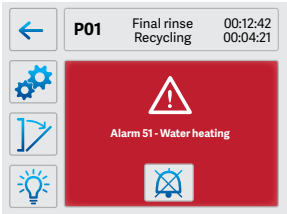
Cycle in Process. A real-time status screen displays time remaining until cycle completion and links to cycle detail screens with the touch of a button.



Cycle Completed. The green Cycle Completed screen confirms completion of the cycle and indicates the washer is safe to unload.



Warning Message. The amber Warning Message screen provides a status report to prompt refill of detergent and rinse agents.



Alarm Message. The red Alarm Message screen confirms the reason for a system shutdown and prompts corrective action needed in advance of a restart.

Comprehensive collection

– a perfect fit for any lab

Superior efficiency for needs small and large.

Geringe Lancer Ultima offers a full range of labware washers to improve throughput. Undercounter washers offer a range of performance features designed to deliver clean labware faster than other industrial washers. Undercounter washers are available in three configurations and two sizes with generous load capacities.

Geringe Lancer Ultima means superior quality

All models are produced to withstand harsh laboratory conditions, minimize water consumption and save energy. The complete line of Geringe Lancer Ultima labware

washers address applications at any capacity for high-density processing of multiple labware types.

All models feature the Prolux PLC microprocessor controller with color enhanced graphic user interface for intuitive one-touch cycle selection and start. The Prolux control functionality permits easy scale-up from smaller to larger models.

For more information on undercounter models please refer to the Geringe Lancer Ultima series undercounter brochure.

Geringe Lancer Ultima Series



*With side chemical cabinet (SCC)



Geringe Lancer Ultima model 810 LX undercounter labware washer, shown with accessory loading racks, sold separately.

GETINGE LANCER ULTIMA FREESTANDING SERIES

Bioreactor preparation solution

– consistent processes deliver repeatable results

The expertise of Geringe and Applikon research and development has established a synergistic process for bioreactor preparation.

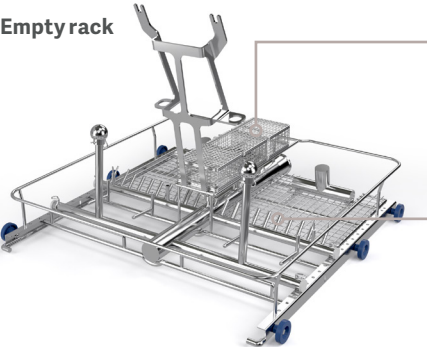
A solution to prevent cross-contamination, minimize any research downtime and ensure validated outcome through optimal processes and procedures. Geringe offers a specially designed bioreactor wash rack for Geringe Lancer Ultima laboratory washers.

This dedicated wash rack, for the Geringe Applikon multi-use bioreactors, establishes a highly reproducible system with significant benefits such as:

- Free-up resources to increase laboratory throughput and minimize downtime
- Decreasing operational labor costs compared to manual cleaning processes
- Improving staff safety by removing potential repetitive motions and exposure of harmful substances related to manual procedures.

The relationship between the bioreactor design and laboratory washer assures predictable outcomes.

The defined connection points on the wash rack and bioreactor head plate ensures a clean bioreactor prepared for sterilization.



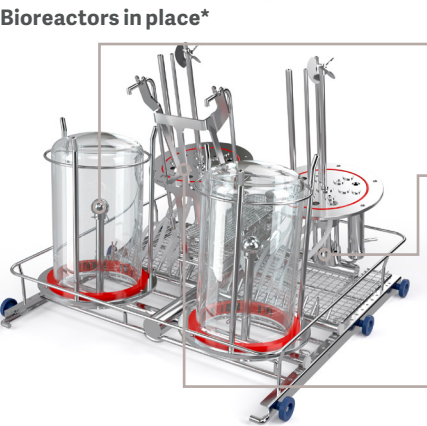
Empty rack

Baskets

Small bioreactor assembly parts are placed in the baskets to ensure that these are in place throughout the cleaning cycle.

Multiple injector tubes

Reassure best possible cleaning performance for each entry connection on the bioreactor head plate.



Bioreactors in place*

Spray headers

High flow of process water through the spray headers clean the inside of the bioreactor vessel.

Head plate fixation

The head plate is fixed in the wash rack. The spray wings within the washer will clean the outside of the head plate.

Angled head plate

Minimum water retention on the head plate surface will speed up the drying phase which shorten the overall process cycle.

*Multi-use, volume 1-3 liter

GETINGE LANCER ULTIM FREESTANDING SERIES



Geringe Lancer Ultima model 910 LX freestanding labware washer.

Adaptable to suit your application

Consumables

For best results, Getinge Lancer offers a selection of detergents and rinsing agents that have been tested and validated to maximize the performance of the Getinge Lancer Ultima washer while minimizing water consumption.

- Getinge Lancer LLL Detergent produces analytically clean results. It is phosphate free, fully biodegradable and will not harm aluminum, plastic or rubber.

A typical dose is from 6 to 10 ml per liter for water with hardness values between 200 and 400 ppm. Available in 10 liter container.

- The Getinge Lancer NLL Neutralizing agent is an acetic-acid based formulation ideal for the final rinse. The dose is typically 5 ml per liter. Available in 10 liter container.

Some options available

Features		910 LX	1300 LX	1400 LX	1400 LXP	1600 LXP	1600 LXP/HE
Discharge water cooling	Reduces effluent temperature to less than 60°C (140°F) for code compliant transfer to utility drain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH programming	Neutralizes effluent before transfer to utility drain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Printer	For hard copy permanent record.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Stop	Emergency stop button.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampling Valve	Manual sampling valve.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conductivity monitoring	Conductivity meter for final rinse verification.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pump pressure monitoring	Verification that correct pump pressure is achieved in the water distribution system that secure optimal cleaning performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water softener	Water softener.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chemical dosing pump, additional	Additional chemical dosing pump. Up to 1 additional on 910 LX / 1300 LX / 1400 LX and up to 2 additional on 1400 LXP / 1600 LXP / 1600 LXP/HE.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Main Switch	Main power switch, shuts off all power to the washer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* See product specifications for details and additional options to select.

☒ / ☐ Standard / optional features

Utilities		910 LX	1300 LX	1400 LX	1400 LXP	1600 LXP	1600 LXP/HE
Steam heating	Steam coil to utilize house steam for heating of wash/rinse water.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low pressure kit	Boosts DI water supply input pressure to assure optimum performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steam condenser	Steam condenser for collapsing exhaust vapor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gravity drain	For quick evacuation of chamber. Requires compressed air and floor drain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tri-clamp DI inlet	Direct DI water inlet with tri-clamp connection and dry contact for control of customer DI loop valve.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Construction		910 LX	1300 LX	1400 LX	1400 LXP	1600 LXP	1600 LXP/HE
Moving runners	Customized location of rack manifolds to accommodate specific loads.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extended diptube kit	Extended diptubes for use with 125-208 L (33-55 gal) chemical containers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dry contact	Dry contacts for external communication.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seismic restraints	Seismic tie down brackets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stainless steel plumbing	Complete stainless steel hydraulic circuit including main circulation pump.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
View-In-Process window	Includes interior light, permitting visual verification during wash cycles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* See product specifications for details and additional options to select. ☒ / ☐ Standard / optional features

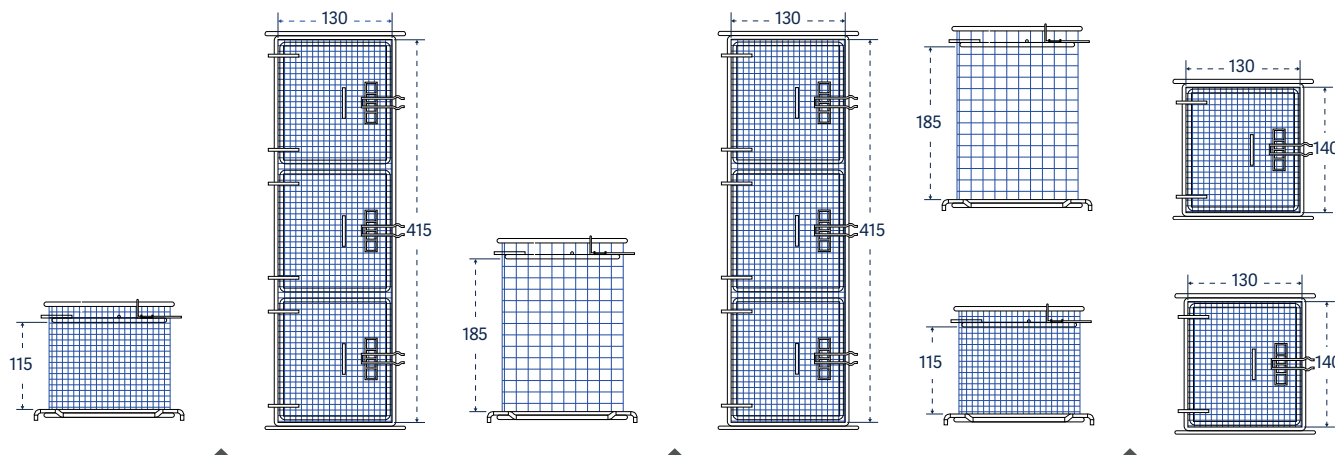
Site preparation	910 LX / 1300 LX / 1400 LX / 1400 LXP / 1600 LXP / 1600 LXP/HE
Water supply (hot, cold and DI)	G ¾" hose thread connection, recommended min. flow 20 L/min (5.25 gpm); lower flow rates may extend cycle times; 200 to 600 kPa (29-87 psi) water pressure
Drain requirement, vertical standpipe	40 mm (1 ½") diameter, 500 to 700 mm (20" to 27") above floor
Certifications	

2006/42/EC

Common accessories

Choose from up to 60 different injector racks, pipette racks and baskets. All racks are interchangeable between the washer lower and upper levels.

- A wide variety of standard inventory baskets and injector racks are available to meet most needs.
- Custom racks and baskets can be fabricated to meet specific needs or special applications.



Small mesh basket with cover, long:
Catalog No. STCXL



Small mesh basket, tall with cover, long:
Catalog No. LTCXL



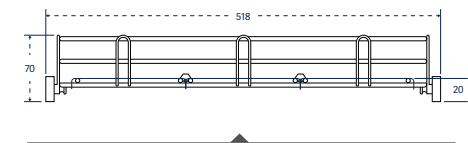
Small mesh baskets, tall and short:
Catalog No. LTC and STC

Small mesh baskets		910 LX / 1300 LX / 1400LXP/ 1600LXP/1600LXP/HE	Part number
For bottle caps, ferrules, plugs, stoppers and test tubes.			
Mesh basket, short, with cover, 130x118x98 mm	STC		02010037
Mesh basket, short, with cover, 405x118x98 mm	STCXL		02010038
Mesh basket, tall, with cover, 130x118x170 mm	LTC		02010029
Mesh basket, tall, with cover, 405x118x170 mm	LTCXL		02010030



Accessories

910 LX / 1300 LX



Basic basket with reversible tray lid:
Catalog No. PST and GC



Basic basket with spray arm:
Catalog No. PSBT



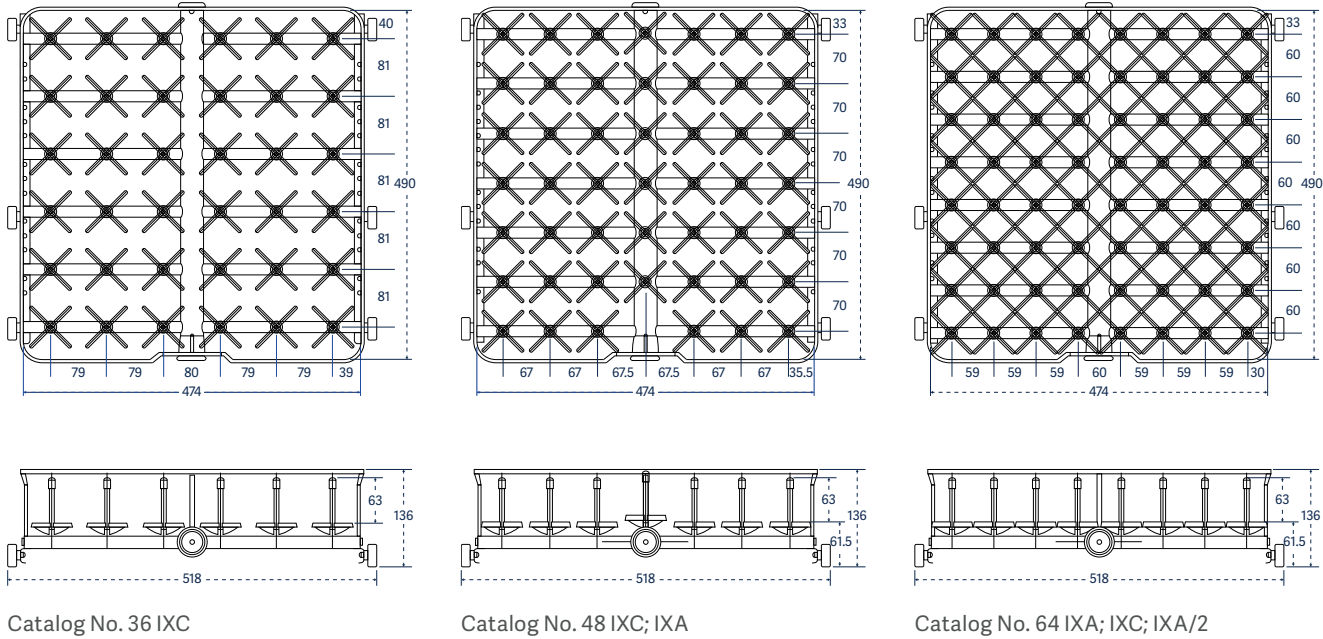
Basket for culture dishes: Catalog No. BP

Baskets	910 LX / 1300 LX	Part number
Useful for beakers, trays, dishes, dissolution vessels, funnels, instruments and jars.		
Basic basket	PST	02600011
Basic basket with spray arm	PSBT	02600010
Support for culture plates (20 pcs./support max 3 supports) to be used with the PST basket	20 PL	01030417

Basket covers	910 LX / 1300 LX	Part number
Accessory basket covers are available to secure small or lightweight labware during the wash cycle.		
Reversible tray lid for PST/PSBT	GC	01030569
Reversible tray lid, half size for PST/PSBT	GC1/2	01030570
Reversible tray lid for injector rack	GC	01030585
Reversible tray lid, half size for injector rack	GC1/2	01030586



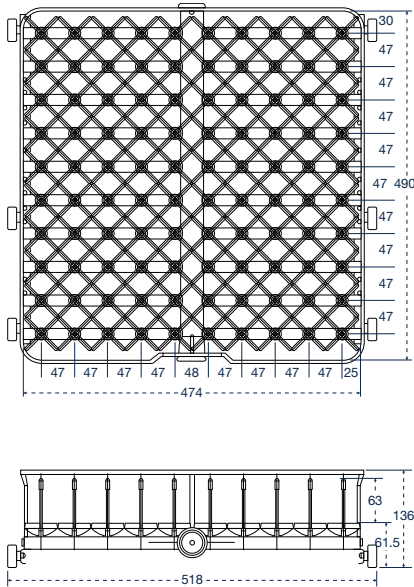
Short injectors		
For inside out cleaning of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.	910 LX / 1300 LX	Part number
Half rack, 27 short jets, 6 mm diameter	27 IXC 1/2	02600022
36 short jets, 6 mm diameter	36 IXC	02600023
41 short jets, 6 mm BOD rack	41 IXC	02600003
48 short jets, 2 mm diameter	48 IXA	02600026
48 short jets, 6 mm diameter	48 IXC	02600027
64 short jets, 2 mm diameter	64 IXA	02600030
64 short jets, 6 mm diameter	64 IXC	02600032
64 short jets, mixed 2 mm and 6 mm diameter	64 IXA/2	02600031
100 short jets, 2 mm diameter	100 IXA	02600016
100 short jets, 6 mm diameter	100 IXC	02600018
100 short jets, mixed 2 mm and 6 mm diameter	100 IXA/2	02600017



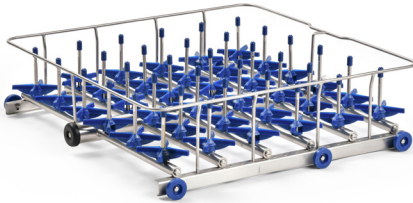
Catalog No. 36 IXC

Catalog No. 48 IXC; IXA

Catalog No. 64 IXA; IXC; IXA/2



Catalog No. 100 IXA; IXC; IXA/2

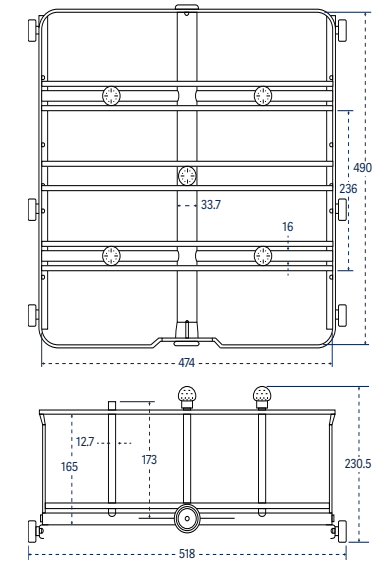


IXC: Injector rack, short injectors, 76 mm (3") tall, jets 6 mm diameter



IXA: Injector rack, short injectors, 76 mm (3") tall, jets 2 mm diameter

Long injectors For inside out cleaning of large narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.		
	910 LX / 1300 LX	Part number
5 long jets, 12.7 mm diameter, with spray ball	5 IXL	02600007
9 long jets, 12.7 mm diameter with spray ball	9 IXL	AA02250223
12 long jets, 8 mm diameter	12 IXL	AA02250224
20 long jets, 8 mm diameter	20 IXL	02600021
36 long jets, 6 mm diameter	36 IXL	02600024
48 long jets, 6 mm diameter	48 IXL	02600028
64 long jets, 6 mm diameter	64 IXL	02600033
100 long jets, 6 mm diameter	100 IXL	02600019



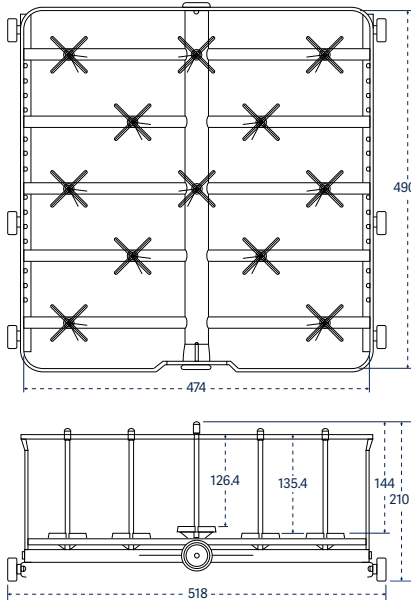
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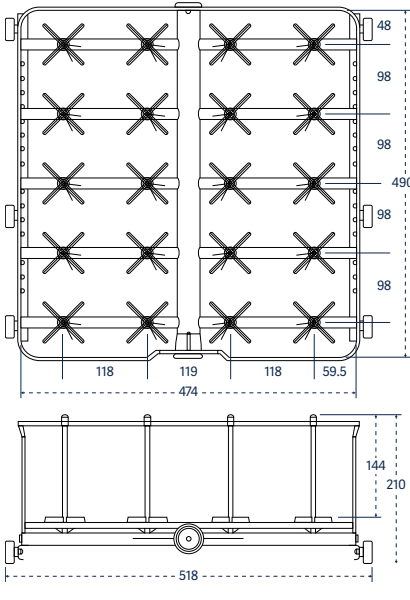
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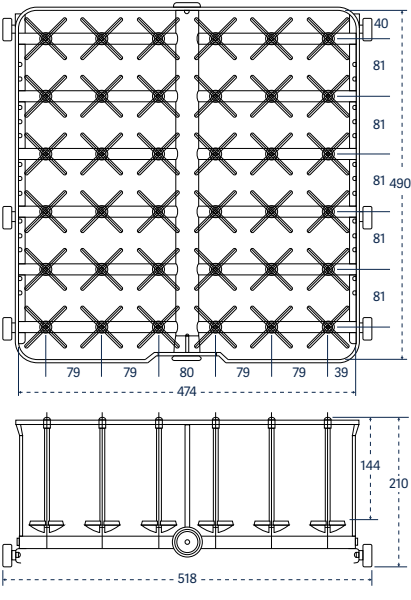
Adjustable clip positions labware on injector for optimal cleaning performance.



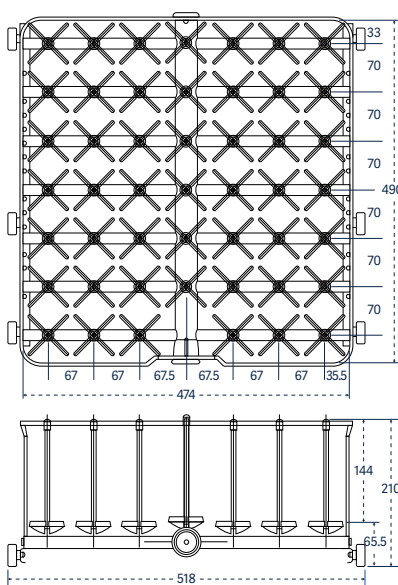
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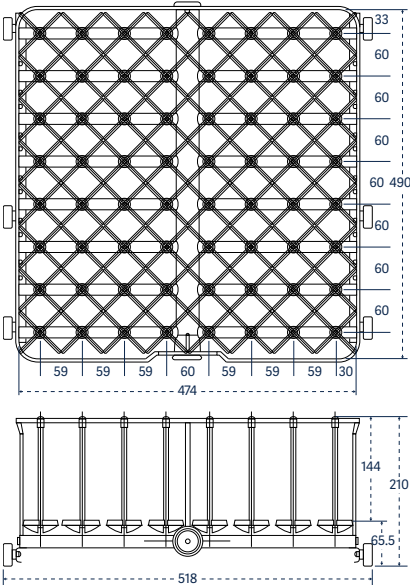
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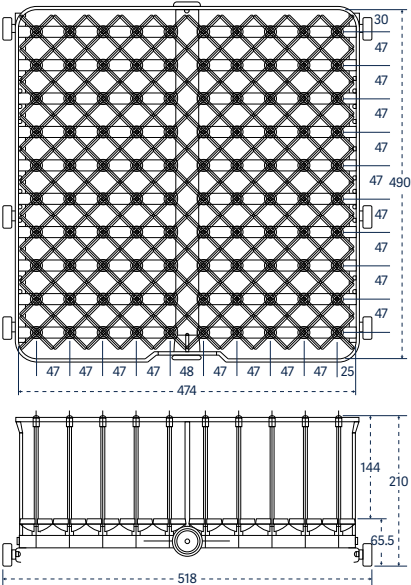
Catalog No. 36 IXL



Catalog No. 48 IXL

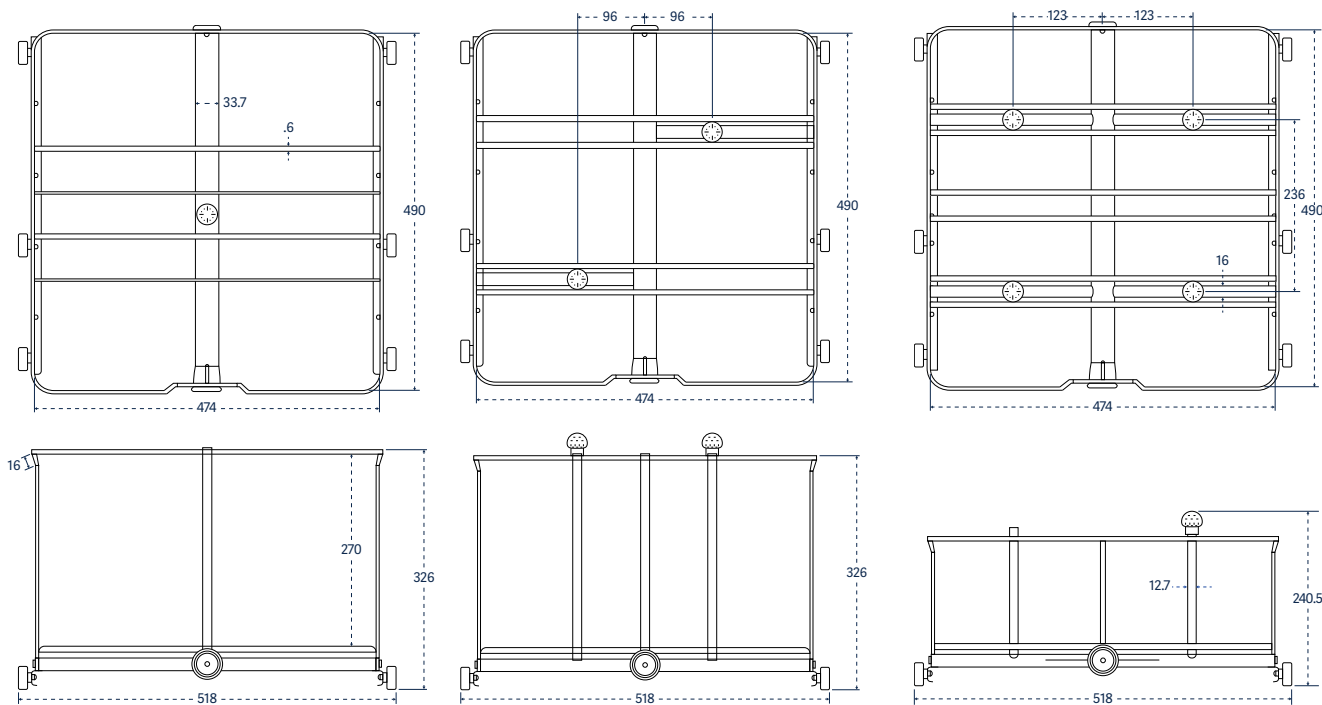


Catalog No. 64 IXL



Catalog No. 100 IXL

Extra long injectors For inside out cleaning of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and large volumetric flasks.		
	910 LX / 1300 LX	Part number
1 long jet, 12.7 mm diameter, with spray ball	1 IXL	02600001
2 long jets, 12.7 mm diameter, with spray ball	2 IXL	02600014
4 long jets, 12.7 mm diameter, with spray ball	4 IXL	02600005



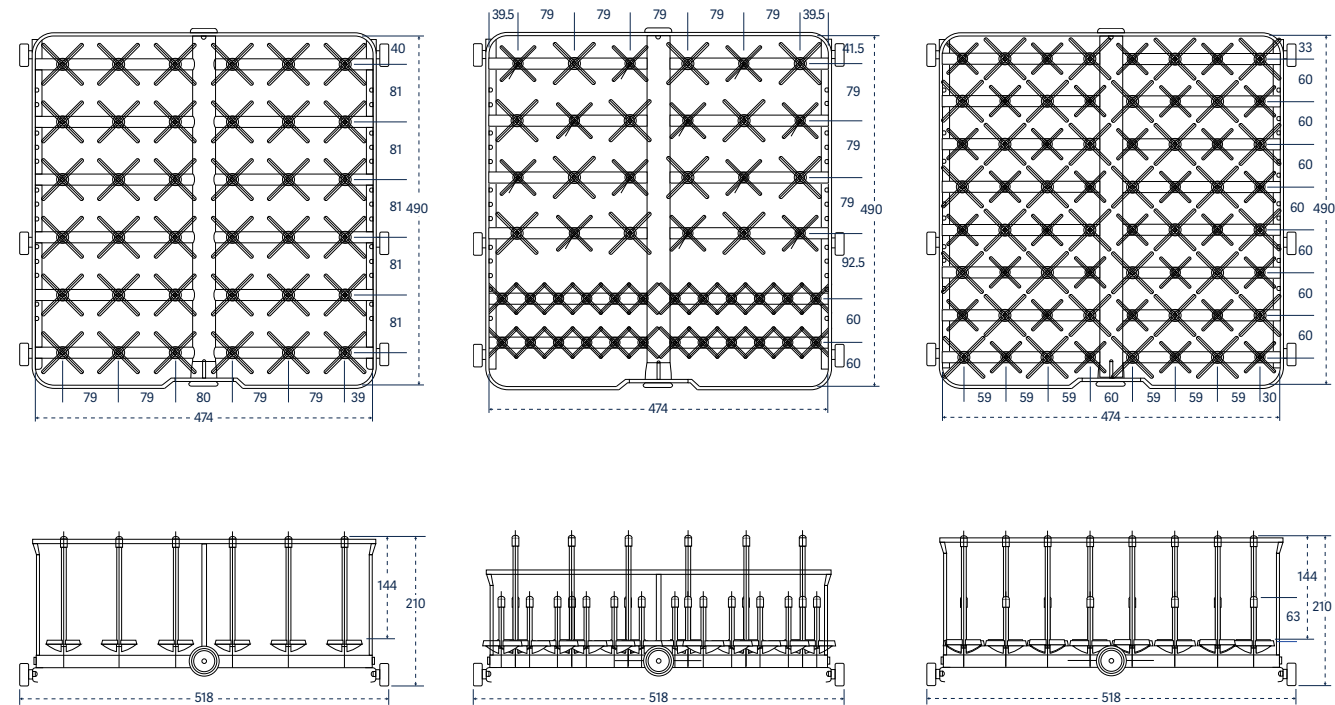
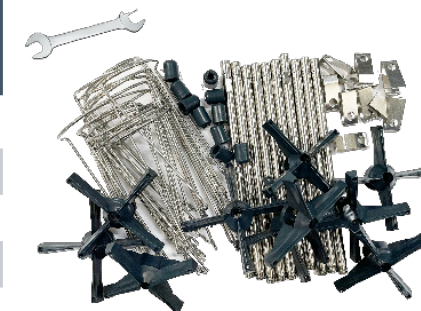
Catalog No. 1 IXL

Catalog No. 2 IXL

Catalog No. 4 IXL

Combination short/long injectors For inside out cleaning of mixed loads of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.		
	910 LX / 1300 LX	Part number
36 short and long jets, 6 mm diameter	36 IXLC	02600025
48 short and long jets, 6 mm diameter	48 IXLC	02600029
48 short and long jets, 6 mm diameter, 2 rows 2 mm diameter	48 IXLCA	02600006
64 short and long jets, 6 mm diameter	64 IXLC	02600034
100 short and long jets, 6 mm diameter	100 IXLC	02600020

Injector KIT packages	
	Part number
KIT enable customization of standard injector racks to fit specific needs. Each KIT include 10 complete injectors with their supports and nozzles.	
Long injectors, length of 230 mm and 6 mm diameter	6007500984
Long injectors, length of 171 mm and 6 mm in diameter	6007500890
Short injectors, length of 86 mm and 6 mm in diameter	6007500957
Short injectors, length of 56 mm and 6 mm in diameter	6007501012
Long injectors, length of 171 mm and 8 mm in diameter	6007501011
Needle injectors, length of 86 mm	6007501007



Catalog No. 36 IXLC

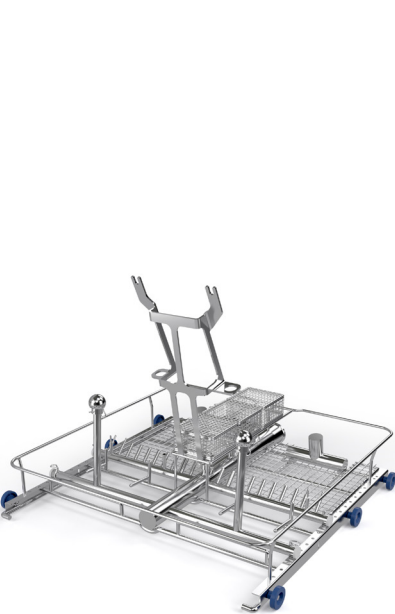
Catalog No. 48 IXLC; IXCLA

Catalog No. 64 IXLC

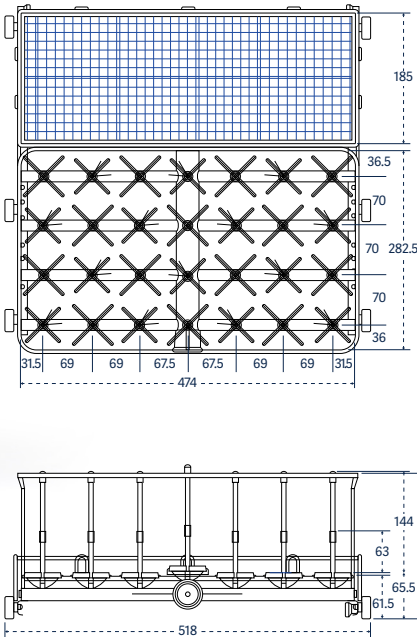
Multipurpose racks	910 LX / 1300 LX	Part number
For a combination of labware and pipettes.		
Basic basket plus 27 short and long jets	PS/27 IXLC	02600039
25 pipettes, angled plus 24 short and long jets	25 PIP/24 IXLC	02600004
50 pipettes plus 34 short and long jets	50 PIP/34 IXLC	02600037
14 short jets plus 4 long injectors angled and perforated	4 EP/14 IXC	02600041
28 short and long jets plus 4 long injectors, angled and perforated	4 EP/28 IXLC	02600036
One third PS plus 21 short and long jets, plus 25 pipettes	PS/21 IXLC/25 PIP	02600038

Bioreactor rack	910 LX / 1300 LX	Part number
Rack for 1-3 L Bioreactors	BRWR	AA02600113

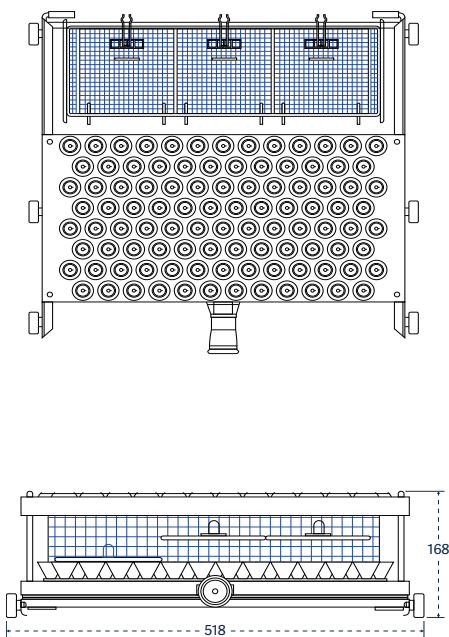
Pipette racks	910 LX / 1300 LX	Part number
Accessory pipette racks are configured to accommodate reusable pipettes.		
Grommet style, individually loaded, 100 position	100 PIP	02600040



Catalog No. BRWR



Catalog No. PS/27/IXLC



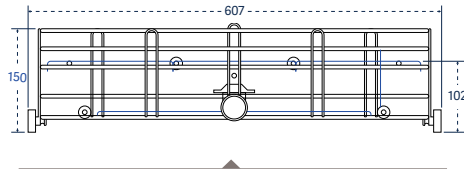
Catalog No. 100 PIP

Storage stand	910 LX / 1300 LX	Part number
An accessory storage stand offers a convenient place to store accessory racks and baskets when not in use.		
Holds up to 5 racks	RP	01040060
Trolley	910 LX	1300 LX
The stainless steel loading trolley transfers the load and mates with the washer to simplify loading and unloading. The trolley includes a retainer lip to keep the floor dry from residual water. Includes locking casters.		
Loading trolley	02530017	02530018



Accessories

1400 LX / 1400 LXP



Basic basket with reversible tray lid:
Catalog No. PST and GC



Basic basket with spray arm: Catalog No.
PSBT



Basket for culture dishes: Catalog No. BP



Baskets	1400 LX / 1400 LXP	Part number
Useful for beakers, trays, dishes, dissolution vessels, funnels, instruments and jars.		
Basic basket	PST 14	02600051
Basic basket with spray arm	PSBT 14	02600050
Basket, half with spray arm	PSBT 1/2 14	02600048
Support for culture plates (20 pcs./support max 3 supports) to be used with the PST basket	20 PL	01030417

Basket covers for basic grid baskets	1400 LX / 1400 LXP	Part number
Accessory basket covers are available to secure small or lightweight labware during the wash cycle.		
Reversible tray lid for PST/PSBT	GC 14	02250017
Reversible tray lid, half size for PST/PSBT	GC 1/2 14	02250024

Short injectors

For inside out cleaning of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.

1400 LX / 1400 LXP

Part number

48 short jets, 6 mm diameter

48 IXC 14

02600059

64 short jets, 6 mm diameter

64 IXC 14

02600063

64 short jets, mixed 2 mm and 6 mm diameter

64 IXA/2 14

02600062

81 short jets, 6 mm diameter

81 IXC 14

02600068

81 short jets, mixed 2 mm and 6 mm diameter

81 IXA/2 14

02600066

100 short jets, 2 mm diameter

100 IXA 14

02600054

100 short jets, 6 mm diameter

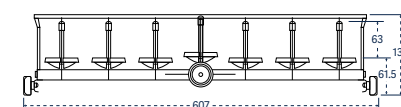
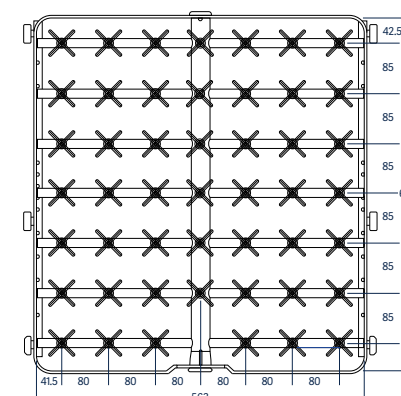
100 IXC 14

02600053

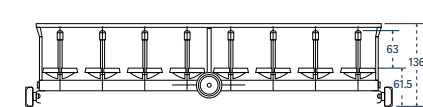
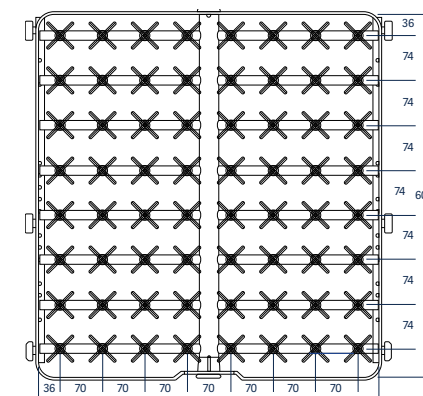
100 short jets, mixed 2 mm and 6 mm diameter

100 IXA/2 14

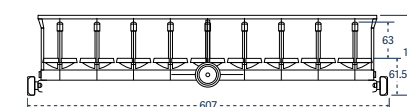
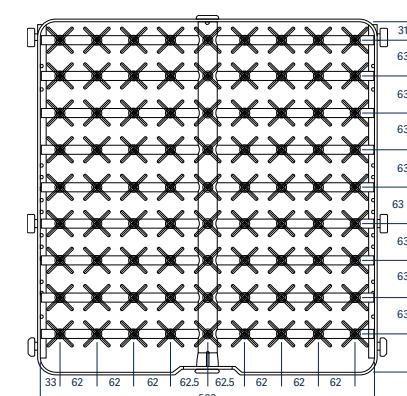
02600052



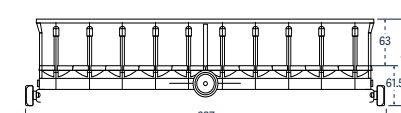
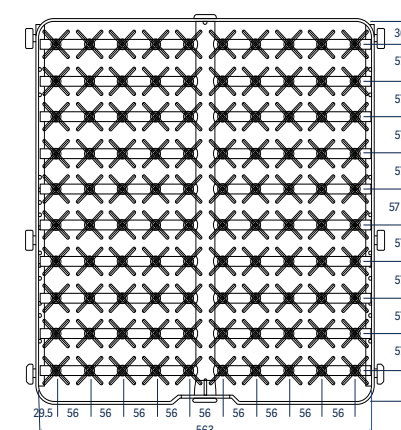
Catalog No. 48 IXC 14



Catalog No. 64 IXC; IXA/2 14

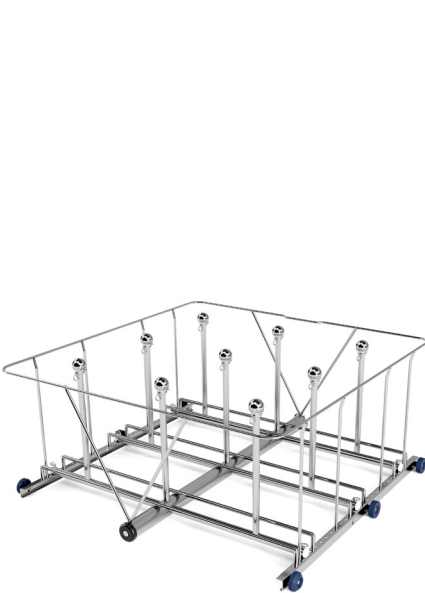


Catalog No. 81 IXA; IXC; IXA/2 14

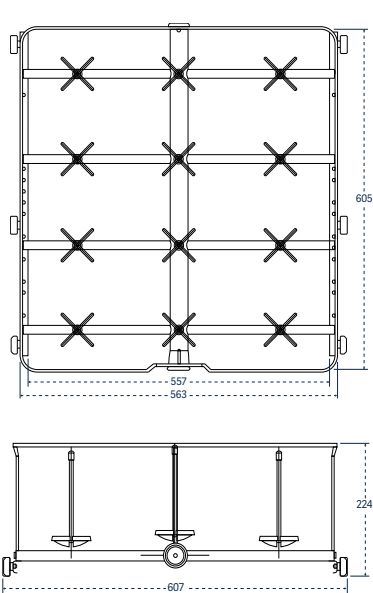


Catalog No. 100 IXA; IXC; IXA/2 14

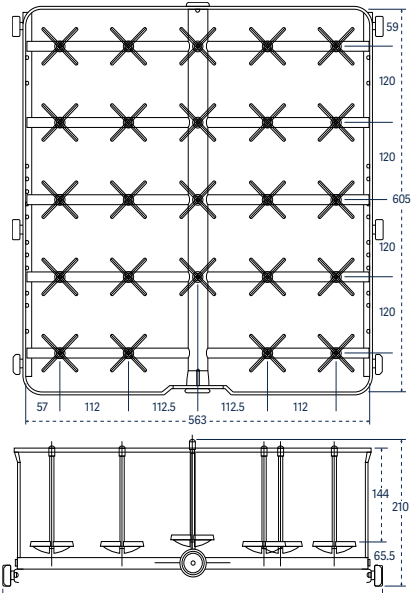
Long injectors For inside out cleaning of large narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.		
	1400 LX / 1400 LXP	Part number
9 long jets, 12.7 mm diameter, with spray balls	9 IXL 14 DIFF	02600070
12 long jets, 8 mm diameter	12 IXL 14	02600044
24 long jets, 8 mm diameter	24 IXL 14	AA0260016
36 long jets, 6 mm diameter	36 IXL 14	02600057
48 long jets, 6 mm diameter	48 IXL 14	02600060
64 long jets, 6 mm diameter	64 IXL 14	02600064



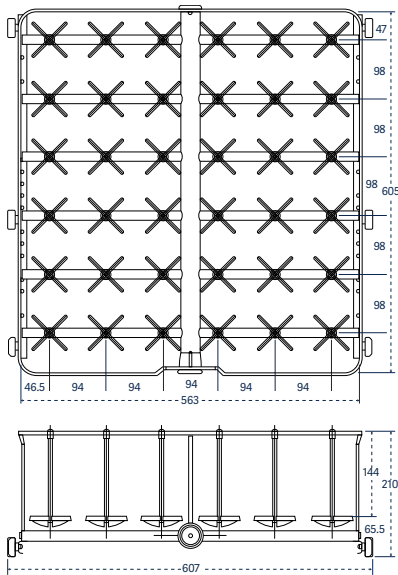
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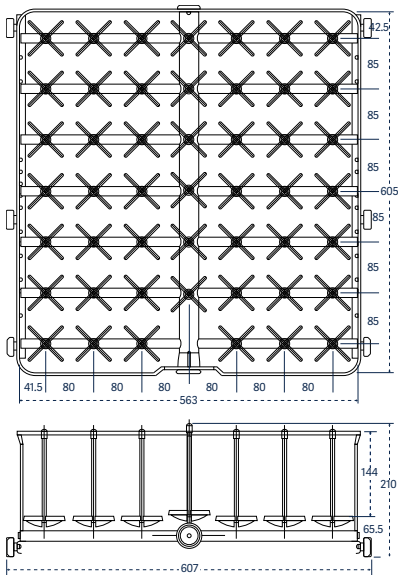
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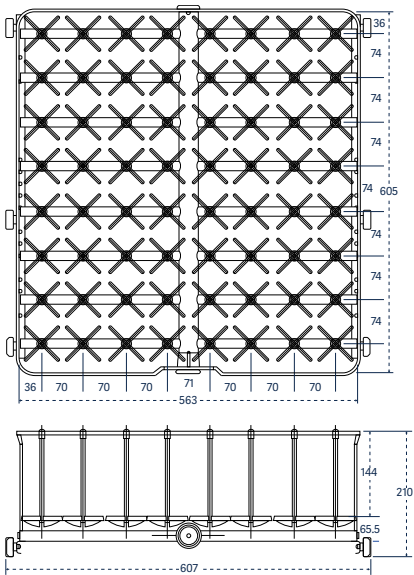
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Catalog No. 36 IXL 14

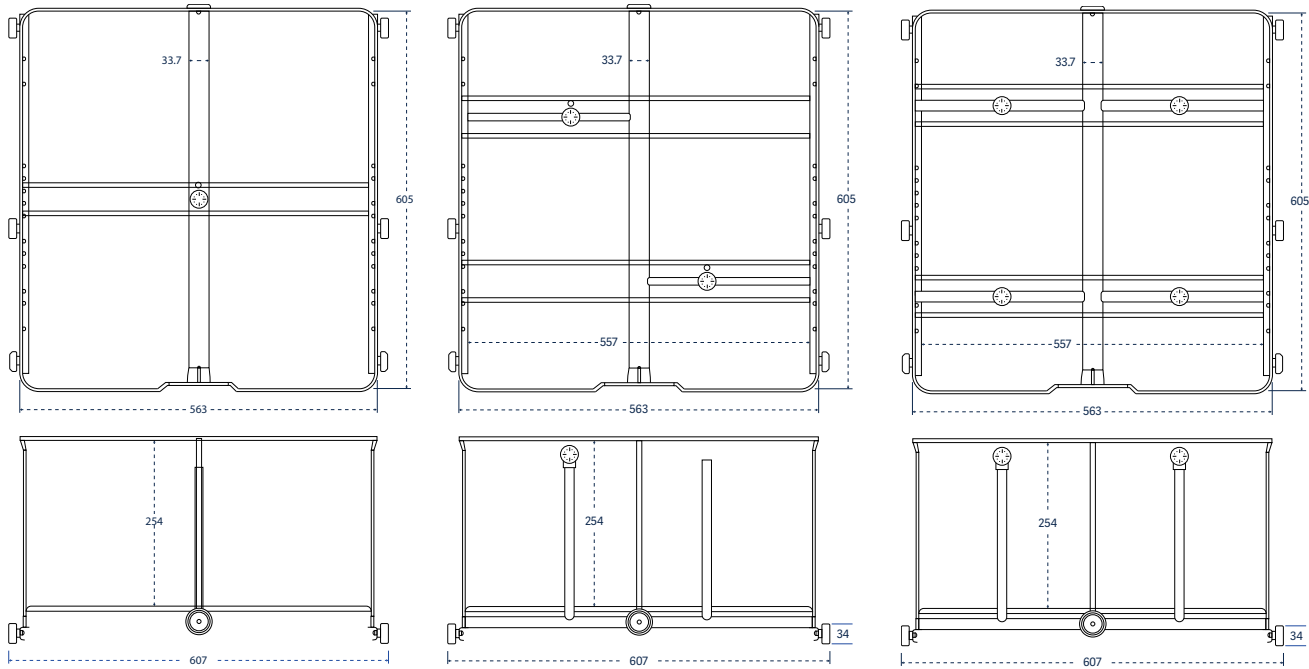


Catalog No. 48 IXL 14



Catalog No. 64 IXL 14

Injector rack covers		
Injector rack covers are available to secure small or lightweight labware during the wash cycle.		
	1400 LX / 1400 LXP	
Injector rack cover full-size	GCI 14	02250023
Injector rack cover half-size	GCI 1/2 14	02250024
Reversible tray lid for injector rack	GCI 14	02250023
Reversible tray lid, half size for injector rack	GCI 1/2 PS	02250025
Cover for 1/2 injector basket	GCI 1/2 14	02250024
Adjustable cross grid	GA 14	02250051



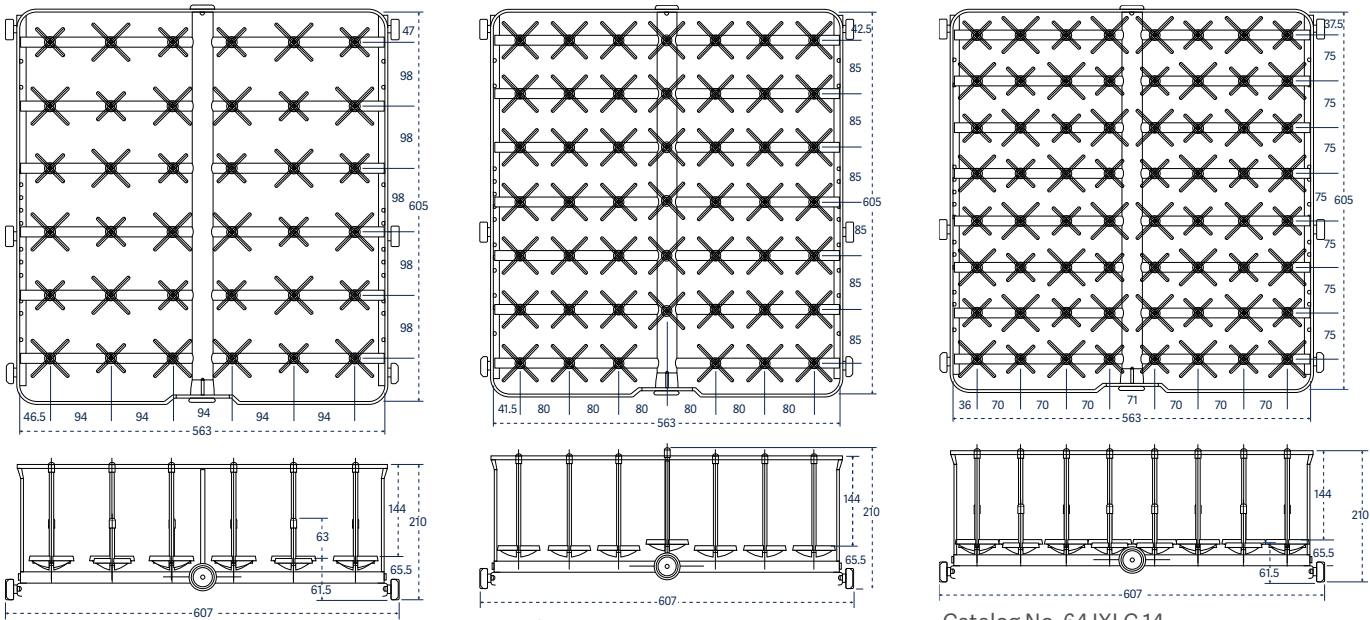
Catalog No. 1 IXL 14

Catalog No. 2 IXL 14

Catalog No. 4 IXL 14

Extra long injectors, 305 mm (12") tall		
For inside out cleaning of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and large volumetric flasks.		
	1400 LX / 1400 LXP	Part number
1 long jet, 12.7 mm diameter, with spray ball	1 IXL 14	02600043
2 long jets, 12.7 mm diameter, with spray ball	2 IXL 14	02600045
4 long jets, 12.7 mm diameter, with spray ball	4 IXL 14	02600046

Combination short/long injectors		
For inside out cleaning of mixed loads of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.		
	1400 LX / 1400 LXP	Part number
36 short and long jets, 6 mm diameter	36 IXLC 14	02600058
48 short and long jets, 6 mm diameter	48 IXLC 14	02600061
64 short and long jets, 6 mm diameter	64 IXLC 14	02600065
81 short and long jets, 6 mm diameter	81 IXLC 14	02600069



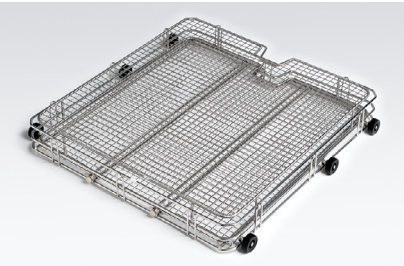
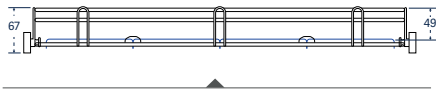
Catalog No. 36 IXLC 14

Catalog No. 48 IXL 14

Catalog No. 64 IXLC 14

Accessories

1600 LXP/ 1600 LXP/HE



Basic basket with reversible tray lid:
Catalog No. PST and GC



Basic basket with spray arm: Catalog No.
PSBT

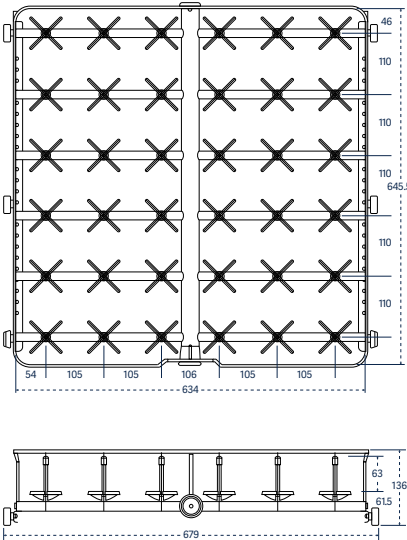


Basket for culture dishes: Catalog No. BP

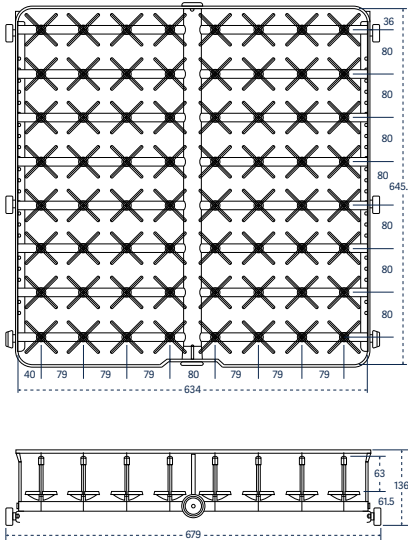
Baskets		
Useful for beakers, trays, dishes, dissolution vessels, funnels, instruments and jars.		
Basic basket	1600 LXP	Part number
	PST 16	02600084
Basic basket with spray arm	PSBT 16	02600083
Support for culture plates for PST basket	20 PL	01030417

Basket covers		
Accessory basket covers are available to secure small or lightweight labware during the wash cycle.		
Reversible tray lid for PST/PSBT	1600 LXP	Part number
	GC 16	01030573
Reversible tray lid for injector racks	GCI 16	01030589

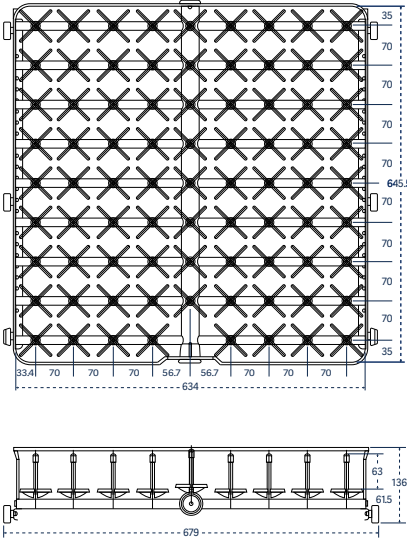
Short injectors For inside out cleaning of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.		
	1600 LXP	Part number
36 short jets, 6 mm diameter	36 IXC 16	02600096
64 short jets, 6 mm diameter	64 IXC 16	02600100
100 short jets, 2 mm diameter	100 IXA 16	02600088
100 short jets, 6 mm diameter	100 IXC 16	02600090
100 short jets, mixed 2 mm and 6 mm diameter	100 IXA/2 16	02600089
144 short jets, 2 mm diameter	144 IXA 16	02600093
144 short jets, 6 mm diameter	144 IXC 16	02600095
144 short jets, mixed 2 mm and 6 mm diameter	144 IXA/2 16	02600094



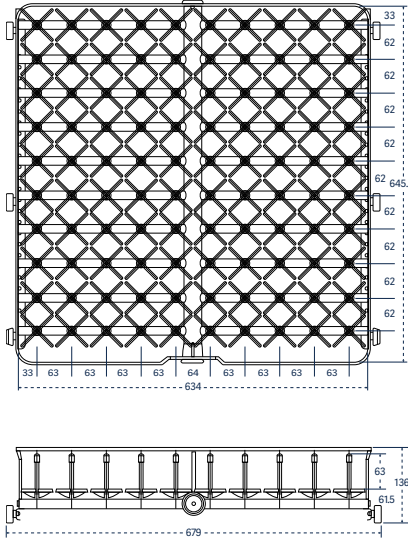
Catalog No. 36 IXC 16



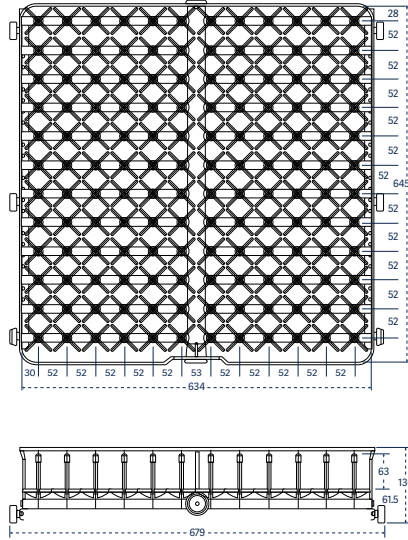
Catalog No.64 IXC 16



Catalog No. 80 IXC 16

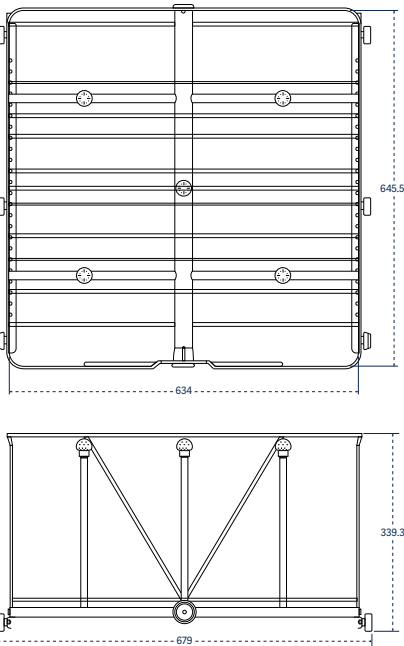


Catalog No. 100 IXA; IXC; IXA/2 16

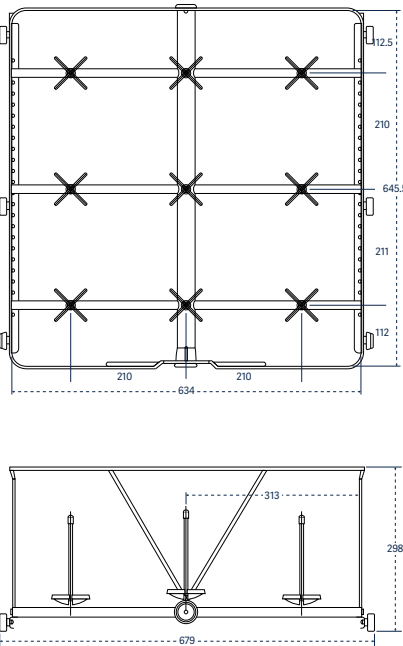


Catalog No. 144 IXA; IXC; IXA/2 16

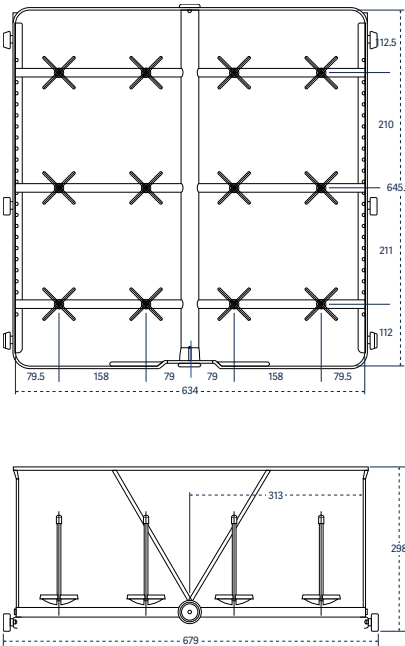
Long injectors For inside out cleaning of large narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.		
	1600 LXP	Part number
5 long jets, 12.7 mm diameter, with spray ball	5 IXL 16	02600080
9 long jets, 12.7 mm diameter, with spray balls	9 IXL 16 DIFF	AA02600112
9 long jets, 12.7 mm diameter	9 IXL 16	02600081
12 long jets, 6 mm diameter	12 IXL 16	02600077
36 long jets, 6 mm diameter	36 IXL 16 D6	02600098
36 long jets, 8 mm diameter	36 IXLC 16 D8	02600097
64 long jets, 6 mm diameter	64 IXL 16	02600101
80 long jets, 6 mm diameter	80 IXL 16	02600104
100 long jets, 6 mm diameter	100 IXL 16	02600091



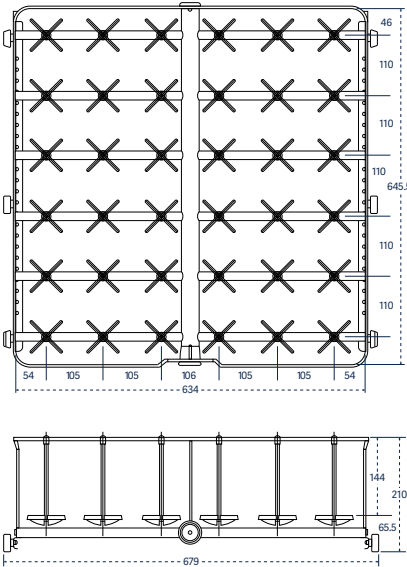
Catalog No. 5 IXL 16



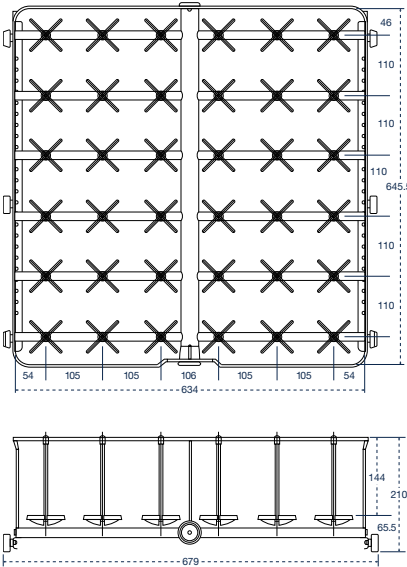
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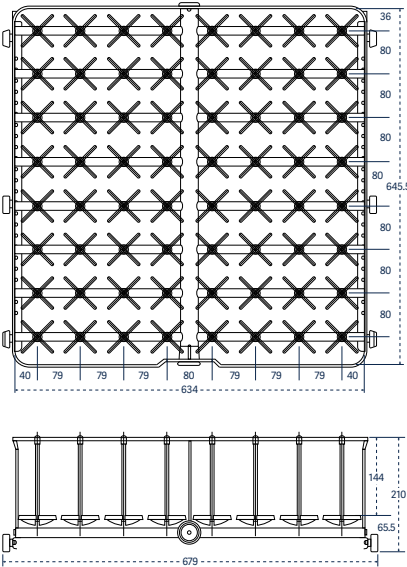
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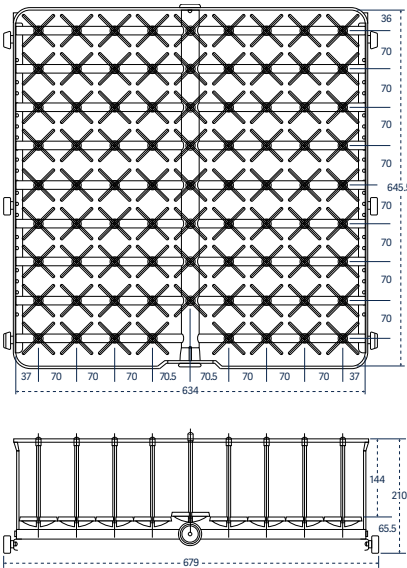
Catalog No. 36 IXL 16 D6



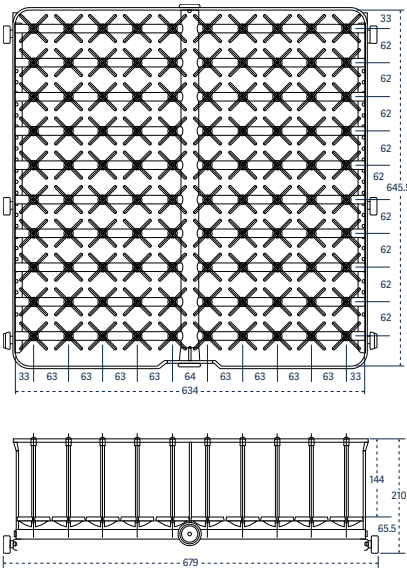
Catalog No. 36 IXL 16



Catalog No. 64 IXL 16



Catalog No. 80 IXL 16



Catalog No. 100 IXL 16

Extra long injectors, 305 mm (12”) tall

For inside out cleaning of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and large volumetric flasks.

1600 LXP

Part number

1 long jet, 12.7 mm diameter, with spray ball

1 IXL 16

02600076

2 long jets, 12.7 mm diameter, with spray ball

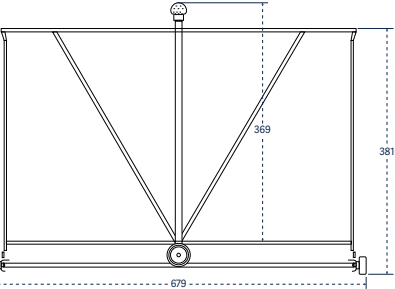
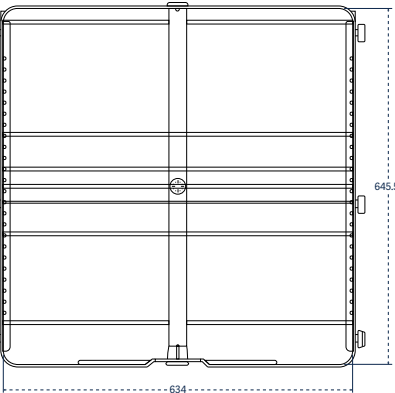
2 IXL 16

02600078

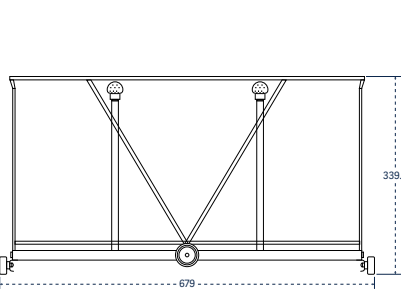
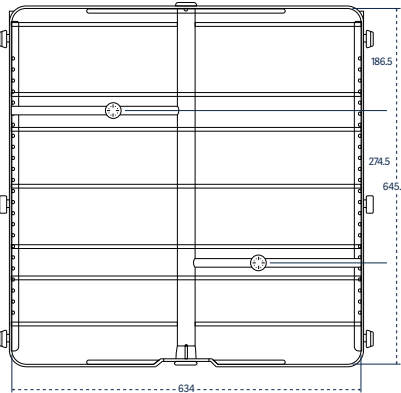
4 long jets, 12.7 mm diameter, with spray ball

4 IXL 16 DIFF

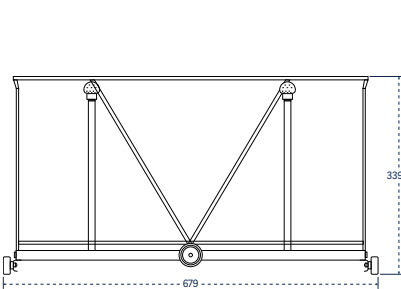
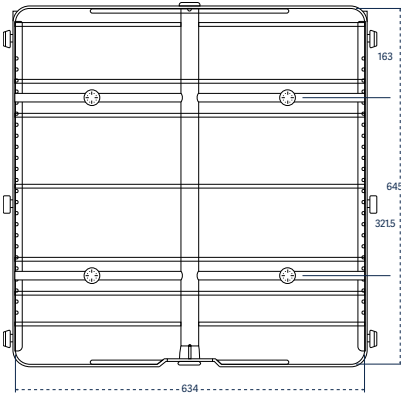
02600079



Catalog No. 1 IXL 16



Catalog No. 2 IXL 16



Catalog No. 4 IXL 16

Combination short/long injectors

For inside out cleaning of mixed loads of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.

1600 LXP

Parts number

36 short and long jets, 6 mm diameter

36 IXLC 16

02600099

64 short and long jets, 6 mm diameter

64 IXLC 16

02600102

80 short and long jets, 6 mm diameter

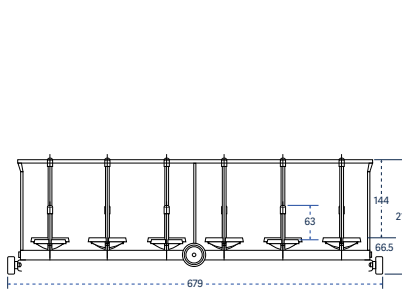
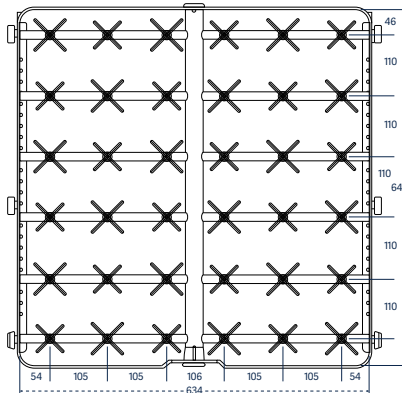
80 IXLC 16

02600105

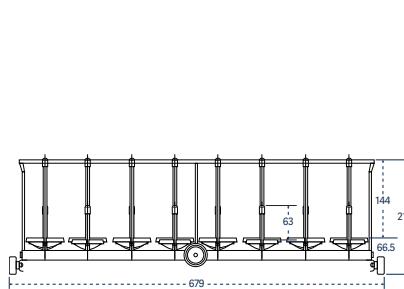
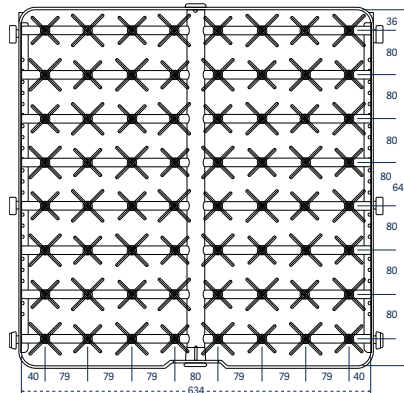
100 short and long jets, 6 mm diameter

100 IXLC 16

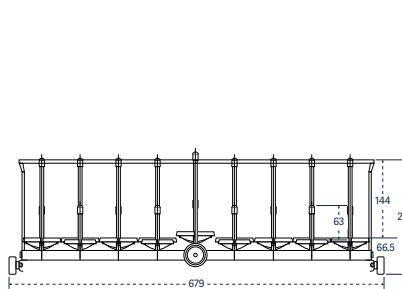
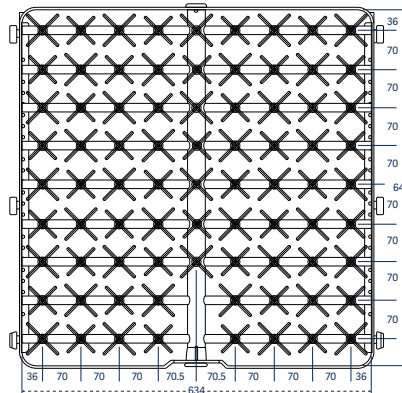
02600092



Catalog No. 36 IXLC 16

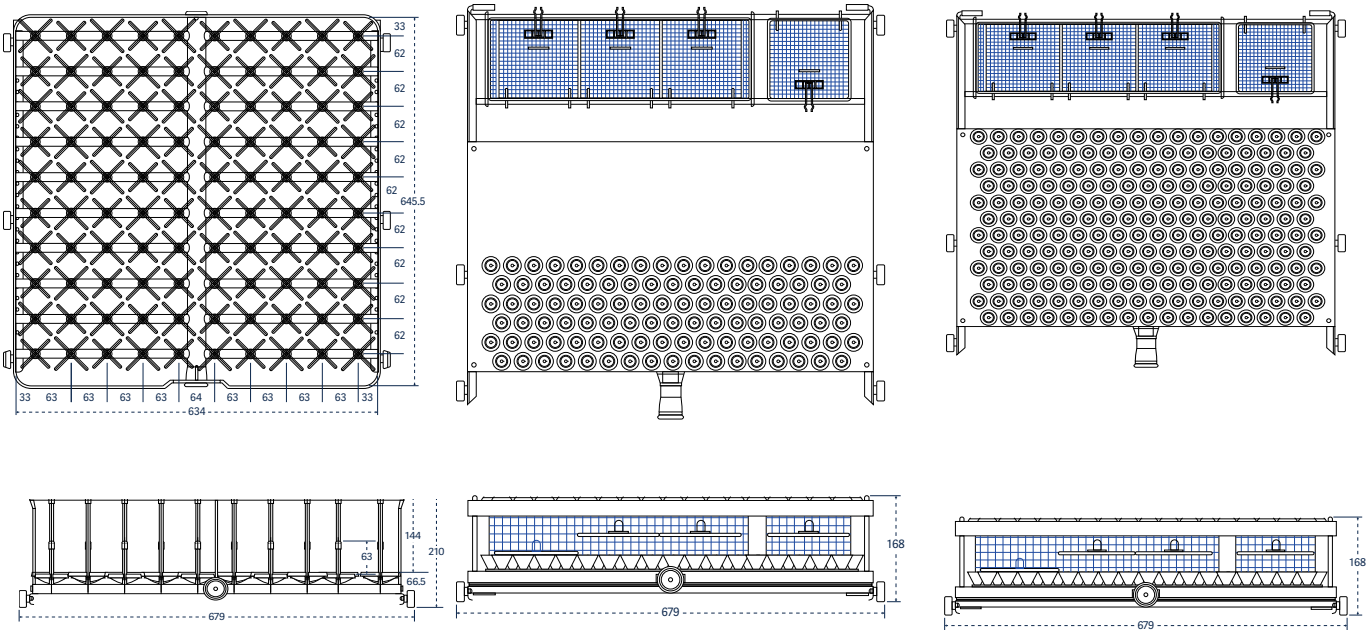


Catalog No. 64 IXLC 16



Catalog No. 80 IXLC 16

Pipette racks	1600 LXP	Part number
Accessory pipette racks are configured to accommodate reusable pipettes.		
Grommet style, individually loaded, 105 position	105 PIP 14	02600106
Bioreactor rack	1600 LXP	Part number
Rack for 1-3 L Bioreactors	BRWR 16	AA02600115
Storage stand	1600 LXP	Part number
An accessory storage stand offers a convenient place to store accessory racks and baskets when not in use.		
Holds up to 5 racks	RP 16	01040063

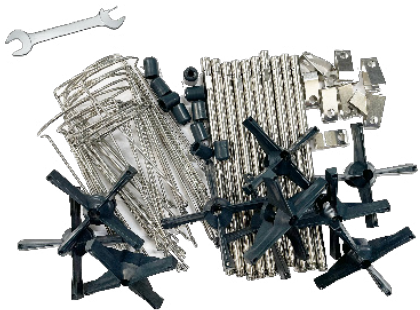


Catalog No. 100 IXLC 16

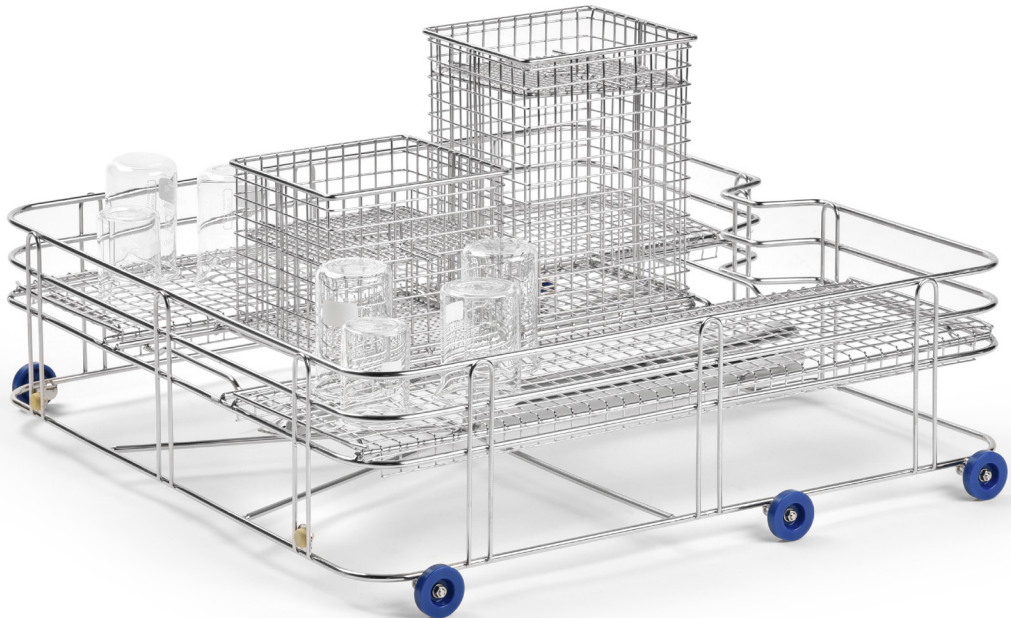
Catalog No. 105 PIP 16

Catalog No. 210 PIP 16

Injector KIT packages	1600 LXP	Part number
KIT enable customization of standard injector racks to fit specific needs. Each KIT include 10 complete injectors with their supports and nozzles.		
Long injectors, length of 230 mm and 6 mm diameter		6007500984
Long injectors, length of 171 mm and 6 mm in diameter		6007500890
Short injectors, length of 86 mm and 6 mm in diameter		6007500957
Short injectors, length of 56 mm and 6 mm in diameter		6007501012
Long injectors, length of 171 mm and 8 mm in diameter		6007501011
Needle injectors, length of 86 mm		6007501007



Trolley	1600 LXP	Part number
The stainless steel loading trolley transfers the load and mates with the washer to simplify loading and unloading. The trolley includes a retainer lip to keep the floor dry from residual water. Includes locking casters.		
Trolley, 4 levels	TN 16	02530020





910 LX

The 910 LX offers washing on 2 levels with the possibility of 3 rack positions for flexible loading options. The dual drying system provides HEPA filtered forced air through both injectors and chamber to ensure complete and rapid drying of glassware both inside and out. The built-in drawer accommodates chemical canisters to save floor space while providing safe storage with minimal handling.

Additionally, the drop-down door offers ergonomic loading. Rack systems are common across the 810 LX and 815 LX models of Lancer Ultima Undercounter Washers, and the 910 LX and 1300 LX models of Lancer Ultima Freestanding Washers to enable economical upgrades when expanding the capacity of your lab.



1300 LX

The higher capacity 1300 LX keeps laboratory space limitations in mind. It provides washing and drying on 3 levels with 4 possible rack positions allowing for flexible loading configurations in a compact footprint. The dual drying system through both chamber and injector minimizes total process time.

The load-bearing door provides a platform for convenient loading without having to carry heavy racks from workbench to washer. Rack systems are common across the 810-1300 LX models to enable economical upgrades when expanding the capacity of your lab.



1400 LX

The 1400 LX allows labs to wash and dry high volumes of glassware. With a wider chamber and washing on 3 levels, the 1400 LX is suitable for high-throughput labs or centralized washing facilities serving multiple labs.

Four possible rack positions provide loading flexibility and efficient use of chamber volume. The dual drying system through both chamber and injector quickly and thoroughly dries both the inside and outside of the glassware to minimize process times.

Exterior dimensions (WxHxD)	609 x 1483 x 752mm (24"x58,4"x29,6")	Exterior dimensions (WxHxD)	609 x 1643 x 752mm (24"x64,7"x29,6")	Exterior dimensions (WxHxD)	789x 1731 x 800mm (31,1"x68,2"x31,5")
Chamber dimensions (WxHxD)	535 x 544 x 520 mm (21,1"x21,4"x20,8")	Chamber dimensions (WxHxD)	535 x 644 x 520 mm (21,1"x25,4"x20,8")	Chamber dimensions (WxHxD)	626 x 773 x 626 mm (24,6"x30,4"x24,6")
Chamber volume	160 L (5,7 cu.ft.)	Chamber volume	180 L (6,4 cu.ft.)	Chamber volume	304 L (10,7 cu.ft.)
Weight	143 kg (315 lbs.)	Weight	145 kg (319 lbs.)	Weight	213 kg (469 lbs.)
Sound level	≤ 60 dB(A)	Sound level	≤ 60 dB(A)	Sound level	≤ 60 dB(A)
Washing levels	2	Washing levels	3	Washing levels	3
Human interface	Color touch screen 3,5"	Human interface	Color touch screen 3,5"	Human interface	Color touch screen 3,5"
Controller	PROLUX - 40 programs	Controller	PROLUX - 40 programs	Controller	PROLUX - 40 programs
Drying	Dual system - chamber and injector drying	Drying	Dual system - chamber and injector drying	Drying	Dual system - chamber and injector drying



Getinge Lancer Ultima labware washing systems

Undercounter series

This document is intended to provide information to an international audience outside of the US.

GETINGE 

GETINGE LANCER ULTIMA UNDERCOUNTER SERIES

High performance

– compact footprint

Getinge Lancer Ultima series washers offer the best labware cleaning solutions in the industry. From quality control to general laboratory research, Getinge Lancer Ultima series washers deliver high performance in a compact footprint.

High density loading demands fewer cycles. Efficient use of water, detergents and rinsing agents minimizes the environmental impact. Energy saving construction lowers total cost of ownership.

The exclusive Prolux programmable microprocessor controller commands a full range of prewash, wash, rinse and drying functions through simple touchscreen menus on all Ultima series washers. The convenience of five preset programs for light to heavy loads simplifies operation, while more complex programs can be customized whenever needed to meet specific applications.



Getinge Lancer Ultima model 810 LX undercounter labware washer, shown with accessory loading racks, sold separately.



Quiet operation
Noise reduction design minimizes sound for quiet operation.



Cool surface
High-performance insulation contains heat and limits energy consumption.



Prolux programmable microprocessor controller with intuitive touchscreen graphic user interface, alarm and monitoring, data capture and communications document cycle performance.

Stainless steel top and bottom spray arms and two levels of injection washing ensure thorough spray coverage.

High efficiency powerful fluid circulation with direct fluid path and rear manifold connections deliver optimal pressure and flow rates.

Chamber walls made in durable AISI 316L stainless steel material.

The high performance, high temperature cleaning process is managed with preset or user defined programmable cycles.

Injector jet performance provides inside out wash and rinse functions.

Two integrated automatic chemical dosing pumps are standard on all models.



View-In-Process Window

An optional View-In-Process (VIP) window includes an interior LED light for visual verification of the interior load during the cycle.

Less noise, less surface heat and less space required

Getinge Lancer Ultima series washers offer an ideal combination of precision engineering, efficient loading design and comprehensive controls required to process and document labware washing cycles. Getinge Lancer Ultima

series models are ideal for installation under casework or freestanding placement. The compact footprint minimizes floor space and maximizes valuable research space.



810 LX features

5 preset cycles

Programmable cycles

No drying

Additive level sensors



815 LX features

5 preset cycles

Programmable cycles

Standard: Hot forced-air introduced into the chamber
Optional: HEPA filtered hot air through chamber and injectors

Additive level sensors

Models shown with optional View-In-Process (VIP) window.

Getinge Lancer Ultima model 815 LX undercounter labware washer, shown with accessory loading rack, sold separately.

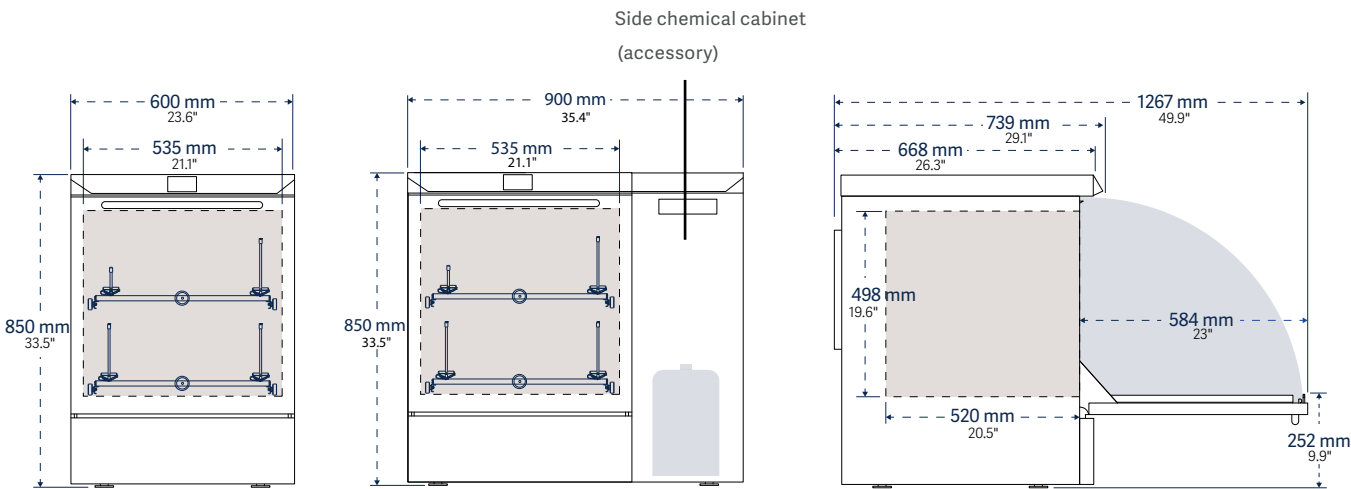
Three options, compact footprint

810 LX / 815 LX

810 LX / 815 LX

Ultima 810/815 LX with additional side chemical cabinet is sold as an accessory.

Drawings display top, front and side of unit, with door swing allowance.



Model	Interior dimensions W x H x D	Exterior dimensions W x H x D	Water per fill* L (gal)	Programs	
				presets	custom
810 LX	535 x 498 x 520 mm 21.1" x 19.6" x 2.5"	600 x 850 x 739 mm 23.6"x33.5"x29.1"	12 (3.1)	5	35
810 LX with side chemical cabinet (SCC)		900 x 850 x 739 mm 35.4" x 33.5" x 29.1"			
815 LX	535 x 498 x 520 mm 21.1" x 19.6" x 20.5"	600 x 850 x 739 mm 23.6" x 33.5" x 29.1"	12 (3.1)	5	35
815 LX with side chemical cabinet (SCC)		900 x 850 x 739 mm 35.4" x 33.5" x 29.1"			

* Total water consumption per fill based on reservoir sump and all fluid path fill volumes, care should be taken when evaluating comparative water consumption claims.

Site preparation		810 LX / 815 LX
Water supply (hot, cold and DI)	G ¾" hose thread connection, recommended min. flow 20 L/min (5.25 gpm); lower flow rates may extend cycle times; 200 to 600 kPa (29-87 psi) water pressure	
Drain requirement, vertical standpipe	40 mm (1 ½") diameter, 500 to 700 mm (20" to 27") above floor	



Model	Wash Temp. max. °C	Cycle function			Chemical dosing		Net weight Empty kg (lb)
		Rinse purified water	Rinse acid	Drying	Automatic pumps	Level sensors	
810 LX	95°C	■	■	–	■	–	85 (187)
810 LX with side chemical cabinet (SCC)							115 (254)
815 LX	95°C	■	■	Standard: Forced-air chamber Option: Forced-air chamber and injectors	■		85 (187)
815 LX with side chemical cabinet (SCC)							115 (254)

■ / □ Standard / optional features

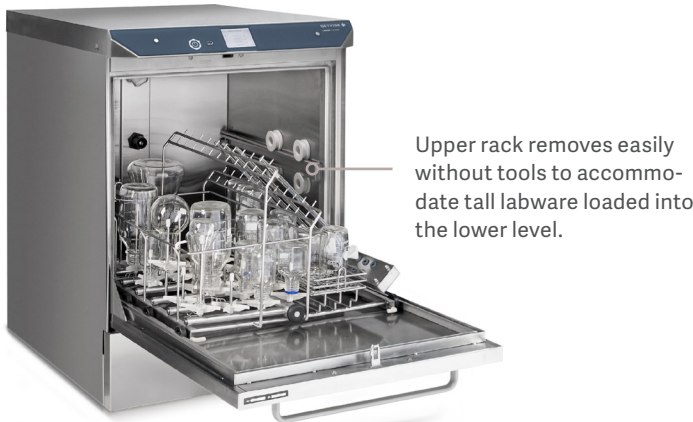
Certifications	
2006/42/EC	

World class engineering

– robust construction
for safety and efficiency

Ergonomic loading configurations

- Telescoping load-bearing rails permit extension of racks for easy loading. All racks are interchangeable between top and bottom wash levels, and among Getinge Lancer Ultima series freestanding models 910 LX and 1300 LX. This minimizes the need for additional accessories.
- The fold-down door creates a platform for proper rack positioning and more comfortable loading and unloading.

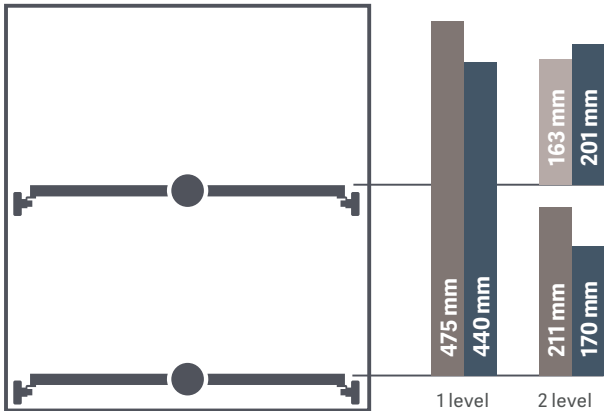


Cleaning performance and safety

Operating systems are designed for performance, efficiency and high throughput.

- An automatic door lock prevents door opening during active cycles; protects the user from heat and chemical exposure.
- Top and bottom stainless steel spray arms are pressurized to provide exterior coverage to the labware.
- Injector rack manifold connections are located at the rear for proper alignment and the most efficient pressure and flow.
- Washing temperature can be set to a maximum of 95°C (203°F) if required for more difficult soils.
- Automatic Peristaltic pumps are self-contained for accurate and repeatable dosing of detergents or acids required by each cycle.
- Multiple DI rinses can be programmed to eliminate interior and exterior spotting.

Wash load configurations



- PST Basic basket
- PSBT Basic basket with spray arm
- IXC / IXL injection racks (long / short jets)

Alarms and monitoring

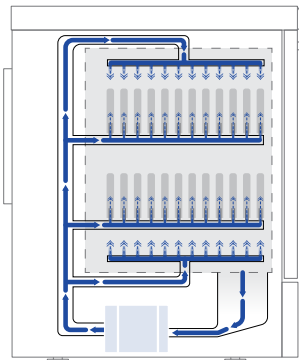
- The 3.5" high resolution touchscreen color display is easy to read from a distance and saves steps when monitoring.
- The intuitive graphic user interface creates a series of visual performance indicators such as active program, time remaining, warning, alarm and cycle completed functions. Five preset programs permit one touch operation. Additional cycles are programmed from the graphic user interface.
- An integrated USB port allows easy front panel access for process tracking and data logging. Process record printouts available through RS 232 or Ethernet port are managed by the Prolux controller.

Construction

The sump, spray arms, interior chamber walls and door are fabricated from 316L stainless steel to resist aggressive chemicals and residues.

- Exterior 304L stainless steel panels resist corrosion, simplify cleaning and protect electrical and plumbing components.

Hydraulic design



The combination of a high performance recirculation pump, straight-line fluid path and center-mounted rack interface assures maximum water flow through spray arms and injectors. The design provide excellent cleaning performance on all wash levels.

Washer pump is protected from debris by a stainless steel sump screen. The screen lifts out without tools for easy cleaning.

- Cabinet fits in 600 mm wide (23,6") casework opening for new and replacement installation.
- A steam condenser minimizes water vapor during heated cycles to protect casework from moisture damage. Standard on model 815 LX; optional on model 810 LX.
- Precut utility panels on sides and rear simplify installation.
- Double-wall insulated assembly confines heat loss and minimizes noise.
- Easy access stainless steel chamber filters extend washer life by protecting pumps and interior plumbing from debris.
- A compact liquid sump and direct fluid path minimizes water volume per fill, lowers overall consumption per cycle and improves sustainability throughout the useful life.

View-In-Process



An optional 348 mm (13.7") H x 173 mm (6.8") W dual pane View-In-Process (VIP) window includes an interior LED light for visual verification of the interior load during the cycle. The light is activated by the On/Off switch through the Prolux controller. Tempered safety glass provides excellent sound and heat abatement and enhances operator safety. Factory installed, specify when ordering.

One touch simplicity, limitless flexibility.

Prolux controller

The Prolux controller is based on a high-performance PLC microprocessor designed for simplicity, one-touch start, real-time status indicators and intuitive programming options that permit customization over the range of washer operations.

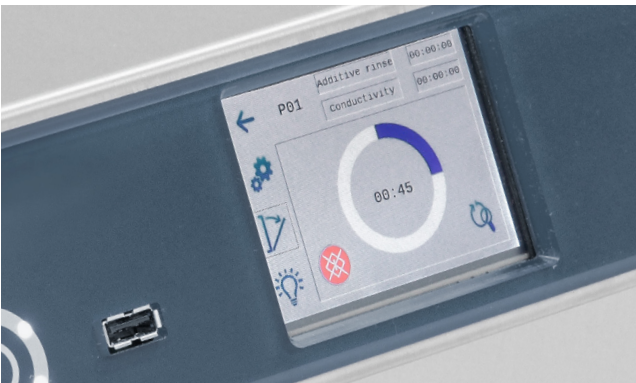
Prolux integrates a suite of menu screens that support digital functions from cycle selection, process monitoring, warning advisories, audible and visual alarms, system communications and data capture.

Operation

- Screen menus and a graphic user interface are designed to simplify setup and operations including active program, remaining time, warnings, alarms and complete cycle notifications.
- Five preset programs are factory loaded for one-touch control of most routine applications.
- When additional cycle programs are desired, parameters can be changed through secure access to the administration screen where an intuitive graphic user interface displays all options..

Communication and connectivity

- A front-panel USB port simplifies direct connection to peripheral devices for cycle tracking and data capture. The port is covered by a protective hood.
- A real-time process record is printed if optional printer is installed.
- Multiple data ports include Ethernet and RS422 connectors.
- Impact or network printers options document cycle performance, warnings and alarms.



810 LX / 815 LX

- 3.5" color touchscreen interface
- 320 x 240 pixel resolution display
- Five presets
- Additional custom program options



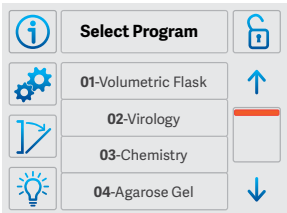
The Prolux PLC Controller includes a touchscreen interface with a common icon directory that permits scrolling access to primary screens from the same menu. A set of sub-menu screens display additional icon directories specific to the screen functions.

Programming

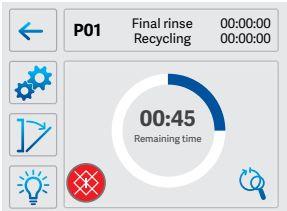
Programmable cycle parameter selections include:

- Prewash. Up to 3 prewashes, 0 to 30 minutes each, temperatures up to 95°C (203°F), chemical dosing as desired.
- Wash. 0 to 30 minutes, temperatures up to 95°C (203°F), chemical dosing as desired.
- Acid rinse. 0 to 30 minutes chemical dosing, temperatures up to 95°C (203°F).
- Running water rinses. One or more short rinse sequences after the wash or rinse cycle purge the hydraulic circuit of residual detergent and rinsing agents.
- Rinse, DI. Up to 4 rinses, 0 to 30 minutes each. Ambient to 95°C (203°F).
- Final rinse, DI. 0 to 30 minutes, temperatures up to 95°C (203°F).
- Drying*
Standard chamber drying: 35 minutes at approx 110°C (230°F). Optional HEPA filtered injector drying: 90 minutes adjusted mode 60°C (140°F) or maximum mode 85°C (185°F).
- Cooling*
Standard drying: 35 minutes.
Optional injector drying: 90 minutes.
*Please note that model 810 LX is not equipped with drying or cooling functions.

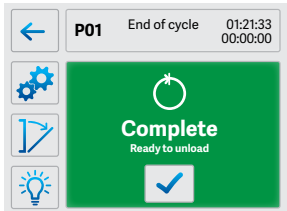
Display screens



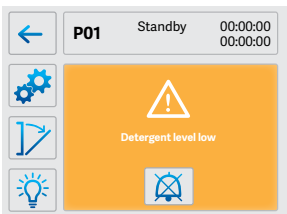
Program Selection. The Program Selection screen lists the five factory presets, as well as additional presets added through administrator access.



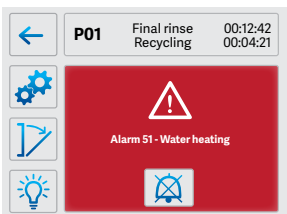
Cycle in Process. A real-time status screen displays time remaining until cycle completion and links to cycle detail screens with the touch of a button.



Cycle Completed. The green Cycle Completed screen confirms completion of the cycle and indicates the washer is safe to unload.



Warning Message. The amber Warning Message screen provides a status report to prompt refill of detergent and rinse agents.



Alarm Message. The red Alarm Message screen confirms the reason for a system shutdown and prompts corrective action needed in advance of a restart.

Comprehensive collection

– a perfect fit for any lab

Superior efficiency – for small and large needs.

Getinge Lancer Ultima offers an expanded line of higher volume labware washers to improve throughput. Freestanding washers offer a range of performance features designed to deliver clean labware faster than other industrial washers. Freestanding washers are available in five configurations and five sizes to meet the demand for higher turnover of larger loads.

Getinge Lancer Ultima means superior quality

All models are produced to withstand harsh laboratory conditions, minimize water consumption and save energy. The complete line of Getinge Lancer Ultima labware washers address applications at any capacity for high-density processing of multiple labware types.

All models feature the Prolux PLC microprocessor controller with color enhanced graphic user interface for intuitive one-touch cycle selection and start. The Prolux control functionality permits easy scale-up from smaller to larger models.

For more information on freestanding models please refer to the Getinge Lancer Ultima series freestanding brochure.

Getinge Lancer ULTIMA Series



*With side chemical cabinet (SCC)



Bioreactor preparation solution

– consistent processes deliver repeatable results

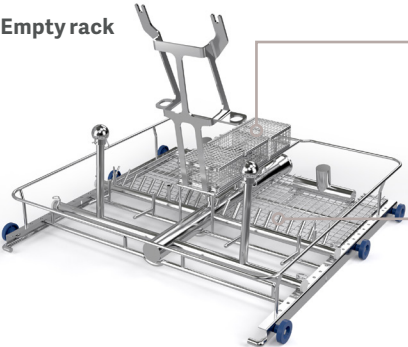
The expertise of Getinge and Applikon research and development has established a synergistic process for bioreactor preparation.

A solution to prevent cross-contamination, minimize any research downtime and ensure validated outcome through optimal processes and procedures. Getinge offers a specially designed bioreactor wash rack for Getinge Lancer Ultima laboratory washers.

This dedicated wash rack, for Getinge Applikon multi-use bioreactors, establishes a highly reproducible system with significant benefits such as:

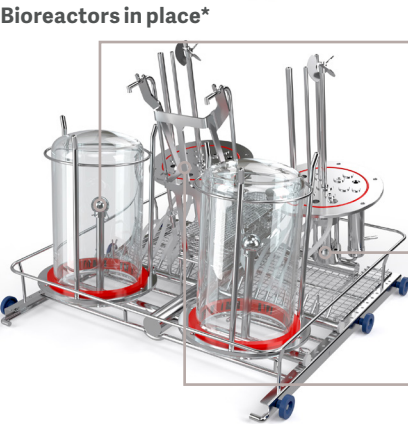
- Free-up resources to increase laboratory throughput and minimize downtime
- Decreasing operational labor costs compared to manual cleaning processes
- Improving staff safety by removing potential repetitive motions and exposure of harmful substances related to manual procedures.

The relationship between the bioreactor design and laboratory washer assures predictable outcomes. The defined connection points on the wash rack and bioreactor head plate ensures a clean bioreactor prepared for sterilization.



Baskets
Small bioreactor assembly parts are placed in the baskets to ensure that these are in place throughout the cleaning cycle.

Multiple injector tubes
Reassure best possible cleaning performance for each entry connection on the bioreactor head plate.



Spray headers
High flow of process water through the spray headers clean the inside of the bioreactor vessel.

Head plate fixation
The head plate is fixed in the wash rack. The spray wings within the washer will clean the outside of the head plate.

Angled head plate
Minimum water retention on the head plate surface will speed up the drying phase which shorten the overall process cycle.

*Multi-use, volume 1-3 liter



Getinge Lancer Ultima model 815 LX undercounter labware washer.

Enhancements for your unique application

Consumables

For best results, Getinge Lancer offers a selection of detergents and rinsing agents that have been tested and validated to maximize the performance of the Getinge Lancer Ultima washer while minimizing water consumption.

- Getinge Lancer LLL Detergent produces analytically clean results. It is phosphate free, fully biodegradable and will not harm aluminum, plastic or rubber.

A typical dose is from 6 to 10 ml per liter for water with hardness values between 200 and 400 ppm. Available in 10 liter container.

- Getinge Lancer NLL Neutralizing agent is an acetic-acid based formulation ideal for the final rinse. The dose is typically 5 ml per liter. Available in 10 liter container.

Options and accessories

Features		810 LX	815 LX
HEPA filtered hot air through chamber and injectors	Optimal drying performance through loading rack injectors for narrow neck glassware.	–	<input type="checkbox"/>
pH programming	Neutralizes effluent before transfer to utility drain.	<input type="checkbox"/>	<input type="checkbox"/>
Low pressure kit	Boosts DI water supply input pressure to assure optimum performance.	<input type="checkbox"/>	<input type="checkbox"/>
Liquid level sensor	Indicates low volume in detergent and acid additive reservoirs.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
External printer, externally mounted	Installs by direct connection to washer port. Generates 57 mm (2.25") thermal strip record of washer function.	<input type="checkbox"/>	<input type="checkbox"/>
Side Chemical cabinet (SCC)	Side Chemical cabinet placed at the right side of the washer. The cabinet can accommodate two 10 liter chemical canisters. Additional upper level storage available for protective equipment used when replacing chemical containers. The side chemical cabinet is sold as an accessory. Side Chemical cabinet can not be combined with Base cabinet.	<input type="checkbox"/>	<input type="checkbox"/>
Base cabinet	Stainless steel cabinet sized to accommodate models 810 LX and 815 LX. Elevates washer loading platform by 508 mm (20") to improve ergonomic access when undercounter installation is not desired.	<input type="checkbox"/>	<input type="checkbox"/>
IQ/OQ validation	Includes documentation verification, review of accessories/options, review of equipment installation, verification of utility supplies, review of access levels, review of configuration settings, I/O testing, functional testing, alarm testing, and a complete cycle test.	<input type="checkbox"/>	<input type="checkbox"/>
Conductivity verification	Conductivity verification of final rinse quality.	<input type="checkbox"/>	<input type="checkbox"/>
View-In-Process window	Includes interior light, permitting visual verification during wash cycles.	<input type="checkbox"/>	<input type="checkbox"/>

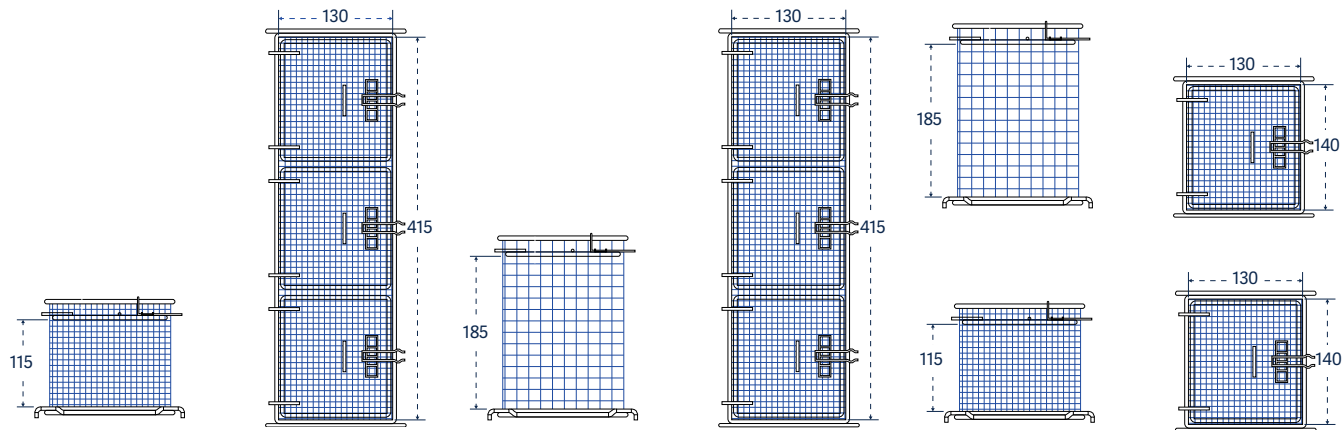
See product specifications for details and additional options to select.

☒ / ☐ Standard / optional features

Common accessories

Choose from up to 60 different injector racks, pipette racks and baskets. All racks are interchangeable between the washer lower and upper levels.

- A wide variety of standard inventory baskets and injector racks are available to meet most needs.
- Custom racks and baskets can be fabricated to meet specific needs or special applications.



Small mesh basket with cover, long: Catalog No. STCXL



Small mesh basket, tall with cover, long: Catalog No. LTCXL

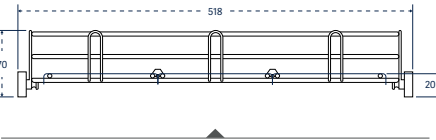


Small mesh baskets, tall and short: Catalog No. LTC and STC

Small mesh baskets		
For bottle caps, ferrules, plugs, stoppers and test tubes, interior dimensions (LxDxH).		
	810 LX / 815 LX	Part number
Mesh basket, short, with cover, 130x118x98 mm	STC	02010037
Mesh basket, short, with cover, 405x118x98 mm	STCXL	02010038
Mesh basket, tall, with cover, 130x118x170 mm	LTC	02010029
Mesh basket, tall, with cover, 405x118x170 mm	LTCXL	02010030

Accessories

810 LX / 815 LX



Basic basket with reversible tray lid: Catalog No. PST and GC



Basic basket with spray arm: Catalog No. PSBT

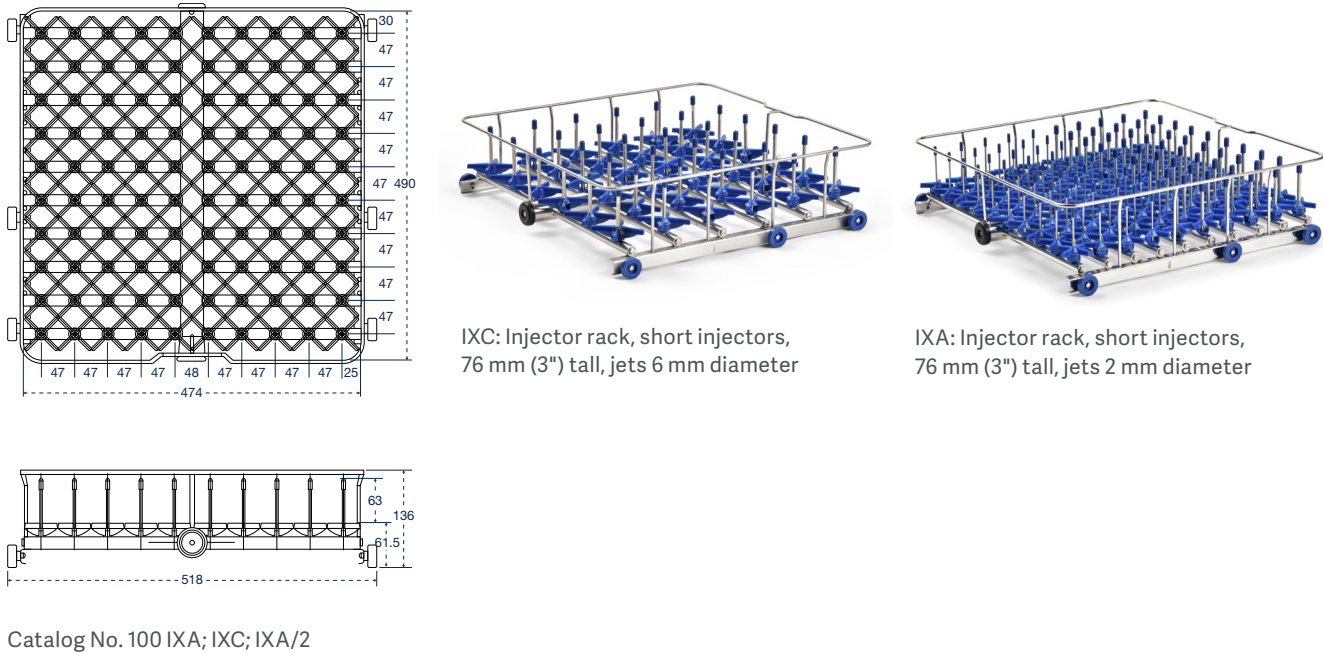
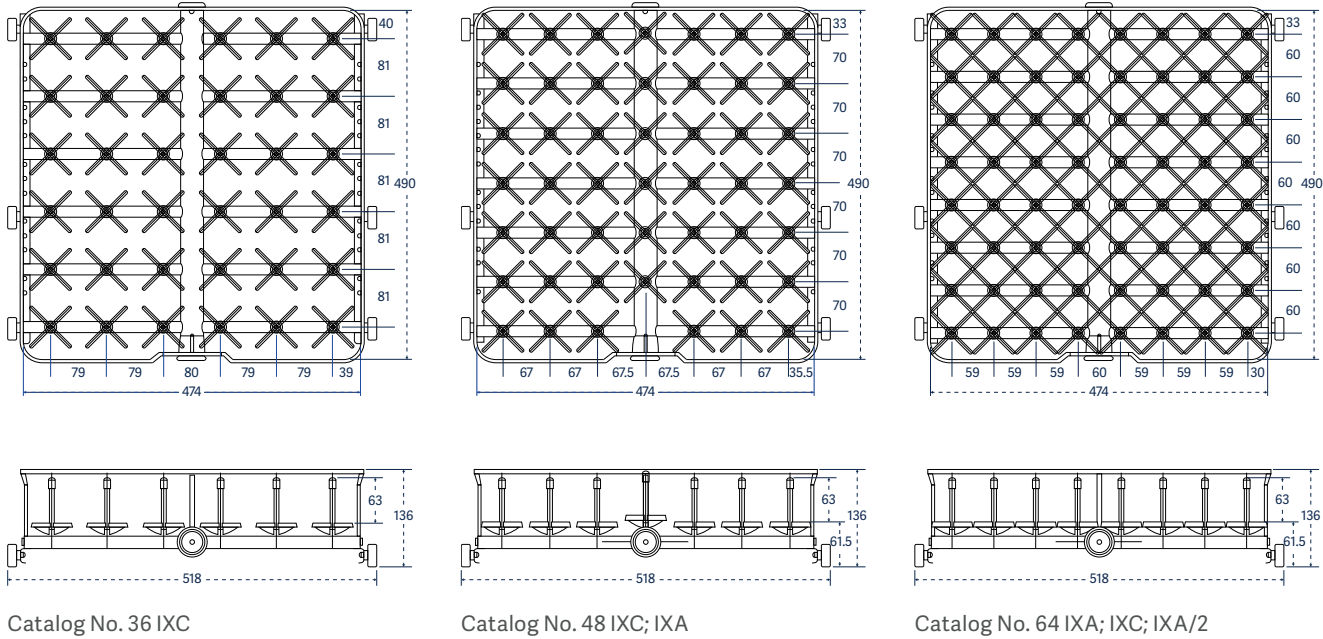


Support for culture dishes (3x) placed in PST basket.

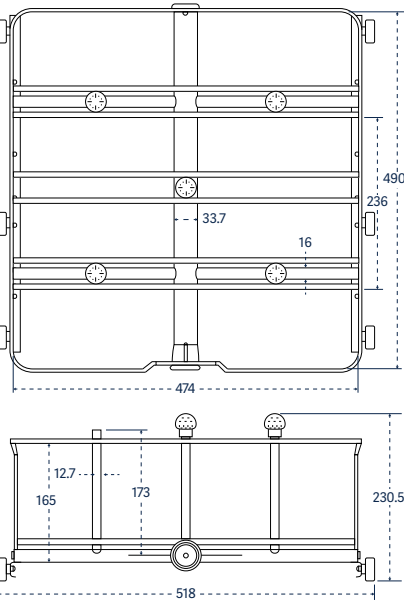
Baskets	810 LX / 815 LX	Part number
Useful for beakers, trays, dishes, dissolution vessels, funnels, instruments and jars.		
Basic basket	PST	02600011
Basic basket with spray arm	PSBT	02600010
Support for culture plates for PST basket	20 PL	01030417

Basket covers	810 LX / 815 LX	Part number
Accessory basket covers are available to secure small or lightweight labware during the wash cycle.		
Reversible tray lid for PST/PSBT	GC	01030569
Reversible tray lid, half size for PST/PSBT	GC1/2 PS	01030570
Reversible tray lid for injector rack	GC	01030585
Reversible tray lid, half size for injector rack	GC1/2 PS	01030586

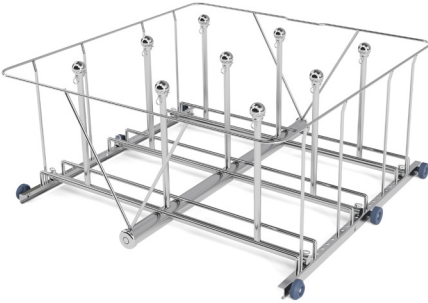
Short injectors		
For inside out cleaning of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.		
	810 LX / 815 LX	Part number
Half rack, 27 short jets, 6 mm diameter	27 IXC 1/2	02600022
36 short jets, 6 mm diameter	36 IXC	02600023
41 short jets, 6 mm BOD rack	41 IXC	02600003
48 short jets, 2 mm diameter	48 IXA	02600026
48 short jets, 6 mm diameter	48 IXC	02600027
64 short jets, 2 mm diameter	64 IXA	02600030
64 short jets, 6 mm diameter	64 IXC	02600032
64 short jets, mixed 2 mm and 6 mm diameter	64 IXA/2	02600031
100 short jets, 2 mm diameter	100 IXA	02600016
100 short jets, 6 mm diameter	100 IXC	02600018
100 short jets, mixed 2 mm and 6 mm diameter	100 IXA/2	02600017



Long injectors For inside out cleaning of large narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.		
	810 LX / 815 LX	Part number
5 long jets, 12.7 mm diameter, with spray ball	5 IXL	02600007
9 long jets, 12,7 mm diameter, with spray ball	9 IXL	AA02250223
12 long jets, 8 mm diameter	12 IXL	AA02250224
20 long jets, 8 mm diameter	20 IXL	02600021
36 long jets, 6 mm diameter	36 IXL	02600024
48 long jets, 6 mm diameter	48 IXL	02600028
64 long jets, 6 mm diameter	64 IXL	02600033
100 long jets, 6 mm diameter	100 IXL	02600019



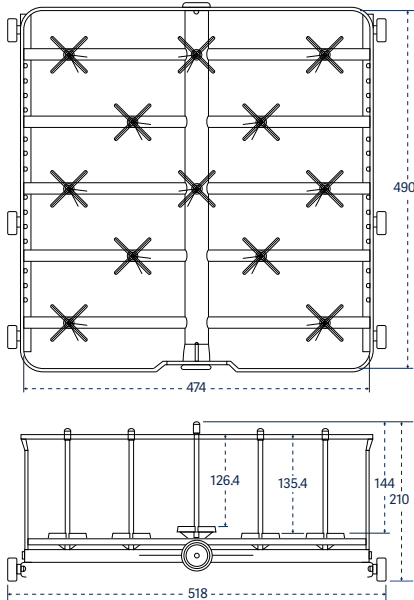
Catalog No. 5 IXL



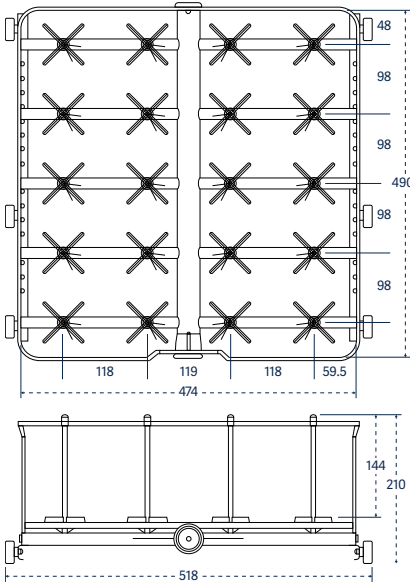
Catalog No. 9 IXL



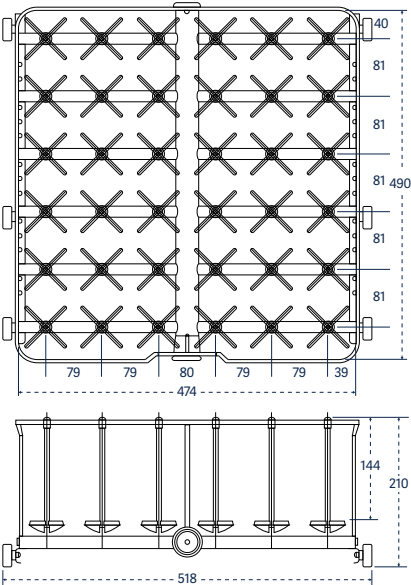
Adjustable clip positions labware on injector for optimal cleaning performance.



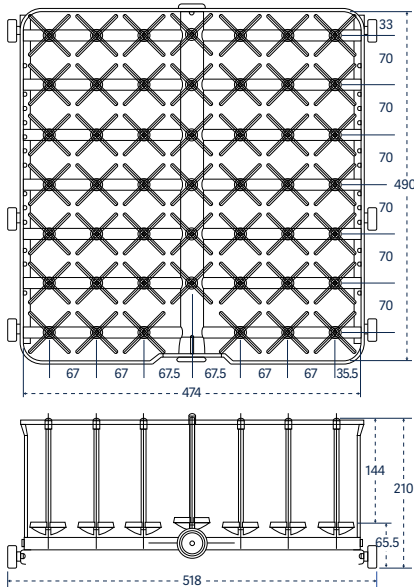
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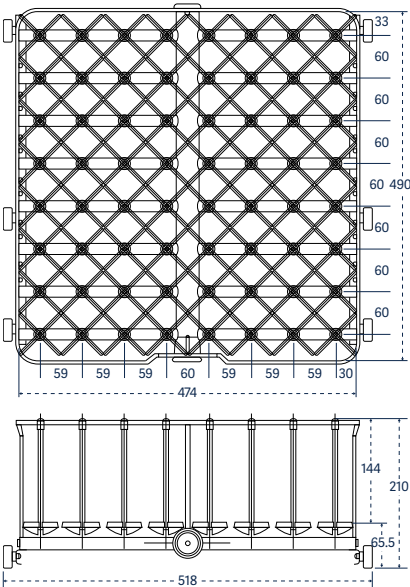
Catalog No. 20 IXL



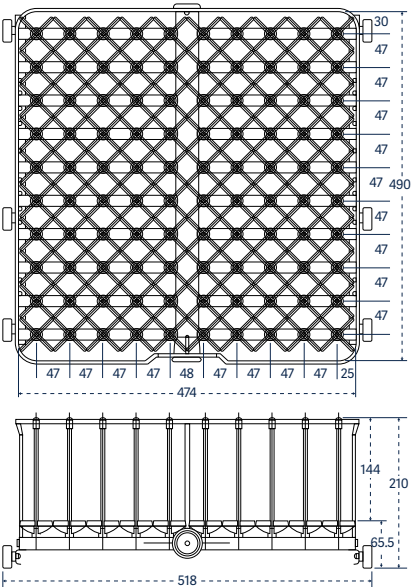
Catalog No. 36 IXL



Catalog No. 48 IXL



Catalog No. 64 IXL



Catalog No. 100 IXL

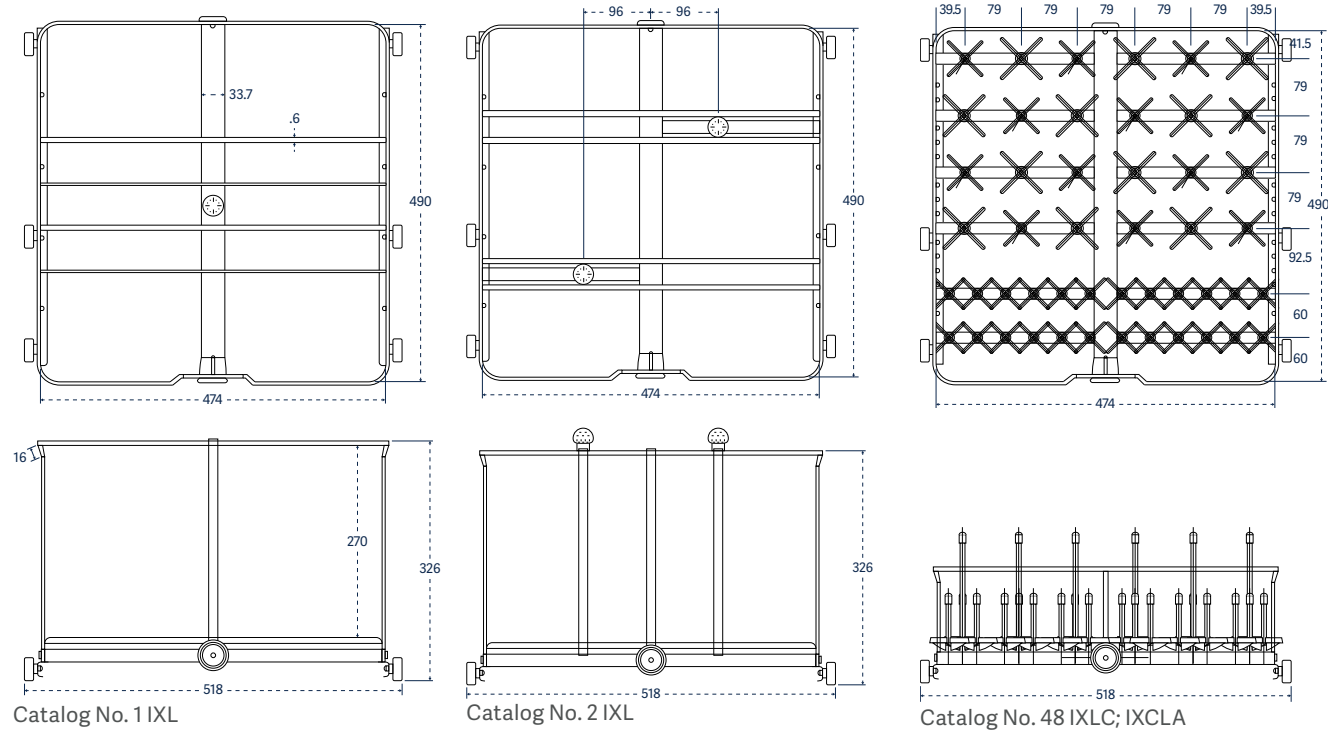
Extra long injectors		
For inside out cleaning of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and large volumetric flasks.		
810 LX / 815 LX	Part number	

1 long jet, 12.7 mm diameter, with spray ball	1 IXL	02600001
2 long jets, 12.7 mm diameter, with spray ball	2 IXL	02600014
4 long jets, 12.7 mm diameter, with spray ball	4 IXL	02600005

Combination short/long injectors		
For inside out cleaning of mixed loads of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.		
810 LX / 815 LX	Part number	

36 short and long jets, 6 mm diameter	36 IXLC	02600025
48 short and long jets, 6 mm diameter	48 IXLC	02600029
48 short and long jets, 6 mm diameter, 2 rows 2 mm diameter	48 IXLCA	02600006
64 short and long jets, 6 mm diameter	64 IXLC	02600034
100 short and long jets, 6 mm diameter	100 IXLC	02600020

Injector KIT packages	
KIT enable customization of standard injector racks to fit specific needs. Each KIT include 10 complete injectors with their supports and nozzles.	
Part number	
Long injectors, length of 230 mm and 6 mm diameter	6007500984
Long injectors, length of 171 mm and 6 mm in diameter	6007500890
Short injectors, length of 86 mm and 6 mm in diameter	6007500957
Short injectors, length of 56 mm and 6 mm in diameter	6007501012
Long injectors, length of 171 mm and 8 mm in diameter	6007501011
Needle injectors, length of 86 mm	6007501007



Multipurpose racks		
For a combination of labware and pipettes.		
810 LX / 815 LX	Part number	

Basic basket plus 27 short and long jets	PS/27 IXLC	02600039
25 pipettes, angled plus 24 short and long jets	25 PIP/24 IXLC	02600004
25 pipettes plus 30 short and long jets	25 PIP/30 IXLC	02600035
14 short jets plus 4 long injectors angled and perforated	4 EP/14 IXC	02600041
28 short and long jets plus 4 long injectors, angled and perforated	4 EP/28 IXLC	02600036
50 pipettes plus 34 short and long jets	50 PIP/34 IXLC	02600037
One third PS plus 21 short and long jets, plus 25 pipettes	PS/21 IXLC/25 PIP	02600038

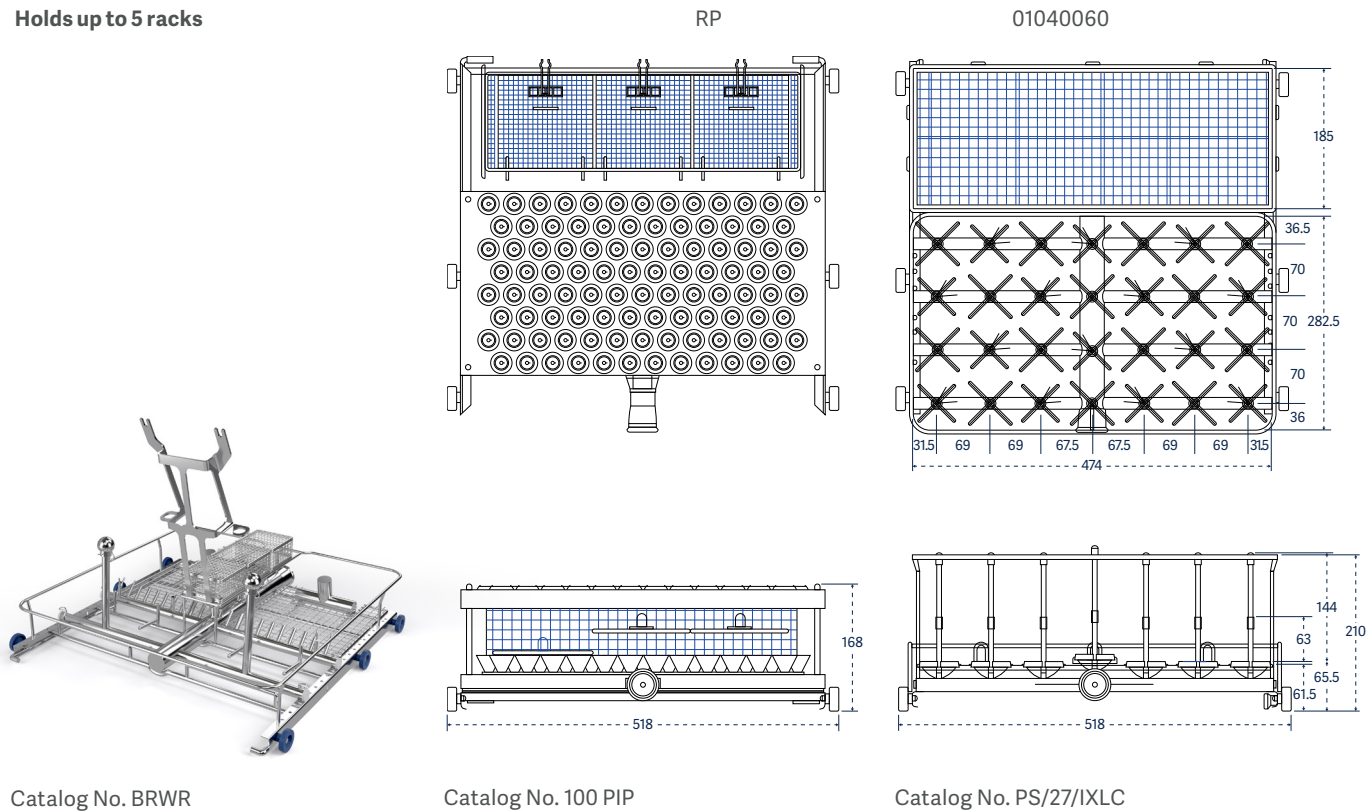
Pipette racks		
Accessory pipette racks are configured to accommodate reusable pipettes.		
810 LX / 815 LX	Part number	

Grommet style, individually loaded, 100 position	100 PIP	02600040
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Bioreactor rack		
810 LX / 815 LX	Part number	

Rack for 1-3 L Bioreactors	BRWR	AA02600113
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Storage stand		
An accessory storage stand offers a convenient place to store accessory racks and baskets when not in use.		
810 LX / 815 LX	Part number	





810 LX

The 810 LX is the entry level model in the undercounter range of laboratory washer/Dryers. It offers direct injection washing on two levels, and fits under standard casework to meet the budget and space requirements of many laboratories.

The racks are interchangeable among the 810 LX and 815 LX models of Geringe Lancer Ultima Undercounter Washers, and the 910 LX and 1300 LX models of Geringe Lancer Ultima Freestanding Washers, which limits the need for additional loading equipment when expanding the capacity of your lab.

Exterior Dimensions (WxHxD)	600x850x739 mm (23,6"x33,5"x29,1")
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Exterior Dimensions (wxHxD) with side chemical cabinet, sold as accessory	900x850x739 mm (35,4"x33,5"x29,1")
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815 LX

The 815 LX offers all the benefits of the 810 LX plus chamber or HEPA filtered injector drying capabilities.

Optimal drying performance even for narrow neck glassware, if the optional HEPA filtered injector drying system is selected.

Exterior Dimensions (WxHxD)	600x850x739 mm (23,6"x33,5"x29,1")
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Exterior Dimension (wxHxD) with side chemical cabinet, sold as accessory	900x850x739 mm (35,4"x33,5"x29,1")
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Chamber Dimensions (WxHxD)	535 x 498 x 520 mm (21,1" x 19,6" x 20,5")	Chamber (WxHxD)	535 x 498 x 520 mm
Chamber Volume	140 L (4,9 cu.ft.)	Chamber Volume	140 L (4,9 cu.ft.)
Weight	85 kg (187 lbs.)	Weight	85 kg (187 lbs.)
Weight with side chemical cabinet	100 kg (220 lbs.)	Weight with side chemical cabinet	100 kg (220 lbs.)
Sound Level	≤ 60 dB(A)	Sound level	≤ 60 dB(A)
Washing Levels	2	Washing levels	2
Human Interface	Color touch screen 3,5"	Human Interface	Color touch screen 3,5"
Controller	PROLUX - 40 Programs	Controller	PROLUX - 40 Programs
Drying	No	Drying	Standard: Forced air chamber drying Optional: HEPA filtered forced injector drying system for narrow neck glassware

Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89	Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81	Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37	Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Саранск (8342)22-96-24 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97	Тверь (4822)63-31-35 Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93
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