# ULTIMA series **freestanding** labware washing systems







## Professional cleaning performance.

## Integrated systems, repeatable results.

From quality control to general laboratory research, 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 four preset programs for light to heavy loads simplifies operation, while more complex programs can be customized whenever needed to meet specific applications.

#### Washer Function and Flexibility



4 Factory Preset Programs light, moderate, normal, heavy and dozens more as desired





## Uncommon selection, common controls.



Quiet Operation.

Noise reduction design minimizes sound for quiet operation.



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

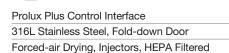
The Lancer ULTIMA series freestanding washers include five high-performance models that offer a range of labware loading options using baskets, injector racks or combination racks for the best high capacity processing of multiple labware types in the industry.





910 LX / 1300 LX Features





1400 LXP / 1600 LXP Features





High Impact Glass, Vertical Sliding Doors
Forced-air Drying, Injectors, HEPA Filtered

#### **Capacity Comparison**

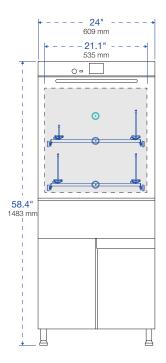
Model	Volume	Interior (W x H x D)	Positions	Wash Levels	Configurations
910 LX	5.7 cu. ft. (160 L)	21.1" x 21.4" x 20.5" (535 x 544 x 520 mm)	3	2	3
1300 LX	6.4 cu. ft. (180 L)	21" x 25.4" x 20.5" (535 x 644 x 520 mm)	4	3	5
1400 LXP	10.7 cu. ft. (304 L)	24.6" x 30.4" x 24.8" (626 x 773 x 629 mm)	4	3	6
1600 LXP w/optional height extension	14.4 cu. ft. (408 L) 18.6 cu. ft. (528 L)	27.7" x 33.8" x 26.7" (703 x 858 x 678 mm) 27.7" x 43.6" x 26.7" (703 x 1108 x 678 mm)	5	4	12
1800 LXA	16.2 cu. ft. (458 L)	43.3" x 31.2" x 20.7" (1100 x 793 x 526 mm)	4 x 2	3 x 2	20*

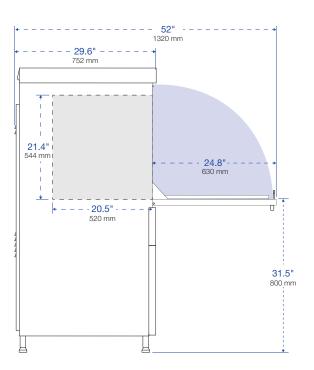
<sup>\*</sup> Three racks each side; six configurations each side.

# Small spaces, impressive capacity.

## 910 LX

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





Model	Specifications									
	Interior Dimensions W x H x D	Exterior Dimensions W x H x D	Water Per Fill* gal (L)	_	rams custom	<b>208V</b> 1-phase	<b>208V</b> 3-phase	<b>240V</b> 1-phase	<b>240V</b> 3-phase	<b>480V</b> 3-phase
910 LX	21.1" x 21.4" x 20.5" 535 x 544 x 520 mm	<b>24" x 58.4" x 29.6"</b> 609 x 1483 x 752 mm	<b>3.4</b> (13)	4	36					_

<sup>\*</sup> Because Lancer calculates 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.



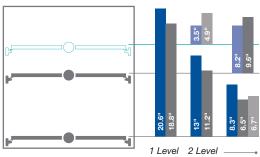


Stainless steel top and bottom spray arms on all models ensure complete washing and rinsing of glassware exterior and interior of large mouthed glassware.



#### 910 LX

Wash load configurations.



PST Basic basket IXL Injection rack (long jets)
PSBT Basic basket with spray arm IXC Injection rack (short jets)

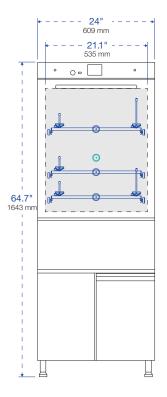
Sound Level <63 dB(A)

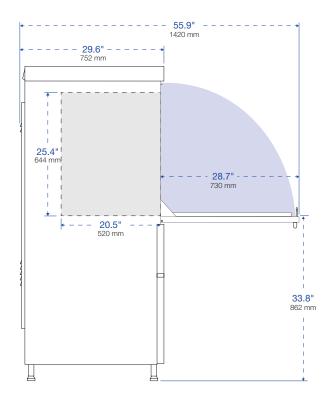
N	Model		Cycle Func	tion		Chemical Dosing				Net Weight
		Wash Temp. max. °C/°F	Rinse purified water	Rinse acid	Drying	Automatic pumps	On-Board chemical storage	Level Sensors	Water Softener	Empty lb (kg)
91	10 LX	95°C / 203°F	•	•	forced-air chamber and injectors; HEPA filtered	2 (max 2)	•	2	•	<b>315</b> 143

# Compact footprint, lasting impression.

### 1300 LX

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





Model	Specifications									
	Interior Dimensions W x H x D	Exterior Dimensions W x H x D	Water Per Fill* gal (L)		rams custom	<b>208V</b> 1-phase	<b>208V</b> 3-phase	<b>240V</b> 1-phase	<b>240V</b> 3-phase	<b>480V</b> 3-phase
1300 LX	21" x 25.4" x 20.5" 535 x 644 x 520 mm	<b>24" x 64.7" x 29.6"</b> 609 x 1643 x 752 mm	<b>4</b> (15)	4	36					

<sup>\*</sup> Because Lancer calculates 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.



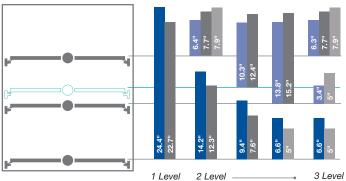


For maximum connectivity, all ULTIMA series washers include two USB (3.0) ports, one conveniently located on the front panel for easy access and transfer of cleaning process documentation, including cycle parameters, cycle number, date and time, phase duration, temperature for each phase, and detergent and acid intake.



#### 1300 LX

Wash load configurations.



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Sound Level <63 dB(A)

PST Basic basket	IXL
PSBT Basic basket with spray arm	IXC

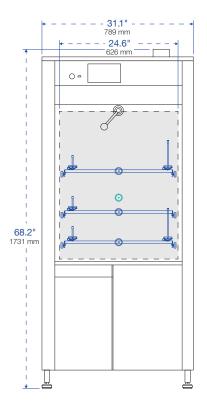
IXL Injection rack (long jets)
IXC Injection rack (short jets)

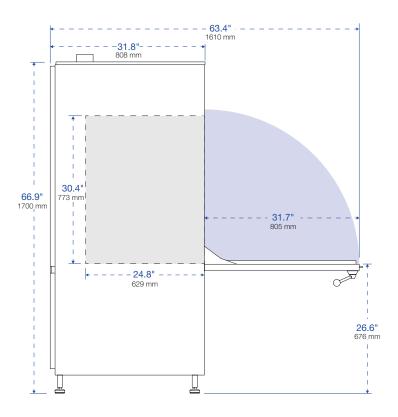
Model		Cycle Func		Net Weight					
	<b>Wash Temp.</b> max. °C/°F	Rinse purified water	<b>Rinse</b> acid	Drying	Automatic pumps	On-Board chemical storage	Level Sensors	Water Softener	Empty lb (kg)
1300 LX	95°C / 203°F	•	•	forced-air chamber and injectors; HEPA filtered	<b>2</b> (max 3)	•	2		<b>319</b> 145

# Space efficiency, multi-level loading.

## 1400 LXP

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





Model	Specifications									
	Interior Dimensions W x H x D	Exterior Dimensions W x H x D	Water Per Fill* gal (L)		rams custom	<b>208V</b> 1-phase	<b>208V</b> 3-phase	<b>240V</b> 1-phase	<b>240V</b> 3-phase	<b>480V</b> 3-phase
1400 LXP	24.6" x 30.4" x 24.8" 626 x 773 x 629 mm	31.1" x 68.2" x 31.8" 789 x 1731 x 808 mm	<b>5.2-6.6</b> (20-25)	4	36	_		_		

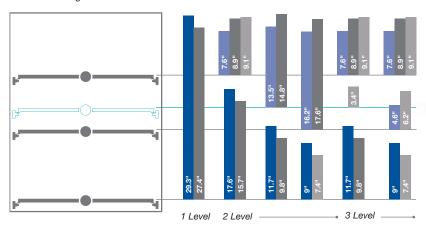
<sup>\*</sup> Because Lancer calculates total water consumption per fill based on reservoir sump and all fluid path fill volumes, care should be taken when evaluating comparative water consumption claim:



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 LXP

Wash load configurations.



PST Basic basket
PSBT Basic basket with spray arm

IXL Injection rack (long jets)

IXC Injection rack (short jets)

Sound Level <63 dB(A)

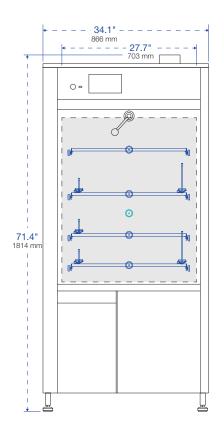
Model		Cycle Func	tion			Chemical D	osing		Net Weight
	<b>Wash Temp.</b> max. °C/°F	Rinse purified water	Rinse acid	Drying	Automatic pumps	On-Board chemical storage	Level Sensors	Water Softener	Empty lb (kg)
1400 LXP	95°C / 203°F	•	•	forced-air chamber and injectors; HEPA filtered	2 (max 5)	•	2		<b>469</b> 213

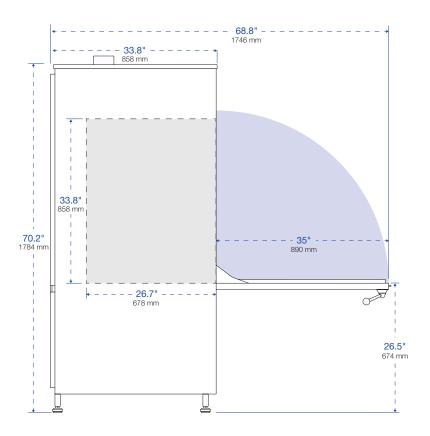
# Maximum flexibility.

## 1600 LXP

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

\* Drawing does not include optional chamber height extension.





Model	Specifications									
	Interior Dimensions W x H x D	Exterior Dimensions W x H x D	Water Per Fill* gal (L)		rams custom	<b>208V</b> 1-phase	<b>208V</b> 3-phase	<b>240V</b> 1-phase	<b>240V</b> 3-phase	<b>480V</b> 3-phase
1600 LXP	27.7" x 33.8" x 26.7" 703 x 858 x 678 mm	34.1" x 71.4" x 33.8" 866 x 1814 x 858 mm	7.9-9.2							
w/ optional height extension	27.7" x 43.6" x 26.7" 703 x 1108 x 678 mm	34.1" x 81.3" x 33.8" 866 x 2064 x 858 mm	(30-35)	4	36	_		_		

<sup>\*</sup> Because Lancer calculates 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.

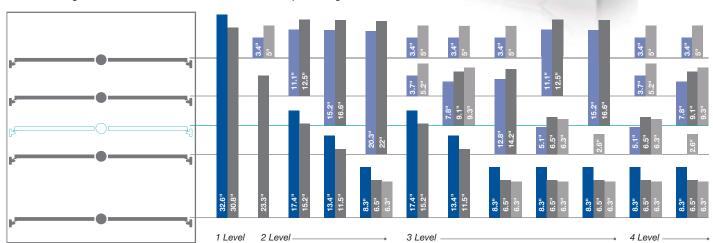






#### 1600 LXP

Wash load configurations. Measurements valid for units without the optional height extension.



PST Basic basket

PSBT Basic basket with spray arm

IXL Injection rack (long jets)

IXC Injection rack (short jets)



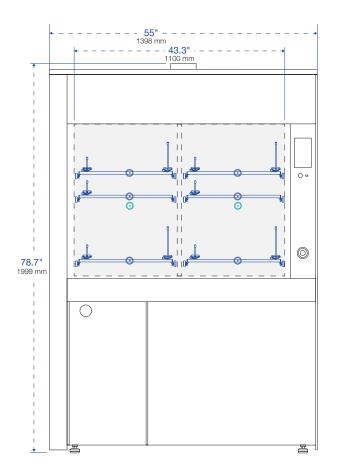
Sound Level <69 dB(A)

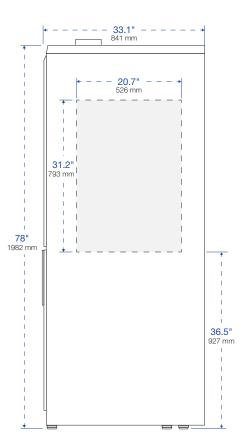
Model		Cycle Func	Chemical Dosing				Net Weight		
	Wash Temp. max. °C/°F	Rinse purified water	Rinse acid	Drying	Automatic pumps	On-Board chemical storage	Level Sensors	Water Softener	Empty lb (kg)
1600 LXP		_	_	forced-air chamber and	2	_			<b>474</b> 215
w/ optional height extension	95°C / 203°F	•		injectors; HEPA filtered	(max 5)		2		<b>529</b> 240

# Vanishing door, easy to load.

## 1800 LXA

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





Model	Specifications											
	Interior Dimensions W x H x D	Exterior Dimensions W x H x D	Water Per Fill* gal (L)		rams custom	<b>208V</b> 1-phase	<b>208V</b> 3-phase	<b>240V</b> 1-phase	<b>240V</b> 3-phase	<b>480V</b> 3-phase		
1800 LXA	43.3" x 31.2" x 20.7" 1100 x 793 x 526 mm	55" x 78.7" x 33.1" 1398 x 1999 x 841 mm	<b>10.5</b> (40)	10.5	10.5	4	36					
w/ optional condenser	43.3" x 31.2" x 20.7" 1100 x 793 x 526 mm	55" x 91.1" x 35" 1398 x 2315 x 891 mm		4	36	_		_				

<sup>\*</sup> Because Lancer calculates 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.

<sup>\*</sup> Drawing does not include optional steam condenser.

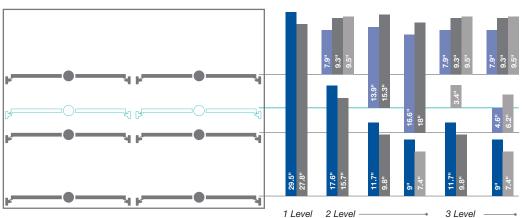


The dual pane glass door opens easily by sliding vertically into the cabinet beneath the loading chamber. This design eliminates the need for additional floor space in front or head space above the washer.



#### 1800 LXA

Wash load configurations per side. Three racks each side; six configurations each rack.



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Sound Level <65 dB(A)

PST Basic basket	IXL Injection rack (long jets)
PSBT Basic basket with spray arm	IXC Injection rack (short jets)

Model	Cycle Function			Chemical Dosing				Net Weight	
	<b>Wash Temp.</b> max. °C/°F	Rinse purified water	<b>Rinse</b> acid	Drying	Automatic pumps	On-Board chemical storage	Level Sensors	Water Softener	Empty lb (kg)
1800 LXA	05°C / 202°F	_	_	forced-air chamber and	2	_	0		<b>805</b> 365
w/ optional condenser	95°C / 203°F	•	•	injectors; HEPA filtered	(max 5)	•	2	П	<b>915</b> 415



# Repeatable results, with reliability, safety and high throughput.

Ergonomic Loading Configurations. Unlike oversized washers with less efficient loading patterns, 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 Lancer ULTIMA series undercounter models and freestanding models 910 LX, 1300 LX and 1800 LXA 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. (Does not apply to model 1800 LXA with vertical sliding door.)

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.
- Four 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.

Hydraulic Design

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

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

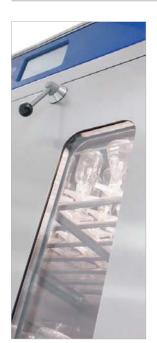
Washer pump is protected from debris by a stainless steel sump screen. The screen lifts out without tools for easy cleaning.

Model 1400 LXP, waterflow

**Construction.** The sump, spray arms, interior chamber 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.

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



## 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.
- Four 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 complies with international IP21 standards for ingress protection from condensation.
- A real-time process record is printed if optional printer is installed.
- Multiple data ports include Ethernet and RS422/485 connectors.
- Optional printer documents cycle performance, warnings and alarms.



The Prolux and Prolux Plus (above) controllers include 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.

#### 910 LX / 1300 LX



- 3.5" Prolux color touchscreen interface
- 320 x 240 pixel resolution display
- four presets
- · additional custom program options

#### 1400 LXP / 1600 LXP / 1800 LXA



- 7" Prolux Plus color touchscreen interface
- 800 x 480 pixel resolution display
- four 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 touch-screen 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**

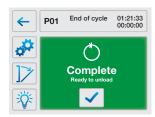
Featured display screens are 3.5" screen. Displays for 7" screens are identical.



 Program Selection. The Program Selection screen lists the four 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.

## Configurable for your facility.

## Site Preparation and Utilities

**Pre-Installation.** Lancer start-up services by factory-authorized technicians include washer set and leveling, pre-installation and final inspections, soft hook-up to utilities (in place by customer), check-out and initial operation. Contact Lancer to arrange startup services. Validation documentation and execution options are available; contact Lancer for information. See options.

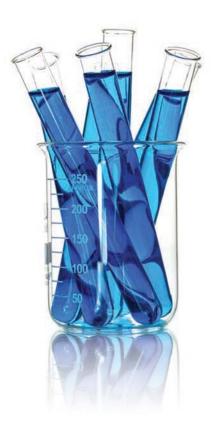
**Post-Installation.** Lancer offers technical support by direct product specialists between 8AM and 7PM Eastern Time EST.

**Warranty Information.** Lancer products are supported by a standard industry warranty.

Lancer Model	910 LX / 1300 LX / 1400 LXP / 1600 XLP / 1800 LXA
Water Supply (hot, cold and DI)	3/4" hose thread connection, recommended min. flow 5.25 gpm (20 L); lower flow rates may extend cycle times; 29-87 psi water pressure
Drain Requirement, Vertical Standpipe	1 ½" (40 mm) diameter, 20" to 27" (500 to 700 mm) above floor

#### Certifications

UL/IEC 61010-1





# Adaptable to suit your application.

## Options

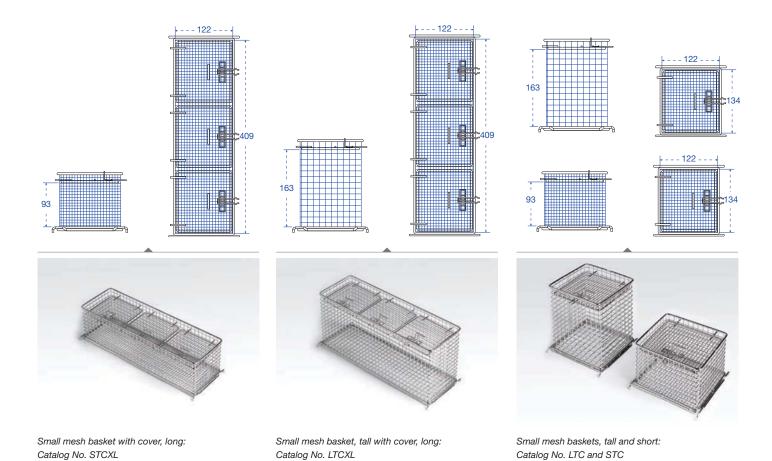
Features		910 LX	1300 LX	1400 LXP	1600 LXP	1800 LXA
Discharge Water Cooling	Reduces effluent temperature to less than 60°C (140°F) for code compliant transfer to utility drain.					
pH Programming	Neutralizes effluent before transfer to utility drain.					
Printer	For hard copy permanent record.					
Emergency Stop	Emergency stop button.					
Sampling Valve	Manual sampling valve.					
Conductivity Verification	Conductivity meter for final rinse verification.					
Final Rinse Kit	Final Rinse kit for conductivity monitoring inclusive of chemical isolation valves, recirculation pump case drain and Pneumatic drain valve for quick evacuation of chamber. Requires compressed air and floor drain.	-	_			
Water Softener	Water softener.					
Chemical Dosing Pump, Additional	Additional chemical dosing pump. Up to 1 additional on 910 LX / 1300 LX and up to 3 additional on 1400 LXP / 1600 LXP/ 1800 LXA.					
Main Switch	Main power switch, shuts off all power to the washer.	_	_			

Utilities		910 LX	1300 LX	1400 LXP	1600 LXP	1800 LXA
Steam Heating	Steam coil to utilize house steam for heating of wash/rinse water.	_				
Low Pressure Kit	Boosts DI water supply input pressure to assure optimum performance.					
Steam Condenser	Steam condenser for collapsing exhaust vapor.					
Gravity Drain	For quick evacuation of chamber. Requires compressed air and floor drain.					
Tri-clamp DI Inlet	Direct DI water inlet with tri-clamp connection and dry contact for control of customer DI loop valve.					
Construction		910 LX	1300 LX	1400 LXP	1600 LXP	1800 LXA
Trim Kit	Stainless steel trim kit for recessed installation.					
Moving Runners	Customized location of rack manifolds to accommodate specific loads.					
Chamber Height Extension	Chamber elevation extension; additional 250 mm (includes door jacks).	_	_	_		_
Extended Diptube Kit	Extended diptubes for use with 33-55 gallon chemical containers.					
Dry Contact	Dry contact for DI control.					
Seismic Restraints	Seismic tie down brackets.					
Stainless Steel Plumbing	Complete stainless steel hydraulic circuit.	_	_			
View-In-Process Window	Includes interior light, permitting visual verification during wash cycles.					

## 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 Baskets**

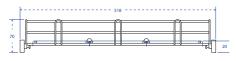
For bottle caps, ferrules, plugs, stoppers and test tubes.

	910 LX / 1300 LX / 1400 LXP / 1600 LXP / 1800 LXA
Mesh basket, short, with cover, 122 x 134 x 93 mm	STC
Mesh basket, short, with cover, 122 x 409 x 93 mm	STCXL
Mesh basket, tall, with cover, 122 x 134 x 163 mm	LTC
Mesh basket, tall, with cover, 122 x 409 x 163 mm	LTCXL

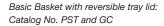


## Accessories. 910 LX / 1300 LX / 1800 LXA











Basic basket with spray arm: Catalog No. PSBT



Basket for culture dishes: Catalog No. BP

#### **Baskets**

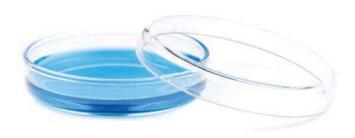
Useful for beakers, trays, dishes, dissolution vessels, funnels, instruments and jars.

	910 LX / 1300 LX / 1800 LXA
Basic basket	PST
Basic basket with spray arm	PSBT
Basket, half with spray arm	PSBT 1/2
Basket, for culture dishes	BP

#### **Basket Covers**

Accessory basket covers are available to secure small or lightweight labware during the wash cycle.

	910 LX / 1300 LX / 1800 LXA
Reversible tray lid for PST/PSBT	GC
Reversible tray lid, half size for PST/PSBT	GC1/2
Reversible tray lid, one-third size for PST/PSBT	GC1/3

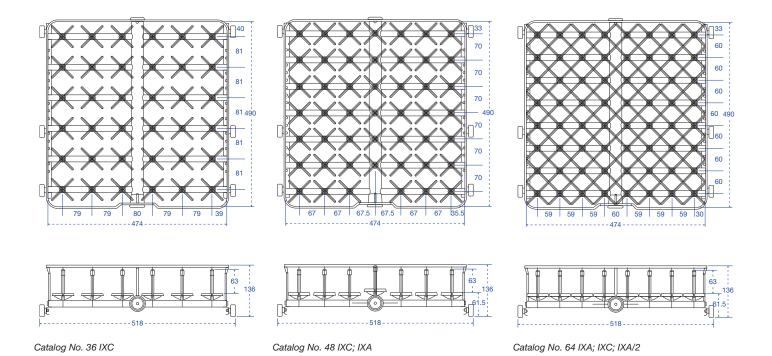


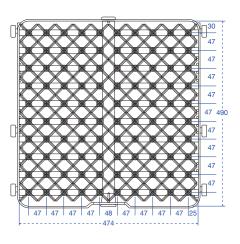
#### Short Injectors, 3" (76 mm) tall

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

	910 LX / 1300 LX / 1800 LXA
Half rack, 27 short jets, 6 mm diameter	27 IXC 1/2
36 short jets, 6 mm diameter	36 IXC
41 short jets, 6 mm BOD rack	41 IXC
48 short jets, 2 mm diameter	48 IXA
48 short jets, 6 mm diameter	48 IXC
64 short jets, 2 mm diameter	64 IXA
64 short jets, 6 mm diameter	64 IXC
64 short jets, mixed 2 mm and 6 mm diameter	64 IXA/2
100 short jets, 2 mm diameter	100 IXA
100 short jets, 6 mm diameter	100 IXC
100 short jets, mixed 2 mm and 6 mm diameter	100 IXA/2









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

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

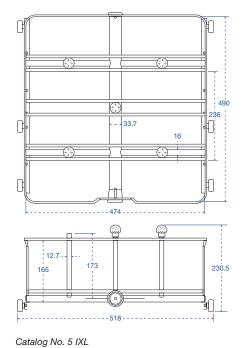
63 136 63 136 61.5

Catalog No. 100 IXA; IXC; IXA/2

#### Long Injectors, 6" (152 mm) tall

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

	910 LX / 1300 LX / 1800 LXA
5 long jets, 12.7 mm diameter, with spray ball	5 IXL
9 long jets, 12.7 mm diameter	9 IXL
12 long jets, 6 mm diameter	12 IXL
20 long jets, 8 mm diameter	20 IXL
36 long jets, 6 mm diameter	36 IXL
48 long jets, 6 mm diameter	48 IXL
64 long jets, 6 mm diameter	64 IXL
100 long jets, 6 mm diameter	100 IXL

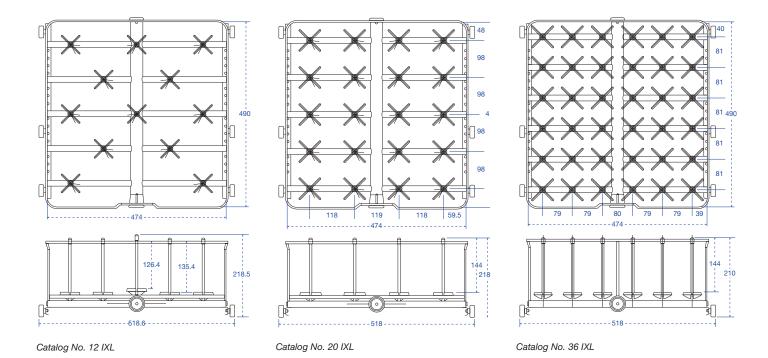


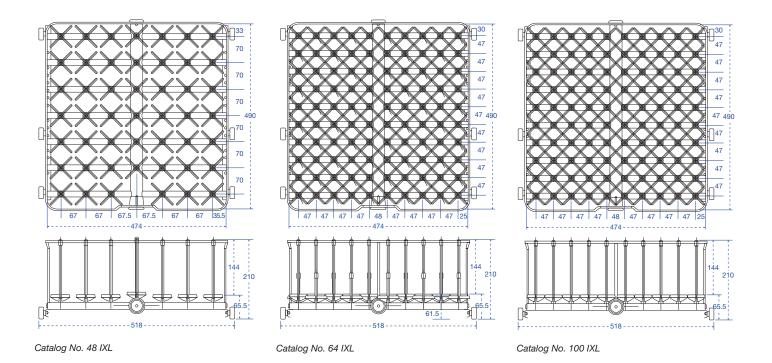
Catalog No. 9 IXL

- -518.6- -



Adjustable clip positions labware on injector to protect labware from breakage.





#### **Injector Rack Covers**

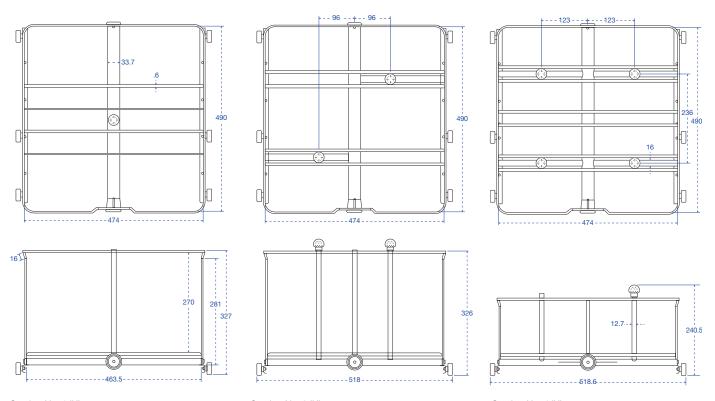
Injector rack covers are available to secure small or lightweight labware during the wash cycle.

	910 LX / 1300 LX / 1800 LXA
Full-size	GCI
Half-size	GCI 1/2
Third-size	GCI 1/3

#### Extra Long Injectors, 12" (305 mm) tall

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

	910 LX / 1300 LX / 1800 LXA
1 long jet, 12.7 mm diameter, with spray ball	1 IXL
2 long jets, 12.7 mm diameter, with spray ball	2 IXL
4 long jets, 12.7 mm diameter, with spray ball	4 IXL

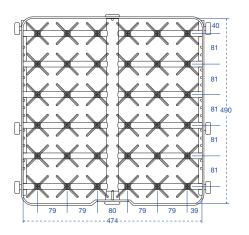


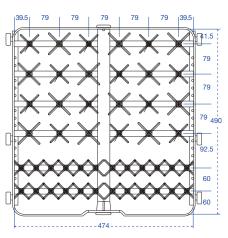
Catalog No. 1 IXL Catalog No. 2 IXL Catalog No. 4 IXL

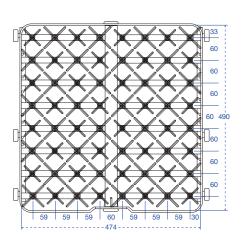
#### **Combination Short/Long Injectors**

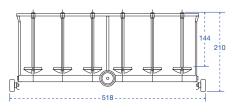
For inside out cleaning of mixed loads of narrow neck glassware, bottles, cylinders, boiling flasks, Erlenmeyer flasks and volumetric flasks.

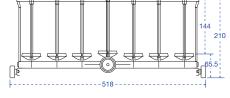
910 LX / 1300 LX / 1800 LXA
36 IXLC
48 IXLC
48 IXLCA
64 IXLC
100 IXLC

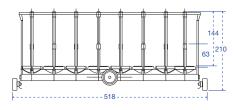












Catalog No. 36 IXLC

Catalog No. 48 IXLC; IXCLA

Catalog No. 64 IXLC

#### **Multipurpose Racks**

For a combination of labware and pipettes.

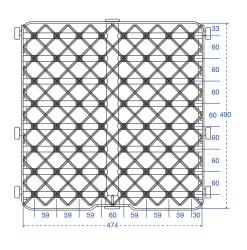
	910 LX / 1300 LX / 1800 LXA
Basic basket plus 27 short and long jets	PS/27 IXLC
25 pipettes, angled plus 24 short and long jets	25 PIP/24 IXLC
50 pipettes, angled plus 34 short and long jets	50 PIP/34 IXLC
PST plus 14 short jets plus 4 long injectors, angled and perforated	4 EP/14 IXC/PS
28 short and long jets plus 4 long injectors, angled and perforated	4 EP/28 IXLC
One third PS plus 21 short and long jets, plus 25 pipettes	PS/21 IXLC/25PIP

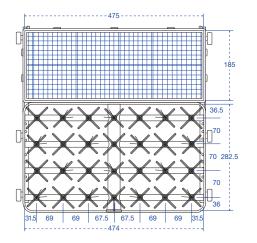
#### **Pipette Racks**

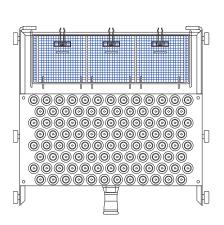
Accessory pipette racks are configured to accommodate reusable pipettes.

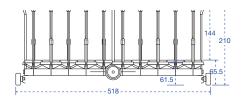
910 LX / 1300 LX / 1800 LXA

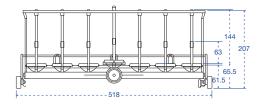
Grommet style, individually loaded, 100 position 100 PIP

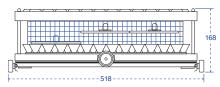












Catalog No. 100 IXLC

Catalog No. PS/27/IXLC

Catalog No. 100 PIP

#### Storage Stand

An accessory storage stand offers a convenient place to store accessory racks and baskets when not in use.

	910 LX / 1300 LX / 1800 LXA
Holds up to 5 racks	RP

#### **Supports**

Stainless steel. Fits inside open basket to permit placement of load at an angle.

	910 LX / 1300 LX / 1800 LXA	
Standard support, short, 3 1/2" (85 mm)	SSC	
Standard support, short, 1/3 PST Surface	SSC 1/3 PS	
Standard support, tall, 6" (150 mm)	SSL	
Standard support, tall, 1/3 PST Surface	SSL 1/3 PS	

#### Trolley

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.

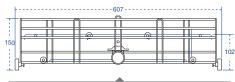
	910 LX	1300 LX	1800 LXA
Loading trolley	TN 910 LX	TN 13	_
Loading table	_	_	TC 1800





## **Accessories.** 1400 LXP









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

Basic basket with spray arm: Catalog No. PSBT

#### **Baskets**

Useful for beakers, trays, dishes, dissolution vessels, funnels, instruments and jars.

	1400 LXP
Basic basket	PST 14
Basic basket with spray arm	PSBT 14
Basket, half with spray arm	PSBT 1/2 14

#### **Basket Covers**

Accessory basket covers are available to secure small or lightweight labware during the wash cycle.

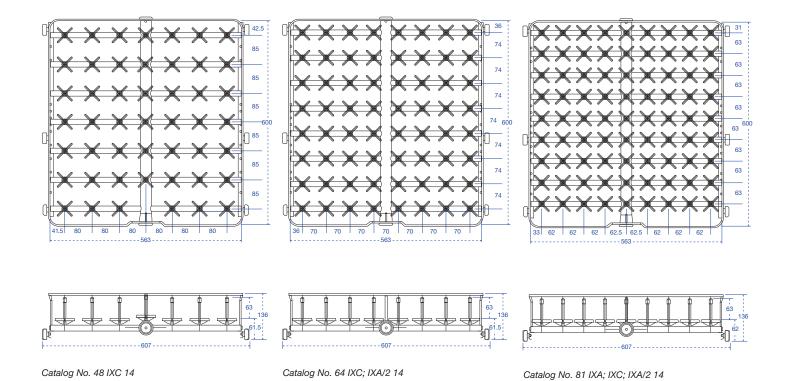
	1400 LXP
Reversible tray lid for PST/PSBT	GC 14
Reversible tray lid, half size for PST/PSBT	GC 1/2 14

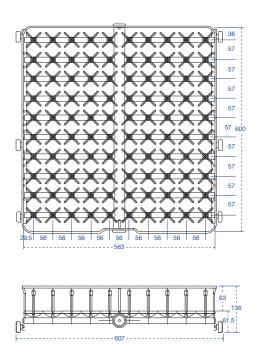
## Short Injectors, 3" (76 mm) tall

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

	1400 LXP
48 short jets, 6 mm diameter	48 IXC 14
64 short jets, 6 mm diameter	64 IXC 14
64 short jets, mixed 2 mm and 6 mm diameter	64 IXA/2 14
81 short jets, 2 mm diameter	81 IXA 14
81 short jets, 6 mm diameter	81 IXC 14
81 short jets, mixed 2 mm and 6 mm diameter	81 IXA/2 14
100 short jets, 2 mm diameter	100 IXA 14
100 short jets, 6 mm diameter	100 IXC 14
100 short jets, mixed 2 mm and 6 mm diameter	100 IXA/2 14







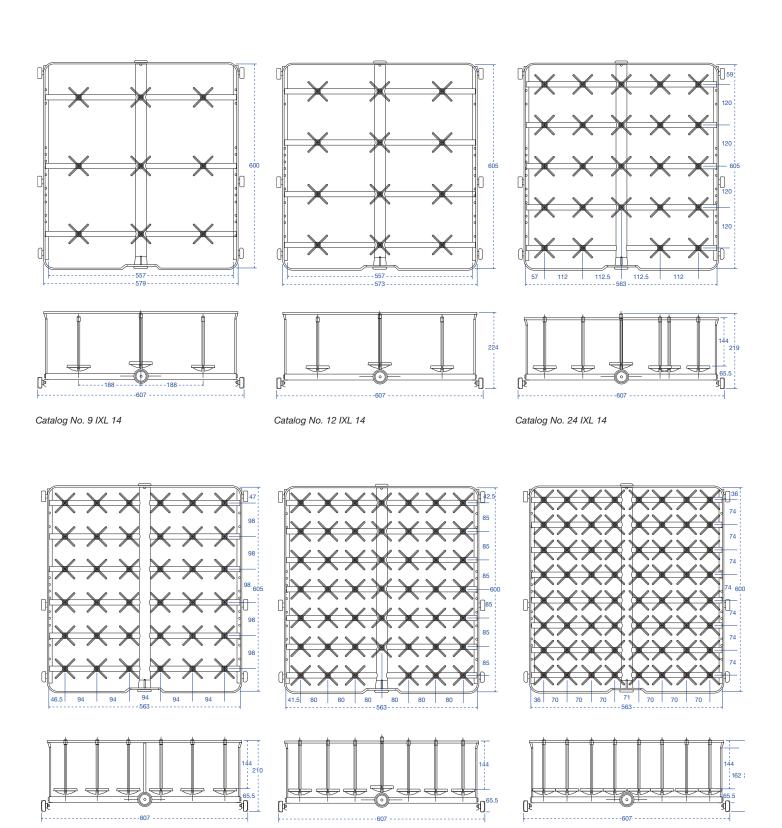
Catalog No. 100 IXA; IXC; IXA/2 14

## Long Injectors, 6" (152 mm) tall

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

	1400 LXP
9 long jets, 12.7 mm diameter	9 IXL 14
12 long jets, 6 mm diameter	12 IXL 14
24 long jets, 6 mm diameter	24 IXL 14
36 long jets, 6 mm diameter	36 IXL 14
48 long jets, 6 mm diameter	48 IXL 14
64 long jets, 6 mm diameter	64 IXL 14





Catalog No. 48 IXL 14

Catalog No. 36 IXL 14

Catalog No. 64 IXL 14

## **Injector Rack Covers**

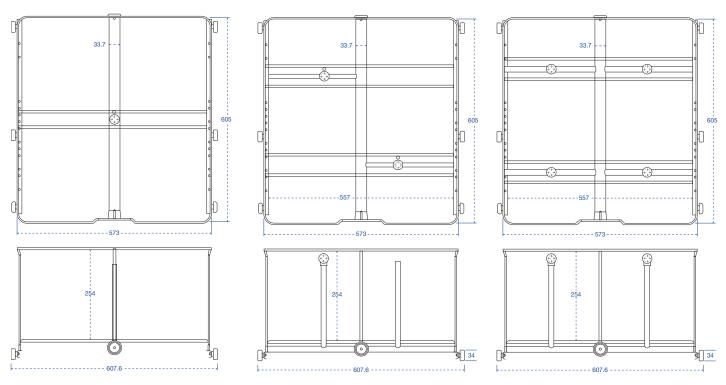
Injector rack covers are available to secure small or lightweight labware during the wash cycle.

	1400 LXP
Full-size	GCI 14
Half-size	GCI 1/2 14

#### Extra Long Injectors, 12" (305 mm) tall

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

	1400 LXP
1 long jet, 12.7 mm diameter, with spray ball	1 IXL 14
2 long jets, 12.7 mm diameter, with spray ball	2 IXL 14
4 long jets, 12.7 mm diameter, with spray ball	4 IXL 14

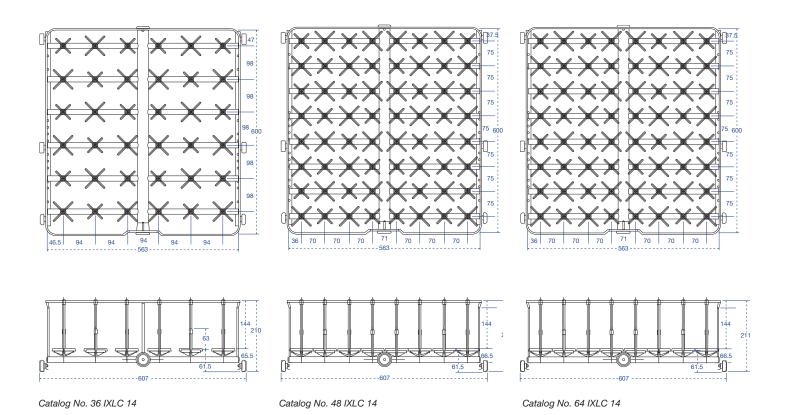


 Catalog No. 1 IXL 14
 Catalog No. 2 IXL 14
 Catalog No. 4 IXL 14

## **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 LXP
36 short and long jets, 6 mm diameter	36 IXLC 14
48 short and long jets, 6 mm diameter	48 IXLC 14
64 short and long jets, 6 mm diameter	64 IXLC 14
81 short and long jets, 6 mm diameter	81 IXLC 14



#### **Multipurpose Racks**

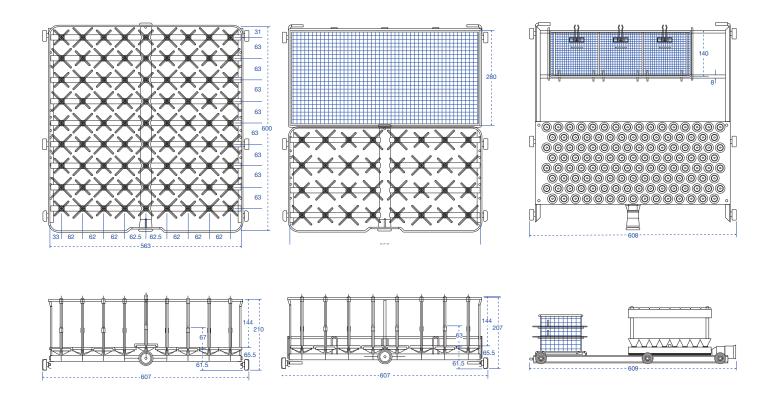
For a combination of labware and pipettes.

	1400 LXP
Basic basket plus 32 short and long jets	PS/32 IXLC 14
31 pipettes, angled plus 25 short and long jets	31 PIP/25 IXLC 14
24 short and long jets plus 4 long injectors, angled and perforated	4 EP/24 IXLC 14

#### **Pipette Racks**

Accessory pipette racks are configured to accommodate reusable pipettes.

	1400 LXP
Grommet style, individually loaded, 124 position	124 PIP 14
Pipette rack, canisters (4)	PPI 4B 14



Catalog No. 124 PIP 14

Catalog No. PS/32 IXLC 14

44

Catalog No. 81 IXLC 14

#### **Storage Stand**

An accessory storage stand offers a convenient place to store accessory racks and baskets when not in use.

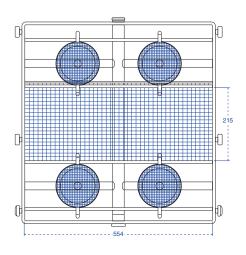
	1400 LXP
Holds up to 5 racks	RP 14

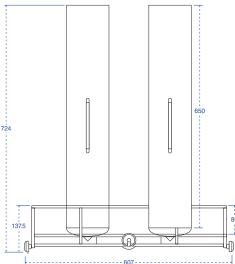
#### **Trolley**

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.

 1400 LXP

 Trolley, 3 levels
 TN 14



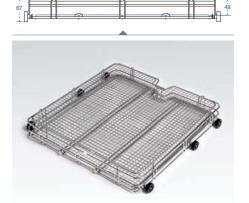


Catalog No. PPI 4B 14





# **Accessories.** 1600 LXP





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

Basic basket with spray arm: Catalog No. PSBT

#### **Baskets**

Useful for beakers, trays, dishes, dissolution vessels, funnels, instruments and jars.

	1600 LXP
Basic basket	PST 16
Basic basket with spray arm	PSBT 16

#### **Basket Covers**

Accessory basket covers are available to secure small or lightweight labware during the wash cycle.

	1600 LXP
Reversible tray lid for PST/PSBT	GC 16

## Short Injectors, 3" (76 mm) tall

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

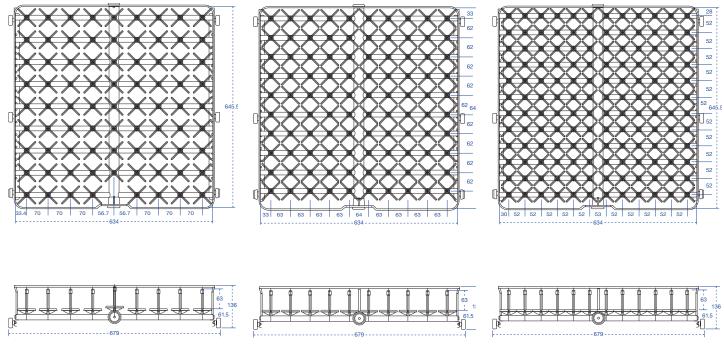
	1600 LXP
36 short jets, 6 mm diameter	36 IXC 16
64 short jets, 6 mm diameter	64 IXC 16
80 short jets, 6 mm diameter	80 IXC 16
100 short jets, 2 mm diameter	100 IXA 16
100 short jets, 6 mm diameter	100 IXC 16
100 short jets, mixed 2 mm and 6 mm diameter	100 IXA/2 16
144 short jets, 2 mm diameter	144 IXA 16
144 short jets, 6 mm diameter	144 IXC 16
144 short jets, mixed 2 mm and 6 mm diameter	144 IXA/2 16





Catalog No. 36 IXC 16

Catalog No.64 IXC 16



Catalog No.80 IXC 16

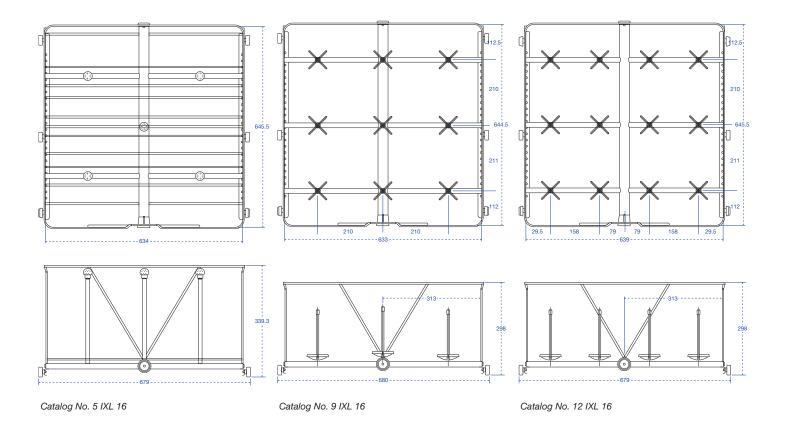
Catalog No. 100 IXA; IXC; IXA/2 16

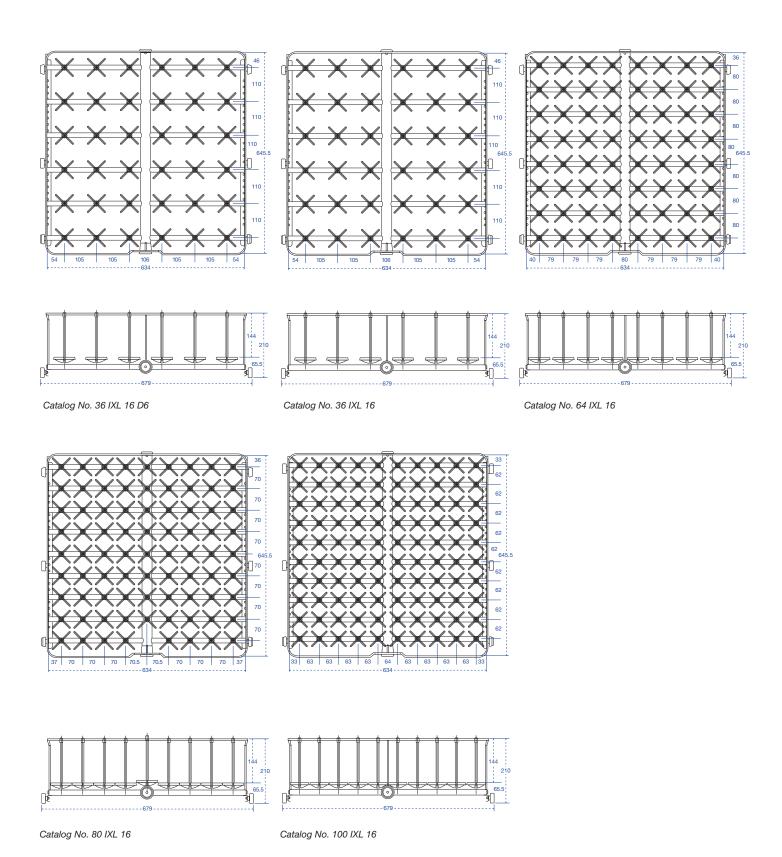
Catalog No. 144 IXA; IXC; IXA/2 16

## Long Injectors, 6" (152 mm) tall

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

	1600 LXP
5 long jets, 12.7 mm diameter, with spray ball	5 IXL 16
9 long jets, 12.7 mm diameter	9 IXL 16
12 long jets, 6 mm diameter	12 IXL 16
36 long jets, 6 mm diameter	36 IXL 16 D6
36 long jets, 8 mm diameter	36 IXL 16
64 long jets, 6 mm diameter	64 IXL 16
80 long jets, 6 mm diameter	80 IXL 16
100 long jets, 6 mm diameter	100 IXL 16





## **Injector Rack Covers**

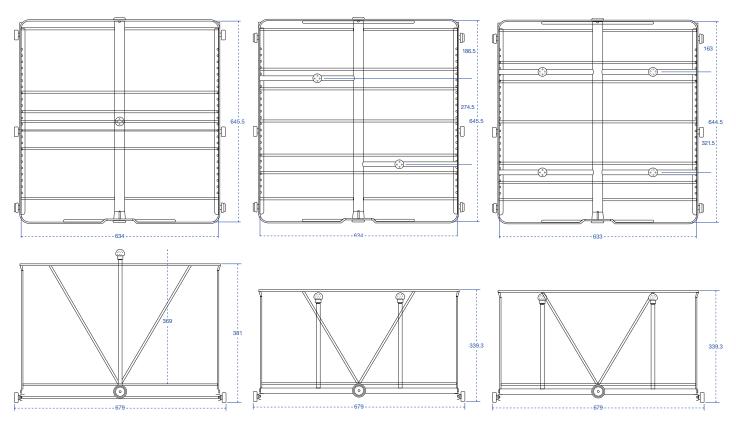
Injector rack covers are available to secure small or lightweight labware during the wash cycle.

	1600 LXP
Full-size	GCI 16

## Extra Long Injectors, 12" (305 mm) tall

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

	1600 LXP
1 long jet, 12.7 mm diameter, with spray ball	1 IXL 16
2 long jets, 12.7 mm diameter, with spray ball	2 IXL 16
4 long jets, 12.7 mm diameter, with spray ball	4 IXL 16

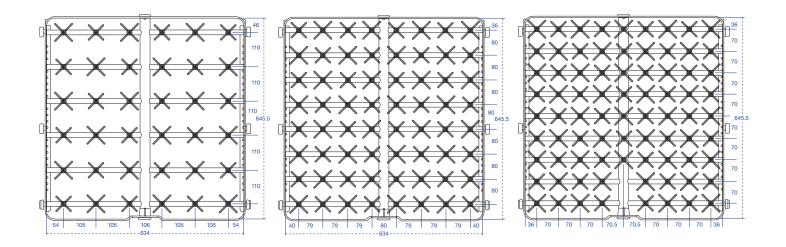


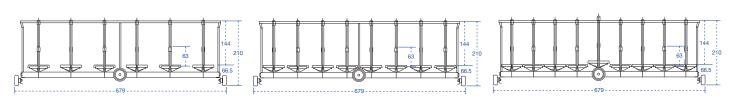
Catalog No. 1 IXL 16 Catalog No. 2 IXL 16 Catalog No. 4 IXL 16

## **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
36 short and long jets, 6 mm diameter	36 IXLC 16
64 short and long jets, 6 mm diameter	64 IXLC 16
80 short and long jets, 6 mm diameter	80 IXLC 16
100 short and long jets, 6 mm diameter	100 IXLC 16





 Catalog No. 36 IXLC 16
 Catalog No. 64 IXLC 16
 Catalog No. 80 IXLC 16

#### **Pipette Racks**

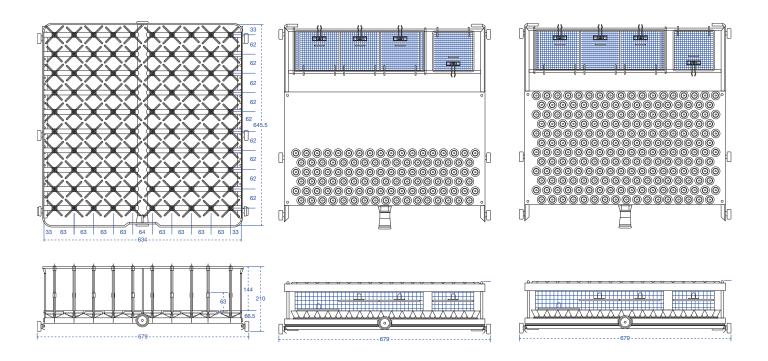
Accessory pipette racks are configured to accommodate reusable pipettes.

	1600 LXP
Grommet style, individually loaded, 105 position	105 PIP 16
Grommet style, individually loaded, 210 position	210 PIP 16

#### **Storage Stand**

An accessory storage stand offers a convenient place to store accessory racks and baskets when not in use.

	1600 LXP
Holds up to 5 racks	RP 16



Catalog No. 100 IXLC 16 Catalog No. 105 PIP 16 Catalog No. 210 PIP 16

## Supports

Stainless steel. Fits inside open basket to permit placement of load at an angle.

	1600 LXP
Standard support, short, 3 1/2" (85 mm)	SSC 16
Standard support, short, 1/3 PST 16 Surface	SSC 1/3 PS 16
Standard support, tall, 6" (150 mm)	SSL 16
Standard support, tall, 1/3 PST 16 Surface	SSL 1/3 PS 16

## Trolley

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.

	1600 LXP
Trolly, 4 levels	TN 16



**Customer Service.** Lancer offers a range of customer services before, during and after installation. These include technical service and support, preventive maintenance plans, and operator training and education. Contact Lancer for details.

**Detergents and Rinsing Agents.** For best results Lancer offers a selection of detergents and rinse agents formulated to maximize the performance of the Lancer labware washer while minimizing water consumption. Available exclusively from Lancer, these cleaning chemicals are made specifically for use in high pressure washers. To order call 407-327-8488 or contact chemsales@lancer.com.

 LancerClean Detergent is available in three solutions formulated for cleaning all different types of contaminants including laboratory soils, "baked on" organic residues, petroleum applications and other hard to clean soils. LancerClean is ideal for cleaning glassware, surgical instruments and many other labware items.

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

LCD-S is a sodium hydroxide based solution specifically formulated to provide exceptional cleaning for the most difficult types of contaminants.

LCD-H is a low pH detergent comprised of a sodium silicate solution.

 LancerAcid Rinse is available in three formulas to meet specific cleaning requirements. Used as a rinsing agent following LancerClean detergent in the wash cycle, LancerAcid provides excellent results following washing of standard laboratory soils, organics, pharmaceutical based contaminants, petroleum and other difficult materials.

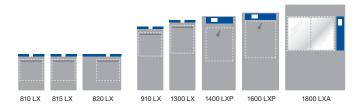
LCD-A is an acetic acid based neutralizing solution. It is the most commonly used rinsing agent.

LCD-C is an excellent rinsing agent with a citric acid based solution.

LCD-P is a phosphoric acid solution.

Lancer Undercounter Labware Washers. Lancer offers a line of compact undercounter labware washers for lower volume washing requirements. These washers are available in three models with two size options. Contact Lancer for details.

#### **ULTIMA** series labware washers



LANCER GETINGE GROUP

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## **GETINGE GROUP**

Getinge Group is a leading global provider of innovative solutions for operating rooms, intensive-care units, hospital wards, sterilization departments, elderly care and for life science companies and institutions. With a genuine passion for life we build quality and safety into every system. Our unique value proposition mirrors the continuum of care, enhancing efficiency throughout the clinical pathway. Based on our first-hand experience and close partnerships, we are able to exceed expectations from customers – improving the every-day life for people, today and tomorrow.

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