

LC-N and LC-Q

Complete Domestic Hot Water Solutions

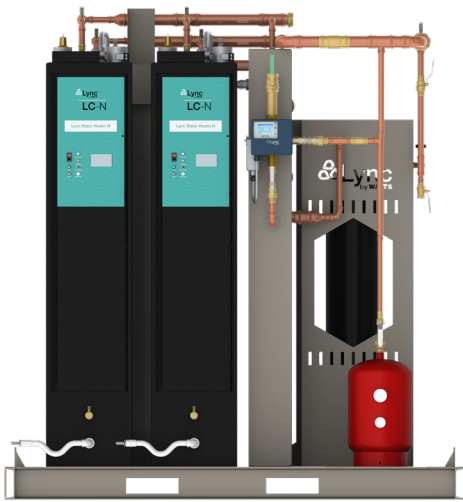


Compact, Reliable Systems with Built-in Redundancy

LC-N and LC-Q are complete domestic hot water system solutions fully engineered, designed and assembled by the manufacturer to deliver safe, reliable hot water through a compact, high performing, energy-efficient system.

Featuring built-in redundancy, the LC Series incorporates high-efficiency water heaters, precise digital tempering valves, and MAC anti-scale technology. Available in a large range of capacities, the LC Series offers several configurable options to meet a variety of site conditions. The LC Series also features component uniformity and simplifies complex system designs so they can be easily dropped into plans minimizing planning, design and installation time and costs.

LC-N and LC-Q are ideal solutions for both new and retrofit buildings across a variety of applications, including hospitality, restaurants, fitness centers, healthcare, industrial, multifamily and education.



LC-N

Ideal for applications with occasional high load demands and in places very tight on space.

- Gas condensing water heaters
- Configurable with 2 to 5 water heaters
- 398-995 MBH
- Up to 96% thermal efficiency
- 7:1 turndown
- 50-125-gallon internal buffer storage
- N+1 redundancy without oversizing
- Separate recirculation connection

LC-Q

Ideal for applications in larger commercial buildings with very short or high peak loads.

- Gas condensing water heaters
- Configurable with 2 or 3 water heaters
- 800-2,400 MBH
- Up to 97% thermal efficiency
- Seamless modulation prevents short cycling
- 260-390-gallon internal buffer storage
- Built-in redundancy
- Separate recirculation connection

Designed and Pre-assembled for Optimal Performance

Because Lync's LC-N and LC-Q are complete, fully engineered and pre-assembled domestic hot water systems, they simplify planning and installation while saving valuable time and money – all with one convenient source for sales, service support and technical documentation.



Simplify Planning

- **Expertly Engineered and Fully Assembled**
Easily drops into design plans and reduces project timelines
- **Standardized Solution**
Features a known footprint as well as components designed to work seamlessly together and optimized for high performance
- **Error-Free Application**
Eliminates the risks of incorrect application that typically occur when installing components and individual products from multiple manufacturers



Save Time, Increase ROI

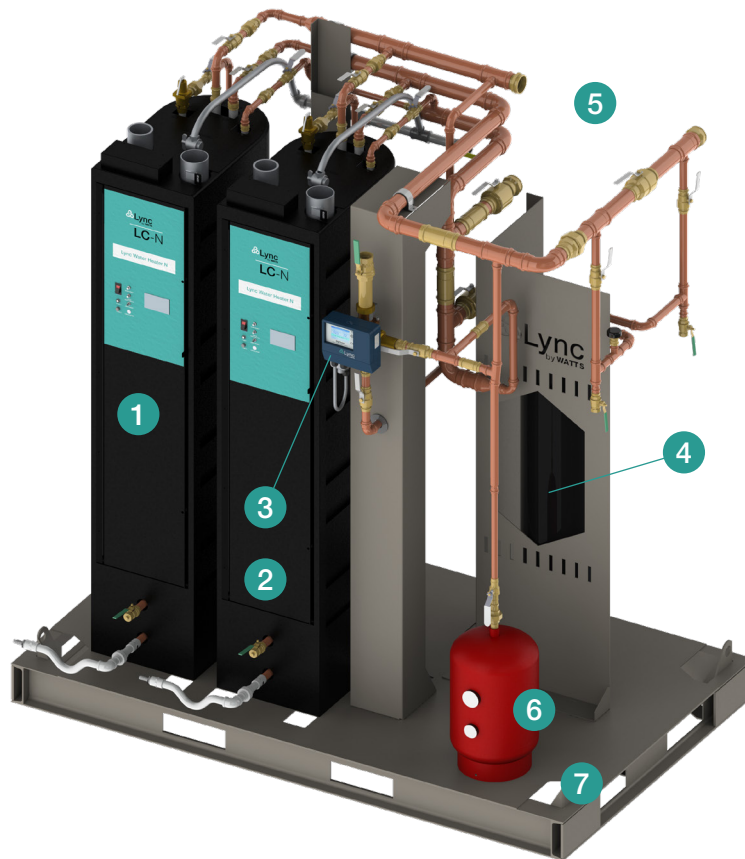
- **Reduced Downtime**
Quickly and easily installs in any space reducing downtime and associated costs or revenue losses
- **Increased ROI**
Provides superior energy efficiency and increased life expectancy of the equipment reducing maintenance needs and operational costs
- **Compact Design and Footprint**
Frees up more space in the building for value-adding or revenue-driving purposes



Reduce Installation and Maintenance Costs

- **Easy and Quick Installation**
Quickly installs without delays due to missing parts and requires less skilled labor
- **One Point of Contact**
Provides one, convenient point of contact for support and troubleshooting to quickly address and resolve operational and maintenance matters
- **Service Warranty**
Includes a factory-guaranteed assembly and a 1st year labor service warranty

Ideal for Occasional High Load Demands and Small Spaces



1. Condensing water heaters operate with a submerged, single-pass, down-fired design for higher efficiency.

2. 25-gallon duplex stainless-steel tanks increase lifespan due to its corrosion-resistant materials. No anode rods needed.

3. Digital mixing valve enables accurate control of temperatures within $\pm 2^{\circ}\text{F}$ control for optimal operation.

4. TAC anti-scale technology effectively reduces scale and microorganism build-up. Safe and easy to maintain, requiring no salt or chemicals.

5. Optimized piping minimizes footprint, simplifies planning and installation, and allows for better service access.

6. Expansion tank comes in a floor mount design.

7. Compact footprint to make it fit through a double door and it can be pushed up against the wall while remaining easy to service.

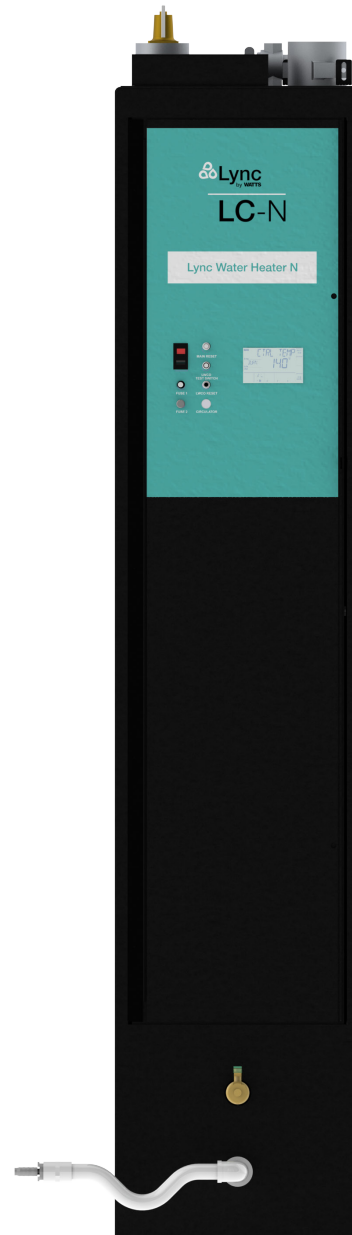
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Lync Water Heater N

Dynamic Water Heater with Minimal Footprint

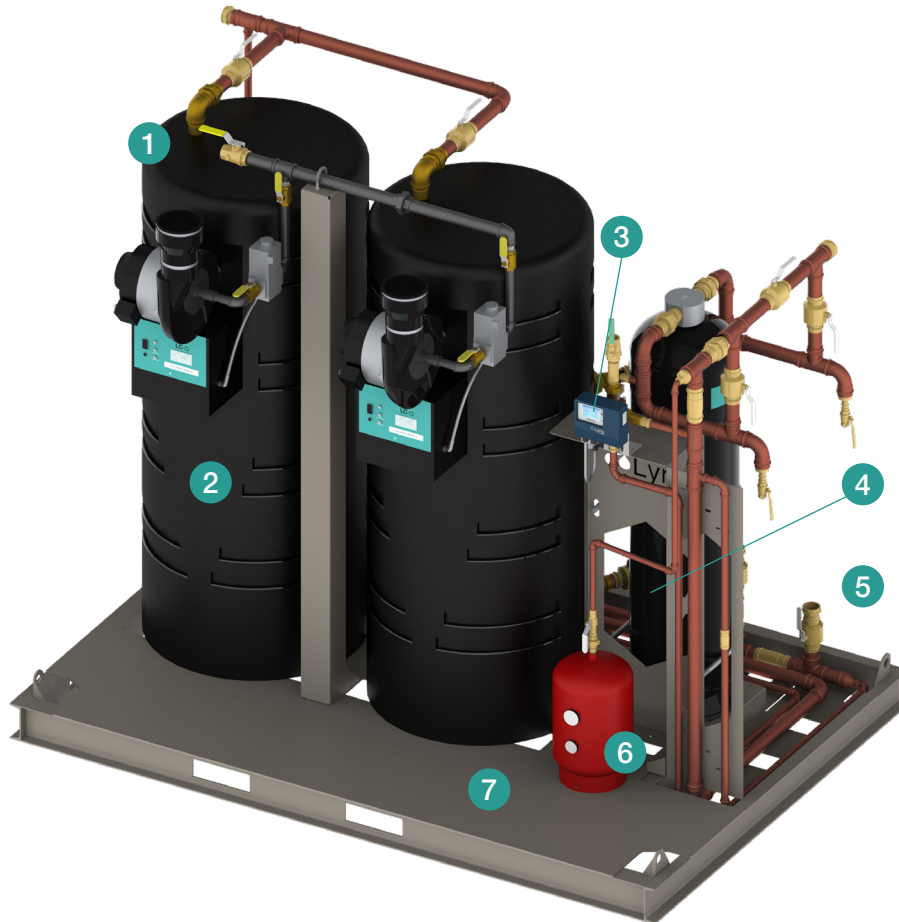
At the heart of LC-N is a powerful single-pass instantaneous water heater with a 25-gallon internal buffer tank that delivers reliable hot water for demanding applications in an ultra-compact design.

- A dedicated **recirculation fitting** re-introduces hot return water to the hot zone of the water heater, leaving the cold zone at the bottom of the tank unaffected for higher efficiency and the elimination of a 'cold water sandwich'.
- **Fire tube heater** with a large surface area to heat for maximum efficiency. Made of duplex stainless steel to make it less prone to scale formation which reduces maintenance time and replacement costs.
- A **25-gallon internal buffer tank** per heater provides the ability to respond to occasions when demand outpaces the production of hot water. This eliminates the need for additional water heaters to factor in redundancy requirements.
- **Corrosion-resistant storage tank** made of duplex stainless steel extends lifespan and eliminates the need for anode rods or tank lining.
- High thermal efficiency is maintained by a **cold-water zone** at the bottom of the heater where flue product is "super-cooled" to extract the maximum energy via the condensing process.



Easily accessible with all plumbing, combustion, gas connections located at the top, and no connections on the back or sides allowing for minimal side clearance

Ideal for Large Commercial Buildings with Short or High Peak Loads



1. Condensing water heaters operate with a submerged, single-pass, down-fired design for higher efficiency.

2. 130-gallon duplex stainless-steel tanks increase lifespan due to its corrosion-resistant materials. No anode rods needed.

3. Digital mixing valve enables accurate control of temperatures within $\pm 2^\circ\text{F}$ control for optimal operation.

4. TAC anti-scale technology effectively reduces scale and microorganism build-up. Safe and easy to maintain, requiring no salt or chemicals.

5. Optimized piping minimizes footprint, simplifies planning and installation, and allows for better service access.

6. Expansion tank comes in a floor mount design.

7. Compact footprint to make it fit through a double door and it can be pushed up against the wall while remaining easy to service.

*Width dependent on selected configuration.

Lync Water Heater Q

A Semi-Instantaneous Condensing Water Heater

At the heart of LC-Q is a condensing single-pass semi-instantaneous firetube water heater combining an advanced fuel-saving design with extended product life. The 130-gallon internal buffer tank in each water heater represents a dynamic heating approach that relies on the firing rate of the unit for hot water production, while leaning on the storage volume to reduce cycling during low loads and help support peak loads.

- **The dedicated hot water return connection** maintains two distinct temperature zones in tanks allowing only the coldest water to enter the lower condensing zone of the water heater during a firing cycle to increase efficiency.
- A completely submerged, single-pass, down-fired design, which includes an array of helical fire tubes. **Combustion gases are counter-flow** to the direction of the potable water enabling the coolest flue gases to contact the coldest water and raise low-fire efficiency to 99%.
- A **130-gallon internal buffer tank** per heater provides the ability to respond to regular short and high peak loads as well as very low loads before the burner cycle is required to maximize energy efficiency.
- **Corrosion-resistant storage tank** made of duplex stainless steel extends lifespan and eliminates the need for anode rods or tank lining.
- The water heater employs **burner modulation with a variable speed blower** to meet low flow conditions with low BTU input while avoiding inefficient short-cycling.
- A **volute-less circulating pump** forces water across the heating surfaces for more aggressive contact between the water and heating surfaces to increase efficiency. Circulation also helps to equalize tank temperature and its scouring effect reduces scale buildup.



Mitigates Scale and Pathogen Formation

LC-N and LC-Q integrate AquaSolve using scientifically proven Media Assisted Crystallization (MAC) technology to prevent scale formation and mitigate the accompanying risks of Legionella and other water-borne pathogens as well as protect the water heating system against corrosion. MAC technology transforms dissolved hardness minerals into harmless, inactive microscopic particles without using salt or harsh chemicals like water softeners and chemical additives for a cost-effective, virtually maintenance-free, and environmentally friendly scale prevention.



Safer, High-Quality Water

AquaSolve reduces scale formation known to harbor biofilm and microorganisms thereby mitigating the risks of Legionella and other water-borne pathogens. It also retains beneficial minerals in the treated water including calcium and magnesium which helps in producing water of a higher quality.

Improves Operational Efficiency and Lifespan

With a sustained scale reduction by over 95% to effectively prevent the corrosion of the water heating system and pipes, the anti-scale technology helps protect performance, energy efficiency and longevity of LC-N and LC-Q, and it requires no additional electricity.

Virtually Maintenance-Free

The MAC technology is virtually maintenance-free with an easy and straightforward replacement of the media every three years, on average. Unlike water softeners, there is no ongoing maintenance, like backwashing, draining, or product purchases, and no control valves or internal seals to replace when they wear down.

Environmentally Friendly

No salt or harsh chemicals are used. No regular wastewater discharge or backflush operation.

Extremely Hard Water?

For applications or water chemistries that require stronger scale prevention, traditional salt-based water softener options are available.

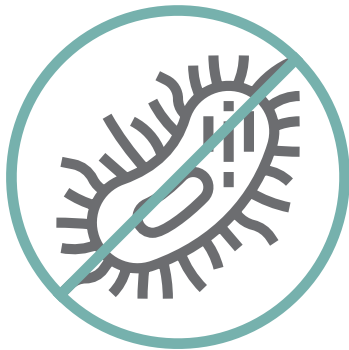
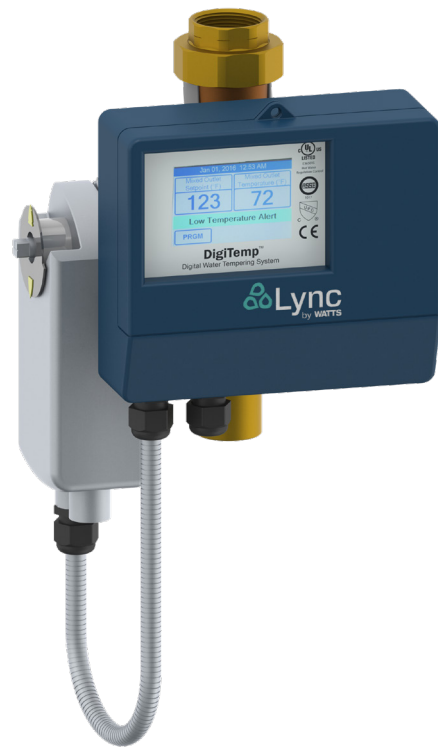
Mitigates Scalding with Precise Temperature Control

The Lync DigiTemp digital mixing valve featured in both LC-N and LC-Q ensures safe, precise and consistent water temperatures which helps protect building occupants by mitigating risks of scalding.

The ASSE 1017-listed DigiTemp also features a thermal sanitization mode providing an additional pathogen barrier and mitigation for greater peace of mind.

Key Features

- ASSE 1017 compliance
- $\pm 2^{\circ}\text{F}$ control
- Thermal sanitization mode for pathogen mitigation
- Automatic fail cold during power outage
- Lowers temperature when the building is unoccupied
- Prevents overnight temperature creep
- Programmable high temperature alarm
- Connect to BAS for remote read/write



MITIGATES PATHOGEN GROWTH

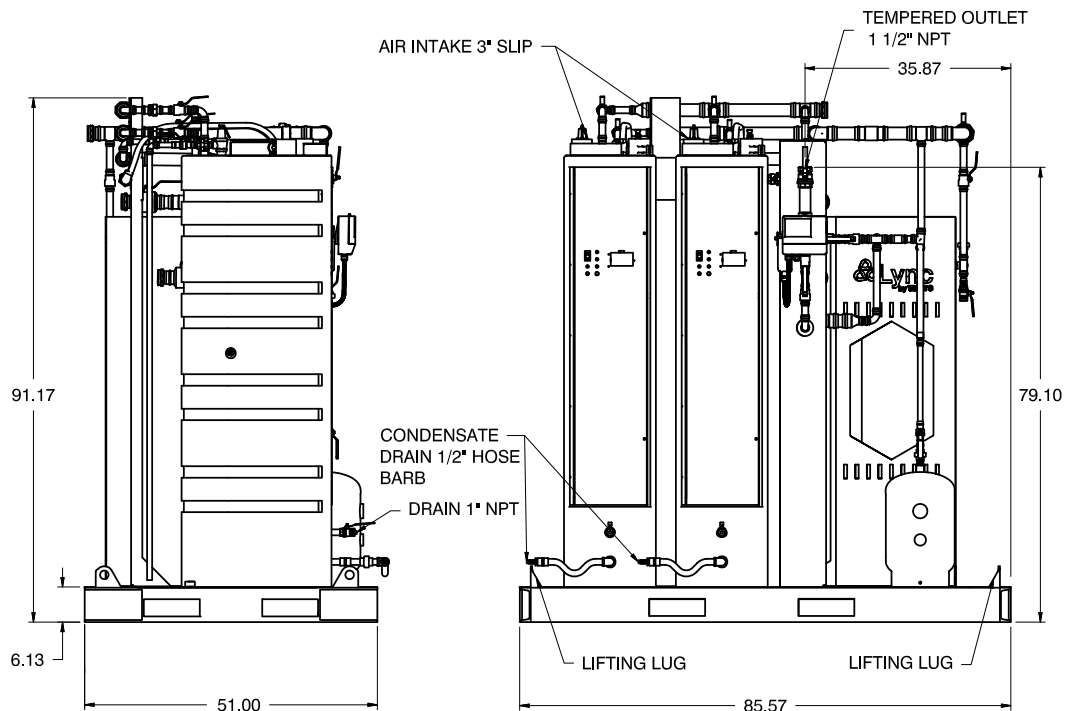


MITIGATES SCALDING RISK

LC-N Specifications

	Unit	LC-N-400	LC-N-600	LC-N-800	LC-N-1000
Performance and Specs	Number of Heaters	2	3	4	5
	Design Flow ¹ [GPM]	13	19	26	32
	BTU Input [BTU]	398,000	597,000	796,000	995,000
	Recovery at $\Delta 70^{\circ}\text{F}$ [GPM]	10.6	15.9	21.2	26.4
	Recovery at $\Delta 100^{\circ}\text{F}$ [GPM]	7.4	11.1	14.8	18.5
	Total Internal Volume [Gal]	50	75	100	125
	Max Gas Flow [ft ³ /hr]	398	597	796	995
Inlet Gas Pressure Requirements	Natural gas: 3.5 - 14" w.c.				
Electrical Data ^{2,3}	Voltage [V], Phase, Frequency [Hz]	120, 1Ø, 60			
	Amps [A]	5 / unit			
Dimensions	Width [in]	85 ½	105	124 ¾	143 ¾
	Depth [in]	51	51	51	51
	Height [in]	91	91	91	91
	Shipping Weight [lbs]	2000	2550	3500	4100
	Wet Weight [lbs]	2460	3240	4420	5250

1. Design Flow calculated 60°F to 140°F and blended to 125°F. For other conditions, contact your Lync rep.
2. Electrical Data specific to each individual heater
3. Digital mixing system electrical data: Power: 115 – 230 V(AC) ± 10%, 50/60 Hz, 20 VA / Actuator Load: 24 V(DC), 0.55 A, 13 W

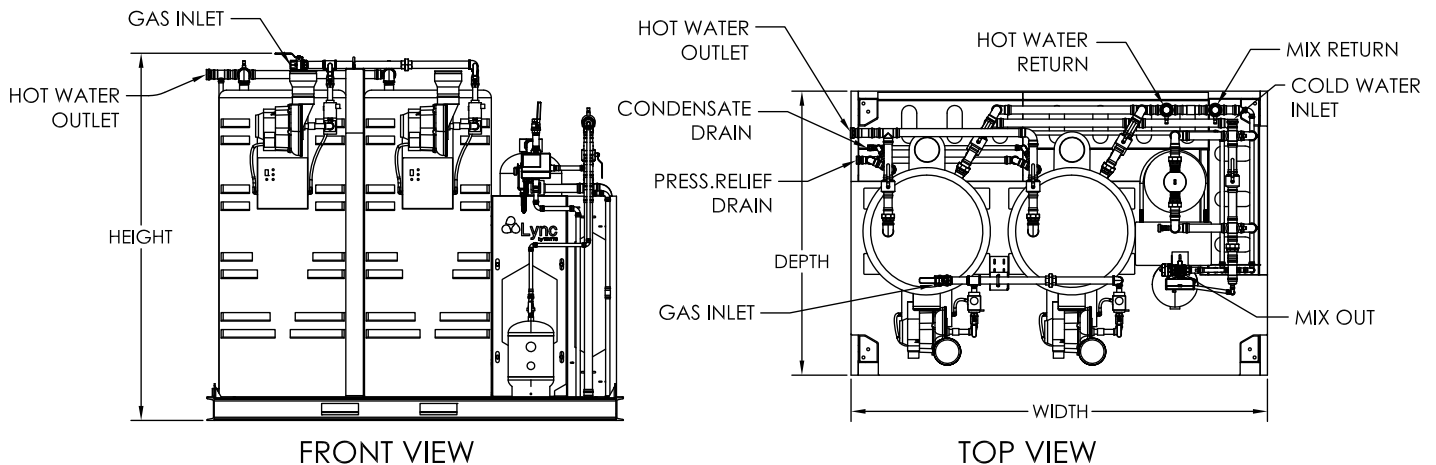


For dimensions on all models, please refer to dimensional drawings.

LC-Q Specifications

Unit	LC-Q-800-2	LC-Q-1000-2	LC-Q-1200-2	LC-Q-1400-2	LC-Q-1600-2	LC-Q-1800-2	LC-Q-2000-2	LC-Q-1200-3	LC-Q-1500-3	LC-Q-1800-3	LC-Q-2100-3	LC-Q-2400-3	
Performance and Specs	Number of Heaters	2	2	2	2	2	2	3	3	3	3	3	
	Design Flow ¹ [GPM]	30	36	42	48	53	59	65	45	54	63	71	80
	BTU Input [MBH]	798	1000	1200	1400	1600	1800	1998	1197	1500	1800	2100	2400
	Recovery at $\Delta 70^{\circ}\text{F}$ [GPM]	21.2	26.6	31.9	37.2	42.5	47.8	53.1	31.8	39.9	47.8	55.8	63.8
	Recovery at $\Delta 100^{\circ}\text{F}$ [GPM]	14.8	18.6	22.3	26.0	29.8	33.5	37.2	22.3	27.9	33.5	39.1	44.6
	Total Internal Volume [Gal]	260	260	260	260	260	260	260	390	390	390	390	390
	Max Gas Flow [ft ³ /hr]	798	1000	1200	1400	1600	1800	1998	1197	1500	1800	2100	2400
	Inlet Gas Pressure Requirements	Natural gas: 3.5 - 14" w.c. Propane: 8" - 13" w.c.											
Electrical Data ^{2,3}	Voltage [V], Phase, Frequency [Hz]	120, 1Ø, 60											
	Amps [A]	11 / unit											
Dimensions	Length [in]	123.5"					110"			167"			
	Depth [in]	63.8125"					75"			63.8125"			
	Height [in]	100"					100"			100"			
	Dry Weight [lbs]	2900					3000			4000			4100
	Wet Weight [lbs]	5400				5500	5600			7600			8000

1. Design Flow calculated at 60°F to 140°F and blended to 125°F. For flow rates at other conditions, contact your Lync rep.
2. Electrical Data specific to each individual heater
3. Digital mixing system electrical data: Power: 115 – 230 V(AC) ± 10%, 50/60 Hz, 20 VA / Actuator Load: 24 V(DC), 0.55 A, 13 W



For dimensions on all models, please refer to dimensional drawings. Dimensions and connection points are subject to change

Complete Engineered System Solutions

Superior Safety. Maximum Efficiency. Improved Water Quality.



Lync combines advanced technologies and innovative design with industry-leading manufacturing expertise to deliver complete, cost-effective commercial water technology system solutions from a single source.

Our fully assembled, integrated solutions provide your building with maximum efficiency, superior safety and improved water quality while minimizing planning, design and installation time to reduce costs and increase your return on investment.

Lyncbywatts.com



Engineered Solutions

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