

LAARS-Stor[®]

STAINLESS STEEL INDIRECT-FIRED WATER HEATER

2018 October and Later. Only for Models LS-SS (30, 40, 50, 75, 120 Gallons).

Submittal Data



LS-SS-50-L

The LAARS-STOR[®] SS Models Feature:

- **Stainless Steel Tank and Heat Exchanger**—Made from chromium molybdenum - titanium ferritic 444 stainless steel alloy.
- **Stainless Steel Heat Exchanger**—Single-wall 1" (25mm) O.D. stainless steel coil. Maximum supply temperature from the boiler must not exceed 240°F (116°C).
- **Factory Installed Sediment Reducing Inlet Tube**—Sediment reducing device that also increases first hour rating of hot water while minimizing temperature build-up in tank (excluding LS-SS-120-L).
- **Immersed Adjustable Honeywell Aquastat**—Supplied with a fast acting immersion aquastat for automatic temperature control (adjustable from 80-160°F / 27-71°C).
- **Supply and Return Connections**—1" NPT female connections are located on the front for both the boiler supply and boiler return.
- **Insulation System**—2" (51 mm) Non-CFC foam insulation covers the sides and top of the tank, reducing heat loss. This results in less energy consumption, improved efficiencies, and jacket rigidity.
- **Potable Water Connections**—3/4" NPT (1" NPT on LS-SS-120-L).
- **T&P Relief Valve**—Included.
- **Low Restrictive Brass Drain Valve**—Durable tamper proof design (excluding the LS-SS-120-L).
- **AHRI Certified**—These water heaters are rated by the Air-Conditioning, Heating, and Refrigeration Institute to provide accurate performance data within the standards of the certification. This certification provides a recognized standard for proper comparison of hydronic appliances.

LAARS[®]
Heating Systems Company

A subsidiary of **BRADFORD WHITE[®]** Corporation



**Limited Lifetime Tank and Heat Exchanger Warranties / 6-Year Limited Warranty on Component Parts.
5-Year Limited Tank Warranties on Commercial Models / 1-Year Limited Warranty of Component Parts.**

For products installed in USA, Canada, and Puerto Rico. Some states do not allow limitations on warranties.
See complete copy of the warranty included with the heater.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,682,666; 7,634,976; 5,660,165; 5,954,492; 6,056,542; 6,935,280; 5,372,185; 5,485,879; 5,574,822; 7,971,560; 7,992,526; 6,684,821; 6,442,178; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,596,952; 6,142,216; 7,699,026; 5,341,770; 7,337,517; 7,665,211; 7,665,210; 7,063,132; 7,063,133; 7,559,293; 7,900,589; 5,943,984; 8,082,888; 5,988,117; 7,621,238; 7,650,859; 5,761,379; 7,409,925; 5,277,171; 8,146,772; 7,458,341; 2,262,174. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 2,314,845; 2,504,824; 2,108,186; 2,143,031; 2,409,271; 2,548,958; 2,112,515; 2,476,685; 2,239,007; 2,092,105; 2,107,012.

LAARS-STOR® SS Single-Wall Indirect Water Heater

Model Number	Capacity		A Floor to Heater Top	B Jacket Dia.	C Floor to T&P Conn.	D Floor to Hot Water Conn.	E Floor to Cold Water Conn.	F Floor to Exchanger Outlet	G Floor to Exchanger Inlet	H Floor to Aquastat	Approx. Shipping Weight
	U.S. Gal.	Imp. Gal.	in.	in.	in.	in.	in.	in.	in.	in.	lbs.
LS-SS-30-L	29	24	31 ⁵ / ₈	24	22 ¹ / ₂	32 ¹ / ₂	32 ¹ / ₂	10	22 ⁵ / ₈	16 ¹ / ₂	75
LS-SS-40-L	38	31	38 ¹ / ₄	24	29 ¹ / ₈	38 ⁷ / ₈	38 ⁷ / ₈	10	24 ³ / ₄	18 ³ / ₄	91
LS-SS-50-L	50	42	48	24	39 ³ / ₄	48 ⁷ / ₈	48 ⁷ / ₈	10	29 ¹ / ₄	19 ¹ / ₂	103
LS-SS-75-L	73	60	65 ⁵ / ₈	24	56 ¹ / ₂	66 ¹ / ₄	66 ¹ / ₄	10	33 ⁵ / ₈	19 ¹ / ₂	142
LS-SS-120-L	111	92	63 ³ / ₈	30 ¹ / ₄	65 ³ / ₄	53 ¹ / ₂	2 ¹¹ / ₁₆	11 ³ / ₄	40	31 ³ / ₈	217

Model Number	Capacity		A Floor to Heater Top	B Jacket Dia.	C Floor to T&P Conn.	D Floor to Hot Water Conn.	E Floor to Cold Water Conn.	F Floor to Exchanger Outlet	G Floor to Exchanger Inlet	H Floor to Aquastat	Approx. Shipping Weight
	Liters	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	kg.
LS-SS-30-L	110	803	610	572	826	826	254	575	419	34	
LS-SS-40-L	142	972	610	740	987	987	254	629	476	41	
LS-SS-50-L	189	1219	610	1010	1241	1241	254	743	495	47	
LS-SS-75-L	274	1667	610	1435	1683	1683	254	854	495	64	
LS-SS-120-L	420	1610	768	1670	1359	68	299	1016	797	98	

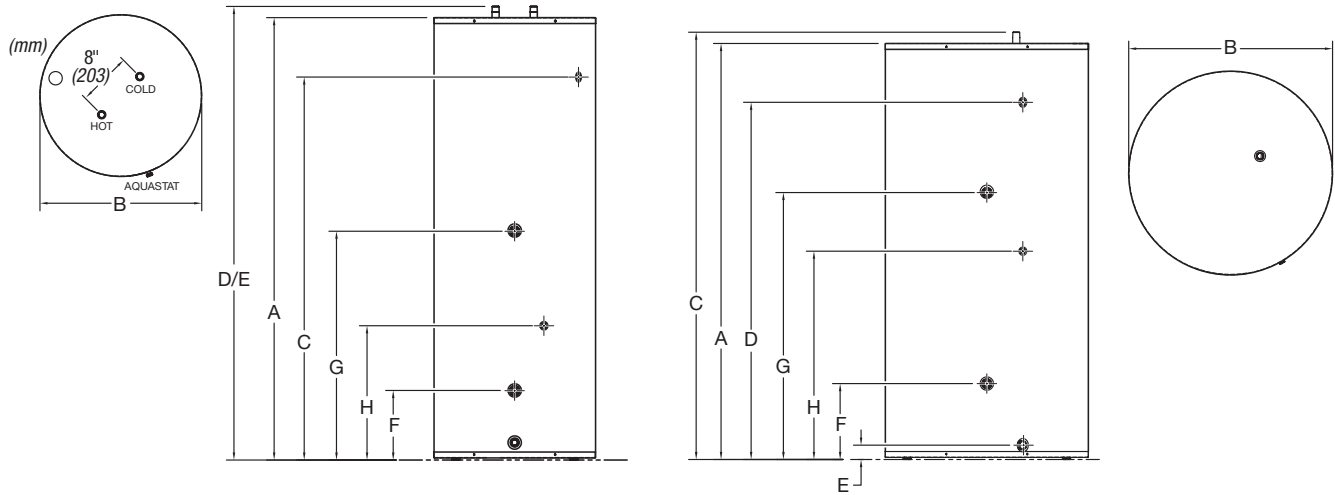
AHRI Certified Water Heater Ratings English

Model Number	First Hour Delivery Rating Gal./Hr.	Continuous Draw @135°F Gal./Hr.	Standby Heat Loss Rating °F/Hr.	Minimum Heat Required Rate BTU/Hr.	Minimum Heat Source Flow Rate Gal./Min.
LS-SS-30-L	179	160	0.8	105,000	14.0
LS-SS-40-L	237	209	0.6	135,000	14.0
LS-SS-50-L	269	229	0.5	145,000	14.0
LS-SS-75-L	367	307	0.4	193,000	14.0
LS-SS-120-L	409	319	0.3	199,000	9.0

Metric

Model Number	First Hour Delivery Rating Liters/Hr.	Continuous Draw @57°C Liters/Hr.	Standby Heat Loss Rating °C/Hr.	Minimum Heat Required Rate kW/Hr.	Minimum Heat Source Flow Rate Liters/Min.
LS-SS-30-L	678	606	0.44	30.8	53.0
LS-SS-40-L	897	791	0.33	39.6	53.0
LS-SS-50-L	1018	867	0.27	40.5	53.0
LS-SS-75-L	1389	1162	0.22	56.6	53.0
LS-SS-120-L	1548	1208	0.16	58.3	34.0

NOTE: These certified ratings were obtained with a heat source output and flow rate as specified and a 180°F (82°C) boiler water supply temperature. Other results will be obtained under different conditions.



MODELS: LS-SS-30-L, LS-SS-40-L, LS-SS-50-L, LS-SS-75-L

MODEL: LS-SS-120-L

General

All units are certified at 300 PSI (2068 kPa) test pressure and 150 PSI working pressure (1034 kPa). All potable water connections are 3/4" NPT (1" NPT on LS-SS-120).

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

Toxic chemicals, such as those used for boiler treatment, shall NEVER be introduced into the potable water side. The potable side of this unit may NEVER be connected to any existing heating system or component(s) previously used with a non-potable water heating appliance. The heat exchanger side of the unit may be used in space heating applications.