

# LST(R) GE direct storage vessels



- Storage capacities from 312 to 2820 litres
- Up to 10 bar working pressure
- Cleanout opening for inspection and maintenance
- A-rated fire resistant insulation and jacket
- For use with circulating-type water heaters and packaged plate heat exchangers



**Lochinvar**<sup>®</sup>  
HIGH EFFICIENCY BOILERS & WATER HEATERS

# Lochinvar

## LST(R) GE direct storage vessels

The LST(R) GE range of direct storage vessels comprises 10 models with storage capacities ranging from 312 to 2820 litres, storage capacity. Constructed from enamelled steel, LST(R) GE units can operate at working pressures of up to 10.0 bar. Cathodic protection is provided as standard by sacrificial magnesium anodes and for models LSTR66GE to LSTR220GE, a Correx non-sacrificial protection system is available as an ancillary option.

LST(R) GE direct storage vessels are designed for use with Lochinvar circulating-type water heaters such as our EcoForce, EcoKnight or TTW ranges. They can also be used to provide additional storage for other water heater types including our LOK range of packaged plate heat exchangers.



LST(R) GE direct storage vessel  
10 models

### Circulating water heaters

LST(R) GE units are frequently installed in conjunction with products like our EcoKnight range; the benefit of this type of water heating method, is that multiple water heater/storage vessel combinations are possible. This can be particularly useful for applications with high hot water demand and can help with equipment location in plant rooms, which are restricted for space.

### Immersion heaters

Available as ancillary options, our immersion heaters are all 3 phase and come with inputs starting at 18kw up to 90kw; dependent upon LST(R) model. This option can provide alternative fuel stand-by, which is a particularly good feature for buildings where hot water supply is critical eg hospitals, care homes etc.

### Packaged plate heat exchangers

This has become a popular method to provide domestic hot water in certain applications, particularly where space is restricted. In instances where peak demand is required over short periods, it can be beneficial to provide with LST(R) GE direct storage vessels.

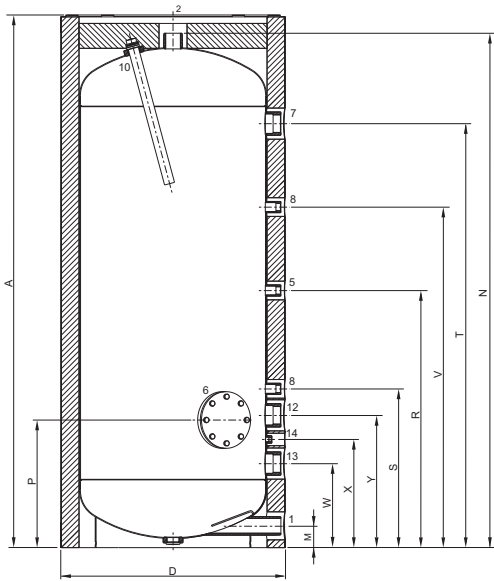


EcoKnight circulating-type gas-fired water heater  
with LST(R) GE direct storage vessel

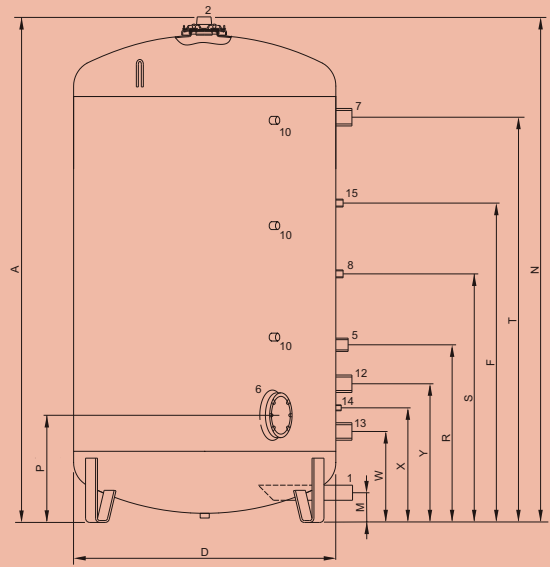


LOK packaged plate heat exchanger  
with LST(R) GE direct storage vessel

## Dimensional drawings



LSTR66GE to LSTR220GE



LST330GE to LST660GE

## LST(R) direct storage vessel – dimensions (mm)

Legend	Description	LSTR66GE	LSTR100GE	LSTR110GE	LSTR130GE	LSTR165GE	LSTR220GE	LST330GE	LST440GE	LST550GE	LST660GE
A	Total height (with insulation)	1370	1710	2045	1840	2035	2005	1985	2175	2045	2070
D	Diameter of water heater (with insulation)	740	740	760	910	930	1100	1300	1300	1600	1600
	Diameter of water heater (without insulation)	600	600	600	750	750	900	1100	1100	1400	1400
F	Auxiliary tapping	n/a	n/a	n/a	n/a	n/a	n/a	1190	1340	1220	1270
M	Drain	70	70	70	85	85	95	135	135	185	185
N	Hot water outlet	1315	1655	1995	1805	2000	1965	1985	2175	2045	2170
P	Cleaning / inspection opening	410	410	410	493	493	530	450	450	530	530
R	Auxiliary tapping	660	825	995	1045	1085	1005	710	745	790	790
S	Auxiliary tapping	510	510	510	655	655	705	950	1045	980	1045
T	T&P-valve connection	1035	1360	1700	1470	1666	1595	1515	1705	1495	1625
V	Auxiliary tapping	845	1095	1350	1260	1380	1355	n/a	n/a	n/a	n/a
W	Water heater return	270	270	270	315	315	360	385	385	465	465
X	Connection temp. sensor	355	355	355	405	405	450	485	485	565	565
Y	Water heater flow	425	425	425	485	485	530	585	585	665	665

## LST(R) Direct Storage Vessel – Connections

Size	Description	Unit	LSTR66GE	LSTR100GE to LSTR110GE	LSTR130GE	LSTR165GE to LSTR220GE	LST330 to LST660
1	Drain	BSP inch	Rp 1½"	Rp 1½"	Rp 1½"	Rp 2"	Rp 2"
2	Hot water outlet	BSP inch	Rp 1½"	Rp 1½"	Rp 1½"	Rp 2"	Rp 2"
5	Auxiliary tapping	BSP inch	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1¼"
6	Diameter of cleaning/inspection opening	mm	115	115	180	180	110
7	T&P valve connection	BSP inch	Rp 1½"	Rp 1½"	Rp 1½"	Rp 1½"	Rp 2"
8	Auxiliary tapping	BSP inch	Rp ¾"	Rp ¾"	Rp ¾"	Rp ¾"	Rp 1¼"
10	Anode	BSP inch	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp 1¼"	Rp ¾"
12	Water heater flow	BSP inch	Rp 2"	Rp 1½"	Rp 1½"	Rp 2½"	Rp 2"
13	Water heater return	BSP inch	Rp 2"	Rp 1½"	Rp 1½"	Rp 2½"	Rp 2"
14	Water heater temperature sensor	BSP inch	Rp ¼"	Rp ¼"	Rp ¼"	Rp ¼"	Rp ¼"



## Technical specification

Direct storage vessel model		LSTR66GE	LSTR100GE	LSTR110GE	LSTR130GE	LSTR165GE	LSTR220GE	LSTR330GE	LST440GE	LST550GE	LST660GE
Storage capacity	litres	312	405	499	678	763	1055	1550	1880	2500	2820
<b>Efficiency data - building regulations</b>											
Heat loss	Kw/24 hr	1.3	1.6	1.9	1.9	2.0	2.2	3.7	4.1	5.6	5.8
<b>Efficiency data - ErP</b>											
Ecodesign energy label rating		C	C	C	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Standing loss	W	55	67	78	77	85	91	154	171	232	243
<b>General data</b>											
Dimensions (height)	mm	1370	1710	2045	1840	2035	2005	1930	2118	2000	2128
Dimensions (width)	mm	740	740	760	910	930	1100	1200	1200	1500	1500
Hot outlet connection (inches)	BSP	R 1½	R 1½	R 1½	R 1½	R 2	R 2	R 2	R 2	R 2	R 2
Drain connection (inches)	BSP	R 1½	R 1½	R 1½	R 1½	R 2	R 2	R 2	R 2	R 2	R 2
Flow/return connection (inches)	BSP	Rp 2	Rp 1½	Rp 1½	Rp 1½	Rp 2½	Rp 2½	Rp 2	Rp 2	Rp 2	Rp 2
Weight (empty)	kg	81	99	131	179	201	262	325	350	485	520
Weight (full)	kg	393	504	630	857	964	1317	1875	2230	2985	3340
Minimum working pressure	bar	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Maximum working pressure	bar	10	10	10	10	10	10	7	7	7	7

**Note.** LSTR66GE to LSTR110GE models are supplied with a pre-fitted insulation jacket. The insulation jacket for the LSTR130GE to LST660GE models are supplied separately for fitting on site.

## Complementary products

### Gas-fired circulating-type water heaters

- EcoForce wall hung
- EcoKnight floor standing
- TTW floor standing

### Other water heater products

- Electric immersion heaters
- LOK packaged plate heat exchangers

## Ancillary options

- Correx non sacrificial protection system (models LSTR66 to 220GE only)
- Destratification pump sets
- Unvented system kits
- Thermometer kits



For further information on the LST(R) direct storage vessels, including ICM & user instructions and our full warranty terms and conditions, please visit our website: [www.lochinvar.ltd.uk](http://www.lochinvar.ltd.uk)

