

Squire stainless indirect water heaters



- Storage capacities of from 300 to 3,000 litres
- Single and twin coil models
- Stainless steel construction
- High capacity stainless steel coils
- Up to 10.0 bar working pressure



Lochinvar[®]
HIGH EFFICIENCY BOILERS & WATER HEATERS

Lochinvar

Squire stainless indirect water heaters

Indirect water heaters, also known as calorifiers have been used to supply a wide range of hot water demands for many years. Installed in conjunction with heating boilers, such products provide an indirect method of generating hot water for a number of different building types.

Our squire stainless models are particularly suitable for large domestic or small commercial applications and provide a reliable supply of hot water when installed with a suitably sized heating boiler.

Squire stainless indirect water heaters are constructed from stainless steel, are available with storage capacities from 300 to 3,000 litres, and with single or twin coil options.



Squire stainless indirect water heaters

SIT single coil models

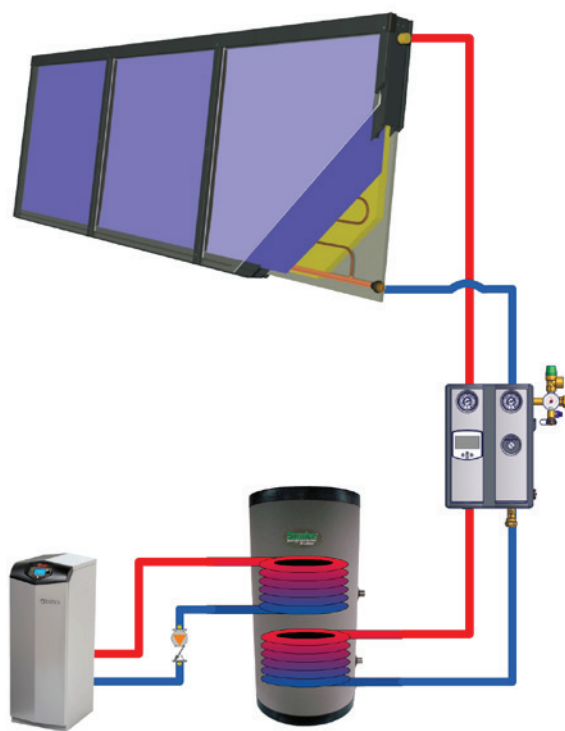
Built on the traditional design of Indirect Water Heaters, these products are typically installed as part of a heating boiler circuit. The high capacity stainless steel coils provide domestic hot water with maximum draw off capacity (first hour) ranging from 537 to 3552 litres, based upon a temperature rise of 50°C; and subject to having sufficient boiler output.



Lochinvar Herald boiler with
Squire stainless SIT single coil Indirect water heater

SDT twin coil models

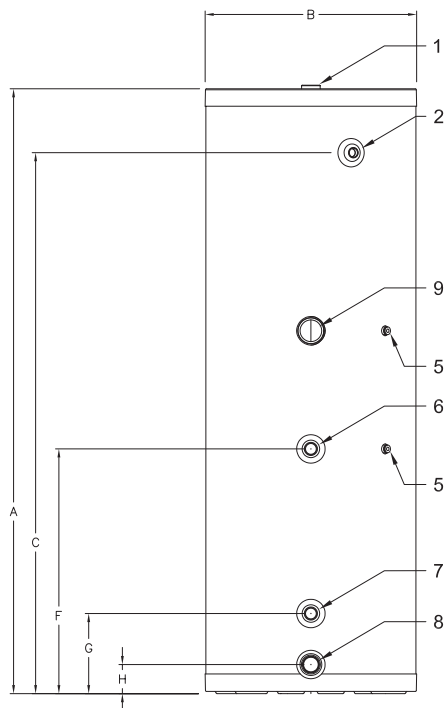
SDT models include two coils and these models are often installed where renewable technologies such as heat pumps or solar thermal are used to provide pre-heated water via the lower coil. The upper coil is connected to the boiler/heating circuit. The use of a renewable technology in this way can reduce energy consumption and carbon emissions, and the traditional boiler can ensure that a reliable supply of domestic hot water is provided.



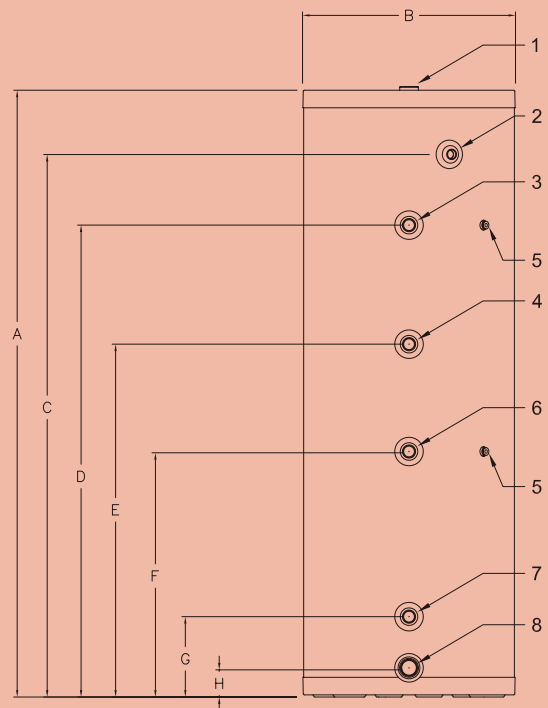
Lochinvar Herald boiler with
Squire stainless SDT twin coil indirect water heater

Dimensional drawings
Squire stainless models SIT/SDT300 and 450

Model	Storage capacity	Hot outlet	A	B	C	D	E	F	G	H
No.	Litres	mm	mm	mm	mm	mm	mm	mm	mm	mm
SIT300	310	1765	1765	609	1568	n/a		711	235	83
SIT450	427	1734	1734	711	1530	n/a		806	235	83
SDT300	299	1765	1765	609	1568	1365	1022	711	235	83
SDT450	416	1734	1734	711	1530	1384	952	806	235	83



SIT 300/450



SDT 300/450

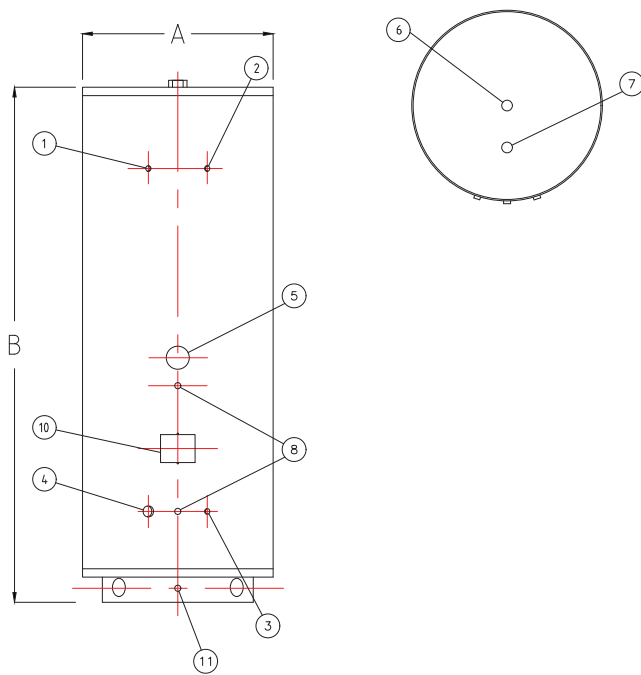
Legend	Description	Model reference
1	1 ½" BSP hot water outlet	All models
2	3/4" BSP P&T relief valve tapping	All models
3	1" BSP upper coil flow	SDT300, SDT450
4	1" BSP upper coil return	SDT300, SDT450
5	Temperature sensor	SDT300, SDT450
6	1" BSP lower coil flow	All models
7	1" BSP lower coil return	All models
8	1 1/2" BSP cold inlet / drain	All models
9	2 ¼" immersion boss	SIT300, SIT450

Dimensional drawings

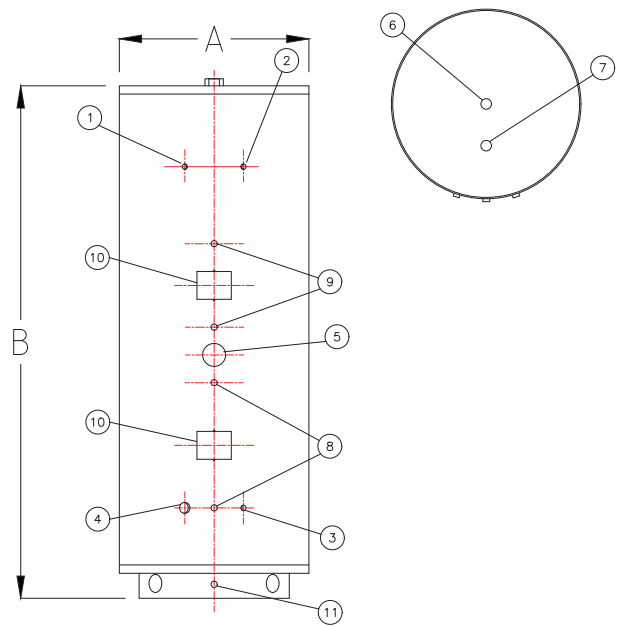
Squire stainless models SIT/SDT 600 to 3000

Model	Volume	Coil size	Dimension	
			A	B
SIT600	575	54	740	1978
SIT900	840	81	1080	1600
SIT1100	1125	108	1080	2100
SIT1400	1380	108	1180	2074
SIT1900	1875	162	1380	2038
SIT2500	2500	162	1380	2595
SIT3000	3000	162	1380	3040

Model	Volume	Lower coil size kW	Upper coil size kW	Dimension	
				A	B
SDT600	575	27	27	740	1978
SDT900	840	27	40	1080	1595
SDT1100	1125	54	40,5	1080	2100
SDT1400	1380	54	54	1180	2120
SDT1900	1875	81	67	1380	2050
SDT2500	2500	81	81	1380	2600
SDT3000	3000	81	67	1380	3040



SIT 600-3000



SDT 600-3000

Legend	Unit	Size	Description - SIT models
1	BSP	½"	Sensor pocket
2	BSP	½"	Spare
3	BSP	½"	Sensor pocket
4	BSP	2"	Inlet
5	BSP	2¼"	Immersion heater boss
6	BSP	2"	Outlet
7	BSP	¾"	T&P valve
8	BSP	1"	Coil connection
9	n/a	n/a	n/a
10		n/a	Dual thermostat
11	BSP	1"	Drain

Legend	Unit	Size	Description - SDT models
1	BSP	½"	Sensor pocket
2	BSP	½"	Spare
3	BSP	½"	Sensor pocket
4	BSP	2"	Inlet
5	BSP	2¼"	Immersion heater boss
6	BSP	2"	Outlet
7	BSP	¾"	T&P valve
8	BSP	1"	Coil connection
9	BSP	1"	Coil connection
10		n/a	Dual thermostat
11	BSP	1"	Plugged drain

Technical specification

Squire stainless twin coil models

Water heater model		SDT 600	SDT 900	SDT 1100	SDT 1400	SDT 1900	SDT 2500	SDT 3000
Storage capacity	litres	575	840	1125	1380	1875	2500	3000
Efficiency data - building regulations								
Heat loss	kWh/24hr	2,88	3,29	3,60	3,84	4,13	4,56	4,87
Efficiency data - ErP and energy label								
Ecodesign energy label rating		n/a	n/a	n/a	n/a	n/a	n/a	n/a
Standing loss	W	120	137	150	160	172	190	203
General Data								
Dimensions (height)	mm	1978	1595	2100	2120	2050	2600	3040
Dimensions (width)	mm	740	1080	1080	1180	1380	1380	1380
Hot outlet connection (inches)	BSP	2	2	2	2	2	2	2
Cold feed connection (inches)	BSP	2	2	2	2	2	2	2
Flow/return connection (inches)	BSP	1	1	1	1	1	1	1
Weight (empty)	kg	114	162	195	241	291	370	427
Weight (full)	kg	689	1002	1320	1621	2166	2870	3427
Minimum working pressure	bar	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Maximum working pressure	bar	6	6	6	6	6	6	6
Electrical requirements		230V /1Ph/ 50hz*						
Coil and performance data								
Coil output (80/60 °C) bottom/top	kW	27/27	27/40	54/40	54/54	81/67	81/81	81/67
Coil surface area bottom/top	m²	1.0/1.0	1.0/1.5	2/1.5	2.0/2.0	3.0/2.5	3.0/3.0	3.0/2.5
Flow rate (80/60 °C) bottom/top	l/sec	0.33/0.33	0.33/0.495	0.45/0.495	0.45/0.45	0.4/0.43	0.4/0.4	0.4/0.43
Pressure loss bottom/top	kPa	12.2/12.2	12.2/14.3	30.0/14.3	30.0/30.0	30.0/30.0	30.0/30.0	30.0/30.0
Maximum coil temperature	°C	100	100	100	100	100	100	100
Maximum coil pressure	bar	6	6	6	6	6	6	6
Max. draw off capacity (1 st hour) at 50°C temperature rise (top coil only)	l/hr	924	1360	1588	2033	2652	3393	3552
Heat up time at 50°C temperature rise (top coil only)	min	50	37	59	53	49	65	104
Max. draw off capacity (1 st hour) At 50°C temperature rise (both coils)	l/hr	1220	1985	1389	1824	4046	4786	4969
Heat up time at 50°C temperature rise (both coils)	min	19	16	37	44	44	54	42

*For use of 230v thermostats only

Energy label, product fiche and ErP data table are available at www.lochinvar.ltd.uk

Ancillary options

- Unvented system kits
- De-stratification pump sets
- High limit thermostat
- Immersion heater elements

For further information on the Squire stainless indirect water heater, including ICM & user instructions and our full warranty terms and conditions, please visit our website: www.lochinvar.ltd.uk

Lochinvar Ltd reserves the right to change specifications without prior notice

Technical specification

Squire stainless single coil models

Water heater model		SIT 300	SIT 450	SIT 600	SIT 900	SIT 1100	SIT 1400	SIT 1900	SIT 2500	SIT 3000
Storage capacity	litres	310	427	575	840	1125	1380	1875	2500	3000
Efficiency data - building regulations										
Heat loss	kWh/24hr	0.62	0.85	2.88	3.36	3.38	4.14	3.75	5.00	6.00
Efficiency data - ErP and energy label										
Ecodesign energy label rating		B	B	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Standing loss	W	57.4	67.7	120	137	150	160	172	190	203
General data										
Dimensions (height)	mm	1765	1734	1978	1600	2100	2120	2050	2600	3040
Dimensions (width)	mm	609	711	740	1080	1080	1180	1380	1380	1380
Hot outlet connection (inches)	BSP	1½	1½	2	2	2	2	2	2	2
Cold feed connection (inches)	BSP	1½	1½	2	2	2	2	2	2	2
Flow/return connection (inches)	BSP	1	1	1	1	1	1	1½	1½	1½
Weight (empty)	kg	80	96.5	114	162	195	241	291	370	427
Weight (full)	kg	390	523.5	689	1002	1320	1621	2166	2870	3427
Minimum working pressure	bar	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Maximum working pressure	bar	10.0	10.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Electrical requirements	230V /1Ph/ 50hz*									

*For use of 230v thermostats only

Water heater model		SIT 300	SIT 450	SIT 600	SIT 900	SIT 1100	SIT 1400	SIT 1900	SIT 2500	SIT 3000
Coil and performance data										
Coil output (80/60 °C)	kW	34	56	54	81	108	108	162	162	162
Coil surface area	m ²	1.25	2.05	2	3	4	4	6	6	6
Flow rate (80/60 °C)	l/sec	0.41	0.68	0.45	0.40	0.35	0.35	1.45	1.45	1.45
Pressure loss	kPa	6.4	14	30	30	30	30	30	30	30
Maximum coil temperature	°C	110	110	110	110	110	110	110	110	110
Maximum coil pressure	bar	10	10	6	6	6	6	6	6	6
Max. draw off capacity (1 st hour) at 50°C temperature rise	l/hr	828	1289	1389	2065	2758	2962	4286	4786	5186
Heat up time at 50°C temperature rise	min	32	27	37	36	36	45	40	54	65

Energy label, product fiche and ErP data table are available at www.lochinvar.ltd.uk

Ancillary options

- Unvented system kits
- De-stratification pump sets
- High limit thermostat
- Immersion heater elements

ACS
REGISTRARS
ENVIRONMENTAL ASSURANCE
ISO 14001

ACS
REGISTRARS
QUALITY ASSURANCE
ISO 9001

iphe
Industrial Associate

CIBSE
PATRONS

ICOM

THE SOCIETY OF PUBLIC UTILITIES
ENGINEERS
INDUSTRIAL ASSOCIATE

CE
0063

For further information on the Squire stainless indirect water heater, including ICM & user instructions and our full warranty terms and conditions, please visit our website: www.lochinvar.ltd.uk



8 Lombard Way, The MXL Centre, Banbury, Oxon, OX16 4TJ
Tel: +44(0) 1295 269 981, Fax: +44(0) 1295 271 640, Email: info@lochinvar.ltd.uk
www.lochinvar.ltd.uk

Lochinvar Ltd reserves the right to change specifications without prior notice

LOC_24_0003 | SIT/SDT | November 2024