

ITS

Dual coil indirect calorifier

Storage Capacity

300 Litres to 1000 Litres

**Calorifiers for a wide
range of applications**



ITS

ITS is an indirect water heater (calorifier) suitable for nearly all applications. ITS has 2 coils, one of the coils can be used to warm the storage tank via an external heat source like a heat pump.

FEATURES

SIZES	300 Litres to 1000 Litres.
MAXIMUM WORKING PRESSURE	10 bar working pressure.
GLASS LINING	All internal surfaces exposed to water are glass-lined. Perma Glass Ultra Coat second-generation glass coating technology prevents corrosion.
ANODE	Replaceable magnesium anode.
WARRANTY	All ITS tanks receive a three years warranty on the tank and one year on parts.
OTHER STANDARD FEATURES	<ul style="list-style-type: none">• Insulated access cover for comprehensive waterside maintenance• ITS 300: Three adjustable legs facilitate easy installation• ITS 400-1000: Insulated ring base for easy installation
OPTIONS	<ul style="list-style-type: none">• Flexible magnesium anode for installation in confined areas• Powered anode for reduced maintenance requirements• Temperature and pressure valve with stainless steel spring set to 95°C and a maximum water pressure of 7 bar• Analogue temperature gauge (0-120°C)• Electric element heat packs (3 -36 kW)• Unvented kits• Destratification pump kit• Flowstore heat pack

ABOUT A. O. SMITH

A. O. SMITH: WORLDWIDE	<p>A. O. Smith is the largest manufacturer in North America, and one of the world's leading manufacturers of residential and commercial water heating equipment, offering a comprehensive product line and featuring the best-known brands in North America and China. Through an inspired blend of innovation, teamwork, technology and industry expertise, A. O. Smith has created a full line of state-of-the-art water heaters and boilers that combine incredible performance with higher-than-ever energy efficiency. A. O. Smith is a global leader applying innovative technology and energy-efficient solutions to products marketed worldwide. A. O. Smith is also one of the largest manufacturers of electric motors for residential and commercial applications in North America.</p> <p>A. O. Smith developed and patented a process to glass-line water heaters. And over the years, A. O. Smith has gained the respect and support of homeowners, contractors, architects, and specifying engineers in over 60 countries by providing innovative energy efficient products designed for years of trouble-free service.</p>
A. O. SMITH: INDIA	<p>A. O. Smith India Water Heater Private Limited was established in 2005. Backed by 70 years of proven technological advances A. O. Smith India has created a stylish design with features demanded by the Indian consumer and successfully marketed a range of domestic water heaters that in a short period of time have become the most trusted brand in it's category.</p>

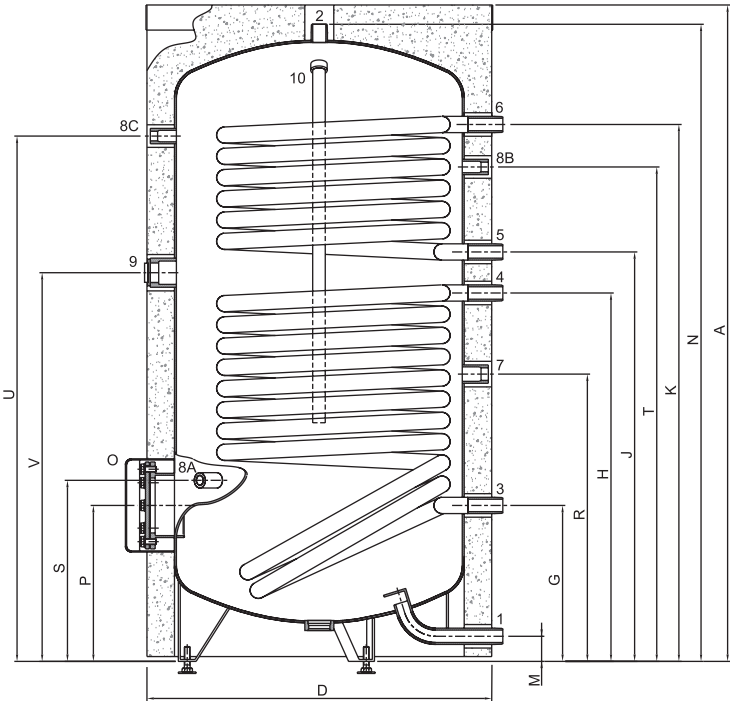
Technical specifications

		ITS 300	ITS 400	ITS 500	ITS 600	ITS 750	ITS 1000
Technical data							
Output solar coil	kcal	40,000	45,000	60,000	62,000	70,000	75,000
Output solar coil	kW	46	52	68	72	80	87
Surface area solar coil	m²	1.45	1.64	2.13	2.39	2.66	2.89
Water capacity solar coil	l	9.5	9.9	12.8	20.3	22.6	24.6
Flow rate solar coil (80-60°C)	l/h	1978	2236	2924	3096	3440	3741
Pressure drop solar coil	mbar	44	78	166	37	50	61
Output primary coil	kW	27	37	42	40	56	58
Output primary coil	kcal	23,000	32,000	36,000	35,000	48,000	50,000
Surface area primary coil	m²	0.85	1.15	1.31	1.33	1.86	1.93
Water capacity primary coil	l	5.7	6.9	7.9	11.3	15.8	16.4
Flow rate primary coil (80-60°C)	l/h	1161	1591	1806	1720	2408	2494
Pressure drop primary coil	mbar	12	30	43	7	18	20
Maximum working pressure tank	bar	10	10	10	10	10	10
Maximum working pressure coil	bar	16	16	16	16	16	16
Maximum operating temperature tank	°C	95	95	95	95	95	95
Maximum operating temperature coil	°C	110	110	110	110	110	110
Standby loss	kWh/24h	1.32	1.60	1.88	1.85	2.03	2.19
Anodes	-	1	1	1	1	1	1
Maximum weight	kg	422	527	666	887	980	1347
Draw-off capacity*							
Storage capacity	l	289	382	470	641	718	1007
30 min. ΔT=44°C	l	1089	1373	1694	1976	2306	2832
60 min. ΔT=44°C	l	1802	2243	2769	3070	3635	4249
90 min. ΔT=44°C	l	2516	3113	3844	4165	4964	5666
120 min. ΔT=44°C	l	3229	3983	4919	5259	6293	7083
Continuous ΔT=44°C	l/h	1427	1740	2150	2189	2658	2834
Heating-up time ΔT=44°C	min.	12	13	13	18	16	21
30 min. ΔT=50°C	l	958	1208	1491	1739	2029	2492
60 min. ΔT=50°C	l	1586	1974	2437	2702	3199	3739
90 min. ΔT=50°C	l	2214	2739	3383	3665	4368	4986
120 min. ΔT=50°C	l	2841	3505	4329	4628	5538	6233
Continuous ΔT=50°C	l/h	1256	1531	1892	1926	2339	2494
Heating-up time ΔT=50°C	min.	14	15	15	20	18	24
30 min. ΔT=55°C	l	871	1099	1355	1581	1845	2265
60 min. ΔT=55°C	l	1442	1794	2215	2456	2908	3399
90 min. ΔT=55°C	l	2012	2490	3075	3332	3971	4533
120 min. ΔT=55°C	l	2583	3186	3935	4208	5035	5666
Continuous ΔT=55°C	l/h	1141	1392	1720	1751	2127	2267
Heating-up time ΔT=55°C	min.	15	16	16	22	20	27
Shipping data							
Weight empty	kg	133	145	196	246	262	340
Weight incl. packaging	kg	144	156	207	257	273	352
Width packaging	mm	780	780	780	870	870	1010
Height packaging	mm	1510	1850	2150	1930	2150	2100

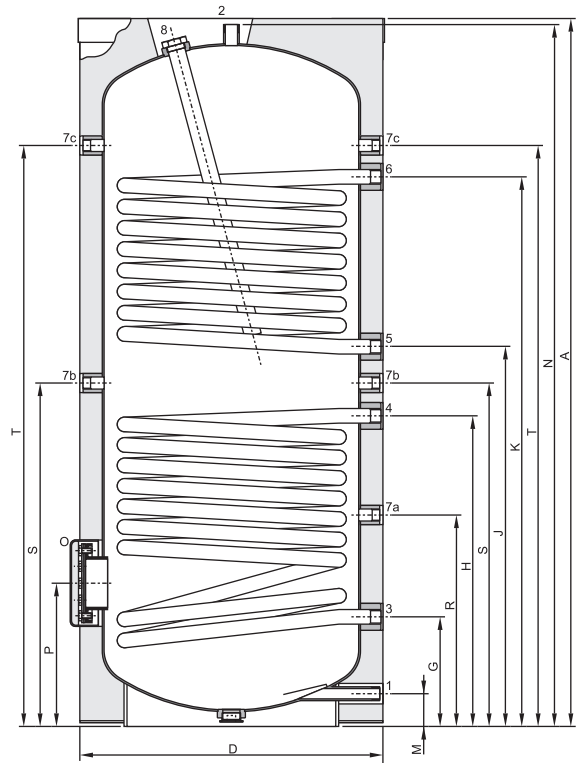
* Draw-off capacity is based on both coils. This is not always possible.

Dimensions

ITS 300



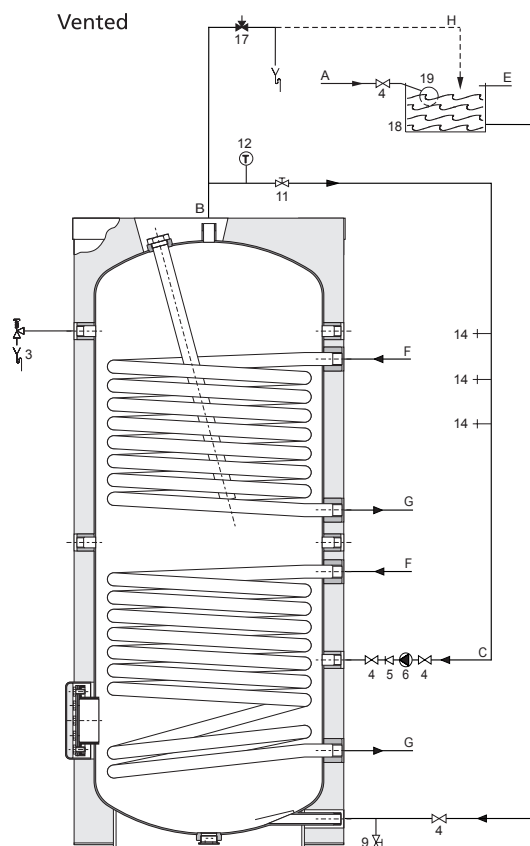
ITS 400-1000



Dimensions in mm

		ITS 300	ITS 400	ITS 500	ITS 600	ITS 750	ITS 1000
A		1370	1705	2040	1835	2030	2000
D		720	720	720	910	910	1060
G		325	255	255	305	305	345
H		765	771	915	907	967	947
J		850	941	1085	1087	1147	1127
K		1110	1277	1469	1387	1567	1487
M		75	70	70	85	85	95
N		1310	1652	1990	1797	1992	1962
O		115	115	115	180	180	180
P		325	330	330	420	420	440
R		595	500	500	660	660	710
S		375	855	1000	1000	1065	1035
T		1025	1360	1700	1485	1680	1600
U		1115	-	-	-	-	-
V		800	-	-	-	-	-
1	Cold water	R1	R2	R2	R2½	R2½	R2½
2	Hot water	R1	R2	R2	R2½	R2½	R2½
3/4	Solar coil	R1	R1	R1	R1¼	R1¼	R1¼
5/6	Primary coil	R1	R1	R1	R1¼	R1¼	R1¼
7	Connection	Rp¾	Rp¾	Rp¾	Rp¾	Rp¾	Rp¾
8a+b+c	Connection	Rp½	-	-	-	-	-
8	Anode connection	-	Rp1¼	Rp1¼	Rp1¼	Rp1¼	Rp1¼
10	Anode connection	R1	-	-	-	-	-
All ITS dual coil calorifiers receive a three years warranty on the tank and one year on parts.							

Installation diagrams

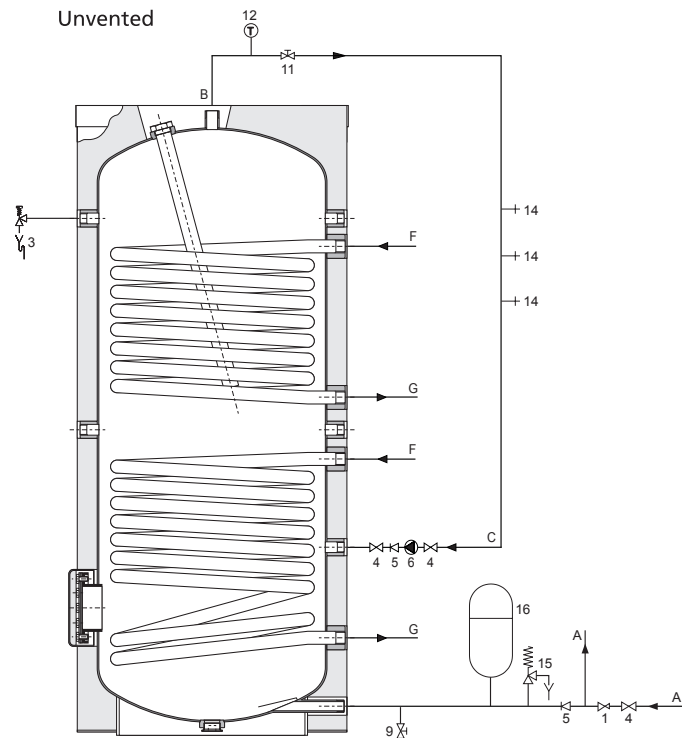


- 1 Pressure reducing valve
- 3 T&P valve
- 4 Stop valve
- 5 Non-return valve
- 6 Circulation pump
- 9 Drain valve
- 11 Isolating valve
- 12 Temperature gauge
- 14 Hot water outlets
- 15 Expansion relief valve
- 16 Expansion vessel
- 17 Three way valve
- 18 Water tank
- 19 Float valve

- A Cold water
- B Hot water
- C Return circulation
- F Primary flow
- G Primary return
- E Over flow pipe
- H Expansion vent pipe

A.O. Smith unvented system kits utilise combination valves.

Further installation and connection details can be found in the Installation Manual.





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