

# MSB Heating Buffer Vessels

## Carbon Steel Buffer Vessels for Central Heating Systems



The Adveco MSB range of carbon steel primary system buffer vessels has been designed as a standard solution for a broad range of central heating applications.

The MSB carbon steel buffer range includes a large selection of tanks from 300 to 5,000 litres suitable for use as heating system buffers, thermal inertia tanks, or energy storage vessels.

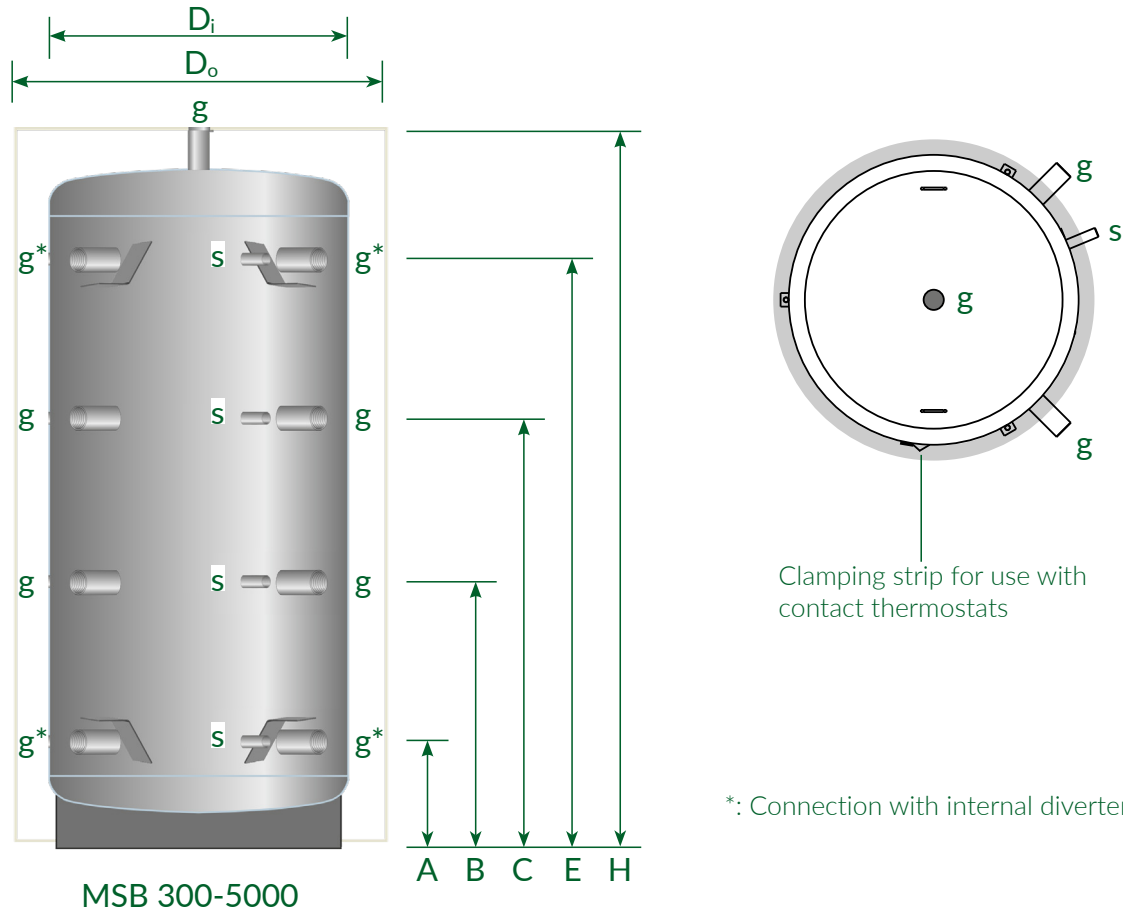
All buffers are provided with a large number of high, low, and mid-level connections to maximise compatibility for system integration, making them a suitable choice for almost any heating application. With 90-degree connection positions, the MSB range is designed for corner installations to allow the most efficient use of available plant room space. MSB tanks from 500 to 2000 litres are also available with a single fixed heat exchange coil in the bottom of the tank.

The MSB range is suitable for use with working pressures of up to 3 or 6 bar, and working temperatures up to 95°C.

### FEATURES

- Vertical Orientation
- High quality carbon steel construction
- High and low level inlet diverter baffles
- Maximum working pressure 3 bar
- 6 bar working pressure options available on request
- Maximum working temperature 95°C
- Supplied with 100mm removable insulation, packed separately
- Available ancillaries include control and overheat thermostats, automatic air vents, and gauges.
- Available with a single internal heat exchange coil (MSB 501-2001)





\*: Connection with internal diverter plate

**Connections:**

Port	Purpose	MSB 300-3	MSB 500-3	MSB 750-3	MSB 1000-3	MSB 1500-3	MSB 2000-3	MSB 3000-3	MSB 4000-3	MSB 5000-3
g (x9)	Connections	1.5"	1.5"	1.5"	1.5"	1.5"	1.5"	2.0"	2.0"	2.5"
s (x4)	Sensor connections	½"	½"	½"	½"	½"	½"	½"	½"	½"

**Dimensions:**

		MSB 300-3	MSB 500-3	MSB 750-3	MSB 1000-3	MSB 1500-3	MSB 2000-3	MSB 3000-3	MSB 4000-3	MSB 5000-3
H	Total height	1805	1602	1687	2093	2050	2140	2660	2765	2815
Do	Outer diameter with insulation	700	850	990	990	1200	1400	1450	1600	1800
Di	Inner diameter without insulation	500	650	790	790	1000	1200	1250	1400	1600
A	Connections	200	230	320	320	320	365	380	445	475
B	Connections	670	610	670	800	785	830	1010	1075	1090
C	Connections	1114	994	1014	1290	1255	1300	1635	1690	1705
E	Connections	1584	1374	1364	1770	1720	1765	2265	2320	2320

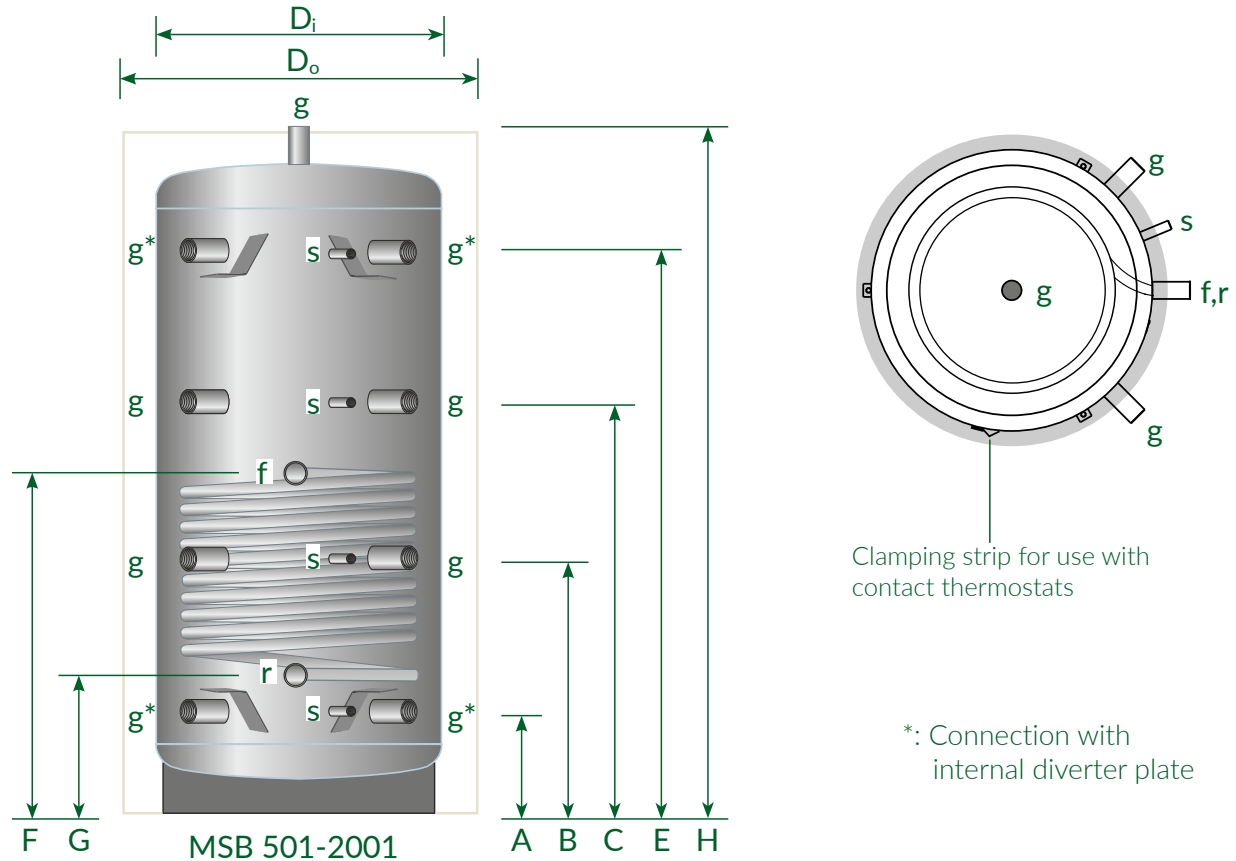
**Specifications:**

Storage volume (l)	310	475	740	940	1426	2122	2960	3820	5022
Max. working temperature (°C)	95	95	95	95	95	95	95	95	95
Max. working pressure (bar)	3	3	3	3	3	3	3	3	3
Standing losses (W) / (Energy Efficiency Class)	95 / (C)	109 / (C)	130 / (C)	141 / (C)	168 / (C)	192 / (C)	--	--	--
Dry mass (kg) (insulated)	65	85	110	130	200	285	345	410	480
<b>Specifications: 6 bar high pressure variant</b>	<b>MSB 300-6</b>	<b>MSB 500-6</b>	<b>MSB 750-6</b>	<b>MSB 1000-6</b>	<b>MSB 1500-6</b>	<b>MSB 2000-6</b>	<b>MSB 3000-6</b>	<b>MSB 4000-6</b>	<b>MSB 5000-6</b>

All other details as above, except:

Max. working pressure (bar)	6	6	6	6	6	6	6	6	6
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Test pressures equal to 1.5 times rated working pressure. Connection sizes given in inches BSP female. Dimensions given in millimetres.



Connections:		MSB 501-3	MSB 751-3	MSB 1001-3	MSB 1501-3	MSB 2001-3
Port	Purpose					
g (x9)	Connections	1.5"	1.5"	1.5"	1.5"	1.5"
s (x4)	Sensor connections	½"	½"	½"	½"	½"
f, r	Coil flow and return connections	1¼"	1¼"	1¼"	1¼"	1¼"

Dimensions:		MSB 501-3	MSB 751-3	MSB 1001-3	MSB 1501-3	MSB 2001-3
H	Total height	1602	1687	2093	2050	2140
Do	Outer diameter with insulation	850	990	990	1200	1400
Di	Inner diameter without insulation	650	790	790	1000	1200
A	Connections	230	320	320	320	365
B	Connections	610	670	800	785	830
C	Connections	994	1014	1290	1255	1300
E	Connections	1374	1364	1770	1720	1765
F	Coil inlet connection	680	920	1020	1120	1165
G	Coil outlet connection	280	370	370	420	465

Specifications:		MSB 501-3	MSB 751-3	MSB 1001-3	MSB 1501-3	MSB 2001-3
Storage volume (l)		475	740	940	1426	2122
Maximum tank working temperature (°C)		95	95	95	95	95
Maximum tank working pressure (bar)		3	3	3	3	3
Heat exchanger surface area (m²)		1.33	2.29	2.57	3.65	4.47
Heat exchanger volume (l)		8.07	13.95	15.70	22.32	27.43
Standing losses (W) / (Energy Efficiency Class)		109 / (C)	130 / (C)	141 / (C)	168 / (C)	192 / (C)
Dry mass (kg) (insulated)		106	147	197	260	350
<b>Specifications: 6 bar high pressure variant</b>		<b>MSB 501-6</b>	<b>MSB 751-6</b>	<b>MSB 1001-6</b>	<b>MSB 1501-6</b>	<b>MSB 2001-6</b>

All other details as above, except:						
Max. working pressure (bar)		6	6	6	6	6

Test pressures equal to 1.5 times rated working pressure. Connection sizes given in inches BSP female. Dimensions given in millimetres.