

# BR-HP 150 - 500



# Heat pump storage tank

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### Application

The "High Performance" hot water storage tank features a large heating surface and is thus suitable for heat pump applications.

It can also be used as a high performance storage tank for oil, gas, solid fuel and similar.

### Corrosion protection for parts with drinking water contact

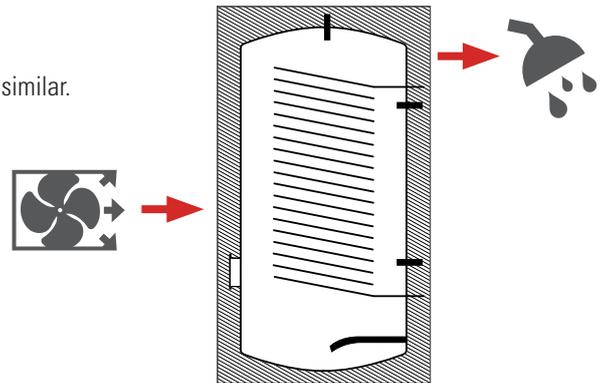
Enamelled as per DIN 4753. A magnesium anode offers additional corrosion protection.

### External corrosion protection

Protective enamelled layers and foam encased

### Heat insulation

50 mm PU rigid foam insulation with soft sleeve



Model overview BR-HP 150 - 500

Type	Article no.	Volume	Height with insulation	Tilt height	Installation diameter	Weight (empty)	Surface HE bottom	Output figure at supply temp. 55 °C	Efficiency class
Unit	[-]	[l]	[mm]	[mm]	[mm]	[kg]	[m²]	[-]	[-]
BR HP 150	STD0150BRHP	151	970	1150	610	79	1.4	1.2	B
BR HP 200	STD0200BRHP	224	1350	1485	610	91	1.9	1.7	C
BR HP 300	STD0300BRHP	285	1670	1780	610	120	2.6	3.3	C
BR HP 400	STD0400BRHP	415	1500	1685	760	155	3	4.2	C
BR HP 500	STD0500BRHP	496	1740	1900	760	185	3.4	7.2	C

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### Technical specifications BR-HP 150 - 500

Type	Unit	BR HP 150	BR HP 200	BR HP 300	BR HP 400	BR HP 500
Article no.	[-]	STD0150BRHP	STD0200BRHP	STD0300BRHP	STD0400BRHP	STD0500BRHP
Volume	[l]	151	224	285	415	496
Drinking water content	[l]	142.4	212.3	269	396.5	472
Content HE bottom	[l]	8.6	11.7	16	18.5	24
Height with insulation	[mm]	970	1350	1670	1500	1740
Diameter with insulation	[mm]	610	610	610	760	760
Diameter without insulation	[mm]	500	500	500	650	650
Tilt height	[mm]	1150	1485	1780	1685	1900
Installation diameter	[mm]	610	610	610	760	760
Weight (empty)	[kg]	79	91	120	155	185
Max. operating pressure heating side	[bar]	10	10	10	10	10
Test pressure heating side	[bar]	15	15	15	15	15
Max. operating pressure hot drinking water side	[bar]	10	10	10	10	10
Test pressure hot drinking water side	[bar]	15	15	15	15	15
Max. operating temperature heating side	[°C]	95	95	95	95	95
Max. operating temperature hot drinking water side	[°C]	95	95	95	95	95
Surface HE bottom	[m <sup>2</sup> ]	1.4	1.9	2.6	3	3.9
Insulation thickness	[mm]	50	50	50	50	50
Max. installation length EHP	[mm]	450	500	500	650	650
Max. output EHP	[kW]	3	3	3	6	6
Output figure at supply temp. 55 °C	[-]	1.2	1.7	3.3	4.2	7.2
On-demand heat overhead	[kWh/d]	1.20	1.63	1.92	2.40	2.57
Holding losses	[W]	50	68	80	101	107
Efficiency class	[-]	B	C	C	C	C
Insulation material	[-]	PU rigid foam ( $\lambda=0.024$ W/mK)				
Corrosion protection	[-]	Enamelled as per DIN 4753, magnesium anode				

### Output data BR-HP 150 - 500

	Continuous output at supply temperature <sup>1</sup>				Values as per DIN4708 (data relative to output figure) <sup>2</sup>					Draw-off performance in 60 min <sup>3</sup>	
	50 °C		60 °C		Output at 55 °C supply temp.	Max. draw-off performance in 10 min		Draw-off performance after 30 min		Supply temp. 55 °C	
	[kW]	[l/h]	[kW]	[l/h]		[l]	[l/min]	[l]	[l/min]		
HE bottom	150	5.9	144	16.8	413	1.2	156	15.6	43	15.2	313
	200	8.0	196	22.8	560	1.7	181	18.1	62	16.9	447
	300	10.9	268	31.2	766	3.3	243	24.3	122	21.2	587
	400	12.6	309	36.0	884	4.2	273	27.3	155	23.3	777
	500	16.4	402	46.8	1150	7.2	359	35.9	264	29.3	960

1 - Heating from CW 10 °C to WW 45 °C

2 - Heating from CW 10 °C to WW 45 °C; supply 70 °C; storage tank temperature CW + 50 K

3 - Computed data at maximum output; CW 10 °C to WW 45 °C; storage tank temperature 60 °C

## Connections and dimensions BR-HP 150 - 500

Connections		Unit	BR HP 150	BR HP 200	BR HP 300	BR HP 400	BR HP 500
TS	Top sensor	[mm]	970 ½" IT	1350 ½" IT	1670 ½" IT	1500 ½" IT	1740 ½" IT
HW	Hot water	[mm]	970 1¼" IT	1350 1¼" IT	1670 1¼" IT	1500 1¼" IT	1740 1¼" IT
AN	Anode	[mm]	970 1¼" IT	1350 1¼" IT	1670 1¼" IT	1500 1¼" IT	1740 1¼" IT
HES	Heating supply	[mm]	745 1" IT	1125 1" IT	1410 1" IT	1235 1" IT	1475 1" IT
HER	Heating return	[mm]	230 1" IT	230 1" IT	230 1" IT	255 1" IT	255 1" IT
C	Circulation	[mm]	630 ½" IT	1000 ½" IT	1250 ½" IT	1115 ½" IT	1270 ½" IT
HWPSB	Hot water post-heating sensor bottom	[mm]	390 ½" IT	390 ½" IT	390 ½" IT	450 ½" IT	450 ½" IT
CW	Cold water	[mm]	135 1¼" IT	135 1¼" IT	135 1¼" IT	145 1¼" IT	145 1¼" IT
FL	Flange	[mm]	285 Ø180mm	285 Ø180mm	285 Ø180mm	310 Ø180mm	310 Ø180mm
S/TH	Sensor/Thermometer	[mm]	760 ½" IT	1140 ½" IT	1425 ½" IT	1250 ½" IT	1490 ½" IT

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