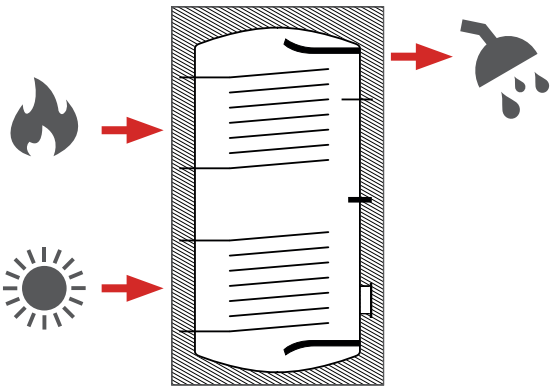
BRR 200 - 2000

Hot water storage tank solar BRR 200 - 2000

Application

This hot water storage tank features two smooth pipe heat exchangers and is thus suitable for combining with solar heating systems. Potential conventional heat sources include various heating boilers such as 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

Up to 500 l protective enamelled layers and foam encased

800 to 2,000 l powder-coated

Heat insulation

Type 200-600: 50 mm PU rigid foam insulation with soft sleeve

Type 800-1000: 95 mm PU rigid foam half-shell with soft sleeve

Type 1500-2000: 85 mm PU rigid foam half-shell with soft sleeve

Model overview BRR 200 - 2000

Type	Article no.	Volume	Height with insulation	Tilt height	Installation diameter	Weight (empty)	Surface HE top / bottom	Output figure	Efficiency class
Unit	[-]	[l]	[mm]	[mm]	[mm]	[kg]	[l]	[-]	[-]
BRR 200	STD0200BRR	201	1215	1370	610	94	0,5 / 1	1,2	C
BRR 300	STD0300BRR	326	1570	1710	660	136	1 / 1,5	2,2	C
BRR 400	STD0400BRR	415	1500	1690	760	161	0,8 / 1,8	3	C
BRR 500	STD0500BRR	496	1800	1960	760	190	1,4 / 2,3	4,8	C
BRR 600	STD0600BRR	559	2000	2150	760	220	1,7 / 2,3	6	C
BRR 800	STD0800BRR	805	1990	2020	790	286	1,7 / 2,9	8	C
BRR 1000	STD1000BRR	910	2190	2220	790	330	2,2 / 3,6	11	C
BRR 1500	STD1500BRR	1388	2250	2355	950	381	2,3 / 3,9	17	C
BRR 2000	STD2000BRR	1936	2390	2490	1100	417	3,6 / 4,1	26	C

Technical specifications BRR 200 - 2000

Type	Unit	BRR 200	BRR 300	BRR 400	BRR 500	BRR 600	BRR 800	BRR 1000	BRR 1500	BRR 2000
Article no.	[-]	STD0200BRR STD0200BRR.H	STD0300BRR STD0300BRR.H	STD0400BRR STD0400BRR.H	STD0500BRR STD0500BRR.H	STD0600BRR STD0600BRR.H	STD0800BRR	STD1000BRR	STD1500BRR	STD2000BRR
Volume	[l]	201	326	415	496	559	805	910	1388	1936
Drinking water content	[l]	192	311	399	472	534	765	860	1334	1869
Content HE top	[l]	3	6	5	9	10	15	19	20	32
Content HE bottom	[l]	6	9	11	15	15	25	31	34	35
Height with insulation	[mm]	1215	1570	1500	1800	2000	1990	2190	2250	2390
Diameter with insulation	[mm]	610	660	760	760	760	990	990	1200	1350
Diameter without insulation	[mm]	-	-	-	-	-	790	790	950	1100
Tilt height	[mm]	1370	1710	1690	1960	2150	2020	2220	2355	2490
Installation diameter	[mm]	610	660	760	760	760	790	790	950	1100
Weight (empty)	[kg]	94	136	161	190	220	286	330	381	417
Max. operating pressure heating side	[bar]	10	10	10	10	10	10	10	10	10
Test pressure heating side	[bar]	15	15	15	15	15	15	15	15	15
Max. operating pressure hot drinking water side	[bar]	10	10	10	10	10	10	10	6	6
Test pressure hot drinking water side	[bar]	15	15	15	15	15	15	15	9	9
Max. operating pressure solar side	[bar]	10	10	10	10	10	10	10	10	10
Test pressure solar side	[bar]	15	15	15	15	15	15	15	15	15
Max. operating temperature heating side	[°C]	95	95	95	95	95	95	95	95	95
Max. operating temperature hot drinking water side	[°C]	95	95	95	95	95	95	95	95	95
Max. operating temperature solar side	[°C]	95	95	95	95	95	95	95	95	95
Surface HE top	[m²]	0,5	1	0,8	1,4	1,7	1,7	2,2	2,3	3,6
Surface HE bottom	[m²]	1	1,5	1,8	2,3	2,3	2,9	3,6	3,9	4,1
Insulation thickness	[mm]	50	50	50	50	50	95	95	85	85
Max. installation length EHP	[mm]	500	550	650	650	650	800	800	1000	1100
Max. output EHP	[kW]	2	2,5	4	4	6	7,5	7,5	12	15
Output figure	[-]	1,2	2,2	3	4,8	6	8	11	17	26
On-demand heat overhead	[kWh/d]	1,6	1,8	2,4	2,60	2,60	3,10	3,40	4,10	4,50
Holding losses	[W]	68	75	101	107	110	129	141	171	185
Efficiency class	[-]	C	C	C	C	C	C	C	C	C
Pressure loss heating side	[mbar]	48	60	66	112	135	85	110	138	216
Flow rate heating side	[m³/h]	1,4	1,8	2	2,5	3,1	3,1	4	4,1	6,5
Insulation material	[-]	PU rigid foam (λ=0.024 W/mK)					PU rigid foam shell (λ=0.024 W/mK)			
Corrosion protection	[-]	Enamelled as per DIN 4753, magnesium anode								

Output data BRR 200 - 2000

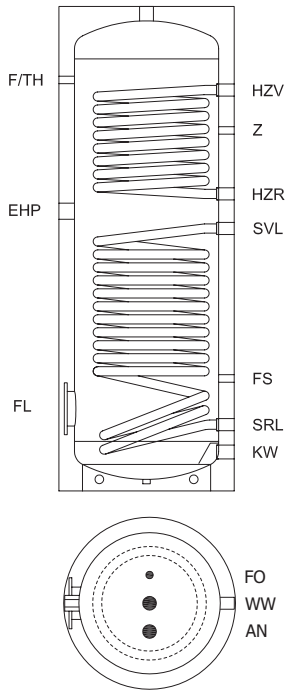
		Continuous output at supply temperature [1]							Values as per DIN4708 (data relative to output figure) [2]				Draw-off performance in 60 min [3]
		50 °C		60 °C		70 °C		NL	Max. draw-off performance in 10 min		Draw-off performance after 30 min		Supply temp. 70 °C
		[kW]	[l/h]	[kW]	[l/h]	[kW]	[l/h]		[l]	[l/min]	[l]	[l/min]	[l]
HE top	200	2,9	72	8,4	206	10,0	361	1,2	156	15,6	43	15,2	476
	300	4,2	103	12,0	295	21,0	516	2,2	204	20,4	80	18,5	660
	400	4,6	113	13,2	324	16,0	567	3,0	236	23,2	111	20,5	802
	500	5,5	134	15,6	383	27,3	671	4,8	291	29,1	177	24,6	931
	600	7,1	175	20,4	501	35,7	877	6	326	32,6	220	27,0	1176
	800	7,1	175	20,4	501	35,7	877	8,0	380	38,0	292	30,7	1308
	1000	9,2	227	26,4	649	46,2	1135	11,0	435	43,5	403	34,5	1616
	1500	9,7	237	27,6	678	48,3	1187	17,0	556	55,6	616	42,9	2012
	2000	15,1	371	43,2	1061	75,6	1857	26,0	713	71,3	933	53,8	2903
HE bottom	200	4,2	103	12,0	295	21,0	516	3,1	235	23,5	115	20,7	783
	300	6,3	154	18,0	442	31,5	774	6,0	325	32,5	220	27,0	1109
	400	7,1	175	20,4	501	35,7	877	10,4	423	42,4	381	33,7	1423
	500	8,8	216	25,2	619	44,1	1083	13,0	478	47,8	474	37,5	1678
	600	10,1	248	28,8	708	50,3	1238	16	536	53,6	580	41,5	1881
	800	12,2	299	34,8	855	60,9	1496	22,0	645	64,5	792	49,1	2818
	1000	15,1	371	43,2	1061	75,6	1857	34,0	839	83,9	1214	62,6	2953
	1500	16,4	402	46,8	1150	81,9	2012	46,0	1021	102,1	1631	75,2	3871
	2000	17,2	423	49,2	1209	86,1	2115	60,0	1150	11,5	1837	84,5	4520

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

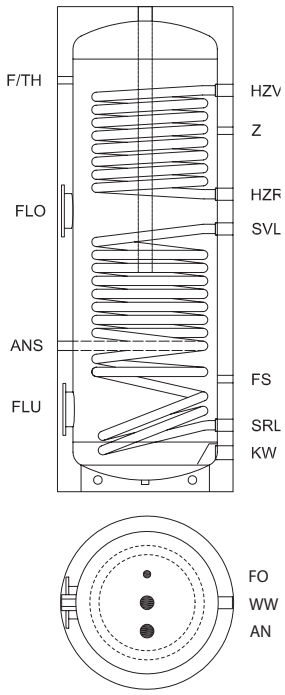
Connections and dimensions BRR 200 - 2000

Connections		Unit	BRR 200	BRR 300	BRR 400	BRR 500	BRR 600	BRR 800	BRR 1000	BRR 1500	BRR 2000
FO	Top sensor	[mm]	1215 ½" IT	1570 ½" IT	1500 ½" IT	1800 ½" IT	2000 ½" IT	1940 ½" IT	2140 ½" IT	2250 ½" IT	2390 ½" IT
ENT	Ventilation	[mm]	-	-	-	-	-	1940 1¼" IT	2140 1¼" IT	2250 1¼" IT	2390 1¼" IT
AN	Anode	[mm]	1215 1¼" IT	1570 1¼" IT	1500 1¼" IT	1800 1¼" IT	2000 1¼" IT	1940 1¼" IT	2140 1¼" IT	2250 1¼" IT	2390 1¼" IT
F/TH	Sensor/Thermo-meter	[mm]	990 ½" IT	1350 ½" IT	1250 ½" IT	1550 ½" IT	1750 ½" IT	1650 ½" IT	1850 ½" IT	1825 ½" IT	1960 ½" IT
EHP	Electric heating cartridge	[mm]	710 1½" IT	-	-	-	-	-	-	-	-
FLO	Flange top	[mm]	-	920 Ø 180/120 mm	930 Ø 180 mm	1080 Ø 180/120 mm	1080 Ø 180/120 mm	1120 Ø 180/120 mm	1275 Ø 180/120 mm	1315 Ø 180/120 mm	1280 Ø 180/120 mm
ANS	Anode side	[mm]	-	-	-	-	625 1¼" IT	690 1¼" IT	690 1¼" IT	830 1¼" IT	990 1¼" IT
FLU	Flange bottom	[mm]	285 Ø 180/120 mm	295 Ø 180/120 mm	310 Ø 180/120 mm	310 Ø 180/120 mm	310 Ø 180/120 mm	350 Ø 290/220 mm	350 Ø 290/220 mm	445 Ø 290/220 mm	470 Ø 290/220 mm
WW	Hot water	[mm]	1215 1¼" IT	1570 1¼" IT	1500 1¼" IT	1800 1¼" IT	2000 1¼" IT	1765 2" IT	1965 2" IT	1955 2" IT	2060 2" IT
HZV	Heating supply	[mm]	950 1" IT	1330 1" IT	1235 1" IT	1525 1" IT	1670 1" IT	1580 1¼" IT	1845 1¼" IT	1815 1¼" IT	1960 1¼" IT
Z	Circulation	[mm]	-	1200 ½" IT	1150 ½" IT	1400 ½" IT	1550 ½" IT	1400 1" IT	1600 1" IT	1670 1" IT	1620 1" IT
FHZ	Heating sensor	[mm]	-	-	-	-	-	-	-	1560 ½" IT	1510 ½" IT
HZR	Heating return	[mm]	780 1" IT	1000 1" IT	1000 1" IT	1150 1" IT	1150 1" IT	1195 1¼" IT	1350 1¼" IT	1395 1¼" IT	1360 1¼" IT
SVL	Solar supply	[mm]	640 1" IT	840 1" IT	855 IT	1020 1" IT	1020 1" IT	1045 1¼" IT	1195 1¼" IT	1225 1¼" IT	1200 1¼" IT
FS	Solar sensor	[mm]	-	570 ½" IT	590 ½" IT	600 ½" IT	600 ½" IT	660 ½" IT	660 ½" IT	575 ½" IT	600 ½" IT
SRL	Solar return	[mm]	240 1" IT	240 1" IT	255 1" IT	255 1" IT	255 1" IT	275 1¼" IT	275 1¼" IT	325 1¼" IT	360 1¼" IT
KW	Cold water	[mm]	130 1¼" IT	140 1¼" IT	155 1¼" IT	155 1¼" IT	155 1¼" IT	175 2" IT	175 2" IT	225 2" IT	260 2" IT

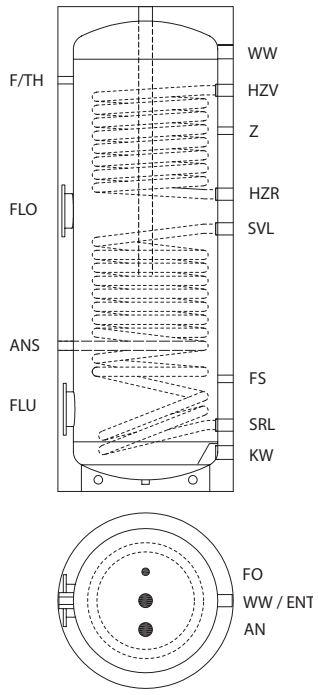
BRR 200 - 500



BRR 600



BRR 800 - 2000



marani g.