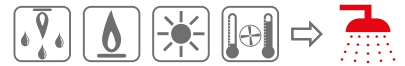


BOLLY® 2 XL

POLYWARM® COATED DOMESTIC HOT WATER CALORIFIER WITH 2 FIXED HEAT EXCHANGERS



APPLICATION

Production and storage of domestic hot water (DHW).
All the connections are aligned on the front and on the back for quick and easy installation.

MATERIAL

Mild steel Polywarm® coated (Attestation ACS - SSICA - EN 16421 - WRAS).

HEAT EXCHANGER:

N° 2 Mild steel Polywarm® coated heat exchangers.

INSULATION

- HARD: High thermal insulation with ecological polyurethane hard foam.
- HARD FOAM (CLASS "A" MODELS): rigid polyurethane foam for high thermal insulation with a vacuum sheet of highly insulating material.
- DISMOUNTABLE: NOFIRE® polyester fleece 100% made of recyclable material, with high thermal insulation. Fire resistance class B-s2d0 according to EN 13501.

EXTERNAL LINING:

Grey PVC.

CATHODE PROTECTION

Magnesium anode.

DRAIN

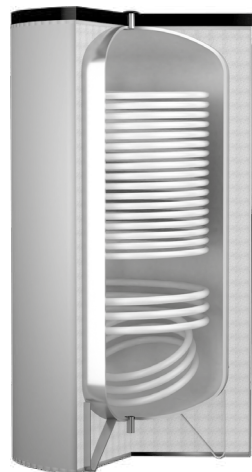
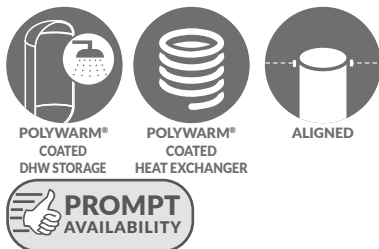
External confluence through drain connection.

GASKET- FLANGE PLATE

Silicone gaskets suitable for water intended for human consumption (tested according to 98/83/CE); max temperature up to 200°C. Mild steel inspection flange plate with Polywarm® and connection for electric heater.

WARRANTY

5 years - See general sales conditions and warranty on Calorifiers and Thermal Storage Export Catalogue Pricelist 11.



BOLLY® 2 XL WB

Model	HARD FOAM INSULATION Art. Nr.	HEAT EXCHANGERS SURFACE [m ²]		ENERGY EFFICIENCY CLASS
		Upper	Lower	
200	3134162320001	1,4	0,4	B
300	3134162320002	1,9	0,9	B
500	3134162320003	3,1	1,4	C
NEW 800	3134162330036	4,2	1,8	C
NEW 1000	3134162330037	5,2	2,5	C



BOLLY® 2 XL WB CLASSE A

Model	HARD FOAM INSULATION Art. Nr.	HEAT EXCHANGERS SURFACE [m ²]		ENERGY EFFICIENCY CLASS
		Upper	Lower	
200	3134162330021	1,4	0,4	A
300	3134162330022	1,9	0,9	A
500	3134162330023	3,1	1,4	A



BOLLY® 2 XL WC

Model	DISMOUNTABLE SOFT FLEECE INSULATION Art. Nr.	HEAT EXCHANGERS SURFACE [m ²]		ENERGY EFFICIENCY CLASS
		Upper	Lower	
NEW 800	3138162320123	4,2	1,8	C
NEW 1000	3138162320124	5,2	2,5	C

ACCESSORIES

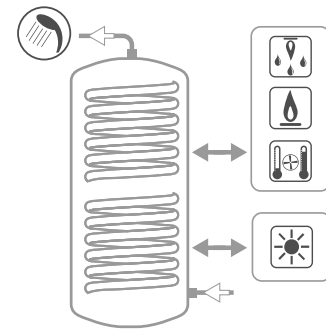
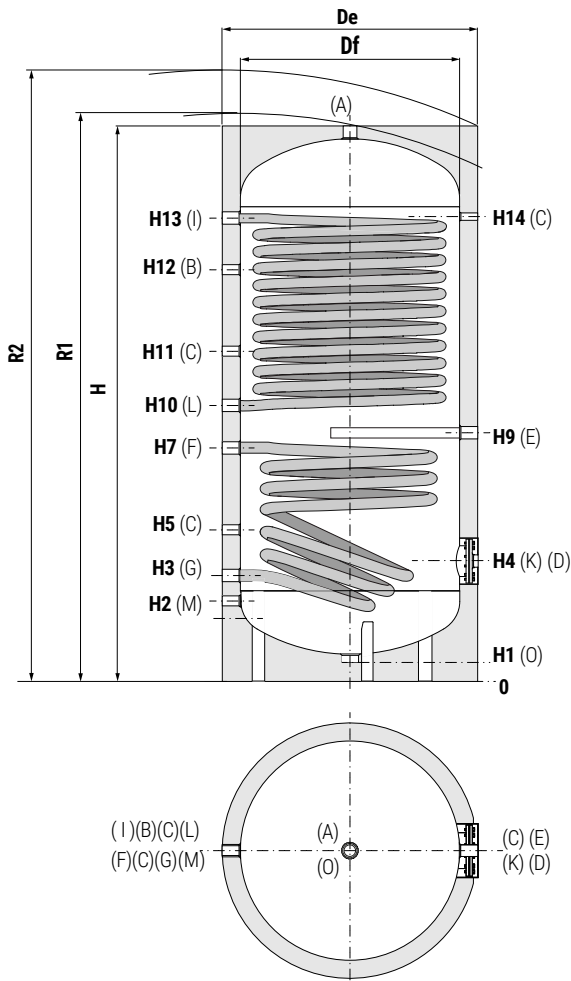
ELECTRIC IMMERSION HEATERS

Mod.	Heated volume by electric immersion heater [lt]	MONOPHASE			THREEPHASE					
		1,5 kW	2 kW	3 kW	4 kW	5 kW	6 kW	9 kW	12 kW	
		52400000000051	52400000000052	52400000000053	52400000000047	52400000000048	52400000000049	52400000000050	52400000000031	
		Ignition time from 10 °C to 45 °C with electric immersion heaters [min]								
200	159	285	214	142	//	//	//	//	//	
300	235	421	316	210	158	//	//	//	//	
400	353	632	474	316	237	//	//	//	//	
500	413	741	555	370	278	222	//	//	//	
800	668	1197	898	598	449	359	299	199	//	
1000	874	1565	1174	783	587	470	391	261	196	

BOLLY® 2 XL

POLYWARM® COATED DOMESTIC HOT WATER CALORIFIER WITH 2 FIXED HEAT EXCHANGERS

Model	STORAGE		HEAT EXCHANGER	
	Pmax	Tmax	Pmax	Tmax
200 ÷ 800	10 bar	90 °C	12 bar	110 °C
1000,1500	8 bar			



A	Domestic hot water outlet 1" 1/4
B	Recirculation
C	Connection for instrumentation G 1/2" F
D	Connection for electric immersion heater G 1" 1/2 F
E	Connection for magnesium anode G 1" 1/4 F
F	Lower heat exchanger inlet G 1" 1/4 F
G	Lower heat exchanger outlet G 1" 1/4 F
I	Upper heat exchanger inlet G 1" 1/4 F
K	Flange for inspection
L	Upper heat exchanger outlet G 1" 1/4 F
M	Domestic cold water circuit inlet
O	Drain G 1" 1/4

BOLLY® 2 XL WB + XL WB CLASS A (HARD FOAM INSULATION)

Model	Gross volume [lt]	Weight [Kg]	De	H	R2	H1	H2	H3	H4	H5	H7
200	189	65	550	1434	1540	65	215	285	325	405	475
300	291	83	650	1486	1620	65	241	311	381	431	596
500	498	134	750	1786	1940	65	266	346	411	466	671
800	789	303	900	2170	2350	100	340	420	485	540	780
1000	1038	368	1000	2230	2440	89	360	440	500	560	840

Model	H9	H10	H11	H12	H13	H14	K	Connections Gas F		
								M	B	A
	[mm]									
200	520	570	690	1089	1200	1200	Øi120/Øe180	3/4"	3/4"	1" 1/4
300	641	686	806	1090	1226	1226	Øi120/Øe180	1"	1"	1" 1/4
500	716	761	881	1091	1476	1476	Øi120/Øe180	1"	1"	1" 1/4
800	790	910	1030	1550	1800	1800	Øi170/Øe240	1"	1"	1" 1/4
1000	905	970	1090	1585	1830	1830	Øi170/Øe240	1" 1/4	1"	1" 1/2

Net volume data according to EN 15332 available on product label

BOLLY® 2 XL WC (DISMOUNTABLE SOFT FLEECE INSULATION)

Model	Gross volume [lt]	Weight [Kg]	Df	H	De	R1	R2	H1	H2	H3	H4	H5	H7
800	789	303	750	2170	950	2300	2370	100	340	420	485	540	780
1000	1038	368	850	2230	1050	2390	2460	89	360	440	500	560	840

Model	H9	H10	H11	H12	H13	H14	K	Connections Gas F		
								M	B	A
	[mm]									
800	790	910	1030	1550	1800	1800	Øi170/Øe240	1"	1"	1" 1/4
1000	905	970	1090	1585	1830	1830	Øi170/Øe240	1" 1/4	1"	1" 1/2

Net volume data according to EN 15332 available on product label

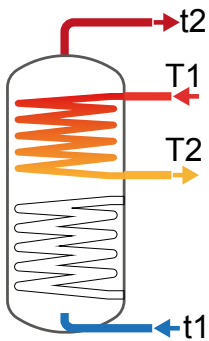


Data have been calculated on following basis:

- 1) Primary circuit at T1 and proper energy source;
- 2) Production of DHW in continuous from 10 °C to t2;
- 3) DHW that can be taken in the first 10' and in the first hour from storage at t2, input 10 °C and output 45 °C;
- 4) Non-scaling sanitary water

Model	Primary flow rate [m³/h]	Ignition time (minutes) from 10 °C to t2 and primary at T1				Maximum power exchange (kW) with primary at T1, secondary from 10°C to t2 constant use of DHW production					DHW continuous production lt/h from 10°C to t2 and primary at T1				
		T1/t2				T1/t2					T1/t2				
	55/50	65/60	70/60	80/60	55/45	65/45	70/45	80/45	80/60	55/45	65/45	70/45	80/45	80/60	
200	2,5	37	38	27	18	15	23	27	34	29	377	564	659	851	495
	1,25	42	44	31	21	14	21	24	30	25	346	507	586	749	442
300	3	43	45	31	20	20	30	35	46	38	501	747	871	1123	653
	1,5	50	52	37	24	18	27	31	39	34	454	661	765	975	585
500	3,5	46	48	34	22	33	49	56	72	61	812	1198	1392	1786	1064
	1,75	47	49	35	23	30	42	49	62	54	732	1050	1208	1525	945
800	5	35	36	26	17	45,0	66,2	76,9	98,5	84,9	1112	1638	1904	2437	1480
	2,5	42	44	31	21	41,0	58,9	67,8	85,5	76,4	1014	1457	1676	2117	1330
1000	8	36	38	27	18	57,4	85,2	99,0	127,3	108,8	1420	2108	2453	3153	1897
	4	42	44	31	21	53,4	77,5	89,5	113,6	99,9	1321	1918	2214	2812	1741

UPPER HEAT EXCHANGERS



Model	Primary flow rate [m³/h]	DHW produced in the first 10 minutes in lt/10' input 10 °C output 45 °C, storage at t2 and primary at T1				DHW produced in the first hour in lt/60' input 10 °C output 45 °C, storage at t2 and primary at T1				Heat exchanger pressure drop	
		T1/t2				T1/t2				[mmH ₂ O]	[mbar]
	55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60			
200	2,5	201	267	283	315	440	624	700	854	714,5	70,0
	1,25	196	257	271	298	415	578	642	772	225,6	22,1
300	3	270	357	378	420	587	830	929	1131	378,4	37,1
	1,5	262	343	360	395	550	762	845	1013	121,4	11,9
500	3,5	478	628	661	726	993	1387	1542	1857	777,2	76,2
	1,75	465	604	630	683	928	1269	1395	1649	247,5	24,3
800	5	583	770	814	903	1287	1808	2020	2447	2177,8	213,4
	2,5	567	740	776	850	1209	1663	1838	2191	670,1	65,7
1000	8	774	1023	1080	1197	1673	2358	2634	3194	6207,4	608,3
	4	757	991	1040	1140	1594	2206	2443	2921	1816,2	178,0

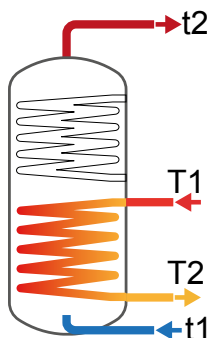


Data have been calculated on following basis:

- 1) Primary circuit at T1 and proper energy source;
- 2) Production of DHW in continuous from 10 °C to t2;
- 3) DHW that can be taken in the first 10' and in the first hour from storage at t2, input 10 °C and output 45 °C;
- 4) Non-scaling sanitary water

Model	Primary flow rate [m³/h]	Ignition time (minutes) from 10 °C to t2 and primary at T1				Maximum power exchange (kW) with primary at T1, secondary from 10 °C to t2 constant use of DHW production					DHW continuous production lt/h from 10 °C to t2 and primary at T1				
		T1/t2				T1					T1				
	55/50	65/60	70/60	80/60	55/45	65/45	70/45	80/45	80/60	55/45	65/45	70/45	80/45	80/60	
200	2,5	182	189	130	84	4,8	6,9	8,1	10,5	6,3	110	168	198	259	108
	1,25	225	241	151	95	4,4	6,4	7,5	9,7	5,8	99	152	179	235	100
300	3	127	132	92	60	9,9	15,0	17,5	22,8	18,8	243	368	431	561	326
	1,5	150	157	107	69	9,1	13,6	15,8	20,4	17,2	220	330	385	499	298
500	3,5	141	146	102	67	15,5	23,2	27,1	35,1	27,5	380	572	669	868	478
	1,75	139	145	101	66	14,2	21,0	24,4	31,3	25,3	346	514	598	771	298
800	5	171	178	125	82	20,0	30,0	35,1	45,5	38,3	493	741	866	1123	664
	2,5	190	198	140	92	19,0	27,7	32,2	41,4	35,5	461	683	795	1023	616
1000	8	157	163	115	75	28,4	42,7	49,9	64,7	54,3	699	1054	1233	1599	944
	4	171	178	126	83	27,0	40,0	46,6	59,9	51,2	664	987	1150	1481	889

LOWER HEAT EXCHANGERS

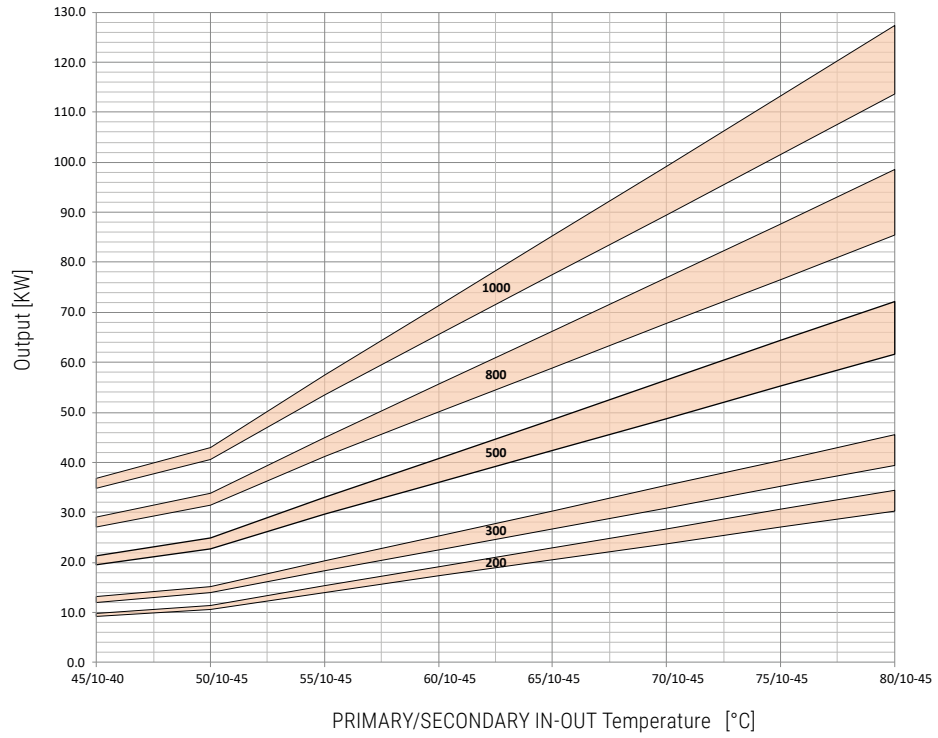


Model	Primary flow rate [m³/h]	DHW produced in the first 10 minutes in lt/10' input 10 °C output 45 °C, storage at t2 and primary at T1				DHW produced in the first hour in lt/60' input 10 °C output 45 °C, storage at t2 and primary at T1				Heat exchanger pressure drop	
		T1/t2				T1/t2				[mmH ₂ O]	[mbar]
	55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60			
200	2,5	234	298	303	313	304	405	428	477	241,0	23,6
	1,25	232	295	300	309	295	392	413	458	73,7	7,2
300	3	373	477	488	509	527	710	761	865	195,3	19,1
	1,5	369	471	480	499	508	679	724	815	61,7	6,0
500	3,5	546	698	714	748	786	1060	1138	1297	373,3	36,6
	1,75	540	688	703	731	759	1014	1082	1219	117,4	11,5
800	5	985	1252	1273	1316	1297	1721	1821	2027	985,3	96,6
	2,5	980	1242	1261	1299	1272	1675	1765	1947	300,1	29,4
1000	8	1302	1657	1687	1748	1744	2325	2468	2761	3101,6	304,0
	4	1296	1646	1673	1728	1716	2271	2401	2666	902,8	88,5



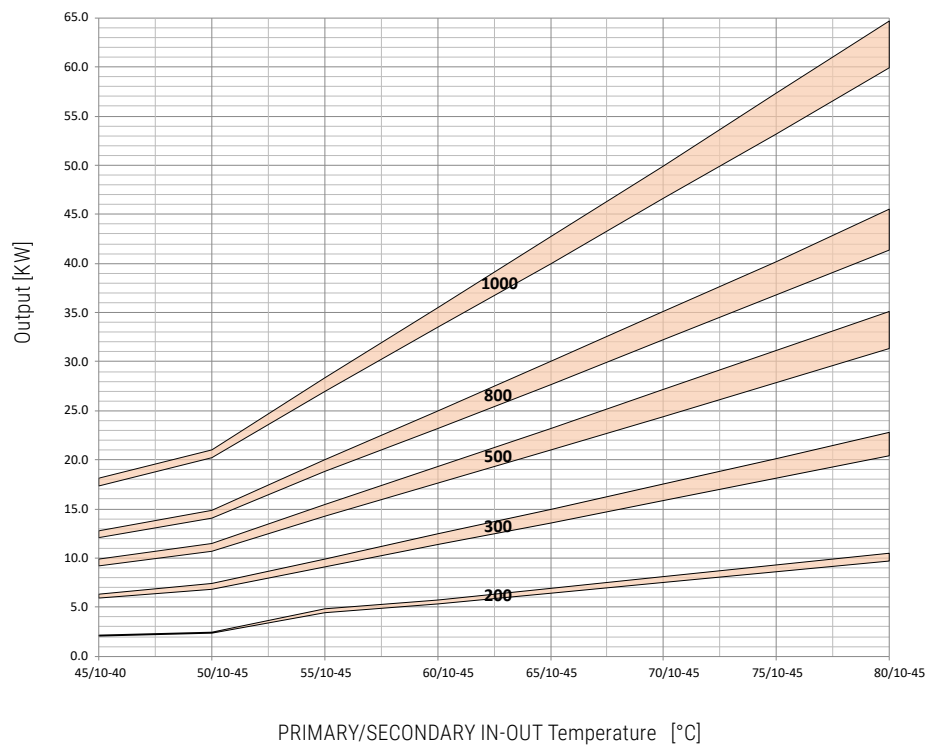
Heat Exchanger output referred to temperature and flow rate of primary circuit and with secondary at 10/45°C at maximum withdrawal of producible DHW (Upper limit of the curves referred to maximum primary flow rate in the heat exchanger, while the lower limit in the curves refer to the minimum primary flow rate)

UPPER HEAT EXCHANGERS

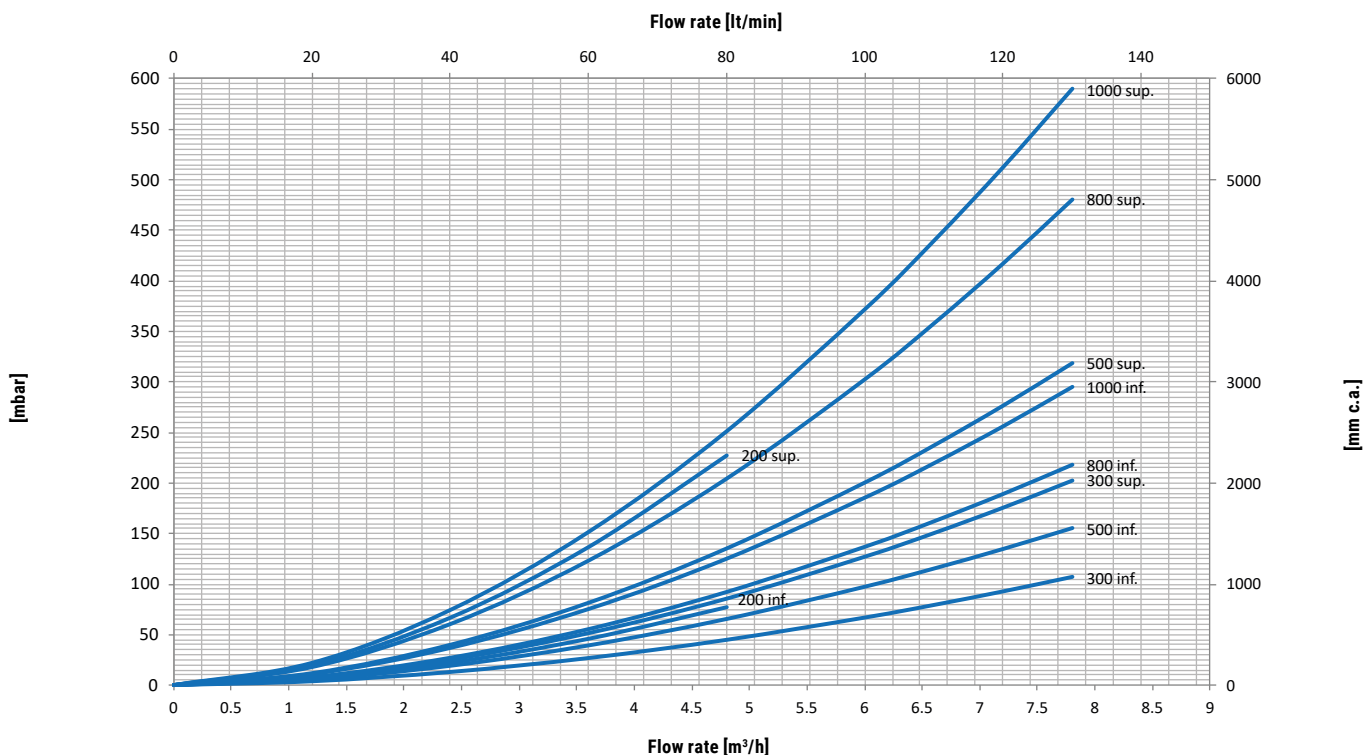


Model	200		300		500		800		1000	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
Flow rate [m³/h]	2,5	1,25	3	1,5	3,5	1,75	5	2,5	8	4

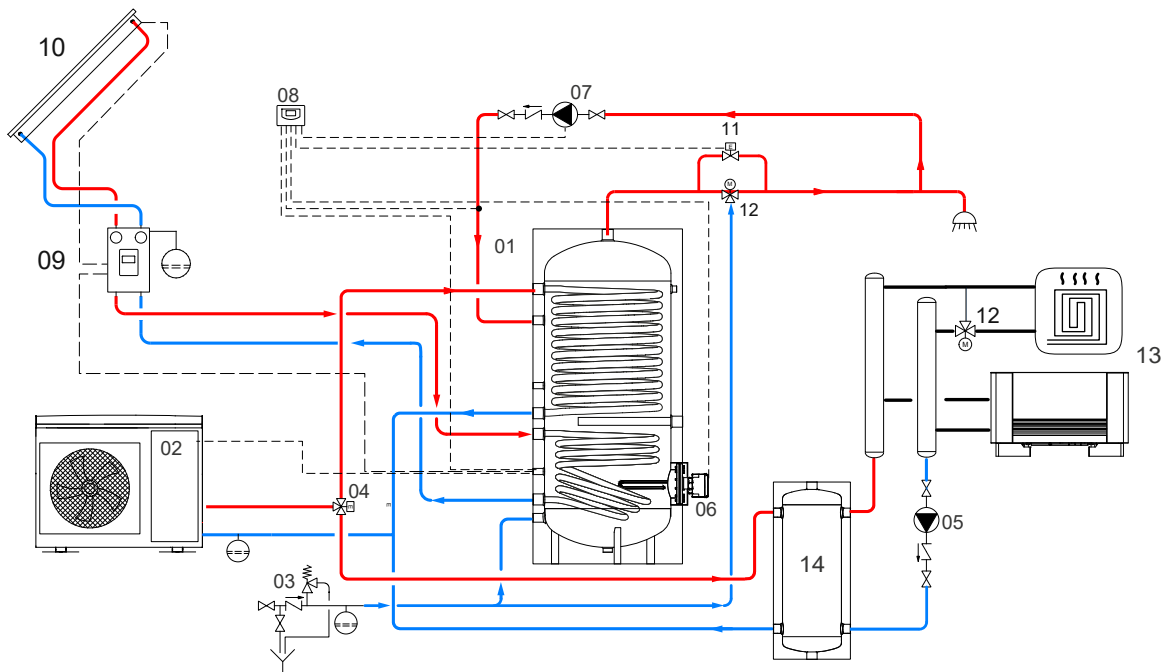
LOWER HEAT EXCHANGERS



Model	200		300		500		800		1000	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
Flow rate [m³/h]	2,5	1,25	3	1,5	3,5	1,75	5	2,5	8	4



EXAMPLE OF INSTALLATION WITH BOLLY® 2 XL



1	Bolly® 2 XL	5	Circulation group for heating/cooling system	9	Solar system circulation group	13	Heating/cooling units
2	Heat pump	6	Electric immersion heater	10	Solar panels	14	Buffer tank
3	Hydraulic safety group	7	D.H.W. circulation group	11	By-pass solenoid valve		
4	Motorized 3-way valve	8	Electronic Control/thermostat	12	Mixing valve		

The following schemes are purely illustrative. To realize the installation, always refer to a qualified technician.