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.
Grey PVC external lining.

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 Polywarm® coated and connection for electric immersion heater
WARRANTY
5 years (See general sales conditions and warranty)
ACCESSORIES AND SPARE PARTS
See Accessories section for the entire list.

BOLLY® 2 XL WB

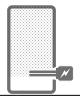
Model	HARD FOAM INSULATION	HEAT EXCHANGER SURFACE Upper	Lower	ENERGY EFFICIENCY CLASS
	Art. Nr.	[m²]		
200	3134162320001	1,4	0,4	**B**
300	3134162320002	1,9	0,9	**B**
500	3134162320003	3,1	1,4	**C**

BOLLY® 2 XL WB CLASS A

Model	HARD FOAM INSULATION	HEAT EXCHANGER SURFACE Upper	Lower	ENERGY EFFICIENCY CLASS
	Art. Nr.	[m²]		
200	3134162330021	1,4	0,4	**A**
300	3134162330022	1,9	0,9	**A**
500	3134162330023	3,1	1,4	**A**

ACCESSORIES

ELECTRIC IMMERSION HEATERS



Mod.	Heated volume by electric immersion heater [lt]	MONOPHASE 1,5 kW	2 kW	3 kW	THREEPHASE 4 kW	5 kW
		5240000000051	5240000000052	5240000000053	5240000000047	5240000000048
		Ignition time from 10 °C to 45 °C with electric immersion heaters [min]			Ignition time from 10 °C to 45 °C with electric immersion heaters [min]	
200	159	259	194	129	//	//
300	235	383	287	191	144	//
500	413	673	505	337	252	202

HEAT MANAGER + electric immersion heater 1,5 kW + probe +3m cable

Art. Nr.	ELECTRIC IMMERSION HEATER
5240000000074	1,5 kW
5240000000075	2 kW
5240000000076	3 kW

Titanium anode

See Accessories section

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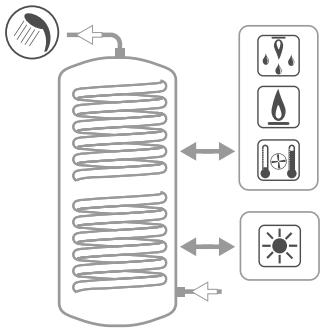
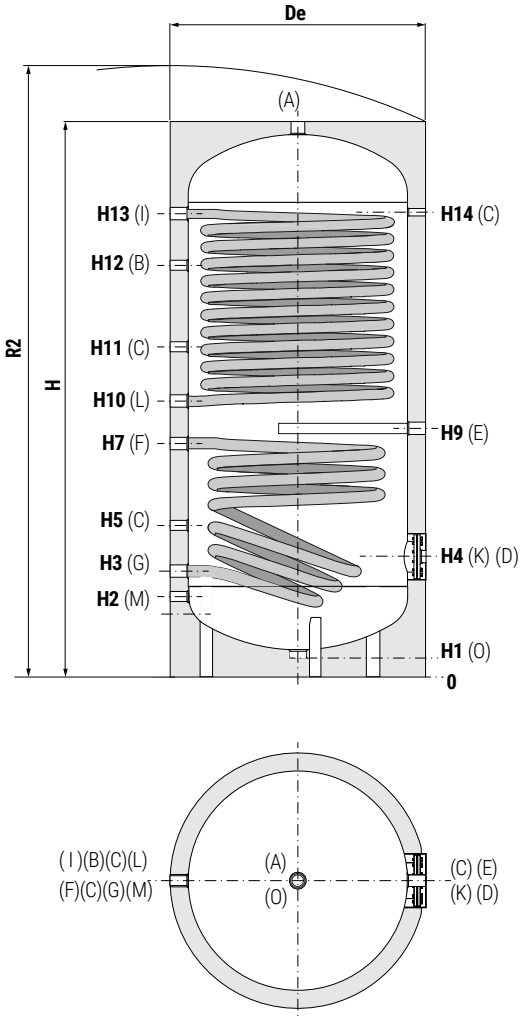
POLYWARM® COATED DOMESTIC HOT WATER CALORIFIER WITH 2 FIXED HEAT EXCHANGERS

STORAGE		HEAT EXCHANGER	
Pmax	Tmax	Pmax	Tmax
10 bar	90 °C	12 bar	110 °C





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

P.E.D. product designed and produced in conformity to the article 4.3 of directive 2014/68/UE - ErP Ecodesgin directive 2009/125/CE

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

Model	Volume	Weight	De	H	R2	H1	H2	H3	H4	H5	H7
	[lt]	[Kg]	[mm]								
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

Model	H9	H10	H11	H12	H13	H14	K	M	B
	[mm]							Connections F	
200	520	570	690	1089	1200	1200	Øi120/Øe180	3/4"	3/4"
300	641	686	806	1090	1226	1226	Øi120/Øe180	1"	1"
500	716	761	881	1091	1476	1476	Øi120/Øe180	1"	1"

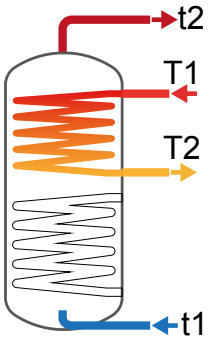
BOLLY® **2 XL**

HEAT EXCHANGERS TECHNICAL DATA

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	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				
	[m^3/h]	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

UPPER
HEAT EXCHANGER



Model	Primary flow rate	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	
	[m^3/h]	T1/t2				T1/t2				[mmH_2O]	[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	163,5	16,0
	1,25	196	257	271	298	415	578	642	772	45,6	4,5
300	3	270	357	378	420	587	830	929	1131	88,4	8,7
	1,5	262	343	360	395	550	762	845	1013	24,5	2,4
500	3,5	478	628	661	726	993	1387	1542	1857	70,2	6,9
	1,75	465	604	630	683	928	1269	1395	1649	20,9	2,0

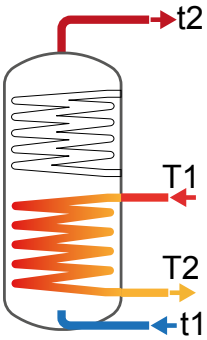
BOLLY® **2 XL**

HEAT EXCHANGERS TECHNICAL DATA

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	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				
	[m³/h]	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

LOWER
HEAT EXCHANGER



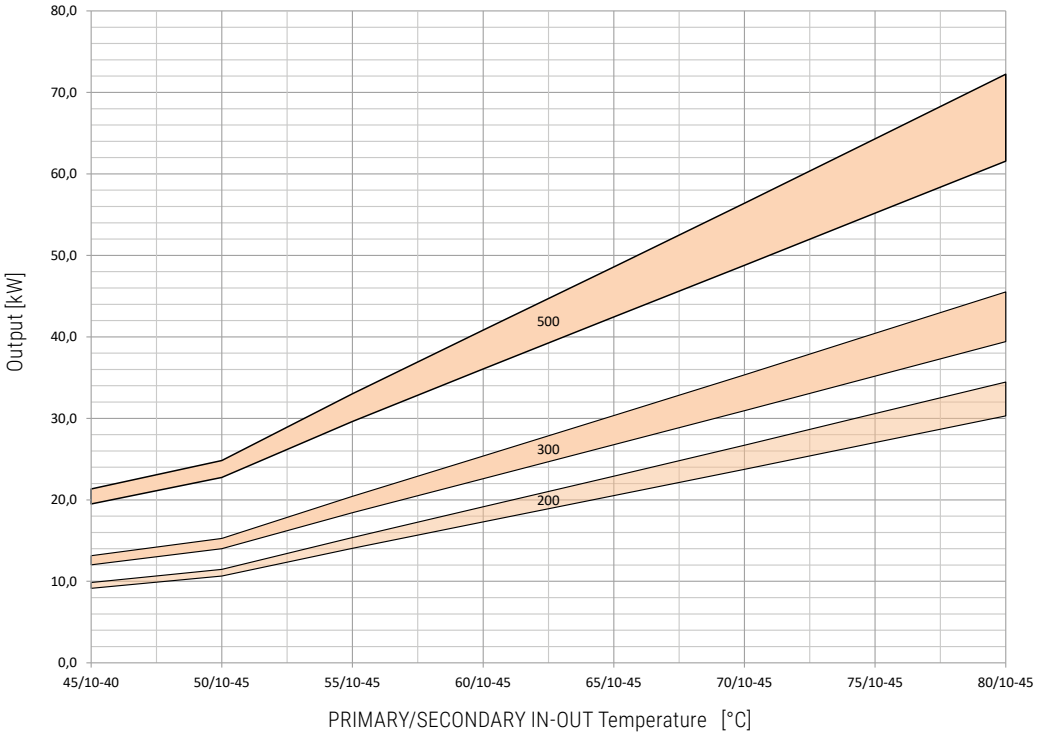
Model	Primary flow rate	DHW produced in the first 10 minutes in lt/10' input 10 °C output 45 °C, storage at t2 and primary at T1				DHW produced in the first hour in lt/60' input 10 °C output 45 °C, storage at t2 and primary at T1				Heat exchanger pressure drop	
	[m³/h]	T1/t2				T1/t2				[mmH$_2$O]	[mbar]
		55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60		
200	2,5	217	298	303	313	222	405	428	477	92,7	9,1
	1,25	217	295	300	309	221	392	413	458	24,5	2,4
300	3	335	477	488	509	345	710	761	865	61,5	6,0
	1,5	335	471	480	499	343	679	724	815	16,5	1,6
500	3,5	486	698	714	748	501	1060	1138	1297	100,1	9,8
	1,75	486	688	703	731	499	1014	1082	1219	27,4	2,7

BOLLY® **2 XL**

UPPER HEAT EXCHANGERS TECHNICAL DATA

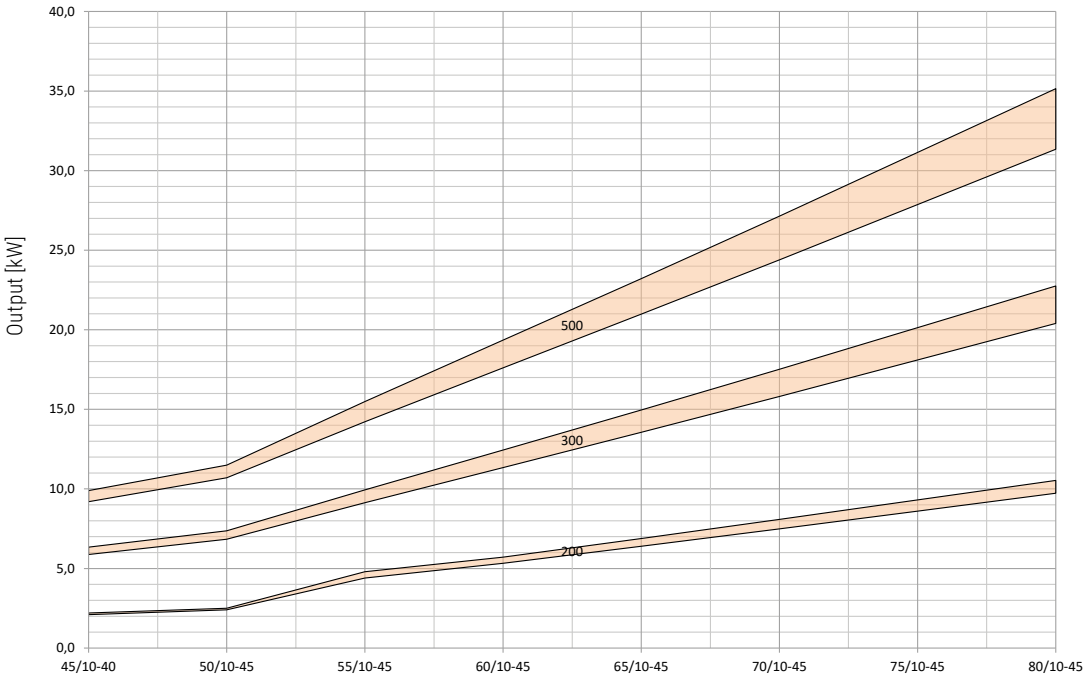
Heat Exchanger output referred to temperature and flow rate of primary circuit and with secondary at 10/45°C at maximum withdrawal of producible DHW (Upper limit of the curves referred to maximum primary flow rate in the heat exchanger, while the lower limit in the curves refer to the minimum primary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

UPPER
HEAT EXCHANGERS



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

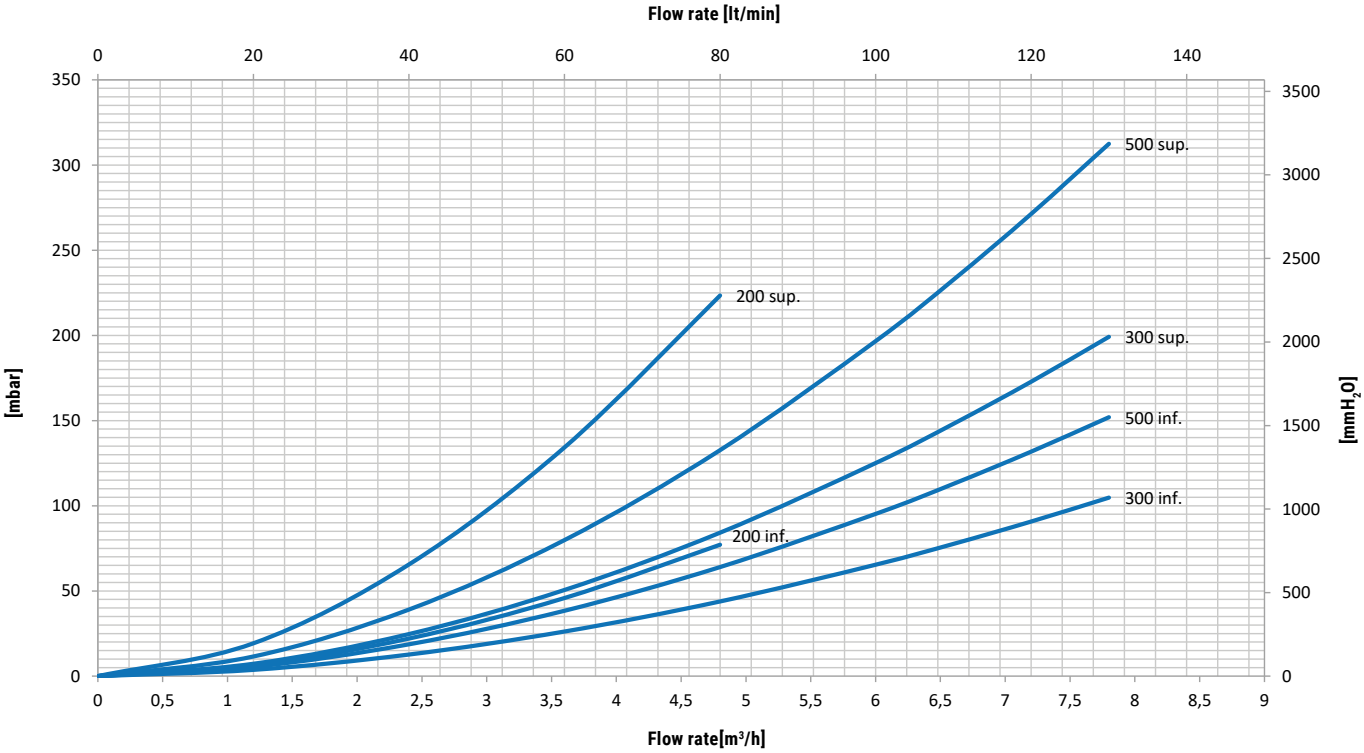
LOWER
HEAT EXCHANGERS



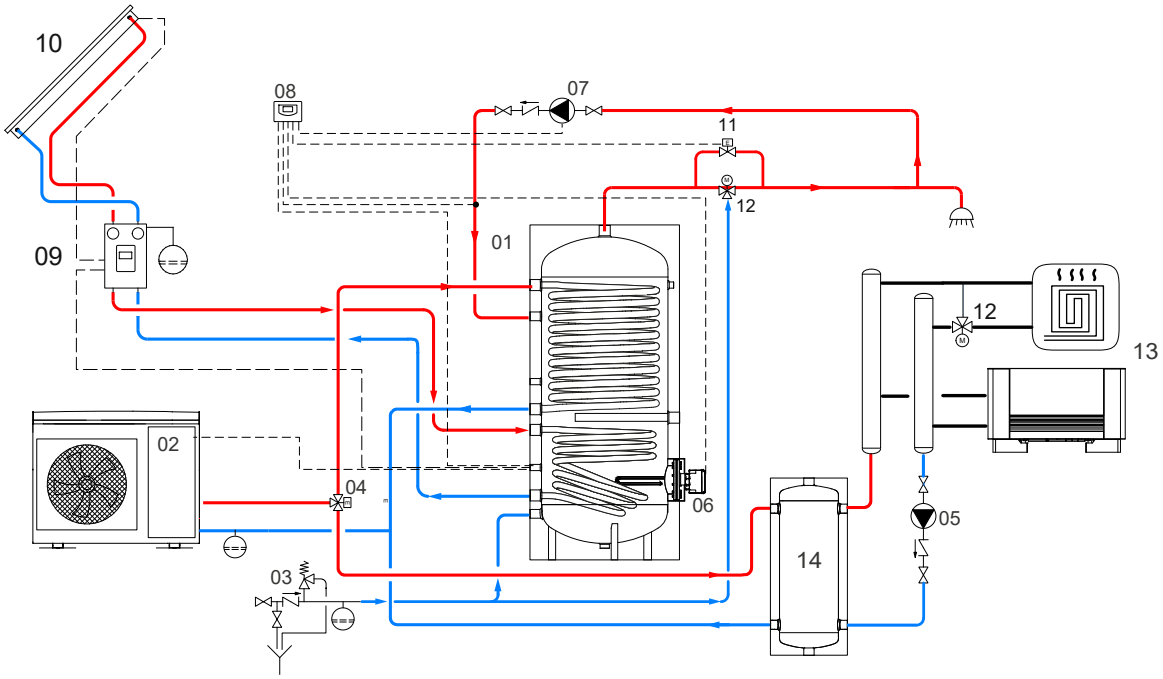
Model	200		300		500	
Flow rate [m³/h]	MAX	MIN	MAX	MIN	MAX	MIN
	2,5	1,25	3	1,5	3,5	1,75

BOLLY® **2 XL**

HEAT EXCHANGERS PRESSURE DROP



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 units
2	Generator (Heat pump)	6	Electric immersion heater	10	Solar panels	14	Buffer tank
3	Hydraulic safety group	7	D.H.W. recirculation 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.