BOLLY® 1 AP INOX - HIGH PERFORMANCES

STAINLESS STEEL 316L DOMESTIC HOT WATER CALORIFIER WITH 1 FIXED STAINLESS STEEL HEAT EXCHANGER FOR DHW PRODUCTION

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
Stainless Steel 316 L suitable for domestic hot water
HEAT EXCHANGER:
N° 1 fixed stainless steel 316L heat exchanger.
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); Stainless steel blind flange and connection for electric heater.
WARRANTY
5 years (See general sales conditions and warranty)
ACCESSORIES AND SPARE PARTS
See Accessories section for the entire list.

BOLLY® 1 AP XB

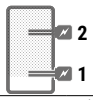
Model	HARD FOAM INSULATION Art. Nr.	HEAT EXCHANGER SURFACE INOX 316L [m²]	ENERGY EFFICIENCY CLASS
150	3104052010100	1,0	**B**
200	3104052010101	1,2	**B**
300	3104052010102	1,5	**B**
400	3104052010103	2,0	**C**
500	3104052010104	2,2	**C**

BOLLY® 1 AP XB CLASS A

Model	HARD FOAM INSULATION Art. Nr.	HEAT EXCHANGER SURFACE INOX 316L [m²]	ENERGY EFFICIENCY CLASS
200	3104052010110	1,2	**A**
300	3104052010111	1,5	**A**
500	3104052010112	2,2	**A**

ACCESSORIES

ELECTRIC IMMERSION HEATERS



Mod.	Position electric immersion heater	Heated volume by electric immersion heater [lt]	MONOPHASE 1,5 kW	MONOPHASE 2 kW	MONOPHASE 3 kW	THREEPHASE 4 kW	THREEPHASE 5 kW	THREEPHASE 6 kW
			5240000000051	5240000000052	5240000000053	5240000000047	5240000000048	5240000000049
			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]		
150	1	126	225	169	113	//	//	//
	2	46	82	61	41	31	//	//
200	1	161	288	216	144	//	//	//
	2	53	94	71	47	35	//	//
300	1	237	425	319	213	159	//	//
	2	83	148	111	74	56	45	//
400	1	356	637	478	318	239	//	//
	2	138	247	185	124	93	74	//
500	1	417	746	560	373	280	224	//
	2	150	269	202	135	101	81	67

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

Thermometer

Art. Nr.
5032240000107
5 units box

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

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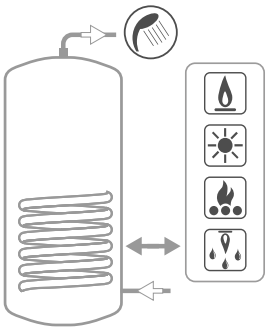
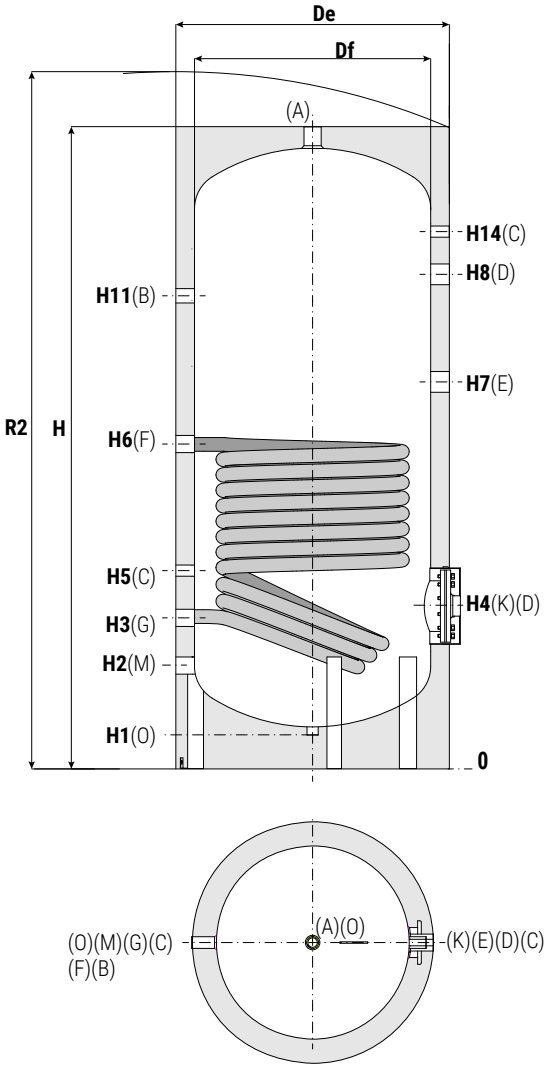
STORAGE		HEAT EXCHANGER	
Pmax	Tmax	Pmax	Tmax
6 bar	95 °C	12 bar	110 °C





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

BOLLY® 1 AP INOX - 1 AP INOX CLASS A (HARD FOAM INSULATION -XB)

Model	Volume	Weight	Df	De	H	R2	H1	H2	H3	H4	H5	H6	H7	H8	H11	H14
	[lt]	[kg]	[mm]													
150	150	35	400	500	1420	1510	65	205	310	310	420	719	830	960	1060	1180
200	192	41	450	550	1440	1540	65	215	320	320	430	780	880	1010	1094	1200
300	293	59	550	650	1495	1639	70	245	350	380	460	750	910	1040	1110	1230
400	425	79	600	700	1770	1907	65	255	360	390	470	895	1040	1170	1325	1480
500	503	84	650	750	1796	1950	65	265	370	480	405	1060	1090	1220	1335	1490

Model	A	B	C	D	E	F	G	K	M	O
	Connections F									
150	1"	3/4"	1/2"	1"1/2	1"1/4	1"	1"	Øi120/Øe180	3/4"	1/2"
200	1"	3/4"	1/2"	1"1/2	1"1/4	1"	1"	Øi120/Øe180	3/4"	1/2"
300	1"	1"	1/2"	1"1/2	1"1/4	1"	1"	Øi120/Øe180	1"	1/2"
400	1"	1"	1/2"	1"1/2	1"1/4	1"	1"	Øi120/Øe180	1"	1/2"
500	1"	1"	1/2"	1"1/2	1"1/4	1"	1"	Øi120/Øe180	1"	1/2"

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

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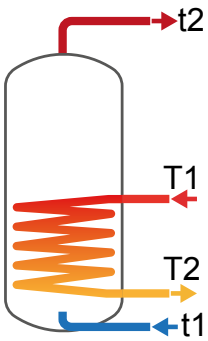
HEAT EXCHANGERS TECHNICAL DATA

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

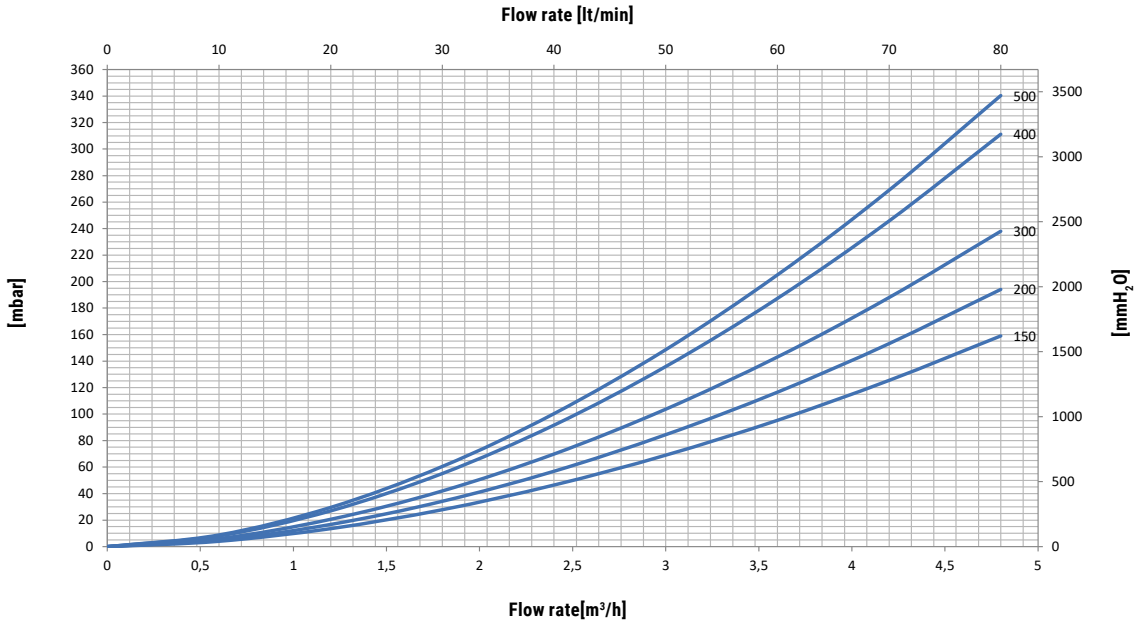
LOWER
HEAT EXCHANGER



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 within 10-45 °C and constant use of DHW production				DHW continuous production lt/h within 10-45 °C and primary at T1			
	[m³/h]	T1/t2				T1				T1			
		55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
150	2	65	68	47	30	8,9	11,3	14,4	20,1	188	191	245	345
	1	76	78	55	36	8,3	10,5	13,2	18,1	173	176	224	310
200	2,5	65	68	47	31	11,3	14,3	18,2	25,4	240	243	315	438
	1,25	75	78	55	36	10,6	13,4	16,8	23,1	223	227	287	397
300	3	79	82	57	37	14,3	18,0	22,9	32,0	304	308	394	553
	1,5	90	94	66	43	13,4	16,9	21,3	29,2	284	289	366	504
400	3,5	85	89	62	41	19,1	24,0	30,1	42,7	408	414	529	739
	1,75	99	103	72	48	17,9	22,6	28,4	38,9	383	389	491	673
500	3,5	93	96	68	45	20,9	26,4	33,6	46,6	448	454	580	809
	1,75	108	113	80	53	19,6	24,8	31,1	42,3	420	427	537	734

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		
150	2	202	245	254	270	321	323	366	446	342	34
	1	199	242	250	265	309	311	349	418	100	10
200	2,5	258	313	325	346	410	413	470	569	623	61
	1,25	255	311	321	339	397	400	448	536	183	18
300	3	386	470	484	511	578	581	650	777	1057	104
	1,5	382	467	480	503	562	566	628	738	311	30
400	3,5	554	676	695	730	812	817	909	1077	1817	178
	1,75	550	672	689	719	792	797	879	1024	536	53
500	3,5	650	794	815	853	933	938	1039	1222	1989	195
	1,75	645	790	808	841	911	916	1004	1162	587	58

HEAT EXCHANGERS PRESSURE DROP



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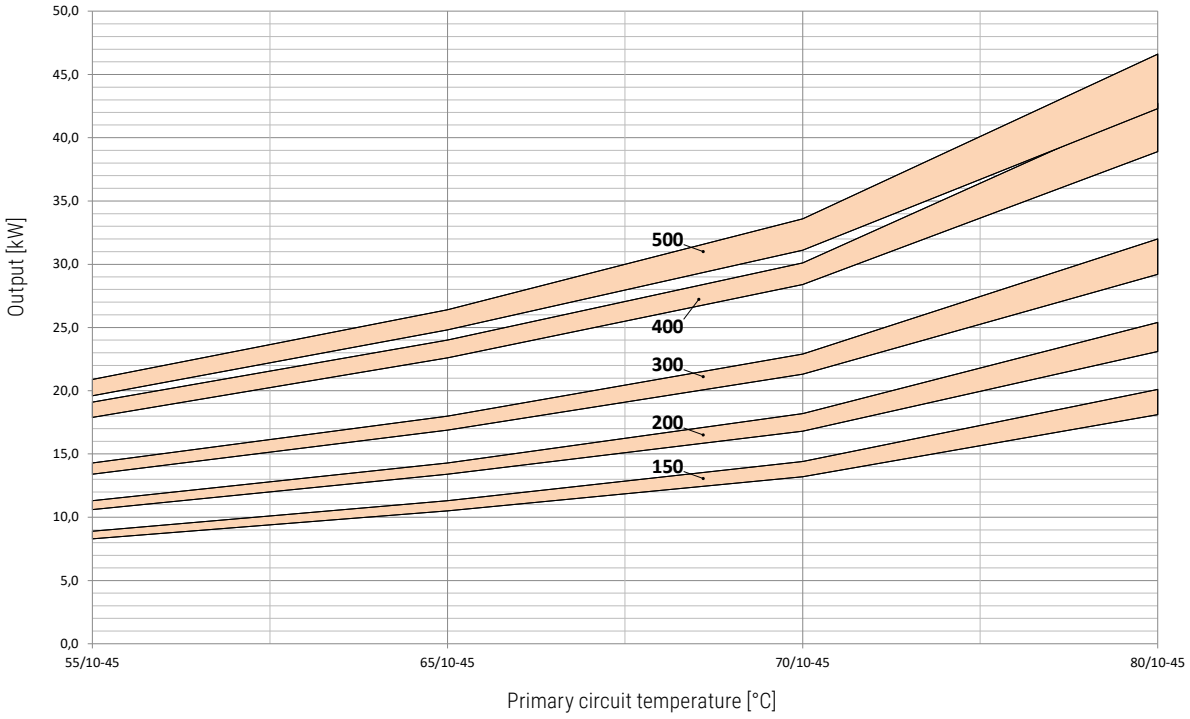
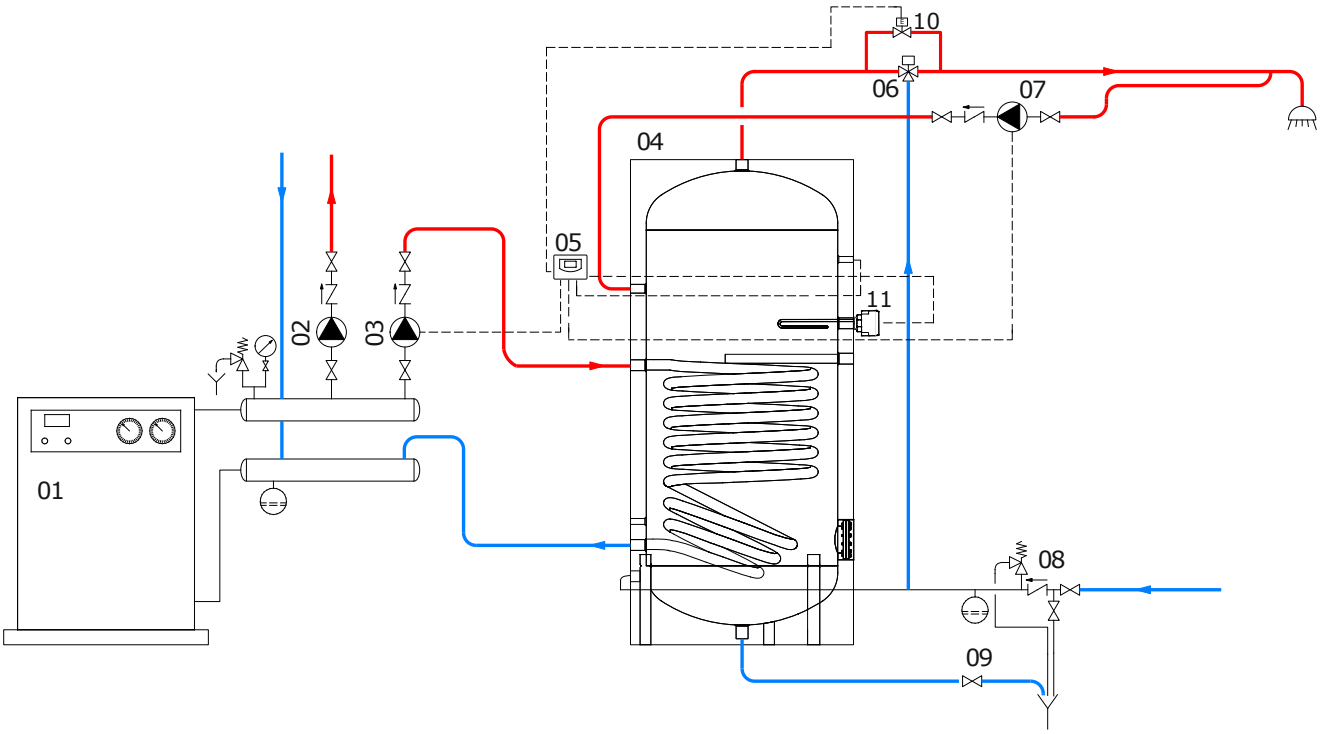
HEAT EXCHANGERS TECHNICAL DATA

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).



Model Bolly® 1 AP XB	150		200		300		400		500	
Flow rate [m³/h]	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	2	1	2,5	1,25	3	1,5	3,5	1,75	3,5	1,75

EXAMPLE OF INSTALLATION WITH **BOLLY® 1 AP INOX**



01	Generator	04	BOLLY® 1 AP INOX	07	D.H.W. recirculation group	10	By-pass solenoid valve
02	Heating system circulation group	05	Electronic Control/thermostat	08	Hydraulic safety group	11	Electric immersion heater (optional)
03	D.H.W. circulation group	06	Thermostatic mixing valve	09	Blowdown valve		

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