

BOLLY® 1 ST

POLYWARM® COATED DOMESTIC HOT WATER CALORIFIER WITH 1 FIXED HEAT EXCHANGER



APPLICATION

Production and storage of domestic hot water.

MATERIAL

Mild steel Polywarm® coated (Attestation ACS - SSICA - DVGW - W270 - UBA - WRAS)

HEAT EXCHANGER

1 Polywarm® coated fixed heat exchanger.

INSULATION

- HARD: High thermal insulation with ecological polyurethane hard foam.
- SOFT: NOFIRE® polyester fleece 100% made of recyclable material, with high thermal insulation. Fire resistance class B-s2d0 according to EN 13501.
Grey PVC external lining complete with top and flange cover

CATHODE PROTECTION

Magnesium anode.

DRAIN

External confluence through drain connection.

Models > 500 external confluence through drain pipe.

GASKET- FLANGE PLATE

Silicone gaskets suitable for alimentary use for max temperature up to 200°C. Mild steel inspection flange plate with Polywarm®

WARRANTY

5 years - See general sales conditions and warranty

ACCESSORIES AND SPARE PARTS :

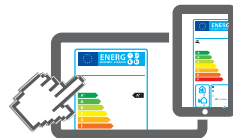
See Accessories section for the entire list.



HARD FOAM INSULATION



SOFT FLEECE INSULATION



www.cordivari.com/erp

On line ErP label tool

BOLLY® 1 ST WB

Model	HARD FOAM insulation Art. Nr.	HEAT EXCHANGER SURFACE [m²]	ENERGY EFFICIENCY CLASS ErP
150	3105162321101	0,6	B
200	3105162321102	0,8	B
300	3105162321103	1,2	C
400	3105162321104	1,5	C
500	3105162321105	1,8	C
800	3104162331106	2,7	C
1000	3104162331107	3,5	C
1500	3104162331108	3,8	C

BOLLY® 1 ST WC

Model	DISMOUNTABLE SOFT FLEECE insulation Art. Nr.	HEAT EXCHANGER SURFACE [m²]	ENERGY EFFICIENCY CLASS ErP
800	3103162321136	2,7	C
1000	3103162321137	3,5	C
1500	3103162321138	3,8	C

ELECTRICAL IMMERSION HEATERS

Mod.	Volume of water heated by the electrical immersion [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 immersion heaters [min]							
150	42	76	57	38	//	//	//	//	//
200	72	128	96	64	//	//	//	//	//
300	113	202	152	101	//	//	//	//	//
400	167	299	225	150	//	//	//	//	//
500	184	329	247	165	//	//	//	//	//
800	313	560	420	280	//	//	//	//	//
1000	383	686	514	343	257	206	171	114	86
1500	557	998	749	499	374	299	250	166	125

Accessories on request

"Easy Control" Electronic Display

ART. NR.	FOR MODELS
5005000310002	WC
5005000310003	WB



Electrical immersion flange plate

See Accessories section



Titanium electronic anode

See Accessories section



BOLLY® 1 ST

POLYWARM® COATED DOMESTIC HOT WATER CALORIFIER WITH 1 FIXED HEAT EXCHANGER

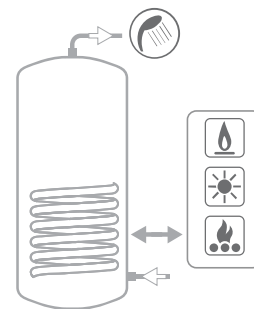
Model	STORAGE		HEAT EXCHANGER	
	Pmax	Tmax	Pmax	Tmax
150 + 800	10 bar	90 °C	12 bar	110 °C
1000 + 1500	8 bar			



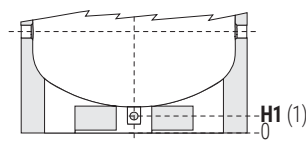
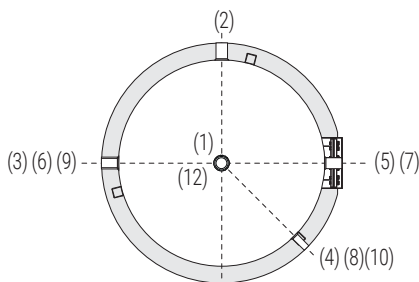
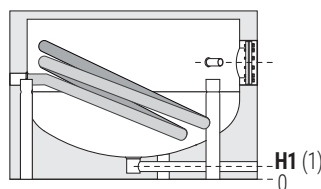
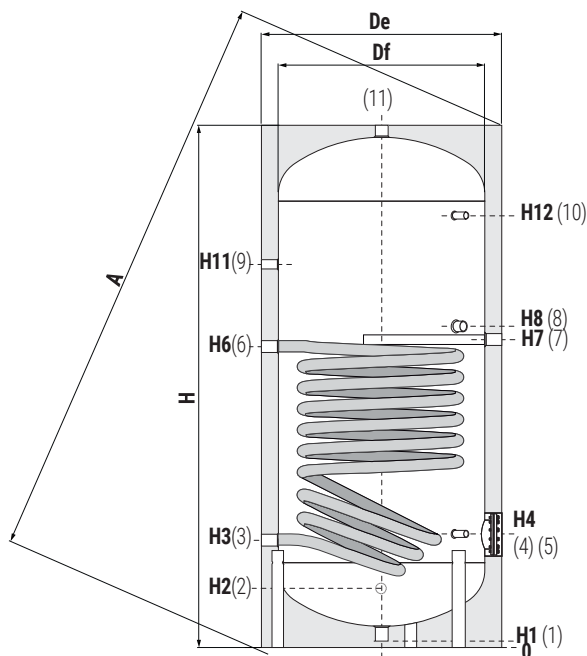
CORDIVARI Lab
TÜV Rheinland Energie und Umwelt GmbH states that test procedures and Cordivari LAB are certified conforming to European standard EN 15332, as indicated by Ecodesign ErP Directive.



ASK ALWAYS FOR
CERTIFIED LABORATORIES
DATA RESULTS



- 1 Drain 1 1/4 Gas F (3/4" su 800 e 1000.) (1" su 1500)
- 2 Domestic cold water circuit inlet
- 3 Primary circuit outlet
- 4 Connection for instrumentation 1/2" Gas F
- 5 Blind flange for inspection
- 6 Primary circuit inlet
- 7 Connection for magnesium anode 1 1/4 Gas F
- 8 Connection for electrical immersion
- 9 Recirculation
- 10 Connection for instrumentation 1/2" Gas F
- 11 Domestic hot water outlet



Models 1500 have two grippos on the bottom which allow the use of forklift when handling and drain pipe already fitted.

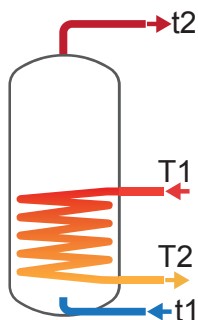
Model	Volume [litres]	Weight [Kg]	Df (vers. WC) [mm]	De (vers. WC) [mm]	De (vers. WB) [mm]	H	A	H1 [mm]	H2	H3	H4
150	148	49	//	//	500	1414	1500	70	210	275	315
200	189	55	//	//	550	1434	1536	70	220	285	325
300	291	67	//	//	650	1486	1622	70	246	311	381
400	422	88	//	//	700	1766	1900	70	261	326	396
500	498	120	//	//	750	1786	1937	70	271	346	411
800	789	184	750	950	900	2163	2343	101	493	328	483
1000	1038	215	850	1050	1000	2217	2432	89	524	439	499
1500	1443	389	950	1150	1100	2440	2654	109	450	425	575

Model	H6	H7	H8	H11	H12	5	2	3	6	8	9	11
	[mm]						Connections Gas F					
150	888	956	1011	1065	1185	Ø 120	3/4"	1 1/4"	1 1/4"	1 1/2"	3/4"	1 1/4"
200	811	855	915	1089	1195	Ø 120	3/4"	1 1/4"	1 1/4"	1 1/2"	3/4"	1 1/4"
300	832	871	931	1101	1221	Ø 120	1"	1 1/4"	1 1/4"	1 1/2"	1"	1 1/4"
400	988	1033	1091	1286	1486	Ø 120	1"	1 1/4"	1 1/4"	1 1/2"	1"	1 1/4"
500	1036	1076	1144	1331	1476	Ø 120	1"	1 1/4"	1 1/4"	1 1/2"	1"	1 1/4"
800	1181	1243	1308	1598	1788	Ø 160	1"	1 1/4"	1 1/4"	2"	1"	1 1/4"
1000	1279	1309	1364	1584	1819	Ø 160	1 1/4"	1 1/4"	1 1/4"	2"	1"	1 1/2"
1500	1403	1450	1515	1825	2065	Ø 300	1 1/2"	1 1/4"	1 1/4"	2"	1"	2"

BOLLY® 1 ST- 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 continue way from 10 °C at t2;
- 3) DHW that can be taken in the first 10' and in the first hour from storage at 60°C, input 10°C and output 45°C;
- 4) Sanitary water according to UNI CTI 8065.



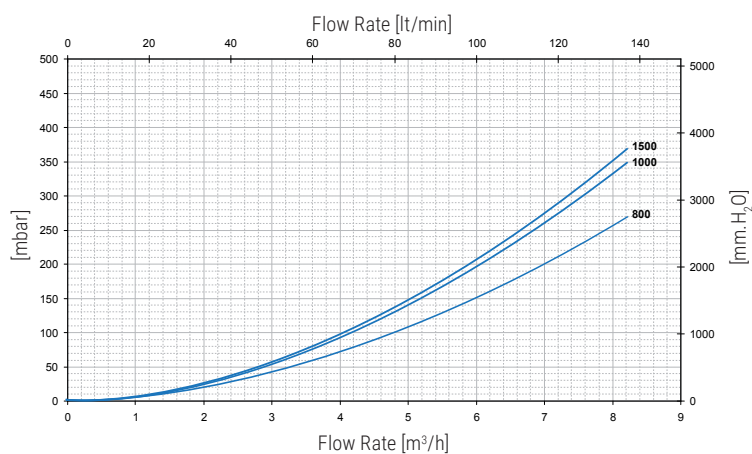
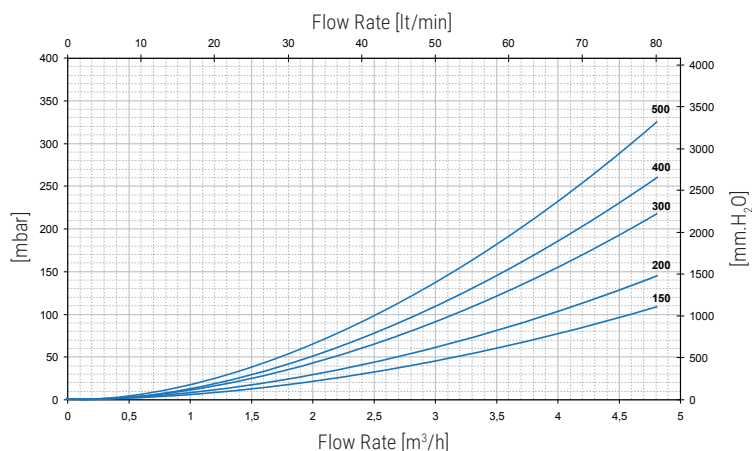
FIXED HEAT EXCHANGER

Model	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			
	T1/t2				T1				T1			
	55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
150	99	102	71	46	6,6	10	11,7	15,2	162	246	288	371
	111	116	81	53	6,1	9,1	10,6	13,2	149	223	260	336
200	92	95	66	43	9	13,5	15,8	20,5	220	332	389	506
	103	107	75	49	8,3	12,3	14,4	18,5	203	303	354	456
300	97	101	70	45	13,5	20,2	23,6	30,6	331	498	583	756
	106	111	78	51	12,5	18,5	21,5	27,5	307	455	529	680
400	105	110	76	50	16,9	25,4	29,6	38,3	416	625	731	947
	117	122	86	57	15,4	23,2	26,9	34,5	387	571	664	853
500	111	116	81	53	20,2	30,1	35,1	45,3	496	742	867	1121
	126	131	93	61	18,7	27,3	31,7	40,6	459	674	782	1000
800	116	120	84	55	30,3	45,4	53	68,6	746	1120	1309	1695
	131	136	96	64	28,2	41,4	48,1	61,6	692	1021	1186	1521
1000	114	119	84	56	38,9	57,9	67,5	87	958	1429	1667	2151
	132	138	98	65	35,5	52,2	60,4	77	882	1288	1492	1903
1500	162	168	119	78	41	61	71	91,5	1009	1504	1753	2261
	189	197	139	92	37,7	54,9	63,4	80,7	927	1352	1564	1993

PRESSURE LOSS - FIXED HEAT EXCHANGERS BOLLY® 1 ST



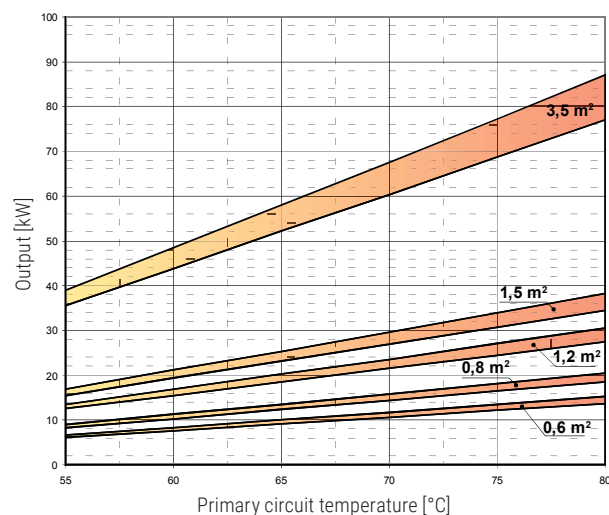
Heat exchanger surface [m²]	
150	0,6
200	0,8
300	1,2
400	1,5
500	1,8
800	2,7
1000	3,5
1500	3,8



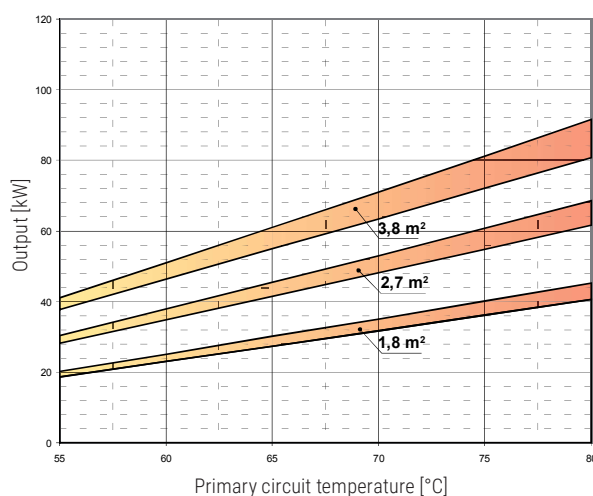
	DHW produced in the first 10 minutes in lt/10' input 10 °C output 45 °C, storage at t2 and primary at T1				DHW produced in the first hour in lt/60' input 10 °C output 45 °C, storage at t2 and primary at T1				Flow rate	Exchanger pressure loss	
	T1/t2				T1/t2				[m³/h]	[mm.H₂O]	[mbar]
	55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60			
	195	251	258	272	298	407	440	507	2	218,85	21,46
	193	247	253	266	287	388	418	479	1	60,62	5,95
	253	325	335	354	392	536	581	675	2,5	441,12	43,26
	250	321	329	346	378	512	553	635	1,25	122,19	11,98
	388	499	513	542	597	814	882	1021	3	927,45	90,95
	384	492	504	529	578	780	839	960	1,5	256,91	25,19
	550	706	723	759	814	1101	1186	1359	3,5	1480,67	145,20
	546	697	712	744	791	1058	1133	1284	1,75	410,16	40,22
	651	834	855	897	965	1304	1404	1607	3,5	1850,84	181,50
	645	822	840	877	935	1249	1336	1510	1,75	512,70	50,28
	1026	1314	1345	1410	1499	2023	2174	2483	6	1538,50	150,87
	1017	1297	1325	1381	1455	1944	2076	2344	3	426,18	41,79
	1345	1720	1759	1840	1952	2625	2815	3202	6	1994,35	195,58
	1332	1696	1730	1799	1891	2512	2675	3004	3	552,45	54,18
	1870	2378	2419	2504	2509	3330	3530	3936	6	2108,31	206,75
	1856	2352	2388	2459	2443	3209	3378	3722	3	584.02	57.27

HEAT EXCHANGERS OUTPUT CHART BOLLY® ST

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 CURVE REFERS TO THE MINIMUM PRIMARY FLOW RATE)



Heat exchanger surface	0,6 m²		0,8 m²		1,2 m²		1,5 m²		3,5 m²	
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	6	3



Heat exchanger surface	1,8 m²		2,7 m²		3,8 m²	
Flow rate [m³/h]	MAX	MIN	MAX	MIN	MAX	MIN
	3,50	1,75	6	3	6	3