

BOLLY® 1 ST

POLYWARM® COATED CALORIFIERS WITH 1 FIXED HEAT EXCHANGER



APPLICATION

Production and storage of sanitary hot water.

MATERIAL

Material and finishings, suitable for drinkable water according to D. M. n. 174 dated 06.04.04.;

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

HEAT EXCHANGER:

1 Polywarm® coated fixed heat exchanger.

INSULATION

- For models up to 500: Ecological hard polyurethane foam with high thermal insulation.
- For models from 800: NOFIRE® polyester fibre 100% made of recyclable material, with high thermal insulation. Fire resistance class B-s2d0 according to EN 13501. PVC external lining complete with top and flange cover.

HE SERIES: High thermal insulation with ecological hard polyurethane foam.

CATHODE PROTECTION

Magnesium anode (Polywarm®).

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® treatment.

WARRANTY

5 years (Polywarm)

See general sales conditions and warranty for electrical parts.

ACCESSORIES AND SPARE PARTS

See Accessories section for the entire list.



BOLLY® 1 ST WB / WC

Model	D.H.W. Storage: POLYWARM® coated Heat exchanger POLYWARM® coated	Art. Nr.	ENERGY EFFICIENCY CLASS	HEAT EXCHANGER SURFACE
			ErP	[m²]
150		3105162321101	C	0,6
200		3105162321102	C	0,8
300		3105162321103	C	1,2
400		3105162321104	C	1,5
500		3105162321105	C	1,8
800		3103162321106	E	2,7
1000		3103162321107	E	3,5
1500		3103162321108	E	3,8

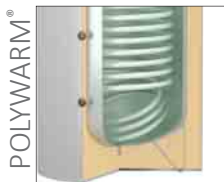


TECHNICAL DATA AND ECODSIGN ERP LABELS AVAILABLE ONLINE AT WWW.CORDIVARI.COM

BOLLY® 1 ST HE SERIES

HIGH EFFICIENCY INSULATION TANKS

Designed according to 2009/125/CE Directive (ErP – Eco-friendly Plan Specification), HE series are already compliant with Regulation n. 814/2013, that demands C-energy efficiency class from September, 26th 2017.



BOLLY® 1 ST WB HE

Model	D.H.W. Storage: POLYWARM® coated Heat exchanger POLYWARM® coated	Art. Nr.	ENERGY EFFICIENCY CLASS	HEAT EXCHANGER SURFACE
			ErP	[m²]
800		3104162331106	C	2,7
1000		3104162331107	C	3,5
1500		3104162331108	C	3,8

Accessories on request

“Easy Control” Electronic Display

ART. NR.	FOR MODELS
5005000310002	800÷1500 STANDARD
5005000310003	150÷500 STANDARD
	800÷1500 HE SERIES



Thermometer

Art. Nr.
5032240000107
5 units box



Titanium electronic anode

Art. Nr.	Model
5200000000008	150 ÷ 300
5200000000009	400, 500
5200000000011	1000, 1500

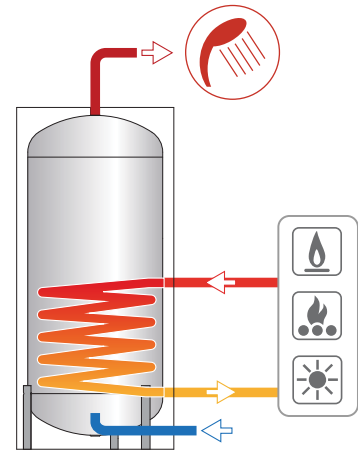


BOLLY® 1 ST

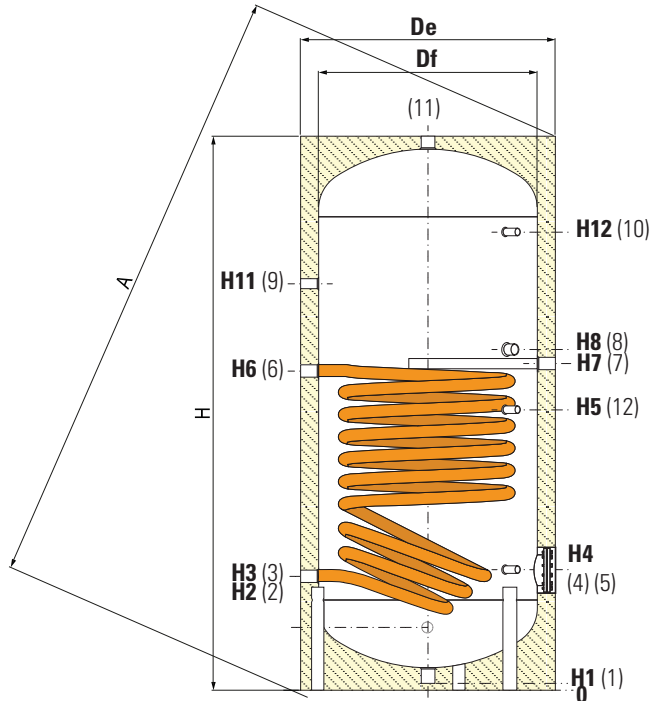
POLYWARM® COATED CALORIFIERS WITH 1 FIXED HEAT EXCHANGER

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

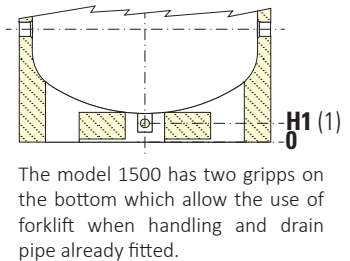
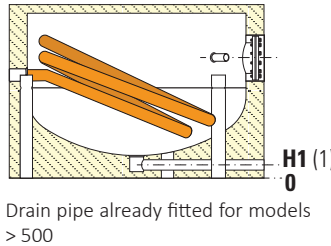
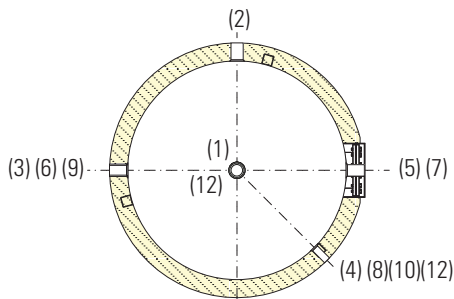
CORDIVARI® Lab
 TÜV Rheinland
 Energie und Umwelt
 GmbH states that test
 procedures and Cordivari LAB are
 certified conforming to European
 standard EN 15332, as indicated
 by Ecodesign ErP Directive.



BOLLY® - INTERKA
CALORIFIERS



1	Drain 1"1/4 Gas F (3/4" for models 800 and 1000) (1" for model 1500)
2	Domestic cold water circuit inlet
3	Heating water back to the buffer 1" Gas F (1"1/4 for models 800÷1500)
4	Connection for instrumentation 1/2" Gas F
5	Blind flange for inspection (Øi 120 mm for models 150÷500 lt) (Øi 160 mm for models 800÷1000 lt) (Øi 300 mm for models 1500 lt)
6	Entry heating water from the buffer 1" Gas F (1"1/4 for models 800÷1500)
7	Connection for magnesium anode 1"1/4 Gas F
8	Connection for electrical immersion 1"1/2 Gas F (2" gas F for models 1000÷1500 lt)
9	Recirculation
10	Connection for instrumentation 1/2" Gas F
11	Domestic hot water outlet
12	Connection for instrumentation 1/2" Gas F



Model	Net Volume [litres]	Weight [Kg]	Df	De	De (HE SERIE)	H	A	H1	H2	H3	H4
150	147	49	400	500	//	1414	1500	70	210	275	315
200	189	55	450	550	//	1434	1536	70	220	285	325
300	291	67	550	650	//	1486	1622	70	246	311	381
400	421	88	600	700	//	1766	1900	70	261	326	396
500	497	120	650	750	//	1786	1937	70	271	346	411
800	789	184	750	950	900	2189	2367	101	493	328	483
1000	1037	215	850	1050	1000	2223	2438	89	524	439	499
1500	1489	389	950	1150	1100	2471	2705	115	456	431	581

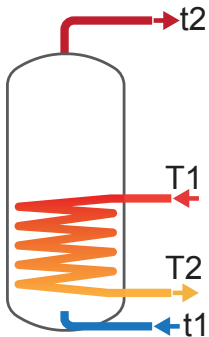
Model	H5	H6	H7	H8	H11	H12	Connections Gas F		
							2	9	11
	[mm]								
150	//	888	956	1011	1065	1185	3/4"	3/4"	1"1/4
200	//	811	855	915	1089	1195	3/4"	3/4"	1"1/4
300	//	832	871	931	1101	1221	1"	1"	1"1/4
400	//	988	1033	1091	1286	1486	1"	1"	1"1/4
500	//	1036	1076	1144	1331	1476	1"	1"	1"1/4
800	//	1181	1243	1308	1598	1788	1"	1"	1"1/4
1000	//	1279	1309	1364	1584	1819	1"1/4	1"	1"1/2
1500	1241	1409	1456	1521	1831	2071	1"1/2	1"	2"

P.E.D. product planned and produced in conformity to the article 3.3 of directive 92/23/CE

BOLLY® 1 ST- HEAT EXCHANGERS TECHNICAL DATA

Data have been calculated on following basis:

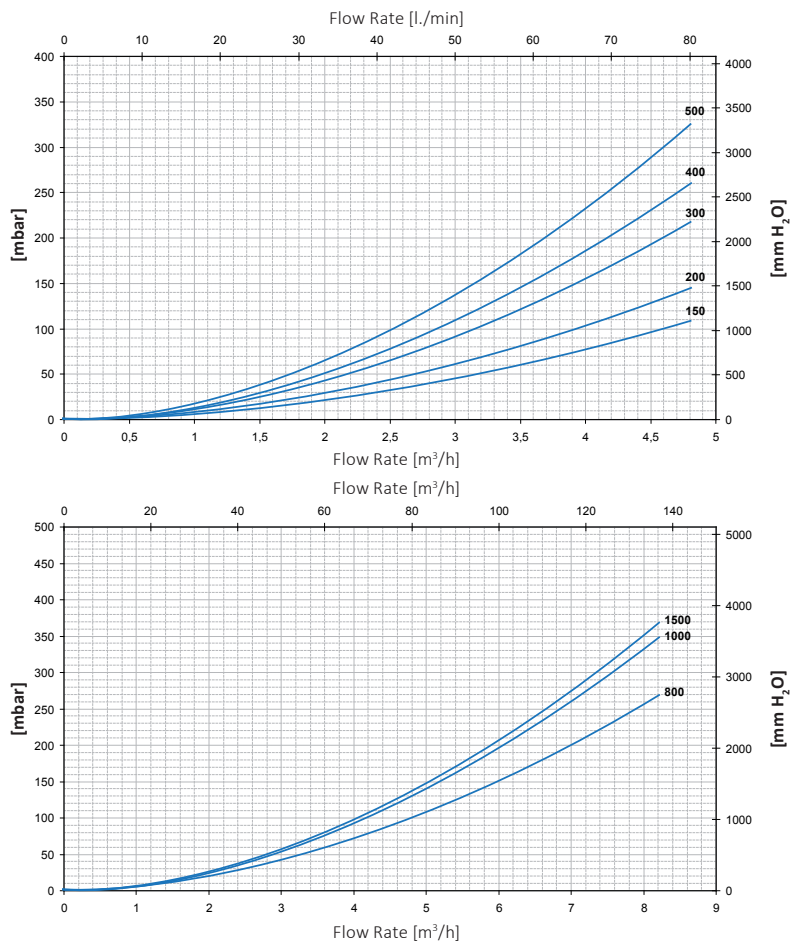
- 1) Primary circuit at T1 and proper energy source;
- 2) Production of DHW in continue way from 10 °C at t2;
- 3) DHW that can be taken in the first 10' and in the first hour from storage at 60°C, input 10°C and output 45°C;
- 4) Sanitary water according to UNI CTI 8065.



FIXED HEAT EXCHANGER

Model	Storage Volume [litres]	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	147	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	189	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	291	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	421	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	497	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	789	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	1037	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	1489	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

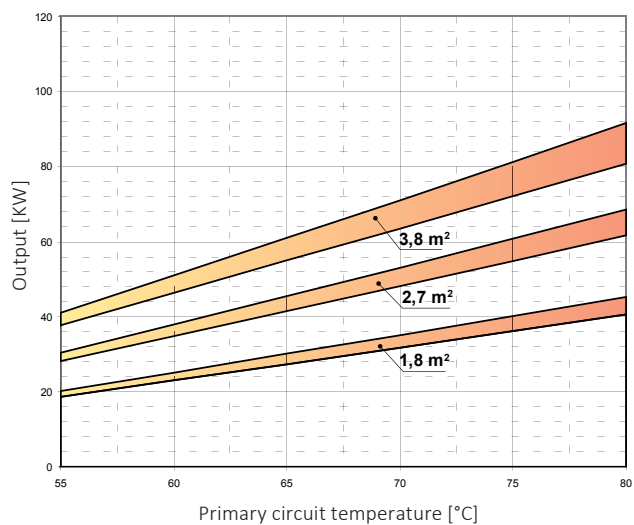
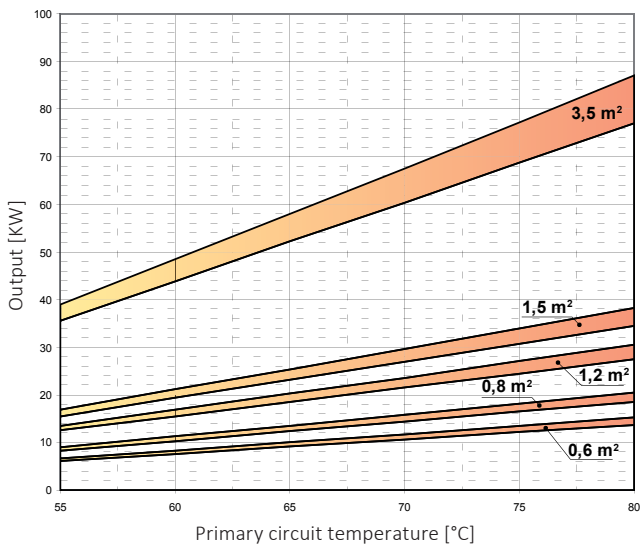
PRESSURE LOSS - FIXED HEAT EXCHANGERS BOLLY® 1 ST



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 [m³/h]	Exchanger pressure loss	
T1/t2				T1/t2					[mm.H ₂ O]	[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® 1 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 m ²		0,8 m ²		1,2 m ²		1,5 m ²		3,5 m ²	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
Primary flow rate [m³/h]	2	1	2,5	1,25	3	1,5	3,5	1,75	6	3

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