

BOLLY® 2 ST

POLYWARM® COATED CALORIFIERS WITH 2 FIXED HEAT EXCHANGERS



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:

2 Polywarm® coated fixed heat exchangers.

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.



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

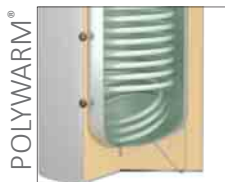
BOLLY® 2 ST WB / WC

BOLLY® 2 ST WB / WC			ENERGY EFFICIENCY CLASS	HEAT EXCHANGER SURFACE	
Model	D.H.W. Storage: POLYWARM® coated Heat exchanger POLYWARM® coated			Upper	Lower
	Art. Nr.			[m²]	
150	3135162321201		C	0,4	0,6
200	3135162321202		C	0,5	0,8
300	3135162321203		C	0,7	1,2
400	3135162321204		C	1	1,5
500	3135162321205		C	1	1,8
800	3138162321206		E	1,6	2,7
1000	3138162321207		E	1,8	3,5
1500	3138162321208		E	1,9	3,8

BOLLY® 2 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® 2 ST WB HE

BOLLY® 2 ST WB HE			ENERGY EFFICIENCY CLASS	HEAT EXCHANGER SURFACE	
Model	D.H.W. Storage: POLYWARM® coated Heat exchanger POLYWARM® coated			Upper	Lower
	Art. Nr.			[m²]	
800	3134162331206		C	1,6	2,7
1000	3134162331207		C	1,8	3,5
1500	3134162331208		C	1,9	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
52000000000008	150 ÷ 300
52000000000009	400, 500
52000000000011	1000, 1500



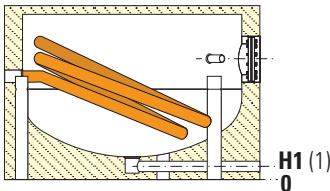
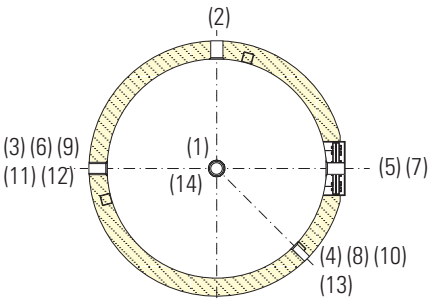
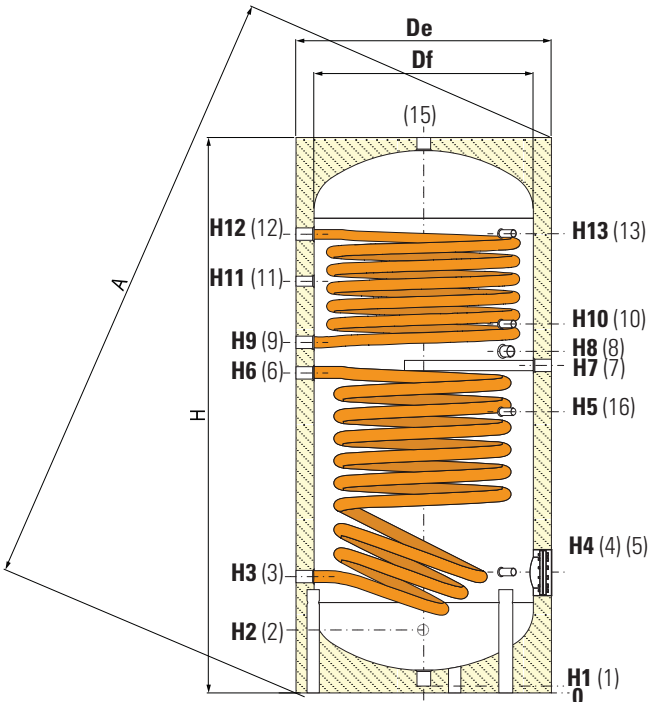
Suitable for
Polywarm®
coated models

BOLLY® 2 ST

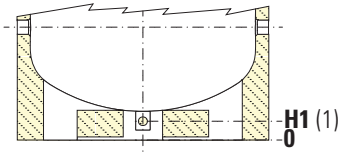
POLYWARM® COATED CALORIFIERS WITH 2 FIXED HEAT EXCHANGERS

STORAGE		HEAT EXCHANGERS		
Model	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.



Drain pipe already fitted for models
>500



The model 1500 has two grippos on
the bottom which allow the use of
forklift when handling and drain
pipe already fitted.

1	Drain 1"1/4 Gas F (3/4" for models 800 e 1000 lt.) (1" for models 1500 lt.)
2	Domestic cold water circuit inlet
3	Heating water back to the buffer 1" Gas F (1"1/4 for models 800 ÷ 1500 lt.)
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 lt.)
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	Lower heat exchanger outlet 1" Gas F (1"1/4 for models 800÷1500 lt.)
10	Connection for instrumentation 1/2" Gas F
11	Recirculation
12	Fixed upper heat exchanger inlet 1" Gas F (1"1/4 for models 800÷1500 lt.)
13	Connection for instrumentation 1/2" Gas F
15	Domestic hot water outlet
16	Connection for instrumentation 1/2" Gas F

Model	Net Volume [litres]	Weight [Kg]	Df	De	De (HE SERIE)	H	A	H1	H2	H3	H4	H5
[mm]												
150	147	54	400	500	//	1414	1500	70	210	275	315	/
200	189	65	450	550	//	1434	1536	70	220	285	325	/
300	291	83	550	650	//	1486	1622	70	246	311	381	/
400	421	112	600	700	//	1766	1900	70	261	326	396	/
500	497	134	650	750	//	1786	1937	70	271	346	411	/
800	789	232	750	950	900	2189	2367	101	493	428	483	/
1000	1037	272	850	1050	1000	2223	2438	89	524	439	499	/
1500	1489	351	950	1150	1100	2471	2705	115	456	431	581	1241

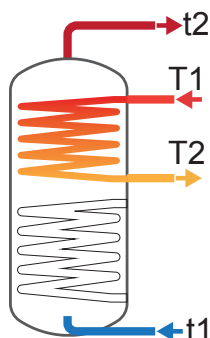
Model	H6	H7	H8	H9	H10	H11	H12	H13	2	11	15
150	759	815	885	945	1035	1065	1185	1185	3/4"	3/4"	1"1/4
200	811	855	915	960	1105	1089	1195	1195	3/4"	3/4"	1"1/4
300	832	871	931	981	1076	1101	1221	1221	1"	1"	1"1/4
400	988	1033	1091	1143	1286	1286	1486	1486	1"	1"	1"1/4
500	1036	1076	1144	1186	1296	1331	1476	1476	1"	1"	1"1/4
800	1181	1243	1308	1362	1579	1598	1770	1788	1"	1"	1"1/4
1000	1279	1309	1364	1399	1609	1584	1819	1819	1"1/4	1"	1"1/2
1500	1409	1456	1521	1596	1741	1831	2051	2071	1"1/2	1"	2"

BOLLY® - INTERKA
CALORIFIERS

BOLLY® 2 ST- HEAT EXCHANGERS TECHNICAL DATA

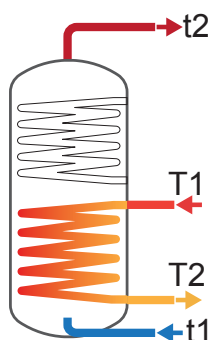
Data have been calculated on following basis:

- 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.



UPPER FIXED HEAT EXCHANGER

Model	Storage Volume	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			
	[litres]	55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
150	48	47	49	34	22	4,5	6,8	7,9	10,3	109	165	194	254
		52	64	38	24	4,1	6,2	7,2	9,4	100	151	177	231
200	60	46	48	33	21	5,7	8,6	10	13,1	138	210	247	322
		51	53	37	24	5,3	7,9	9,3	12	129	194	227	296
300	95	51	53	37	24	8	12,1	14,1	18,4	195	296	347	453
		57	59	41	27	7,5	11,2	13,1	16,9	183	274	321	416
400	144	55	57	40	26	11,4	17,2	20,2	26,2	279	423	496	646
		61	63	44	29	10,7	16	18,6	24	262	392	458	592
500	160	61	64	44	29	11,4	17,2	20,2	26,2	279	423	496	646
		68	70	49	32	10,7	16	18,6	24	262	392	458	592
800	286	68	71	49	32	18,3	27,6	32,3	41,9	447	677	794	1034
		75	78	54	36	17,2	25,6	29,8	38,5	419	628	733	949
1000	371	79	82	57	37	20,5	30,9	36,1	46,9	501	759	889	1157
		87	91	64	42	19,2	28,5	33,3	42,9	469	701	818	1057
1500	512	87	90	63	41	26	39	45,6	59,1	636	959	1123	1457
		97	102	71	46	24,2	35,8	41,6	53,6	592	879	1024	1318



FIXED HEAT EXCHANGER

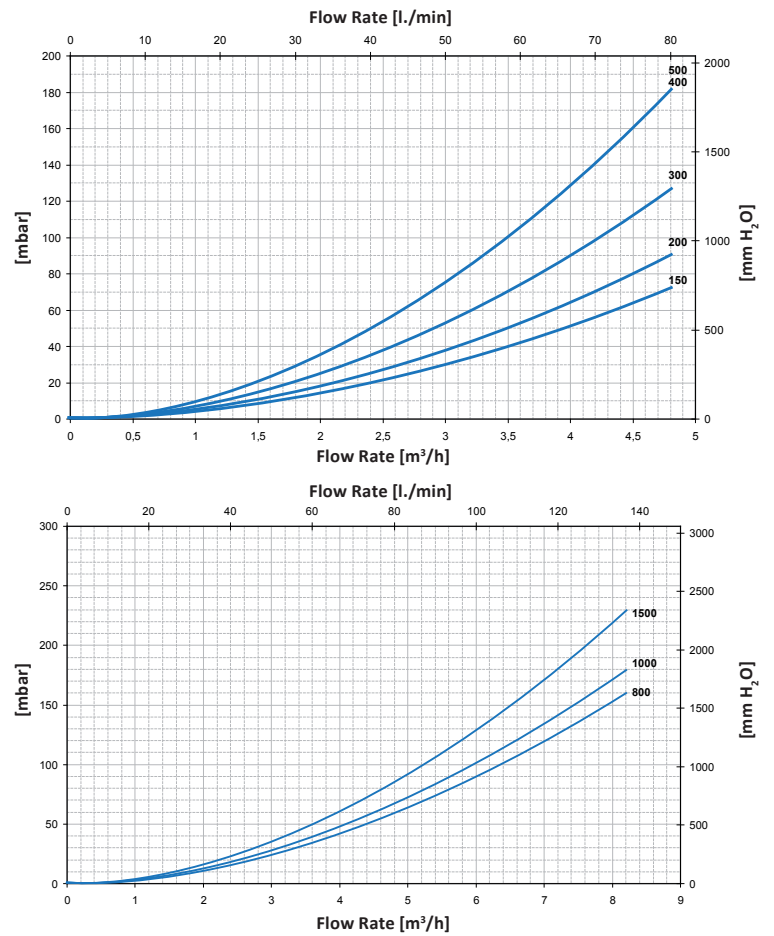
Model	Storage Volume	Ignition time (minutes) from 10 °C to t2 and primary at t1				Maximum power exchange (kw) with primary at t1, secondary within 10-45 °C and constant use of DHW production				DHW continuous production lt/h within 10-45 °C and primary at t1			
		T1/t2				T1				T1			
	[litres]	55/50	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

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.H ₂ O]	[mbar]
55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60			
73	96	101	111	142	201	224	272	2	145,90	14,31
72	94	98	107	135	189	210	253	1	40,41	3,96
92	121	127	139	179	254	283	343	2,5	275,70	27,04
90	118	124	135	172	241	267	323	1,25	76,37	7,49
141	185	194	211	265	373	413	498	3	541,01	53,06
139	181	189	205	255	355	393	469	1,5	149,87	14,70
211	276	288	313	388	544	603	723	3,5	1028,24	100,84
208	271	282	304	374	519	572	679	1,75	284,83	27,93
229	299	311	336	406	567	625	745	3,5	1028,24	100,84
227	294	305	327	392	542	595	702	1,75	284,83	27,93
401	521	541	581	684	950	1044	1236	6	911,70	89,41
397	513	531	567	662	911	995	1168	3	252,55	24,77
508	657	678	723	825	1137	1241	1456	6	1025,66	100,58
502	647	666	706	799	1091	1184	1376	3	284,12	27,86
691	891	919	974	1094	1499	1630	1897	6	1310,57	128,52
684	878	902	951	1059	1435	1551	1786	3	363,04	35,60

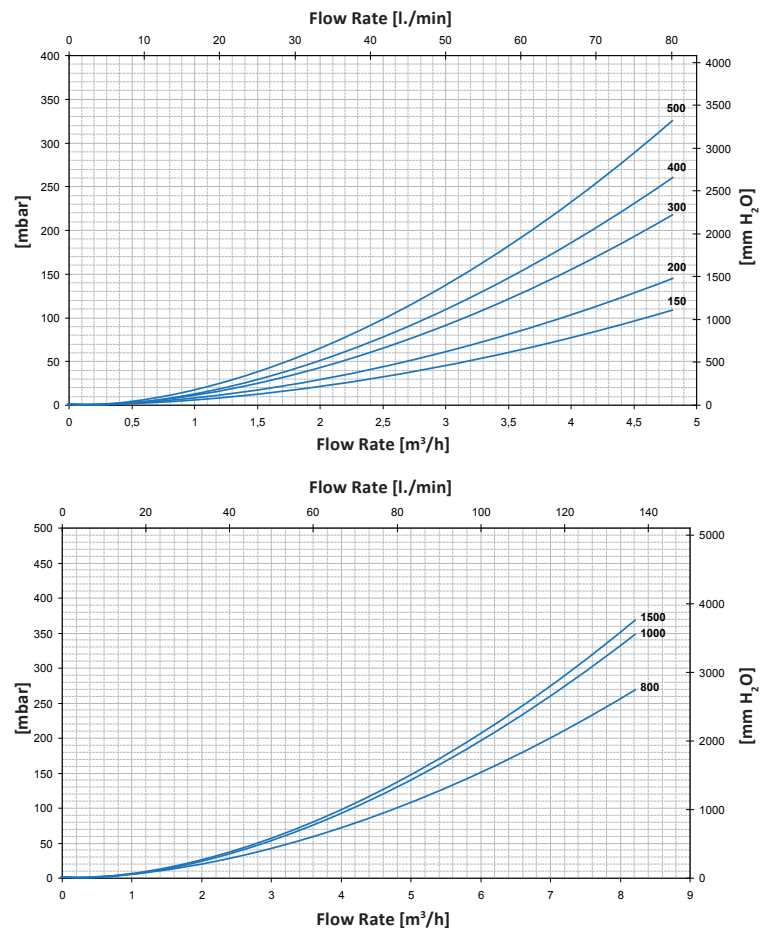
DHW produced in the first 10 minutes in lt/10' input 10 °C output 45 °C, storage at t2 and primary at T1				DHW produced in the first hour in lt/60' input 10 °C output 45 °C, storage at t2 and primary at T1				Flow rate	Exchanger pressure loss	
T1/t2				T1/t2				[m³/h]	[mm.H ₂ O]	[mbar]
55/50	65/60	70/60	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

BOLLY® 2 ST - PRESSURE LOSS

PRESSURE LOSS - UPPER FIXED HEAT EXCHANGER

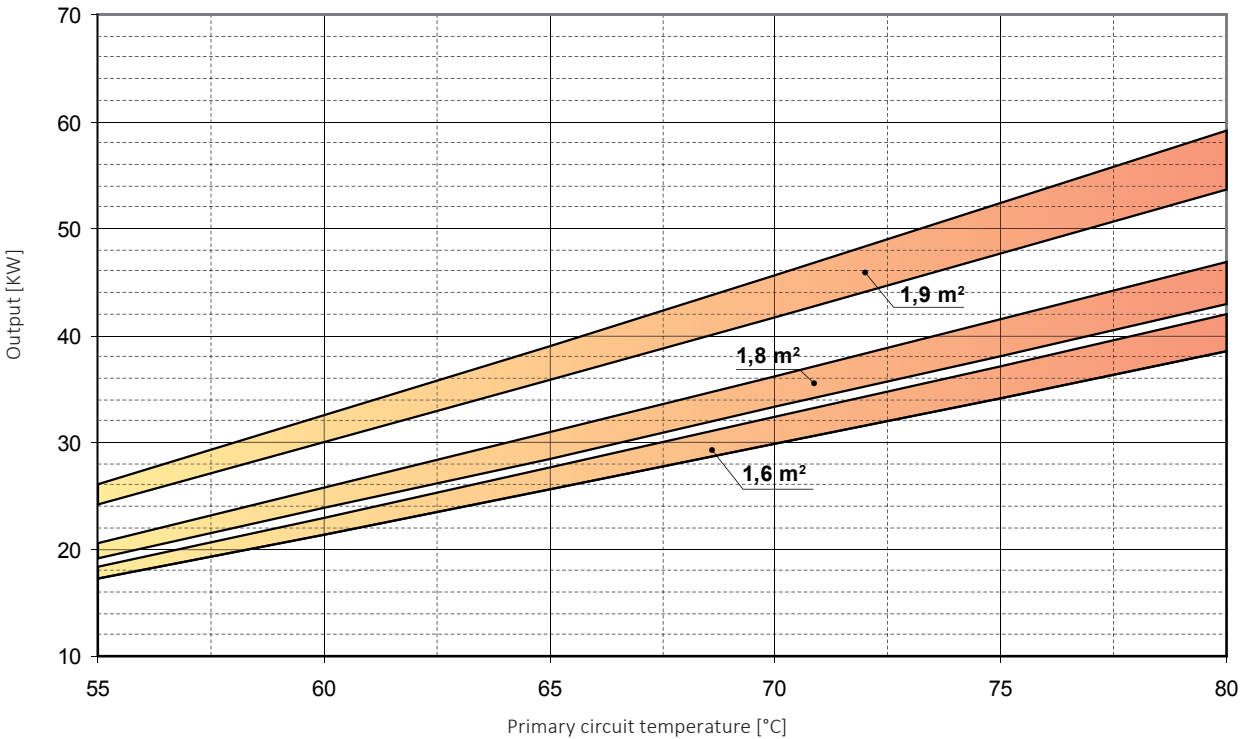
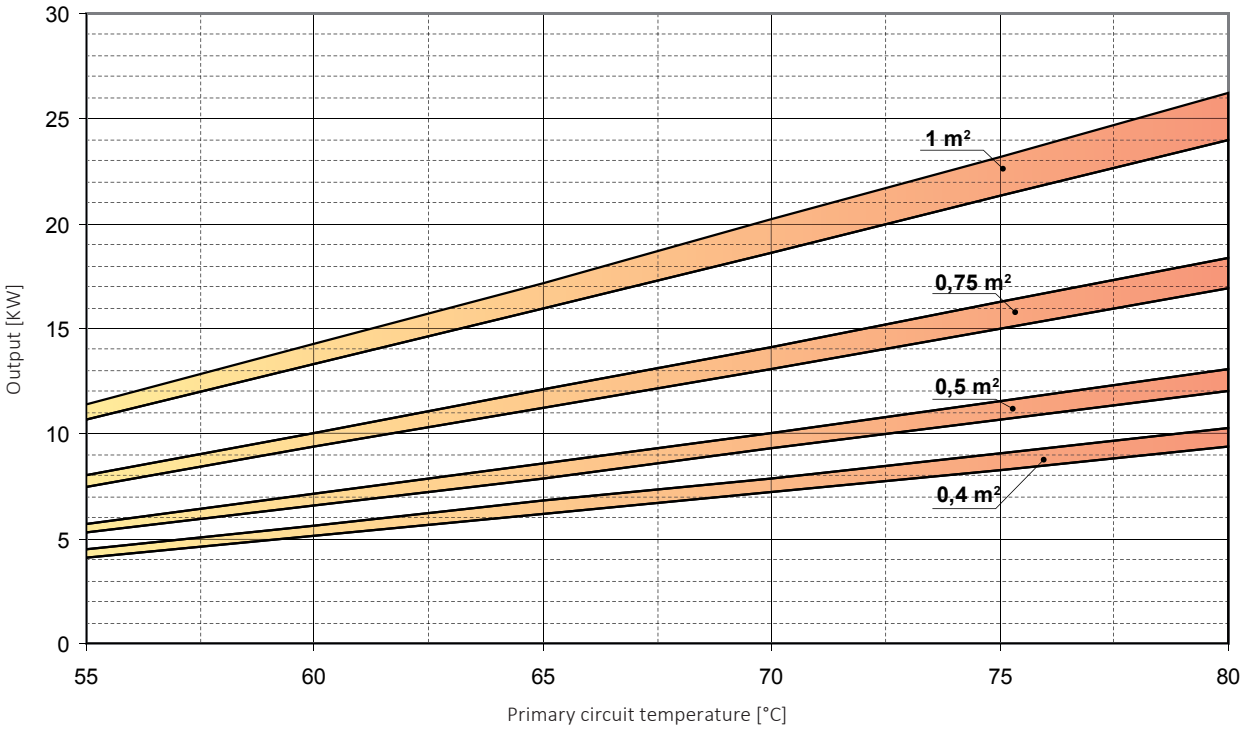


PRESSURE LOSS - LOWER FIXED HEAT EXCHANGER



BOLLY® 2 ST - UPPER HEAT EXCHANGER OUTPUT CHART

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)



LOWER HEAT EXCHANGER TECHNICAL DATA- SEE BOLLY® 1 ST