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SCAMBIATORI - BOLLITORI - SERBATOI



BTH-C - BT-C



ENAMELLED STEEL DHW CALORIFIER EQUIPPED WITH ONE
REMOVABLE TUBE BUNDLE HEAT EXCHANGER

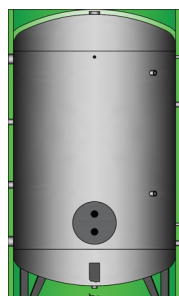
ENAMELLED STEEL DHW CALORIFIER EQUIPPED WITH ONE REMOVABLE TUBE BUNDLE HEAT EXCHANGER

Calorifiers made of enamelled steel with one removable tube bundle heat exchanger for production and storage of DHW. Designed for connection to a single primary energy source.

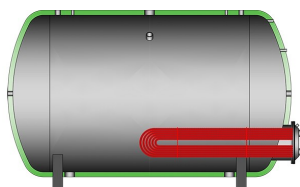
The calorifiers of the **BTH-C | BT-C** range stand out for the wide choice of capacities, from 200 to 5000 L as standard and over upon request. They are available, in the larger sizes, in vertical-low and vertical extra-low versions to allow them to be installed in circumstances where the available height is not sufficient for the standard measurement. The tube bundle heat exchangers, made of Stainless Steel AISI 304 as standard, is also available in Stainless Steel AISI 316L or copper on request.

The possibility of selecting between various operating pressures - up to 10 bar - and the availability of different external claddings for indoor or outdoor installation, extends their use to all the possible applications. Protection from galvanic currents is provided by the electronic anodes fitted as standard, which both save on costs of checking and replacing conventional magnesium anodes and ensure superior reliability and durability.

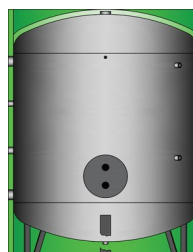
CONSTRUCTION



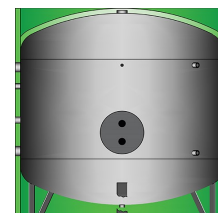
BTH-C | BT-C



BTH-OC | BT-OC



BTH-RC | BT-RC



BT-XC

TANK MATERIAL	Carbon steel	Carbon steel	Carbon steel	Carbon steel
INTERNAL SURFACE TREATMENT	CERAMFLON enamel	CERAMFLON enamel	CERAMFLON enamel	CERAMFLON enamel
EXTERNAL SURFACE TREATMENT	Anti-rust primer	Anti-rust primer	Anti-rust primer	Anti-rust primer
CAPACITY	200 ÷ 5000 L	200 ÷ 5000 L	1500 ÷ 5000 L	3000 ÷ 5000 L
VERSION	Vertical	Horizontal	Vertical LOW-height	Vertical EXTRA-LOW height
CONNECTIONS	Threaded	Threaded	Threaded	Threaded
PRIMARY CHEST MATERIAL	CERAMFLON enamelled steel	CERAMFLON enamelled steel	CERAMFLON enamelled steel	CERAMFLON enamelled steel
REMOVABLE TUBE BUNDLE HEAT EXCHANGER MATERIAL	- Stainless steel AISI 304 - Stainless steel AISI 316L (on request) - Copper (on request)	- Stainless steel AISI 304 - Stainless steel AISI 316L (on request) - Copper (on request)	- Stainless steel AISI 304 - Stainless steel AISI 316L (on request) - Copper (on request)	- Stainless steel AISI 304 - Stainless steel AISI 316L (on request) - Copper (on request)
INSULATION 200 ÷ 500 L	Hard foam Polyurethane 80 mm injected	Hard foam Polyurethane 50 mm injected	—	—
INSULATION 800 ÷ 2000 L	PLFH 100 mm High density eco-friendly polyester fiber	PLFH 100 mm High density eco-friendly polyester fiber	PLFH 100 mm High density eco-friendly polyester fiber	—
INSULATION 2500 ÷ 5000 L	PLF 50 mm Eco-friendly polyester fiber	PLF 50 mm Eco-friendly polyester fiber	PLF 50 mm Eco-friendly polyester fiber	PLF 50 mm Eco-friendly polyester fiber
CLADDING	- PVC Yellow RAL1023 - Aluminium	- PVC Yellow RAL1023 - Aluminium	- PVC Yellow RAL1023 - Aluminium	- PVC Yellow RAL1023 - Aluminium
ANODE	Electronic	Electronic	Electronic	Electronic
ACCESSORIES	Thermometer	Thermometer	Thermometer	Thermometer

Energy efficiency class - Regulation 812/2013 & 814/2013 | European Directive 2009/125/CE

Capacity - L			200	300	500	800	1000	1500	2000
Energy efficiency class			B	B	B	C	C	C	C
BTH-C	Standing loss	S W	55	64	81	133	143	168	189
	Storage volume	V L	193	294	503	792	915	1482	1986
Energy efficiency class			C	C	C	C	C	C	C
BTH-OC	Standing loss	S W	67	80	103	133	143	168	189
	Storage volume	V L	193	295	487	792	915	1482	1986
Energy efficiency class								C	C
BTH-RC	Standing loss	S W						166	185
	Storage volume	V L						1520	1961

STANDARD WORKING CONDITIONS

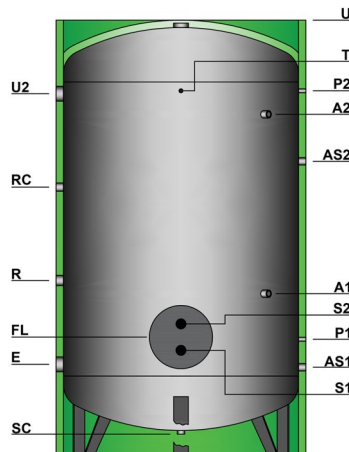
Capacity	200	300	500	800	1000	1500	2000	2500	3000	4000	5000
Tank working pressure	bar ATM ÷ 8	ATM ÷ 8	ATM ÷ 8	ATM ÷ 8	ATM ÷ 8	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6
Heat exchanger working pressure	bar ATM ÷ 12	ATM ÷ 12	ATM ÷ 12	ATM ÷ 12	ATM ÷ 12	ATM ÷ 12	ATM ÷ 12	ATM ÷ 12	ATM ÷ 12	ATM ÷ 12	ATM ÷ 12
Tank working temperature	°C AMB ÷ 85	AMB ÷ 85	AMB ÷ 85	AMB ÷ 85	AMB ÷ 85	AMB ÷ 85	AMB ÷ 85	AMB ÷ 85	AMB ÷ 85	AMB ÷ 85	AMB ÷ 85
Heat exchanger working temperature	°C AMB ÷ 99	AMB ÷ 99	AMB ÷ 99	AMB ÷ 99	AMB ÷ 99	AMB ÷ 99	AMB ÷ 99	AMB ÷ 99	AMB ÷ 99	AMB ÷ 99	AMB ÷ 99

REGULATORY COMPLIANCE

ErP - Reg. 812/2013 & Reg. 814/2013 | CE

European Pressure Equipment Directive (PED) 2014/68/UE | SEP (Sound Engineering Practice) - exclusion from CE marking - Art. 4.3

D.M. 174/04 or Reg. (CE) 1935/04 | Compatible with potable water



GENERAL CHARACTERISTICS - VERTICAL STANDARD VERSION

Capacity - L		200	300	500	800	1000	1500
DIMENSIONS							
Diameter without insulation	mm	450	550	650	800	800	950
Diameter with insulation	mm	610	710	810	1000	1000	1150
Overall height	mm	1513	1554	1844	1950	2200	2510
Overturning height with without insulation	mm	1613 —	1709 —	2014 —	2080 1918	2316 2166	2653 2502
CONNECTIONS							
E Cold water supply	mm Ø	353 1 1/2"	369 1 1/2"	384 1 1/2"	420 2"	420 2"	465 2 1/2"
U DHW return	mm Ø	1513 1 1/2"	1554 1 1/2"	1844 1 1/2"	1950 2"	2200 2"	2510 2 1/2"
U2 DHW additional return	mm Ø	—	—	—	—	—	—
RC Recirculation	mm Ø	1003 1 1/2"	1019 1 1/2"	1259 1 1/2"	1370 1 1/2"	1405 1 1/2"	1580 1 1/2"
R Immersion electric heater	mm Ø	773 2"	789 2"	804 2"	1010 2"	1010 2"	1035 2"
P1 Sensor	mm Ø	473 1/2"	489 1/2"	504 1/2"	610 1/2"	608 1/2"	635 1/2"
P2 Sensor	mm Ø	1253 1/2"	1269 1/2"	1534 1/2"	1550 1/2"	1698 1/2"	2125 1/2"
T Thermometer	mm Ø	1253 1/2"	1269 1/2"	1534 1/2"	1550 1/2"	1800 1/2"	2125 1/2"
A1 Anode	mm Ø	853 1/2"	869 1/2"	884 1/2"	920 1/2"	608 1/2"	945 1/2"
A2 Anode	mm Ø	—	—	—	—	—	1965 1/2"
AS1 Spare	mm Ø	353 1 1/4"	369 1 1/4"	384 1 1/4"	420 1 1/4"	418 1 1/4"	445 1 1/4"
AS2 Spare	mm Ø	1153 1 1/4"	1169 1 1/4"	1184 1 1/4"	1220 1 1/4"	1818 1 1/4"	1845 1 1/4"
FL Heat exchanger manhole	mm Ø	473 220×300	489 220×300	504 220×300	610 300×380	610 300×380	635 300×380
S1 Heat exchanger return	mm Ø	413 1"	429 1"	444 1"	535 2"	535 2"	560 2"
S2 Heat exchanger supply	mm Ø	533 1"	549 1"	564 1"	685 2"	685 2"	710 2"
SC Drain	mm Ø	118 1 1/4"	109 1 1/4"	99 1 1/4"	95 1 1/4"	95 1 1/4"	135 1 1/4"

TUBE BUNDLE HEAT EXCHANGERS PERFORMANCES

Heat exchanger heating surface area	m²	0,50	0,75	1,00	1,50	2,00	3,00
HEX output (Prim. 80/70°C - Sec. 10/45°C)	kW	18	27	36	54	72	108
DHW continuous flow 10/45°C	L/h	441	662	882	1323	1764	2646

EMPTY WEIGHTS

Empty weight	kg	75	85	120	165	185	245
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Capacity - L		2000	2500	3000	4000	5000
DIMENSIONS						
Diameter without insulation	mm	1100	1200	1250	1400	1600
Diameter with insulation	mm	1300	1300	1350	1500	1700
Overall height	mm	2535	2590	2790	2869	2960
Overturning height with without insulation	mm	2712 2541	2773 2600	2976 2800	3088 2883	3232 2982

CONNECTIONS

E Cold water supply	mm Ø	485 2 1/2"	530 3"	525 3"	559 3"	620 3"
U DHW return	mm Ø	2535 2 1/2"	2590 3"	2790 3"	2869 3"	2960 3"
U2 DHW additional return	mm Ø	—	—	—	2399 3"	2460 3"
RC Recirculation	mm Ø	1600 1 1/2"	1645 1 1/2"	1730 1 1/2"	1764 1 1/2"	1825 1 1/2"
R Immersion electric heater	mm Ø	1055 2"	1100 2"	1095 2"	1129 2"	1190 2"
P1 Sensor	mm Ø	655 1/2"	700 1/2"	695 1/2"	729 1/2"	790 1/2"
P2 Sensor	mm Ø	2095 1/2"	2190 1/2"	2385 1/2"	2419 1/2"	2480 1/2"
T Thermometer	mm Ø	2095 1/2"	2190 1/2"	2385 1/2"	2419 1/2"	2480 1/2"
A1 Anode	mm Ø	965 1/2"	1010 1/2"	1005 1/2"	1039 1/2"	1100 1/2"
A2 Anode	mm Ø	1935 1/2"	2030 1/2"	2225 1/2"	2259 1/2"	2320 1/2"
AS1 Spare	mm Ø	465 1 1/4"	510 1 1/4"	505 1 1/4"	539 1 1/4"	600 1 1/4"
AS2 Spare	mm Ø	1865 1 1/4"	1910 1 1/4"	1905 1 1/4"	1939 1 1/4"	2000 1 1/4"
FL Heat exchanger manhole	mm Ø	655 300×380	700 300×380	695 300×380	729 350×430	790 350×430
S1 Heat exchanger return	mm Ø	580 2"	625 2"	620 2"	629 2"	690 2"
S2 Heat exchanger supply	mm Ø	730 2"	775 2"	770 2"	829 2"	890 2"
SC Drain	mm Ø	123 1 1/4"	135 1 1/4"	125 1 1/4"	114 1 1/4"	145 1 1/4"

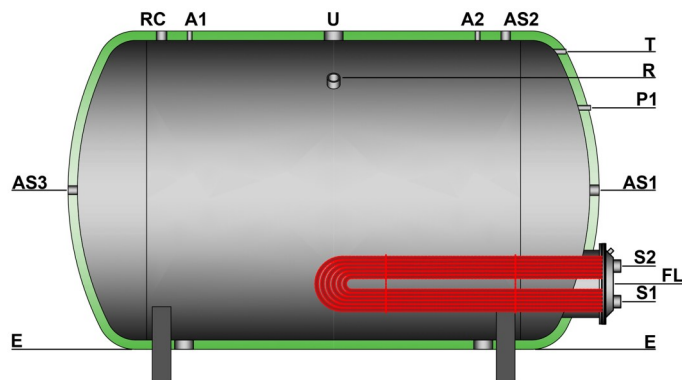
TUBE BUNDLE HEAT EXCHANGERS PERFORMANCES

Heat exchanger heating surface area	m²	4,00	5,00	6,00	8,00	10,00
HEX output (Prim. 80/70°C - Sec. 10/45°C)	kW	144	180	215	287	359
DHW continuous flow 10/45°C	L/h	3529	4411	5293	7057	8821

EMPTY WEIGHTS

Empty weight	kg	320	385	465	610	725
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Note: All the measurements of the connections are considered "from the ground". The thread are female GAS type, unless otherwise specified.
The tanks higher than 2200mm are packaged horizontally.



GENERAL CHARACTERISTICS - HORIZONTAL VERSION

		Capacity - L	200	300	500	800	1000	1500
DIMENSIONS								
Diameter without insulation	mm		450	550	650	800	800	950
Diameter with insulation	mm		550	650	750	1000	1000	1150
Overall height	mm		656	755	855	1091	1091	1254
Overturning height with without insulation	mm		1469	1519	1819	2049	2299	2559
CONNECTIONS								
E Cold water supply	mm Ø		106 1 1/2"	105 1 1/2"	105 1 1/2"	121 2"	121 2"	154 2 1/2"
U DHW return	mm Ø		656 1 1/2"	755 1 1/2"	855 1 1/2"	1091 2"	1091 2"	1254 2 1/2"
RC Recirculation	mm Ø		656 1 1/2"	755 1 1/2"	855 1 1/2"	1091 1 1/4"	1091 1 1/4"	1254 1 1/2"
R Immersion electric heater	mm Ø		575 2"	660 2"	745 2"	945 2"	945 2"	1085 2"
P1 Sensor	mm Ø		486 1/2"	548 1/2"	609 1/2"	831 1/2"	831 1/2"	904 1/2"
T Thermometer	mm Ø		576 1/2"	655 1/2"	727 1/2"	931 1/2"	931 1/2"	1054 1/2"
A1 Anode	mm Ø		656 1/2"	755 1/2"	855 1/2"	1091 1/2"	1091 1/2"	1254 1/2"
A2 Anode	mm Ø		—	—	—	—	—	1254 1/2"
AS1 Spare	mm Ø		—	—	—	591 1 1/2"	591 1 1/2"	679 1 1/2"
AS2 Spare	mm Ø		656 1 1/4"	755 1 1/4"	855 1 1/4"	1091 1 1/4"	1091 1 1/4"	1254 1 1/4"
AS3 Spare	mm Ø		381 1 1/4"	430 1 1/4"	480 1 1/4"	591 1 1/4"	591 1 1/4"	679 1 1/4"
FL Heat exchanger manhole	mm Ø		296 220×300	300 220×300	280 220×300	351 300×380	351 300×380	404 300×380
S1 Heat exchanger return	mm Ø		236 1"	242 1"	221 1"	276 2"	276 2"	329 2"
S2 Heat exchanger supply	mm Ø		356 1"	359 1"	338 1"	426 2"	426 2"	479 2"

TUBE BUNDLE HEAT EXCHANGER PERFORMANCES

Heat exchanger heating surface area	m²	0,50	0,75	1,00	1,50	2,00	3,00
HEX output (Prim. 80/70°C - Sec. 10/45°C)	kW	18	27	36	54	72	108
DHW continuous flow 10/45°C	L/h	441	662	882	1323	1764	2646

EMPTY WEIGHTS

Empty weight	kg	75	85	120	165	185	245
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		Capacity - L	2000	2500	3000	4000	5000
DIMENSIONS							
Diameter without insulation	mm		1100	1200	1250	1400	1600
Diameter with insulation	mm		1300	1300	1350	1500	1700
Overall height	mm		1395	1493	1540	1680	1872
Overall length	mm		2587	2590	2804	2907	2947

CONNECTIONS

E Cold water supply	mm Ø		145 2 1/2"	193 3"	190 3"	180 3"	172 3"
U DHW return	mm Ø		1395 2 1/2"	1493 3"	1540 3"	1680 3"	1872 3"
RC Recirculation	mm Ø		1395 1 1/2"	1493 1 1/2"	1540 1 1/2"	1680 1 1/2"	1872 3"
R Immersion electric heater	mm Ø		1204 2"	1303 2"	1342 2"	1459 2"	1619 2"
P1 Sensor	mm Ø		1135 1/2"	1243 1/2"	1190 1/2"	1279 1/2"	1462 1/2"
T Thermometer	mm Ø		1235 1/2"	1343 1/2"	1390 1/2"	1569 1/2"	1762 1/2"
A1 Anode	mm Ø		1395 1/2"	1493 1/2"	1540 1/2"	1680 1/2"	1872 1/2"
A2 Anode	mm Ø		1395 1/2"	1493 1/2"	1540 1/2"	1680 1/2"	1872 1/2"
AS1 Spare	mm Ø		745 1 1/2"	843 1 1/2"	865 1 1/2"	929 1 1/2"	1022 1 1/2"
AS2 Spare	mm Ø		1395 1 1/4"	1493 1 1/4"	1540 1 1/4"	1680 1 1/4"	1872 1 1/4"
AS3 Spare	mm Ø		745 1 1/4"	843 1 1/4"	865 1 1/4"	929 1 1/4"	1022 1 1/4"
FL Heat exchanger manhole	mm Ø		445 300×380	493 300×380	491 300×380	529 350×430	522 350×430
S1 Heat exchanger return	mm Ø		370 2"	418 2"	416 2"	429 2"	422 2"
S2 Heat exchanger supply	mm Ø		520 2"	568 2"	566 2"	629 2"	622 2"

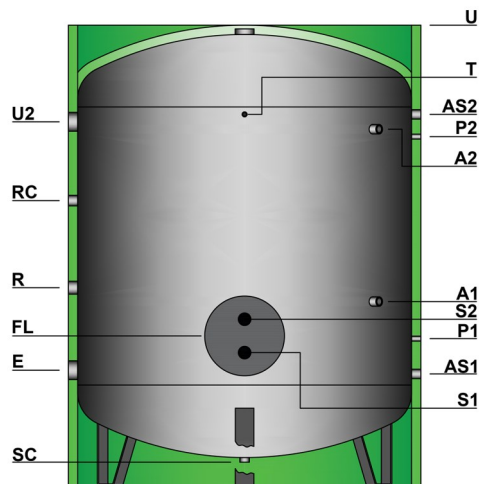
TUBE BUNDLE HEAT EXCHANGER PERFORMANCES

Heat exchanger heating surface area	m²	4,00	5,00	6,00	8,00	10,00
HEX output (Prim. 80/70°C - Sec. 10/45°C)	kW	144	180	215	287	359
DHW continuous flow 10/45°C	L/h	3529	4411	5293	7057	8821

EMPTY WEIGHTS

Empty weight	kg	320	385	465	610	725
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Note: All the measurements of the connections are considered "from the ground". The thread are female GAS type, unless otherwise specified.
The tanks higher than 2200mm are packaged horizontally.


GENERAL CHARACTERISTICS - VERTICAL-LOW VERSION

	Capacity	1500	2000	2500	3000	4000	5000
DIMENSIONS							
Diameter without insulation	mm	1100	1250	1400	1400	1600	1800
Diameter with insulation	mm	1300	1450	1500	1500	1700	1900
Overall height	mm	2015	2039	2119	2369	2460	2483
Overturning height with without insulation	mm	2237 2019	2310 2059	2410 2147	2632 2392	2781 2490	2874 2523

CONNECTIONS

E	Cold water supply	mm Ø	485 2"½	504 2"½	559 3"	559 3"	620 3"	622 3"
U	DHW return	mm Ø	2015 2"½	2039 2"½	2119 3"	2369 3"	2460 3"	2483 3"
U2	Additional DWH return	mm Ø	—	—	1649 3"	1899 3"	1960 3"	1962 3"
RC	Recirculation	mm Ø	1235 1"½	1254 1"½	1309 1"½	1474 1"½	1535 1"½	1537 1"½
R	Immersion electric heater	mm Ø	865 2"	884 2"	939 2"	1004 2"	1065 2"	1067 2"
P1	Sensor	mm Ø	655 ½"	674 ½"	729 ½"	729 ½"	790 ½"	792 ½"
P2	Sensor	mm Ø	1595 ½"	1564 ½"	1669 ½"	1819 ½"	1880 ½"	1882 ½"
T	Thermometer	mm Ø	1595 ½"	1564 ½"	1669 ½"	1939 ½"	2000 ½"	2002 ½"
A1	Anode	mm Ø	870 ½"	864 ½"	944 ½"	929 ½"	990 ½"	992 ½"
A2	Anode	mm Ø	1535 ½"	1504 ½"	1609 ½"	1859 ½"	1920 ½"	1922 ½"
AS1	Spare	mm Ø	465 1"¼	484 1"¼	539 1"¼	539 1"¼	600 1"¼	602 1"¼
AS2	Spare	mm Ø	1265 1"¼	1284 1"¼	1339 1"¼	1939 1"¼	2000 1"¼	2002 1"¼
FL	Heat exchanger manhole	mm Ø	655 300×380	674 300×380	729 300×380	729 300×380	790 350×430	792 350×430
S1	Heat exchanger return	mm Ø	580 2"	599 2"	654 2"	654 2"	691 2"	693 2"
S2	Heat exchanger supply	mm Ø	730 2"	749 2"	804 2"	804 2"	891 2"	893 2"
SC	Drain	mm Ø	123 1"¼	106 1"¼	114 1"¼	114 1"¼	145 1"¼	126 1"¼

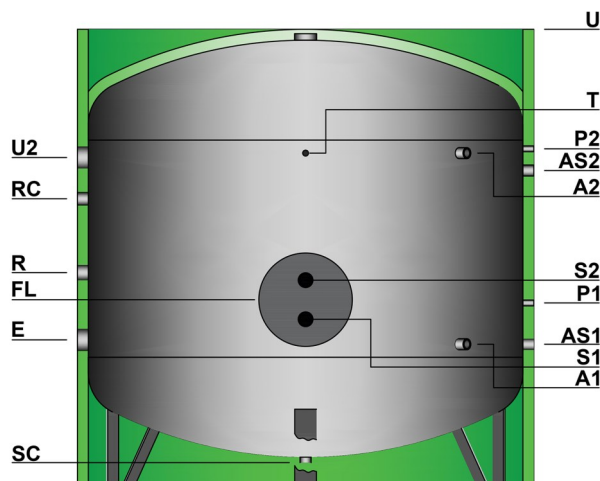
TUBE BUNDLE HEAT EXCHANGER PERFORMANCES

Heat exchanger heating surface area	m²	3,00	4,00	5,00	6,00	8,00	10,00
HEX output (Prim. 80/70°C - Sec. 10/45°C)	kW	108	144	180	215	287	359
DHW continuous flow 10/45°C	L/h	2646	3529	4411	5293	7057	8821

EMPTY WEIGHTS

Empty weight	kg	260	335	440	480	585	750
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Note: All the measurements of the connections are considered "from the ground". The thread are female GAS type, unless otherwise specified.
The tanks higher than 2200mm are packaged horizontally.



GENERAL CHARACTERISTICS - VERTICAL EXTRA-LOW VERSION

		Capacity - L	3000	4000	5000
DIMENSIONS					
Diameter without insulation	mm		1500	1700	2000
Diameter with insulation	mm		1600	1800	2100
Overall height	mm		2130	2190	2100
Overturning height with without insulation	mm		2452 2161	2579 2230	2628 2160

CONNECTIONS

E	Cold water supply	mm Ø	560 3"	590 3"	670 3"
U	DHW return	mm Ø	2130 3"	2190 3"	2100 3"
U2	DHW additional return	mm Ø	1650 3"	1680 3"	1510 3"
RC	Recirculation	mm Ø	1340 1"½	1370 1"½	1320 1"½
R	Immersion electric heater	mm Ø	1030 2"	1060 2"	980 2"
P1	Sensor	mm Ø	730 ½"	760 ½"	840 ½"
P2	Sensor	mm Ø	1670 ½"	1700 ½"	1530 ½"
T	Thermometer	mm Ø	1670 ½"	1700 ½"	1530 ½"
A1	Anode	mm Ø	540 ½"	570 ½"	650 ½"
A2	Anode	mm Ø	1590 ½"	1620 ½"	1530 ½"
AS1	Spare	mm Ø	540 1"¼	570 1"¼	650 1"¼
AS2	Spare	mm Ø	1340 1"¼	1370 1"¼	1450 1"¼
FL	Heat exchanger manhole	mm Ø	730 350×430	760 350×430	840 350×430
S1	Heat exchanger return	mm Ø	655 2"	661 2"	741 2"
S2	Heat exchanger supply	mm Ø	805 2"	861 2"	941 2"
SC	Drain	mm Ø	105 1"¼	105 1"¼	105 1"¼

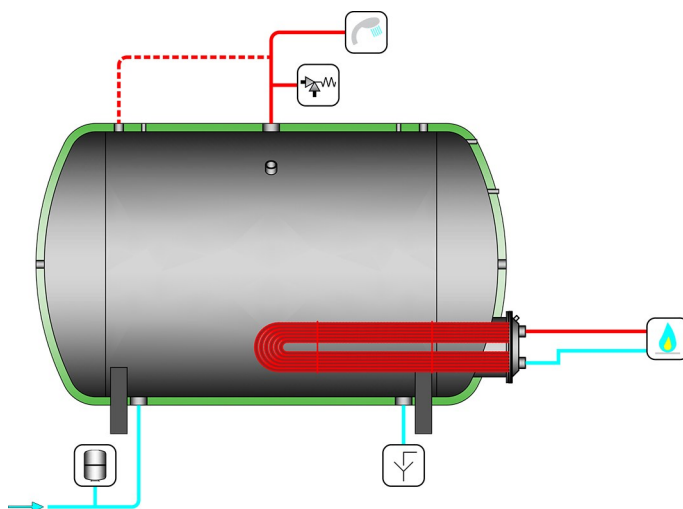
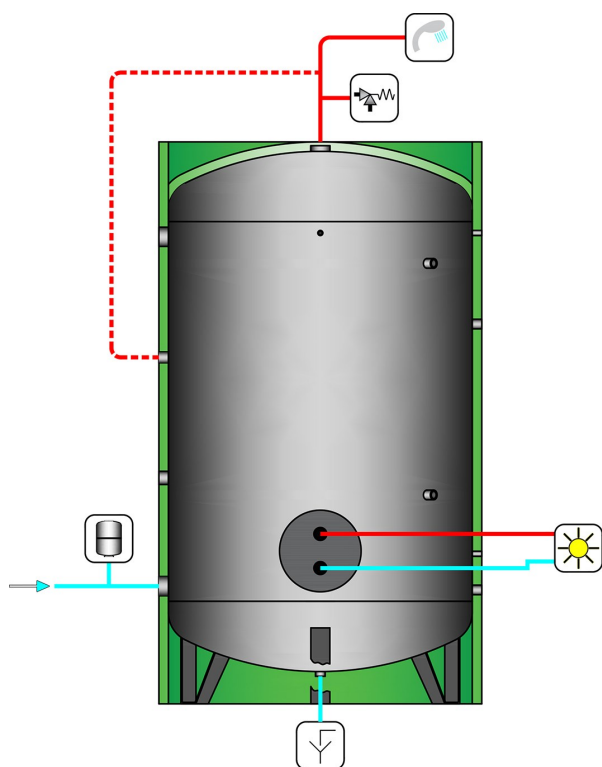
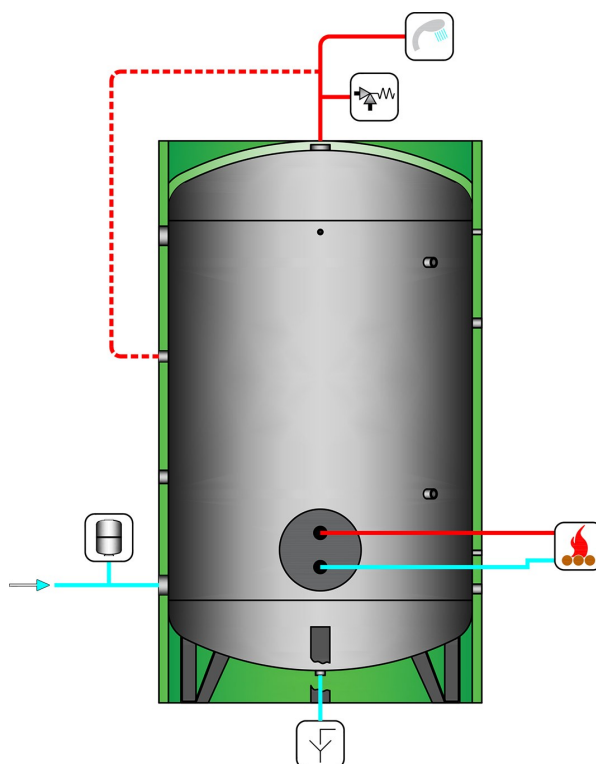
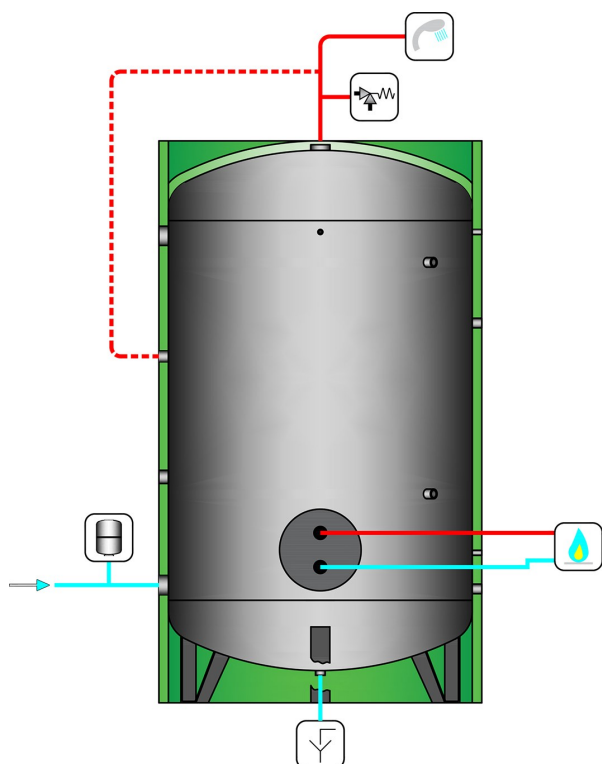
PERFORMANCES

TUBE BUNDLE HEAT EXCHANGER SURFACE AREA	m²	6,00	8,00	10,00
HEX output (Prim. 80/70°C - Sec. 10/45°C)	kW	215	287	359
DHW continuous flow 10/45°C	L/h	5293	7057	8821

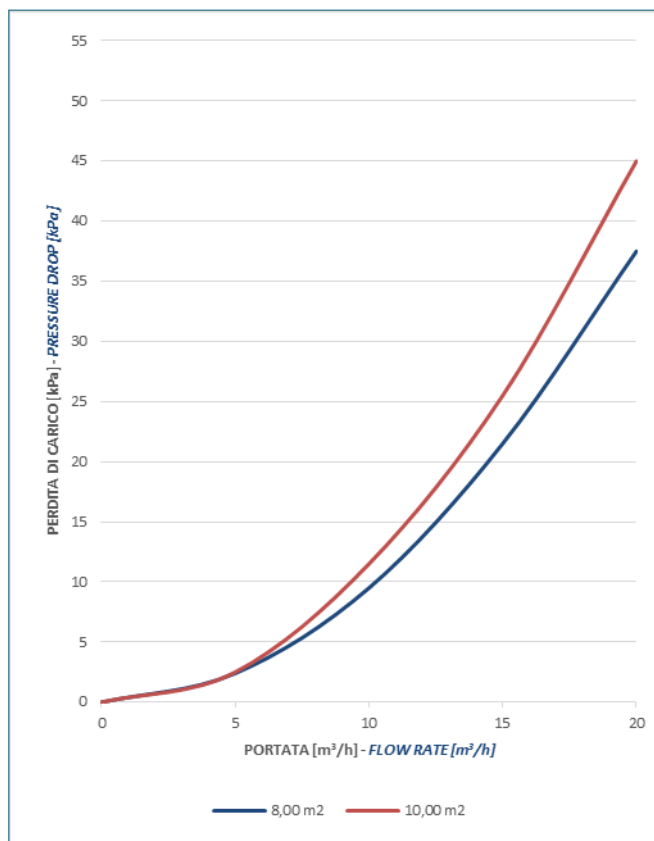
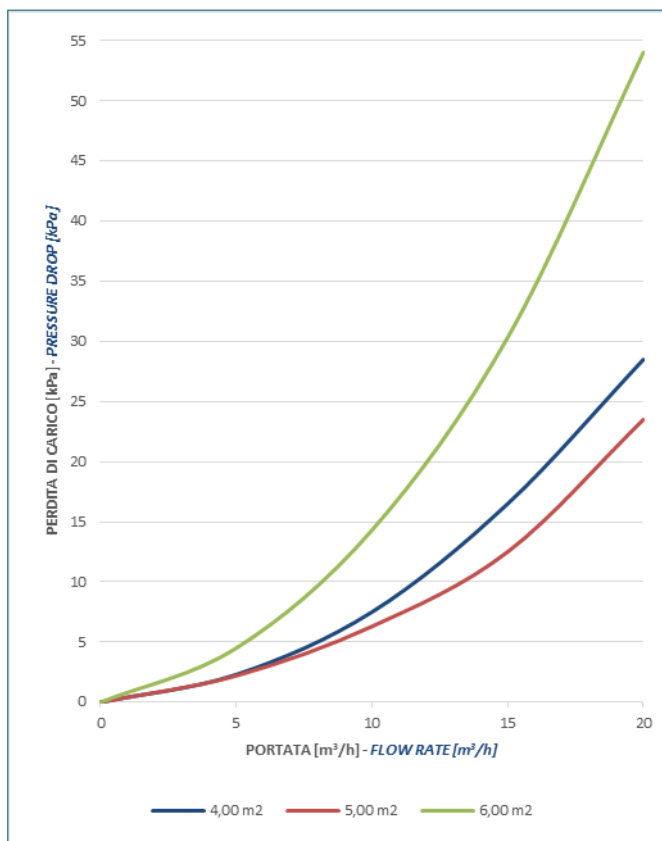
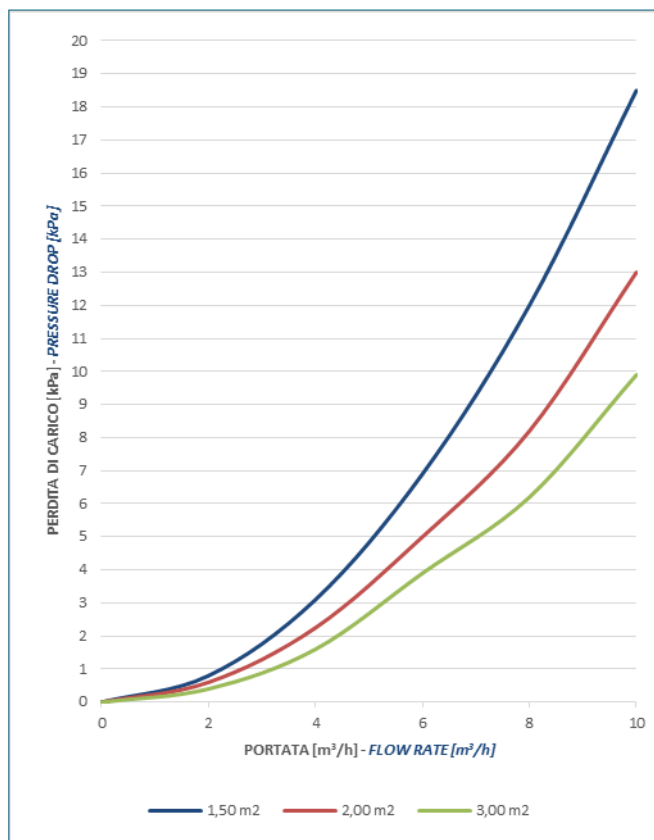
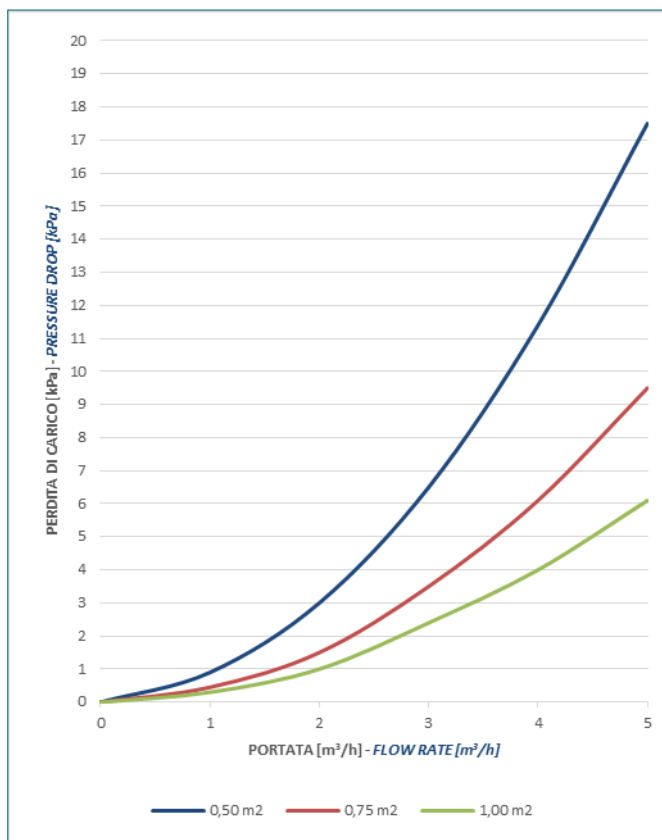
EMPTY WEIGHTS

Empty weight	kg	480	630	740
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Note: All the measurements of the connections are considered "from the ground". The thread are female GAS type, unless otherwise specified.
The tanks higher than 2200mm are packaged horizontally.



HEAT EXCHANGER PRESSURE DROP



TUBE BUNDLE HEAT EXCHANGER OUTPUT

Primary (80-70)°C | Secondary (10-45)°C

Storage Volume	Heating surface area	Capacity	Primary flow	SECONDARY (DHW)		
				Continuous production	Production first 10'	Production first 60'
				L/h	L	L
200	0,50	18	1544	441	274	641
300	0,75	27	2316	662	410	962
500	1,00	36	3088	882	647	1382
800	1,50	54	4631	1323	1021	2123
1000	2,00	72	6175	1764	1294	2764
1500	3,00	108	9263	2646	1941	4146
2000	4,00	144	12350	3529	2588	5529
2500	5,00	180	15438	4411	3235	6911
3000	6,00	215	18525	5293	3882	8293
4000	8,00	287	24700	7057	5176	11057
5000	10,00	359	30875	8821	6470	13821

Primary (70-60)°C | Secondary (10-45)°C

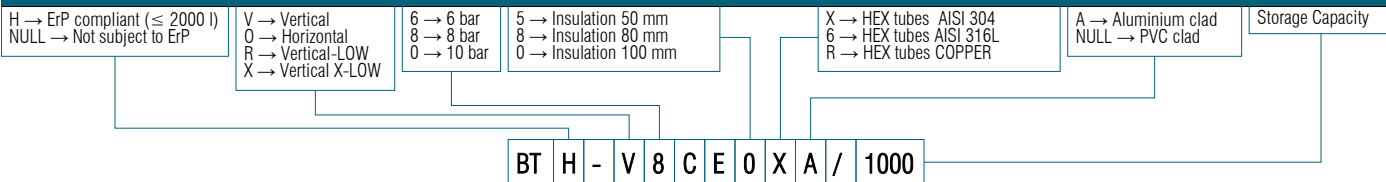
Storage Volume	Heating surface area	Capacity	Primary flow	SECONDARY (DHW)		
				Continuous production	Production first 10'	Production first 60'
				L/h	L	L
200	0,50	13	1125	321	254	521
300	0,75	20	1688	482	380	782
500	1,00	26	2250	643	607	1143
800	1,50	39	3375	964	961	1764
1000	2,00	52	4500	1286	1214	2286
1500	3,00	78	6750	1929	1821	3429
2000	4,00	105	9000	2571	2429	4571
2500	5,00	131	11250	3214	3036	5714
3000	6,00	157	13500	3857	3643	6857
4000	8,00	209	18000	5143	4857	9143
5000	10,00	262	22500	6429	6071	11429

Primary (60-50)°C | Secondary (10-45)°C

Storage Volume	Heating surface area	Capacity	Primary flow	SECONDARY (DHW)		
				Continuous production	Production first 10'	Production first 60'
				L/h	L	L
200	0,50	9	756	216	236	416
300	0,75	13	1134	324	354	624
500	1,00	18	1513	432	572	932
800	1,50	26	2269	648	908	1448
1000	2,00	35	3025	864	1144	1864
1500	3,00	53	4538	1296	1716	2796
2000	4,00	70	6050	1729	2288	3729
2500	5,00	88	7563	2161	2860	4661
3000	6,00	106	9075	2593	3432	5593
4000	8,00	141	12100	3457	4576	7457
5000	10,00	176	15125	4321	5720	9321

ENAMELLED STEEL DHW CALORIFIER EQUIPPED WITH ONE REMOVABLE TUBE BUNDLE HEAT EXCHANGER

HOW TO ORDER



ACCESSORIES & SPARE PARTS

ITEM

PART NO.

THERMOMETER Ø65 mm L=150 mm (0÷120)°C	TERMOMETRO-D65_L
THERMOMETER Ø100 mm L=150 mm (0÷120)°C	TERMOMETRO-D100
SENSOR SOCKET Ø½" L=150 mm Ø _{int} 10 mm	POZZETTO_L
THERMOSTAT Ø½" (0÷90)°C	TERMOSTATO
ELECTRONIC ANODE KIT 200÷500 L	ANODE012X380_P
ELECTRONIC ANODE KIT 800-1000 L	ANODE012X430_P
ELECTRONIC ANODE KIT 1500÷5000 L	ANODE012X430X2_P



THERMOMETER



SENSOR SOCKET



THERMOSTAT



ELECTRONIC ANODE

1-3 PHASE IMMERSION ELECTRIC HEATER - STAINLESS STEEL 316I / INCOLOY TUBES

Threaded plug 2" | Aluminium box IP55 | V230/400

Capacity	Capacity/L matching	Lenght	1-THERMOSTAT Temperature regulation only	2-THERMOSTAT Temp. regulation & overheating protection
Watt	L	mm	PART NO.	PART NO.
2000	200 ÷ 5000	280	RES020-200-L280-6-M	RES020-200-L280-6-B
3000	200 ÷ 5000	380	RES030-200-L380-6-M	RES030-200-L380-6-B
5000	200 ÷ 5000	500	RES050-200-L500-6-M	RES050-200-L500-6-B
6000	300 ÷ 5000	600	RES060-200-L600-6-M	RES060-200-L600-6-B
9000	500 ÷ 5000	680	RES090-200-L680-I-M	RES090-200-L680-I-B
10000	500 ÷ 5000	680	RES100-200-L680-I-M	RES100-200-L680-I-B
12000	800 ÷ 5000	820	RES120-200-L820-I-M	RES120-200-L820-I-B



PRIMARY CHEST AND SEALING GASKETS

Diameter Internal×External mm	Capacity L	Primary chest made of galvanized steel PART NO.	EPDM gasket without cross bar PART NO.	EPDM gasket with cross bar PART NO.
220×300	200 ÷ 500	TESTA300X220X5-Z	GUGOMEPPDM300X220ST	GUGOMEPPDM300X220CT
300×380	800 ÷ 3000	TESTA380X300X5-Z	GUGOMEPPDM380X300ST	GUGOMEPPDM380X300CT
350×430	4000-5000	TESTA430X350X5-Z	GUGOMEPPDM430X350ST	GUGOMEPPDM430X350CT

TUBE BUNDLE HEAT EXCHANGERS

Heating surface area m²	Dimensions D L mm mm	Stainless Steel AISI 304 tubes & CERAMFLON enamelled steel plate Part no.	Stainless Steel AISI 316L tubes & CERAMFLON enamelled steel plate Part no.	COPPER tubes & CERAMFLON enamelled steel plate Part no.
0,50	300 445	SFX4005D300-S	SFX6005D300-S	SFRA005D300-S
0,75	300 445	SFX4007D300-S	SFX6007D300-S	SFRA007D300-S
1,00	300 473	SFX4010D300-S	SFX6010D300-S	SFRA010D300-S
1,50	380 594	SFX4015D380-S	SFX6015D380-S	SFRA015D380-S
2,00	380 594	SFX4020D380-S	SFX6020D380-S	SFRA020D380-S
3,00	380 718	SFX4030D380-S	SFX6030D380-S	SFRA030D380-S
4,00	380 850	SFX4040D380-S	SFX6040D380-S	SFRA040D380-S
5,00	380 1050	SFX4050D380-S	SFX6050D380-S	SFRA050D380-S
6,00	380 1250	SFX4060D380-S	SFX6060D380-S	SFRA060D380-S
8,00	430 1250	SFX4080D430-S	SFX6080D430-S	SFRA080D430-S
10,00	430 1510	SFX4100D430-S	SFX6100D430-S	SFRA100D430-S



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PROTECTIVE TREATMENTS FOR CARBON STEEL TANKS

CERAMFLON enamelling

The "CERAMFLON" anti-corrosion treatment is an innovative system for the protection of the metallic walls which has been introduced by the recent developments in the studies on resins, guaranteeing hygiene and many other qualities:

- it is inert and insensitive corrosion thanks to its considerable resistance to ageing;
- it is water-repellent and impermeable to steam and moisture;
- it has a practically zero absorption of humidity and the stability is maintained both at high and low temperatures, so they can withstand even very high thermal excursions;
- it has a high impact resistance and a very low friction coefficient, which avoids large and hazardous adherence phenomena which, in the majority of cases, can be attributed to limescale;
- it has a low dielectric constant which is maintained at variations in operating temperatures.

The application of the resins using triboelectric guns, carried out after careful cleaning of the support, is consolidated on the product after baking in an oven at 200°C

CATHODIC PROTECTION

The corrosion of a metal structure occurs mainly in areas in which there is the passage of current (oxidation-reduction process) from the structure towards the outside (water or gas) causing a dissolution of the structure itself.

Cathodic protection by means of magnesium anodes.

The application of sacrificial magnesium anodes is a simple and economic method to obtain a cathodic protection. The sacrificial anode creates a situation similar to an electric battery, where the electrodes are represented by the anode and the metal structure to be protected.

Since the magnesium has a dissolution voltage which is much higher than that of other metals, the corrosion will only affect the anode, which will dissolve slowly, to the advantage of the metal structure to be protected.

Given the importance of the protection of the metal against corrosion, the wear of the anode is systematically controlled and it is immediately replaced if consumed.



Cathodic protection by means of electronic impressed current system.

As an alternative to the galvanic system (coupling of materials with different potentials) there is a protection method which consists in applying an equal and opposite continuous current to the metallic structure to be protected, neutralising the voltages formed inside the tank.

Thanks to the modern techniques there is an innovative electronic system of cathodic protection with continuous impressed current.

The main advantages are:

- active protection by means of impressed currents from the outside;
- excellent flexibility of operation in order to adhere to the changeable internal coating conditions and the mass of water;
- reduction of maintenance costs due to the permanent protection of the system.



INSULATION

Insulating material	Removable	Thickness	Density	Thermal conductivity coefficient at 45°C	Operating temperature	Fire reaction class Euroclass EN13501-1
PLF Polyester fibre	✓	50 mm	20 kg/m ³	$\lambda = 0,037 \text{ W/mK}$	Amb. / +99°C	B-s2, d0
PLFH High Density Polyester fibre	✓	100 mm	25 kg/m ³	$\lambda = 0,034 \text{ W/mK}$	Amb. / +99°C	B-s2, d0
Hard foam Polyurethane	✗	80 mm	40 ÷ 42 kg/m ³	$\lambda = 0,019 \text{ W/mK}$	-10°C / +99°C	F

PLFH / PLF – Polyester fibre

- 100% recyclable
- Environmental friendly
- Lightweight
- Self-supporting
- Fire-retardant
- Rot-proof
- Resistant to mould, bacteria or rodents
- Hypoallergenic
- Water repellent



The raw materials consist of polyester fibres and heat-bonded co-polyester fibres, coming mainly from the recycling of plastic bottles obtained from urban waste collection.

It does not contain substances harmful to humans, may be handled and installed in complete safety, does not release powder, is hypoallergenic and cannot be attacked by microorganisms, mould and insects.

PLFH/PLF is a heat insulating product considered environmentally sustainable, even though it is not of natural origin: it is in fact recyclable and the quantity of embodied energy necessary to obtain it is extremely low.

The composition of the polyester fibre makes it an insulating material with an extremely low heat dispersion and its characteristics remain unaltered over time as it is not affected by humidity and its compact, flexible and resistant original structure is not modified.

Thanks to its characteristics, PLFH/PLF is an insulating material with the highest performance characteristics, which allows the requirements set by the severest technical standards to be satisfied, guaranteeing the maximum environmental compatibility for its entire life cycle.

Hard foam Polyurethane

Thermal and anti-condensation insulation made of hard closed cell polyurethane foam (PU), free from CFC and HCFC.

It is available in various thickness and can be injected directly to the shell of the tank to prevent it from condensation and provide the lower thermal dispersion. For some sizes it is pre-formed into half-shells to ease the insulation removal in case the tank has to pass through narrow doors.

CLADDINGS



PVC

External cladding made of coloured PVC with hinge closing, suitable for installations in locations protected against adverse weather conditions. The standard colours of each product are indicated in their construction characteristics,

but different colours can be requested for each model as shown in the following table.

In the personalised TLR storage tanks the choice of the alternative colour is free of cost and does not incur any surcharge.

ITEM

PART NUMBER

PVC COVER YELLOW RAL1023	COVER-RAL1023
PVC COVER ORANGE RAL2004	COVER-RAL2004
PVC COVER RED RAL3000	COVER-RAL3000
PVC COVER BLUE RAL5015	COVER-RAL5015
PVC COVER WHITE RAL9016	COVER-RAL9016
PVC COVER LIGHT GREY RAL7035	COVER-RAL7035
PVC COVER DARK GREY RAL7024	COVER-RAL7024
PVC COVER BLACK RAL9004	COVER-RAL9004



ALUMINIUM

External cladding made of embossed aluminium sheeting suitable also for outdoor installations. The insulations made with this type of cladding consist of panels joined together by means of rivets and extruded aluminium slats with an exclusive design, specifically designed to facilitate assembly even directly at the installation site.

The coverings and flange covers made of same material securely anchored to the insulation guarantee the same levels of quality in terms of duration and outside appearance and do not risk being damaged by the wind and adverse weather conditions.

www.pacetti.it



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