dal 1968

Pacetti

SCAMBIATORI - BOLLITORI - SERBATOI

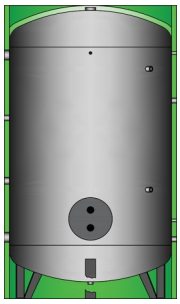
BTH-C - BT-C

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

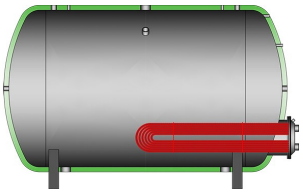
ENAMELLED STEEL DHW CALORIFIER EQUIPPED WITH ONE REMOVABLE TUBE BUNDLE HEAT EXCHANGER

Storage calorifiers made of enamelled steel with one removable tube bundle heat exchanger for 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 height and vertical extra-low height versions to allow them to be installed in rooms where the available height is not sufficient for the standard design.
The tube bundle heat exchangers, made of Stainless Steel AISI 304 or Stainless Steel AISI 316L.
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.

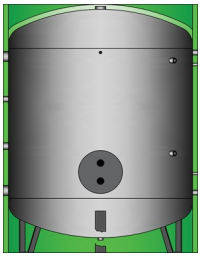
CONSTRUCTION



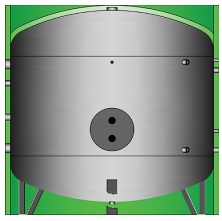
BTH-C | BT-C



BTH-OC | BT-OC



BTH-RC | BT-RC



BT-XC

	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)*	• Stainless steel AISI 304 • Stainless steel AISI 316L *(on request)*	• Stainless steel AISI 304 • Stainless steel AISI 316L *(on request)*	• Stainless steel AISI 304 • Stainless steel AISI 316L *(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

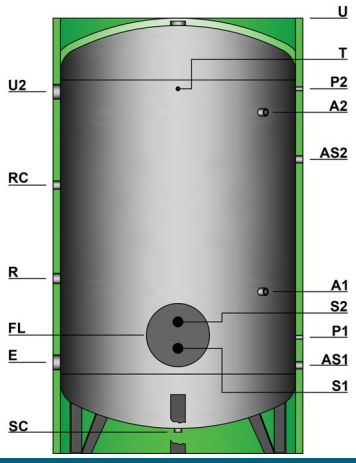
REGULATORY COMPLIANCE

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

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



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"½	369 | 1"½	384 | 1"½	420 | 2"	420 | 2"	465 | 2"½
U DHW return	mm | Ø	1513 | 1"½	1554 | 1"½	1844 | 1"½	1950 | 2"	2200 | 2"	2510 | 2"½
U2 DHW additional return	mm | Ø	—	—	—	—	—	—
RC Recirculation	mm | Ø	1003 | 1"½	1019 | 1"½	1259 | 1"½	1370 | 1"½	1405 | 1"½	1580 | 1"½
R Immersion electric heater	mm | Ø	773 | 2"	789 | 2"	804 | 2"	1010 | 2"	1010 | 2"	1035 | 2"
P1 Sensor	mm | Ø	473 | ½"	489 | ½"	504 | ½"	610 | ½"	608 | ½"	635 | ½"
P2 Sensor	mm | Ø	1253 | ½"	1269 | ½"	1534 | ½"	1550 | ½"	1698 | ½"	2125 | ½"
T Thermometer	mm | Ø	1253 | ½"	1269 | ½"	1534 | ½"	1550 | ½"	1800 | ½"	2125 | ½"
A1 Anode	mm | Ø	853 | ½"	869 | ½"	884 | ½"	920 | ½"	608 | ½"	945 | ½"
A2 Anode	mm | Ø	—	—	—	—	—	1965 | ½"
AS1 Spare	mm | Ø	353 | 1"¼	369 | 1"¼	384 | 1"¼	420 | 1"¼	418 | 1"¼	445 | 1"¼
AS2 Spare	mm | Ø	1153 | 1"¼	1169 | 1"¼	1184 | 1"¼	1220 | 1"¼	1818 | 1"¼	1845 | 1"¼
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"¼	109 | 1"¼	99 | 1"¼	95 | 1"¼	95 | 1"¼	135 | 1"¼
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

	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"½	530 | 3"	525 | 3"	559 | 3"	620 | 3"
U DHW return	mm | Ø	2535 | 2"½	2590 | 3"	2790 | 3"	2869 | 3"	2960 | 3"
U2 DHW additional return	mm | Ø	—	—	—	2399 | 3"	2460 | 3"
RC Recirculation	mm | Ø	1600 | 1"½	1645 | 1"½	1730 | 1"½	1764 | 1"½	1825 | 1"½
R Immersion electric heater	mm | Ø	1055 | 2"	1100 | 2"	1095 | 2"	1129 | 2"	1190 | 2"
P1 Sensor	mm | Ø	655 | ½"	700 | ½"	695 | ½"	729 | ½"	790 | ½"
P2 Sensor	mm | Ø	2095 | ½"	2190 | ½"	2385 | ½"	2419 | ½"	2480 | ½"
T Thermometer	mm | Ø	2095 | ½"	2190 | ½"	2385 | ½"	2419 | ½"	2480 | ½"
A1 Anode	mm | Ø	965 | ½"	1010 | ½"	1005 | ½"	1039 | ½"	1100 | ½"
A2 Anode	mm | Ø	1935 | ½"	2030 | ½"	2225 | ½"	2259 | ½"	2320 | ½"
AS1 Spare	mm | Ø	465 | 1"¼	510 | 1"¼	505 | 1"¼	539 | 1"¼	600 | 1"¼
AS2 Spare	mm | Ø	1865 | 1"¼	1910 | 1"¼	1905 | 1"¼	1939 | 1"¼	2000 | 1"¼
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"¼	135 | 1"¼	125 | 1"¼	114 | 1"¼	145 | 1"¼
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

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.

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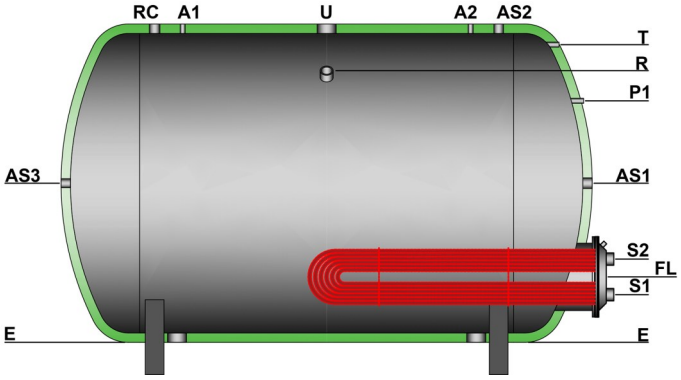


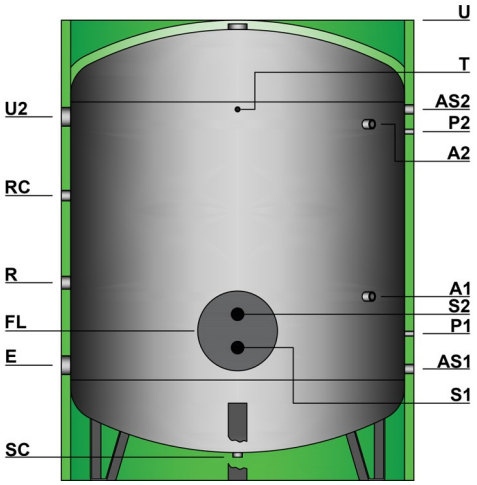
GENERAL CHARACTERISTICS - HORIZONTAL VERSION

	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"½	105 | 1"½	105 | 1"½	121 | 2"	121 | 2"	154 | 2"½
U	DHW return	mm | Ø	656 | 1"½	755 | 1"½	855 | 1"½	1091 | 2"	1091 | 2"	1254 | 2"½
RC	Recirculation	mm | Ø	656 | 1"½	755 | 1"½	855 | 1"½	1091 | 1"½	1091 | 1"¼	1254 | 1"½
R	Immersion electric heater	mm | Ø	575 | 2"	660 | 2"	745 | 2"	945 | 2"	945 | 2"	1085 | 2"
P1	Sensor	mm | Ø	486 | ½"	548 | ½"	609 | ½"	831 | ½"	831 | ½"	904 | ½"
T	Thermometer	mm | Ø	576 | ½"	655 | ½"	727 | ½"	931 | ½"	931 | ½"	1054 | ½"
A1	Anode	mm | Ø	656 | ½"	755 | ½"	855 | ½"	1091 | ½"	1091 | ½"	1254 | ½"
A2	Anode	mm | Ø	—	—	—	—	—	1254 | ½"
AS1	Spare	mm | Ø	—	—	—	591 | 1"½	591 | 1"½	679 | 1"½
AS2	Spare	mm | Ø	656 | 1"¼	755 | 1"¼	855 | 1"¼	1091 | 1"¼	1091 | 1"¼	1254 | 1"¼
AS3	Spare	mm | Ø	381 | 1"¼	430 | 1"¼	480 | 1"¼	591 | 1"¼	591 | 1"¼	679 | 1"¼
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

	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 lenght		mm	2587	2590	2804	2907	2947
CONNECTIONS							
E	Cold water supply	mm | Ø	145 | 2"½	193 | 3"	190 | 3"	180 | 3"	172 | 3"
U	DHW return	mm | Ø	1395 | 2"½	1493 | 3"	1540 | 3"	1680 | 3"	1872 | 3"
RC	Recirculation	mm | Ø	1395 | 1"½	1493 | 1"½	1540 | 1"½	1680 | 1"½	1872 | 3"
R	Immersion electric heater	mm | Ø	1204 | 2"	1303 | 2"	1342 | 2"	1459 | 2"	1619 | 2"
P1	Sensor	mm | Ø	1135 | ½"	1243 | ½"	1190 | ½"	1279 | ½"	1462 | ½"
T	Thermometer	mm | Ø	1235 | ½"	1343 | ½"	1390 | ½"	1569 | ½"	1762 | ½"
A1	Anode	mm | Ø	1395 | ½"	1493 | ½"	1540 | ½"	1680 | ½"	1872 | ½"
A2	Anode	mm | Ø	1395 | ½"	1493 | ½"	1540 | ½"	1680 | ½"	1872 | ½"
AS1	Spare	mm | Ø	745 | 1"½	843 | 1"½	865 | 1"½	929 | 1"½	1022 | 1"½
AS2	Spare	mm | Ø	1395 | 1"¼	1493 | 1"¼	1540 | 1"¼	1680 | 1"¼	1872 | 1"¼
AS3	Spare	mm | Ø	745 | 1"¼	843 | 1"¼	865 | 1"¼	929 | 1"¼	1022 | 1"¼
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

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.

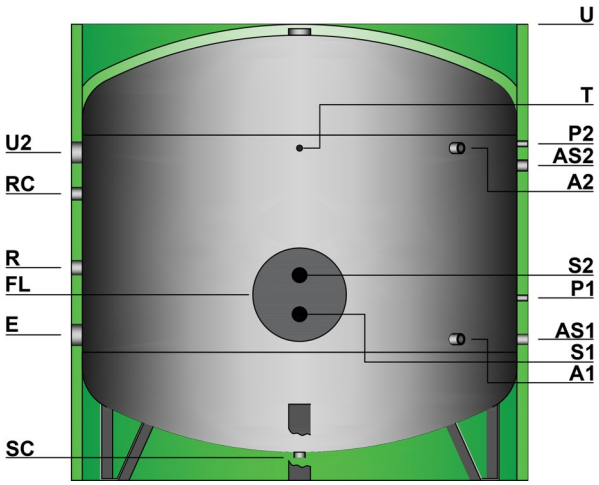
ENAMELLED STEEL DHW CALORIFIER EQUIPPED WITH ONE REMOVABLE TUBE BUNDLE HEAT EXCHANGER



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		m^2	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

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.

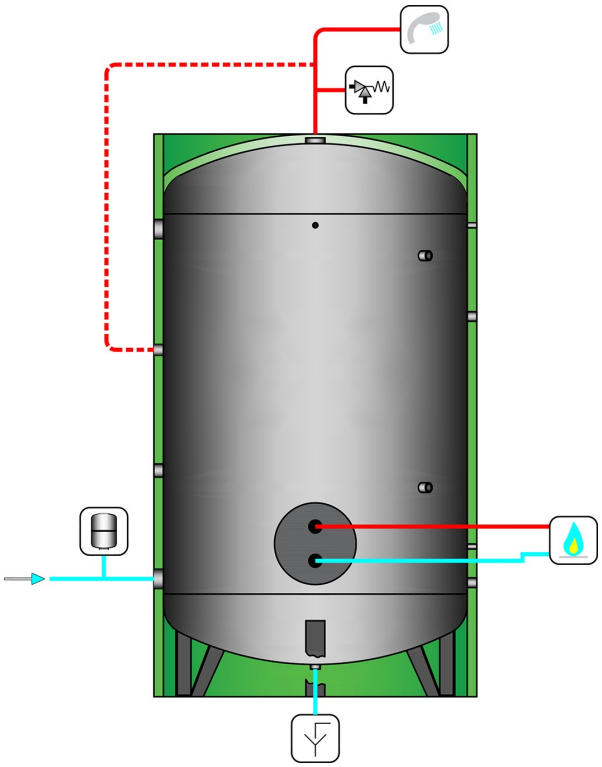


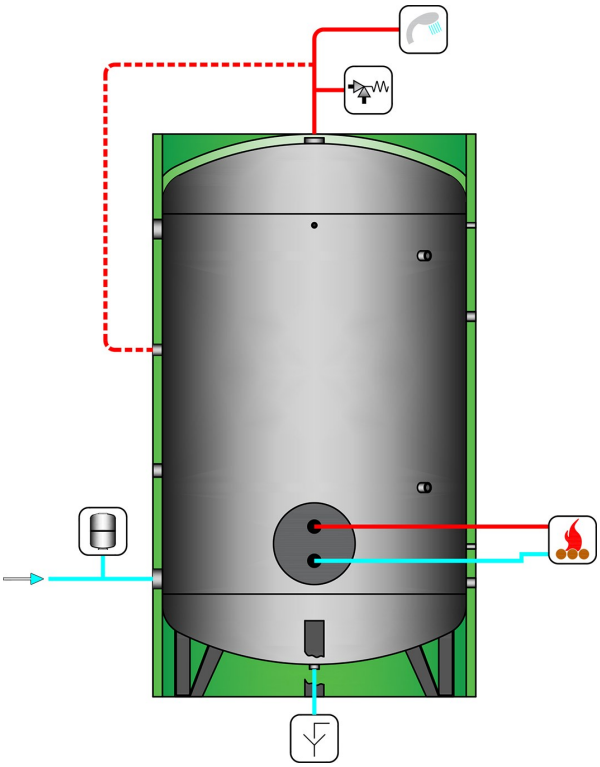
GENERAL CHARACTERISTICS - VERTICAL EXTRA-LOW VERSION

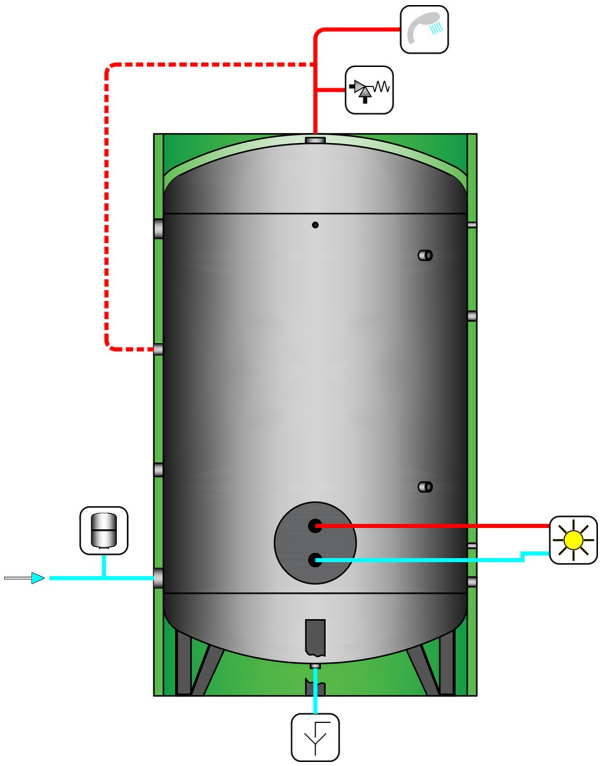
		Capacity - L	3000	4000	5000
DIMENSIONS					
Diameter without insulation		mm	1500	1700	2000
Diameter with insulation		mm	1600	1800	2100
Overall height		mm	2130	2190	2100
Overturning height with | without insulation		mm	2452 | 2161	2579 | 2230	2628 | 2160
CONNECTIONS					
E	Cold water supply	mm | Ø	560 | 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

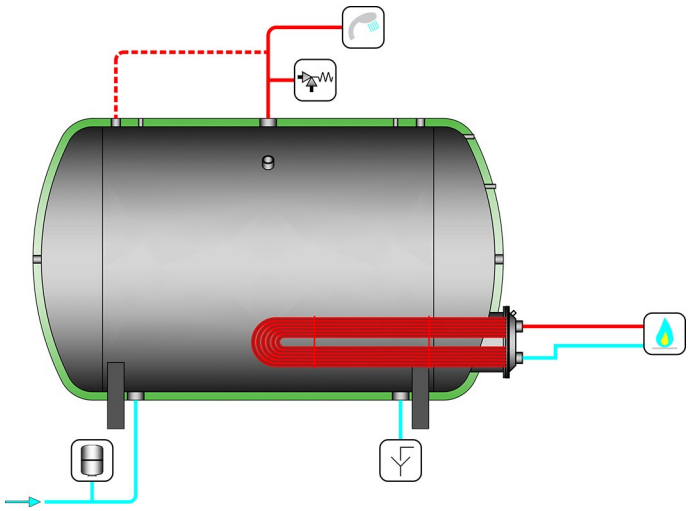
Note: All the measurements of the connections are considered "from the ground". The thread are female GAS type, unless otherwise specified.
The tanks higher than 2200mm are packaged horizontally.

INSTALLATION DIAGRAM EXAMPLES



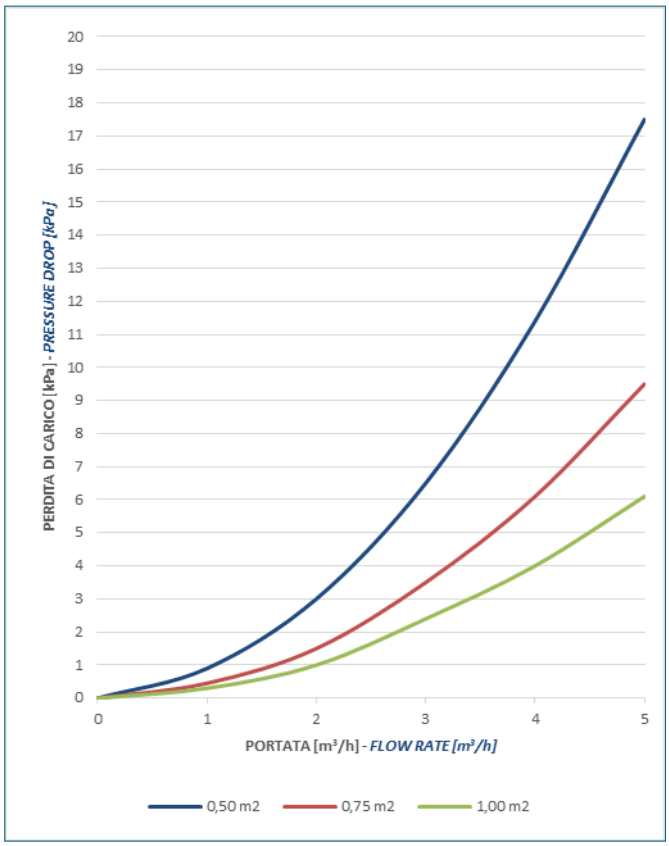


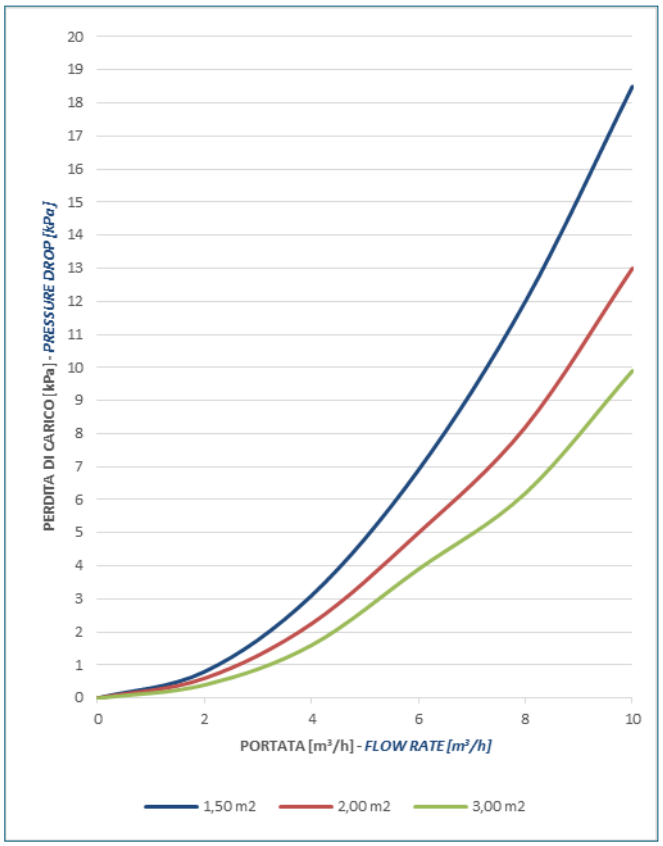


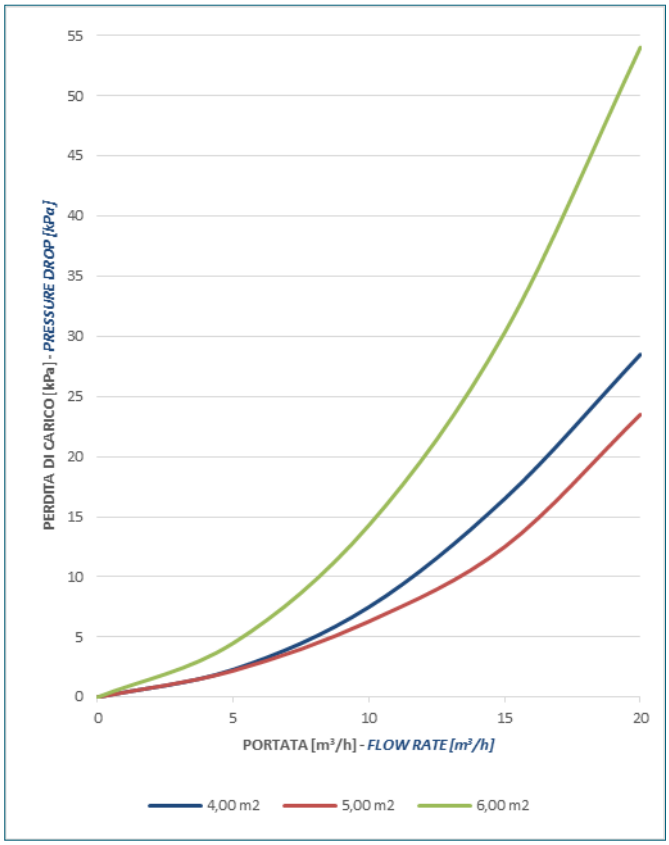


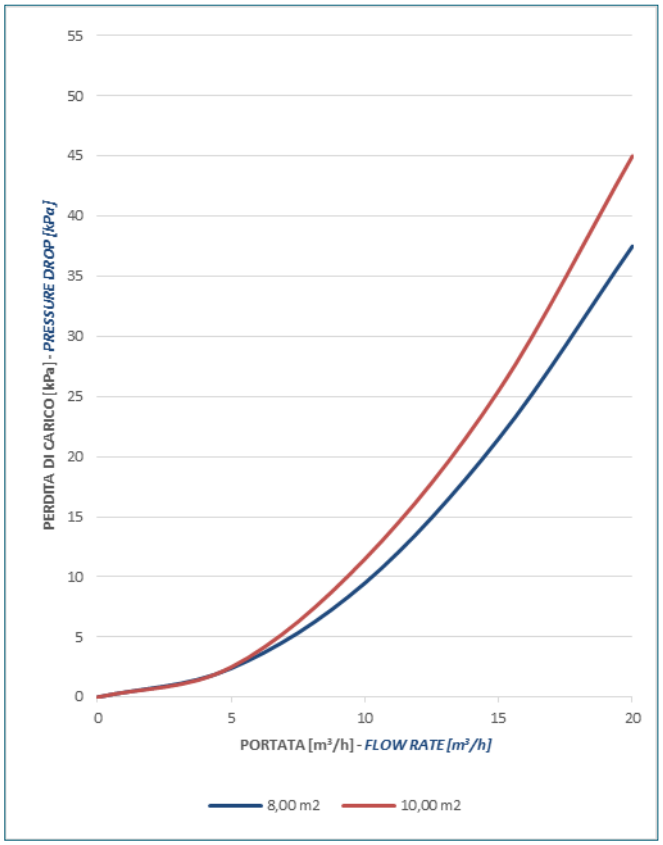
The proposed diagrams are purely indicative

HEAT EXCHANGER PRESSURE DROP









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

TUBE BUNDLE HEAT EXCHANGER OUTPUT

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

				SECONDARY (DHW)		
Storage Volume	Heating surface area	Capacity	Primary flow	Continuous production	Production first 10'	Production first 60'
L	*m²*	*kW*	*L/h*	*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

				SECONDARY (DHW)		
Storage Volume	Heating surface area	Capacity	Primary flow	Continuous production	Production first 10'	Production first 60'
L	*m²*	*kW*	*L/h*	*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

				SECONDARY (DHW)		
Storage Volume	Heating surface area	Capacity	Primary flow	Continuous production	Production first 10'	Production first 60'
L	*m²*	*kW*	*L/h*	*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

BT	H	-	V	8	C	E	0	X	A	/	1000

- H → ErP compliant (≤ 2000 l) / NULL → Not subject to ErP
- V → Vertical / O → Horizontal / R → Vertical-LOW / X → Vertical X-LOW
- 6 → 6 bar / 8 → 8 bar / 0 → 10 bar
- 5 → Insulation 50 mm / 8 → Insulation 80 mm / 0 → Insulation 100 mm
- X → HEX tubes AISI 304 / 6 → HEX tubes AISI 316L
- A → Aluminium clad / NULL → PVC clad
- Storage Capacity

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-PHASE & 3-PHASE IMMERSION ELECTRIC HEATER - STAINLESS STEEL 316L TUBES
Threaded plug 1.1/2" with brass adapter 1.1/2" to 2" | Aluminium box IP54 | V220/1-V240/1 or V400/3

Capacity	Capacity/L matching	Length	Volt	Plug type	2-THERMOSTAT Temperature regulation & overheating protection
Watt	*L*	*mm*	*mm*	*mm*	*PART NO.*
2000	200÷5000	310	220/1 240/1	SHUKO	*RES020-L310-6-M-BT*
3000	200÷5000	350			*RES030-L350-6-M-BT*
5000	200÷5000	375	400/3	Not supplied	*RES050-L375-6-T-BT*
6000	200÷5000	435			*RES060-L435-6-T-BT*
9000	500÷5000	610			*RES090-L610-6-T-BT*
10000	500÷5000	670			*RES100-L670-6-T-BT*
12000	800÷5000	730			*RES120-L727-6-T-BT*
15000	1500÷5000	870			*RES150-L870-6-T-BT*


1-PHASE


3-PHASE

PRIMARY CHEST AND SEALING GASKETS


Primary chest made of galvanized steel


EPDM gasket without cross bar


EPDM gasket with cross bar

Diameter *Internal×External*	Capacity	Primary chest made of galvanized steel	EPDM gasket without cross bar	EPDM gasket with cross bar
mm	*L*	*PART NO.*	*PART NO.*	*PART NO.*
220×300	200÷500	*TESTA300X220X5-Z*	*GUGOMEPDM300X220ST*	*GUGOMEPDM300X220CT*
300×380	800÷3000	*TESTA380X300X5-Z*	*GUGOMEPDM380X300ST*	*GUGOMEPDM380X300CT*
350×430	4000-5000	*TESTA430X350X5-Z*	*GUGOMEPDM430X350ST*	*GUGOMEPDM430X350CT*

TUBE BUNDLE HEAT EXCHANGERS

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

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ANTI-CORROSION PROTECTION STEEL TREATMENTS

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 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/m³	λ = 0,037 W/mK	Amb. / +99°C	B-s2, d0
PLFH High Density Polyester fibre	✓	100 mm	25 kg/m³	λ = 0,034 W/mK	Amb. / +99°C	B-s2, d0
Hard foam Polyurethane	✗	80 mm	40÷42 kg/m³	λ = 0,019 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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