

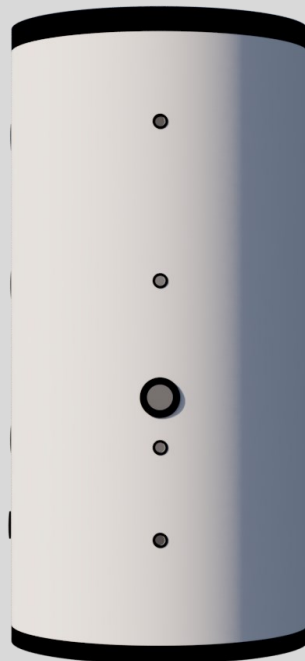
dal 1968



SCAMBIATORI - BOLLITORI - SERBATOI



TANKO MIX



BUFFER VESSEL FOR HOT AND COLD WATER STORAGE

Buffer vessels for hot and cold water storage, designed to increase the thermal inertia in heating and inverter air conditioning systems connected to heat pumps.

The dual-function insulation protects against heat loss and condensation, making this tank suitable for any purpose in both heating and cooling systems.

Minimum dispersions and reduced variations in the temperature of the water stored are guaranteed thanks to the insulation performance.

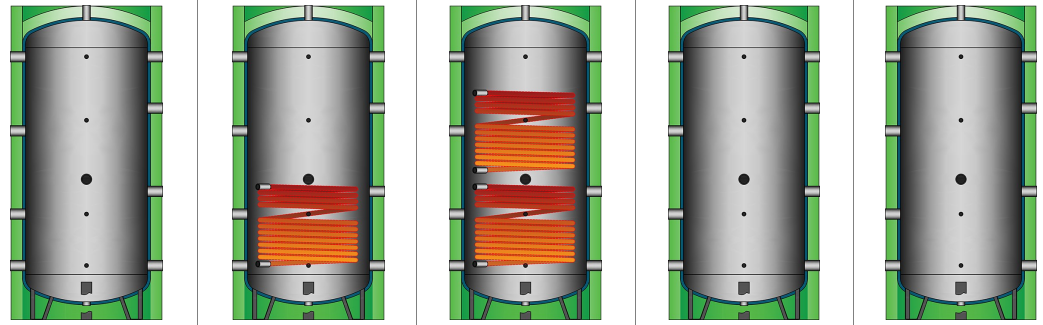
The compressor start-ups are also reduced, thus achieving the maximum efficiency and greater reliability of the heat pump.

TANKO-1 MIX and **TANKO-2 MIX** series are provided with built-in coils to be connected to one or two additional heating sources.

Available in raw carbon steel, galvanized steel or Stainless Steel 316L.

The outer cladding is made of PVC for indoor installation or Aluminium for indoor & outdoor installation.

CONSTRUCTION



	TANKO-G MIX	TANKO-1 MIX	TANKO-2 MIX	TANKO-Z MIX	TANKO-X MIX
TANK MATERIAL	Carbon steel	Carbon steel	Carbon steel	Carbon steel	Stainless Steel AISI 316L
FIXED COIL MATERIAL	—	Carbon steel	Carbon steel	—	—
INTERNAL SURFACE TREATMENT	—	—	—	Hot dip galvanizing	—
EXTERNAL SURFACE TREATMENT	Anti-rust primer	Anti-rust primer	Anti-rust primer	Hot dip galvanizing	Pickling
CAPACITY	300 ÷ 5000 L	300 ÷ 3000 L	300 ÷ 3000 L	300 ÷ 5000 L	300 ÷ 5000 L
VERSION	Vertical	Vertical	Vertical	Vertical	Vertical
CONNECTIONS	Threaded	Threaded	Threaded	Threaded	Threaded
INSULATION 300-500 L	Hard foam Polyurethane injected 50/55 mm	Hard foam Polyurethane injected 50/55 mm	Hard foam Polyurethane injected 50/55 mm	Hard foam Polyurethane injected 50/55 mm	Hard foam Polyurethane injected 50/55 mm
INSULATION 800-1000 L	Hard foam Polyurethane injected 70 mm	Hard foam Polyurethane injected 70 mm	Hard foam Polyurethane injected 70 mm	Hard foam Polyurethane injected 70 mm	Hard foam Polyurethane injected 70 mm
INSULATION 1500-2000 L	Closed cell Elastomer 20 mm + PLFH (HD Polyester fibre) 75 mm	Closed cell Elastomer 20 mm + PLFH (HD Polyester fibre) 75 mm	Closed cell Elastomer 20 mm + PLFH (HD Polyester fibre) 75 mm	Closed cell Elastomer 20 mm + PLFH (HD Polyester fibre) 75 mm	Closed cell Elastomer 20 mm + PLFH (HD Polyester fibre) 75 mm
INSULATION 2500 ÷ 5000 L	Closed cell Elastomer 20 mm + PLF (Polyester fibre) 75 mm	Closed cell Elastomer 20 mm + PLF (Polyester fibre) 75 mm	Closed cell Elastomer 20 mm + PLF (Polyester fibre) 75 mm	Closed cell Elastomer 20 mm + PLF (Polyester fibre) 75 mm	Closed cell Elastomer 20 mm + PLF (Polyester fibre) 75 mm
CLADDING	• PVC light grey RAL 7035 • Aluminium	• PVC light grey RAL 7035 • Aluminium	• PVC light grey RAL 7035 • Aluminium	• PVC light grey RAL 7035 • Aluminium	• PVC light grey RAL 7035 • Aluminium

PRODUCT FICHE - Reg. 812/2013 supplementing Directive 2010/30/EU & Reg 814/2013 implementing Directive 2009/125/EC

		Capacity	300	500	800	1000	1500	2000	2500	3000	4000	5000
TANKO-G MIX	Energy efficiency class		C	C	B	B	C	C				
TANKO-Z MIX	Standing loss	S W	71	93	91	101	157	183				
TANKO-X MIX	Storage volume	V L	288	478	747	872	1471	1974				
TANKO-1 MIX	Energy efficiency class		C	C	B	B	C	C				
	Standing loss	S W	72	93	92	100	156	183				
	Storage volume	V L	281	469	734	859	1448	1951				
TANKO-2 MIX	Energy efficiency class		C	C	B	B	C	C				
	Standing loss	S W	72	93	92	100	156	183				
	Storage volume	V L	274	460	721	845	1426	1929				

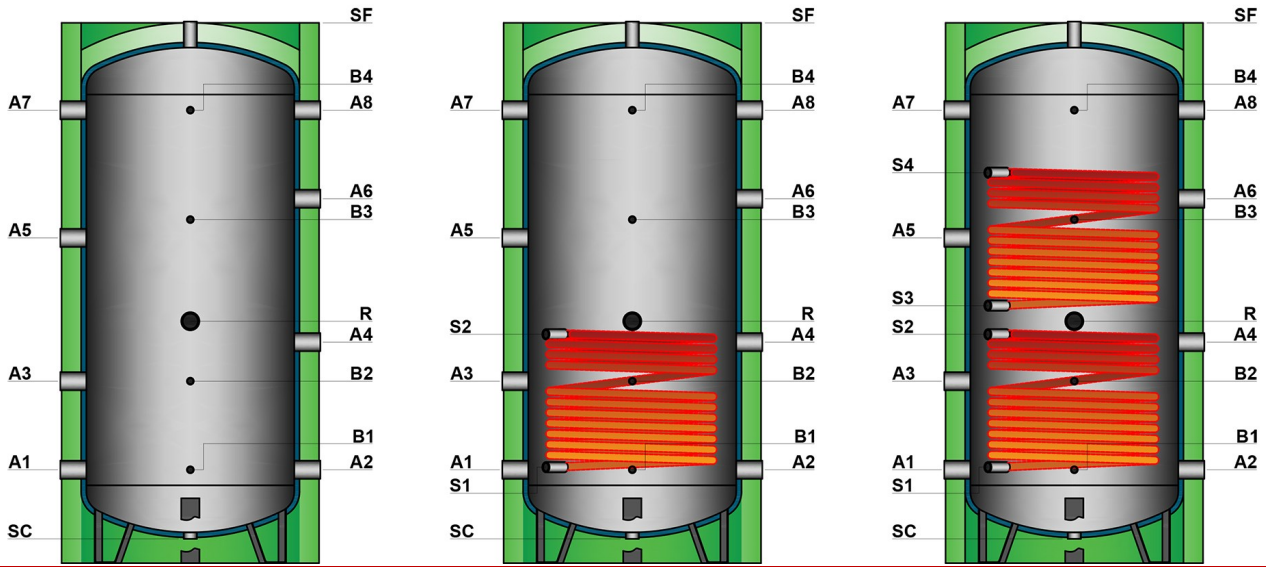
WORKING CONDITIONS

	Capacity	300	500	800	1000	1500	2000	2500	3000	4000	5000
Tank working pressure (carbon steel)	bar ATM ÷ 8	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6
Tank working pressure (galvanized steel)	bar ATM ÷ 8	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6
Tank working pressure (Stainless Steel)	bar ATM ÷ 10	ATM ÷ 8	ATM ÷ 8	ATM ÷ 8	ATM ÷ 8	ATM ÷ 8	ATM ÷ 8	ATM ÷ 8	ATM ÷ 6	ATM ÷ 6	ATM ÷ 6
Tank working temperature (carbon Steel)	°C -10 ÷ 99	-10 ÷ 99	-10 ÷ 99	-10 ÷ 99	-10 ÷ 99	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90
Tank working temperature (galvanized steel)	°C -10 ÷ 95	-10 ÷ 95	-10 ÷ 95	-10 ÷ 95	-10 ÷ 95	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90
Tank working temperature (Stainless Steel)	°C -10 ÷ 99	-10 ÷ 99	-10 ÷ 99	-10 ÷ 99	-10 ÷ 99	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90	-10 ÷ 90
Fixed coil working pressure	bar ATM ÷ 10	ATM ÷ 10	ATM ÷ 10	ATM ÷ 10	ATM ÷ 10	ATM ÷ 10	ATM ÷ 10	ATM ÷ 10	ATM ÷ 10	—	—
Fixed coil working temperature	°C AMB ÷ 110	AMB ÷ 110	AMB ÷ 110	AMB ÷ 110	AMB ÷ 110	AMB ÷ 110	AMB ÷ 110	AMB ÷ 110	AMB ÷ 110	—	—

REGULATORY COMPLIANCE

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

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



GENERAL CHARACTERISTICS

Capacity	300	500	800	1000	1500	1500 (SS)	2000	2000 (SS)	2500	3000	4000	5000
----------	-----	-----	-----	------	------	-----------	------	-----------	------	------	------	------

DIMENSIONS

		300	500	800	1000	1500	1500 (SS)	2000	2000 (SS)	2500	3000	4000	5000	
VERTICAL STANDARD HEIGHT	Diameter w/o insulation	mm	550	650	800	800	950	1000	1100	1200	1200	1250	1400	1600
	Diameter w/insulation	mm	650	760	940	940	1150	1200	1300	1400	1400	1450	1600	1800
	Overall height	mm	1420	1640	1798	2048	2490	2245	2495	2164	2620	2820	2900	2990
	Overturning height w/insulation	mm	1562	1803	2029	2236	2628	2409	2668	2393	2812	3015	3127	3273
	Overturning height w/o insulation	mm	—	—	—	—	2509	2267	2518	2194	2645	2846	2928	3027
VERTICAL LOW HEIGHT	Diameter w/o insulation	mm	—	—	—	—	1100	1100	1250	1250	1400	1400	1600	1800
	Diameter w/insulation	mm	—	—	—	—	1290	1290	1440	1440	1590	1590	1790	1990
	Overall height	mm	—	—	—	—	2015	2015	2090	2090	2170	2420	2510	2500
	Overturning height w/insulation	mm	—	—	—	—	2209	2209	2335	2335	2454	2672	2826	2917
	Overturning height w/o insulation	mm	—	—	—	—	2024	2024	2106	2213	2215	2435	2559	2591
VERTICAL EXTRA-LOW HEIGHT	Diameter w/o insulation	mm	—	—	—	—	—	—	—	—	1500	1700	2000	
	Diameter w/insulation	mm	—	—	—	—	—	—	—	—	1690	1890	2190	
	Overall height	mm	—	—	—	—	—	—	—	—	2180	2240	2170	
	Overturning height w/insulation	mm	—	—	—	—	—	—	—	—	2513	2621	2668	
	Overturning height w/o insulation	mm	—	—	—	—	—	—	—	—	2224	2298	2227	

CONNECTIONS

		300	500	800	1000	1500	1500 (SS)	2000	2000 (SS)	2500	3000	4000	5000	
A1-A2	Inlet / Outlet	mm Ø	285 2"½	270 3"	378 3"	378 3"	455 3"	480 3"	475 3"	504 3"	540 3"	535 3"	589 4"	650 4"
A3	Inlet / Outlet	mm Ø	415 1"¼	500 1"¼	568 2"	698 2"	775 2"	750 2"	795 2"	754 2"	840 2"	865 2"	899 2"	960 2"
A4	Inlet / Outlet	mm Ø	—	—	808 2"	848 2"	975 2"	900 2"	995 2"	904 2"	1040 2"	1085 2"	1119 2"	1180 2"
A5	Inlet / Outlet	mm Ø	795 1"¼	950 1"¼	1038 2"	1248 2"	1575 2"	1400 2"	1545 2"	1294 2"	1640 2"	1805 2"	1819 2"	1880 2"
A6	Inlet / Outlet	mm Ø	—	—	1278 2"	1398 2"	1775 2"	1550 2"	1745 2"	1444 2"	1840 2"	2005 2"	2059 2"	2120 2"
A7-A8	Inlet / Outlet	mm Ø	1125 2"½	1360 3"	1468 3"	1718 3"	2095 3"	1820 3"	2065 3"	1694 3"	2140 3"	2335 3"	2349 4"	2410 4"
B1	Sensor	mm Ø	265 ½"	250 ½"	358 ½"	358 ½"	455 ½"	480 ½"	475 ½"	504 ½"	540 ½"	535 ½"	589 ½"	650 ½"
B2	Sensor	mm Ø	385 ½"	500 ½"	568 ½"	698 ½"	775 ½"	750 ½"	795 ½"	754 ½"	840 ½"	865 ½"	899 ½"	960 ½"
B3	Sensor	mm Ø	895 ½"	990 ½"	1148 ½"	1318 ½"	1675 ½"	1475 ½"	1645 ½"	1374 ½"	1740 ½"	1905 ½"	1939 ½"	2000 ½"
B4	Sensor	mm Ø	1145 ½"	1380 ½"	1488 ½"	1738 ½"	2095 ½"	1820 ½"	2065 ½"	1694 ½"	2140 ½"	2335 ½"	2349 ½"	2410 ½"
R	Immersion electric heater	mm Ø	535 2"	650 2"	698 2"	928 2"	1240 2"	1030 2"	1245 2"	1074 2"	1305 2"	1365 2"	1399 2"	1460 2"
S1	Lower coil return	mm Ø	255 1"	240 1"	368 1"	368 1"	435 1"	—	455 1"	—	500 1"	495 1"	—	—
S2	Lower coil supply	mm Ø	665 1"	770 1"	878 1"	878 1"	1145 1"	—	1165 1"	—	1210 1"	1295 1"	—	—
S3	Upper coil return	mm Ø	745 1"	860 1"	968 1"	988 1"	1305 1"	—	1375 1"	—	1420 1"	1495 1"	—	—
S4	Upper coil supply	mm Ø	1155 1"	1390 1"	1478 1"	1498 1"	2015 1"	—	2085 1"	—	2130 1"	2205 1"	—	—
SF	Air vent	mm Ø	1420 1"¼	1640 1"¼	1798 1"¼	2048 1"¼	2490 1"¼	2245 1"¼	2495 1"¼	2164 1"¼	2620 1"¼	2820 1"¼	2899 1"¼	2990 1"¼
SC	Drain	mm Ø	n/a	n/a	93 1"¼	93 1"¼	135 1"¼	130 1"¼	120 1"¼	109 1"¼	135 1"¼	125 1"¼	114 1"¼	145 1"¼

FIXED COIL CAPACITY / PERFORMANCE (Primary 80/60°C - Average storage temperature 60°C)

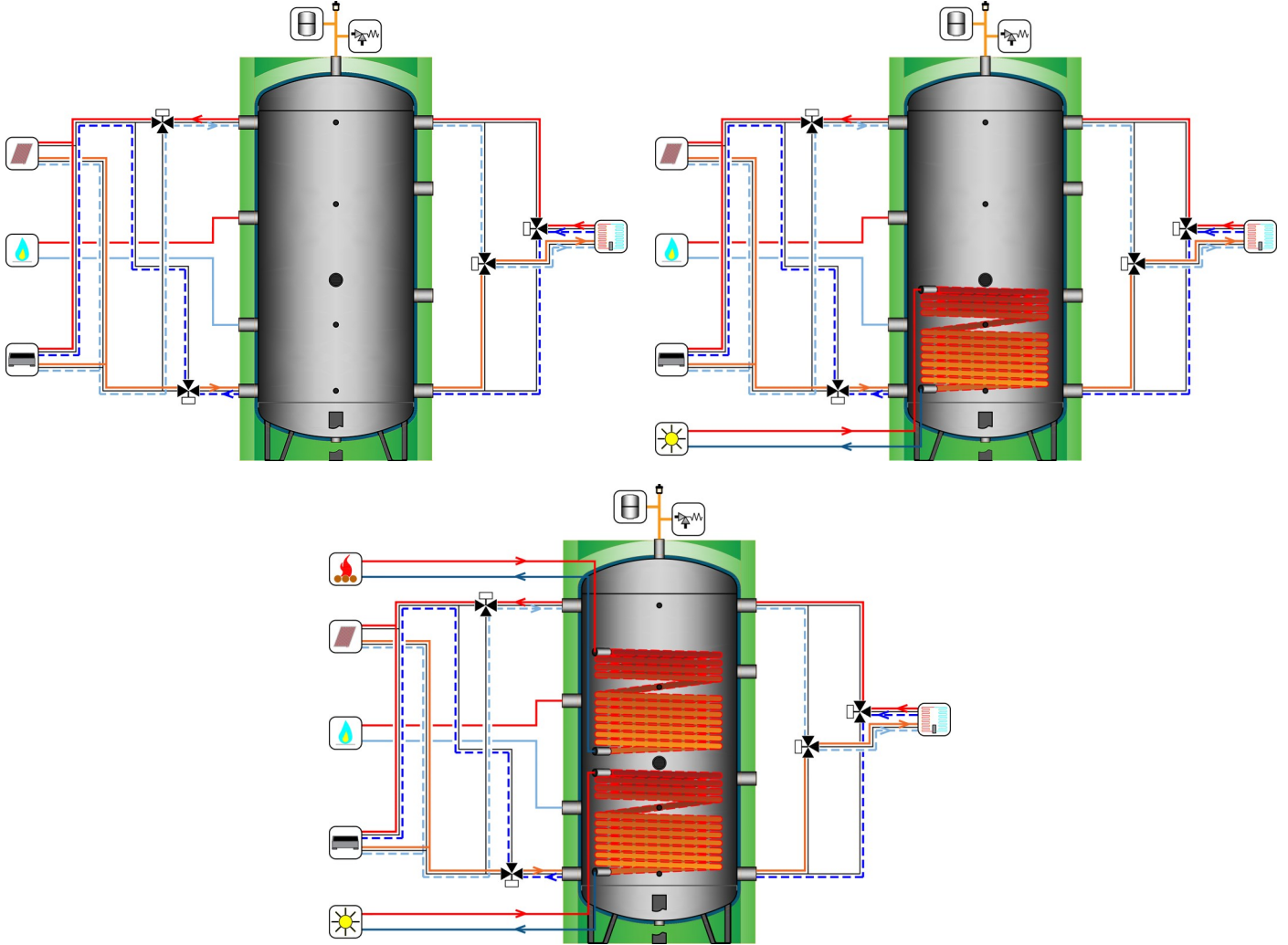
		300	500	800	1000	1500	1500 (SS)	2000	2000 (SS)	2500	3000	4000	5000
Lower coil heating surface area	m²	1,5	2,3	2,8	3,0	4,5	—	4,5	—	4,5	6,0	—	—
Lower coil capacity	kW	14	21	26	28	42	—	42	—	42	56	—	—
Primary flow	L/h	602	903	1099	1178	1767	—	1767	—	1767	2356	—	—
Hydraulic head	kPa	2,0	4,0	4,9	5,4	8,1	—	8,1	—	8,1	10,8	—	—
Water content	L	7,5	11,5	14,0	15,0	22,5	—	22,5	—	22,5	30,0	—	—
Upper coil heating surface area	m²	1,5	2,3	2,8	3,0	4,5	—	4,5	—	4,5	4,5	—	—
Upper coil capacity	kW	14	21	26	28	42	—	42	—	42	42	—	—
Primary flow	L/h	602	903	1099	1178	1767	—	1767	—	1767	1767	—	—
Hydraulic head	kPa	2,0	4,0	4,9	5,4	8,1	—	8,1	—	8,1	8,1	—	—
Water content	L	7,5	11,5	14,0	15,0	22,5	—	22,5	—	22,5	22,5	—	—

EMPTY WEIGHT

		300	500	800	1000	1500	1500 (SS)	2000	2000 (SS)	2500	3000	4000	5000
No coil —> TANKO-G MIX	kg	53	74	108	120	215	204	253	229	287	321	476	564
1 coil —> TANKO-1 MIX	kg	72	104	144	159	273	—	311	—	345	348	—	—
2 coil —> TANKO-2 MIX	kg	84	134	180	198	331	—	369	—	403	456	—	—

Note: All the measurements of the connections are considered "from the ground" - The threads are female GAS type (unless otherwise specified). The products higher than 2200mm will be packaged horizontally. In this case, should the cladding be Aluminium type, it will come disassembled to avoid transportation damages.

INSTALLATION DIAGRAM



The proposed diagrams are purely by way of example.




HOW TO ORDER

M0 → No coil M1 → 1 coil M2 → 2 coil	V → Vertical R → Low-height X → X-Low height	6 → 6 bar 8 → 8 bar 0 → 10 bar	G → Raw carbon steel Z → Galvanized steel X → Stainless Steel AISI 316L	H → ErP compliant (300 ÷ 2000 L) J → Not subject to ErP (2500 ÷ 5000L)	B → PVC cladding A → Aluminium cladding	Capacity - L
--	--	--------------------------------------	---	---	--	--------------

TANKO - M0 - V 6 G H B / 0800

ACCESSORIES & SPARE PARTS

ITEM

ITEM	PART NO.		
THERMOMETER Ø65 mm L=150 mm (0 ÷ 120)°C	TERMOMETRO-D65_L		THERMOMETER
THERMOMETER Ø100 mm L=150 mm (0 ÷ 120)°C	TERMOMETRO-D100		
PROBE SOCKET Ø½" L=150 mm Ø _{int} 10 mm	POZZETTO_L		PROBE SOCKET
THERMOSTAT Ø½" (0 ÷ 90)°C	TERMOSTATO		THERMOSTAT

1-3 PHASE IMMERSION ELECTRIC HEATER - STAINLESS STEEL 316I / INCOLOY TUBES
Threaded plug 2" | Aluminium box IP55 | V230/400

Capacity Watt	Capacity/L matching L	Length mm	1-THERMOSTAT Temperature adjusting only		2-THERMOSTAT Temperature adj. & overheating protection	
			PART NO.	PART NO.	PART NO.	PART NO.
2000	300 ÷ 5000	280	RES020-200-L280-6-M	RES020-200-L280-6-B		
3000	300 ÷ 5000	380	RES030-200-L380-6-M	RES030-200-L380-6-B		
5000	300 ÷ 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		



ANTI-CORROSION PROTECTION STEEL TREATMENT

PROTECTIVE TREATMENTS FOR CARBON STEEL TANKS

Hot dip galvanizing

The corrosion treatment by hot dip galvanizing in accordance with UNI EN ISO 1461 is carried out by immersion of the tank in a bath of liquid zinc at a temperature of approximately 450°C.

PROTECTIVE TREATMENTS FOR STAINLESS STEEL TANKS

Pickling

Buffer vessels made of Stainless Steel 316L are treated with full immersion pickling procedures

INSULATIONS

Insulating material	Removable	Thickness	Density	Thermal conductivity coefficient at 45°C	Operating Temperature	Fire reaction class Euroclass EN13501-1
PLF Polyester fibre	✓	75 mm	20 kg/m ³	$\lambda = 0,037$ W/mK	Amb. / +99°C	B-s2, d0
PLFH High Density Polyester fibre	✓	75 mm	25 kg/m ³	$\lambda = 0,034$ W/mK	Amb. / +99°C	B-s2, d0
Hard foam Polyurethane injected	✗	50 ÷ 70 mm	40 ÷ 42 kg/m ³	$\lambda = 0,019$ W/mK	-10°C / +99°C	F
Closed cell elastomer foam	✗	20 mm	30 kg/m ³	$\lambda = 0,032$ W/mK	-10°C / +90°C	C-s3, d0

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.

Closed cell elastomer foam

Insulation with high anti-condensation properties made of closed cell elastomer, CFC-free, asbestos free, odourless.

It is resistant to the diffusion of water vapour, chemical agents, mould, parasites, ozone, adverse weather conditions and UV rays.



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.

ITEM

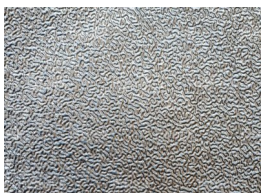
ITEM	PART NO.
PVC CLADDING YERLLOW RAL1023	COVER-RAL1023
PVC CLADDING OREANGE RAL2004	COVER-RAL2004
PVC CLADDING RED RAL3000	COVER-RAL3000
PVC CLADDING BLUE RAL5015	COVER-RAL5015
PVC CLADDING WHITE RAL9016	COVER-RAL9016
PVC CLADDING LIGHT GREY RAL7035	COVER-RAL7035
PVC CLADDING DARK GREY RAL7024	COVER-RAL7024
PVC CLADDING 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



MADE IN ITALY

PACETTI S.r.l.

Via G. Marconi, 240/242

44122 - Ferrara - ITALY

Tel. +39 0532 774066

Fax +39 0532 773835

info@pacetti.it