



AISI 316L Stainless steel calorifier for heat pumps WP1X - With one coil for heat pumps

WP2X - With two coils for heat pumps and solar systems

Calorifiers made of AISI 316L Stainless steel, designed for the production and storage of domestic hot water (DHW). They are equipped with one or two internal fixed coils that can be fed by a heat pump and by a solar system and/or a boiler. The special heat exchanger with enhanced exchanging capacity, allows a more efficient spread of the power delivered by the heat pump

on the coldest part of the cylinder, thus reducing the number of on-off cycles of the compressor and increasing its lifespan. The wide range of capacities (from 200 to 2000 litres) allows their installation in several systems, from domestic use to commercial applications. Cylinders are also prepared to host a backup immersion heater (not supplied).

HEAT SOURCE



APPLICATION



TECHNICAL FEATURES	DHW cylinder	Material	AISI 316L Stainless steel (1.4404)
			Internal protective treatment
		External protective treatment	Pickling and passivation
		Rating (P max. / T max.)	6 bar / 95°C
		Cathodic protection	Magnesium anode
	Heat exchanger	Material	AISI 316L Stainless steel (1.4404)
		Internal protective treatment	Pickling and passivation
		External protective treatment	Pickling and passivation
		Type	Fixed coil for 200 litres capacity Double spiral fixed coil for capacities above 300 litres
		Rating (P max. / T max.)	10 bar / 95°C
		Capacity	200 - 2000 L
		Warranty	5 years
		Insulation	- Rigid polyurethane foam + PVC: Fire retardant class B3 (DIN 4102) - Soft insulation with polyester + PVC: Fire retardant class B2 (DIN 4102)
	General features	In compliance with	- Pressure Equipment Directive (PED) 2014/68/UE Art. 4 Para 3 - Italian MOH specifications (products suitable to contain potable water) - Energy related Products (Erp) Directive 2009/125/CE

ACCESSORIES (page 218)

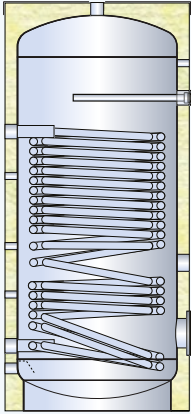
Impressed current electronic anode

Electronic control unit

Thermostat

Thermometer

1 1/2 electric immersion heater

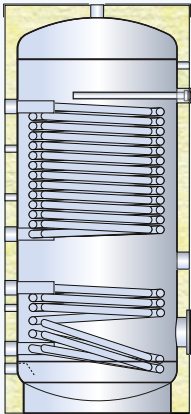


WP1X - Hard insulation with rigid polyurethane foam and PVC jacket

CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	HEAT EXCHANGER (m ²) / (L) *
WP1X 00200 R	50	B	56,7	189,8	1,90 / 18,6
WP1X 00300 R	50	B	69,2	290,3	3,50 / 34,3
WP1X 00400 R	50	B	73,0	414,9	4,50 / 44,1
WP1X 00500 R	50	B	81,6	500,3	5,70 / 55,9
WP1X 00600 R	50	B	90,2	585,7	5,70 / 55,9
WP1X 00800 R	100	C	106,6	749,8	6,00 / 58,8
WP1X 01000 R	100	C	110,5	931,5	6,00 / 58,8
WP1X 01500 R	100	C	133	1474,3	7,50 / 73,5
WP1X 02000 R	100	C	143,3	1951,9	10,40 / 101,9

WP1X - Soft insulation with polyester and PVC jacket

CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	HEAT EXCHANGER (m ²) / (L) *
WP1X 00800 F	130	C	126,6	749,8	6,00 / 58,8
WP1X 01000 F	130	C	138,4	931,5	6,00 / 58,8
WP1X 01500 F	130	C	168,3	1474,3	7,50 / 73,5
WP1X 02000 F	130	C	181,8	1951,9	10,40 / 101,9



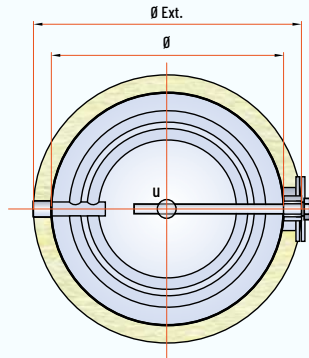
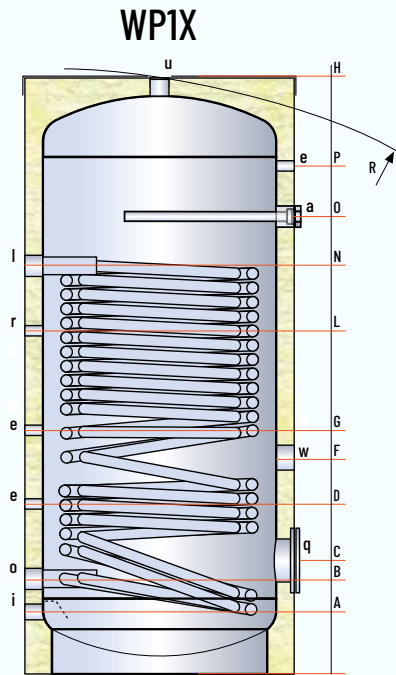
WP2X - Hard insulation with rigid polyurethane foam and PVC jacket

CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	LOWER HEAT EXCHANGER (m ²) / (L) *	UPPER HEAT EXCHANGER (m ²) / (L) *
WP2X 00300 R	50	B	69,2	290,3	1,00 / 9,8	2,40 / 23,5
WP2X 00400 R	50	B	73,0	414,9	1,20 / 11,8	3,00 / 29,4
WP2X 00500 R	50	B	81,6	500,3	1,50 / 14,7	4,20 / 41,2
WP2X 00600 R	50	B	90,2	585,7	2,00 / 19,6	5,00 / 49,0
WP2X 00800 R	100	C	106,6	749,8	2,00 / 19,6	5,20 / 51,0
WP2X 01000 R	100	C	110,5	931,5	3,30 / 32,3	6,00 / 58,8
WP2X 01500 R	100	C	133	1474,3	3,60 / 35,3	7,50 / 73,5
WP2X 02000 R	100	C	143,3	1951,9	5,50 / 53,9	8,50 / 83,3

WP2X - Soft insulation with polyester and PVC jacket

CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	LOWER HEAT EXCHANGER (m ²) / (L) *	UPPER HEAT EXCHANGER (m ²) / (L) *
WP2X 00800 F	130	C	126,6	749,8	2,00 / 19,6	5,20 / 51,0
WP2X 01000 F	130	C	138,4	931,5	3,30 / 32,3	6,00 / 58,8
WP2X 01500 F	130	C	168,3	1474,3	3,60 / 35,3	7,50 / 73,5
WP2X 02000 F	130	C	181,8	1951,9	5,50 / 53,9	8,50 / 83,3

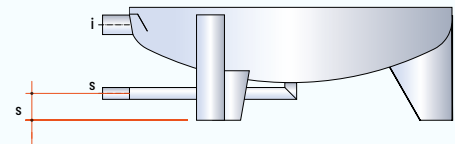
* Volume occupied by the heat exchanger and its support structure



LEGEND

- a . Magnesium anode
- e . Thermometer - Sensor
- i . Domestic cold water inlet
- l . Heat pump flow
- o . Heat pump return
- q . DHW inspection hatch
- r . Recirculation
- u . Domestic hot water outlet
- w . Opening for immersion heater

Detail of the total drain pipe only for the 2000 litres model



MODEL	DIMENSIONS (mm)		Ø EXT ** (Hard/Soft ins.)	R *	HEAT EXCHANGER (m ²)	WEIGHT (kg)
	Ø	H				
WPIX 00200 R	450	1305	550	1430	1,90 ***	64
WPIX 00300 R	500	1595	600	1720	3,50	91
WPIX 00400 R	650	1395	750	1600	4,50	110
WPIX 00500 R	650	1645	750	1820	5,70	131
WPIX 00600 R	650	1895	750	2050	5,70	142
WPIX 00800_	790	1750	990/1050	1745	6,00	168
WPIX 01000_	790	2110	990/1050	2095	6,00	188
WPIX 01500_	1000	2115	1200/1260	2145	7,50	271
WPIX 02000_	1100	2465	1300/1360	2465	10,40	362

* For capacities from 200 to 600 litres, the tilt height refers to the insulated cylinder

** The insulation is removable except for models from 200 to 600 litres

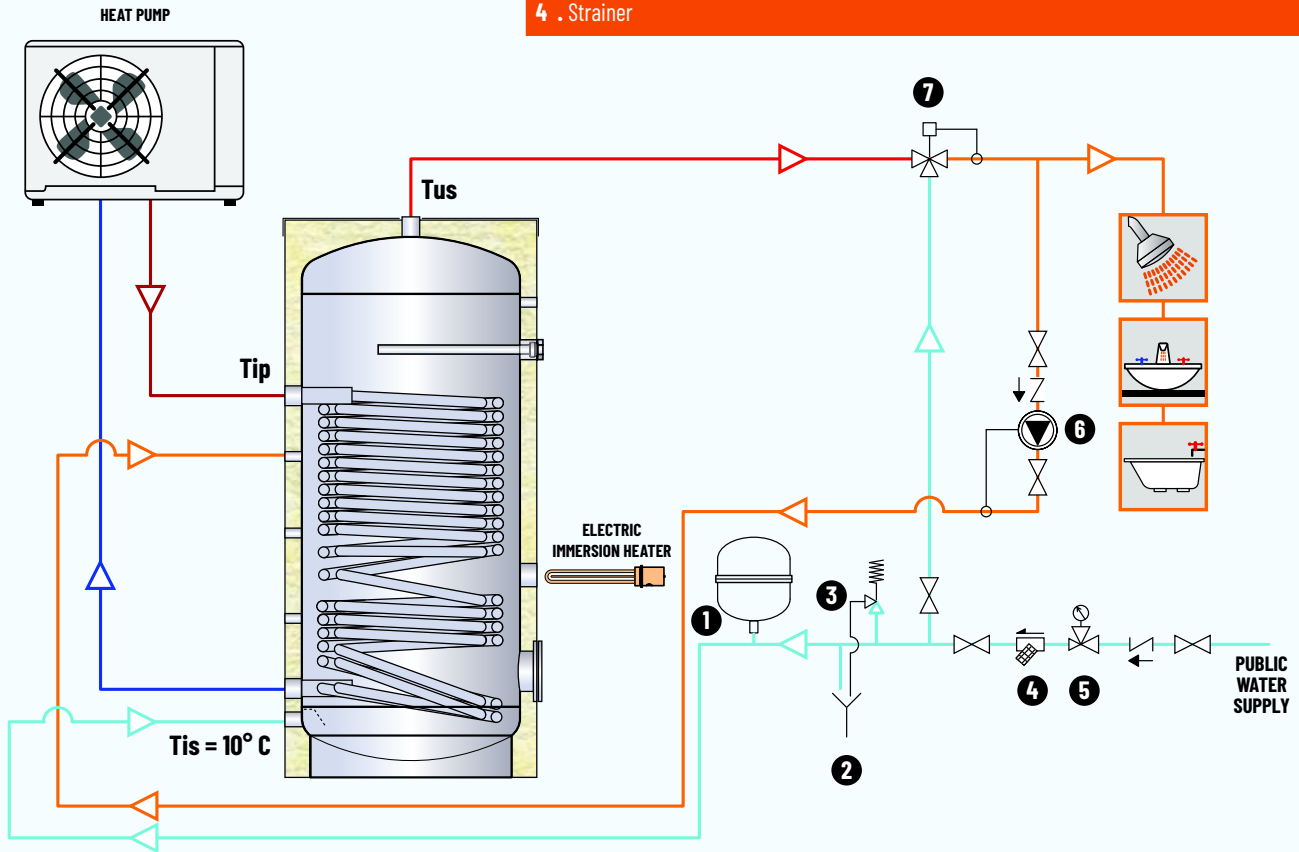
*** Fixed single spiral coil

MODEL	HEIGHTS (mm)											CONNECTIONS (GAS)							
	A	B	C	D	F	G	L	N	O	P	S	a	o	e	r	i	u	s	w
WPIX 00200 R	95	187	262	342	623	623	743	1077	953	1087	-	1"¼	1"	½"	½"	1"	-	1"½	120/180
WPIX 00300 R	120	210	300	320	495	780	925	1110	1160	1365	-	1"¼	1"¼	½"	½"	1"	-	1"½	120/180
WPIX 00400 R	145	240	310	340	525	680	870	1005	1030	1140	-	1"¼	1"¼	½"	½"	1"	-	1"½	120/180
WPIX 00500 R	145	240	310	350	570	810	1020	1250	1280	1390	-	1"¼	1"¼	½"	½"	1"	-	1"½	120/180
WPIX 00600 R	145	240	310	390	605	930	1070	1250	1510	1640	-	1"¼	1"¼	½"	½"	1"	-	1"½	120/180
WPIX 00800_	170	275	345	405	620	840	1000	1170	1310	1425	-	1"¼	1"¼	½"	1"	1"½	-	1"½	120/180
WPIX 01000_	170	275	345	475	750	1000	1120	1275	1615	1770	-	1"¼	1"¼	½"	1"	1"½	-	1"½	120/180
WPIX 01500_	230	345	475	535	805	1030	1165	1325	1600	1740	-	1"¼	1"¼	½"	1"	2"	-	1"½	220/290
WPIX 02000_	325	455	585	655	1030	1240	1385	1530	1885	2035	100	1"¼	1"¼	½"	1"	2"	1"	1"½	220/290

Disclaimer: this layout is purely indicative. It does not replace consultant's design

LEGEND

- | | |
|---|-----------------------------|
| 1 . Domestic water expansion vessel | 5 . Pressure reducing valve |
| 2 . Domestic water drain | 6 . DWH Recirculation pump |
| 3 . Domestic water safety valve (6 bar) | 7 . DHW 3-way valve |
| 4 . Strainer | |



MODEL		WPIX 00200R				WPIX 00300R				WPIX 00400R			
DHW FROM 10 TO 45 °C	HEAT EXCHANGER (m ²) [L] ¹	1,9 [13,5]				3,5 [24,9]				4,5 [32,0]			
	PRIMARY FLOW (m ³ /h)	2				2				3			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80
	LITRES 10' (L/10') ²	249	296	413	452	390	462	642	701	546	643	896	977
	LITRES FIRST HOUR ²	595	872	1193	1425	962	1391	1880	2235	1305	1887	2562	3044
DHW FROM 10 TO 60 °C	CONTINUOUS DRAW (L) ³	437	729	984	1229	722	1173	1565	1938	959	1571	2104	2612
	POWER (kW)	18	30	40	50	29	48	64	79	39	64	86	106
	PREHEATING ³ (min)	29	17	12	10	29	17	12	10	31	18	13	10
	LITRES 10' (L/10') ²	-	-	260	291	-	-	406	455	-	-	568	634
	LITRES FIRST HOUR ²	-	-	657	846	-	-	1057	1349	-	-	1434	1831
DHW FROM 10 TO 60 °C	CONTINUOUS DRAW (L) ³	-	-	501	701	-	-	822	1129	-	-	1095	1512
	POWER (kW)	-	-	29	41	-	-	48	66	-	-	63,7	87,9
	PREHEATING ³ (min)	-	-	25	18	-	-	25	18	-	-	26	19
	NL ⁴	4				11				20			

MODEL		WPIX 00500R				WPIX 00600R				WPIX 00800_			
DHW FROM 10 TO 45 °C	HEAT EXCHANGER (m ²) [L] ¹	5,7 [40,5]				5,7 [40,5]				6,0 [42,6]			
	PRIMARY FLOW (m ³ /h)	3				3				3			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80
	LITRES 10' (L/10') ²	658	771	1072	1165	739	852	1188	1281	902	1018	1424	1520
	LITRES FIRST HOUR ²	1571	2247	3037	3595	1652	2329	3153	3711	1851	2548	3458	4032
DHW FROM 10 TO 60 °C	CONTINUOUS DRAW (L) ³	1153	1865	2482	3070	1153	1866	2483	3070	1198	1933	2569	3173
	POWER (kW)	47	76	101	125	47	76	101	125	49	79	105	129
	PREHEATING ³ (min)	32	19	14	11	37	22	16	13	47	27	20	16
	LITRES 10' (L/10') ²	-	-	683	760	-	-	764	841	-	-	928	1007
	LITRES FIRST HOUR ²	-	-	1721	2182	-	-	1802	2263	-	-	2005	2480
DHW FROM 10 TO 60 °C	CONTINUOUS DRAW (L) ³	-	-	1311	1796	-	-	1311	1796	-	-	1361	1861
	POWER (kW)	-	-	76	104	-	-	76	104	-	-	79,1	108,2
	PREHEATING ³ (min)	-	-	28	19	-	-	32	23	-	-	40	28
	NL ⁴	30				34				44			

MODEL		WPIX 01000_				WPIX 01500_				WPIX 02000_			
DHW FROM 10 TO 45 °C	HEAT EXCHANGER (m ²) [L] ¹	6,0 [42,6]				7,5 [53,3]				10,4 [73,8]			
	PRIMARY FLOW (m ³ /h)	3				4				5			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80
	LITRES 10' (L/10') ²	1075	1191	1671	1767	1642	1791	2520	2643	2180	2378	3344	3507
	LITRES FIRST HOUR ²	2023	2721	3704	4278	2846	3741	5118	5856	3807	4997	6821	7799
DHW FROM 10 TO 60 °C	CONTINUOUS DRAW (L) ³	1198	1933	2568	3173	1522	2464	3281	4058	2056	3308	4391	5421
	POWER (kW)	49	79	105	129	62	100	134	165	84	135	179	221
	PREHEATING ³ (min)	58	34	24	19	71	41	30	24	71	41	30	24
	LITRES 10' (L/10') ²	-	-	1100	1180	-	-	1675	1776	-	-	2224	2359
	LITRES FIRST HOUR ²	-	-	2178	2653	-	-	3045	3655	-	-	4071	4882
DHW FROM 10 TO 60 °C	CONTINUOUS DRAW (L) ³	-	-	1361	1861	-	-	1731	2373	-	-	2333	3187
	POWER (kW)	-	-	79	108	-	-	101	138	-	-	135,7	185,3
	PREHEATING ³ (min)	-	-	50	35	-	-	61	43	-	-	61	43
	NL ⁴	53				86				101			

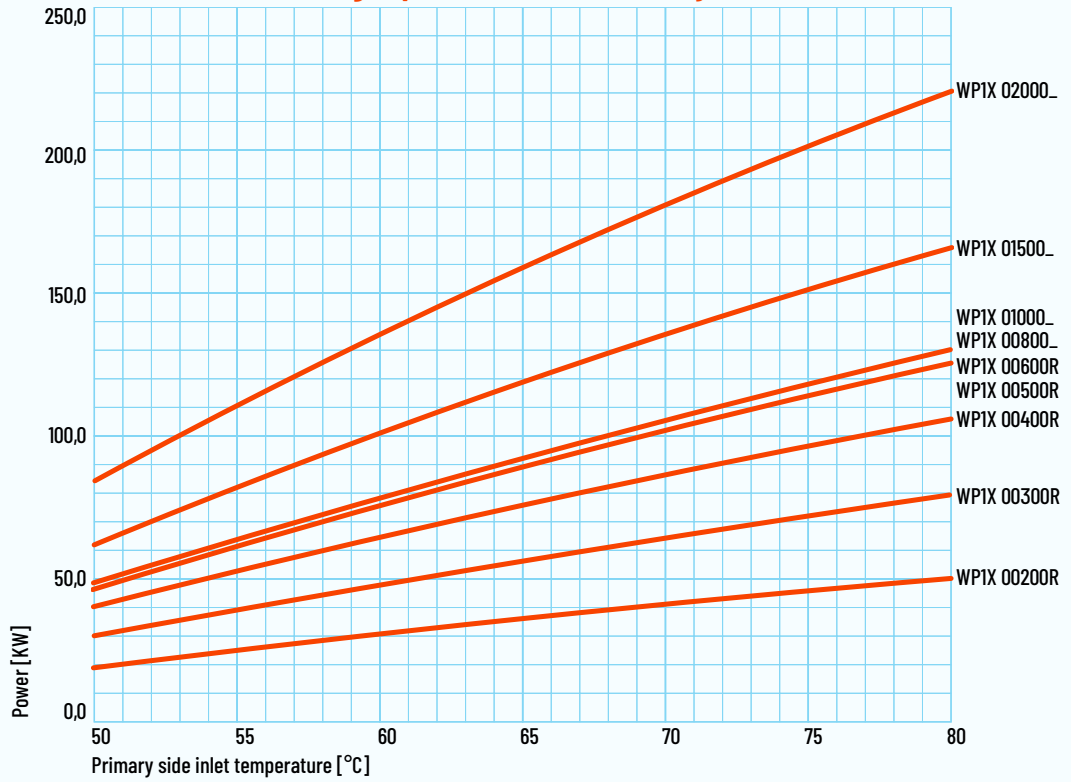
(1) Volume of fluid contained in the heat exchanger

(2) Obtainable with pre-heated cylinder (at 45 °C with primary side set at 50 or 60 °C and pre-heated at 60 °C in the other cases) and a running heat source

(3) With a proper power heat source generator

(4) Primary side 80 °C - Secondary side 10-45 °C

WPIX - Heat exchanger powers with secondary side at 10/45 °C



WPIX - Heat exchanger pressure drops

