

Glass lined calorifier for heat pumps WP1V - With one coil for heat pumps

WP2V - With two coils for heat pumps and solar systems



Calorifiers made of glass lined 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 1500 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	Glass lined S 235 Jr Carbon steel
Internal protective treatment	Enamelling according to DIN 4753.3
External protective treatment	Anti rust protection + epoxy painting
Rating (P max. / T max.)	8 bar / 95°C
Cathodic protection	Magnesium anode

Heat exchanger

Material	Glass lined S 235 Jr Carbon steel
Internal protective treatment	None
External protective treatment	Enamelling according to DIN 4753.3
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

General features

Capacity	200 - 1500 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)
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



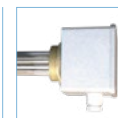
Electronic control unit



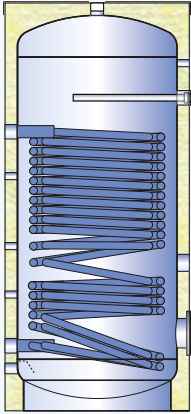
Thermostat



Thermometer



1 1/2 electric immersion heater

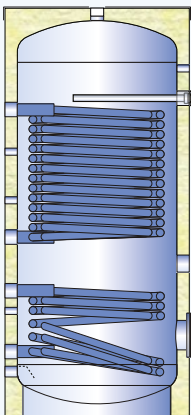


WP1V - Hard insulation with rigid polyurethane foam and PVC jacket

CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	HEAT EXCHANGER (m ²) / (L) *
WP1V 00200 R	50	B	56,7	189,8	2,10 / 20,6
WP1V 00300 R	50	B	69,2	290,3	3,50 / 34,3
WP1V 00400 R	50	B	73,0	414,9	4,50 / 44,1
WP1V 00500 R	50	B	81,6	500,3	5,70 / 55,9
WP1V 00600 R	50	B	90,2	585,7	5,70 / 55,9
WP1V 00800 R	100	C	106,6	749,8	6,00 / 58,8
WP1V 01000 R	100	C	110,5	931,5	6,00 / 58,8
WP1V 01500 R	100	C	133	1474,3	7,50 / 73,5

WP1V - 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) *
WP1V 00800 F	130	C	126,6	749,8	6,00 / 58,8
WP1V 01000 F	130	C	138,4	931,5	6,00 / 58,8
WP1V 01500 F	130	C	168,3	1474,3	7,50 / 73,5



WP2V - Hard insulation with rigid polyurethane foam and PVC jacket

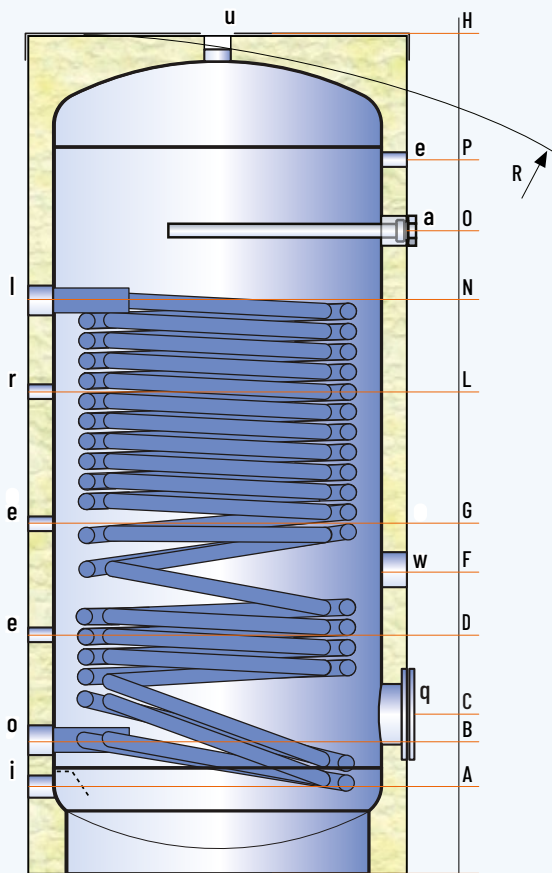
CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	LOWER HEAT EXCHANGER (m ²) / (L) *	UPPER HEAT EXCHANGER (m ²) / (L) *
WP2V 00300 R	50	B	69,2	290,3	1,00 / 9,8	2,40 / 23,5
WP2V 00400 R	50	B	73,0	414,9	1,20 / 11,8	3,00 / 29,4
WP2V 00500 R	50	B	81,6	500,3	1,50 / 14,7	4,20 / 41,2
WP2V 00600 R	50	B	90,2	585,7	2,00 / 19,6	5,00 / 49,0
WP2V 00800 R	100	C	106,6	749,8	2,00 / 19,6	5,20 / 51,0
WP2V 01000 R	100	C	110,5	931,5	3,30 / 32,3	6,00 / 58,8
WP2V 01500 R	100	C	133	1474,3	3,60 / 35,3	7,50 / 73,5

WP2V - 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) *
WP2V 00800 F	130	C	126,6	749,8	2,00 / 19,6	5,20 / 51,0
WP2V 01000 F	130	C	138,4	931,5	3,30 / 32,3	6,00 / 58,8
WP2V 01500 F	130	C	168,3	1474,3	3,60 / 35,3	7,50 / 73,5

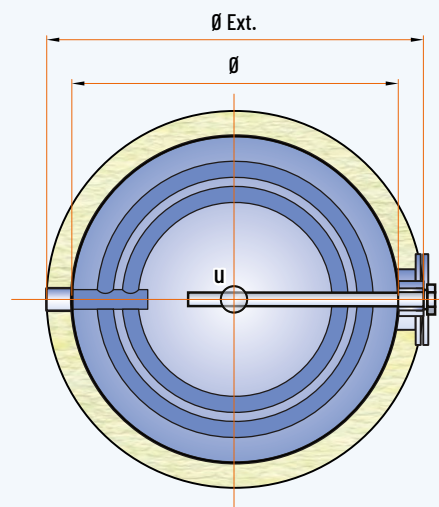
* Volume occupied by the heat exchanger and its support structure

WP1V



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



MODEL	DIMENSIONS (mm)		Ø EXT ** (Hard/Soft ins.)	R *	HEAT EXCHANGER (m ²)	WEIGHT (kg)
	Ø	H				
WP1V 00200 R	450	1320	550	1440	2,10 ***	78
WP1V 00300 R	500	1610	600	1730	3,50	110
WP1V 00400 R	650	1410	750	1610	4,50	133
WP1V 00500 R	650	1660	750	1835	5,70	159
WP1V 00600 R	650	1910	750	2065	5,70	167
WP1V 00800_	790	1750	990/1050	1745	6,00	215
WP1V 01000_	790	2110	990/1050	2095	6,00	251
WP1V 01500_	1000	2115	1200/1260	2145	7,50	383

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

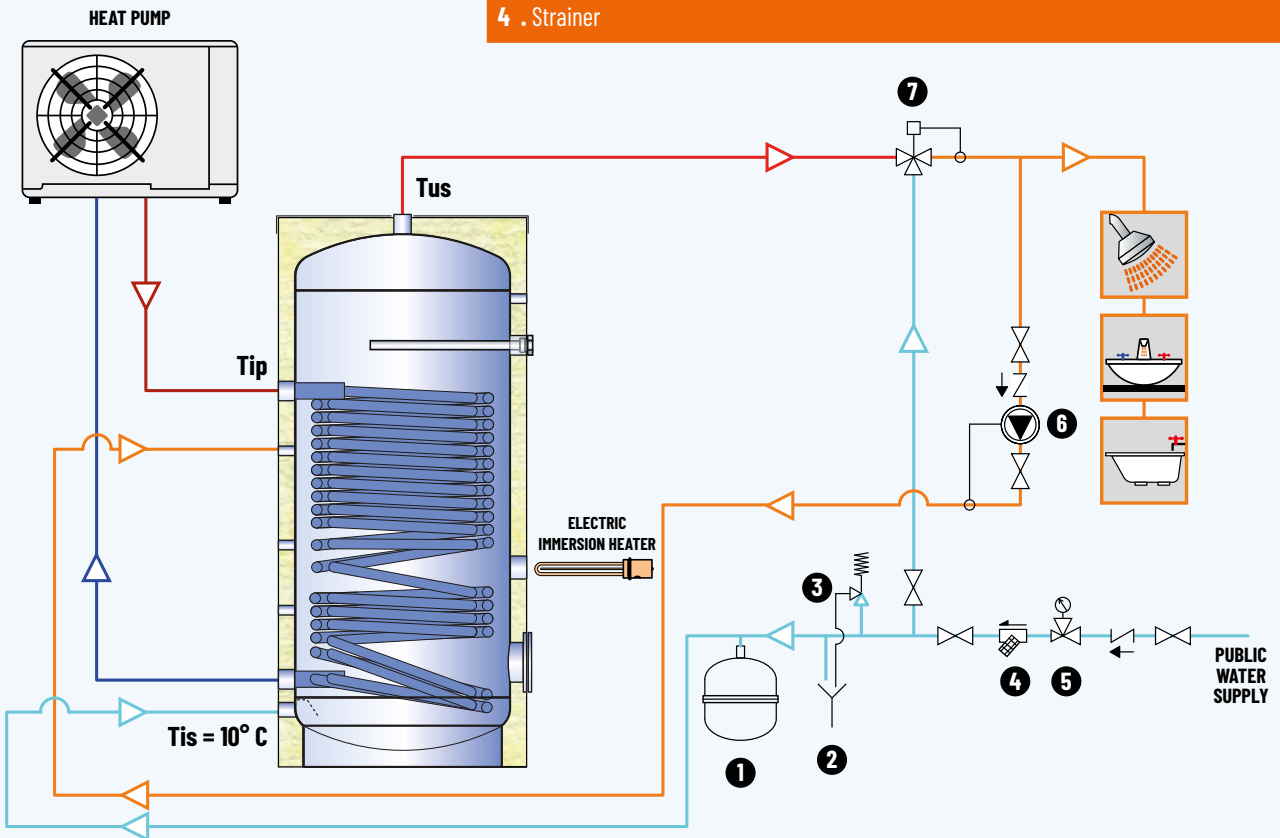
** The insulation is removable except for models from 200 to 600 litres

*** Fixed single spiral coil

MODEL	HEIGHTS (mm)										CONNECTIONS (GAS)						
	A	B	C	D	F	G	L	N	O	P	a	l o	e	r	i u	w	q
WP1V 00200 R	95	187	262	342	623	623	743	1077	953	1087	1"¼	1"	½"	½"	1"	1"½	120/180
WP1V 00300 R	120	210	300	320	495	780	925	1110	1160	1365	1"¼	1"¼	½"	½"	1"	1"½	120/180
WP1V 00400 R	145	240	310	340	525	680	870	1005	1030	1140	1"¼	1"¼	½"	½"	1"	1"½	120/180
WP1V 00500 R	145	240	310	350	570	810	1020	1250	1280	1390	1"¼	1"¼	½"	½"	1"	1"½	120/180
WP1V 00600 R	145	240	310	390	605	930	1070	1250	1510	1640	1"¼	1"¼	½"	½"	1"	1"½	120/180
WP1V 00800_	150	275	345	405	620	840	1000	1170	1310	1425	1"¼	1"¼	½"	1"	1"½	1"½	120/180
WP1V 01000_	150	275	345	475	750	1000	1120	1275	1615	1770	1"¼	1"¼	½"	1"	1"½	1"½	120/180
WP1V 01500_	230	345	475	535	805	1030	1165	1325	1600	1740	1"¼	1"¼	½"	1"	2"	1"½	220/290

LEGEND

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



MODEL		WP1V 00200R				WP1V 00300R				WP1V 00400R			
	HEAT EXCHANGER (m ²) [L] ¹	2,1 [14,9]				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
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') ²	216	266	370	412	295	366	505	564	428	525	727	808
	LITRES FIRST HOUR ²	593	892	1215	1466	866	1295	1744	2099	1187	1769	2393	2875
	CONTINUOUS DRAW (L) ³	476	791	1067	1332	722	1173	1565	1938	960	1572	2104	2612
	POWER (kW)	19	32	43	54	29	48	64	79	39	64	86	106
	PREHEATING ³ (min)	21	12	9	7	19	11	8	6	21	12	9	7
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') ²	-	-	227	261	-	-	310	359	-	-	449	515
	LITRES FIRST HOUR ²	-	-	659	864	-	-	961	1253	-	-	1316	1712
	CONTINUOUS DRAW (L) ³	-	-	546	761	-	-	822	1130	-	-	1095	1512
	POWER (kW)	-	-	32	44	-	-	48	66	-	-	63,7	87,9
	PREHEATING ³ (min)	-	-	18	13	-	-	16	12	-	-	18	13
NL ⁴	5				11				20				

MODEL		WP1V 00500R				WP1V 00600R				WP1V 00800_			
	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
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') ²	577	690	956	1049	658	771	1072	1165	902	1018	1424	1520
	LITRES FIRST HOUR ²	1489	2167	2922	3479	1571	2247	3037	3595	1851	2548	3458	4032
	CONTINUOUS DRAW (L) ³	1153	1866	2483	3070	1153	1865	2482	3070	1198	1933	2569	3173
	POWER (kW)	47	76	101	125	47	76	101	125	49	79	105	129
	PREHEATING ³ (min)	26	15	11	9	32	19	14	11	47	27	20	16
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') ²	-	-	602	679	-	-	683	760	-	-	928	1007
	LITRES FIRST HOUR ²	-	-	1640	2101	-	-	1721	2182	-	-	2005	2480
	CONTINUOUS DRAW (L) ³	-	-	1311	1796	-	-	1311	1796	-	-	1361	1861
	POWER (kW)	-	-	76,2	104,5	-	-	76	104	-	-	79	108
	PREHEATING ³ (min)	-	-	23	16	-	-	28	19	-	-	40	28
NL ⁴	30				34				44				

MODEL		WP1V 01000_				WP1V 01500_							
	HEAT EXCHANGER (m ²) [L] ¹	6,0 [42,6]				7,5 [53,3]							
	PRIMARY FLOW (m ³ /h)	3				4							
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80				
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') ²	1075	1191	1671	1767	1642	1791	2520	2643				
	LITRES FIRST HOUR ²	2023	2721	3704	4278	2846	3741	5118	5856				
	CONTINUOUS DRAW (L) ³	1198	1933	2568	3173	1522	2464	3281	4058				
	POWER (kW)	49	79	105	129	62	100	134	165				
	PREHEATING ³ (min)	58	34	24	19	71	41	30	24				
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') ²	-	-	1100	1180	-	-	1675	1776				
	LITRES FIRST HOUR ²	-	-	2178	2653	-	-	3045	3655				
	CONTINUOUS DRAW (L) ³	-	-	1361	1861	-	-	1731	2373				
	POWER (kW)	-	-	79,2	108,2	-	-	100,7	138,0				
	PREHEATING ³ (min)	-	-	50	35	-	-	61	43				
NL ⁴	53				86								

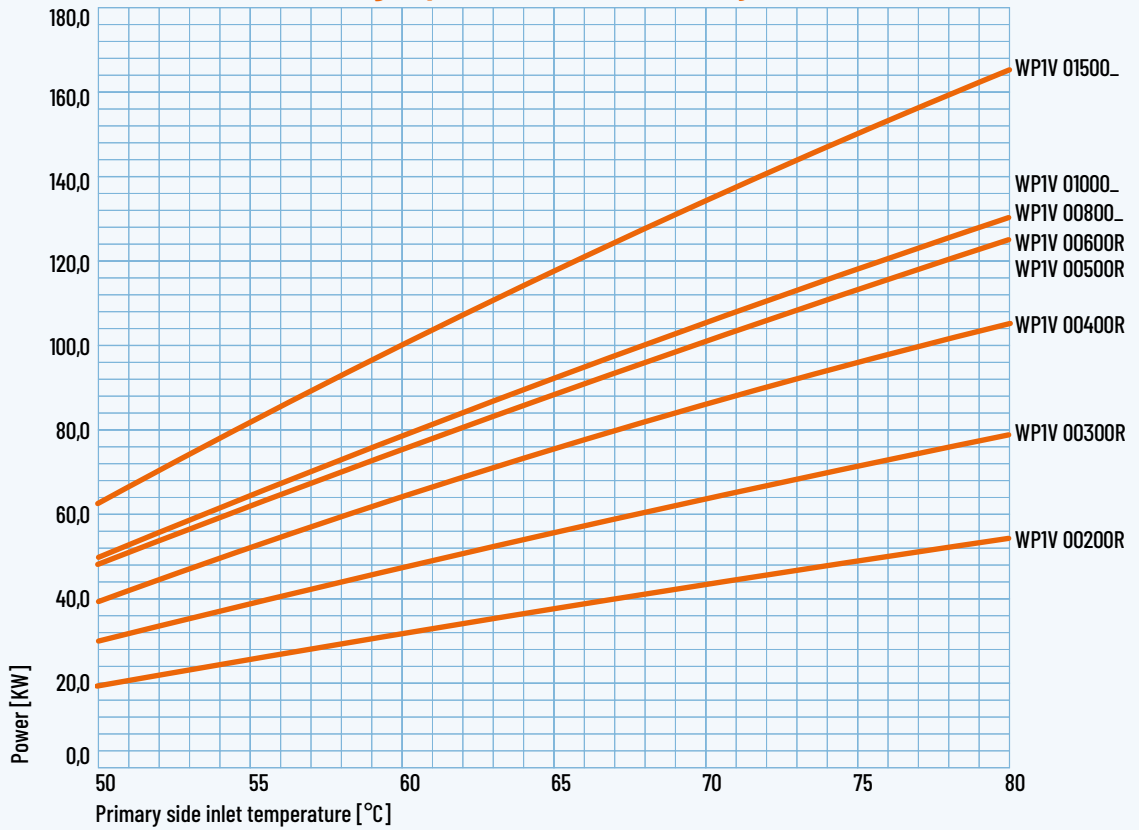
(1) Volume of fluid contained in the heat exchanger

(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

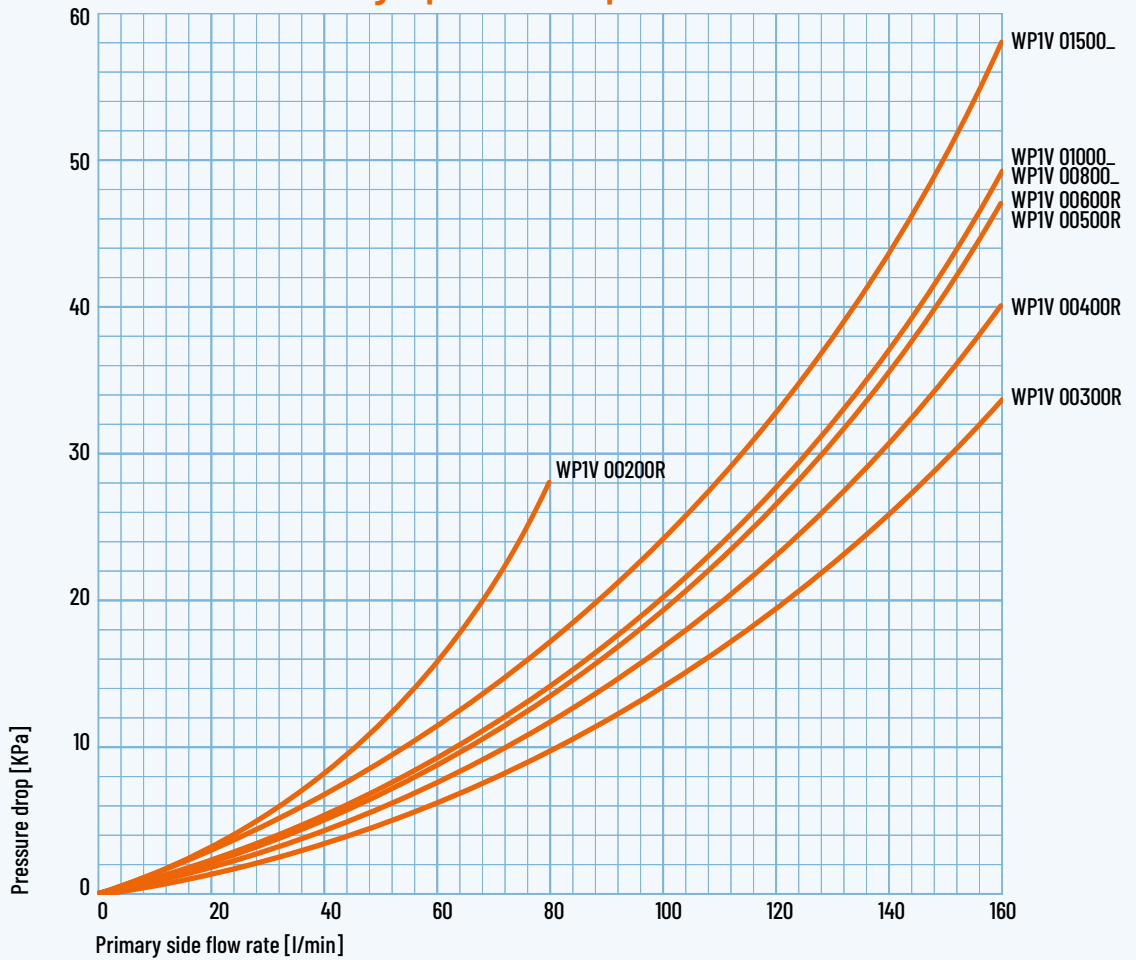
(3) With a proper power heat source generator

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

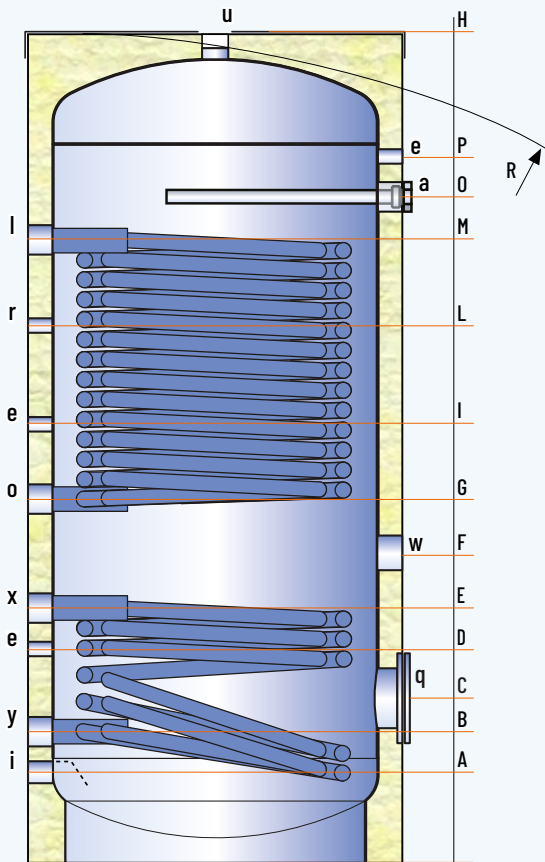
WP1V - Heat exchanger powers with secondary side at 10/45 °C



WP1V - Heat exchanger pressure drops

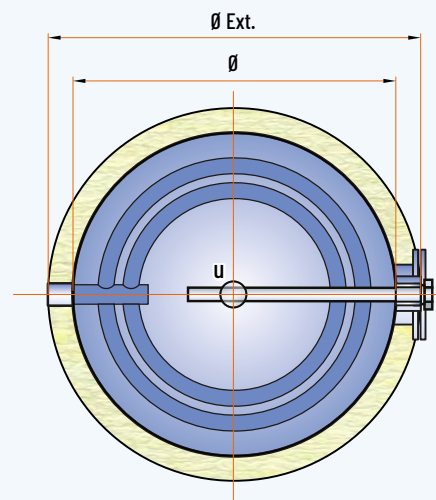


WP2V



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
- x . Solar system flow
- y . Solar system return



MODEL	DIMENSIONS (mm)		Ø EXT **	R *	LOWER HEAT EXCHANGER (m ²)	UPPER HEAT EXCHANGER (m ²)	WEIGHT (kg)
	Ø	H					
WP2V 00300 R	500	1610	600	1730	1,00	2,40	108
WP2V 00400 R	650	1410	750	1610	1,20	3,00	128
WP2V 00500 R	650	1660	750	1835	1,50	4,20	159
WP2V 00600 R	650	1910	750	2065	2,00	5,00	188
WP2V 00800_	790	1750	990/1050	1745	2,00	5,20	234
WP2V 01000_	790	2110	990/1050	2095	3,30	6,00	285
WP2V 01500_	1000	2115	1200/1260	2145	3,60	7,50	417

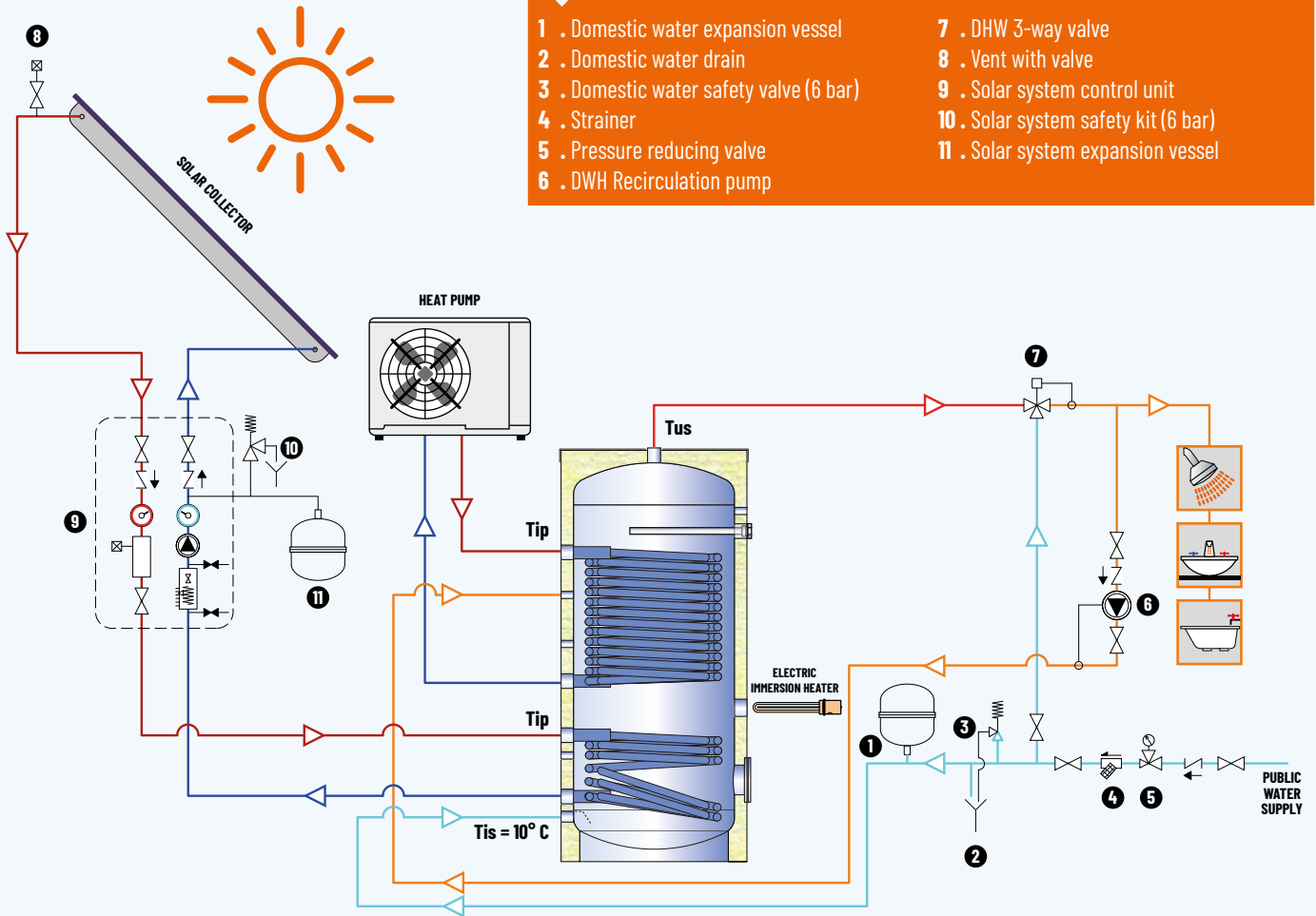
* For capacities from 300 to 600 litres, the tilt height refers to the insulated cylinder

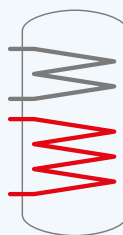
** The insulation is removable except for models from 300 to 600 litres

MODEL	HEIGHTS (mm)													CONNECTIONS (GAS)						
	A	B	C	D	E	F	G	I	L	M	O	P	a	l	e	r	i	u	w	q
WP2V 00300 R	120	210	300	320	430	495	560	745	925	1110	1160	1365	1"¼	½"	½"	1"	1"¼	1"¼	1"½	120/180
WP2V 00400 R	145	240	310	340	440	525	565	720	870	1005	1030	1140	1"¼	½"	½"	1"	1"¼	1"¼	1"½	120/180
WP2V 00500 R	145	240	310	350	460	570	610	820	1020	1250	1280	1390	1"¼	½"	½"	1"	1"¼	1"¼	1"½	120/180
WP2V 00600 R	145	240	310	390	540	605	670	870	1070	1470	1510	1640	1"¼	½"	½"	1"	1"¼	1"¼	1"½	120/180
WP2V 00800_	150	275	345	405	535	620	665	835	1000	1270	1310	1425	1"¼	½"	1"	1"½	1"½	1"½	1"½	120/180
WP2V 01000_	150	275	345	475	675	750	825	975	1120	1575	1615	1770	1"¼	½"	1"	1"½	1"½	1"½	1"½	120/180
WP2V 01500_	230	345	475	535	730	805	880	1025	1165	1560	1600	1740	1"¼	½"	1"	2"	2"	1"½	1"½	220/290

LEGEND

- | | |
|---|--------------------------------------|
| 1 . Domestic water expansion vessel | 7 . DHW 3-way valve |
| 2 . Domestic water drain | 8 . Vent with valve |
| 3 . Domestic water safety valve (6 bar) | 9 . Solar system control unit |
| 4 . Strainer | 10 . Solar system safety kit (6 bar) |
| 5 . Pressure reducing valve | 11 . Solar system expansion vessel |
| 6 . DWH Recirculation pump | |





Data related to the lower heat exchanger

MODEL		WP2V 00300R				WP2V 00400R				WP2V 00500R			
	HEAT EXCHANGER (m ²) [L] ¹	1,0 [7,1]				1,2 [8,5]				1,5 [10,6]			
	PRIMARY FLOW (m ³ /h)	3				3				3			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') ²	316	344	487	511	441	475	673	701	534	574	813	848
	LITRES FIRST HOUR ²	515	683	950	1094	678	877	1222	1391	825	1068	1486	1692
	CONTINUOUS DRAW (L) ³	251	429	586	737	299	508	693	871	368	623	849	1066
	POWER (kW)	10	17	24	30	12	21	28	35	15	25	35	43
	PREHEATING ³ (min)	72	42	30	24	87	50	37	29	86	50	36	29
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') ²	-	-	322	341	-	-	449	471	-	-	542	570
	LITRES FIRST HOUR ²	-	-	552	667	-	-	722	858	-	-	878	1045
	CONTINUOUS DRAW (L) ³	-	-	291	412	-	-	345	488	-	-	424	599
	POWER (kW)	-	-	17	24	-	-	20	28	-	-	25	35
	PREHEATING ³ (min)	-	-	62	43	-	-	75	52	-	-	74	52
NL ⁴	4				6				8				
MODEL		WP2V 00600R				WP2V 00800_				WP2V 01000_			
	HEAT EXCHANGER (m ²) [L] ¹	2,0 [14,2]				2,0 [14,2]				3,3 [23,4]			
	PRIMARY FLOW (m ³ /h)	3				3				3			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') ²	632	684	968	1012	788	840	1191	1235	1003	1080	1527	1592
	LITRES FIRST HOUR ²	1167	1468	1835	2098	1167	1478	2058	2321	1591	2056	2842	3232
	CONTINUOUS DRAW (L) ³	479	806	1095	1372	479	806	1095	1372	743	1233	1661	2071
	POWER (kW)	19	33	45	56	19	33	45	56	30	50	68	84
	PREHEATING ³ (min)	79	46	33	27	101	59	43	34	85	49	36	29
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') ²	-	-	644	679	-	-	800	835	-	-	1020	1073
	LITRES FIRST HOUR ²	-	-	1080	1293	-	-	1236	1449	-	-	1694	2011
	CONTINUOUS DRAW (L) ³	-	-	551	775	-	-	551	775	-	-	851	1186
	POWER (kW)	-	-	32	45	-	-	32	45	-	-	49	69
	PREHEATING ³ (min)	-	-	68	48	-	-	87	61	-	-	73	51
NL ⁴	13				16				29				
MODEL		WP2V 01500_											
	HEAT EXCHANGER (m ²) [L] ¹	3,6 [25,5]											
	PRIMARY FLOW (m ³ /h)	4											
	PRIMARY TEMP. (°C)	50	60	70	80								
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') ²	1533	2192	2299	2373								
	LITRES FIRST HOUR ²	1621	2723	3790	4236								
	CONTINUOUS DRAW (L) ³	833	1392	1883	2353								
	POWER (kW)	34	57	77	96								
	PREHEATING ³ (min)	117	68	50	39								
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') ²	-	-	1552	1613								
	LITRES FIRST HOUR ²	-	-	2310	2673								
	CONTINUOUS DRAW (L) ³	-	-	957	1339								
	POWER (kW)	-	-	56	78								
	PREHEATING ³ (min)	-	-	101	71								
NL ⁴	43												

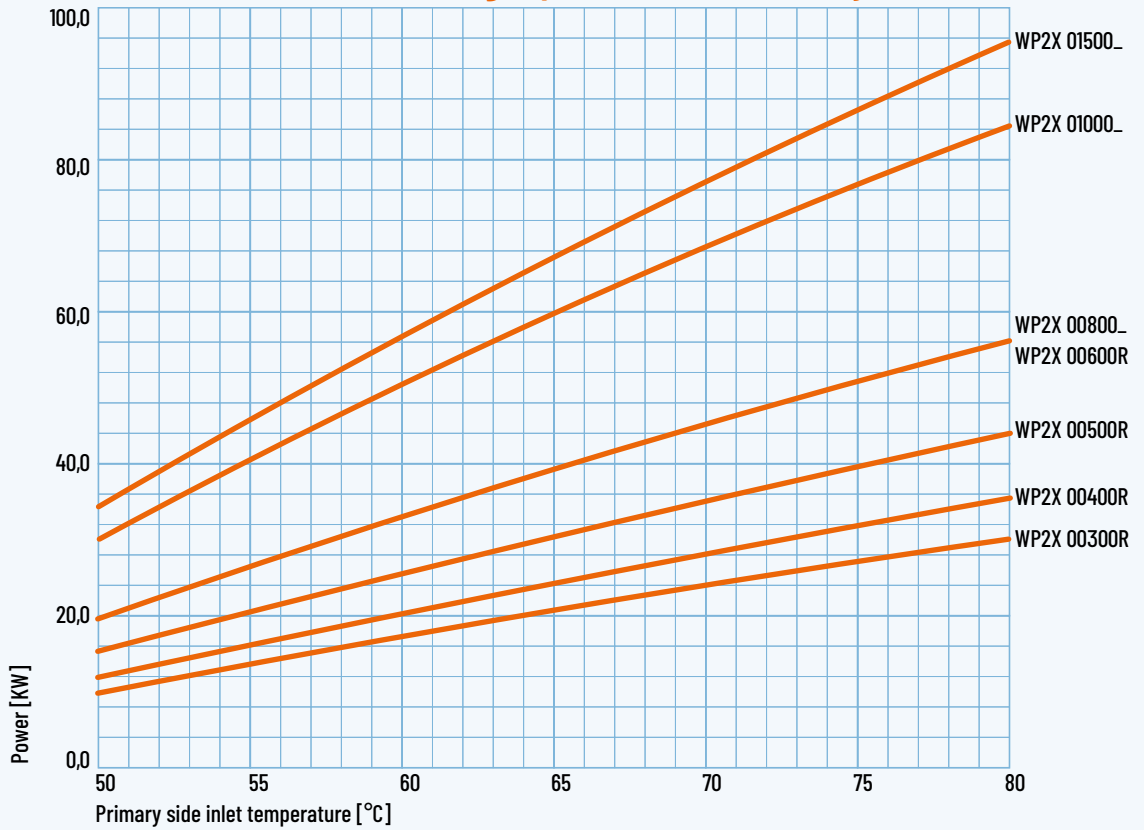
(1) Volume of fluid contained in the heat exchanger

(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

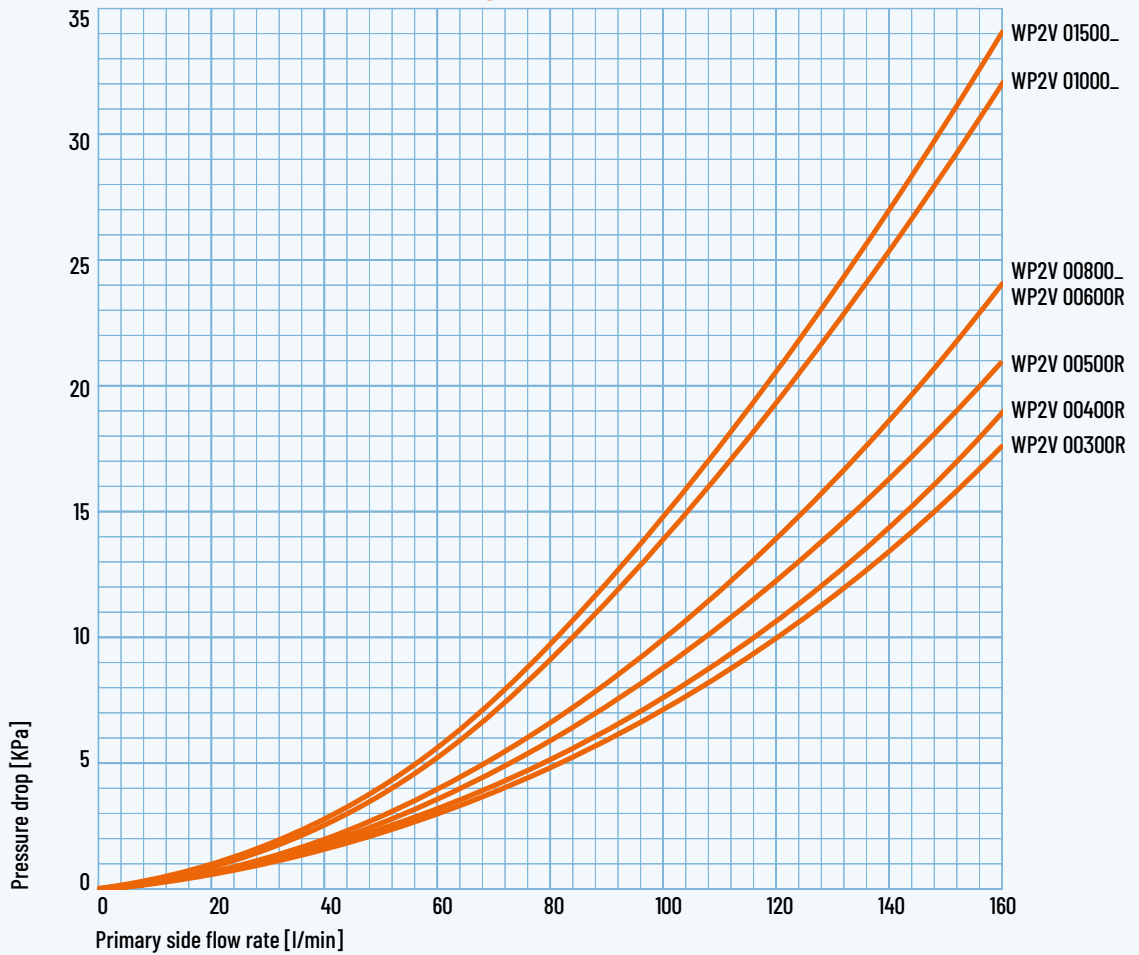
(3) With a proper power heat source generator

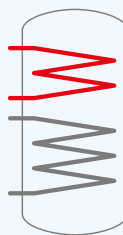
(4) Primary side 80 °C - Secondary side 10-45 °C

WP2V - Lower heat exchanger powers with secondary side at 10/45 °C



WP2V - Lower heat exchanger pressure drops





Data related to the upper heat exchanger

The performance values in the chart refer to the partial volume of water affected by the heat exchanger

MODEL		WP2V 00300R				WP2V 00400R				WP2V 00500R			
	HEAT EXCHANGER (m ²) [L] ¹	2,4 [17,0]				3,0 [21,3]				4,2 [29,8]			
	PRIMARY FLOW (m ³ /h)	2				3				3			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') ²	265	320	445	492	345	417	582	643	445	538	747	824
	LITRES FIRST HOUR ²	687	1018	1385	1661	888	1320	1801	2164	1164	1718	2330	2792
	CONTINUOUS DRAW (L) ³	533	881	1186	1477	685	1140	1540	1922	907	1491	2000	2485
	POWER (kW)	22	36	48	60	28	46	63	78	37	61	81	101
	PREHEATING ³ (min)	24	14	10	8	24	14	10	8	24	14	10	8
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') ²	-	-	277	315	-	-	361	411	-	-	466	529
	LITRES FIRST HOUR ²	-	-	760	986	-	-	983	1279	-	-	1286	1665
	CONTINUOUS DRAW (L) ³	-	-	610	848	-	-	786	1097	-	-	1037	1435
	POWER (kW)	-	-	35,5	49,3	-	-	45,7	63,8	-	-	60,3	83,4
	PREHEATING ³ (min)	-	-	21	15	-	-	21	15	-	-	21	15
NL ⁴	8				12				19				
MODEL		WP2V 00600R				WP2V 00800_				WP2V 01000_			
	HEAT EXCHANGER (m ²) [L] ¹	5,0 [35,5]				5,2 [36,9]				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
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') ²	526	630	876	961	611	718	1000	1088	717	833	1160	1256
	LITRES FIRST HOUR ²	1352	1975	2672	3187	1462	2102	2846	3374	1666	2363	3193	3767
	CONTINUOUS DRAW (L) ³	1042	1699	2269	2812	1075	1748	2332	2888	1198	1933	2568	3173
	POWER (kW)	42	69	92	114	44	71	95	118	49	79	105	129
	PREHEATING ³ (min)	26	15	11	9	31	18	13	11	34	20	15	12
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') ²	-	-	550	620	-	-	635	708	-	-	743	822
	LITRES FIRST HOUR ²	-	-	1490	1915	-	-	1604	2040	-	-	1820	2295
	CONTINUOUS DRAW (L) ³	-	-	1188	1635	-	-	1224	1683	-	-	1361	1861
	POWER (kW)	-	-	69,1	95,1	-	-	71,2	97,9	-	-	79,1	108,2
	PREHEATING ³ (min)	-	-	23	16	-	-	27	19	-	-	30	21
NL ⁴	22				26				31				
MODEL		WP2V 01500_											
	HEAT EXCHANGER (m ²) [L] ¹	7,5 [53,2]											
	PRIMARY FLOW (m ³ /h)	4											
	PRIMARY TEMP. (°C)	50	60	70	80								
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') ²	1060	1209	1690	1813								
	LITRES FIRST HOUR ²	2265	3160	4287	5025								
	CONTINUOUS DRAW (L) ³	1522	2464	3281	4058								
	POWER (kW)	62	100	134	165								
	PREHEATING ³ (min)	42	24	18	14								
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') ²	-	-	1093	1195								
	LITRES FIRST HOUR ²	-	-	2464	3074								
	CONTINUOUS DRAW (L) ³	-	-	1731	2373								
	POWER (kW)	-	-	100,7	138,0								
	PREHEATING ³ (min)	-	-	36	25								
NL ⁴	47												

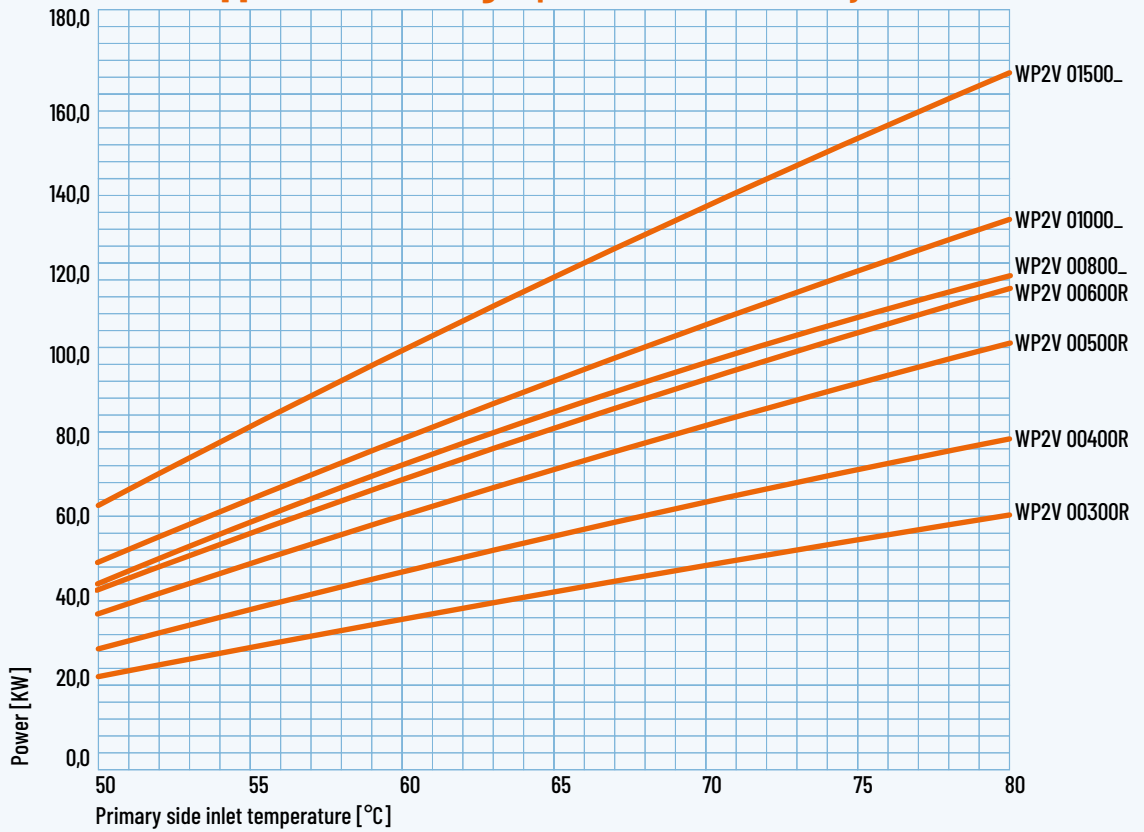
(1) Volume of fluid contained in the heat exchanger

(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

WP2V - Upper heat exchanger powers with secondary side at 10/45 °C



WP2V - Upper heat exchanger pressure drops

