

Pipe in Tank Solar



SERIES PWS 500÷2000 HR

Pipe In Tank Solar main feature is the ability to store energy from multiple heat sources, with operating temperature up to 95°C.

The production of hot instantaneous sanitary water is granted by a stainless steel coil: this systems provides the maximum protection against the formation of bacteria.

- Raw carbon steel tank
- Corrugated Stainless steel AISI 316L coil for the instantaneous domestic hot water production
- External soft plastic coating (PVC)
- No. 7 fittings 1 ½" to connect other heating sources
- 1 solar coil integrated
- 1 ½" connection for heating element kit
- High density polyurethane insulation (PU) shells

WARRANTY 2+3 YEARS

ACCESSORIES PP. 85

TECHNICAL DATA	M.U.	PWS 500 HR	PWS 800 HR	PWS 1000 HR	PWS 1500 HR	PWS 2000 HR
Total working capacity	l	497	772	902	1526	1998
Code	/	172335	172336	172337	172338	172339
D.H.W. coil exchange surface	m ²	5,5	6,0	6,0	9,8	9,8
D.H.W. coil capacity	l	28,0	30,0	30,0	50,0	50,0
Anti-corrosion coil for D.H.W. production	[-]	Stainless steel AISI 316L EN 1.4404				
Heat exchange surface solar coil	m ²	1,9	2,4	3,1	3,5	3,8
Heat exchanger capacity solar coil	l	11,0	15,0	19,0	21,5	23,5
Heating water storage capacity	l	458	727	853	1454	1924
Thermal insulation	[-]	Hard PU foam insulation shells (λ=0,024 W/mK)				
Insulation thickness	mm	≥70	≥70	≥70	≥85	≥85
ErP Energy Class		C	C	C	C	C
ErP Heat Loss Watt		104	129	141	171	185
Heat loss	kW/24h	2,50	3,10	3,38	4,10	4,44
Max. Operating temperature	°C	95	95	95	95	95
Max. Operating temperature (D.H.W. coil)	°C	95	95	95	95	95
Max. Operation temperature solar coil	°C	110	110	110	110	110
Max. Operating pressure ^{1/2}	MPa	0,3/0,45	0,3/0,45	0,3/0,45	0,3/0,45	0,3/0,45
Max. Operating pressure (D.H.W. coil) ^{1/2}	MPa	0,6/0,9	0,6/0,9	0,6/0,9	0,6/0,9	0,6/0,9
Max. Operation pressure solar coil ^{1/2}	MPa	1,0/1,5	1,0/1,5	1,0/1,5	1,0/1,5	1,0/1,5
Net weight (dry)	kg	180	191	219	345	375
Total height (incl. Insulation)	mm	1750	1970	2120	2220	2420
Ø Diameter (without Insulation)	mm	650	750	790	1000	1100
Ø Diameter (incl. Insulation)	mm	810	910	950	1200	1300
Heating element (max. length)	mm	500	500	500	750	750
Tilt height	mm	1740	1950	2100	2220	2410

Notes: ¹ Max. operating pressure, ² Max. pressure test according to EN 12897 P.4.4.1 - D.H.W. = Domestic hot water



TECHNICAL DATA	M.U.	PTSW 500 HR	PTSW 800 HR	PTSW 1000 HR	PTSW 1500 HR	PTSW 2000 HR
Air Vent (ENT)	IG / mm	1¼" / 1670	1¼" / 1910	1¼" / 2060	1¼" / 2140	1¼" / 2320
Domestic hot water outlet (WW)	AG / mm	1" / 1410	1" / 1670	1" / 1820	1" / 1835	1" / 2000
Boiler Inlet connection 1 (KV1)	IG / mm	1½" / 1410	1½" / 1670	1½" / 1820	1½" / 1835	1½" / 2000
Boiler Inlet connection 2 (KV2)	IG / mm	1½" / 1300	1½" / 1560	1½" / 1710	1½" / 1725	1½" / 1890
Inlet heating system (HZV)	IG / mm	1½" / 1020	1½" / 1150	1½" / 1300	1½" / 1285	1½" / 1380
Heating element connection (EHP)	IG / mm	1½" / 900	1½" / 950	1½" / 1100	1½" / 1065	1½" / 1230
Boiler Outlet connection 1 (KR1)	IG / mm	1½" / 820	1½" / 870	1½" / 990	1½" / 975	1½" / 1030
Inlet solar connection (SLV)	IG / mm	1" / 720	1" / 770	1" / 890	1" / 875	1" / 930
Outlet heating system 1 (HZR1)	IG / mm	1½" / 620	1½" / 670	1½" / 790	1½" / 775	1½" / 830
Boiler Outlet connection 2 (KR2)	IG / mm	1½" / 390	1½" / 400	1½" / 400	1½" / 465	1½" / 480
Outlet solar connection (SLR)	IG / mm	1" / 280	1" / 290	1" / 290	1" / 355	1" / 370
Domestic hot water inlet (KW)	AG / mm	1" / 260	1" / 270	1" / 270	1" / 335	1" / 350
Outlet heating system 2 (HZR2)	IG / mm	1½" / 150	1½" / 170	1½" / 170	1½" / 235	1½" / 250
Sensor-clip (FKL)		X	X	X	X	X

Notes : AG = Male fitting, IG = Female fitting

	Tank completely heated			Tank heated only in the upper part ¹						
	Initial performance without heating integration [l]			Initial performance without heating integration [l]			Values according to DIN4708 ²			
	Water extraction volume			Water extraction volume			Max. performance in 10 min. ³			
	10 l/min.	15 l/min.	20 l/min.	10 l/min.	15 l/min.	20 l/min.	NL	(l)	(l/min.)	
D.H.W. coil	500	373	319	281	260	234	209	3,0 (29kW)	232	23,2
	800	573	519	456	382	322	275	3,8 (30kW)	260	26,0
	1000	637	600	536	402	331	281	4,0 (33kW)	267	26,7
	1500	700	650	547	385	358	301	9,3 (70kW)	399	39,9
	2000	842	714	651	463	393	358	10,4 (80kW)	423	42,3

1 - AF (cold water) heating from 10° up to 45° C; Cylinder temperature 65° C
 2 - AF (cold water) heating from 10° up to 45° C; Inlet 70°C; Cylinder temperature AF+50K
 3 - Datas referred to NL factor

