

# Buffer cylinder 1 coil



## SERIES ISPHW 500÷2000 PR

Buffer cylinder main feature is the ability to combine multiple sources of heat both as an input or an output and the flexibility to heat the water at different times of day, up to 95 °C. Buffers are an easy way to make most renewable energy projects even more efficient, because they adds necessary thermal mass to the system to dampen fast transitions and minimize boiler cycling that occurs during low domestic load conditions.

- Raw carbon steel tank externally painted with powder paint
- High density polyurethane insulation shells (PUR)
- External soft plastic coating (PVC)
- Solar compatible
- Ready to install probe holders with 1/2 " threaded connection with sensor-clip (FKL)
- 1 1/2 " connection for the installation of specific heating element kits up to 9 kW (EHP)
- 1 fixed coil for integration with another heat source

**ACCESSORIES PP. 77**

**WARRANTY 2+3 YEARS**

TECHNICAL DATA	M.U.	ISPHW 500 PR	ISPHW 750 PR	ISPHW 950 PR	ISPHW 1250 PR	ISPHW 1500 PR	ISPHW 2000 PR
Total working capacity	l	497	772	902	1283	1526	1998
Code	/	<b>171995</b>	<b>171996</b>	<b>171997</b>	<b>171998</b>	<b>171999</b>	<b>172254</b>
Heating water storage capacity	l	482,5	755,8	883,4	1264,4	1502,5	1971,6
Heat exchange surface	m <sup>2</sup>	1,8	2,4	3,1	3,2	3,5	3,8
Heat exchanger capacity	l	14,5	16,2	18,6	18,6	23,5	26,4
Power (ΔT 35°C)*	kW	55,0	74,0	95,0	98,0	113,0	120,0
Heating water production (ΔT 35°C)*	l/h	1351	1820	2333	2407	2775	2947
Heating Time (ΔT 35°C)*	min.	24	27	25	34	35	43
Primary flow rate	m <sup>3</sup> /h	3,0	3,0	3,0	3,0	3,0	3,0
Insulation thickness	mm	≥70	≥70	≥70	≥85	≥85	≥85
Thermal insulation	[-]	Hard PU foam insulation shells (λ=0,024 W/mK)					
ErP Energy Class		C	C	C	C	C	C
ErP Heat Loss Watt		104	129	141	163	171	185
Max. Operating temperature	°C	95	95	95	95	95	95
Max. solar coil operating temperature	°C	95	95	95	95	95	95
Max. Operating pressure <sup>1/2</sup>	MPa	0,3/0,45	0,3/0,45	0,3/0,45	0,3/0,45	0,3/0,45	0,3/0,45
Max. Operating pressure Solar coil <sup>1/2</sup>	MPa	1,0/1,5	1,0/1,5	1,0/1,5	1,0/1,5	1,0/1,5	1,0/1,5
Heating element (max. length)	mm	650	750	800	800	1000	1100
Heating element (max. power)	kW	6,0	7,5	9,0	9,0	9,0	9,0
Net weight (dry)	kg	128	145	180	208	237	283
Heat Loss	[kWh/24h]	2,50	3,10	3,40	3,90	4,10	4,50
Total height (incl. Insulation)	mm	1750	1970	2120	2080	2220	2420
Ø Diameter (incl. Insulation)	mm	810	910	950	1150	1200	1300
Ø Diameter (without Insulation)	mm	650	750	790	950	1000	1100
Installation diameter	mm	650	750	790	950	1000	1100
Tilt height	mm	1740	1950	2100	2080	2200	2410

Notes: \* Primary circuit temperature 80°C / Secondary circuit temperature 10/45°C / Primary flow rate indicated in the table / H.W. =Heating water  
Notes: <sup>1</sup> Max. operating pressure, <sup>2</sup> Max. pressure test according to EN 12897 P.4.4.1



TECHNICAL DATA	M.U.	ISPHW 500 PR	ISPHW 750 PR	ISPHW 950 PR	ISPHW 1250 PR	ISPHW 1500 PR	ISPHW 2000 PR
Boiler Inlet connection 1 (KV1)	IG / mm	1½" / 1410	1½" / 1670	1½" / 1820	1½" / 1715	1½" / 1835	1½" / 2000
Boiler Inlet connection 2 (KV2)	IG / mm	1½" / 1300	1½" / 1560	1½" / 1710	1½" / 1605	1½" / 1725	1½" / 1890
Inlet heating system 1 (HZV1)	IG / mm	1½" / 1020	1½" / 1150	1½" / 1300	1½" / 1195	1½" / 1285	1½" / 1380
Boiler Outlet connection 1 (KR1)	IG / mm	1½" / 820	1½" / 870	1½" / 990	1½" / 915	1½" / 975	1½" / 1030
Inlet solar coil (SLV)	IG / mm	1" / 720	1" / 770	1" / 890	1" / 815	1" / 875	1" / 930
Outlet heating system 1 (HZR1)	IG / mm	1½" / 620	1½" / 670	1½" / 790	1½" / 715	1½" / 775	1½" / 830
Boiler Outlet connection 2 (KR2)	IG / mm	1½" / 390	1½" / 400	1½" / 400	1½" / 445	1½" / 465	1½" / 480
Outlet solar coil (SLR)	IG / mm	1" / 280	1" / 290	1" / 290	1" / 335	1" / 355	1" / 370
Outlet heating system 2 (HZR2)	IG / mm	1½" / 150	1½" / 170	1½" / 170	1½" / 215	1½" / 235	1½" / 250
Plate heat exchanger inlet connection (FWV)	IG / mm	1¼" / 1410	1¼" / 1670	1¼" / 1820	1¼" / 1715	1¼" / 1835	1¼" / 2000
Heating element connection (EHP)	IG / mm	1½" / 900	1½" / 950	1½" / 1100	1½" / 995	1½" / 1065	1½" / 1230
Plate heat exchanger outlet connection (FWR)	IG / mm	1¼" / 260	1¼" / 270	1¼" / 270	1¼" / 315	1¼" / 335	1¼" / 350
Air Vent (ENT)	IG / mm	1¼" / 1690	1¼" / 1910	1¼" / 2060	1¼" / 2000	1¼" / 2140	1¼" / 2320
Sensor-clip (FKL)		X	X	X	X	X	X

Notes : AG = Male fitting, IG = Female fitting -

