

PUK - Low size pufferspeicher thermal accumulator



Thermal accumulator for the storage of heating water produced from continuous and discontinuous heat sources. Boilers of reduced height are designed to be transported insulated in a vertical position. Available in:

- only accumulation
- only accumulation + a single fixed coil heat exchanger
- accumulation + two fixed coil heat exchangers.

The thermal fluid contained in the tank and in the primary heat exchangers must operate "closed loop" (without oxygen), this to avoid corrosion.

TECHNICAL CHARACTERISTICS

Puffer	Material:	S 235 Jr
	Internal protective processing:	Rough
	External protective processing:	Painting with anti rust and industrial glaze
	Operation (P max. / T max.):	4 bar / 95°C
Upper exchanger (boiler)	Material:	S 235 Jr
Lower exchanger (solar)	Internal protective processing:	Rough
	External protective processing:	Rough
	Typology:	Spiral fixed coil
	Operation (P max. / T max.):	12 bar / 95°C
General characteristics	Capacity:	2000 - 5000 Lt
	Warranty:	5 years
	Insulation:	Flexible polyurethane with pvc coating
	Reference legislation:	- PED 14/68/UE Art. 4 Par. 3 - Directive 2009/125/CE (Energy related Products)

* On request up to 100 000 Lt

FITTINGS
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Electronic control unit



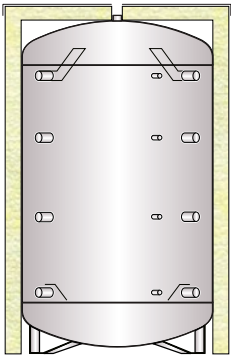
Electrical resistance 1"1/2 connection



Thermostat

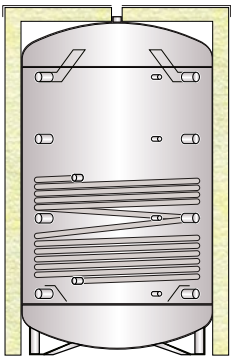


Thermometer



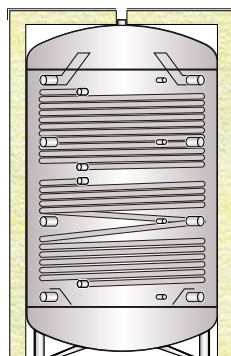
PUK - Pufferspeicher thermal accumulator		
Flexible Polyurethane insulation thick. 100mm + pvc		
Code	ErP	€
PUK 02000 F	D	-
PUK 02500 F	-	-
PUK 03000 F	-	-
PUK 04000 F	-	-
PUK 05000 F	-	-

For bigger capacities require estimate



PUKS - Pufferspeicher thermal accumulator with a single fixed coil		
Flexible Polyurethane insulation thick. 100mm + pvc		
Code	ErP	€
PUKS 02000 F	D	-
PUKS 02500 F	-	-
PUKS 03000 F	-	-
PUKS 04000 F	-	-
PUKS 05000 F	-	-

For bigger capacities require estimate



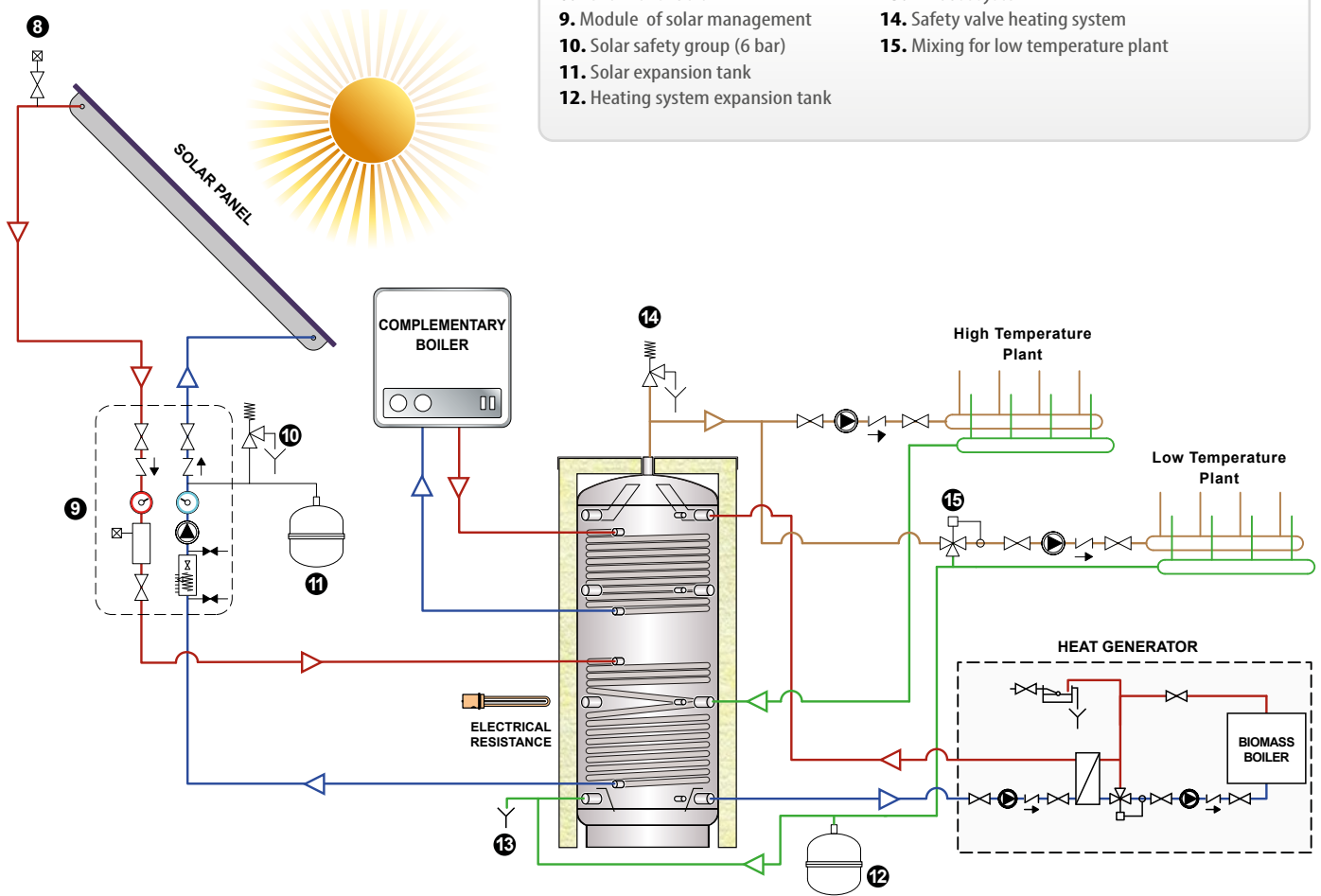
PUKSS - Pufferspeicher thermal accumulator with two fixed coil		
Flexible Polyurethane insulation thick. 100mm + pvc		
Code	ErP	€
PUKSS 02000 F	D	-
PUKSS 02500 F	-	-
PUKSS 03000 F	-	-
PUKSS 04000 F	-	-
PUKSS 05000 F	-	-

For bigger capacities require estimate

Caution: Indicative Schematic diagram, not substitutive for project work.

LEGEND

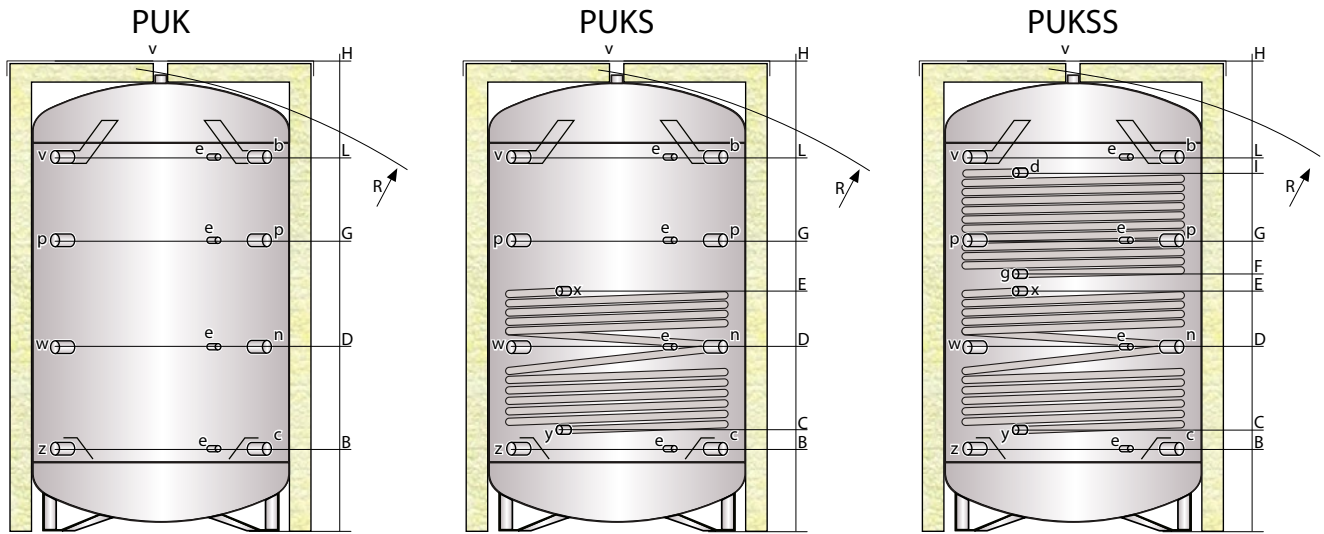
- 8. Vent with shut-off
- 9. Module of solar management
- 10. Solar safety group (6 bar)
- 11. Solar expansion tank
- 12. Heating system expansion tank
- 13. Exhaust system
- 14. Safety valve heating system
- 15. Mixing for low temperature plant



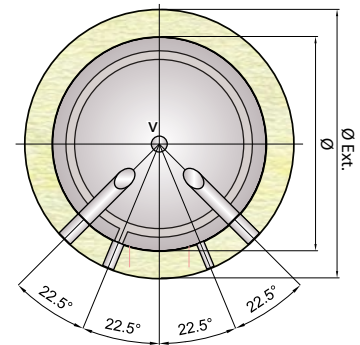
Model	FE spiral lower exchanger					FE spiral upper exchanger				
	Sq.m. (Lt)	Power (kW)				Sq.m. (Lt)	Power (kW)			
		ΔT^* 10° C	ΔT^* 15° C	ΔT^* 20° C	ΔT^* 25° C		ΔT^* 10° C	ΔT^* 15° C	ΔT^* 20° C	ΔT^* 25° C
PUK 02000F	4,8 (34,1)	30,7	46,0	61,4	76,7	3,8 (27,0)	24,3	36,5	48,6	60,8
PUK 02500F	4,8 (34,1)	30,7	46,0	61,4	76,7	3,8 (27,0)	24,3	36,5	48,6	60,8
PUK 03000F	6,0 (42,6)	38,4	57,6	76,7	95,9	3,8 (27,0)	24,3	36,5	48,6	60,8
PUK 04000F	7,0 (49,7)	44,8	67,2	89,5	111,9	4,5 (32,0)	28,8	43,2	57,6	71,9
PUK 05000F	8,0 (56,8)	51,2	76,7	102,3	127,9	5,0 (35,5)	32,0	48,0	64,0	79,9

* ΔT : difference between the average temperature of the heating fluid (inside the heat exchanger) and the average temperature of the heated fluid (internal to the puffer in the area affected by the coil).

For the purposes of the Directive (ErP) 2009/125 / EC Regulation N° 812/2013 and N° 814/2013 the results of the energy measurements are given on page 231



- b biomass boiler flow
- c biomass boiler return
- d boiler flow integration
- e thermometer - probe
- g integration boiler return
- n heating system return
- p service connection
- x solar flow
- y solar return
- v heating system flow
- w preparation for electrical resistance
- z return from low temperature heating system



Technical water thermal accumulators

Model	Dimensions (mm)				Exchanger (Sq.m.)		Weight PUKSS (Kg)
	Ø	H	Ø Ext *	R	Lower	Upper	
PUK 02000F	1200	2195	1400	2285	4,80	3,80	342
PUK 02500F	1300	2260	1500	2385	4,80	3,80	377
PUK 03000F	1400	2320	1600	2470	6,00	3,80	435
PUK 04000F	1600	2320	1800	2565	7,00	4,50	512
PUK 05000F	1800	2320	2000	2660	8,00	5,00	694

* All insulations are removable

Model	Dimensions (mm)								Connections (gas)		
	B	C	D	E	F	G	I	L	dgxy	e	bcnpvwz
PUK 02000F	385	450	860	1080	1220	1360	1690	1750	1"	1/2"	1"1/2
PUK 02500F	420	485	895	1155	1295	1435	1725	1785	1"	1/2"	2"
PUK 03000F	455	520	930	1190	1330	1470	1760	1820	1"	1/2"	2"
PUK 04000F	460	525	975	1195	1335	1475	1735	1795	1"	1/2"	2"
PUK 05000F	490	555	1005	1225	1355	1475	1705	1765	1"	1/2"	2"