



PUK - Hot water buffer store Low size Pufferspeicher

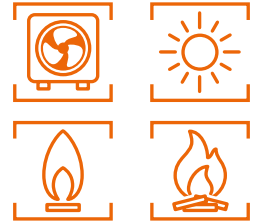
Carbon steel hot water buffer store for the storage of primary water produced from continuous and discontinuous heat sources.

Available in the following options:

- only storage
- storage + one auxiliary coil
- storage + two auxiliary coils

The thermal fluid contained in the cylinder and in the primary heat exchangers must operate in closed circuit (without oxygen), in order to avoid corrosion phenomena. Cylinders are also prepared to host a backup immersion heater (not supplied).

HEAT SOURCE



APPLICATION



Version with reduced height to allow its shipment in upright position.



TECHNICAL FEATURES

Buffer vessel

Material	S 235 Jr Carbon steel
Internal protective treatment	None
External protective treatment	Anti rust protection + epoxy painting
Rating (P max. / T max.)	4 bar / 95°C

Heat exchanger

Material	S 235 Jr Carbon steel
Internal protective treatment	None
External protective treatment	None
Type	Fixed coil
Rating (P max. / T max.)	10 bar / 95°C

General features

Capacity	2000 - 5000 L
Warranty	5 years
Insulation	Soft polyurethane with PVC jacket
In compliance with	- Pressure Equipment Directive (PED) 2014/68/UE Art. 4 Para 3 - Energy related Products (Erp) Directive 2009/125/CE

ACCESSORIES
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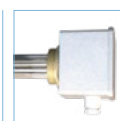
Electronic control unit



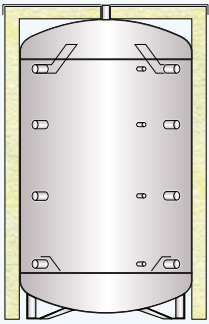
Thermostat



Thermometer

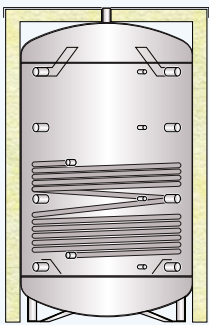


1½ electric immersion heater



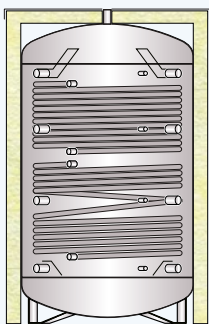
PUK - Hot water buffer vessel Insulation with soft polyurethane and PVC jacket

CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)
PUK 02000 F	130	C	190,6	2147,9
PUK 02500 F	100	-	-	2546,2
PUK 03000 F	100	-	-	3033,0
PUK 04000 F	100	-	-	3967,4
PUK 05000 F	100	-	-	4978,3



PUKS - Hot water buffer vessel with one coil Insulation with soft polyurethane and PVC jacket

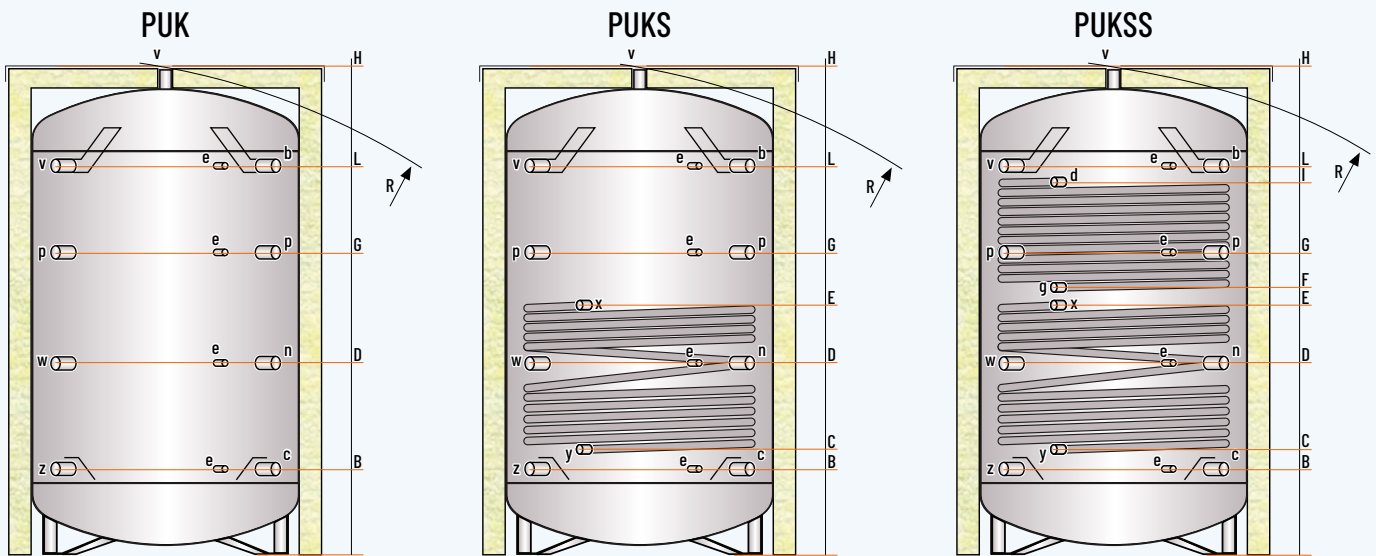
CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	HEAT EXCHANGER (m ²) / (L)*
PUKS 02000 F	130	C	190,6	2147,9	4,80 / 47,0
PUKS 02500 F	100	-	-	2546,2	4,80 / 47,0
PUKS 03000 F	100	-	-	3033,0	6,00 / 58,8
PUKS 04000 F	100	-	-	3967,4	7,00 / 68,6
PUKS 05000 F	100	-	-	4978,3	8,00 / 78,4



PUKSS - Hot water buffer vessel with two coils Insulation with soft polyurethane and PVC jacket

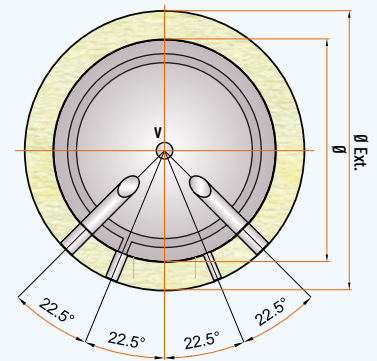
CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	LOWER HEAT EXCHANGER (m ²) / (L)*	UPPER HEAT EXCHANGER (m ²) / (L)*
PUKSS 02000 F	130	C	190,6	2147,9	4,80 / 47,0	3,80 / 37,2
PUKSS 02500 F	100	-	-	2546,2	4,80 / 47,0	3,80 / 37,2
PUKSS 03000 F	100	-	-	3033,0	6,00 / 58,8	3,80 / 37,2
PUKSS 04000 F	100	-	-	3967,4	7,00 / 68,6	4,50 / 44,1
PUKSS 05000 F	100	-	-	4978,3	8,00 / 78,4	5,00 / 49,0

* Volume occupied by the heat exchanger and its support structure



LEGEND

- b** . Biomass boiler flow
- c** . Biomass boiler return
- d** . Boiler flow
- e** . Thermometer - Sensor
- g** . Boiler return
- n** . Heating system return
- p** . Free connection
- x** . Solar system flow
- y** . Solar system return
- v** . Heating system flow
- w** . Opening for immersion heater
- z** . Low temperature heating system return

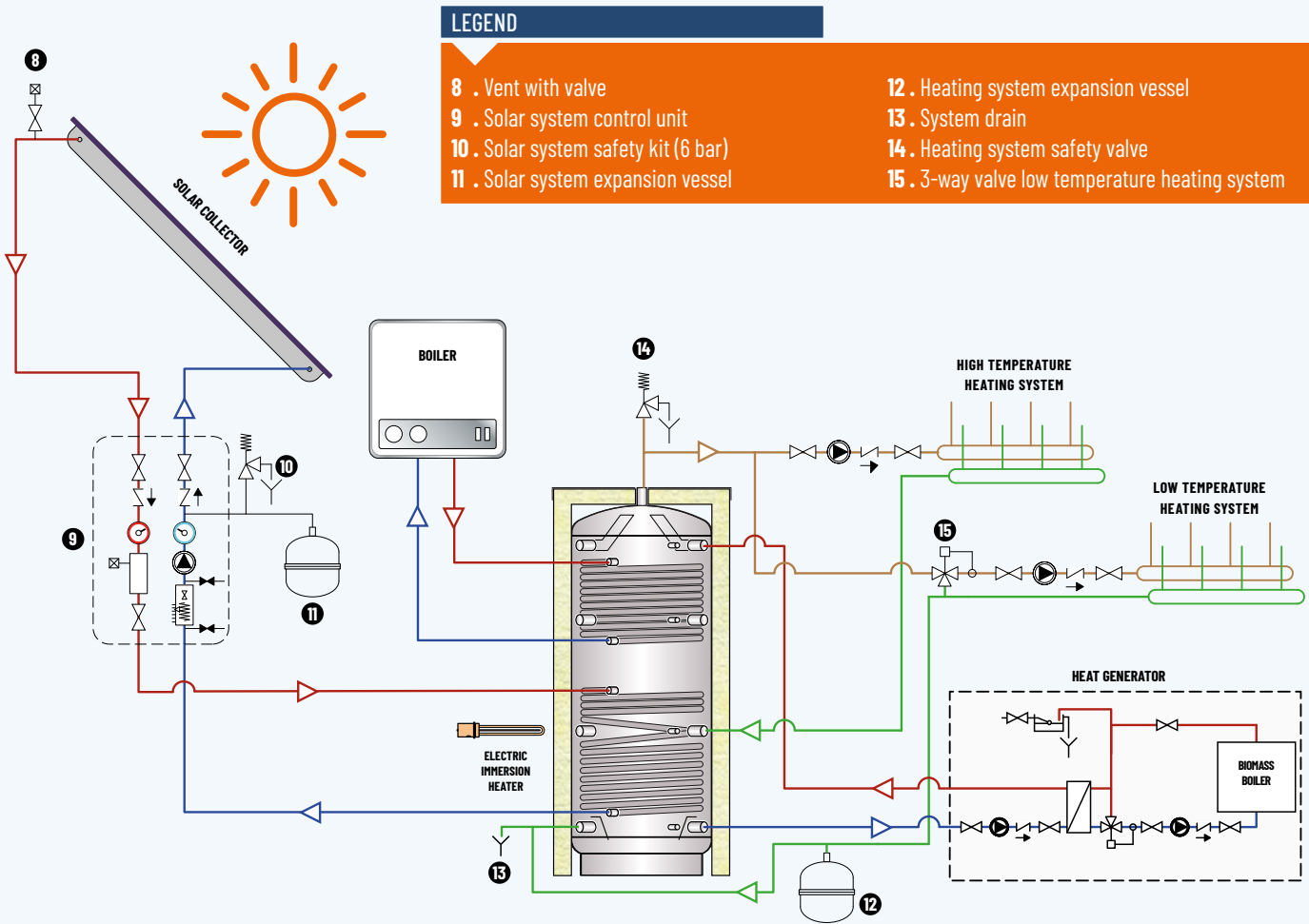


MODEL	DIMENSIONS (mm)				LOWER HEAT EXCHANGER (m ²)	UPPER HEAT EXCHANGER (m ²)	WEIGHT PUKSS (kg)
	Ø	H	Ø EXT	R *			
PUK__ 02000 F	1200	2225	1460	2285	4,80	3,80	342
PUK__ 02500 F	1300	2260	1500	2385	4,80	3,80	377
PUK__ 03000 F	1400	2320	1600	2470	6,00	3,80	435
PUK__ 04000 F	1600	2320	1800	2565	7,00	4,50	512
PUK__ 05000 F	1800	2320	2000	2660	8,00	5,00	694

* The insulation is removable

MODEL	HEIGHTS (mm)								CONNECTIONS (GAS)			
	B	C	D	E	F	G	I	L	dgxy	e	bcnpvwz	
PUK__ 02000 F	385	450	860	1080	1220	1360	1690	1750	1"	½"	½"	
PUK__ 02500 F	420	485	895	1155	1295	1435	1725	1785	1"	½"	2"	
PUK__ 03000 F	455	520	930	1190	1330	1470	1760	1820	1"	½"	2"	
PUK__ 04000 F	460	525	975	1195	1335	1475	1735	1795	1"	½"	2"	
PUK__ 05000 F	490	555	1005	1225	1355	1475	1705	1765	1"	½"	2"	

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



LEGEND

- 8 . Vent with valve
- 9 . Solar system control unit
- 10 . Solar system safety kit (6 bar)
- 11 . Solar system expansion vessel
- 12 . Heating system expansion vessel
- 13 . System drain
- 14 . Heating system safety valve
- 15 . 3-way valve low temperature heating system

Lower heat exchanger performance

Upper heat exchanger performance

CODE	m ² (L)	Power (kW)				m ² (L)	Power (kW)			
		$\Delta T^* 10\text{ }^\circ\text{C}$	$\Delta T^* 15\text{ }^\circ\text{C}$	$\Delta T^* 20\text{ }^\circ\text{C}$	$\Delta T^* 25\text{ }^\circ\text{C}$		$\Delta T^* 10\text{ }^\circ\text{C}$	$\Delta T^* 15\text{ }^\circ\text{C}$	$\Delta T^* 20\text{ }^\circ\text{C}$	$\Delta T^* 25\text{ }^\circ\text{C}$
PUK_ 002000 F	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_ 002500 F	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_ 003000 F	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_ 004000 F	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_ 005000 F	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 buffer in the area affected by the coil).