

Main features	
Application	storage of thermal energy for DHW and space heating
Description	this combination Thermal Store utilizes a heat pump with PV panels as a heat source for both space and DHW heating; DHW is being prepared in 2 integrated stainless-steel heat exchangers; a tightly fitting separating metal plate increases the heat pump's seasonal coefficient of performance, a dedicated PV heating element is placed in the lower tank section; more electric heating elements can be installed if needed
Working fluid	water (tank); water, water/glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1) (heat exchangers)

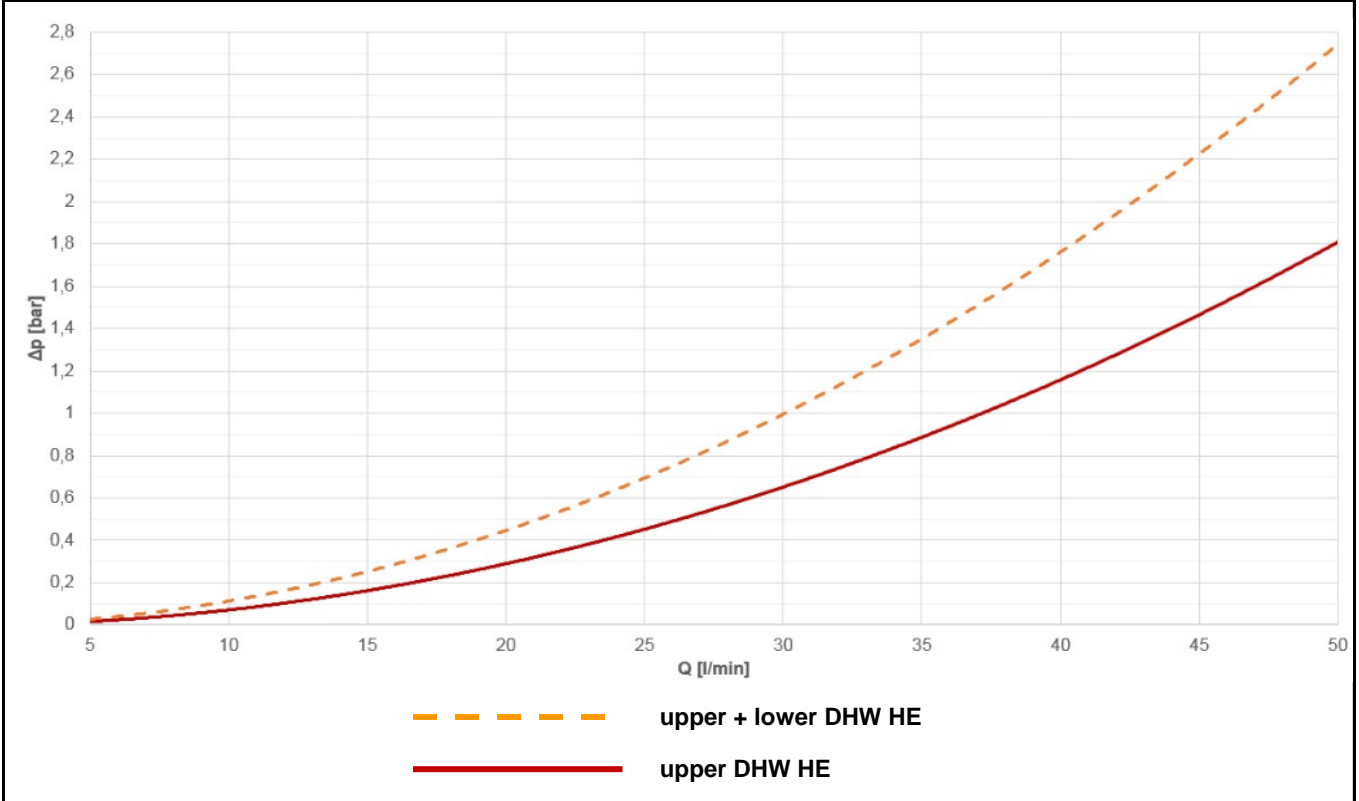
**HSK 1000 PV**

**HSK 1000 PV with insulation**


Code	
Thermal Store	16 180
Insulation	16 312
Energy Efficiency Data (as per EC Regulation No. 812/2013)	
<b>HSK 1000 PV with insulation</b>	
Energy efficiency class	N/A
Standing loss	132 W
Storage volume	922 l
Technical data	
Total tank volume	922 l
Fluid volume in tank	890 l
Upper DHW heat exchanger volume	21 l
Lower DHW heat exchanger volume	11 l
Upper DHW heat exchanger surface area	6 m <sup>2</sup>
Lower DHW heat exchanger surface area	3 m <sup>2</sup>
Max. working temp. in thermal store	95 °C
Max. working temp. in DHW heat exchangers	95 °C
Max. working pressure in thermal store	4 bar
Max. working pressure in DHW heat exchangers	6 bar
Tank Materials	
Tank material	S235JR
DHW heat exchanger material	AISI 316 L
Materials	
Tank perimeter insulation	fleece
Tank perimeter insulation outer surface	PU leather
Top and bottom tank insulation	fleece
Dimensions, Tipping height, Weight	
Tank diameter	800 mm
Tank diameter with insulation	1000 mm
Tank overall height	2080 mm
Tipping height without insulation	2230 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulation thickness	120 mm
Empty weight without insulation	192 kg
Accessories	
El. heating element	type ETT-C, L, M
Heating elem. max. length / output	4x 755 mm / 9 kW

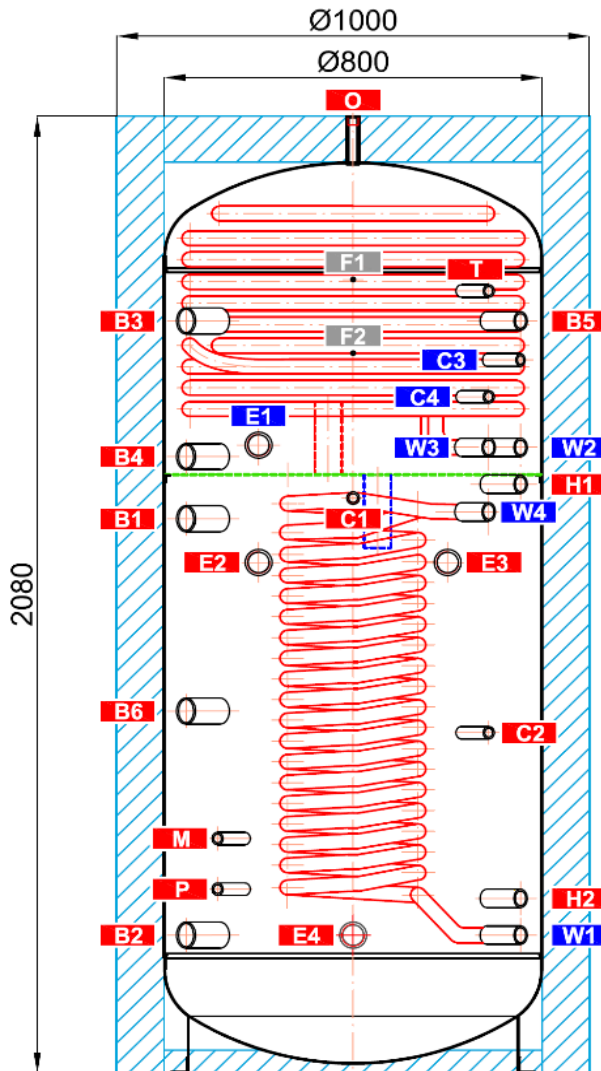
Volume of supplied DHW (heated from 10 °C to 40 °C)												
Heated volume	entire			entire			entire			above metal sheet		
Temperature in tank	60 °C			60 °C			80 °C			60 °C		
Backup heater	10 kW			none			none			10 kW		
Flow rate [l/min]	8	12	20	8	12	20	8	12	20	8	12	20
Hot water volume [l]	1381	1008	796	846	749	697	1406	1365	1173	423	301	270

Heat exchanger pressure drop



Dimensions

Tipping height without insulation 2230 mm.



TAPPINGS

pos.	connection	height [mm]
<b>Heat sources</b>		
B1	G6/4" F	1205
B2	G6/4" F	200
B3	G6/4" F	1635
B4	G6/4" F	1340
B5	G1" F	1635
B6	G6/4" F	787
<b>Heating system</b>		
H1	G1" F	1280
H2	G1" F	380
<b>EI. heating elements</b>		
E1	G6/4" F	1365
E2	G6/4" F	1110
E3	G6/4" F	1110
E4	G6/4" F	300
<b>DHW heating</b>		
W1	G1" M	300
W2	G1" M	1360
W3	G1" M	1360
W4	G1" M	1220
<b>Control and safety</b>		
C1	G1/2" F	1250
C2	G1/2" F	740
C3	G1/2" F	1550
C4	G1/2" F	1470
T	G1/2" F	1700
M	G1/2" F	510
P	G1/2" F	400
<b>Air release</b>		
O	G1/2" F	2080
<b>Pump station support</b>		
F1	M6	1725
F2	M6	1565