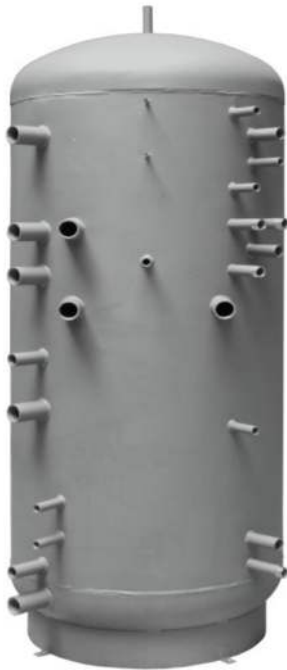


## HSK 1000 PR Combination Thermal Store

**HSK 1000 PR**

**HSK 1000 PR with insulation**


### Main features

Application	accumulation of thermal energy for space and DHW heating
Description	combination thermal store with DHW heating in an integrated stainless-steel heat exchanger, fitted with a tight separating metal plate that increases Seasonal coefficient of performance (SCOP) of a heat pump and the efficiency of a solar thermal system, with a solar heat exchanger in the lower tank section below the plate
Working fluid	water (tank) water, water/glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1) (heat exchangers)

### Code

Thermal Store	<b>14012</b>
Insulation	<b>18844</b>

### Energy Efficiency Data (as per EC Regulation No. 812/2013)

<b>HSK 1000 PR with insulation</b>	
Energy efficiency class	N/A
Standing loss	128 W
Storage volume	898 l

### Technical Data

Total tank volume	916 l
Fluid volume in tank	866 l
Fluid volume above the separating plate	314 l
Fluid volume below the separating plate	552 l
Solar heat exchanger volume	18 l
Upper DHW heat exchanger volume	21 l
Lower DHW heat exchanger volume	11 l
Solar heat exchanger surface area	3,2 m <sup>2</sup>
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 temperature in solar HE	95 °C
Max. working temp. in DHW heat exchangers	95 °C
Max. working pressure in Thermal Store	4 bar
Max. working pressure in solar HE	10 bar
Max. working pressure in DHW heat exchangers	10 bar

### Tank Materials

Tank material	S235JR
Solar heat exchanger material	S235JR+N
DHW heat exchanger material	AISI 316 L

### Insulation Materials

Tank perimeter insulation	fleece and polystyrene
Tank perimeter insulation outer surface	hard polystyrene
Top and bottom tank insulation	fleece

### Dimensions, Tipping height, Insulation thickness, Weight

Tank diameter	800 mm
Tank diameter with insulation	1000 mm
Tank overall height	2080 mm
Tipping height without insulation	2120 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulation thickness	120 mm
Empty weight without insulation	192 kg

## HSK 1000 PR Combination Thermal Store

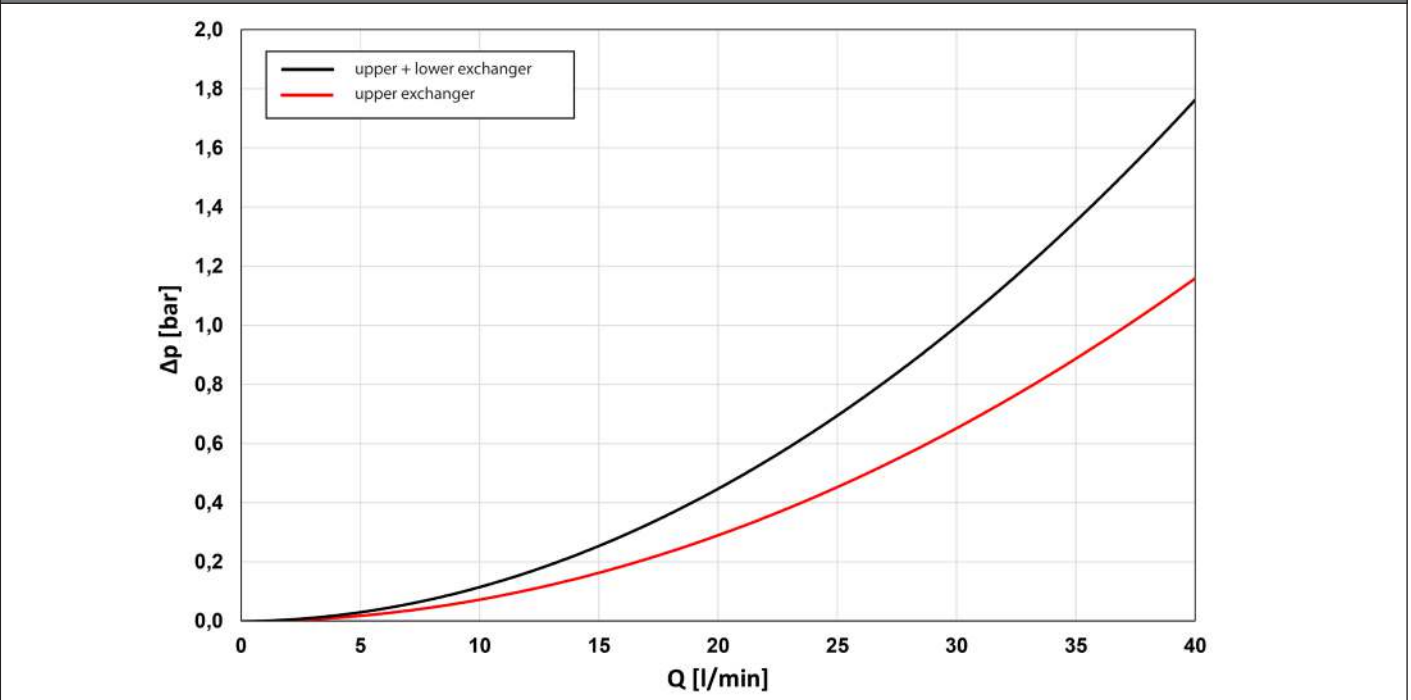
### Accessories

El. heating element (models)	ETT-C, M, P
Heating elem. max. length / output	3x 755 mm / 9 kW

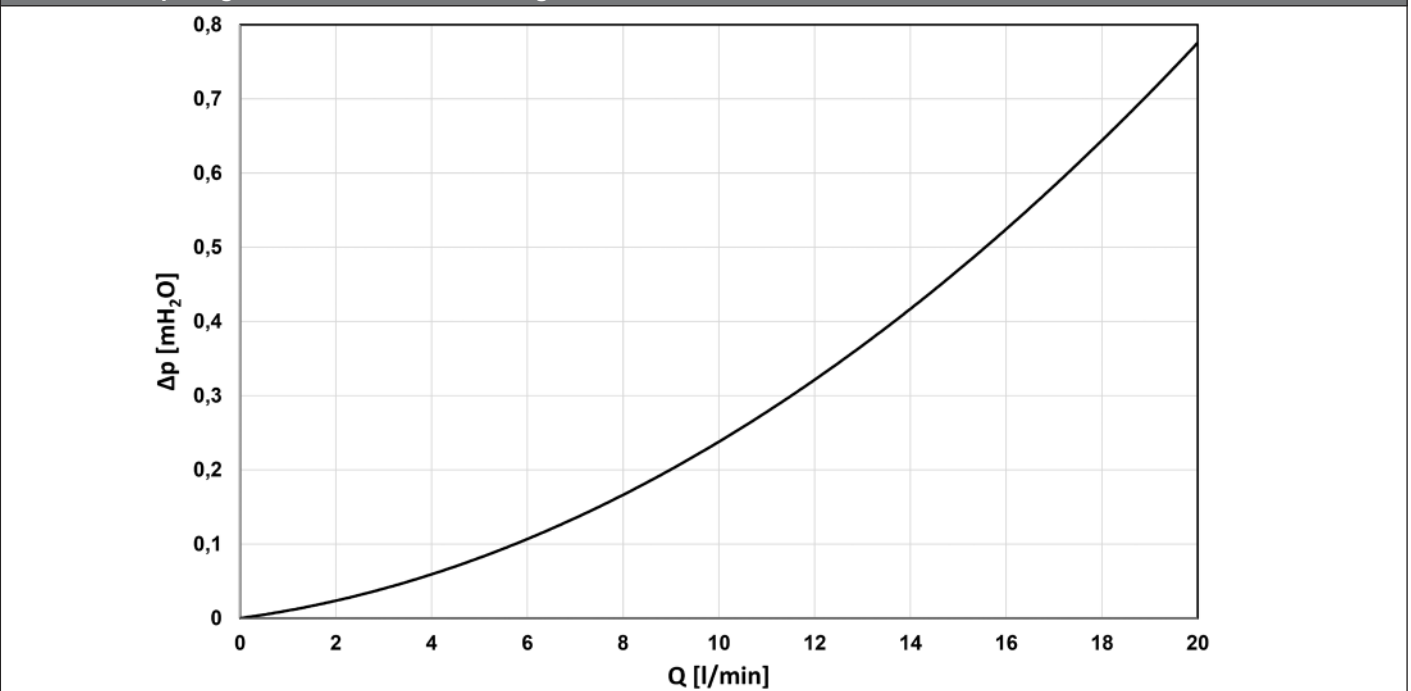
### Volume of supplied DHW (heated from 10 °C to 40 °C)

Heated volume	entire			entire			above metal sheet			entire			entire			above metal sheet			entire		
Temperature in tank	50 °C			50 °C			50 °C			60 °C			60 °C			60 °C			80 °C		
Backup heater	10 kW			none			10 kW			10 kW			none			10 kW			none		
Flow rate [l/min]	8	12	20	8	12	20	8	12	20	8	12	20	8	12	20	8	12	20	8	12	20
<b>Hot water volume [l]</b>	<b>451</b>	<b>391</b>	<b>287</b>	<b>414</b>	<b>370</b>	<b>253</b>	<b>218</b>	<b>199</b>	<b>118</b>	<b>1381</b>	<b>1008</b>	<b>796</b>	<b>846</b>	<b>749</b>	<b>697</b>	<b>423</b>	<b>301</b>	<b>270</b>	<b>1406</b>	<b>1365</b>	<b>1173</b>

### Pressure Drop Diagram for DHW Heat Exchange



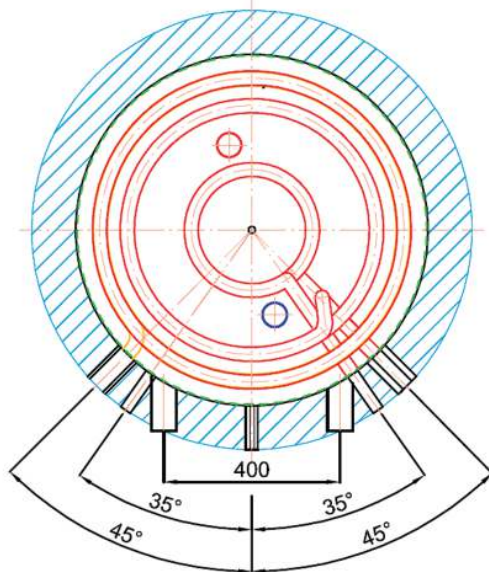
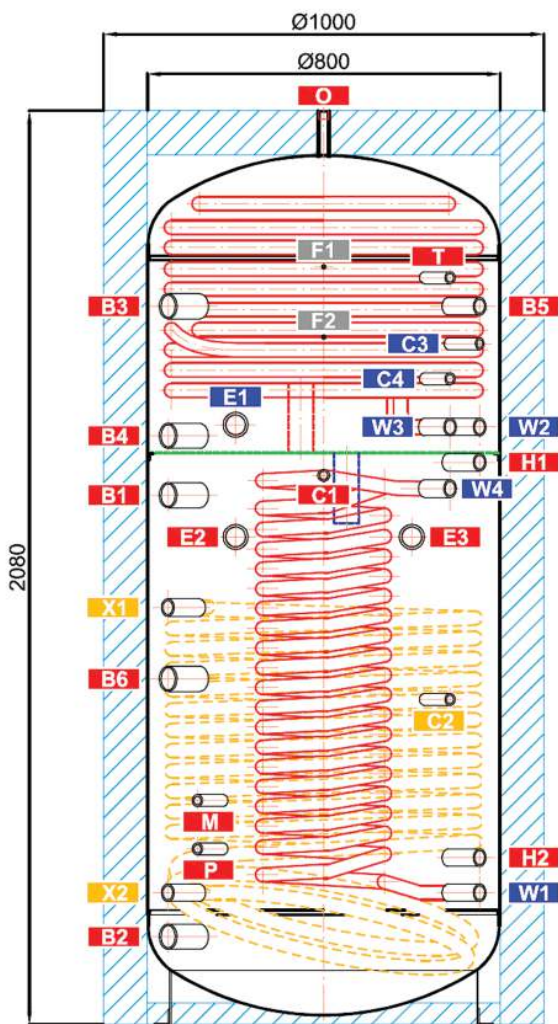
### Pressure Drop Diagram for Solar Heat Exchanger



## HSK 1000 PR Combination Thermal Store

### Dimensions

Tipping height without insulation 2120 mm



### TAPPINGS

Pos.	Description	Connec-tion	Height [mm]
<b>Heat sources</b>			
B1	Incoming from heat source	G 6/4" F	1205
B2	Return to heat source	G 6/4" F	200
B3	Incoming from heat source	G 6/4" F	1635
B4	Return to heat source	G 6/4" F	1340
B5	Incoming from heat source	G 1" F	1635
B6	Incoming from heat source	G 6/4" F	787
<b>Heating system</b>			
H1	Flow to heating system	G 1" F	1280
H2	Return from heating system	G 1" F	380
<b>Solar thermal system</b>			
X1	Flow to heating system	G 1" F	950
X2	Return from heating system	G 1" F	300
<b>EI . heating elements</b>			
E1	Electric heating element for DHW heating	G 6/4" F	1365
E2	Electric heating element for space heating	G 6/4" F	1110
E3	Electric heating element for space heating	G 6/4" F	1110
<b>DHW heating</b>			
W1	Cold water	G 1" M	300
W2	Hot water	G 1" M	1360
W3	Circulation	G 1" M	1360
W4	Hot water	G 1" M	1220
<b>Control and safety</b>			
C1	Temperature sensor	G 1/2" F	1250
C2	Temperature sensor	G 1/2" F	740
C3	Temperature sensor	G 1/2" F	1550
C4	Temperature sensor	G 1/2" F	1470
T	Thermometer	G 1/2" F	1700
M	Pressure gauge	G 1/2" F	510
P	Safety valve	G 1/2" F	400
<b>Air release</b>			
O	Air vent valve	G 1/2" F	2080
<b>Pump station support</b>			
F1	Pump station support – upper	M6	1725
F2	Pump station support – lower	M6	1565