

**HSK 1700 P Combination Thermal Store**


Main Features	
Application	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. Thermal stores are supplied uninsulated. Thermal insulation is available as a separate item, see the codes below.
Working fluid	Water (heat exchanger), water; water-glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1 (thermal store)).
Thermal store code	14558
Insulation code	18846

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

	valid for a thermal store with insulation
Energy efficiency class	N/A
Static loss	175 W
Storage volume	1687 l

**Technical data**

Total thermal store volume	1687 l
Fluid volume in thermal store	1666 l
Fluid volume above separating plate	550 l
Fluid volume below separating plate	1116 l
Fluid volume of DHW heat exchanger above the separating plate	21.0 l
Surface area of DHW heat exchanger above the separating plate	6.0 m <sup>2</sup>
Max. working temperature in thermal store	95 °C
Max. working temperature in DHW heat exchanger	95 °C
Max. working pressure in thermal store	3 bar
Max. working pressure in DHW heat exchanger	10 bar
Thermal store diameter	1100 mm
Thermal store diameter with insulation	1300 mm
Thermal store overall height	2075 mm
Tipping height without insulation	2190 mm
Thermal store perimeter insulation thickness	100 mm
Thermal store bottom insulation thickness	50 mm
Thermal store top insulation thickness	100 mm
Empty weight without insulation	215 kg

**Accessories**

Electric heating element	types ETT-C, P, F2, M, U
Heating element max. length	955 mm

**Materials**

Thermal store material	S235JR
Thermal store perimeter insulation	fleece
Thermal store outer surface insulation	hard polystyrene
Top and bottom thermal store insulation	fleece
DHW heat exchanger	AISI 316 L

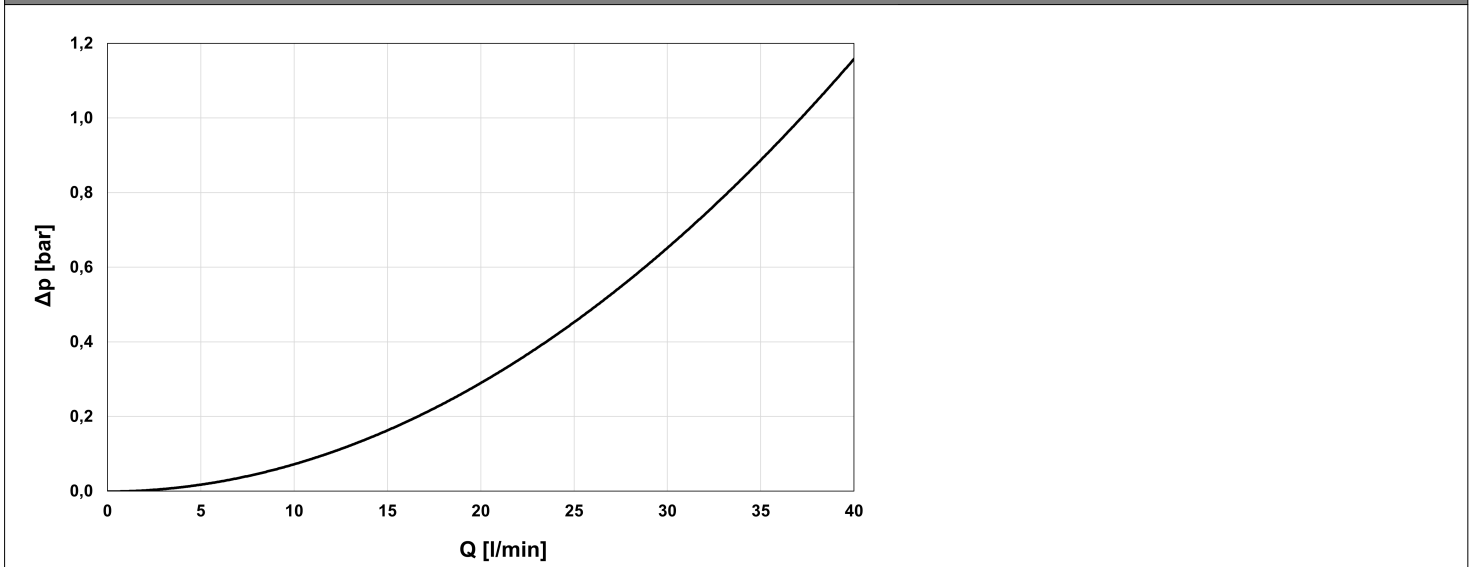
*Insulation thermal conductivity  $\lambda \leq 0.037$  W/mK, thermal resistance (short/long term) 150/100 °C, fire class E.*

**HSK 1700 P Combination Thermal Store**

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

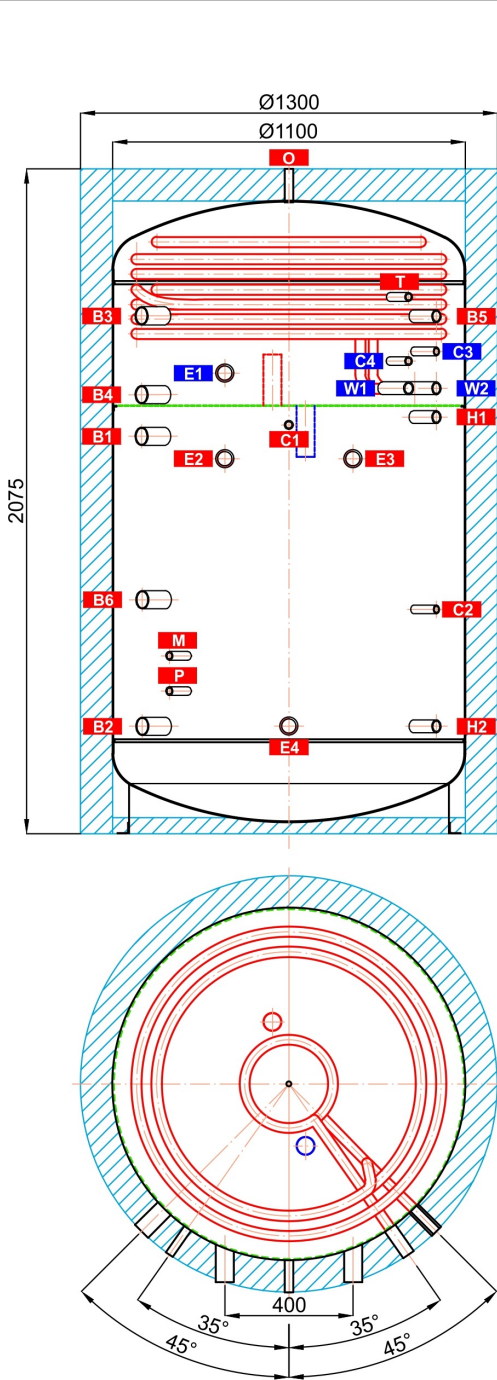
Heated volume	Temperature in thermal store	Backup heater	Flow rate [l/min]	Hot water volume [l]
Entire	50 °C	10 kW	8	712
			12	669
			20	515
Entire	50 °C	none	8	601
			12	546
			20	321
Above metal sheet	50 °C	10 kW	8	394
			12	262
			20	180
Entire	60 °C	10 kW	8	2077
			12	1339
			20	1313
Entire	60 °C	none	8	1072
			12	983
			20	990
Above metal sheet	60 °C	10 kW	8	779
			12	589
			20	415
Entire	80 °C	none	8	1673
			12	1632
			20	1568

**DHW heat exchanger pressure drop graph**



HSK 1700 P Combination Thermal Store

Dimensions



CONNECTIONS

pos.	description	connection	height [mm]
<b>Heat sources</b>			
B1	Supply from heat source	G 6/4" F	1240
B2	Return to heat source	G 6/4" F	335
B3	Supply from heat source	G 6/4" F	1615
B4	Return to heat source	G 6/4" F	1370
B5	Supply from heat source	G 1" F	1615
B6	Supply from heat source	G 6/4" F	730
<b>Heating system</b>			
H1	Flow to heating system	G 1" F	1300
H2	Return from heating system	G 1" F	335
<b>Electric heating element</b>			
E1	El. heating element (DHW)	G 6/4" F	1437
E2	El. heating element (space heating)	G 6/4" F	1170
E3	El. heating element (space heating)	G 6/4" F	1170
E4	El. heating element (for PV system)	G 6/4" F	335
<b>DHW heating</b>			
W1	Cold water	G 1" M	1390
W2	Domestic hot water	G 1" M	1390
<b>Control and safety</b>			
C1	Temperature sensor	G 1/2" F	1275
C2	Temperature sensor	G 1/2" F	700
C3	Temperature sensor	G 1/2" F	1505
C4	Temperature sensor	G 1/2" F	1475
T	Thermometer	G 1/2" F	1675
M	Pressure gauge	G 1/2" F	555
P	Safety valve	G 1/2" F	445
<b>Air discharge</b>			
O	Air vent valve	G 1/2" F	2075