

HSK 600 PR Combination Thermal Store



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	14187
Insulation	18838

Energy Efficiency Data (as per EC Regulation No. 812/2013)	
	HSK 600 PR with insulation
Energy efficiency class	N/A
Standing loss	98 W
Storage volume	540 l

Technical Data	
Total tank volume	553 l
Fluid volume in tank	508 l
Fluid volume above the separating plate	235 l
Fluid volume below the separating plate	273 l
Solar heat exchanger volume	13 l
Upper DHW heat exchanger volume	21 l
Lower DHW heat exchanger volume	11 l
Solar heat exchanger surface area	2,4 m ²
Upper DHW heat exchanger surface area	6 m ²
Lower DHW heat exchanger surface area	3 m ²
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
Tank perimeter insulation outer surface	hard polystyrene
Top and bottom tank insulation	fleece

Dimensions, Tipping height, Insulation thickness, Weight	
Tank diameter	650 mm
Tank diameter with insulation	850 mm
Tank overall height	1935 mm
Tipping height without insulation	1970 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulation thickness	120 mm
Empty weight without insulation	157 kg

HSK 600 PR Combination Thermal Store

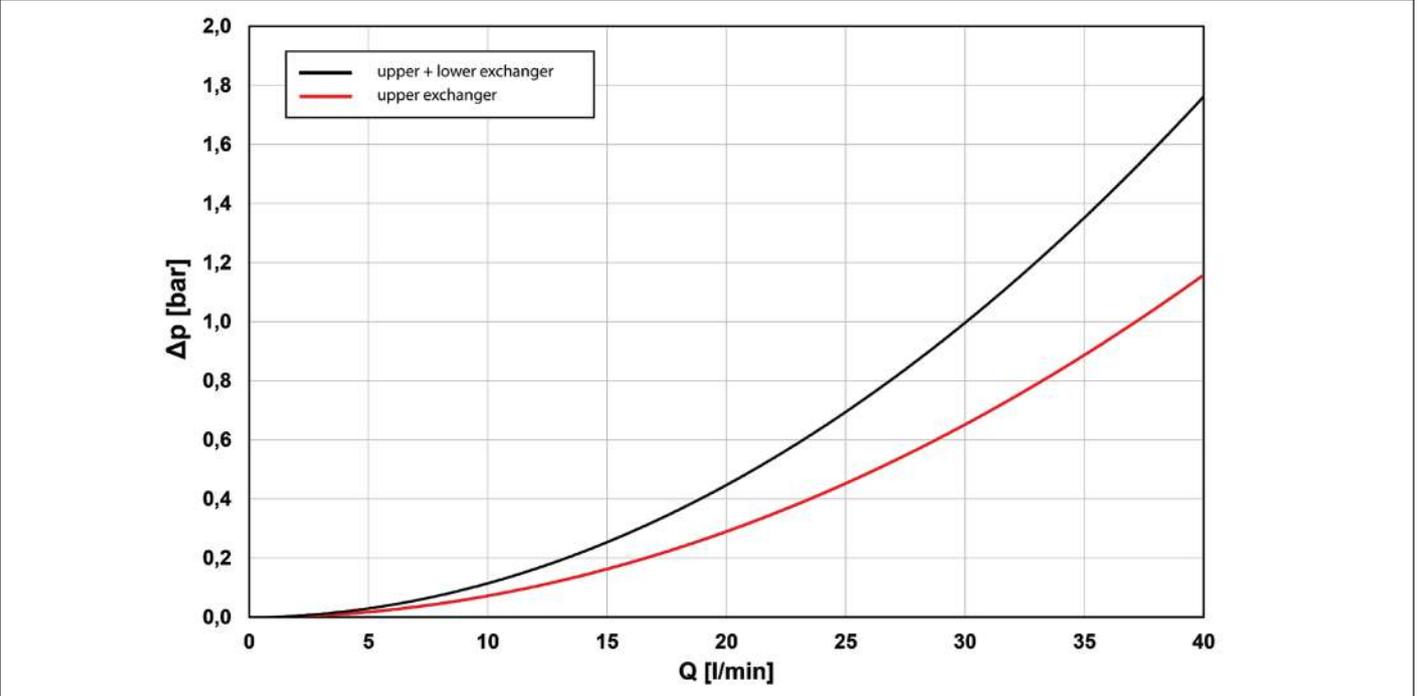
Accessories

El. heating element (models)	ETT-C, M, P
Heating elem. max. length / output	3x 555 mm / 6 kW

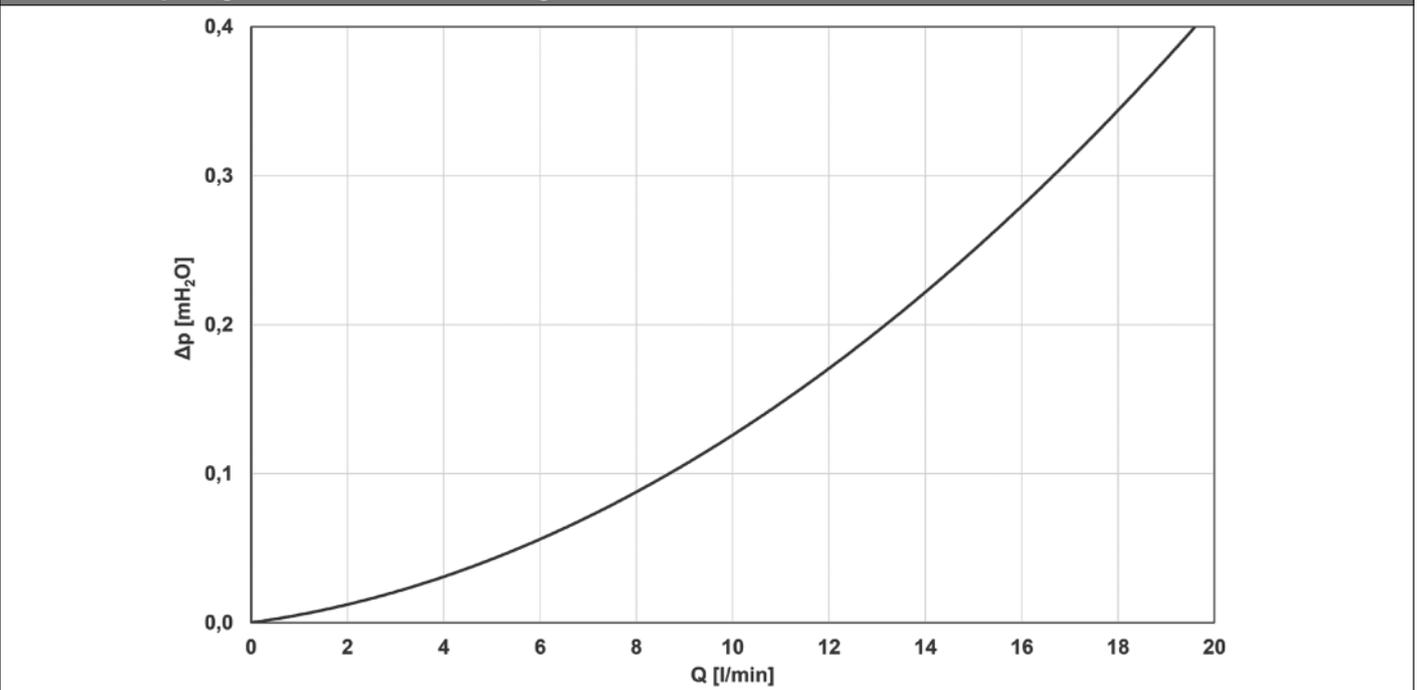
Volume of supplied DHW (heated from 10 °C to 40 °C)

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
Hot water volume [l]	315	287	213	283	247	175	167	152	105	1094	835	406	669	651	567	320	287	257	1037	1007	924

Pressure Drop Diagram for DHW Heat Exchange



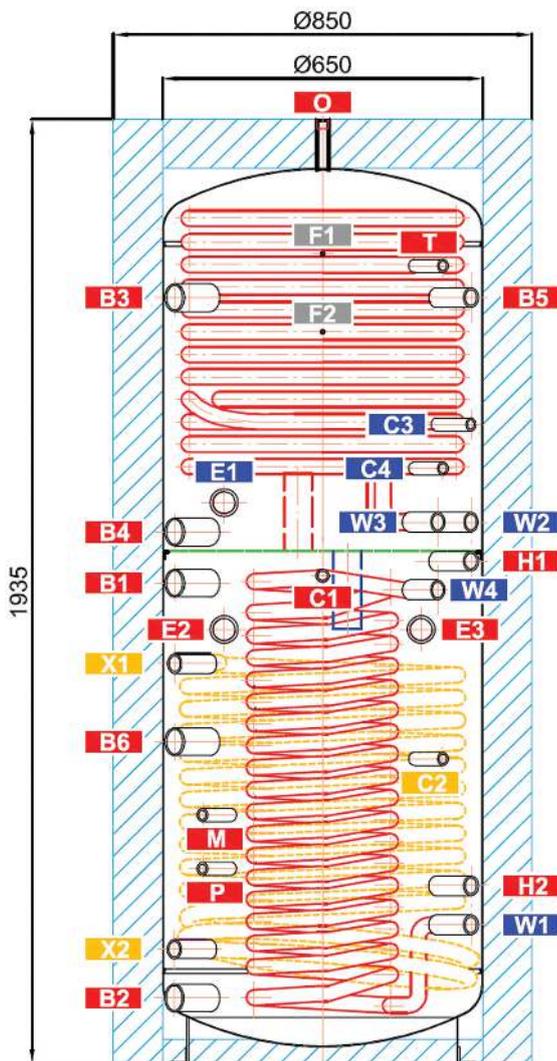
Pressure Drop Diagram for Solar Heat Exchanger



HSK 600 PR Combination Thermal Store

Dimensions

Tipping height without insulation 1970 mm



TAPPINGS

Pos.	Description	Connec-tion	Height [mm]
Heat sources			
B1	Incoming from heat source	G 6/4" F	985
B2	Return to heat source	G 6/4" F	135
B3	Incoming from heat source	G 6/4" F	1570
B4	Return to heat source	G 6/4" F	1090
B5	Incoming from heat source	G 1" F	1570
B6	Incoming from heat source	G 6/4" F	660
Heating system			
H1	Flow to heating system	G 1" F	1030
H2	Return from heating system	G 1" F	365
Solar thermal system			
X1	Flow to heating system	G 1" F	820
X2	Return from heating system	G 1" F	235
El. heating elements			
E1	Electric heating element for DHW heating	G 6/4" F	1150
E2	Electric heating element for space heating	G 6/4" F	890
E3	Electric heating element for space heating	G 6/4" F	890
DHW heating			
W1	Cold water	G 1" M	285
W2	Hot water	G 1" M	1110
W3	Circulation	G 1" M	1110
W4	Hot water	G 1" M	970
Control and safety			
C1	Temperature sensor	G 1/2" F	1000
C2	Temperature sensor	G 1/2" F	625
C3	Temperature sensor	G 1/2" F	1310
C4	Temperature sensor	G 1/2" F	1220
T	Thermometer	G 1/2" F	1635
M	Pressure gauge	G 1/2" F	510
P	Safety valve	G 1/2" F	400
Air release			
O	Air vent valve	G 1/2" F	1935
Pump station support			
F1	Pump station support – upper	M6	1660
F2	Pump station support – lower	M6	1500