

DATA SHEET

HSK 390 P 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.
Working fluid	Water (DHW heat exchanger). Water; water-glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1) (thermal store).

Code	
Thermal Store	13517
Insulation	18722

Energy Efficiency Data (as per EC Regulation No. 812/2013)	
	HSK 390 P with insulation
Energy efficiency class	C
Standing loss	81 W
Storage volume	398 l

Technical Data	
Total tank volume	398 l
Total fluid volume in tank	377 l
Fluid volume above the separating plate	214 l
Fluid volume below the separating plate	163 l
Surface area of DHW heat exchanger above the separating plate	21 l
Surface area of DHW heat exchanger above the separating plate	6 m ²
Max. working temperature in tank	95 °C
Max. working temperature in DHW HE	95 °C
Max. working pressure in tank	4 bar
Max. working pressure in DHW HE	10 bar

Tank Materials	
Tank material	S235JR
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	550 mm
Tank diameter with insulation	750 mm
Tank overall height	1905 mm
Tipping height without insulation	1940 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulation thickness	120 mm
Empty weight without insulation	91 kg

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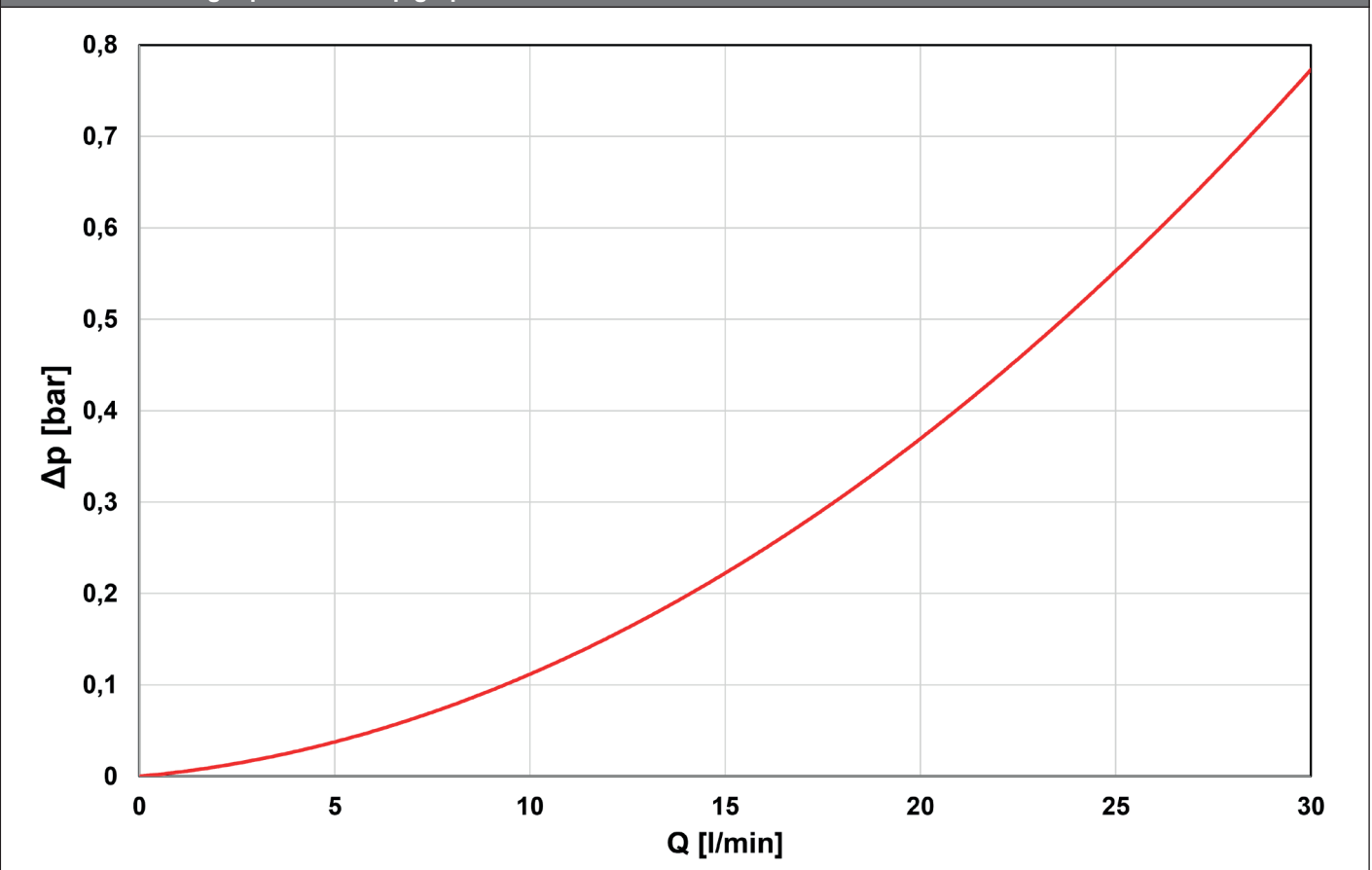
Accessories

El. heating element (models)	ETT-C, P, M
Heating elem. max. length/output	4x 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]	363	237	120	222	187	101	195	132	106	534	359	268	321	290	266	253	235	208	567	528	516

DHW heat exchanger pressure drop graph

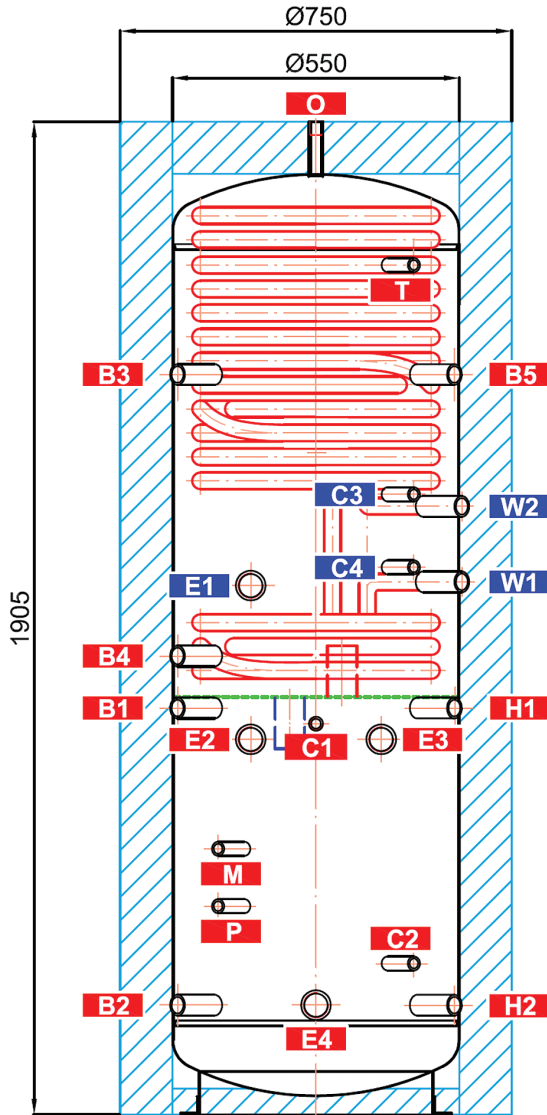


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Dimensions

Tipping height without insulation 1940 mm



CONNECTIONS

Pos.	Description	Conne- tion	Height [mm]
Heat sources			
B1	Incoming from heat source	G 1" F	780
B2	Return to heat source	G 1" F	210
B3	Incoming from heat source	G 1" F	1420
B4	Return to heat source	G 1" F	880
B5	Incoming from heat source	G 1" F	1420
Heating system			
H1	Flow to heating system	G 1" F	780
H2	Return from heating system	G 1" F	210
El. heating elements			
E1	Electric heating element for DHW heating	G 6/4" F	1015
E2	Electric heating element for space heating	G 6/4" F	720
E3	Electric heating element for space heating	G 6/4" F	720
E4	Electric heating element for PV system	G 6/4" F	210
DHW heating			
W1	Cold water	G 1" M	1022
W2	Hot water	G 1" M	1167
Control and safety			
C1	Temperature sensor	G 1/2" F	750
C2	Temperature sensor	G 1/2" F	290
C3	Temperature sensor	G 1/2" F	1190
C4	Temperature sensor	G 1/2" F	1050
T	Thermometer	G 1/2" F	1630
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	1905