

**HSK 390 PR Combination Thermal Store**

Main features	
Application	storage of thermal energy for DHW and space heating
Description	combination Thermal Store with immersed DHW heat exchanger made of stainless steel, with integrated solar heat exchanger, with a tight separating metal sheet that increases the COP of the heat pump and efficiency of the solar thermal system
Working fluid	water (tank), water, water/glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1) (heat exchangers)



Code	
Thermal Store	<b>14 172</b>
Insulation	<b>16 319</b>

Energy Efficiency Data (as per EC Regulation No. 812/2013)	
	<b>HSK 390 PR with insulation</b>
Energy efficiency class	C
Standing loss	82 W
Storage volume	385 l

Technical Data	
Total tank volume	394 l
Fluid volume in tank	364 l
Solar heat exchanger volume	9 l
Upper DHW heat exchanger volume	21 l
Lower DHW heat exchanger volume	-
Solar heat exchanger surface area	1,5 m <sup>2</sup>
Upper DHW heat exchanger surface area	6 m <sup>2</sup>
Lower DHW heat exchanger surface area	-
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	6 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	PU leather
Top and bottom tank insulation	fleece

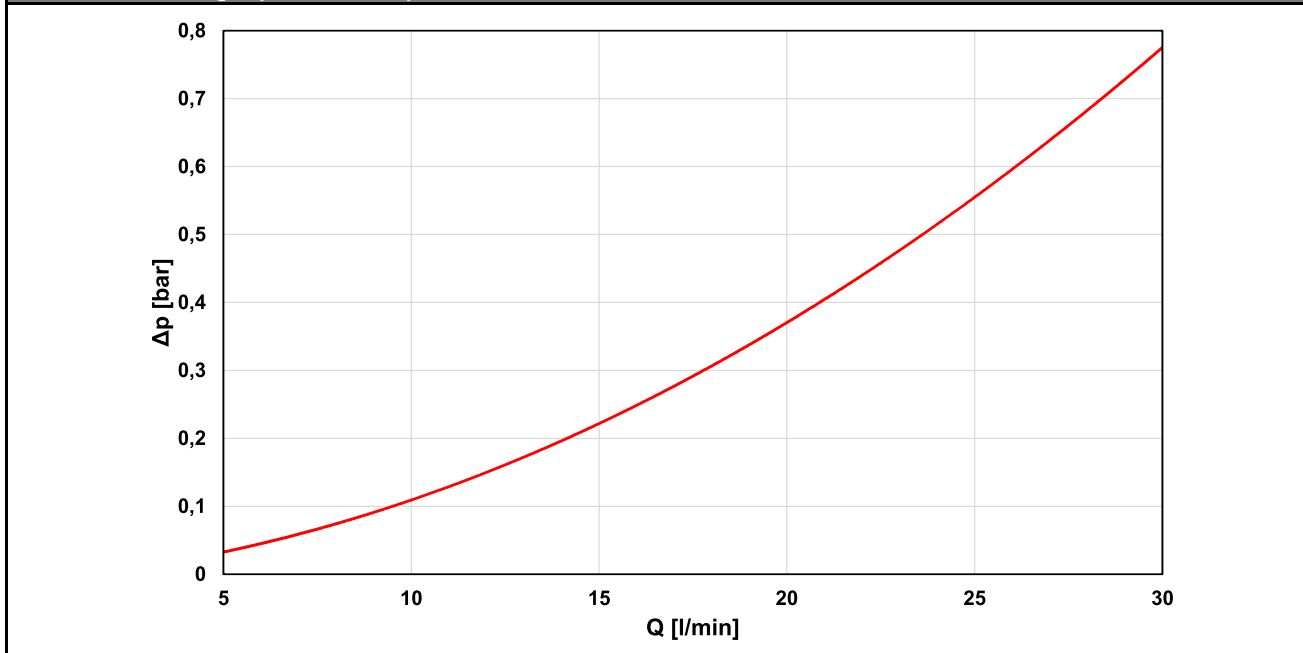
Dimensions, Tipping height, Insulation thickness, Weight	
Tank diameter	550 mm
Tank diameter with insulation	750 mm
Tank overall height	1905 mm
Tipping height without insulation	1940 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulation thickness	120 mm
Empty weight without insulation	110 kg

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

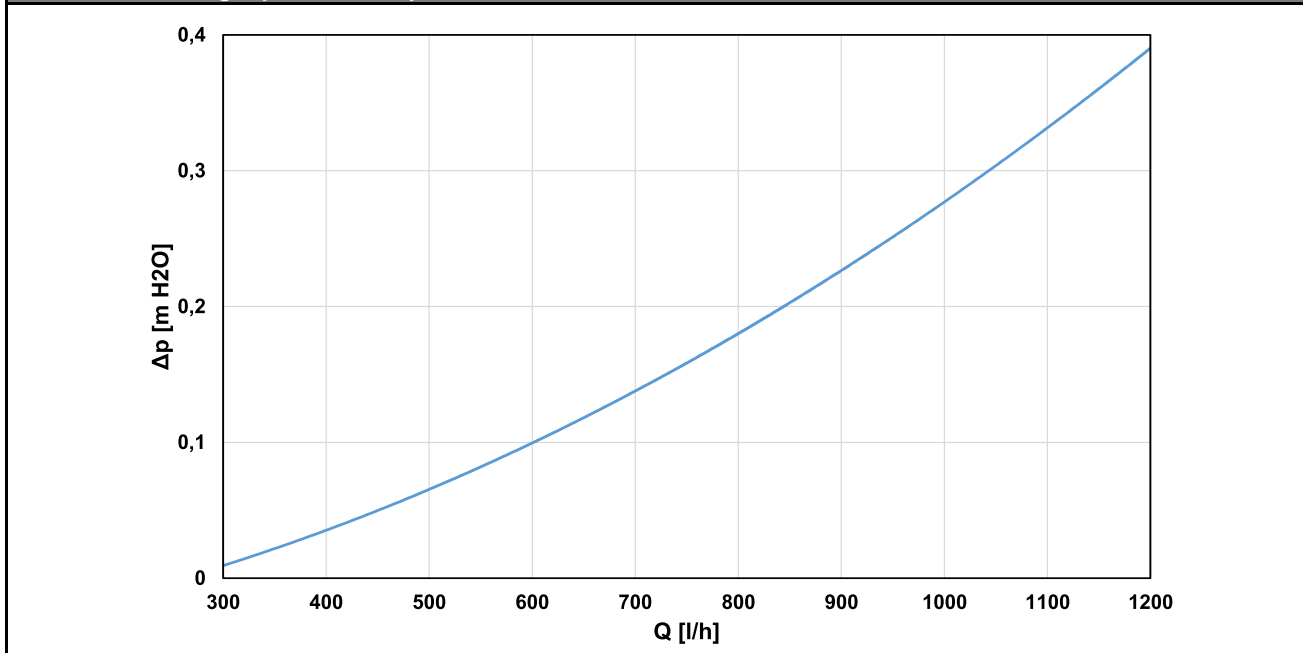
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Volume of supplied DHW (heated from 10 °C to 40 °C)												
Heated volume	entire			entire			entire			above metal sheet		
Backup heater	10 kW			none			none			10 kW		
Flow rate [l/min]	8	12	20	8	12	20	8	12	20	8	12	20
Temperature in tank	60°C			60°C			80°C			60°C		
<b>Hot water volume [l]</b>	<b>534</b>	<b>359</b>	<b>268</b>	<b>321</b>	<b>290</b>	<b>266</b>	<b>567</b>	<b>528</b>	<b>516</b>	<b>253</b>	<b>235</b>	<b>208</b>
Temperature in tank	50°C			50°C			-			50°C		
<b>Hot water volume [l]</b>	<b>363</b>	<b>237</b>	<b>120</b>	<b>222</b>	<b>187</b>	<b>101</b>	-	-	-	<b>195</b>	<b>132</b>	<b>106</b>

**DHW heat exchanger pressure drop**



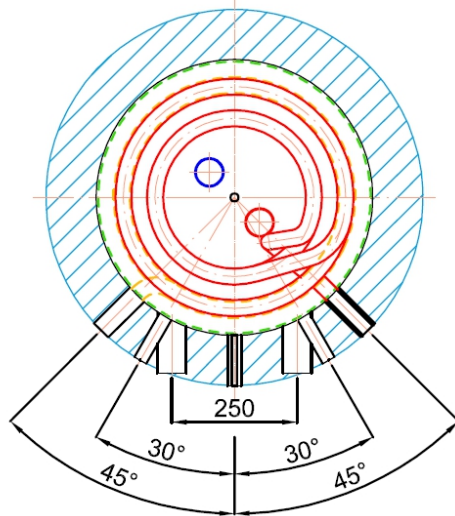
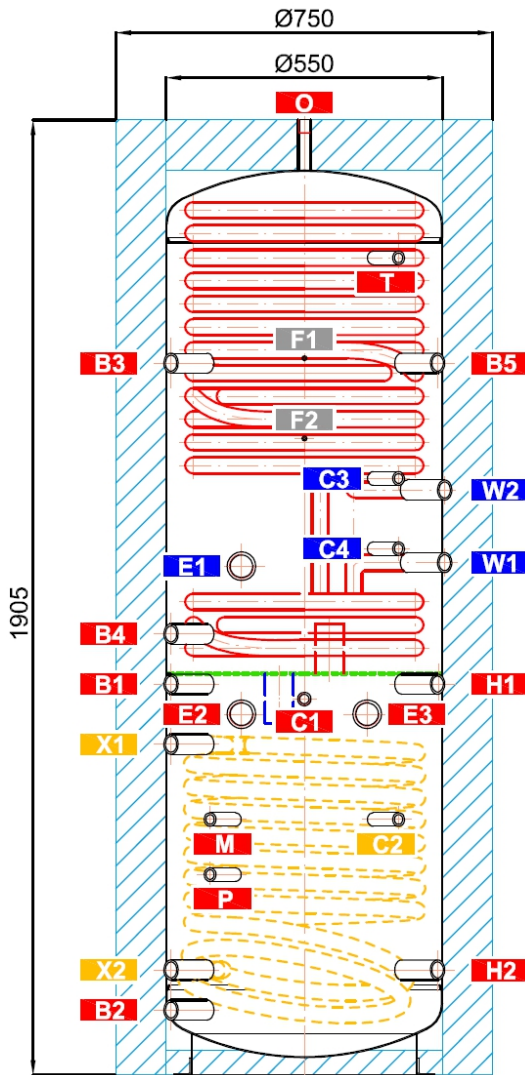
**Solar heat exchanger pressure drop**



**HSK 390 PR Combination Thermal Store**

**Dimensions**

Tipping height without insulation 1940 mm.



**TAPPINGS**

Pos.	Connection	Height [mm]
<b>Heat sources</b>		
B1	G 1" F	780
B2	G 1" F	210
B3	G 1" F	1420
B4	G 1" F	880
B5	G 1" F	1420
B6	-	-
<b>Heating system</b>		
H1	G 1" F	780
H2	G 1" F	210
<b>Solar thermal system</b>		
X1	G 1" F	660
X2	G 1" F	210
<b>EI . heating elements</b>		
E1	G 6/4" F	1015
E2	G 6/4" F	720
E3	G 6/4" F	720
<b>DHW heating</b>		
W1	G 1" M	1022
W2	G 1" M	1167
W3	-	-
W4	-	-
<b>Control and safety</b>		
C1	G 1/2" F	750
C2	G 1/2" F	510
C3	G 1/2" F	1190
C4	G 1/2" F	1050
T	G 1/2" F	1630
M	G 1/2" F	510
P	G 1/2" F	400
<b>Air release</b>		
O	G 1/2" F	1905
<b>Pump station support</b>		
F1	M6	1270
F2	M6	1430