

DUO 390/130 K PR Thermal store with immersed DHW tank

Main features	
Application	storage of thermal energy for DHW and space heating; the overall height of these tanks is reduced compared to the standard ones, making them a suitable alternative for spaces with a low ceiling
Description	combination Thermal Store with immersed DHW tank and 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, water/glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1) (thermal store), water (immersed DHW tank)

DUO 390/130 K PR



DUO 390/130 K PR with insulation



Code	
Thermal Store	16077
Insulation	16299

Energy Efficiency Data (as per EC Regulation No. 812/2013)	
	DUO 390/130 K PR with insulation
Energy efficiency class	N/A
Standing loss	93 W
Storage volume	386 l

Technical data	
Total volume	395 l
Fluid volume in thermal store	252 l
Immersed DHW tank volume	134 l
Heat exchanger (HE) volume	9 l
Heat exchanger surface area	1,5 m ²
Max. working temp. in thermal store	95 °C
Max. working temp. in DHW tank	95 °C
Max. working temp. in HE	95 °C
Max. working pressure in thermal store	3 bar
Max. working pressure in DHW tank	6 bar
Max. working pressure in HE	10 bar

Materials	
Thermal store material	S235JR
DHW tank material	S235JR + DC01EK
Heat exchanger material	S235JR+N

Insulation materials	
Tank perimeter insulation	fleece
Perimeter insulation's outer surface	PU leather
Top and bottom tank insulation	fleece

Dimensions, tipping height, insulation thickness, weight	
Tank diameter	600 mm
Tank diameter with insulation	800 mm
Tank overall height	1670 mm
Tipping height without insulation	1780 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulation thickness	120 mm
Empty weight without insulation	118 kg

Accessories	
El. heating elements	models ETT-C, F, L, M
Heating elements max. length / output	3 x 500 mm / 5 kW
Pump station	solar, S1 and S2 models
Electronic anode rod	code 13793
Expansion vessel (drinking water)	model HW 8 l and bigger

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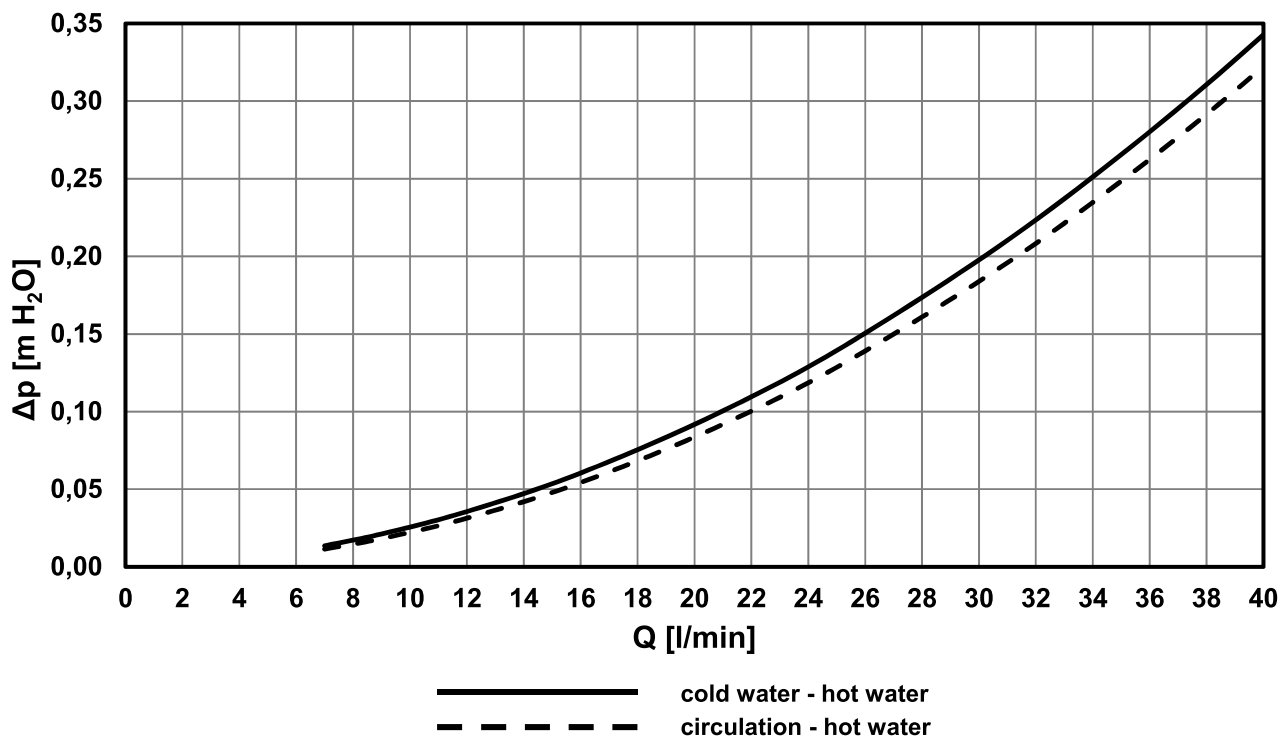
Spare parts

Magnesium anode rod	code 13959
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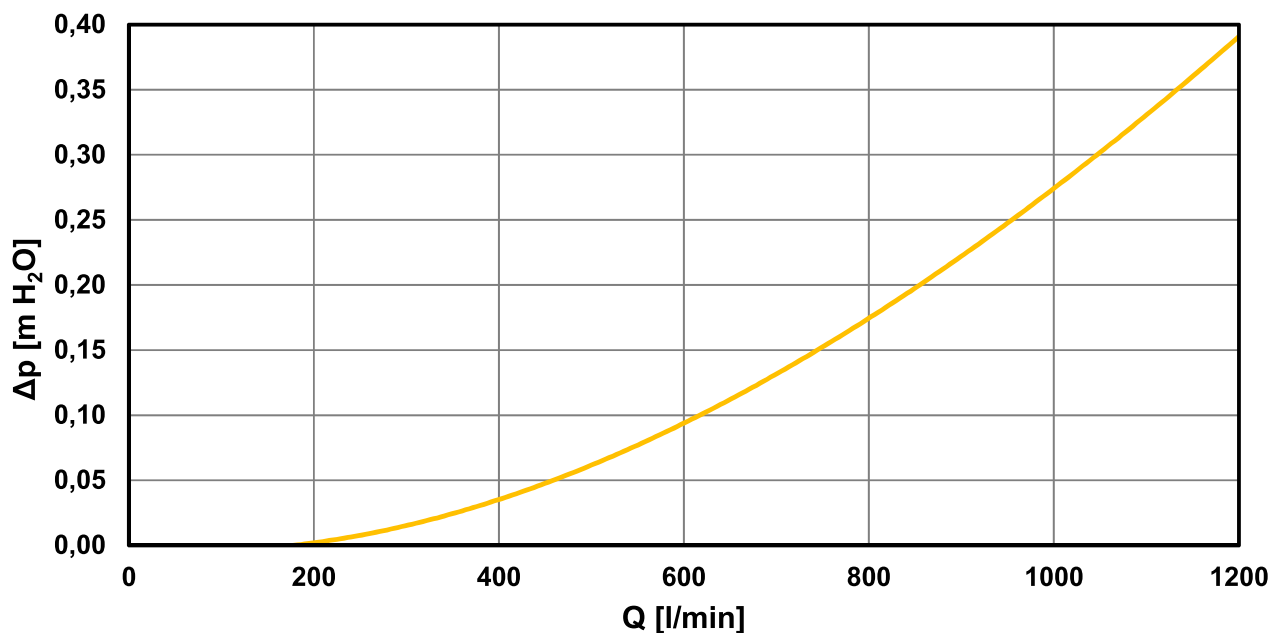
Volume of supplied DHW (heated from 10 °C to 40 °C)

Heated volume	entire			entire			entire			above metal sheet		
Temperature in tank	60 °C			60 °C			80 °C			60 °C		
Backup heater	10 kW			none			none			10 kW		
Flow rate [l/min]	8	12	20	8	12	20	8	12	20	8	12	20
Hot water volume [l]	356	222	205	256	226	214	536	477	391	184	161	119

Pressure drop vs. flow rate graph



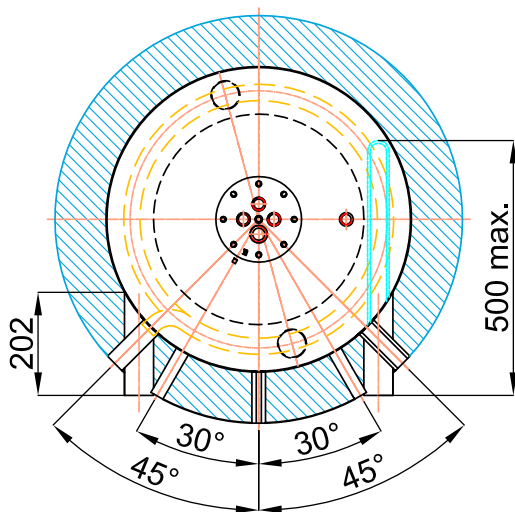
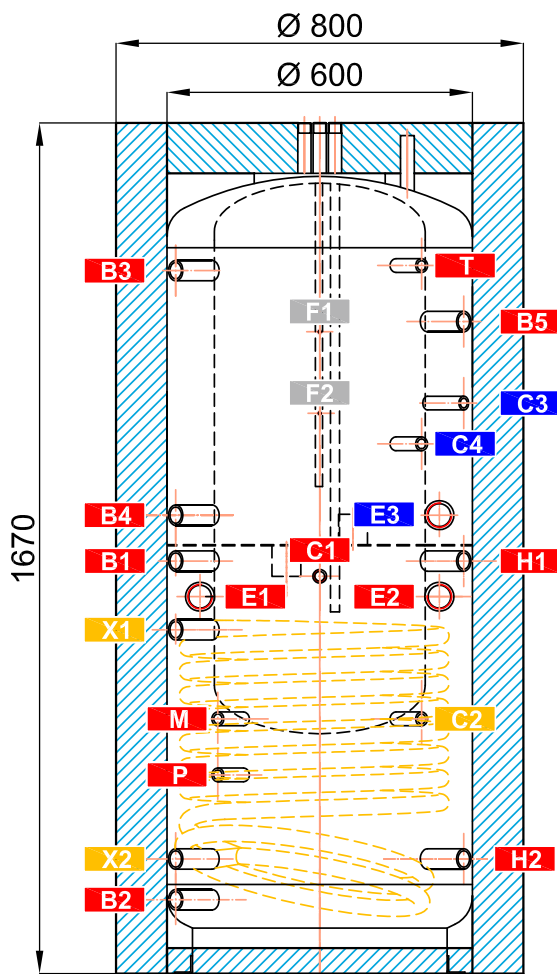
Solar heat exchanger pressure drop



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Dimensions

Tank diameter with insulation 800 mm.



TAPPINGS

pos.	connection	height [mm]
Heat sources		
B1	G1" F	810
B2	G1" F	145
B3	G1" F	1380
B4	G1" F	900
B5	G1" F	1280
B6	-	-
Heating system		
H1	G1" F	810
H2	G1" F	225
Solar thermal system		
X1	G1" F	675
X2	G1" F	225
Electric immersion heaters		
E1	G6/4" F	740
E2	G6/4" F	740
E3	G6/4" F	900
DHW heating		
W1	G1" M	1670
W2	G1" M	1670
W3	G1" M	1670
N	G3/4" F	1570
Control and safety		
C1	G1/2" F	780
C2	G1/2" F	500
C3	G1/2" F	1120
C4	G1/2" F	1040
C5	Ø 10,5 mm	1670
T	G1/2" F	1390
M	G1/2" F	500
P	G1/2" F	390
Air release		
O	G1/2" F	1645
Pump station support		
F1	M6	1260
F2	M6	1100

