

## DATA SHEET

### DUO 1000/200 N P Thermal Store with immersed DHW tank



#### Main Features

Application	Storage of thermal energy for DHW and space heating.
Description	Combination Thermal Store with immersed stainless steel DHW tank; a tight separating plate increases seasonal performance factor of a heat pump.
Working fluid	Water, water/glycol mixture (max. 1:1) or water/glycerine mixture (max. 2:1) (thermal store), water (immersed DHW tank).
Thermal store Code	<b>19143</b>
Insulation Code	<b>19334</b>

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

##### with insulation

Energy efficiency class	N/A
Standing loss	130 W
Storage volume	903 l

#### Technical Data

Total volume	903 l
Fluid volume in thermal store	729 l
Immersed DHW tank volume	174 l
Max. working temp. in thermal store	95 °C
Max. working temp. in DHW tank	95 °C
Max. working pressure in thermal store	3 bar
Max. working pressure in DHW tank	6 bar

#### Materials

Thermal store material	S235JR
DHW tank material	AISI 304
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	800 mm
Tank diameter with insulation	1000 mm
Tank overall height	2080 mm
Tipping height without insulation	2120 mm
Tank perimeter insulation thickness	100 mm
Bottom insulation thickness	50 mm
Top insulations thickness	120 mm
Empty weight without insulation	167 kg

#### Accessories

El. heating elements	types ETT-C, F, M, P
Heating elements max. lenght	3 x 700 mm into E1–E3 connections, 755 mm into E4 connection
Electronic anode rod	code 13793
Expansion vessel (drinking water)	type HW 8 l and larger

#### Spare Parts

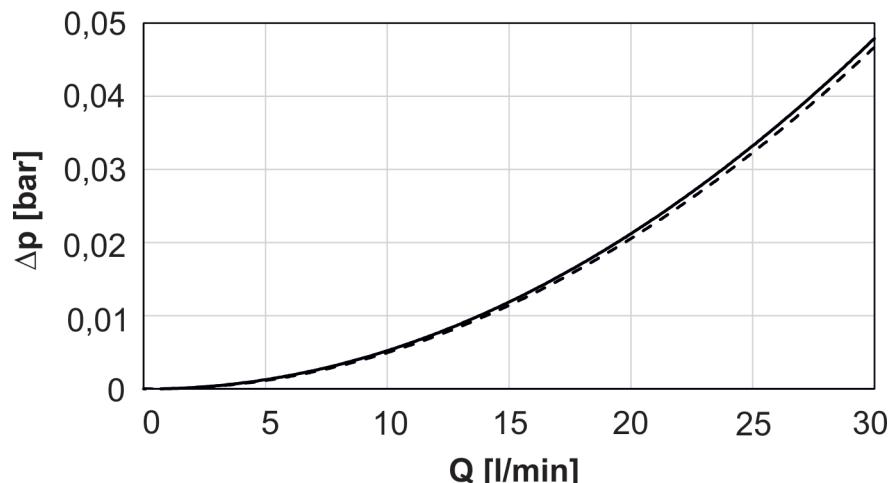
Magnesium anode rod	code 19152
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**Volume of supplied DHW (heated from 10 °C to 40 °C)**

Heated volume	entire			entire			above separating plate			entire		
Temperature in tank	60 °C			60 °C			60 °C			80 °C		
Backup heater	10 kW			none			10 kW			none		
Flow rate [l/min]	8	12	20	8	12	20	8	12	20	8	12	20
<b>Hot water volume [l]</b>	<b>730</b>	<b>434</b>	<b>315</b>	<b>538</b>	<b>451</b>	<b>323</b>	<b>254</b>	<b>240</b>	<b>222</b>	<b>1002</b>	<b>859</b>	<b>665</b>

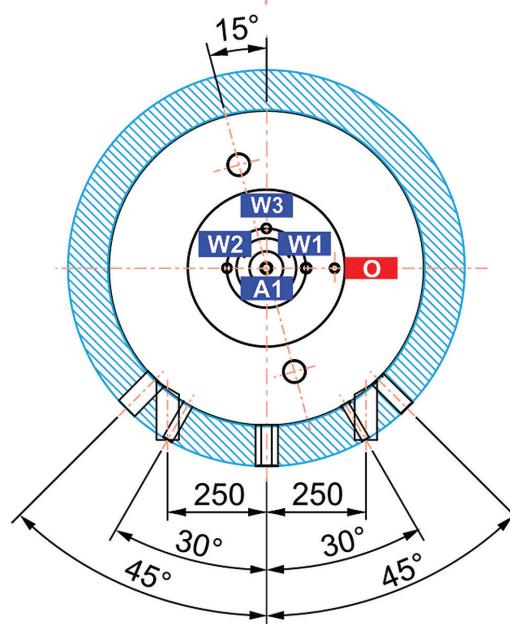
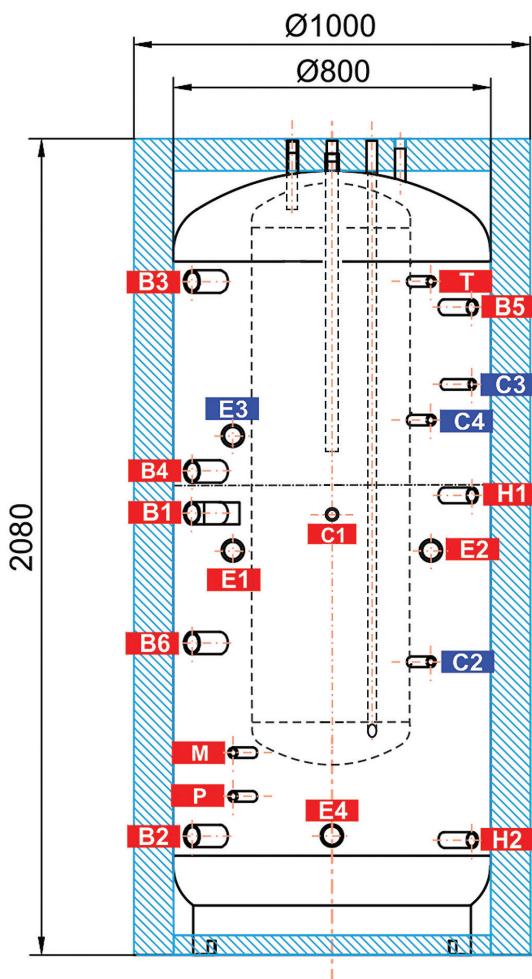
**Graph of pressure drop versus flow in the DHW tank**


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### DUO 1000/200 N P Thermal Store with immersed DHW tank

#### Dimensions

Tipping height without insulation 2120 mm



#### CONNECTIONS

pos.	descriptions	connection	height [mm]
<b>Heat sources</b>			
<b>B1</b>	Incoming from heat source	G 6/4" F	1115
<b>B2</b>	Return to heat source	G 6/4" F	300
<b>B3</b>	Incoming from heat source	G 6/4" F	1700
<b>B4</b>	Return to heat source	G 6/4" F	1220
<b>B5</b>	Incoming from heat source	G 1" F	1635
<b>B6</b>	Incoming from heat source	G 6/4" F	785
<b>Heating system</b>			
<b>H1</b>	Outlet to the heating circuit	G 1" F	1160
<b>H2</b>	Returnable from the heating circuit	G 1" F	290
<b>Electric heating elements</b>			
<b>E1</b>	Electric heating element for space heating	G 6/4" F	1020
<b>E2</b>	Electric heating element for space heating	G 6/4" F	1020
<b>E3</b>	Electric heating element for DHW heating	G 6/4" F	1310
<b>E4</b>	Electric heating element for PV system	G 6/4" F	300
<b>DHW heating</b>			
<b>W1</b>	Cold water	G 3/4" M	2080
<b>W2</b>	Hot water	G 3/4" M	2080
<b>W3</b>	Circulation	G 3/4" M	2080
<b>A1</b>	Anode	G 3/4" F	2025
<b>Control and safety</b>			
<b>C1</b>	Temperature sensor – space heating	G 1/2" F	1130
<b>C2</b>	Temperature sensor – DHW heating	G 1/2" F	740
<b>C3</b>	Temperature sensor – DHW heating	G 1/2" F	1440
<b>C4</b>	Temperature sensor – DHW heating	G 1/2" F	1350
<b>T</b>	Thermometer	G 1/2" F	1700
<b>M</b>	Pressure gauge	G 1/2" F	510
<b>P</b>	Safety valve	G 1/2" F	400
<b>Air release</b>			
<b>O</b>	Air vent valve	G 1/2" F	2055