

Regulus

HSK THERMAL STORES with separating metal sheet



**Thermal Stores
with DHW heating
in stainless-steel HE**

HSK THERMAL STORES

Regulus HSK Thermal Stores with a separating metal sheet and stainless-steel heat exchangers are designed to store heat from solar thermal and photovoltaic systems, heat pumps, hydronic fireplace inserts and other heat sources. The integrated stainless-steel heat exchanger ensures comfortable hot water supply, preventing the formation of Legionella bacteria at the same time. Hot water is heated by all the connected sources efficiently. The inner separation into two sections not only brings higher efficiency of alternative sources, but also ensures sufficient supply of hot water even when the lower section of the thermal store is exhausted by space heating.

SUFFICIENT HOT WATER SUPPLY

Data sheets for separate tanks contain tables with the volume of hot water supplied under different conditions. As an illustration, one example for HSK 390 P thermal store:

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

Heated volume	entire tank			entire tank			entire tank			tank top section		
Tank temperature	60 °C			60 °C			80 °C			60 °C		
Backup heating	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]	534	359	268	321	290	266	567	528	516	253	235	208

INSULATION

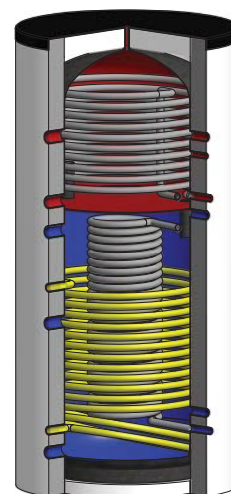
We supply high quality insulation sets, incl. bottom insulation. This way the energy efficiency class C is reached.

ADVANTAGES OF THERMAL STORES WITH SEPARATING METAL SHEET

Energy savings due to a higher efficiency of a heat pump as well as of a solar thermal system during heating the bottom section.

Hot water supply remains available even when the bottom section for heating is exhausted.

Possibility to launch additional energy sources separately for heating and separately for hot water, after a solid fuel boiler is extinguished and heat from the thermal store exhausted.



PUMP STATIONS

We produce and offer a wide range of pump stations designed for heating systems, solar pump stations and load units for boilers.



boiler



heating



solar



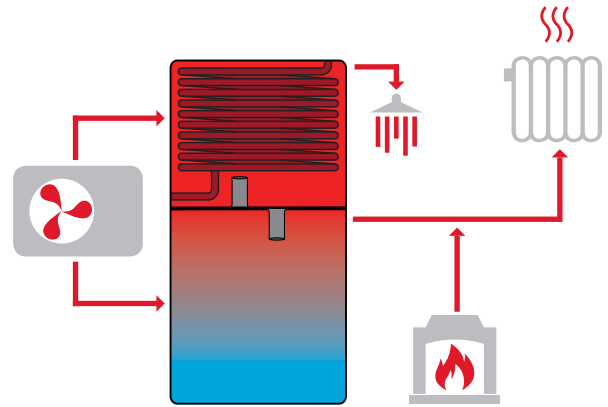
all-in-one

HSK P

Thermal Store with a stainless-steel DHW heat exchanger and separating metal sheet

- For heat pumps and biomass boilers

This thermal store is mostly installed in systems where the main heat source for both space and DHW heating is a boiler, hydronic fireplace insert or a heat pump. Heat sources can be combined as an advantage. Besides that, electric heating elements can also be installed for both DHW and space heating.

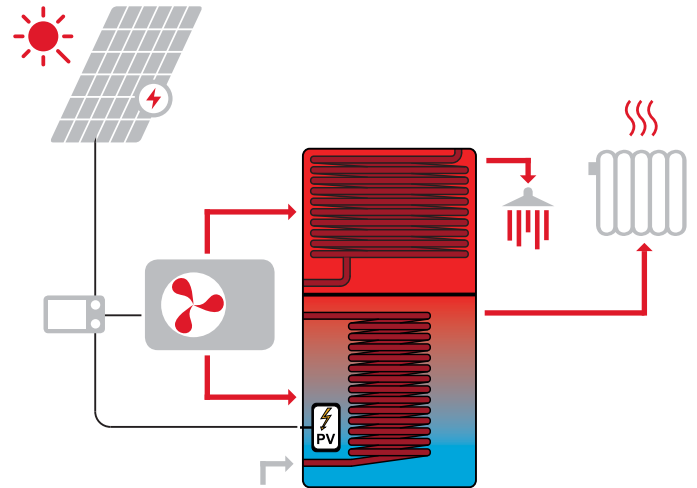


HSK PV

Thermal Store with 2 stainless-steel DHW heat exchangers and separating metal sheet

- For PV panels and heat pumps

This thermal store is mostly installed in systems where the main source for both space and DHW heating is a heat pump combined with PV panels. Two stainless steel heat exchangers for DHW are located inside the tank. In the upper tank section sufficient temperature is kept for immediate DHW heating through the upper heat exchanger that is intended also for DHW recirculation heating. The entire tank volume can be utilized to gather more heat from PV excess energy. Hot water is heated in two steps, the lower heat exchanger serving to pre-heat it. Other heat sources can be connected to the tank as well, combined as an advantage. Besides a specially located PV powered heating element, also other electric heating elements can be installed for space or DHW heating.

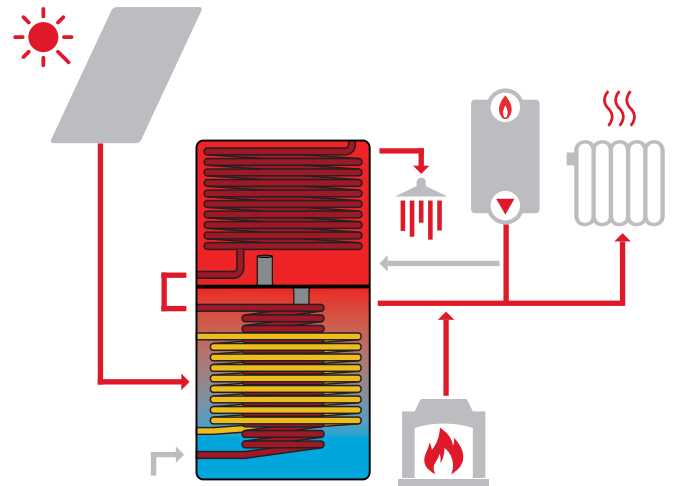


HSK PR

Thermal Store with a solar heat exchanger, 2 stainless steel DHW heat exchangers* and a separating metal sheet

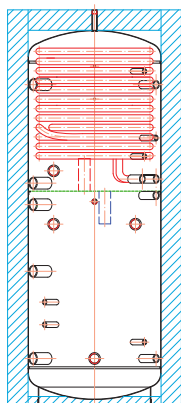
- For solar thermal heat and any other source

The tank is used in systems with a solar thermal system for both DHW and support space heating, and with any other heat source. In its lower section, a solar heat exchanger and a stainless steel one for water pre-heating are located. Thanks to this, the solar thermal system works with higher efficiency under lower temperatures. In the upper tank section sufficient temperature is kept for immediate DHW heating through the upper heat exchanger that is intended also for DHW recirculation heating. The main heat source can be a heat pump, hydronic fireplace insert, gas-fired or another boiler. Heat sources can be combined as an advantage. Besides that, also electric heating elements can be installed for DHW or space heating.



*HSK 390 PR is fitted with only one stainless steel DHW heat exchanger.

HSK P Thermal Store with stainless-steel DHW heat exchanger and separating metal sheet



Model	Height [mm]	Diam. [mm]	Tank volume [l]	Volume of supplied hot water [l]**	Code	Insulation code
HSK 390 P*	1905	550	398	321	13517	18722
HSK 600 P	1935	650	560	468	14175	18724
HSK 750 P	1975	750	760	548	14178	18840
HSK 1000 P	2080	800	925	592	14555	18843
HSK 1700 P	2075	1100	1687	1072	14558	18846

Thermal Store:

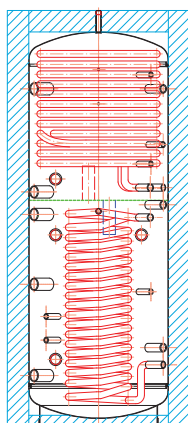
8* G 1" or G 6/4" F side tapplings to connect heating system and heat sources
 3G 6/4" F side tapplings to insert el. heating element
 5G 1/2" F side tapplings to insert sheaths for temperature sensors
 1G 1/2" F top tapping for air vent valve

DHW heating:

2G 1" M side tapplings in, out
 1G 6/4" F side tapping to insert el. heating element
 2G 1/2" F side tapplings to insert sheaths for temperature sensors

* HSK 390 P is fitted with 7 G 1" F side tapplings to connect a heating system and heat sources

HSK PV Thermal Store with 2 stainless steel DHW heat exchangers and separating metal sheet



Model	Height [mm]	Diam. [mm]	Tank volume [l]	Volume of supplied hot water [l]**	Code	Insulation code
HSK 600 PV	1935	650	557	669	16158	18839
HSK 750 PV	1975	750	757	784	16177	18842
HSK 1000 PV	2080	800	922	846	16180	18845
HSK 1700 PV	2075	1100	1684	1533	16183	18848

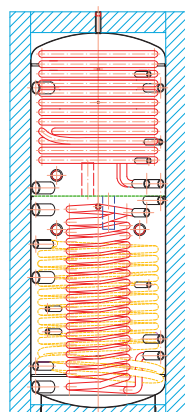
Thermal Store:

8G 1" F or G 6/4" F side tapplings to connect heating system and heat sources
 3G 6/4" F side tapplings to insert el. heating element
 5G 1/2" F side tapplings to insert sheaths for temperature sensors
 1G 1/2" F top tapping for air vent valve

DHW heating:

4G 1" M side tapplings in, out
 1G 6/4" F side tapping to insert el. heating element
 2G 1/2" F side tapplings to insert sheaths for temperature sensors

HSK PR Thermal Store with 2 stainless steel DHW heat exchangers*, separating metal sheet and solar heat exchanger



Model	Height [mm]	Diam. [mm]	Tank volume [l]	Volume of supplied hot water [l]**	Solar heat exchanger surface area [m²]	Code	Insulation code
HSK 390 PR*	1905	550	394	321	1,5 m²	14172	18723
HSK 600 PR	1935	650	553	669	2,4 m²	14187	18838
HSK 750 PR	1975	750	753	784	2,5 m²	14190	18841
HSK 1000 PR	2080	800	916	846	3,2 m²	14012	18844
HSK 1700 PR	2075	1100	1676	1533	4 m²	14013	18847

Thermal Store:

8* G 1" or G 6/4" F side tapplings to connect heating system and heat sources
 2G 1" F side tapplings to connect solar thermal system
 2G 6/4" F side tapplings to insert el. heating element
 5G 1/2" F side tapplings to insert sheaths for temperature sensors
 1G 1/2" F top tapping for air vent valve
 2 M6 pins to mount pump station

DHW heating:

4* G 1" M side tapplings in, out
 1G 6/4" F side tapping to insert el. heating element
 2G 1/2" F side tapplings to insert sheaths for temperature sensors

* HSK 390 PR is fitted with only 1 stainless steel heat exchanger for DHW, only 7 G 1" F side tapplings to connect a heating system and heat sources, and only 2 G 1" tapplings for DHW heating.

** for tank heated to 60°C with 40°C outlet temperature at flowrate of 8 l/min., no backup