Cyclone Thermal Store

incorporating mains pressure (boosted) domestic hot water

The Joule Copper and Stainless Steel Thermal Stores are the next generation of heating and hot water production. The Joule thermal store has been designed with multi fuel heating systems in mind. The cylinder allows an easy installation of solid fuel, solar and boiler easily and effectively. The thermal store allows pressurised hot water heated from solid fuel safely and fully compliant with current plumbing practices and standards. The tank operates like a hot water cylinder in reverse. The tank is completely full of heating system water, the domestic hot water flows through a network of coils up through the centre of the tank supplying you with high flow rate pressurised hot water at piping hot temperatures. The thermal store is ideally suited to providing solar heat support and domestic hot water production simultaneously and easily.

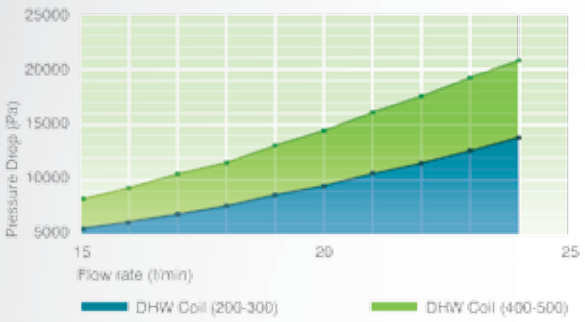
Copper or Stainless Steel?

When choosing your Joule Thermal Store it is important to consider what pressure the heating system will be operating at. Our Stainless Steel thermal stores are better suited to high pressure heating systems because of their higher tensile strength. Our Copper thermal store is a better choice for areas of hard water. While Joule always require hard water to be treated so that is maintained below 200ppm Total Hardness in water conditions where the untreated levels are higher than this figure the Joule Copper Thermal Store is recommended.

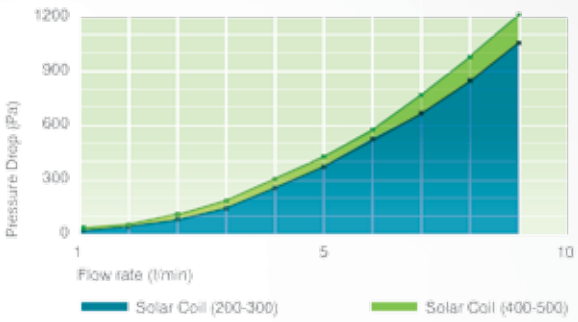
Technical Information

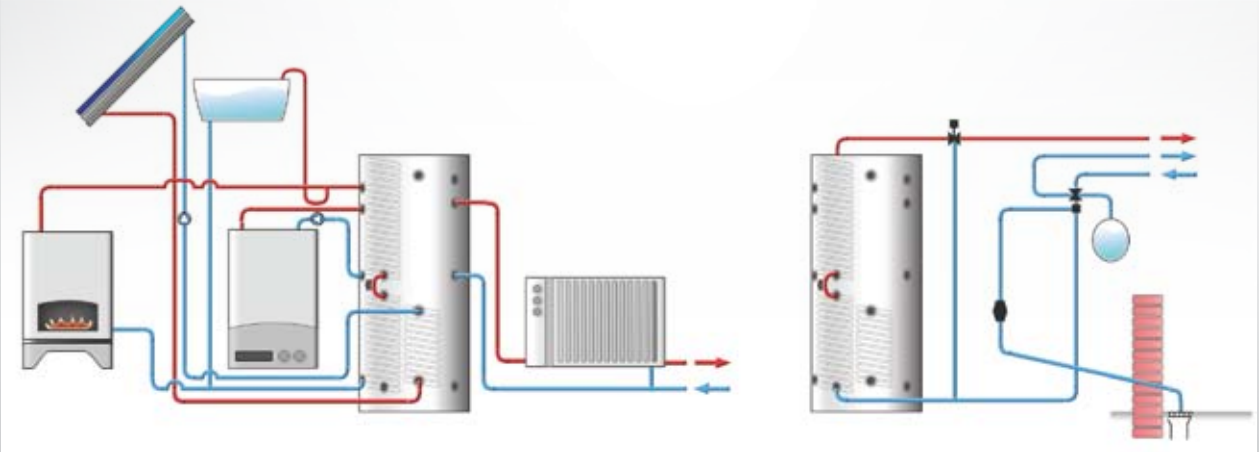
	STAINLESS STEEL					COPPER		
Volume (l)	200	250	300	400	500	200	250	300
Height (mm)	1400	1335	1535	1535	1880	1400	1600	1800
Diameter (mm)	500	560	560	660	660	450	450	500
Weight Empty (kg)	44	53	57	72	85	32	41	47
Weight Full (kg)	244	303	357	472	585	232	241	247
1st Hour Hot Water (l/h) @50 Deg C	150	187.5	225	300	375	150	187.5	225
Max Flow Rate (l/min) @50 Deg C	15	17	20	22	24	15	17	20
kW Load 1 Hour Recovery	13	16	19	26	32	13	16	19
Dedicated Solar Volume (l)	110	135	160	210	260	110	135	160
Standing Loss Cylinder (kWh/Day)	1.7	1.9	2.0	2.41	2.54	1.7	2.0	2.1

DHW Coil - Pressure Drop Graph



Solar Coil - Pressure Drop Graph





0	1	1	0	1	0	1	0	0
Temperature and Pressure Relief Valve	Expansion Vessel	High Flow Rate Inlet Control Set	Dual Thermostat	Incoloy Long 240V 3kW Immersion Heater	15/22 Tundish	22mm Thermostatic Mixing Valve	Expansion Vessel Hose	22 mm 2 Port Motorzed Diverting Valve