

PRODUCT PROFILE

JK190-5118-3

Swimming Pool Heat Exchanger

Introduction

The Bowman JK190-5118-3 is a highly efficient shell and tube heat exchanger, which is designed for heating large sized swimming pools up to 1230 m³ via a boiler heat source.

The cast end covers are finished in 'C' coat, an advanced technology coating, which is highly corrosion resistant for durability and the unit is available with either a titanium or cupro-nickel tube core.

Typical Heat Transfer

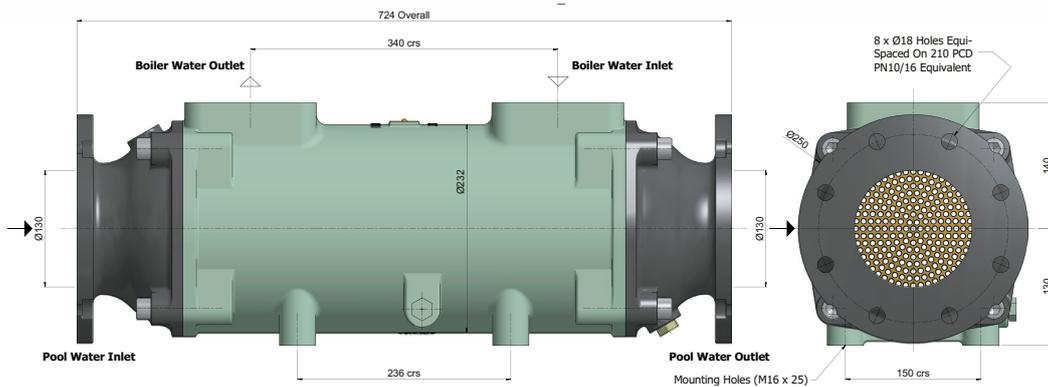
Boiler heating – up to 960kW

Product Benefits

- Performance** – heats pools fast, reducing energy costs
- Proven** – designed for commercial leisure or sports pools
- Durability** – salt water and mineral rich fresh water compatible
- Simple to maintain** – easy disassembly for cleaning
- Titanium models** – full 10 year warranty on titanium models



Specification



All dimensions in mm (except threaded connectors)

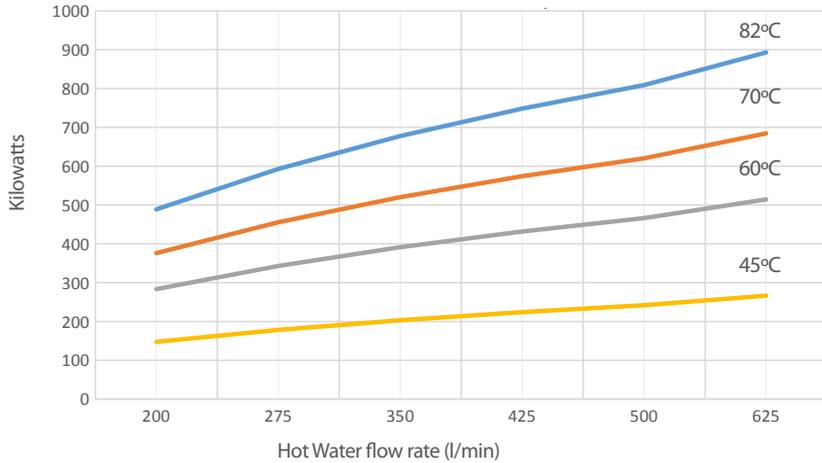
Type	Tube Material	Typical Pool Capacity		Maximum Pool Water Flow		Maximum Hot Water Temp		Max. Operating Pressure Pool Water		Max. Operating Pressure Hot Water		Weight
		m ³	gal	m ³ /h	l/min	°C	°F	bar	psi	bar	psi	
JK190-5118-3C	Cupro-nickel	1,000	220,000	114.0	1,900	110	230	6	87	6	87	85
JK190-5118-3T	Titanium	1,230	270,000	150.0	2,500	110	230	6	87	6	87	76

Water Flow

As the graphs and table below illustrate, providing the right water flow volume is vital to the performance of the heat exchanger. If the flow rate of either the hot water supply, or the pool water circuit is too low, the heat exchanger will not perform at its designed efficiency and will be unable to transfer all the available heat energy in to the pool water.

For more information please visit; <https://ej-bowman.com/knowledge-centre/why-doesn't-my-pool-heat-up-faster/>

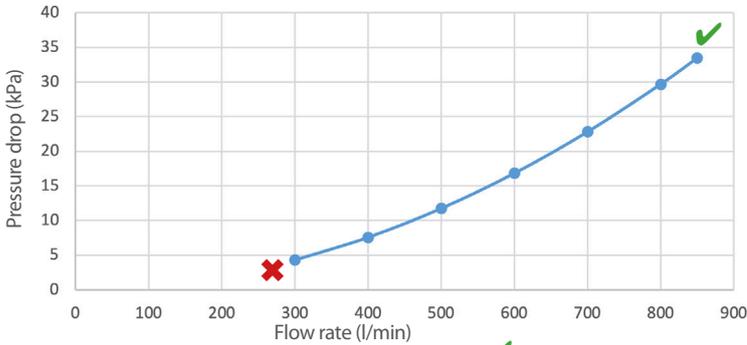
Heat Transfer



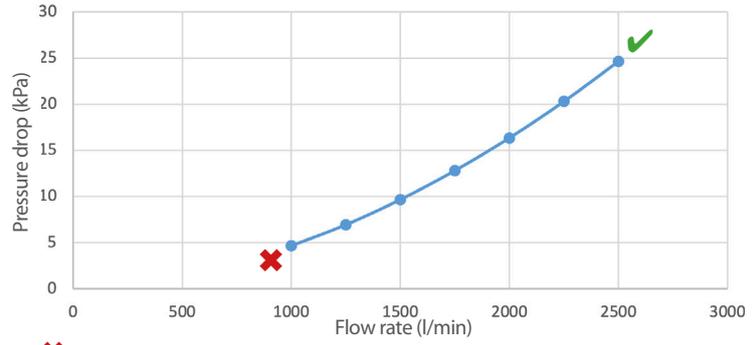
kW Heat Transfer - JK190-5118-3
Pool water flow 1900 l/min at 28°C

Hot Water	Temperature & Heat Transfer			
Flow rate l/min	82°C kW	70°C kW	60°C kW	45°C kW
200	489	376	283	148
275	593	456	343	178
350	678	520	391	203
425	748	574	432	224
500	809	620	466	242
625	893	684	514	267

Pressure Drop Hot Water (Shell Side)



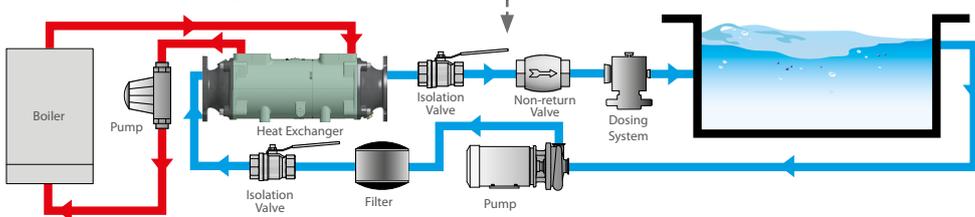
Pressure Drop Pool Water (Tube Side)



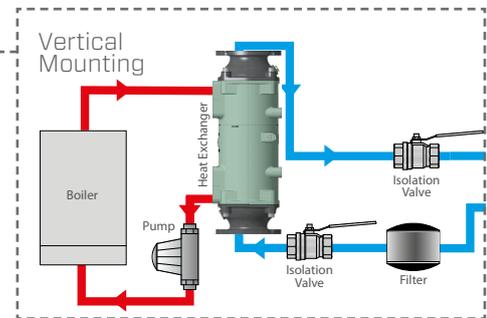
✓ Optimum heat transfer performance ✗ Reduced heat transfer performance

Installation

Horizontal Mounting



If an automatic dosing system is added, it must be installed after the heat exchanger on the return to the pool.



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