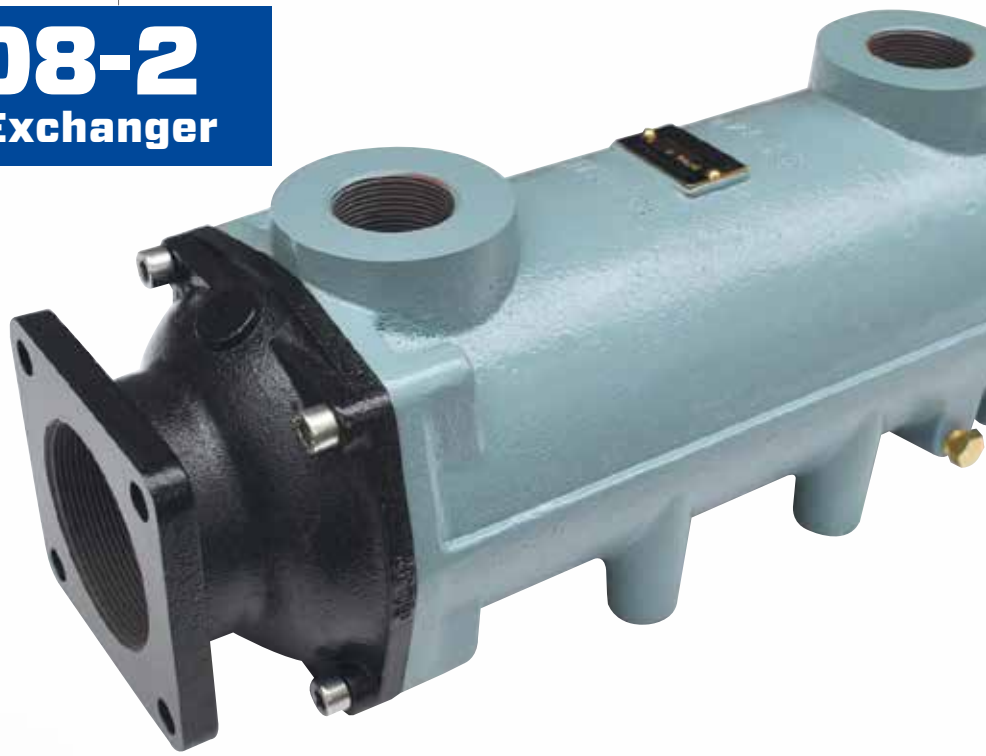
PRODUCT PROFILE

GL140-5108-2
Swimming Pool Heat Exchanger



Introduction

The Bowman GL140-5108-2 is an efficient shell and tube heat exchanger which is suitable for heating swimming pools up to 16,800 ft^3 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.

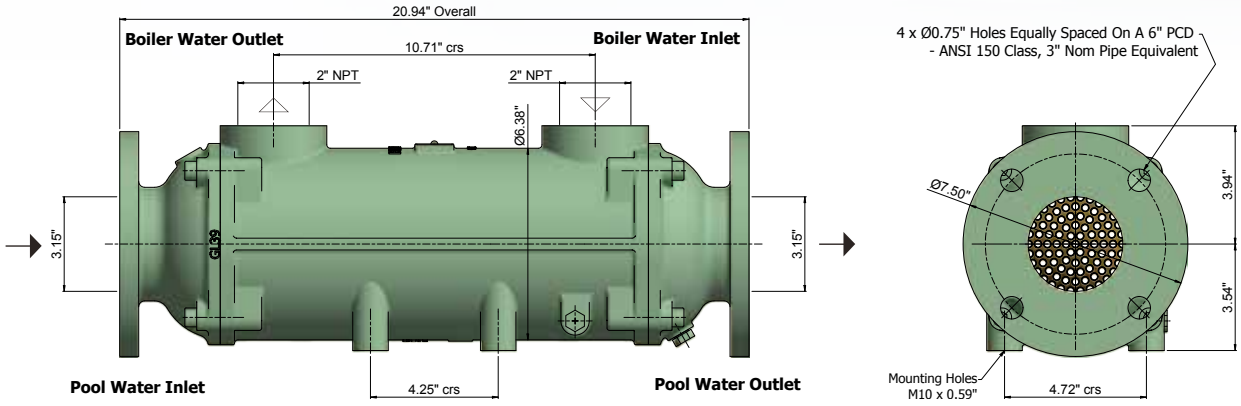
Typical Heat Transfer

Boiler heating – 1,000,000 Btu/h

Product Benefits

Proven – heats pools fast, reducing energy costs
Easy to install – 3.15" NPT threaded end covers or 4 x Ø0.75" holes flange
Durability – salt water and mineral rich fresh water compatible
Simple to maintain – easy disassembly for routine maintenance
Titanium models – full 10 year warranty on titanium materials

Specification



All dimensions in inches.

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
		ft^3	gal	USGPM	°F	psi	psi	lb
GL140-5108-2C	Cupro-nickel	16,000	120,000	54.5	230	87	87	66
GL140-5108-2S*	Stainless Steel	16,800	126,000	59.4	230	87	87	66
GL140-5108-2T	Titanium	16,800	126,000	59.4	230	87	87	60

*Not suitable for use on pools fitted with salt water chlorinators or salt water pools.

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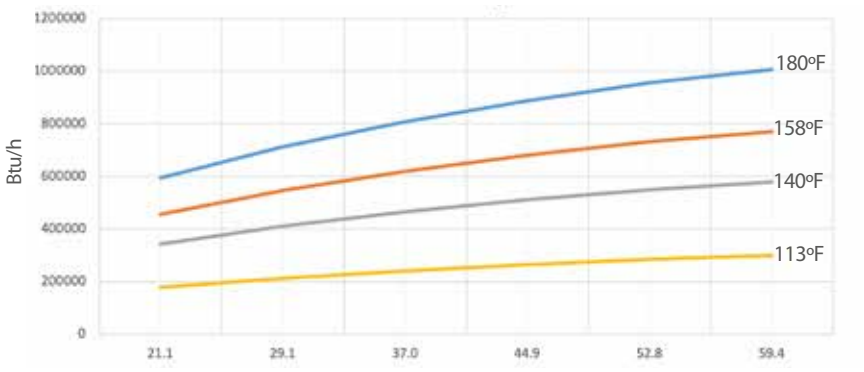
100 YEARS OF HEAT TRANSFER TECHNOLOGY

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/

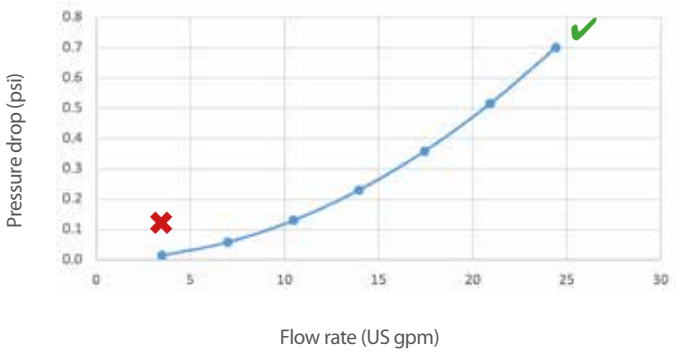
Heat Transfer



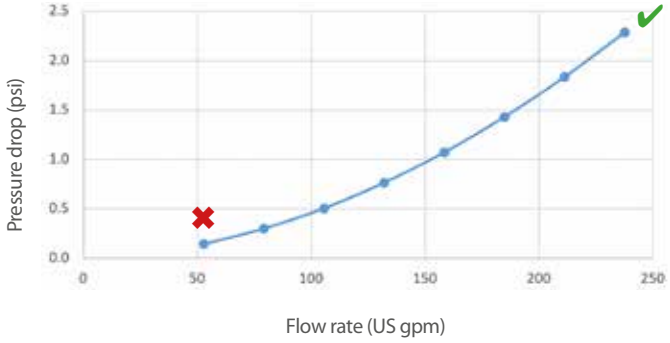
Btu/h Heat Transfer - GL140-5108-2
Pool water flow 222 US gpm at 82˚F

Hot Water	Temperature & Heat Transfer			
Flow rate	180ºF	158ºF	140ºF	113ºF
(US GPM)	Btu/h	Btu/h	Btu/h	Btu/h
21.1	593700	455900	342900	178100
29.1	712500	546600	410800	212900
37.0	808000	619600	465400	241200
44.9	887800	680400	511100	264800
52.8	956100	732600	550000	284900
59.4	1006200	770800	578700	299600

Pressure Drop Hot Water (Shell Side)



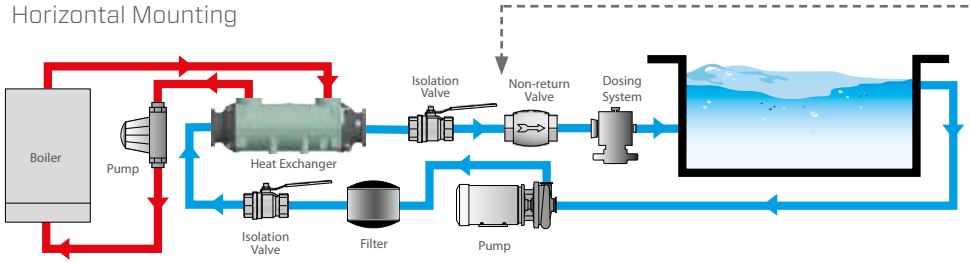
Pressure Drop Pool Water (Tube Side)



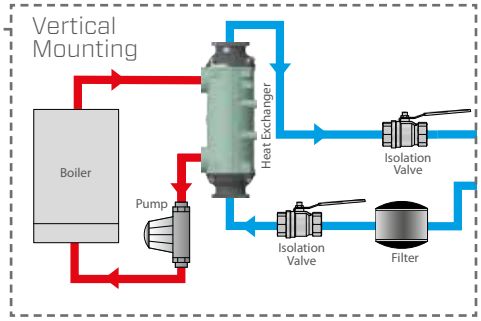
✔ Optimum heat transfer performance ✖ Reduced heat transfer performance

Installation

Horizontal Mounting



Vertical 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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