SWIMMING POOL HEAT EXCHANGERS

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Swimming Pool Heat Exchangers

There are two ranges of Bowman Swimming Pool Heat Exchangers, one for use with boilers (refer to pages 4-7) and the other for use with Solar Panels/Heat Pumps (see pages 8-9). Available worldwide, Bowman units offer reliability and durability and come with the following features:

- Available in cupronickel, titanium and stainless steel.
- Transfer up to 1050 kW to your pool quickly making more efficient use of the energy, therefore saving money.
- Integral 7mm thermostat pockets (on most models) for easier installation.
- Removable tube stack makes the units easy to service.
- Composite end covers with solvent weld connections fit directly into the pool pipework on 5113 and 5114 series heat exchangers.
- Units are also ideal for cooling pools in warmer climates via a chiller system.
- Titanium materials in contact with pool water come with a 10 year anti-corrosion guarantee.

More efficient – Incorporating more heat transfer tubes than many of our competitors' heat exchangers, Bowman units will heat your pool more quickly, dramatically reducing your fuel costs.

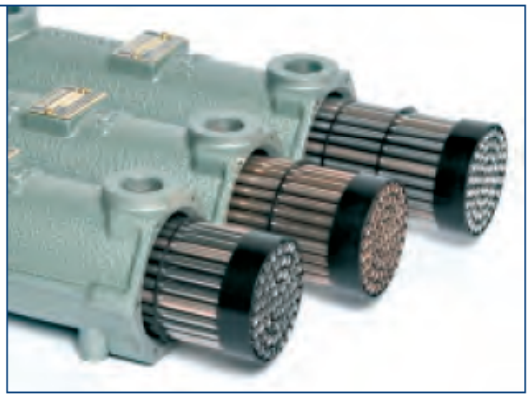
Más eficientes.– Al incorporar más tubos de transferencia de calor que muchos de los intercambiadores de calor de nuestros competidores, los equipos Bowman calentarán su piscina más rápidamente, reduciendo significativamente sus costes de combustible.

Easy to maintain – Special feature enables the end covers and tube stack to be removed for cleaning purposes.

Fácil de mantener– Su especial característica permite desmontar las tapas y el haz tubular para la limpieza.

Corrosion-resistant materials – Units are available in titanium, cupronickel and stainless steel making them suitable for all types of pool set-up.

Materiales resistentes a la corrosión – Los equipos están disponibles en titanio, cuproníquel y acero inoxidable haciéndolos adecuados para todos los tipos de configuraciones de piscinas.



Easy to install – 5113 and 5114 units come complete with imperial and metric solvent weld adaptors allowing for easy installation into pool pipework.

Fáciles de instalar – Los equipos 5113 y 5114 vienen completos con adaptadores soldados de solvente imperiales y métricos permitiendo una fácil instalación en las tuberías de la piscina.

*Thermostat not supplied
*Termostato no suministrado

Swimming Pool Heat Exchangers for use with boilers

The table below enables the selection of the appropriate heat exchanger and shows the output that can be achieved from our units with different boiler inlet temperatures and swimming pool sizes. The performance capabilities of the heat exchanger are based on achieving a pool water temperature of 30°C.

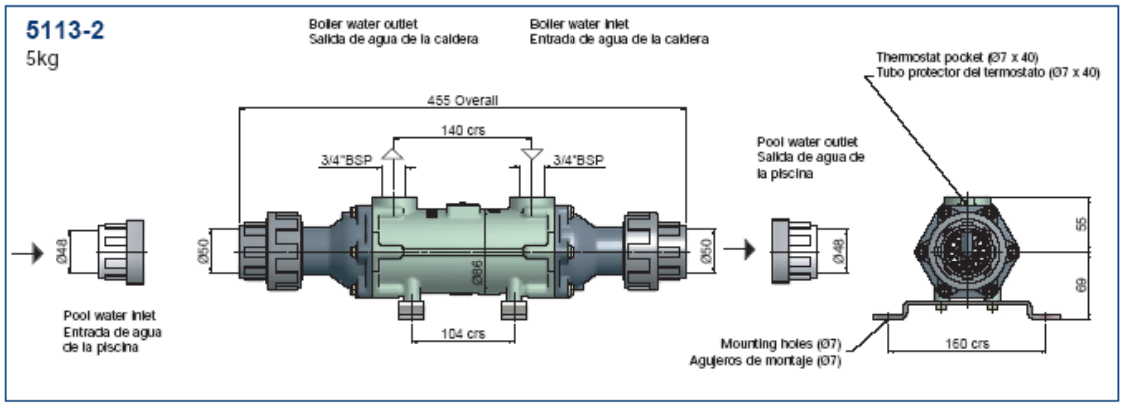
Type Tipo	Pool capacity Capacidad de la piscina		Boiler water flow Flujo de agua de la caldera		Maximum pool water flow Flujo de agua máximo de la piscina		Heat transfer Transferencia de calor 82°C Boiler water Agua de la caldera a 82?		Heat transfer Transferencia de calor 60°C Boiler water Agua de la caldera a 60?	
	m^3	gal	m^3/h	l/m	m^3/h	l/m	kW	BTU	kW	BTU
5113-2 C/S/T*	80	18000	2.4	40	10.2	170	40	135000	22	75000
5113-3 C/S/T*	120	26000	3.6	60	15.0	250	70	240000	40	135000
5114-2 C/S/T*	170	37000	5.4	90	21.0	350	100	340000	55	190000
4497-2 C	230	50000	7.2	120	28.8	480	160	545000	92	310000
5114-5 S/T*	240	52000	7.8	130	28.8	480	200	680000	130	440000
3708-2 C	400	89000	12.6	210	50.4	840	284	950000	160	550000
3709-3 C	600	130000	19.2	320	75.0	1250	550	1900000	310	1050000
3711-3 C	910	200000	28.6	475	114.0	1900	780	2650000	440	1500000
3710-3 C	1400	300000	44	730	175.2	2920	1050	3600000	590	2000000

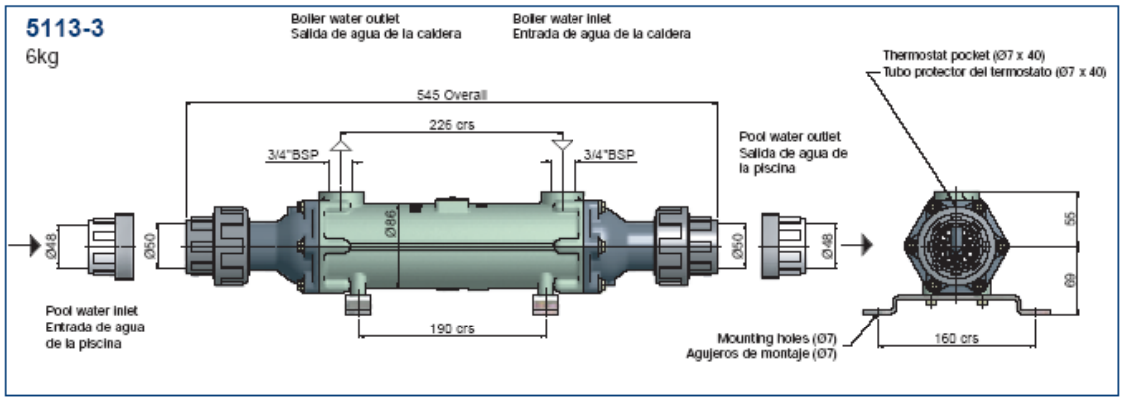
* Add the appropriate suffix indicating tube material when ordering these part numbers (C, S or T).
* Añada el sufijo apropiado indicando el material del tubo cuando haga el pedido de estos números de pieza (C, S o T).

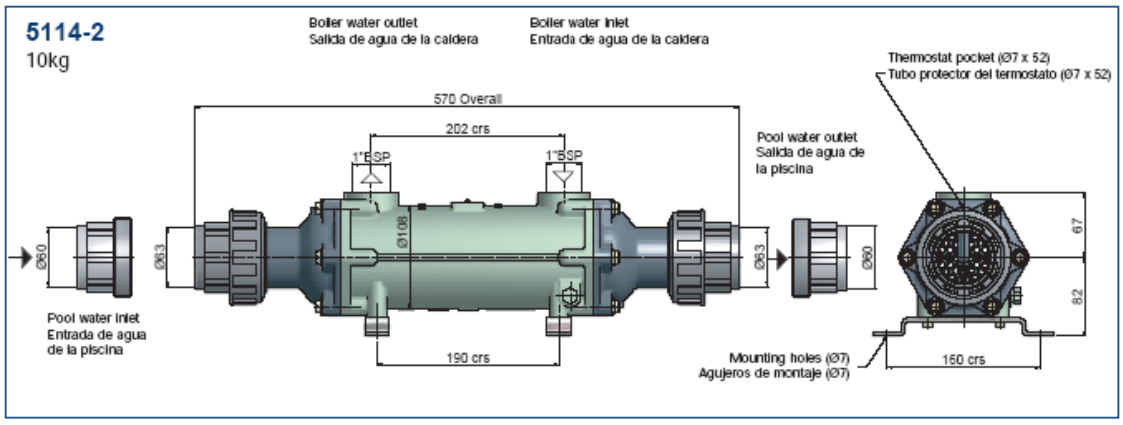
C = Cupronickel
S = Stainless steel
T = Titanium

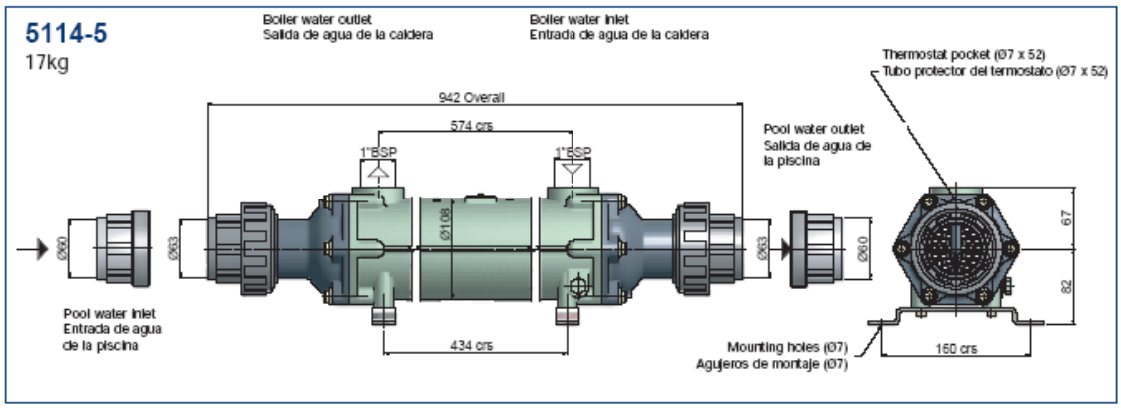
C = Cuproniquel
S = Acero inoxidable
T = Titanio

N.B. Stainless steel heat exchangers should not be used on pools fitted with chlorinators or salt water pools.
Nota: Los intercambiadores de calor de acero inoxidable no deben utilizarse en piscinas equipadas con clorinadores de agua salada.



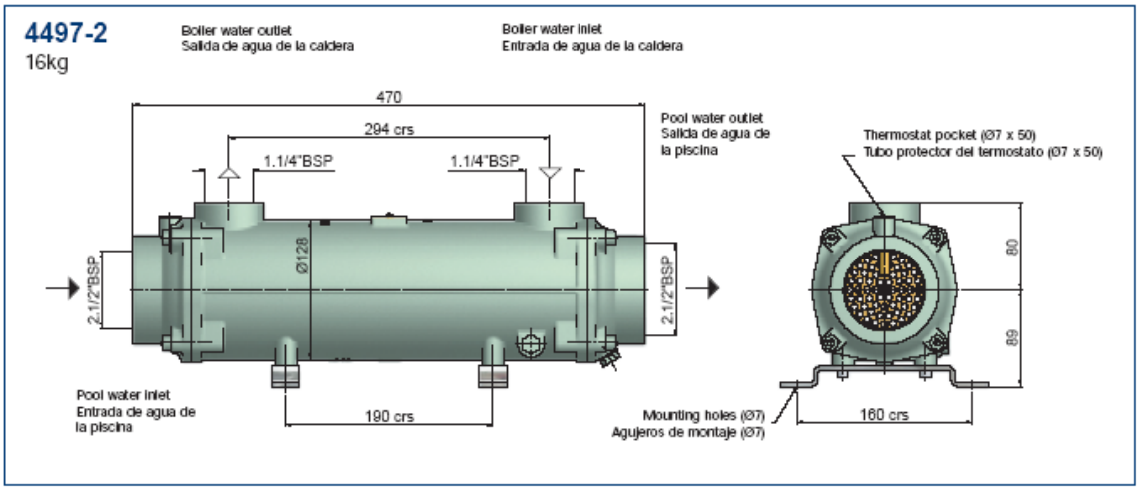




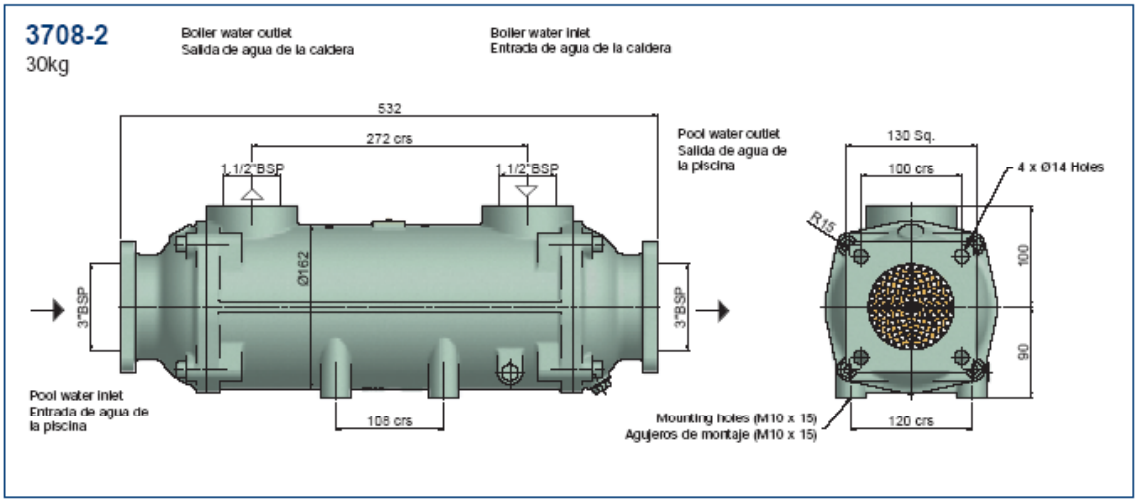


All dimensions in mm. Todas las dimensiones en mm.

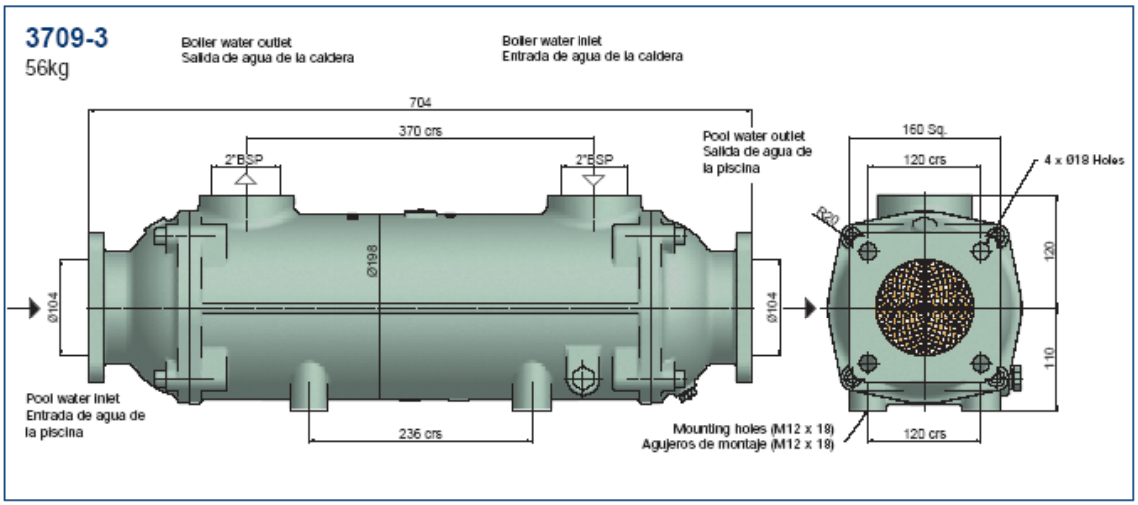
4497-2
16kg



3708-2
30kg

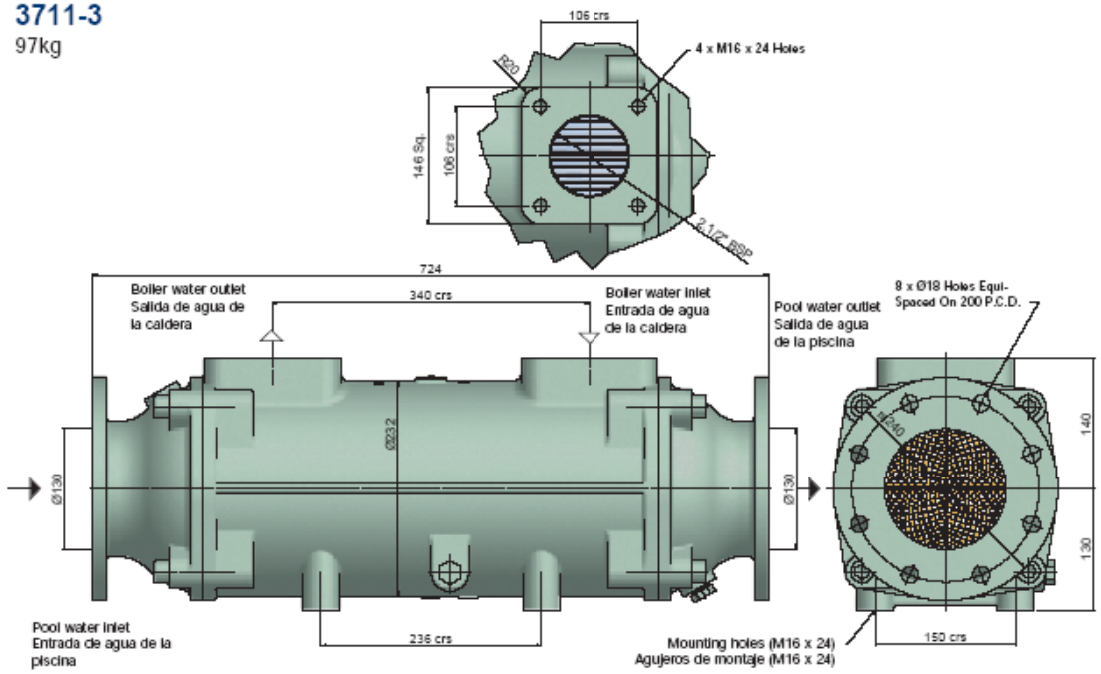


3709-3
56kg

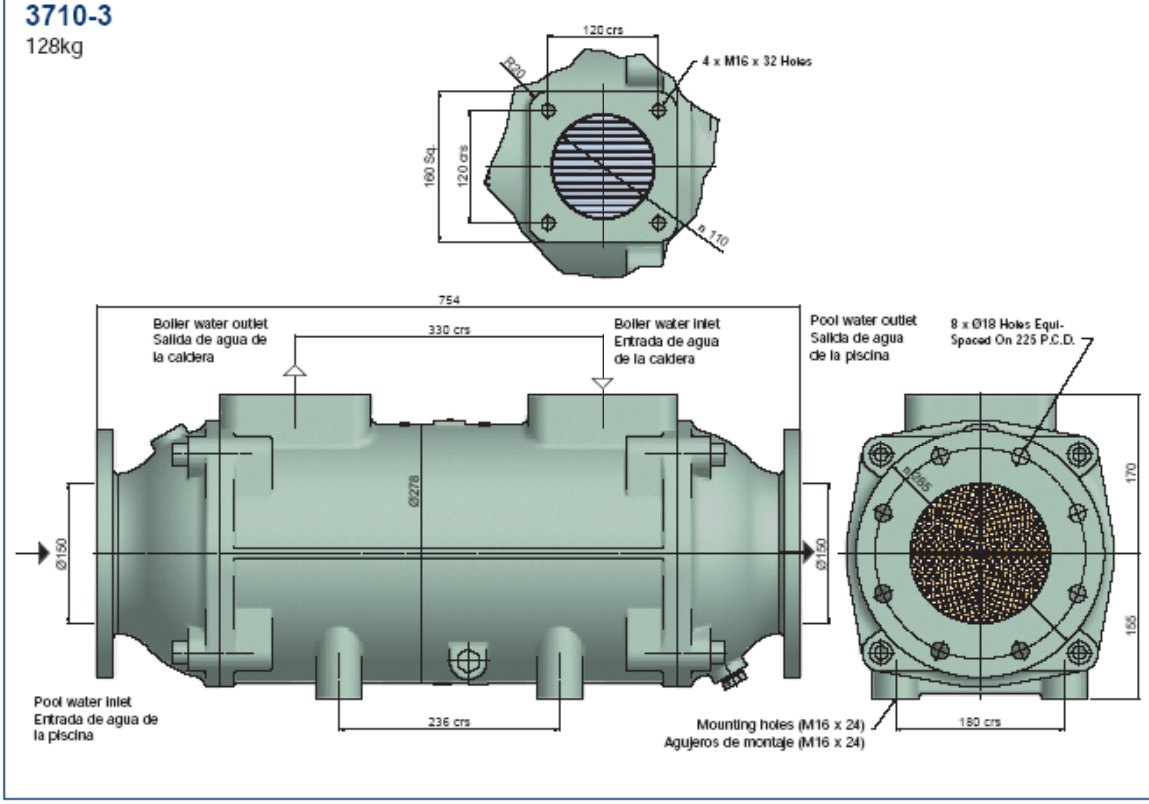


All dimensions in mm.
Todas las dimensiones en mm.

3711-3
97kg



3710-3
128kg



All dimensions in mm.
Todas las dimensiones en mm.

Flanges to BS4504 table 6.
Bridas según BS4504 tabla 6.

Swimming Pool Heat Exchangers for use with solar panels and heat pumps

The table below shows the heat that can be transferred by Bowman units with the water temperature from the solar panels or heat pump being 70°C (158°F), 60°C (140°F) or 45°C (113°F) for various pool capacities and the swimming pool water at 30°C (86°F).

Type Tipo	Pool capacity Capacidad de la piscina		Solar/heat pump water flow Flujo de agua solar /bomba de calor		Maximum pool water flow Flujo de agua máximo de la piscina		Heat transfer Transferencia de calor	
	m³	gal	m³/h	l/m	m³/h	l/m	kW	BTU
HOT WATER AT 70°C AGUA CALIENTE A 70°C								
5113-3 C/S/T *	50	11000	1.2	20	6.2	104	24	82000
5113-5 C/S/T *	120	26000	3	50	15.0	250	70	240000
5114-5 C/S/T *	180	40000	4.5	76	23.0	380	123	420000
4827-5 C	230	50000	5.7	96	29.0	480	176	600000
HOT WATER AT 60°C AGUA CALIENTE A 60°C								
5113-3 C/S/T*	50	11000	1.2	20	6.2	104	18	61000
5113-5 C/S/T*	120	26000	3	50	15.0	250	52	175000
5114-5 C/S/T*	180	40000	4.5	76	23.0	380	91	310000
4827-5 C	230	50000	5.7	96	29.0	480	131	440000
HOT WATER AT 45°C AGUA CALIENTE A 45°C								
5113-3 C/S/T*	50	11000	1.2	20	6.2	104	9	30000
5113-5 C/S/T*	120	26000	3	50	15.0	250	25	850000
5114-5 C/S/T*	180	40000	4.5	76	23.0	380	45	150000
4827-5 C	230	50000	5.7	96	29.0	480	64	220000

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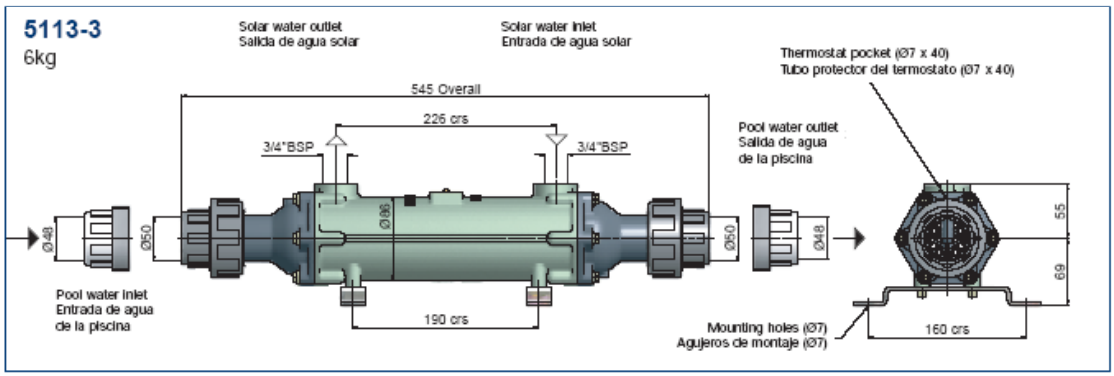
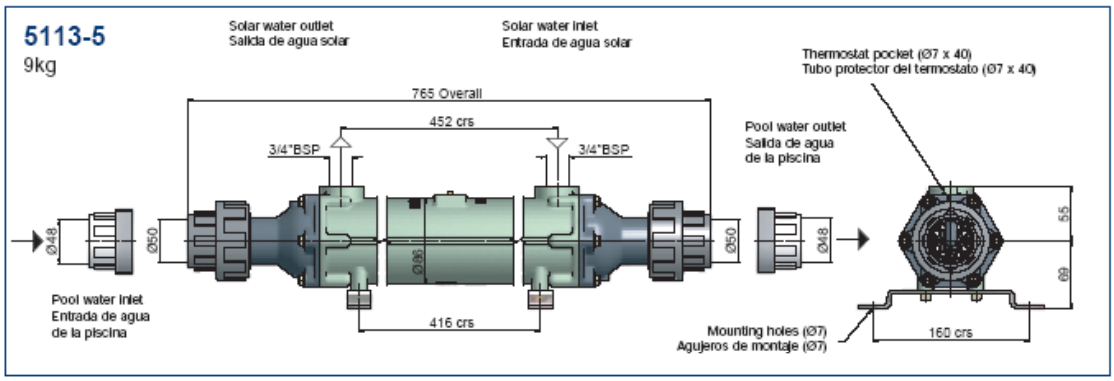
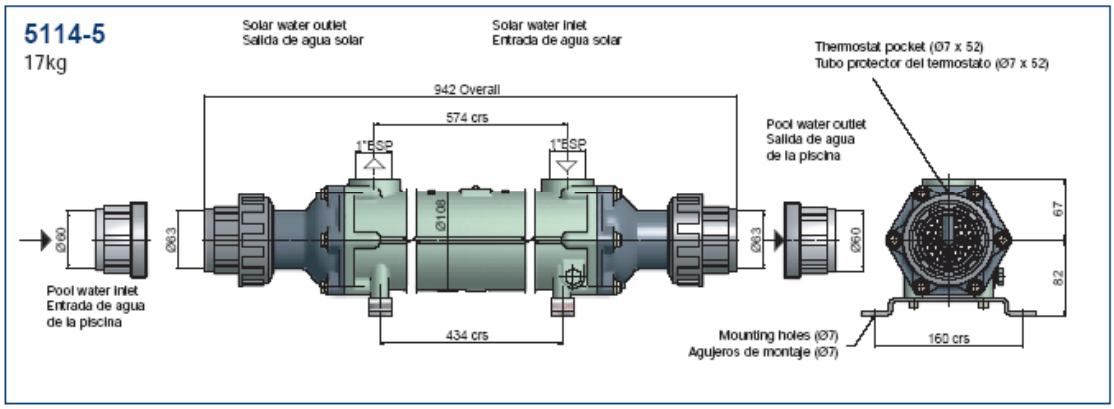
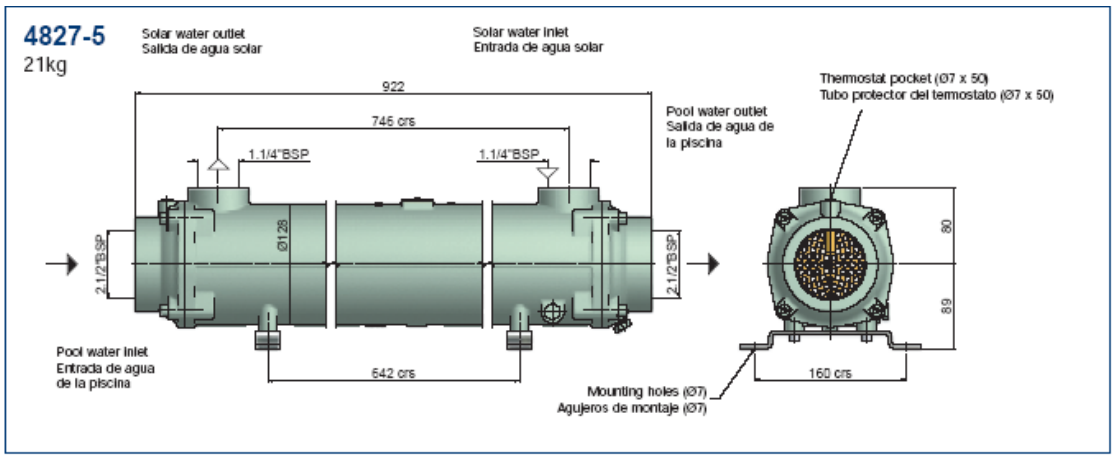


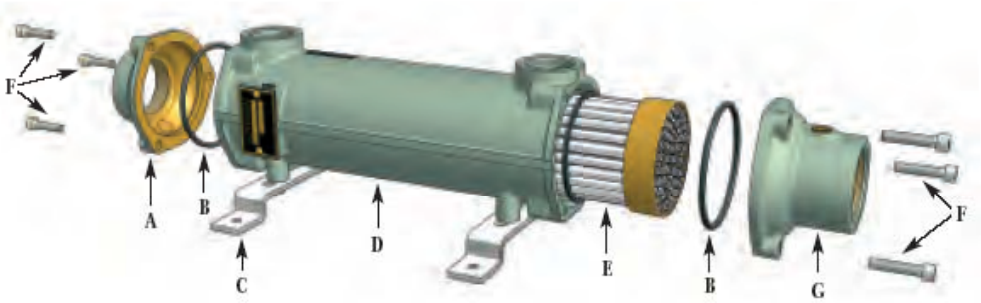




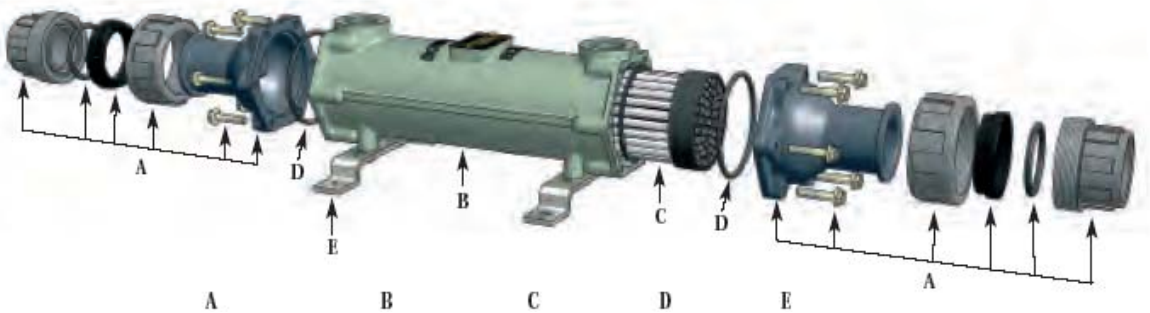


All dimensions in mm. Todas las dimensiones en mm.

Spare parts / Piezas de recambio



	A	B	C	D	E	F	G
Type Tipo	Plain end cover tapa plana	"O" Seals Juntas tóricas	Mounting brackets Soportes de montaje	Body Cuerpo	Tube stack Haz tubular	End cover screws Tornillos de la tapa	Thermostat pocket end cover tapa del tubo protector del termostato
3705-3 4495-3	EC033-784GM	AN12NT	4154	EC071-4568-3CI	5088-3TN2P	HS06X30	– EC060-3920NB
3706-2 4496-2	FC033-1176GM	OS46NT	4154	FC010-1200-2CI	5089-2TN2P	HS08X35	– FC033-4760GM
3707-2 4497-2	FG007-2802GM	OS52NT	4154	FG010-1650-2CI	3446-2TN2P	HS08X35	– FG007-4761GM
3708-2	GL037-3140GM	OS63NT	–	GL015-3136-2CI	3447-2TN2B	HS10X40	–
3709-3	GK063-3255GM	OS69NT	–	GK019-2865-3CI	3448-3TN2B	HS12X50	–
3711-3	JK004-3331GM	OS74NT	–	JK019-3332-3CI	3450-3TN2B	HS16X70	–
3710-3	PK004-2926GM	OS81NT	–	PK019-2919-3CI	3449-3TN2B	HS16X70	–



	A	B	C	D	E
Type Tipo	End cover assembly Conjunto de la tapa	Body Cuerpo	Tube stack Haz tubular	"O" Seals Juntas tóricas	Mounting brackets Soportes de montaje
5113-2C 5113-2S 5113-2T	5030	EC070 4568-2CI	5095-2TNP 5095-2STP 5095-2TIP	AN12NT	4154
5113-3C 5113-3S 5113-3T	5030	EC071 4568-3CI	5095-3TNP 5095-3STP 5095-3TIP	AN12NT	4154
5113-5C 5113-5S 5113-5T	5030	EC073 4568-5CI	5095-5TNP 5095-5STP 5095-5TIP	AN12NT	4154
5114-2C 5114-2S 5114-2T	5031	FC070 4668-2CI	5096-2TNP 5096-2STP 5096-2TIP	OS46NT	4154
5114-5S 5114-5T	5031	FC073 4668-5CI	5096-5STP 5096-5TIP	OS46NT	4154

When replacing the tube stack, always fit new seals - 2 off per unit.

Al sustituir el haz tubular, debe montar siempre juntas nuevas - 2 por equipo.

Installation and Maintenance

All Bowman swimming pool heat exchangers must be installed in accordance with the 'Installation, Operation & Maintenance Guide' which can be downloaded from the Bowman website - **www.ejbowman.co.uk**

Pool Water Flow - The maximum pool water flow rates detailed in the ratings charts must not be exceeded.

Operating Temperature - Heating water must not exceed 120ºC.

Operating Pressure - The maximum working pressure on both sides is 3 bar (43.5 psi).

Mounting - The heat exchanger can be mounted vertically or horizontally as per the diagram below.