

# Refrigerant to Water Titanium Heat Exchanger

For Heating/Cooling Swimming Pools with Direct Expansion AC/Heat Pumps



## Introduction

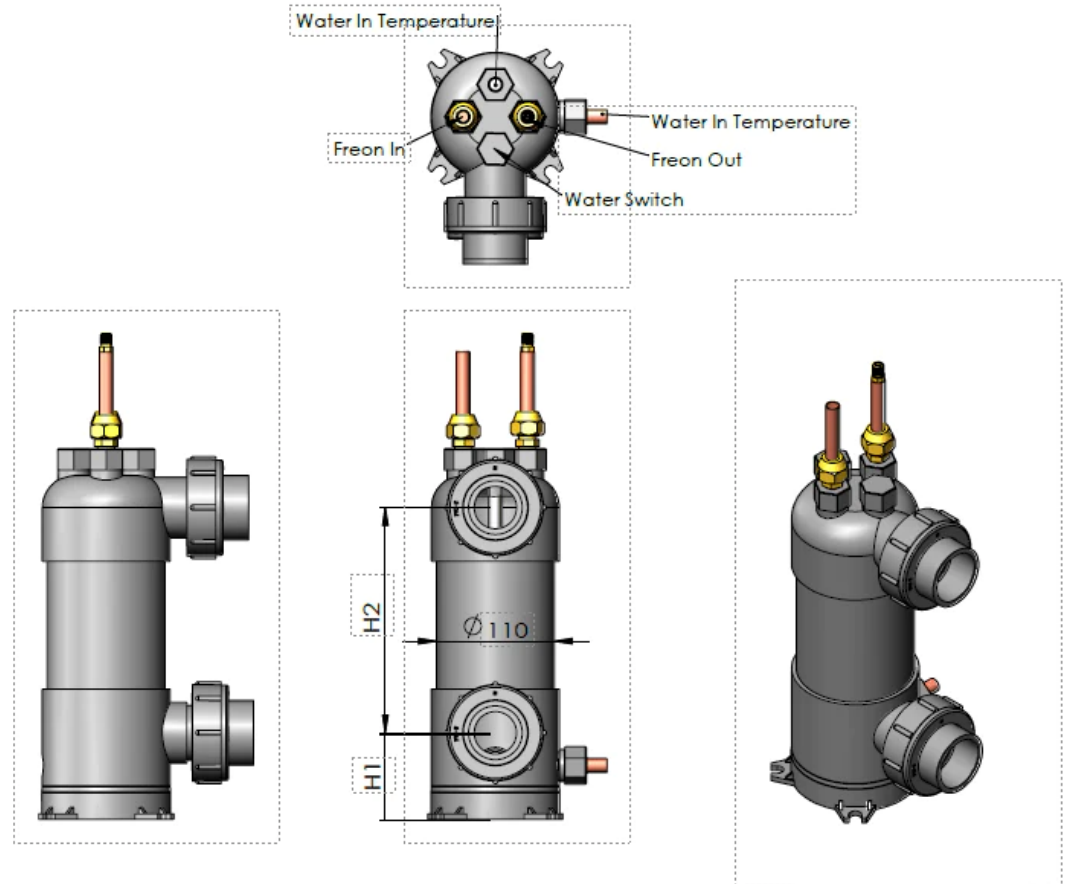
Corrosion resistant heat exchangers for swimming pool, aquariums, aquaculture, waste heat recovery, water source geothermal heat exchange, and other non-potable water heating or heat transfer use with PVC compatible working fluids. All models use 6mm thick PVC shell with TA1 pure titanium seamless tube. Compatible with all CFC, HCFC, and HFC refrigerants. Designed for use with highly chlorinated water and salt water.

## Specifications

Water Side Temperature Range °F (°C)	32 (0) - 113 (45)
Water Side Maximum Pressure (PSI)	72
Refrigerant Side Temperature Range °F (°C)	-58 (-50) - 248 (120)
Water Side Maximum Pressure (PSI)	740

Connection of refrigerant side of the heat exchanger to an existing Direct Expansion (DX) Air Conditioning or Heat Pump Unit shall be done by certified refrigeration technician.

Always check with DX unit manufacturer warranty requirements since this operation might affect equipment's warranty.



Use Proper control devices (*Temperature Sensor, Motorised Valves, Controller, etc...*) to switch between existing DX machine condenser (usually air cooled) and this heat exchanger.

## Technical Properties

Model	Capacity	Capacity	Water Flow Rate	Water Flow Rate	H1	H2	H2	H3	Total Height	Total Height	PVC Shell (mm)	Tube Size	Tube Size	Tube Length (m)	Tube Length (ft)	Refrigerant Connection (mm)	Refrigerant Connection (in-in)	Water Connection (mm) - (in)	Weight	Weight
	(KW)	(MBH)	(m <sup>3</sup> /h)	US GPM	(mm)	(in)	(mm)	(in)	(mm)	(in)		(mm)	(in)	(mm)	(in)				kg	Lb
PVX-38	3.8	12.97	1.8	7.93	70	2.76	170	6.7	380	14.97	φ110*330	12.7	0.5	3	9.84	φ12.7/φ12.7	Ø ½ - ½	φ50 - φ2" PVC thread	2.3	5.06
PVX-45	5	17.06	2	8.81	70	2.76	235	9.26	445	17.52	φ110*405	12.7	0.5	4.9	16.08	φ12.7/φ12.7	Ø ½ - ½		2.7	5.94
PVX-95	9.5	32.42	4.2	18.5	70	2.76	285	11.2	495	19.49	φ110*495	12.7	0.5	6.5	21.32	φ12.7/φ12.7	Ø ½ - ½		3.5	7.7
PVX-120	12	40.95	5.5	24.22	70	2.76	350	13.8	560	22.05	φ160*470	12.7	0.5	8.4	27.56	φ12.7/φ12.7	Ø ½ - ½		4.5	9.9
PVX-140	14	47.77	6.2	27.3	80	3.15	375	14.8	595	23.43	φ160*510	12.7	0.5	10.5	34.44	φ12.7/φ12.7	Ø ½ - ½		4.8	10.56
PVX-170	17	58.01	7.5	33.03	80	3.15	360	14.2	585	23.04	φ200*520	16	0.63	9.8	32.15	φ12.7/φ12.7	Ø ½ - ½		5.9	12.98
PVX-210	21	71.65	9.2	40.51	80	3.15	370	14.6	595	23.43	φ200*530	19	0.75	10	32.8	φ12.7/φ19	Ø ½ - ¾		6.2	13.64
PVX-250	25	85.3	12	52.84	80	3.15	400	15.8	625	24.61	φ200*560	19	0.75	12.5	41	φ12.7/φ19	Ø ½ - ¾		6.6	14.52
PVX-300	30	102.36	14	61.65	80	3.15	430	16.9	650	25.6	φ200*590	19	0.75	15	49.2	φ12.7/φ19	Ø ½ - ¾		7	15.4
PVX-360	36	122.83	15	66.05	80	3.15	450	17.7	660	25.99	φ200*610	19	0.75	17	55.76	φ12.7/φ19	Ø ½ - ¾		7.4	16.28

## Warranty

Heat Exchanger is subject to one year limited residential warranty.

Certain chemicals shall not be used with this type of heat exchanger:

- Hydrochloric acid up to 0.1% concentration
- Solutions that contain MCI
- Chlorides (MgCl<sub>2</sub>, NaCl between 0.01-1%, CuCl up to 1%, CaCl<sub>2</sub> from 5%to saturation)
- Any fluid that will deposit alkaline residue or phosphorous.

**IMPORTANT! ! !** IT IS PURCHASER’S RESPONSIBILITY TO ENSURE THAT ALL FLUIDS IN CONTACT WITH THE PRODUCTS ARE COMPATIBLE WITH THE CONSTRUCTION MATERIAL OF THE PRODUCT. THIS INCLUDES OPERATIONAL FLUIDS AND CLEANING FLUIDS. CORROSIVE ENVIRONMENTS ARE OFTEN A COMBINATION OF CHEMICAL LEVELS, FLOW RATES, AND TEMPERATURES. FAILURE TO ENSURE THIS WILL RESULT IN DAMAGES TO THE PRODUCT. IF ANY OF ABOVE CONDITIONS IS NOT FULLY COMPLIED THE WARRANTY OF THIS UNIT IS VOID.

Technical or commercial considerations may, from time to time to alter the design, performance and dimensions of the equipment and the right is reserved to making such changes without previous notice.