

Water pump sets

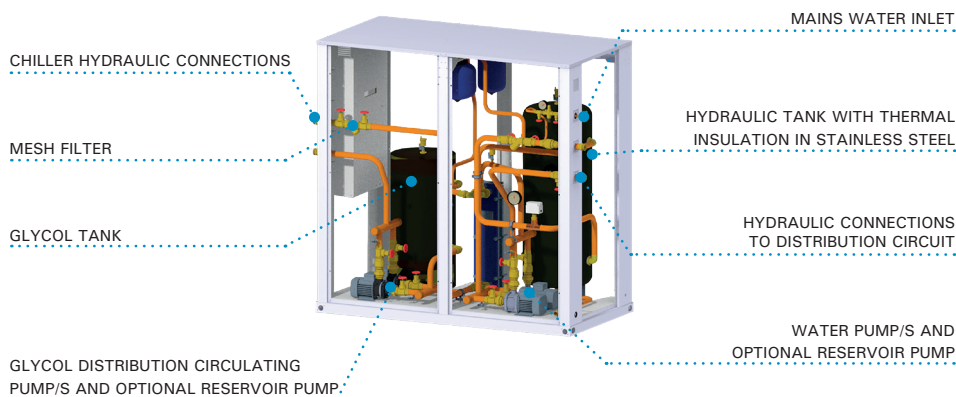


Hydraulic unit for cooling mains water in closed circuit, assembled in galvanised sheet steel bodywork and structure with polyester paint and copper piping, for outdoor installation. Ready to supply water at 1 °C to a recirculation and consumption ring.

Features

- ▶ 400V 3N 50Hz power supply. Available in 60Hz. Other voltages on request
- ▶ Glycol circulating pump + Glycol circuit reserve pump.
- ▶ Consumption water circulating pump + reserve pump built in AISI-304 stainless steel.
- ▶ Glycol circuit buffer tank with high density polyurethane foam insulation and vapour barrier.
- ▶ Water circuit AISI-304 stainless steel buffer tank with high density polyurethane foam insulation and vapour barrier.
- ▶ Heat exchanger with removable AISI-304 stainless steel plates and gaskets.
- ▶ Closed diaphragm expansion vessel and ducted safety valve for each circuit.
- ▶ Mesh filter.
- ▶ Glycerine thermometers and pressure gauges, air vent and drain connection.
- ▶ Continuous water recirculation to minimise consumption.
- ▶ Check valves at mains water inlet and water return.
- ▶ Threaded hydraulic connections.
- ▶ Electrical control and power panel with magneto-thermal protection and independent differential for each pump, and electronic control unit for management and rotation of primary and secondary circuit pumps. Communication with chiller plant for set-point management. Set-point management.
- ▶ Adjustable cold water outlet temperature between +15 °C and +1 °C.

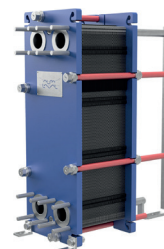
B version scheme



- ❄ Easily integrated modular construction.
- ❄ Optimised water and glycol assemblies.
- ❄ Compatible with Sigilus (WF) and intarcube (WV) chillers.

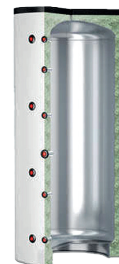
Removable plate heat exchanger

It allows periodic cleaning in case of dirt accumulation.



stainless steel buffer tank

It guarantees a long service life, being compatible with mains water and avoiding scales and limescale deposits in it.



intarChiller electronic control

Electronic control with Modbus communication RS-485. Set point change. Alarm management and pump rotation.



Built-in copper hydraulic circuit

Prevents corrosion and scaling.
Check compatibility with brines.

Removable mains water filter

In order to minimise the amount of impurities introduced into the circuit, a removable mesh filter is supplied and installed in the unit.



400V 3N 50Hz | High temperature | Water

	Series / Model	Q consumption average (litre/hour) ⁽¹⁾	Equivalent Cooling capacity (kW) ⁽²⁾	Glycol flow (m³/h)	Available glycol pressure (m.c.a.)	Water flow (m³/h)	Available water pressure (m.c.a.)	Tanks volume	Water diameter	Main water	Recommended chiller
WATER	AGH-BPH-4 002	357	10	1.8	5	1.4	15	100 glycol /	1 ¼"	3/4"	MWF-SD-7 049
	AGH-BPH-4 003	714	20	3.6	10	2.8	15	200 water	1 ½"	1"	MWV-SD-6 0982
	AGH-BPH-4 005	1 071	30	5.4	13	4.3	20		2"	1"	MWV-SD-7 1473

Applications

Food production

In order to control temperatures during the food production process to prevent the growth of micro-organisms, or to perform a thermal shock when mixing it with cooled water, the following food processes stages stand out:

- Dilution of concentrates in the production of beverages (juices and soft drinks) and preparation of sauces and dressing.
- Mixing of dry ingredients and temperature control in baking.
- Mixing of dry ingredients with water to maintain proper temperature and adjust consistency in the production of ice cream, sorbets and pastries.
- Pharmaceutical products preparation.
- Cooling of perishable products such as soups and broths.
- Delicatessen industry to avoid temperature increase during the mixing process of ingredients.
- Seafood processing for refrigeration, defrost, cooking or temperature holding.

Fruit and vegetables washing and pre-cooling

Temperature is the most relevant factor affecting the deterioration of harvested fresh products, directly affecting its respiration rate and the release of ethylene that induces ripening. Drop in temperature is the most efficient post-harvest technique to maintain the quality of fruit and vegetables and to extend their sales period.

Water pre-cooling for ice production

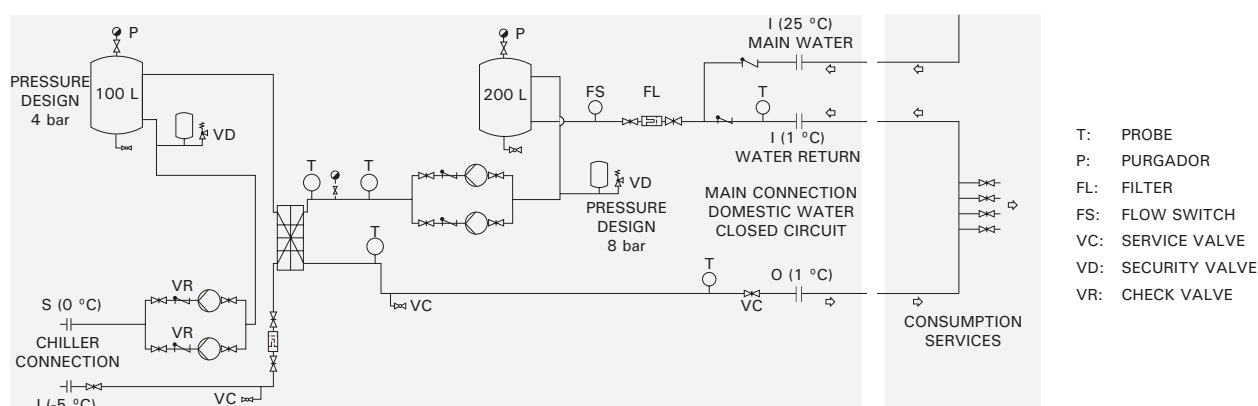
In order to increase efficiency, reduce production time and increase the capacity of ice making equipment, supplying water at a temperature as close to freezing point as possible increases the performance of new or existing equipment.

⁽¹⁾ Average water consumption flow rate, considering a mains water temperature of 25 °C and a consumption at 1 °C.

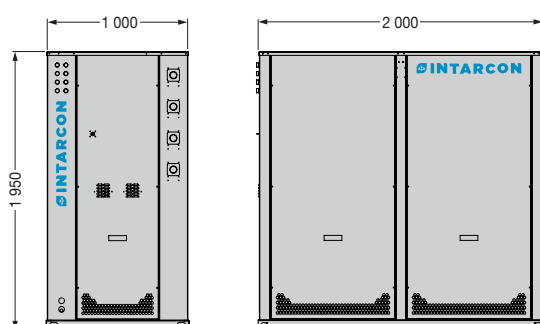
⁽²⁾ Calculated performance for pumping 30 % propylene glycol concentration at -5 °C.



Installation scheme



Dimensions



Measuring in mm.