

PRODUCT SERIES

- XF SERIES

A heat exchanger transfers heat between heat transfer fluid from a primary cooling circuit and fluid from the application to regulate process temperatures, without the fluids ever mixing together. The design of heat exchangers exposes fluids to a considerably larger surface area than other designs of heat exchanger, maximising the area available for thermal exchange to take place whilst keeping pressure drop to a minimum.



Where can a water-to-water heat exchanger be used?

Heat exchangers are usually a good option in situations where there is already a primary cooling circuit in place. Examples of primary cooling circuits include:

- Centralised chiller
- Centralised flatbed/dry cooler
- Centralised adiabatic cooler
- Cooling tower
- Tap water - Whilst almost infinite levels of cooling can be achieved by using tap water, it is terrible for the environment and for the billpayer.

The XF-Series from Applied Thermal Control



This range of floor-standing heat exchangers is designed for use with primary cooling circuits, providing cooling to applications for which the facilities water may be unsuitable for. Closed loop water to water heat exchangers from Applied Thermal Control utilise chilled house water to remove heat from the process coolant via a heat exchanger, providing an efficient way to cool without the need for an additional refrigeration circuit.

Heat exchangers in the XF series provide a barrier, protecting process coolants from potentially harmful cooling water that may contain contaminants. Units from Applied Thermal Control also overcome problems associated with insufficient pressure, fluctuating flow, or very cold water, by providing a stable supply of coolant to the process, regardless of house water condition, thus ensuring that the process remains at optimum performance.

Units in the XF range are self-contained systems with modulated primary supply, a water to water plate heat exchanger, coolant storage tank, and pump. A wide range of non-ferrous/stainless steel pumps with varying flows and pressures are available to suit requirement. Pumps are of positive displacement or centrifugal construction with fan-cooled electric motors, supplied in 304 & 316 stainless steel as standard.

Other features of the XF range include:

- Supplied complete with circuit breakers and on/off switches
- Coolant pump starting contactors
- Pump motor protection
- IP54 protection
- Temperature gauge
- Pressure gauge
- Coolant safety bypass
- Visual tank level indicator
- 24 V control circuit available

The XF-Series

XF004

The XF004 is built into the K1 chiller enclosure, making it easily portable and small enough to fit under a laboratory bench. Designed to provide 4kW of cooling at 10°C above the temperature of the primary water circuit the XF004 is ideally suited for most laboratory equipment, vacuum pumps and smaller laser systems.

XF004

HEAT EXCHANGER



ENCLOSURE SIZE

545 x 420 x 575mm



PUMP OPTIONS

Positive Displacement Pump



POWER SUPPLY OPTIONS

Single-phase



COOLING CAPACITY

4kW Cooling Capacity at 10°C above supply
+/- 0.5 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- High temperature water circuit without heater
- Low flow alarm
- Onboard RS485 data protocol
- Standard VFC set
- In-line deionising cartridge and fittings
- CPC quick release connectors
- Installation kit
- Flow meter pack output to RS485
- Seismic mounts
- In-line UV decontamination
- Qwikfoot kit
- Stainless enclosure
- De-branding of standard model
- External manifolds (2- to 10- way)
- Remote stop-start
- Auto refill
- Fluid adapters
- Pressure sensor
- Pressure sensor to RS485
- Conductivity sensor
- Conductivity sensor to RS485
- Inverter-driven pump

The XF-Series

XF008

The XF008 is also built into the K1 enclosure. Designed to provide 8kW of cooling at 10°C above the temperature of the primary water circuit the XF008 is ideal for use with larger laboratory or production equipment, vacuum pumps and cryocompressors, whilst still being portable and small enough to fit underneath a laboratory bench.

XF008

HEAT EXCHANGER



ENCLOSURE SIZE

545 x 420 x 575mm



PUMP OPTIONS

Positive Displacement Pump



POWER SUPPLY OPTIONS

Single-phase



COOLING CAPACITY

8kW Cooling Capacity at 10°C above supply
+/- 0.5 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- High temperature water circuit without heater
- Low flow alarm
- Onboard RS485 data protocol
- Standard VFC set
- In-line deionising cartridge and fittings
- CPC quick release connectors
- Installation kit
- Flow meter pack output to RS485
- Seismic mounts
- In-line UV decontamination
- Qwikfoot kit
- Stainless enclosure
- De-branding of standard model
- External manifolds (2- to 10- way)
- Remote stop-start
- Auto refill
- Fluid adapters
- Pressure sensor
- Pressure sensor to RS485
- Conductivity sensor
- Conductivity sensor to RS485
- Inverter-driven pump

The XF-Series

XF015

The XF015 is available in two enclosure types, depending upon which pump option is required. The smaller footprint of the G02 allows you to save space, whilst use of the G04 enclosure allows for a wider range of pump options, including use of a centrifugal pump. The XF015 is well suited for use in both laboratory and production environments.

XF015

HEAT EXCHANGER



ENCLOSURE SIZE

545 x 420 x 575mm (up to 17L/min)
600 x 513 x 887.5mm (up to 25L/min)



PUMP OPTIONS

Positive Displacement Pump
Centrifugal Pump



POWER SUPPLY OPTIONS

Single-phase



COOLING CAPACITY

15kW Cooling Capacity at 10°C above supply
+/- 0.5 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- High temperature water circuit without heater
- Low flow alarm
- Onboard RS485 data protocol
- Standard VFC set
- In-line deionising cartridge and fittings
- CPC quick release connectors
- Installation kit
- Flow meter pack output to RS485
- Seismic mounts
- In-line UV decontamination
- Qwikfoot kit
- Stainless enclosure
- De-branding of standard model
- External manifolds (2- to 10- way)
- Remote stop-start
- Auto refill
- Fluid adapters
- Pressure sensor
- Pressure sensor to RS485
- Conductivity sensor
- Conductivity sensor to RS485
- Inverter-driven pump

The XF-Series

XF025

The XF025 is built into the K6 enclosure to enable use with centrifugal pumps. This versatile enclosure has the room to allow for a wide range of additional options to be included, such as larger tanks and heater packs. The XF025 is available on castors, making it a portable piece of equipment commonly used with laser systems and ion sources. It can also be used for cooling multiple systems.

XF025

HEAT EXCHANGER



ENCLOSURE SIZE

775 x 510 x 850mm



PUMP OPTIONS

Centrifugal Pump



POWER SUPPLY OPTIONS

Available in single- or three phase



COOLING CAPACITY

25kW Cooling Capacity at 10°C above supply
+/- 0.5 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- High temperature water circuit without heater
- Low flow alarm
- Onboard RS485 data protocol
- Standard VFC set
- In-line deionising cartridge and fittings
- CPC quick release connectors
- Installation kit
- Flow meter pack output to RS485
- Seismic mounts
- In-line UV decontamination
- Qwikfoot kit
- Stainless enclosure
- De-branding of standard model
- External manifolds (2- to 10- way)
- Remote stop-start
- Auto refill
- Fluid adapters
- Pressure sensor
- Pressure sensor to RS485
- Conductivity sensor
- Conductivity sensor to RS485
- Inverter-driven pump

The XF-Series

XF050

The XF050 utilises a purpose built enclosure designed to house large centrifugal pumps and is ideally suited to cooling multiple systems that require isolation from the primary cooling circuit, for example cooling laser systems with deionised water from a primary glycol circuit. The XF050 is also ideal for server and data centre cooling.

XF050

HEAT EXCHANGER



ENCLOSURE SIZE

1100 x 750 x 1060mm



PUMP OPTIONS

Centrifugal Pump



POWER SUPPLY OPTIONS

Available in single- or three phase



COOLING CAPACITY

50kW Cooling Capacity at 10°C above supply
+/- 1 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- High temperature water circuit without heater
- Low flow alarm
- Onboard RS485 data protocol
- Standard VFC set
- In-line deionising cartridge and fittings
- CPC quick release connectors
- Installation kit
- Flow meter pack output to RS485
- Seismic mounts
- In-line UV decontamination
- Qwikfoot kit
- Stainless enclosure
- De-branding of standard model
- External manifolds (2- to 10- way)
- Remote stop-start
- Auto refill
- Fluid adapters
- Pressure sensor
- Pressure sensor to RS485
- Conductivity sensor
- Conductivity sensor to RS485
- Inverter-driven pump

The XF-Series

XF085

The XF085 utilises a purpose built enclosure designed for use with large centrifugal pumps and is capable of cooling multiple systems, and larger systems, for example cooling laser systems and hydrogen electrolysis. The XF085 is also well suited to cooling multiple systems that require isolation from the primary cooling circuit.

XF085

HEAT EXCHANGER



ENCLOSURE SIZE

1100 x 750 x 1060mm



PUMP OPTIONS

Centrifugal Pump



POWER SUPPLY OPTIONS

Available in three-phase



COOLING CAPACITY

85kW Cooling Capacity at 10°C above supply
+/- 1 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- High temperature water circuit without heater
- Low flow alarm
- Onboard RS485 data protocol
- Standard VFC set
- In-line deionising cartridge and fittings
- CPC quick release connectors
- Installation kit
- Flow meter pack output to RS485
- Seismic mounts
- In-line UV decontamination
- Qwikfoot kit
- Stainless enclosure
- De-branding of standard model
- External manifolds (2- to 10- way)
- Remote stop-start
- Auto refill
- Fluid adapters
- Pressure sensor
- Pressure sensor to RS485
- Conductivity sensor
- Conductivity sensor to RS485
- Inverter-driven pump

The XF-Series

XF120

The XF120 is built into a specifically designed enclosure allowing for the use of larger centrifugal pumps. It is ideally suited to cooling multiple systems, systems needing to be isolated from the primary cooling circuit, or large systems with multiple cooling pathways, for example UV curing systems and laser systems.

XF120

HEAT EXCHANGER



ENCLOSURE SIZE

1100 x 750 x 1060mm



PUMP OPTIONS

Centrifugal Pump



POWER SUPPLY OPTIONS

Available in three-phase



COOLING CAPACITY

120kW Cooling Capacity at 10°C above supply
+/- 1 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- High temperature water circuit without heater
- Low flow alarm
- Onboard RS485 data protocol
- Standard VFC set
- In-line deionising cartridge and fittings
- CPC quick release connectors
- Installation kit
- Flow meter pack output to RS485
- Seismic mounts
- In-line UV decontamination
- Qwikfoot kit
- Stainless enclosure
- De-branding of standard model
- External manifolds (2- to 10- way)
- Remote stop-start
- Auto refill
- Fluid adapters
- Pressure sensor
- Pressure sensor to RS485
- Conductivity sensor
- Conductivity sensor to RS485
- Inverter-driven pump

The XF-Series

XF200

The XF200 is housed within a purpose built enclosure, designed for use with large centrifugal pumps. It is ideally suited to cooling systems that must be isolated from the primary cooling circuit, for cooling multiple systems, or for use with large systems with multiple cooling pathways. Examples of applications include UV curing systems, hydrogen electrolysis, and laser systems.

XF200

HEAT EXCHANGER



ENCLOSURE SIZE

1000 x 1180 x 1733mm



PUMP OPTIONS

Centrifugal Pump



POWER SUPPLY OPTIONS

Available in three-phase



COOLING CAPACITY

200kW Cooling Capacity at 10°C above supply
+/- 1 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- High temperature water circuit without heater
- Low flow alarm
- Onboard RS485 data protocol
- Standard VFC set
- In-line deionising cartridge and fittings
- CPC quick release connectors
- Installation kit
- Flow meter pack output to RS485
- Seismic mounts
- In-line UV decontamination
- Qwikfoot kit
- Stainless enclosure
- De-branding of standard model
- External manifolds (2- to 10- way)
- Remote stop-start
- Auto refill
- Fluid adapters
- Pressure sensor
- Pressure sensor to RS485
- Conductivity sensor
- Conductivity sensor to RS485
- Inverter-driven pump

The XF-Series

Common Applications

Common Applications - XF004:

- Laser systems
- X-ray sources
- Vacuum pumps
- Resistance welding machines
- High frequency generators
- Furnaces
- Hydraulic systems
- RF generators

Common Applications - XF008:

- Laser systems
- Vacuum pumps
- Resistance welding
- High frequency generators
- Furnaces
- Hydraulic systems
- RF generators

Common Applications - XF008 and upwards:

- Additive manufacturing
- Cooling cryocompressors
- Vacuum systems
- Plasma etching
- Deposition systems
- PVD
- Microchip

Common Applications - XF025 and upwards:

- Extruders

Common Applications - XF120 and up:

- UV curing for printing
- Fuel cells/hydrogen electrolysis





WolfLabs

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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