

FLOW CENTERS: MULTIZONE FLOW CENTER

2, 3 or 4 CIRCUIT MULTIZONE FLOW CENTER DESIGNED FOR MULTIPLE HEAT PUMPS WITH ONE COMMON LOOP FIELD.

It is a recognized fact that geothermal applications utilizing multiple heat pumps are optimized when a single consolidated earth loop is used. This consolidated earth loop approach capitalizes on load diversity and can reduce loop installation costs by up to 25%.

Until now, there were many reasons why an application did not use a consolidated earth loop. Typically, there may have been a need for individual tenant metering, as in a multi-tenant application. Or a centralized larger pump consumed too much energy. Or, in many cases the sophisticated control requirements led to excessive installation costs.

THOSE DAYS ARE GONE, YOU CAN NOW HAVE AN OPTIMIZED CONSOLIDATED LOOP WITH CONTROL SIMPLICITY AND INDIVIDUAL TENANT METERING, WHILE MAINTAINING A SIMPLE AND COST EFFICIENT INSTALLATION.

- **OPTIMIZED PERFORMANCE**

The benefits of taking advantage of load diversity are many, but perhaps the most significant is the impact on system performance/ installed cost. You have the flexibility to maximize operating efficiency or minimize installed costs, or compromise and have excellent efficiency with a reduced installation cost.

- **CONTROL SIMPLICITY**

The circuit pump(s) are controlled directly with a branch circuit from the heat pump that is connected to it. No need for relay boxes or other more complicated control strategies.

- **INDIVIDUAL METERING**

All energy consumed in a Multizone System is monitored through the meters supplying power to the heat pumps. For landlords, that translates into zero energy costs.

- **LOWER INSTALLED COSTS**

The simplicity of the system will result in fewer man-hours for installation as well as the significantly reduced earth loop size.

- **MAINTENANCE SIMPLICITY**

Simply by closing the pump isolation valves, turning off and disconnecting the electrical power and removing four bolts a pump can be removed and then replaced, and the total system does not have to be shut down during this procedure..... and for this the other tenants will be very thankful.



Call For Part Number & Configuration Help



ALL THE "PUMP" YOU NEED AND MORE

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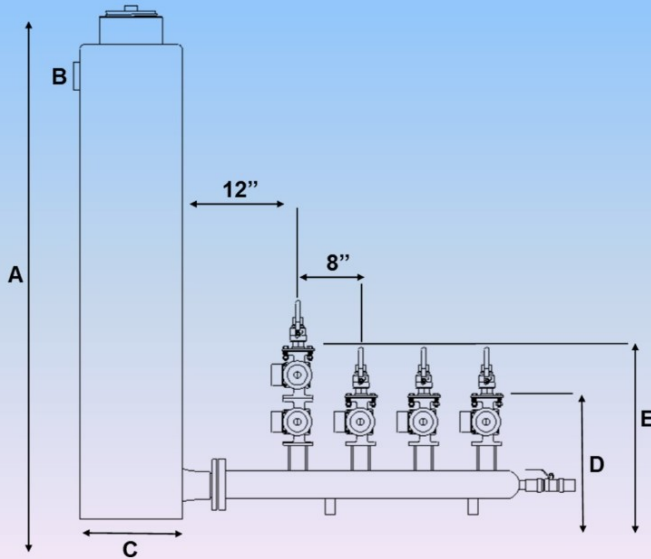
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MULTIZONE FEATURES



Multizone GT Flow Center Physical Dimensions (in.)

Tank Size	A	B	C	D	E	Volume (gal)
B	62	2" MPT	10"	30"	36 1/2"	17.5
C	70	3" MPT	12"	32"	38 1/2"	20.8

* B-Model - (3 circuit header max & single pump only)

** C-Model- (4 circuit header max)

NOTE: ALL MEASUREMENTS ARE APPROXIMATE

Sealable Lid – Provides for a closed sealed system while allowing for ease of access to sample fluid and measure flow rate.

Inlet Connection – Stainless Steel MPT connection provided as standard, with various transitions available upon request. Size based on canister size (see chart).

Check Valves – Check valves are provided in each pump circuit assuring proper flow and reliable pump operation.

Canister – Provides a standing column of water on the suction side of the pump(s) to insure a flooded volute and reliable pump operation. Size required is based on max load design flow rate (see chart).

Optional Ball Valve – Butterfly Valve is available as an option to isolate canister from pump manifold (not shown).

Pump Connection – 1 1/4" FPT Brass with isolation ball valve.

Pump Control – Pumps can be directly controlled with a branch circuit from the heat pump or controlled with a relay box.

Pump Circuits – Individual pump circuits consisting of one, two or three 1/6 HP circulating pumps. Capable of delivering up to 25 gpm @ 48 ft of H₂O head loss. Grundfos 2699/3 speed is standard with others available upon request. Voltage 230-1ph.

Pump Isolation – 1 1/4" Brass isolation ball valves provided above and below each pump (or set of pumps) allowing for service of one circulator while the rest of the system is functional.

Insulation – 3/8" Armaflex insulation factory installed to prevent condensation

Pump Manifold – Factory assembled manifold, including check valves, one isolation valve per circuit and drain valve at end of a 4 circuit manifold.

Manifold Connection – Flange provided to field assemble the pump manifold to the canister and allowing for installation of optional butterfly valve.

Drain Valve - Drain valve is installed on 4 circuit manifold only

See Pump Curve Section in Back of Catalog for Pump Performance Data



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