

VT2218 ECM High-Efficiency Circulator

Taco 00e™ series — VT2218 Delta-T Variable Speed circulator is a temperature sensing, self-adjusting, variable speed, high-efficiency wet rotor circulator with an ECM permanent magnet motor. Operating modes include Delta-T differential temperature, 4 fixed speeds, set point heat, set point cool and boiler protection.



- Delta-T operation maximizes system efficiency and comfort
- High-efficiency ECM motor uses up to 85% less electricity
- Can save hundreds in fuel costs
- LCD displays operating mode, temperature or speed setting, watts, supply & return temperatures
- Easy to program and install
- *Sure Start* automatic unblocking mode
- Standard 2-bolt and universal 4-bolt flange configurations available



Features

The ONLY temperature sensing pump in its class.

- 22' Shut-off Head, 18 gpm max flow
- ECM High-efficiency motor
- Operates in 5 different modes:
 - Delta-T (5-50°F) Variable Speed
[factory pre-set : 20°F ΔT]
 - Multi-Speed (4 fixed speeds)
 - Set Point Heat (50-220°F)
variable speed with boiler protection option
 - Set Point Cool (32-100°F)
 - Boiler Protection (100-160°F),
protects boiler from low return water temperature
- Full Speed Over-ride
 - For system fill and purging
- Full backlit LCD displays:
 - Operating mode, temperature or speed setting, watts, supply & return temperatures
 - Error code diagnostics
 - English or Metric units
- Use with a Taco ZVC Zone Valve Control or SR Switching Relay for ON/OFF operation.
- Sensors and Integral Flow Check (IFC®) included
- Whisper quiet operation
- BIO Barrier® protects the pump from black system contaminants
- Sure Start mode automatically corrects locked rotor condition
- Optional 4-bolt flange reduces SKU's and provides universal fit-up to any flange position

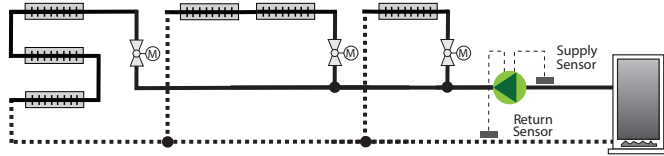


Applications & Performance

Typical Variable Speed Applications

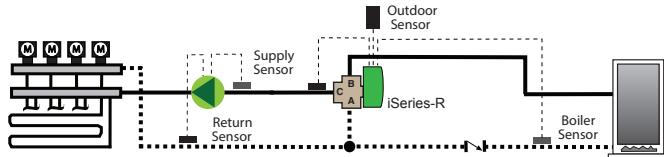
Delta-T

Across a series loop system using zone valves



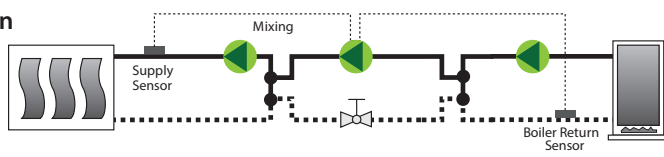
Delta-T

Across multi-zone radiant manifolds with loop actuators



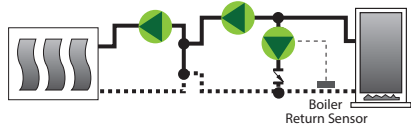
Radiant Injection with boiler protection

Decreases speed to protect boiler from low return water temperature and flue gas condensation



Boiler Protection — by-pass loop

Increases speed to protect boiler from low return water temperature and flue gas condensation



Heating or Chilled Water Cooling

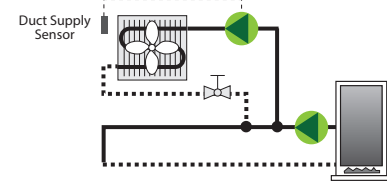
Fan coil fixed water temperature

Set Point Heat

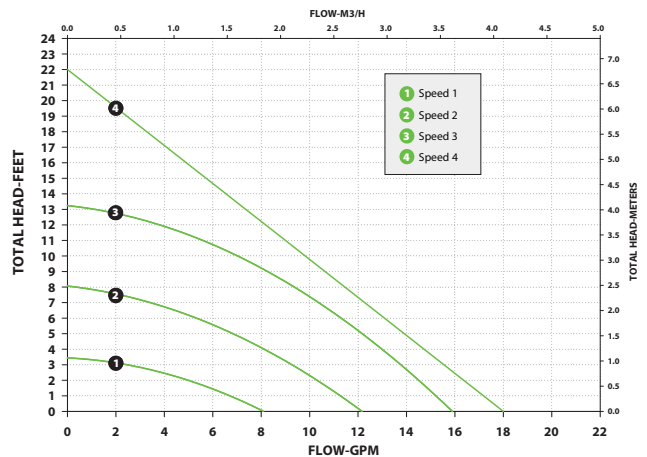
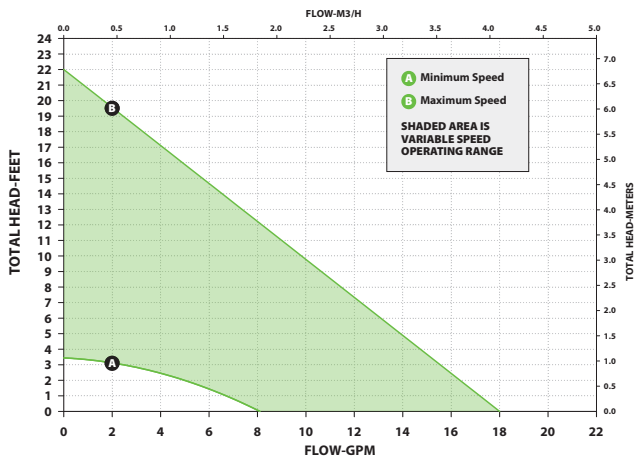
Decreases speed on temperature rise

Set Point Cool

Increases speed on temperature rise



Performance Curves for the Taco 00e™ series— VT2218



Submittal Data Information **00e™ series — VT2218**

Submittal Data # 101-169
 Supersedes: 08/12/15

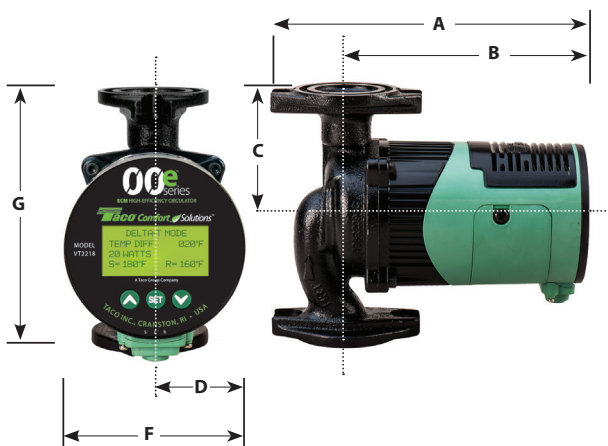
Effective: 09/16/15

Specifications

- Maximum Shut-off Head: 22 feet
- Maximum Flow: 18 gpm
- Maximum Operating Pressure: 125 psi (862 kPa)
- Maximum Water Temp: 230°F (110°C)
- Minimum Water Temp: 36°F (2°C)
- Electrical specifications:
 - Voltage: 110-120V, 50/60 Hz, Single phase
 - Operating Power Range: 9W to 58W
 - Maximum AMP Rating: 0.67
- Equipped with a cast iron casing and should be used for closed loop systems only.
- Taco circulator pumps are for indoor use only
- Acceptable for use with water or maximum of 50% water/glycol solution.

Applications

The VT2218 is a temperature sensing, variable speed, high-efficiency wet rotor circulator with an ECM permanent magnet motor. It's ideal for Delta-T or setpoint temperature applications. Typical uses include hydronic systems zoned with zone valves, radiant loops, injection pumping, snowmelt or hydro-air fan coils. Can also be used in constant speed mode for zoning with circulators, indirect water heaters or primary boiler loops.



Materials of Construction:

Casing: Cast Iron
 Stator Housing: Aluminum/Composite
 Cartridge: Stainless Steel
 Impeller: Non-Metallic
 Shaft: Ceramic
 Bearings: Ceramic
 O-Ring & Gaskets: EPDM
 Integral Flow Check (IFC):
 Body, Plunger Acetal
 O-ring Seal EPDM
 Spring Stainless Steel

Pump Dimensions & Weights

Model	Flange Code	A		B		C		D		F		G		Ship Wt.	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
VT2218F	S	8-1/8	207	6	153	3-1/4	82	2	54	4-1/4	107	6-3/8	161	7-3/4	3.52
VT2218F/4	U	8-1/8	207	6	153	3-1/4	82	2	54	4-1/4	107	6-3/8	161	7-3/4	3.52

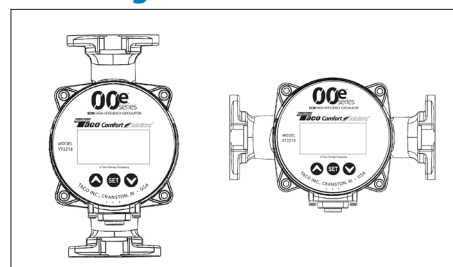
Electrical Data

Model	Volts	Hz	Ph	Max.Amps	RPM
All Models	110/120	50/60	1	.67	1650 - 4200
Motor Type	ECM, Permanent Magnet, Electronically Protected				

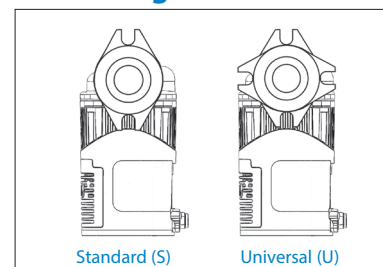
Maximum Watts

Speed 1	Speed 2	Speed 3	Speed 4
9	24	40	58

Mounting Positions



Flange Orientation



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