



Water Circulation Pumps & Circulators

0034e™ ECM High-Efficiency Circulator

The 0034e™ is a high-performance, variable speed, wet-rotor circulator with high-efficiency ECM permanent magnet technology. With 5 easy settings, its variable speed performance curves are equivalent to the Taco 009, 0010, 0011, 0012, 0012 3-Speed, 0013, 0013 3-Speed & 0014. Ideal for large residential and light commercial hydronic heating, chilled water cooling and domestic hot water systems. The 0034e reduces power consumption by up to 85% compared to equivalent AC permanent split capacitor circulators. With a maximum of 34 feet of head and 50 gpm, it is available in either Cast Iron or NSF certified Stainless Steel.



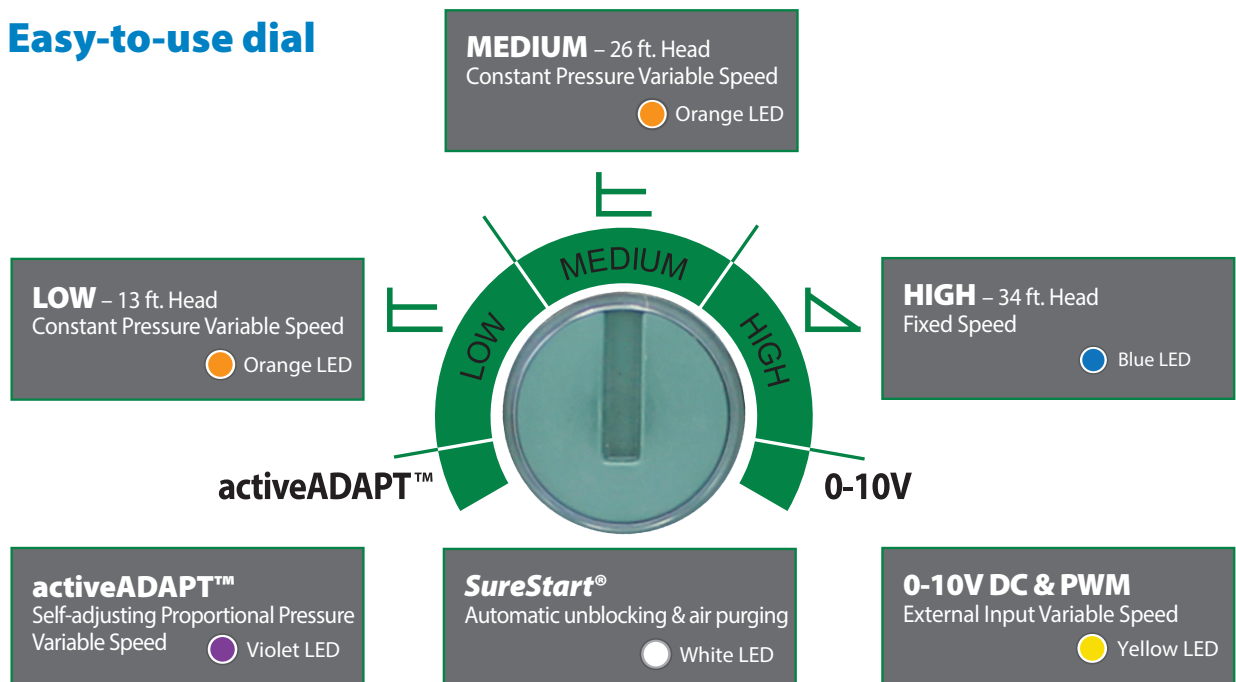
Applications



APPLICATION:

- Maximum operating pressure: 150 psi (10.3 bar)
- Minimum NPSHR: 18 psi at 203°F (95°C)
- Maximum fluid temperature: 230°F (110°C)
- Minimum fluid temperature: 14°F (-10°C)
- Electrical specifications:
 - Voltage: 115/208/230V, 50/60 Hz, single phase
 - Maximum operating power: 170W
 - Maximum amp rating: 1.48 (115V) / .70 (230V)
- Equipped with a cast iron or stainless steel casing
- Stainless Steel model suitable for open loop potable water systems
- Taco circulators are for indoor use only
- Acceptable for use with water or maximum of 50% water/glycol solution

Easy-to-use dial



Features



FEATURES:

- 5 easy dial settings to match system requirements
- activeADAPT™, LOW, MEDIUM, HIGH or 0-10V DC analog or PWM digital signal external input
- **BIO Barrier®** protects the pump from system contaminants
- **SureStart®** automatic unblocking and air purging mode
- Replaces all single speed and 3-speed circulators in its class
- Multi-color LED: power on, mode setting and error code diagnostics
- Use with a Taco ZVC Zone Valve Control or SR Switching Relay for ON/OFF operation
- Nut-grabber feature on flanges for easier fit up
- Dual electrical knockouts and removable quick-connect terminal strip for easy wiring
- Double insulated
- Whisper quiet operation
- Rotatable control cover to simplify installation

Pump Replacement Chart
(6-1/2" Flange-to-Flange Dimension)

Taco	Bell & Gossett	Armstrong	Grundfos	Wilo
2400-10	PL 50	E 11	TP(E) 32-40	Stratos:
2400-20	PL 45	E 10	UP 50-75	1.25 x 3 – 35
2400-30	PL 36	E 8	UPS 43-100	1.25 x 3 – 30
2400-40	PL 30	E 7	UPS 50-44	1.25 x 3 – 25
110	E90 1AAB	S 25	UP 43-75	1.25 x 3 – 20
111	Series 60 (601)	H 63	UP(S) 43-44	
112	Series HV	H 52	UP 26-116	Top S:
113	Series PR	H 51	UP(S) 26-99	1.25 x 15
009	Series HV	Astro 290	UP 26-96	1.25 x 25
0010	Series 100	Astro 280	UP 26-64	1.25 x 35
0011	NRF 45	Astro 210	UPS 32-40	1.50 x 20
0012	NRF 36	1050 1B	UPS 32-80	
0013	ECOCirc XL 36-45	1050 1 1/4B	Magna 32-100	Top Z:
0014		Compass ECM	Magna 32-60	1.5 x 15
VR3452			Alpha2 26-99	1.5 x 20

NOTE: Flange size and flange-to-flange dimensions will vary by competitive model and may require some piping changes.

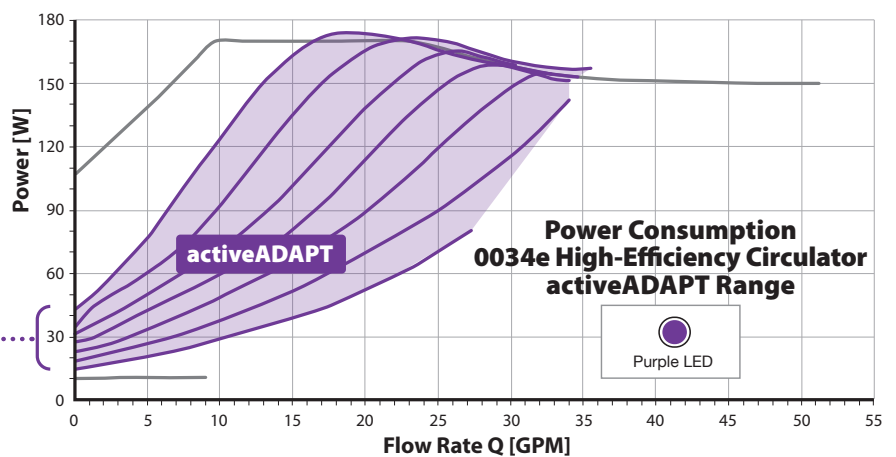
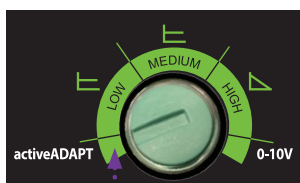
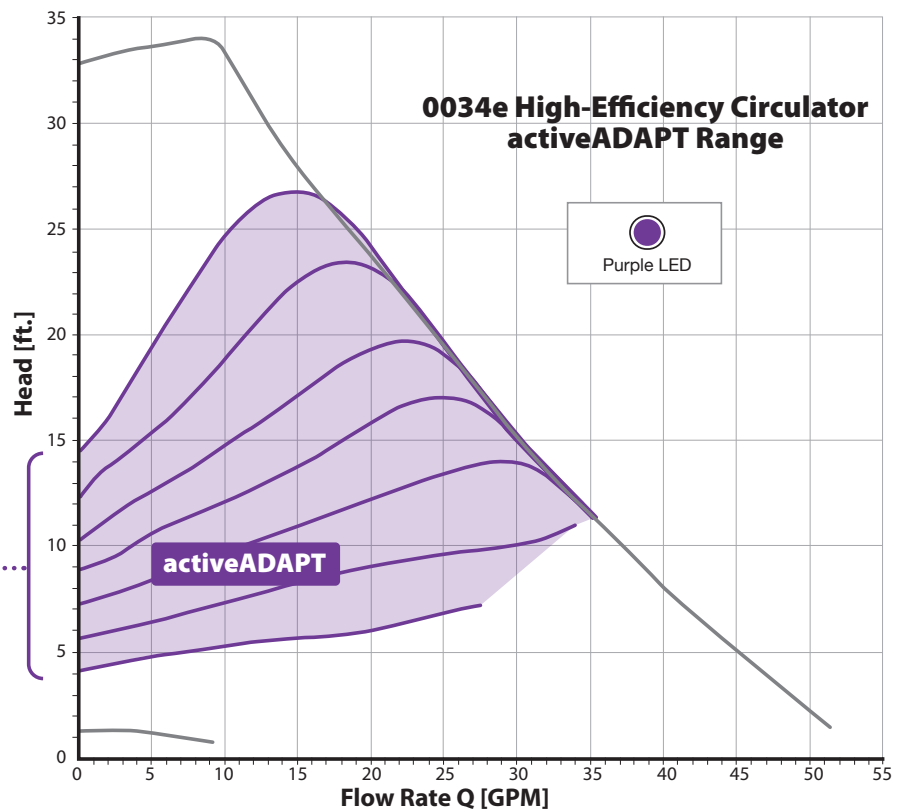
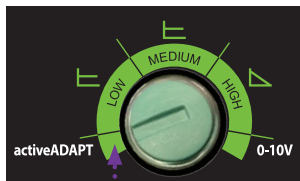


Stainless Steel
Model Only

Performance Curves

activeADAPT™ Mode:

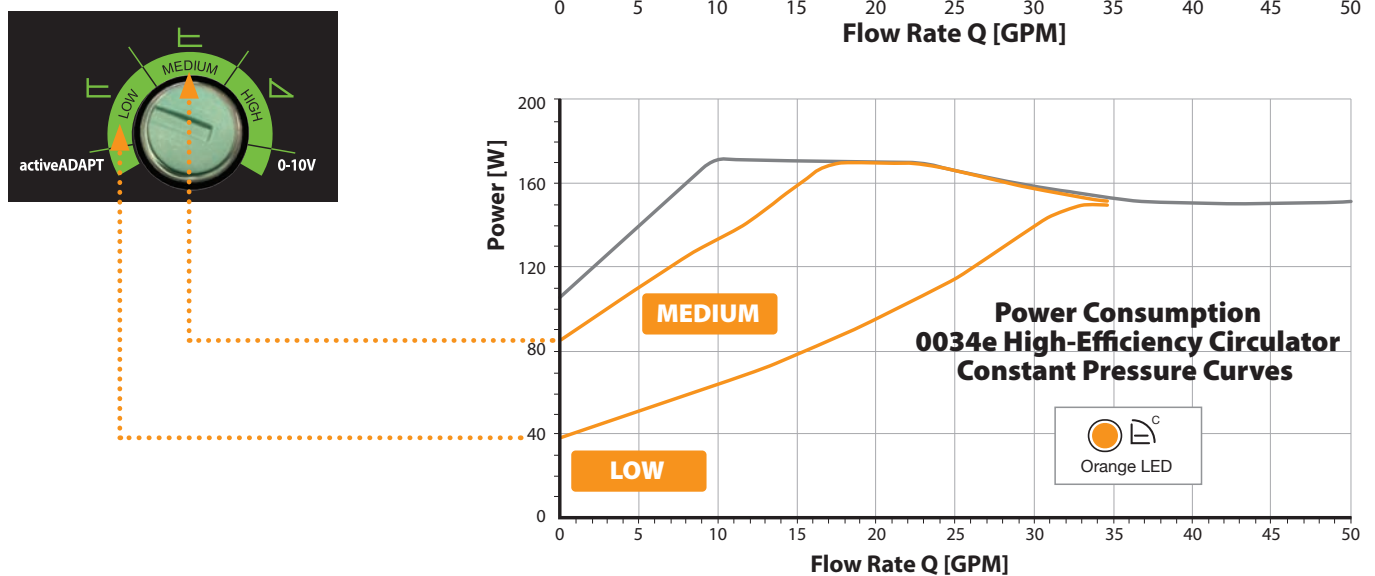
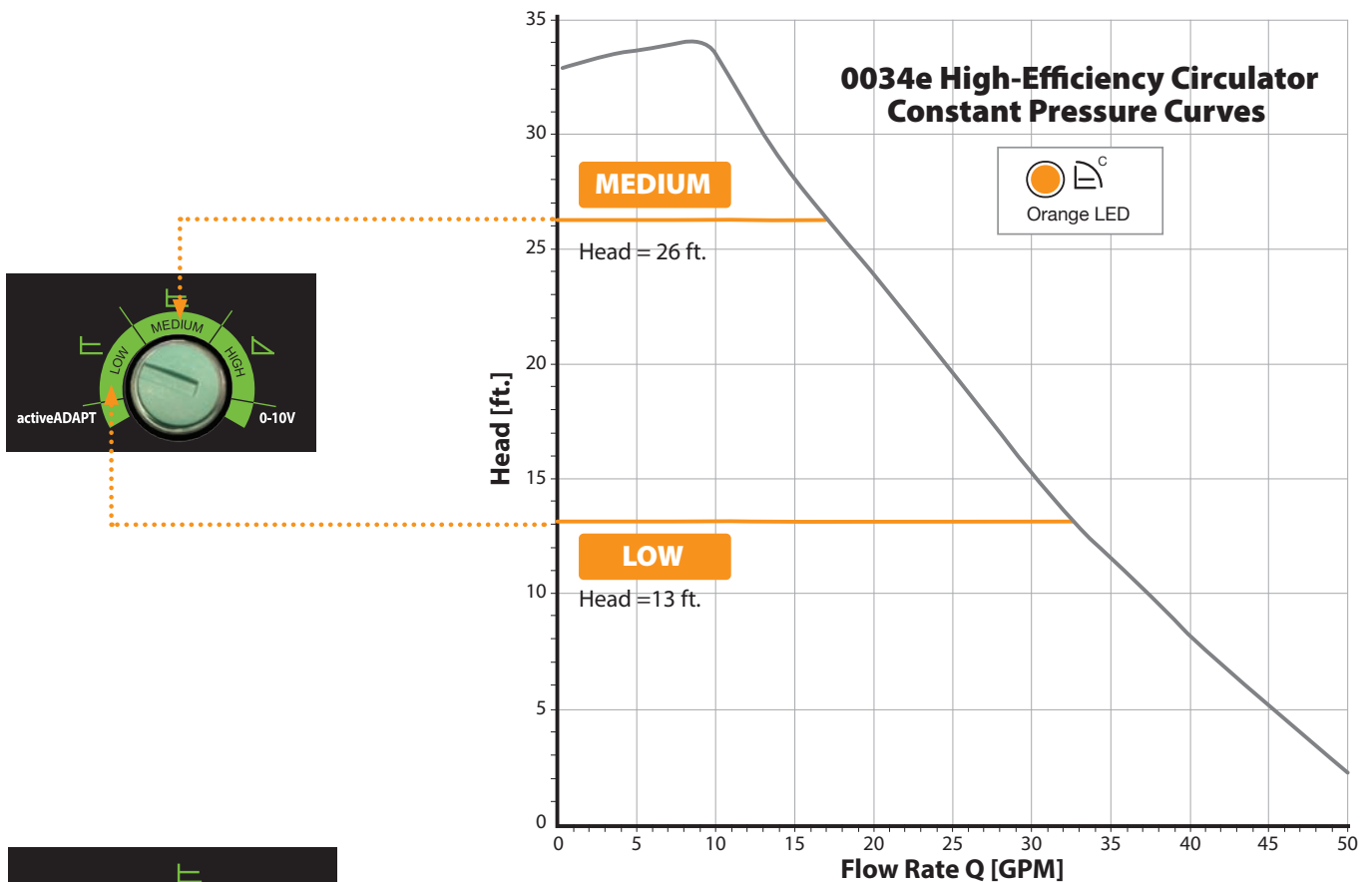
activeADAPT is an operating mode designed for constant circulation systems. On this setting, the circulator will sense changes in system flow and head conditions and adjust the operating curve automatically.



Performance Curves

Constant Pressure Mode:

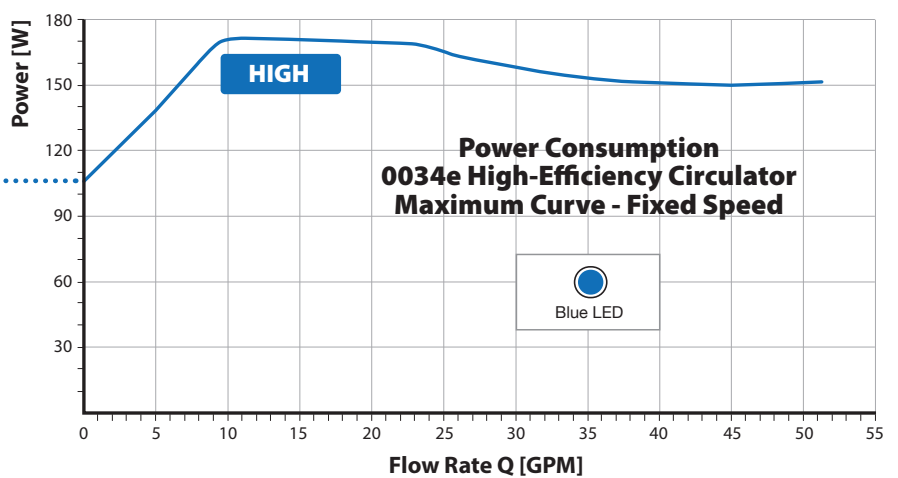
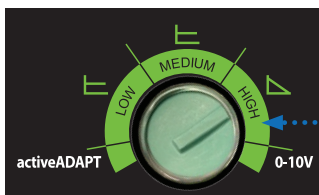
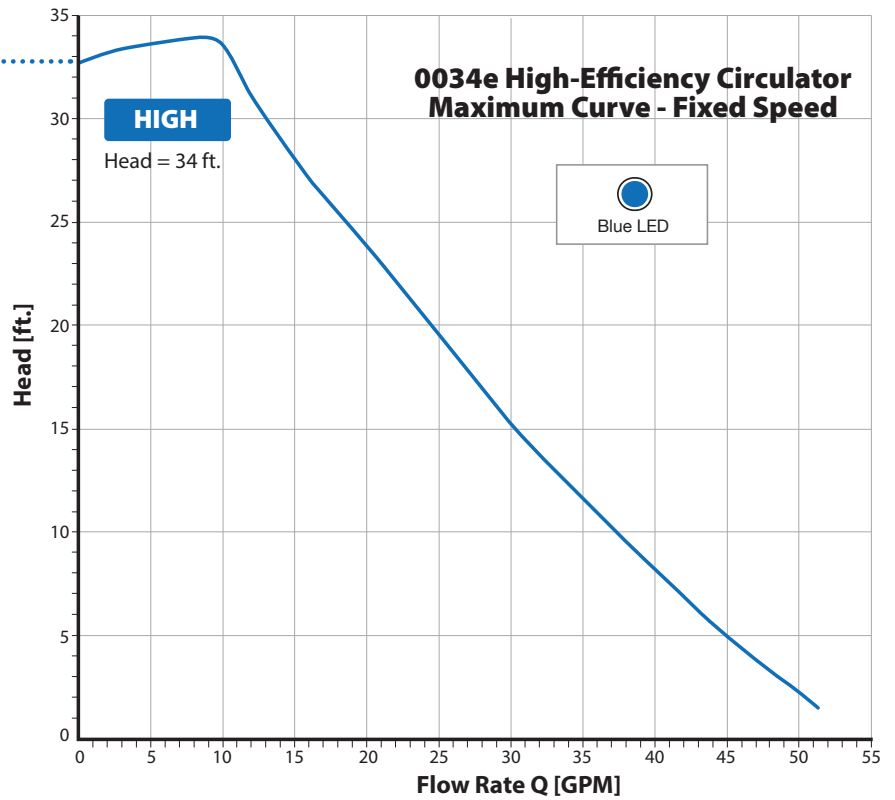
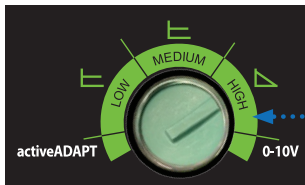
At Low setting the circulator will vary speed to maintain 13 feet of head constant pressure. At Medium setting the circulator will vary speed to maintain 26 feet of head constant pressure.



Performance Curves

Fixed Speed Mode:

At High setting the circulator always operates at full speed.



Performance Curves

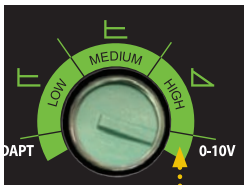
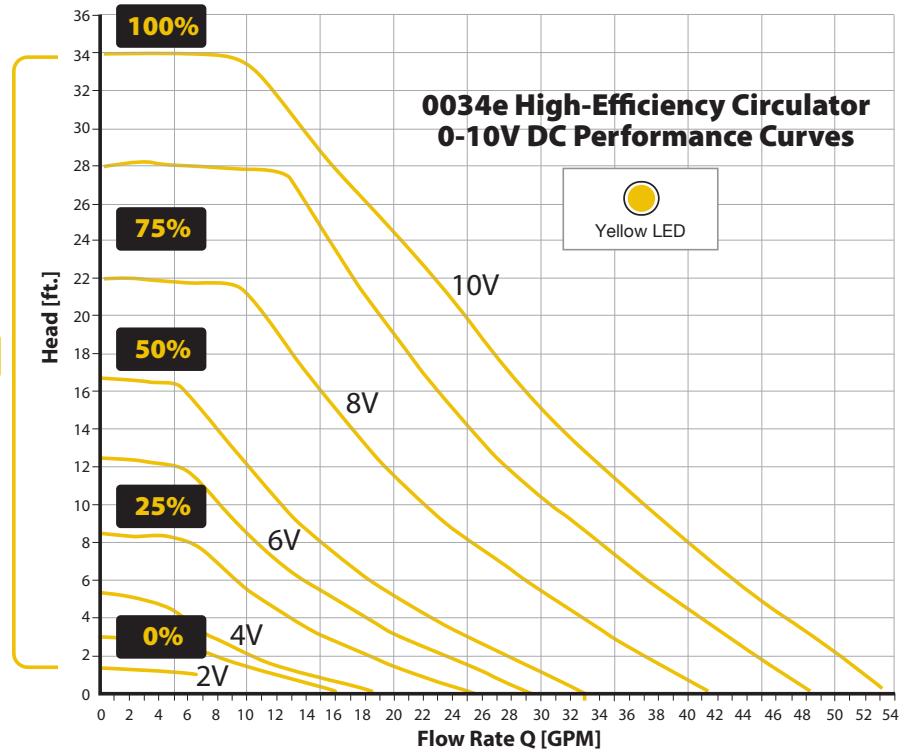
0-10V DC or PWM External Input:

The circulator will vary its speed and performance based on a 0-10V DC analog or PWM digital signal external input.



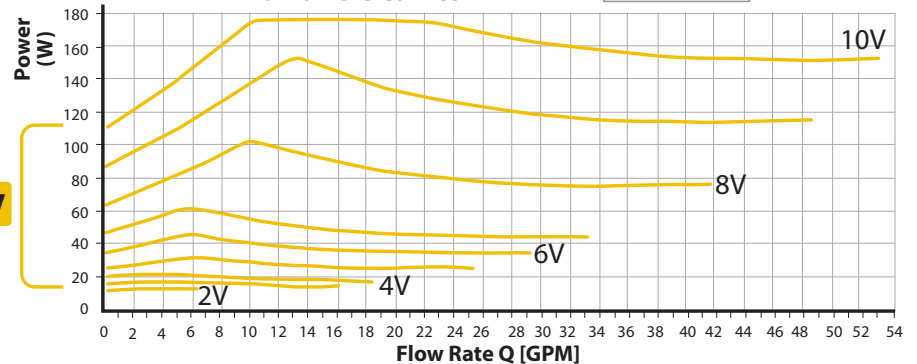
0-10V

PWM (Pulse Width Modulation)



0-10V

Power Consumption 0034e High-Efficiency Circulator 0-10V DC Curves



Submittal Data Information 0034e™ ECM Circulator

Submittal Data # 101-192

Supersedes: New

Effective: 03/10/20

Specifications

- Maximum Shut-off Head: 34 feet
- Maximum Flow: 50 gpm
- Maximum Operating Pressure: 150 psi (10.3 bar)
- Maximum Water Temp: 230°F (110°C)
- Minimum Water Temp: 14°F (-10°C)
- Electrical specifications:
 - Voltage: 115V/208/230, 50/60 Hz Single phase
 - Operating Power Range: 10 - 170W
 - Max. AMP Rating: 1.48 (115V) - 0.70 (230V)
- Equipped with a Cast Iron or Stainless Steel casing
- Suitable for chilled water systems
- Stainless Steel model suitable for open loop potable water systems
- Taco circulators are for indoor use only
- Acceptable for use with water or maximum of 50% water/glycol solution

Materials of Construction:

Casing: Cast Iron or Stainless Steel

Stator Housing: Composite

Control Base: Composite

Control Cover: Composite

Cartridge: Composite

Impeller: Composite

Shaft: Ceramic

Rotor: Neodymium

Bearings: Ceramic

Thrust Bearing: Carbon

O-Ring & Gaskets: EPDM

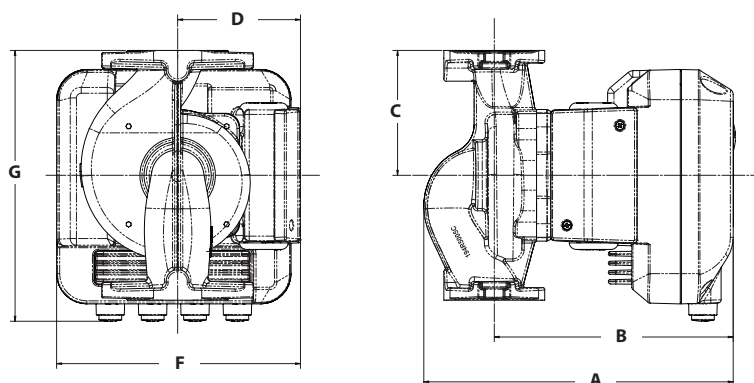


Applications

Cast Iron Model: Closed loop, pressurized heating and chilled water HVAC systems

Stainless Steel Model: Open loop, potable water systems

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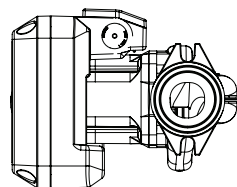
Pump Dimensions & Weights

Model Number Part Number	Casing	Flange Type	A	B	C	D	F	G	Wt.lbs. [kg]
Inches [mm]									
0034e-F2 VM3450-HY1-FC2A00	Cast Iron	R	8.05" [205]	6.22" [158]	3.25" [83]	3.20" [81]	6.22" [158]	7.05" [179]	10.5 [4.8]
0034e-SF2 VM3450-HY1-FS2A00	Stainless Steel								

Electrical Data

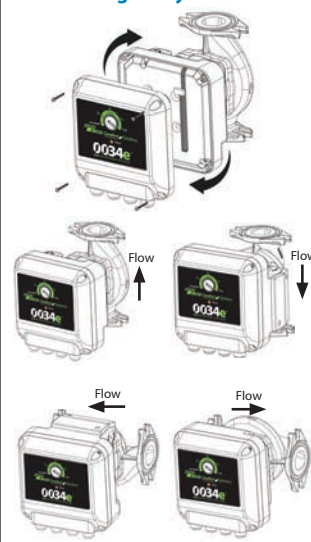
Model	Volts	Hz	Ph	Max Amps	Watts	RPM
All Models	115/208/230	50/60	1	1.48	10 - 170	830 - 4300
Motor Type	ECM, Permanent Magnet, Electronically Protected					

Flange Orientation



Rotated (R)

Rotatable Control Cover to allow mounting in any orientation



A Taco Family Company

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