0034ePlus ECM High-Efficiency Circulator

The 0034ePlus[™] is a high-performance, variable speed, wet-rotor circulator with high-efficiency ECM permanent magnet technology. An intuitive digital user interface lets you choose between a variety of operating modes; activeADAPT[™], five Constant Pressure curves, five Proportional Pressure curves, Min/Max fixed speed or speed control through 0-10V DC or PWM external input. Ideal for large residential and light commercial hydronic heating, chilled water cooling and domestic hot water systems. The 0034ePlus 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.



Effective Date: 03/09/20 Printed in USA

Applications



APPLICATION:

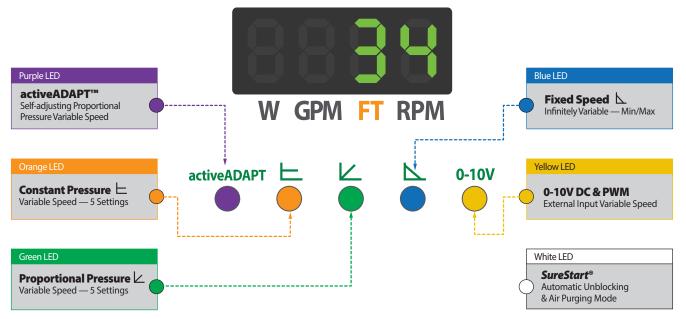
- Maximum operating pressure: 150 psi (10.3 bar)
- Minimum NPSHR: 18 psi at 203°F (95°C)
- Maximum fluid temperature: 230°F (110°C)
- Minimum fluid temperature: 14°F (-10°C)
- Electrical specifications: Voltage: 115/208/230V, 50/60 Hz, single phase

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

Intuitive Digital Interface



Features



FEATURES:

- Simple 3-button control
- Digital LED screen displays; Watts, GPM, Head, RPM and diagnostic error codes
- Five operating modes to match any system requirements
 — activeADAPT™, Constant Pressure, Proportional Pressure,
 Min/Max Fixed Speed or speed control through 0-10V DC
 or PWM 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
- 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







Stainless Steel Model Only



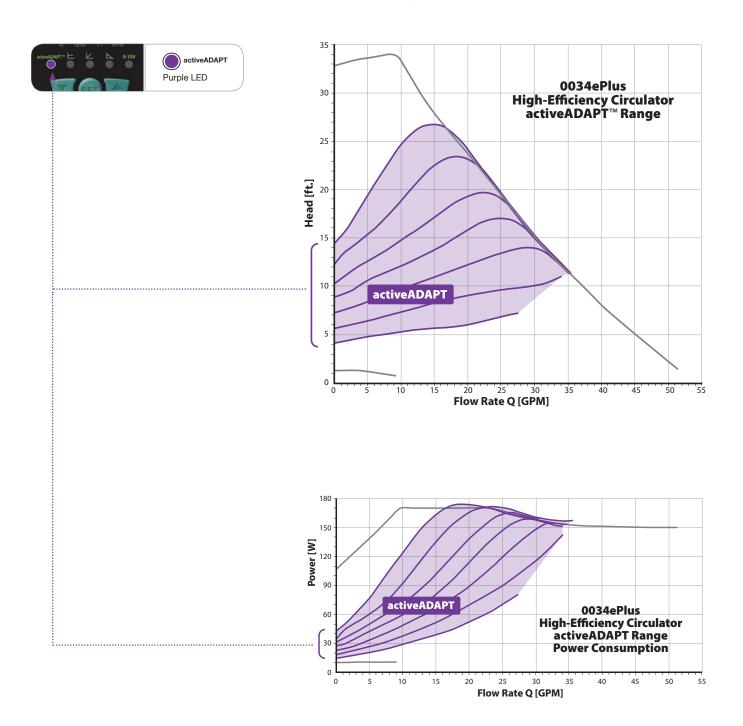
Pump Replacement Chart (6-1/2" Flange-to-Flange Dimension)

Тасо	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 1 A A B	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.

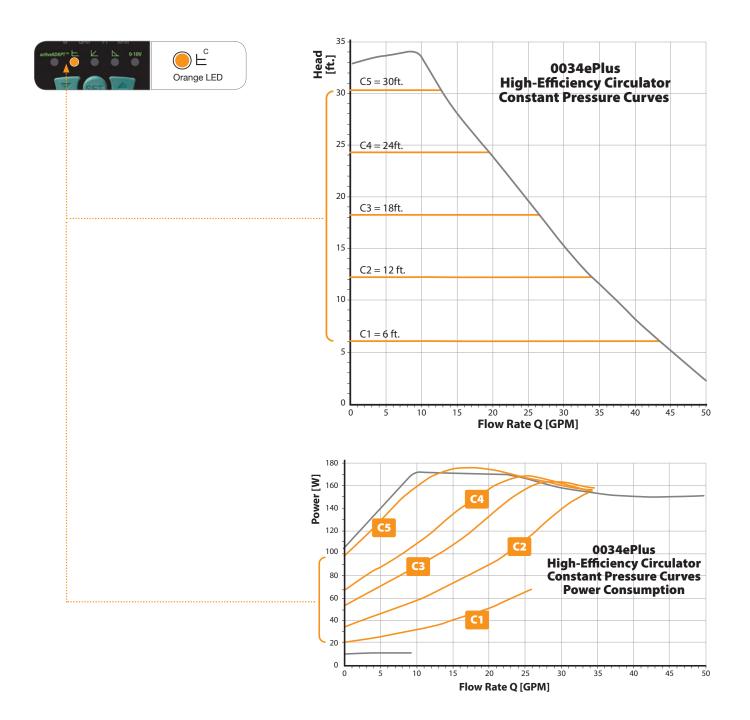
activeADAPT[™] Mode:

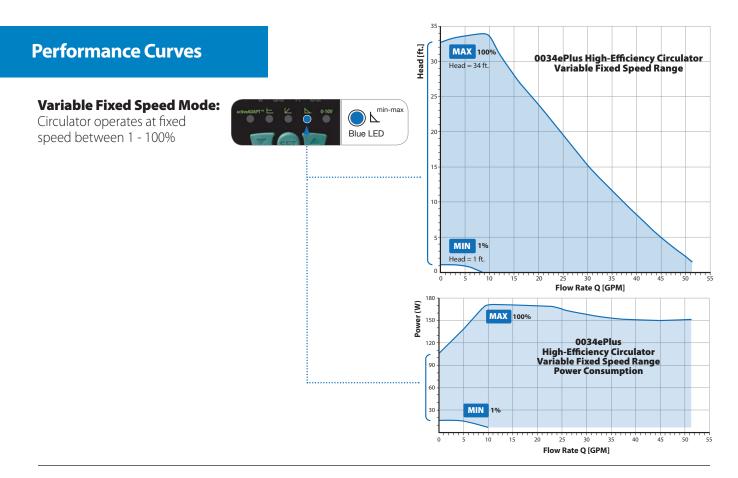
activeADAPT is an operating mode designed for constant circulation systems. On this setting, the circulator will sense changes in system flow and head conditions and adjust the operating curve automatically.

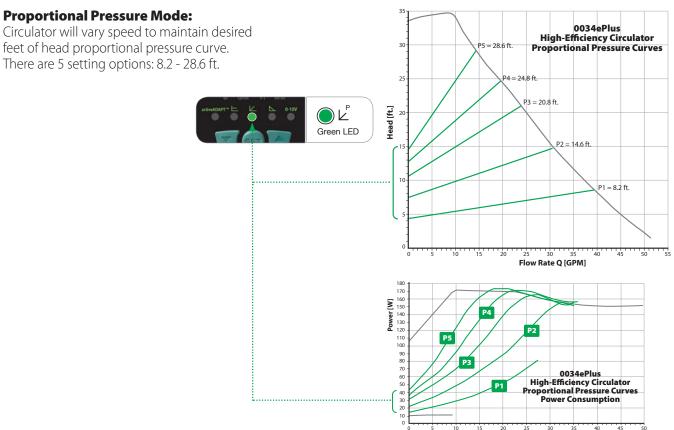


Constant Pressure Mode:

Circulator will vary speed to maintain desired feet of head constant pressure curve. There are 5 setting options: 6 - 30 feet.



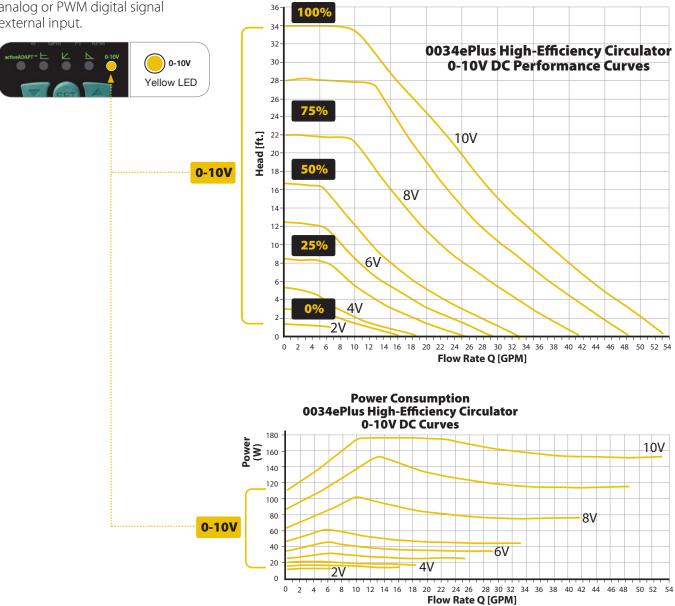




Flow Rate Q [GPM]

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.



PWM (Pulse Width Modulation)

Submittal Data Information 0034ePlus[™] ECM Circulator

Submittal Data # 101-193 Supersedes: New

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:

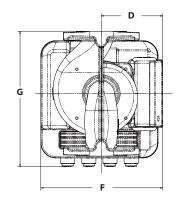
Casing:Cast Iron or Stainless Steel
Stator Housing:Composite
Control Base:Composite
Control Cover:Composite
Cartridge:Composite
Impeller:Composite
Shaft:Ceramic
Rotor:Neodymium
Bearings:Ceramic
Thrust Bearing:Carbon
O-Ring & Gaskets:EPDM

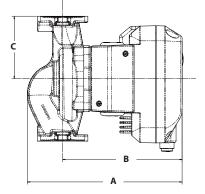


Applications

Cast Iron Model: Closed loop, pressurized heating and chilled water HVAC systems **Stainless Steel Model:** Open loop, potable water systems

The 0034ePlus is a high-performance, variable speed, wet-rotor circulator with high-efficiency ECM permanent magnet technology. With 5 easy settings and an intuitive digital interface, 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 0034ePlus reduces power consumption by up to 85% compared to equivalent AC permanent split capacitor circulators.

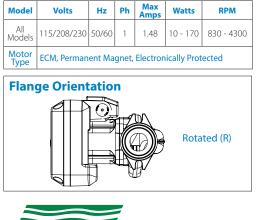




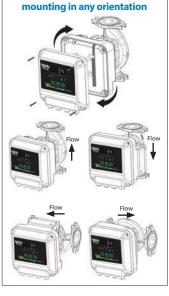
Pump Dimensions & Weights

Model Number	Casing	Flange Type	Α	В	С	D	F	G	Lbs.
Part Number			Inches [mm]				[kg]		
0034eP-F2 VR3450-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]
0034eP-SF2 VR3450-HY1-FS2A00	Stainless Steel								

Electrical Data







Rotatable Control Cover to allow

Taco Inc., 1160 Cranston Street, Cranston, RI 02920 / (401) 942-8000 / Fax (401) 942-2360 Taco (Canada) Ltd., 8450 Lawson Road, Unit #3, Milton, Ontario L9T 0J8 / (905) 564-9422 / Fax (905) 564-9436