

# **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; **TacoAdapt™**, 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





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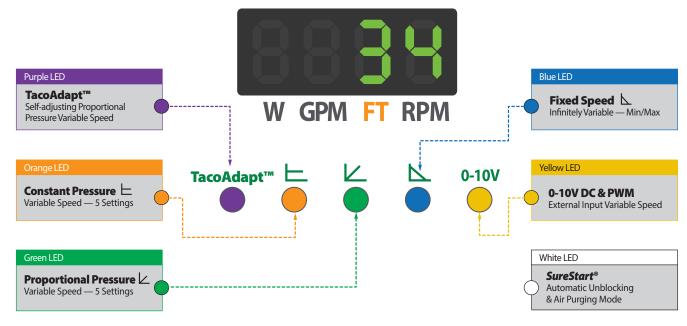
# **Applications**



#### **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**

Stainless Steel





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

#### **Bell & Gossett** Wilo Taco **Armstrong** Grundfos 2400-10 PL 50 E 11 TP(E) 32-40 Stratos: 2400-20 E 10 UP 50-75 PL 45 1.25 x 3 - 35 2400-30 PL 36 E 8 UPS 43-100 1.25 x 3 - 30 2400-40 UPS 50-44 PL 30 F 7 1.25 x 3 - 25 E90 1AAB UP 43-75 110 S 25 1.25 x 3 - 20 111 Series 60 (601) H 63 UP(S) 43-44 Series HV UP 26-116 112 H 52 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 Series 100 UP 26-64 0010 Astro 280 1.25 x 35 NRF 45 0011 Astro 210 UPS 32-40 1.50 x 20 0012 NRF 36 1050 1B UPS 32-80 ECOCirc XL 36-45 1050 1 1/4B Magna 32-100 0013 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.

#### **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
   — TacoAdapt™, 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
- Whisper quiet operation
- Rotatable control cover to simplify installation





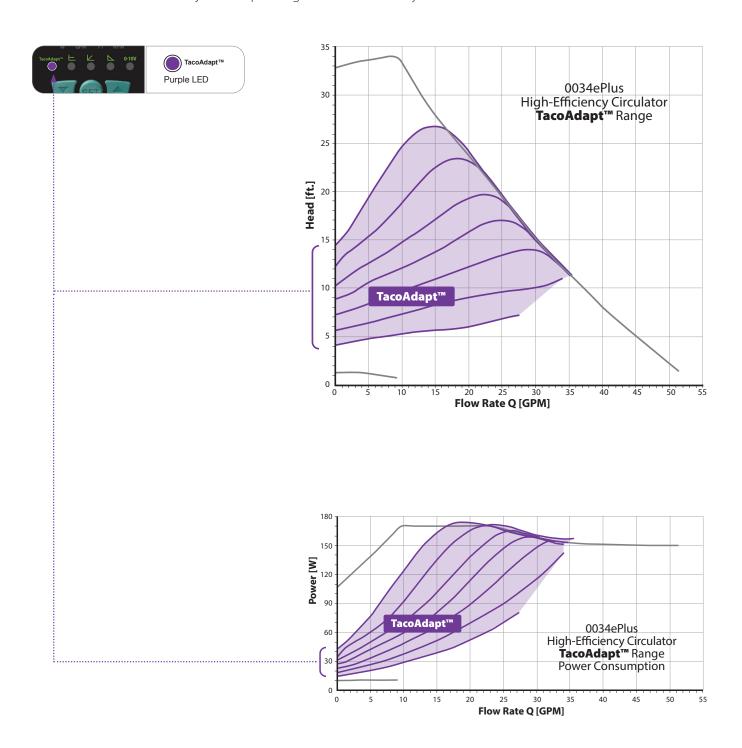


Stainless Steel Model Only

# **Performance Curves**

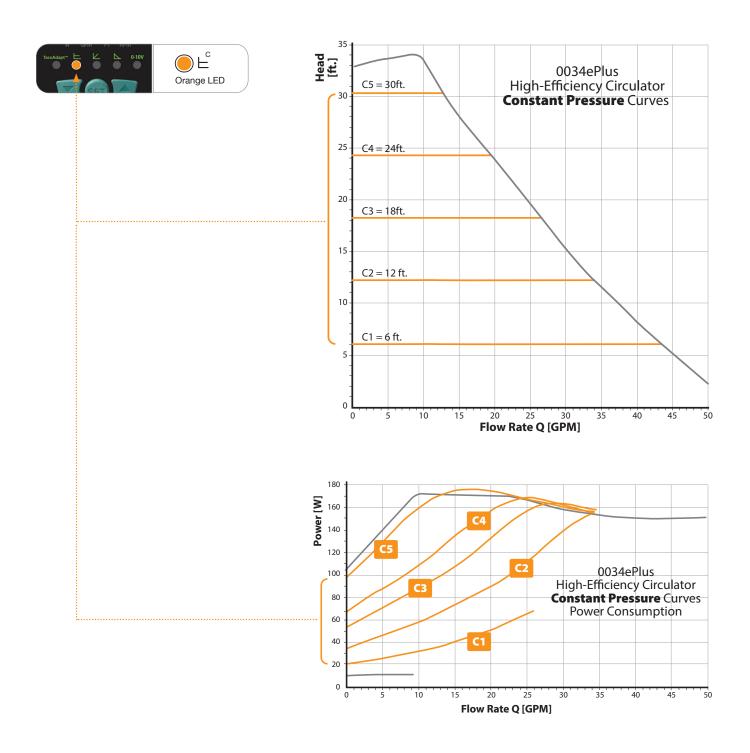
# **TacoAdapt™ Mode:**

**TacoAdapt™** 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.

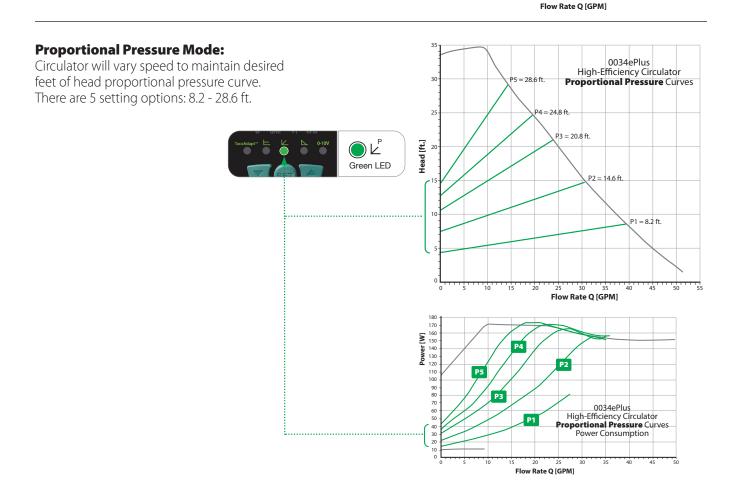


## **Constant Pressure Mode:**

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



# **Performance Curves** Head [ft.] MAX 100% 0034ePlus High-Efficiency Circulator Variable **Fixed Speed** Range Head = 34 ft. **Variable Fixed Speed Mode:** Circulator operates at fixed Blue LED speed between 1 - 100% MIN 1% Head = 1 ft. Flow Rate Q [GPM] MAX 100% 0034ePlus 120 High-Efficiency Circulator Variable **Fixed Speed** Range Power Consumption MIN 1%



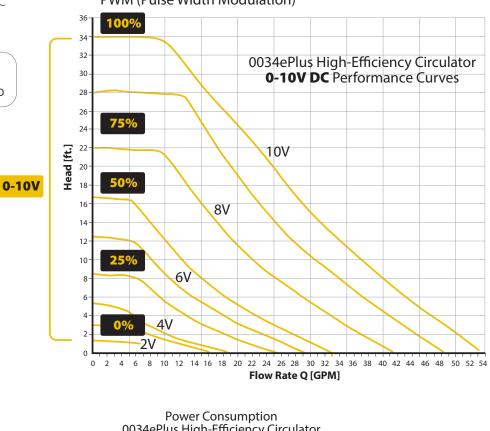
# **Performance Curves**

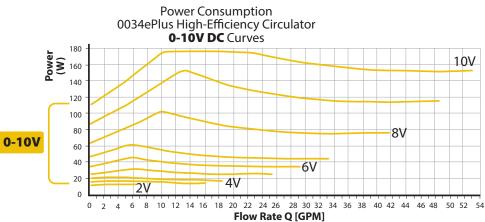
# **0-10V DC or PWM External Input:**

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



# PWM (Pulse Width Modulation)





# **Submittal Data Information** 0034ePlus™ ECM Circulator

Submittal Data # 101-193 Supersedes: 12/20/21

### **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
- 6.5" Flange to Flange dimension retrofits most circulators in its class

#### **Materials of Construction:**

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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



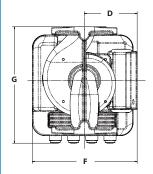


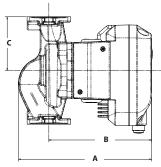


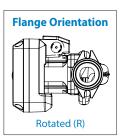
## **Applications**

**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.







Effective: 08/02/23

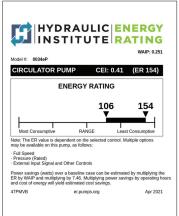
## **Pump Dimensions & Weights**

Model Number	Casing	Flange Type	Α	В	C	D	F	G	Lbs.
			Inches [mm]						[kg]
0034eP-F2	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	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								







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