



## 007e<sup>®</sup> ECM High-Efficiency Circulator

The Taco 007e<sup>®</sup> is a variable speed, high-efficiency wet rotor circulator with an ECM permanent magnet motor. It is ideal for hydronic systems zoned with circulators or zone valves, or used on potable water systems for domestic water recirculation. The 007e delivers the performance equivalent of the classic 007, plus the reliability and easy installation that made the 00<sup>®</sup> famous. **Install it, forget it.<sup>®</sup>**



## Features & Benefits

### The 007e<sup>®</sup> ECM circulator: **Install it, forget it.**<sup>®</sup>



Use the Cast Iron 007e with a Taco Switching Relay or Zone Valve Control



Use the Stainless Steel 007e for open loop potable hot water systems with up to 500 feet of recirculation piping

- 10' Shut-off head, 16 gpm max flow
- ECM performance equivalent to the legendary 007 circulator
- High-efficiency ECM motor uses up to 85% less electricity
- **SureStart**<sup>®</sup> automatic unblocking and air purging mode
- **BIO Barrier**<sup>®</sup> protects pump from system contaminants (Cast Iron only)
- **Green Mode** active system monitoring and automatic power optimization
- Nut-grabber feature on flanges for easier fit-up
- Dual electrical knockouts, 6" stranded wire leads included for easy wiring
- Integral Flow Check (IFC<sup>®</sup>) included
- Double insulated — No ground wire required
- Whisper quiet operation
- Cast Iron models available with standard or universal flange
- Stainless Steel models available with universal flange or 1" union connection
  - Customizable 1/2" & 3/4" union fitting sets available in sweat, NPT or press (Sold Separately)

#### Multi-color LED showing operating mode and error code diagnostics



Orange LED

#### Orange LED:

Indicates 007e is running normally



SureStart LED

#### SureStart<sup>®</sup> LED:

Indicates the innovative **SureStart**<sup>®</sup> automatic unblocking and air purge is active



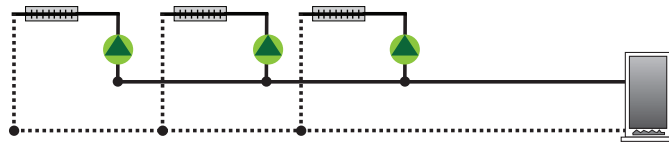
Green LED

#### Green Mode LED:

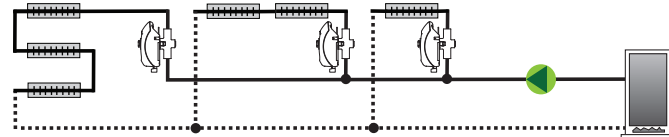
Indicates the 007e is running in **Green Mode** for power optimization

## Typical Applications for Closed Loop Hydronic Heating Systems

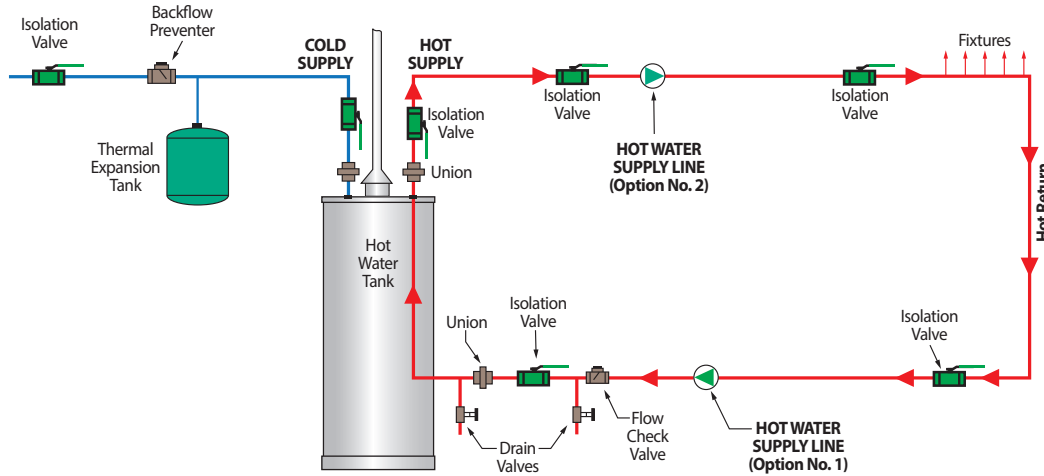
For zoning with circulators



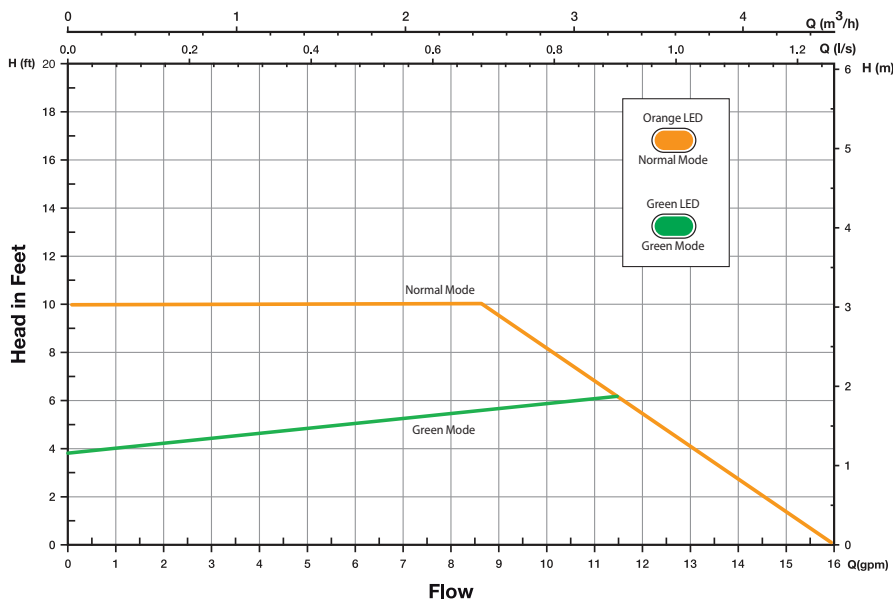
Across a series loop system using zone valves



## Typical Installation for Open Loop Hot Water Recirculation Systems



## Performance Curves



The 007e performance is ideal for hydronic zoning to reduce velocity noise or banging of zone valves closing against high head pressure circulators.

The 007e has an additional Green Mode operating curve that will self-adjust automatically.

**Green Mode:** After 7 days of constant running, the 007e will adjust its curve to Low Proportional Pressure curve for power optimization.

(See Green Mode curve on the left) LED will change to green. The 007e will reset to the original normal mode curve every time it cycles OFF.

# Submittal Data Information Taco 007e<sup>®</sup> ECM Circulators

Submittal Data # 101-177  
Supersedes: 03/26/21

Effective: 08/16/21

## Specifications

- Max. Shut-off Head: 10 feet
- Max. Flow: 16 gpm
- Max. Operating Pressure:
  - Cast Iron: 125 psi (8.6 bar)
  - Stainless Steel: 150 psi (10 bar)
- Max. Water Temp: 230°F (110°C)
- Min. Water Temp: 36°F (2°C)
- Electrical specifications:
  - Voltage: 120V, 60 Hz
  - Single phase
  - Max. Operating Power: 44W
  - Max. AMP Rating: 0.54
- Cast iron casing suitable for closed loop systems only
- Stainless steel casing suitable for potable water and open loop systems
- Not suitable for chilled water
- Taco circulator pumps 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

Cartridge: ..... Composite

Impeller: ..... Composite

Shaft: ..... Ceramic

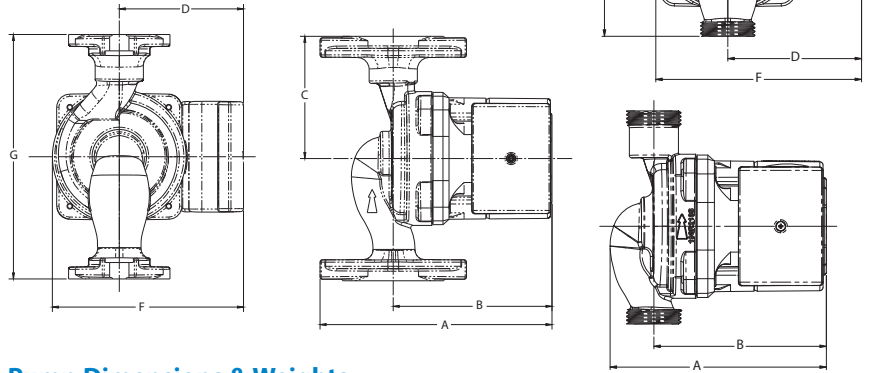
Bearings: ..... Carbon

Thrust Bearing: ..... Ceramic

O-Ring & Gaskets: ..... EPDM

## Applications

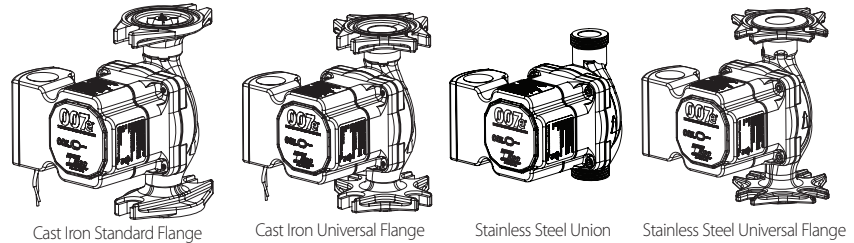
The 007e is a high-efficiency wet rotor circulator with an ECM permanent magnet motor. Its ECM performance is equivalent to the legendary 007 circulator. It is ideal for hydronic systems zoned with circulators or zone valves or used on potable water systems for domestic water recirculation. The 007e is not suitable for chilled water systems.



## Pump Dimensions & Weights

Model Number	Connection Type	Casing	A		B		C		D		F		G		Ship Wt.	
			in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
007e-2F2	Standard	CI	6	152	4-1/8	104	3-3/16	80	3-1/4	82	5	126	6-3/8	161	5.8	2.6
007e-2F4	Universal	CI	6	152	4-1/8	104	3-3/16	80	3-1/4	82	5	126	6-3/8	161	6	3.7
007e-SF4	Universal	SS	6	152	4-1/8	104	3-3/16	80	3-1/4	82	5	126	6-3/8	161	5.5	2.5
007e-SU	Union	SS	5-1/6	131	4-1/8	104	3-3/16	80	3-1/4	82	5	126	5-1/8	130	4.6	2.1

## Connection Types



Certified to  
NSF/ANSI 61 & 372

Stainless Steel  
models only



## Electrical Data

Model	Volts	Hz	Ph	Max. Amps	Max. Watts	RPM
All Models	120	60	1	.54	44	1590-4830
Motor Type	ECM, Permanent Magnet, Thermally Protected					



A Taco Family Company

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Taco (Canada) Ltd., 8450 Lawson Road, Unit #3, Milton, Ontario L9T 0J8 / (905) 564-9422 / Fax (905) 564-9436

**HYDRAULIC INSTITUTE ENERGY RATING**

Model #: 007e  
WAIIP: 0.048

**CIRCULATOR PUMP CEI: 0.48 (ER 187)**

**ENERGY RATING**

168 187

Most Consumptive
RANGE
Least Consumptive

Note: The ER value is dependent on the selected control. Multiple options may be available on this pump, as follows:

- Full Speed
- Pressure (Rated)

Power savings (watts) over a baseline case can be estimated by multiplying the ER by WAIIP and multiplying by 7.46. Multiplying power savings by operating hours and cost of energy will yield estimated cost savings.

QJXEB7 er.pumps.org Apr 2021