## Model 0013 Cartridge Circulator

The High Velocity series Taco 00I3 Cartridge Circulator is designed for quiet, efficient operation in high head / high flow applications for Large Residential / Light Commercial Hydronic heating, Radiant heating, Chilled Water cooling and Domestic fresh water systems. The exclusive ACB anti-condensate baffle with ambient air flow prevents the build up of condensate on the motor windings when pumping chilled water. Its unique field-serviceable cartridge contains all moving parts. Replacing the cartridge rebuilds the circulator. With no mechanical seal, the self-lubricating, maintenance free design provides unmatched reliability. Compact and lightweight, with excellent performance characteristics, the 0013 is ideal for high efficiency jobs where space is a premium. Available in Cast Iron, Bronze or Stainless Steel construction.


## Features

- Exclusive ACB Anti-Condensate Baffle with Ambient Air Flow-Protects motor windings against condensate buildup
- High Velocity Performance-Compact design
- Quiet, Efficient operation
- Direct Drive-Low Power consumption
- Unique Replaceable Cartridge design-field serviceable
- Self lubricating
- No Mechanical Seal
- Unmatched reliability - Maintenance free
- Universal Flange to Flange dimensions
- Cast Iron, Bronze or Stainless Steel Construction


## Materials of Construction

| ACB Baffle | Non-Ferrous |
| :--- | :--- |
| Casing (Volute): | Cast Iron, Bronze or |
|  | 304 Stainless Steel |
| Stator Housing: | Aluminum |
| Cartridge: | Stainless Steel |
| Impeller: | Non-Metallic |
| Shaft: | Ceramic |
| Bearings: | Carbon |
| O-Ring \& Gaskets: EPDM |  |

## Model Nomenclature

| F - Cast Iron, Flanged |
| :--- |
| BF - Bronze, Flanged |
| SF - 304 Stainless Steel, Flanged |
| Variations: |
| Z - Zoning Circulator |
| J - Bronze Cartridge with Cast Iron Casing |

## Performance Data

Flow Range: 0-34 GPM
Head Range: $0-33$ Feet
Minimum Fluid Temperature: $40^{\circ} \mathrm{F}\left(4^{\circ} \mathrm{C}\right)$
Maximum Fluid Temperature: $230^{\circ} \mathrm{F}\left(110^{\circ} \mathrm{C}\right)$
Maximum Working Pressure: 125 psi
Connection Sizes: $3 / 4^{\prime \prime}, \mathrm{I}$ ", $\mathrm{I}-\mathrm{I} / 4^{\prime \prime}, \mathrm{I}-\mathrm{I} / 2^{\prime \prime}$ Flanged


## Application

The Taco 0013 is specifically designed for high head / high flow applications in Large Residential and Light Commercial systems. Ideal for high pressure drop Boilers, Fan Coil units, Heat Exchangers, larger Radiant systems, Heat Recovery and Geothermal systems. The Bronze or Stainless Steel 0013 should be used on open loop systems. The unique replaceable cartridge contains all of the moving parts and allows for easy service instead of replacing the entire circulator. Universal flange to flange dimensions and orientation allows the 0013 to easily replace other models. Compact, low power consumption design makes it ideal for high-efficiency jobs.

## Pump Dimensions \& Weights

|  |  | A |  | B |  | C |  | D |  | F |  |  | G |  |  | Ship Wt. |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Casing | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | Ibs. | Kg |  |  |
| 0013-F3 | Cast Iron | $7-1 / 2$ | 191 | $6-3 / 8$ | 162 | $3-1 / 2$ | 89 | $3-7 / 8$ | 98 | 6 | 152 | $6-1 / 2$ | 165 | 12.0 | 5.5 |  |  |
| 0013-BF3 | Bronze | $7-1 / 2$ | 191 | $6-3 / 8$ | 162 | $3-1 / 2$ | 89 | $3-7 / 8$ | 98 | 6 | 152 | $6-1 / 2$ | 165 | 12.0 | 5.5 |  |  |
| 0013-SF3 | St. Steel | $7-1 / 2$ | 191 | $6-3 / 8$ | 162 | $3-1 / 2$ | 89 | $3-7 / 8$ | 98 | 6 | 152 | $6-1 / 2$ | 165 | 11.5 | 5.2 |  |  |



## Electrical Data

| Model | Volts | Hz | Ph | Amps | RPM | HP |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| All Models | 115 | 60 | I | 2.0 | 3250 | $1 / 6$ |
| Motor <br> Type | Permanent Split Capacitor <br> Impedance Protected |  |  |  |  |  |
| Motor <br> Options | 220/50/I, 220/60/I, 230/60/I, 100/110/50/60/1 |  |  |  |  |  |

Flange Orientation


Performance Field - 60 Hz



