

### In-Line Circulators

Taco In-Line Circulators are designed to efficiently circulate heated or chilled water in residential or light commercial Hydronic Systems. These circulators may also be used for zoning large installations and are available in bronze or stainless steel construction for domestic hot water applications.

In-Line Circulators demonstrate proven performance, dependability, quiet operation and long lasting performance.



**NSF® ≤ .25% Lead**

Stainless Steel Models  
Meet California AB 1953  
and Vermont Act 193



# 110 Series In-Line Circulators

## 110 Series (110, 111, 112, 113, 120) Red Baron Circulators:

### Rugged Motor Built to Last

- Resilient mounted, split phase motor with built-in overload protector
- Equipped with sleeve bearings for quiet operation

### Proven Pump Construction

- One piece non-ferrous impeller
- Stainless steel shaft
- Rugged bronze sleeve bearing
- Two piece carbon/ceramic seal assembly
- Durable one piece spring coupling

### Factory Tested

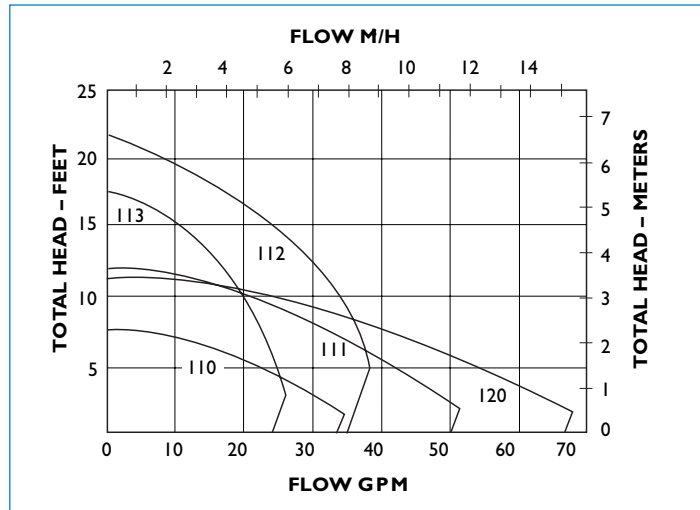
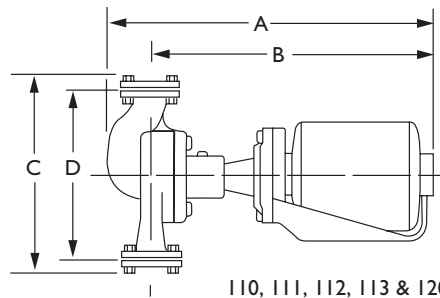
- Every circulator is operated before shipment

### Easy, Low-Cost Service

- No special tools required
- Nationwide parts availability

### Accessories & Options

- Circulators available in:
  - Bronze (113 & 120 models)
  - Stainless Steel (110 thru 120 models)
- Companion *freedom*<sup>®</sup> flanges\* available in:
  - 3/4", 1", 1-1/4", 1-1/2" sizes
- *freedom*<sup>®</sup> Shut-off flanges\*\* available in:
  - 3/4", 1", 1-1/4" and 1-1/2" sizes
- Allows easy isolation and service



## Specifications (110 Series)

MODEL NUMBER <sup>(1)</sup>	FLANGE SIZE	MOTOR <sup>(2)</sup>		MAXIMUM TEMP. <sup>(3)</sup>	PRESSURE RATING	DIMENSIONS								APPROX. SHIPPING WEIGHT	
		115V 60C 1 Ph	RPM			A		B		C		D		LBS	KG
						IN.	MM	IN.	MM	IN.	MM	IN.	MM		
110	3/4", 1", 1 1/4", 1 1/2"	1/12	1725	240° F	125 psi	14 5/8	371.5	12 5/8	320.7	7 7/8	200.0	6 5/16	160.3	21	9.5
111	3/4", 1", 1 1/4", 1 1/2"	1/8	1725	240° F <sup>(3)</sup>	125 psi	16 1/4	412.8	13 7/8	352.4	10 1/4	260.4	8 3/4	222.3	26	11.8
112	3/4", 1", 1 1/4", 1 1/2"	1/3	3450	240° F	125 psi	16 1/2	419.1	14 1/2	368.3	7 7/8	200.0	6 3/8	161.9	28	12.7
113	3/4", 1", 1 1/4", 1 1/2"	1/8	1725	240° F <sup>(3)</sup>	125 psi	16 1/4	412.8	14	355.6	10 7/8	257.2	8 1/2	215.9	27	12.2
120	2"	1/6	1725	240° F <sup>(3)</sup>	125 psi	16 7/8	428.6	14 1/4	362.0	13 1/2	342.9	11	279.4	46	20.9

(1) When specifying all bronze construction, add letter "B" after model number (i.e. 110B). When specifying Stainless Steel construction, add letter "S" after model number (i.e. 110-24S).

(2) Motors are available with other electrical characteristics – consult your Taco representative.

(3) 240° Intermittent; 200° Continuous.

\* For more information about *Taco Freedom*<sup>®</sup> flanges see Catalog #100-7.3

\*\* For more information about *Taco Freedom*<sup>®</sup> Shut-off flanges see Catalog #100-31

## 121-138 In-Line Cartridge Design Pump Series:

### Applications

Designed to efficiently circulate heated or chilled water in large residential and commercial Hydronic Systems. Ideal for primary-secondary systems, as well as parallel pumping designs. Available in bronze construction for fresh water service.

### Features

*Proven Performance:* In-Line Cartridge Design Pumps are backed by years of Taco experience in design and manufacture of circulators. Hundreds of thousands are in service.

*Dependable, Quiet Operation:*

In-Line Cartridge Design Pumps offer quiet dependable pumping power and long lasting performance. Ideal for heating and/or air conditioning systems requiring high head performance, pressure boosting, and recirculation systems with relatively low volume.

*Unique Cartridge Design:*

Replaceable “cooler running” bearing cartridge extends bearing life. With permanently sealed grease lubricated ball bearings it is virtually maintenance free.

### Built to Last

*Cartridge Bearing Assembly*

Cartridge design isolates the bearings from the effects of system fluid temperatures which greatly extends bearing life



- Alloy steel shaft
- Cupro-Nickel shaft sleeve

*Mechanical Seal*

- Two piece carbon/ceramic seal is standard
- Sealide-C/viton available for high temperature and aggressive water applications

*Body & Flanges*

- Available in cast iron or bronze
- In-Line configuration
- Companion flanges provided in 2-1/2” or 3”

*Impeller*

- Dynamically and hydraulically balanced
- Enclosed type – cast iron or bronze

*Drive Coupling*

- Rugged flexible rubber construction absorbs angular and parallel misalignment

*Rugged Motor*

- Available in single and three phase, and all standard voltages . . . open-drip proof enclosure
- Equipped with sleeve bearings for quiet operation
- Resilient mounted
- Built-in overload protector on single phase models

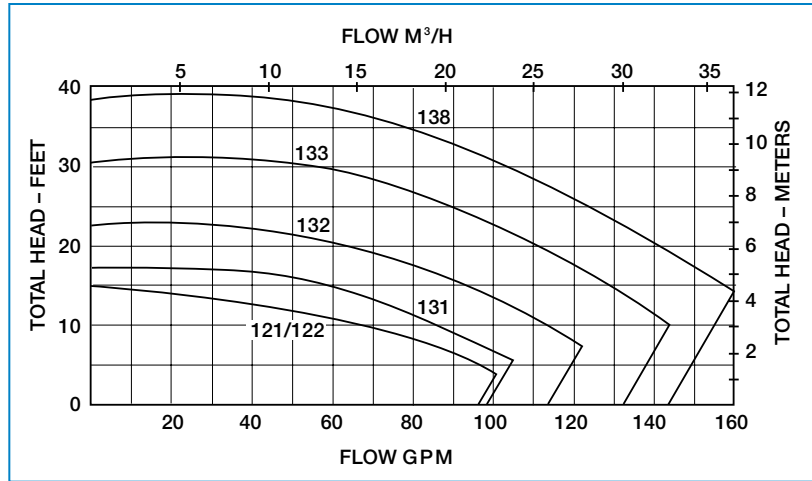
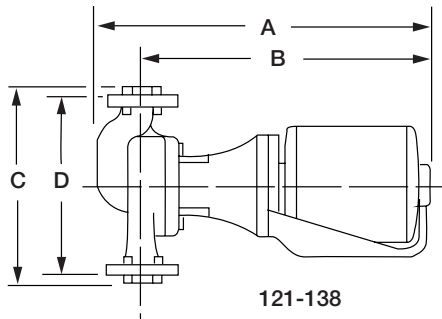
*Factory Tested*

- Every pump is built to Hydraulic Institute standards and operated before shipment

*Easy Low-Cost Service*

- No special tools required
- One cartridge bearing assembly fits all models – replace cartridge only . . . not bracket
- One mechanical seal fits all models

# Submittal Data Information 121-138 Series Circulators



## Specifications (121-138 Series)

MODEL NUMBER <sup>(1)</sup>	FLANGE SIZE	MOTOR <sup>(2)</sup>		DIMENSIONS								SHIPPING WEIGHT		
				A		B		C		D				
		60C/AC	1 PH	RPM	IN.	MM	IN.	MM	IN.	MM	IN.	MM	LBS.	KG
121	2½"	¼ HP, 115 V		1725	18⅞	460.4	15⅞	403.2	14¼	362.0	11⅞	282.6	72	32.7
122	3"	¼ HP, 115 V		1725	18⅞	460.4	15⅞	403.2	13⅝	346.1	11⅞	282.6	72	32.7
131	3"	⅓ HP, 115 V		1725	19¼	489.0	15¾	400.1	16	406.4	13⅝	346.1	95	43.1
132	3"	½ HP, 115/230 V or 230/460/60/3 or 200/60/3		1725	21½	546.1	18	457.2	16	406.4	13⅝	346.1	108	49.0
133	3"	¾ HP, 115/230 V or 230/460/60/3 or 200/60/3		1725	22⅞	562.0	18⅝	473.1	16	406.4	13⅝	346.1	113	51.3
138	3"	1 HP, 115/230 V or 230/460/60/3 or 200/60/3		1725	22⅝	574.0	19⅞	485.8	16	406.4	13⅝	346.1	118	53.5

(1) When specifying all bronze construction, add letter "B" after model number (i.e. 132B).

When specifying bronze fitted construction, add letter "C" after model number (i.e. 132C).

(2) Motors are available with other electrical characteristics – consult your Taco representative.

