# Water Circulation Pumps & Circulators

## **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 construction for domestic hot water applications.

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





## 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

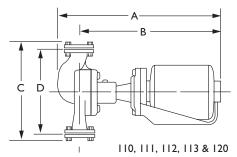
- No special tools required
- Nationwide parts availability

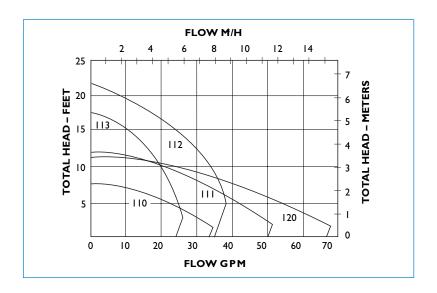
#### **Accessories & Options**

- · Available in all bronze construction
- Companion Freedom<sup>®</sup> flanges available in: 3/4", I", I-I/4", I-I/2" sizes
- Freedom<sup>®</sup> Shut-off flanges available in: 3/4", I", I-I/4" and I-I/2" sizes

Allow easy isolation and service







## **Specifications (110 Series)**

MODEL NUMBER <sup>(1)</sup>	FLANGE SIZE	MOTOR <sup>(2)</sup>			PDECOURE	DIMENSIONS								APPROX.	
		115V 60C 1 Ph	RPM	MAXIMUM TEMP. <sup>(3)</sup>	PRESSURE	Α		В		С		D		SHIPPING WEIGHT	
						IN.	MM	IN.	MM	IN.	MM	IN.	MM	LBS	KG
110	<sup>3</sup> / <sub>4</sub> ", 1", 1 <sup>1</sup> / <sub>4</sub> ", 1 <sup>1</sup> / <sub>2</sub> "	1/12	1725	240° F	125 psi	14%	371.5	12 1/8	320.7	77/8	200.0	65/16	160.3	21	9.5
111	3/4", 1", 11/4", 11/2"	1/8	1725	240° F <sup>(3)</sup>	125 psi	161/4	412.8	137/8	352.4	101/4	260.4	83/4	222.3	26	11.8
112	3/4", 1", 11/4", 11/2"	1/3	3450	240° F	125 psi	16½	419.1	14½	368.3	77/8	200.0	63/8	161.9	28	12.7
113	3/4", 1", 11/4", 11/2"	1/8	1725	240° F <sup>(3)</sup>	125 psi	161/4	412.8	14	355.6	101/8	257.2	81/2	215.9	27	12.2
120	2"	1/6	1725	240° F <sup>(3)</sup>	125 psi	161/8	428.6	141/4	362.0	131/2	342.9	11	279.4	46	20.9

<sup>(1)</sup> When specifying all bronze construction, add letter "B" after model number (i.e. 110B).
(2) Motors are available with other electrical characteristics – consult your Taco representative.
(3) 240° Intermittent; 200° Continuous.

### 121-138 Series In-Line Circulators

## 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"

#### Imbeller

- 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

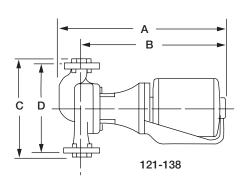
#### Factory Tested

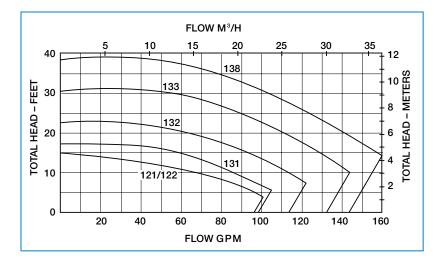
 Every pump is built to Hydraulic Institute standards and operated before shipment

#### 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								
					Α		В		С		D		WEIGHT
		60C/AC 1 PH	RPM	IN.	MM	IN.	MM	IN.	ММ	IN.	MM	LBS.	KG
121	21/2"	1/ <sub>4</sub> HP, 115 V	1725	181/8	460.4	151/8	403.2	141/4	362.0	1111/8	282.6	72	32.7
122	3"	1/ <sub>4</sub> HP, 115 V	1725	181/8	460.4	151/8	403.2	135/8	346.1	1111/8	282.6	72	32.7
131	3"	⅓ HP, 115 V	1725	191/4	489.0	15¾	400.1	16	406.4	135/8	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	135/8	346.1	108	49.0
133	3"	3/ <sub>4</sub> HP, 115/230 V or 230/460/60/3 or 200/60/3	1725	221/8	562.0	185/8	473.1	16	406.4	135/8	346.1	113	51.3
138	3"	1 HP, 115/230 V or 230/460/60/3 or 200/60/3	1725	225/8	574.0	191//8	485.8	16	406.4	135/8	346.1	118	53.5

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

