# 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 or stainless steel construction for domestic hot water applications.

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



NSF<sub>®</sub> ≤ .25% Lead

Stainless Steel Models Meet California AB 1953 and Vermont Act 193



Submittal Data # 101-155

Supersedes: New

### 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**

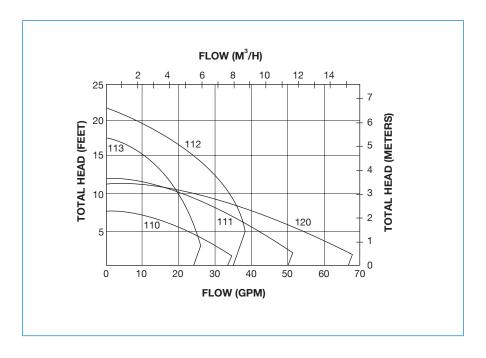
• Every circulator is operated before shipment

#### **Easy, Low-Cost Service**

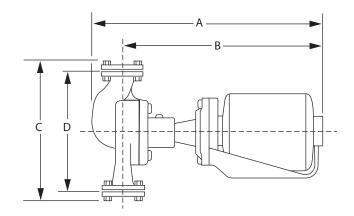
- · No special tools required
- · Nationwide parts availability

#### **Accessories & Options**

- Circulators available in:
  - Stainless Steel (110 thru 120 models)
- Companion freedom flanges available in: 3/4", 1", 1-1/4", 1-1/2" sizes
- freedow Shut-off flanges available in: 3/4", 1", 1-1/4" and 1-1/2" sizes
- · Allows easy isolation and service



Effective: 02/01/13



## **Specifications**

MODEL NUMBER (1)	FLANGE SIZE	MOTOR (2) (115V/60 HZ/1 PH)		MAXIMUM TEMP. (3)	PRESSURE RATING	DIMENSIONS									APPROX. SHIPPING	
						Α		В		С		D		WEIGHT		
		HP	RPM			IN.	ММ	IN.	MM	IN.	MM	IN.	ММ	LBS.	KG	
110	<sup>3</sup> / <sub>4</sub> ", 1", 1 <sup>1</sup> / <sub>4</sub> ", 1 <sup>1</sup> / <sub>2</sub> "  2"	1/12	1725	240°F	125 psi	14 <sup>5</sup> / <sub>8</sub>	371.5	125/8	320.7	77/8	200.0	6 <sup>5</sup> ⁄ <sub>16</sub>	160.3	21	9.5	
111		1/8		240°F (3)		16 <sup>1</sup> / <sub>4</sub>	412.8	13 <sup>7</sup> / <sub>8</sub>	352.4	101/4	260.4	83/4	222.3	26	11.8	
112		1/3	3450	240°F		16½	419.1	141/2	368.3	77/8	200.0	63/8	161.9	28	12.7	
113		1/8	1725	240°F (3)		16 <sup>1</sup> / <sub>4</sub>	412.8	14	355.6	101/8	257.2	81/2	215.9	27	12.2	
120		1/6				16 <sup>7</sup> / <sub>8</sub>	428.6	14 <sup>1</sup> / <sub>4</sub>	362.0	13½	342.9	11	279.4	46	20.9	

<sup>(1)</sup> When specifying all stainless steel construction, add letter "S" after model number (e.g. 110S). (2) Motors are available with other electrical characteristics – consult your Taco representative.

<sup>(3) 240°</sup> 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"

#### Impeller

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

#### **Drive Coupling**

 Rugged flexible rubber construction absorbs angular and parallel misalignmen

#### 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

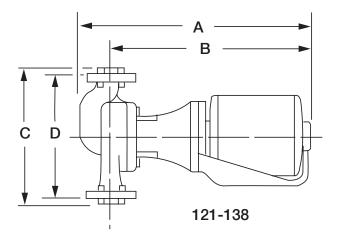
#### Factory Tested

 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>	EL ANIGE	MOTOR <sup>(2)</sup>			DIMENSIONS								
	FLANGE SIZE				Α		В		С		D		WEIGHT
		60C/AC 1 PH	RPM	IN.	ММ	IN.	ММ	IN.	ММ	IN.	ММ	LBS.	KG
121	21/2"	½ HP, 115 V	1725	181/8	460.4	151/8	403.2	141/4	362.0	111/8	282.6	72	32.7
122	3"	½ HP, 115 V	1725	181/8	460.4	151/8	403.2	135/8	346.1	111/8	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

- (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.

