# **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.







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

# **Specifications**





S Stainless Steel Models

MODEL NUMBER (1)	FLANGE SIZE	MOTOR (2) (115V/60 HZ/1 PH)		MAXIMUM TEMP. (3)	PRESSURE	DIMENSIONS									APPROX. SHIPPING	
						Α		В		С		D		WEIGHT		
		HP	RPM			IN.	ММ	IN.	ММ	IN.	ММ	IN.	ММ	LBS.	KG	
110	<sup>3</sup> /4", 1", 1 <sup>1</sup> /4", 1 <sup>1</sup> /2" 2"	<sup>1</sup> / <sub>12</sub>	1725	240°F		<b>1</b> 45⁄8	371.5	125⁄8	320.7	71/8	200.0	6 <sup>5</sup> ⁄16	160.3	21	9.5	
111		1/8		240°F (3)		16 <sup>1</sup> /4	412.8	13 <sup>7</sup> ⁄8	352.4	10¼	260.4	<b>8</b> ¾	222.3	26	11.8	
112		1/3	3450	240°F		<b>16</b> ½	419.1	<b>1</b> 4½	368.3	7 <sup>7</sup> /8	200.0	6¾	161.9	28	12.7	
113		1⁄8	1725	240°F (3)		16¼	412.8	14	355.6	101⁄8	257.2	8½	215.9	27	12.2	
120		1⁄6				16 <sup>7</sup> /8	428.6	<b>1</b> 4 <sup>1</sup> / <sub>4</sub>	362.0	13½	342.9	11	279.4	46	20.9	

(1) 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.
(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 Stainless Steel 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 304SS
- In-Line configuration
- Companion flanges provided in 2-1/2" or 3"

# Impeller

- Dynamically and hydraulically balanced
- Enclosed type cast iron or 304SS

# 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>		MOTOR <sup>(2)</sup>			DIMENSIONS								
	FLANGE SIZE				Α		В		С		D		WEIGHT
	SIZE	60C/AC 1 PH	RPM	IN.	ММ	IN.	ММ	IN.	ММ	IN.	ММ	LBS.	KG
121	2½"	1⁄4 HP, 115 V	1725	181/8	460.4	151/8	403.2	<b>1</b> 4¼	362.0	$11\frac{1}{8}$	282.6	72	32.7
122	3"	1⁄4 HP, 115 V	1725	181/8	460.4	151/8	403.2	131/8	346.1	$11\frac{1}{8}$	282.6	72	32.7
131	3"	⅓ HP, 115 V	1725	191⁄4	489.0	15¾	400.1	16	406.4	131/8	346.1	95	43.1
132	3"	<sup>1</sup> / <sub>2</sub> HP, 115/230 V or 200-230/460/60/3	1725	21½	546.1	18	457.2	16	406.4	131/8	346.1	108	49.0
133	3"	<sup>3</sup> / <sub>4</sub> HP, 115/230 V or 200-230/460/60/3	1725	22½	562.0	18 <sup>5</sup> ⁄8	473.1	16	406.4	13%	346.1	113	51.3
138	3"	1 HP, 115/230 V or 200-230/460/60/3	1725	22 <sup>5</sup> / <sub>8</sub>	574.0	19½	485.8	16	406.4	131/8	346.1	118	53.5

(1) When specifying all SS — non NSF construction, add letter "D" after model number (i.e.132D). When specifying all SS NSF construction, add letter "N" after model number (i.e.132N) When specifying cast iron — SS fitted construction,add letter "E" after model number (i.e.132E)

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







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