

# **3-PIECE CIRCULATORS**1070 SERIES



# **AURORA 1070 SERIES 3-PIECE CIRCULATORS**

#### **PRODUCT OFFERING**

Aurora 1070 Series 3-piece circulators are suitable for applications such as hydronics heating and cooling, domestic water systems, multistage zoning and general industrial service. Both models are available in a wide range of sizes to match the performance requirements of any of these applications.

#### **DESIGN FEATURES**

Aurora 1070 Series 3-piece circulators are built using a standard 3-piece design that features a radially-split body, oversized shaft, centrifugal impeller, positive mechanical seal and modular construction.



#### **BODY**

The radially-split body can be left in line while servicing the pump, eliminating cumbersome disconnecting of pipes.

### **OVERSIZED SHAFT**

Aurora circulating pumps have oversized shafts made from special alloy steel, machined to exacting tolerances. Shafts have integral thrust collars, heat-treated to provide long life under severe working conditions.

#### **CENTRIFUGAL IMPELLER**

The balanced, centrifugal-design impeller ensures maximum water delivery in the HVAC system.

### **POSITIVE MECHANICAL SEAL**

Made from long-lasting, hard-wearing materials, it ensures many years of noise-free, trouble-free service.

### **MODULAR CONSTRUCTION**

Models 325–357 feature a unique Aurora shaft and bearing module which fits all of these models for ease of serviceability and reduced inventory costs.

## **MATERIALS OF CONSTRUCTION**

PART NAME	IRON BODY PUMP  BRONZE-FITTED CONSTRUCTION	BRONZE BODY PUMP		
Volute	Construction  Cast Iron	Bronze		
volute	Castilon	DIVIIZE		
Impeller: 1070-APx325-357 1070-APx369 1070-APx363-368	Non-Ferrous Brass-Stamped Cast Bronze	Non-Ferrous Brass-Stamped Cast Bronze		
Shaft	Alloy Steel Copper Sleeve	Alloy Steel Copper Sleeve		
Mechanical Seal Assembly	Carbon Brass Trim Ceramic Seat	Carbon Brass Trim Ceramic Seat		

## **DESIGN INFORMATION**

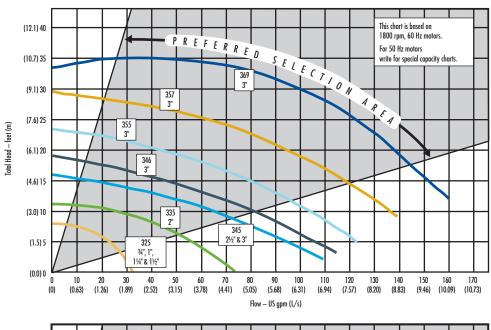
	IRON BODY PUMP	BRONZE BODY PUMP	
PART NAME	BRONZE-FITTED CONSTRUCTION		
Maximum Operating Temperature	225°F (107°C)	225°F (107°C)	
Maximum Working Pressure: 325-346, 355-357, 369 351-354, 363-368	125 psi (862 kPa) 175 psi (1207 kPa)	125 psi (862 kPa) 175 psi (1207 kPa)	

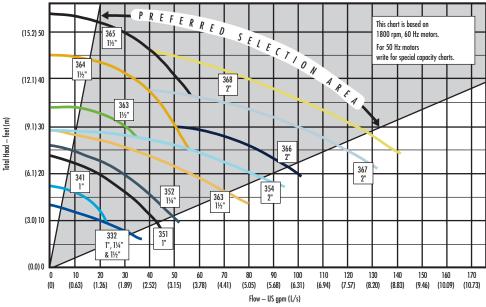
#### NOTES

- 1. All circulators are to be mounted with pump and shaft in horizontal position.
- For domestic hot water or fresh water systems, always specify bronze body pumps.
- 3. For temperatures over 225°F (107°C) consult your Aurora Representative.

A-02-1053 (05-09-24)

# **PERFORMANCE DATA**





## **TYPICAL SPECIFICATION**

Furnish and install as shown on the plans, Aurora 3-piece circulating pump, designed for quiet operation and guaranteed by the manufacturer for the intended application. The pump shall have a capacity of \_\_\_\_\_\_ US gpm (L/s), handling (state liquid and temperature) against a total head of \_\_\_\_\_\_ ft (m). Pump shall be equipped with a \_\_\_\_\_\_ hp (kW), \_\_\_\_\_ volt, \_\_\_\_\_ phase, \_\_\_\_\_ Hz, 1800 rpm drip-proof mounted motor.

Pump shall be \_\_\_\_\_ construction, 3-piece design featuring the Aurora shaft and bearing module which shall fit all models 325–357. The shaft shall have an integral thrust collar and shall be supported by oil-lubricated bronze sleeve bearings. Pump to be equipped with a watertight, long-life mechanical seal and be suitable for \_\_\_\_\_ psi (kPa) working pressure.

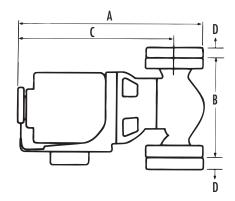
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# **DIMENSION DETAILS**

MODEL	FLANGE SIZE (NPT)	MOTOR		DIMENSIONS IN INCHES (MM)			SHIPPING WEIGHT	
		HP	VOLTS & PHASE	A	В	С	D	LBS. (KG)
1070-APBF325	3/4	1/12	115V 1 phase	13-3/4 (349)	6-1/2 (165)	11-1/2 (292)	3/4 (19)	20 (9)
	1	1/12		13-3/4 (349)	6-1/2 (165)	11-1/2 (292)	3/4(19)	20(9)
	1-1/4	1/12		13-3/4(349)	6-1/2 (165)	11-1/2 (292)	7/8 (22)	20(9)
	1-1/2	1/12		13-3/4 (349)	6-1/2 (165)	11-1/2 (292)	7/8 (22)	20(9)
1070-APBF335	2	1/6		15 (381)	8-1/2 (216)	12-1/2 (318)	7/8 (22)	35 (16)
	2-1/2	1/4		15-3/4 (400)	10 (254)	12-1/2 (318)	1(25)	51 (23)
1070-APBF345	3	1/4		15-3/4 (400)	10 (254)	12-1/2 (318)	1(25)	51 (23)
1070-APBF346	3	1/3		15-3/4 (400)	10 (254)	12-1/2 (318)	1(25)	51 (23)
1070-APBF355	3	1/2	115/230V	19-1/2 (495)	12 (305)	16 (406)	1(25)	82 (37)
1070-APBF357	3	3/4	1 phase or 208 – 230/460 or 575V	20 (508)	12 (305)	16-1/2 (419)	1(25)	85 (39)
1070-APBF369	3	1	3 phase	25 (635)	14-1/4 (362)	20-1/4 (514)	1(25)	135 (61)
	1	1/6		15 (381)	8-1/2 (216)	12-1/2 (318)	7/8 (22)	33 (15)
1070-APAB332	1-1/4	1/6		15 (381)	8-1/2 (216)	12-1/2 (318)	7/8 (22)	33 (15)
	1-1/2	1/6	115V	15 (381)	8-1/2 (216)	12-1/2 (318)	7/8 (22)	33 (15)
1070-APAB341	1	1/6	1 phase	15-1/4 (387)	8-1/2 (216)	12-1/2 (318)	3/4(19)	33 (15)
1070-APBF351	1	1/4		17-1/4 (438)	11-1/2 (292)	13-1/2 (343)	3/4(19)	54 (24)
1070-APBF352	1-1/4	1/3		17-1/4 (438)	11-1/2 (292)	13-1/2 (343)	7/8 (22)	54 (24)
1070-APBF353	1-1/2	1/2		20 (508)	11-1/2 (292)	16-1/2 (419)	7/8 (22)	64(29)
1070-APBF354	2	3/4		20 (508)	11-1/2 (292)	16-1/2 (419)	7/8 (22)	71(32)
1070-APBF363	1-1/2	1/2	115/230V 1 phase or	23 (584)	13-1/2 (343)	19-3/4 (502)	7/8 (22)	96 (44)
1070-APBF364	1-1/2	3/4	208 - 230/460	23 (584)	13-1/2 (343)	19-3/4(502)	7/8 (22)	100 (45)
1070-APBF365	1-1/2	1	or 575V 3 phase	23 (584)	13-1/2 (343)	19-3/4 (502)	7/8 (22)	102 (46)
1070-APBF366	2	3/4		23-1/4 (591)	14 (356)	19-3/4 (502)	7/8 (22)	120 (54)
1070-APBF367	2	1		23-1/4 (591)	14 (356)	19-3/4 (502)	7/8 (22)	125 (57)
1070-APBF368	2	1-1/2	208 - 230/460 or 575V 3 phase	21-3/4 (552)	14 (356)	18-1/4 (464)	7/8 (22)	130 (59)

#### NOTES

- Dimensions given are for reference only. For exact dimensional data, contact factory.
- 2. All single-phase motors are equipped with built-in thermal overload protection. Three-phase motors require external overload protection.
- 3. Companion flanges not furnished as standard on 325, 345 and 332.
- 4. Conduit box not supplied on 1/2 HP or greater.
- 5. For other design characteristics, consult your Aurora Representative.







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