PENTAIR

AURORA® 1070 SERIES
3-PIECE CIRCULATORS

WWW.AURORAPUMP.COM

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

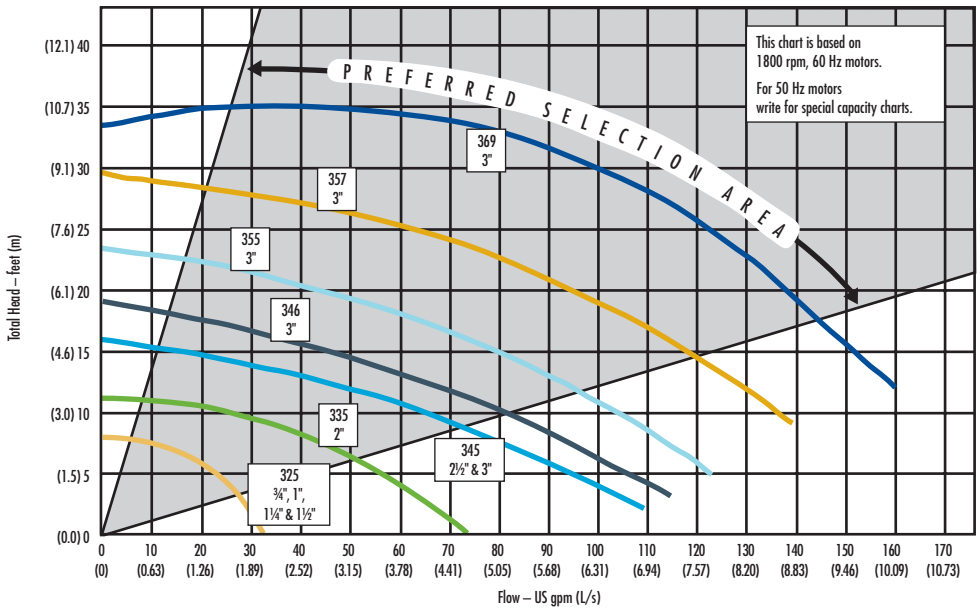
Part Name	Iron Body Pump Bronze-Fitted Construction	Bronze Body Pump
Volute	Cast Iron	Bronze
Impeller: 1070-APx325–357 1070-APx369 1070-APx363–368	Non-Ferrous Brass-Stamped Cast Bronze	Non-Ferrous Brass-Stamped Cast Bronze
Shaft	Alloy Steel Copper Sleeve	Alloy Steel Copper Sleeve
Mechanical Seal Assembly	Carbon Brass Trim Ceramic Seat	Carbon Brass Trim Ceramic Seat

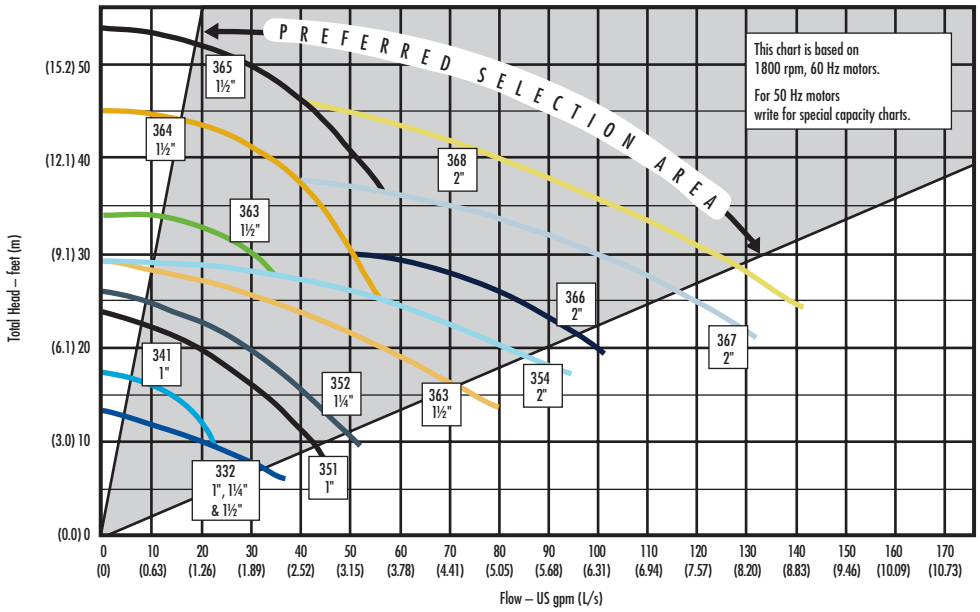
Design Information

Part Name	Iron Body Pump Bronze-Fitted Construction	Bronze Body Pump
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.
2) 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.

Performance Data

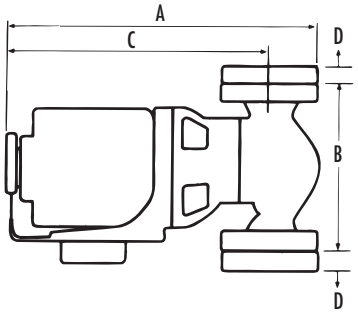




Typical Specification

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.

Dimension Details



Model	Flange Size (NPT)	Motor		Dimensions in inches (mm)				Shipping Weight lbs. (kg)
		HP	Volts & Phase	A	B	C	D	
1070-APBF325	¾	1/12	115V 1 phase	13¾ (349)	6½ (165)	11½ (292)	¾ (19)	20 (9)
	1	1/12		13¾ (349)	6½ (165)	11½ (292)	¾ (19)	20 (9)
	1¼	1/12		13¾ (349)	6½ (165)	11½ (292)	⅞ (22)	20 (9)
	1½	1/12		13¾ (349)	6½ (165)	11½ (292)	⅞ (22)	20 (9)
1070-APBF335	2	⅙		15 (381)	8½ (216)	12½ (318)	⅞ (22)	35 (16)
1070-APBF345	2½	¼		15¾ (400)	10 (254)	12½ (318)	1 (25)	51 (23)
	3	¼		15¾ (400)	10 (254)	12½ (318)	1 (25)	51 (23)
1070-APBF346	3	⅓		15¾ (400)	10 (254)	12½ (318)	1 (25)	51 (23)
1070-APBF355	3	½	115/230V 1 phase or 208 – 230/460 or 575V 3 phase	19½ (495)	12 (305)	16 (406)	1 (25)	82 (37)
1070-APBF357	3	¾		20 (508)	12 (305)	16½ (419)	1 (25)	85 (39)
1070-APBF369	3	1		25 (635)	14¼ (362)	20¼ (514)	1 (25)	135 (61)
1070-APAB332	1	⅙	115V 1 phase	15 (381)	8½ (216)	12½ (318)	⅞ (22)	33 (15)
	1¼	⅙		15 (381)	8½ (216)	12½ (318)	⅞ (22)	33 (15)
	1½	⅙		15 (381)	8½ (216)	12½ (318)	⅞ (22)	33 (15)
1070-APAB341	1	⅙		15¼ (387)	8½ (216)	12½ (318)	¾ (19)	33 (15)
1070-APBF351	1	¼		17¼ (438)	11½ (292)	13½ (343)	¾ (19)	54 (24)
1070-APBF352	1¼	⅓		17¼ (438)	11½ (292)	13½ (343)	⅞ (22)	54 (24)
1070-APBF353	1½	½	115/230V 1 phase or 208 – 230/460 or 575V 3 phase	20 (508)	11½ (292)	16½ (419)	⅞ (22)	64 (29)
1070-APBF354	2	¾		20 (508)	11½ (292)	16½ (419)	⅞ (22)	71 (32)
1070-APBF363	1½	½		23 (584)	13½ (343)	19¾ (502)	⅞ (22)	96 (44)
1070-APBF364	1½	¾		23 (584)	13½ (343)	19¾ (502)	⅞ (22)	100 (45)
1070-APBF365	1½	1		23 (584)	13½ (343)	19¾ (502)	⅞ (22)	102 (46)
1070-APBF366	2	¾		23¼ (591)	14 (356)	19¾ (502)	⅞ (22)	120 (54)
1070-APBF367	2	1		23¼ (591)	14 (356)	19¾ (502)	⅞ (22)	125 (57)
1070-APBF368	2	1½	208 – 230/460 or 575V 3 phase	21¾ (552)	14 (356)	18¼ (464)	⅞ (22)	130 (59)

Notes:

1) 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.

PENTAIR

800 AIRPORT ROAD, NORTH AURORA, ILLINOIS 60542 WWW.AURORAPUMP.COM

Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice.
A-02-1053 06/03/15 © 2015 Pentair Ltd. All Rights Reserved.