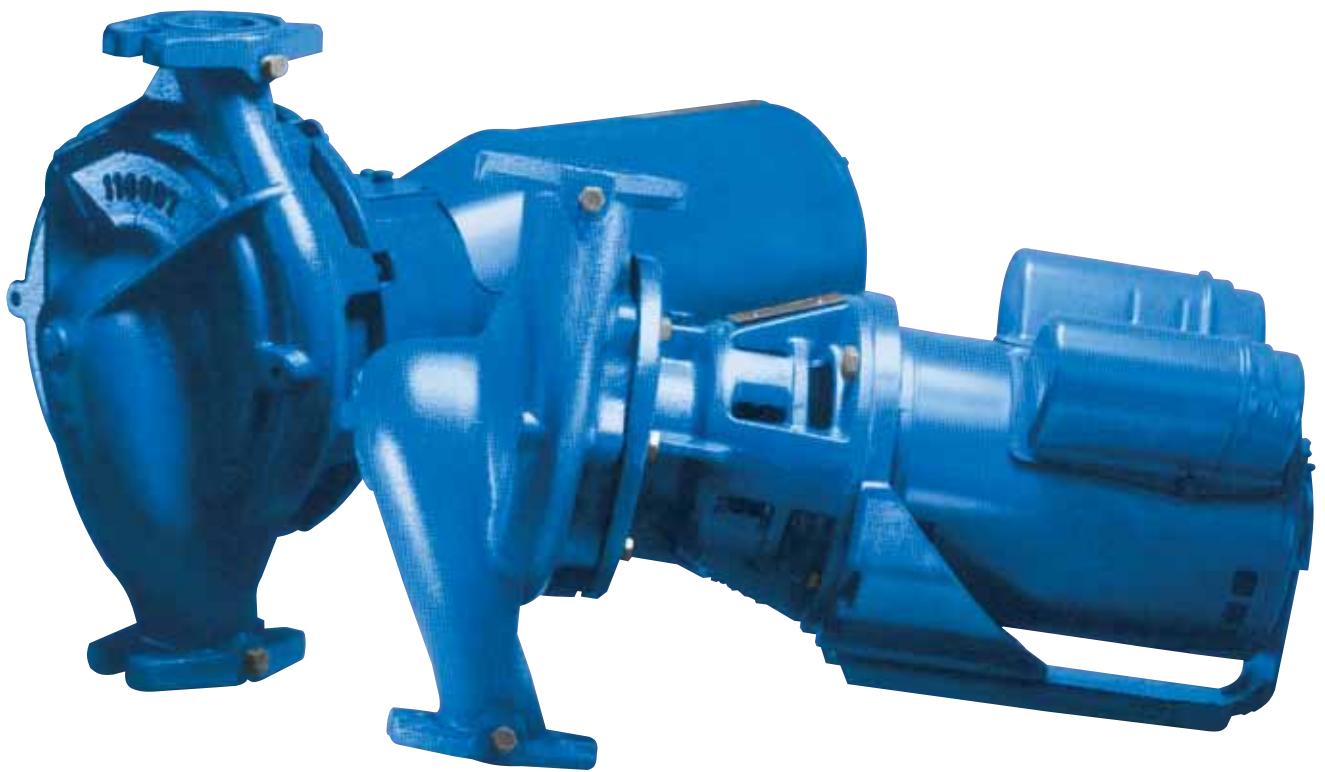




AURORA[®]
Pentair Water

1070 Series Custom In-Line Circulators



motralec

4 rue Lavoisier . ZA Lavoisier . 95223 HERBLAY CEDEX
Tel. : 01.39.97.65.10 / Fax. : 01.39.97.68.48
Demande de prix / e-mail : service-commercial@motralec.com
www.motralec.com

Aurora Custom In-Line Circulators

Applications

- Hydronic Heating and Cooling
- Domestic Water Systems
- Multistage Zoning
- General Industrial Service

Standard Three-Piece Design

Body

Radially-split body can be left in the line while servicing the pump, eliminating needless disconnecting of pipes.

Oversized Shaft

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

Extra Long Sleeve Bearings

Series 1070 features bronze sleeve bearings, extra long, to keep shaft in perfect alignment and provide quiet operation.

Positive Mechanical Seal

A tried and proven method of preventing water leakage, mechanical seal construction is an often imitated feature of the Aurora circulator. Made of long-lasting, hardwearing materials, it ensures many years of noise-free, trouble-free service.

Modular Construction

Series 1070 features the unique Aurora shaft and bearing module for ease of serviceability and reduced inventory costs.

Materials of Construction

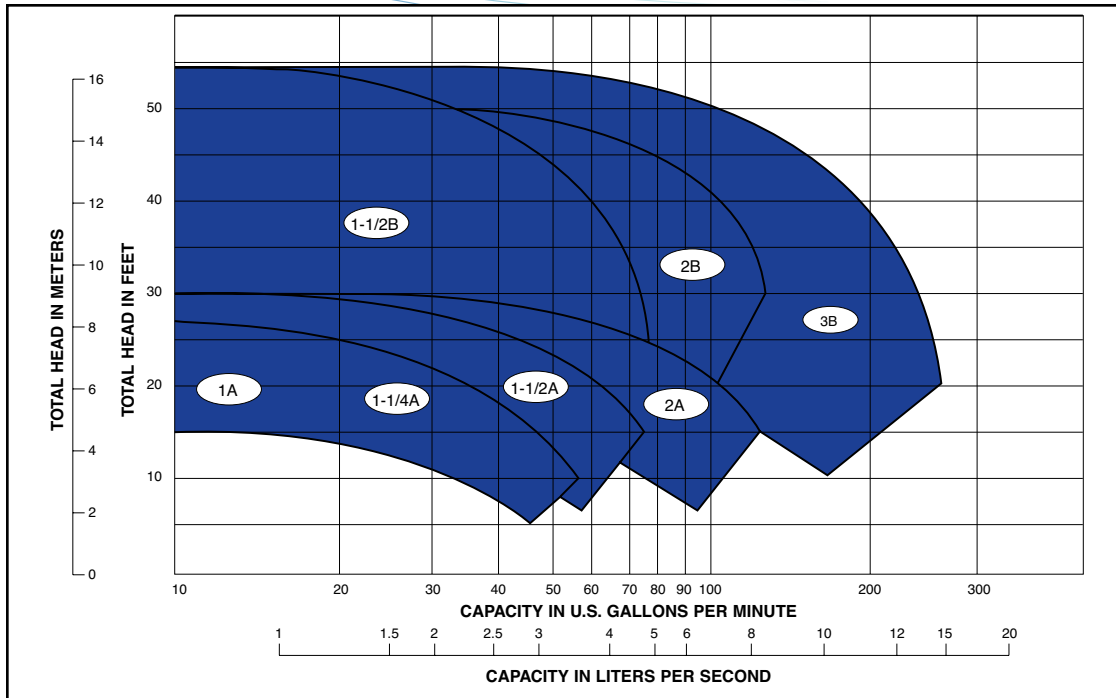
Part Name	Iron Body Pump	Bronze Body Pump
	Bronze-Fitted Construction	
Pump Body	Cast Iron	Bronze
Impeller: 1070-APxx1½A-2A 1070-APxx1½B-3B	Non-Ferrous Bronze	Non-Ferrous Bronze
Bearings	Sleeve – Oil Lubricated	Sleeve – Oil Lubricated
Shaft	Alloy Steel – Copper Sleeve	Alloy Steel – Copper Sleeve
Mechanical Seal Assembly	Carbon Brass Trim – Ceramic Seat	

Design Information

Part Name	Iron Body Pump	Bronze Body Pump
	Bronze-Fitted Construction	
Maximum Operating Temperature	225°F (107°C)	225°F (107°C)
Maximum Working Pressure: 1070-APxx1½A-2A 1070-APxx1½B-3B	175 psi (1207 kPa) 175 psi (1207 kPa)	175 psi (1207 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.

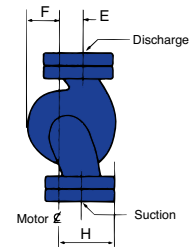
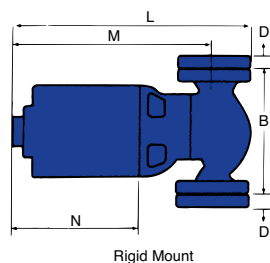
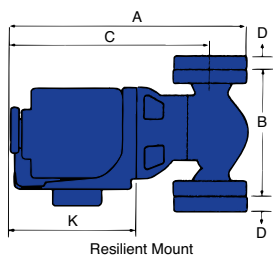
1070 Series Product Offering



Notes: For custom selections, refer to individual curves for impeller diameters and motor horsepower.

Typical Specification

Furnish and install as shown on the plans and the specification, an Aurora Series ____ In-Line Circulating Pump, designed and guaranteed by the manufacturer for the intended application. The pump shall have a capacity of ____ US gpm (l/s), total head ____ feet (meters), liquid ____, temperature ____°F (°C), viscosity ____ SSU, pump size ____, 1800 rpm, ____ HP (kw), ____ volt, ____ phase, ____ hertz mounted motor. Pump shall be ____ construction, suitable for 175 psi (1207 kPa) working pressure. The shaft shall have an integral thrust collar and shall be supported by two oil-lubricated bronze sleeve bearings.



Pump Size	Flange Size (N.P.T)	Dimensions in inches (mm)				
		B	D	E	F	H
1070 1A	1	11½ (292)	¾ (19)	1¾ (35)	3¾ (95)	4¾ (105)
1070 1¼A	1¼	11½ (292)	⅞ (22)	1¾ (35)	3¾ (95)	4¾ (105)
1070 1½A	1½	11½ (292)	⅞ (22)	1¾ (35)	3¾ (95)	4¾ (105)
1070 2A	2	11½ (292)	⅞ (22)	1¾ (35)	3¾ (95)	4¾ (105)
1070 1½B	1½	13½ (343)	⅞ (22)	1 (25)	4¾ (117)	4¾ (124)
1070 2B	2	14 (356)	⅞ (22)	1 (25)	4¾ (121)	5½ (130)
1070 3B	3	18 (457)	1 (25)	0 (0)	5½ (149)	5 (127)

- Notes: 1) Dimensions given are for reference only. For exact dimensional data, contact factory.
 2) Pumps are shipped for up discharge.
 3) Tapped openings are provided in body for venting and draining.
 4) Companion flanges furnished with pump.

Pump and Motor Data

Pump Size	HP	Resilient Mount in inches (mm)			Rigid Mount in inches (mm)			Shipping Weight lbs. (kg)
		A	C	K	L	M	N	
1070 1A	¼	17¼ (438)	13½ (343)	7¾ (187)	—	—	—	48 (22)
	½	17¼ (438)	13½ (343)	7¾ (187)	—	—	—	48 (22)
1070 1¼A	¼	17¼ (438)	13½ (343)	7¾ (187)	—	—	—	48 (22)
	½	17¼ (438)	13½ (343)	7¾ (187)	—	—	—	48 (22)
	¾	19¾ (502)	16 (406)	9% (251)	—	—	—	58 (26)
1070 1½A	¼	17¼ (438)	13½ (343)	7¾ (187)	—	—	—	48 (22)
	½	17¼ (438)	13½ (343)	7¾ (187)	—	—	—	48 (22)
	¾	19¾ (502)	16 (406)	9% (251)	—	—	—	58 (26)
	1	20 (508)	16½ (419)	10% (264)	—	—	—	75 (34)
1070 2A	½	17¼ (438)	13½ (343)	7¾ (187)	—	—	—	55 (25)
	¾	19¾ (502)	16 (406)	9% (251)	—	—	—	72 (33)
	1	20 (508)	16½ (419)	10% (264)	—	—	—	75 (34)
	1½	20¾ (527)	17 (431)	10% (276)	—	—	—	80 (36)
1070 1½B	½	22 (559)	18¾ (476)	9% (251)	—	—	—	86 (39)
	¾	23 (584)	19¾ (502)	10% (264)	—	—	—	82 (37)
	1	23½ (597)	20¼ (514)	10% (276)	—	—	—	92 (42)
	1½	—	—	—	21½ (546)	18¼ (464)	8% (225)	115 (52)
1070 2B	½	22¾ (578)	19¾ (489)	9% (251)	—	—	—	90 (41)
	¾	23¾ (603)	19¾ (502)	10% (264)	—	—	—	96 (44)
	1	23¾ (603)	20¼ (514)	10% (276)	—	—	—	100 (45)
	1½	—	—	—	21¾ (552)	18¼ (464)	8% (225)	120 (54)
	2	—	—	—	22¾ (578)	19¾ (489)	9% (251)	124 (56)
1070 3B	1	—	—	—	23½ (597)	18½ (470)	8% (225)	135 (61)
	1½	—	—	—	24 (610)	19 (483)	8% (225)	138 (63)
	2	—	—	—	25 (635)	20 (508)	9% (251)	143 (65)
	3	—	—	—	27¾ (705)	22¾ (578)	9% (251)	150 (68)

Voltages: ¼ and ½ hp are 115 volt 1 phase. ½, ¾, 1 and 1½

NOTE: Aurora Pump reserves the right to make revisions to its products and their specifications, and to this bulletin and related information, without notice.

motralec

4 rue Lavoisier . ZA Lavoisier . 95223 HERBLAY CEDEX

Tel. : 01.39.97.65.10 / Fax. : 01.39.97.68.48

Demande de prix / e-mail : service-commercial@motralec.com

www.motralec.com



A-02-1054 05.10