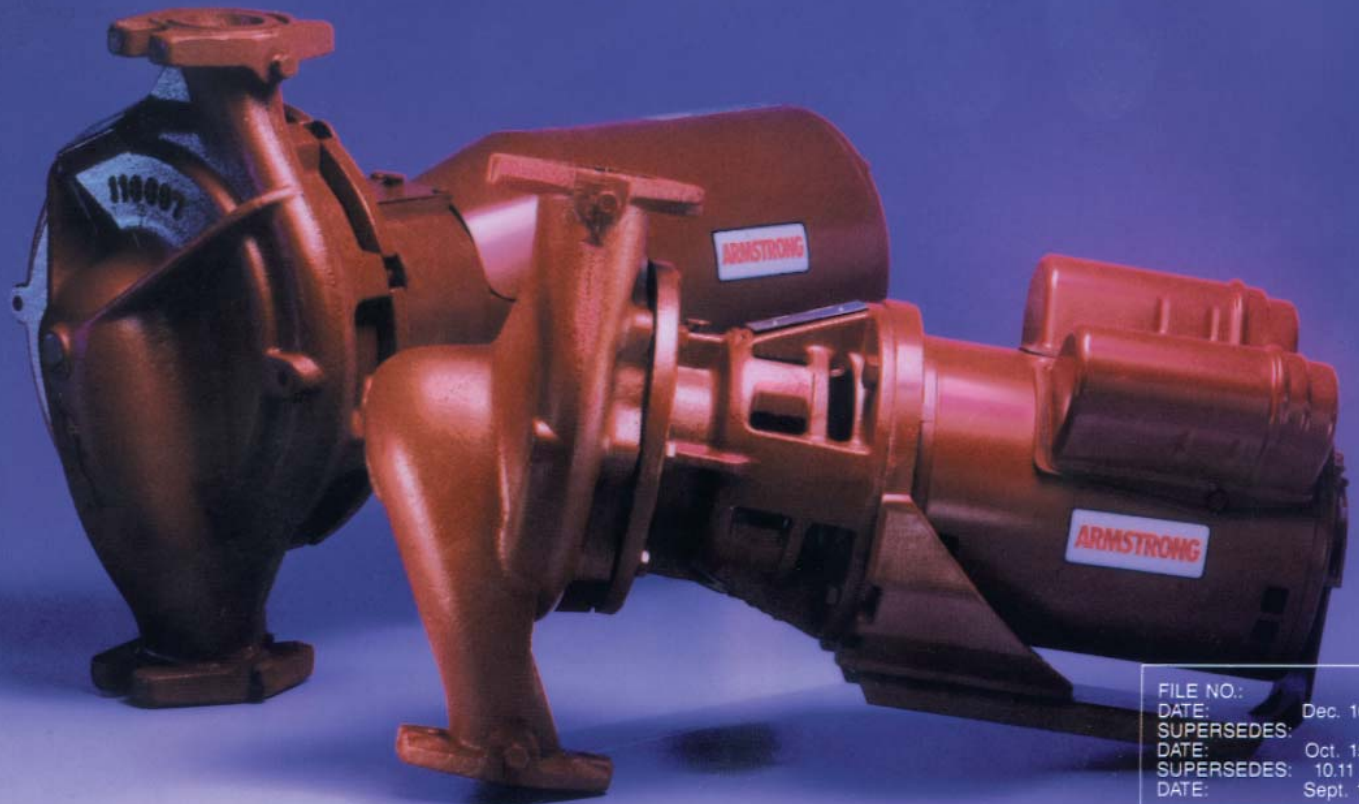


# ARMSTRONG

S E R I E S 1 0 5 0 & 1 0 6 0



FILE NO.:	10.11
DATE:	Dec. 16, 1991
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DATE:	Oct. 15, 1991
SUPERSEDES:	10.11 (CAN.)
DATE:	Sept. 1, 1969

*Custom In-Line Circulators*

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# Custom In-Line Circulators Series 1050 & 1060

## Applications

- Hydronic Heating and Cooling
- Domestic Water Systems
- Multi-Stage 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

ARMSTRONG circulating pumps have over-sized 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 1060 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, the well-known "ARMSEAL" construction is an often imitated feature of the ARMSTRONG circulator. Made of long-lasting, hard-wearing materials, it ensures many years of noise-free, trouble-free service.

### Modular Construction

Series 1050 features the unique ARMSTRONG 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	Series 1050	Non-Ferrous	Non-Ferrous
	Series 1060	Bronze	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	

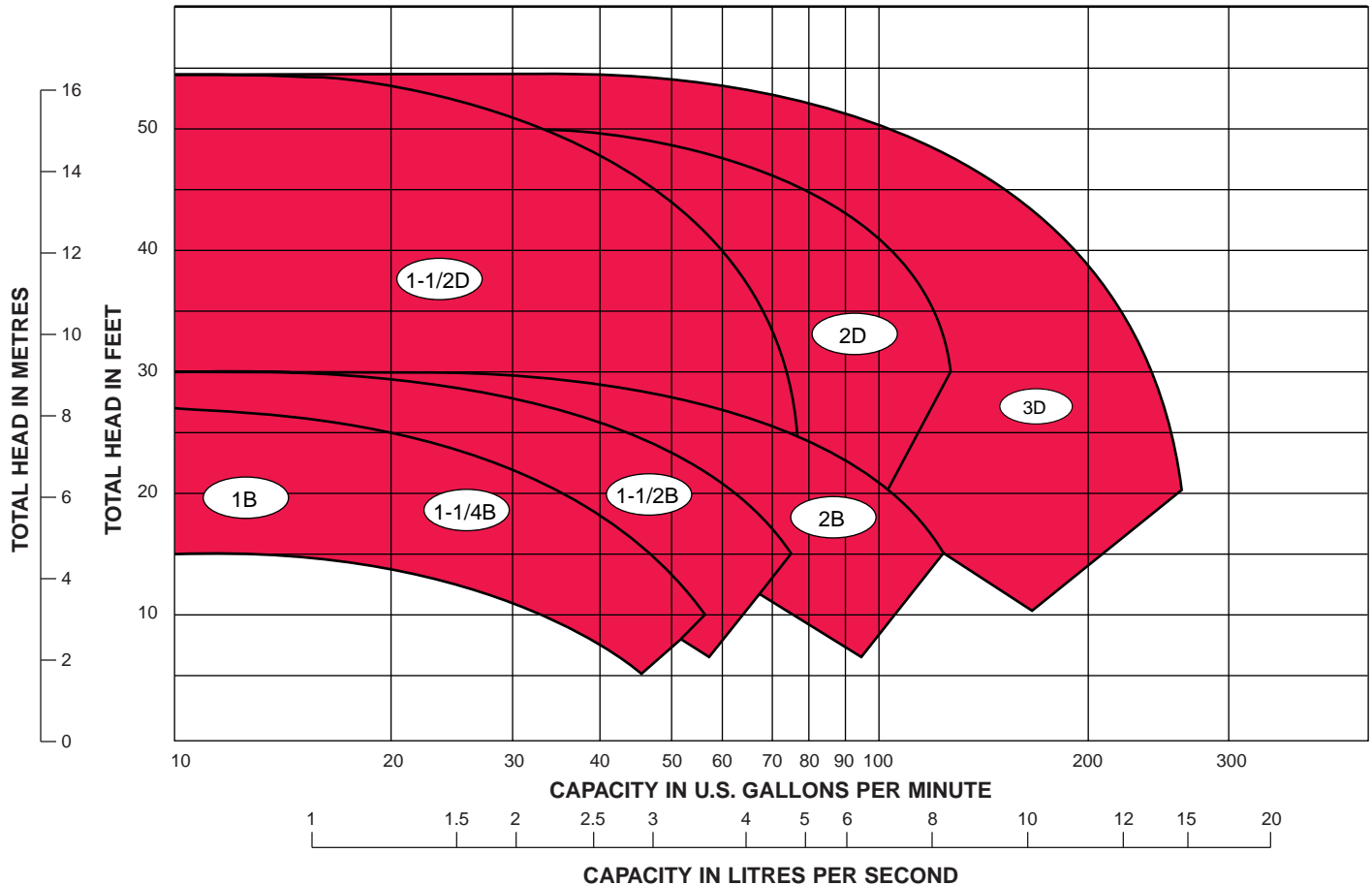
## Design Information

		Iron Body Pump	Bronze Body Pump
		Bronze-Fitted Construction	
Maximum Operating Temp.		225°F (107°C)	225°F (107°C)
Maximum Working Pressure	Series 1050	175 psi (1207 kPa)	175 psi (1207 kPa)
	Series 1060	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 ARMSTRONG Representative.

# Composite Performance Chart



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

## Typical Specification

Furnish and install as shown on the plans and the specification, an ARMSTRONG Series\_\_\_\_ In-Line Circulating Pump, designed and guaranteed by the manufacturer for the intended application. The pump shall have a capacity of \_\_\_\_ USgpm (l/s), total head \_\_\_\_ feet (metres), 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 to be equipped with a water-tight, long-life “ARMSEAL” mechanical seal.

# Pump and Motor Data

Pump Size	hp	Resilient Mount inches (mm)			Rigid Mount inches (mm)			Shipping Weight lbs. (kg)
		A	C	K	L	M	N	
<b>1050 1B</b>	1/4	17-1/4 (438)	13-1/2 (343)	7-3/8 (187)	—	—	—	48 (22)
	1/3	17-1/4 (438)	13-1/2 (343)	7-3/8 (187)	—	—	—	48 (22)
<b>1050 1-1/4B</b>	1/4	17-1/4 (438)	13-1/2 (343)	7-3/8 (187)	—	—	—	48 (22)
	1/3	17-1/4 (438)	13-1/2 (343)	7-3/8 (187)	—	—	—	48 (22)
	1/2	19-3/4 (502)	16 (406)	9-7/8 (251)	—	—	—	58 (26)
<b>1050 1-1/2B</b>	1/4	17-1/4 (438)	13-1/2 (343)	7-3/8 (187)	—	—	—	48 (22)
	1/3	17-1/4 (438)	13-1/2 (343)	7-3/8 (187)	—	—	—	48 (22)
	1/2	19-3/4 (502)	16 (406)	9-7/8 (251)	—	—	—	58 (26)
	3/4	20 (508)	16-1/2 (419)	10-3/8 (264)	—	—	—	75 (34)
<b>1050 2B</b>	1/3	17-1/4 (438)	13-1/2 (343)	7-3/8 (187)	—	—	—	55 (25)
	1/2	19-3/4 (502)	16 (406)	9-7/8 (251)	—	—	—	72 (33)
	3/4	20 (508)	16-1/2 (419)	10-3/8 (264)	—	—	—	75 (34)
	1	20-3/4 (527)	17 (431)	10-7/8 (276)	—	—	—	80 (36)

<b>1060 1-1/2 D</b>	1/2	22 (559)	18-3/4 (476)	9-7/8 (251)	—	—	—	86 (39)
	3/4	23 (584)	19-3/4 (502)	10-3/8 (264)	—	—	—	82 (37)
	1	23-1/2 (597)	20-1/4 (514)	10-7/8 (276)	—	—	—	92 (42)
	1-1/2	—	—	—	21-1/2 (546)	18-1/4 (464)	8-7/8 (225)	115 (52)
<b>1060 2D</b>	1/2	22-3/4 (578)	19-1/4 (489)	9-7/8 (251)	—	—	—	90 (41)
	3/4	23-3/4 (603)	19-3/4 (502)	10-3/8 (264)	—	—	—	96 (44)
	1	23-3/4 (603)	20-1/4 (514)	10-7/8 (276)	—	—	—	100 (45)
	1-1/2	—	—	—	21-3/4 (552)	18-1/4 (464)	8-7/8 (225)	120 (54)
	2	—	—	—	22-3/4 (578)	19-1/4 (489)	9-7/8 (251)	124 (56)
<b>1060 3D</b>	1	—	—	—	23-1/2 (597)	18-1/2 (470)	8-7/8 (225)	135 (61)
	1-1/2	—	—	—	24 (610)	19 (483)	8-7/8 (225)	138 (63)
	2	—	—	—	25 (635)	20 (508)	9-7/8 (251)	143 (65)
	3	—	—	—	27-3/4 (705)	22-3/4 (578)	9-7/8 (251)	150 (68)

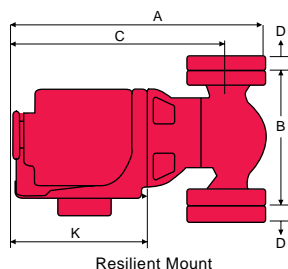
**Voltages:** 1/4 and 1/3 hp are 115 volt 1 phase. 1/2, 3/4, 1 and 1-1/2 hp are 115/230 volt 1 phase, or 208-230/460 volt or 575 volt 3 phase. 2 and 3 hp available only in 3 phase.

Pump Size	Flange size (N.P.T.)	Dimensions inches (mm)				
		B	D	E	F	H
<b>1050 1B</b>	1	11-1/2 (292)	3/4 (19)	1-3/8 (35)	3-3/4 (95)	4-1/8 (105)
<b>1050 1-1/4B</b>	1-1/4	11-1/2 (292)	7/8 (22)	1-3/8 (35)	3-3/4 (95)	4-1/8 (105)
<b>1050 1-1/2B</b>	1-1/2	11-1/2 (292)	7/8 (22)	1-3/8 (35)	3-3/4 (95)	4-1/8 (105)
<b>1050 2B</b>	2	11-1/2 (292)	7/8 (22)	1-3/8 (35)	3-3/4 (95)	4-1/8 (105)

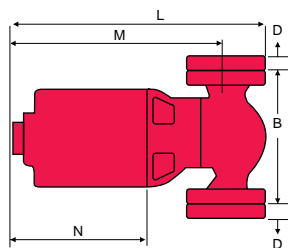
<b>1060 1-1/2D</b>	1-1/2	13-1/2 (343)	7/8 (22)	1 (25)	4-5/8 (117)	4-7/8 (124)
<b>1060 2D</b>	2	14 (356)	7/8 (22)	1 (25)	4-3/4 (121)	5-1/8 (130)
<b>1060 3D</b>	3	18 (457)	1 (25)	0 (0)	5-7/8 (149)	5 (127)

## Notes:

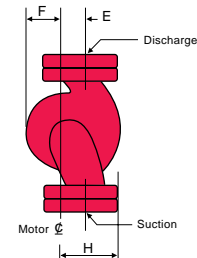
1. Dimensions given are for reference only. For exact dimensional data, contact factory.
2. Pumps are shipped for up discharge.
3. Tapped openings are provided in body for venting and draining.
4. Companion flanges furnished with pump.



Resilient Mount



Rigid Mount



**Armstrong Pumps Inc.**  
93 East Avenue  
North Tonawanda, New York  
U.S.A. 14120-6594  
Tel: (716) 693-8813  
Fax: (716) 693-8970

www.armstrongpumps.com

**Armstrong Holden Brooke Pullen**  
Wenlock Way  
Manchester  
United Kingdom, M12 5JL  
Tel: +44 (0) 1612 232223  
Fax: +44 (0) 1612 209660



**S.A. Armstrong Limited**  
23 Bertrand Avenue  
Toronto, Ontario  
Canada, M1L 2P3  
Tel: (416) 755-2291  
Fax: (416) 759-9101

**Armstrong Darling**  
9001 De L'Innovation, Suite 200  
Montreal (Anjou), Quebec  
Canada, H1J 2X9  
Tel: (514) 352-2424  
Fax: (514) 352-2425

