

ARMSTRONG



In-Line Circulators

FILE NO:	1-3
DATE:	August 2010
SUPERSEDES:	1-3
DATE:	December 2004

In-Line Circulators

Armstrong Series S & H in-line circulators are suitable for applications such as hydronics heating and cooling, domestic water systems, multi-stage zoning and general industrial service. Both models are available in a wide range of sizes to match the performance requirements of any of the above applications. Armstrong Series S & H circulators are durable and trusted products that have been used by HVAC professionals for decades.



► Design Features

The Series S & H in-line circulators are built using a standard three-piece design that features a radially-split split body, oversized shaft, centrifugal impeller, positive mechanical seal and modular construction.

► Body

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

► Oversized Shaft

Armstrong 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 duty conditions.

► Centrifugal Impeller

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

► Positive Mechanical Seal

A proven method of preventing water leakage, the well known ARMseal construction is a frequently imitated feature of the Armstrong circulator. Made from longlasting hard-wearing materials, it ensures many years of noise-free, trouble-free service.

► Modular Construction

Models S-25 through S-57 and H-32 through H-54 feature a unique Armstrong 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 Body Pump
		Bronze-Fitted Construction	
Volute		Cast Iron	Bronze
Impeller	S-25 to S-57	Non-Ferrous	Non-Ferrous
	H-32 to H-54	Non-Ferrous	Non-Ferrous
	S-69	Brass-Stamped	Brass-Stamped
	H-63 to H-68	Cast Bronze	Cast Bronze
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 Temperature		225°F (107°C)	225°F (107°C)
Maximum Working Pressure	S-25 to S-69, H-32, H-41	125 psi (862 kPa)	125 psi (862 kPa)
	H-51 to H-54, H-63 to H-68	175 psi (1207 kPa)	175 psi (1207 kPa)

Standard three phase design

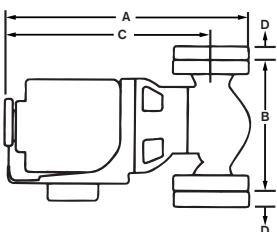
Notes:

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.

► Pump and Motor Details

Model	Flange Size (NPT)	Motor		Dimensions inches (mm)				Shipping Weight lbs (kg)	
		hp	Volts & Phase	A	B	C	D		
S-25	3/4	1/12	115 Volt 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)	
S-35	2	1/6		15 (381)	8 1/2 (216)	12 1/2 (318)	7/8 (22)	35 (16)	
S-45	2 1/2	1/4		15 3/4 (400)	10 (254)	12 1/2 (318)	1 (25)	51 (23)	
	3	1/4		15 3/4 (400)	10 (254)	12 1/2 (318)	1 (25)	51 (23)	
S-46	3	1/3		15 3/4 (400)	10 (254)	12 1/2 (318)	1 (25)	51 (23)	
S-55	3	1/2		115/230 Volt 1 phase or 208-230/460 or 575 Volt 3 phase	19 1/2 (495)	12 (305)	16 (406)	1 (25)	82 (37)
S-57	3	3/4			20 (508)	12 (305)	16 1/2 (419)	1 (25)	85 (39)
S-69	3	1	25 (635)		14 1/4 (362)	20 1/4 (514)	1 (25)	135 (61)	

Model	Flange Size (NPT)	Motor		Dimensions inches (mm)				Shipping Weight lbs (kg)
		hp	Volts & Phase	A	B	C	D	
H-32	1	1/6	115 Volt 1 phase	15 (381)	8 1/2 (216)	12 1/2 (318)	7/8 (22)	33 (15)
	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		15 (381)	8 1/2 (216)	12 1/2 (318)	7/8 (22)	33 (15)
H-41	1	1/6		15 1/4 (387)	8 1/2 (216)	12 1/2 (318)	3/4 (19)	33 (15)
H-51	1	1/4		17 1/4 (438)	11 1/2 (292)	13 1/2 (343)	3/4 (19)	54 (24)
H-52	1 1/4	1/3		17 1/4 (438)	11 1/2 (292)	13 1/2 (343)	7/8 (22)	54 (24)
H-53	1 1/2	1/2	115/230 Volt 1 phase or 208-230/460 or 575 Volt 3 phase	20 (508)	11 1/2 (292)	16 1/2 (419)	7/8 (22)	64 (29)
H-54	2	3/4		20 (508)	11 1/2 (292)	16 1/2 (419)	7/8 (22)	71 (32)
H-63	1 1/2	1/2		23 (584)	13 1/2 (343)	19 3/4 (502)	7/8 (22)	96 (44)
H-64	1 1/2	3/4		23 (584)	13 1/2 (343)	19 3/4 (502)	7/8 (22)	100 (45)
H-65	1 1/2	1		23 (584)	13 1/2 (343)	19 3/4 (502)	7/8 (22)	102 (46)
H-66	2	3/4		23 1/4 (591)	14 (356)	19 3/4 (502)	7/8 (22)	120 (54)
H-67	2	1		23 1/4 (591)	14 (356)	19 3/4 (502)	7/8 (22)	125 (57)
H-68	2	1 1/2		208-230/460 or 575 Volt 3 phase	21 3/4 (552)	14 (356)	18 1/4 (464)	7/8 (22)

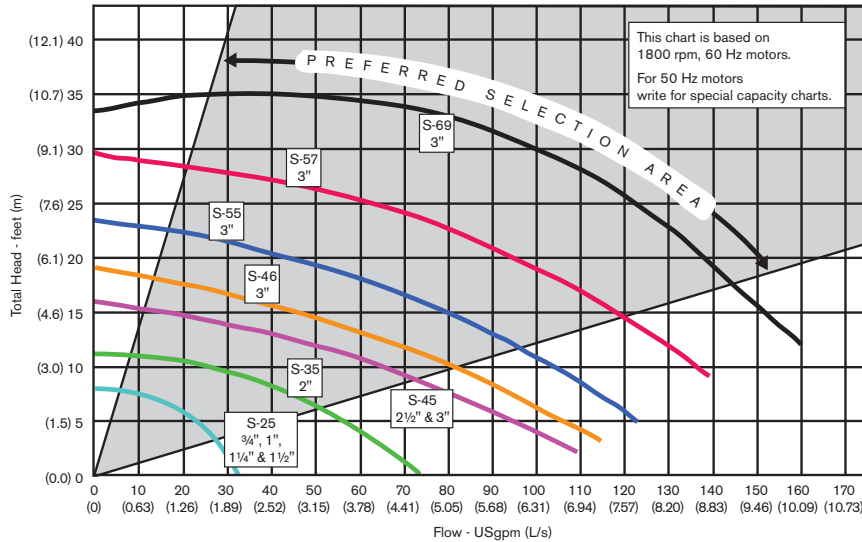


Notes:

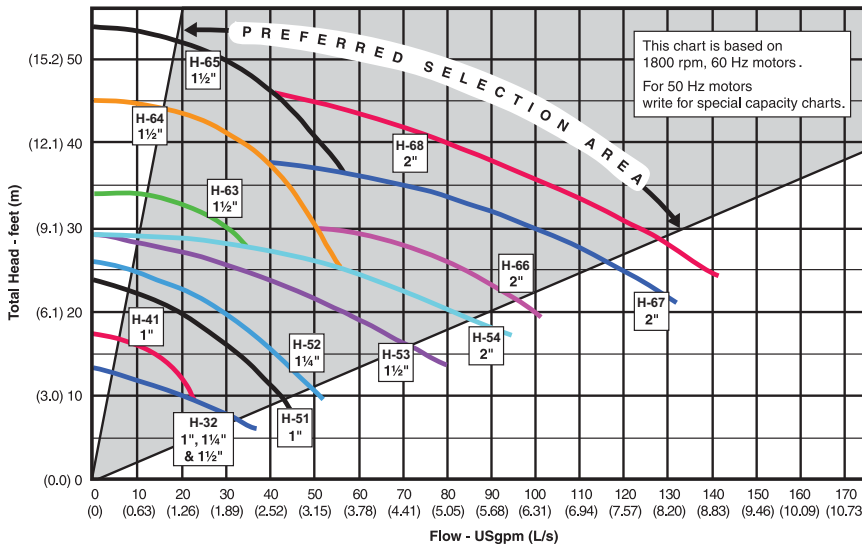
1. Dimensions given are for reference only. For exact dimensional data, contact factory.
2. All single phase motors are equipped with built-in thermal overload protection. Three phase motors require external overload protection.
3. Companion flanges not furnished as standard on S-25, S-45 and H-32.
4. Conduit box not supplied on 1/2 hp or greater
5. For other design characteristics, consult your Armstrong Representative.

► Composite Performance Charts

► Series S



► Series H



► Typical Specification

Furnish and install as shown on the plans, Armstrong Holden Brooke Pullen "S" or "H" Series Circulating Pump, designed for quiet operation and guaranteed by the manufacturer for the intended application. The pump shall have a capacity of ____ L/s, handling (state liquid and temperature) against a total head of ____ m. Pump shall be equipped with a ____ kW, ____ Volt, ____ phase, ____ Hz, 1425 rpm drip-proof mounted motor.

Pump shall be ____ construction, three-piece design featuring the Armstrong shaft and bearing module which shall fit all models S-25 through S-57 and H-32 through H-54. 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 ARMseal mechanical seal and be suitable for ____ kPa working pressure.

Our policy is one of continuous improvement and we reserve the right to alter our dimensions and specifications without notice

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