Series S & H

ARMSTRONG

NSF ≤0.25% Lead

In-Line Circulators

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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 these applications. Armstrong Series S & H circulators are durable and trusted products that have been used by HVAC professionals for decades.

Design Features

Armstrong Series S & H in-line circulators are built using a standard three-piece design that features a radially-split body, oversized shaft, centrifugal impeller, sintered silicon carbide 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

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 working 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 sintered silicon carbide construction is a frequently imitated feature of the Armstrong circulator. Made from long-lasting 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-Fitted Construction	Bronze Body Pump	LF Bronze Body Pump*
Volute		Cast Iron	Bronze	Lead free Bronze
Impeller	S-25 to S-57	Non-Ferrous		
	H-32 to H-54	Non-Ferrous		
	S-69	Brass-Stamped		
	H-63 to H-68	Cast Bronze	Cast Bronze	Cast LF Bronze
Shaft		Alloy Steel-Copper Sleeve		
Mechanical Seal Assembly		Sintered Silicon Carbide Seal		

* Certified ≤0.25 weighted average percent lead and complies with California Health and Safety Code Section 116875 (commonly known as AB1953).

Design Information

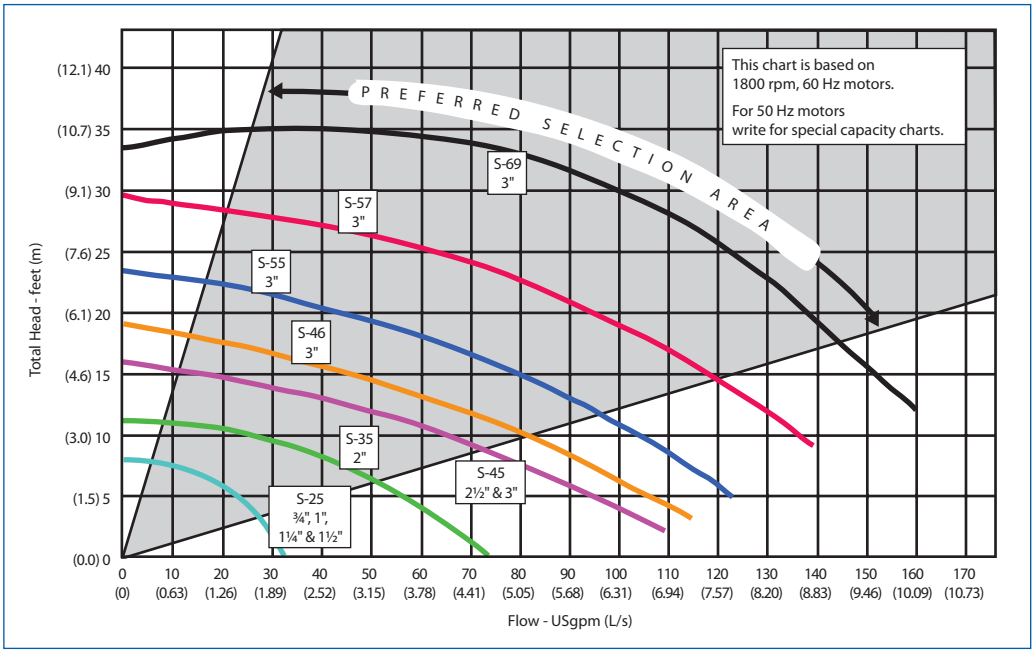
Maximum Operating Temperature		225°F (107°C)
Maximum Working Pressure	S-25 to S-69, H-32, H-41	125 psi (862 kPa)
	H-51 to H-54, H-63 to H-68	175 psi (1207 kPa)

Notes:

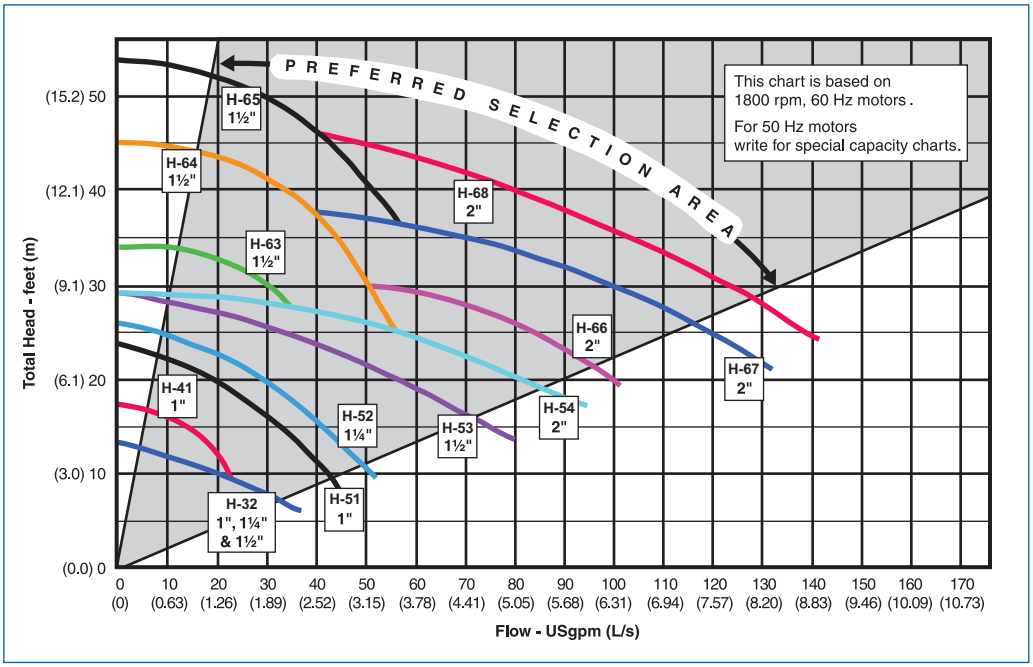
1. All circulators are to be mounted with pump and shaft in horizontal position.
2. For domestic hot water or fresh water systems, always specify bronze body pumps or lead free bronze body pumps.
3. For temperatures over 225°F (107°C) consult your Armstrong Representative.

Composite Performance Charts

Series S



Series H



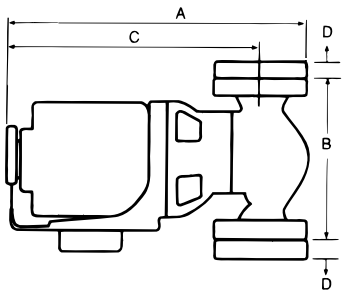
Typical Specification

Furnish and install as shown on the plans, Armstrong 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 _____ USgpm (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, 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 water-tight, long-life silicon carbide mechanical seal and be suitable for _____ psi (kPa) working pressure.

▶ Pump and Motor Data

Model	Flange Size (NPT)	Motor		Dimensions inches (mm)				Shipping Weight lbs (kg)
		hp	Volts & Phase	A	B	C	D	
S-25	¾	1/12	115 Volt 1 phase	13.75 (349)	6.50 (165)	11.50 (292)	0.75 (19)	20 (9)
	1	1/12		13.75 (349)	6.50 (165)	11.50 (292)	0.75 (19)	20 (9)
	1¼	1/12		13.75 (349)	6.50 (165)	11.50 (292)	0.88 (22)	20 (9)
	1½	1/12		13.75 (349)	6.50 (165)	11.50 (292)	0.88 (22)	20 (9)
S-35	2	⅛		15.00 (381)	8.50 (216)	12.50 (318)	0.88 (22)	35 (16)
S-45	2½	¼		15.75 (400)	10.00 (254)	12.50 (318)	1.00 (25)	51 (23)
	3	¼		15.75 (400)	10.00 (254)	12.50 (318)	1.00 (25)	51 (23)
S-46	3	⅓		15.75 (400)	10.00 (254)	12.50 (318)	1.00 (25)	51 (23)
S-55	3	½	115/230 Volt 1phase or 208-230/460 or 575 Volt 3 phase	19.50 (495)	12.00 (305)	16.00 (406)	1.00 (25)	82 (37)
S-57	3	¾		20.00 (508)	12.00 (305)	16.50 (419)	1.00 (25)	85 (39)
S-69	3	1		25.00 (635)	14.25 (362)	20.25 (514)	1.00 (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	⅙	115 Volt 1 phase	15.00 (381)	8.50 (216)	12.50 (318)	0.88 (22)	33 (15)
	1¼	⅙		15.00 (381)	8.50 (216)	12.50 (318)	0.88 (22)	33 (15)
	1½	⅙		15.00 (381)	8.50 (216)	12.50 (318)	0.88 (22)	33 (15)
H-41	1	⅙		15.25 (387)	8.50 (216)	12.50 (318)	0.75 (19)	33 (15)
H-51	1	¼		17.25 (438)	11.50 (292)	13.50 (343)	0.75 (19)	54 (24)
H-52	1¼	⅓		17.25 (438)	11.50 (292)	13.50 (343)	0.88 (22)	54 (24)
H-53	1½	½	115/230 Volt 1 phase or 208-230/460 or 575 Volt 3 phase	20.00 (508)	11.50 (292)	16.50 (419)	0.88 (22)	64 (29)
H-54	2	¾		20.00 (508)	11.50 (292)	16.50 (419)	0.88 (22)	71 (32)
H-63	1½	½		23.00 (584)	13.50 (343)	19.75 (502)	0.88 (22)	96 (44)
H-64	1½	¾		23.00 (584)	13.50 (343)	19.75 (502)	0.88 (22)	100 (45)
H-65	1½	1		23.00 (584)	13.50 (343)	19.75 (502)	0.88 (22)	102 (46)
H-66	2	¾		23.25 (591)	14.00 (356)	19.75 (502)	0.88 (22)	120 (54)
H-67	2	1		23.25 (591)	14.00 (356)	19.75 (502)	0.88 (22)	125 (57)
H-68	2	1½	208-230/460 or 575 Volt 3 phase	21.75 (552)	14.00 (356)	18¼ (464)	0.88 (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 S-25, S-45 and H-32.
4. For other design characteristics, consult your Armstrong Representative.

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