

ARMSTRONG

Series S&H



LEAFLET NO:	K2.100
DATE:	March 1998
SUPERSEDES:	K3.1
DATE:	Sept. 1995

In-Line Circulators

In-Line Circulators Series S & H

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 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.

Centrifugal Impeller

Balanced impeller of centrifugal design ensures maximum water delivery.

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

Models S-25 through S-57 and H-32 through H-54 feature the 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	Noryl	Noryl
	H-32 to H-54	Noryl	Noryl
	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

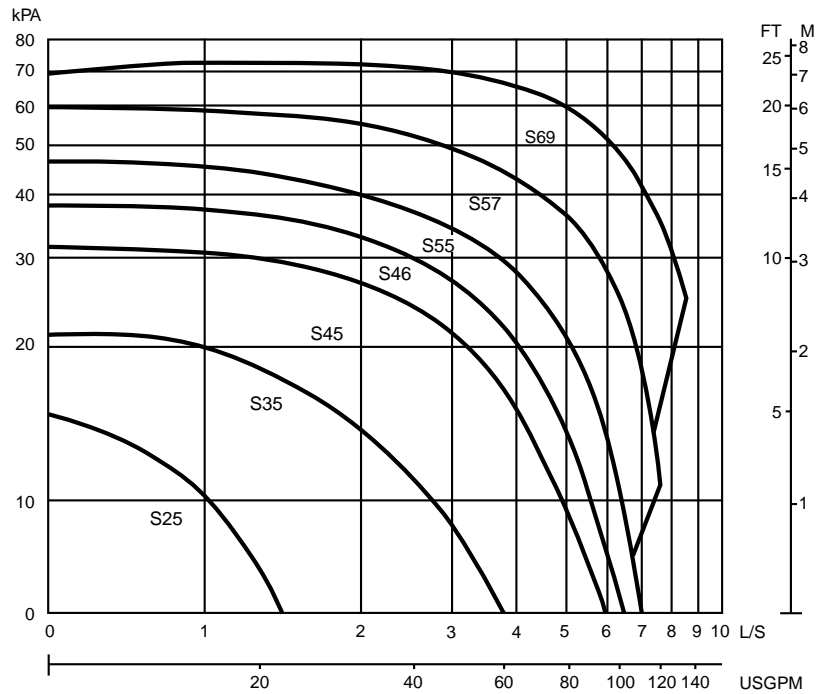
		Iron Body Pump	Bronze Body Pump
		Bronze-Fitted Construction	
Maximum Operating Temp.		107°C (225°F)	107°C (225°F)
Maximum Working Pressure	S-25 to S-69, H-32, H-41	862 kPa (125 psi)	862 kPa (125 psi)
	H-51 to H-54, H-63 to H-68	1207 kPa (175 psi)	1207 kPa (175 psi)

Notes:

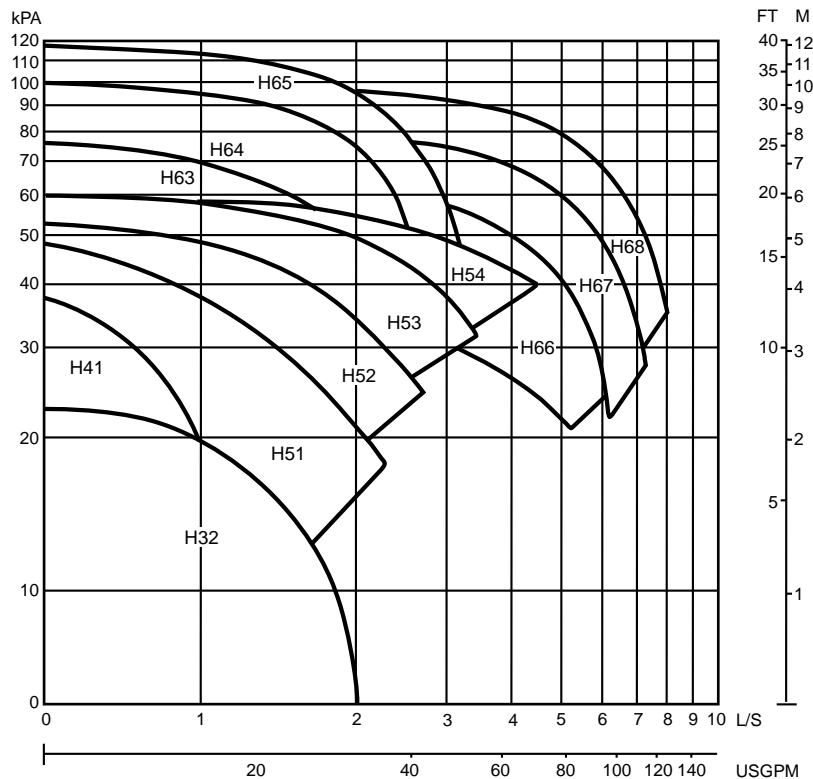
- 1) All circulators are to be mounted with pump and shaft in **horizontal** position.
- 2) For domestic hot water or fresh water systems, always specify bronze body pumps.
- 3) For temperatures over 107°C (225°F), consult your ARMSTRONG Representative.

Composite Performance Charts

Series S STANDARD PUMPS



Series H HIGH DUTY PUMPS



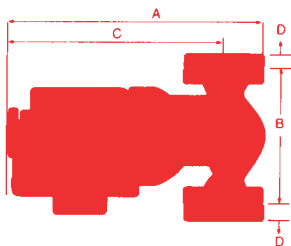
Typical Specifications

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 _____ l/s (US gpm), handling (state liquid and temperature) against a total head of ____ kPa (m) (ft). Pump shall be equipped with a ____ kW (hp), ____ volt, ____ phase, ____ hertz, 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 oil-lubricated bronze sleeve bearings. Pump to be equipped with a water-tight, long-life "ARMSEAL" mechanical seal and be suitable for _____ kPa (psi) working pressure.

Pump and Motor Data

Model	Flange Size		Motor			Dimensions inches (mm)				Shipping Weight lbs. (kg)
	BSP	NPT	hp	watts	volts & phase	A	B	C	D	
S-25	20	3/4	1/12	60	220 volt 1 phase	13-3/4 (349)	6-1/2 (165)	11-1/2 (292)	3/4 (19)	20 (9)
	25	1	1/12	60		13-3/4 (349)	6-1/2 (165)	11-1/2 (292)	3/4 (19)	20 (9)
	32	1-1/4	1/12	60		13-3/4 (349)	6-1/2 (165)	11-1/2 (292)	7/8 (22)	20 (9)
	40	1-1/2	1/12	60		13-3/4 (349)	6-1/2 (165)	11-1/2 (292)	7/8 (22)	20 (9)
S-35	50	2	1/6	120	220 volt 1 phase	15 (381)	8-1/2 (216)	12-1/2 (318)	7/8 (22)	35 (16)
S-45	65	2-1/2	1/4	180		15-3/4 (400)	10 (254)	12-1/2 (318)	1 (25)	51 (23)
	80	3	1/4	180		15-3/4 (400)	10 (254)	12-1/2 (318)	1 (25)	51 (23)
S-46	80	3	1/3	250	220 volt 1 phase or 190/380 volt 3 phase	15-3/4 (400)	10 (254)	12-1/2 (318)	1 (25)	51 (23)
S-55	80	3	1/2	370		19-1/2 (495)	12-1/8 (308)	16 (406)	1 (25)	82 (37)
S-57	80	3	3/4	550		20 (508)	12-1/8 (308)	16-1/2 (419)	1 (25)	85 (39)
S-69	80	3	1	750	25 (635)	14-1/4 (362)	20-1/4 (514)	1 (25)	135 (61)	

Model	Flange Size		Motor			Dimensions inches (mm)				Shipping Weight lbs. (kg)
	BSP	NPT	hp	watts	volts & phase	A	B	C	D	
H-32	25	1	1/6	120	220 volt 1 phase	15 (381)	8-9/16 (218)	12-1/2 (318)	7/8 (22)	33 (15)
	32	1-1/4	1/6	120		15 (381)	8-9/16 (218)	12-1/2 (318)	7/8 (22)	33 (15)
	40	1-1/2	1/6	120		15 (381)	8-9/16 (218)	12-1/2 (318)	7/8 (22)	33 (15)
H-41	25	1	1/6	120	220 volt 1 phase	15-1/4 (387)	8-5/8 (219)	12-1/2 (318)	3/4 (19)	33 (15)
H-51	25	1	1/4	180		17-1/4 (438)	11-1/2 (292)	13-1/2 (343)	3/4 (19)	54 (24)
H-52	32	1-1/4	1/3	250	220 volt 1 phase or 190/380 volt 3 phase	17-1/4 (438)	11-1/2 (292)	13-1/2 (343)	7/8 (22)	54 (24)
H-53	40	1-1/2	1/2	370		20 (508)	11-1/2 (292)	16-1/2 (419)	7/8 (22)	64 (29)
H-54	50	2	3/4	550		20 (508)	11-1/2 (292)	16-1/2 (419)	7/8 (22)	71 (32)
H-63	40	1-1/2	1/2	370		23 (584)	13-1/2 (343)	19-3/4 (502)	7/8 (22)	96 (44)
H-64	40	1-1/2	3/4	550		23 (584)	13-1/2 (343)	19-3/4 (502)	7/8 (22)	100 (45)
H-65	40	1-1/2	1	750		23 (584)	13-1/2 (343)	19-3/4 (502)	7/8 (22)	102 (46)
H-66	50	2	3/4	550		23-1/4 (591)	14 (356)	19-3/4 (502)	7/8 (22)	120 (54)
H-67	50	2	1	750		23-1/4 (591)	14 (356)	19-3/4 (502)	7/8 (22)	125 (57)
H-68	50	2	1-1/2	1120	190/380 volt 3 phase	21-3/4 (552)	14 (356)	18-1/4 (464)	7/8 (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. Conduit box not supplied on 1/2 hp or greater.
5. For other design characteristics, consult your Armstrong Representative.

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

Armstrong Pumps Limited
Peartree Road, Stanway
Colchester, Essex
United Kingdom, CO3 5JX
Tel.: 01206-579491
Fax: 01206-760532

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



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

Armstrong Darling Inc.
2200 Place Transcanadienne
Montreal, Quebec
Canada, H9P 2X5
Tel.: (514) 421-2424
Fax: (514) 421-2436

