

## SERIES S&H ECM | ECM CIRCULATORS | SUBMITTAL

File No: 10.515  
 Date: JANUARY 28, 2025  
 Supersedes: 10.515  
 Date: JUNE 30, 2022

Job: \_\_\_\_\_ Representative: \_\_\_\_\_  
 \_\_\_\_\_ Ordered by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Engineer: \_\_\_\_\_ Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Contractor: \_\_\_\_\_ Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

### PUMP DESIGN DATA

Pump model: \_\_\_\_\_ Flange size: \_\_\_\_\_  
 No. of pumps: \_\_\_\_\_ Note: \_\_\_\_\_  
 Capacity: \_\_\_\_\_ USgpm (L/s) Head: \_\_\_\_\_ ft (m)  
 Temperature: \_\_\_\_\_ °F (°C) Liquid: \_\_\_\_\_  
 Companion flanges: Included  
 All Bronze Circulators are NSF - 372 rated

### MATERIALS OF CONSTRUCTION

PART NAME	BRONZE FITTED	LEAD FREE BRONZE*
Pump Body	Cast iron	Lead free bronze

**Impeller:** Non-ferrous

- Bearings:**  Sleeve - Oil lubricated for the H-63 to 67 and S-69 \*\*  
 'Maintenance free' bearings - No lubrication for the S-25, S-35, S-45/46, H-32, H-41, H-53, H-54, S-55 and S-57 \*\*\*

**Seal:** Mechanical

**Stationary seal face:** Sintered silicon carbide

\* Contains less than 0.25% lead, weighted average.

\*\* Alloy shaft with copper sleeve.

\*\*\* Stainless steel shaft.

### CAUTION

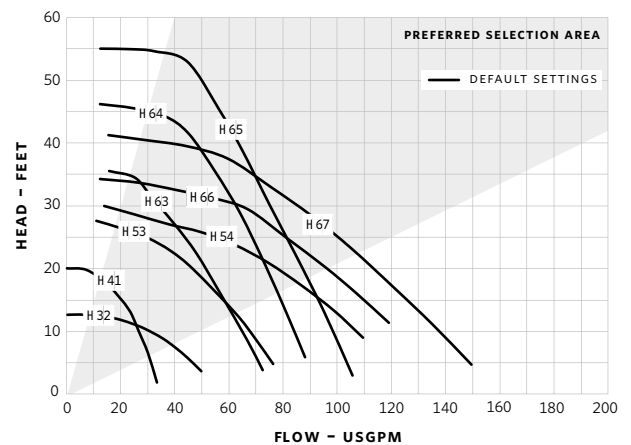
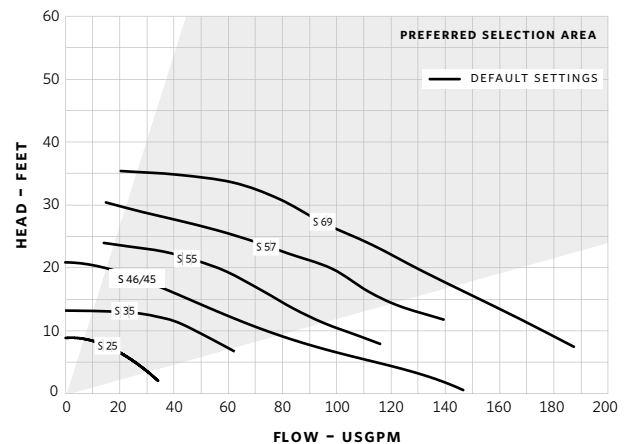


To avoid motor overheating and possible burnout, do not operate pump outside of the preferred operating range. To view these operating ranges, please see the submittals on our website, file numbers for S series 10.50 and H series 10.51.

### MAXIMUM PUMP OPERATING CONDITIONS

125 PSI at 225°F (863 kPa at 107°C)

### PERFORMANCE CURVE

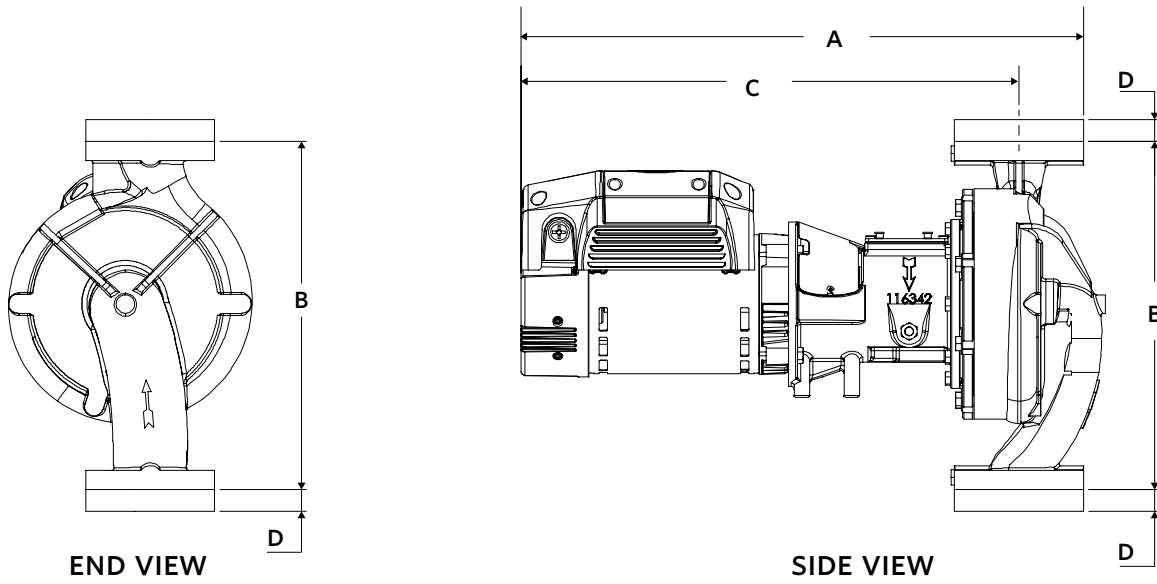


Based on 1800 RPM, 60 Hz motors.

MODEL	FLANGE SIZE (NPT)	MOTOR		DIMENSIONS inches (mm)				WEIGHT lbs (kg)
		HP	PHASE AND VOLT	A	B	C	D	
H-32 ECM	Less Flgs, see table	1/3	1 phase 115 v / 1 phase 208-230 v	16.90 (429)	8.50 (216)	19.40 (493)	-	38 (17.4)
H-41 ECM	1	1/3	1 phase 115 v / 1 phase 208-230 v	16.60 (422)	8.50 (216)	19.00 (483)	-	43 (19.5)
H-53 ECM	1,5	1/2	1 phase 115 v / 1 phase 208-230 v	20.36 (517)	11.5 (292)	16.79 (426)	0.88 (22)	59 (26.8)
H-54 ECM	2	3/4	1 phase 115 v / 1 phase 208-230 v	20.42 (519)	11.5 (292)	19.93 (50 6)	0.88 (22)	66 (30.0)
H-63 ECM	1.5	1/2	1 phase 115 v / 1 phase 208-230 v	23.12 (587)	13.5 (343)	19.93 (506)	0.88 (22)	91 (41.4)
H-64 ECM	1.5	3/4	1 phase 115 v / 1 phase 208-230 v	23.12 (587)	13.5 (343)	19.93 (506)	0.88 (22)	95 (43.2)
H-65 ECM	1.5	1	1 phase 208-230 v	23.12 (587)	13.5 (343)	19.93 (506)	0.88 (22)	100 (45.4)
H-66 ECM	2	3/4	1 phase 115 v / 1 phase 208-230 v	23.53 (598)	14.02 (356)	20.04 (509)	0.88 (22)	115 (52.3)
H-67 ECM	2	1	1 phase 208-230 v	23.53 (598)	14.02 (356)	20.04 (509)	0.88 (22)	123 (55.9)
S-25 ECM	Less Flgs, see table	1/3	1 phase 115 v / 1 phase 208-230 v	16.80 (427)	6.50 (165)	18.80 (478)	-	33 (15.1)
S-35 ECM	2	1/3	1 phase 115 v / 1 phase 208-230 v	17.10 (434)	8.50 (216)	19.50 (495)	-	43 (19.7)
S-45/46 ECM	Less Flgs, see table	1/3	1 phase 115 v / 1 phase 208-230 v	17.00 (432)	10.00 (254)	20.30 (516)	-	54 (24.5)
S-55 ECM	3	1/2	1 phase 115 v / 1 phase 208-230 v	20.24 (514)	12.00 (305)	16.93 (430)	1.00 (25)	77 (35.0)
S-57 ECM	3	3/4	1 phase 115 v / 1 phase 208-230 v	20.42 (519)	11.50 (292)	16.93 (430)	1.00 (25)	80 (36.4)
S-69 ECM	3	1	1 phase 208-230 v	24.44 (621)	14.25 (362)	19.93 (506)	1.00 (25)	113 (60.5)

## Flange

MODEL	FLANGE SIZE	CAST IRON	STAINLESS STEEL
S-25 ECM	0.75"	816013-111K	816013-621K
	1"	816012-111K	816012-621K
	1.25"	816011-111K	816011-621K
	1.5"	816009-111K	816009-621K
H-32 ECM	1"	806073-111K	816012-621K
	1.25"	804300-111K	816011-621K
	1.5"	804301-111K	816009-621K
S-45/46 ECM	2.5"	805189-111K	805189-621K
	3.0"	805188-111K	805188-621K



To make the installation faster and simpler Armstrong provides a 0-10Vdc connector cable that connects direct to the s&H ECM motor to 0-10Vdc wiring. Part # D500400-301

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