



# MARCH PUMPS

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## 809-HS 24 VDC Brushless HOT WATER PUMPS

### DESCRIPTION:

March 809 Series hot water booster centrifugal magnetic drive pumps are built to handle liquid transfer in heating and cooling operations. Contact the factory for application assistance.

### Model Abbreviations:

BR: Bronze, PL: Polysulfone, SS: Stainless Steel  
 HS: High Speed, C: Center Inlet

### INSTALLATION:

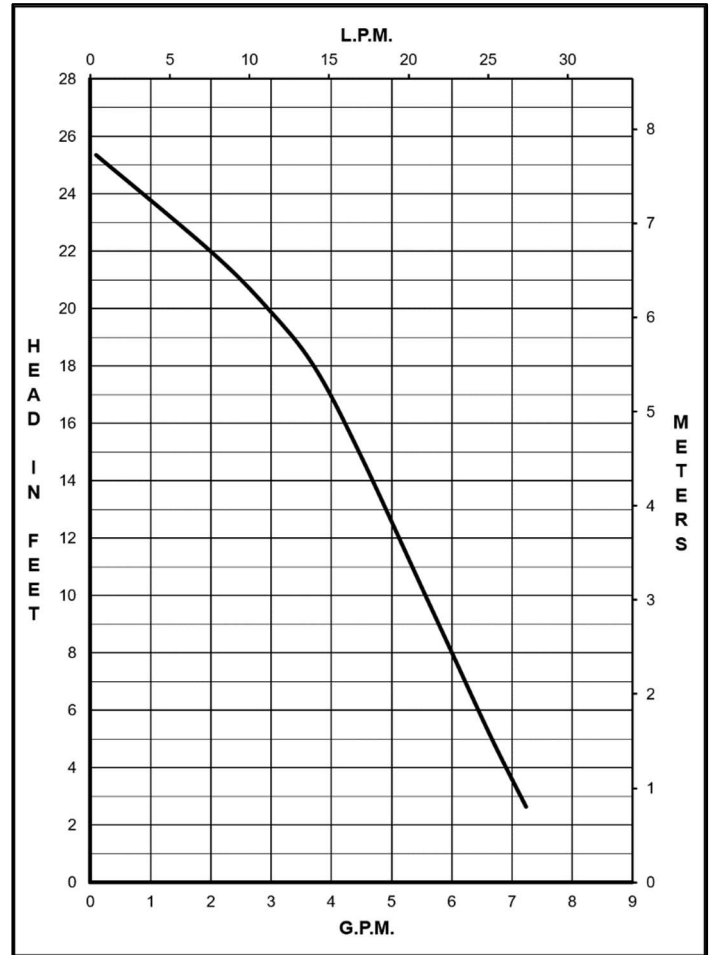
Pumps are not self-priming, lack a suction lift, and thus require a flooded suction. Pumps cannot be run dry and should be installed with the pump housing arrow pointing in the direction of flow within the system. If the arrow indicating flow is not in the direction required, remove the housing screws holding the housing to the motor bracket and rotate the housing assembly as required. Replace the screws and tighten. The pump is composed of a wet end assembly which can be separated by unscrewing the housing screws. The pump will then separate into 2 parts. The liquid will be contained within the wet end assembly unless the screws on the rear housing are loosened.

### GENERAL SAFETY INFORMATION:

Follow all local electrical and safety codes, and the Occupational Safety and Health Act (OSHA). Make certain that the power source conforms to the requirements of your equipment. Always disconnect power source before performing any work on or near the electric motor. Caution must be exercised to relieve any pressure in the system and in draining hot water from the pump or the system. March cannot recommend the 809 Series out of bronze where the liquid is used for human consumption per California Law due to the presence of lead.

### ELECTRICAL:

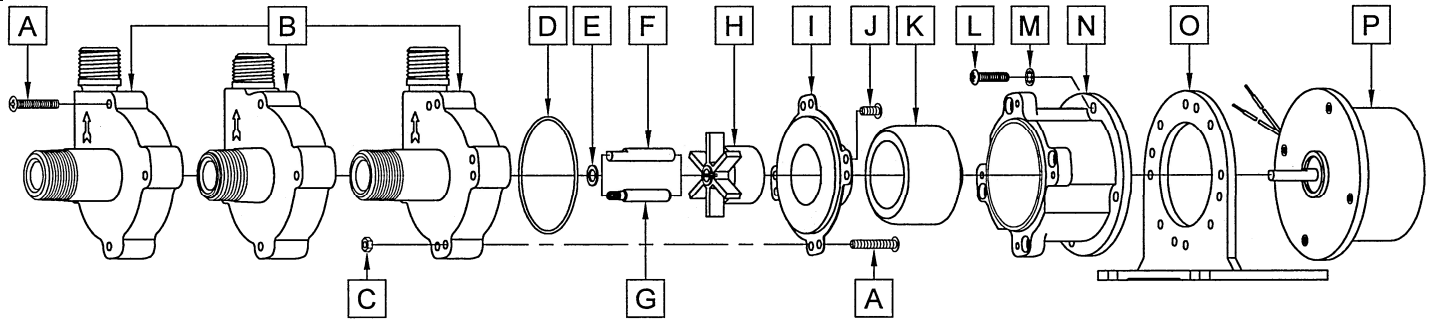
All models have a DC brushless motor. Motor has leads for electrical connection (11-1/2" Long). The red lead is positive & black lead is negative. Motor must be operated within a restricted voltage range due to motor electronics (14V to 30V).



SPECIFICATIONS																	
		809-BR-HS-C				809-PL-HS-C				809-SS-HS-C							
MODELS		809-BR-HS-C				809-PL-HS-C				809-SS-HS-C							
Product #	24 V	0809-0206-0200				0809-0180-0600				0809-0177-0600							
Inlet		3/4" MPT				3/8" FPT & 3/4" MPT				3/4" MPT							
Outlet		1/2" MPT				1/2" MPT				1/2" MPT							
Max Internal Pressure		150 psi / 1034 kPa				50 psi / 344 kPa				150 psi / 1034 kPa							
Max Liquid Temperature		250 °F / 121 °C				250 °F / 121 °C				250 °F / 121 °C							
Packed Weight		5.5 lbs / 2.5 kg				4.5 lbs / 2 kg				5.5 lbs / 2.5 kg							
MODEL	Max Flow		Max Head			ELECTRICAL						Height		Width		Length	
	gpm	lpm	ft	psi	m	V	W	A	Hp	kW	Rpm	Inches	cm	Inches	cm	Inches	cm
809-BR-HS-C	7.2	27.2	25	10.8	7.6	24	50	2.1	1/25	0.029	3800	4.69	11.9	4.50	11.4	6.54	16.6
809-PL-HS-C	7.2	27.2	25	10.8	7.6	24	50	2.1	1/25	0.029	3800	4.57	11.6	4.50	11.4	6.05	15.3
809-SS-HS-C	7.2	27.2	25	10.8	7.6	24	50	2.1	1/25	0.029	3800	4.69	11.9	4.50	11.4	6.54	16.6

All specifications & data are based on pumping water & are intended as a guideline only. Specifications may vary with different motors.

**PARTS LIST**



#	DESCRIPTION	MATERIAL	SIZE (Inches)	QTY.	809-BR-HS-C	809-PL-HS-C	809-SS-HS-C
A	Screw (Housing)	Steel	#8-32 x 1 Lg.	4	0923-0003-1000		
		Stainless		8			0809-0205-1000
B	Pump Housing	Bronze	Center Inlet	1	0809-0142-0000		
		Polysulfone		1		0809-0179-0100	
		Stainless		1			0809-0150-0010
				1			
C	Hex Nut	Stainless	#8-32	4			0991-0004-1000
D	"O" Ring	Silicone	0.070 CS x 2.441 ID	1	0809-0165-1000		0809-0165-1000
		Silicone	1/16 CS x 2-3/8 ID	1		0809-0027-1000	
E	Thrust Washer	Teflon		1		0809-0043-1000	
F	*Shaft	Stainless	"D" Flat	1		0809-0161-1000	
G	*Shaft	Stainless	Left-Hand Thread	1	0809-0214-1000		0809-0214-1000
H	Impeller	Ryton/Teflon/Glass	1-11/16 Dia.	1		0809-0005-0200	
I	Rear Housing	Stainless		1		0809-0012-1000	
J	Screw	Stainless	#8-32 x 3/8 Lg.	4	0135-0040-1000		
K	Drive Magnet		6mm Bore	1		0125-0083-0200	
L	Screw	Stainless	#8-32 x 3/4 Lg.	4		0210-0036-1000	
M	Lock Washer	Stainless	#8	4		0620-0010-1000	
N	Motor Bracket	Plastic		1		0809-0058-1000	
O	Base	Plastic		1		0125-0106-1000	
P	Motor (24 VDC Brushless) 3650 RPM			1		0125-0128-1000	

**DISASSEMBLY & REASSEMBLY**

The motor can be removed from the wet end assembly without draining the liquid from the system. To do so remove the four housing screws and slide the motor assembly away. If parts inside the wet end assembly must be removed, isolate the pump or drain the system. When the system is drained and cool, remove the four screws from the rear of the housing. The rear housing can now be removed. Remaining pump parts can be removed. Replace any worn or damaged parts. Replace the "O" ring anytime the rear housing is removed.

**LIMITED WARRANTY**

March pumps are guaranteed only against defects in workmanship or materials for a period of one year from date of manufacture pumping water. For the complete warranty and to register online go to [www.marchpump.com/warranty-registration](http://www.marchpump.com/warranty-registration)

NOTE: Contact Factory for other materials and/or parts not listed.

0809-0053-1500 R4

\*Check shaft type before ordering replacement parts.