



# MARCH PUMPS

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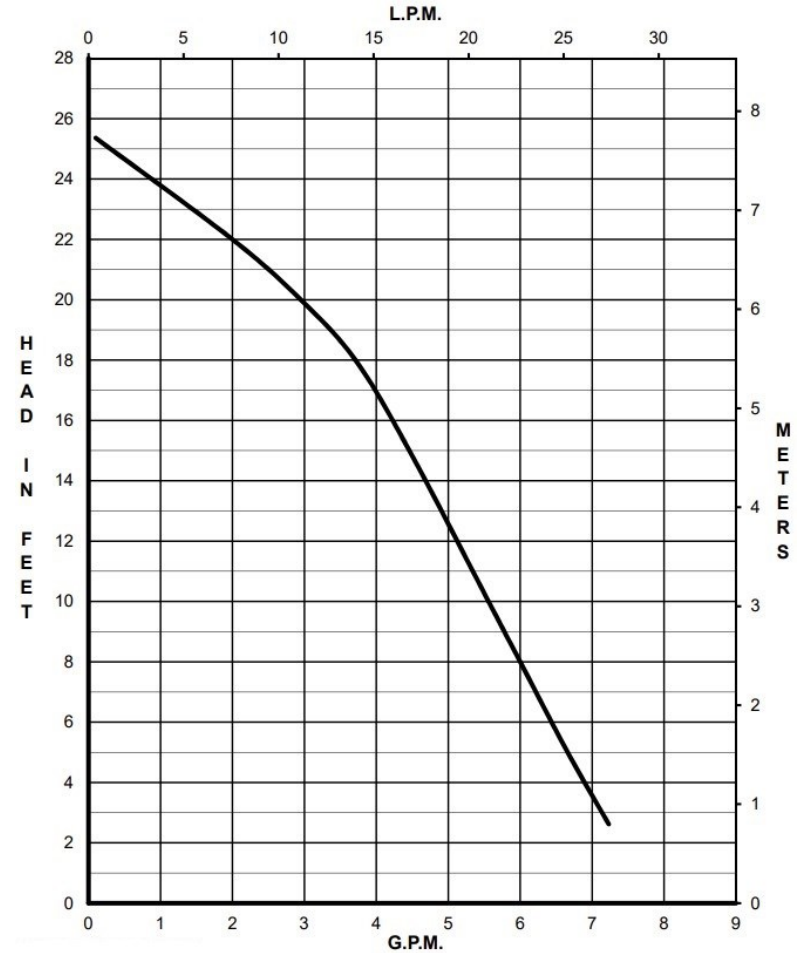
## 809 High Speed Center Inlet Brushless DC

**DESCRIPTION & OPERATION:** 809-HS-C Brushless DC 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. Pumps are not self-priming, lack a suction lift, and thus require a flooded suction. Pumps cannot be run dry.

**INSTALLATIONS:** Pumps 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 rear housing screws on the rear housing are loosened.

**GENERAL SAFETY INFORMATION:** Follow all local safety codes & 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 & in draining hot water from the pump or the system.

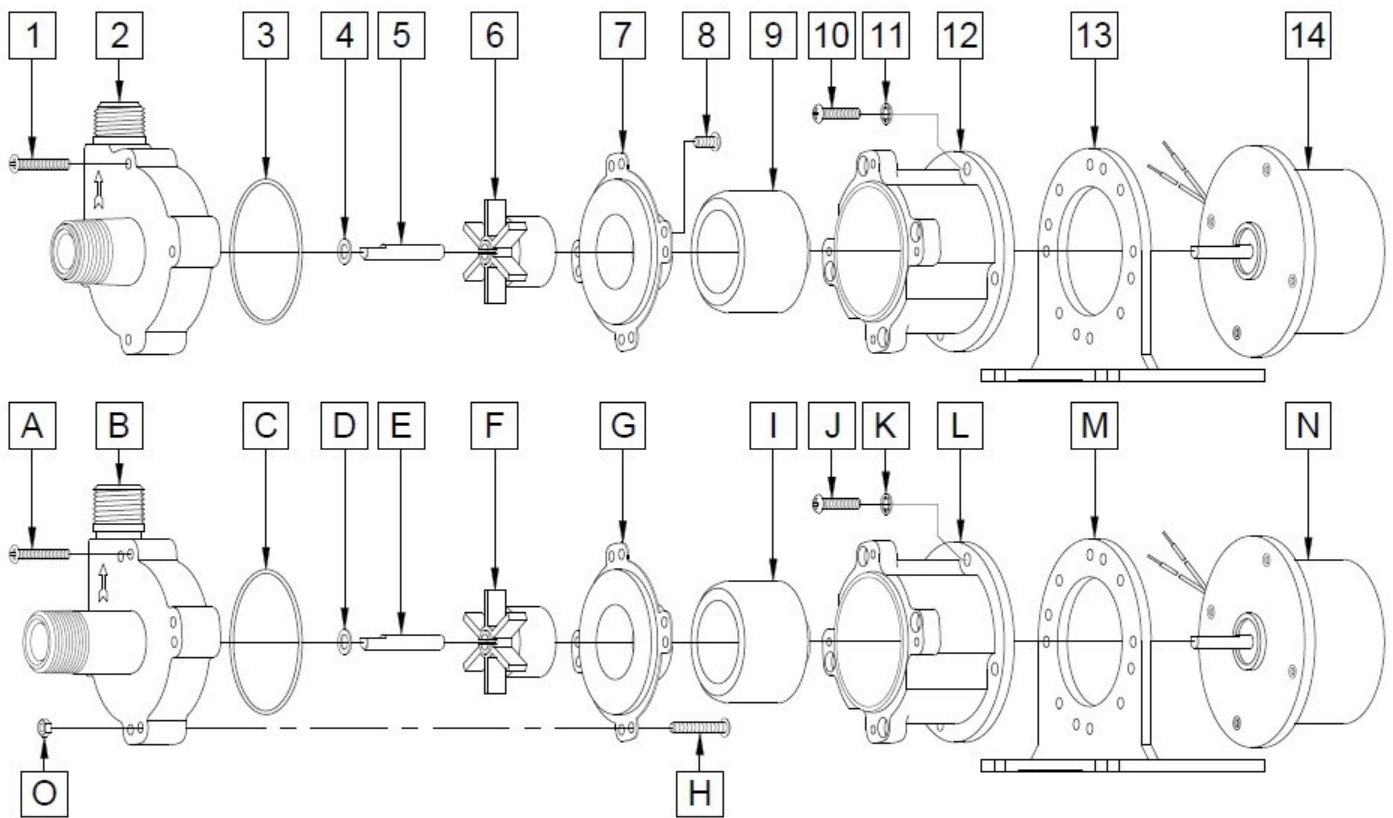
**ELECTRICAL:** All models have a DC brushless motor. Motor has leads for electrical connection (11-1/2" Long). The red lead is positive & black lead is negative. Motor must be operated within a restricted voltage range due to motor electronics (14V to 30V).



Specifications		809-PL-HS-C	809-SS-HS-C
Product	24V	0809-0180-0600	0809-0177-0600
Inlet-Outlet		3/8" FPT & 3/4" MPT-1/2" MPT	3/4" MPT-1/2" MPT
Max Internal Pressure		50PSI (344 kPa)	150PSI (1034 kPa)
Max Liquid Temperature		250F (121C)	250F (121C)

Model	Max Flow		Max Head			Electrical					Packed Weight
	GPM	LPM	FT	PSI	M	V	A	HP	kW	RPM	Pounds
809-PL-HS-C	7.5	28.3	25	10.8	7.6	24	2.1	1/25	0.03	3650	4.5
809-SS-HS-C	7.5	28.3	25	10.8	7.6	24	2.1	1/25	0.03	3650	5.5

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



809-PL-HS-C Brushless				809-SS-HS-C Brushless			
Item	Part Number	QTY REQ	Description	Item	Part Number	QTY REQ	Description
1	0923-0003-1000	4	#8-32 x 1 Lg. Screw (Steel)	A	0809-0205-1000	4	#8-32 x 1" Long Housing Screw (Stainless)
2	0809-0179-0100	1	Pump Housing (Polysulfone)	B	0809-0150-0010	1	Pump Housing (Stainless)
3	0809-0027-1000	1	1/16" CS x 2-3/8" ID "O" Ring (Silicone)	C	0809-0165-1000	1	0.070" CS x 2.441" ID "O" Ring (Silicone)
4	0809-0043-1000	1	Thrust Washer (Teflon)	D	0809-0043-1000	1	Thrust Washer (Teflon)
5	0809-0161-1000	1	"D" Flat Shaft (Stainless)	E	0809-0214-1000	1	Left Hand Thread Shaft (Stainless)
6	0809-0005-0200	1	1-11/16" Impeller (Ryton/Teflon/Glass)	F	0809-0005-0200	1	1-11/16" Impeller (Ryton/Teflon/Glass)
7	0809-0012-1000	1	Rear Housing (Stainless)	G	0809-0012-1000	1	Rear Housing (Stainless)
8	0135-0040-1000	4	#8-32 x 3/8Lg. Screw (Stainless)	J	0210-0036-1000	4	#8-32 x 3/4" Long Screw (Stainless)
9	0125-0083-0100	1	Drive Magnet (0.250 Bore)	I	0125-0083-0100	1	Drive Magnet Motor (0.250 Bore)
10	0210-0036-1000	4	#8-23 x 3/4 LG Screw (Stainless)	H	0809-0205-1000	4	#8-32 x 1" Long Rear Housing Screw (Stainless)
11	0620-0010-1000	4	#8 Washer (Stainless)	K	0620-0010-1000	4	#8 Washer (Stainless)
12	0809-0058-1000	1	Motor Bracket (Plastic)	L	0809-0058-1000	1	Motor Bracket (Plastic)
13	0125-0106-1000	1	Base (Plastic)	M	0125-0106-1000	1	Base (Plastic)
14	0125-0128-1000	1	Motor, 24V DC Brushless, 3650 RPM	N	0125-0128-1000	1	Motor, 24V DC Brushless, 3650 RPM
				O	0991-0004-1000	4	#8-32 Hex Nut (Stainless)

**DISASSEMBLY & REASSEMBLY:** The motor can be removed from the wet end assembly without draining the liquid from the system. To do so remove 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

**Materials in contact with the liquid:**

**809-PL-HS-C:** Polysulfone, Stainless Steel, Ryton/Teflon/Carbon, Silicone, Teflon  
**809-SS-HS-C:** Stainless Steel, Ryton/Teflon/Carbon, Silicone, Teflon  
 NOTE: Contact Factory for other materials and/or parts not listed.  
 Special voltage motors are available upon special order.

**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)