

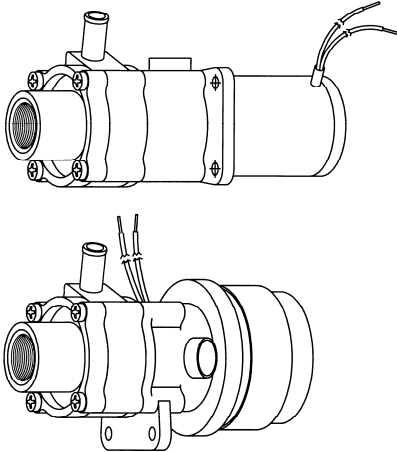


# MARCH PUMPS

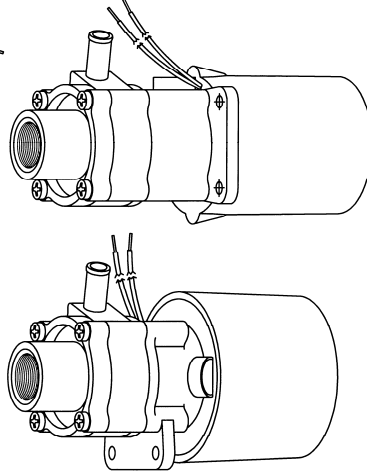
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 WWW.MARCHPUMP.COM

# 893

(893-03),(893-05)  
 NONSUBMERSIBLE  
 BRUSH MOTOR

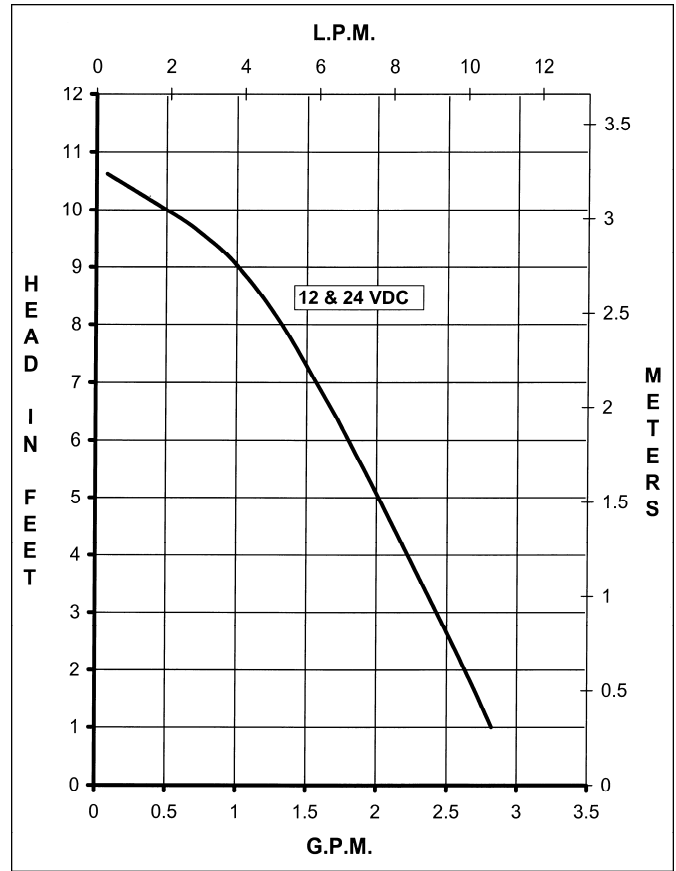


(893-04),(893-06)  
 SUBMERSIBLE  
 BRUSH MOTOR



(893-07),(893-08)  
 NONSUBMERSIBLE  
 BRUSHLESS MOTOR

(893-09),(893-10)  
 SUBMERSIBLE OR  
 NONSUBMERSIBLE  
 BRUSHLESS MOTOR



### PUMP CONSTRUCTION & SERVICING:

March "Orbital" Magnetic Drive Pumps eliminate the conventional shaft seals found in most pumps. This means that there is no rotating seal to wear and allow the liquid being pumped to leak out. All these pumps can be serviced with the use of a screwdriver. The only moving part other than the motor is the Impeller Assembly. This Impeller Assembly rotates on a stationary shaft and up against a thrust washer. This is the only part that can wear out, and may need to be replaced. See the Repair Parts List for replacement parts if necessary.

### OPERATION:

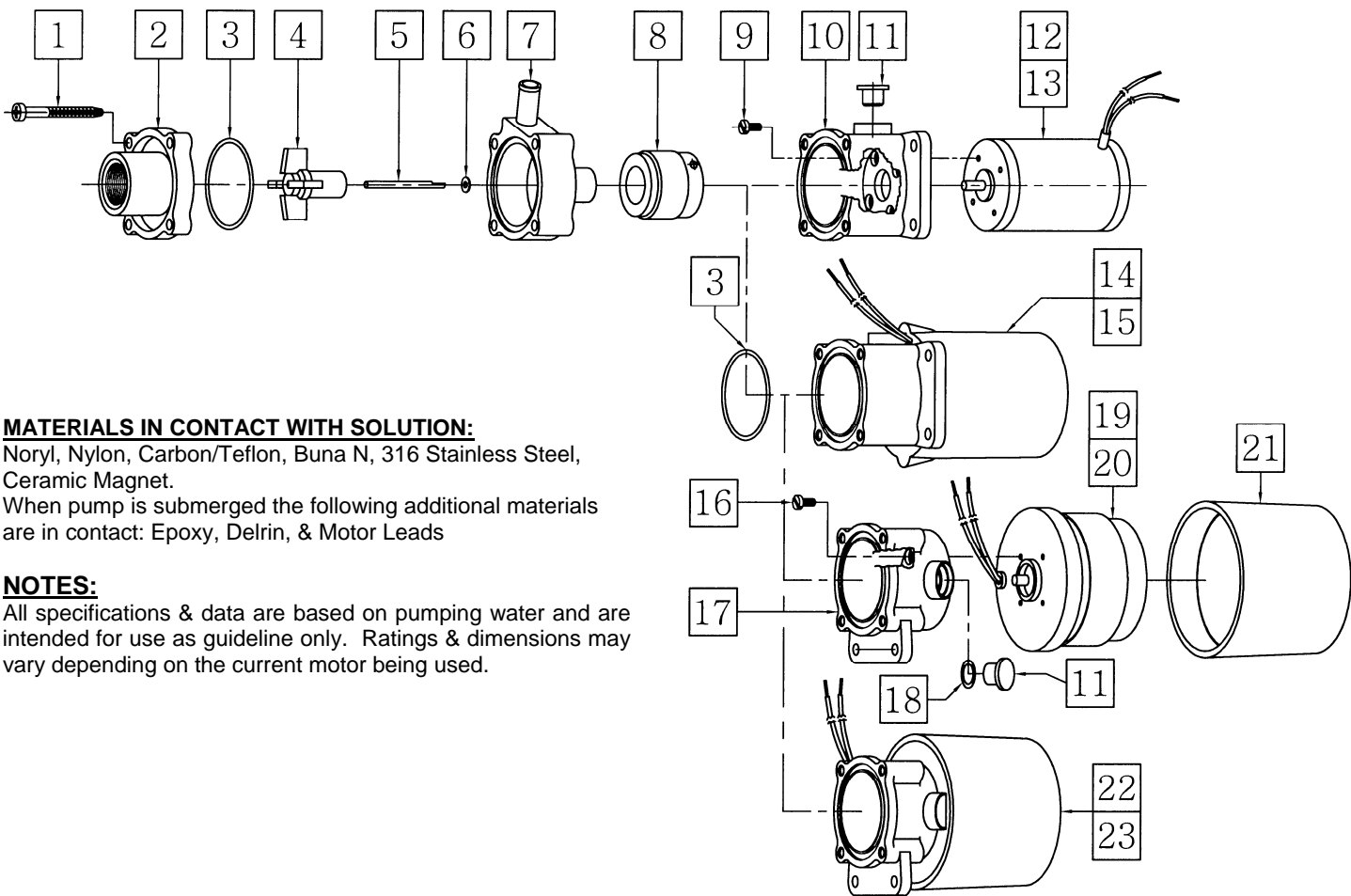
Pumps are not self priming and will not produce a suction lift and must be installed with a positive flooded suction. These pumps rely on the liquid being pumped to lubricate the Impeller Assembly spinning on the stationary shaft and, therefore, are not intended for dry running.

### ELECTRICAL:

Brushless Motors must be operated within a restricted voltage range due to the electronics in the motor.

12 V.D.C. + 2 Volts, - 5 Volts  
 24 V.D.C. + 4 Volts, - 12 Volts  
 The Red Lead is Positive.  
 The Blue Lead is Negative.

SPECIFICATIONS		893-03 (12V) 893-05 (24V)		893-04 (12V) 893-06 (24V)		893-07 (12V) 893-08 (24V)		893-09 (12V) 893-10 (24V)	
Max Flow	lpm	11		11		11		11	
	gpm	2.7		2.7		2.7		2.7	
Max Head	m	3.3		3.3		3.3		3.3	
	ft (psi)	10.6 (4.5)		10.6 (4.5)		10.6 (4.5)		10.6 (4.5)	
Inlet		3/8" FPT		3/8" FPT		3/8" FPT		3/8" FPT	
Outlet		3/8" OD		3/8" OD		3/8" OD		3/8" OD	
Max Internal Pressure	psi	50		50		50		50	
	bar	3.4		3.4		3.4		3.4	
Max Liquid Temperature	°F	190 open air		160 sub		190 open air		190 open air 130 sub	
	°C	87 open air		71 sub		87 open air		87 open air 54 sub	
Packed Weight	kg/lbs	0.45/1.0		0.54/1.2		0.45/1.0		0.54/1.2	
Motor Type		DC 12V and 24V		DC 12V and 24V		DC 12V and 24V		DC 12V and 24V	
Volts		12	24	12	24	12	24	12	24
Watts		12	12	12	12	12	12	12	12
Amps		1	0.5	1	0.5	1	0.5	1	0.5
Hp		1/150	1/150	1/150	1/150	1/150	1/150	1/150	1/150
Kw		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Rpm		4000	4000	4000	4000	4000	4000	4000	4000
Electrical Connection		leads		leads		leads		leads	
Overall Pump Dimensions (Inches)	Height	2.52	2.52	2.79	2.79	2.96	2.96	2.96	2.96
	Width	2.19	2.19	2.66	2.66	2.25	2.25	2.45	2.45
	Length	5.01	5.01	5.11	5.11	4.28	4.28	4.46	4.46
Overall Pump Dimensions (cm)	Height	6.4	6.4	7.0	7.0	7.5	7.5	7.5	7.5
	Width	5.5	5.5	6.7	6.7	5.7	5.7	6.2	6.2
	Length	12.7	12.7	12.9	12.9	10.8	10.8	11.3	11.3



**MATERIALS IN CONTACT WITH SOLUTION:**

Noryl, Nylon, Carbon/Teflon, Buna N, 316 Stainless Steel, Ceramic Magnet.

When pump is submerged the following additional materials are in contact: Epoxy, Delrin, & Motor Leads

**NOTES:**

All specifications & data are based on pumping water and are intended for use as guideline only. Ratings & dimensions may vary depending on the current motor being used.

**REPAIR PARTS LIST**

ITEM	DESCRIPTION	MATERIAL	QTY	PART #	Brush				Brushless			
					893-03	893-04	893-05	893-06	893-07	893-08	893-09	893-10
1	Screws, Self-Tapping #7-19 x 1-7/16 Lg	Stainless	4	0115-0062-1000	S	S	S	S	S	S	S	S
2	Cover	Noryl	1	0893-0004-1000	S	S	S	S	S	S	S	S
3	"O" Ring 1/16"CS x 1-5/16"ID x 1-7/16"OD	Buna N	2	0115-0018-1000	A	S	A	S	S	S	S	S
4	Impeller Assembly	Nylon/Ceramic Magnet	1	0115-0008-0100	S	S	S	S	S	S	S	S
5	Shaft	316 Stainless	1	0115-0032-1000	S	S	S	S	S	S	S	S
6	Thrust Washer (Rear)	Carbon/Teflon	1	0115-0033-1000	S	S	S	S	S	S	S	S
7	Rear Housing	Noryl	1	0893-0003-1000	S	S	S	S	S	S	S	S
8	Drive Magnet Assembly		1	0115-0101-0100	S	S	S	S	S	S	S	S
9	Screws, #4-40 x 1/4" Lg	Stainless	4	0893-0016-1000	S		S					
10	Motor Bracket		1	0893-0002-1000	S		S					
11	Plug		1	0125-0110-1000	S		S		S	S		
12	Motor (DC) 12V Brush		1	0893-0001-1000	S	S						
13	Motor (DC) 24V Brush		1	0893-0022-1000			S	S				
14	Encapsulated Assy. (DC) 12V Brush		1	0893-0019-0100	S	S						
15	Encapsulated Assy. (DC) 24V Brush		1	0893-0022-0100			S	S				
16	Screws, .118 x .5 x .236 Lg	Stainless	4	0893-0029-1000					S	S		
17	Motor Bracket		1	0893-0035-0000					S	S		
18	"O" Ring 1/16"CS x 5/16"ID x 7/16"OD		1	0210-0008-1000					S	S		
19	Motor (DC) 12V Brushless		1	0893-0026-1000					S		S	
20	Motor (DC) 24V Brushless		1	0893-0027-1000						S		S
21	Motor Cap		1	0893-0036-1000					O	O		
22	Submersible Sub Assy. (DC) 12V Brushless		n/a	n/a							S	S
23	Submersible Sub Assy. (DC) 24V Brushless		n/a	n/a							S	S

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

Legend: S = Standard, O = Optional, A = Only one required

**LIMITED WARRANTY:**

March pumps are warranted to the original user against defects in workmanship and materials under normal use with room temperature water. The brush type motors used on 03, 04, 05 & 06 have a rated brush life of 2,800 hours. They are warranted for 2,800 hours or 12 months, whichever comes first. The brushless motors used on 07, 08, 09, & 10 have a rated life of 50,000 hours and are warranted for 18 months from date of manufacture.