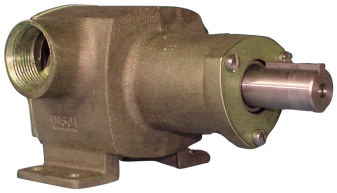
BRONZE RUBBER IMPELLER PUMP

RUBBER IMPELLER PUMPS SERIES 501



FEATURES

- Bronze Construction - Corrosion Resistance
- Machined-in Cam for Reduced Impeller Wear
- Polytetrafluoroethylene (PTFE) Barrier Seals Protecting Ball Bearings
- Mechanical Carbon Ring, Ceramic Face Main Pump Seal
- Two Sealed Ball Bearings Spaced for Maximum Load Ability
- Large Vent & Drain Openings Separate Seal & Bearing Areas
- Shaft Slinger for Additional Bearing Protection
- Neoprene (05) or Nitrile (06) Impellers
- Stainless Steel Shaft
- O-Ring Seal Between Body & Cover
- Impeller easily replaced
- Option: Flanged Engine Mount SAE ‘B’ Available

DRIVE

Either direct drive with flexible coupling or pulley drive can be used. Make sure both flexible coupling halves are properly aligned. When using pulley, do not over-tighten belt.

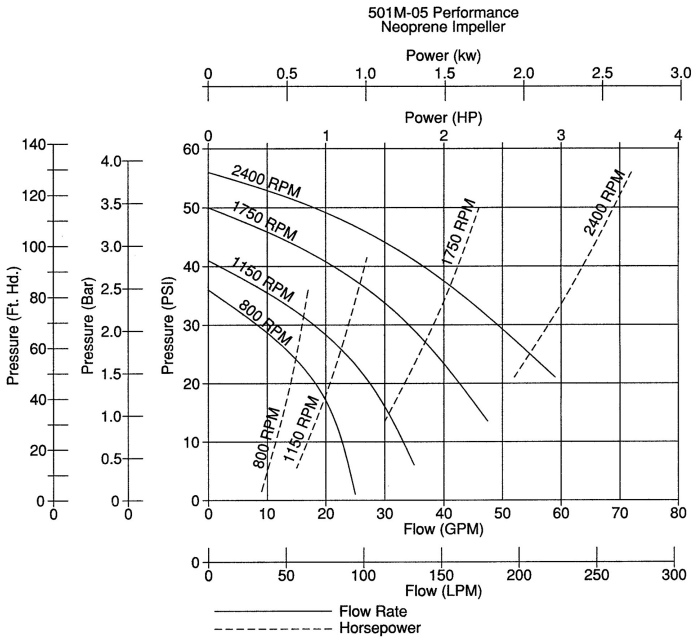
LIQUIDS AND TEMPERATURE

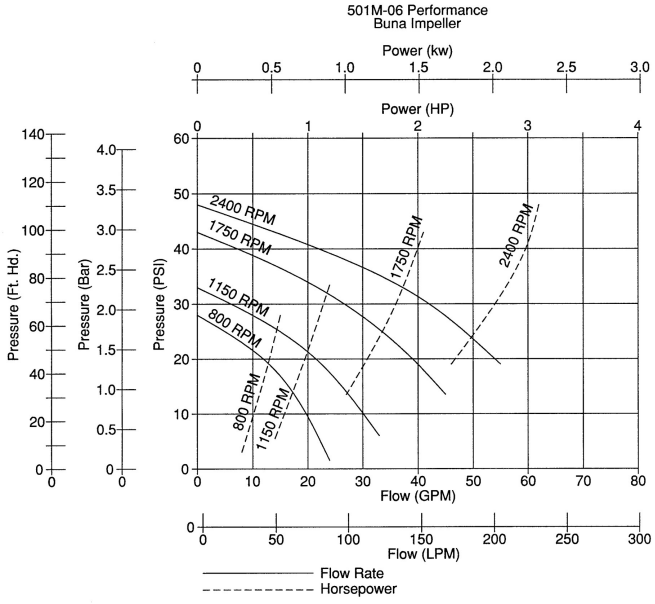
DO NOT PUMP SEVERE SOLVENTS OR ACIDS.

Liquids compatible with neoprene (05) can be pumped, including fresh and saltwater solutions and mild chemicals. Nitrile (06) impellers can handle oil-contaminated water. When possible, flush pump with fresh water after each usage.

Extremes of cold and heat will affect impeller life. Limits of 40o to 180o F should be observed. Do not allow liquid in pump to freeze. Drain pump by loosening cover screws and use methyl alcohol based anti-freeze compounds such as Zerex®, Shell Zone®, Pyro Permanent®, Permagard®, or Dowgard®.

PERFORMANCE

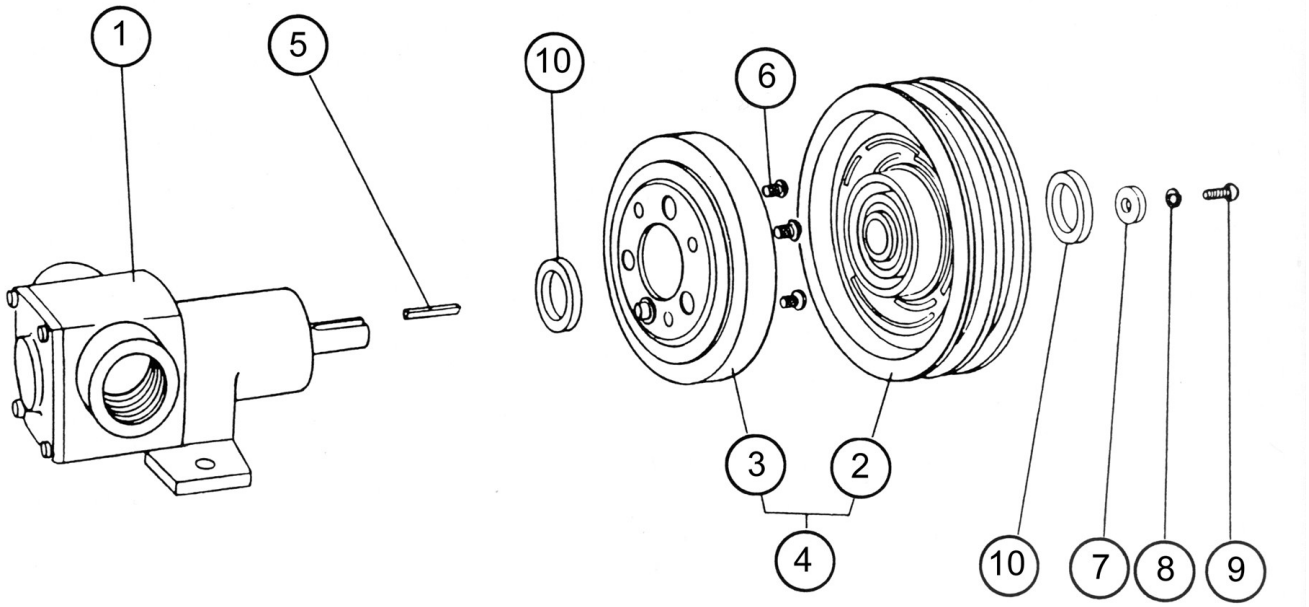




SUCTION LIFT

Suction lift of 15 feet is possible when impeller is wet. Suction lines must be air tight in order for pump to self-prime. A foot valve at the beginning of the suction line is recommended.

EXPLODED VIEW AND PARTS LIST

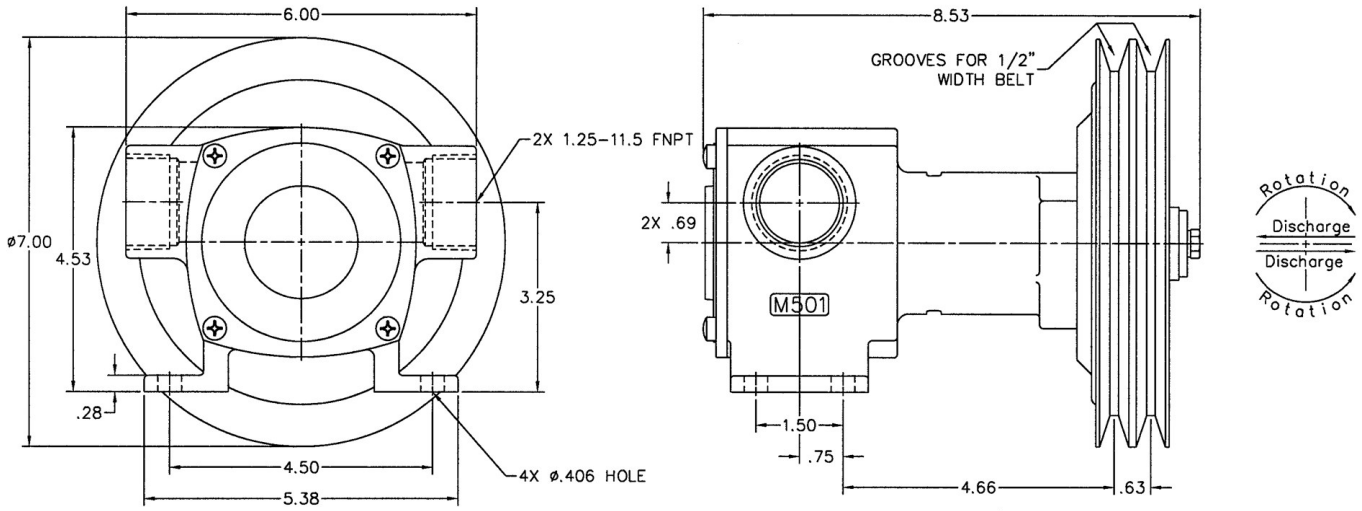


Pump No	Configuration	1 Screw 7 or 4 Req'd	2 Cover 1 Req'd	3* O-ring 1 Req'd	4* Impeller 1 Req'd	5 Body 1 Req'd	6 Set Screw 1 or 4 Req'd	7 Lip Seal 1 Req'd	8 Ball Bearing 2 Req'd	9 Ret. Ring 2 Req'd	10* Seal Assy 1 Req'd	11 Shaft 1 Req'd	12 Key 1 Req'd	13 End Plate or Flange 1 Req'd	14 Lip Seal 1 Req'd	15 Flange O-ring 1 Req'd	16 Flange Gasket 1 Req'd	Repair Kit *
501M-05	Pedestal / Neoprene	5504	6717	8232	7054	9932	6436	6710	6332	6559	32953	9930	6342	6713	---------- -	-------	-------	10706
501M-06	Pedestal / Buna	5504	6717	8232	7593	9932	6436	6710	6332	6559	32953	9930	6342	6713	---------- -	-------	-------	11672
501-07	SAE B / Neoprene	5504	6717	8232	7054	9932-1	6436	6710	6332	6559	32953	9930-1	--------	2396	7262	2395-044	2397	10706

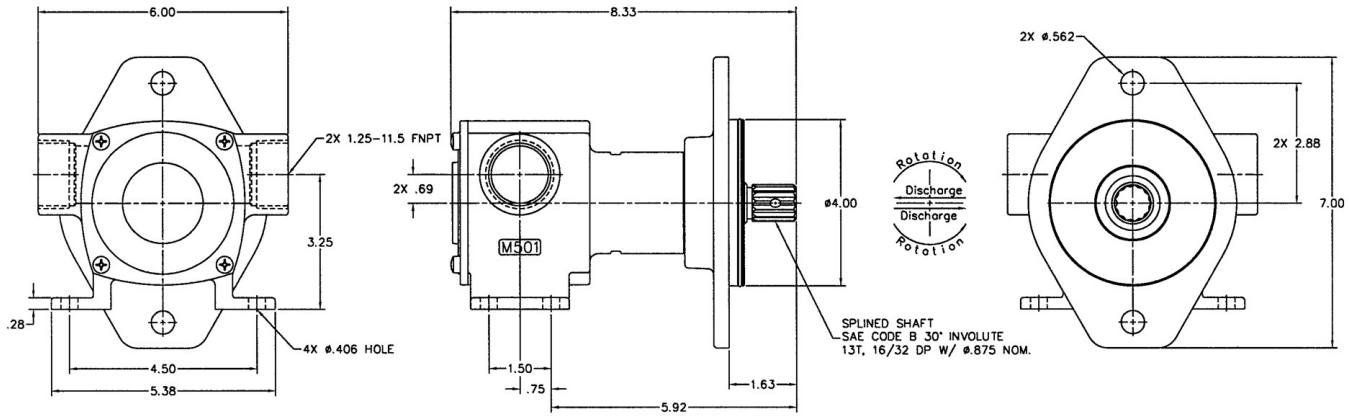
* Repair Kit includes these items

Pump No.	1** Pump 1 Reqd	2 Clutch Body 1 Reqd	3 Coil 1 Reqd	4* Clutch Assy 1 Reqd	5 Key 1 Reqd	6 Screw 3 Reqd	7 Washer 1 Reqd	8 Lock Washer 1 Reqd	9 Screw 1 Reqd	10 Spacer 2 Reqd	Clutch Kit #
501-05E12	501M-05	7227	7224	32238	6711	6437	6663	5016	7735	6715	10717
501-05E24	501M-05	7227	9902	33066	6711	6437	6663	5016	7735	6715	10853
501-05E32	501M-05	7227	7225	32239	6711	6437	6663	5016	7735	6715	10856
501-06E12	501M-06	7227	7224	32238	6711	6437	6663	5016	7735	6715	10717
501-06E32	501M-06	7227	7225	32239	6711	6437	6663	5016	7735	6715	10856

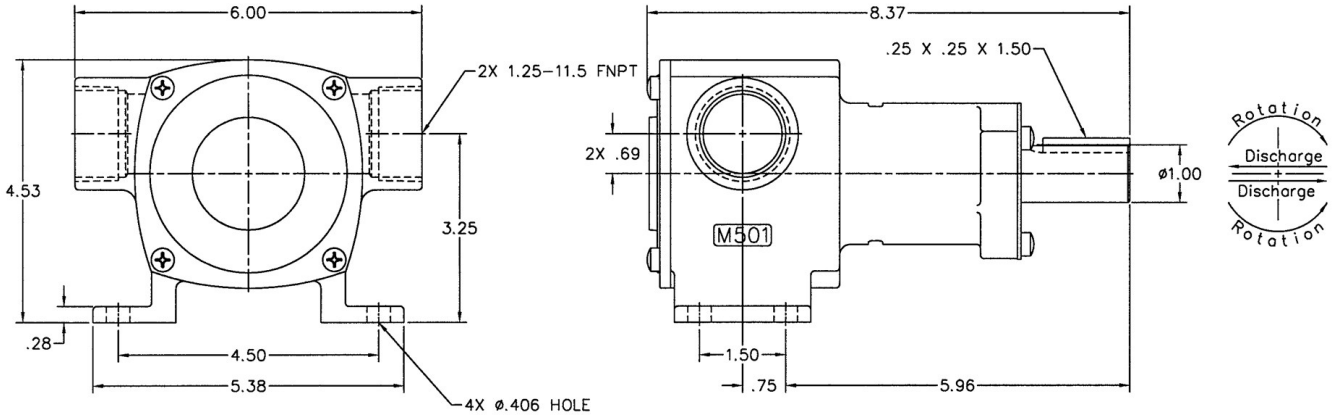
DIMENSIONS



DIMENSIONS
501M-05 & 501M-06
w/ ELECTRIC CLUTCH



DIMENSIONS
501-07



DIMENSIONS
501M–05 & 501M–06

INSTALLING ELECTRIC CLUTCH PARTS

1. Remove bearing end plate as shown in photograph.
2. Slide spacer ring (item 10) onto pump shaft against bearing.
3. Attach electric coil portion of clutch (item 3) to pump body using three screws item 6 previously removed.
4. Insert shaft key (item 5) into shaft key slot.
5. Slide pulley portion of electric clutch (item 2) onto pump shaft engaging the shaft key.
6. Slide spacer ring (item 10) onto pump shaft.
7. Install washer (item 7).
8. Install lock washer (item 8).
9. Install screw (item 9).

ADDITIONAL

501M Performance at Elevated Speed

Speed		Feet Hd.		34.8	40	60	80
RPM		PSI		15.1*	17.3	26	34.6
2400	GPM			62.5	60.5	52.2	44.2
	HP			2.4	2.5	2.8	3.2

Speed		Feet Hd.	32.5		40	60	80
RPM		PSI	14.1 *		17.3	26	34.6
3000	GPM		57.6		57.7	57.2	56
	HP		3.3		3.5	3.9	4.2

Notes: * Wide Open maximum flow condition possible under testing conditions

Test conditions: flooded suction from elevated water tank (+4.2 psi)

Pump No.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S
501M	1 1/4	5 3/8	4 1/2	9/32	4 9/16	6	3 1/4	8 17/32	1	2 9/16	1 7/8	6	6 3/4	3/4	13/32	1/4 x 1/4 x 1 1/2	1 1/2

Pump Model	RPM	Feet Hd.	0	20	40	60	80
		PSI	**0**	**8.7**	**17.3**	**26.0**	**34.6**
501M	800	GPM	28.0	26.0	22.0	16.0	10.0
		HP	3/4	3/4	3/4	1	1
	1150	GPM	38.0	36.0	30.0	25.0	13.0
		HP	3/4	3/4	1	1 1/2	1 1/2
	1750	GPM	58.0	55.0	49.0	41.0	32.0
		HP	1 1/2	1 1/2	1 1/2	2	3

GPM = Gallons per minute

RPM = Revolutions per minute

PSI = Pounds per square in pressure

Feet Hd.= Feet head pressure

HP = Horsepower