

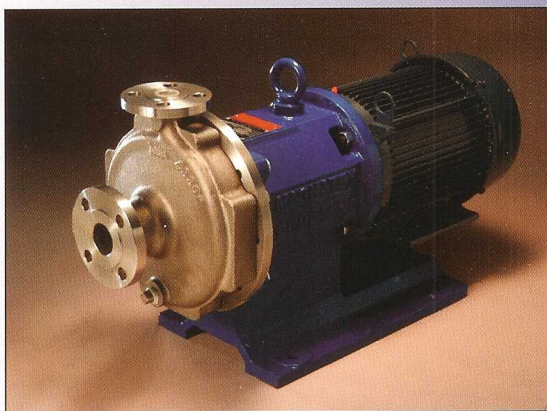
MPL/MP Series

MPL/MP Series Magnetically Driven, Seal-less, Close-Coupled Centrifugal Pumps

Compact Magnatex MPL/MP Series pumps are the efficient and dependable choice for medium flow, medium to high head applications. Rare earth Neodymium magnets make the difference: synchronous drive with no slippage and less internal heat than other magnetic drive pumps for cooler running and longer life. And the attraction doesn't end there. With 13 models to choose from in 316 SS, Alloy 20 or Hastelloy C construction, there's an MPL/MP Series pump to meet exacting application requirements.

Magnatex MPL/MP Series pumps offer outstanding features for unbeatable performance:

- Sturdy straddle-mounted, double-bearing design reduces shaft load and bearing wear compared to typical cantilevered, over-hung designs
- Slip fit construction allows easy maintenance and on-site repairs
- Larger internal flow path handles solids: 1% at 500 micron; 8% at 100 micron
- Close-coupled configuration eliminates alignment of coupling and motor
- Provides hydraulic operation closer to BEP for low flow applications

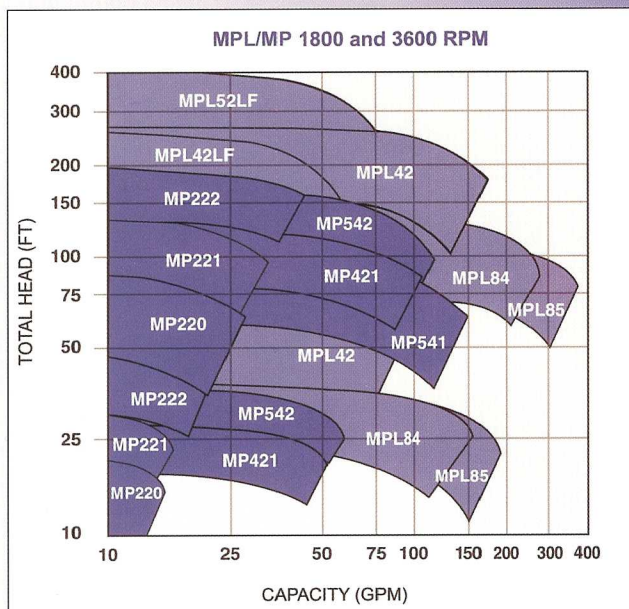


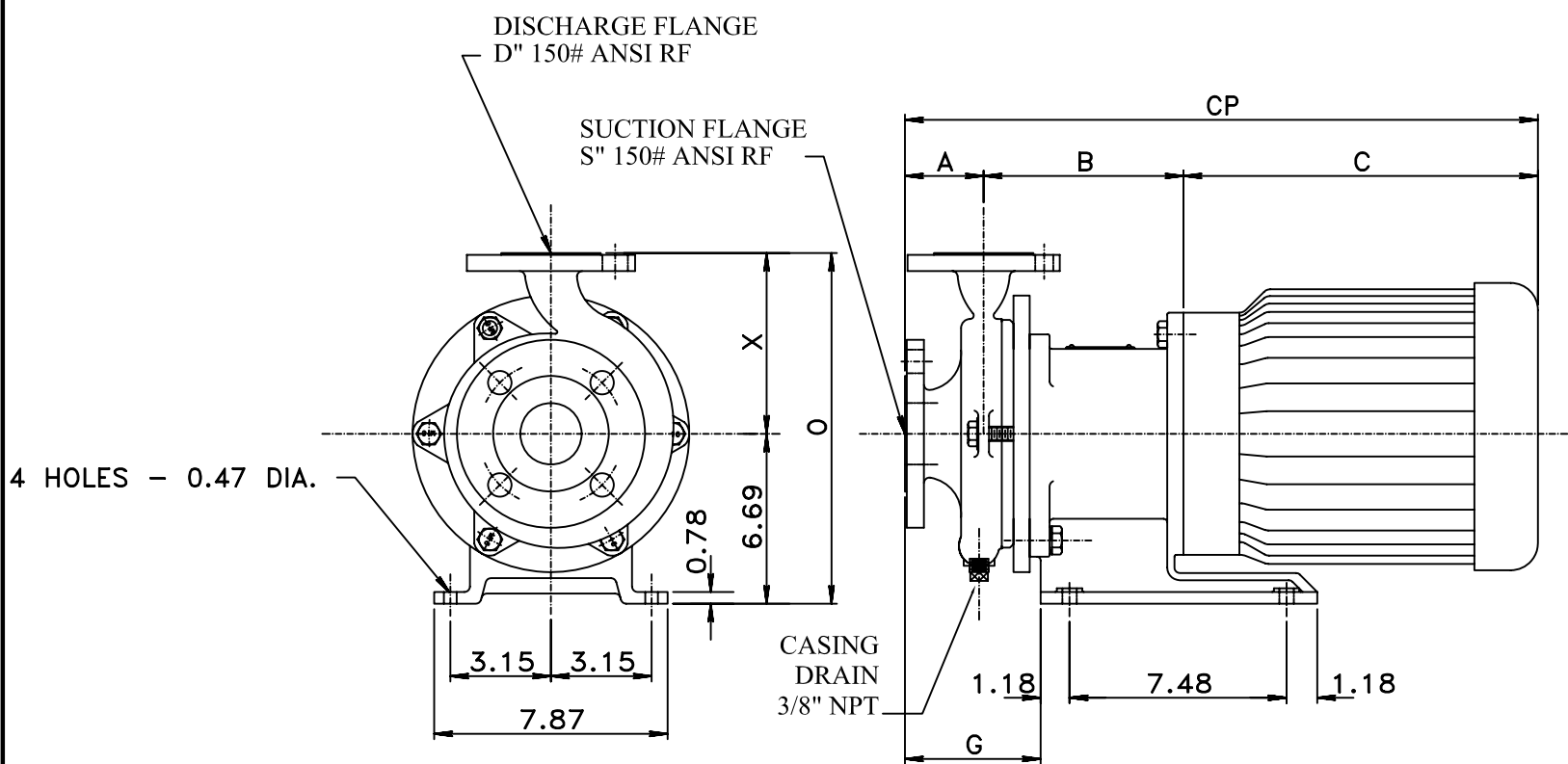
- Pricing comparable to mechanical sealed pumps
- Product-lubricated Silicon Carbide bearings don't require maintenance or additional lubrication
- No expensive mechanical seals: eliminates costly shutdowns and pump repairs
- Handles toxic, noxious and corrosive liquids for leak-free pumping with increased safety to plant personnel and the environment
- MPL Series - process side conforms to ANSI B73.3 dimensions
- MP Series sub-ANSI sizes for efficient lower flow applications

“A very narrow range of pumpable temperatures for 55% formaldehyde was a big headache for one of the midwest's largest chemical plants. Too hot and unwanted formic acid was formed; too cold and formalin precipitated out. Either way, the mechanical seals on existing pumps fell victim and noxious, dangerous odors were emitted from the pumps. Finally, Magnatex MP pumps solved the problem through uniform-temperature pumping and no leak path for fumes.”

MPL/MP Specifications


Maximum Flow	340 GPM
Maximum Head	400 FT
Temperature	-100° to 300° F
Maximum Power	20 HP
Working Pressure	225/150 PSIG
Materials of Construction	316 SS, Alloy 20, Titanium, Hastelloy C
Connections	150 LB RF
Bearings	Silicon Carbide
Impeller	Enlosed
Speeds	1800/3600 RPM
Magnets	Neodymium
Motor	“C” Face





MODEL	MOTOR FRAME	S	D	CP	O	A	X	G	B	C	PUMP WEIGHT (LBS.)
MP220	56C	1	3/4	19.74	11.42	2.36	4.72	4.33	6.85	10.53	55
	143TC			21.34						12.13	
	145TC			21.34						12.13	
MP221	143TC	1	3/4	21.34	11.81	2.56	5.12	4.33	6.65	12.13	55
	145TC			21.34					12.13		
	182TC			24.23					14.31	62	
	184TC			24.23					14.31		
MP222	143TC	1	3/4	21.54	12.20	2.56	5.51	4.33	6.85	12.13	60
	145TC			21.54					12.13		
	182TC			24.23					14.31	68	
	184TC			24.23					14.31		
MP420	143TC	1 1/2	1	21.93	12.01	2.95	5.32	4.92	6.85	12.13	62
MP421	145TC			21.93					12.13		
	182TC			24.82					14.31	70	
	184TC			24.82					14.31		
MP541	182TC	2	1 1/2	25.02	12.20	3.15	5.51	5.12	7.56	14.31	73
	184TC			25.02					14.31		
MP542	182TC	2	1 1/2	24.23	12.60	2.56	5.91	4.33	7.36	14.31	79
	184TC			24.23					14.31		

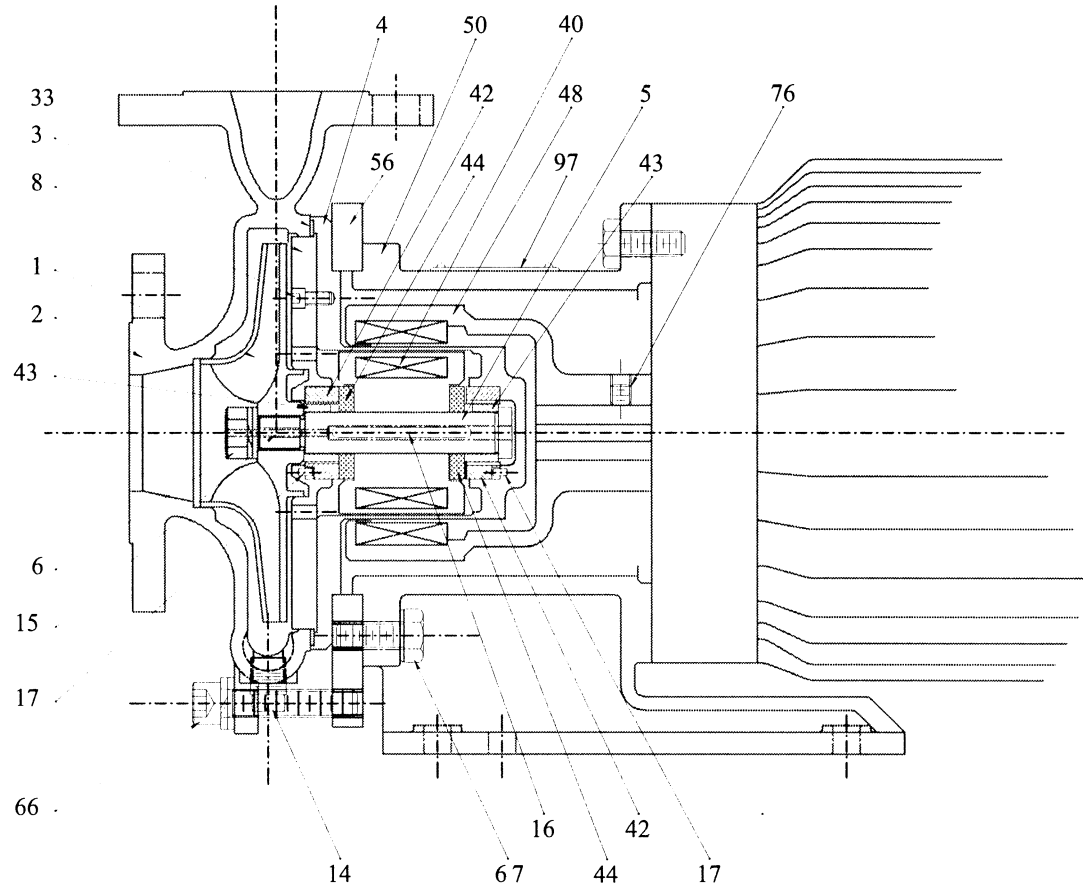
ALL DIMENSIONS ARE IN INCHES.
ALL DIMENSIONS ARE +/- 0.13".


REVISIONS				
NO.	DATE			
1		OUTLINE DIMENSIONS MP SERIES CLOSE-COUPLED PUMPS		
2				
3		DRAWN: J. CARTER	DATE: 3-21-03	REV.
4		MP SERIES		DD-4100
5				

RECOMMENDED TIGHTENING TORQUE

BOLT SIZE (mm)	FORCE (ft./lb.)
5	2.1
8	5.8
10	17.7

ITEM	DESCRIPTION	QTY	SPARE NO. REQD.	REMARKS
97	NAMEPLATE	1		304SS
76	OUTER MAGNET SET SCREW	1		STEEL (M8)
67	HEX HEAD CAPSCREW	4		304SS (M10)
66	CASING HEX SOCKET HEAD CAPSCREW	6		304SS (M10)
56	ADAPTER FLANGE	1		304SS
50	FRAME ADAPTER	1		C. I.
48	OUTER MAGNET	1		STEEL/Nd
44	THRUST RING	2	2	SiC
43	SLEEVE	2	2	SiC
42	BUSHING	2	2	SiC
40	INNER MAGNET	1		316SS/Nd
33	CASING GASKET	1	1	PTFE
17	BUSHING PIN	2		316SS
16	INNER MAGNET KEY	1		316SS
15	IMPELLER KEY	1		316SS
14	CASING DRAIN PLUG	1		316SS
8	HEX SOCKET HEAD CAPSCREW	4		316SS (M5)
6	IMPELLER NUT	1		316SS
5	INNER MAGNET SHAFT WITH KEYS	1		316SS
4	REAR CASING	1		316SS
3	CASING COVER	1		316SS
2	CASING	1		316SS
1	IMPELLER	1		316SS



REVISIONS							
NO.	DATE						
1		SECTIONAL DRAWING MP SERIES CLOSE-COUPLED PUMPS					
2							
3					DRAWN BY: J. W. CARTER	DATE: 9-09-02	REV.
4					MP SERIES		SD-4110
5							