

TYPE MPCP

SEALLESS

VERTICAL IN-LINE, STAINLESS STEEL MAGNET DRIVE PUMPS

Motor output :

0.4kW to 5.5kW

- ▶ **Space saving vertical construction.**
- ▶ **304SS and 316SS** provide excellent corrosion resistance.
- ▶ Leak free (sealless) magnet drive construction.
- ▶ **Eliminates expensive foundations, base plates and grouting.**
- ▶ **Easy to install and remove** if necessary.
- ▶ **SiC-D bearings withstand accidental dry-run on start up.** (MPCP25, 250~502 only)
- ▶ Design provides easy assembly and disassembly.



TYPE MPCP25

400W

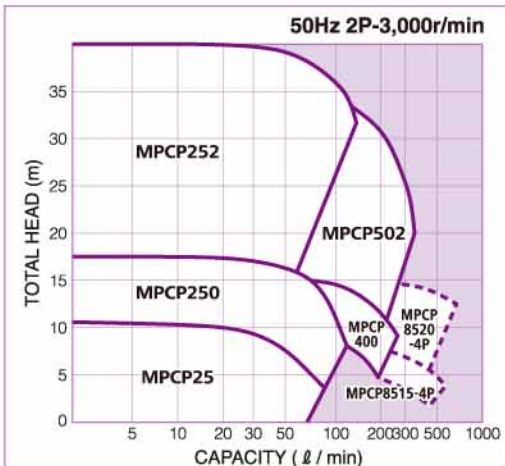
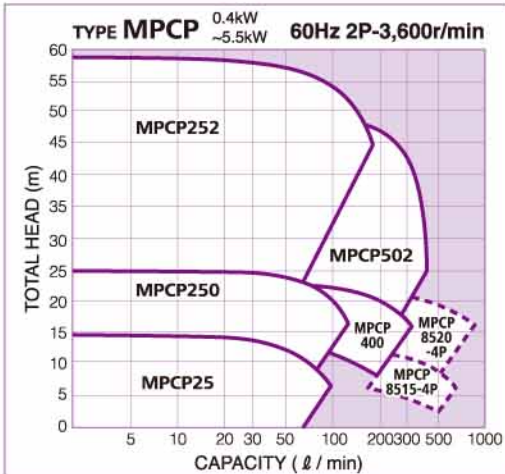


TYPE MPCP250~502

0.75kW~5.5kW

(Note) Pump stand is option.

Selection charts



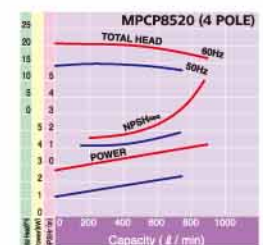
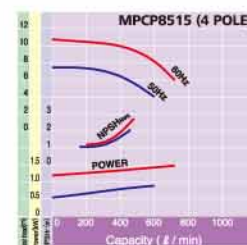
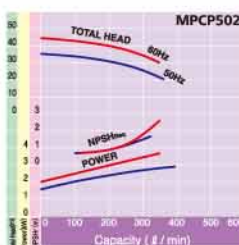
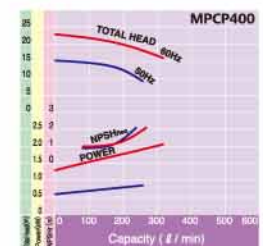
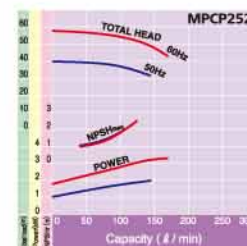
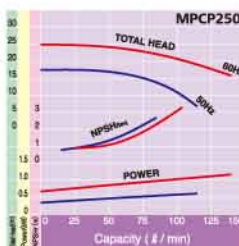
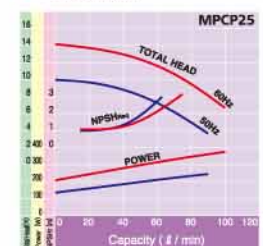
Specifications

	MPCP25		MPCP250~502		MPCP8515,8520	
Frequency	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Max. total head	9m	13m	36m	55m	14m	20m
Max. capacity	90 l/min	100 l/min	350 l/min	350 l/min	700 l/min	900 l/min
Max. temperature applicable	150°C					
Min. temperature applicable	-30°C					
Max. liquid specific gravity	2					
Max. liquid viscosity	100mPa·s(cP)		300mPa·s(cP)			
Design pressure	0.6MPaG		1.0MPaG		1.2MPaG	
Bore (suction x discharge)	25x25mm		25x25~50x50mm		80x50mm	
Flange standard	JIS 10K RF / ASME 150LB RF					
Type of impeller	Closed type					
Motor output rating	400W		0.75~3.7kW(2P)		2.2~5.5kW(4P)	
Pump material	SCS13(SUS304),SCS14(SUS316)					
Liquid-immersed bearings	SiC-D				SiC	

Performance curves

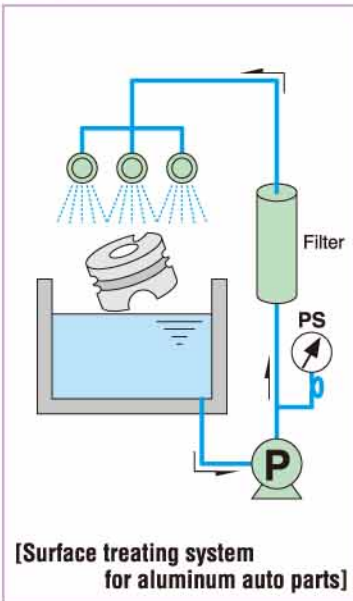
(60Hz 2P-3,600r/min, 50Hz 2P-3,000r/min)

— : Total Head(m) — : Power(kW)
— : NPSHreq(m)





Application example

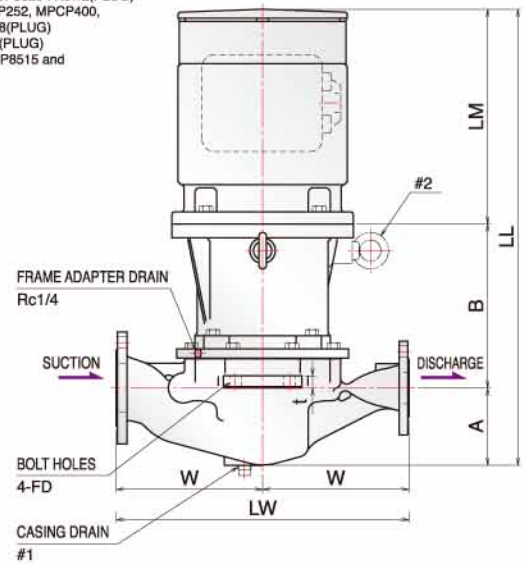
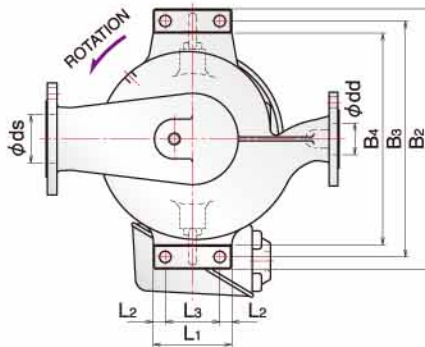


Typical usage

- Petrochemical industry
- Chemical plants
- For cold and hot water circulation
- For general industries
- For setting to various machines and equipment

Outline dimension

- #1. MPCP8515, MPCP8520 : Rc1/2(PLUG)
- MPCP250, MPCP252, MPCP400, MPCP502 : Rc3/8(PLUG)
- MPCP25 : Rc1/4(PLUG)
- #2. Eye bolt for MPCP8515 and MPCP8520 only.

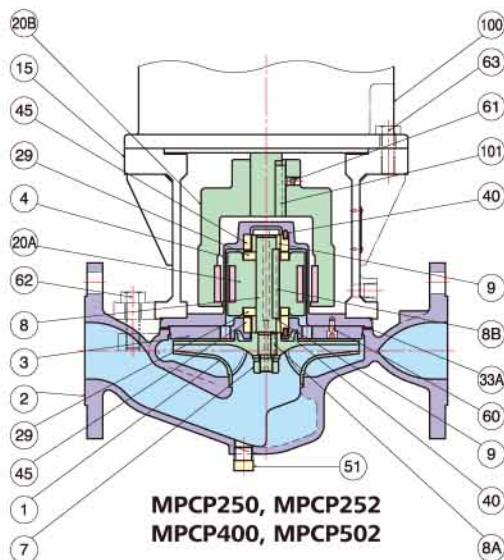


(In the unit of mm)

PUMP SIZE	MOTOR		BORE				PUMP & MOTOR						BASE PLATE							WEIGHT APPROX(kg)			
	FRAME SIZE	OUTPUT (kW)	SUCT ds	DISCH S	dd	D	A	B	W	LW	LM	LL	L1	L2	L3	B2	B3	B4	t	FD	PUMP	MOTOR	TOTAL
MPCP25	71M	0.4	25		25		50	112.5	100	200	231	393.5	60	10	40	160	140	115	10	φ10	13	11	24
MPCP250	80M	0.75	25	RF	25	RF	58	170	130	260	233	461	85	12.5	60	250	225	200	10	φ12	24	12.5	36.5
	90L	1.5																					
MPCP252	90L	1.5,2.2	25	RF	25	RF	61	165	140	280	275	501	100	12.5	75	280	250	220	12	φ15	30	18	48
	(100L)112M	(2.2),3.7																					
MPCP400	80M	0.75	40	RF	40	RF	73	170	135	270	233	476	85	12.5	60	250	225	200	10	φ12	26	12.5	38.5
	90L	1.5,2.2																					
MPCP502	90L	2.2	50	RF	50	RF	91	169	160	320	275	535	100	12.5	75	280	250	220	12	φ15	34	18	52
	(100L)112M	(2.2),3.7																					
MPCP8515	100L	2.2	80	JIS 10K	50	JIS 10K	120	273	210	420	275	668	130	20	90	380	340	300	20	φ19	72	37	109
MPCP8520	112M	3.7	80	RF	50	RF	128	271	242	484	326	725	130	20	90	430	390	350	20	φ19	73	28	101
	132S	5.5																					

MPCP8515, MPCP8520 are used only with 4 POLE motor. # LM, LL dimensions and motor weight may vary depending on motor used.

Construction and materials



**MPCP250, MPCP252
MPCP400, MPCP502**

- Magnet
- Pressure vessel
- Rotating parts
- Bearings
- Liquid immersed portion

- #5. For MPCP8515 and MPCP8520 regular SIC sleeves are used. (SIC-D sleeves are optional.)
- #6. 1 pce. of thrust ring is used for MPCP25.
- #7. SIC-D bushings are used for MPCP25.

MARK	NAME OF PART	MAT'L	No. REQ'D
101	COUPLING KEY(M)	S45C	1
100	MOTOR	-	1
63	HEXAGON HEAD BOLT	SUS304	4
62	HEXAGON HEAD BOLT	SUS304	6
61	SET SCREW	SCM435	2
60	HEXAGON SOCKET HEAD CAP SCREW	SUS	4
51	PLUG	SUS	1
45	BUSHING #7	SIC	2
40	PIN	SUS	1
33A	GASKET	PTFE	1
30	SET SCREW	SUS	3
29	THRUST RING #6	SIC	2
20B	MAGNET	RARE EARTH	1 ^S
	MAGNET COUPLING(M)	FCD	1
20A	MAGNET	RARE EARTH	1 ^S
	MAGNET COUPLING(P)	SUS	1
15	FRAME ADAPTER	SS400	1
10A	SET SCREW	SUS	1
10	SLEEVE BOLT	SUS	1
9	SLEEVE #5	SIC-D	2
8B	COUPLING KEY(P)	SUS	1
8A	IMPELLER KEY	SUS	1
8	SHAFT	SUS	1
7A	SET SCREW	SUS	1
7	IMPELLER NUT	SUS	1
4	REAR CASING	SUS	1
3	CASING COVER	SUS	1
2	CASING	SCS	1
1	IMPELLER	SCS	1