### **KEMPION**



## MAGNETIC DRIVE Pumps



# MX Series **KEMPION** Magnetic Drive Pumps

Safe and rapid transfer of dangerous chemical that cannot be handled in the industrial field

#### Main Features

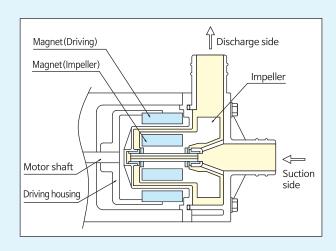
- ·Leak proof because there is no shaft by Non Seal Type using magnet
- ·Small and light structure which is composed with compactly high-efficient motor and pump chamber
- ·Suitable for highly corrosive chemical
- ·Polypropylene which is superior corrosion resistance (P type)
- ·Suitable for transfer of high temperature (100°C) chemical by using MPPO which is superior heat resistance (M type)
- ·Suitable for transfer of wear chemical by using Bearing which is superior wear resistance (G type)

#### Applications

- ·Water Bath, Gas Analyzer, Ion Analyzer, Chemical Machinery, etc.
- ·Circulation of liquid such as Ultrasonic Washer, medical equipment, etc.
- ·Cathode-ray tube production equipment, photo plate making equipment for IC, etc.
- ·Transfer, circulation, and agitation of chemical
- ·Research room, laboratory, and test plant
- ·Semiconductor equipment (for circulation in a wet gas scrubber)
- ·For circulation in P.C.B manufacturing line
- ·For circulation of plating liquid

#### Principle of Operation

As indicated in the picture, the impeller embedded the magnet is rotated by the magnet (driving) attached to the motor shaft. The pump chamber is isolated from the exterior by casing which is composed of chemical resistance resin. Because the impeller is rotated by the magnet, there aren't pump axis and shaft such as mechanical seal.



#### Cautions

- $\cdot \mbox{Do}$  not use the liquid affecting Liquid End material.
- ·Do not keep the motor sealed, and do not use the motor at over 40°C (ambient temperature).
- ·Do not put flammable materials near the pump.
- ·Do not use the liquid containing the powders of iron, nickel, etc. because there is magnet in pump.
- ·Do not use liquid which the viscosity is over 30mPas.
- •Do not have a dryrun because it causes damage of internal parts.
- •Do not operate the pump for long time near maximum head (Shaft and Bearing can be damaged).
- ·For P type and M type, pumping slurry liquid reduces the life time of the pump.
- ·Do not use the liquid to be solidified in atmosphere.

#### ■ Model Code

1 2 3 4 5 MX - 135 - P H - S

① Series Name MX:MX (Magnetic Drive Pumps) Series

② Model No. Max. Capacity 135:135L/min (60Hz)

**3 Liquid End Materials** 

P:PP(For general liquid) M:MPPO(For high temperature liquid) G:PP(For abrasive liquid) X:Special

**4** Connection Type

H: Hose F: Flange T: Thread X: Special

**⑤ Power Supply** 

S:1 Ø 220V 60Hz A:3 Ø 220/380V 60Hz B:3 Ø 440V 60Hz X: Special

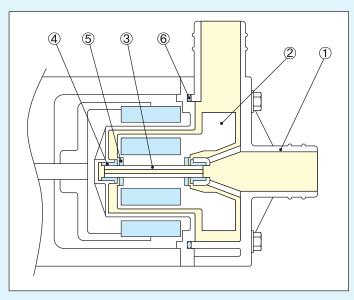
#### Specifications

Specs	Мах. сарас	city(L/min)	Мах. Н	ead(m)	Standard capa	city(L/min-m)	Connection		Motor		Max	Weight	
Model	50Hz	60Hz	50Hz	60Hz	50Hz	60Hz	Hose	Flange	Thread	Output	Phase	S.G.	(kg)
MX-30	25	30	2.9	4.3	15-2	22-2	16mm			35W		1.4	3
MX-50	45	50	2	2.8	30-1.1	40-1.2	25mm	-	-	3344	1Ø	1.4	3
MX-85	75	85	3.2	4.5	45-2	65-2	25mm			65W		1.4	5.5
MX-120	105	120	7.2	10.4	60-5.5	70-8	25mm	25A	G 1	300W	1Ø	1.2	8.5
MX-135	120	135	8.5	12	60-6	70-9	25mm	25A	G 1	30000	3Ø	1.3	0.5
MX-135S	120	133	0,3	12	60-6	0-6 /0-9	Zəmm			0.4kW	3Ø	1.6	14
MX-250	225	250	10	14	120-7	130-10	_	40A	_	0.75kW	3Ø	1.2	26
MX-300	270	300	12.5	17.5	160-7.5	170-11	_	40A	_	1.5kW	30	1.8	30

#### Notes)

- 1. The max. capacity is the value at 0 head, and the max. head is the value when closing the discharge valve.
- 2. The liquid temperature is  $0 \sim 80^{\circ}$ C (P type and G type) and  $0 \sim 100^{\circ}$ C (M type).
- 3. The pump is for indoor use, and do not use freeze liquid.
- 4. The Munsell no. is 1.5BG 5.3/5.
- 5. The contents on this catalogue may be revised for improvement without prior notice.

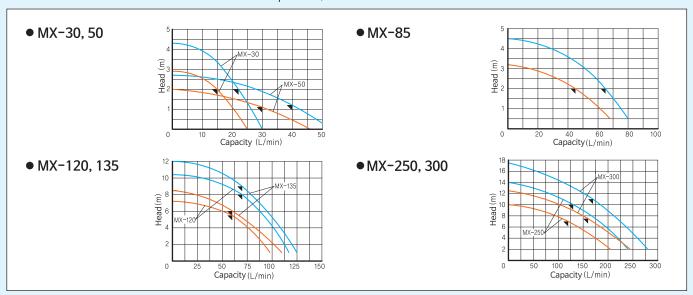
#### ■ Materials of Liquid End



No.	Name of part	Material					
IVO.	Name of part	P.G Type	М Туре				
1	Casing	PP	MPPO				
2	Impeller	PP	MPPO				
3	Shaft	CERAMIC	CERAMIC				
4	Bearing	RULON	RULON				
(5)	Washer	CERAMIC	CERAMIC				
6	O-ring	FKM	FKM				

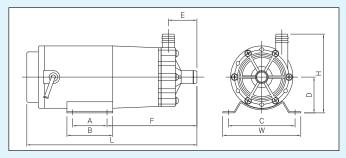
#### ■ Performance Curves

60Hz — 50Hz Conditions: Room temperature, Clean water



#### Dimension

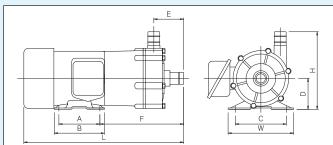
#### ● MX-30, 50, 85



Model	W	Н	L	А	В	С	D	Е	F
MX-30	108	110	238	48	64	93	50	40	126
MX-50	108	114	248	48	64	93	50	47	136
MX-85	120	137	304	60	80	102	65	50	163

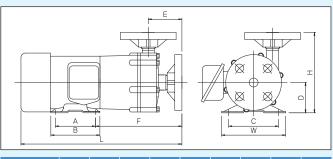
#### ● MX-120, 135 (Hose, Thread type)





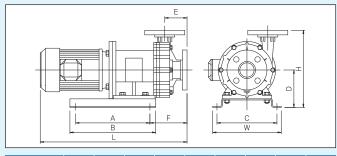
Model	W	Н	L	Α	В	С	D	Е	F
MX-120	1.4.4	170	251	00	110	110	60		104
MX-135	144	170	351	90	110	112	68	66	184
MX-135S	185	210	399	160	200	160	107	66	110

#### • MX-120, 135 (Flange type)



Model	W	Н	L	Α	В	С	D	Е	F
MX-120	144	180	361	90	110	112	68	76	194
MX-135		100	301	90	110	112	00	70	194
MX-135S	185	220	409	160	200	160	107	76	120

#### ● MX-250, 300



Model	W	Н	L	А	В	С	D	Е	F		
MX-250	240	240	27.4	518		200	240	404		404	
MX-300		274	551	260	300	210	131	81	134		

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