

TYPE MWK

SEALLESS

SMALL, COMPACT, STAINLESS STEEL REGENERATIVE TURBINE VANE MAGNET DRIVE PUMPS

Motor output :

0.55kW to 3.0kW

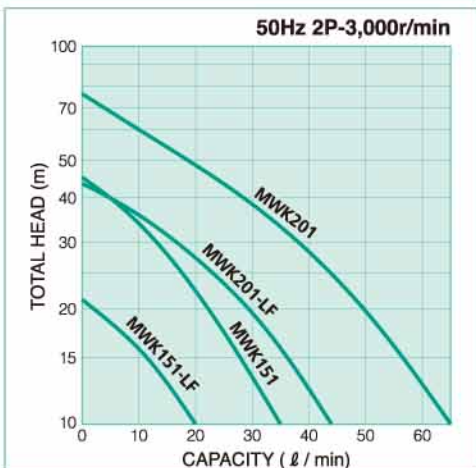
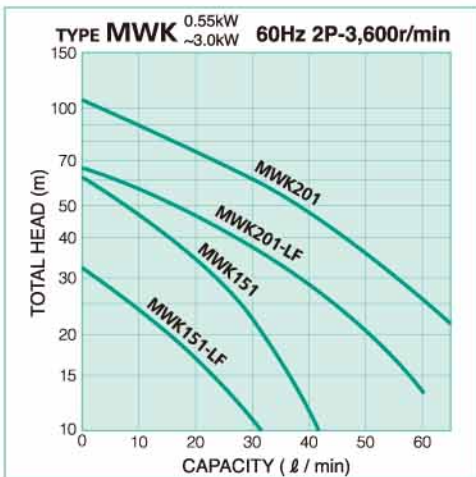
- ▶ Magnet drive (sealless) **cascade pump** sold **exclusively to equipment manufacturers.**
- ▶ Designed for **low flow / high head** requirements. **304SS construction** provides excellent corrosion resistance.
- ▶ No leakage due to Magnet drive (sealless) construction.
- ▶ Low noise and high efficiency.
- ▶ Motors have UL certification, CE mark conform to EPACT.
- ▶ **SiC-D bearings withstand accidental dry-run on start up.**
- ▶ **Compact in size** and light in weight.
- ▶ Easy to assemble and disassemble.



Cascade-bladed impeller →

TYPE MWK -30°C~+150°C 0.55kW~3.0kW

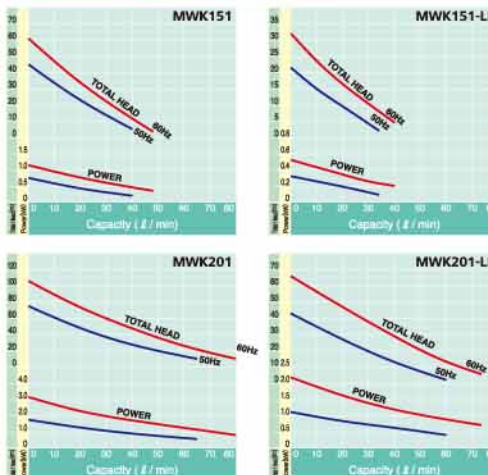
Selection charts



Specifications

	MWK	
Frequency	50Hz	60Hz
Max. total head	65m	90m
Max. capacity	60 l/min	80 l/min
Max. temperature applicable	150°C	
Min. temperature applicable	-30°C	
Max. liquid specific gravity	2	
Max. liquid viscosity	50mPa·s(cP)	
Design pressure	1.6MPaG	
Bore (suction x discharge)	15x15, 20x20mm	
Flange standard	Rc thread	
Type of impeller	Cascade blades	
Motor output rating	0.55~3.0kW(2P)	
Pump material	SCS13(SUS304)	
Liquid-immersed bearings	SiC-D	

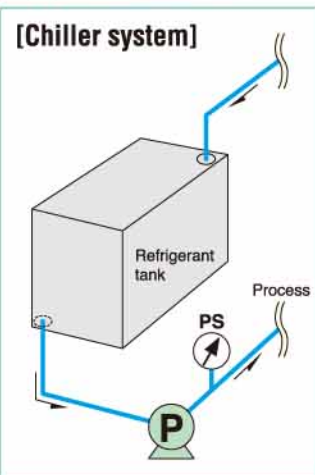
Performance curves (60Hz 2P-3,600r/min, 50Hz 2P-3,000r/min)



Examples of usage

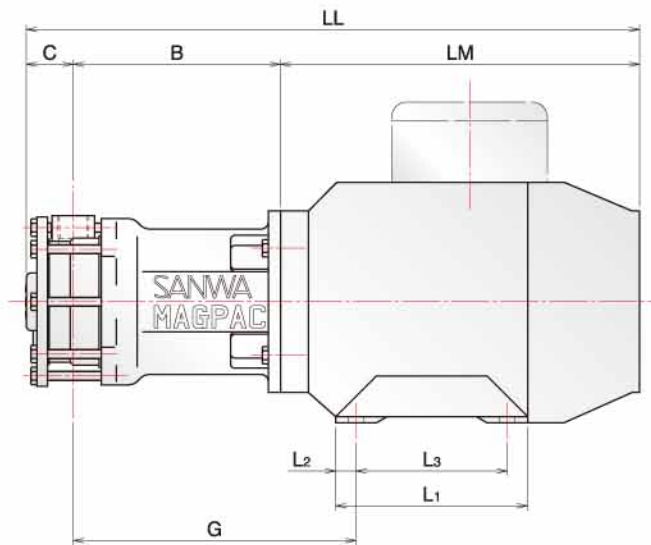
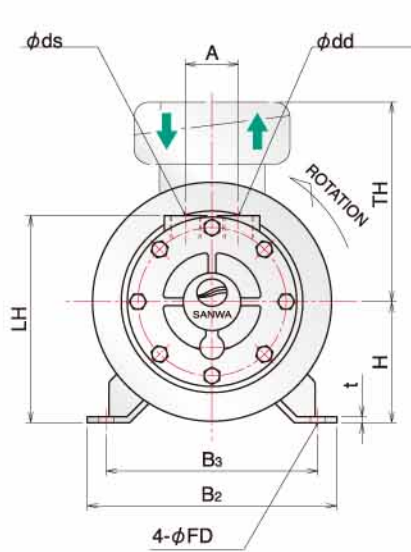
Use	Liquid used
	Exfoliation liquid
Washing device	Hydrocarbon system
	Alcoholic system
Synchrotron orbital radiation/Cooling device	Freon replacing material
Pure water processing	Lithium bromide
Sterilizer/Hot water	Pure water
Absorption type freezer	Ozone water
Low temperature chiller	Fluorinert, Galden
Temperature controller/Dryer	Heat medium
Filter	Various medicine
Solvent collector	Organic solvent
Fine chemicals	Various chemicals

Application example





Outline dimension

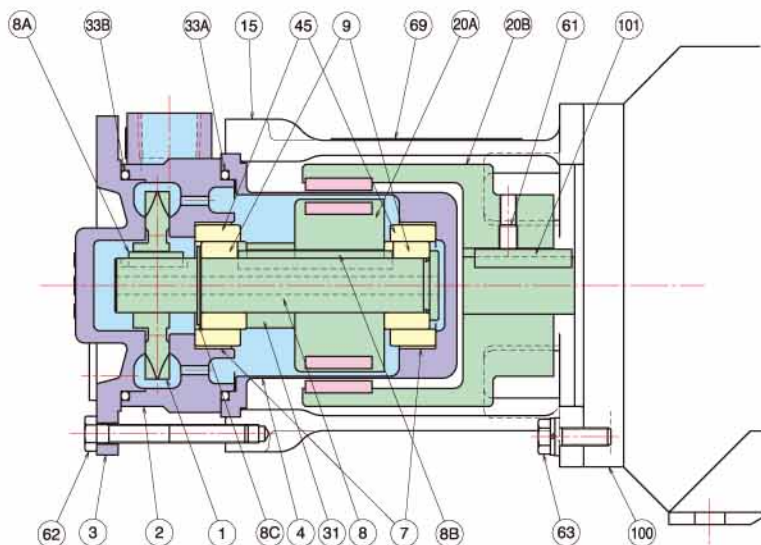


(In the unit of mm)

PUMP SIZE	MOTOR		BORE		PUMP & MOTOR								BASE PLATE							WEIGHT APPROX.(kg)			
	FRAME SIZE	OUTPUT (kW)	ds	dd	A	B	C	H	LH	TH	LM	LL	G	L1	L2	L3	B2	B3	t	FD	PUMP	MOTOR	TOTAL
MWK151-LF	71S	0.55	15	15	35	127	31	71	128	115	208	366	172	110	10	90	131	112	2	φ7	5.7	6.5	12.2
	80M	0.75	Rc1/2	Rc1/2	35	137	31	80	137	127	237.5	405.5	187	127	13.5	100	157	125	4	φ10	5.8	9.0	14.8
MWK151	80M	0.75	15	15	35	137	31	80	137	127	237.5	405.5	187	127	13.5	100	157	125	4	φ10	5.8	9.0	14.8
	90S	1.5	Rc1/2	Rc1/2	35	147	31	90	147	135	272	450	203	150	12.5	100	164	140	4	φ10	7.8	12.5	20.3
MWK201-LF	80M	1.1	20	20	45	137	31	80	150	127	237.5	409	187	127	13.5	100	157	125	4	φ10	8.0	9.0	17.0
	90S	1.5	Rc3/4	Rc3/4	45	147	34.5	90	160	135	272	453.5	203	150	12.5	100	164	140	4	φ10	10.0	12.5	22.5
	90L	2.2	Rc3/4	Rc3/4	45	147	34.5	90	160	135	272	453.5	203	150	12.5	125	164	140	4	φ10	10.0	14.5	24.5
MWK201	100L	3.0	Rc3/4	Rc3/4	157	170	31	100	170	154	308	499.5	220	170	15	140	184	160	4	φ12	10.2	24.3	34.5
	90S	1.5	20	20	45	147	34.5	90	160	135	272	453.5	203	150	12.5	100	164	140	4	φ10	10.0	12.5	22.5
	90L	2.2	Rc3/4	Rc3/4	45	147	34.5	90	160	135	272	453.5	203	150	12.5	125	164	140	4	φ10	10.0	14.5	24.5
MWK201	100L	3.0	Rc3/4	Rc3/4	157	170	31	100	170	154	308	499.5	220	170	15	140	184	160	4	φ12	10.2	24.3	34.5

LM,LL dimensions and motor weight may vary depending on motor used.

Construction and materials



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

101	COUPLING KEY(M)	S45C	1
100	MOTOR	-	1
69	NAME PLATE	AI	1
63	HEXAGON HEAD BOLT WITH WASHER	SUS304	4 ^S
62	HEXAGON HEAD BOLT	SUS304	8
61	SET SCREW	SCM435	2
45	BUSHING	SiC	2
33B	O RING	PTFE	1
33A	O RING	PTFE	1
31	SPACER	SUS304	1
20B	MAGNET	RARE EARTH	1 ^S
	MAGNET COUPLING(M)	SS400	1
20A	MAGNET	RARE EARTH	1 ^S
	MAGNET COUPLING(P)	SUS316	1
15	FRAME ADAPTER	FC200	1
9	SLEEVE	SiC-D	2
8C	RETAINING RING(C TYPE)	SUS304	1
8B	COUPLING KEY	SUS630	1
8A	IMPELLER KEY	SUS304	1
8	SHAFT	SUS304	1
7	TOLERANCE RING	SUS301	2
4	REAR CASING	SUS316	1
3	CASING COVER	SCS13	1
2	CASING	SCS13	1
1	IMPELLER	SUS304	1
MARK	NAME OF PART	MAT'L	No. REQ'D