



Technology & innovation

TI TOWN MAGNETIC DRIVE SEALLESS PUMPS

TME-SERIES (Made of Engineering Plastics)



TI TOWN CHEMICAL PUMPS

TME MAGNET SEALLESS CHEMICAL PUMPS[20W~7.5KW]

TME	—	$\frac{20}{(1)}$	$\frac{180}{(2)}$	$\frac{V}{(3)}$	$\frac{F}{(4)}$	$\frac{R}{(5)}$	$\frac{S}{(6)}$	$\frac{1}{(8)}$	$\frac{XXX}{(9)}$	
TME	—	$\frac{40}{(1)}$	$\frac{2}{(2)}$	$\frac{V}{(3)}$	$\frac{F}{(4)}$	$\frac{C}{(5)}$	$\frac{F}{(6)}$	$\frac{6}{(7)}$	$\frac{3}{(8)}$	$\frac{XXX}{(9)}$

1.Outlet dimension :

16 = 1/2"
 20 = 3/4"
 25 = 1"
 40 = 1.5"
 50/55 = 2"
 65 = 2.5"

2.Drive motor :

20 = 20W 0 = 0.5 HP
 30 = 30W 1 = 1 HP
 65 = 65W 2 = 2 HP
 100 = 100W 3 = 3 HP
 180 = 180W 5 = 5 HP
 260 = 260W 7 = 7.5 HP
 400 = 400W A = 10 HP

3.Casing O-ring :

V = FKM (Viton)
 E = Epdm

4.Wet-end material :

F = GFRPP (20W~4.0KW)
 E = ETFE+CF (20W~4.0KW)
 P = CFRPP (0.37KW~7.5KW)

5.Impeller shaft & Trust / bearing :

C = Alumina ceramic /Carbon graphite
 R = Alumina ceramic / PTFE + CF
 A = Alumina ceramic/SIC
 B = SIC/Carbon graphite
 S = SIC/PTFE + CF
 K = SIC/SIC

6.Connection :

S = Screw (20W~3.7KW)
 H = Hose (20W~400W)
 F = Flange with oval holes
 (0.5HP~10HP)

7.Pump frequency :

5 = 50HZ
 6 = 60HZ
 None = common impeller size
 (20W~180W)

8. Motor voltages specific :

1 = 1Ø 110/220V
 2 = 1Ø 200/220V
 3 = 3Ø 220/380V
 4 = 3Ø 220/440V
 T = Special SPEC.

9.Reserve for customization

■ Features :

The TME pump is a single-stage, magnetic driven, centrifugal pump in close-coupled execution. All wet-end parts are made by injection mold with various engineering plastic (GFR-PP.CFR-PP. and CFR-ETFE) to provide superior corrosion resistance. The magnets are in permanent magnets, ensuring coupling efficiency even when processing liquids with heavy specific gravity.

Silicon carbide bearings allow the use of these pumps even with "difficult" and abrasive liquids. On the other hand, the low friction "Carbon graphite" version, together with our special design for magnetic unit balancing to provide superior cooling system, enables the pump to withstand short periods of dry running. The pump shaft is supported between front casing and rear casing, enables the pump to increased stability and withstand abnormal operation situation.

The connection flanges are arrange with oval holes, can fit ANSI 150P or ISO PN16 or JIS 10K. Easy for mounting.

The transmission is delivered through a magnetic coupling without any mechanical connection between impeller and drive shaft.

This system ensures zero leakage, operator safety and elimination of dangerous odors or liquids to the atmosphere.

The close coupled execution makes the TME an extremely compact, silent and safe pump that can be safely used even by inexperienced operators. The TME pump provides a quality pumping solution at cost-effective level, appealing to all users as well as OEMs.

■ Application fields :

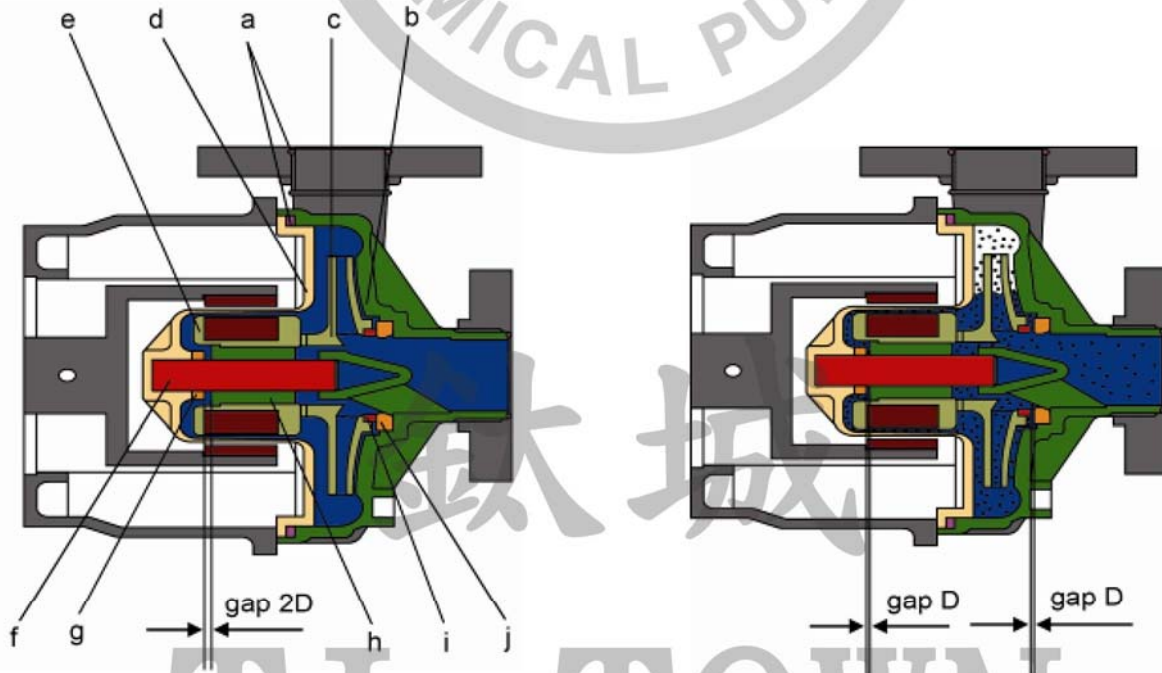
- Biochemistry
- Chemical and pharmaceutical industry
- Chemical storage
- Food industry
- Galvanizing
- Petrochemical industry
- Paper industry
- Textiles
- Tanning industry
- Water and air treatment and purification

■ The operating principle of TME magnetic drive pump

Introducing an additional magnetic field ensures permanent axial thrust compensation. If dry running occurs due to lack of liquid or for other reasons, the impeller assembly is automatically shifted by the additional magnetic field to a neutral position between the front and back casing. Heat generated by thrust friction can be reduced effectively. In this position there is negligible friction on the shaft when fitted with carbon graphite impeller bearing. Thereby preventing any thermal deformation and reducing wear.

Wide gap between impeller bearing/rear thrust
When continuous operation

Contact free operation
When dry running



■ Section view and Wet end materials

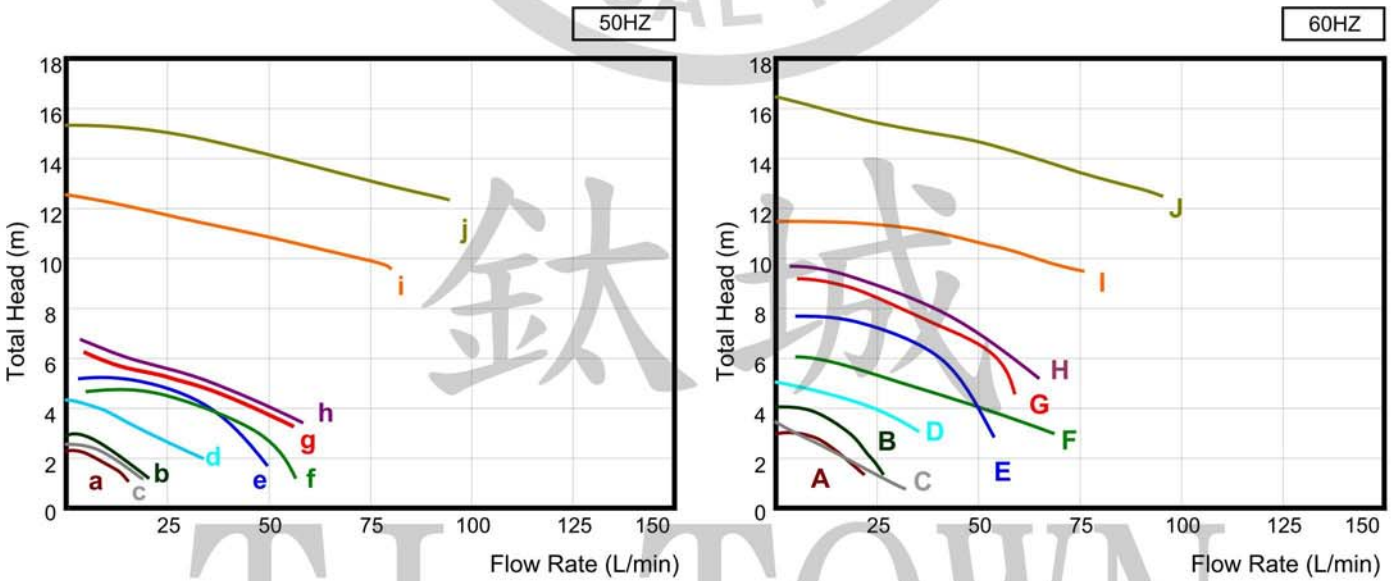
Model	VF(EF)	VP(EP)	VE(EF)
Mark	(20W~4.0KW)	(0.37KW~7.5KW)	(20W~4.0KW)
a. Casing O-ring	FKM (EPDM)※		
b. Front casing	GFRPP	CFRPP	ETFE+CF
c. Impeller	GFRPP	CFRPP	ETFE+CF
d. Back casing	GFRPP	CFRPP	ETFE+CF
e. Magnet capsule	PP		ETFE
f. Shaft	High purity Alumina ceramic		High purity Alumina ceramic/S-SiC
g. Rear thrust	High purity Alumina ceramic		High purity Alumina ceramic/S-SiC
h. Impeller bearing	Carbon/PTFE+CF		Carbon/PTFE+CF/S-SiC
i. Mouth ring	PTFE+CF		
j. Trust ring	High purity Alumina ceramic		High purity Alumina ceramic/S-SiC

※AFLAS or FFKM are also available

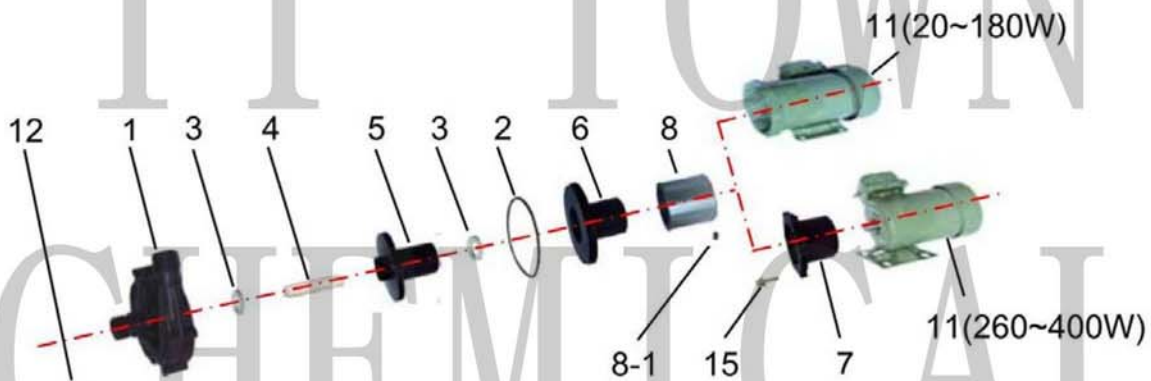
Specification (20W~400W × 50/60HZ , Determined with clear water at room temperature)

TYPE	Curve		Drive MOTOR (w)	In/Outlet		MAX. Flow (L/min)		MAX. Head (M)	
	50HZ	60HZ		HOSE (mm)	Screw(G)	50HZ	60HZ	50HZ	60HZ
1620	a	A	20W/1Ø	Ø17	½"	20	24	2.2	3.0
1630	b	B	30W/1Ø	Ø17	½"	25	28	2.9	4.1
2030	c	C	30W/1Ø	Ø20	¾"	30	36	2.4	3.4
2065	d	D	65W/1Ø	Ø20	¾"	44	49	4.2	5.8
20100	e	E	100W/1Øor 3Ø	Ø20	¾"	60	68	5.0	6.9
25100	f	F	100W/1Øor 3Ø	Ø26	1"	75	85	4.6	6.6
20180	g	G	180W/1Øor 3Ø	Ø20	¾"	67	80	5.8	8.1
25180	h	H	180W/1Øor 3Ø	Ø26	1"	95	97	5.4	7.7
25260	i	I	260W/1Øor 3Ø	Ø26	1"	125	150	12.5	11.6
25400	j	J	400W/1Øor 3Ø	Ø26	1"	130	150	15.7	16.2

(Limit of SG1.0, Adjustable customization for specific gravity above 1.0)



Exploded view and parts list :

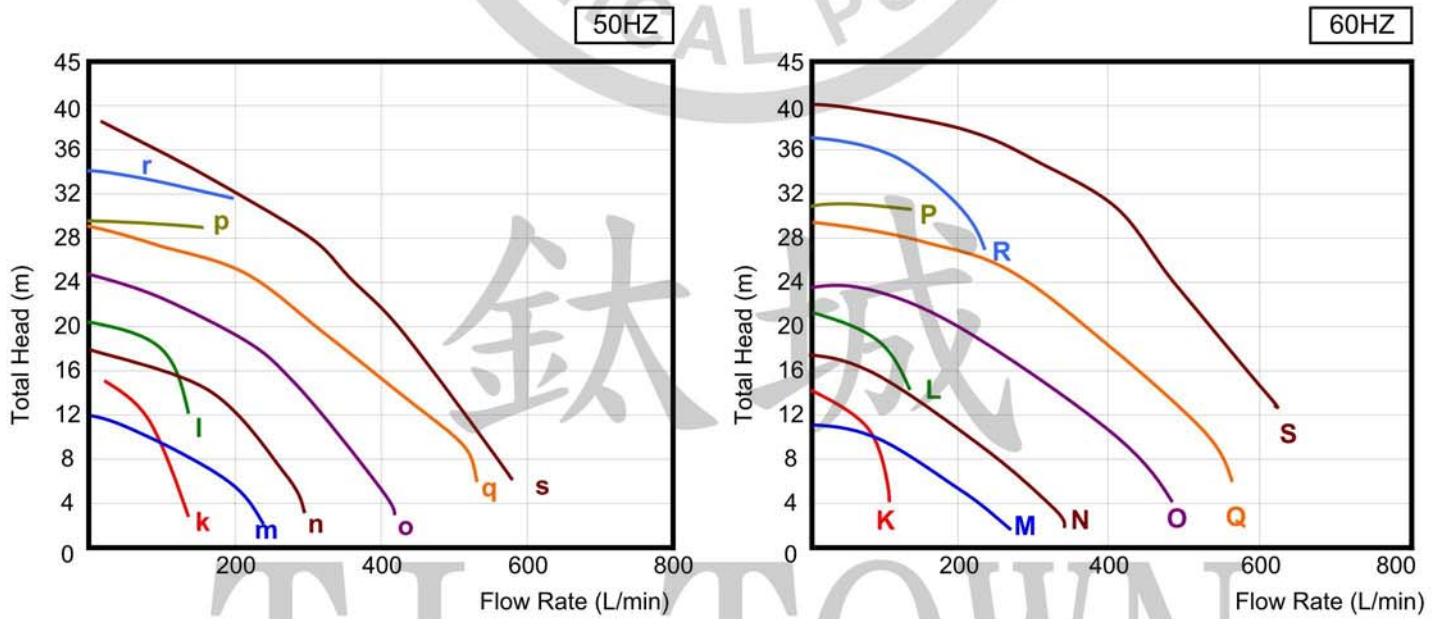


NO	Parts Name	NO	Parts Name
1	Front casing	7	Bracket(only for 260/400w)
2	Casing o-ring	8	Drive magnet
3	Trust ring	8-1	Set screw
4	Shaft	11	Motor
5	Impeller assembly	12	Casing Bolts
6	Back casing	15	Motor mounting Bolts

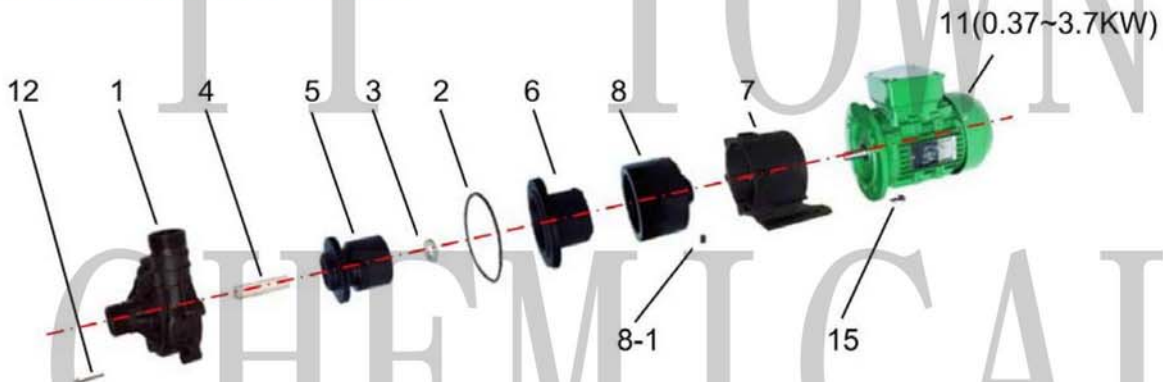
Specification (0.5HP~5HP × 50/60HZ , Determined with clear water at room temperature)

TYPE	Curve		Drive motor HP(KW)	In/Outlet		MAX. Flow (L/min)		MAX. Head (M)	
	50HZ	60HZ		Flange	Screw(G)	50HZ	60HZ	50HZ	60HZ
250	k	K	0.5(0.37)	25 × 25	1"×1"	150	150	14.6	14.4
251	l	L	1.0(0.75)	25 × 25	1"×1"	150	150	20.9	21.4
400	m	M	0.5(0.37)	40 × 40	1.5"×1.5"	280	280	12	11.2
401	n	N	1.0(0.75)	40 × 40	1.5"×1.5"	340	360	18	17.4
402 【552】	o	O	2.0(1.5)	50 × 40 【50 × 50】	2"×1.5"	420	470	25	24.5
402H 【552H】	p	P	2.0(1.5)	50 × 40 【50 × 50】	2"×1.5"	150	150	29.4	32
403 【553】	q	Q	3.0(2.2)	50 × 40 【50 × 50】	2"×1.5"	550	600	29	29.4
403H 【553H】	r	R	3.0(2.2)	50 × 40 【50 × 50】	2"×1.5"	200	250	34.4	37.4
405 【555】	s	S	5.0(4.0)	50 × 40 【50 × 50】	2"×1.5"	600	615	37	40.7

(Limit of SG1.0. Adjustable customization for specific gravity above 1.0)



Exploded view and parts list :

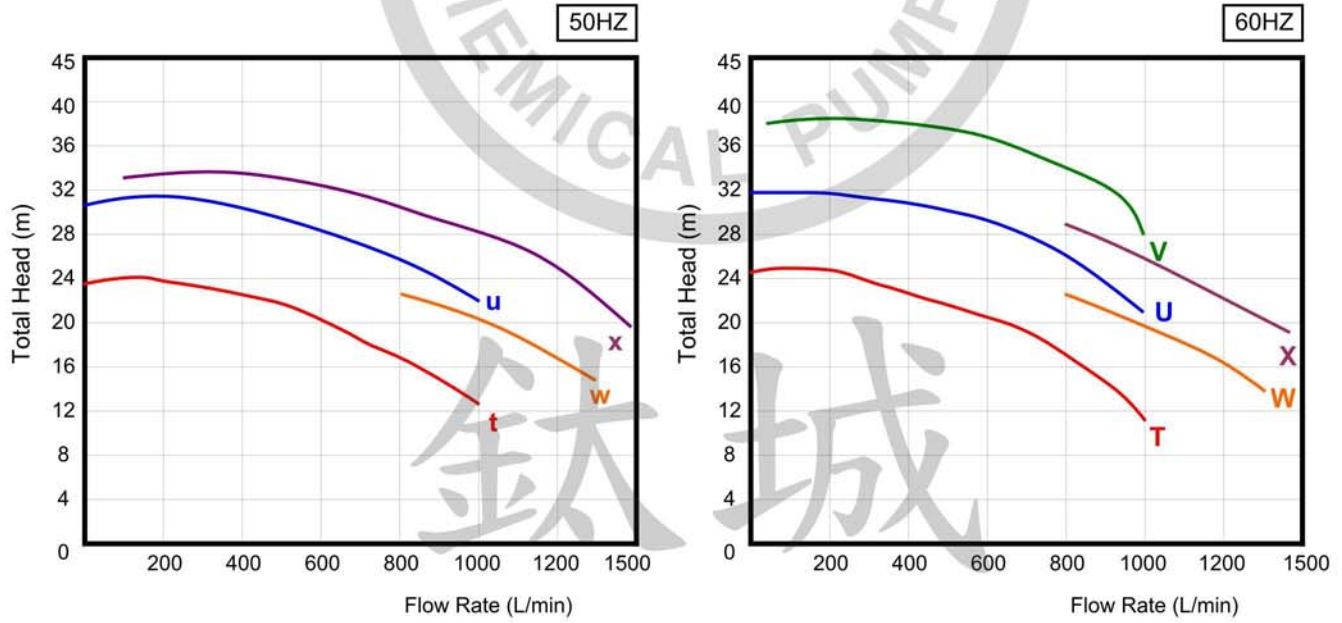


NO	Parts Name	NO	Parts Name
1	Front casing	7	Bracket
2	Casing o-ring	8	Drive magnet
3	Trust ring	8-1	Set screw
4	Shaft	11	Motor
5	Impeller assembly	12	Casing Bolts
6	Back casing	15	Motor mounting Bolts

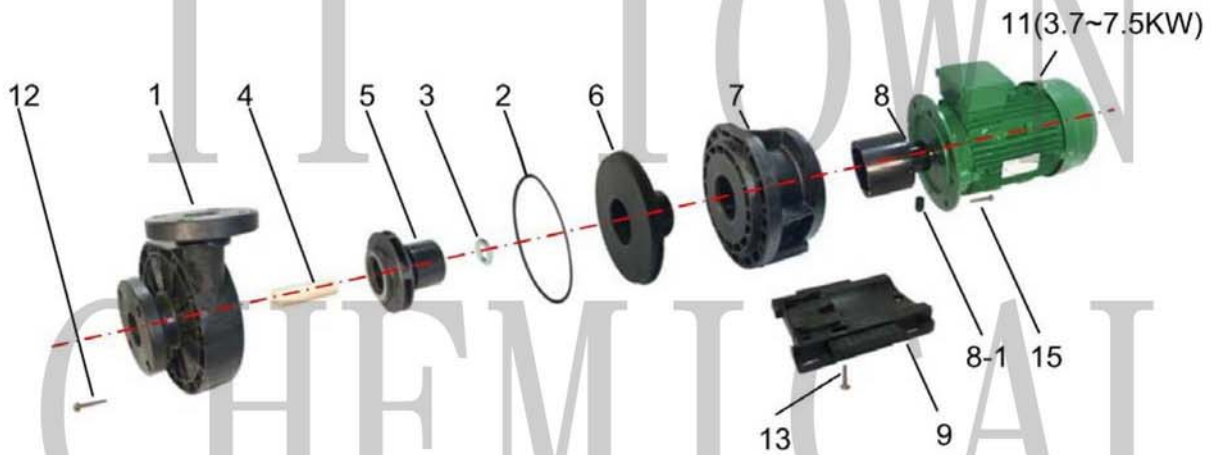
Specification (5HP~10HP × 50/60HZ , Determined with clear water at room temperature)

TYPE	Curve		Drive motor HP(KW)	In/Outlet Flange	MAX. Flow (L/min)		MAX. Head (M)	
	50HZ	60HZ			50HZ	60HZ	50HZ	60HZ
505	t	T	5.0(4.0)	65 × 50	1000	1000	24	24.7
507	u	U	7.5(5.5)	65 × 50	1000	1000	30	32
50A	—	V	10(7.5)	65 × 50	—	1000	—	38
657	w	W	7.5(5.5)	80 × 65	1350	1300	27	27
65A	x	X	10(7.5)	80 × 65	1450	1400	33	32.5

(Limit of SG1.0. Adjustable customization for specific gravity above 1.0)



Exploded view and parts list :



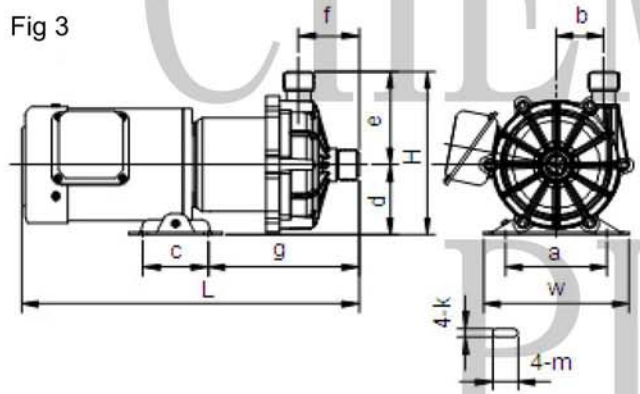
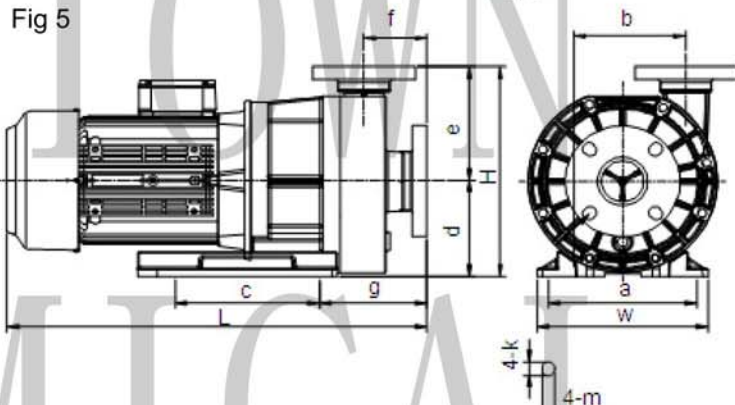
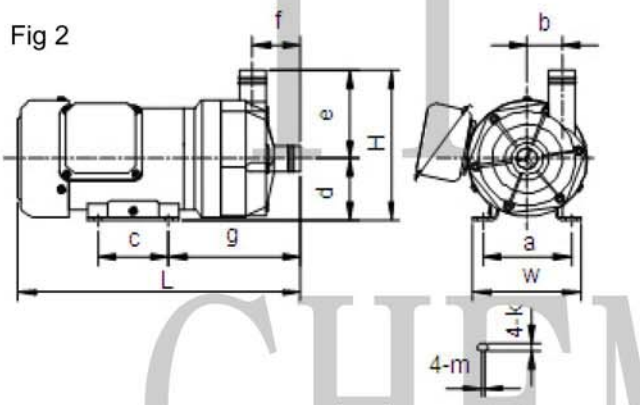
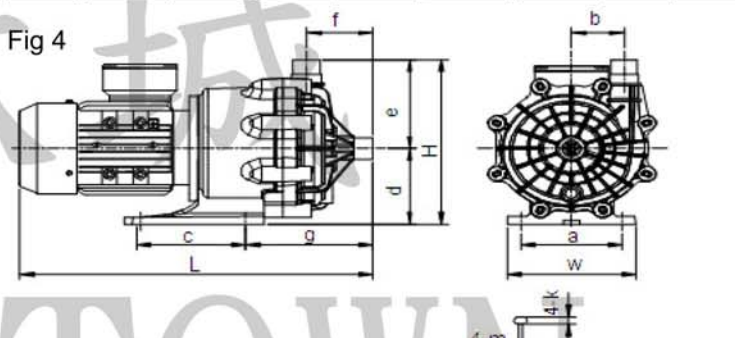
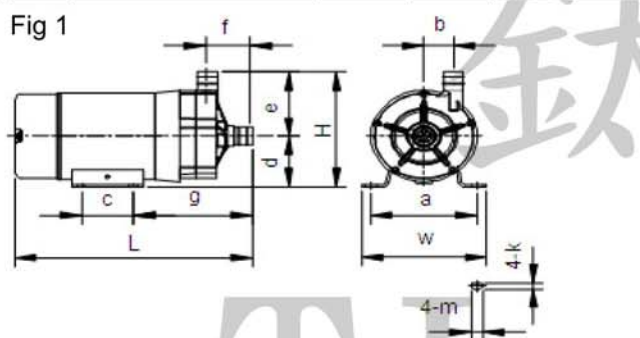
NO	Parts Name	NO	Parts Name
1	Front casing	8	Drive magnet
2	Casing o-ring	8-1	Set screw
3	Trust ring	9	Base leg
4	Shaft	11	Motor
5	Impeller assembly	12	Casing Bolts+Nuts
6	Back casing	13	Base leg Bolts+Nuts
7	Bracket	15	Motor mounting Bolts+Nuts

Dimension :

TME dimension (mm)

※L will differ depending on the difference brand of the motor

	Model	Fig No	W	H	※L	a	b	c	d	e	f	g	k	m
1	TME-1620/1630	1	106	113	217	90	25	44	50	63	38	101	6	10
2	TME-2030	1	106	120	227	90	25	44	50	70	47	111	6	10
3	TME-2065	2	106	120	243.5	90	25	44	50	70	47	111	6	10
4	TME-20100/25100	2	108	153	282	88	35	70	63	90	48	134	8	11
5	TME-20180/25180	2	108	161	298	88	35	70	71	90	48	141	8	11
6	TME-25260	3	156	175	363	110	51	70	75	100	65	162	9	27
7	TME-25400	3	156	175	373	110	51	70	75	100	65	162	9	27
8	TME-250	4	160	248.5	437	130	65	130	115	133.5	82.5	155.5	12	16
9	TME-251	4	160	248.5	463	130	65	130	115	133.5	82.5	163.5	12	16
10	TME-400	4	140	219	436	110	54	98	95	124	81	144	12	16
11	TME-401	4	160	249	477	130	72	130	115	134	97	178	12	16
12	TME-402~405	4	260	273	520	208	80	200	120	153	82	151	13	35
13	TME-505	5	260	330	639	225	96	220	150	180	95	163	38	13
14	TME-507/50A	5	260	365	662	225	96	220	185	180	95	163	38	13
15	TME-657/65A	5	260	395	718	225	92	220	185	210	140	219	38	13



STANDARD OPERATION RANGE :

- (1) Range of liquid temperature:
 - GFR-PP: 0~80℃
 - CFR-ETFE: 0~90℃
 - CFR-PP: 0~80℃
- (2) Range of ambient temperature: 0~40℃
- (3) Viscosity: 200 cps max.
- (4) Solids: 5% max concentration in weight.
Hardness max 80(HS). Size max 50µm



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