

Kawamoto

Ser. No. F-090

CENTRIFUGAL PUMP

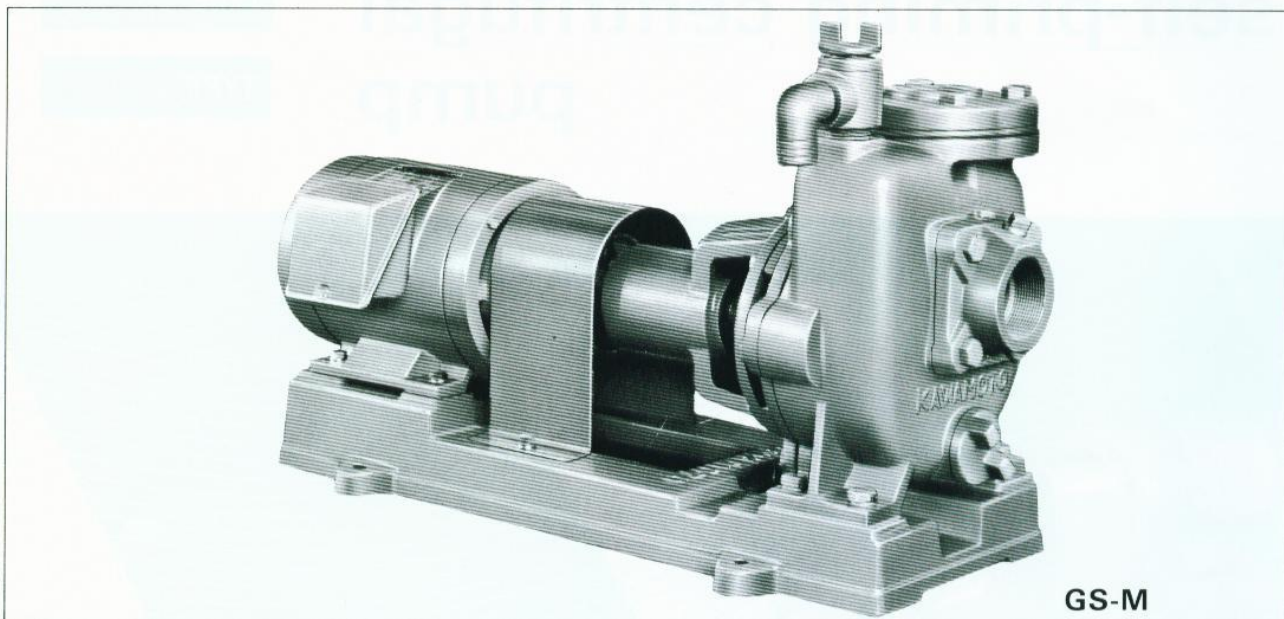
**self-priming centrifugal
pump**

TYPE GS-M

TYPE GS-A



KAWAMOTO PUMP MFG. CO., LTD.



GS-M

1. APPLICATION

- * Building service
- * Air conditioning water supply
- * Irrigation, sprinkling and agricultural water supply
- * Industrial service
- * Other general water supply

2. FEATURES

- * **SELF-PRIMING**
Installation, piping and maintenance can be done with ease.
- * **BACK PULL OUT CONSTRUCTION**
Maintenance, inspection and disassembling can be done without taking out the piping.
- * **HIGH PERFORMANCE**
Totally enclosed type statically and dynamically balanced impeller assures high head and high performance.
- * **DURABLE AND RUGGED**
High grade two sealed ball bearings and stainless steel shaft for the portion contacting with water are adopted.
- * **TROUBLE FREE FROM OUTDOOR USE**
Deflectors provided outside of the bearing covers prevent water from coming into bearing portion.

3. SPECIFICATIONS

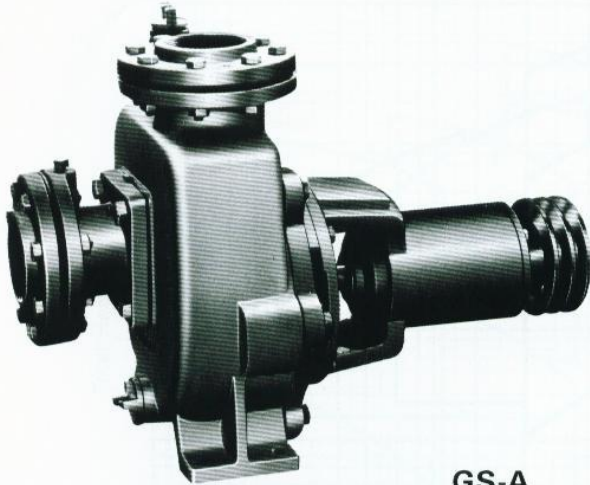
Scope to liquid	Kind	Clean water
	Temperature	0°C(32°F) — 40°C(104°F)
	Hydrogen ion	PH6.5 — 8.0
	Chlorine content	Less than 500ppm
	Size of sand	Smaller than 0.25mm
Material	Impeller	Cast iron
	Shaft	Stainless steel for the portion contacting with water
	Casing	Cast iron
Motor	Type	Open, drip-proof, 2-pole
	Speed	50Hz = 2900rpm 60Hz = 3500rpm
Shaft seal		Gland packing
Suction head		—6 metre
Rotation		Clockwise if seen from P.T.O.

4. ACCESSORIES

	GS-M	GS-A
Discharge companion flange with bolt & packing	<input type="radio"/>	<input type="radio"/>
Suction flange with bolt and suction check valve	<input type="radio"/>	<input type="radio"/>
Shaft coupling	<input type="radio"/>	
Coupling guard	<input type="radio"/>	
Electric motor	<input type="radio"/>	
Common base plate	<input type="radio"/>	
Resin made strainer	<input type="radio"/>	<input type="radio"/>
V-pulley		option
Priming-exhaust valve	<input type="radio"/>	<input type="radio"/>
Foundation bolt	<input type="radio"/>	

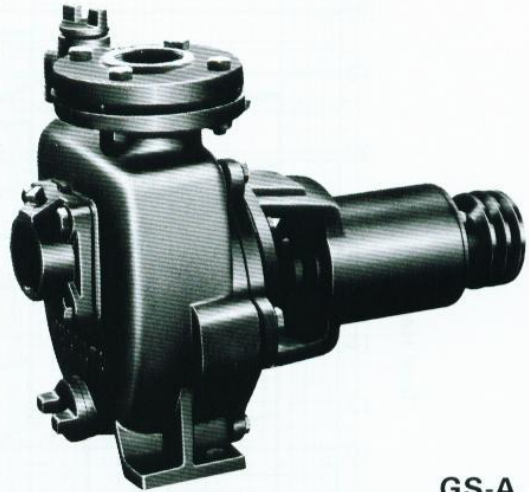
Note : Totally enclosed type electric motor is available upon request.

*V-pulley is optional accessory.



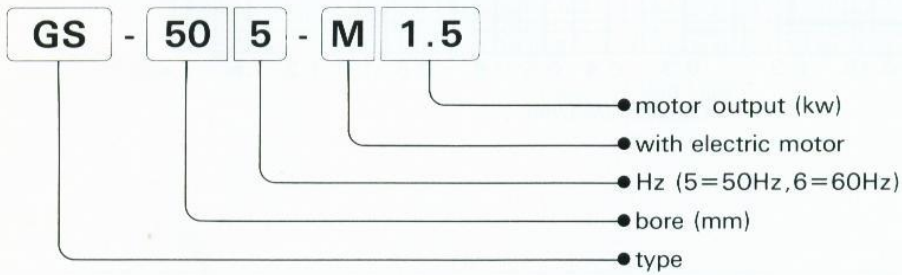
GS-A
(65·80·100mm)

*V-pulley is optional accessory.

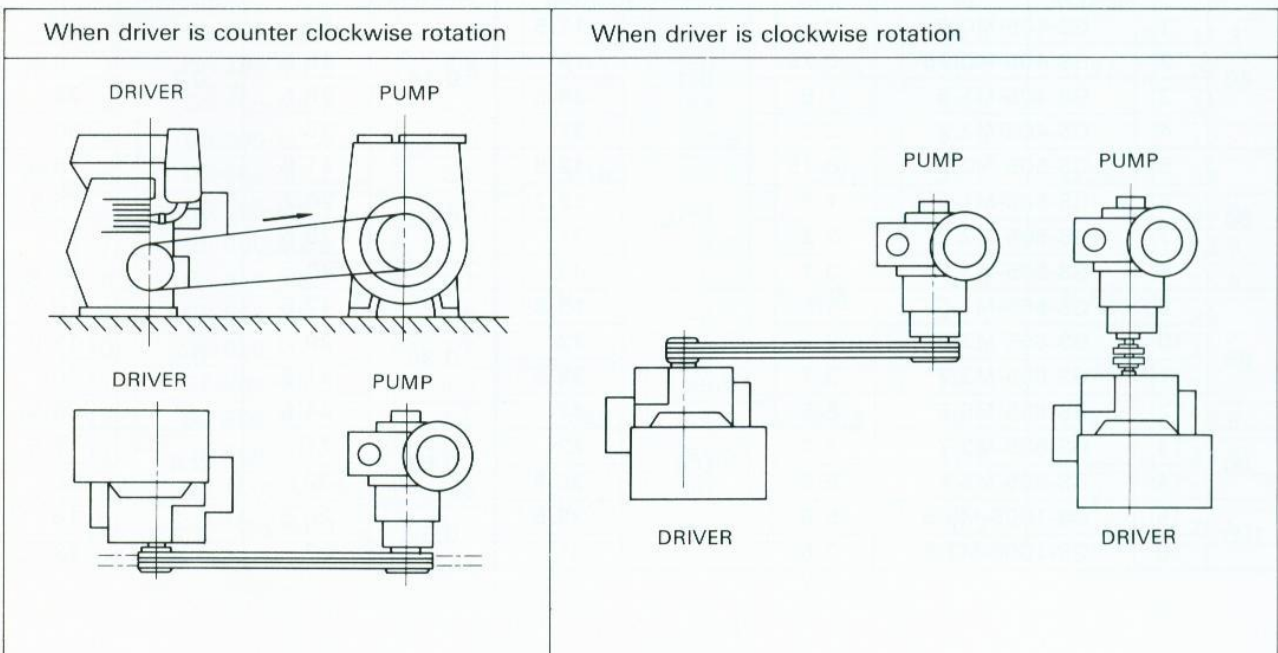


GS-A
(40·50mm)

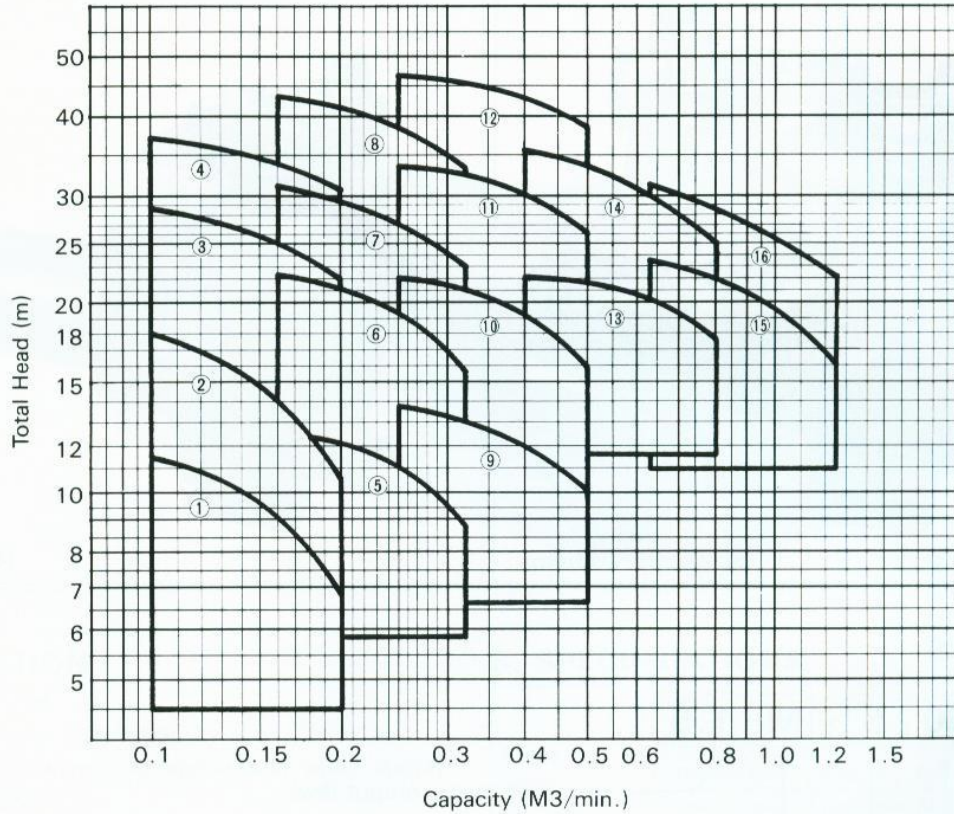
5. SYMBOLS



6. COUPLING METHOD OF GS-A TYPE



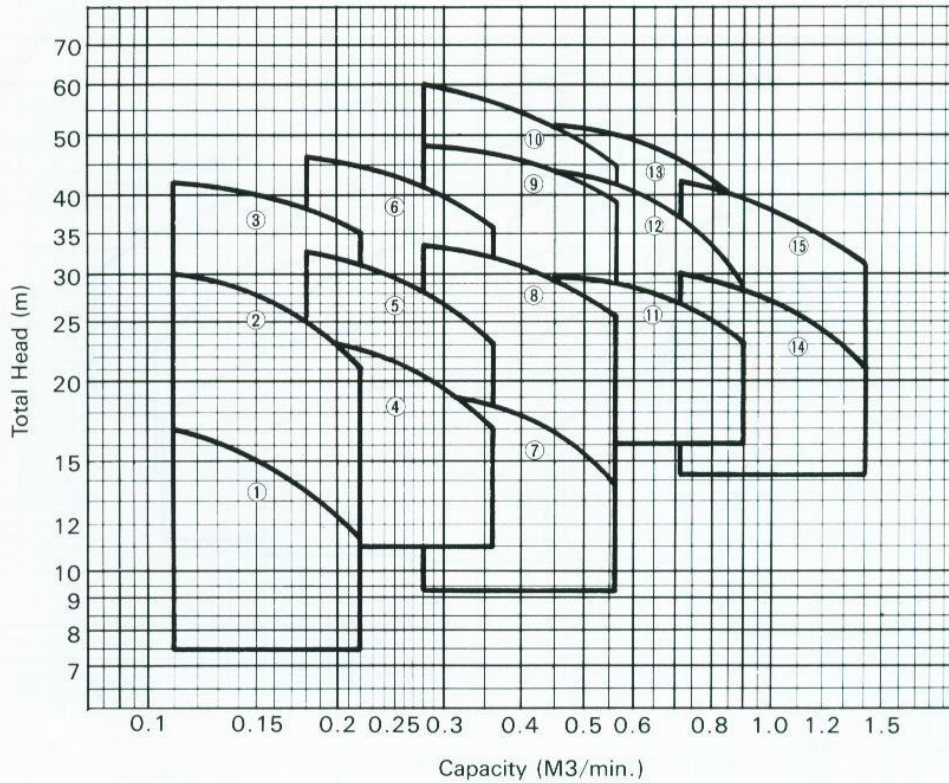
SELECTION CHART & TABLE



BORE (mm)	REF. NO.	MODEL	OUT PUT (Kw)	SPECIFICATIONS					
				Capacity	Head	Capacity	Head	Capacity	Head
				M3/min	m	M3/min	m	M3/min	m
40	1	GS-405-M0.4	0.4	0.1	11.5	0.14	10	0.2	6.8
	2	GS-405-M0.75	0.75		18		15.5		10.5
	3	GS-405-M1.5	1.5		28.5		26.5		22
	4	GS-405-M2.2	2.2		37		35		30.5
50	5	GS-505-M0.75	0.75	0.16	12.5	0.22	11.8	0.32	8.8
	6	GS-505-M1.5	1.5		22.2		20.2		15.5
	7	GS-505-M2.2	2.2		31		28.5		23
	8	GS-505-M3.7	3.7		43		40		33.5
65	9	GS-655-M1.5	1.5	0.25	13.8	0.36	12.5	0.5	10
	10	GS-655-M2.2	2.2		22		20		15.8
	11	GS-655-M3.7	3.7		33.5		31.5		26
	12	GS-655-M5.5	5.5		47		44.5		38.5
80	13	GS-805-M3.7	3.7	0.4	22	0.56	21	0.8	17.5
	14	GS-805-M5.5	5.5		35.5		32		25
100	15	GS-1005-M5.5	5.5	0.65	23.5	0.9	20.5	1.25	16
	16	GS-1005-M7.5	7.5		31		27		22

TYPE:GS-M
(60Hz/3600rpm)

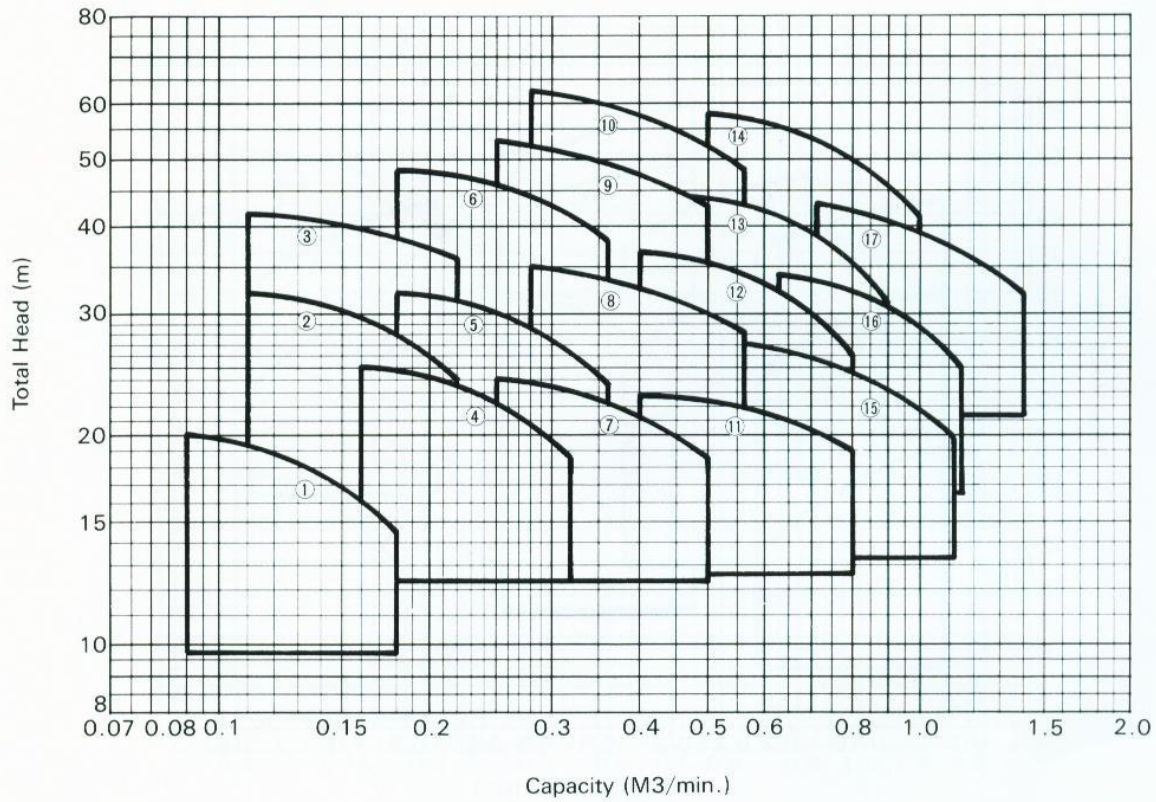
SELECTION CHART & TABLE



BORE (mm)	REF. NO.	MODEL	OUT PUT (Kw)	SPECIFICATIONS					
				Capacity	Head	Capacity	Head	Capacity	Head
				M3/min	m	M3/min	m	M3/min	m
40	1	GS-406-M0.75	0.75	0.11	17	0.16	14.5	0.22	11.2
	2	GS-406-M1.5	1.5		30		27		21
	3	GS-406-M2.2	2.2		42		39.5		35
50	4	GS-506-M1.5	1.5	0.18	23.5	0.25	21.5	0.36	17
	5	GS-506-M2.2	2.2		32.5		29.5		23
	6	GS-505-M3.7	3.7		46		43		35.5
65	7	GS-656-M2.2	2.2	0.28	19.2	0.4	17.8	0.56	13.8
	8	GS-656-M3.7	3.7		33.5		30.5		25.5
	9	GS-656-M5.5	5.5		48.5		45.5		39
	10	GS-656-M7.5	7.5		60		54.5		45
80	11	GS-806-M5.5	5.5	0.45	29.5	0.63	28	0.9	23
	12	GS-806-M7.5	7.5		44.5		39.2		28.5
	13	GS-806-M11	11		51.5		47.8		37.8
100	14	GS-1006-M7.5	7.5	0.71	30	1.0	27	1.4	21
	15	GS-1006-M11	11		41		36.2		29.5

* Specifications subject to change without notice.

SELECTION CHART & TABLE



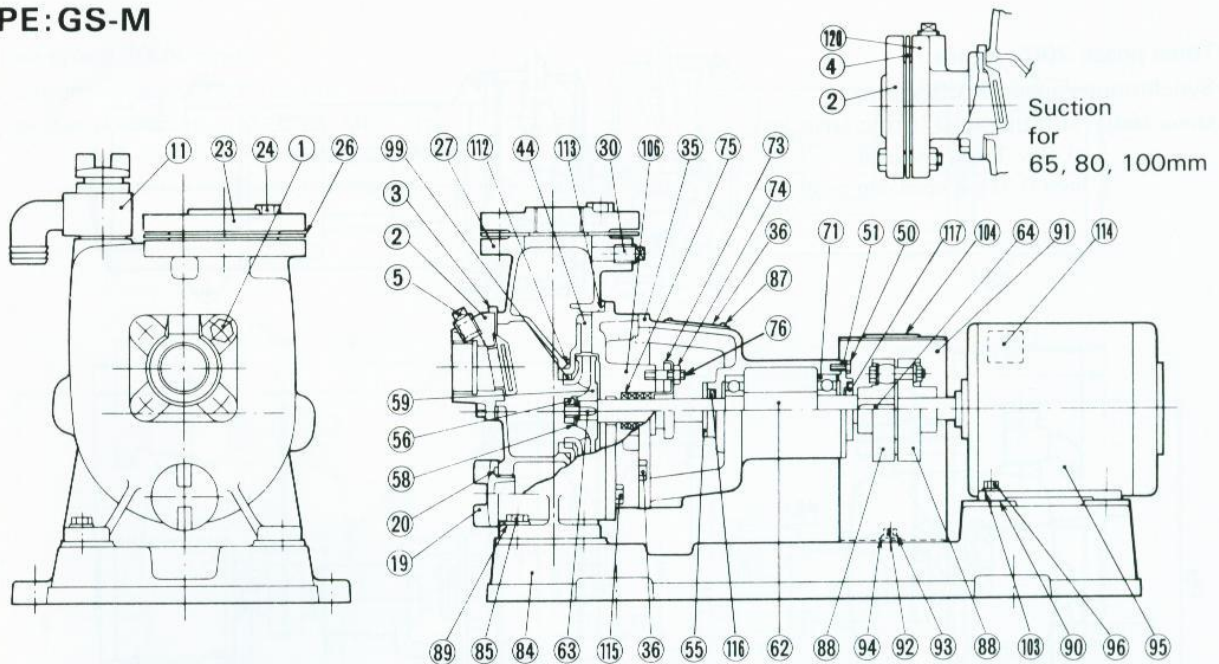
BORE (mm)	MODEL	REF. NO.	SPEED (rpm)	POWER		SPECIFICATIONS					
				Kw	H.P	Capacity	Total head	Capacity	Total head	Capacity	Total head
						M3/min	m	M3/min	m	M3/min	m
40	GMS-40-A	1	2,850	0.75	1	0.09	20	0.125	18.5	0.18	14.5
		2	3,600	1.5	2	0.11	32	0.16	29.5	0.22	24
	GHS-40-A	3	3,500	2.2	3	0.11	41.5	0.16	39.5	0.22	35.5
50	GMS-50-A	4	3,100	1.5	2	0.16	25	0.22	23.5	0.32	18.5
		5	3,500	2.2	3	0.18	32	0.25	30	0.36	23.5
	GHS-50-A	6	3,600	3.7	5	0.18	48.5	0.25	45.5	0.36	38
65	GMS-65-A	7	3,000	2.2	3	0.25	24	0.36	22	0.5	18.5
		8	3,600	3.7	5	0.28	35	0.4	32.5	0.56	28
	GHS-65-A	9	3,300	5.5	7.5	0.25	53	0.36	49	0.5	42.5
10		3,600	7.5	10	0.28	62.5	0.4	57.5	0.56	48.5	
80	GMS-80-A	11	3,000	3.7	5	0.4	22.8	0.56	21.8	0.8	19
		12	3,000	5.5	7.5	0.4	36.5	0.56	34	0.8	26
	GHS-80-A	13	3,300	7.5	10	0.45	44	0.63	41	0.9	31
14		3,750	11	15	0.5	57.5	0.71	52.5	1.0	40.5	
100	GHS-100-A	15	2,850	5.5	7.5	0.56	27	0.8	24.5	1.12	19.8
		16	3,200	7.5	10	0.63	34	0.9	30.5	1.25	25
		17	3,600	11	15	0.71	43	1.0	39	1.4	32

* Specifications subject to change without notice.

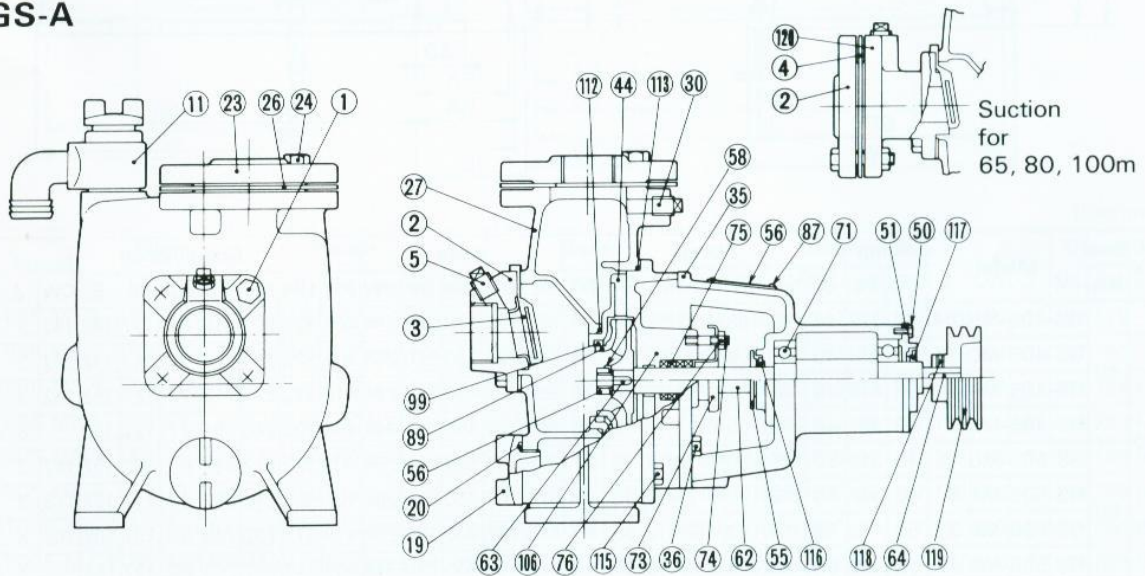
**TYPE: GS-M
GS-A**

CONSTRUCTION & PARTS LIST

TYPE: GS-M



TYPE: GS-A

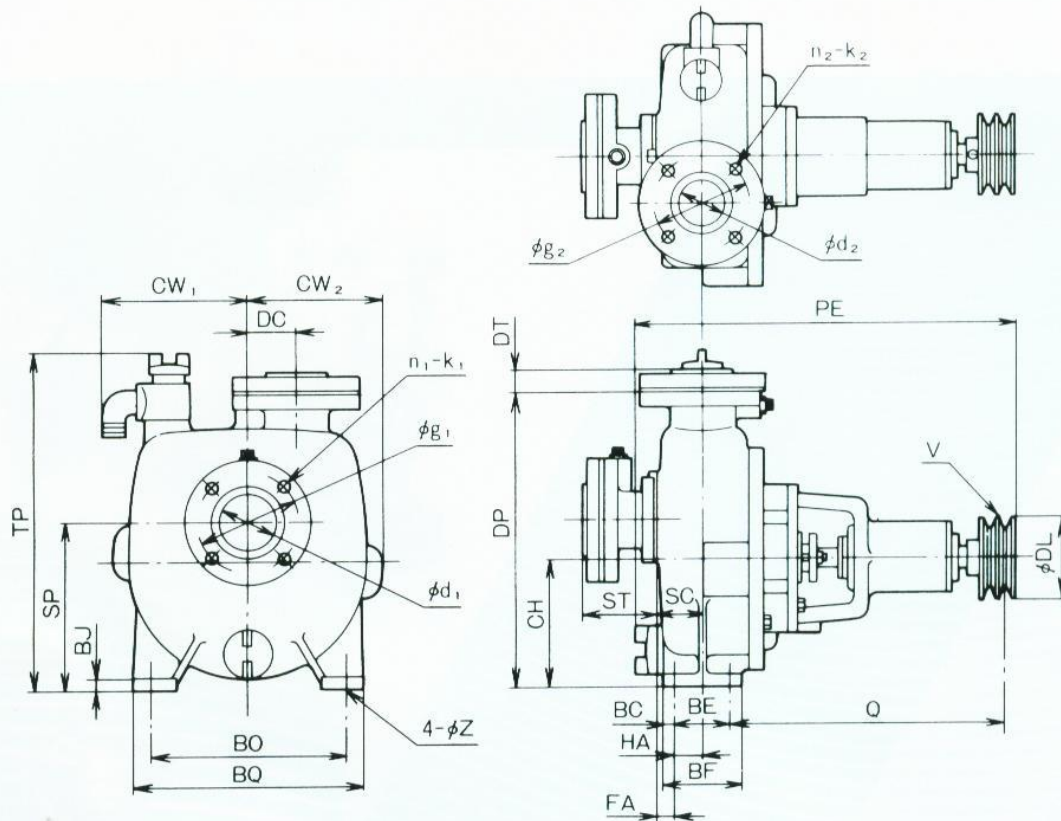


NO.	NAME OF PARTS	NO.	NAME OF PARTS	NO.	NAME OF PARTS	NO.	NAME OF PARTS
1	Suction flange bolt	36	Bracket bolt	75	Gland packing	96	Motor bolt
2	Suction flange	44	Guide vane	76	Gland nut	99	Liner ring
3	Suction check valve	50	Bearing cover bolt	84	Base	103	Spring washer
4	Suction flange packing	51	Bearing cover	85	Pump bolt	104	Caution label
5	3/4" plug	55	Deflector	86	Name plate	106	Casing cover
11	Priming-exhaust valve	56	Impeller nut	87	Ribbet	112	O-ring
19	Drain cap	58	Impeller washer	88	Coupling	113	O-ring for casing cover
20	Drain cap packing	59	Impeller	89	Washer for pump bolt	114	Caution label
23	Discharge flange	62	Shaft	90	Motor shim	115	Casing cover bolt
24	Discharge flange bolt	63	Impeller key	91	Coupling guard	116	Deflector (inboard)
26	Discharge flange packing	64	Coupling key	92	Coupling guard bolt	117	Deflector (outboard)
27	Casing	71	Ball bearing	93	Corrugated washer	118	Pulley stopper
30	3/8" plug	73	Gland	94	Plain washer	119	Pulley
35	Bracket	74	Gland bolt	95	Motor	120	Suction adaptor

DIMENSION DIAGRAM

Shape of discharge flange

JIS 10kgf/cm²



(Unit: mm)

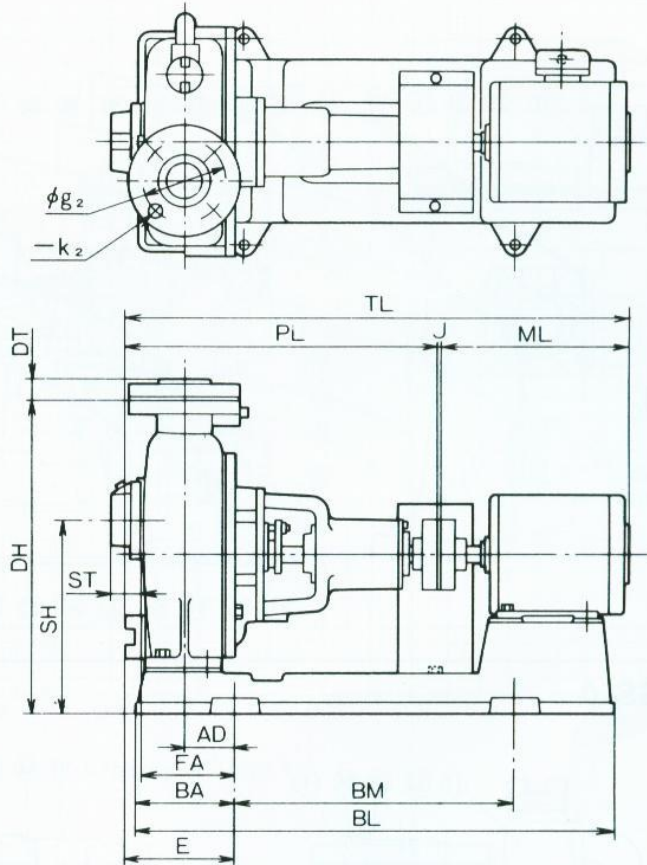
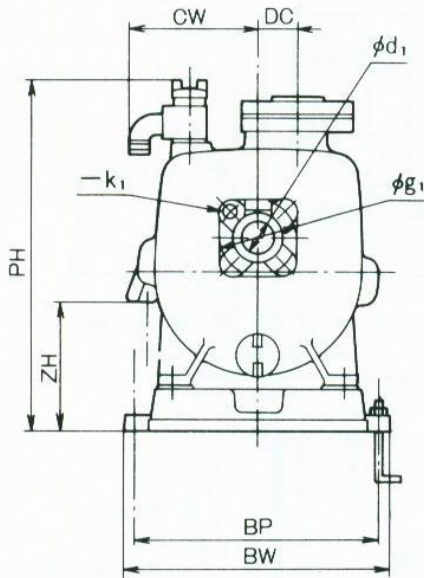
Bore (mm)	Model	Pump											Flange				
		CH	SC	DC	SP	BJ	BF	BC	BE	BO	BQ	Z	d ₁	d ₂	g ₁	g ₂	n ₁
65	GMS-65-A	132	70	52	187	15	121	18	85	190	220	M10	65	65	140	140	4
	GHS-65-A	160	70	55	215	18	120	18	85	254	290	M12	65	65	140	140	4
80	GMS-80-A	132	75	50	192	15	121	16	85	190	220	M10	80	80	150	150	8
	GHS-80-A	160	75	50	220	18	120	16	85	254	290	M12	80	80	150	150	8
100	GHS-100-A	160	90	60	230	18	145	23	100	254	290	M12	100	100	175	175	8

Bore (mm)	Model	Flange					Combination								V-pulley		Weight (kgf)
		n ₂	k ₁	k ₂	ST	DT	TP	Q	DP	PE	CW ₁	CW ₂	HA	FA	DL	V	
65	GMS-65-A	4	M12	M12	104	31	386	312	337	466	157	140	50	20	89	80A2	49
	GHS-65-A	4	M12	M12	104	31	439	332	390	472	182	163	50	20	134	125B2	56
80	GMS-80-A	8	M12	M12	126	33	401	386	357	481	190	143	58	35	89	80A2	90
	GHS-80-A	8	M12	M12	126	33	454	389	410	546	210	164	40	35	136	125B2	90
100	GHS-100-A	8	M12	M12	134	39	447	394	410	566	210	165	55	35	136	125B2	98

TYPE:GS-M
(BORE: 40·50mm)

DIMENSION DIAGRAM

- * Three phase 200V motor
- * Synchronous speed 3,000r.p.m.
- * Motor Maker: MITSUBISHI ELECTRIC MFG, LTD.
0.4kw: Totally enclosed
over 0.75kw: open drip-proof



(Unit:mm)

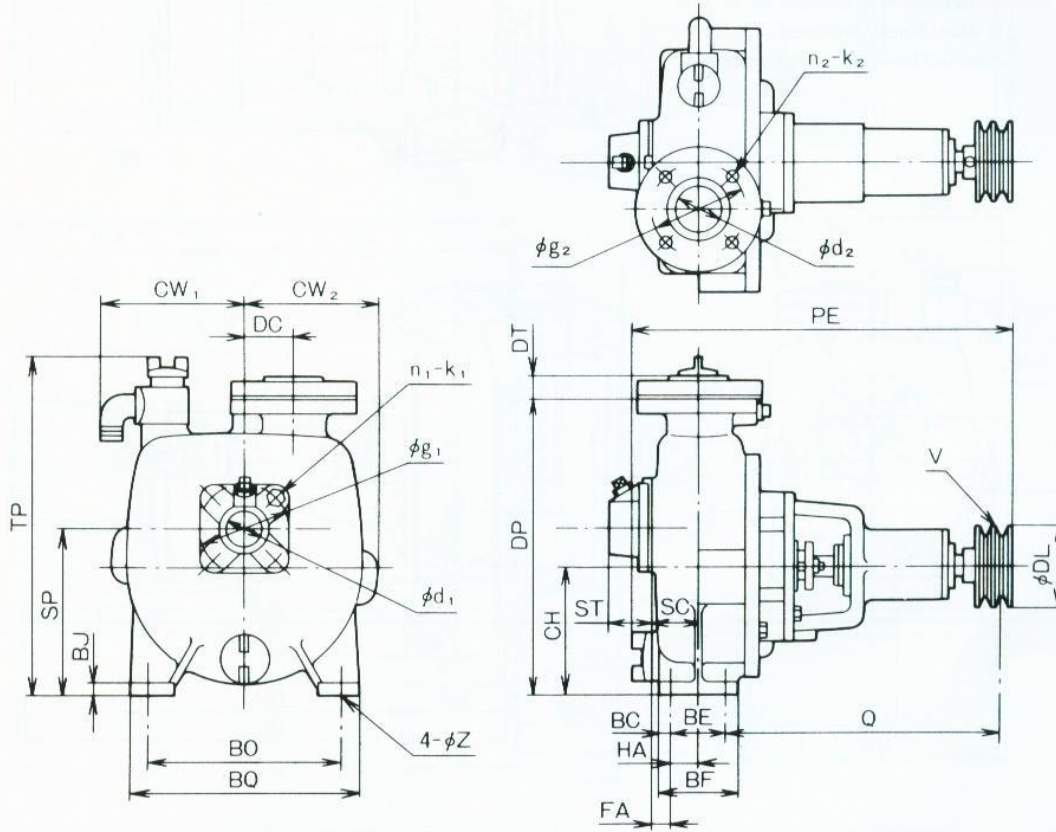
Hz	Bore mm	Model	Pump		Flange						Base					Combination						Other		Weight kgf				
			DC	PL	d ₁	g ₁	g ₂	k ₁	k ₂	ST	DT	BL	BA	BM	BP	BW	PH	DH	SH	TL	AD	FA	E		CW	J	ML	ZH
50	40	GS-405-MN0.4	35	377	44	95	105	M12	M12	38	25	558	127	320	220	254	401	322	207	618	62	117	142	147	3	238	122	45
		GS-405-M0.75	35	377	40	95	105	M12	M12	38	25	576	127	320	220	254	401	322	207	628	62	117	142	147	3	248	118	50
		GS-405-M1.5	50	415	40	95	105	M12	M12	38	25	668	137	400	250	284	419	372	227	715	77	127	152	152	3	297	131	67
		GS-405-M2.2	50	391	40	95	105	M12	M12	38	25	689	137	400	310	344	444	395	240	691	77	127	152	—	3	297	138	74
50	50	GS-505-M0.75	40	392	50	105	120	M12	M12	38	27	576	127	320	220	254	401	322	212	643	67	132	157	147	3	248	118	52
		GS-505-M1.5	40	392	50	105	120	M12	M12	38	27	626	107	400	250	284	401	322	212	692	47	112	137	148	3	297	121	62
		GS-505-M2.2	50	435	50	105	120	M12	M12	38	27	668	137	400	250	284	419	372	232	735	82	137	162	162	3	297	138	70
		GS-505-M3.7	50	405	50	105	120	M12	M12	38	27	689	137	400	310	344	466	417	267	763	82	137	162	—	3	355	169	90

Hz	Bore mm	Model	Pump		Flange						Base					Combination						Other		Weight kgf				
			DC	PL	d ₁	g ₁	g ₂	k ₁	k ₂	ST	DT	BL	BA	BM	BP	BW	PH	DH	SH	TL	AD	FA	E		CW	J	ML	ZH
60	40	GS-406-M0.75	35	377	40	95	105	M12	M12	38	25	576	127	320	220	254	401	322	207	628	62	117	142	147	3	248	118	50
		GS-406-M1.5	35	377	40	95	105	M12	M12	38	25	626	107	400	250	284	401	322	207	677	42	97	122	147	3	297	131	59
		GS-406-M2.2	50	415	40	95	105	M12	M12	38	25	668	137	400	250	284	419	372	227	715	77	127	152	152	3	297	138	69
60	50	GS-506-M1.5	40	392	50	105	120	M12	M12	38	27	626	107	400	250	284	401	322	212	692	47	112	137	148	3	297	131	60
		GS-506-M2.2	40	392	50	105	120	M12	M12	38	27	626	107	400	250	284	401	322	212	692	47	112	137	148	3	297	138	62
		GS-506-M3.7	50	439	50	105	120	M12	M12	38	27	711	152	400	280	314	419	372	232	797	97	152	177	170	3	355	169	85

DIMENSION DIAGRAM

Shape of discharge flange

JIS 10kgf/cm²



(Unit:mm)

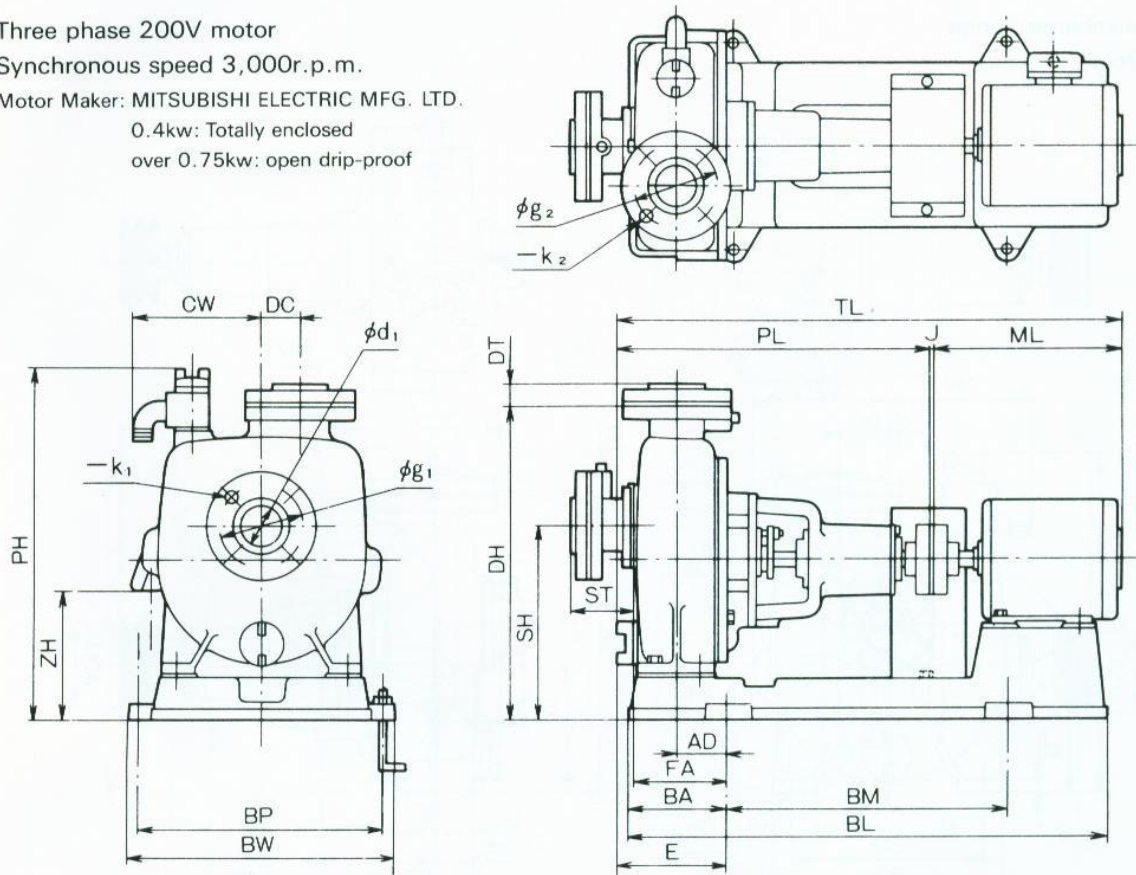
Bore (mm)	Model	Pump											Flange				
		CH	SC	DC	SP	BJ	BF	BC	BE	BO	BQ	Z	d ₁	d ₂	g ₁	g ₂	n ₁
40	GMS-40-A	112	55	35	152	12	90	15	60	175	205	M10	40	40	95	105	4
	GHS-40-A	132	50	50	172	12	96	18	60	190	220	M10	40	40	95	105	4
50	GMS-50-A	112	65	40	157	12	90	15	60	175	205	M10	50	50	105	120	4
	GHS-50-A	132	55	50	177	12	96	18	60	190	220	M10	50	50	105	120	4

Bore (mm)	Model	Flange			Combination										V-pulley		Weight kgf
		n ₂	k ₁	k ₂	ST	DT	TP	DP	Q	PE	CW ₁	CW ₂	HA	FA	DL	V	
40	GMS-40-A	4	M12	M12	38	25	346	290	267	402	147	113	38	17	89	3½A2	27
	GHS-40-A	4	M12	M12	38	25	364	325	317	440	152	136	30	20	89	3½A2	33
50	GMS-50-A	4	M12	M12	38	27	346	290	267	417	147	118	30	32	89	3½A2	29
	GHS-50-A	4	M12		38	27	364	335	317	460	162	140	25	30	89	80A2	35

TYPE:GS-M
(BORE: 65·80·100mm)

DIMENSION DIAGRAM

- * Three phase 200V motor
- * Synchronous speed 3,000r.p.m.
- * Motor Maker: MITSUBISHI ELECTRIC MFG. LTD.
0.4kw: Totally enclosed
over 0.75kw: open drip-proof



(Unit:mm)

Hz	Bore mm	Model	Pump		Flange				Base				Combination						Other		Weight kgf							
			DC	PL	d ₁	g ₁	g ₂	k ₁	k ₂	ST	DT	BL	BA	BM	BP	BW	PH	DH	SH	TL		AD	FA	E	CW	J	ML	ZH
50	65	GS-655-M1.5	52	441	65	140	140	M12	M12	104	31	698	167	400	250	284	441	392	242	741	87	157	182	157	3	297	173	77
		GS-655-M2.2	52	441	65	140	140	M12	M12	104	31	698	167	400	250	284	441	392	242	741	87	157	182	157	3	297	180	79
		GS-655-M3.7	55	455	65	140	140	M12	M12	104	31	750	172	400	310	354	504	455	280	813	92	162	187	182	3	355	227	113
		GS-655-M5.5	55	455	65	140	140	M12	M12	104	31	788	142	500	340	384	504	455	280	872	62	132	157	—	3	414	220	130
80	80	GS-805-M3.7	50	460	80	150	150	M12	M12	126	33	736	167	400	280	314	456	412	247	818	97	172	197	162	3	355	189	100
		GS-805-M5.5	50	520	80	150	150	M12	M12	126	33	862	177	500	340	384	519	475	285	937	82	157	182	210	3	414	220	147
100	100	GS-1005-M5.5	60	540	100	175	175	M12	M12	134	39	862	177	500	340	384	512	475	295	957	87	177	202	210	3	414	220	155
		GS-1005-M7.5	60	540	100	175	175	M12	M12	134	39	862	177	500	340	384	512	475	295	957	87	177	202	210	3	414	220	158

Hz	Bore mm	Model	Pump		Flange				Base				Combination						Other		Weight kgf							
			DC	PL	d ₁	g ₁	g ₂	k ₁	k ₂	ST	DT	BL	BA	BM	BP	BW	PH	DH	SH	TL		AD	FA	E	CW	J	ML	ZH
60	65	GS-656-M2.2	52	441	65	140	140	M12	M12	104	34	698	167	400	250	284	441	392	242	741	87	157	182	152	3	297	180	79
		GS-656-M3.7	52	445	65	140	140	M12	M12	104	34	736	167	400	280	314	441	392	242	803	87	157	182	152	3	355	189	95
		GS-656-M5.5	55	455	65	140	140	M12	M12	104	34	788	167	500	340	384	504	455	280	872	62	131	157	—	3	414	220	130
		GS-656-M7.5	55	455	65	140	140	M12	M12	104	31	788	142	500	340	384	504	455	280	872	62	132	157	—	3	414	220	135
80	80	GS-806-M5.5	50	525	80	150	150	M12	M12	126	33	862	177	500	340	384	519	475	285	937	82	157	182	210	3	414	220	147
		GS-806-M7.5	50	525	80	150	150	M12	M12	126	33	862	177	500	340	384	519	475	285	937	72	147	172	210	3	414	230	157
		GS-806-M11	50	540	80	150	150	M12	M12	126	33	1004	182	630	380	424	519	475	285	1069	87	162	187	263	3	526	221	
100	100	GS-1006-M7.5	60	540	100	175	175	M12	M12	134	39	862	177	500	340	384	512	475	295	957	87	177	202	210	3	414	220	158
		GS-1006-M11	60	540	100	175	175	M12	M12	134	39	1004	182	630	380	424	512	475	295	1089	92	182	207	263	3	526	221	