

MICRO GEAR MOTOR



Range

- 6W~250W

Application

- Material Handling
- Paper, Sugar, Cement
- Pharmaceutical
- Food Processing
- Conveyor, Mixers
- Plastic & Packaging
- Ceramic

DESIGNATION

MICRO AC MOTOR MODEL NAME

LGM	60	YS	06W	G/D	V22	
1	2	3	4	5	6	7

1 Product Code

2 Frame Code

60, 70, 80, 90, 100

4 Power Code

06W, 15W, 25W, 40W, 60W, 90W, 120W,
140W, 160W, 180W, 200W, 250W

5 Rotor Shaft form Code

G : GEAR SHAFT
D : ROUND SHAFT

3 Name Code

YS : STANDARD MOTOR
YT : VARIABLE SPEED MOTOR
YB : ELECTROMAGNETIC
BRAKE MOTOR
YF : VARIABLE SPEED
ELECTROMAGNETIC
BRAKE MOTOR
YR : DAMPING/REV. MOTOR

6 Voltage Code

V11 : SINGLE PHASE 110V
V22 : SINGLE PHASE 220V
Y415/240 : THREE PHASE 220V
Y415/240 : THREE PHASE 380V

7 Derived Code

X : LEAD (LINE LENGTH 300 MM)
T : WITH THERMAL PROTECTOR
H : WITH TERMINAL BLOCK

6W	: 60 frame
15W	: 70 frame
25W	: 80 frame
40W / 60W / 90W / 120W	: 90 frame
120W / 140W / 160W	: 100 frame
180W / 200W / 250W	: 100 frame

GEAR BOX MODEL NAME

LGH	60	GK	100	H	
1	2	3	4	5	6

1 Product Code

2 Frame Code

60, 70, 80, 90, 100,
L80, L90, L100

3 Model Code

GK : 6-25W GEARBOX
GF : 40-250W GEARBOX

4 Reduction Ratio Code

3, 3.6... 200

5 Structure Code

H : STANDARD
HE : EARED / HINGE
RT : RIGHT ANGLE SOLID
RC : RIGHT ANGLE HOLLOW

6 Derived Code

K : HOLE

MICRO AC MOTOR COMMON TECHNICAL STANDARDS

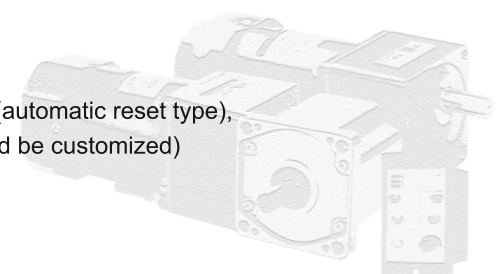
INSULATION RESISTANCE : After running at rated settings under normal temperature and humidity, the insulation resistance between the winding and the shell of the motor measured with a DC500V megger should be more than 100MΩ.

INSULATION VOLTAGE : After running at rated settings under normal temperature and humidity, apply 50Hz or 60Hz, 1.5KV between the winding and the shell for one minute, and the motor is normal.

TEMPERATURE RISE : When running at rated settings with gearbox or equivalent heat radiating plate installed, the temperature rise of the winding measured in resistance method is 75K or less.

INSULATION CLASS : B (130°C)

OVERHEATING PROTECTION DEVICE : With built-in thermal protection device (automatic reset type), operating temperature : 120±5°C, reset temperature : 82±15°C (this feature should be customized)



MOTOR PERFORMANCE

6W

Model		(W) Maximum Output Power	Voltage	Frequency	Current	r/min Speed Range	N·mm Start Torque	Rated Torque (m N.m)		Running Capacitor
								1200r/min	90r/min	
Gear Shaft	LGM60YS06WGV11	6	Single phase 110	50Hz	0.23	90-1300	38	47	30	2.5μf/250V
	LGM60YR06WGV11									
	LGM60YT06WGV11									
	LGM60YB06WGV11									
Round Shaft	LGM60YS06WDV11			60HZ	0.21	90-1600	40	50	30	
	LGM60YR06WDV11									
	LGM60YT06WDV11									
	LGM60YB06WDV11									
Gear Shaft	LGM60YS06WGV22	6	Single phase 220	50Hz	0.11	90-1300	38	47	32	0.8μf/450V
	LGM60YR06WGV22									
	LGM60YT06WGV22									
	LGM60YB06WGV22									
Round Shaft	LGM60YS06WDV22			60HZ	0.10	90-1600	40	50	32	
	LGM60YR06WDV22									
	LGM60YT06WDV22									
	LGM60YB06WDV22									

Reduction Ratio Performance Chart

Reduction Ratio		3	3.60	5	6	7.5	10	12.5	15	18	20	25	30
50Hz	r/min Output bearing speed	433	361	260	217	173	130	104	87	72	65	52	43
	N·m Rated Torque	0.13	0.15	0.22	0.26	0.33	0.44	0.55	0.66	0.79	0.88	1.10	1.32
60Hz	r/min Output bearing speed	533	444	320	267	213	160	128	107	89	80	64	53
	N·m Rated Torque	0.11	0.13	0.18	0.22	0.28	0.37	0.46	0.55	0.66	0.73	0.92	1.10
Reduction Ratio		36	40	50	60	75	90	100	120	150	180	200	
50Hz	r/min Output bearing speed	36	33	26	22	17	14	13	11	9	7	7	
	N·m Rated Torque	1.59	1.76	2.06	2.18	2.42	3	3	8	3	3	3	
60Hz	r/min Output bearing speed	44	40	32	27	21	18	16	13	11	9	8	
	N·m Rated Torque	1.33	1.47	1.71	1.82	2.02	2.42	2.65	3	3	3	3	

MOTOR PERFORMANCE

15W

Model		(W) Maximum Output Power	Voltage	Frequency	Current	r/min Speed Range	N·mm Start Torque	Rated Torque (m N.m) 1200r/min 90r/min		Running Capacitor
Gear Shaft	LGM70YS15WGV11	15	Single phase 110	50Hz	0.39	90-1300	70	125	45	4μf/250V
	LGM70YR15WGV11									
	LGM70YT15WGV11									
	LGM70YB15WGV11									
Round Shaft	LGM70YS15WDV11			60HZ	0.35	90-1600	65	125	45	
	LGM70YR15WDV11									
	LGM70YT15WDV11									
	LGM70YB15WDV11									
Gear Shaft	LGM70YS15WGV22	15	Single phase 220	50Hz	0.20	90-1300	70	125	45	1.5μf/450V
	LGM70YR15WGV22									
	LGM70YT15WGV22									
	LGM70YB15WGV22									
Round Shaft	LGM70YS15WDV22			60HZ	0.17	90-1600	65	125	45	
	LGM70YR15WDV22									
	LGM70YT15WDV22									
	LGM70YB15WDV22									

Reduction Ratio Performance Chart

Reduction Ratio		3	3.60	5	6	7.5	10	12.5	15	18	20	25	30
50Hz	r/min Output bearing speed	433	361	260	217	173	130	104	87	72	65	52	43
	N·m Rated Torque	0.30	0.36	0.50	0.60	0.74	0.99	1.24	1.49	1.79	1.98	2.31	2.78
60Hz	r/min Output bearing speed	533	444	320	267	213	160	128	107	89	80	64	53
	N·m Rated Torque	0.25	0.30	0.41	0.50	0.62	0.83	1.03	1.24	1.49	1.65	1.93	2.31
Reduction Ratio		36	40	50	60	75	90	100	120	150	180	200	
50Hz	r/min Output bearing speed	36	33	26	22	17	14	13	11	9	7	7	
	N·m Rated Torque	3.33	3.70	4.63	5	5	5	5	5	5	5	5	
60Hz	r/min Output bearing speed	44	40	32	27	21	18	16	13	11	9	8	
	N·m Rated Torque	2.78	3.09	3.86	4.35	5	5	5	5	5	5	5	

MOTOR PERFORMANCE

25W

Model		(W) Maximum Output Power	Voltage	Frequency	Current	r/min Speed Range	N·mm Start Torque	Rated Torque (m N.m)		Running Capacitor
								1200r/min	90r/min	
Gear Shaft	LGM80YS25WGV11	25	Single phase 110	50Hz	0.53	90-1300	145	170	45	6μf/250V
	LGM80YR25WGV11									
	LGM80YT25WGV11									
	LGM80YB25WGV11									
Round Shaft	LGM80YS25WDV11			60HZ	0.48	90-1600	120	170	45	
	LGM80YR25WDV11									
	LGM80YT25WDV11									
	LGM80YB25WDV11									
Gear Shaft	LGM80YS25WGV22	25	Single phase 220	50Hz	0.25	90-1300	145	205	50	2μf/450V
	LGM80YR25WGV22									
	LGM80YT25WGV22									
	LGM80YB25WGV22									
Round Shaft	LGM80YS25WDV22			60HZ	0.23	90-1600	120	205	50	
	LGM80YR25WDV22									
	LGM80YT25WDV22									
	LGM80YB25WDV22									
Gear Shaft	LGM80YS25WGY415/240	25	Three phase 220	50Hz	0.25	90-1300	250	195		
	LGM80YT25WGY415/240									
	LGM80YB25WGY415/240									
Round Shaft	LGM80YS25WDY415/240			60Hz	0.23	90-1600	205	160		
	LGM80YT25WDY415/240									
	LGM80YB25WDY415/240									
Gear Shaft	LGM80YS25WGY415/240	25	Three phase 380	50Hz	0.14	90-1300	250	195		
	LGM80YT25WGY415/240									
	LGM80YB25WGY415/240									
Round Shaft	LGM80YS25WDY415/240			60Hz	0.13	90-1600	205	160		
	LGM80YT25WDY415/240									
	LGM80YB25WDY415/240									

Reduction Ratio Performance Chart

Reduction Ratio		3	3.60	5	6	7.5	10	12.5	15	18	20	25	30
50Hz	r/min Output bearing speed	433	361	260	217	173	130	104	87	72	65	52	43
	N·m Rated Torque	0.50	0.6	0.83	0.99	1.24	1.65	1.95	2.34	2.81	3.12	3.90	4.68
60Hz	r/min Output bearing speed	533	444	320	267	213	160	128	107	89	80	64	53
	N·m Rated Torque	0.41	0.5	0.69	0.83	1.03	1.38	1.63	1.95	2.34	2.60	3.25	3.9
Reduction Ratio		36	40	50	60	75	90	100	120	150	180	200	
50Hz	r/min Output bearing speed	36	33	26	22	17	14	13	11	9	7	7	
	N·m Rated Torque	5.62	6.24	6.89	8	8	8	8	8	8	8	8	
60Hz	r/min Output bearing speed	44	40	32	27	21	18	16	13	11	9	8	
	N·m Rated Torque	4.68	5.20	5.74	6.88	8	8	8	8	8	8	8	

MOTOR PERFORMANCE

60W

Model		(W) Maximum Output Power	Voltage	Frequency	Current	r/min Speed Range	N-mm Start Torque	Rated Torque (m N.m)		Running Capacitor
								1200r/min	90r/min	
Gear Shaft	LGM90YS60WGV11	60	Single phase 110	50Hz	1.26	90-1300	350	490	200	14μf/250V
	LGM90YR60WGV11									
	LGM90YT60WGV11									
	LGM90YF60WGV11									
	LGM90YB60WGV11									
Round Shaft	LGM90YS60WDV11			60HZ	1.14	90-1600	280	490	220	
	LGM90YR60WDV11									
	LGM90YT60WDV11									
	LGM90YF60WDV11									
	LGM90YB60WDV11									
Gear Shaft	LGM90YS60WGV22	60	Single phase 220	50Hz	0.62	90-1300	350	490	200	4μf/450V
	LGM90YR60WGV22									
	LGM90YT60WGV22									
	LGM90YF60WGV22									
	LGM90YB60WGV22									
Round Shaft	LGM90YS60WDV22			60Hz	0.57	90-1600	280	490	200	
	LGM90YR60WDV22									
	LGM90YT60WDV22									
	LGM90YF60WDV22									
	LGM90YB60WDV22									
Gear Shaft	LGM90YS60WGY415/240	60	Three phase 220	50Hz	0.53	90-1300	600	460		
	LGM90YB60WGY415/240									
Round Shaft	LGM90YS60WDY415/240			60Hz	0.48	90-1600	490	375		
	LGM90YS60WDY415/240									
Gear Shaft	LGM90YS60WGY415/240	60	Three phase 380	50Hz	0.32	90-1300	600	460		
	LGM90YB60WGY415/240									
Round Shaft	LGM90YS60WDY415/240			50Hz	0.29	90-1300	490	375		
	LGM90YS60WDY415/240									

Reduction Ratio Performance Chart

Reduction Ratio		3	3.60	5	6	7.5	10	12.5	15	18	20	25	30
50Hz	r/min Output bearing speed	433	361	260	217	173	130	104	87	72	65	52	43
	N-m Rated Torque	1.19	1.43	1.98	2.36	2.96	3.97	4.35	5.22	6.27	6.96	8.26	9.92
60Hz	r/min Output bearing speed	533	444	320	267	213	160	128	107	80	80	64	53
	N-m Rated Torque	0.99	1.19	1.65	1.98	2.48	3.31	3.63	4.35	5.80	5.80	6.89	8.26
Reduction Ratio		36	40	50	60	75	90	100	120	150	180	200	
50Hz	r/min Output bearing speed	36	33	26	22	17	14	13	11	9	7	7	
	N-m Rated Torque	11.90	13.22	16.53	19.83	20	20	20	20	20	20	20	
60Hz	r/min Output bearing speed	44	40	32	27	21	18	16	13	11	9	8	
	N-m Rated Torque	9.92	11.02	13.77	16.53	20	20	20	20	20	20	20	

90W

Model		(W) Maximum Output Power	Voltage	Frequency	Current	r/min Speed Range	N-mm Start Torque	Rated Torque (m N.m)		Running Capacitor		
								1200r/min	90r/min			
Gear Shaft	LGM90YS90WGV11	90	Single phase 110	50Hz	1.70	90-1300	525	710	200	20μf/250V		
	LGM90YR90WGV11											
	LGM90YT90WGV11											
	LGM90YB90WGV11											
	LGM90YF90WGV11											
Round Shaft	LGM90YS90WDV11			60HZ	1.50	90-1600	420	710	200			
	LGM90YR90WDV11											
	LGM90YT90WDV11											
	LGM90YB90WDV11											
	LGM90YF90WDV11											
Gear Shaft	LGM90YS90WGV22	90	Single phase 220	50Hz	0.95	90-1300	525	710	200	5μf/450V		
	LGM90YR90WGV22											
	LGM90YT90WGV22											
	LGM90YB90WGV22											
	LGM90YF90WGV22											
Round Shaft	LGM90YS90WDV22			60Hz	0.86	90-1600	420	710	200			
	LGM90YR90WDV22											
	LGM90YT90WDV22											
	LGM90YB90WDV22											
	LGM90YF90WDV22											
Gear Shaft	LGM90YS90WGY415/240	90	Three phase 220	50Hz	0.69	90-1300	910	700				
Round Shaft	LGM90YB90WGY415/240			60Hz	0.63	90-1600	730	560				
Gear Shaft	LGM90YS90WDY415/240	90	Three phase 380	50Hz	0.41	90-1300	910	700				
	LGM90YB90WGY415/240			50Hz	0.38	90-1300	730	560				
Round Shaft	LGM90YS90WDY415/240											
	LGM90YB90WDY415/240											

Reduction Ratio Performance Chart

[illegible]

Reduction Ratio Performance Chart

[illegible]

MOTOR PERFORMANCE

140W

Model		(W) Maximum Output Power	Voltage	Frequency	Current	r/min Speed Range	N·mm Start Torque	Rated Torque (m N.m)		Running Capacitor
								1200r/min	90r/min	
Gear Shaft	LGM100YS140WGV11	140	Single phase 110	50Hz	2.26	90-1300	840	1050	350	28μf/250V
	LGM100YT140WGV11									
	LGM100YB140WGV11									
	LGM100YF140WGV11									
Round Shaft	LGM100YS140WDV11			60HZ	2.10	90-1600	680	1050	350	
	LGM100YT140WDV11									
	LGM100YB140WDV11									
	LGM100YF140WDV11									
Gear Shaft	LGM100YS140WGV22	140	Single phase 220	50Hz	1.13	90-1300	840	1050	350	8μf/450V
	LGM100YT140WGV22									
	LGM100YB140WGV22									
	LGM100YF140WGV22									
Round Shaft	LGM100YS140WDV22			60Hz	1.05	90-1600	680	1050	350	
	LGM100YT140WDV22									
	LGM100YB140WDV22									
	LGM100YF140WDV22									
Gear Shaft	LGM100YS140WGY415/240	140	Three phase 220	50Hz	0.95	90-1300	1393	1078		
	LGM100YB140WGY415/240			60Hz	0.88	90-1600	1183	875		
Round Shaft	LGM100YS140WDY415/240			LGM100YB140WDY415/240						
	LGM100YB140WDY415/240									
Gear Shaft	LGM100YS140WGY415/240	140	Three phase 380	50Hz	0.55	90-1300	1393	1078		
	LGM100YB140WGY415/240			50Hz	0.48	90-1600	1183	875		
Round Shaft	LGM100YS140WDY415/240			LGM100YB140WDY415/240						
	LGM100YB140WDY415/240									

Reduction Ratio Performance Chart

Reduction Ratio		3	3.60	5	6	7.5	10	12.5	15	18	20	25	30
50Hz	r/min Output bearing speed	433	361	260	217	173	130	104	87	72	65	52	43
	N·m Rated Torque	2.62	3.15	4.37	5.25	6.56	7.51	9.38	11.26	13.51	15.02	18.77	21.91
60Hz	r/min Output bearing speed	533	444	320	267	213	160	128	107	89	80	64	53
	N·m Rated Torque	2.19	2.62	3.64	4.37	5.46	6.26	7.82	9.38	11.26	12.51	15.64	18.26
Reduction Ratio		36	40	50	60	75	90	100	120	150	180	200	
50Hz	r/min Output bearing speed	36	33	26	22	17	14	13	11	9	7	7	
	N·m Rated Torque	26.29	29.21	33.94	40.73	44	44	44	44	44	44	44	
60Hz	r/min Output bearing speed	44	40	32	27	21	18	16	13	11	9	8	
	N·m Rated Torque	21.91	24.34	28.28	33.94	40.73	44	44	44	44	44	44	

Model		(W) Maximum Output Power	Voltage	Frequency	Current	r/min Speed Range	N·mm Start Torque	Rated Torque (m N.m)		Running Capacitor
								1200r/min	90r/min	
Gear Shaft	LGM100YS160WGV11	160	Single phase 110	50Hz	2.60	90-1300	900	1250	28μf/250V	
	LGM100YT160WGV11									
	LGM100YB160WGV11									
	LGM100YF160WGV11									
Round Shaft	LGM100YS160WDV11			60HZ	2.34	90-1600	750	1250		
	LGM100YT160WDV11									
	LGM100YB160WDV11									
	LGM100YF160WDV11									
Gear Shaft	LGM100YS160WGV22	160	Single phase 220	50Hz	1.30	90-1300	900	1250	8μf/450V	
	LGM100YT160WGV22									
	LGM100YB160WGV22									
	LGM100YF160WGV22									
Round Shaft	LGM100YS160WDV22			60Hz	1.17	90-1600	750	1250		
	LGM100YT160WDV22									
	LGM100YB160WDV22									
	LGM100YF160WDV22									
Gear Shaft	LGM100YS160WGY415/240	160	Three phase 220	50Hz	1.21	90-1300	1590	1248		
	LGM100YB160WGY415/240									
Round Shaft	LGM100YS160WDY415/240			60Hz	1.09	90-1600	1353	1005		
	LGM100YB160WDY415/240									
Gear Shaft	LGM100YS160WGY415/240	160	Three phase 380	50Hz	0.70	90-1300	1590	1248		
	LGM100YB160WGY415/240									
Round Shaft	LGM100YS160WDY415/240			50Hz	0.50	90-1600	1353	1005		
	LGM100YB160WDY415/240									

Reduction Ratio Performance Chart

[illegible]

180W

Model		(W) Maximum Output Power	Voltage	Frequency	Current	r/min Speed Range	N·mm Start Torque	Rated Torque (m N.m)		Running Capacitor
								1200r/min	90r/min	
Gear Shaft	LGM100YS180WGV11	180	Single phase 110	50Hz	3.00	90-1300	1050	1450		32μf/250V
	LGM100YT180WGV11									
	LGM100YB180WGV11									
	LGM100YF180WGV11									
Round Shaft	LGM100YS180WDV11			60HZ	2.70	90-1600	880	1450		
	LGM100YT180WDV11									
	LGM100YB180WDV11									
	LGM100YF180WDV11									
Gear Shaft	LGM100YS180WGV22	180	Single phase 220	50Hz	1.50	90-1300	1050	1450		10μf/450V
	LGM100YT180WGV22									
	LGM100YB180WGV22									
	LGM100YF180WGV22									
Round Shaft	LGM100YS180WDV22			60Hz	1.35	90-1600	880	1450		
	LGM100YT180WDV22									
	LGM100YB180WDV22									
	LGM100YF180WDV22									
Gear Shaft	LGM100YS180WGY415/240	180	Three phase 220	50Hz	1.30	90-1300	1790	1418		
	LGM100YB180WGY415/240									
Round Shaft	LGM100YS180WDY415/240			60Hz	1.17	90-1600	1523	1135		
	LGM100YB180WDY415/240									
Gear Shaft	LGM100YS180WGY415/240	180	Three phase 380	50Hz	0.75	90-1300	1790	1418		
	LGM100YB180WGY415/240									
Round Shaft	LGM100YS180WDY415/240			50Hz	0.67	90-1600	1523	1135		
	LGM100YB180WDY415/240									

Reduction Ratio Performance Chart

[illegible]

ANALOG SPEED CONTROLLER



FEATURES

- Achieve continuously variable transmission in a wide range combined with variable speed motor
- Feature-rich, enabling slow acceleration, slow deceleration and motor stall protection
- The capacitor for speed controller running is mounted directly inside the controller, featuring neat and convenient wiring

MODEL PARAMETERS

Model	WS-P
Installation Method	Panel
Speed Regulation	Panel potentiometer
Supply Voltage	220V Single Phase 220V
Control Features	Speed Control, Slow acceleration, Slow Deceleration, Electronic Brake
Applicable Motor Power Range	6W~250W
Running Capacitor	Built-in
Power Frequency	50 / 60Hz
Speed Range	50Hz : 90~1300r/min 60Hz : 90~1600r/min
Rate of Speed Change	5%
Electronic Braking Time	0.4 sec
Environment of Use	-10°C~+40°C No freezing, <85% (No condensation)

MULTI-FUNCTION SPEED CONTROLLER



FEATURES

- Achieve continuously variable transmission in a wide range combined with variable speed motor
- Feature-rich, enabling slow acceleration, slow deceleration and motor stall protection
- The capacitor for speed controller running is mounted directly inside the controller, featuring neat and convenient wiring

MODEL PARAMETERS

Model	WX-K
Installation Method	Multi-Function(Built-in)
Speed Regulation	Panel Key and potentiometer
Supply Voltage	220Vac Single Phase 220Vac
Control Features	Speed control, Slow acceleration, Slow deceleration, Electronic brake, Stall protection, Panel Control Forward and reverse rotation, Speed display, Digital display key controlled
Applicable Motor Power Range	6W~250W
Running Capacitor	Built-in
Power Frequency	50 / 60Hz
Speed Range	50Hz : 90~1300r/min 60Hz : 90~1600r/min
Rate of Speed Change	5%
Electronic Braking Time	0.4 sec
Environment of Use	-10°C~+40°C No freezing, <85% (No condensation)



Lubi Electronics

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