

57mm NEMA 23, GM57YA Series Brushless DC Motors

● General Specification

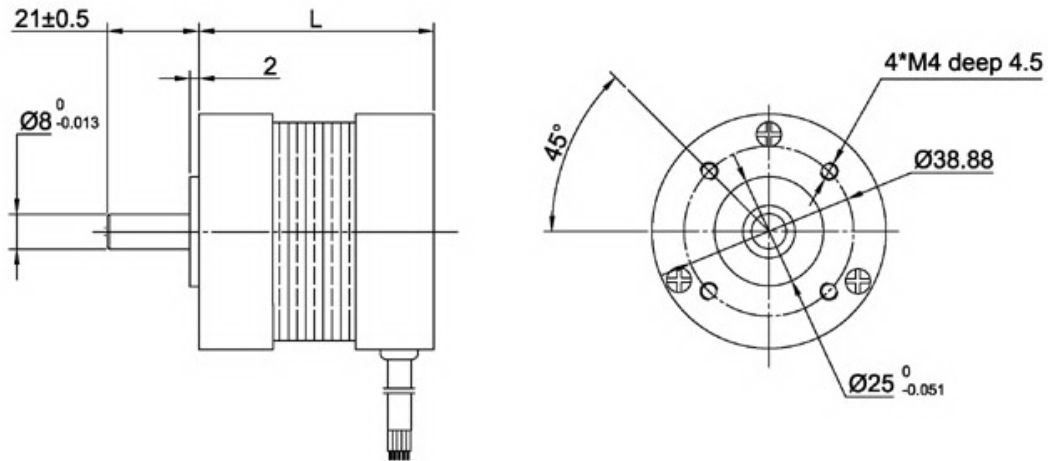
Item	Specifications
Winding type	DELTA
Hall effect angle	120 degree electrical angle
Shaft run out	0.025mm
Radial play	0.025mm@400g
End play	0.025mm@400g
Max. radial force	75N @ 20mm from the flange
Max. axial force	15N
Insulation class	Class B
Dielectric strength	500VDC for one minute
Insulation resistance	100MΩMin., 500VDC



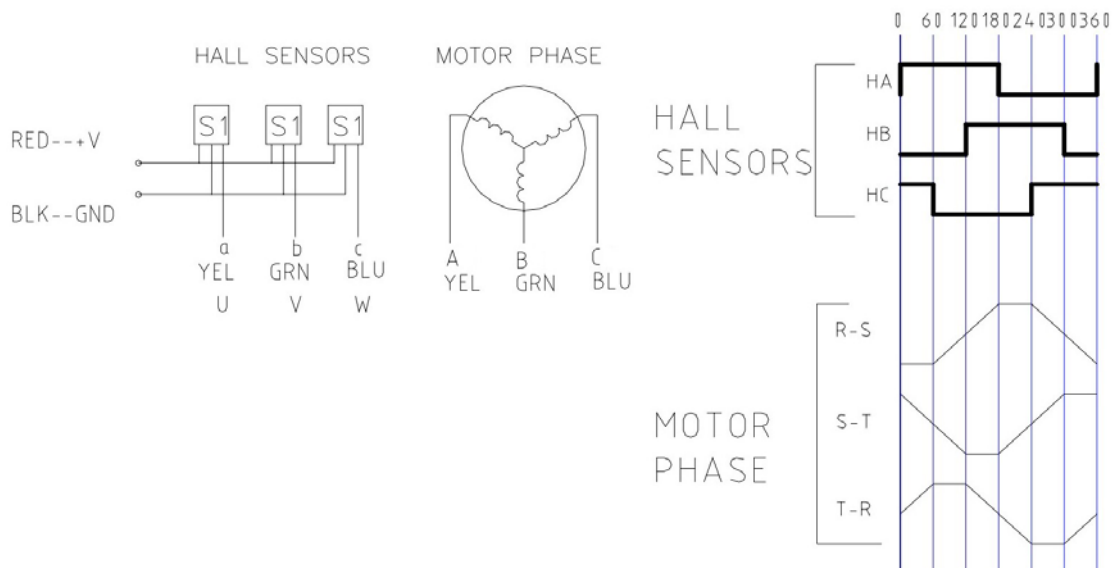
● Technique Specifications

Model		GM57YA -A54A20	57ZW3Y -A54A40	57ZW3Y -A54A60	57ZW3Y -A74A20	57ZW3Y -A74A40	57ZW3Y -A74A60	57ZW3Y -A94A20	57ZW3Y -A94A40
Number of poles	4								
Number of phase	3								
Rated voltage	VDC	24	24	24	24	24	24	24	24
Rated speed	RPM	2000	4000	6000	2000	4000	6000	2000	4000
Continuous stall torque	Oz-in	26.9	26.9	26.9	54.4	54.4	54.4	76.5	76.5
	N.m	0.19	0.19	0.19	0.384	0.384	0.384	0.54	0.54
Rated torque	Oz-in	22.7	22.7	22.7	45.4	45.4	45.4	63.7	63.7
	N.m	0.16	0.16	0.16	0.32	0.32	0.32	0.45	0.45
Rotor power	W	33.5	67	100.5	67	134	201	94	188
Peak torque	Oz-in	68	68	68	131.7	136	136	191.2	191.2
	N.m	0.48	0.48	0.48	0.93	0.96	0.96	1.35	1.35
Peak current	A	5.58	11.1	13.7	11.1	22.2	33.3	15.6	31.2
Torque constant	Oz-in/A	11.5	6	4	11.5	6.4	4	11.5	6.4
	Nm/A	0.081	0.042	0.028	0.081	0.045	0.028	0.081	0.045
Back E.M.F	V/KRPM	8.57	4.8	3	8.57	4.8	3	8.57	4.8
Rotor inertia	g.c m ²	60.5	60.5	60.5	113	113	113	165	165
Body length	mm	54	54	54	74	74	74	94	94
Voltage range	VDC	12~60			24~60			24~160	
Speed Range	rpm	2000~6000							
Weight	Kg	0.5	0.5	0.5	0.75	0.75	0.75	1	1

- **Dimensions (mm)**



- **Wiring Diagram**



- **Custom Motor Options**

Custom housing to meet your dimensional requirements

Custom shaft options: extended, slotted, cross drilled, hollow shaft etc

Custom winding to meet your specific application needs

Lead wire options: special lengths, heat shrink, Teflon leads, pins, connectors, cable harnesses etc

Bearing & lubricant options for high temperature/humid operations

Encoders, gearboxes, sprockets and pulleys installation