

42mm, GM42Y Series Brushless DC Motors

● General Specification

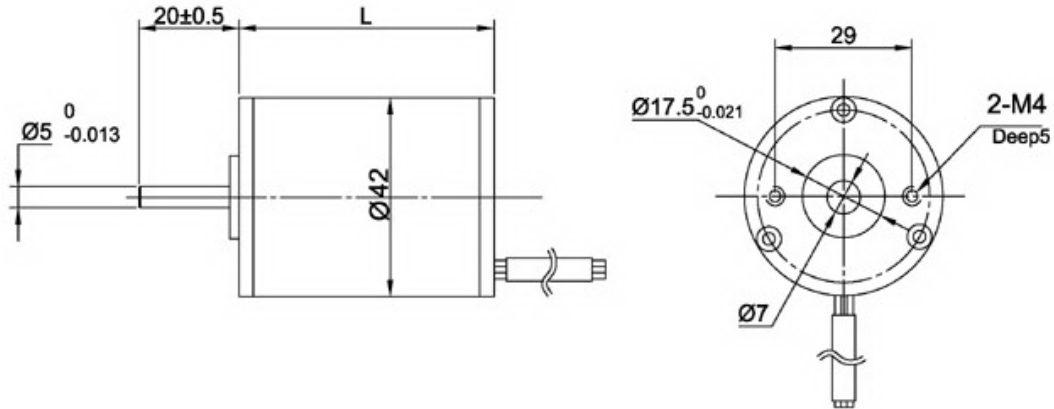
Item	Specifications
Winding type	WYE
Hall effect angle	120 degree electrical angle
Shaft run out	0.05mm
Radial play	0.025mm@460g
End play	0.025mm@400g
Max. radial force	15N @ 10mm from the flange
Max. axial force	10N
Insulation class	Class B
Dielectric strength	500VDC for one minute
Insulation resistance	100MΩMin., 500VDC



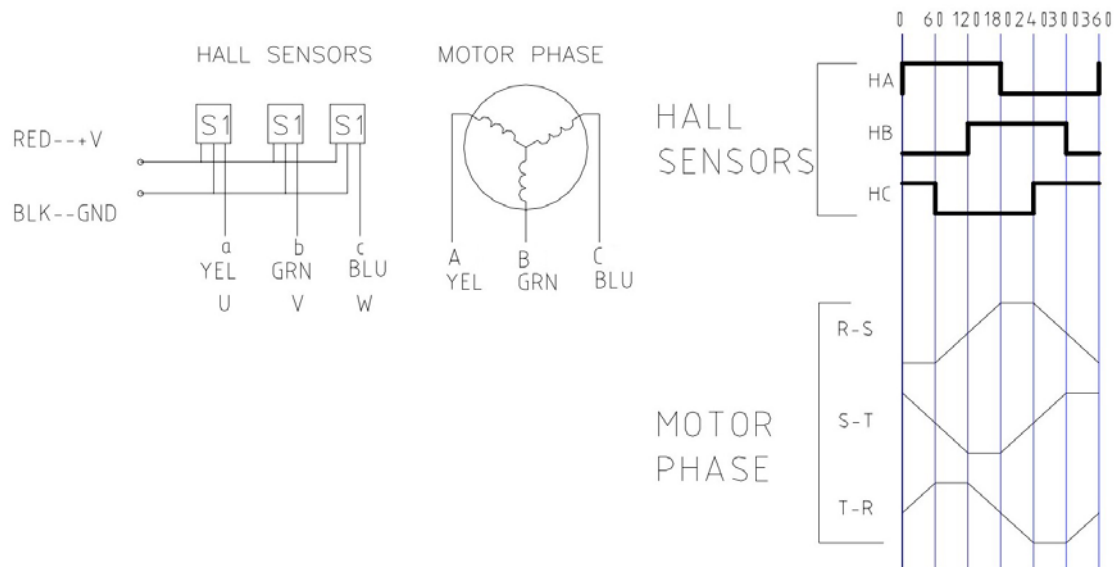
● Technique Specifications

Model		GM42Y -43A20	GM42Y -43A40	GM42Y -43A60	GM42Y -54A20	GM42Y -54A40	GM42Y -54A60	GM42Y -73A20	GM42Y -73A40	GM42Y -73A60
Number of poles		4								
Number of phase		3								
Rated voltage	VDC	24	24	24	24	24	24	24	24	24
Rated speed	RPM	2000	4000	6000	2000	4000	6000	2000	4000	6000
Continuous stall torque	Oz-in	6.8	6.8	6.8	13.6	13.6	13.6	27.2	27.2	27.2
	N.m	0.048	0.048	0.048	0.096	0.096	0.096	0.192	0.192	0.192
Rated torque	Oz-in	5.7	5.7	5.7	11.4	11.4	11.4	22.8	22.8	22.8
	N.m	0.04	0.04	0.04	0.08	0.08	0.08	0.16	0.16	0.16
Rotor power	W	8.4	16.75	25	21	42	63	33.5	67	100
Peak torque	Oz-in	17	17	17	35.4	35.4	35.4	63.7	63.7	63.7
	N.m	0.12	0.12	0.12	0.25	0.25	0.25	0.45	0.45	0.45
Peak current	A	1.34	2.68	4	3.7	7	10.5	5.6	11.2	16.8
Torque constant	Oz-in/A	10.6	5.7	4	10.6	6.1	4.1	10.6	6.1	4.1
	Nm/A	0.075	0.04	0.028	0.075	0.043	0.029	0.075	0.043	0.029
Back E.M.F	V/KRPM	8	4.6	3	8	4.6	3	8	4.6	3
Rotor inertia	g.c m ²	14.6	14.6	14.6	20.3	20.3	20.3	38	38	38
Body length	mm	43	43	43	54	54	54	73	73	73
Voltage range	VDC	24~48								
Speed Range	rpm	2000~15000								
Weight	Kg	0.37	0.37	0.37	0.46	0.46	0.46	0.63	0.63	0.63

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