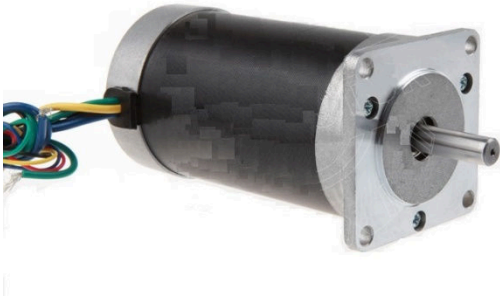


## 57mm R Series BLDC Motor

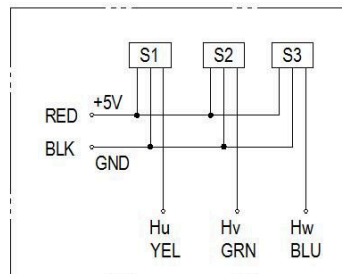


Item	General Specifications
Winding type	Star
Hall Effect Angle	120° Electrical angle
Insulation Class	B
Ambient Temperature Range	-20°C~+50°C
Insulation Resistance	min. 100MΩ, 500VDC
Dielectric Strength	700VAC for one minute
Shaft Radial Play	max. 0.02 (450g-load)
Shaft Axial Play	max. 0.08 (450g-load)
Max. radial force	75N (20mm from the flange)
Max. axial force	15N

### Configuration

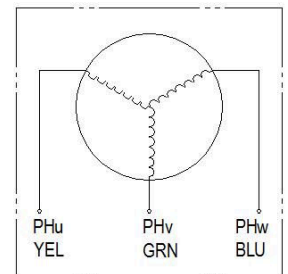
- Encoder
- Brakes
- Shaft Modification and double shaft
- Other winding voltage possible
- Other Types available with special length

### Wiring Diagram



Hall sensor cable

Note: hall sensor power supply voltage +5~+20VDC



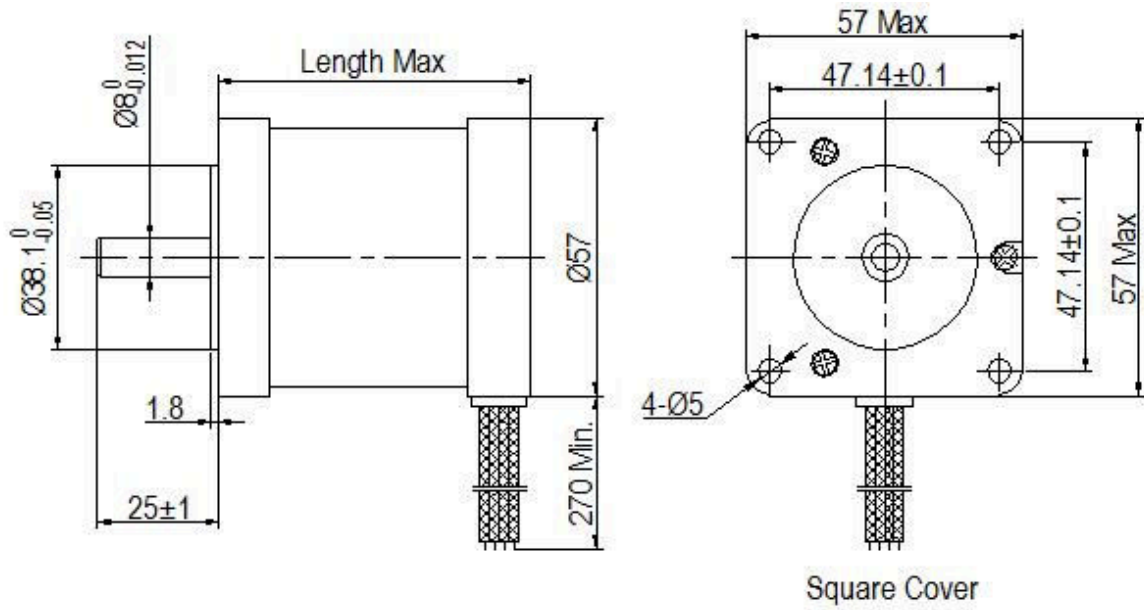
Motor wiring cable

### Specification

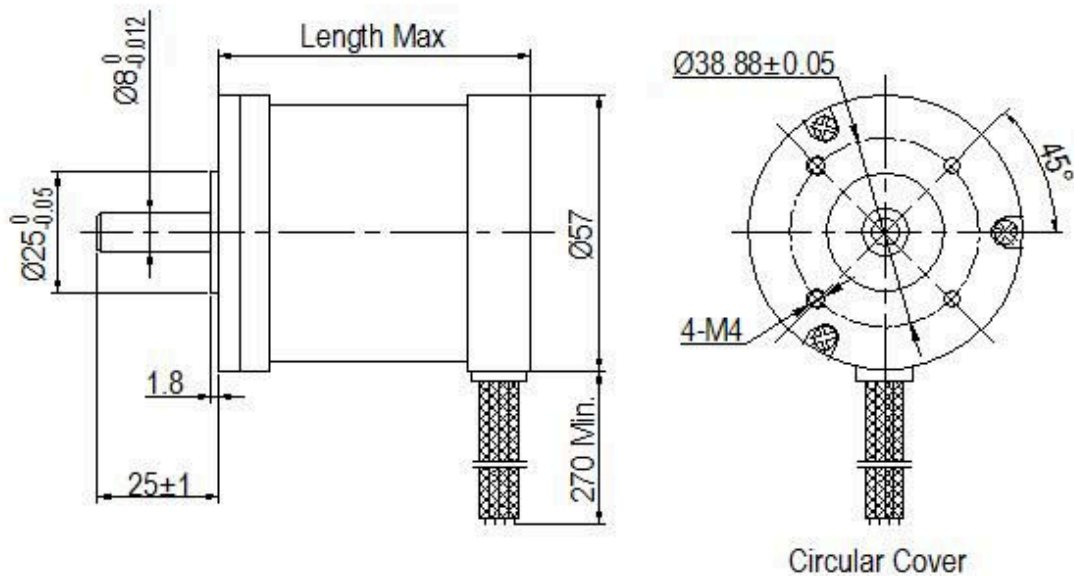
Model	M024BI0057 -57R-42	M024BI0110 -57R-47	M024BI0165 -57R-57	M024BI0220 -57R-67	M024BI0330 -57R-87	M024BI0440 -57R-107
Number of Poles	4	4	4	4	4	4
Number of Phases	3	3	3	3	3	3
Nominal Voltage (VDC)	24	24	24	24	24	24
Rated Speed (RPM)	2500	3000	3000	3000	3000	3000
Continuous Torque (N · m)	0.057	0.11	0.165	0.22	0.33	0.44
Rated Current (A)	1.2	2.3	3.0	4.4	6.6	8.6
Output Power (W)	15	34	52	69	103	138
Peak Torque (N · m)	0.18	0.38	0.58	0.8	1.2	1.6
Peak Current (A)	3.6	6.8	9.0	13.2	19.8	25.8
Torque Constant (N · m/A)	0.074	0.06	0.061	0.062	0.062	0.063
Back EMF (V/KRPM)	7.75	6.3	6.4	6.5	6.5	6.6
Rotor Inertia (g · cm <sup>2</sup> )	32	42	58	72	106	140
Body Length (mm)	41.5	46.5	56.5	66.5	86.5	106.5
Weight (kg)	0.34	0.42	0.55	0.66	0.89	1.15

# 57mm R Series BLDC Motor

## Dimensions



Square Cover

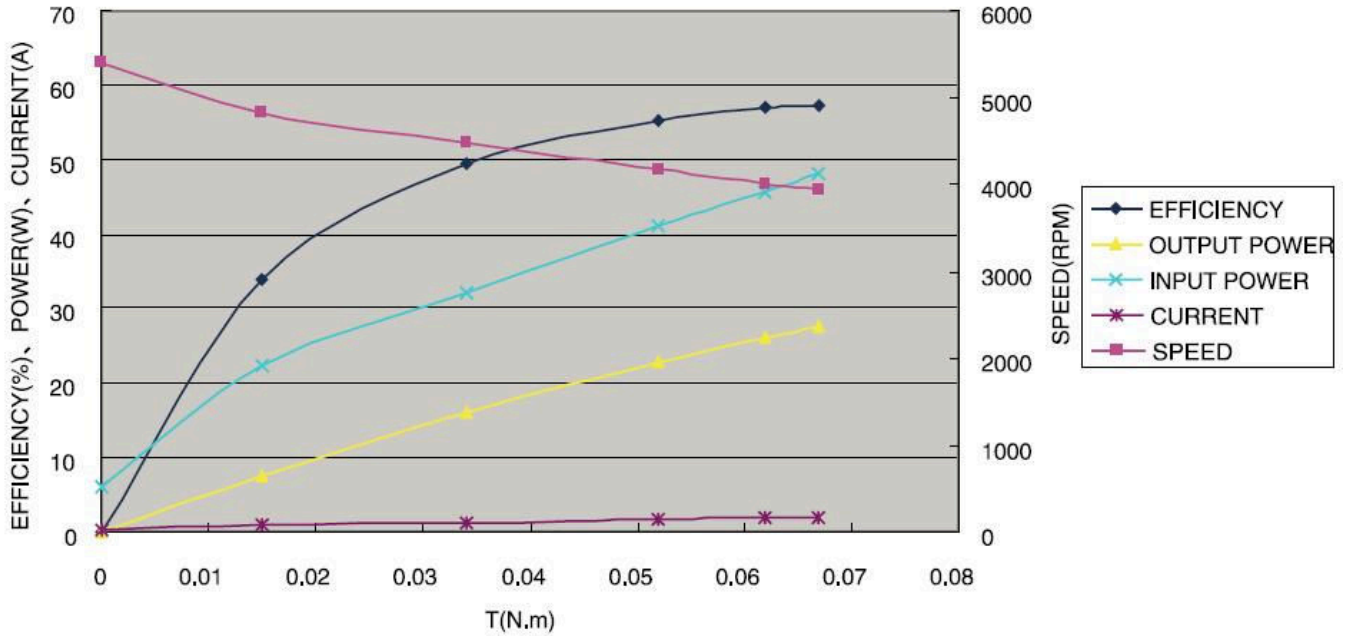


Circular Cover

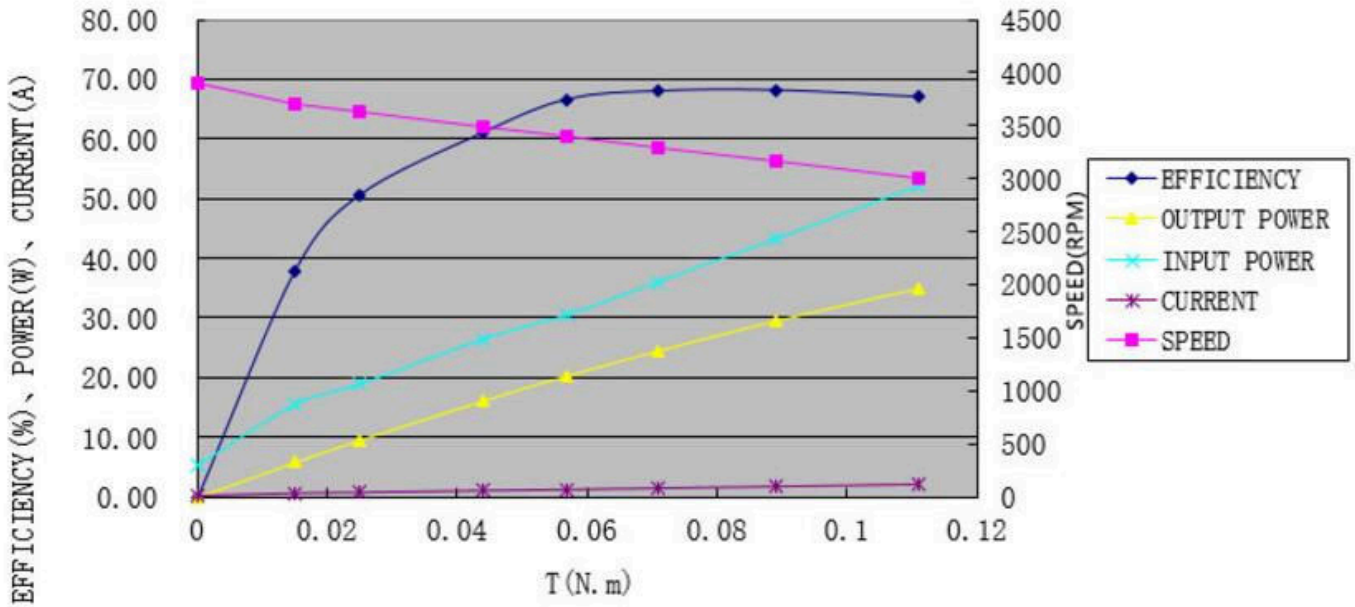
# 57mm R Series BLDC Motor

## Performance Curve

M024BI0057-57R-42, 24VDC, 15W

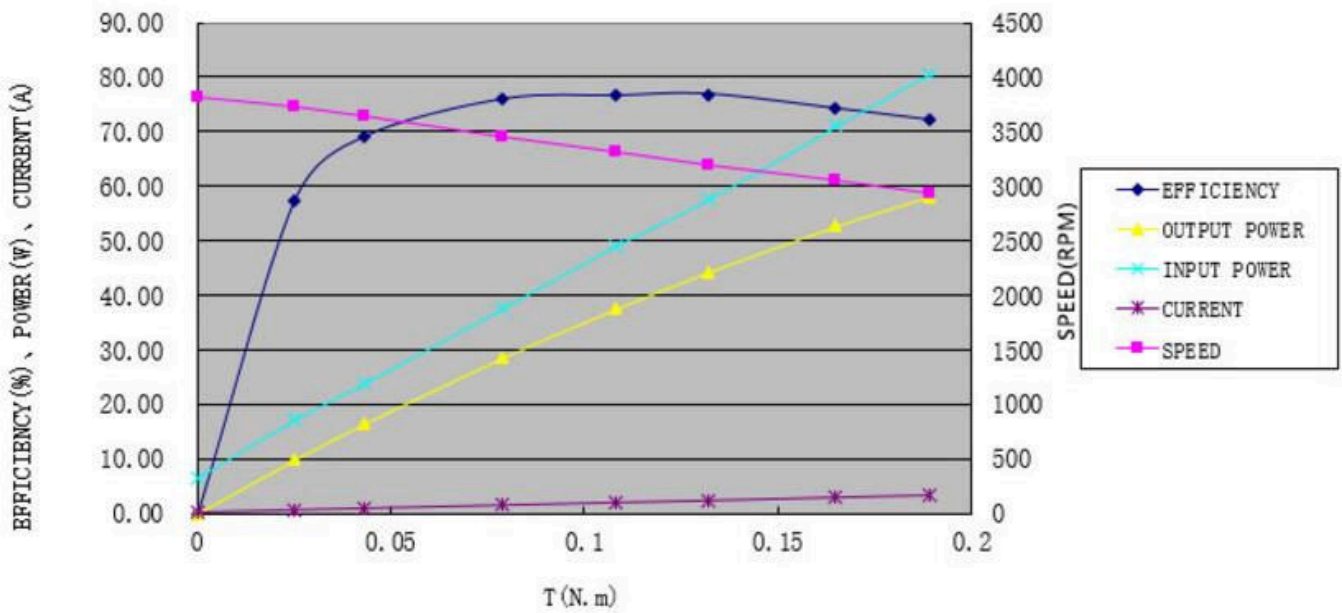


M024BI0110-57R-47, 24VDC, 34W

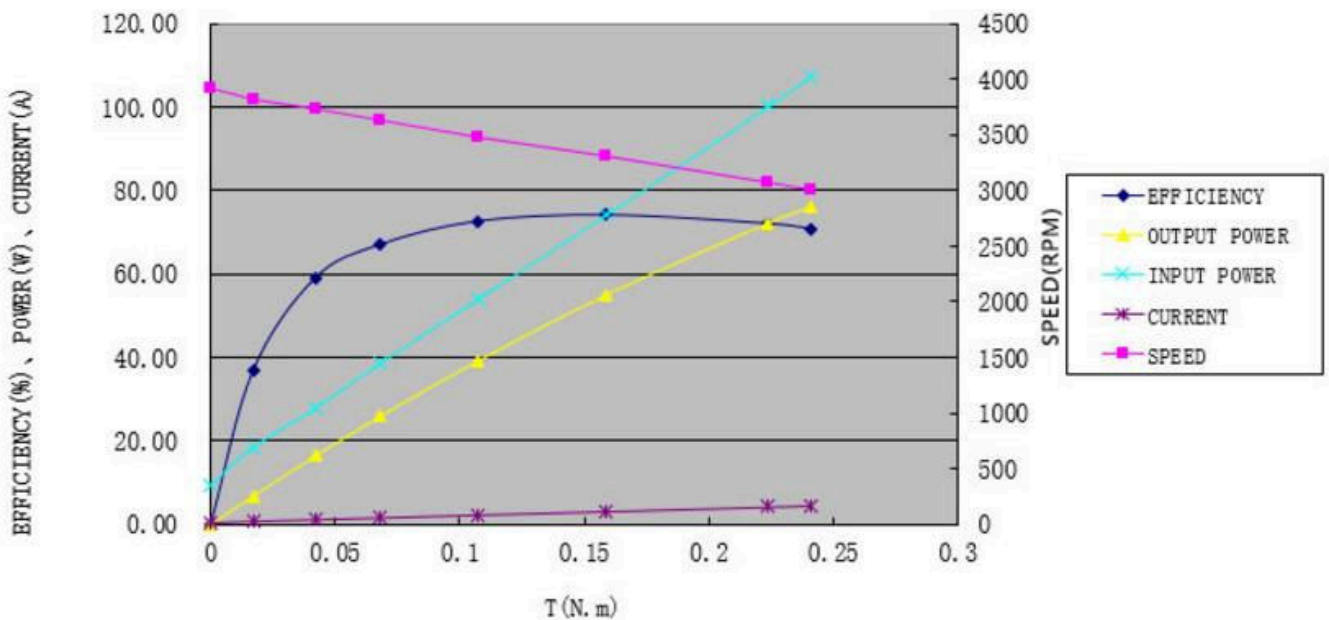


# 57mm R Series BLDC Motor

M024BI0165-57R-57, 24VDC, 52W

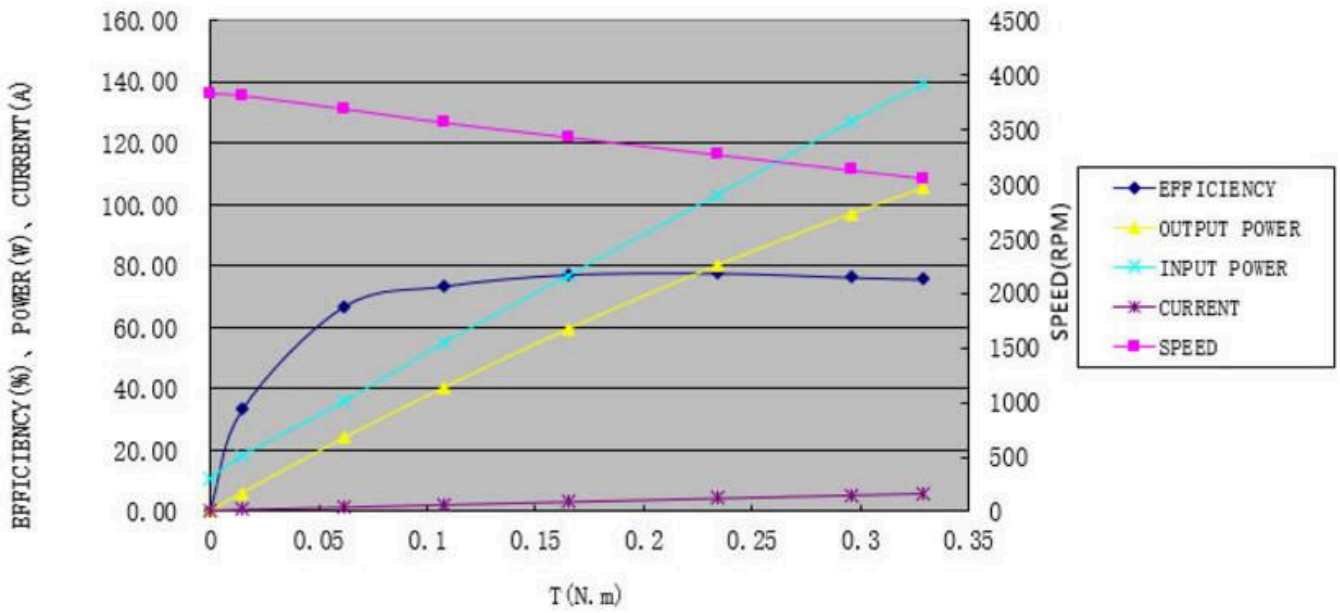


M024BI0220-57R-67, 24VDC, 69W



# 57mm R Series BLDC Motor

M024BI0330-57R-87, 24VDC, 103W



M024BI0440-57R-107, 24VDC, 138W

