

Brushless DC motors 57BL Series

General Specifications

Winding Type	Star
Hall Effect angle	120° electrical angle
Insulation Class:	B
Ambient Temperature Range	-20°C~+50°C
Insulation Resistance	100MΩ Min.500V DC
Dielectric Strength	700VAC 1 minute



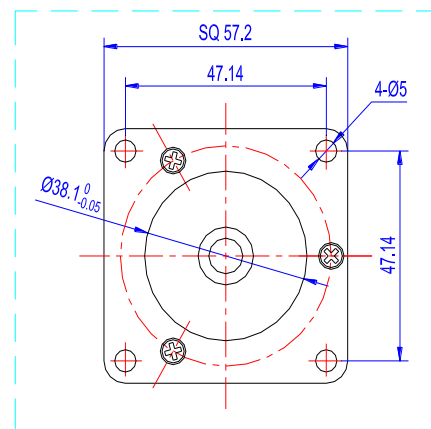
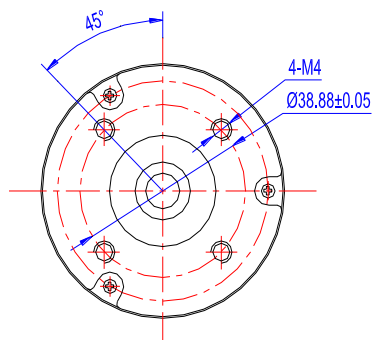
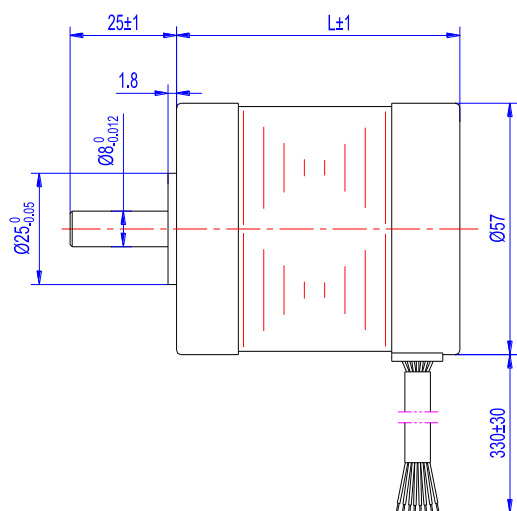
Electrical Specifications

Model	57BL0 1	57BL0 2	57BL0 3	57BL0 4	57BL0 5	57BL0 6
Number of Poles	4					
Number of Phases	3					
Rated Voltage (VDC)	24	24	24	24	24	24
Rated speed (RPM)	2500	3000	3000	3000	3000	3000
Rated Torque (N-m)	0.057	0.11	0.165	0.22	0.33	0.44
Rated Current (Amps)	1.2	2.3	3.0	4.4	6.6	8.6
Output Power (Watts)	15	34	52	69	103	138
Peak Torque (N-m)	0.18	0.38	0.58	0.8	1.2	1.6
Peak Current (Amps)	3.6	6.8	9	13.2	19.8	25.8
Torque constant (N-m/Amps)	0.074	0.059	0.06	0.062	0.062	0.063
Back EMF (V/kRPM)	7.75	6.2	6.3	6.5	6.5	6.6
Rotor inertia (g · cm ²)	32	42	58	72	106	140
Body Length (L) mm	41.5	46.5	56.5	66.5	86.5	106.5
Weight (kg)	0.43	0.5	0.67	0.75	1.0	1.25

Caution 1: Peak Torque is provided for the purpose of performance calculations only. Operate near, or at this condition will result in motor damaged.
 Note: We can also manufacture products according to customer's requirements

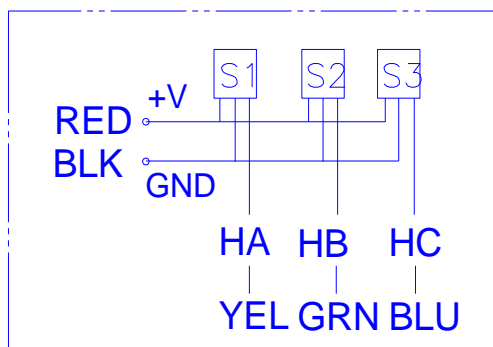
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Mechanical Dimensions



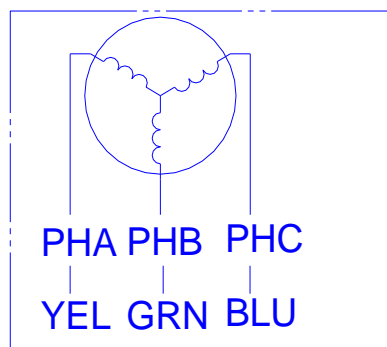
Winding Diagram

Connection diagram:



Hall sensor cable

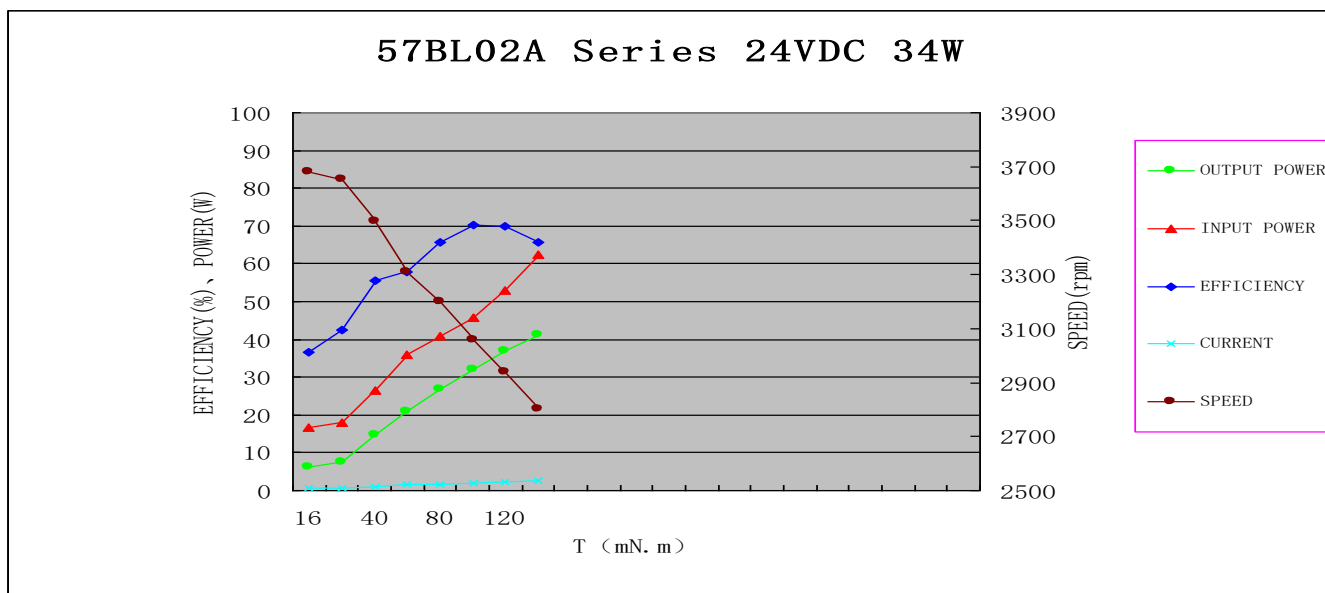
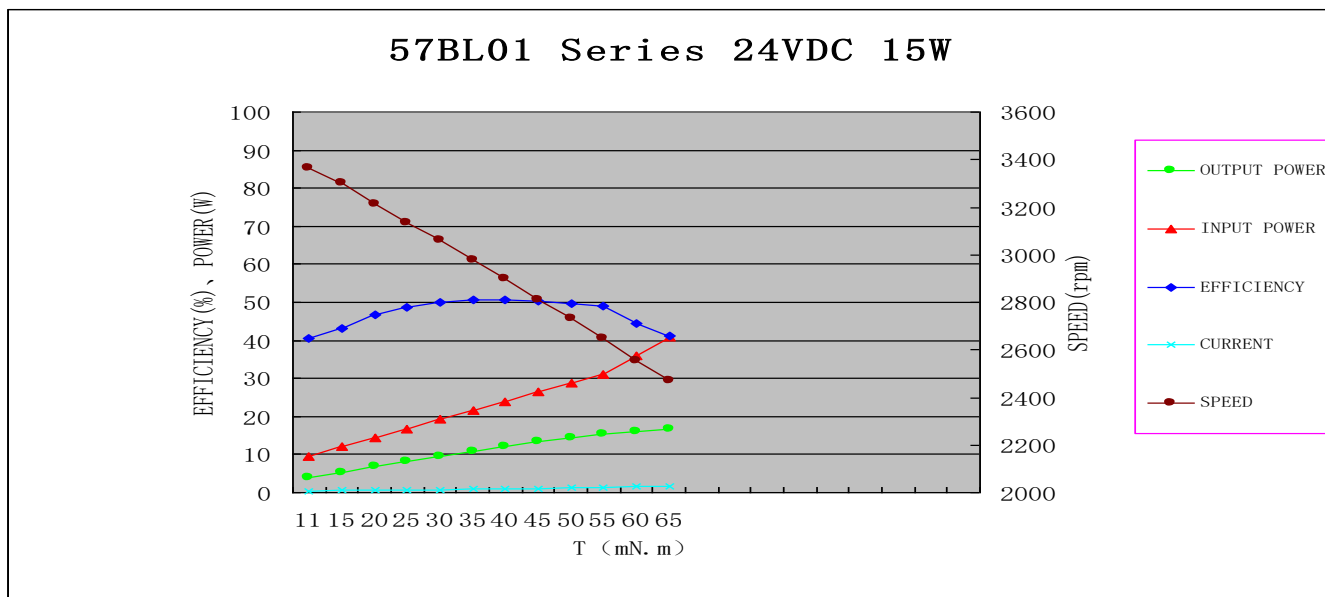
Note: hall sensor power supply voltage +5 to +20VDC



Wiring cable

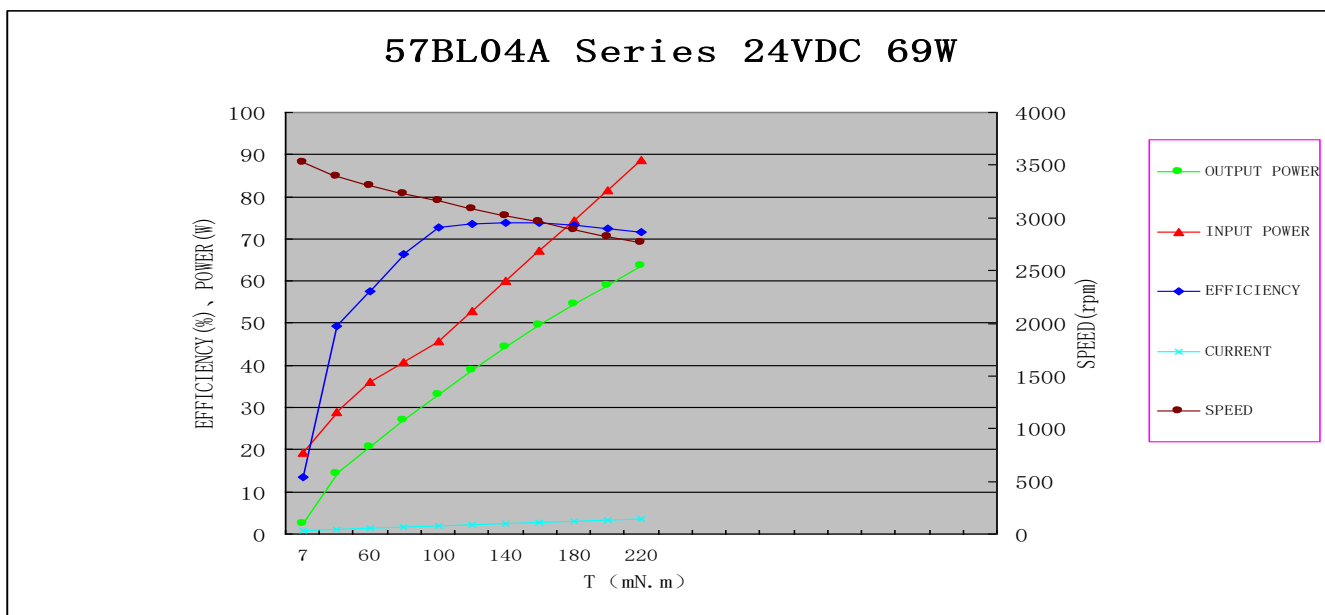
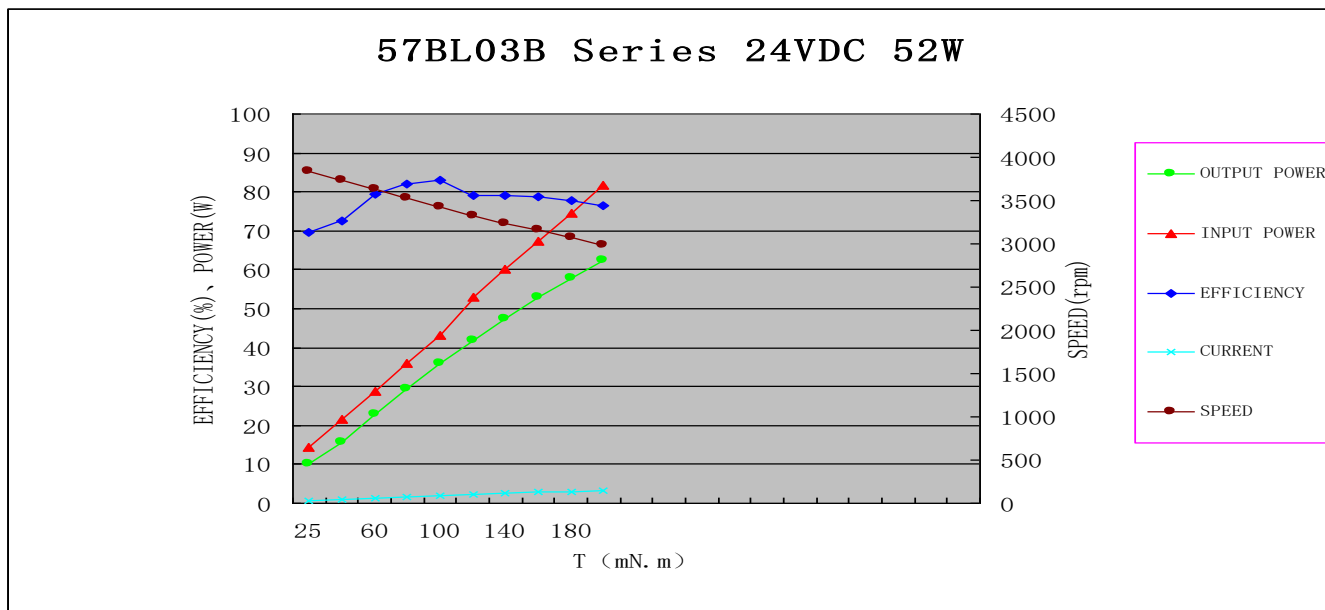
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Mechanical Performance Curves



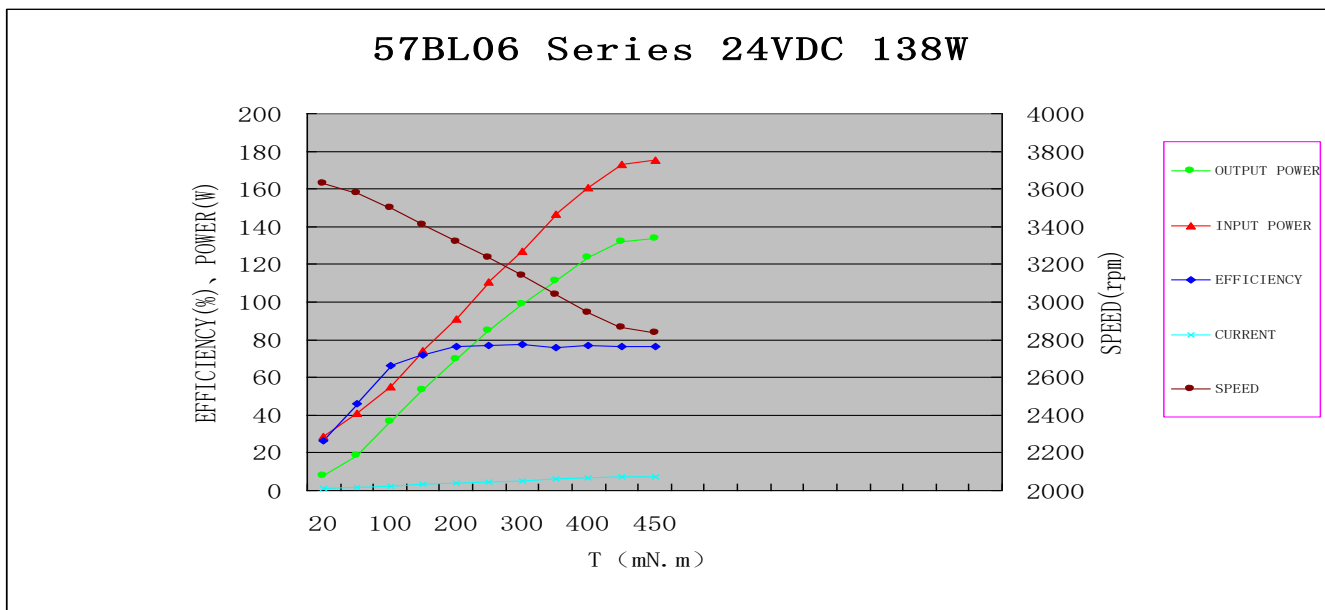
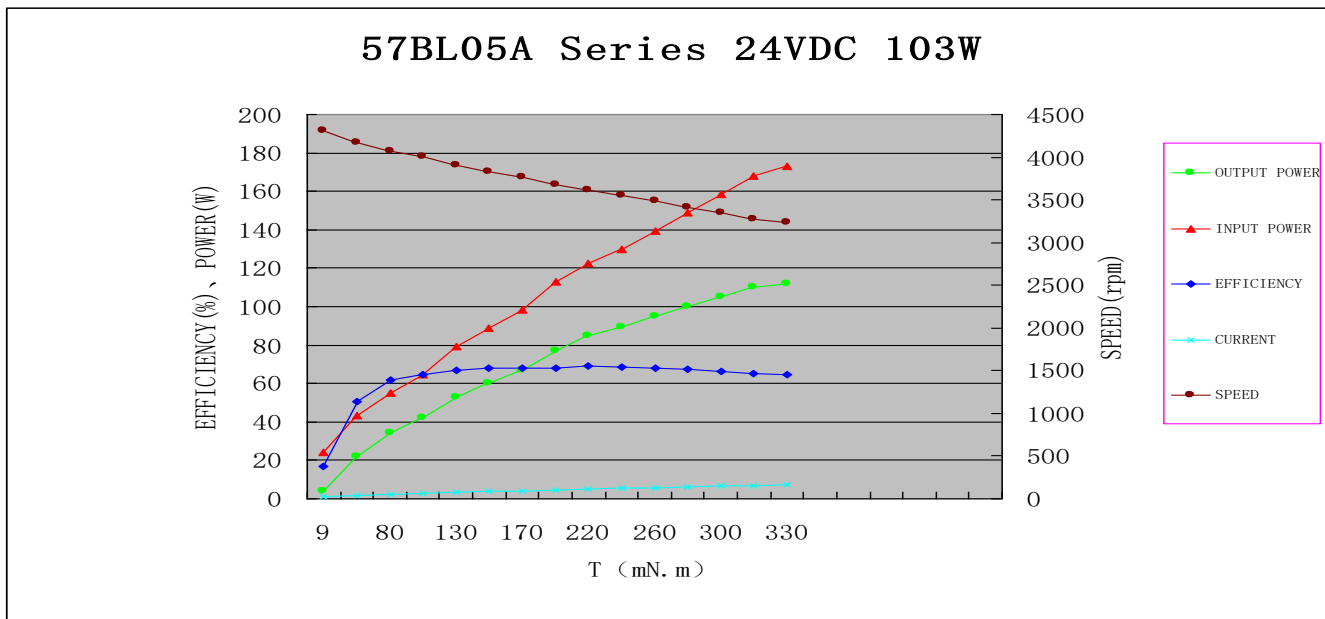
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