

# 57mm Brushless DC Motor



## Specifications:

### General Specifications

Number of phases	3
Number of poles	4
Hall-Effect Angle	120 degree electrical angle
Shaft Run-out	0.025mm
Shaft Radial Play	0.025mm @ 460g
Shaft End Play	0.025mm @ 4000g
Max. Radial Load	75N @ 20mm from the flange
Max. Axial Load	15N
Winding Insulation	Class B
Dielectric strength	500VDC for one minute
Insulation resistance	100M $\Omega$ Min., 500 VDC



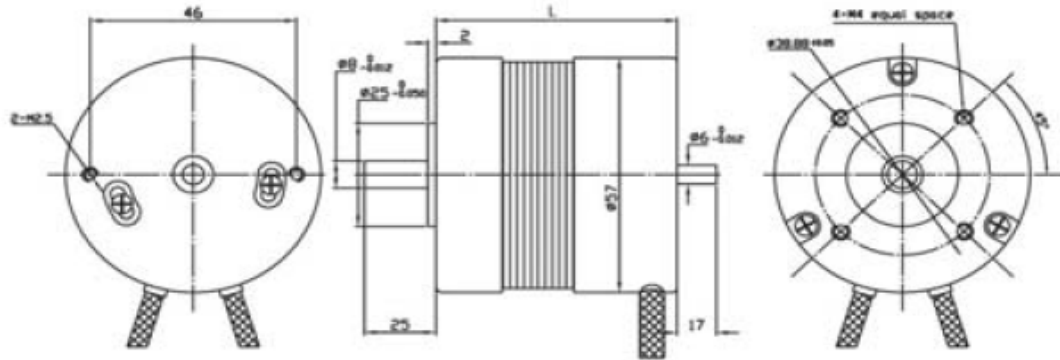
Model		DN5745R-36	DN5755R-36	DN5775R-36	DN5795R-36	DN57115R-36
		DN5745S-36	DN5755S-36	DN5775S-36	DN5795S-36	DN57115S-36
Rated Voltage	V	36	36	36	36	36
Rated Torque	Nm	0.055	0.11	0.22	0.32	0.43
Peak Torque (10% duty cycle)	Nm	0.16	0.39	0.7	1	1.27
Rated Speed	RPM	4000	4000	4000	4000	4000
Rated Output power	W	23	46	92	133	180
Rotor Inertia	Kg-m <sup>2</sup>	30	75	119	173	230
Torque constant	mNm/A	0.053	0.0630	0.063	0.0630	0.06
Resistance (Line to Line)	$\Omega$	4.10	1.50	0.70	0.45	0.35
Inductance (Line to Line)	mH	10	4.2	2.16	1.4	1
Back EMF @ Rated Speed	V/KRPM	5.55	6.6	6.6	6.6	6.6
Peek Current	A	3.50	6.80	11.50	16.50	20.50
Body Length (Dim. "L")	mm	45	55	75	95	115
Motor Weight	Kg	0.25	0.5	0.75	1	1.25

Model		DN5750-24-050	DN5776-24-080	DN57101-24-110		
Rated Voltage	V	24	24	24		
Rated Torque	Nm	0.56	1.06	1.33		
Peak Torque (10% duty cycle)	Nm					
Rated Speed	RPM					
No-load Speed	RPM	4400	3700	3600		
Rated Output power	W	50	80	110		
Rotor Inertia	Kg-m <sup>2</sup>	200	330	500		
Torque constant	Nm/A	0.190	0.2800	0.370		
Resistance (Line to Line)	$\Omega$	1.30	0.80	0.44		
Inductance (Line to Line)	mH	1.8	1.25	0.83		
Peek Current	A	10.00	18.50	25.30		
Body Length (Dim. "L")	mm	50.8	76.2	101.6		
Motor Weight	Kg	0.6	1.1	1.5		

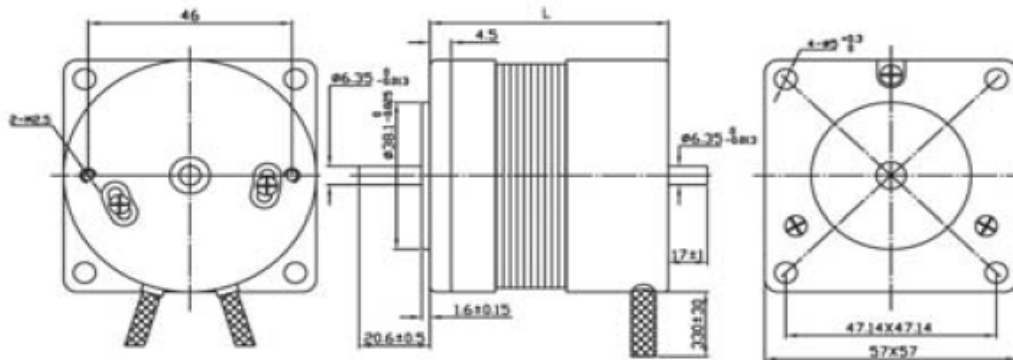
# OUTLINE DRAWING

(DIMENSIONS: mm)

Brushless with round front end bell at 36 rated voltage



Brushless with square front end bell at 36 rated voltage



R: Brushless motor with round front end bell  
S: brushless motor with square front end bell