

# 42mm Brushless DC Motor



## Specifications:

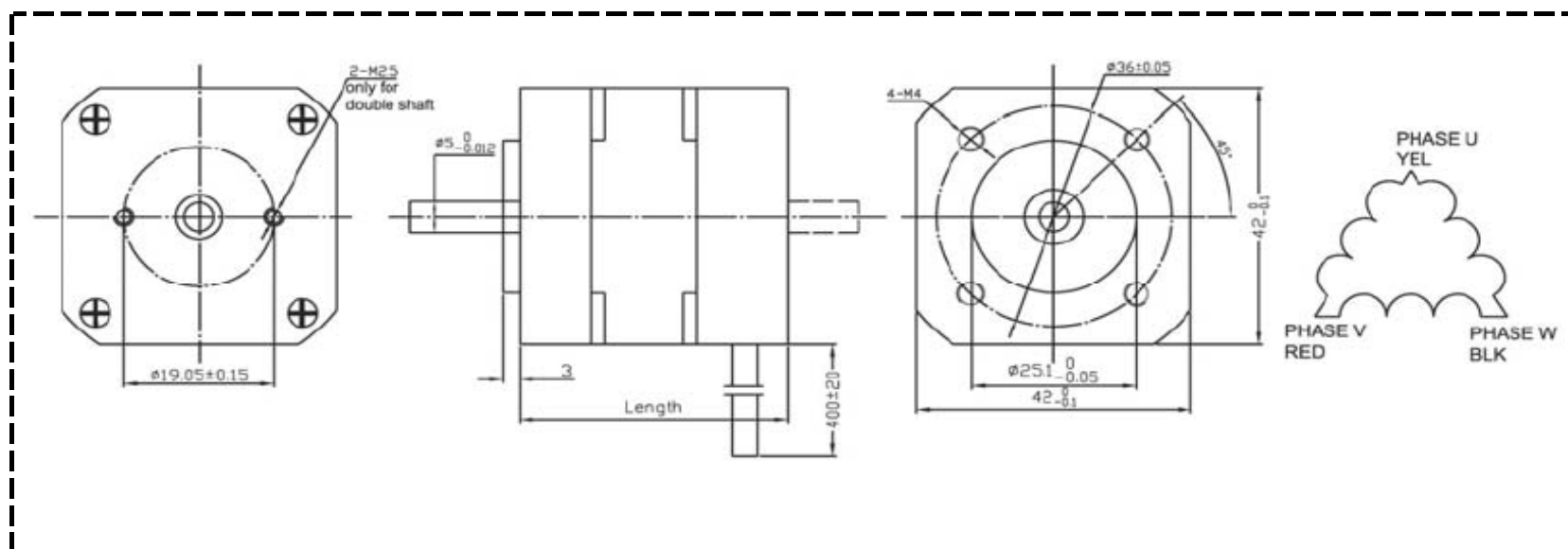
General Specifications	
Number of phases	3
Number of poles	8
Hall-Effect Angle	120 degree electrical angle
Shaft Run-out	0.025mm
Shaft Radial Play	0.02mm@450g
Shaft End Play	0.08mm@450g
Max. Radial Load	28N @ 20mm from the flange
Max. Axial Load	10N
Winding Insulation	Class B
Dielectric strength	500VDC for one minute
Insulation resistance	100M $\Omega$ Min., 500 VDC



Model		DN4241-24-026	DN4261-24-053	DN4281-24-078	DN42100-24-105	
Rated Voltage	V	24	24	24	24	
Rated Torque	Nm	0.0625	0.125	0.185	0.25	
Peak Torque (10% duty cycle)	Nm	0.19	0.38	0.56	0.75	
Rated Speed	RPM	4000	4000	4000	4000	
Rated Output power	W	26	53	78	105	
Rotor Inertia	Kg-m <sup>2</sup>	24	48	72	96	
Torque constant	mNm/A	0.035	0.0355	0.036	0.0376	
Resistance (Line to Line)	$\Omega$	1.80	0.80	0.55	0.28	
Inductance (Line to Line)	mH	2.6	1.2	0.8	0.54	
Back EMF @ Rated Speed	V/KRPM	3.66	3.72	3.76	3.94	
Peek Current	A	5.40	10.60	15.50	20.00	
Body Length (Dim. "L")	mm	41	61	81	100	
Motor Weight	Kg	0.3	0.45	0.65	0.8	

## OUTLINE DRAWING

(DIMENSIONS: mm)



# 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 @ 400g
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



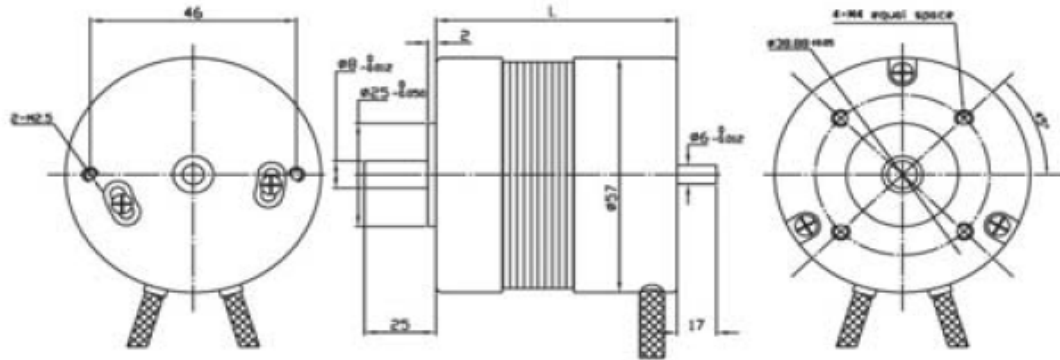
Model		DN5745R-36	DN5755R-36	DN5775R-36	DN5795R-36	DN57115R-36
		DN5745S-36	DN5755S-36	DN5775S-36	DN5795S-36	DN57115S-36
Rated Voltage	V	36	36	36	36	36
Rated Torque	Nm	0.055	0.11	0.22	0.32	0.43
Peak Torque (10% duty cycle)	Nm	0.16	0.39	0.7	1	1.27
Rated Speed	RPM	4000	4000	4000	4000	4000
Rated Output 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		

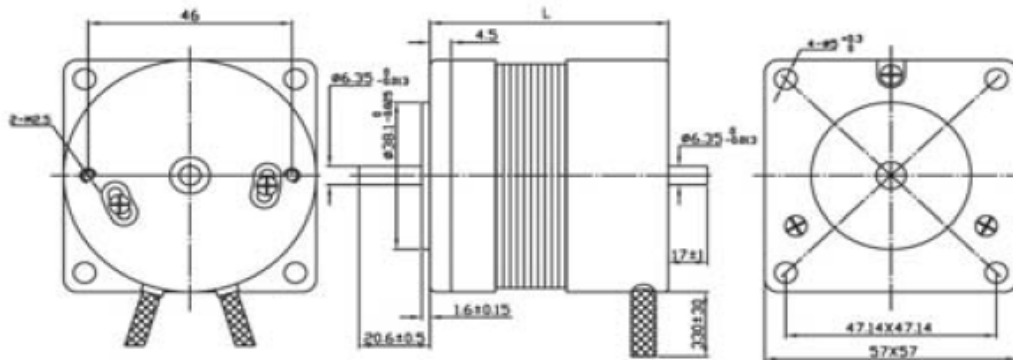
# OUTLINE DRAWING

(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

# 57mm Brushless DC Motor



## Specifications:

### General Specifications

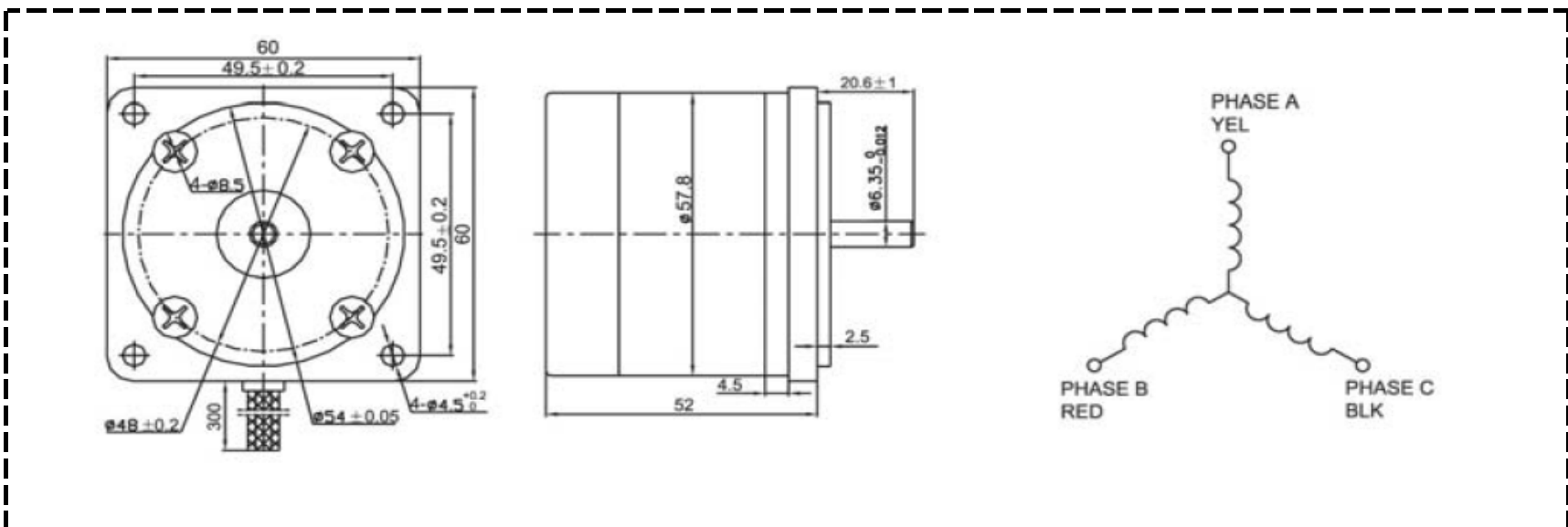
Number of phases	3
Number of poles	4
Hall-Effect Angle	120 degree electrical angle
Shaft Run-out	0.025mm
Shaft Radial Play	0.025mm @ 460g
Shaft End Play	0.025mm @ 4000g
Max. Radial Load	75N @ 20mm from the flange
Max. Axial Load	15N
Winding Insulation	Class B
Dielectric strength	500VDC for one minute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



Model		DN5752-24-058			
Rated Voltage	V	24			
Rated Torque	Nm	0.24			
Peak Torque (10% duty cycle)	Nm	0.55			
Rated Speed	RPM	2300			
Rated Output power	W	58			
Rotor Inertia	Kg-m <sup>2</sup>	200			
Torque constant	mNm/A	0.05			
Resistance (Line to Line)	$\Omega$	1.5			
Inductance (Line to Line)	mH	1.8			
Back EMF @ Rated Speed	V/KRPM	5.2			
Peek Current	A	11.50			
Body Length (Dim. "L")	mm	52			
Motor Weight	Kg	0.65			

## OUTLINE DRAWING

(DIMENSIONS: mm)



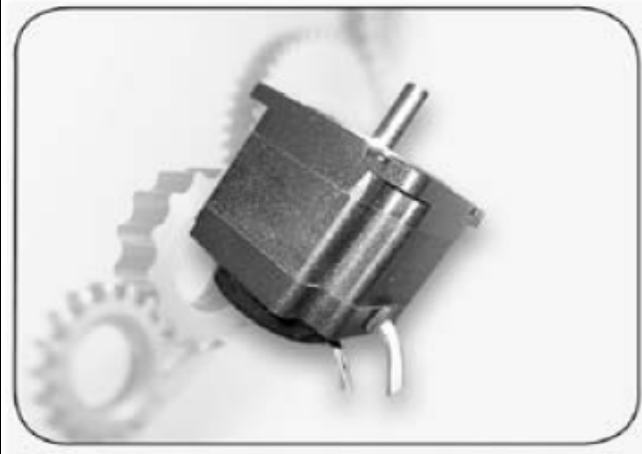
# 86mm Brushless DC Motor



## Specifications:

### General Specifications

Number of phases	3
Number of poles	8
Hall-Effect Angle	120 degree electrical angle
Shaft Run-out	0.05mm
Shaft Radial Play	0.02mm @ 450g
Shaft End Play	0.08mm @ 450g
Max. Radial Load	220N @ 20mm from the flange
Max. Axial Load	60N
Winding Insulation	Class B
Dielectric strength	500VDC for one minute
Insulation resistance	100M $\Omega$ Min., 500 VDC



Model		DN8658-48-110	DN8671-48-220	DN8698-48-440	DN86125-48-660	
Rated Voltage	V	48	48	48	48	
Rated Torque	Nm	0.35	0.7	1.4	2.1	
Peak Torque (10% duty cycle)	Nm	1.05	2.1	4.2	6.3	
Rated Speed	RPM	3000	3000	3000	3000	
Rated Output power	W	110	220	440	660	
Rotor Inertia	Kg-m <sup>2</sup>	400	800	1600	2400	
Torque constant	mNm/A	0.10	0.1100	0.13	0.11	
Resistance (Line to Line)	$\Omega$	1.1	0.36	0.20	0.16	
Inductance (Line to Line)	mH	2.2	1.05	0.48	0.3	
Back EMF @ Rated Speed	V/KRPM	10.5	11.5	13.5	11.5	
Peek Current	A	11.00	19.00	33.00	55.00	
Body Length (Dim. "L")	mm	58	71	98	125	
Motor Weight	Kg	1.5	1.85	2.6	4	

## OUTLINE DRAWING

(DIMENSIONS: mm)

