

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 Ω 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 ²	24	48	72	96	
Torque constant	mNm/A	0.035	0.0355	0.036	0.0376	
Resistance (Line to Line)	Ω	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	
Peak 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)

