

43mm Brushless DC Motor



4373

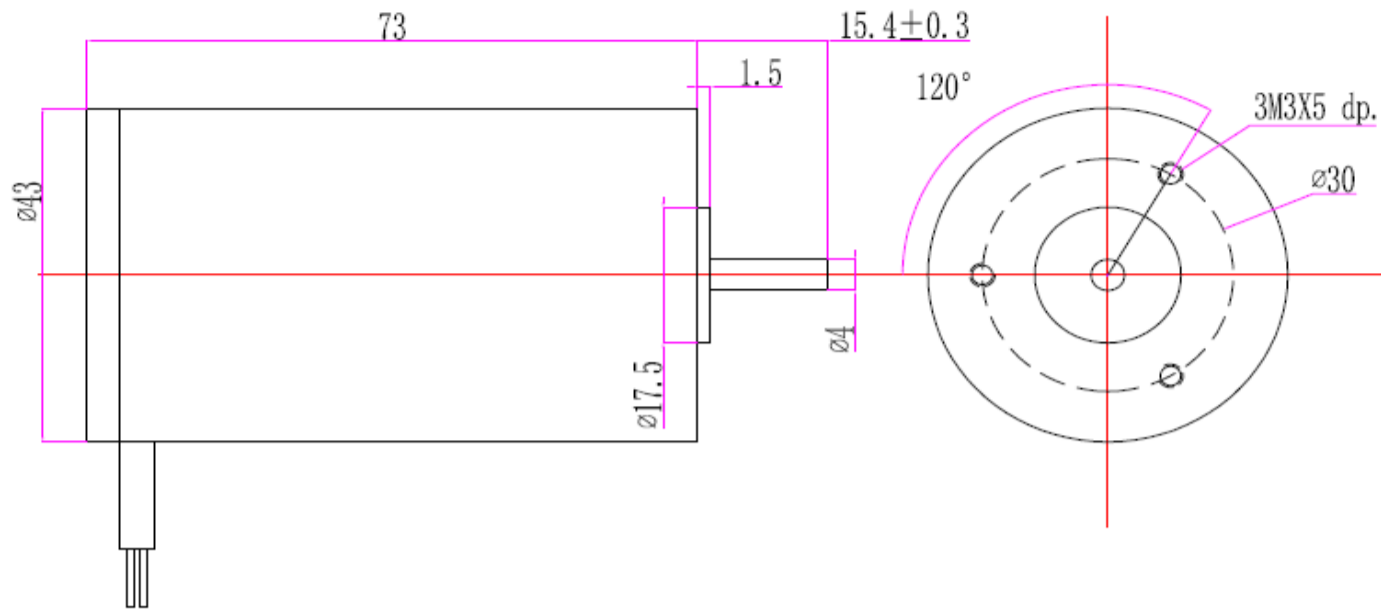
General Specifications

Number of phases	3
Number of poles	2
Operating temperature range	-30°C ~ 85°C
Commutation	Electrically commutated
Bearing type	Shielded ball bearings
Housing material	Black anodized aluminum
Magnet material	Sintered Nd-Fe-B
Direction of rotation	Reversible
Insulation Class	Class B (130°C max.)
Dielectric strength	500 VDC for one minute
Insulation resistance	100Mohms min., 500VDC

Model		DM4373-12-043	DM4373-12-354	DM4373-24-022	DM4373-24-094	DM4373-24-088
Nominal Voltage	V	12	12	24	24	24
Rated Speed	RPM	3891	10108	3386	5043	5568
Rated Current	A	2.26	11.58	0.86	2.03	1.92
Rated Torque	mNm	49.87	108.92	38.01	72.26	61.75
Rated Efficiency	%	75	83	66	78	78
Phase Resistance	W	0.8	0.1	6.2	1.5	1.6
Output Power	P	43.39	354.32	21.58	93.5	87.62
Max. Efficiency	%	75	83	66	78	78
No-Load Speed	RPM	4500	11100	4200	5700	6300
No-Load Current	A	0.27	0.95	0.14	0.21	0.2
Stall Torque	mNm	368.34	1219.29	196.23	626.54	531.22
Friction Torque	mNm	6.75	9.73	7.36	8.33	7.18
Back EMF Constant	mV/RPM	2.62	1.07	5.51	4.16	3.76
Torque Constant	mNm/A	25.01	10.24	52.59	39.68	35.89
Slope of Speed vs. Torque Curve	RPM/mNm	12.22	9.1	21.4	9.1	11.86
Mechanical time Constant	mS	12.27	9.14	21.49	9.13	11.91
Rotor Inertia	g-cm ²	95.88	95.88	95.88	95.88	95.88
Max. Angular Acceleration	10 ³ rad/s ²	38.42	127.17	20.47	65.35	55.4
Sensor		Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor
Driver Recommendation		DR2404	DR2404	DR2404	DR2404	DR2404
Weight	g	510	510	510	510	510
Motor Body Length	"L"	73	73	73	73	73

Model		DM4373-24-117	DM4373-24-156	DM4373-12-140		
Nominal Voltage	V	24	24	12		
Rated Speed	RPM	5855	7871	5165		
Rated Current	A	2.42	3.33	6.45		
Rated Torque	mNm	74.94	76.23	110.5		
Rated Efficiency	%	79	79	77		
Phase Resistance	W	1.2	0.9	0.25		
Output Power	P	117.14	155.95	139.83		
Max. Efficiency	%	79	79	77		
No-Load Speed	RPM	6580	8880	5880		
No-Load Current	A	0.24	0.34	0.7		
Stall Torque	mNm	679.99	670.8	908.36		
Friction Torque	mNm	8.26	8.66	13.44		
Back EMF Constant	mV/RPM	3.6	2.67	2.01		
Torque Constant	mNm/A	34.41	25.48	19.2		
Slope of Speed vs. Torque Curve	RPM/mNm	9.68	13.24	6.47		
Mechanical time Constant	mS	9.72	13.29	6.5		
Rotor Inertia	g-cm ²	95.88	95.88	95.88		
Max. Angular Acceleration	10 ³ rad/s ²	70.92	69.96	94.74		
Sensor		Hall Sensor	Hall Sensor	Hall Sensor		
Driver Recommendation		DR2404	DR2404	DR2404		
Weight	g	510	510	510		
Motor Body Length	"L"	73	73	73		

Outline Drawing



Performance Curve

