

22mm Brushless DC -With Internal Drive



Specifications:

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

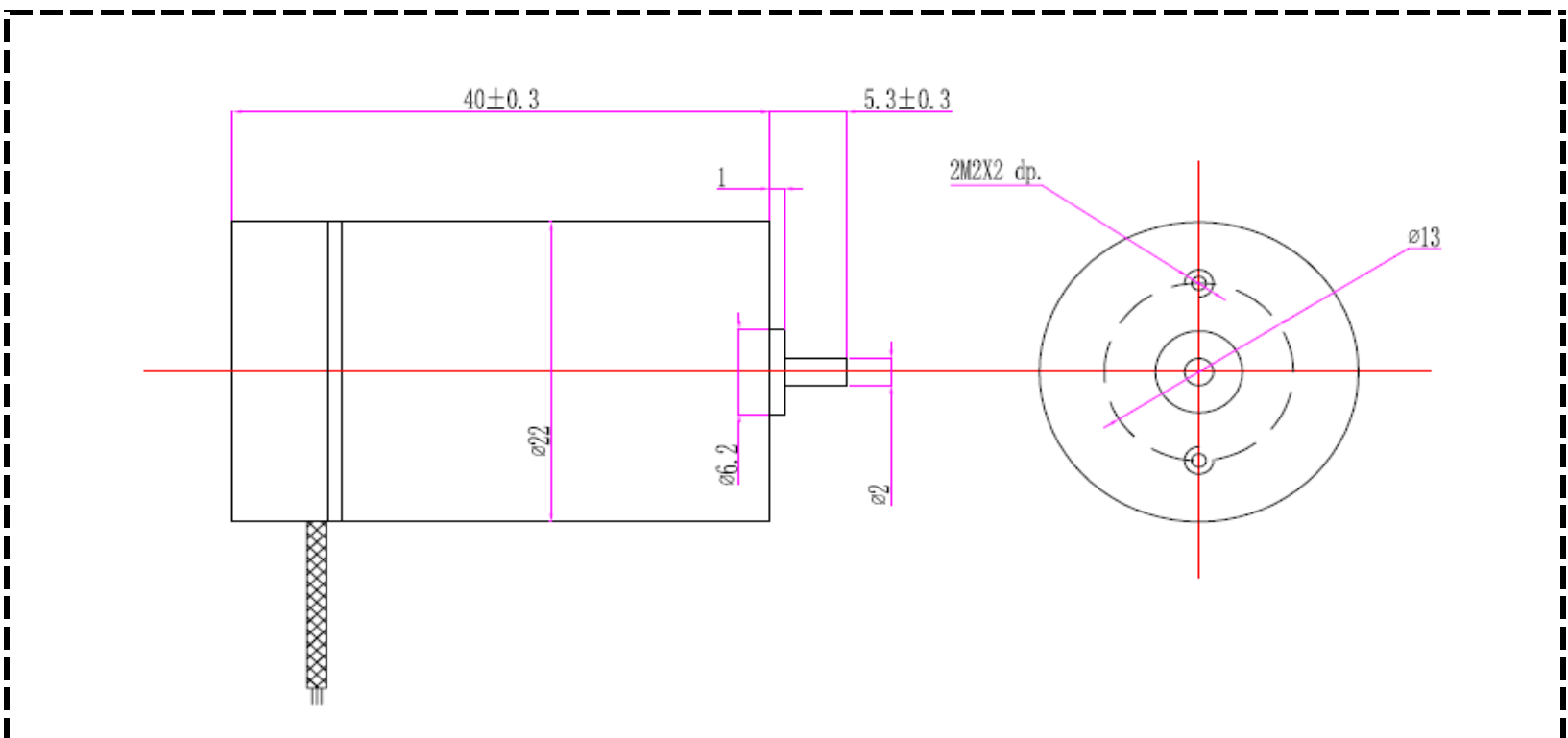
Model		DM2240-06-000-	DM2240-06-000-	DM2240-06-001-	DM2240-06-008--	DM2240-06-001-
		00-1	11-1	03-1	12-1	02-1
Nominal Voltage	V	6	6	6	6	9
Rated Speed	RPM	966	1372	3777	12181	2616
Rated Current	A	0.09	0.12	0.37	1.64	0.11
Rated Torque	mNm	1.24	1.17	2.31	4.54	1.66
Rated Efficiency	%	28	28	43	60	48
Phase Resistance	R	43.7	32.6	7.1	1	32
Output Power	W	0.13	0.17	0.99	8.09	0.52
Max. Efficiency	%	28	28	43	60	48
No-Load Speed	RPM	2,050	2,900	5960	15,890	3,880
No-Load Current	A	0.03	0.04	0.1	0.31	0.027
Stall Torque	mNm	2.34	2.23	6.32	19.46	5.09
Friction Torque	mNm	0.66	0.62	0.85	1.06	0.54
Back EMF Constant	mV/RPM	2.29	1.62	0.89	0.36	2.10
Torque Constant	mNm/A	21.84	15.46	8.48	3.42	20.02
Slope of Speed vs. Torque Curve	RPM/mNm	874.70	1,301.93	943.77	816.68	762.11
Mechanical time Constant	mS	18.14	26.99	19.57	16.93	15.80
Rotor Inertia	g-cm ²	1.98	1.98	1.98	1.98	1.98
Max. Angular Acceleration	10 ³ rad/s ²	11.84	11.25	31.89	98.27	25.71
Sensor		Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor
Driver Recommendation		DR2401IE	DR2401IE	DR2401IE	DR2401IE	DR2401IE
Weight	g	50	50	50	50	50
Motor Body Length	"L"	40	40	40	40	40

Model		DM2240-12-001-	DM2240-12-001-	DM2240-12-003-	DM2240-12-014-	DM2240-12-022-
		02-1	04-1	07-1	16-1	19-1
Nominal Voltage	V	12	12	12	12	12
Rated Speed	RPM	2471	4265	7073	16673	19958
Rated Current	A	0.21	0.32	0.45	1.27	2.14
Rated Torque	mNm	2.41	3.16	3.32	5.45	7.33
Rated Efficiency	%	29	40	48	63	60
Phase Resistance	R	36	18.2	10.5	2.3	1.5
Output Power	W	0.62	1.47	2.8	14.36	21.66
Max. Efficiency	%	29	40	48	63	60
No-Load Speed	RPM	5,100	7,080	10500	21,100	25,900
No-Load Current	A	0.07	0.09	0.11	0.22	0.4
Stall Torque	mNm	4.67	7.96	10.19	26.00	31.94
Friction Torque	mNm	1.24	1.26	1.08	1.14	1.68
Back EMF Constant	mV/RPM	1.86	1.46	1.03	0.54	0.44
Torque Constant	mNm/A	17.75	13.98	9.86	5.20	4.20

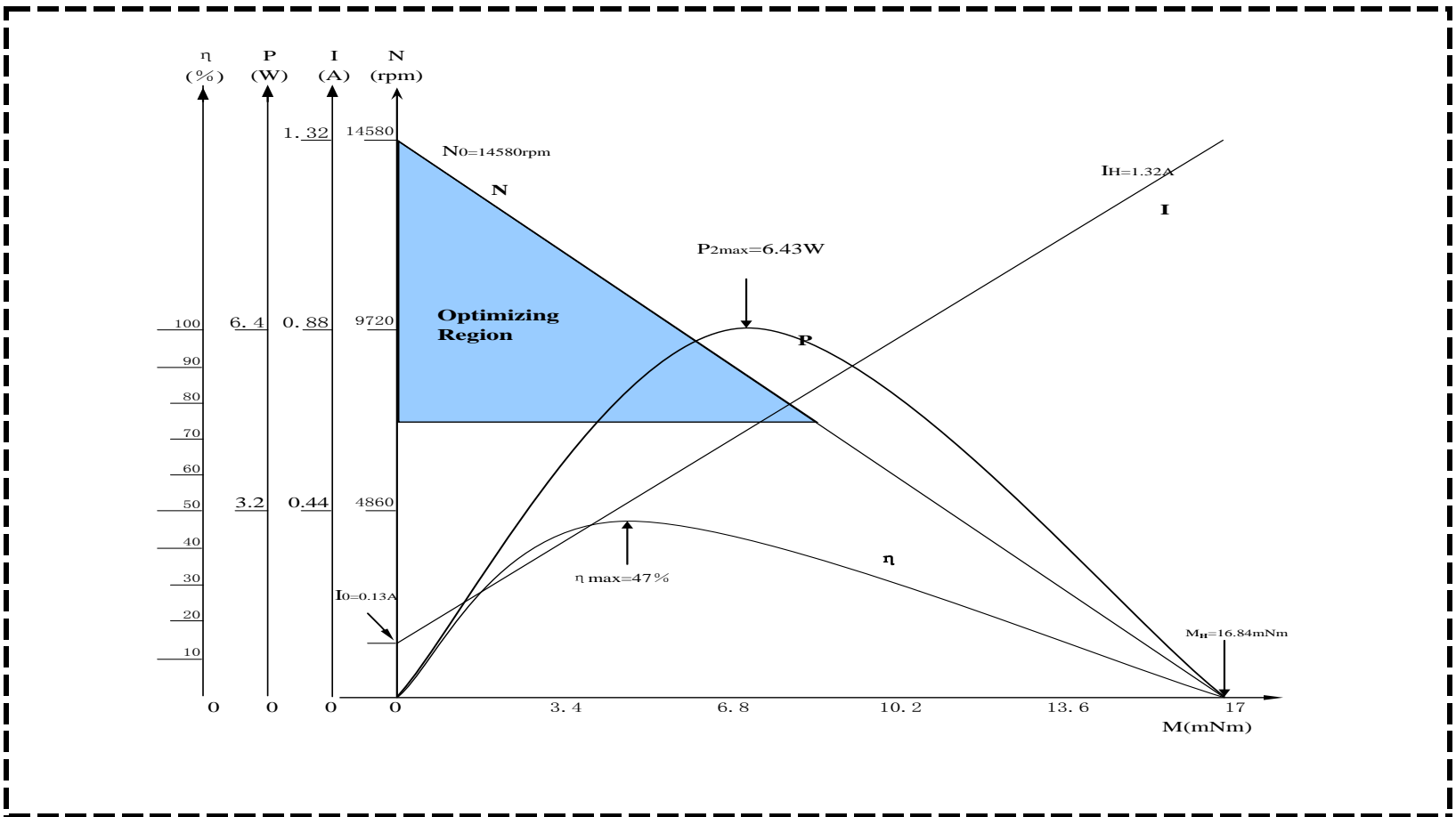
Slope of Speed vs. Torque Curve	RPM/mNm	1091.08	889.77	1,030.71	811.67	810.79
Mechanical time Constant	mS	22.62	18.45	21.37	16.83	16.81
Rotor Inertia	g-cm ²	1.98	1.98	1.98	1.98	1.98
Max. Angular Acceleration	10 ³ rad/s ²	23.61	40.19	51.45	131.29	161.33
Sensor		Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor
Driver Recommendation		DR2401IE	DR2401IE	DR2401IE	DR2401IE	DR2401IE
Weight	g	50	50	50	50	50
Motor Body Length	"L"	40	40	40	40	40

Model		DM2240-24-004-	DM2240-24-005-	DM2240-24-006-	DM2240-24-014-	DM2240-24-028-
		07-I	09-I	09-I	17-I	21-I
Nominal Voltage	V	24	24	24	24	24
Rated Speed	RPM	7582	9004	9758	17626	21845
Rated Current	A	0.30	0.36	0.52	0.69	1.04
Rated Torque	mNm	4.40	4.71	5.57	5.36	7.31
Rated Efficiency	%	50	53	47	60	67
Phase Resistance	R	29.3	22.6	18.2	9.3	4.8
Output Power	W	4.11	5.45	6.43	13.96	28.11
Max. Efficiency	%	50	53	47	60	67
No-Load Speed	RPM	10,920	12,600	14580	22,900	26,700
No-Load Current	A	0.07	0.08	0.13	0.13	0.16
Stall Torque	mNm	14.38	16.52	16.84	23.29	40.22
Friction Torque	mNm	1.34	1.35	1.84	1.24	1.33
Back EMF Constant	mV/RPM	2.01	1.76	1.48	1.00	0.87
Torque Constant	mNm/A	19.19	16.82	14.17	9.50	8.31
Slope of Speed vs. Torque Curve	RPM/mNm	759.47	762.93	865.65	983.23	663.93
Mechanical time Constant	mS	15.75	15.82	17.95	20.39	13.77
Rotor Inertia	g-cm ²	1.98	1.98	1.98	1.98	1.98
Max. Angular Acceleration	10 ³ rad/s ²	72.62	83.41	85.07	117.63	203.11
Sensor		Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor
Driver Recommendation		DR2401IE	DR2401IE	DR2401IE	DR2401IE	DR2401IE
Weight	g	50	50	50	50	50
Motor Body Length	"L"	40	40	40	40	40

Outline Drawing



Performance Curve



22mm Brushless DC -With Internal Drive



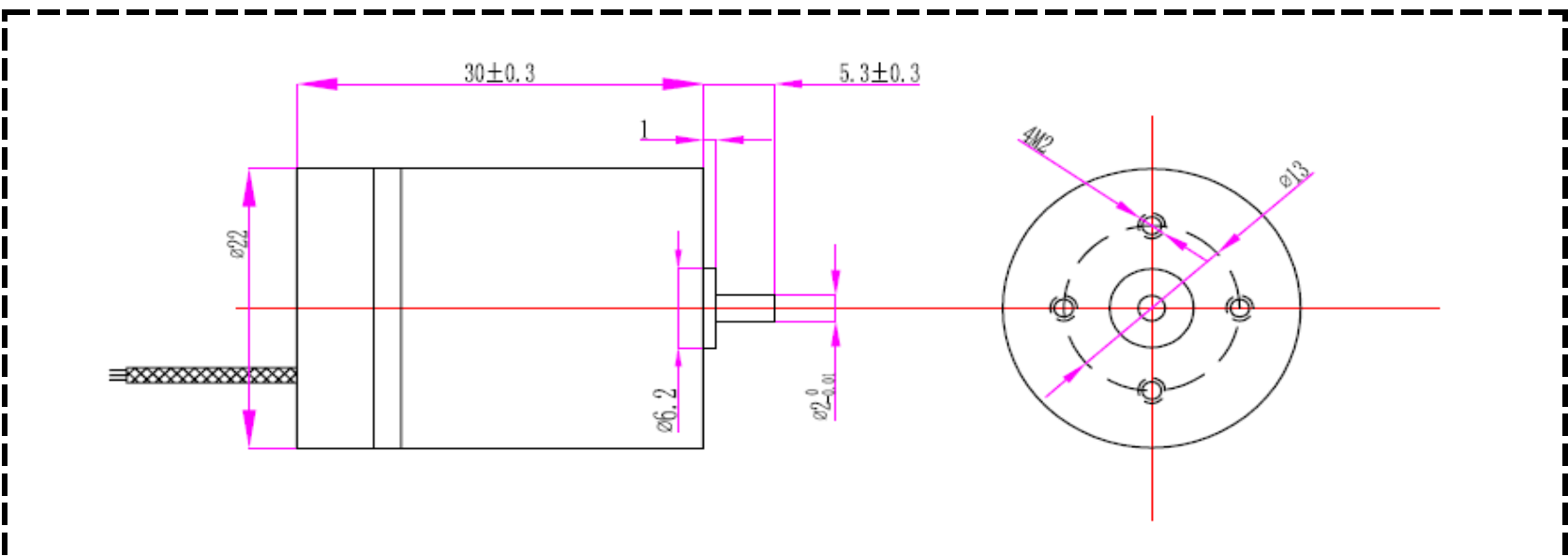
Specifications:

General Specifications

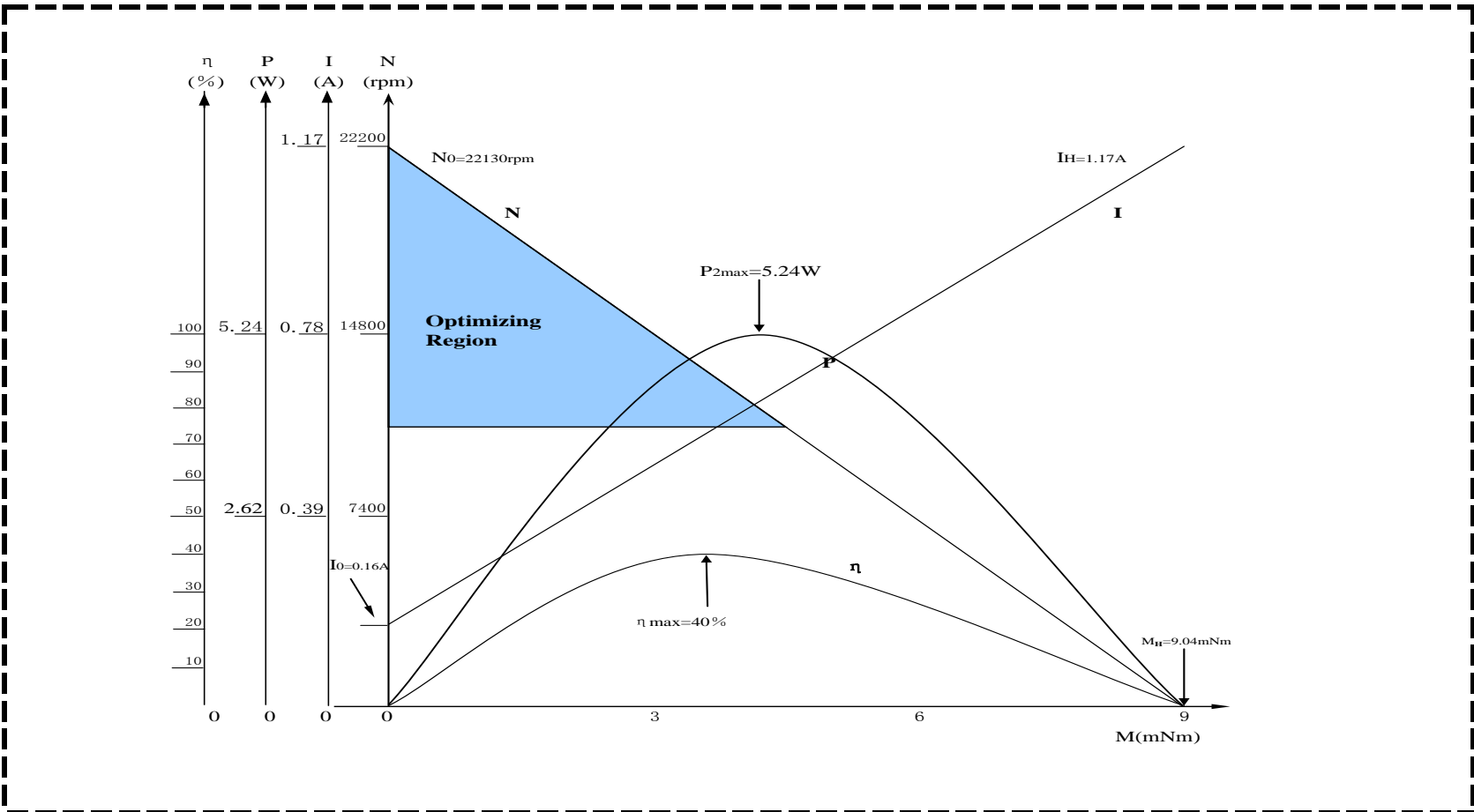
Number of phases	3
Number of poles	2
Operating temperature range	-30°C ~ 85°C
Commutation	Electrically commutated
Bearing type	Shielded ball bearings
Housing material	Black anodized aluminum
Magnet material	Sintered Nd-Fe-B
Direction of rotation	Reversible
Insulation Class	Class B (130°C max.)
Dielectric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

Model		DM2230-06-002-I	DM2230-12-001-I	DM2230-24-005-I		
Nominal Voltage	V	6	12	24		
Rated Speed	RPM	8871	3373	13325		
Rated Current	A	0.94	0.24	0.56		
Rated Torque	mNm	2.23	2.07	3.60		
Rated Efficiency	%	39	30	40		
Phase Resistance	R	3.1	31	20.5		
Output Power	W	2.15	0.73	5.24		
Max. Efficiency	%	39	30	40		
No-Load Speed	RPM	14850	6890	22130		
No-Load Current	A	0.27	0.08	0.16		
Stall Torque	mNm	5.53	4.05	9.04		
Friction Torque	mNm	0.90	1.06	1.43		
Back EMF Constant	mV/RPM	0.35	1.38	1.94		
Torque Constant	mNm/A	3.32	13.19	8.94		
Slope of Speed vs. Torque Curve	RPM/mNm	2685.59	1,700.41	2,448.87		
Mechanical time Constant	mS	34.59	21.9	31.54		
Rotor Inertia	g-cm ²	1.23	1.23	1.23		
Max. Angular Acceleration	10 ³ rad/s ²	44.96	32.94	73.47		
Sensor		Hall Sensor	Hall Sensor	Hall Sensor		
Driver Recommendation		DR2401IE	DR2401IE	DR2401IE		
Weight	g	45	45	45		
Motor Body Length	"L"	30	30	30		

Outline Drawing



Performance Curve



26mm Brushless DC -With Internal Drive



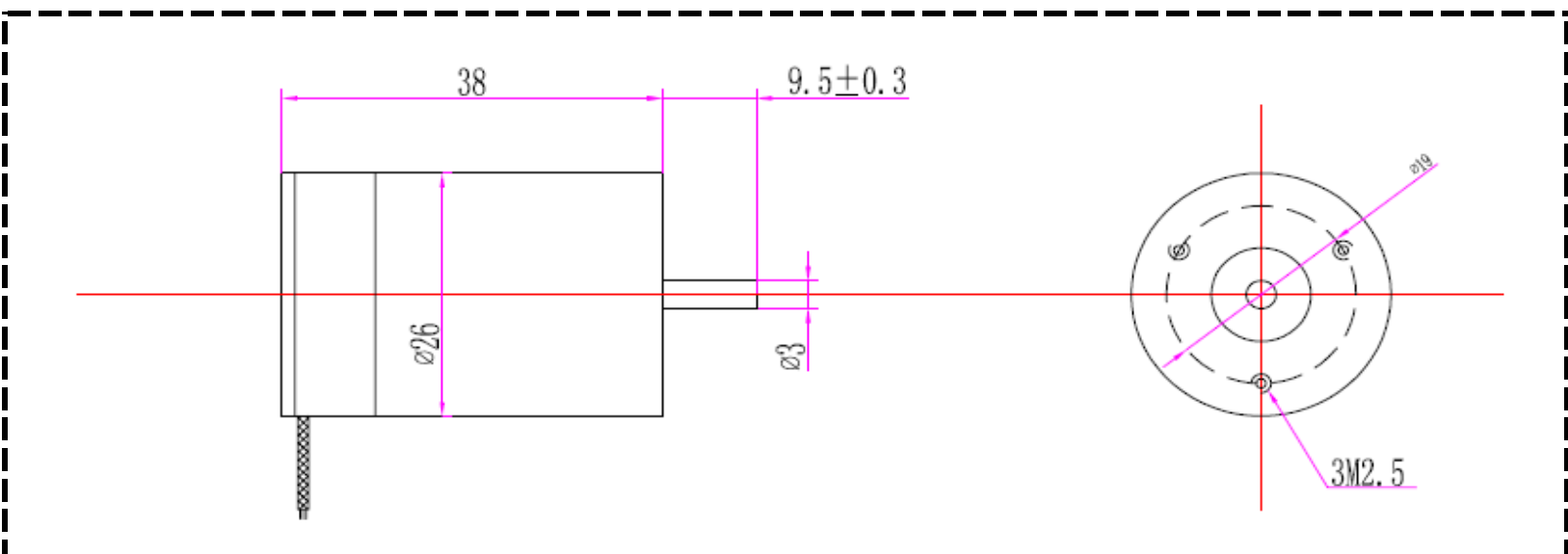
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General Specifications

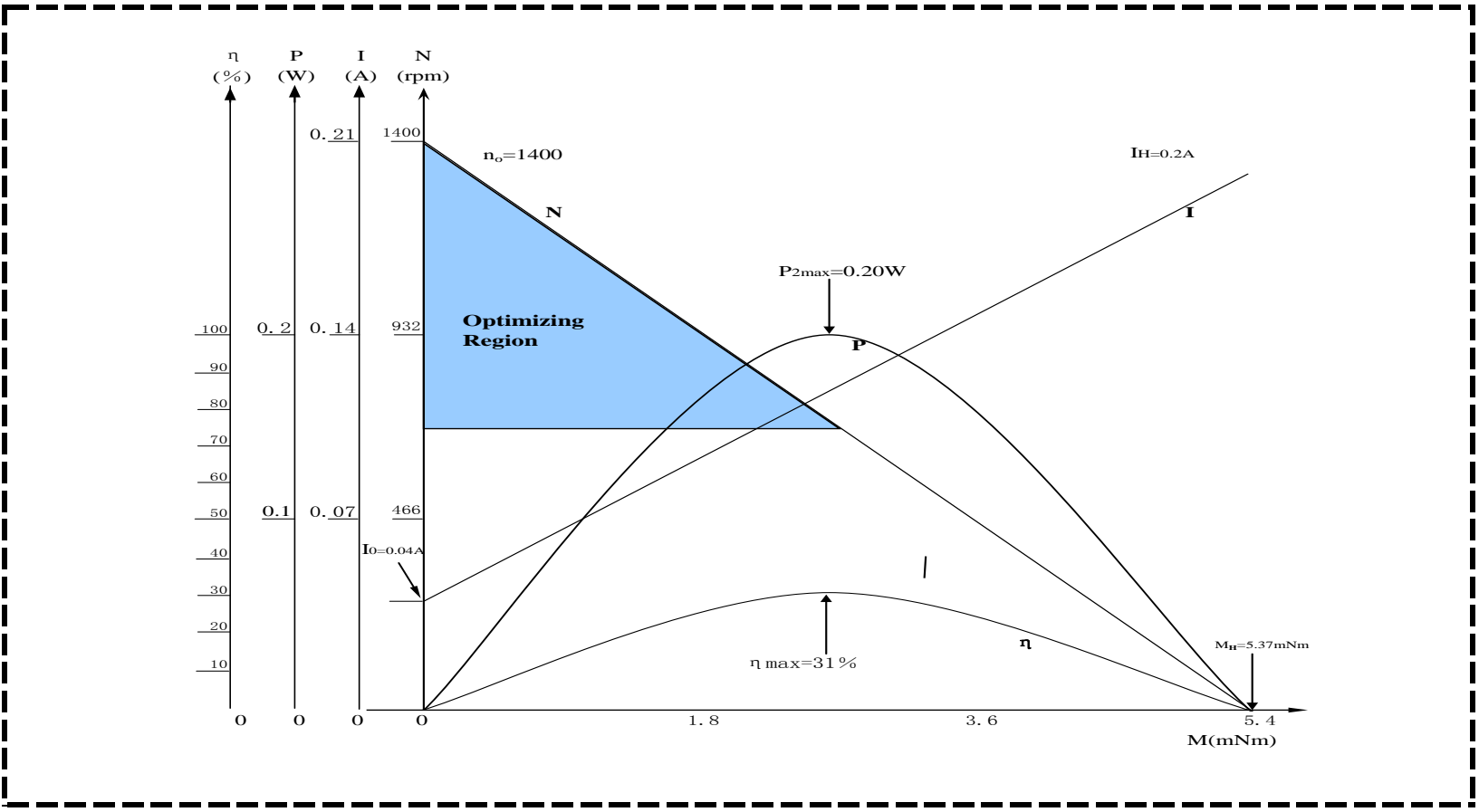
Number of phases	3
Number of poles	2
Operating temperature range	-30°C ~ 85°C
Commutation	Electrically commutated
Bearing type	Shielded ball bearings
Housing material	Black anodized aluminum
Magnet material	Sintered Nd-Fe-B
Direction of rotation	Reversible
Insulation Class	Class B (130°C max.)
Dielectric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

Model		DM2638-06-000-00-1				
Nominal Voltage	V	6				
Rated Speed	RPM	707				
Rated Current	A	0.12				
Rated Torque	mNm	2.66				
Rated Efficiency	%	31				
Phase Resistance	R	29.5				
Output Power	W	0.2				
Max. Efficiency	%	31				
No-Load Speed	RPM	1400				
No-Load Current	A	0.04				
Stall Torque	mNm	5.37				
Friction Torque	mNm	1.32				
Back EMF Constant	mV/RPM	3.44				
Torque Constant	mNm/A	32.88				
Slope of Speed vs. Torque Curve	RPM/mNm	260.62				
Mechanical time Constant	mS	9.12				
Rotor Inertia	g-cm ²	3.34				
Max. Angular Acceleration	10 ³ rad/s ²	16.08				
Sensor		Sensorless				
Driver Recommendation		DR1802IE				
Weight	g	75				
Motor Body Length	"L"	38				

Outline Drawing



Performance Curve



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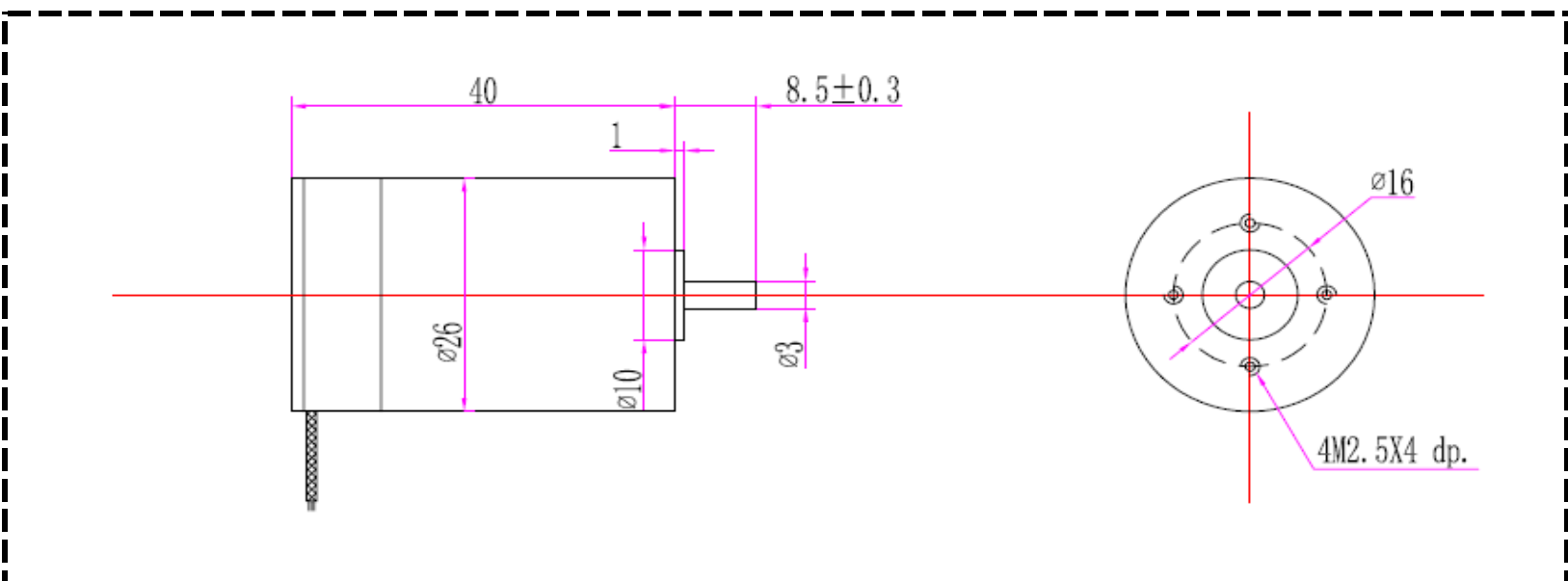
Specifications:

General Specifications

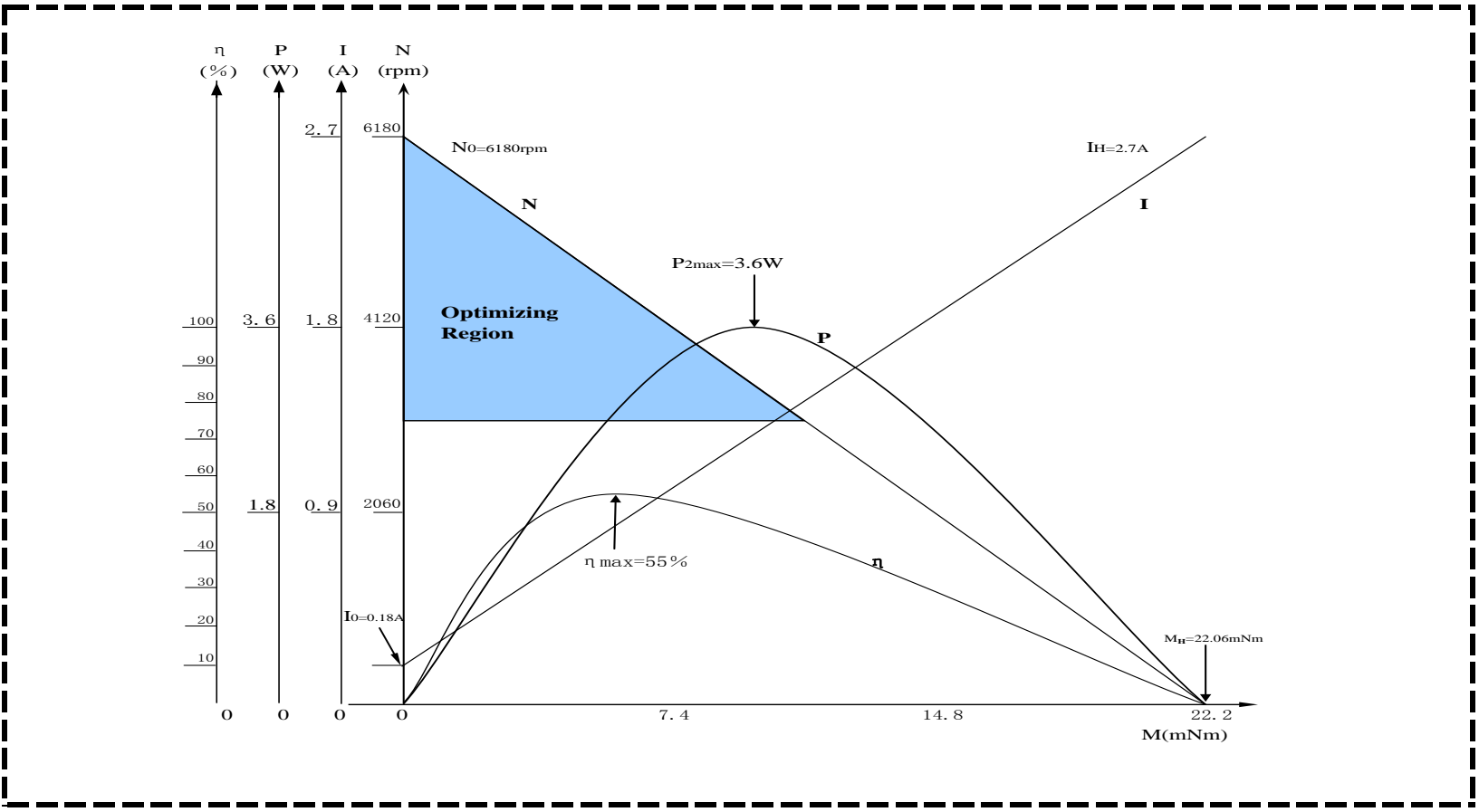
Number of phases	3
Number of poles	2
Operating temperature range	-30°C ~ 85°C
Commutation	Electrically commutated
Bearing type	Shielded ball bearings
Housing material	Black anodized aluminum
Magnet material	Sintered Nd-Fe-B
Direction of rotation	Reversible
Insulation Class	Class B (130°C max.)
Dielectric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

Model		DM2640-06-004-	DM2640-06-008-			
		04-1	09-1			
Nominal Voltage	V	6	6			
Rated Speed	RPM	4537	5903			
Rated Current	A	0.86	1.64			
Rated Torque	mNm	5.86	9.37			
Rated Efficiency	%	55	60			
Phase Resistance	R	2.2	1			
Output Power	W	3.6	8.1			
Max. Efficiency	%	55	60			
No-Load Speed	RPM	6180	7700			
No-Load Current	A	0.18	0.31			
Stall Torque	mNm	22.06	40.15			
Friction Torque	mNm	1.56	2.19			
Back EMF Constant	mV/RPM	0.91	0.74			
Torque Constant	mNm/A	8.66	7.06			
Slope of Speed vs. Torque Curve	RPM/mNm	280.18	191.77			
Mechanical time Constant	mS	12.76	8.74			
Rotor Inertia	g-cm ²	4.35	4.35			
Max. Angular Acceleration	10 ³ rad/s ²	50.71	92.3			
Sensor		Hall Sensor	Hall Sensor			
Driver Recommendation		DR3002IE	DR3002IE			
Weight	g	80	80			
Motor Body Length	"L"	40	40			

Outline Drawing



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Specifications:

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		DM2650-06-000-	DM2650-06-001-	DM2650-06-002--	DM2650-09-002-	DM2650-12-005-
		00-1	01-1	03-1	02-1	03-1
Nominal Voltage	V	6	6	6	9	12
Rated Speed	RPM	583	1791	3419	2718	3576
Rated Current	A	0.1	0.38	0.75	0.47	0.54
Rated Torque	mNm	3.32	5.98	6.31	8.09	10.23
Rated Efficiency	%	37	50	52	55	60
Phase Resistance	R	31	5.7	2.8	6	6
Output Power	W	0.2	1.3	2.7	2.9	5.4
Max. Efficiency	%	37	50	52	55	60
No-Load Speed	RPM	1020	2580	4840	3710	4640
No-Load Current	A	0.03	0.09	0.17	0.1	0.1
Stall Torque	mNm	7.76	19.55	21.5	30.27	44.58
Friction Torque	mNm	1.42	1.83	1.85	2.16	2.35
Back EMF Constant	mV/RPM	4.97	2.13	1.14	2.26	2.46
Torque Constant	mNm/A	47.47	20.31	10.9	21.62	23.46
Slope of Speed vs. Torque Curve	RPM/mNm	131.39	131.97	225.1	122.57	104.09
Mechanical time Constant	mS	8.93	8.97	15.3	8.33	7.07
Rotor Inertia	g-cm ²	6.49	6.49	6.49	6.49	6.49
Max. Angular Acceleration	10 ³ rad/s ²	11.96	30.12	33.13	46.64	68.69
Sensor		Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor
Driver Recommendation		DR3002IE	DR2401IE	DR2401IE	DR2401IE	DR2401IE
Weight	g	106	106	106	106	106
Motor Body Length	"L"	50	50	50	50	50

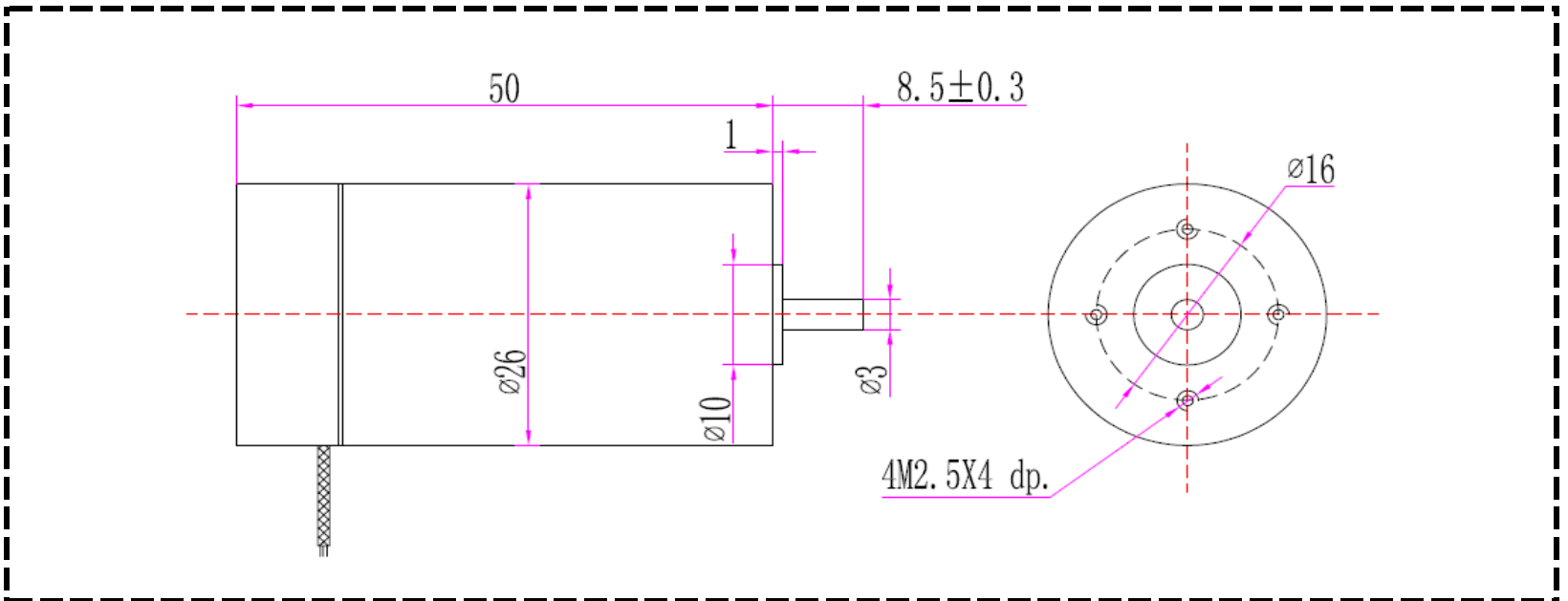
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		05-1	03-IE	07-1	09-1	09-1
Nominal Voltage	V	12	15	15	15	16
Rated Speed	RPM	5117	3453	7014	9167	9221
Rated Current	A	0.8	0.25	0.74	1.03	1.14
Rated Torque	mNm	10.72	5.77	10.36	9.97	12.54
Rated Efficiency	%	60	57	69	63	67
Phase Resistance	R	4	18	4	3.6	3
Output Power	W	8.1	2.8	13.2	14.3	19.9
Max. Efficiency	%	60	57	69	63	67
No-Load Speed	RPM	6640	4620	8490	11640	11340
No-Load Current	A	0.15	0.05	0.11	0.18	0.18
Stall Torque	mNm	46.73	22.83	59.61	46.94	67.09
Friction Torque	mNm	2.46	1.46	1.8	2.12	2.34
Back EMF Constant	mV/RPM	1.72	3.05	1.71	1.23	1.36

Torque Constant	mNm/A	16.39	29.14	16.38	11.77	13.02
Slope of Speed vs. Torque Curve	RPM/mNm	142.11	202.37	142.42	247.98	169.03
Mechanical time Constant	mS	9.66	13.75	9.68	16.85	11.49
Rotor Inertia	g-cm ²	6.49	6.49	6.49	6.49	6.49
Max. Angular Acceleration	10 ³ rad/s ²	72	35.18	91.85	72.33	103.37
Sensor		Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor
Driver Recommendation		DR3002IE	DR2401IE	DR2401IE	DR2401IE	DR2401IE
Weight	g	106	106	106	106	106
Motor Body Length	"L"	50	50	50	50	50

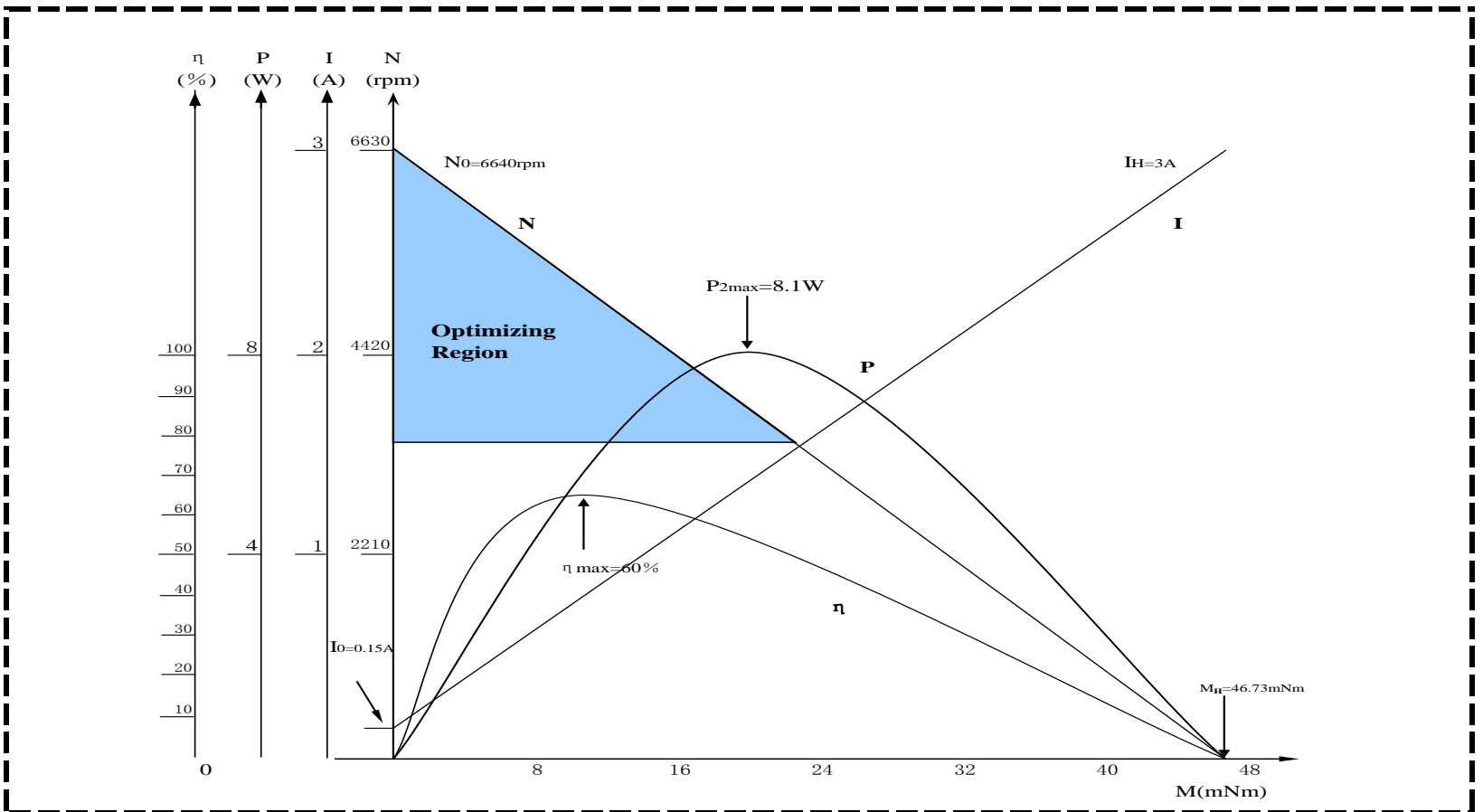
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		04-I	05-I	03-I	09-I	12-I
Nominal Voltage	V	18	18	24	24	24
Rated Speed	RPM	4727	5686	3465	9162	12279
Rated Current	A	0.65	0.95	0.29	1.09	1.79
Rated Torque	mNm	12.64	15.47	9.15	18.04	20.46
Rated Efficiency	%	54	55	49	67	62
Phase Resistance	R	8.9	6	31	4.7	3.4
Output Power	W	7.9	11.8	3.8	28.6	38.6
Max. Efficiency	%	54	55	49	67	62
No-Load Speed	RPM	6500	7760	5060	11250	15700
No-Load Current	A	0.14	0.2	0.07	0.17	0.32
Stall Torque	mNm	46.33	57.89	29.01	97.22	93.91
Friction Torque	mNm	3.45	4.13	2.88	3.35	4.46
Back EMF Constant	mV/RPM	2.58	2.16	4.31	2.06	1.46
Torque Constant	mNm/A	24.61	20.67	41.2	19.69	13.94
Slope of Speed vs. Torque Curve	RPM/mNm	140.28	134.06	174.42	115.72	167.18
Mechanical time Constant	mS	9.53	9.11	11.85	7.86	11.36
Rotor Inertia	g-cm ²	6.49	6.49	6.49	6.49	6.49
Max. Angular Acceleration	10 ³ rad/s ²	71.39	89.19	44.7	149.79	144.7
Sensor		Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor
Driver Recommendation		DR3002IE	DR2401IE	DR2401IE	DR2401IE	DR2401IE
Weight	g	106	106	106	106	106
Motor Body Length	"L"	50	50	50	50	50

Model		DM2650-24-045-				
		21-I				
Nominal Voltage	V	24				
Rated Speed	RPM	21021				
Rated Current	A	1.49				
Rated Torque	mNm	11.35				
Rated Efficiency	%	70				
Phase Resistance	R	3				
Output Power	W	45.5				
Max. Efficiency	%	70				
No-Load Speed	RPM	25150				
No-Load Current	A	0.21				
Stall Torque	mNm	69.12				
Friction Torque	mNm	1.86				
Back EMF Constant	mV/RPM	0.93				
Torque Constant	mNm/A	8.87				
Slope of Speed vs. Torque Curve	RPM/mNm	363.84				
Mechanical time Constant	mS	24.73				
Rotor Inertia	g-cm ²	6.49				
Max. Angular Acceleration	10 ³ rad/s ²	106.51				
Sensor		Hall Sensor				
Driver Recommendation		DR3002IE				
Weight	g	106				
Motor Body Length	"L"	50				

Outline Drawing



Performance Curve



30mm Brushless DC -With Internal Drive



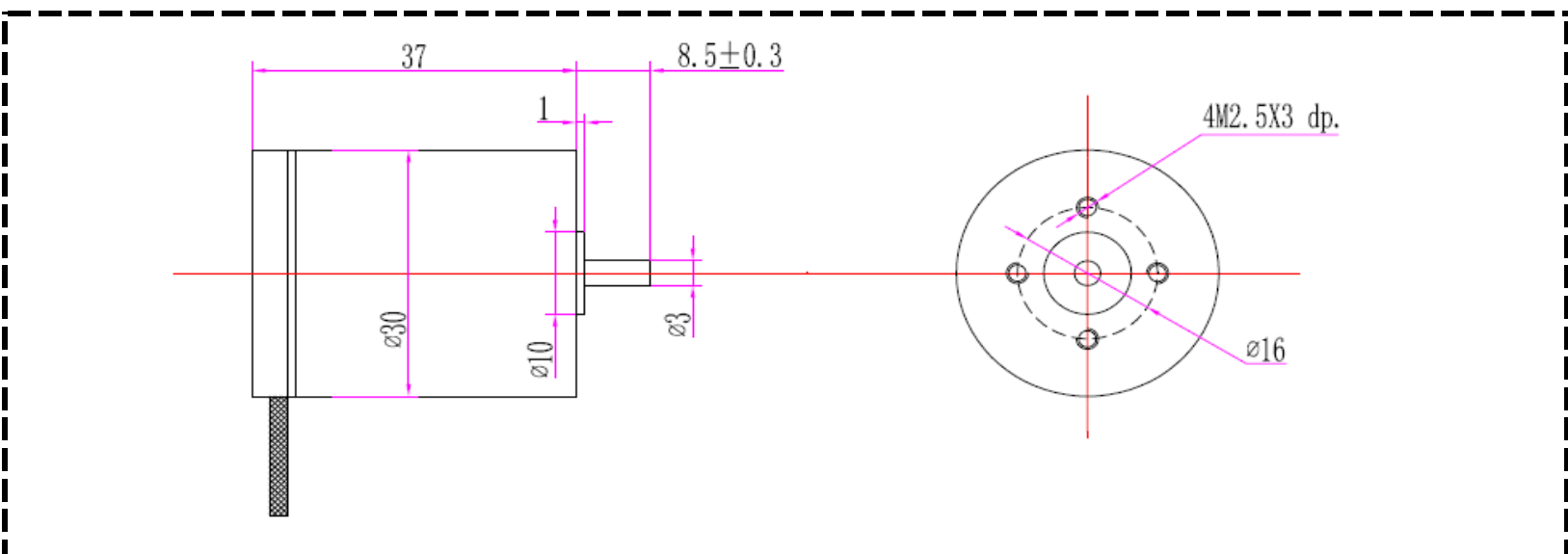
Specifications:

General Specifications

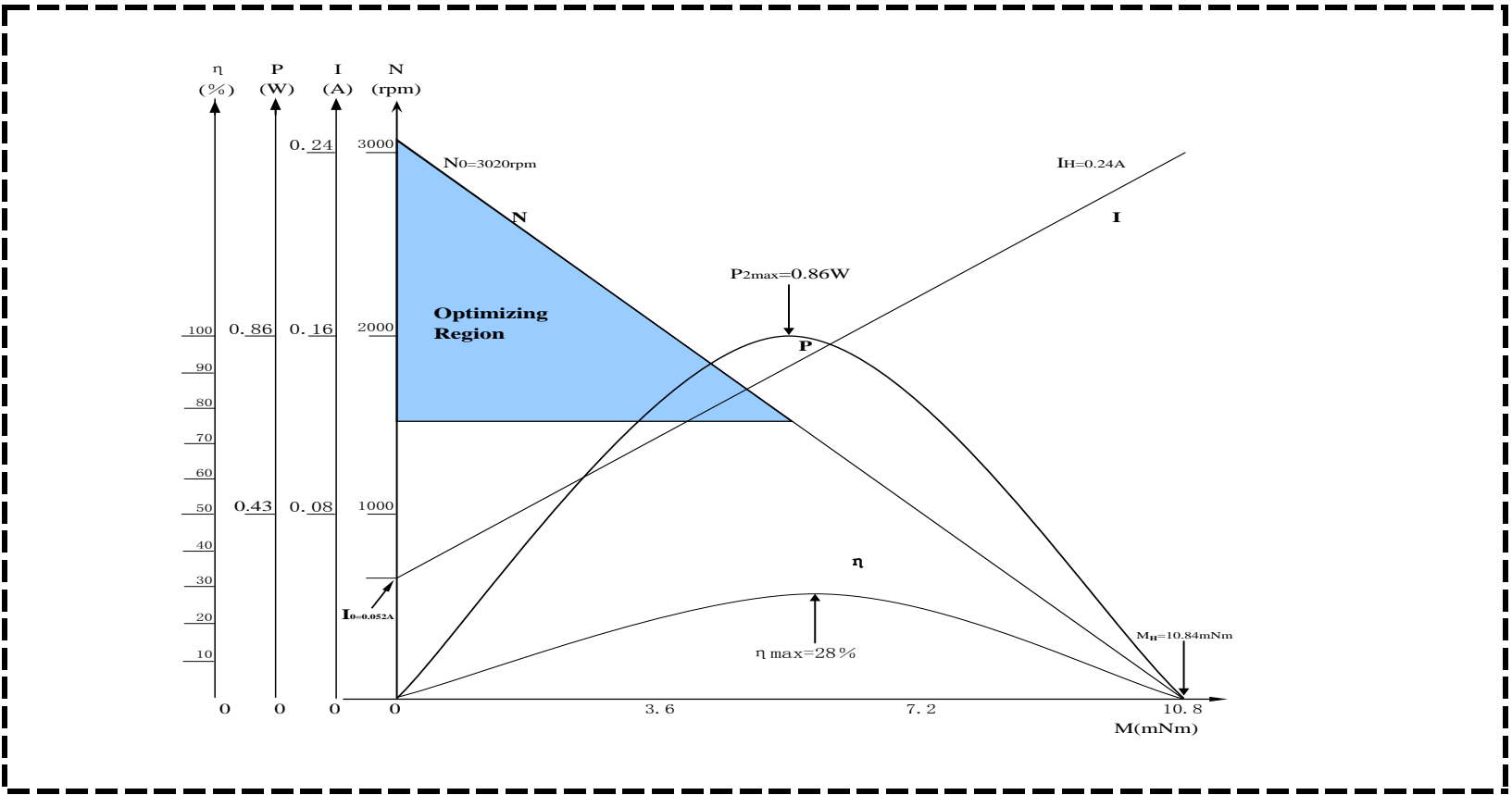
Number of phases	3
Number of poles	2
Operating temperature range	-30°C ~ 85°C
Commutation	Electrically commutated
Bearing type	Shielded ball bearings
Housing material	Black anodized aluminum
Magnet material	Sintered Nd-Fe-B
Direction of rotation	Reversible
Insulation Class	Class B (130°C max.)
Dielectric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

Model		DM3037-24-001-01-I				
Nominal Voltage	V	24				
Rated Speed	RPM	1411				
Rated Current	A	0.15				
Rated Torque	mNm	5.77				
Rated Efficiency	%	28				
Phase Resistance	R	102				
Output Power	W	0.9				
Max. Efficiency	%	28				
No-Load Speed	RPM	3020				
No-Load Current	A	0.052				
Stall Torque	mNm	10.84				
Friction Torque	mNm	3.07				
Back EMF Constant	mV/RPM	6.19				
Torque Constant	mNm/A	59.12				
Slope of Speed vs. Torque Curve	RPM/mNm	278.71				
Mechanical time Constant	mS	19.79				
Rotor Inertia	g-cm ²	6.78				
Max. Angular Acceleration	10 ³ rad/s ²	15.98				
Sensor		Hall Sensor				
Driver Recommendation		DR3002IE				
Weight	g	110				
Motor Body Length	"L"	37				

Outline Drawing



Performance Curve



30mm Brushless DC -With Internal Drive



Specifications:

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

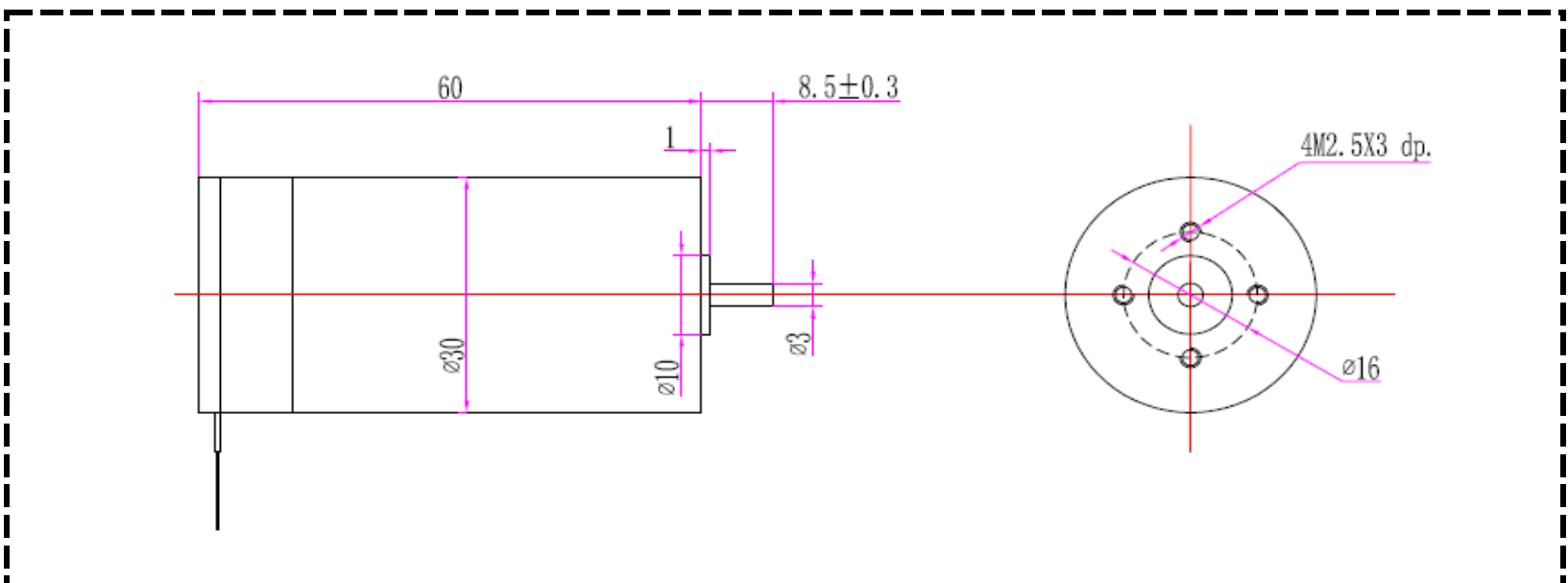
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Nominal Voltage	V	12	18	24	24	24
Rated Speed	RPM	4949	3232	3374	4691	5501
Rated Current	A	1.14	0.66	0.5	0.79	1.01
Rated Torque	mNm	17.99	23.88	21.05	27.34	28.8
Rated Efficiency	%	68	68	62	71	69
Phase Resistance	R	2.1	5.5	12	5.5	4.7
Output Power	W	16.14	13.84	10.94	24.88	28.86
Max. Efficiency	%	68	68	62	71	69
No-Load Speed	RPM	6000	3930	4310	5590	6660
No-Load Current	A	0.17	0.1	0.09	0.11	0.15
Stall Torque	mNm	102.74	134.53	96.99	170	165.55
Friction Torque	mNm	3.15	4.24	4.57	4.4	5.01
Back EMF Constant	mV/RPM	1.94	4.44	5.32	4.19	3.5
Torque Constant	mNm/A	18.53	42.4	50.78	39.97	33.4
Slope of Speed vs. Torque Curve	RPM/mNm	58.4	29.21	44.44	32.88	40.23
Mechanical time Constant	mS	9.79	4.89	7.45	5.51	6.74
Rotor Inertia	g-cm ²	16	16	16	16	16
Max. Angular Acceleration	10 ³ rad/s ²	64.21	84.08	60.62	106.25	103.47
Sensor		Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor
Driver Recommendation		DR3002IE	DR3002IE	DR3002IE	DR3002IE	DR3002IE
Weight	g	200	200	200	200	200
Motor Body Length	"L"	60	60	60	60	60

Model		DM3060-24-039-	DM3060-24-047-	DM3060-24-060-	DM3060-24-091-	DM3060-24-072-
		07-I	07-I	08-I	14-I	17-I
Nominal Voltage	V	24	24	24	24	24
Rated Speed	RPM	7161	7065	8671	14789	17943
Rated Current	A	1.2	2.11	1.63	3.1	4.51
Rated Torque	mNm	27.36	42.59	31.91	33.06	41.62
Rated Efficiency	%	72	63	74	69	72
Phase Resistance	R	3.5	2.8	2.3	1.5	0.9
Output Power	W	39.25	47.08	60.23	90.68	153
Max. Efficiency	%	72	63	74	69	72
No-Load Speed	RPM	8470	8970	10080	17820	21120
No-Load Current	A	0.16	0.37	0.2	0.45	0.59
Stall Torque	mNm	176.98	200.5	228.24	194.36	276.71
Friction Torque	mNm	4.23	9.05	4.46	5.62	6.26
Back EMF Constant	mV/RPM	2.77	2.56	2.34	1.31	1.11

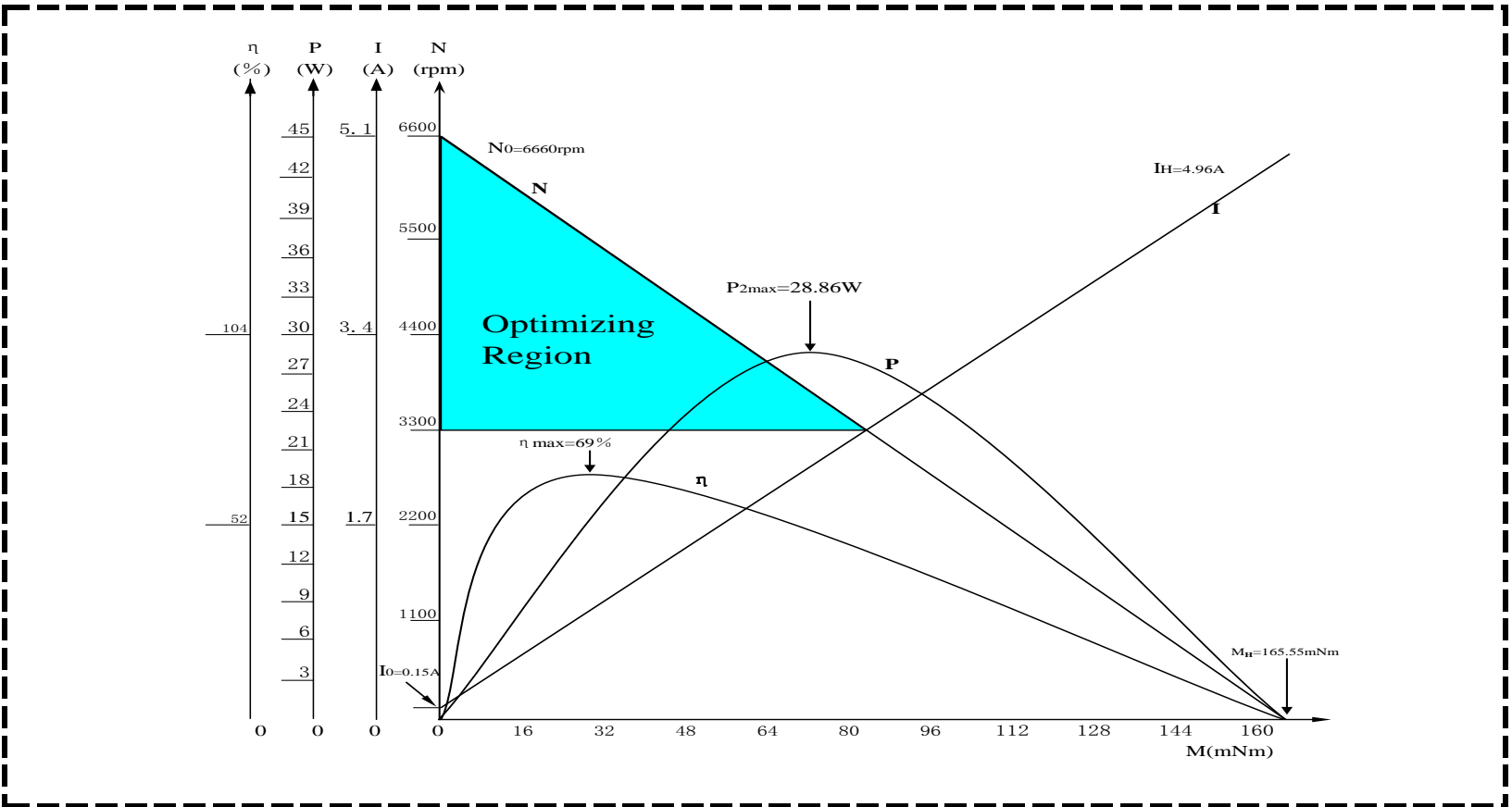
Torque Constant	mNm/A	26.43	24.45	22.3	12.5	10.61
Slope of Speed vs. Torque Curve	RPM/mNm	47.86	44.74	44.16	91.68	76.33
Mechanical time Constant	mS	8.02	7.5	7.4	15.36	12.79
Rotor Inertia	g-cm ²	16	16	16	16	16
Max. Angular Acceleration	10 ³ rad/s ²	110.62	125.31	142.65	121.48	172.94
Sensor		Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor	Hall Sensor
Driver Recommendation		DR3002IE	DR3002IE	DR3002IE	DR3002IE	DR3002IE
Weight	g	200	200	200	200	200
Motor Body Length	"L"	60	60	60	60	60

Model		DM3060-24-002-02-1				
Nominal Voltage	V	24				
Rated Speed	RPM	2072				
Rated Current	A	0.23				
Rated Torque	mNm	10.42				
Rated Efficiency	%	44				
Phase Resistance	R	46				
Output Power	W	2.45				
Max. Efficiency	%	44				
No-Load Speed	RPM	3240				
No-Load Current	A	0.06				
Stall Torque	mNm	28.91				
Friction Torque	mNm	3.76				
Back EMF Constant	mV/RPM	6.56				
Torque Constant	mNm/A	62.6				
Slope of Speed vs. Torque Curve	RPM/mNm	112.09				
Mechanical time Constant	mS	18.78				
Rotor Inertia	g-cm ²	16				
Max. Angular Acceleration	10 ³ rad/s ²	18.07				
Sensor		Hall Sensor				
Driver Recommendation		DR3002IE				
Weight	g	200				
Motor Body Length	"L"	60				

Outline Drawing



Performance Curve



44mm Brushless DC -With Internal Drive



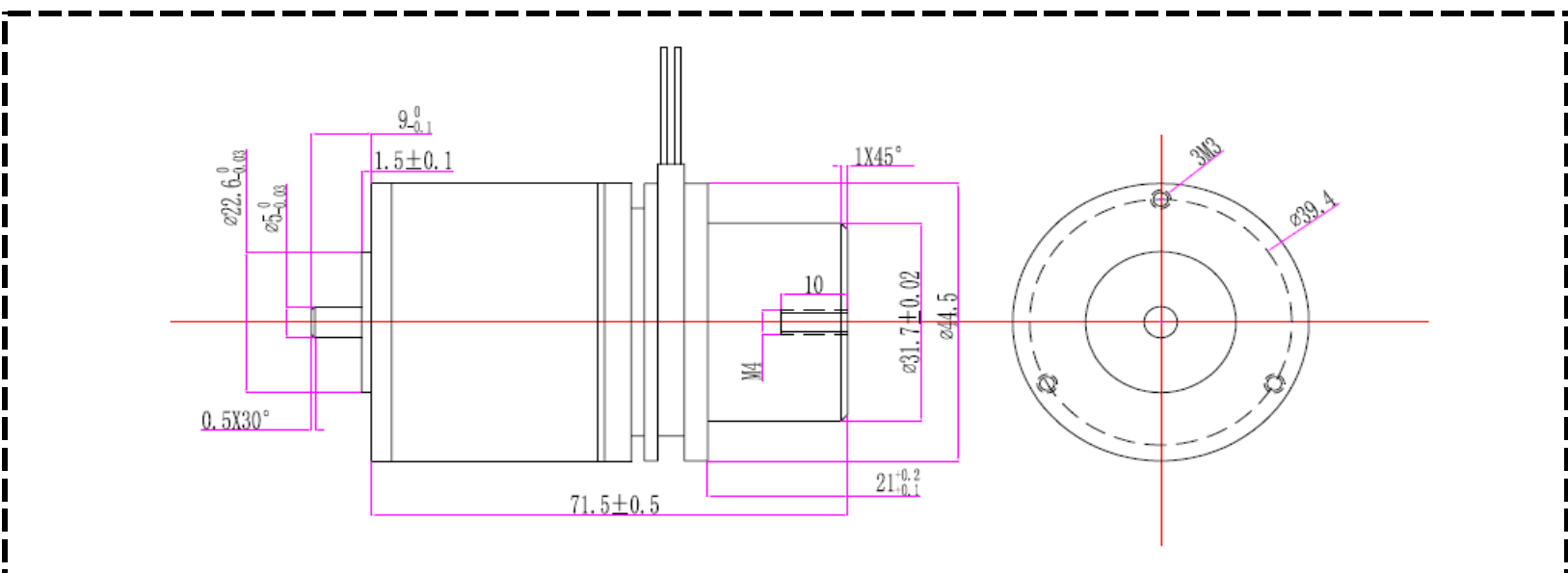
Specifications:

General Specifications

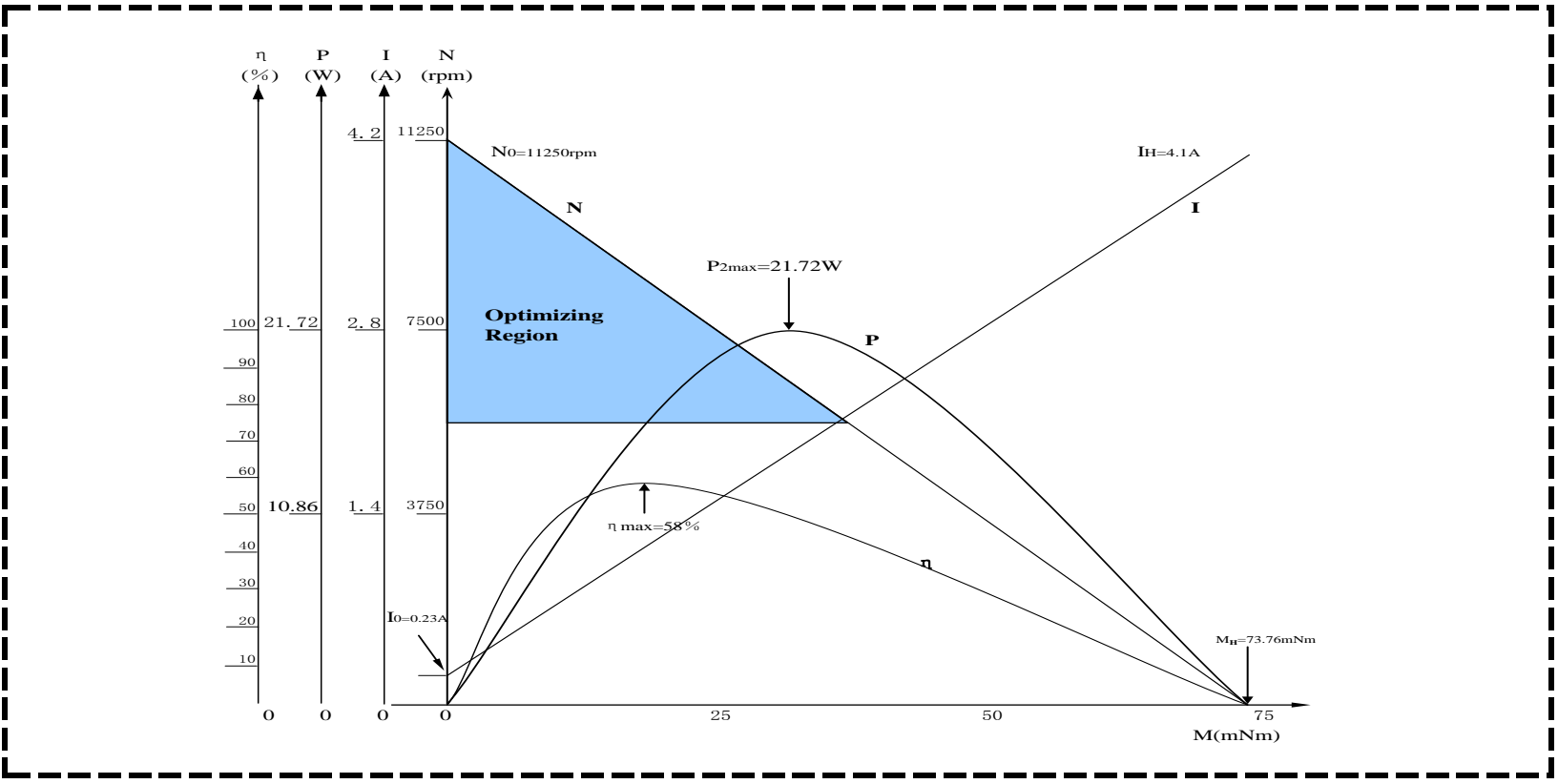
Number of phases	3
Number of poles	2
Operating temperature range	-30°C ~ 85°C
Commutation	Electrically commutated
Bearing type	Shielded ball bearings
Housing material	Black anodized aluminum
Magnet material	Sintered Nd-Fe-B
Direction of rotation	Reversible
Insulation Class	Class B (130°C max.)
Dielectric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

Model		DM4472-24-008-	DM4472-24-022-	DM4472-24-081-		
		04-I	08-I	17-I		
Nominal Voltage	V	24	24	24		
Rated Speed	RPM	4259	8496	17690		
Rated Current	A	0.59	1.17	4.11		
Rated Torque	mNm	15.23	18.06	31.32		
Rated Efficiency	%	49	58	60		
Phase Resistance	R	15.1	5.9	1.6		
Output Power	W	7.93	21.72	80.88		
Max. Efficiency	%	49	58	60		
No-Load Speed	RPM	6180	11250	23100		
No-Load Current	A	0.14	0.23	0.78		
Stall Torque	mNm	49.02	73.76	133.75		
Friction Torque	mNm	4.73	4.42	7.34		
Back EMF Constant	mV/RPM	3.54	2.01	0.98		
Torque Constant	mNm/A	33.82	19.22	9.41		
Slope of Speed vs. Torque Curve	RPM/mNm	126.08	152.52	172.72		
Mechanical time Constant	mS	60.38	73.04	82.71		
Rotor Inertia	g-cm ²	45.73	45.73	45.73		
Max. Angular Acceleration	10 ³ rad/s ²	10.72	16.13	29.25		
Sensor		Hall Sensor	Hall Sensor	Hal Sensor		
Driver Recommendation		DR3006IE	DR3002IE	DR3006IE		
Weight	g	240	240	240		
Motor Body Length	"L"	72	72	72		

Outline Drawing



Performance Curve



75mm Brushless DC -With Internal Drive



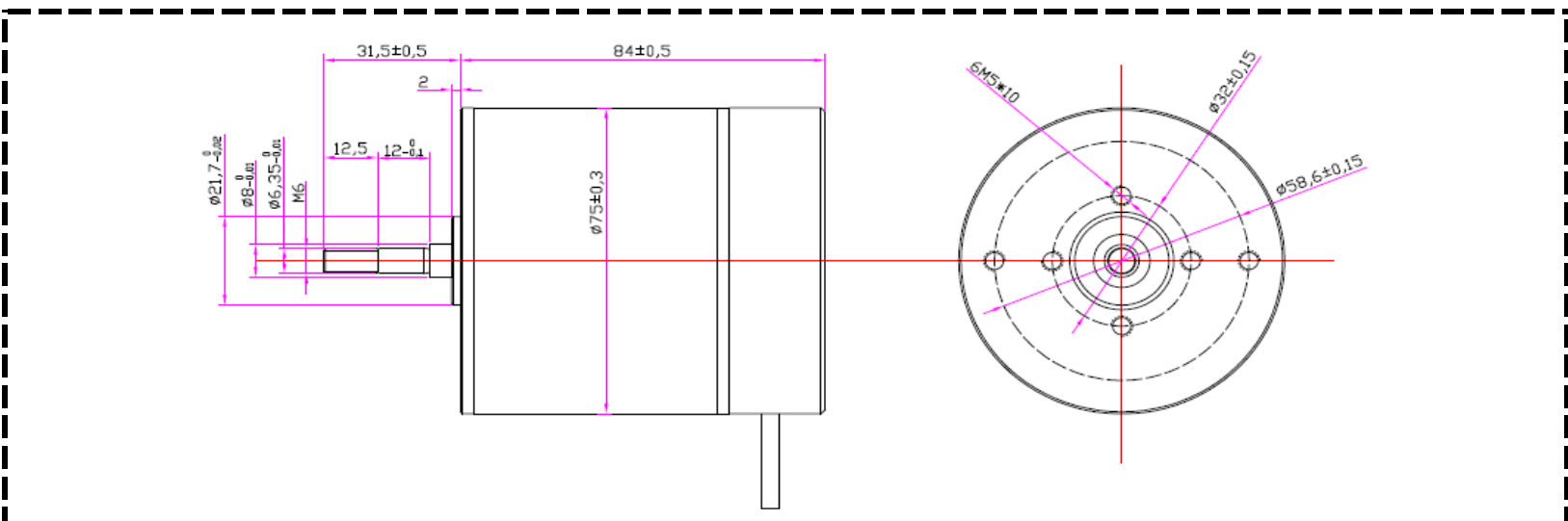
Specifications:

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		DM7584-24-063-04-I				
Nominal Voltage	V	24				
Rated Speed	RPM	4703				
Rated Current	A	2.64				
Rated Torque	mNm	82.4				
Rated Efficiency	%	65				
Phase Resistance	R	2.1				
Output Power	W	63.39				
Max. Efficiency	%	65				
No-Load Speed	RPM	5880				
No-Load Current	A	0.44				
Stall Torque	mNm	411.81				
Friction Torque	mNm	16.49				
Back EMF Constant	mV/RPM	3.92				
Torque Constant	mNm/A	37.48				
Slope of Speed vs. Torque Curve	RPM/mNm	14.28				
Mechanical time Constant	mS	126.49				
Rotor Inertia	g-cm ²	845.95				
Max. Angular Acceleration	10 ³ rad/s ²	4.87				
Sensor		Hall Sensor				
Driver Recommendation		DR3006IE				
Weight	g	1250				
Motor Body Length	"L"	84				

Outline Drawing



Performance Curve

