

## DMN Series

The DMN series is designed with an extremely low profile and a high resolution encoder optimized to achieve high dynamic motion, high torque and high precision. The DMN series is a perfect fit for industries that require high precision but less force.



- Outer rotating structure
- Space saving with Low profile design
- Absolute Encoder
- Maximum torque: 4.2~39.6 Nm

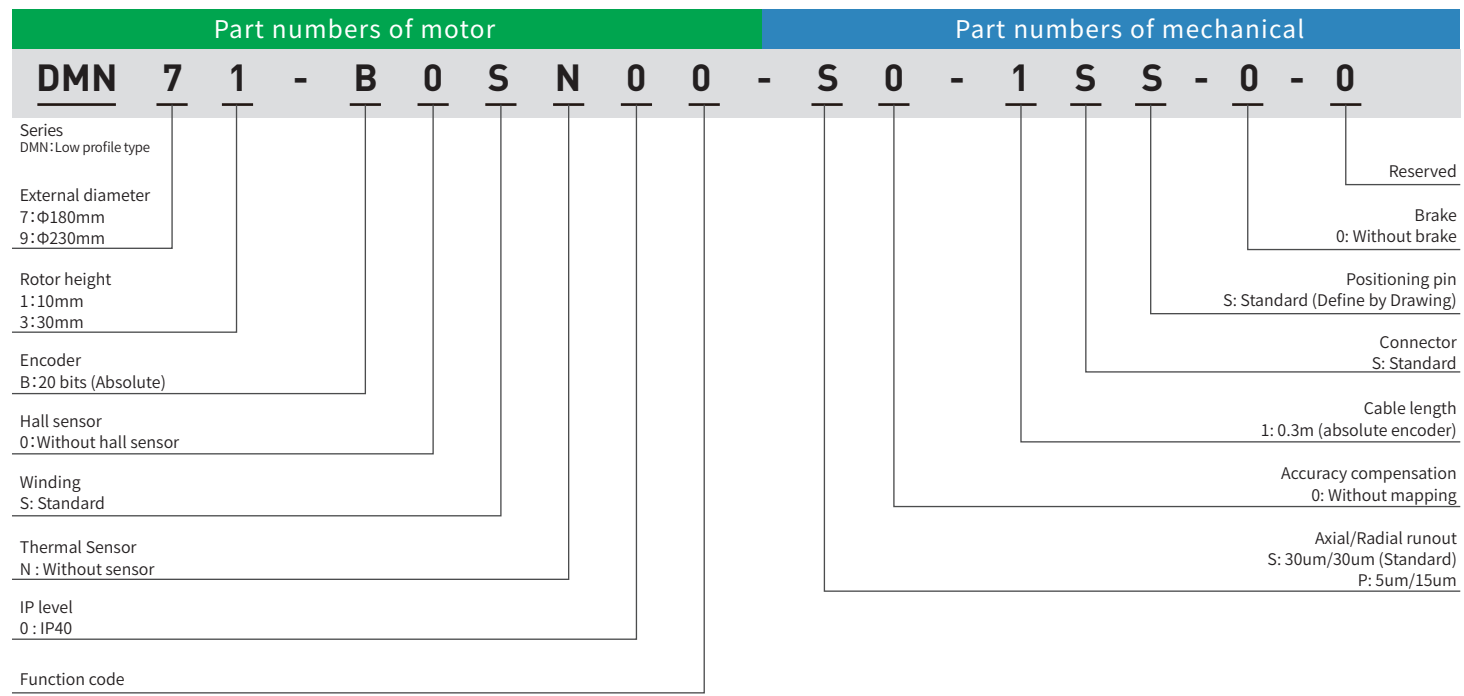
## DMY Series

The DMY series is designed with an intergrated, high resolution feedback system which is optimized to achieve high dynamic motion, high torque and high precision. The DMY series is a perfect fit for industries that require high precision.

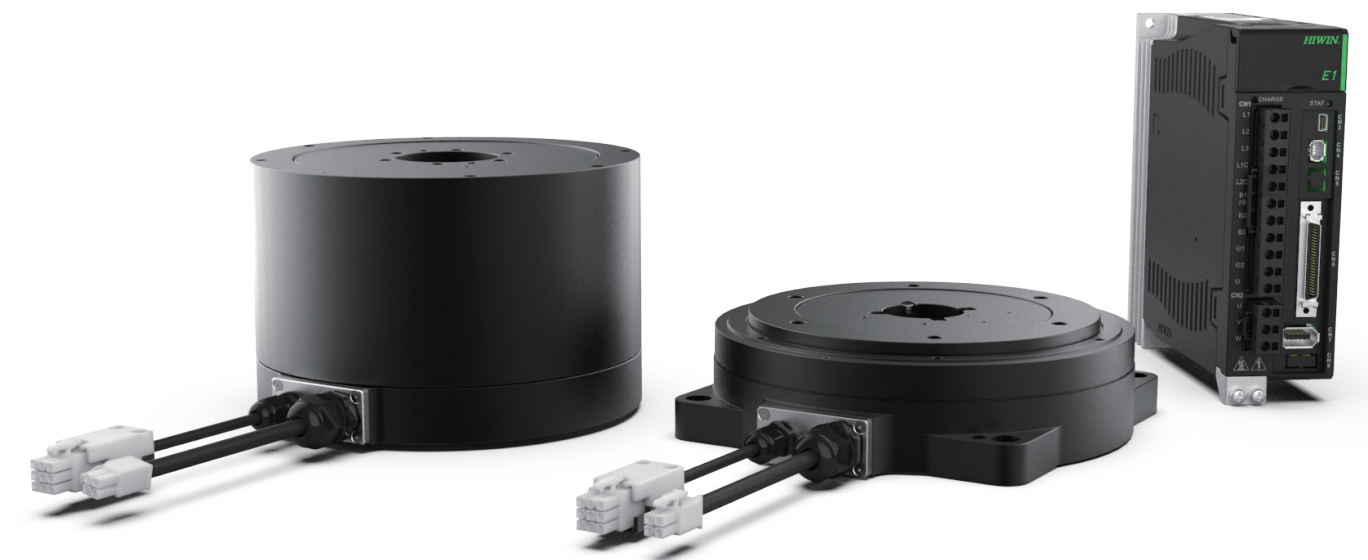
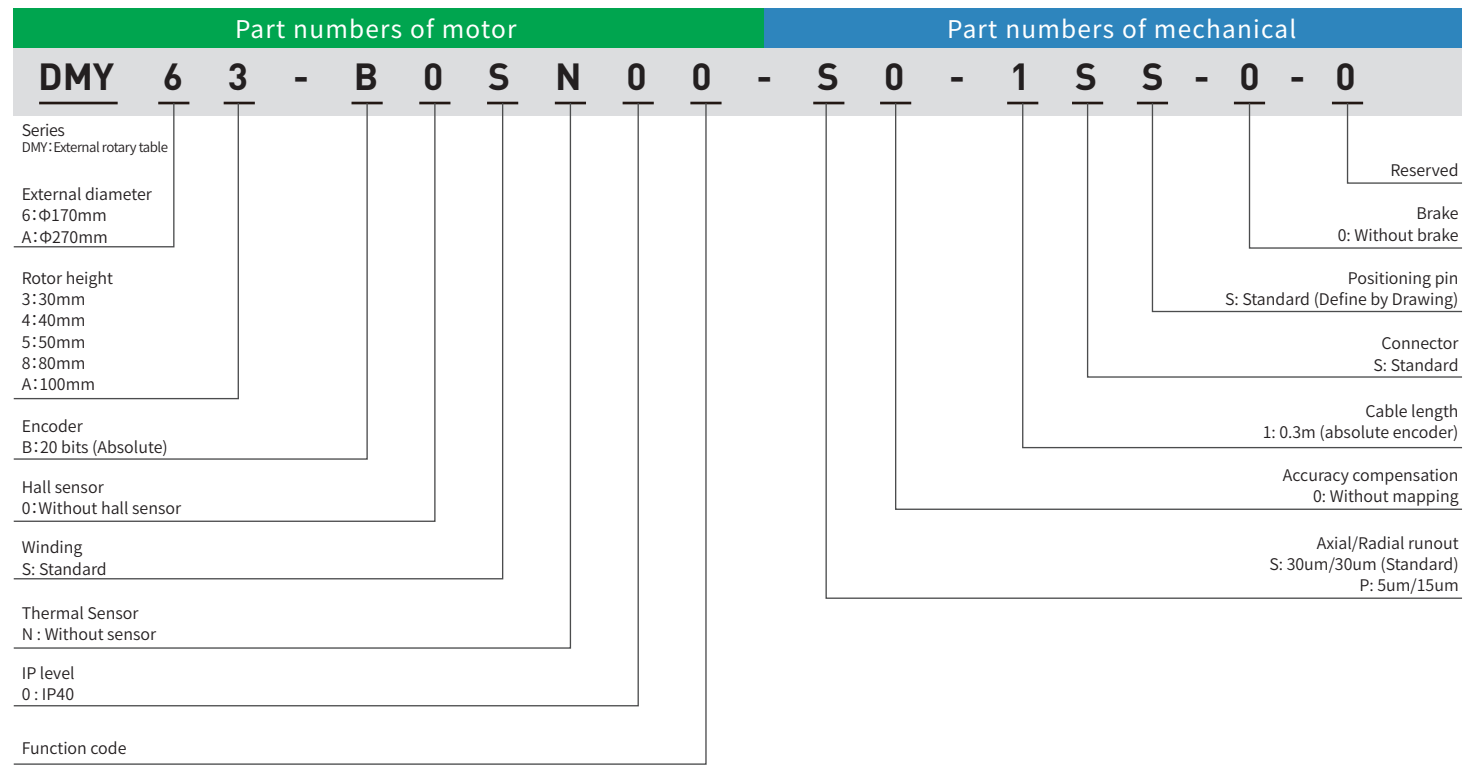


- Outer rotating structure
- Absolute encoder
- High dynamic, torque and precision
- Maximum torque: 12~300 Nm

## Model Description



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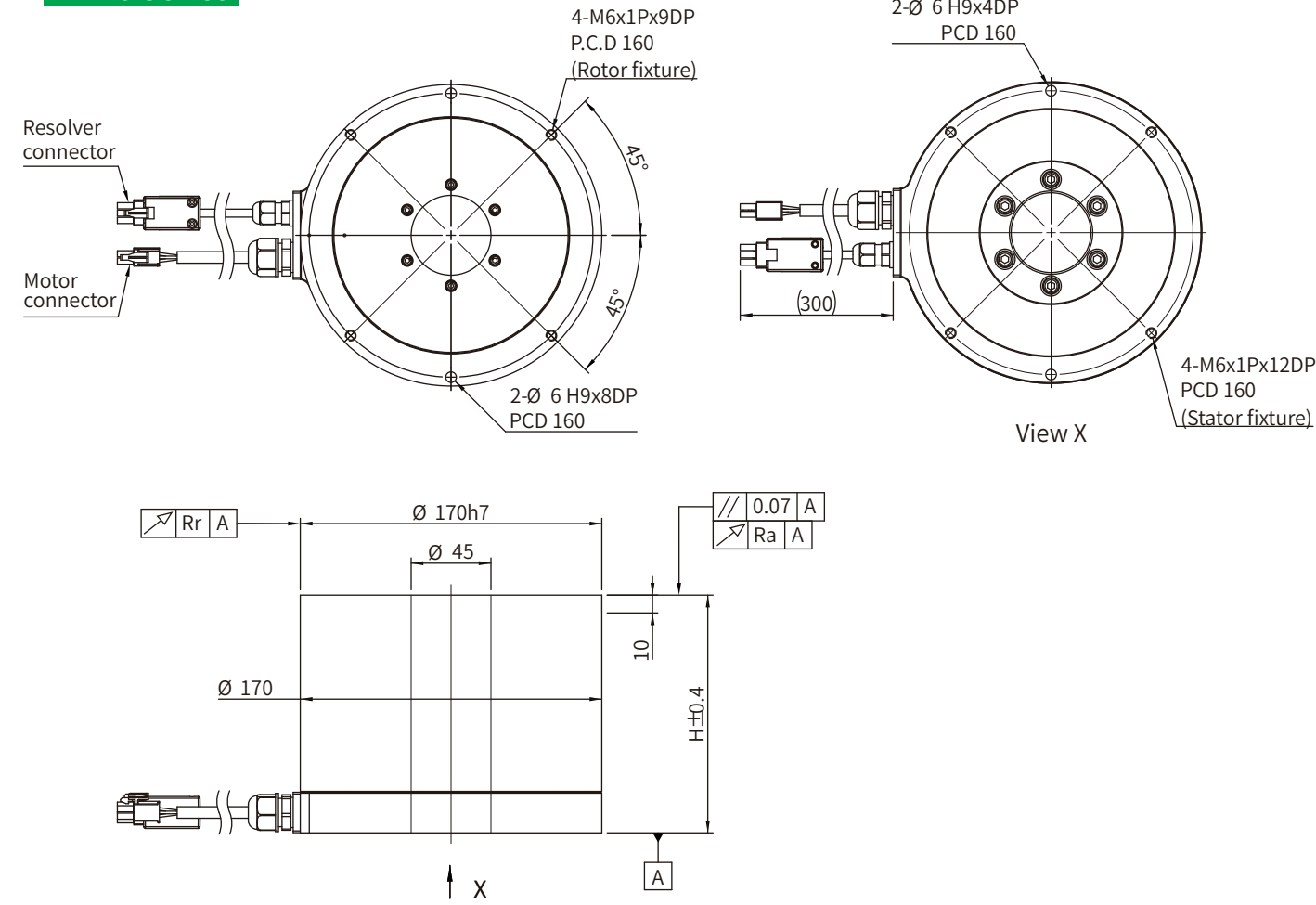
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# DMY/DMN

Absolute Encoder Direct Drive Motor

## Product Dimension

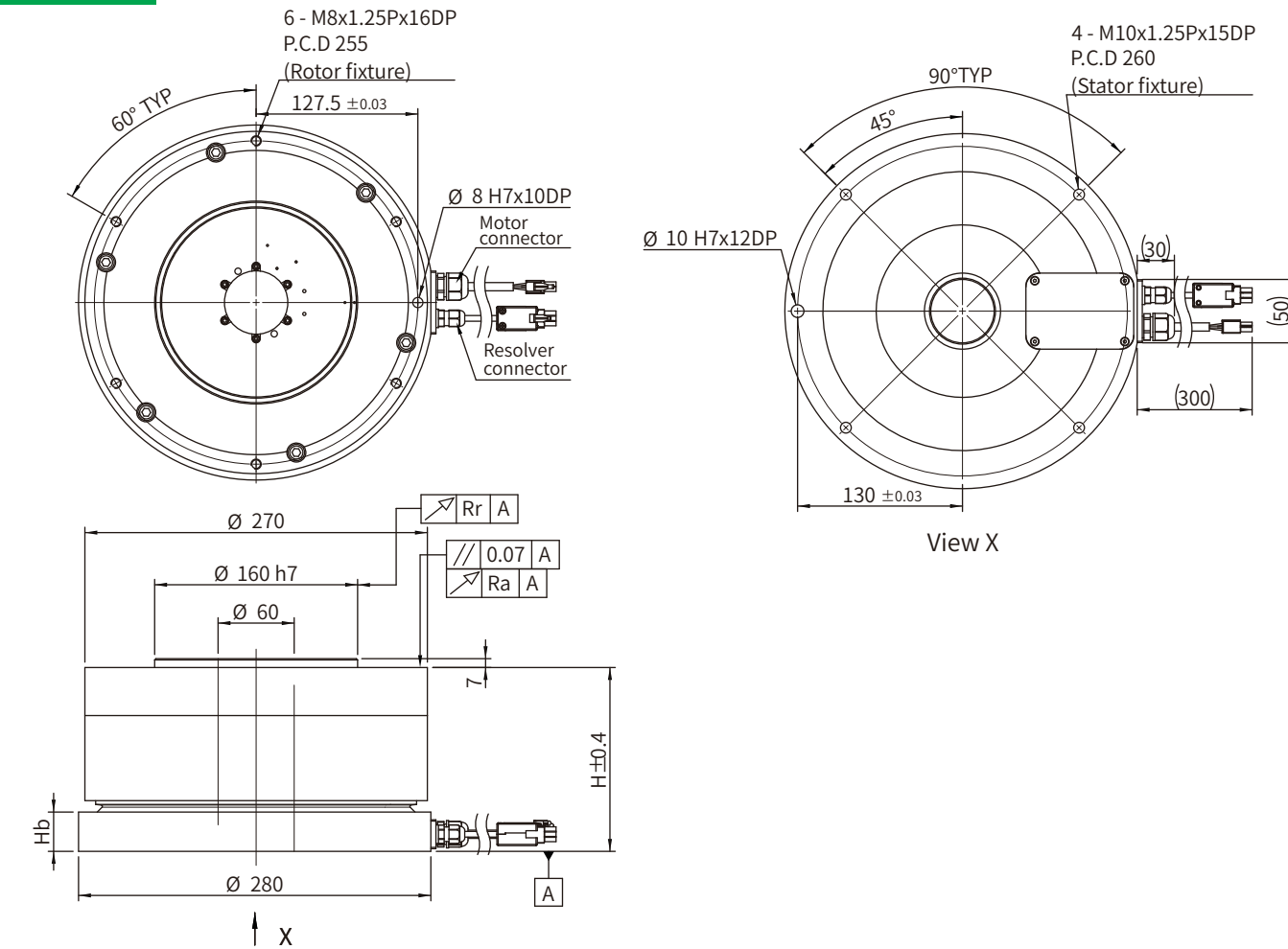
### DMY6 Series



DMY6 Series	Symbol	Unit	DMY63-B0	DMY65-B0	DMY68-B0
Continuous torque	T <sub>c</sub>	Nm	8	16	24
Continuous current	I <sub>c</sub>	A <sub>rms</sub>	3.8	3.8	3.8
Peak torque (Within 1s.)	T <sub>p</sub>	Nm	24	48	72
Peak current (Within 1s.)	I <sub>p</sub>	A <sub>rms</sub>	12	12	12
Torque constant	K <sub>t</sub>	Nm/A <sub>rms</sub>	2.13	4.26	6.39
Electrical time constant	T <sub>e</sub>	ms	5.7	6.3	6.5
Resistance (line to line at 25°C)	R <sub>25</sub>	Ω	2	3.1	4.38
Inductance (line to line)	L	mH	11.4	19.4	28.26
Number of poles	2 <sub>p</sub>		16	16	16
Back emf constant (line to line)	K <sub>v</sub>	V <sub>rms</sub> /(rad/s)	1.2	2.5	3.7
Motor constant (line to line at 25°C)	K <sub>m</sub>	Nm/√W	1.2	2	2.5
Thermal resistance	R <sub>th</sub>	K/W	1.7	1.1	0.8
Nominal input voltage	V <sub>dc</sub>			500(600 <sup>①</sup> )	
Inertia of rotating parts	J	kgm <sup>2</sup>	0.019	0.026	0.033
Mass of motor	M <sub>m</sub>	kg	7.7	10.7	14.7
Max. axial load	F <sub>a</sub>	N	3700	3700	3700
Max. moment load	M	Nm	60	60	60
Max. speed		rpm	500	500	400
Resolution <sup>①</sup>		p/rev		1048576	
Repeatability		arc-sec		±5	
Accuracy		arc-sec		±25	
Axial runout	R <sub>a</sub>	mm		0.03(0.005 <sup>①</sup> )	
Radial runout	R <sub>r</sub>	mm		0.03(0.015 <sup>①</sup> )	
Height	H	mm	109.5	134.5	159.5

Note: <sup>①</sup> Optional  
\*All the specifications in the table are in ±10% of tolerance except dimensions.

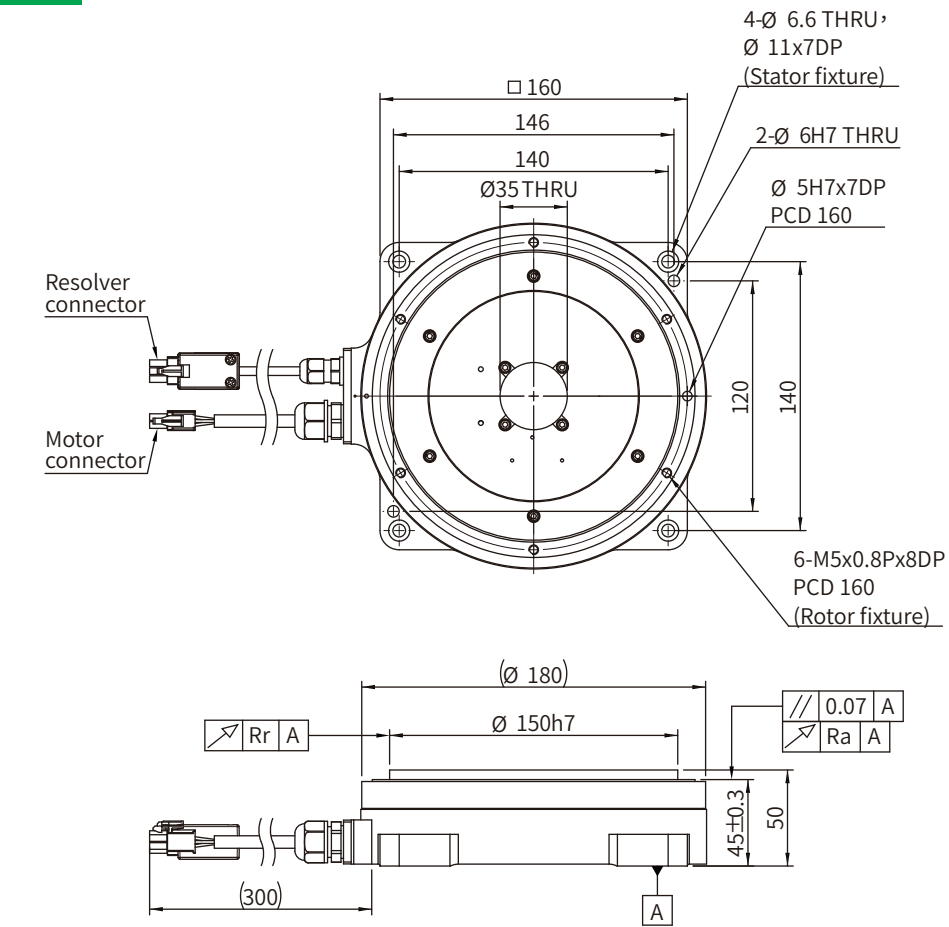
### DMYA Series



DMYA Series	Symbol	Unit	DMYA3-B0	DMYA5-B0	DMYAA-B0
Continuous torque	T <sub>c</sub>	Nm	25	50	100
Continuous current	I <sub>c</sub>	A <sub>rms</sub>	2.2	2.2	4.4
Peak torque (Within 1s.)	T <sub>p</sub>	Nm	75	150	300
Peak current (Within 1s.)	I <sub>p</sub>	A <sub>rms</sub>	6.6	6.6	13.2
Torque constant	K <sub>t</sub>	Nm/A <sub>rms</sub>	11.4	22.5	22.5
Electrical time constant	T <sub>e</sub>	ms	11.3	12.8	13.3
Resistance (line to line at 25°C)	R <sub>25</sub>	Ω	8.6	13.3	5.8
Inductance (line to line)	L	mH	97	170	77
Number of poles	2 <sub>p</sub>		22	22	22
Back emf constant (line to line)	K <sub>v</sub>	V <sub>rms</sub> /(rad/s)	6.6	13	13
Motor constant (line to line at 25°C)	K <sub>m</sub>	Nm/√W	3.2	5	7.6
Thermal resistance	R <sub>th</sub>	K/W	1.2	0.8	0.4
Nominal input voltage	V <sub>dc</sub>			500(600 <sup>①</sup> )	
Inertia of rotating parts	J	kgm <sup>2</sup>	0.254	0.32	0.44
Mass of motor	M <sub>m</sub>	kg	45	54	71
Max. axial load	F <sub>a</sub>	N	8000	8000	8000
Max. moment load	M	Nm	240	240	240
Max. speed		rpm	200	100	100
Resolution <sup>①</sup>		p/rev		1048576	
Repeatability		arc-sec		±5	
Accuracy		arc-sec		±25	
Axial runout	R <sub>a</sub>	mm		0.03(0.005 <sup>①</sup> )	
Radial runout	R <sub>r</sub>	mm		0.03(0.015 <sup>①</sup> )	
Height	H	mm	120	145	200
Height of base	H <sub>b</sub>	mm		31	

Note: <sup>①</sup> Optional  
\*All the specifications in the table are in ±10% of tolerance except dimensions.

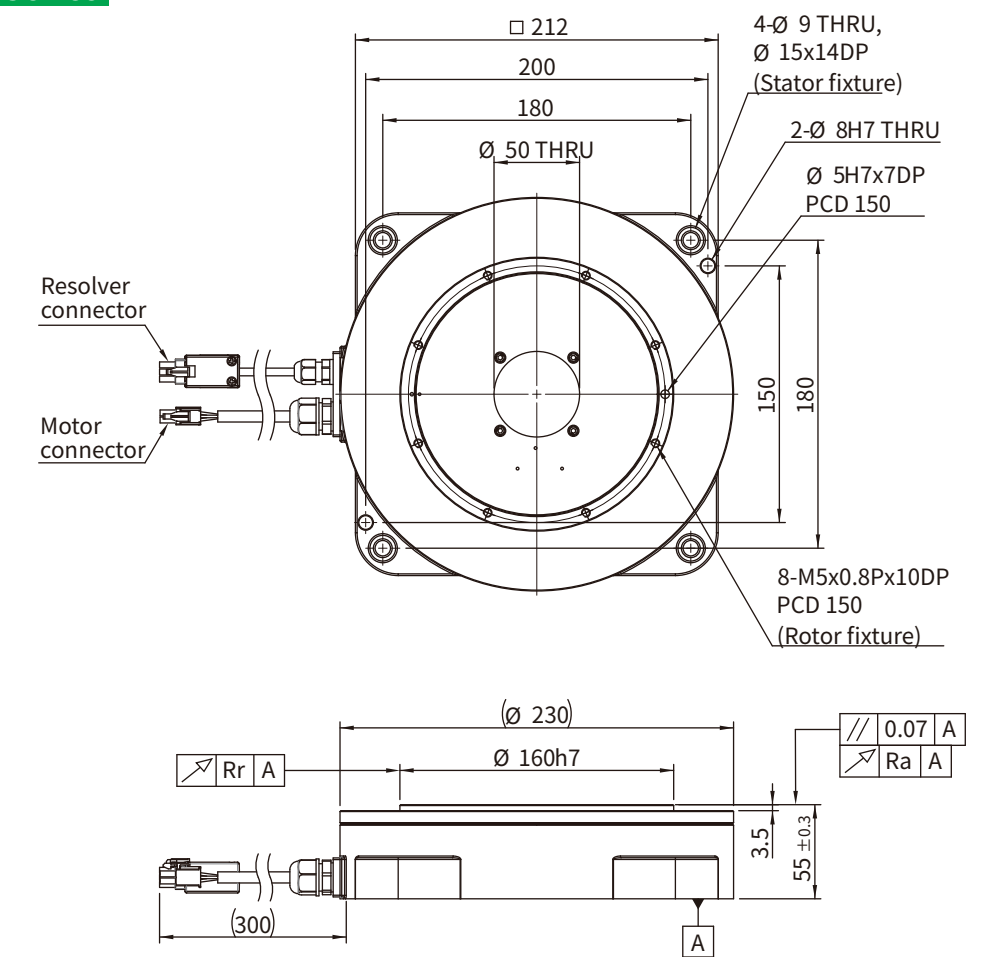
### DMN71 Series



DMN Series	Symbol	Unit	DMN71-B0
Continuous torque	T <sub>c</sub>	Nm	3.7
Continuous current	I <sub>c</sub>	A <sub>rms</sub>	3.4
Peak torque (Within 1s.)	T <sub>p</sub>	Nm	11.1
Peak current (Within 1s.)	I <sub>p</sub>	A <sub>rms</sub>	10.2
Torque constant	K <sub>t</sub>	Nm/A <sub>rms</sub>	1.09
Electrical time constant	T <sub>e</sub>	ms	3.5
Resistance (line to line at 25°C)	R <sub>25</sub>	Ω	2.55
Inductance (line to line)	L	mH	9.02
Number of poles	2 <sub>p</sub>		16
Back emf constant (line to line)	K <sub>v</sub>	V <sub>rms</sub> /(rad/s)	0.63
Motor constant (line to line at 25°C)	K <sub>m</sub>	Nm/√W	0.6
Thermal resistance	R <sub>th</sub>	K/W	1.95
Nominal input voltage	V <sub>dc</sub>		500(600 <sup>①</sup> )
Inertia of rotating parts	J	kgm <sup>2</sup>	0.008
Mass of motor	M <sub>m</sub>	kg	3.5
Max. axial load	F <sub>a</sub>	N	1000
Max. moment load	M	Nm	50
Max. speed		rpm	600
Resolution		p/rev	1048576
Repeatability		arc-sec	±5
Accuracy		arc-sec	±30
Axial runout	R <sub>a</sub>	mm	0.03(0.005 <sup>①</sup> )
Radial runout	R <sub>r</sub>	mm	0.03(0.015 <sup>①</sup> )
Size	WxLxH	mm	160x160x50

Note: <sup>①</sup> Optional  
\*All the specifications in the table are in ±10% of tolerance except dimensions.

### DMN93 Series



DMN Series	Symbol	Unit	DMN93-B0
Continuous torque	T <sub>c</sub>	Nm	13.2
Continuous current	I <sub>c</sub>	A <sub>rms</sub>	3.4
Peak torque (Within 1s.)	T <sub>p</sub>	Nm	39.6
Peak current (Within 1s.)	I <sub>p</sub>	A <sub>rms</sub>	10.2
Torque constant	K <sub>t</sub>	Nm/A <sub>rms</sub>	3.9
Electrical time constant	T <sub>e</sub>	ms	5.4
Resistance (line to line at 25°C)	R <sub>25</sub>	Ω	4.3
Inductance (line to line)	L	mH	23.2
Number of poles	2 <sub>p</sub>		22
Back emf constant (line to line)	K <sub>v</sub>	V <sub>rms</sub> /(rad/s)	2.25
Motor constant (line to line at 25°C)	K <sub>m</sub>	Nm/√W	1.5
Thermal resistance	R <sub>th</sub>	K/W	1.01
Nominal input voltage	V <sub>dc</sub>		500(600 <sup>①</sup> )
Inertia of rotating parts	J	kgm <sup>2</sup>	0.012
Mass of motor	M <sub>m</sub>	kg	7.5
Max. axial load	F <sub>a</sub>	N	1000
Max. moment load	M	Nm	50
Max. speed		rpm	500
Resolution		p/rev	1048576
Repeatability		arc-sec	±5
Accuracy		arc-sec	±25
Axial runout	R <sub>a</sub>	mm	0.03(0.005 <sup>①</sup> )
Radial runout	R <sub>r</sub>	mm	0.03(0.015 <sup>①</sup> )
Size	WxLxH	mm	212x212x55

Note: <sup>①</sup> Optional  
\*All the specifications in the table are in ±10% of tolerance except dimensions.