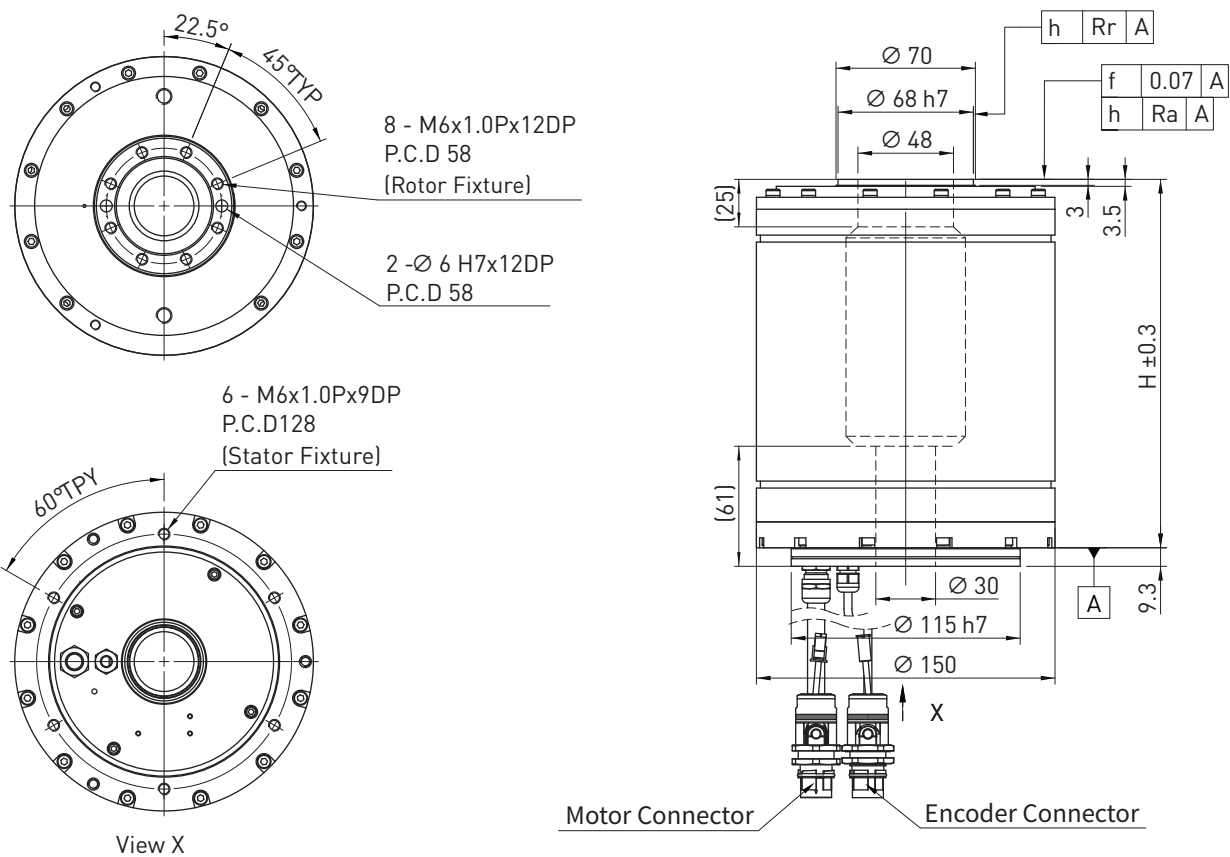


Dimensions



HIWIN® MIKROSYSTEM

HIWIN MIKROSYSTEM  
New Generation Direct Drive Motor



HIWIN® MIKROSYSTEM

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DMH Series

Direct Drive Motor

Features & Specifications

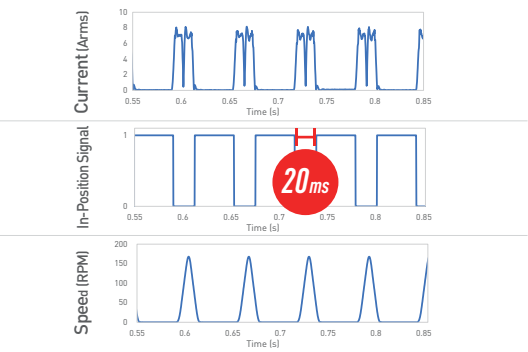
Ideal for applications with small angles of motion and high frequencies.

High Response, High Torque, High Pace

Industry Applications

Test Handlers, Appearance Inspection Machines, Vibration Generators, Taping Machines  
With E-series drive to realize more faster, more stable and more accurate industrial demand, it will greatly improve the production efficiency and realize 50~60K+ UPH production capacity.

Case Study: 22.5 Degree Positioning Action Waveform Positioning time: 20 ms



Application Requirements

- Motor Spec: DMH6G-40
- Load specifications: 0.0207 kgm2
- Positioning operation: 22.5°
- Postioning time: 20 ms
- Cycle time: 60 ms
- Output Performance: 60 K Unit Per Hour

A simple schematic diagram of turret sorting equipment is shown here.  
DMH is suitable for many applications, feel free to contact us for more information.



Model Explanation

Motor Specification										Mechanical Specification									
DMH 6B - 4 0 S P 0 0 - S 0 - 1 A S - 0 - 0																			
Model 6B 6G										Reserved Code Clamp Without Clamp: 0 (Standard)									
Encoder 4: 2,500 lines (Analog Incremental) P: 5,000,000 cnt (Digital Incremental)										Positioning Pinhole Standard: S (According to the drawing)									
Hall Sensor 0: Without Hall sensor										Connector Type Optical scale (Standard): A (M17 Circular connector)									
Winding Code S: Standard										Wire Length 0.3 m (Standard): 1									
Temperature Sensor P: PTC sensor										Absolute Accuracy Compensation Without compensation: 0 ±10 arc-sec: 1									
International Protection Standard 0: IP40										Axial / Radial Runout 30 μm / 30 μm (Standard): S 5 μm / 30 μm: P 5 μm / 15 μm: A									
Function Code																			

Specifications

	Symbol	Unit	DMH6B-4	DMH6G-4
Motor Power	-	W	1319	2532
Continuous Torque	Tc	Nm	36	65
Continuous Torque	Ic	Arms	5.3	8.2
Peak Torque (Within 1s.)	Tp	Nm	100	165
Peak Current (Within 1s.)	Ip	Arms	15.9	26.24
Torque Constant	Kt	Nm / Arms	6.79	7.93
Electrical Time Constant	Te	ms	7.3	7.5
Resistance (line to line at 25°C)	R <sub>25</sub>	Ω	3.85	2.6
Inductance (line to line)	L	mH	28.1	19.5
Number of Poles	2p	-	20	20
Back EMF Constant (line to line)	Kv	Vrms / rad / s	3.92	3.97
Motor Constant (line to line at 25°C)	Km	Nm/√W	2.82	4.01
Thermal Resistance	Rth	K / W	0.51	0.386
Temperature Sensor	-	-	PTC 120	
Max. DC Bus Voltage	-	V <sub>DC</sub>	600	600
Inertia of Rotor	J	kgm <sup>2</sup>	0.00345	0.0046
Mass of Motor	Mm	kg	14	18
Max. Axial Load	Fa	N	800	800
Max. Moment Load	M	Nm	35	35
Max. Speed	-	RPM	350	390
Resolution	-	p / rev	4,320,000 (INC, sin/cos 1Vpp)	
Repeatability	-	arc-sec	±2	
Accuracy	-	arc-sec	±25 / ±10 <sup>1)</sup>	
Axial Runout	Ra	mm	0.03(0.005 <sup>2)</sup> )	
Radial Runout	Rr	mm	0.03(0.015 <sup>2)</sup> )	
Height	H	mm	185	235

Note: 1) After error mapping  
2) Optional  
3) All the specifications in the table are in ±10% of tolerance except dimensions

T-N Curve

(DC bus voltage=325 V<sub>DC</sub>)

