

MDH-60 Series

- Direct Drive Brushless AC Servo
- 60mm diameter, 3 stack lengths
- Incremental or absolute encoder feedback



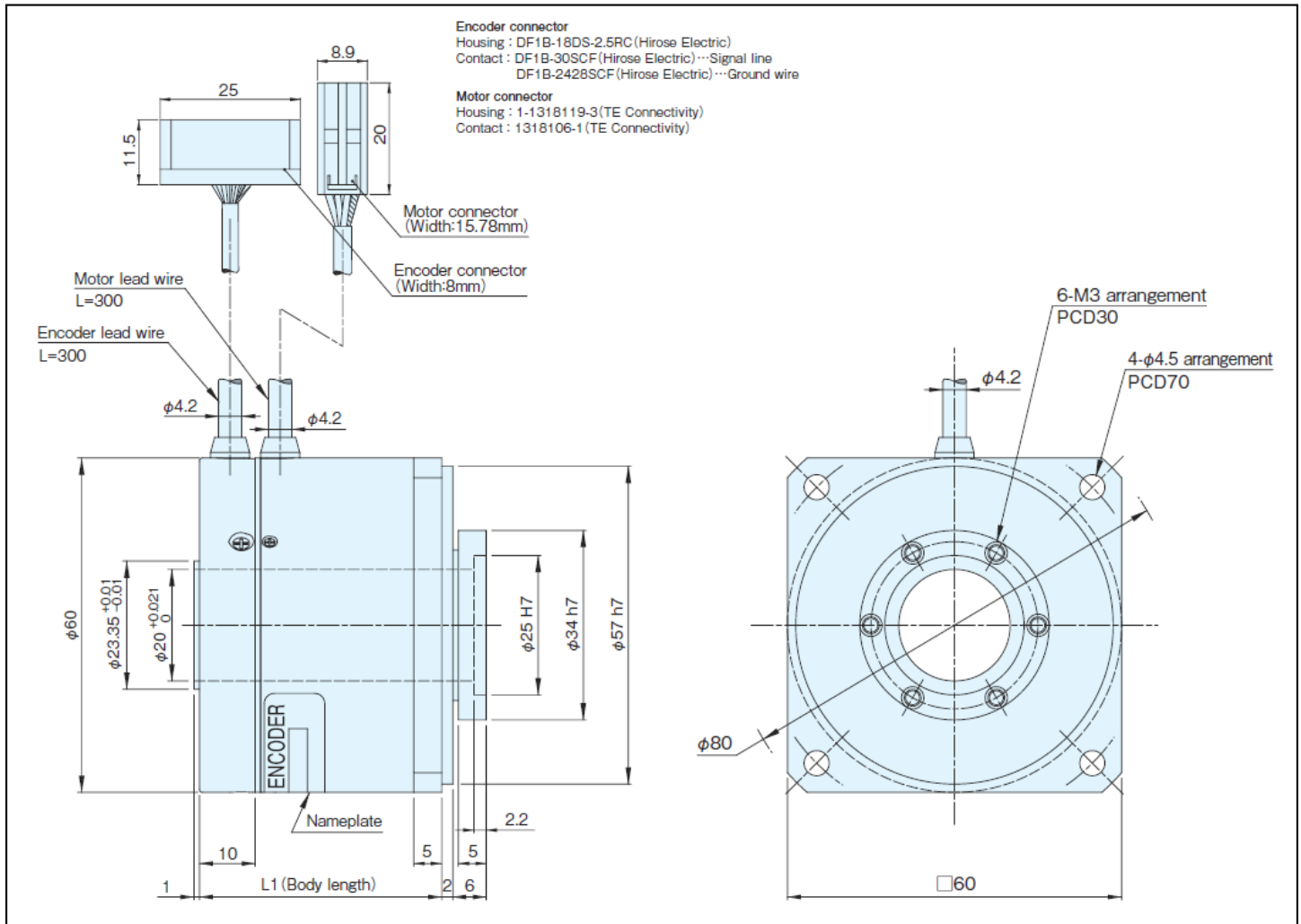
Visit nipponpulse.com to download 3D CAD drawings and 2D prints of this motor.

Specifications	Unit	MDH-6006	MDH-6012	MDH-6018
Max Torque	Nm	1.1	2.1	2.5
Rated Torque	Nm	0.29	0.58	0.77
Continuous Rated Torque	Nm	0.29	0.58	0.77
Max Speed	rpm	300		
Rated Speed	rpm	300		
Max Encoder Resolution	P/R	Incremental: 2,000,000 (multiplied by 4) / Absolute: 1,048,576 (20 bit)		
Input Power (driver input)	VDC	28 / 48		
Peak Power	W	25	51	77
Peak Armature Current	Arms	10	10	10
Rated Armature Current*	Arms	3.0	2.9	3.2
Voltage Constant	V/krpm	11	19	26
Torque Constant (at 25°C)	Nm/Arms	0.1	0.2	0.24
Line Armature Resistance (at 25°C)	Ω	1.0	1.5	1.3
Line Armature Inductance	mH	0.9	1.1	1.1
Rotor Poles	P	16		
Moment of Inertia (J)	g•cm ²	0.31	0.42	0.53
Permissible Radial Load (Fr)	N	320		
Permissible Axial Load (Fa)	N	160		
Mass	kg	0.37	0.46	0.55
Standard Heatsink		200 x 200 x 10 Aluminum		

* Rated armature current is the value measured with the standard heatsink attached to the motor at an ambient temperature of 40°C.

Encoder Options	Base Resolution	Interpolation Factors	Max. Resolution (post quad)
Incremental	1125 2250	2, 4, 5, 8, 10, 16, 20, 32 20, 32	144,000 288,000
Absolute	18-bit	BiSS-C format	262,144

MDH-60XX Dimensions



Standard Models

- MDH-60△-500KE (Incremental)
- MDH-60△-20B (Absolute)

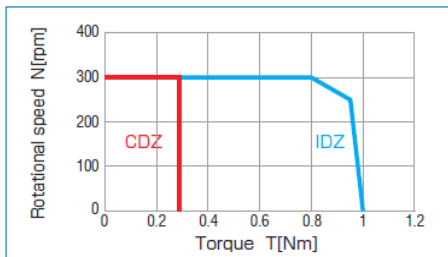
△ = stack length indicator
 06, 12, 18

Model	Stack Length (L1)
MDH-6006	31.5 mm
MDH-6012	37.5 mm
MDH-6018	43.5 mm

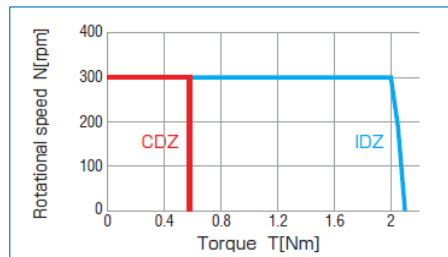
see drawings of motor dimensions on next page

Performance Curves

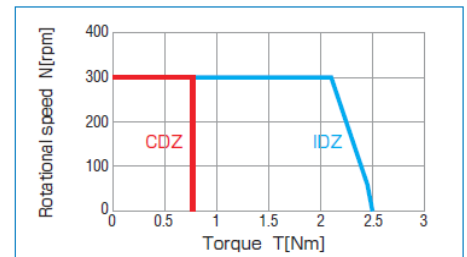
MDH-6006



MDH-6012



MDH-6018



CDZ = Continuous Duty Zone, IDZ = Intermittent Duty Zone

Performance curve based on MCC Drive, 24VDC input power

For assistance in selecting the best motor for your application, contact Nippon Pulse to speak with an applications engineer. 1-540-633-1677