



Matchservo Motor & D310 Drive

Innovated Matchservo Motor

- a. Minimize EMI and maintenance free. Low noise.
- b. Specialized designation to have smooth shaft rotation and improved reliability.
- c. Light weight and compact size, higher power density, higher torque density and higher efficiency than conventional motors.
- d. Wide speed range of high-efficiency operation, suitable for the load changes, speed variation operating conditions are generally advantages that conventional motors can't achieve.

Intelligent Drive Controller

- a. The drive provides position, speed and torque for three kinds of basic modes operation.
- b. Digital I / O output into regulation
- c. Dual system control by torque and speed
- d. Internal drive provides 8 segments speed, two-stage acceleration and deceleration control.
- e. Internal drive 7 segment provides position location and a return HOME mode, eliminate the cumulative amount of error, precise, no need of PC (such as HMI, PLC) control, save costs on PC, and therefore more in line with market demand.
- f. Applicable to many commonly used control interfaces such as RS485, standard panel, terminal signal control, PLC And human-peer
- g. Available for all control interfaces, ex. RS 485, direct signal, PLC, HMI.
- h. Drive provides 24VDC for SENSER require.
- i. Speed rendering and real output DC10V for external control header
- j. Drive signals can be output 128 RPM for external control using.
- k. Position tolerance on high speed, avoid over-current, over-voltage and motor blocked protection against abnormal occurs.

MH2 Servomotor Specification

Rated Power. W	120W	180W	250W	370W
Servomotor Model No.	MH-120L/M	MH-180L/M	MH-250L/M	MH-350L/370M
Rated Torque (N.m)	L:0.59/M:0.39	L:0.87/M:0.58	L:1.19/M:0.80	L:1.77/M:1.18
Max. Toquire (N.m)	L1.77/M1.17	L:2.61/M:1.74	L:3.57/M:2.40	L:5.30/M:3.53
Rated Current (Arms)	L0.64/M:0.65	L:0.90/M:0.90	L:1.40/M:1.30	L:2.20/M:1.95
Max. Current (Arms)	L:1.92/M:1.17	L:2.70/M:2.50	L:4.20/M:3.90	L:6.60/M:5.88
Rated Speed (RPM)	L:2000/M:3000			

Torque Constant-KT (N.m/Arms)	L:1.08/M:0.71	L:1.08/M:0.71	L:0.95/M:0.70	L:0.93/M:0.70
Rotor Moment of Inertia 10 ⁻⁴ (kgm ²)	L:1.25/M:1.11	L:1.25/M:1.11	L:1.57/M:1.42	L:1.89/M:1.57
Mechanical Time Contact (ms)	L:2.2/M:3.69	L:2.2/M:3.69	L:2.25/M:2.54	L:3.18/M:2.54
Electric Time Contact (ms)	L:2.83/M:2.15	L:2.83/M:2.15	L:2.58/M:2.51	L:1.44/M:2.51
Insulation	Class F			
IP Rating	IP40			
MH Motor Dimension (Fig)	1	2	3	L:4/M:3

MB2 Servomotor Specification

Rated Power. W	120W	200W	400W
Servomotor Model No.	MB2-120M	MB2-200M	MB2-400M
Rated Torque (N.m)	0.38	0.64	1.27
Max. Torque (N.m)	1.14	1.92	3.81
Rated Current (Arms)	0.84	1.39	2.69
Max. Current (Arms)	2.52	4.17	8.07
Rated Speed (RPM)	3000		
Torque Constant-KT (N.m/Arms)	0.51	0.53	0.58
Rotor Moment of Inertia 10 ⁻⁴ (kgm ²)	0.19	0.27	0.64
Mechanical Time Contact (ms)	3.37	2.50	1.67
Electric Time Contact (ms)	3.46	3.80	4.79
Insulation	Class F		
IP Rating	IP40		
MH Motor Dimension (Fig)	5	6	7

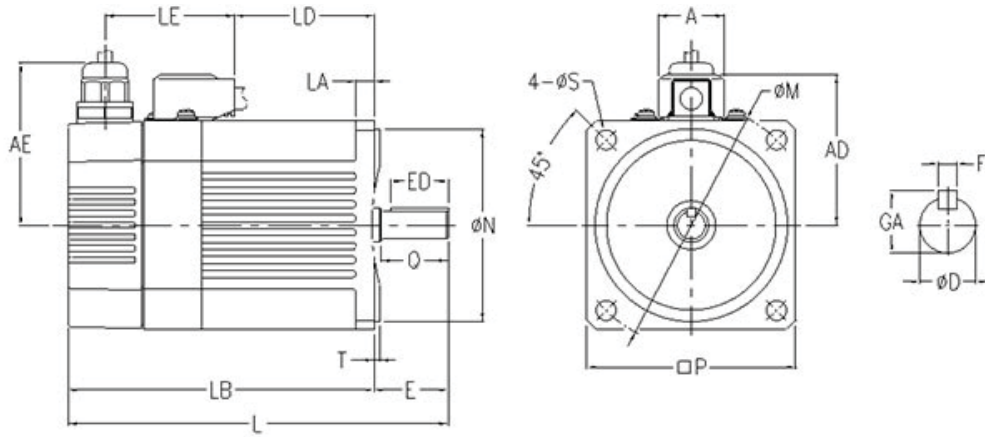
D310 Servo Drive Specification for MH2

Rated Power. W	120W	180W	250W	370W
Drive Model No.	D310			
Motor Model No.	MH2-120L/M	MH2-180L/M	MH250L/M	MH-350L/370M
Input Voltage (AC)	220V±10% 1Ø			
Input Frequency (HZ)	50/60			
Rated Output Current (Arms)	L:0.64/M:0.65	L:0.90/M:0.90	L:1.40/M:1.30	L:2.20/M:1.95
Max. Output Current (Arms)	L:1.92/M:1.70	L:2.70/M:2.50	L:4.20/M:3.90	L:6.60/M:5.88
Encoder Type and Resolution	A,B,Z,HU,HV,HW Open Collector. (A,B Phase= 128PPR)			
ACC. DEC. Time	0.1~60.0 Sec.			
Speed Regulation	Load	± 0.3% Below (0~Rated Torque at Rated Speed)		
	Voltage	± 0.3% Below (Source Voltage ± 10%at Rated Speed no Load)		
	Temperature	± 0.3% Below (-10~45°C /32~113°F at Rated Speed no Load)		
Type of Control	Sin PWM			
Model of Control	1.Speed model 2.Torque mode 3.Position mode			
Input Signal	Analog Panel	1.Vref, Tref ±10V Analog Input 2.Panel VR 0~5V Analog Input		
	Digital Panel	DI0~DI4 and COM common, Input Impedance 4.7KΩ to common		
Output Signal	DOx Open Collector (x=0~1), External Voltage(48VDC, 50mA below).			
Protection	Overload, Over Current, Over Voltage, Over Heat Encoder Abnormal, Short Circuit			
D310 Dimension (Fig)	D310			

D310 Servo Drive Specification for MB2

Rated Power. W	120W	200W	400W
Drive Model No.	D310		
Motor Model No.	MB2-120M	MB2-200M	MB2-400M
Input Voltage (AC)	220V±10% 1Ø		
Input Frequency (HZ)	50/60		
Rated Output Current (Arms)	0.84	1.39	2.69
Max. Output Current (Arms)	2.52	4.17	8.07
Encoder Type and Resolution	A,B,Z,HU,HV,HW Open Collector. (A,B Phase= 128PPR)		
ACC. DEC. Time	0.1~60.0 Sec.		
Speed Regulation	Load	± 0.3% Below (0~Rated Torque at Rated Speed)	
	Voltage	± 0.3% Below (Source Voltage ± 10%at Rated Speed no Load)	
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	Digital Panel	DI0~DI4 and COM common, Input Impedance 4.7KΩ to common	
Output Signal	DOx Open Collector (x=0~1), External Voltage(48VDC, 50mA below).		
Protection	Overload, Over Current, Over Voltage, Over Heat Encoder Abnormal, Short Circuit		
D310 Dimension (Fig)	D310		

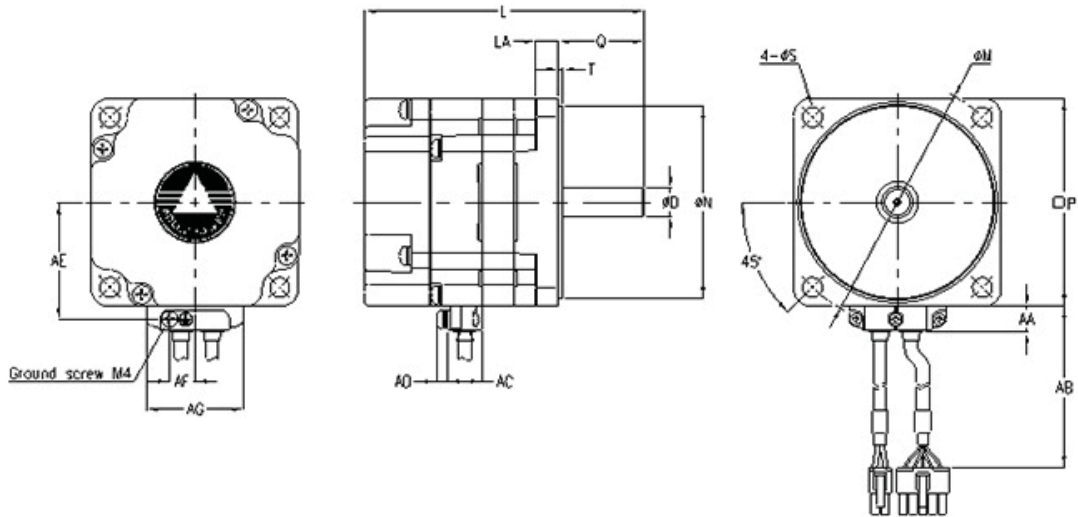
MH2 Servomotor Dimensions



UNIT:mm

Fig	□P	φM	φS	φN	T	L	LA	LB	LD	LE	AE	AD	A	SHAFT END					
														ED	O	E	φD	GA	F
1	90	104	8.5	83	2.5	164	8	132	60	56	70	58.4	28.5	25	29	32	12	13.5	4
2																			
3																			
4																			

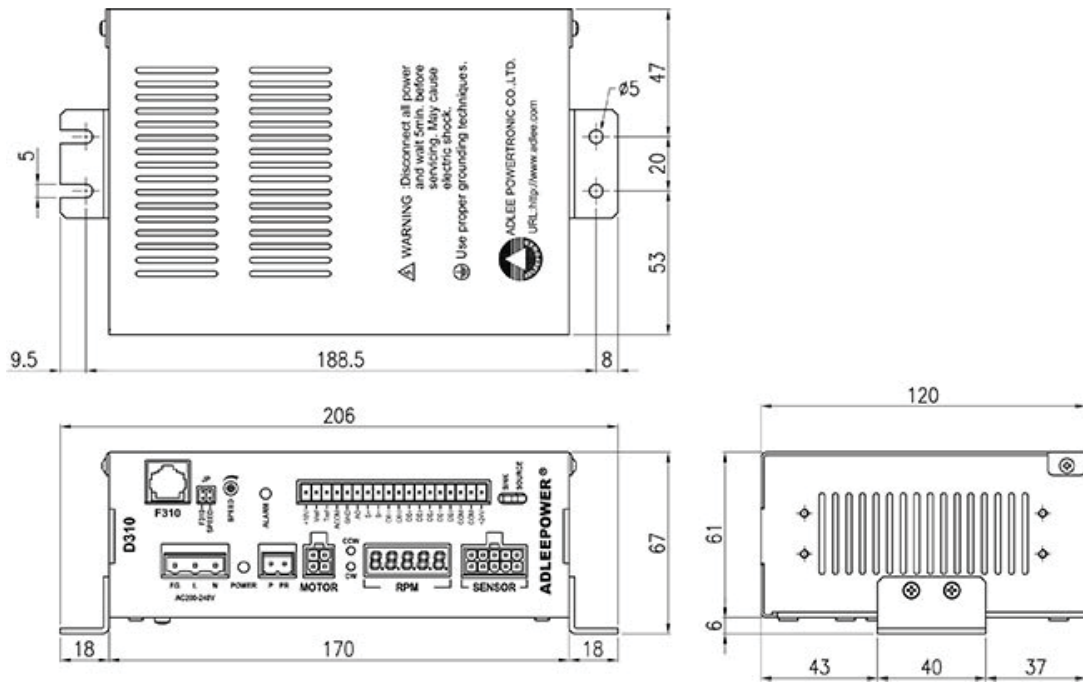
MB2 Servomotor Dimensions



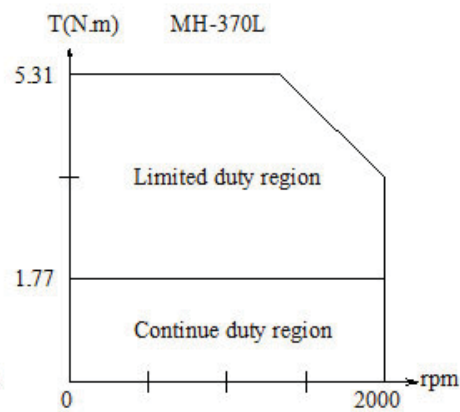
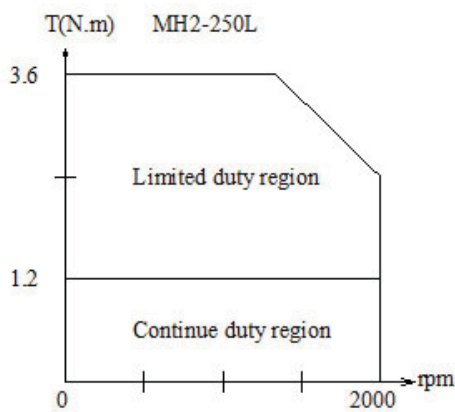
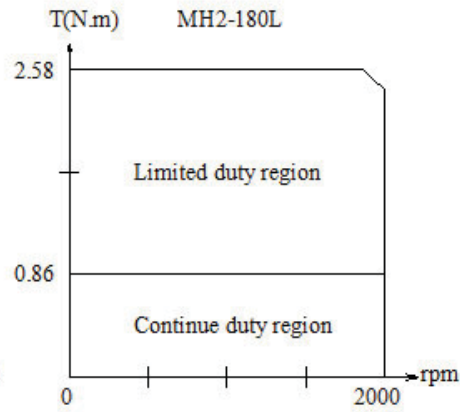
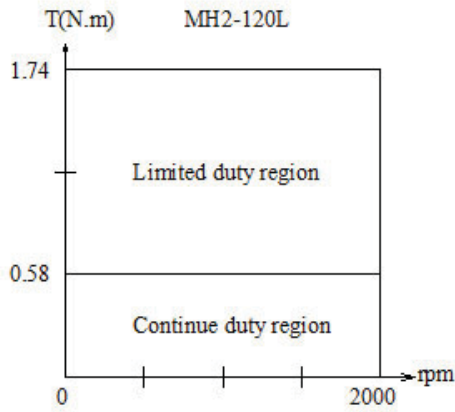
UNIT : mm

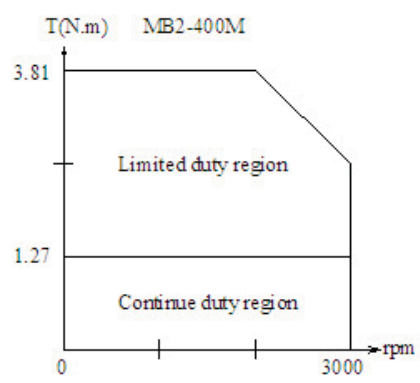
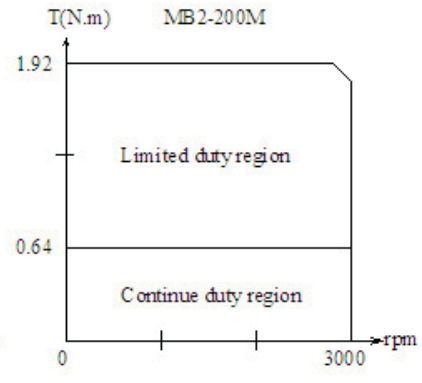
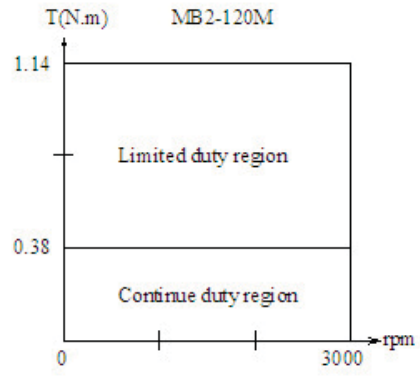
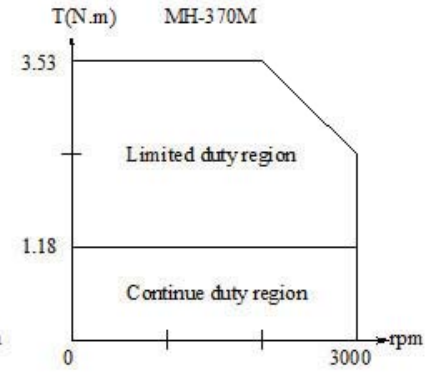
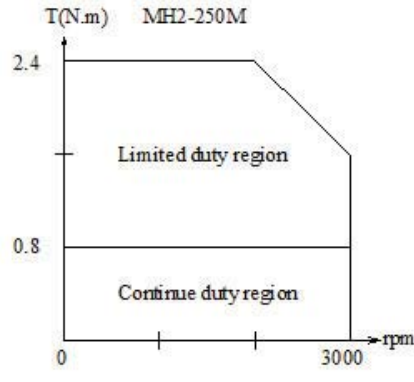
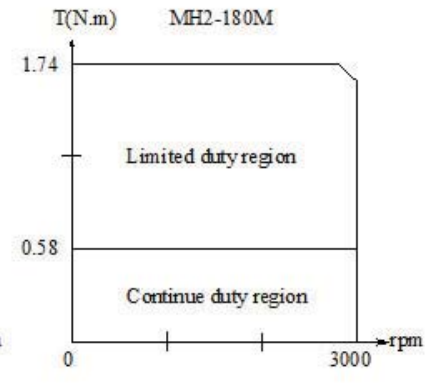
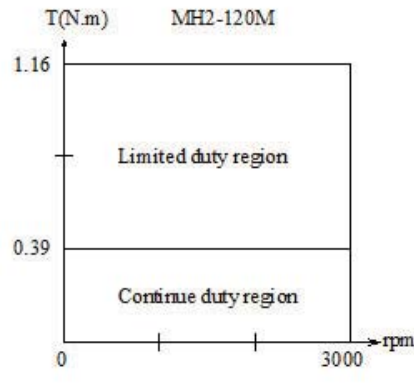
Fig NO.	□P	φM	φS	φN	T	O	φD	L	LA	AA	AB	AC	AO	AE	AF	AG
5	90	104	8.5	83	2	37	12	115.9	10	11	1000	15	5	50.5	11	42
6								120.8								
7								144.6								

D310 Servo Drive Dimensions



Performance Curve





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