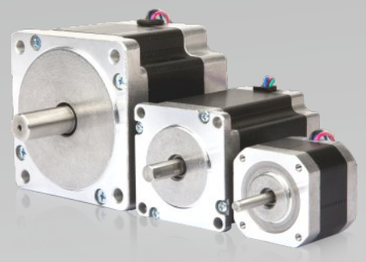
Stepping motor



Motor naming rule

MP3- 57 H □ □ 076 -□

① ② ③ ④ ⑤ ⑥ ⑦

① Name

Sign	Product name
MP3	Stepping motor

② Base number

Sign	Base number
42	42 base
57	57 base
60	60 base
86	86 base
110	110 base
130	130 base

③ Open closed loop type

Sign	Type
H	Standard open loop motor
T	Optical encoder closed-loop motor

④ Special motor type

Sign	Type
I	Waterproof motor
S	Double output shaft motor

⑤ Brake type

Sign	Power-off brake
Vacant	Without brake
Z	With brake

⑥ Body length

Sign	Body length
040	40mm
048	48mm
056	56mm
060	60mm
065	65mm
076	76mm
080	80mm
088	88mm
118	118mm
150	150mm

⑦ General customized code

Sign	Type
Vacant	Standard
B	Right angle flat (without keyway) shaft
D	Shaft diameter change
L	Shaft length change
Z	Z phase output closed-loop motor

*Note: The body length of the closed-loop motor needs to add the encoder length based on the open-loop motor.
The encoder cable lengths include: 42 motor 18mm, 57 motor 20mm, 60 motor 22mm, 86 motor 26mm.

Adaptation table of closed-loop motor and driver

Closed-loop motor model		Base number (mm)	Step angle (°)	Holding torque (N.m)	Phase current (A)	Motor shaft	Motor shaft diameter(mm)	Adaptive driver
Standard series	Brake series							
MP3-42T048	/	42	1.8	0.5	1.68	Flat	5	DP3F/C-305
MP3-42T060	/		1.8	0.8	1.7	Flat	5	
MP3-57T056	/	57	1.8	1.3	4	Flat	8	DP3F/C-705
MP3-57T056-D6.35	/		1.8	1.3	4	Flat	6.35	
MP3-57T076	MP3-57TZ076		1.8	2.3	5	Flat	8	
MP3-57T088	MP3-57TZ088		1.8	3	5	Flat	8	
MP3-57T110	/		1.8	3	4	Flat	8	
MP3-60T088	MP3-60TZ088	60	1.8	3	5	Flat	8	
MP3-86T080	MP3-86TZ080	86	1.8	4.5	6	Flat key 5*25	14	DP3F/C-808
MP3-86T080-D12.7	/		1.8	4.5	6	Flat key 5*25	12.7	
MP3-86T098	MP3-86TZ098		1.8	8	6	Flat key 5*25	14	
MP3-86T118	MP3-86TZ118		1.8	8.5	6	Flat key 5*25	14	
MP3-86T118-D12.7	/		1.8	8.5	6	Flat key 5*25	12.7	
MP3-86T150	MP3-86TZ150		1.8	12	6	Flat key 5*25	14	

Adaptation table of three-phase open loop motor and driver

Three-phase open loop motor model		Base number (mm)	Step angle (°)	Holding torque (N.m)	Phase current (A)	Motor shaft	Motor shaft diameter(mm)	Adaptive driver
Standard series	Brake series							
MP3-110H3153	/	110	1.2	12	6	Flat key 6*30	19	DP3L-11022A3
MP3-110H3186	/		1.2	16	6.4	Flat key 6*30	19	
MP3-110H3221	/		1.2	20	6.9	Flat key 6*30	19	
MP3-130H3223	/	130	1.2	28	6.9	Flat key 8*36	24	
MP3-130H3255	/		1.2	35	6.9	Flat key 8*36	24	
MP3-130H3319	/		1.2	50	6.9	Flat key 8*36	24	

Open loop motor model

Open loop motor model		Base number (mm)	Step angle (°)	Holding torque (N.m)	Phase current (A)	Motor shaft	Motor shaft diameter(mm)	Adaptive driver
Standard series	Brake series							
MP3-42H040	/	42	1.8	0.46	1.7	Flat	5	DP3CL-305 DP3L-224
MP3-42H048	/		1.8	0.5	1.68	Flat	5	
MP3-42H060	/		1.8	0.8	1.7	Flat	5	
MP3-57H044	/	57	1.8	0.6	3	Flat	8	DP3CL-705 DP3L-425/565
MP3-57H056	MP3-57HZ056		1.8	1.3	4	Flat	8	
MP3-57H056-D6.35	/		1.8	1.2	4	Flat	6.35	
MP3-57H076	MP3-57HZ076		1.8	2.3	5	Flat	8	
MP3-57H088	MP3-57HZ088		1.8	3	5	Flat	8	
MP3-57H110	/		1.8	3	4	Flat	8	
MP3-60H088	MP3-60HZ088	60	1.8	3	5	Flat	8	
MP3-86H065	MP3-86HZ065	86	1.8	3.5	4	Flat key 5*25	14	DP3CL-808 DP3L-808
MP3-86H065-D12.7	/		1.8	3.5	4	Flat key 5*25	12.7	
MP3-86H080	MP3-86HZ080		1.8	4.5	6	Flat key 5*25	14	
MP3-86H080-D12.7	/		1.8	4.5	6	Flat key 5*25	12.7	
MP3-86H098	MP3-86HZ098		1.8	8	6	Flat key 5*25	14	
MP3-86H098-D12.7	/		1.8	8	6	Flat key 5*25	12.7	
MP3-86H118	MP3-86HZ118		1.8	8.5	6	Flat key 5*25	14	
MP3-86H118-D12.7	/		1.8	8.5	6	Flat key 5*25	12.7	
MP3-86H150	MP3-86HZ150		1.8	12	6	Flat key 5*25	14	
MP3-110H150	/		1.8	20	6.5	Flat key 6*35	19	DP3L-11022A
MP3-110H201	/		1.8	28	6.5	Flat key 6*35	19	

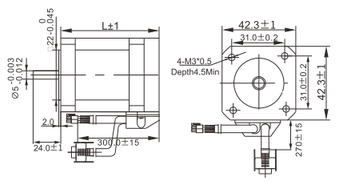
Motor Mounting Dimension

(Unit: mm)

Closed-loop motor

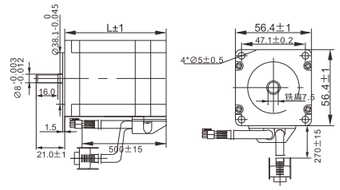
42 series

Model	L(mm)	
	General	With brake
MP3-42T048	66	97
MP3-42T060	78	109



57 series

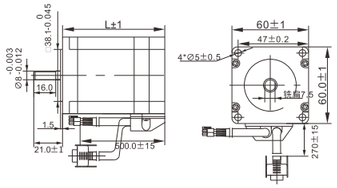
Model	L(mm)	
	General	With brake
MP3-57T056	76	116
MP3-57T076	96	136
MP3-57T110	130	150



Large 57 series

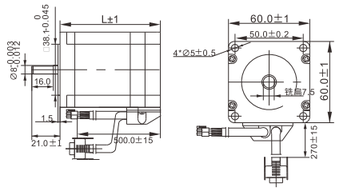
Model	L(mm)	
	General	With brake
MP3-57T088	110	150

*Note: This motor adopts the body width of 60 motor and the front cover of 57 motor. The installation method is the same as that of 57 motor. With a relatively short body length, the holding torque of 3N can be achieved, which improves the stability of the motor.



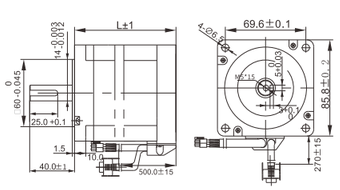
60 series

Model	L(mm)	
	General	With brake
MP3-60T088	110	150



86 series

Model	L(mm)	
	General	With brake
MP3-86T080	106	149
MP3-86T098	122	155
MP3-86T118	144	187
MP3-86T150	174	217



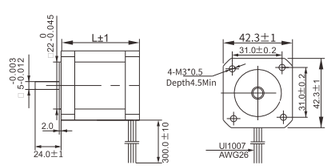
Motor Mounting Dimension

(Unit: mm)

Two-phase open loop motor

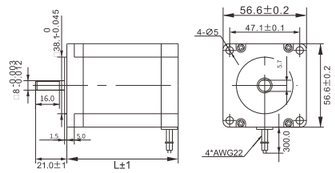
42 series

Model	L(mm)	
	General	With brake
MP3-42H040	39.5	70
MP3-42H048	48	79
MP3-42H060	60	91



57 series

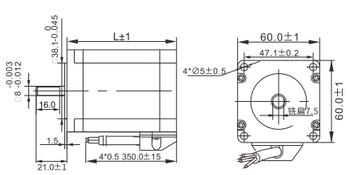
Model	L(mm)	
	General	With brake
MP3-57H056	56	96
MP3-57H076	76	116
MP3-57H110	110	150



Large 57 series

Model	L(mm)	
	General	With brake
MP3-57H088	88	128

*Note: This motor adopts the body width of 60 motor and the front cover of 57 motor. The installation method is the same as that of 57 motor. With a relatively short body length, the holding torque of 3N can be achieved, which improves the stability of the motor.



60 series

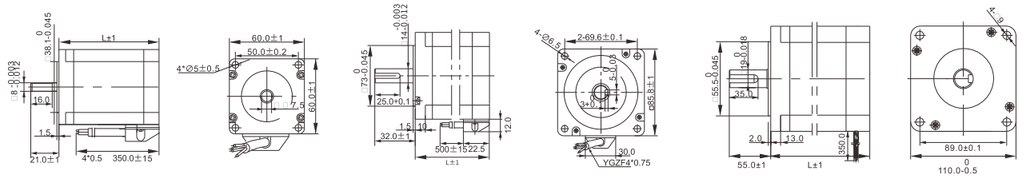
Model	L(mm)	
	General	With brake
MP3-60H088	88	128

86 series

Model	L(mm)	
	General	With brake
MP3-86H065	65	108
MP3-86H080	80	123
MP3-86H098	98	141
MP3-86H118	118	161
MP3-86H150	150	193

110 series

Model	L(mm)	
	General	With brake
MP3-110H150	150	/
MP3-110H201	201	/



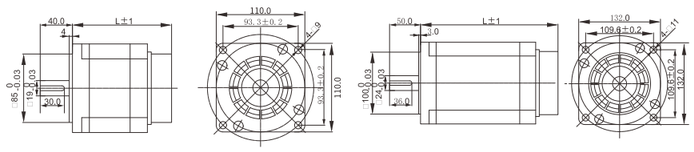
Three-phase open loop motor

110 series

Model	L(mm)	
	General	With brake
MP3-110H3153	151	/
MP3-110H3186	185	/
MP3-110H3221	219	/

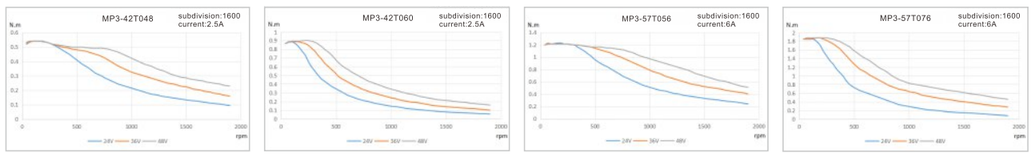
130 series

Model	L(mm)	
	General	With brake
MP3-130H3223	222	/
MP3-130H3255	254	/
MP3-130H3319	319	/

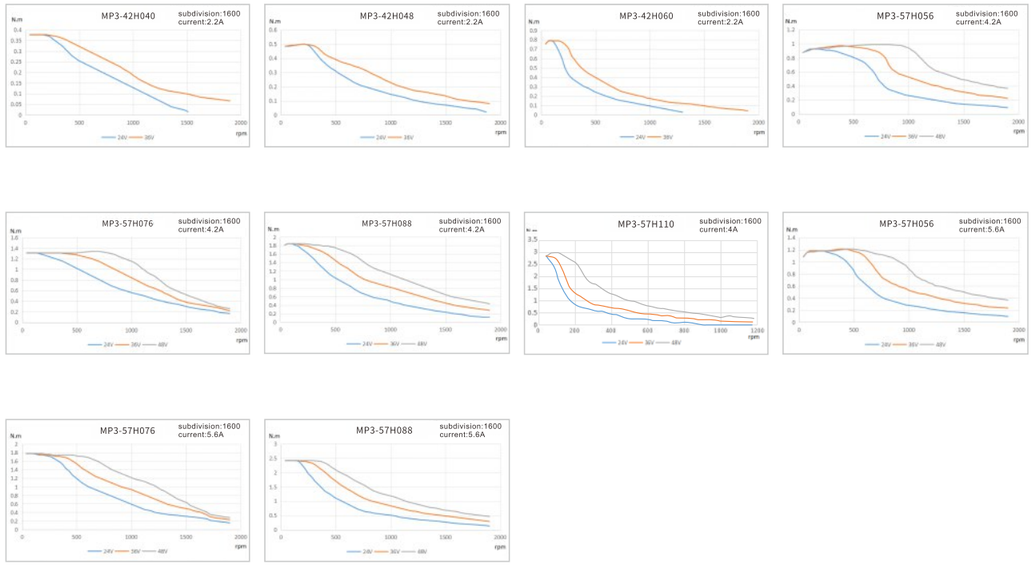


Motor Torque Frequency Characteristic Diagram

Closed-loop series (the follow current is peak current)

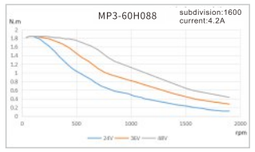


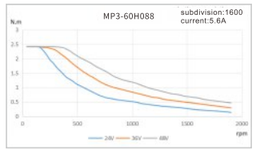
Two-phase open loop series (the follow current is peak current)

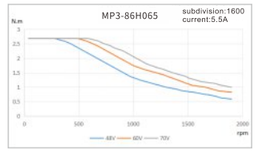


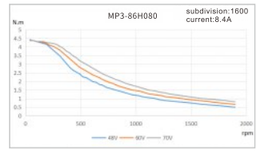
Motor Torque Frequency Characteristic Diagram

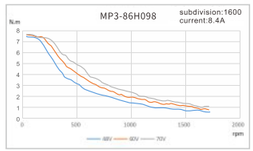
Two-phase open loop series (the follow current is peak current)

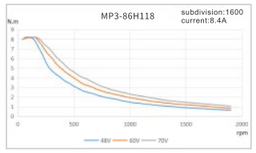


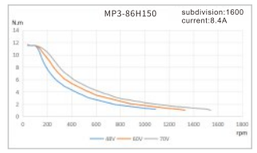












Three-phase open loop series (the follow current is peak current)