

5-Phase Stepper Motor and Driver Specifications

(○: General specifications, ◎: High-speed, High-torque specifications)

Motor					Driver			
Frame size	Type	Model	Torque (kgf·cm)	Rated current (A/Phase)	MD5-HD14/MD5-ND14/MD5-HD14-2X(3X)	MD5-HF14/MD5-HF14-AO	MD5-HF28	
24mm	Shaft type	02K-S523(W)	0.18	0.75	○	◎	—	
		04K-S525(W)	0.28	0.75	○	◎	—	
42mm	Shaft type / Shaft + Built-in brake type	A1K-S543(W)-[B]	1.3	0.75	○	◎	—	
		A2K-S544(W)-[B]	1.8	0.75	○	◎	—	
		A2K-M544(W)	1.8	1.4	○	◎	—	
		A3K-S545(W)-[B]	2.4	0.75	○	◎	—	
	Hollow shaft type	AH1K-S543	1.3	0.75	○	◎	—	
		AH2K-S544	1.8	0.75	○	◎	—	
		AH3K-S545	2.4	0.75	○	◎	—	
	Geared type/ Geared + Built-in brake type	A10K-S545(W)-G[B]5	10	0.75	○	◎	—	
		A15K-S545(W)-G[B]7.2	15	0.75	○	◎	—	
		A15K-S545(W)-G[B]10	15	0.75	○	◎	—	
60mm	Shaft type / Shaft + Built-in brake type	A4K-S564(W)-[B]	4.2	0.75	○	◎	—	
		A4K-M564(W)-[B]	4.2	1.4	○	◎	—	
		A4K-G564(W)	4.2	2.8	—	—	◎	
		A8K-S566(W)-[B]	8.3	0.75	○	◎	—	
		A8K-M566(W)-[B]	8.3	1.4	○	◎	—	
		A8K-G566(W)	8.3	2.8	—	—	◎	
		A16K-M569(W)-[B]	16.6	1.4	○	◎	—	
		A16K-G569(W)-[B]	16.6	2.8	—	—	◎	
	Hollow shaft type	AH4K-S564(W)	4.2	0.75	○	◎	—	
		AH4K-M564(W)	4.2	1.4	○	◎	—	
		AH8K-S566(W)	8.3	0.75	○	◎	—	
		AH8K-M566(W)	8.3	1.4	○	◎	—	
		AH16K-M569(W)	16.6	1.4	○	◎	—	
		AH16K-G569(W)	16.6	2.8	—	—	◎	
	Geared type/ Geared + Built-in brake type	A35K-M566(W)-G[B]5	35	1.4	○	◎	—	
		A40K-M566(W)-G[B]7.2	40	1.4	○	◎	—	
		A50K-M566(W)-G[B]10	50	1.4	○	◎	—	
	Rotary actuator type/ Rotary actuator + Built-in brake type	A35K-M566(W)-R[B]5	35	1.4	○	◎	—	
		A40K-M566(W)-R[B]7.2	40	1.4	○	◎	—	
		A50K-M566(W)-R[B]10	50	1.4	○	◎	—	
	85mm	Shaft type / Shaft + Built-in brake type	A21K-M596(W)-[B]	21	1.4	○	◎	—
			A21K-G596(W)-[B]	21	2.8	—	—	◎
			A41K-M599(W)-[B]	41	1.4	○	◎	—
			A41K-G599(W)-[B]	41	2.8	—	—	◎
A63K-M5913(W)-[B]			63	1.4	○	◎	—	
A63K-G5913(W)-[B]			63	2.8	—	—	◎	
Hollow shaft type		AH21K-M596(W)	21	1.4	○	◎	—	
		AH21K-G596(W)	21	2.8	—	—	◎	
		AH41K-M599(W)	41	1.4	○	◎	—	
		AH41K-G599(W)	41	2.8	—	—	◎	
		AH63K-M5913(W)	63	1.4	○	◎	—	
		AH63K-G5913(W)	63	2.8	—	—	◎	
Geared type/ Geared + Built-in brake type		A140K-M599(W)-G[B]5	140	1.4	—	◎	—	
		A140K-G599(W)-G[B]5	140	2.8	—	—	◎	
		A200K-M599(W)-G[B]7.2	200	1.4	—	◎	—	
		A200K-G599(W)-G[B]7.2	200	2.8	—	—	◎	
		A200K-M599(W)-G[B]10	200	1.4	—	◎	—	
		A200K-G599(W)-G[B]10	200	2.8	—	—	◎	

※(W) stands for dual shaft of motor. (The built-in brake type provides single shaft type only.)

※The motor torque has a big difference in torque by the characteristics of the driver.

Please refer to the graph in this catalogue that shows the characteristics of motors and drivers.

For MD5-HD14, MD5-HD14-2X(3X), MD5-ND14, the high-speed region torque characteristics are better at 35VDC than at 20VDC.

In addition, MD5-HF14 and MD5-HF28 have further improved torque characteristics in the high-speed area than using DC type driver.

SENSORS
FIELD INSTRUMENTS
CONTROLLERS
MOTION DEVICES
SOFTWARE
(A) Closed Loop Stepper System
(B) Stepper Motors
(C) Stepper Motor Drivers
(D) Motion Controllers