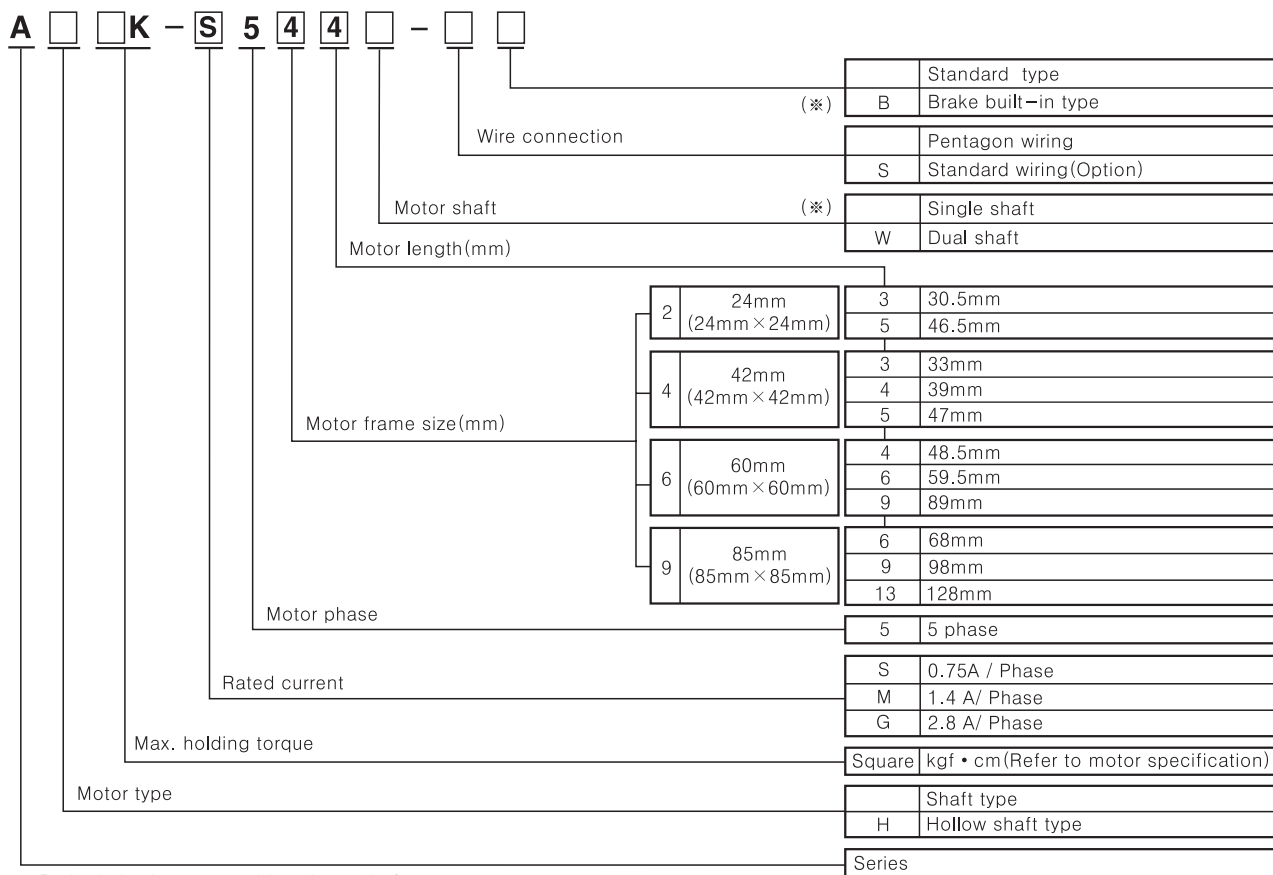
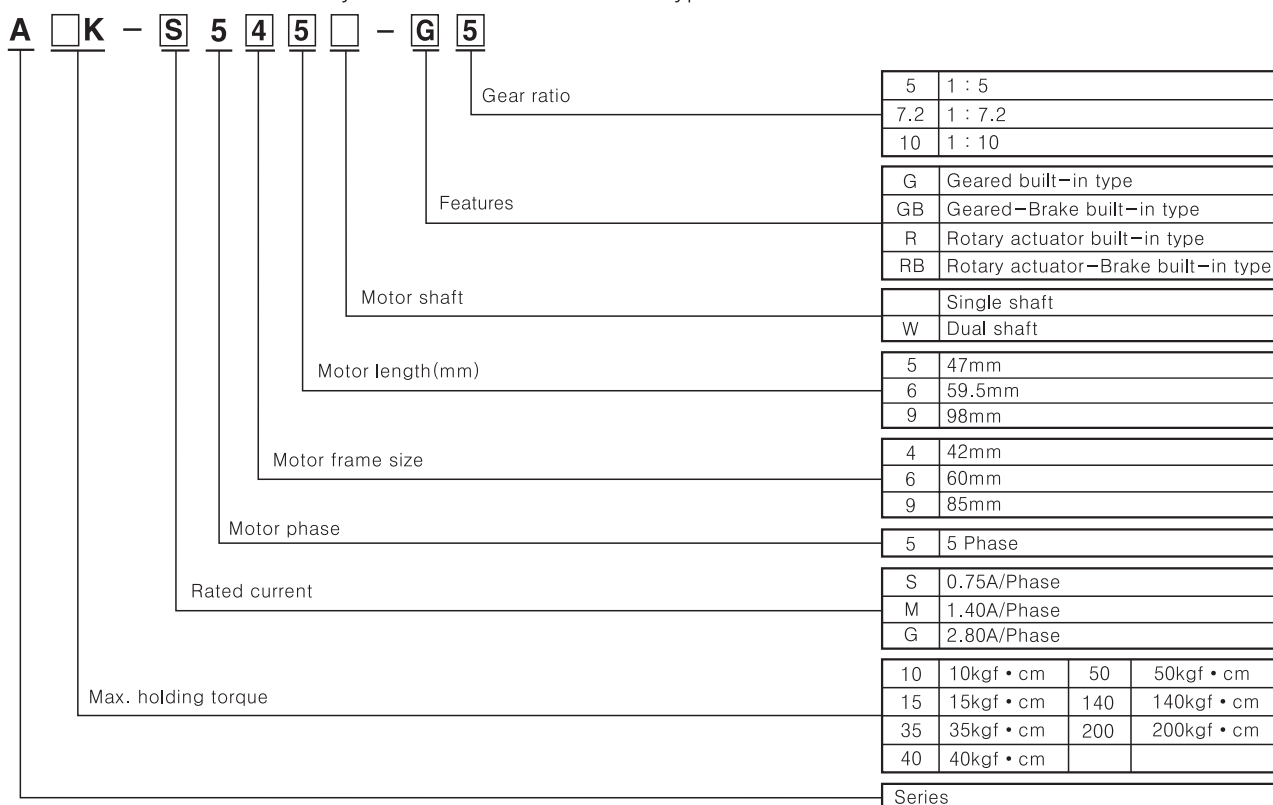

■ Ordering information

- Application model : Shaft type, Hollow shaft type, shaft type+Brake built-in type



※Brake built-in type provides single shaft type only.

- Application model : Geared built-in type, Geared+Brake built-in type, Rotary actuator, Rotary actuator+Brake built-in type



5-Phase Stepping Motor

Specifications

Type	Model	A/phase (A)	Max. holding torque (kgf • cm)	Max. allowable torque (kgf • cm)	Moment of rotor inertia (g • cm ²)	Winding resistance(Ω)	Motor length (mm)
24 Square	Shaft type	02K-S523(W)	0.75	0.18	—	4.2	30.5
		04K-S525(W)	0.75	0.28	—	8.2	46.5
42 Square	Shaft type	A1K-S543(W)	0.75	1.3	—	35	33
		A2K-S544(W)	0.75	1.8	—	54	39
		A3K-S545(W)	0.75	2.4	—	68	47
		AH1K-S543	0.75	1.3	—	35	33
		AH2K-S544	0.75	1.8	—	54	39
	Hollow shaft type	AH3K-S545	0.75	2.4	—	68	47
		A10K-S545(W)-G5	0.75	—	10	68	47
		A15K-S545(W)-G7.2	0.75	—	15	68	47
	Shaft type / Geared built-in type	A15K-S545(W)-G10	0.75	—	15	68	47
60 Square	Shaft type / Shaft type + Brake built-in type	A4K-S564(W)-□B	0.75	4.2	—	175	48.5
		A4K-M564(W)-□B	1.4	4.2	—	175	48.5
		A8K-S566(W)-□B	0.75	8.3	—	280	4.0
		A8K-M566(W)-□B	1.4	8.3	—	280	1.1
		A16K-M569(W)-□B	1.4	16.6	—	560	1.8
		A16K-G569(W)-□B	2.8	16.6	—	560	0.56
	Hollow shaft type	AH4K-S564(W)	0.75	4.2	—	175	2.6
		AH4K-M564(W)	1.4	4.2	—	175	0.8
		AH8K-S566(W)	0.75	8.3	—	280	4.0
		AH8K-M566(W)	1.4	8.3	—	280	1.1
		AH16K-M569(W)	1.4	16.6	—	560	1.8
		AH16K-G569(W)	2.8	16.6	—	560	0.56
	Shft type/ Geared + Brake built-in type	A35K-M566(W)-G5	1.4	—	35	280	1.1
		A40K-M566(W)-G7.2	1.4	—	40	280	1.1
		A50K-M566(W)-G10	1.4	—	50	280	1.1
	Geared + Brake built-in type	A35K-M566-GB5	1.4	—	35	280	1.1
		A40K-M566-GB7.2	1.4	—	40	280	1.1
		A50K-M566-GB10	1.4	—	50	280	1.1
	Rotary actuator type	A35K-M566(W)-R5	1.4	—	35	280	1.1
		A40K-M566(W)-R7.2	1.4	—	40	280	1.1
		A50K-M566(W)-R10	1.4	—	50	280	1.1
	Rotary actuator + Brake built-in type	A35K-M566-RB5	1.4	—	35	280	1.1
		A40K-M566-RB7.2	1.4	—	40	280	1.1
		A50K-M566-RB10	1.4	—	50	280	1.1
85 Square	Shaft type / Shaft type + Brake built-in type	A21K-M596(W)-□B	1.4	21	—	1400	1.76
		A21K-G596(W)-□B	2.8	21	—	1400	0.4
		A41K-M599(W)-□B	1.4	41	—	2700	2.6
		A41K-G599(W)-□B	2.8	41	—	2700	0.58
		A63K-M5913(W)-□B	1.4	63	—	4000	3.92
		A63K-G5913(W)-□B	2.8	63	—	4000	0.86
	Hollow shaft type	AH21K-M596(W)	1.4	21	—	1400	1.76
		AH21K-G596(W)	2.8	21	—	1400	0.4
		AH41K-M599(W)	1.4	41	—	2700	2.6
		AH41K-G599(W)	2.8	41	—	2700	0.58
		AH63K-M5913(W)	1.4	63	—	4000	3.92
		AH63K-G5913(W)	2.8	63	—	4000	0.86
	Shaft type + Geared built-in type	A140K-M599(W)-G5	1.4	—	140	2700	2.6
		A140K-G599(W)-G5	2.8	—	140	2700	0.58
		A200K-M599(W)-G7.2	1.4	—	200	2700	2.6
		A200K-G599(W)-G7.2	2.8	—	200	2700	0.58
		A200K-M599(W)-G10	1.4	—	200	2700	2.6
		A200K-G599(W)-G10	2.8	—	200	2700	0.58
	Geared + Brake built-in type	A140K-M599-GB5	1.4	—	140	2700	2.6
		A140K-G599-GB5	2.8	—	140	2700	0.58
		A200K-M599-GB7.2	1.4	—	200	2700	2.6
		A200K-G599-GB7.2	2.8	—	200	2700	0.58
		A200K-M599-GB10	1.4	—	200	2700	2.6
		A200K-G599-GB10	2.8	—	200	2700	0.58

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

※ Motor length was measured without shaft.

※ Hollow shaft type with standard wiring is optional. (Except for 24mm)

(A) Counter
(B) Timer
(C) Temp. controller
(D) Power controller
(E) Panel meter
(F) Tacho/Speed/Pulse meter
(G) Display unit
(H) Sensor controller
(I) Switching power supply
(J) Proximity sensor
(K) Photo electric sensor
(L) Pressure sensor
(M) Rotary encoder
(N) Stepping motor & Driver & Controller
(O) Graphic panel
(P) Production stoppage models & replacement

5-Phase Stepping Motor

■ Specifications

●24 square

Model	02K-S523(W)	04K-S525(W)
Max. holding torque	0.18 kgf • cm (0.018 N • m)	0.28kgf • cm (0.028 N • m)
Moment of rotor inertia	4.2 g • cm ² (4.2×10 ⁻⁷ kg • m ²)	8.2 g • cm ² (8.2×10 ⁻⁷ kgf • m ²)
Rated current	0.75A/Phase	
Basic step angle	0.72° / 0.36° (Full step/Half step)	
Insulation class	CLASS B type(130℃)	
Insulation resistance	Min. 100MΩ (Standard 500VDC mega) between Motor coil—case	
Dielectric strength	1Min. at 0.5kVAC 50/60Hz between Motor coil—case	
Ambient temperature	-10℃ ~ +50℃, Storage condition : -25℃ ~ +85℃	
Ambient humidity	35 ~ 85%RH	
Protection	IP30(IEC34-5 standard)	
Unit weight	Approx. 0.07kg	Approx. 0.12kg

●42 square

Model	Shaft type	A1K-S543(W)	A2K-S544(W)	A3K-S545(W)	—	—	—
	Hollow shaft type	AH1K-S543	AH2K-S544	AH3K-S545	—	—	—
	Shaft type+ Brake buit-in type	—	—	—	—	—	—
	Shaft type+ Geared buit-in type	—	—	—	A10K-S545(W)-G5	A15K-S545(W)-G7.2	A15K-S545(W)-G10
	Geared type+ Brake buit-in type	—	—	—	—	—	—
Max. allowable torque		—	—	—	10kgf・cm (1.0 N・m)	15kgf・cm (1.5 N・m)	15kgf・cm (1.5 N・m)
Max. holding torque		1.3kgf・cm (0.13 N・m)	1.8kgf・cm (0.18 N・m)	2.4kgf・cm (0.24 N・m)	—	—	—
Moment of rotor inertia		35 g・cm ² (35×10 ⁻⁷ kg・m ²)	54 g・cm ² (54×10 ⁻⁷ kg・m ²)	68 g・cm ² (68×10 ⁻⁷ kg・m ²)	68 g・cm ² (68×10 ⁻⁷ kg・m ²)		
Rated current		0.75A/Phase					
Basic step angle		0.72° / 0.36(Full / Half step)			0.144° / 0.072° (Full / Half step)	0.1° / 0.05° (Full / Half step)	0.072° / 0.036° (Full / Half step)
Gear ratio		—			1 : 5	1 : 7.2	1 : 10
Allowable speed range		—			0 ~ 360rpm	0 ~ 250rpm	0 ~ 180rpm
Backlash[min]		—			±35' (0.58°)		
Electro magnetic brake	Rated excitation voltage	—					
	Rated excitation current	—					
	Static friction torque	—					
	Rotation part inertia	—					
	Operating time	—					
	Releasing time	—					
Insulation class		CLASS B type(130℃)					
Insulation resistance		Min. 100MΩ (Standard 500VDC mega) between Motor coil-case					
Dielectric strength		1Min. at 1kVAC(0.5kVAC for 0.75A/Phase) 50/60Hz between Motor coil-case					
Ambient temperature		-10℃ ~ +50℃, Storage condition : -25℃ ~ +85℃					
Ambient humidity		35 ~ 85%RH					
Protection		IP30(IEC34-5 standard)					
Unit weight		Approx. 0.25kg	Approx. 0.3kg	Approx. 0.4kg	Approx. 5.8kg		

5-Phase Stepping Motor

■ Specifications

●60 square

Model	Shaft type	A4K-S564(W)-□	A4K-M564(W)-□	A8K-S566(W)-□	A8K-M566(W)-□	A16K-S569(W)-□	A16K-M569(W)-□
	Hollow shaft type	AH4K-S564(W)	AH4K-M564(W)	AH8K-S566(W)	AH8K-M566(W)	AH16K-S569(W)	AH16K-M569(W)
	Shaft type+ Brake buit-in type	A4K-S564-□B	A4K-M564-□B	A8K-S566-□B	A8K-M566-□B	A16K-S569-□B	A16K-M569-□B
Max. holding torque		4.2kgf・cm(0.42N・m)		8.3kgf・cm(0.83N・m)		16.6kgf・cm(1.66N・m)	
Moment of rotor inertia		175g・cm ² (175×10 ⁻⁷ kg・m ²)		280g・cm ² (280×10 ⁻⁷ kg・m ²)		560g・cm ² (560×10 ⁻⁷ kg・m ²)	
Rated current		0.75A/Phase	1.4A/Phase	0.75A/Phase	1.4A/Phase	0.75A/Phase	1.4A/Phase
Basic step angle				0.72° / 0.36(Full/Half step)			
Electro magnetic brake	Rated excitation voltage	24VDC(non-polarity)					
	Rated excitation current	0.33A					
	Static friction torque	4kgf・cm					
	Rotation part inertia	2.5×10 ⁻⁶ kgf・cm ²					
	Operating time	Max. 22ms					
	Releasing time	Max. 37ms					
Insulation class		CLASS B type(130℃)					
Insulation resistance		Min. 100MΩ (Standard 500VDC mega) between Motor coil-case					
Dielectric strength		1Min. at 1kVAC(0.5kVAC for 0.75A/Phase) 50/60Hz between Motor coil-case					
Ambient temperature		-10 ~ +50℃, Storage condition : -25 ~ +85℃					
Ambient humidity		35 ~ 85%RH					
Protection		IP30(IEC34-5 standard)					
Unit weight		Standard type : 0.6kg, Brake built-in type : 0.9kg		Standard type : 0.8kg, Brake built-in type : 1.1kg		Standard type : 1.3kg, Brake built-in type : 1.6kg	

●60 square

Model	Shaft type+ Geared built-in type	A35K-M566(W)-G5	A40K-M566(W)-G7.2	A50K-M566(W)-G10
	Geared type+ Brake built-in type	A35K-M566-GB5	A40K-M566-GB7.2	A50K-M566-GB10
	Rotary actuator type	A35K-M566(W)-R5	A40K-M566(W)-R7.2	A50K-M566(W)-R10
	Rotary actuator type+ Brake built-in type	A35K-M566-RB5	A40K-M566-RB7.2	A50K-M566-RB10
Max. holding torque		35kgf・cm(3.5N・m)	40kgf・cm(4.0 N・m)	50kgf・cm(5.0 N・m)
Moment of rotor inertia		280 g・cm ² (280×10 ⁻⁷ kg・m ²)		
Rated current		1.4A/Phase		
Basic step angle		0.144° / 0.072° (Full/Half step)	0.1° / 0.05° (Full/Half step)	0.072° / 0.036° (Full/Half step)
Gear ratio		1 : 5	1 : 7.2	1 : 10
Allowable speed range		0 ~ 360rpm	0 ~ 250rpm	0 ~ 180rpm
Backlash[min]		±20' (0.33°)		
Electro magnetic brake	Rated excitation voltage	24VDC(non-polarity)		
	Rated excitation current	0.33A		
	Static friction torque	4kgf・cm		
	Rotation part inertia	2.5×10 ⁻⁶ kgf・cm ²		
	Operating time	Max. 22ms		
	Releasing time	Max. 37ms		
Absolute position error (★1)		±20 minute(0.33°)		
Lost motion (★1)		±20 minute(0.33°)		
Insulation class		CLASS B type(130℃)		
Insulation resistance		Min. 100MΩ (Standard 500VDC mega) between Motor coil-case		
Dielectric strength		1Min. at 1kVAC 50/60Hz between Motor coil-case		
Ambient temperature		-10℃ ~ +50℃, Storage condition : -25℃ ~ +85℃		
Ambient humidity		35 ~ 85%RH		
Protection		IP30(IEC34-5 standard)		
Unit weight		Geared type:1.3kg, Geared+Brake type:1.4kg, Rotary actuator type:1.5kg, Rotary actuator+Brake type:1.8kg		

※(★1) It is only available for rotary actuator type.

(A)
Counter

(B)
Timer

(C)
Temp.
controller

(D)
Power
controller

(E)
Panel
meter

(F)
Tacho/
Speed/
Pulse
meter

(G)
Display
unit

(H)
Sensor
controller

(I)
Switching
power
supply

(J)
Proximity
sensor

(K)
Photo
electric
sensor

(L)
Pressure
sensor

(M)
Rotary
encoder

(N)
Stepping
motor &
Driver &
Controller

(O)
Graphic
panel

(P)
Production
stoppage
models &
replacement

5-Phase Stepping Motor

■ Specifications

●85 square

Model	Shaft type	A21K-M596(W)-□	A21K-G596(W)-□	A41K-M599(W)-□	A41K-G596(W)-□	A63K-M5913(W)-□	A63K-G5913(W)-□
	Hollow shaft type	AH21K-M596(W)	AH21K-G596(W)	AH41K-M599(W)	AH41K-G599(W)	AH63K-M5913(W)	AH63K-G5913(W)
	Shaft type+ Brake built-in type	A21K-M596-□B	A21K-G596-□B	A41K-M599-□B	A41K-G599-□B	A63K-M5913-□B	A63K-G5913-□B
Max. holding torque		21kgf・cm(2.1 N・m)		41kgf・cm(4.1 N・m)		63kgf・cm(6.3 N・m)	
Moment of rotor inertia		1400 g・cm ² (1400×10 ⁻⁷ kg・m ²)		2700 g・cm ² (2700×10 ⁻⁷ kg・m ²)		4000 g・cm ² (4000×10 ⁻⁷ kg・m ²)	
Rated current		1.4A/Phase	2.8A/Phase	1.4A/Phase	2.8A/Phase	1.4A/Phase	2.8A/Phase
Basic step angle		0.72° / 0.36° (Full/Half step)					
Electro magnetic brake	Rated excitation voltage	24VDC(non-polarity)					
	Rated excitation current	0.62A					
	Static friction torque	40kgf・cm					
	Rotation part inertia	42.5×10 ⁻⁶ kgf・cm ²					
	Operating time	Max. 80ms					
	Releasing time	Max. 70ms					
Insulation class		CLASS B type(130℃)					
Insulation resistance		Min. 100MΩ (Standard 500VDC mega) between Motor coil-case					
Dielectric strength		1Min. at 1kVAC 50/60Hz between Motor coil-case					
Ambient temperature		-10℃ ~ +50℃, Storage condition : -25℃ ~ +85℃					
Ambient humidity		35 ~ 85%RH					
Protection		IP30(IEC34-5 standard)					
Unit weight		Standard type : 1.7kg, Brake built-in type : 2.9kg		Standard type : 2.8kg, Brake built-in type : 4.0kg		Standard type : 3.8kg, Brake built-in type : 5.0kg	

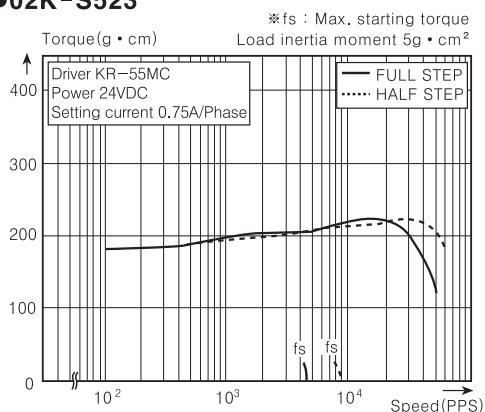
●85 square

Model	Shaft type+ Geared built-in type	A140K- M599(W)-G5	A140K- G599(W)-G5	A200K- M599(W)-G7.2	A200K- G599(W)-G7.2	A200K- M599(W)-G10	A200K- G599(W)-G10
	Geared type+ Brake built-in type	A140K- M599-GB5	A140K- G599-GB5	A200K- M599-GB7.2	A200K- G599-GB7.2	A200K- M599-GB10	A200K- G599-GB10
Max. holding torque		140kgf・cm(14 N・m)			200kgf・cm(20 N・m)		200kgf・cm(20 N・m)
Moment of rotor inertia		2700 g・cm ² (270×10 ⁻⁷ kg・m ²)					
Rated current		1.4A/Phase	2.8A/Phase	1.4A/Phase	2.8A/Phase	1.4A/Phase	2.8A/Phase
Basic step angle		0.144° / 0.072° (Full/Half step)			0.1° / 0.05° (Full/Half step)		0.072° / 0.036° (Full/Half step)
Gear ratio		1 : 5			1 : 7.2		1 : 10
Allowable speed range		0 ~ 360rpm			0 ~ 250rpm		0 ~ 180rpm
Backlash[mm]		±15' (0.25°)					
Electro magnetic brake	Rated excitation voltage	24VDC(non-polarity)					
	Rated excitation current	0.62A					
	Static friction torque	40kgf・cm					
	Rotation part inertia	42.5×10 ⁻⁶ kgf・cm ²					
	Operating time	Max. 80ms					
	Releasing time	Max. 70ms					
Insulation class		CLASS B type(130℃)					
Insulation resistance		Min. 100MΩ (Standard 500VDC mega) between Motor coil-case					
Dielectric strength		1Min. at 1kVAC 50/60Hz between Motor coil-case					
Ambient temperature		-10℃ ~ +50℃, Storage condition : -25℃ ~ +85℃					
Ambient humidity		35 ~ 85%RH					
Protection		IP30(IEC34-5 standard)					
Unit weight		Geared type : 4.4kg, Geared+Brake type : 5.6kg					

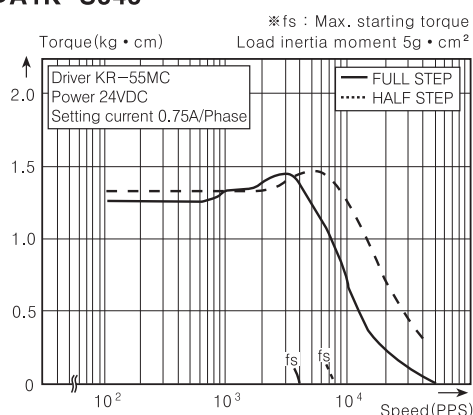
5-Phase Stepping Motor

Characteristic

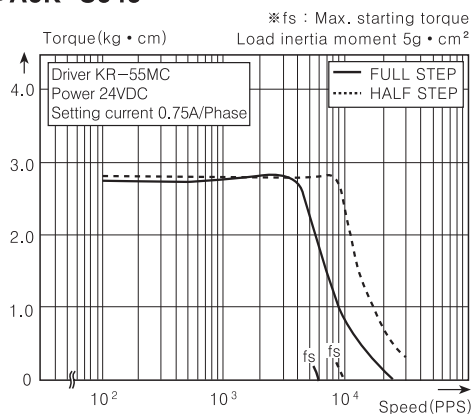
●02K-S523



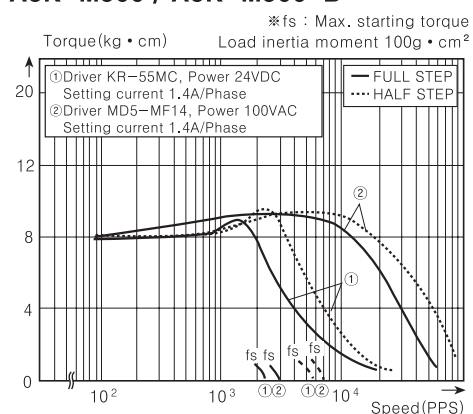
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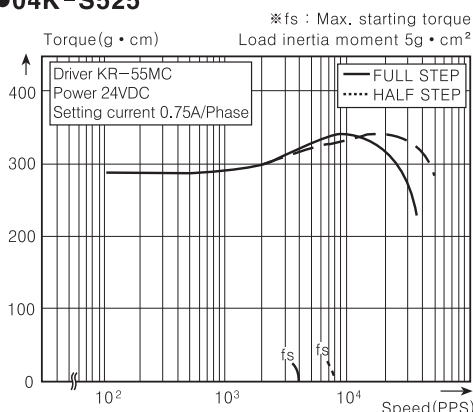
●A3K-S545



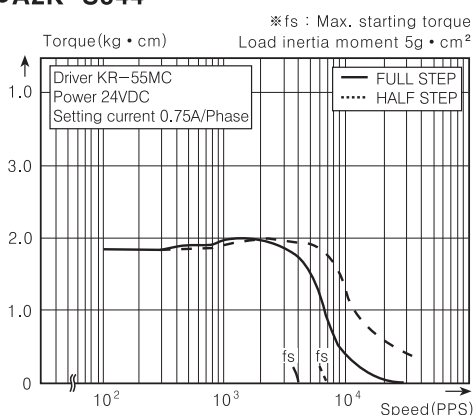
●A8K-M566 / A8K-M566-B



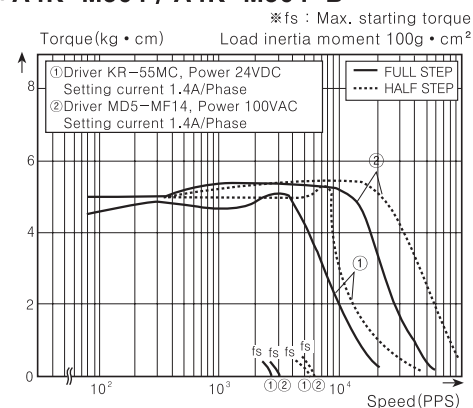
●04K-S525



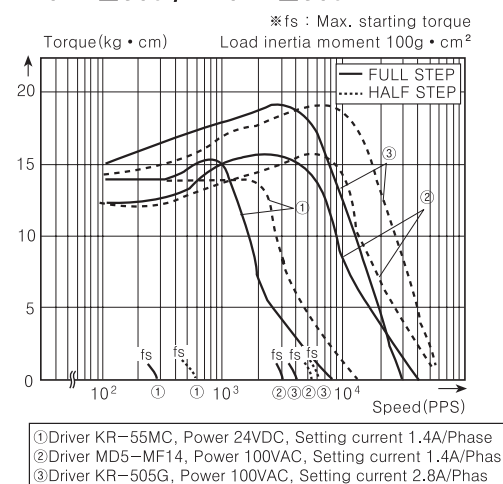
●A2K-S544



●A4K-M564 / A4K-M564-B



●A16K-□569 / A16K-□569-B



(A)
Counter

(B)
Timer

(C)
Temp.
controller

(D)
Power
controller

(E)
Panel
meter

(F)
Tacho/
Speed/
Pulse
meter

(G)
Display
unit

(H)
Sensor
controller

(I)
Switching
power
supply

(J)
Proximity
sensor

(K)
Photo
electric
sensor

(L)
Pressure
sensor

(M)
Rotary
encoder

(N)
Stepping
motor &
Driver &
Controller

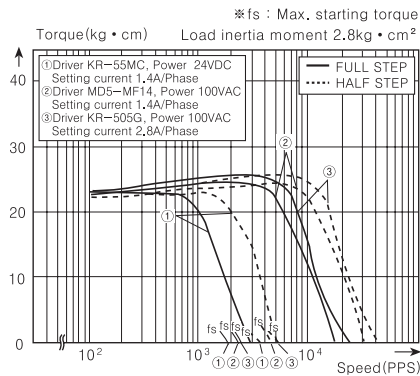
(O)
Graphic
panel

(P)
Production
stoppage
models &
replacement

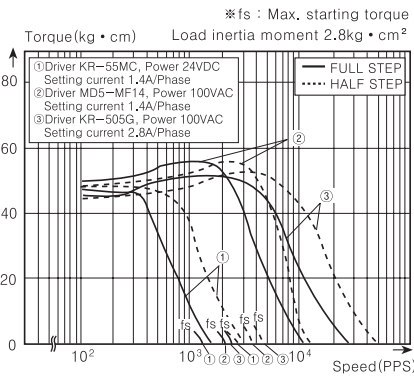
5-Phase Stepping Motor

Characteristic

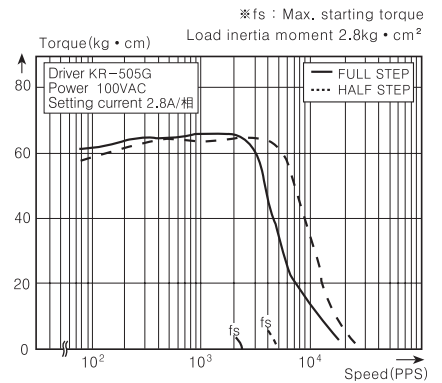
●A21K-□596 / A21K-□596-B



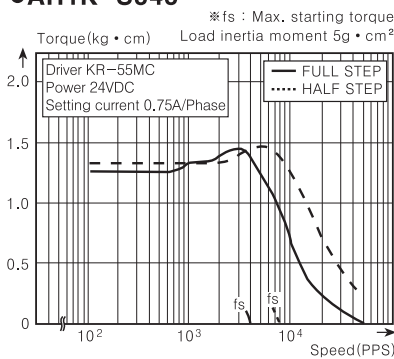
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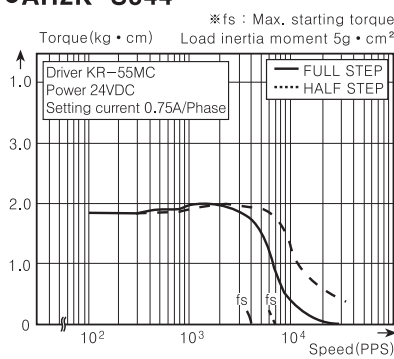
●A63K-G5913 / A63K-G5913-B



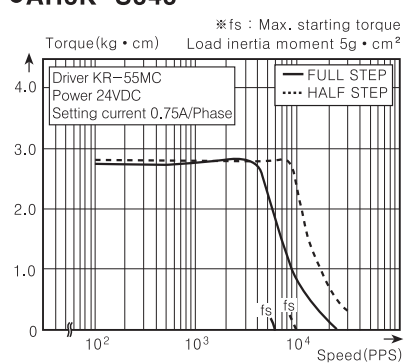
●AH1K-S543



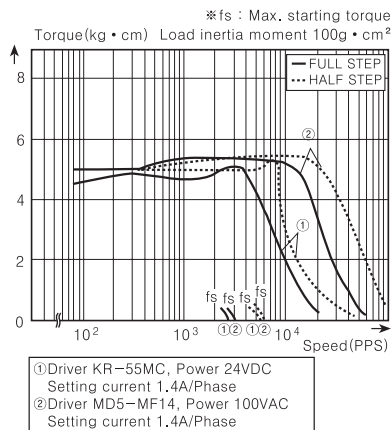
●AH2K-S544



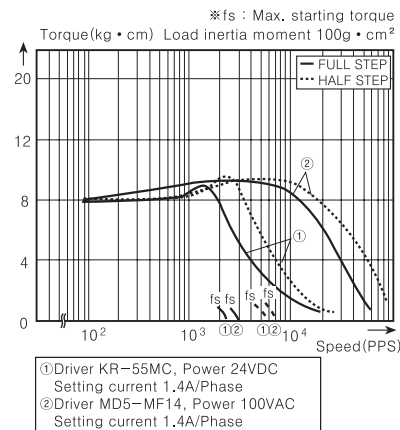
●AH3K-S545



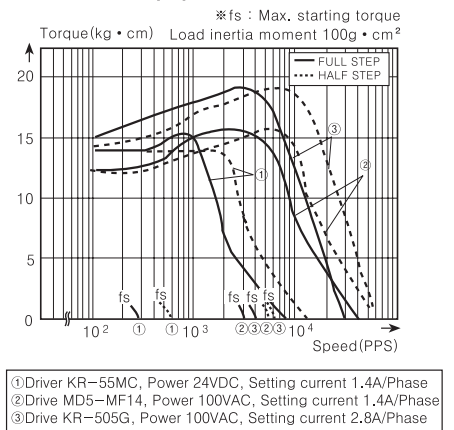
●AH4K-M564



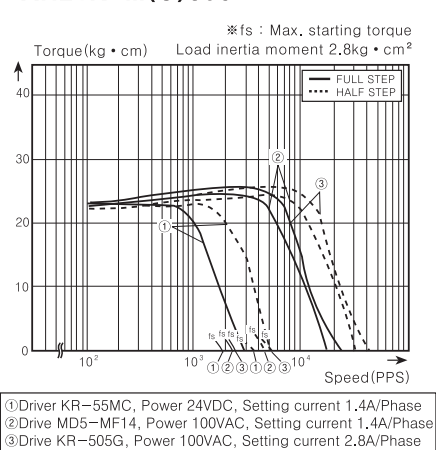
●AH8K-M566



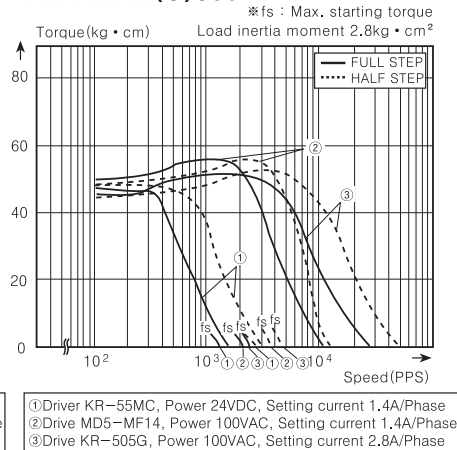
●AH16K-M(G)569



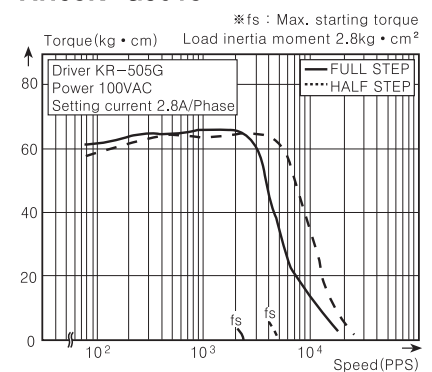
●AH21K-M(G)596



●AH41K-M(G)599



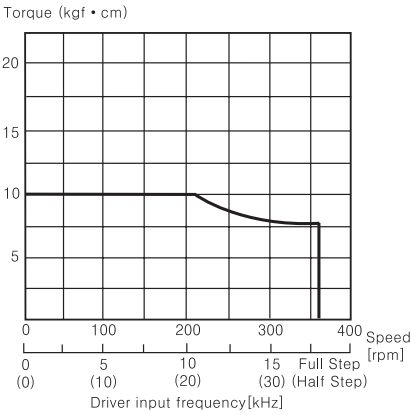
●AH63K-G5913



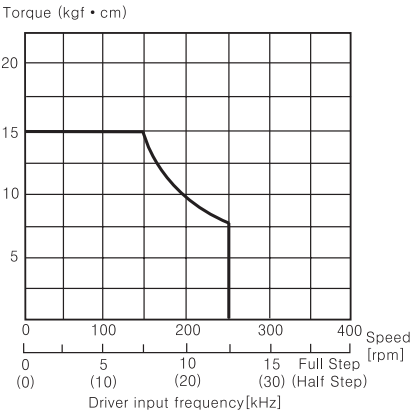
5-Phase Stepping Motor

Characteristic

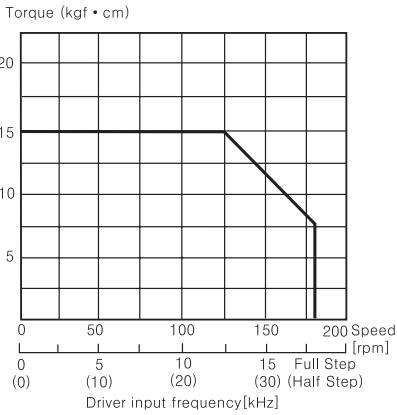
●A10K-S545(W)-G5



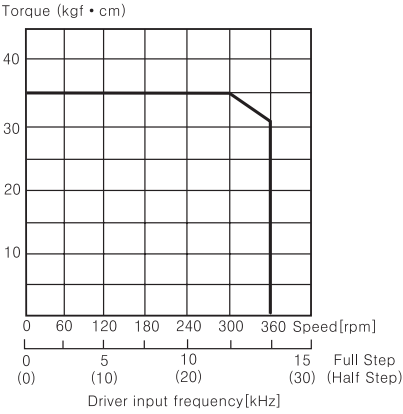
●A15K-S545(W)-G7.2



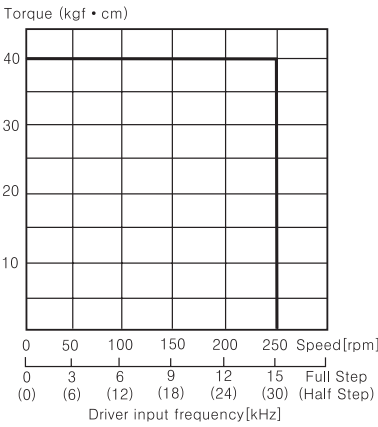
●A15K-S545(W)-G10



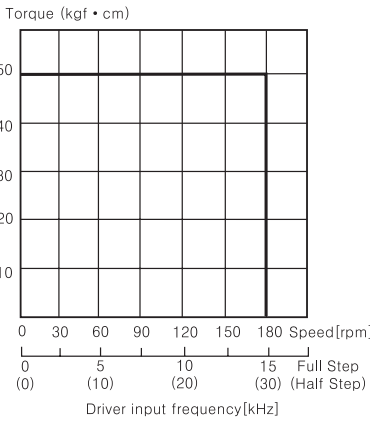
●A35K-M566(W)-□5 A35K-M566-□B5



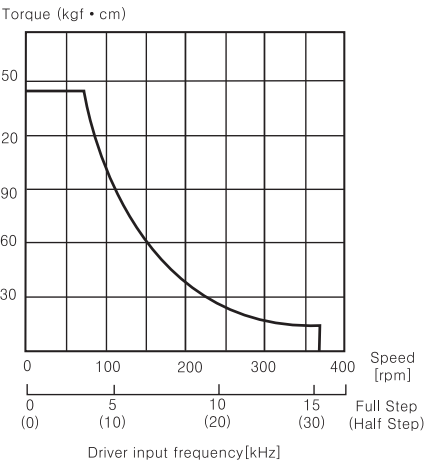
●A40K-M566(W)-□7.2 A40K-M566-□B7.2



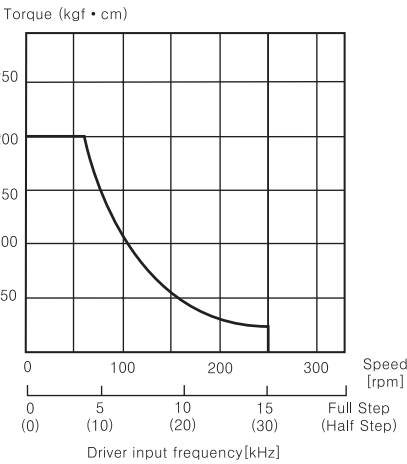
●A50K-M566(W)-□10 A50K-M566-□B10



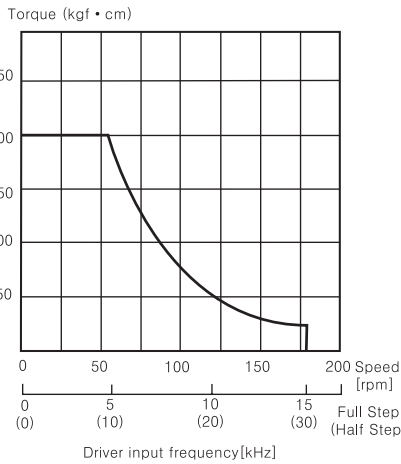
●A140K-□599(W)-G5 A140K-□599-GB5



●A200K-□599(W)-G7.2 A200K-□599-GB7.2



●A200K-□599(W)-G10 A200K-□599-GB10



(A)
Counter

(B)
Timer

(C)
Temp.
controller

(D)
Power
controller

(E)
Panel
meter

(F)
Tacho/
Speed/
Pulse
meter

(G)
Display
unit

(H)
Sensor
controller

(I)
Switching
power
supply

(J)
Proximity
sensor

(K)
Photo
electric
sensor

(L)
Pressure
sensor

(M)
Rotary
encoder

(N)
Stepping
motor &
Driver &
Controller

(O)
Graphic
panel

(P)
Production
stoppage
models &
replacement