

2-Phase Stepping Motor

Ordering information

A ☐ **K** - **M** **2** ☐ ☐ ☐

Motor shaft: ☐ Single Shaft, ☐ W Dual Shaft

Motor length(mm): ☐

Motor Frame Size(mm): ☐ 3 39 Square (38.8mm×38.8mm), ☐ 4 42 Square (42mm×42mm), ☐ 6 56 Square (56.4mm×56.4mm)

Motor phase: ☐ 2 2 Phase, ☐ S 0.8A/Phase, ☐ M 1.2A/Phase OR 1.5A/Phase, ☐ G 2.0A/Phase

Rated current: ☐

Max. holding torque: ☐ Square kgf・cm (Refer to motor specification)

Series: ☐

Specifications

Type	Medel	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)
39 Square	A1K-S233(W)	0.8	1.45	—	17	5	31
	A2K-S234(W)	0.8	2.15	—	27	7.5	37
42 Square	A2K-M243(W)	1.2	2.06	—	33	2.7	34
	A3K-M244(W)	1.2	2.97	—	56	3.3	40
	A4K-M245(W)	1.2	3.48	—	72	2.8	47.5
56 Square	A6K-M264(W)	1.5	5.67	—	145.0	2.1	42
	A6K-G264(W)	2	5.67	—	145.0	1.3	42
	A9K-M265(W)	1.5	9.25	—	245.0	2.8	54.5
	A9K-G265(W)	2	9.25	—	245.0	1.7	54.5
	A16K-M268(W)	1.5	15.70	—	470.0	4.2	77.5
	A16K-G268(W)	2	15.70	—	460.0	2.5	77.5

※ () stands for dual shaft of motor.

※ Motor length was measured without shaft.

(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

2-Phase Stepping Motor

■ Specifications

●39 Square

Model	A1K-S233(W)	A2K-S234(W)
Max. holding torque	1.45 kgf • cm (0.145 N • m)	2.15 kgf • cm (0.215 N • m)
Moment of rotor inertia	17 g • cm ² (17 × 10 ⁻⁷ kg • m ²)	27 g • cm ² (27 × 10 ⁻⁷ kgf • m ²)
Rated current	0.8A/Phase	
Basic step angle	1.8° / 0.9° (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	0℃ ~ +50℃ (Storage condition : -20℃ ~ +70℃)	
Ambient humidity	20 ~ 90%RH	
Protection	IP30(IEC34-5 standard)	
Unit weight	Approx. 0.17kg	Approx. 0.2kg
Reference	N-20~21	

●42 Square

Model	A2K-M243(W)	A3K-M244(W)	A4K-M245(W)
Max. holding torque	2.06 kgf • cm (0.206 N • m)	2.97 kgf • cm (0.280 N • m)	3.48 kgf • cm (0.348 N • m)
Moment of rotor inertia	33 g • cm ² (33 × 10 ⁻⁷ kg • m ²)	56 g • cm ² (56 × 10 ⁻⁷ kg • m ²)	72 g • cm ² (72 × 10 ⁻⁷ kgf • m ²)
Rated current	1.2A/Phase		
Basic step angle	1.8° / 0.9° (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	0℃ ~ +50℃ (Storage condition : -20℃ ~ +70℃)		
Ambient humidity	20 ~ 90%RH		
Protection	IP30(IEC34-5 standard)		
Unit weight	Approx. 0.23kg	Approx. 0.29kg	Approx. 0.43kg
Reference	N-20~21		

●56 Square

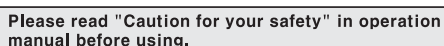
Model	A6K-M264(W)	A6K-G264(W)	A9K-M265(W)	A9K-G265(W)	A16K-M268(W)	A16K-G268(W)
Max. holding torque	5.67 kgf • cm (0.567 N • m)		9.25 kgf • cm (0.925 N • m)		15.70 kgf • cm (1.570 N • m)	
Moment of rotor inertia	145 g • cm ² (145 × 10 ⁻⁷ kg • m ²)		245 g • cm ² (245 × 10 ⁻⁷ kg • m ²)		470 g • cm ² (470 × 10 ⁻⁷ kgf • m ²)	
Rated current	1.5A/Phase	2.0A/Phase	1.5A/Phase	2.0A/Phase	1.5A/Phase	2.0A/Phase
Basic step angle	1.8° / 0.9° (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	0℃ ~ +50℃ (Storage condition : -20℃ ~ +70℃)					
Ambient humidity	20 ~ 90%RH					
Protection	IP30(IEC34-5 standard)					
Unit weight	Approx. 0.5kg		Approx. 0.7kg		Approx. 1.1kg	
Reference	N-20~21					

2-Phase Stepping Motor

☐ 39mm/☐ 42mm/☐ 56mm Shaft type 2-phase stepping motor

■ Features

- Compact and light weight with high accuracy, speed and torque
- Suitable for small-sized equipment applications
- Connector wiring type (Except for 39 Square motor)
- Cost-effective



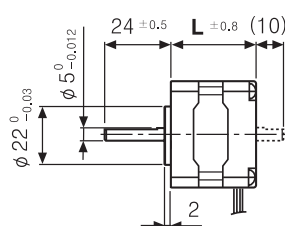
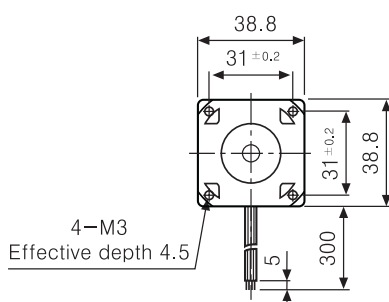
42 Square



56 Square

■ Dimensions

©39 Square

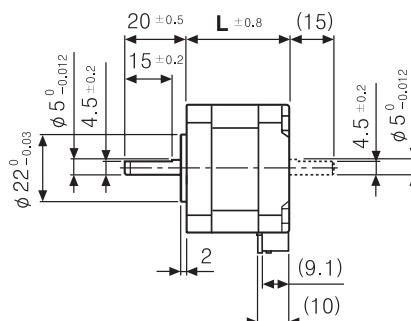
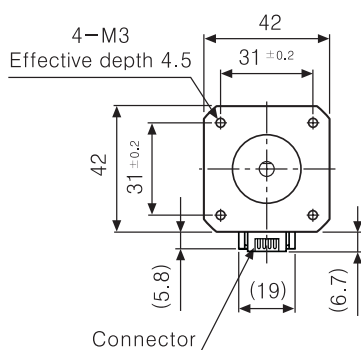


(Unit:mm)

MODEL	L
A1K-S233(W)	31
A2K-S234(W)	37

※ This is dual shaft type of dimension.
In case of single shaft, there is no
(.....) part of shaft.

©42 Square

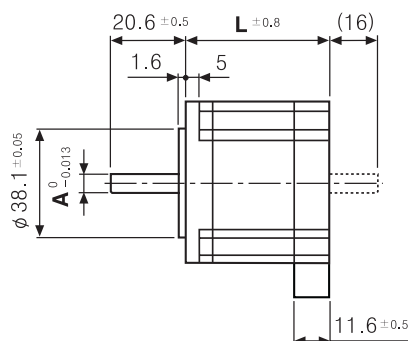
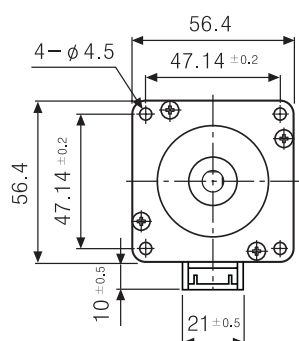


(Unit:mm)

MODEL	L
A2K-M243(W)	34
A3K-M244(W)	40
A4K-M245(W)	47.5

※ This is dual shaft type of dimension.
In case of single shaft, there is no
(.....) part of shaft.

©56 Square



(Unit:mm)

MODEL	L	A
A6K-□264(W)	42	6.35
A9K-□265(W)	54.5	6.35
A16K-□268(W)	77.5	8

※This is dual shaft type of dimension.
In case of single shaft, there is no
(.....) part of shaft.

(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

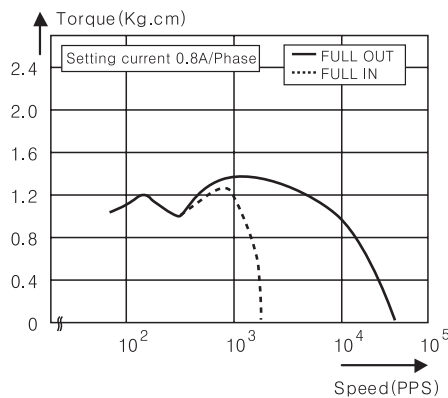
(O)
Graphic
panel

(P)
Production
stoppage
models &
replacement

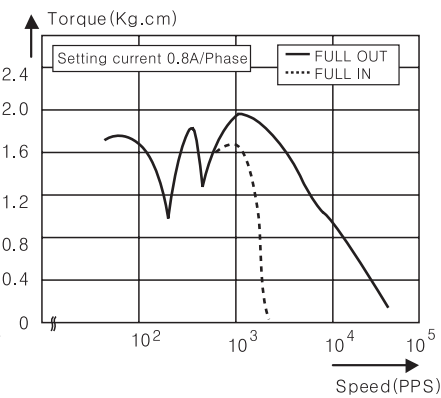
2-Phase Stepping Motor

Characteristic

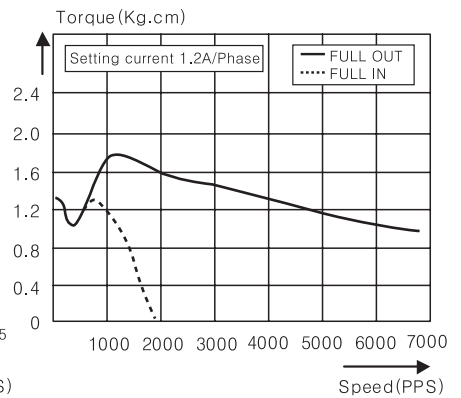
●A1K-S233(W)



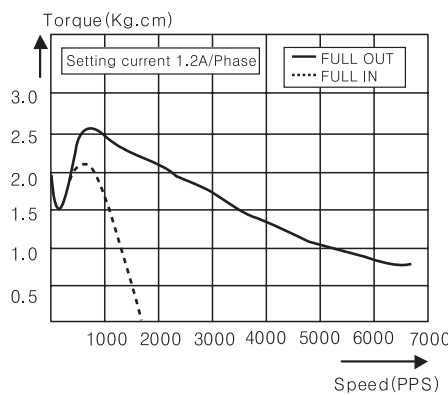
●A2K-S234(W)



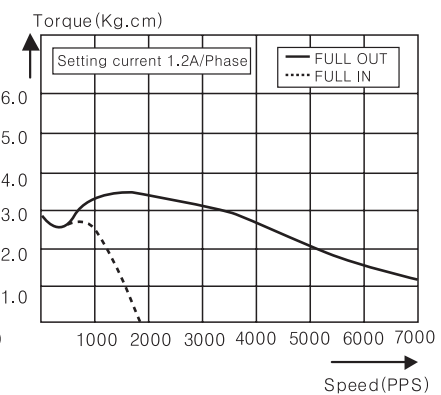
●A2K-M243(W)



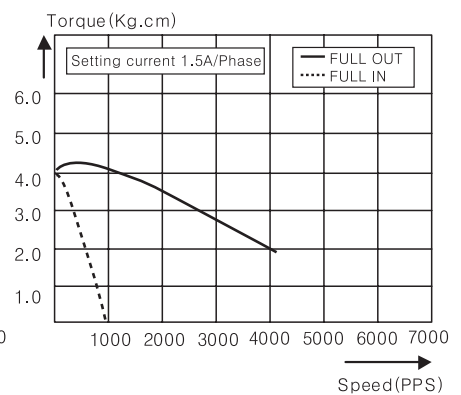
●A3K-M244(W)



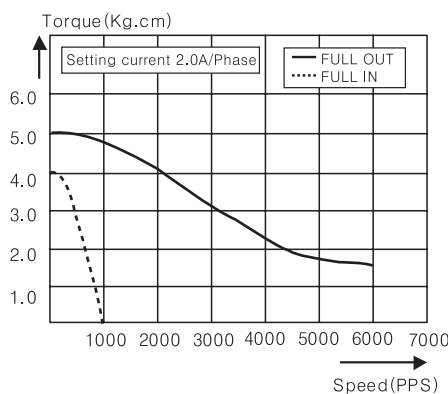
●A4K-M245(W)



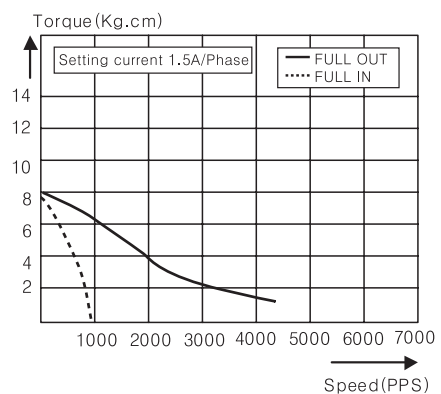
●A6K-M264(W)



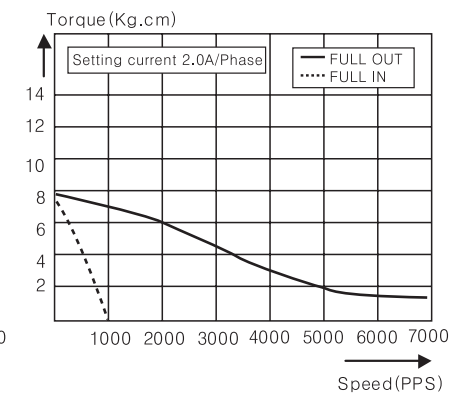
●A6K-G264(W)



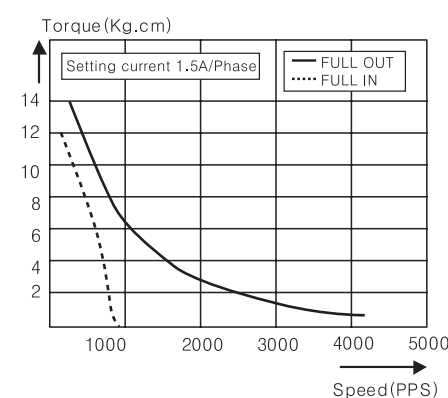
●A9K-M265(W)



●A9K-G265(W)



●A16K-M268(W)



●A16K-G268(W)

