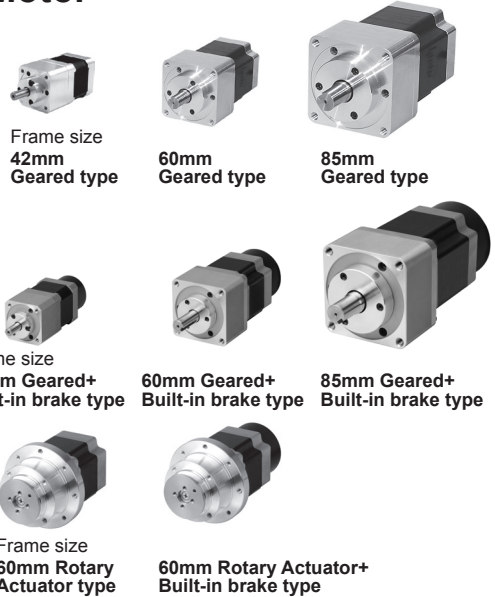


# AK-G/AK-GB/AK-R/AK-RB Series

## Frame Size 42mm/60mm/85mm Geared type /Geared+Built-in brake type Motor Frame Size 60mm Rotary Actuator Type /Rotary Actuator+Built-in brake type Motor

### ■ Features

- Compact design and light weight with high accuracy, speed and torque
- Cost-effective
- Backlash  
Frame size 42mm:  $\pm 35'$  ( $0.58^\circ$ ),  
60mm:  $\pm 20'$  ( $0.33^\circ$ ), 85mm:  $\pm 15'$  ( $0.25^\circ$ )
- Brake force is released when applying 24VDC on brake wire
- Basic step angle  
1:5  $\rightarrow 0.144^\circ$ , 1:7.2  $\rightarrow 0.1^\circ$ , 1:10  $\rightarrow 0.072^\circ$
- Allowable speed  
1:5  $\rightarrow 0$  to 360rpm, 1:7.2  $\rightarrow 0$  to 250rpm  
1:10  $\rightarrow 0$  to 180rpm



Please read "Safety Considerations" in operation manual before using.

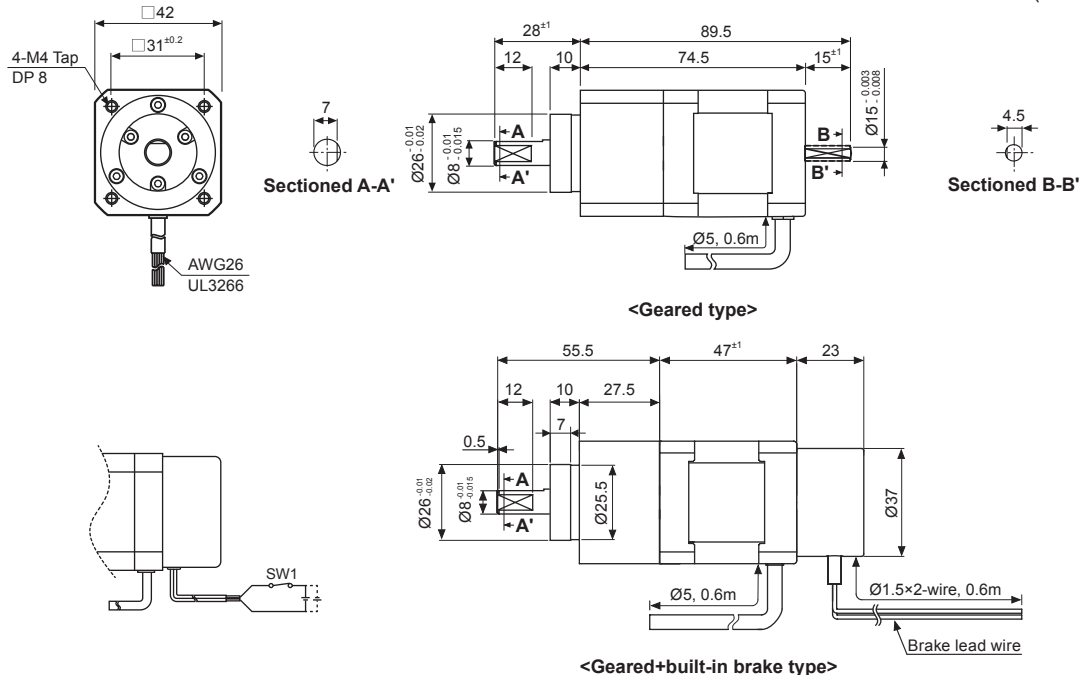


### ■ Dimensions

- ※These dimensions are for dual shaft models. Single shaft models do not include shafts indicated in the dotted lines.
- ※For flexible coupling (ERB series) information, refer to F-80.  
(frame size 60mm, 85mm: geared type, geared+built-in brake type)
- ※Brake is non-polar and be sure to observe rated excitation voltage (24VDC).
- ※SW1 ON: brake release / SW1 OFF: brake execute

#### ◎ Frame size 42mm

(unit: mm)

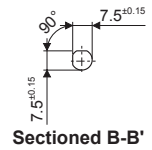
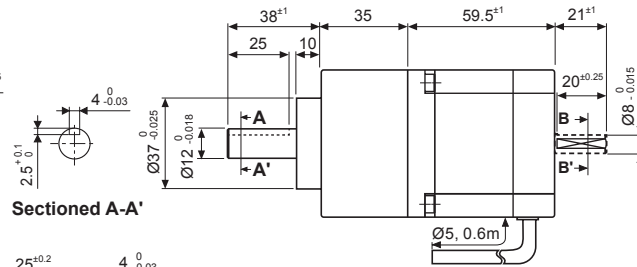
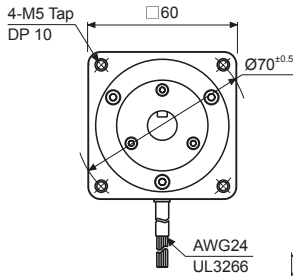


# 5-Phase Stepper Motor

## ■ Dimensions

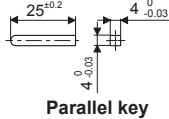
### ◎ Frame size 60mm

(unit: mm)



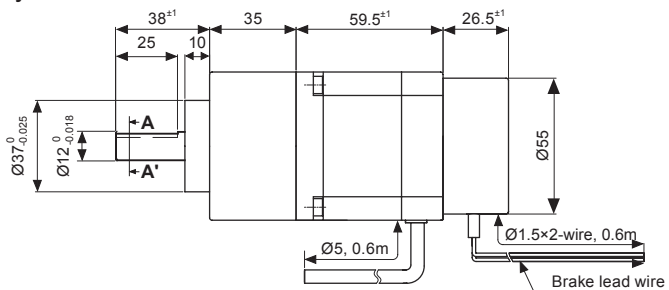
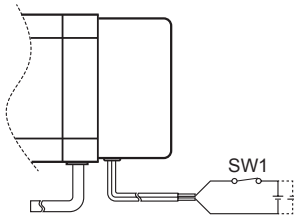
Sectioned A-A'

Sectioned B-B'

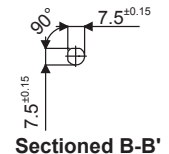
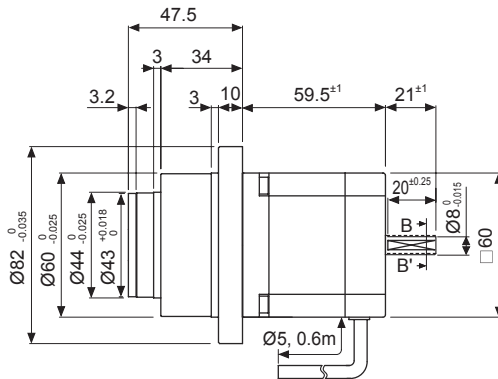
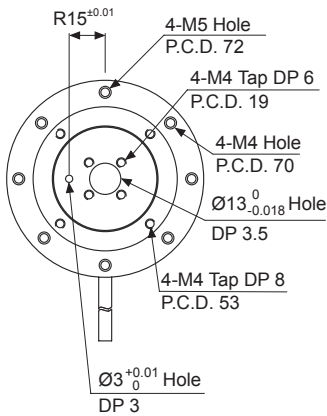


Parallel key

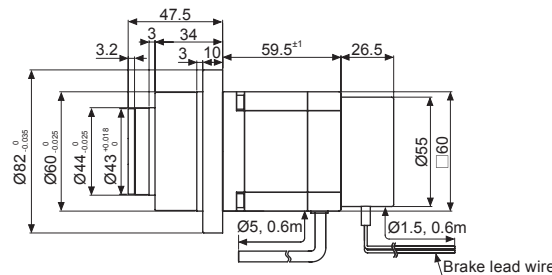
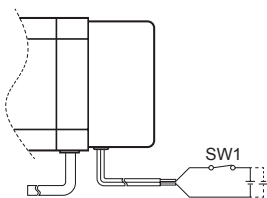
<Geared type>



<Geared+built-in brake type>



<Rotary actuator type>



<Rotary actuator+built-in brake type>

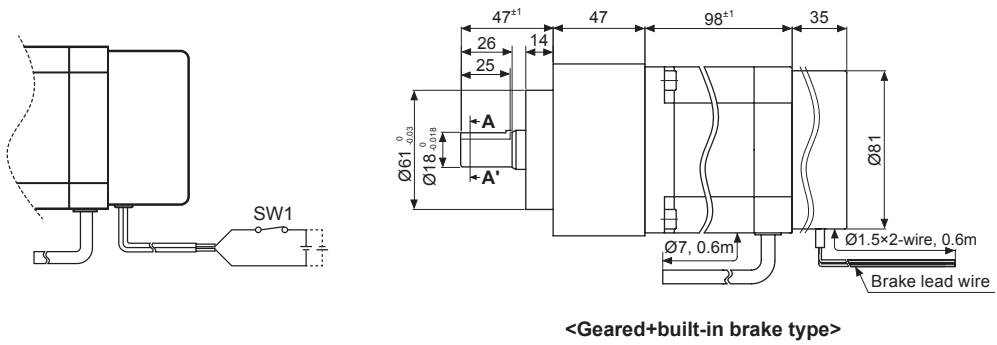
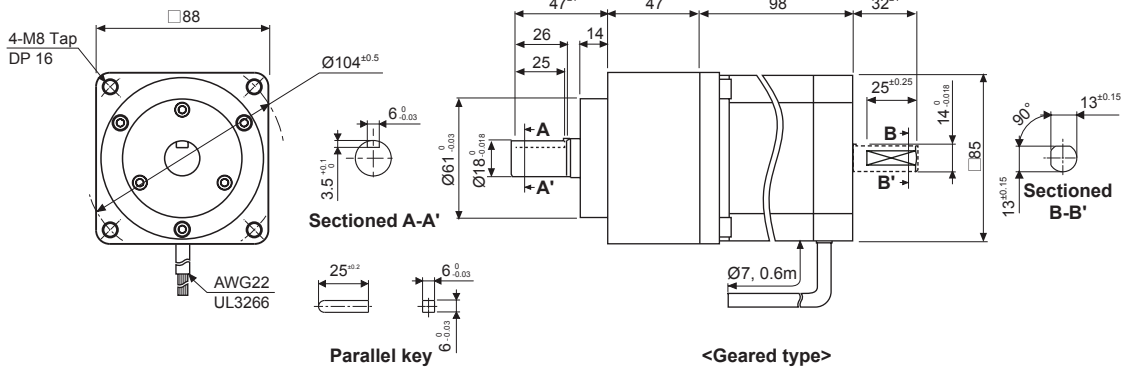
(A)	Photoelectric Sensors
(B)	Fiber Optic Sensors
(C)	Door/Area Sensors
(D)	Proximity Sensors
(E)	Pressure Sensors
(F)	Rotary Encoders
(G)	Connectors/ Connector Cables/ Sensor Distribution Boxes/Sockets
(H)	Temperature Controllers
(I)	SSRs / Power Controllers
(J)	Counters
(K)	Timers
(L)	Panel Meters
(M)	Tacho / Speed / Pulse Meters
(N)	Display Units
(O)	Sensor Controllers
(P)	Switching Mode Power Supplies
(Q)	Stepper Motors & Drivers & Controllers
(R)	Graphic/ Logic Panels
(S)	Field Network Devices
(T)	Software

# AK-G/AK-GB/AK-R/AK-RB Series

## ■ Dimensions

### ◎ Frame size 85mm

(unit: mm)

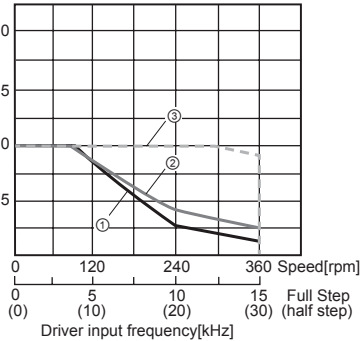


# 5-Phase Stepper Motor

## Characteristic

### ● A10K-S545(W)-G5 A10K-S545-GB5

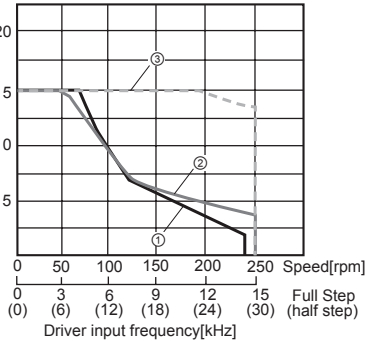
Torque (kgf·cm) ※fs: max. starting torque



- ① Driver MDS-ND14, Power 24VDC, Setting current 1.4A/Phase
- ② Driver MDS-HD14, Power 24VDC, Setting current 1.4A/Phase
- ③ Driver MDS-HF14, Power 220VAC, Setting current 1.4A/Phase
- ① fs: 3.1kpps
- ② fs: 3.2kpps
- ③ fs: 3.2kpps

### ● A15K-S545(W)-G7.2 A15K-S545-GB7.2

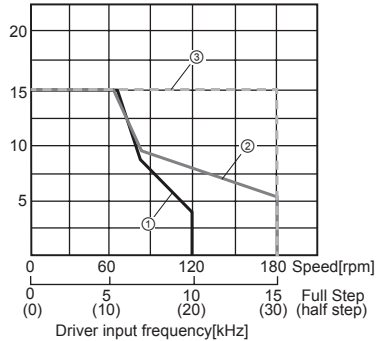
Torque (kgf·cm) ※fs: max. starting torque



- ① Driver MDS-ND14, Power 24VDC, Setting current 1.4A/Phase
- ② Driver MDS-HD14, Power 24VDC, Setting current 1.4A/Phase
- ③ Driver MDS-HF14, Power 220VAC, Setting current 1.4A/Phase
- ① fs: 3.2kpps
- ② fs: 3.3kpps
- ③ fs: 3.4kpps

### ● A15K-S545(W)-G10 A15K-S545-GB10

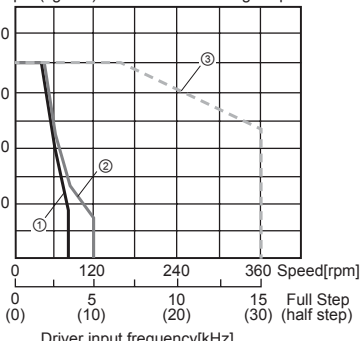
Torque (kgf·cm) ※fs: max. starting torque



- ① Driver MDS-ND14, Power 24VDC, Setting current 1.4A/Phase
- ② Driver MDS-HD14, Power 24VDC, Setting current 1.4A/Phase
- ③ Driver MDS-HF14, Power 220VAC, Setting current 1.4A/Phase
- ① fs: 3.3kpps
- ② fs: 3.3kpps
- ③ fs: 3.4kpps

### ● A35K-M566(W)-□B5 A35K-M566-□B5

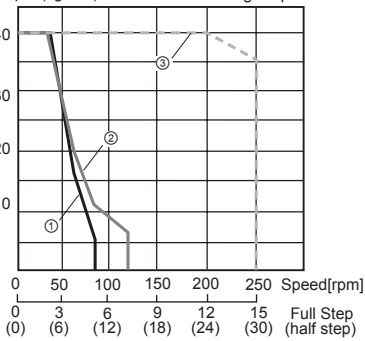
Torque (kgf·cm) ※fs: max. starting torque



- ① Driver MDS-ND14, Power 24VDC, Setting current 1.4A/Phase
- ② Driver MDS-HD14, Power 24VDC, Setting current 1.4A/Phase
- ③ Driver MDS-HF14, Power 220VAC, Setting current 1.4A/Phase
- ① fs: 2.3kpps
- ② fs: 2.3kpps
- ③ fs: 2.6kpps

### ● A40K-M566(W)-□B7.2 A40K-M566-□B7.2

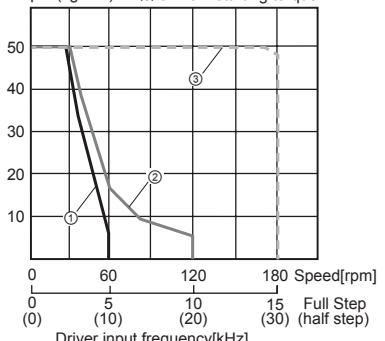
Torque (kgf·cm) ※fs: max. starting torque



- ① Driver MDS-ND14, Power 24VDC, Setting current 1.4A/Phase
- ② Driver MDS-HD14, Power 24VDC, Setting current 1.4A/Phase
- ③ Driver MDS-HF14, Power 220VAC, Setting current 1.4A/Phase
- ① fs: 2.2kpps
- ② fs: 2.3kpps
- ③ fs: 2.6kpps

### ● A50K-M566(W)-□B10 A50K-M566-□B10

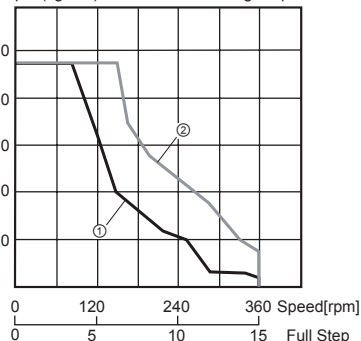
Torque (kgf·cm) ※fs: max. starting torque



- ① Driver MDS-ND14, Power 24VDC, Setting current 1.4A/Phase
- ② Driver MDS-HD14, Power 24VDC, Setting current 1.4A/Phase
- ③ Driver MDS-HF14, Power 220VAC, Setting current 1.4A/Phase
- ① fs: 2.3kpps
- ② fs: 2.3kpps
- ③ fs: 2.8kpps

### ● A140K-□599(W)-G5 A140K-□599-GB5

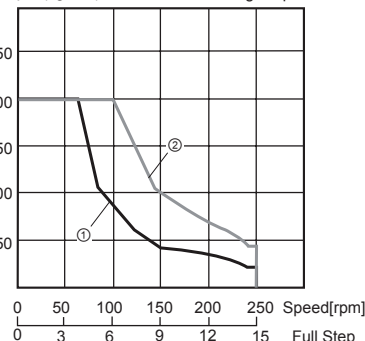
Torque (kgf·cm) ※fs: max. starting torque



- ① Driver MDS-HF14, Power 220VAC, Setting current 1.4A/Phase
- ② Driver MDS-HF28, Power 220VAC, Setting current 2.8A/Phase
- ③ fs: 1.8kpps
- ④ fs: 2.1kpps

### ● A200K-□599(W)-G7.2 A200K-□599-GB7.2

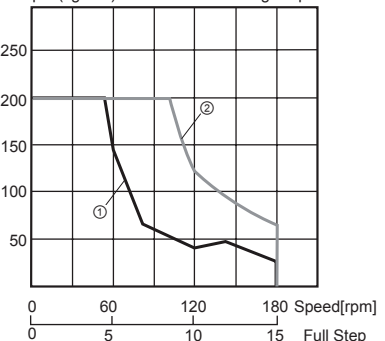
Torque (kgf·cm) ※fs: max. starting torque



- ① Driver MDS-HF14, Power 220VAC, Setting current 1.4A/Phase
- ② Driver MDS-HF28, Power 220VAC, Setting current 2.8A/Phase
- ③ fs: 1.8kpps
- ④ fs: 2.1kpps

### ● A200K-□599(W)-G10 A200K-□599-GB10

Torque (kgf·cm) ※fs: max. starting torque



- ① Driver MDS-HF14, Power 220VAC, Setting current 1.4A/Phase
- ② Driver MDS-HF28, Power 220VAC, Setting current 2.8A/Phase
- ③ fs: 1.9kpps
- ④ fs: 2.1kpps

- (A) Photoelectric Sensors
- (B) Fiber Optic Sensors
- (C) Door/Area Sensors
- (D) Proximity Sensors
- (E) Pressure Sensors
- (F) Rotary Encoders
- (G) Connectors/ Connector Cables/ Sensor Distribution Boxes/Sockets
- (H) Temperature Controllers
- (I) SSRs / Power Controllers
- (J) Counters
- (K) Timers
- (L) Panel Meters
- (M) Tacho / Speed / Pulse Meters
- (N) Display Units
- (O) Sensor Controllers
- (P) Switching Mode Power Supplies
- (Q) Stepper Motors & Drivers & Controllers
- (R) Graphic/ Logic Panels
- (S) Field Network Devices
- (T) Software