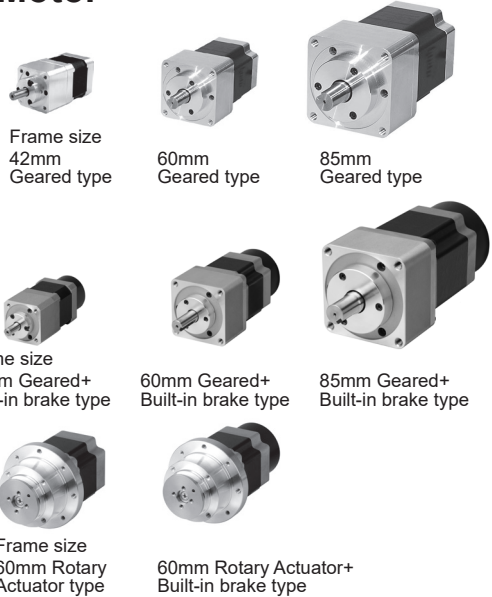


# AK-G/AK-GB/AK-R/AK-RB Series

## 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 the instruction manual before using.

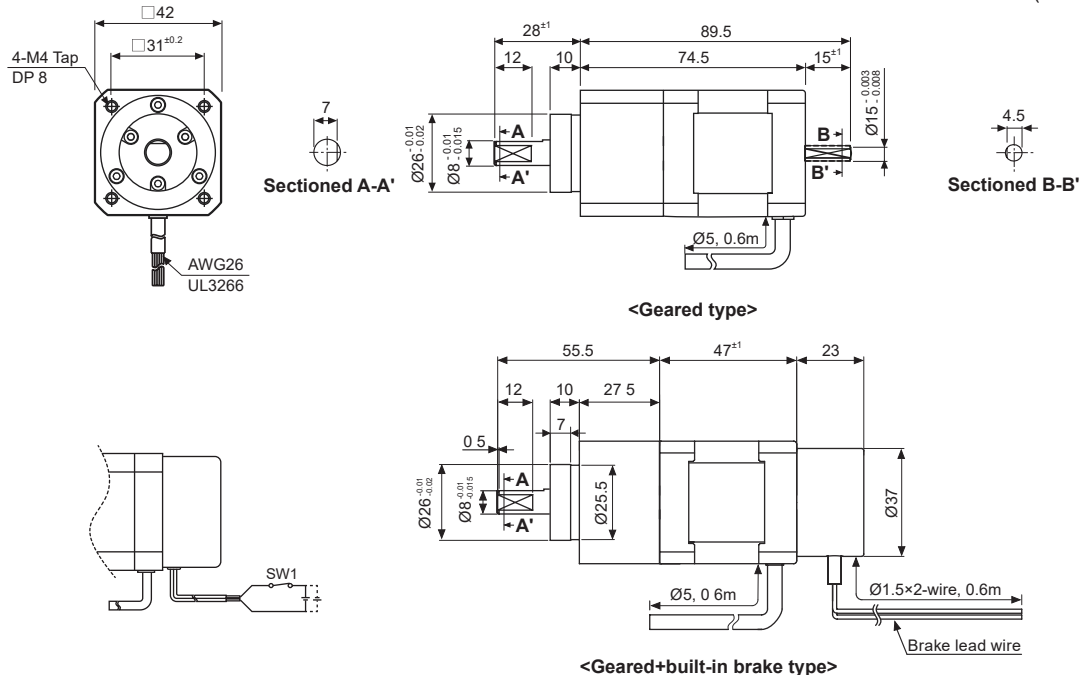


### ■ Dimensions

- ※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 'ERB Series' in 'Rotary encoder'.
- (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)

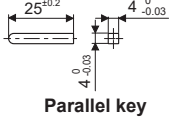
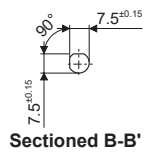
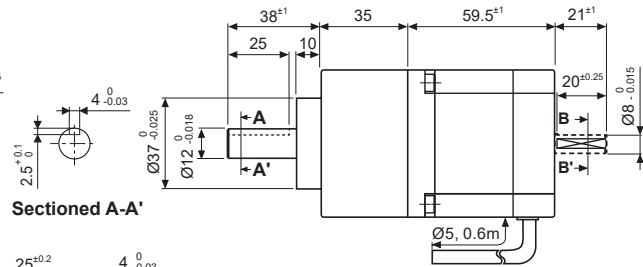
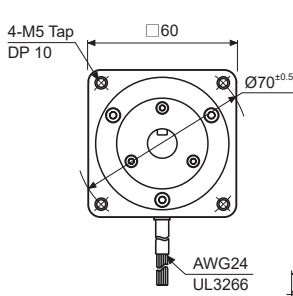


# 5-Phase Stepper Motor

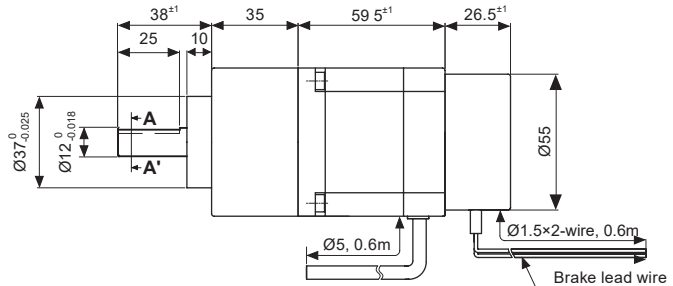
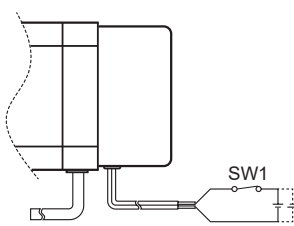
## ■ Dimensions

### ◎ Frame size 60mm

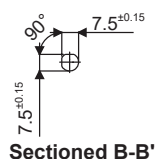
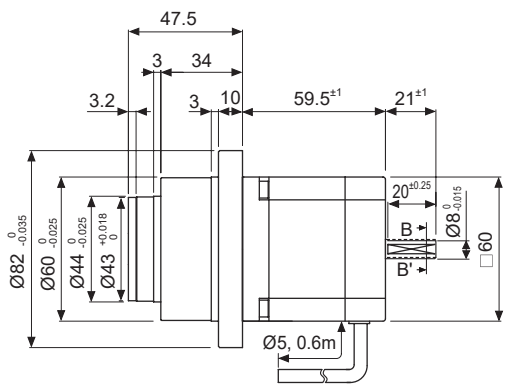
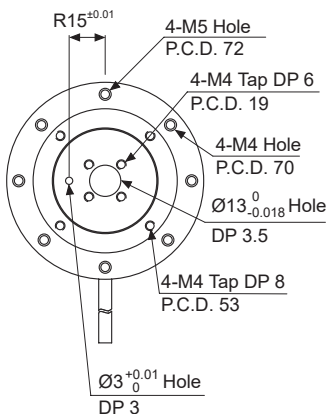
(unit: mm)



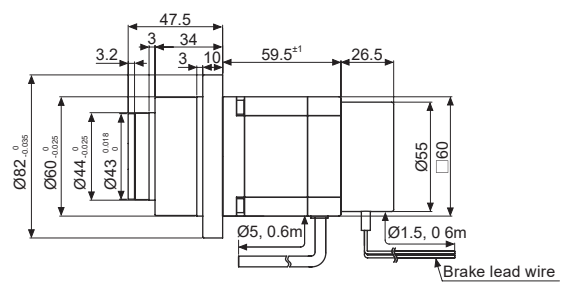
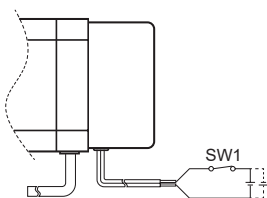
<Geared type>



<Geared+built-in brake type>



<Rotary actuator type>



<Rotary actuator+built-in brake type>

SENSORS
CONTROLLERS
<b>MOTION DEVICES</b>
SOFTWARE

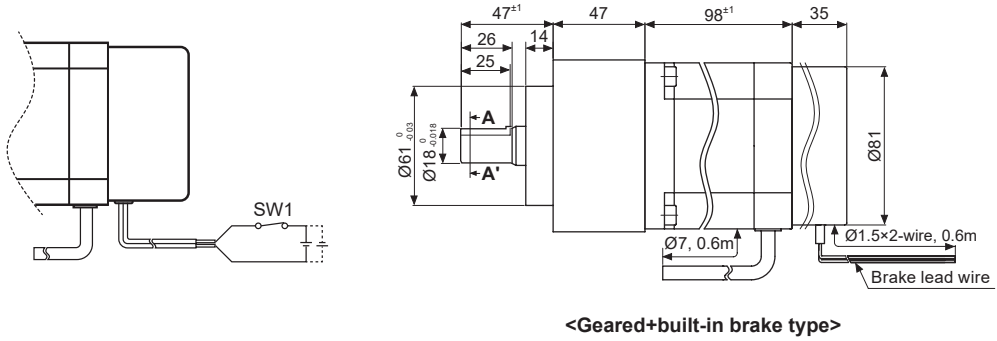
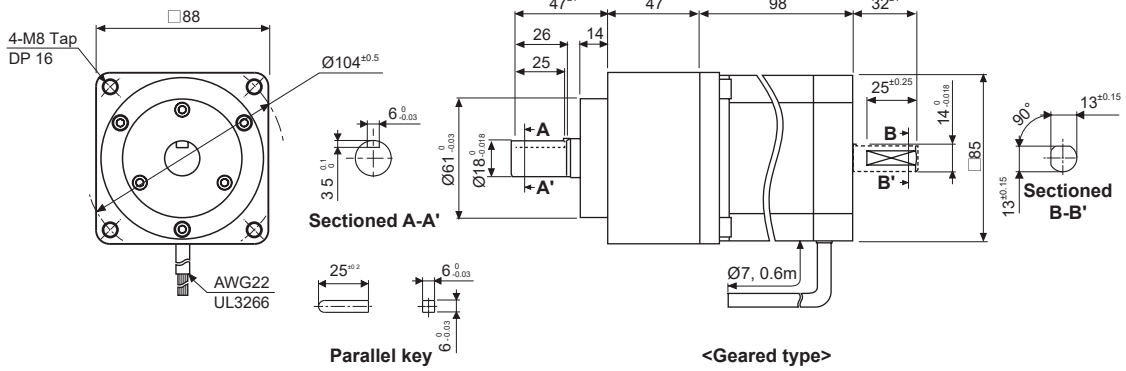
(Y) Closed Loop Stepper System
<b>(Z) Stepper Motors</b>
(AA) Drivers
(AB) Motion Controllers

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

## ■ Dimensions

### ◎ Frame size 85mm

(unit: mm)

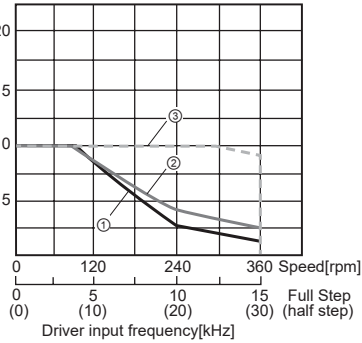


# 5-Phase Stepper Motor

## Characteristic

### ● A10K-S545(W)-G5 A10K-S545-GB5

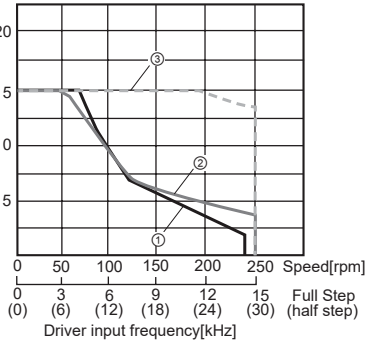
Torque (kgf cm) ※fs: max. starting torque



- 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
- ④ fs 3.1kpps
- ⑤ fs 3.2kpps
- ⑥ fs 3.2kpps

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

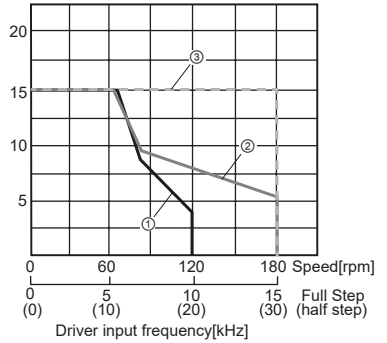
Torque (kgf cm) ※fs: max. starting torque



- 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
- ④ fs 3.2kpps
- ⑤ fs 3.3kpps
- ⑥ fs 3.4kpps

### ● A15K-S545(W)-G10 A15K-S545-GB10

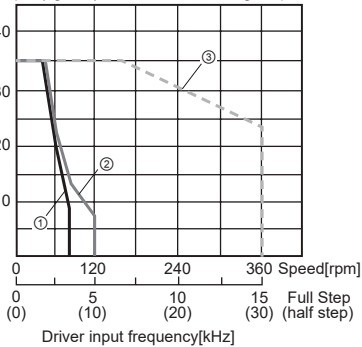
Torque (kgf cm) ※fs: max. starting torque



- 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
- ④ fs 3.3kpps
- ⑤ fs 3.3kpps
- ⑥ fs 3.4kpps

### ● A35K-M566(W)-□5 A35K-M566-□B5

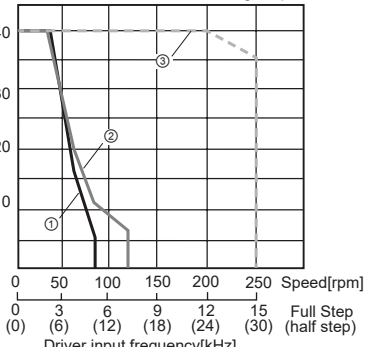
Torque (kgf cm) ※fs: max. starting torque



- 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
- ④ fs 2.3kpps
- ⑤ fs 2.3kpps
- ⑥ fs 2.6kpps

### ● A40K-M566(W)-□7.2 A40K-M566-□B7.2

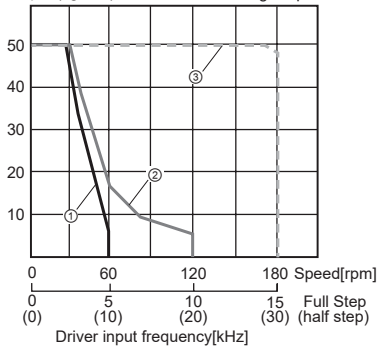
Torque (kgf cm) ※fs: max. starting torque



- 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
- ④ fs 2.2kpps
- ⑤ fs 2.3kpps
- ⑥ fs 2.6kpps

### ● A50K-M566(W)-□10 A50K-M566-□B10

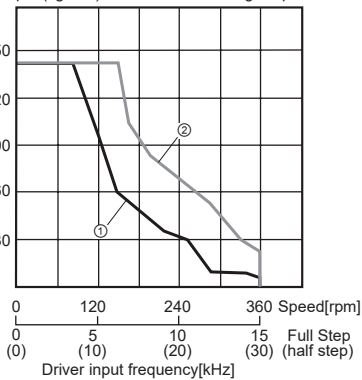
Torque (kgf cm) ※fs: max. starting torque



- 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
- ④ fs 2.3kpps
- ⑤ fs 2.3kpps
- ⑥ fs 2.8kpps

### ● A140K-□599(W)-G5 A140K-□599-GB5

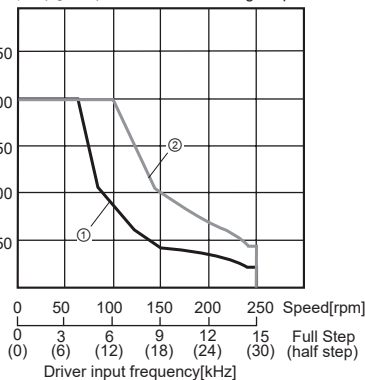
Torque (kgf cm) ※fs: max. starting torque



- 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

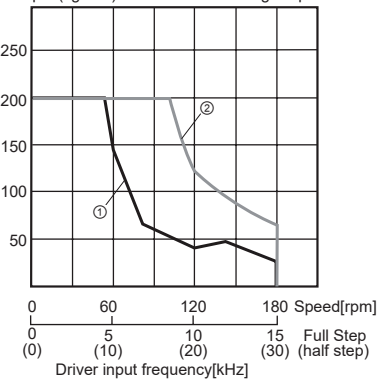
Torque (kgf cm) ※fs: max. starting torque



- 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

SENSORS
CONTROLLERS
MOTION DEVICES
SOFTWARE

(Y)  
Closed Loop Stepper System

(Z)  
Stepper Motors

(AA)  
Drivers

(AB)  
Motion Controllers