

Brushed Screwdriver



α Series
(DC Type)

Powerful, high speed motor improves productivity

- α-Series increases operating efficiency by reducing screw tightening time with high speed rotation (1,700 rpm).
- A low DC voltage power safety design.
- α-Series is noiseless as a standard specification.

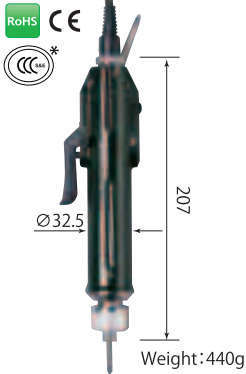
Lever Start Type

Lever Start Type

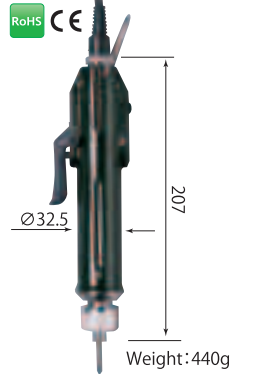
Push-to-Start Type

Push-to-Start Type

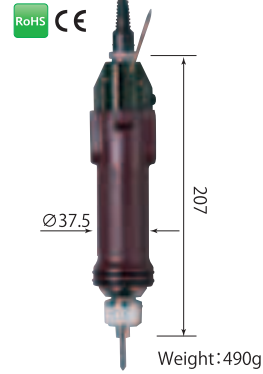
α-4500



α-5000



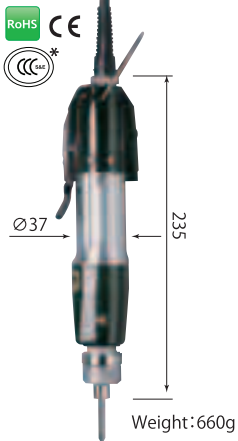
α-4500PS



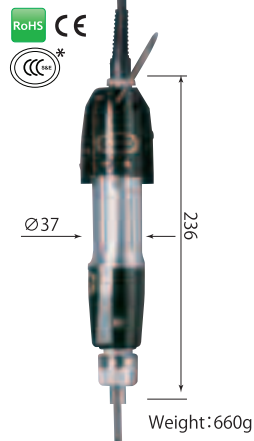
α-5000PS



α-6500



α-6500PS



Note: CCC certified models have different specification and order codes from the standard models. Please contact HIOS distributors before ordering.

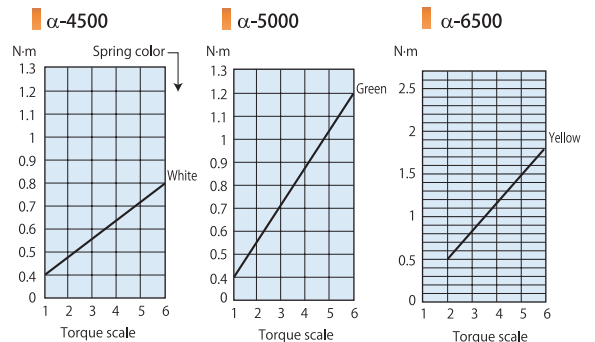
α-Series Specifications

Specifications

Lever Start Type Model		α-4500	α-5000	α-6500
Push-to-Start Type Model		α-4500PS	α-5000PS	α-6500PS
Output	N·m	0.4 - 0.8	0.4 - 1.2	0.5 - 1.8
Torque Range	lbf·in	3.5 - 7	3.5 - 10	4.3 - 16
	(kgf·cm)	(4 - 8)	(4 - 12)	(5 - 18)
Torque Switching		Stepless adjustment	Stepless adjustment	Stepless adjustment
Unloaded Rotation	HI	1,700	1,000	1,700
Speed (r.p.m) ±10%	LOW	1,200	700	1,200
Screw	Machine Screw	2.0 - 3.0	2.3 - 3.0	3.0 - 4.0
	Tapping Screw	2.0 - 2.6	2.3 - 3.0	2.6 - 3.0
Bit	HIOS Shank	H4	H4	H5
Drive	HEX Shank	1/4HEX or 5HEX	1/4HEX or 5HEX	1/4HEX or 5HEX
Power Supply	CLT-60	○	○	○
	CLT-100	○	○	—
	MC-70L	○	○	○
Accessories	Bit (one each)	H4	+ #1 (∅4.0×40 mm) + #2 (∅4.0×40 mm)	+ #1 (∅4.0×40 mm) + #2 (∅4.0×40 mm)
		H5	+ #1 (∅5.0×50 mm) + #2 (∅5.0×60 mm)	+ #1 (∅5.0×60 mm) + #2 (∅5.0×60 mm)
	1/4HEX	+ #1 (5.0×50 mm) + #2 (5.0×50 mm)	+ #1 (5.0×50 mm) + #2 (5.0×50 mm)	+ #1 (5.0×50 mm) + #2 (5.0×50 mm)
		— (5.0×50 mm)	— (5.0×50 mm)	— (5.0×50 mm)
Cord length (m)		1.5 m (5P)	1.5 m (5P)	2 m (5P)
Carbon brush (order code)		1pair (A45-0420)	1pair (A45-0420)	1pair (CL65-0490)

Output torque guide (HI input)

(Including PS type)



The unloaded rotation speed (r.p.m.) in the specifications is measured when the screwdriver is operated with the HIOS standard power supply. Therefore, if you use another power supply or when input voltage varies, the value displayed will also vary. Please refer to the value in the specifications only as a guide.

Suction (Vacuum)

By making use of negative pressure, the effort needed to pick up screws can be reduced. This suction device can even pick up non-ferrous screws such as stainless steel screws by vacuuming, and improves operation efficiency. It can also be used to remove powder dust generated from screw tightening.

αQ

Order guide

(A) and (B) needed to be purchased separately if you have a suction-type screwdriver. (A), (B) and (C) needed to be purchased separately if you want to convert your screwdriver to a suction type.

* There are several options of sizes of (A) and (B) depending on the screw size. For more information on the size, please refer to P. 58.

Model	(A) Mouthpiece model	(B) Bit length	(C) Suction attachment model
αQ-4500	F3-Standard 18mm	H4 60mm	CLQ4-SET/CLQ4-SET-ESD*
αQ-5000	F3-Standard 18mm	H4 60mm	CLQ4-SET/CLQ4-SET-ESD*
αQ-6500	F6-Standard 31mm	H5 80mm	CLQ65-SET/CLQ65-SET-ESD*

(Including PS Type)

*ESD is anti-electrostatic

Note: The suction attachment cannot be used with 1/4HEX.



Anti-electrostatic

α-ESD



The screwdriver body uses an anti-electrostatic material prevent the generation of static electricity, which is suitable for the assembly of precision equipment and electronic parts.

[Surface resistance: max. 10⁹Ω]

Models:
α-4500ESD α-6500ESD
α-5000ESD
(Including PS Type)



Clean Room + Anti-electrostatic

αQ-CR-ESD



In addition to anti-electrostatic measures, two vacuum units are installed in the body and the suction attachment in order to suck up dust generated from screw tightening.

[Class 100 equivalent]

[Surface resistance: max. 10⁹Ω]

Models:
αQ-4500CR-ESD
αQ-5000CR-ESD
αQ-6500CR-ESD
(Including PS Type)

* Push-to-start grip attachment PS-1-ESD (anti-electrostatics) is attached to αQ-4500CR-ESD and αQ5000CR-ESD.

Related Products

Related Products

Power supply with HIOS screw counter

CLT-70STC3

Power supply with HIOS screw counter helps to prevent skipping screw tightening.



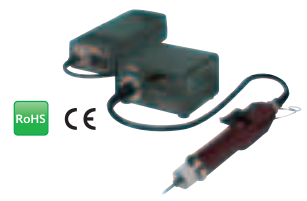
RoHS

Compatible screwdrivers:
α-4500, α-5000, α-6500
(Including PS Type)

Separate counter

CLOP-SC1

External counter helps to prevent skipping screw tightening.



RoHS

CE

▶ See P. 41-43 for details.

Accessories

Accessories

Pistol Attachment

PA-65

This attachment converts a standard screwdriver to a pistol-style screwdriver, most suitable for horizontal tightening.



RoHS

Compatible screwdrivers:
α-6500 (Including PS Type)

Angle Attachment

ANGL-Z (For HIOS H5 and 5HEX drive)

ANGLX-Z (For 1/4 HEX drive)

This attachment is most suitable when the available space is very tight for screw tightening. This attachment can be fitted to the tip of the screwdriver.



RoHS

Compatible screwdrivers:
α-6500 (Lever Type only)

* Always set the output to 1.5N·m or lower when you use this attachment.

Push-to-Start Grip Attachment

PS-1

PS-1-ESD

This attachment converts the screwdriver from lever start to push-to-start.



RoHS

Compatible screwdrivers:
α-4500, α-5000 (Image of fitting)