

# HIOS

## Electric Screwdriver

General catalog

09B

The English version

**HIOS**  
www.hios.com

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Cautions for safety

Cautions for safety. Read the instruction manual carefully before use and operate the screwdriver for its intended purpose. Always use the specified current and Voltage.

- Please note that the specifications and appearance may change as improvements are made.
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- The information presented in this catalog are current as of September 2009.
- Catalog number :EK-A001



Classic Design CL-6500  
Since 1977

## Contents

List of Screw drivers / Variations .....	pp.1-2
CL Series .....	pp.3-4
SS Series / α Series .....	pp.5-6
Power Supply for DC drivers .....	pp.7-8
VZ Series .....	pp.9-10
Power Supply with Screw Counter .....	p.11
CD Series / SB Series / Peripherals .....	p.12
Digital Torque Meter Series .....	p.13-14
Automatic Screw Feeder .....	pp.15-16
Mouthpieces for Suction drivers / Exchange Bit .....	pp.17-18
Order Codes .....	pp.19-22

## Standard specifications

(See the icon on each page for standard driver specifications)

**RoHS** ..... The screwdriver is RoHS compliant.

**CE** ..... Products meet European safety standards.

**UL** ..... Meet UL standard.

External dimensions can be viewed in DXF file format from the HIOS home page. \*Special software is required to view DXF files.

**DXF File** [www.hios.com](http://www.hios.com)

## Variations

HIOS screwdriver provides several assembly solutions with variations of its functions.

### Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL	E	OPC
Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools		Screwdriver for screw counter	

\* The suction attachment sold separately.



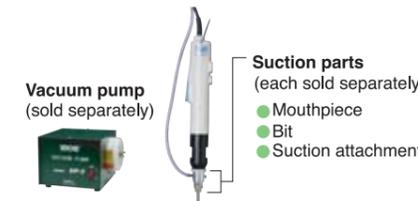
### Q

Variation **A**

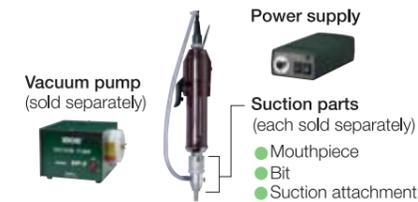
### Suction Type

A suction attachment has been installed as standard on the screwdriver. The vacuum assists in picking screws up. Screws that cannot be picked up magnetically, as well as minus screws, can also be picked up with the suction device, while dust generated during screw tightening is also eliminated.

**AC Type** Combination of VZ suction screwdriver



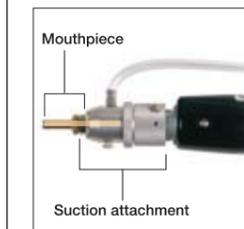
**DC Type** Combination of CL, SS, α suction screwdriver



### Suction parts

Standard screwdrivers can be equipped for suction head operation by fitting them with the suction attachment.

#### Parts of suction fitting



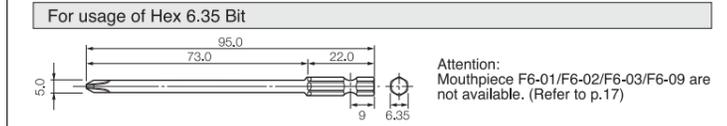
#### Mouthpiece

<b>F3-00</b>	Used with CLQ-2000, CLQ-3000, CLQ-4000, α Q-4500, α Q-5000, SSQ-2000, SSQ-3000, SSQ-4000, VZQ-1510,
<b>F6-00</b>	Used with CLQ-6000, CLQ-6500, CLQ-7000, SSQ-6500, SSQ-7000, α Q-6500, VZQ-1812, VZQ-1820, VZQ-3007, VZQ-3012, VZQ-4504, VZQ-4506

- Suction screwdriver needs (A) and (B) separately.
- To put suction function to standard screwdriver, (A),(B),(C) are needed.

Model	(A) Mouthpiece model (Refer to p.17)	(B)*1 Bit Length (Refer to p.17)	(C) Suction attachment model
CLQ-2000	F3- standard 18 mm	H4 60 mm	CLQ2-SET
CLQ-3000,4000			CLQ4-SET
CLQ-6000,6500,7000	F6- standard 31 mm	H5 80 mm	CLQ65-SET
SSQ-2000			CLQ2-SET
SSQ-3000,4000	F3- standard 18 mm	H4 60 mm	CLQ4-SET
SSQ-6500, 7000			CLQ65-SET
α Q-4500,5000	F3- standard 18 mm	H4 60 mm	CLQ4-SET
α Q-6500			CLQ65-SET
(100V) VZQ-1510	F3- standard 18 mm	H4 60 mm	VZQ10-SET
(120V) VZQ-1820, 3012*2,4506			H5 100 mm or 6.35 mm hex bit (Dimension chart below)
(230V) VZQ-1812, 3007*2,4504	F6- standard 31 mm		VZQ18-SET*3

\*1 A longer bit than the standard type is required.  
\*2 VZQ-4506/VZQ-4504 are 6.35mm hex bit only.  
\*3 VZQ18-SET cannot use with other option attachment.  
Please refer to the order code table for ordering suction attachment.



## Electric Screwdrivers List

Model	Output Torque Range																				Unloaded Rotation Speed (r.p.m.)	Screw Size (mm)		Used in assembling					
	(kgf • cm)																					(Hi / LOW)	Small Size Screw		Tapping screw				
	0	0.5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18						19	20	30	40
<b>CL-2000</b>	█																									680 / 490	1.0 - 2.3	1.0 - 2.0	Cameras, watches, eyeglasses, cell phones, digital cameras, hard disks, CD drives, optical pickups, car audios, car navigation monitors, mini video recorders, small calculators
<b>CL-3000</b>	█																									1000 / 670	1.0 - 2.0	1.0 - 1.7	
<b>CL-4000</b>		█																								1000 / 690	1.4 - 2.6	1.4 - 2.3	
<b>CL-6000</b>			█																							800 / 500	2.0 - 3.0	2.0 - 2.6	Automobile parts, computers, printers, TVs, air conditioners, fan heaters, TV games, fax machines, communications equipment, copiers, scanners, laptop computers, jet printers, laser printers, satellite TV antennas, video recorder, car door mirrors, toys, electronic clinical thermometers
<b>CL-6500</b>				█																						900 / 600	2.0 - 4.0	2.0 - 3.0	
<b>CL-7000</b>					█																					750 / 500	2.0 - 5.0	2.0 - 4.0	
<b>CL-9000</b>						█																				530 (Hi or L)	4.0 - 6.0	4.0 - 6.0	Electrical components, computer parts, automobile compressors, pressurization equipment
<b>SS-2000</b>	█																									680 / 490	1.0-2.3	1.0-2.0	High density boards, hard disks, car navigation monitor, CD, MD and DVD players, digital cameras, cell phones, watches
<b>SS-3000</b>	█																									1000 / 670	1.0 - 2.0	1.0 - 1.7	
<b>SS-4000</b>		█																								1000 / 690	1.4 - 2.6	1.4 - 2.3	
<b>SS-6500</b>			█																							900 / 600	2.0 - 3.0	2.0 - 3.0	
<b>SS-7000</b>				█																						750 / 500	2.0 - 4.0	2.0 - 4.0	
<b>α-4500</b>					█																					1700 / 1200	2.0 - 3.0	2.0 - 2.6	TVs, communications equipment, copiers, fax machines, computers, POS systems, automobile parts, car door mirrors, taillights, headlights, electronic pianos, TV games, toys
<b>α-5000</b>						█																				1000 / 700	2.0 - 3.0	2.0 - 3.0	
<b>α-6500</b>							█																			1700 / 1200	3.0 - 4.0	2.6 - 3.0	
<b>VZ-1510 (100V)</b>								█																		1000	2.0 - 4.0	2.0 - 3.0	Home lighting equipment, pressurization equipment, washing machines
<b>VZ-1820 (120V)</b>									█																	2000	2.6 - 4.0	2.6 - 3.0	Automobile parts, car audios, car navigation monitors, air conditioners, office lighting equipment, car door mirrors, taillights, headlights, gas fixtures, vacuum cleaners, TV games, video recorders, communications equipment, copiers, laser printers, microwave ovens, TVs, power tools
<b>VZ-3012 (120V)</b>										█																1200	3.0 - 5.0	3.0 - 4.0	
<b>VZ-4506 (120V)</b>											█															600	3.0 - 5.0	2.6 - 4.0	
<b>VZ-1812 (220V-240V)</b>												█														1200	2.6 - 4.0	2.6 - 3.0	
<b>VZ-3007 (220V-240V)</b>													█													700	3.0 - 5.0	3.0 - 4.0	
<b>VZ-4504 (220V-240V)</b>														█												400	3.0 - 5.0	2.6 - 4.0	

### ESD

Variation **B**

### Anti-static electricity features

Anti-electrostatic material used in manufacture of the body case, switches, lever and power cord to protect against electrostatic charge accumulations.

● Surface resistance: 10<sup>4</sup> Ω

### NL

Variation **D**

### Noiseless Specifications

These reduce electrical noise generated by the screwdriver. Note that all models in the Q and SS series include these as standard specifications.

### Q-CR-ESD

Variation **C**

### Clean room, anti-static electricity features

The screwdrivers is equipped with a Vacuum pipes as well as a suction head to insure complete remover of fine particles generated by the screw tightening process in clean rooms.

● Surface resistance: 10<sup>4</sup> Ω  
● Cleanliness class 100

### OPC (100V Only)

Variation **E**

### Screwdriver for screw counter

Operates with the screw counter VZOP-STC to ensure that all screws are tightened. The screwdriver can be operated in ordinary and reverse directions as well as providing torque increase signals (after screw tightening is complete).

\* Refer to p10 for screw counters



## Handle low-torque tightening jobs with confidence!

- This screwdriver is especially designed to deliver low torque for accurate and stable fastening of precision screws.
- Model CL-2000 has a coreless motor with an especially long life.
- These mini type screwdrivers are suitable for those who prefer a light, compact tool.
- Running on low voltage, direct current, this tool is designed for safety.

### Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL*
Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools	

\* CE NL Type is CE mark compliant



## Well suited for many kinds of operations requiring a wide range of torque values

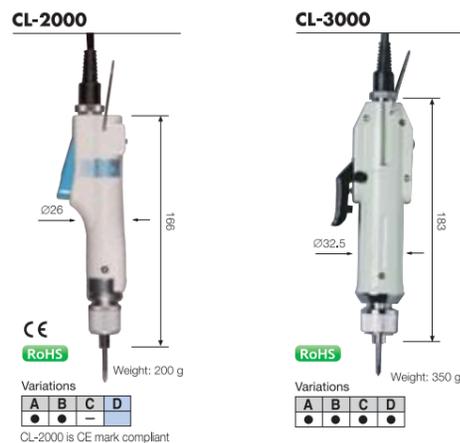
- This driver has been a long favorite of users who perform precision assembly, for its operability, reliability and stability.
- Has a grip designed for ease of operation over long work periods.
- Running on low voltage, direct current, this tool is designed for safety.

### Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL*
Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools	

\* CE NL Type is CE mark compliant

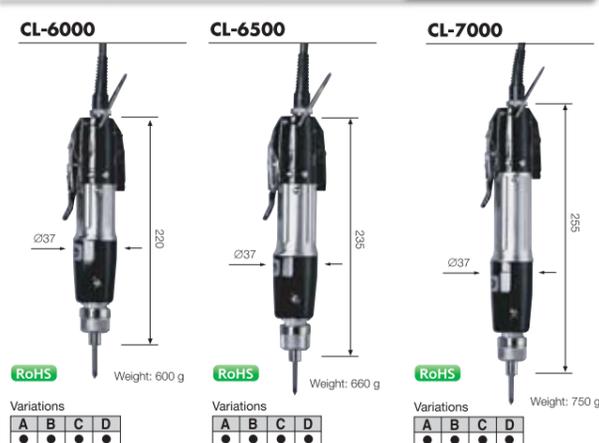
### Lever Start Type



### Push-to-Start Type



### Lever Start Type



### Push-to-Start Type



### Accessories for better operation

#### Push-start grip attachment PS-1 · PS-2

Converts the starting system of a mini size driver from lever-start to push-start.



Compatible model:  
**PS-1:** CL-4000 **PS-2:** CL-3000

### CL-9000 (with shockless stand)



### Accessories for better operation

#### Pistol attachment PA-65

This attachment converts a standard driver to a pistol-style driver.



#### Angle attachment

**ANGL-Z** (For Hios shanks)  
**ANGLX-Z** (For hex shanks)

Attach to the end of the driver when there isn't enough space for a standard driver to tighten the target screw.



### Specifications

Lever Start type Model	CL-2000	CL-3000	CL-4000		
Push-to-Start type Model		CL-3000PS	CL-4000PS		
Output Torque Range	N·m 0.02 - 0.2 lbf·in 0.17 - 1.7 (kgf·cm) (0.2 - 2)	0.03 - 0.2 0.3 - 1.7 (0.3 - 2)	0.1 - 0.55 0.9 - 4.8 (1 - 5.5)		
Torque Switching	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment		
Unloaded Rotation Speed (r.p.m)	HI 680 LOW 490	1000 670	1000 690		
Screw Size (mm)	Small Size Screw 1.0 - 2.3 Tapping Screw 1.0 - 2.0	1.0 - 2.0 1.0 - 1.7	1.4 - 2.6 1.4 - 2.3		
Bit Type	Hios H4	Hios H4	Hios H4 or 1/4HEX		
Power Pack	LHT-30	○	—		
	LVT-30	○	—		
	CLT-30	○	—		
	CLT-60	○	○		
	CLT-100	○	○		
MC-70L	○	○	○		
Accessories	Bit	(H4)	+ #0(∅2.0 x 40 mm) 1 piece + #0(∅2.5 x 40 mm) 1 piece	+ #0(∅2.0 x 40 mm) 1 piece + #0(∅2.5 x 40 mm) 1 piece	+ #0(∅2.0 x 40 mm) 1 piece + #1(∅4.0 x 40 mm) 1 piece + #1(∅5 x 50 mm) 1 piece + #2(∅5 x 50 mm) 1 piece -(∅5 x 50 mm) 1 piece
		(1/4 HEX)			
	Spring	Yellow	Gold	Blue	
	Carbon brush (Order code)		1 pair (A45-0420)	1 pair (CL4-0420)	
Cord Length (m)	1.5 m (5P)	1.5 m (5P)	1.5 m (5P)		

Ordercode  
 →P19

Model CL-2000's carbon brushes are located in a sealed case that cannot be opened for replacement by the user. In our test, they will last for 3-4 years when 6,000 operations are conducted daily (depends on the conditions of use).

### Specifications

Lever Start type Model	CL-6000	CL-6500	CL-7000	CL-9000	
Push-to-Start type Model		CL-6000PS	CL-6500PS	CL-7000PS	
Output Torque Range	N·m 0.2 - 1 lbf·in 1.7 - 8.8 (kgf·cm) (2 - 10)	0.3 - 1.6 2.6 - 14 (3 - 16)	0.3 - 2.5 2.6 - 22 (3 - 25)	1.2 - 5 10 - 43 (12 - 50)	
Torque Switching	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	
Unloaded Rotation Speed (r.p.m)	HI 800 LOW 500	900 600	750 500	530	
Screw Size (mm)	Small Size Screw 2.0 - 3.0 Tapping Screw 2.0 - 2.6	2.0 - 4.0 2.0 - 3.0	2.0 - 5.0 2.0 - 4.0	4.0 - 6.0	
Bit Type	Hios H5 or 1/4HEX	Hios H5 or 1/4HEX	Hios H5 or 1/4HEX	1/4 HEX	
Power Pack	CLT-60	○	○	—	
	CLT-100	○	○	—	
	MC-70L	○	○	—	
	CLT-75	—	—	○	
Accessories	Bit	(H5)	+ #1(∅5 x 60 mm) 1 piece + #2(∅5 x 60 mm) 1 piece	+ #1(∅5 x 60 mm) 1 piece + #2(∅5 x 60 mm) 1 piece	
		(1/4 HEX)	+ #1(∅5 x 50 mm) 1 piece + #2(∅5 x 50 mm) 1 piece -(∅5 x 50 mm) 1 piece	+ #1(∅5 x 50 mm) 1 piece + #2(∅5 x 50 mm) 1 piece -(∅5 x 50 mm) 1 piece	+ #2(∅7 x 100 mm) 1 piece + #3(∅7 x 100 mm) 1 piece
	Spring		White	Yellow	
	Carbon brush (Order code)	1 pair (CL65-0490)	1 pair (CL65-0490)	1 pair (CL65-0490)	
Cord Length (m)	2 m (5P)	2 m (5P)	2 m (5P)	2 m (5P)	

Ordercode  
 →P19



## Optimal tool for assembly of precision parts! A vibration-absorbing screwdriver

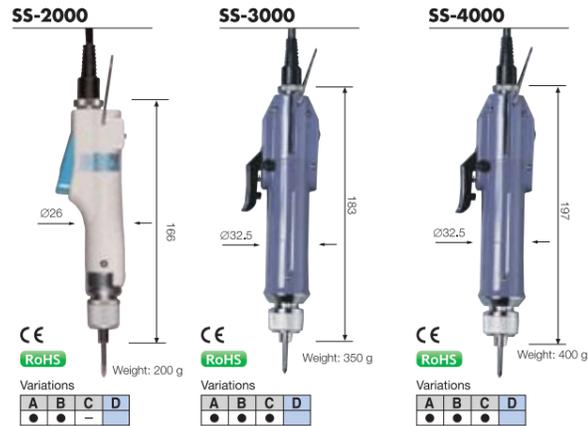
● Designed to reduce shock wave energy while the clutch is operating to minimize the effects of vibrations or impacts on the work. The optimal tool for assembly of hard disks, liquid crystal displays, high-density boards or other precision parts.

### Variation chart

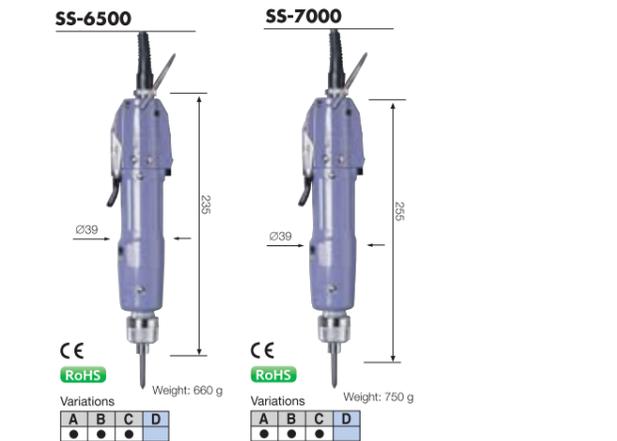
A	Q	B	ESD	C	Q-CR-ESD	D	NL*
Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools	

\*SS series has NL future as standard

### Lever Start Type



### Push-to-Start Type



### Accessories for better operation

**Pistol attachment PA-65**  
 This attachment converts a standard driver to a pistol-style driver.

**Compatible model:**  
 SS-6500, SS-7000

**Push-start grip attachment PS-1 · PS-2**  
 Converts the starting system of a mini size driver from lever-start to push-start.

**Compatible model:**  
 PS-1: SS-4000 PS-2: SS-3000

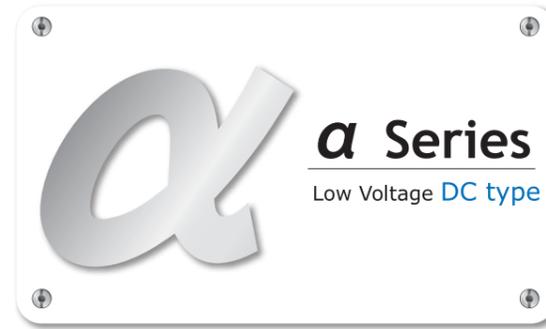
### Specifications

Lever Start type Model		SS-2000	SS-3000	SS-4000	SS-6500	SS-7000
Push-to-Start type Model		SS-3000PS		SS-4000PS		
Output Torque Range	N·m	0.02 - 0.2	0.03 - 0.2	0.1 - 0.45	0.25 - 1.3	0.3 - 2
	lbf·in (kgf·cm)	0.17 - 1.7 (0.2 - 2)	0.3 - 1.7 (0.3 - 2)	0.9 - 3.9 (1 - 4.5)	2.2 - 11 (2.5 - 13)	2.6 - 17.4 (3 - 20)
Torque Switching		Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment
Unloaded Rotation Speed (r.p.m)	HI	680	1000	1000	900	750
	LOW	490	670	690	600	500
Screw Size (mm)	Small Size Screw	1.0 - 2.3	1.0 - 2.0	1.4 - 2.6	2.0 - 3.0	2.0 - 4.0
	Tapping Screw	1.0 - 2.0	1.0 - 1.7	1.4 - 2.3	2.0 - 3.0	2.0 - 4.0
Bit Type		Hios H4	Hios H4	Hios H4 or 1/4HEX	Hios H5 or 1/4HEX	Hios H5 or 1/4HEX
Power Pack	CLT-30	○	○	○	○	○
	CLT-60	○	○	○	○	○
	CLT-100	○	○	○	○	○
	MC-70L	○	○	○	○	○
Accessories	Bit	(H4)	+ #0(Ø2.0 x 40 mm) 1 piece + #0(Ø2.5 x 40 mm) 1 piece	+ #0(Ø2.0 x 40 mm) 1 piece + #0(Ø2.5 x 40 mm) 1 piece	+ #0(Ø2.5 x 40 mm) 1 piece + #1(Ø4.0 x 40 mm) 1 piece	
		(H5)			+ #1(Ø5 x 60 mm) 1 piece + #2(Ø5 x 60 mm) 1 piece	+ #1(Ø5 x 60 mm) 1 piece + #2(Ø5 x 60 mm) 1 piece
	(1/4 HEX)			+ #1(Ø5 x 50 mm) 1 piece + #2(Ø5 x 50 mm) 1 piece -(Ø5 x 50 mm) 1 piece	+ #1(Ø5 x 50 mm) 1 piece + #2(Ø5 x 50 mm) 1 piece -(Ø5 x 50 mm) 1 piece	+ #1(Ø5 x 50 mm) 1 piece + #2(Ø5 x 50 mm) 1 piece -(Ø5 x 50 mm) 1 piece
Spring		Yellow	Gold	Blue		
Carbon brush (Order code)			1 pair (A45-0420)	1 pair (CL4-0420)	1 pair (CL65-0490)	1 pair (CL65-0490)
Cord Length (m)		1.5 m (5P)	1.5 m (5P)	1.5 m (5P)	2 m (5P)	2 m (5P)

### Ordercode

→P19

Model SS-2000's carbon brushes are located in a sealed case that cannot be opened for replacement by the user. In our test, they will last for 3-4 years when 6,000 operations are conducted daily (depends on the conditions of use).



## Powerful, high speed motor boosts your productivity

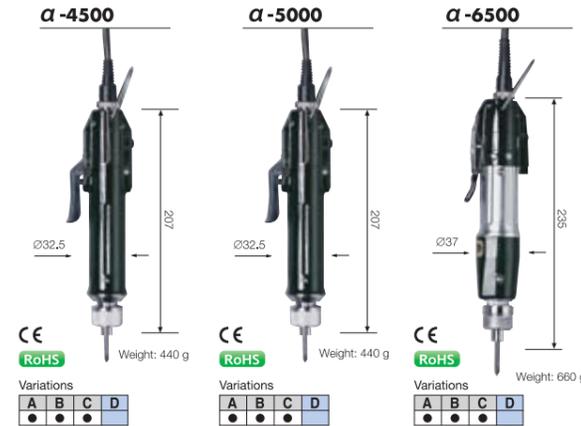
● High speed (1,700 rpm) Models α-4500 or α-6500 increase operating efficiency.  
 ● The α-5000 driver is a compact model having a powerful, high speed motor.  
 ● Features a low voltage power safety design that makes it possible for the user to conduct maintenance.

### Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL*
Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools	

\*α series has NL future as standard

### Lever Start Type



### Push-to-Start Type



### Accessories for better operation

**Pistol attachment PA-65**  
 This attachment converts a standard driver to a pistol-style driver.

**Compatible model:**  
 α-6500

**Angle attachment ANGL-Z** (For Hios shanks)  
**ANGL-X** (For hex shanks)  
 Attach to the end of the driver when there isn't enough space for a standard driver to tighten the target screw.

**Compatible model:**  
 α-6500 (Lever Start type only)

**Push-start grip attachment PS-1 · PS-2**  
 Converts the starting system of a mini size driver from lever-start to push-start.

**Compatible model:**  
 PS-1: α-4500, α-5000

### Specifications

Lever Start type Model		α-4500	α-5000	α-6500
Push-to-Start type Model		α-4500PS	α-5000PS	α-6500PS
Output Torque Range	N·m	0.4 - 0.8	0.4 - 1.2	0.5 - 1.8
	lbf·in (kgf·cm)	3.5 - 7 (4 - 8)	3.5 - 10 (4 - 12)	4.3 - 16 (5 - 18)
Torque Switching		Stepless Adjustment	Stepless Adjustment	Stepless Adjustment
Unloaded Rotation Speed (r.p.m)	HI	1700	1000	1700
	LOW	1200	700	1200
Screw Size (mm)	Small Size Screw	2.0 - 3.0	2.0 - 3.0	3.0 - 4.0
	Tapping Screw	2.0 - 2.6	2.0 - 3.0	2.6 - 3.0
Bit Type		Hios H4 or 1/4HEX	Hios H4 or 1/4HEX	Hios H5 or 1/4HEX
Power Pack	CLT-60	○	○	○
	CLT-100	○	○	○
	MC-70L	○	○	○
Accessories	Bit	(H4)	+ #1(Ø4.0 x 40 mm) 1 piece + #2(Ø4.0 x 40 mm) 1 piece	+ #1(Ø4.0 x 40 mm) 1 piece + #2(Ø4.0 x 40 mm) 1 piece
		(H5)		+ #1(Ø5 x 60 mm) 1 piece + #2(Ø5 x 60 mm) 1 piece
	(1/4 HEX)	+ #1(Ø5 x 50 mm) 1 piece + #2(Ø5 x 50 mm) 1 piece -(Ø5 x 50 mm) 1 piece	+ #1(Ø5 x 50 mm) 1 piece + #2(Ø5 x 50 mm) 1 piece -(Ø5 x 50 mm) 1 piece	+ #1(Ø5 x 50 mm) 1 piece + #2(Ø5 x 50 mm) 1 piece -(Ø5 x 50 mm) 1 piece
Carbon brush (Order code)		1 pair (A45-0420)	1 pair (A45-0420)	1 pair (CL65-0490)
Cord Length (m)		1.5 m (5P)	1.5 m (5P)	2 m (5P)

### Ordercode

→P19

# Power Supply for DC drivers

## CLT-30



Connects to one CL-2000, CL-3000, SS-2000 or SS-3000 model.



### Specifications

Model	<b>CLT-30</b>
Input	AC100-240V ±5% (47-63 Hz)
Output Voltage	LOW/HI
Size (mm)	62x134x40 (H)
Weight (kg)	0.3
Power Cord Length (m)	1.8

## CLT-60



Connects to one CL, SS or α series driver. (except CL-9000 model).



### Specifications

Model	<b>CLT-60</b>
Input	AC100-240V ±5% (47-63 Hz)
Output Voltage	LOW/HI
Size (mm)	88x210x52 (H)
Weight (kg)	0.83
Power Cord Length (m)	1.8

## LHT-30



Connects to one CL-2000 and CL-3000 model.

Power output ranges from 15V to 30V. Precise output control is possible in sixteen one-volt increments. A low-to-high feature is also included. For a set period of time after start-up (adjustable to 0, 0.2, 0.4, or 0.6 seconds) the screwdriver will rotate at a slow speed, helping to secure a firm fit between bit and screw and screw and pilot hole.



### Specifications

Model	<b>LHT-30</b>
Input	AC100-240V ±5% (47-63 Hz)
Output Voltage	15V-30V, Volume adjustment
Size (mm)	85x155x42(H)
Weight (kg)	0.37
Power Cord Length (m)	1.8

## LVT-30



Connects to one CL-2000 and CL-3000 model.

The LVT-30 is a switching power pack that connects to HIOS power torque/low-torque drivers. It includes controls for low rpm/low torque screw fixing jobs and 16-stage adjustable rpm.



### Specifications

Model	<b>LVT-30</b>
Input	AC100-240V ±5% (47-63 Hz)
Output Voltage	15V-30V, Volume adjustment
Size (mm)	85x155x42(H)
Weight (kg)	0.37
Power Cord Length (m)	1.8

## CLT-100



Connects to two CL, SS or α series driver. (except the α -6500, CL-9000 model).



### Specifications

Model	<b>CLT-100</b>
Input	AC100V,120V or 220-240V ±5% (50/60 Hz)
Output Voltage	LOW/HI
Size (mm)	182x145x132 (H)
Weight (kg)	4.0
Power Cord Length (m)	1.8

## MC-70L



Connects to many CL,SS, α series drivers.



### Specifications

Model	<b>MC-70L*</b>	
Input	AC100V,120V or 220-240V ±5% (50/60 Hz)	
Output Voltage	LOW/HI	
Size (mm)	320x220x153 (H)	
Weight (kg)	12.0	
Power Cord Length (m)	1.8	
Accessories	Trunk-line wire 20 m 1 line (Black and Red), Branch-line wire 0.5 m 10 lines (Black and Red) , U-Element 20 pcs. #560B	
Max. number of drivers	Up to 20	CL-2000,CL-3000,CL-4000,SS-2000,SS-3000,SS-4000
	Up to 10	CL-6000,CL-6500,CL-7000,SS-6500,SS-7000,α-4500,α-5000
	Up to 5	α-6500

### Control box CB-105(SUB)



Control boxes for cutting off and supplying current in response to clutch action of drivers. Each driver should be connected to one control box.

### Specifications

Size (mm)	70 x 42 x 100(H)
Weight (g)	240
Input cord Length (m)	2
Attachment Plates	2 pieces



## CLT-75



Connects to one CL-9000 model.



### Specifications

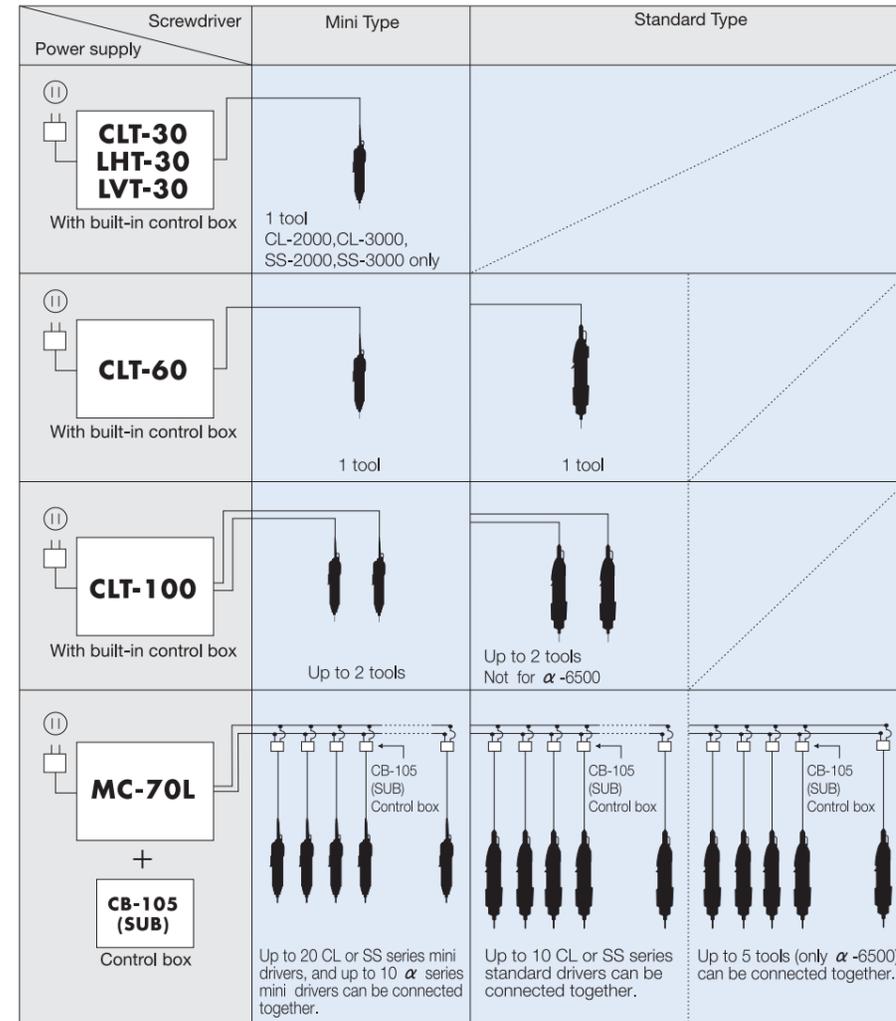
Model	<b>CLT-75</b>
Input	AC100V,120V or 220-240V ±5% (50/60 Hz)
Output Voltage	HI
Size (mm)	182x220x133 (H)
Weight (kg)	6.0
Power Cord Length (m)	1.8

# DC driver and power unit combinations

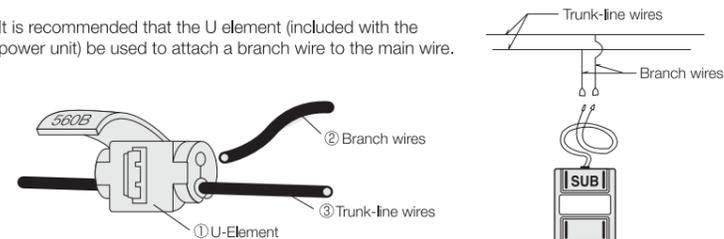
## Classification of Screwdrivers

Mini Type ( CL-2000, CL-3000, CL-4000, SS-2000, SS-3000, SS-4000, α -4500, α -5000)

Standard Type ( CL-6000, CL-6500, CL-7000, SS-6500, SS-7000, α -6500)



It is recommended that the U element (included with the power unit) be used to attach a branch wire to the main wire.



1. Holding the slot at the bottom of the element open, push the main wire into the groove.
2. Insert the cut area of the branch wire through the upper hole from the right and push it in all the way to the opposite end.
3. Use pliers to forcefully push U element flat with plastic body.
4. Snap on the insulation cover.

### [Accessories]

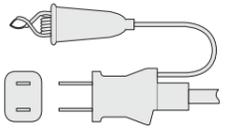
LEAD KIT for MC-70L

Parts No. MCCB-SET

- U-Element 20 pieces
- Branch wire 10 pieces (Black & Red)
- Trunk-line wire 20m 1 pieces (Black & Red)

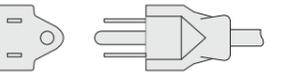
## ● Plug

### Type A-1 / 100V

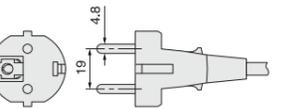


Please send inquiry concerning 100 V specifications.

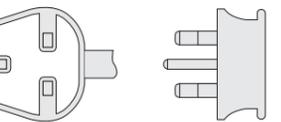
### Type A-2 / 120V



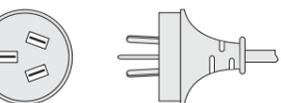
### Type C / 220V



### Type BF / 220V - 240V



### Type S / 220V - 240V





## No-transformer driver, for hard duty

- Has built-in controller, transformer is required.
- Can be plugged into an ordinary AC outlet.
- Its light, slim body is balanced to minimize fatigue of the operator's hand.
- Both Hios H5 bit and 5 mm hexagonal bit can be used with the standard type. (excluding VZ-1510, VZ-1510PS, VZ-4506, VZ-4506PS, VZ-4504, VZ-4504PS model)

### Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL	E	OPC
	Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools		Screwdriver for screw counter



### Variation chart

A	Q	B	ESD	C	Q-CR-ESD	D	NL	E	OPC
	Suction		Anti-static electricity features		Clean room and anti-static electricity features		Electrical noise is more subdued than in standard tools		Screwdriver for screw counter

### Lever Start Type

### Push-to-Start Type

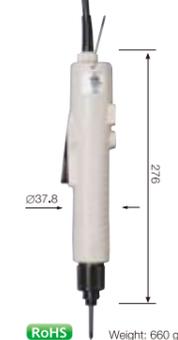
(100 V)  
VZ-1510



RoHS Weight: 497 g

A	B	C	D	E
●	-	-	-	●

(120 V)  
VZ-1820



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

(100 V)  
VZ-1510PS



RoHS Weight: 502 g

A	B	C	D	E
●	-	-	-	●

(120 V)  
VZ-1820PS



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

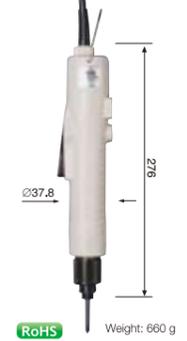
(120 V)  
VZ-3012



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

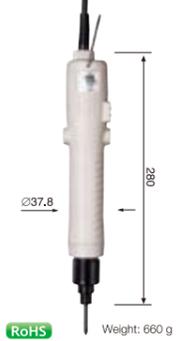
(120 V)  
VZ-4506



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

(120 V)  
VZ-3012PS



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

(120 V)  
VZ-4506PS



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

### Lever Start Type

### Push-to-Start Type

VZ-1812



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

VZ-3007



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

VZ-4504



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

VZ-1812PS



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

VZ-3007PS



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

VZ-4504PS



RoHS Weight: 660 g

A	B	C	D	E
●	-	-	-	-

### Accessories for better operation

#### Pistol attachment PA-18 · PA-18PS

This attachment converts a standard driver to a pistol-style driver.



RoHS

Compatible model:

PA-18: Lever Start type only  
PA-18PS: Push-to-Start type only  
(excluding VZ-1510, VZ-1510PS model)

#### Angle attachment

ANGLV-Z-CH (For Hios shanks)  
ANGLV-Z-XX (For hex shanks)

Attach to the end of the driver when there isn't enough space for a standard driver to tighten the target screw.



RoHS

Compatible model:

Lever Start type only  
(excluding VZ-1510, VZ-1510PS model)

### Specifications

Input	100 V	120 V	120 V	120 V
Lever Start type Model	<b>VZ-1510*</b>	<b>VZ-1820</b>	<b>VZ-3012</b>	<b>VZ-4506</b>
Push-to-Start type Model	<b>VZ-1510PS*</b>	<b>VZ-1820PS</b>	<b>VZ-3012PS</b>	<b>VZ-4506PS</b>
Output Torque N·m	0.15 - 1.5	0.4 - 1.8	0.9 - 3	1 - 4.5
Range	lbf·in (kgf·cm)	3.5 - 16 (4 - 18)	7.8 - 26 (9 - 30)	8.8 - 39 (10 - 45)
Torque Switching	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment
Unloaded Rotation Speed (r.p.m) ±10%	1000	2000	1200	600
Screw Size	Small Size Screw	2.0 - 4.0	2.6 - 4.0	3.0 - 5.0
(mm)	Tapping Screw	2.0 - 3.0	2.6 - 3.0	3.0 - 4.0
Bit Type	Hios H4	Hios H5 & 5 HEX or 1/4HEX	Hios H5 & 5 HEX or 1/4HEX	1/4HEX
Power cable (m)	3m	3m	3m	3m
Accessories	Bit	(H4)	+#1(∅4 x 40 mm) 1 piece +#2(∅4 x 40 mm) 1 piece	
		(H5)	+#1(∅5 x 60 mm) 1 piece +#2(∅5 x 60 mm) 1 piece	
		(1/4 HEX)	+#1(∅5 x 50 mm) 1 piece +#2(∅5 x 50 mm) 1 piece -(∅5 x 50 mm) 1 piece	
Carbon brush (Order code)	1 pair (ACL10-0490)	1 pair (VZ18-0480)	1 pair (VZ18-0480)	1 pair (VZ18-0480)

Ordercode  
→P20

\*3PIN to 2 PIN power cable adaptor is attached (for VZ-1510, VZ-1510PS)

### Specifications

Input	220 V - 240 V	220 V - 240 V	220 V - 240 V	
Lever Start type Model	<b>VZ-1812</b>	<b>VZ-3007</b>	<b>VZ-4504</b>	
Push-to-Start type Model	<b>VZ-1812PS</b>	<b>VZ-3007PS</b>	<b>VZ-4504PS</b>	
Output Torque N·m	0.4 - 1.8	0.9 - 3	1 - 4.5	
Range	lbf·in (kgf·cm)	3.5 - 16 (4 - 18)	7.8 - 26 (9 - 30)	
Torque Switching	Stepless Adjustment	Stepless Adjustment	Stepless Adjustment	
Unloaded Rotation Speed (r.p.m) ±10%	1200	700	400	
Screw Size	Small Size Screw	2.6 - 4.0	3.0 - 5.0	
(mm)	Tapping Screw	2.6 - 3.0	3.0 - 4.0	
Bit Type	Hios H5 & 5 HEX or 1/4HEX	Hios H5 & 5 HEX or 1/4HEX	1/4HEX	
Power cable (m)	3m	3m	3m	
Accessories	Bit	(H5)	+#1(∅5 x 60 mm) 1 piece +#2(∅5 x 60 mm) 1 piece	
		(1/4 HEX)	+#1(∅5 x 50 mm) 1 piece +#2(∅5 x 50 mm) 1 piece -(∅5 x 50 mm) 1 piece	
		Carbon brush (Order code)	1 pair (VZ18-0480B)	1 pair (VZ18-0480B)

Ordercode  
→P20

The actual rpm values will vary somewhat from the values in the table according to input voltage variation. Please consider the table values as approximate.

# Power Supply with Screw Counter

The number of screws to be tightened can be set from 1 to 99, with the remaining number counted down after each screw is tightened.

- Buzzer to indicate screw tightening complete**  
A buzzer will sound when the final screw has been tightened to allow a check of complete screw tightening.
- Auto reset function**  
The count down number is automatically reset after all screws have been tightened so that work can start on the next job immediately. The screwdriver will not be operable until the "next work set" confirmation SET signal is input.
- Count timer function**  
Prevents confirmation tightening, supplemental tightening and secondary tightening from being counted.
- Normal power mode**  
In normal power mode the count function is disabled.

## VZOP-STC (AC100V Only)

RoHS

### VZ-OPC screwdriver single power point

#### Specifications

Model	VZOP-STC
Input	AC100V ±5% (50/60Hz)
Power consumption (w)	2W / load free
Size (mm)	160x175x84(H)
Weight (kg)	1.5
Power cord length (m)	1.8



## CLT-70STC3

RoHS CE

### CL,SS, α screwdriver single power point

#### Specifications

Model	CLT-70STC3
Input	AC100V-240V ±5% (47-63Hz)
Power consumption (w)	75W output with DC31V input
Output	HI: DC31V±5% LOW: DC20V±5% (with overload protection)
Size (mm)	127x208x76(H)
Weight (kg)	1.8
Power cord length (m)	1.8



## Part names and functions CLT-70STC3

### Front panel



### Function (F1, F2, F3) operation mode, operation time, buzzer settings etc

F1	Set number of screws to be tightened (01 to 99) COUNT NUMBER	Set the number of screws to be tightened
	Set count timer (.00 to 0.99 seconds) COUNT TIMER (CN-T)	Setting to prevent counting of secondary tightening operations
	Set work set timer (0.0 to 3.9 seconds) WORK SET TIMER (WS-T)	Time until the screwdriver is operational
	Set work reset timer (0.0 to 3.9 seconds) WORK RESET TIMER (WR-T)	Time until the screwdriver becomes not operational
F2	Set reverse count timer (0.1 to 1.0 seconds) REVERSE COUNT TIMER (RCN-T)	Time until the count starts after reverse operation
	Display the rest of the screw. Control the sound of the buzzer. Setting the ON/OFF of the reverse count.	
F3	Control the motion of the counter at any time. Setting the ON/OFF of the torque-up sound of the buzzer.	
Metal connector	Connects to the CL,SS,α screwdriver.	

\* The control panel display and some functions of the VZOP-STC differ slightly.

### Rear panel



### Terminal block

Terminal	Label	Description
(A)	COMP	"Work complete" signal output terminal, open collector output (maximum load rating DC30V/80mA)
(B)	RESET	Resets the count timer, input terminal for the "work fixed released" signal from external equipment
(C)	SET	Input terminal for the "work set confirmation" signal
(D)	GND	—
(E)	+DC24V	Power supply terminal for external equipment, maximum rating DC24V/0.2A
(F)	VALVE	Output terminal for external equipment control, open collector output (maximum load rating DC30V/80mA)
(G)	BZ	Work complete output terminal, open collector output (maximum load rating DC30V/80mA)
(H)	ER BZ	Warning output open collector output if work is removed before operation is complete (maximum load rating DC30V/80mA)

## Separate Counter

Compact external screw counter. Connected in-between a screwdriver and a power unit.

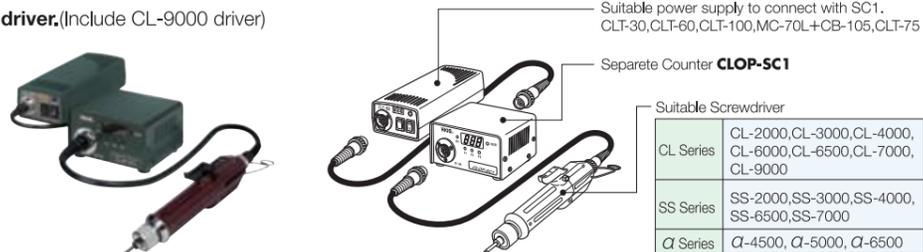
## CLOP-SC1 (For one drivers)

RoHS

Compatible model : CL,SS or α series driver.(Include CL-9000 driver)

#### Specifications

Model	CLOP-SC1
Input	DC20V/31V
Out put	Depends on the HIOS Power Unit (Same as primary power voltage)
Size (mm)	110x100x55(H) (casing only)
Weight (kg)	0.6
Power cord Length (m)	1.5 (5P)



# CD Series / SB Series / Peripherals

## Cell type Screwdriver

### Seruste21 CD series

Can turn up to 4,000 M3 screws on a single charge. Has features for monitoring operations to insure that every last screw is properly fastened.

#### Bench-mount model CDB-12



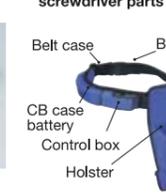
A: CDB-12 / B: CDC-12

#### Portable model CDS-12



A: CDS-12 / B: CDC-12

#### Cell type portable screwdriver parts



#### Specifications of battery for portable/bench-mount screwdrivers

Model	CDS-12	CDB-12
Voltage Input Rating	10 cells 12 VDC	10 cells 12 VDC
Battery capacity	1900 mAh	1900 mAh
Dimensions (mm)	—	152x100x50 (H)
Belt Length (cm)	70 - 110*	—
Weight (g)	1010	930
Connector	6P	6P
Monitoring function	Has power switch and breaker restore function.	

\* The indicated weight of the 1,900 mAh portable-type battery, includes belt, belt case, CB case, control box and holster.

#### Accessories to battery for portable model

Model	Name	Part No.
CDS-12	Belt	CDS12-HD 01
	Belt case	CDS12-HD 02
	CB case	CDS12-HD 03
	Holster	CDS12-HD 04
	Control box (skeleton type)	CDS12-CB
Battery(1,900 mAh)	CDS12-BT-19	

#### Specifications of rechargeable batteries for holster and stationary type models

Model	CDC-12
Input	AC100 V±5% (50/60 Hz)
Output	DC15 V 1900 mAh
Charging time	1 hour - 1 hour and half
Dimensions (mm)	180x97x78 (H)
Weight	1500 g
Connector	6P

#### Specifications

Lever Start type Model	CD-4000	CD-5000	CD-6000	CD-7000	
Push-to-Start type Model	CD-4000PS	CD-5000PS	CD-6000PS	CD-7000PS	
Voltage Input Rating	12 VDC	12 VDC	12 VDC	12 VDC	
Output Torque Range	N·m	0.1 - 0.5	0.4 - 1.2	0.5 - 1.5	0.5 - 1.8
	lbf·in (kgf·cm)	0.9 - 4.3 (1 - 5)	3.5 - 10 (4 - 12)	4.3 - 13 (5 - 15)	4.3 - 16 (5 - 18)
Torque Switching	Stepless Adjustment				
Unloaded Rotation Speed (r.p.m)	1000	1000	1300	900	
Screw Size (mm)	Small Size Screw	1.4 - 2.6	2.0 - 3.0	2.6 - 4.0	2.6 - 4.0
	Tapping Screw	1.4 - 2.3	2.0 - 3.0	2.6 - 4.0	2.6 - 4.0
Bit	Hios H4 or 1/4HEX		Hios H5 or 1/4HEX		
Cord	6P 2 m curled cord				

※Refer to Carbon brushes/ P.20

## Electric Tools

### SB Series Tapper

Can be set for tapping to any depth. Pressure on forward and backward rotation is the same, so there is no chance of loss of threading accuracy or broken taps.

#### SB-400C (Cord Type)



A: SB-400C / B: SBT-50

#### SB-650C (Cord Type)



A: SB-650C / B: SBT-50

#### Specifications

※ CE: NL type is CE mark compliant

Model	SB-400C	SB-650C	
Tap capacity (mm)	0.9 - 2.6	2.0 - 4.0	
Chuck dia. (mm)	Max. 4 mm	Max. 6.5 mm	
Safe load torque adjustable range (N·m)	0.1 - 5.5	0.3 - 1.6	
Unloaded Rotation Speed (r.p.m) HI	1,000	900	
Total length (not including tap)	220	295	
Weight	450 g	750 g	
Accessories	Stopper	2mm, 2.3mm, 2.6mm 1 piece each	2.6mm, 3mm, 4mm 1 piece each
	Chuck key	1 piece	1 piece
	Cord	5P 1.5 m	5P 2 m

#### Specifications of Speial Power Supply (Option)

Model	SBT-50
Input	AC220,120V,or 220-240 V±5% (50/60 Hz)
Output	HI/LOW Two stage settings Max 2.5 A
Power consumption	48 W
Size (mm)	105 (W)×185 (D)×91 (H)
Weight	Approx. 2.7 g
AC cord length	1.8 m (Inlet type with ground wire)

## Vertical-Operation

### Screwdriver Stand

RoHS

Keeps driver in vertical position for screw tightening operations.

### VMS-40 VMS-50 VMS-50VZ

#### Specifications

Model	VMS-40	VMS-50	VMS-50VZ
Stand length (mm)	515	615	615
Weight (kg)	2.5	2.65	2.65
Appropriate driver	All models except VZ screwdriver		Only for VZ screwdriver



## Flexible screwdriver cord 2m

RoHS

Flexible cord that is resistant to kinking or bending for heavy duty.

Compatible models:  
CL, SS, α Series (5P)



## Screwdriver extension cord 3m/5m

RoHS

Use this cord as an extension cord when the standard screwdriver cord is not long enough.

Compatible models:  
CL,SS, α Series (5P)



## Vacuum pump

RoHS CE (for suction screwdriver)

A vacuum is generated to pick up and hold the screw on the bit end.

### VP-3

#### Specifications

Model	VP-3
Primary power input	AC100V,120V,or220-240V±5%
Max. power consumption	39W
Vacuum attained	-350mm Hg
Dimensions (mm)	200x188x142(H)
Weight (kg)	3.8



## Handy Screwdriver for Clocks (With wood handle grip)

### WOOD-4

Applicable bit:  
Hios H4 (Ø4)



### Wood handle grip

RoHS

### WOOD-5

Applicable bit:  
Hios H5 (Ø5)



# Digital Torque Meter Series

## Hios torque meters are world standard instruments.

- Measurement data can be transferred to a computer. (This requires an input tool.)
- Up to 100 data measurements can be stored in memory at a time. (HP series and HDP series)
- Can be checked maximum, minimum and average torque measurement. (HP series and HDP series)
- Measurement can be easily taken in either clockwise or counterclockwise direction.
- Data can be output either numerically or as waveforms.
- Light, compact and operating on a rechargeable battery, it is convenient for carrying around any job site.

# HP

HP-10  
HP-100

RoHS CE



Use for making torque settings on electric drivers, checking torque of torque wrenches or measuring torque of fasteners, etc.

Model		HP-10	HP-100
Peak measuring range	N • m	0.015 - 1.000	0.15 - 10.00
	lbf • in	0.15 - 9.00	1.5 - 90.0
	(kgf • cm)	(0.15 - 10.00)	(1.5 - 100.0)
Accuracy		Up to ± 0.5% (F.S.)	
Measuring modes		track, peak, first peak	
Dimensions (mm)		230 x 124 x 65.2 (H)	
Weight		1.8kg	
Battery pack (charging time)		1.2V NiMH cells 1,000mA (6 hours)	
Continuous running time on a full charge		8 hours	
Battery life		Approx. 300 charges	
Exclusive battery charger		AC 100V-240V input (50 or 60Hz)	
		DC 7.3V-8V output 0.5 A	

# HDP

HDP-5  
HDP-50  
HDP-100 (option)

RoHS CE



Use for measuring slack torque of fastened screws or torque increase.

Model		HDP-5	HDP-50	HDP-100
Peak measuring range	N • m	0.015 - 0.500	0.15 - 5.00	0.15 - 10.00
	lbf • in	0.15 - 4.40	1.5 - 44.0	1.5 - 90.0
	(kgf • cm)	(0.15 - 5.00)	(1.5 - 50.0)	(1.5 - 100.0)
Accuracy		Up to ± 0.5% (F.S.)		
Measuring modes		track, peak, first peak		
Dimensions (mm)	Display unit	125 x 95.6 x 42(H)		
	Detector	104(L) x Ø21	160(L) x Ø34.5	
Weight	Display unit	780g		
	Detector	68g	250g	
Detector cord		1.7m (No.: DPC-0506)		
Battery pack (charging time)		1.2V NiMH cells 1,000mA (6 hours)		
Continuous running time on a full charge		8 hours		
Battery life		Approx. 300 charges		
Exclusive battery charger		AC 100V-240V input (50 or 60Hz)		
		DC 7.3V-8V output 0.5A		

# HM

HM-10  
HM-100

RoHS CE



Use for control of torque of automatic drivers.

Model		HM-10	HM-100
Peak measuring range	N • m	0.015 - 1.000	0.15 - 10.00
	lbf • in	0.15 - 9.0	1.5 - 90.0
	(kgf • cm)	(0.15 - 10.0)	(1.5 - 100.0)
Accuracy		Up to ± 0.5% (F.S.)	
Measuring modes		track, peak	
Dimensions (mm)		165 x 95 x 55(H)	
Weight		1.0 kg	
Detector cord		1.7m (No.: DPC-0506)	
Battery pack (charging time)		1.2V NiCd cell (8 hours)	
Continuous running time on a full charge		30 hours	
Battery life		Approx. 300 charges	
Exclusive battery charger		AC 100V, 120V or 220V-240V input	
		DC 7.2V output 120mA	

# HIT

HIT-200  
HIT-500  
HIT-2000

RoHS CE



Use for control of torque of impact drivers and torque wrenches.

Model		HIT-200	HIT-500	HIT-2000
Peak measuring range	N • m	0.15 - 18.00	1.5 - 50.0	25.0 - 180.0
	lbf • in	1.5 - 160.0	15 - 440	250 - 1600
	(kgf • cm)	(1.5 - 180.0)	(15 - 500)	(250 - 1800)
Accuracy		Up to ± 1% (F.S.)		
Measuring modes		peak, track, first peak		
Dimensions of display (mm)		165 x 95 x 55(H)		
Weight	Display unit	1.0 kg		
	Detector	0.85kg	1.65kg	1.65kg
Socket dimensions		9.5sq mm	12.7sq mm	12.7sq mm
Detector cord		1.7m (No.: DPC-0506)		
Battery pack (charging time)		1.2V NiCd cell (8 hours)		
Continuous running time on a full charge		30 hours		
Battery life		Approx. 300 charges		
Exclusive battery charger		AC 100V, 120V or 220V-240V input		
		DC 7.2V output 120mA		

## HP Standard Accessories

### Standard Accessories

Market Areas	Model	Fidaptor with Safety Guard	Driver Shaft*	Fidaptor Buffer Spring	Grease	Others
China Japan Korea Taiwan Hong Kong Singapore	HP-10	Hios shank Ø4 Measuring range: 0.15-0.6 N • m (Yellow Spring) 1 piece Part No. <b>TF4G-Z</b>				
	HP-100	Hios shank Ø5 Measuring range: 0.5-3 N • m (Black Spring) 1 piece Part No. <b>TF5G-Z</b>	Hex. shank (convertible shaft) 1 piece 5 mm subtense (upper) 6.35 mm subtense (Lower) Part No. <b>TF6XG-0010 (A)</b>  Hios shank Ø4 1 piece Part No. <b>TF5G-0010-4 (B)</b>	Yellow Spring 1 piece Measuring range: 0.15-0.6 N • m Part No. <b>CL65-0040</b>		Battery Charger  * See Battery Charger List
Europe U.S.A. Canada U.K. Australia	HP-10	Hex. shank (convertible shaft) Measuring range: 0.15-0.6 N • m (Yellow Spring) 1 piece 5 mm subtense (upper) 6.35 mm subtense (Lower) Part No. <b>TF6SG-Z</b>				Calibration Sheet
	HP-100	Hex. shank (convertible shaft) Measuring range: 0.5-3 N • m (Black Spring) 1 piece 5 mm subtense (upper) 6.35 mm subtense (Lower) Part No. <b>TF6XG-Z</b>		Yellow Spring 1 piece Measuring range: 0.15-0.6 N • m Part No. <b>CL65-0040</b>		Calibration Sheet

\*Driver shaft This threaded shaft is provided for use when the Hios 5mm shank does not fit the bit of the driver to be measured.

### Optional Fidaptors

#### For HP-10

Hios shank Ø4  
Measuring range:  
Less than  
0.25 N • m  
(Black Spring)  
1 piece  
Part No.  
**TF4S-Z**



Hex. shank  
Measuring range:  
3-9 N • m  
(Black Spring)  
1 piece  
Part No.  
**TF6U-Z**



#### For HP-100

Hex. shank  
Measuring range:  
3-9 N • m  
(Black Spring)  
1 piece  
Part No.  
**TF6UP-Z**



## HDP Standard Accessories

### Standard Accessories

Market Areas	Model	Bit	Sensor Unit Cord	Support Arm	Others
China Japan Korea Taiwan Hong Kong Singapore	HDP-5	Hios shank Ø4 +Bit #0 x 40 mm #1 x 40 mm #2 x 40 mm	1.7m 1 piece Part No. <b>DPC-0506</b>	1 piece	Battery Charger  * See Battery Charger List
	HDP-50	Hios shank Ø5 +Bit #0 x 60 mm #1 x 60 mm #2 x 60 mm			Calibration Sheet
	HDP-100 (Option)	6.35 mm hex shank +Bit #1 x 50 mm #2 x 50 mm			
Europe U.S.A. Canada U.K. Australia	HDP-5	6.35 mm hex shank +Bit #1 x 50 mm #2 x 50 mm	1.7m 1 piece Part No. <b>DPC-0506</b>	1 piece	Calibration Sheet
	HDP-50 (Option)	6.35 mm hex shank +Bit #1 x 50 mm #2 x 50 mm			

## HM Series

### Standard Accessories

Model	Fidaptor	Fidaptor Buffer Spring	Screws of Fidaptor	L-Type Wrench	Sensor Unit Cord	Others
HM-10	Phillips head #1 bit measuring range: 0.15-0.6 N • m one yellow spring Part No. <b>TFM26-Z</b>		5 pcs. of Phillips-head pan screw 2 pcs. of Hexagonal head screw	The Opposite side: 1.5mm 1Piece		Battery Charger  * See Battery Charger List
HM-100	Phillips head #2 bit measuring range: 0.5-3 N • m one black spring Part No. <b>TFM40-Z</b>	Yellow Spring 1 piece Measuring range: 0.15-0.6 N • m Part No. <b>CL65-0040</b>	5 pcs. of Phillips-head pan screw 2 pcs. of Hexagonal head screw	The Opposite side: 1.5mm, 2mm 1Piece each	1.7m 1 piece Part No. <b>DPC-0506</b>	Calibration Sheet

### Optional Fidaptors

#### For HM-10



Phillips head #0 bit measuring range:  
Less than 0.25 N • m (for measurement)  
(Red spring)  
Part No. **TFM20-Z**

## Battery Charger List

### HP/HDP Series

Market Areas	Battery Charger
China * Japan Korea Taiwan Hong Kong * Singapore * U.S.A. Canada U.K. * Australia *	100V-240V Part No. <b>TCH-MULTI (A plug)</b>
Europe	100V-240V Part No. <b>TCH-EU (C plug)</b>

\* Note : With 3 types Adaptor Plug



### HM/HIT Series

Market Areas	Battery Charger
Japan	100V Part No. <b>TCH-100N</b>
Korea Taiwan U.S.A. Canada	120V Part No. <b>TCH-120N</b>
Hong Kong Europe China	220V-240V Part No. <b>TCH-230G</b>
Singapore U.K. Australia	220V-240V Part No. <b>TCH-230B</b>



# Automatic screw feeder

## Model selection chart

Automatic screw feeder models (with replaceable rail)	Screw size										Screw transport type	Model features
	M1.0	M1.2	M1.4	M1.7	M2.0	M2.3	M2.6	M3.0	M4.0	M5.0		
<b>HSF Series</b> 	HSF-10	HSF-12	HSF-14	HSF-17	HSF-20		HSF-26	HSF-30			Horizontal transport type	<ul style="list-style-type: none"> <li>● Slim and compact body</li> <li>● Can be used with a range of screw sizes</li> </ul>
<b>Neji TaroII HS Series</b> 									HS-40	HS-50	Horizontal transport type	<ul style="list-style-type: none"> <li>● Can be used with two screw sizes</li> </ul>
<b>Neji TaroIII HSIII Series</b> 	HSIII-10C	HSIII-12C	HSIII-14C	HSIII-17C	HSIII-20	HSIII-23	HSIII-26	HSIII-30			Horizontal transport type	<ul style="list-style-type: none"> <li>● Can be used with eight screw sizes</li> </ul>
<b>Automatic Neji TaroII HS-RB Series</b> 									HS-40RB	HS-50RB	Horizontal transport type	<ul style="list-style-type: none"> <li>● Can be used with suction tip</li> </ul>
<b>Automatic Neji TaroIII HSIII-RB Series</b> 			HSIII-14 CRB	HSIII-17 CRB	HSIII-20 RB	HSIII-23 RB	HSIII-26 RB	HSIII-30 RB			Horizontal transport type	<ul style="list-style-type: none"> <li>● Can be used with suction tip</li> </ul>

## Neji Taro

### Speeding up your assembly lines

- A single unit can handle two screw sizes by simply replacing the rail (M4.0 and M5.0).
- The horizontal transport type can handle special screws.
- A single unit can handle eight screw sizes by simply replacing the rail (M1.0 to M3.0).
- The horizontal transport type can handle special screws.

**Neji TaroII**  
**HS Series** RoHS CE

**HS-40** [M4.0]  
**HS-50** [M5.0]

**Neji TaroIII**  
**HSIII Series** RoHS CE

**HSIII-10C** [M1.0]    **HSIII-20** [M2.0]  
**HSIII-12C** [M1.2]    **HSIII-23** [M2.3]  
**HSIII-14C** [M1.4]    **HSIII-26** [M2.6]  
**HSIII-17C** [M1.7]    **HSIII-30** [M3.0]

#### Specifications

Power (AC Adapter)	Power input	AC100V,115V or 230V (50/60Hz)
	Power output	DC12V 500mA
Dimensions (mm)/weight (kg) 130(W)×215(D)×136(H)/approximately 3.2kg (including the rail)		
Screw capacity 150cc		
Protection circuits Motor overload stop function		

● Included items/1 installed standard rail, 1 transport plate, 1 hexagonal L-shaped wrench 2mm wide.

#### Specifications

Power (AC Adapter)	Power input	AC100V,115V or 230V (50/60Hz)
	Power output	DC12V 500mA
Dimensions (mm)/weight (kg) 123(W)×181(D)×145(H)/approximately 3kg (including the rail)		
Screw capacity 80cc		
Protection circuits Motor overload stop function		

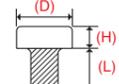
● Included items/1 installed standard rail, 1 transport plate, 1 hexagonal L-shaped wrench 2mm wide, 1 0.35mm gauge board.

#### Number of screws that can be supplied

Model	Neji TaroIII HSIII-300										
	Model number	HS-40	HS-50	HSIII-10C	HSIII-12C	HSIII-14C	HSIII-17C	HSIII-20	HSIII-23	HSIII-26	HSIII-30
Number of screws that can be supplied	Screw size	M4.0	M5.0	M1.0	M1.2	M1.4	M1.7	M2.0	M2.3	M2.6	M3.0
	Head diameter (D)	4.3~10.7	5.3~10.7	1.2~9	1.4~9	1.6~9	1.9~9	2.2~9	2.5~9	2.8~9	3.2~9
	Head thickness (H)	More than 0.5	More than 0.5	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35
	Shaft length (L)	5~18	6~18	1.6~20	1.8~20	2.0~20	2.3~20	2.6~20	2.9~20	3.2~20	3.6~20
Replacement rail model number		R-40	R-50	SR-10	SR-12	SR-14	SR-17	SR-20	SR-23	SR-26	SR-30

The sizes (D), (H) and (L) of screws that can be supplied in the specification chart refers to the following parts.

#### Number of screws that can be supplied

Number of screws that can be supplied	Screw size	
	Head diameter (D)	
	Head thickness (H)	
	Shaft length (L)	

#### Dimensions provided in specification charts

Automatic screw feeder dimensions do not include surface irregularities. See the DXF file for more information.

#### DXF File



External dimensions can be viewed in DXF file format from the Hios homepage.

\*Special software is required to view DXF files.

[Go to Peripheral Units](#) | [Screw Feeders](#) | [DXF File](#)

[www.hios.com](http://www.hios.com)

## HSF

### Ultra-slim 55mm design that is ideal for use in cell production.

- A single unit can handle a range of screw sizes by simply replacing the rail.
- The ultra-slim and compact design is ideal for working in confined areas.
- Can be adapted to line changes.
- The transport speed can be adjusted to suit the screws being used.
- A range of inputs (AC 100V to 240V).



### HSF Series

RoHS CE

**HSF-10** [M1.0]    **HSF-20** [M2.0]  
**HSF-12** [M1.2]    **HSF-26** [M2.6]  
**HSF-14** [M1.4]    **HSF-30** [M3.0]  
**HSF-17** [M1.7]

#### Specifications

Power (AC Adapter)	Power input	AC100V-240V 50/60Hz
	Power output	DC15V 1A
Dimensions (mm)/weight (kg) 55(W)×205(D)×14.25(H)/approximately 2.4kg (including the rail)		
Screw capacity 40cc		

● Included items/1 installed standard rail, 1 hexagonal L-shaped wrench 2mm wide.

#### Number of screws that can be supplied

Model	HSF-01						HSF-02	
	Model number	HSF-10	HSF-12	HSF-14	HSF-17	HSF-20	HSF-26	HSF-30
Number of screws that can be supplied	Screw size	M1.0	M1.2	M1.4	M1.7	M2.0	M2.6	M3.0
	Head diameter (D)	1.2~2.2	1.4~2.5	1.6~2.8	1.9~3.4	2.2~4.2	2.8~5.0	3.2~5.8
	Head thickness (H)	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35
	Shaft length (L)	1.6~16	1.8~16	2.0~16	2.3~16	2.6~16	3.2~16	3.6~16
Replacement rail model number		WR-10	WR-12	WR-14	WR-17	WR-20	WR-26	WR-30

## Neji Taro (for automatic line and vacuum pick up)

### Speeding up your automated lines

- A single unit can handle two screw sizes by simply replacing the rail (M4.0 and M5.0).
- A fast supply speed is more than capable of supplying screws to the automated tact (M3×8, 120 screws/minute).
- Compatible with suction tips.
- A single unit can handle six screw sizes by simply replacing the rail (M1.4 to M3.0).
- A fast supply speed is more than capable of supplying screws to the automated tact (M3×8, 120 screws/minute).
- Compatible with suction tips.

**Neji TaroII**  
**HS-RB Series** RoHS CE

**HS-40RB** [M4.0]  
**HS-50RB** [M5.0]

**Neji TaroIII**  
**HSIII-RB Series** RoHS CE

**HSIII-14CRB** [M1.4]    **HSIII-20RB** [M2.0]  
**HSIII-17CRB** [M1.7]    **HSIII-23RB** [M2.3]  
**HSIII-26RB** [M2.6]  
**HSIII-30RB** [M3.0]

#### Specifications

Power (AC Adapter)	Power input	AC100V,115V or 230V (50/60Hz)
	Power output	DC12V 500mA
Dimensions (mm)/weight (kg) 134(W)×275(D)×136(H)/approximately 4.2kg (including the rail)		
Screw capacity 150cc		
Protection circuits Motor overload stop function		

● Included items/1 installed standard rail, 1 transport plate, 1 hexagonal L-shaped wrench 2mm wide, 1 escaping plate.

#### Specifications

Power (AC Adapter)	Power input	AC100V,115V or 230V (50/60Hz)
	Power output	DC12V 500mA
Dimensions (mm)/weight (kg) 124(W)×181(D)×144(H)/approximately 3kg (including the rail)		
Screw capacity 80cc		
Protection circuits Motor overload stop function		

● Included items/1 installed standard rail, 1 transport plate, 1 hexagonal L-shaped wrench 2mm wide, 1 0.35mm gauge board, 1 escaping plate.

#### Number of screws that can be supplied

Model	Neji TaroII HS-450RB						Neji TaroIII HSIII-300RB			
	Model number	HS-40RB	HS-50RB	HSIII-14CRB	HSIII-17CRB	HSIII-20RB	HSIII-23RB	HSIII-26RB	HSIII-30RB	
Number of screws that can be supplied	Screw size	M4.0	M5.0	M1.4	M1.7	M2.0	M2.3	M2.6	M3.0	
	Head diameter (D)	4.3~10.7	5.3~10.7	1.6~9	1.9~9	2.2~9	2.5~9	2.8~9	3.2~9	
	Head thickness (H)	More than 0.5	More than 0.5	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35	
	Shaft length (L)	5~18	6~18	2.0~20	2.3~20	2.6~20	2.9~20	3.2~20	3.6~20	
Replacement rail model number		R-40RB	R-50RB	SR-14RB	SR-17RB	SR-20RB	SR-23RB	SR-26RB	SR-30RB	

# Mouthpieces

For suction head-equipped screwdrivers

## F3 Standard Type Mouthpiece 18mm

Driver model:  
CLQ-2000, CLQ-3000, CLQ-4000, SSQ-2000, SSQ-3000, SSQ-4000, αQ-4500, αQ-5000, VZQ-1510

Diagram of Mouthpiece

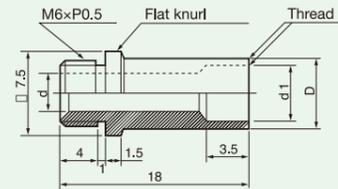


Table of Mouthpieces and Fasteners Standard parts are of BS only.

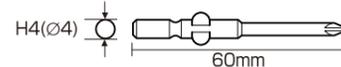
Order No. (Standard)	Standard Mouthpiece Dimensions (mm)				Type of screw head configuration		
	D	d	d1		JIS Phillips head (Small Screw)	JCIS Phillips head	JIS Slotted head (Small Screw)
F3-00	7.5				Blank	User-finished part	User-finished part
F3-01	3.3	2.1	2.1			User-finished part	User-finished part
F3-02	3.6	2.6	2.6			type 1 M1.4	
F3-03	4.1	3.1	3.1			type 1 M1.7/type 3 M1.4	
F3-04	4.6	3.6	3.6		Pan, Round M2.0	type 1 M2.0/type 3 M1.7	Pan, Round, Flat M2.0/Countersunk, Oval countersunk M1.7
F3-05	5.1	4.1	4.1		Pan, Round M2.3/Countersunk, Oval countersunk M2.0	type 1 M2.3/type 3 M2.0	Countersunk, Oval countersunk M2.0
F3-06	5.8	4.3	4.5		Pan, Round M2.6	type 1 M2.6/type 3 M2.3	Binding M2.0
F3-07	7.0	4.3	5.5		Pan, Round M3.0/Binding M2.6	type 3 M2.6	Pan, Round, Flat M3.0/Binding M2.6
F3-10	5.5	4.3	4.3		Binding M2.0		Pan, Round, Flat M2.3
F3-11	6.0	4.0	4.9		Binding M2.3a		Binding M2.3
F3-15	3.8	2.8	2.8				Pan, Round, Flat M1.4
F3-16	3.5	2.5	2.5				Countersunk, Oval countersunk M1.2
F3-17	4.3	3.3	3.3				Pan, Round, Flat M1.7

●Mouthpieces are supplied in packs of three.

### Bit

**H4(Ø4) 60mm (Overall length)**

Driver model:  
CLQ-2000, CLQ-3000, CLQ-4000, SSQ-2000, SSQ-3000, SSQ-4000, αQ-4500, αQ-5000, VZQ-1510



Head recess	Screw size	Adaptive screwdriver bit	Order code
JIS Phillips head	M2.0-M2.6	BP-H4-#1-3.0-60	BP4130060
	M3.0	BP-H4-#2-4.0-60	BP4240060
JCIS Phillips head	M1.4 type 1	BP-H4-#0-1.8-60	BP4018060
	M1.4-M1.7	BP-H4-#0-2.0-60	BP4020060
JCIS Slotted head	M2.0-M2.6	BP-H4-#0-2.5-60	BP4025060
	M1.2	BS-H4-2.0-60	BS420060
JCIS Slotted head	M1.4	BS-H4-2.5-60	BS425060
	M1.7-M2.0	BS-H4-3.0-60	BS430060
	M2.3-M3.0	BS-H4-4.0-60	BS440060

## F6 Standard Type Mouthpiece 31mm

Driver model:  
CLQ-6000, CLQ-6500, CLQ-7000, SSQ-6500, SSQ-7000, αQ-6500, VZQ-1820, VZQ-1812, VZQ-3007, VZQ-3012 \*VZQ-4504, \*VZQ-4506

Diagram of Mouthpiece A

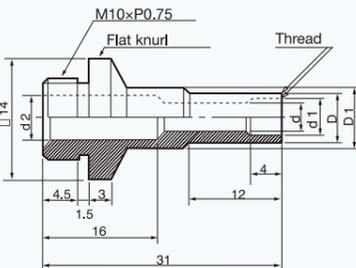


Diagram of Mouthpiece B

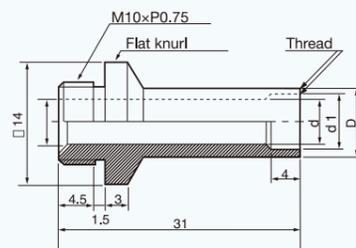


Table of Mouthpieces and Fasteners Standard parts are of BS only.

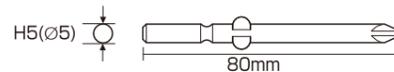
Diagram	Order No. (Standard)	Standard Mouthpiece Dimensions (mm)					Type of screw head configuration	
		D	D1	d	d1	d2	JIS Phillips head (Small Screw)	JIS Slotted head (Small Screw)
B	F6-00	8.0					Blank	User-finished part
	F6-01	4.6	7.0	3.5	3.6	5.5	Pan, Round M2.0	Pan, Round M2.0
A	F6-02	5.1	7.0	3.5	4.1	5.5	Pan, Round M2.3/Countersunk, Oval countersunk M2.0	Pan, Round M2.3
	F6-03	5.8	7.0	3.5	4.5	5.5	Pan, Round M2.6/Binding, Truss M2.0	Binding, Truss M2.0
B	F6-04	7.0		5.5	5.5		Pan, Round M3.0/Binding M2.6	Pan, Round M3.0/Binding M2.6
	F6-05	7.5		5.5	6.0		Countersunk, Oval countersunk M3.0	Truss M2.6
A	F6-06	8.5		5.5	7.0		Pan, Round M4.0/Truss M3.0	Pan, Round M4.0/Truss M3.0
	F6-09	6.5	7.0	3.5	5.2	5.5	Countersunk, Oval countersunk M2.6	Truss M2.3
B	F6-10	14.0					Blank	User-finished part
	F6-11	7.7		5.5	6.3		Binding M3.0	Binding M3.0
A	F6-13	9.7		5.5	8.3		Binding M4.0	Binding M4.0
	F6-16	9.4		5.5	8.0		Countersunk, Oval countersunk M4.0	
B	F6-22	9.7		7.5	8.3			Binding M4.0

●Mouthpieces are supplied in packs of three.

### Bit

**H5(Ø5) 80mm (Overall length)**

Driver model:  
CLQ-6000, CLQ-6500, CLQ-7000, SSQ-6500, SSQ-7000, αQ-6500

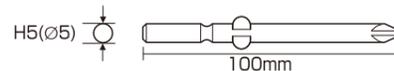


Head recess	Screw size	Adaptive screwdriver bit	Order code
JIS Phillips head	M2.0-M2.6	BP-H5 #1-3.0x80	BP5130080
	M3.0-M5.0	BP-H5 #2-5.0x80	BP5250080
(Use + #1 for Truss M3.0)			
Head recess	Screw size	Adaptive screwdriver bit	Order code
JCIS Slotted head	M2.0-M2.3	BS-H5-3.0x80	BS530080
JCIS Slotted head	M2.6-M4.0	BS-H5-5.0x80	BS550080
(Use H5 7.0 x 80 mm for Binding M4.0)			

### Bit

**H5(Ø5) 100mm (Overall length)**

Driver model:  
VZQ-1820, VZQ-1812, VZQ-3007, VZQ-3012



Head recess	Screw size	Adaptive screwdriver bit	Order code
JIS Phillips head	M2.0-M2.6	BP-H5 #1-3.0x100	BP5130100
JIS Phillips head	M3.0-M5.0	BP-H5 #2-5.0x100	BP5250100
JCIS Slotted head	M3.0-M5.0	BP-H5 5.0x100	BS550100

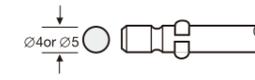
●Blank Mouthpiece Order Code No.

Model	Order Code	Size (mm)	Package
Blank Mouthpiece	F3-00	Ø8x18	3 pieces/1 PACK
	F6-00	Ø8x31	3 pieces/1 PACK
	F6-10	Ø14.0x31	3 pieces/1 PACK

\* 6.35 Hex bit only.  
(For usage of Hex 6.35 screwdriver, Please refer to p.2)

# HIOS shank Bit Series

HIOS shank shape  
(bit socket)



Please purchase our standard bits.

Classification of Screwdrivers

**H4 (Ø4) RoHS**

CL-2000, CL-3000, CL-4000, SS-2000, SS-3000, SS-4000  
α-4500, α-5000, VZ-1510 include PS type

Classification of Screwdrivers

**H5 (Ø5) RoHS**

CL-6000, CL-6500, CL-7000, SS-6500, SS-7000, α-6500  
VZ-1820, VZ-3012, VZ-1812, VZ-3007 include PS type

\* Please address inquiries to your HIOS dealer for hexagonal bit.

Type (Dia. at base mm)	Specifications			Overall Length (mm) (standard type)
	Point size No.	Shaft dia. (mm)	Shape of shaft type	
H4 (Ø4)	#00	1.5	B	40, 60, 80
		1.2	B	40
		1.5, 1.7	B	40, 60, 80
	#1	1.8	B	60
		2.0, 2.5	B	40, 60, 80, 100, 120
		3.0	B	40, 60, 80, 100, 120
H5 (Ø5)	#1	4.0	A	40, 60, 80, 100, 120, 150, 180, 200
		4.0	A	40, 60, 80, 100, 120, 150
		2.0	B	60
	#2	2.5	B	60, 80, 100, 120
		3.0	B	40, 60, 80, 100, 120
		5.0	A	40, 60, 80, 100, 120, 150, 180, 200, 250, 300
#3	5.0	A	40, 60, 80, 100, 120, 150, 180, 200, 250, 300, 400	
	7.0	C	60, 80, 100, 120	



Dimension of stepped part	H4	H5
(a) Shaft dia.	Refer to the left list.	2.0 2.5 3.0
(b) Length	20	20 25 30

\*Only the stepped part of H5 + #1 3.0x4.0 is 15mm in length.

\*Relationship between point size No. and shape of shaft size  
#00 M0.8-M1.0 #0 M1.4-M2.6 #1 M2.0-M2.6 #2 M3.0-M5.0  
#3 M6.0-M8.0

Type (Dia. at base mm)	Specifications			Overall Length (mm) (standard type)
	Blade width (mm)	Blade thickness (mm)	Shape of shaft type	
H4 (Ø4)	1.1	0.28	B	60, 80
	1.3	0.28	B	60, 80
	1.5	0.3	B	40, 60, 80
	1.7	0.3	B	40, 60, 80
	1.8	0.4	B	60, 80
	2.0	0.4	B	40, 60, 80
	2.3	0.4	B	60, 80
	2.5	0.4	B	40, 60, 80
	2.8	0.4	B	60, 80
	3.0	0.4	B	40, 60, 80
H5 (Ø5)	4.0	0.6	A	40, 60, 80, 100
	2.0	0.4	B	60
	2.5	0.4	B	60
	3.0	0.4	B	60, 80
	4.0	0.6	B	60
	5.0	0.7	A	60, 80, 100, 120, 150, 180
	7.0	1.0	C	60

Dimension of stepped part	H4	H5
(a) Blade Width	Refer to the left list.	2.0 2.5 3.0 4.0
(b) Length	20	20 25 30 30

Type (Dia. at base mm)	Specifications		Overall Length (mm) (standard type)
	Hex. across flat (mm)		
H4 (Ø4)	0.89, 1.5, 2.0, 3.0		60
	1.27		60, 100
	2.5		60, 100, 120
H5 (Ø5)	1.27		70
	1.5, 3.0, 4.0, 6.0		70, 100
	2.0, 2.5, 5.0		70, 100, 120

\*1 Used for tightening hollow set screws, cap screws, etc.

Type (Dia. at base mm)	Specifications		Overall Length (mm) (standard type)
	Nut across flat (mm)		
H4 (Ø4)	2.3, 2.5, 3.0		40
	4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0		60
	10.0		60
	4.0, 4.5, 5.0, 5.5, 6.0, 6.35		60
	7.0, 8.0		80
H5 (Ø5)	9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 17.0		80

\*2 Used for bolt nuts.

Type (Dia. at base mm)	Specifications		Overall Length (mm) (standard type)
	Nut across flat (mm)		
H4 (Ø4)	4.0, 4.5, 5.0, 5.5, 6.0, 7.0		60
	8.0		65
H5 (Ø5)	4.0, 4.5, 5.0, 5.5, 6.0, 7.0		60
	8.0		65

\*2 Used for bolt nuts.

## Bit order codes explained

Example 1: To order a Phillips head bit for a mini driver with a #1 point size, 3 mm in shaft diameter and 40 mm long, write the following: BP-H4-#1-3.0-40mm  
Example 2: To order a slotted bit for a standard driver with a 3.0 mm blade width, and 80 mm long, write the following: BS-H5-3.0-80mm

Bit classification	Bit specs
BP	(H4 or H5) — (Point size No.) — (Shaft dia.) — (Overall length in mm)
BS	(H4 or H5) — (Blade width) — (Overall length in mm)
BH	(H4 or H5) — (Hex. across flat) — (Overall length in mm)
BN	(H4 or H5) — (Nut across flat) — (Overall length in mm)
BC	(H4 or H5) — (Nut across flat) — (Overall length in mm)

When placing an order

- One order for standard bits should not be less than one pack (10 pieces).
- One order for special bits should be:
  - For BT, BP, BS and BH types, not less than one lot (100 pieces).
  - For BN type, not less than one lot (50 pieces).
  - For BC type, not less than one lot (10 pieces).

## Order codes

pp.3-4

### CL-Series

#### ● Lever Start Type

Model	Order Code	Bit
CL-2000	CL-2000E	H4
CL-3000	CL-3000E	H4
CL-4000	CL-4000E	H4
	CL-4000X	1/4HEX
CL-6000	CL-6000E	H5
	CL-6000X	1/4HEX
CL-6500	CL-6500E	H5
	CL-6500X	1/4HEX
CL-7000	CL-7000E	H5
	CL-7000X	1/4HEX

#### ● Push-to-Start Type

Model	Order Code	Bit
CL-3000PS	CL-3000PS	H4
CL-4000PS	CL-4000PS	H4
	CL-4000PSX	HEX
CL-6000PS	CL-6000PS	H5
	CL-6000PSX	1/4HEX
CL-6500PS	CL-6500PS	H5
	CL-6500PSX	1/4HEX
CL-7000PS	CL-7000PS	H5
	CL-7000PSX	1/4HEX
CL-9000	CL-9000	1/4HEX

### CLQ Type

#### ● Lever Start Type

Model	Order Code	Bit
CLQ-2000	CLQ-2000	H4
CLQ-3000	CLQ-3000	H4
CLQ-4000	CLQ-4000	H4
CLQ-6000	CLQ-6000	H5
	CLQ-6000X	1/4HEX
CLQ-6500	CLQ-6500	H5
	CLQ-6500X	1/4HEX
CLQ-7000	CLQ-7000	H5
	CLQ-7000X	1/4HEX

#### ● Push-to-Start Type

Model	Order Code	Bit
CLQ-3000PS	CLQ-3000PS	H4
CLQ-4000PS	CLQ-4000PS	H4
CLQ-6000PS	CLQ-6000PS	H5
	CLQ-6000PSX	1/4HEX
CLQ-6500PS	CLQ-6500PS	H5
	CLQ-6500PSX	1/4HEX
CLQ-7000PS	CLQ-7000PS	H5
	CLQ-7000PSX	1/4HEX

### Suction Attachment

#### ● CL drivers

Model	Order Code
CLQ-2000	CLQ2-SET
CLQ-3000, CLQ-4000	CLQ4-SET
CLQ-6000, CLQ-6500, CLQ-7000	CLQ65-SET

### CL-ESD Type

#### ● Lever Start Type

Model	Order Code	Bit
CL-2000ESD	CL-2000ESD	H4
CL-3000ESD	CL-3000ESD	H4
CL-4000ESD	CL-4000ESD	H4
	CL-4000X-ESD	1/4HEX
CL-6000ESD	CL-6000ESD	H5
	CL-6000X-ESD	1/4HEX
CL-6500ESD	CL-6500ESD	H5
	CL-6500X-ESD	1/4HEX
CL-7000ESD	CL-7000ESD	H5
	CL-7000X-ESD	1/4HEX

pp.3-4

### CL-ESD Type

#### ● Push-to-Start Type

Model	Order Code	Bit
CL-3000PSESD	CL-3000PSESD	H4
CL-4000PSESD	CL-4000PS-ESD	H4
	CL-4000PSX-ESD	1/4HEX
CL-6000PSESD	CL-6000PS-ESD	H5
	CL-6000PSX-ESD	1/4HEX
CL-6500PSESD	CL-6500PS-ESD	H5
	CL-6500PSX-ESD	1/4HEX
CL-7000PSESD	CL-7000PS-ESD	H5
	CL-7000PSX-ESD	1/4HEX

### CLQ-CR-ESD Type

#### ● Lever Start Type

Model	Order Code	Bit
CLQ-3000CR-ESD	CLQ-3000CR-ESD	H4
CLQ-4000CR-ESD	CLQ-4000CR-ESD	H4
	CLQ-4000XCR-ESD	1/4HEX
CLQ-6500CR-ESD	CLQ-6500CR-ESD	H5
	CLQ-6500XCR-ESD	1/4HEX

#### ● Push-to-Start Type

Model	Order Code	Bit
CLQ-6500PS CR-ESD	CLQ-6500PSCR-ESD	H5
	CLQ-6500PSXCR-ESD	1/4HEX

### CL-NL Type

#### ● Lever Start Type

Model	Order Code	Bit
CL-3000NL	CL-3000NL	H4
CL-4000NL	CL-4000NL	H4
	CL-4000NLX	1/4HEX
CL-6000NL	CL-6000NL	H5
	CL-6000NLX	1/4HEX
CL-6500NL	CL-6500NL	H5
	CL-6500NLX	1/4HEX
CL-7000NL	CL-7000NL	H5
	CL-7000NLX	1/4HEX

p.5

### SS-Series

#### ● Lever Start Type

Model	Order Code	Bit
SS-2000	SS-2000E	H4
SS-3000	SS-3000E	H4
SS-4000	SS-4000E	H4
	SS-4000X	1/4HEX
SS-6500	SS-6500E	H5
	SS-6500X	1/4HEX
SS-7000	SS-7000E	H5
	SS-7000X	1/4HEX

#### ● Push-to-Start Type

Model	Order Code	Bit
SS-3000PS	SS-3000PS	H4
SS-4000PS	SS-4000PS	H4
	SS-4000PSX	1/4HEX

### SSQ Type

#### ● Lever Start Type

Model	Order Code	Bit
SSQ-2000	SSQ-2000	H4
SSQ-3000	SSQ-3000	H4
SSQ-4000	SSQ-4000	H4
	SSQ-4000X	1/4HEX
SSQ-6500	SSQ-6500	H5
	SSQ-6500X	1/4HEX
SSQ-7000	SSQ-7000	H5
	SSQ-7000X	1/4HEX

#### ● Push-to-Start Type

Model	Order Code	Bit
SSQ-3000PS	SSQ-3000PS	H4
SSQ-4000PS	SSQ-4000PS	H4
	SSQ-4000PSX	1/4HEX

p.5

### Suction Attachment

#### ● SS drivers

Model	Order Code
SSQ-2000	CLQ2-SET
SSQ-3000, SSQ-4000	CLQ4-SET
SSQ-6500, SSQ-7000	CLQ65-SET

### SS-ESD Type

#### ● Lever Start Type

Model	Order Code	Bit
SS-2000ESD	SS-2000ESD	H4
SS-3000ESD	SS-3000ESD	H4
SS-4000ESD	SS-4000ESD	H4
	SS-4000X-ESD	1/4HEX
SS-6500ESD	SS-6500ESD	H5
	SS-6500X-ESD	1/4HEX
SS-7000ESD	SS-7000ESD	H5
	SS-7000X-ESD	1/4HEX

#### ● Puh-to-Start Type

Model	Order Code	Bit
SS-3000PSESD	SS-3000PSESD	H4
SS-4000PSESD	SS-4000PS-ESD	H4
	SS-4000PSX-ESD	1/4HEX

### SSQ-CR-ESD Type

#### ● Lever Start Type

Model	Order Code	Bit
SSQ-2000CR-ESD	SSQ-2000CR-ESD	H4
SSQ-3000CR-ESD	SSQ-3000CR-ESD	H4
SSQ-4000CR-ESD	SSQ-4000CR-ESD	H4
	SSQ-4000XCR-ESD	1/4HEX
SSQ-6500CR-ESD	SSQ-6500CR-ESD	H5
	SSQ-6500XCR-ESD	1/4HEX
SSQ-7000CR-ESD	SSQ-7000CR-ESD	H5
	SSQ-7000XCR-ESD	1/4HEX

p.6

### α-Series

#### ● Lever Start Type

Model	Order Code	Bit
α-4500	A-4500E	H4
	A-4500X	1/4HEX
α-5000	A-5000E	H4
	A-5000X	1/4HEX
α-6500	A-6500E	H5
	A-6500X	1/4HEX

#### ● Push-to-Start Type

Model	Order Code	Bit
α-4500PS	A-4500PS	H4
	A-4500PSX	1/4HEX
α-5000PS	A-5000PS	H4
	A-5000PSX	1/4HEX
α-6500PS	A-6500PS	H5
	A-6500PSX	1/4HEX

### α Q Type

#### ● Lever Start Type

Model	Order Code	Bit
α Q-4500	AQ-4500	H4
	AQ-4500X	1/4HEX
α Q-5000	AQ-5000	H4
	AQ-5000X	1/4HEX
α Q-6500	AQ-6500	H5
	AQ-6500X	1/4HEX

#### ● Push-to-Start Type

Model	Order Code	Bit
α Q-4500PS	AQ-4500PS	H4
	AQ-4500PSX	1/4HEX
α Q-5000PS	AQ-5000PS	H4
	AQ-5000PSX	1/4HEX
α Q-6500PS	AQ-6500PS	H5
	AQ-6500PSX	1/4HEX

p.6

### Suction Attachment α drivers

Model	Order Code
α Q-4500, α Q-5000	CLQ4-SET
α Q-6500	CLQ65-SET

### α-ESD Type

#### ● Lever Start Type

Model	Order Code	Bit
α-4500ESD	A-4500ESD	H4
	A-4500X-ESD	1/4HEX
α-5000ESD	A-5000ESD	H4
	A-5000X-ESD	1/4HEX
α-6500ESD	A-6500ESD	H5
	A-6500X-ESD	1/4HEX

#### ● Push-to-Start Type

Model	Order Code	Bit
α-4500PSESD	A-4500PS-ESD	H4
	A-4500PSX-ESD	1/4HEX
α-5000PSESD	A-5000PS-ESD	H4
	A-5000PSX-ESD	1/4HEX
α-6500PSESD	A-6500PS-ESD	H5
	A-6500PSX-ESD	1/4HEX

### α Q-CR-ESD Type

#### ● Lever Start Type

Model	Order Code	Bit
α Q-4500CR-ESD	AQ-4500CR-ESD	H4
	AQ-4500XCR-ESD	1/4HEX
α Q-5000CR-ESD	AQ-5000CR-ESD	H4
	AQ-5000XCR-ESD	1/4HEX
α Q-6500CR-ESD	AQ-6500CR-ESD	H5
	AQ-6500XCR-ESD	1/4HEX

#### ● Push-to-Start Type

Model	Order Code	Bit
α Q-6500PS CR-ESD	AQ-6500PSCR-ESD	H5
	AQ-6500PSXCR-ESD	1/4HEX

pp.3-6

## CL/SS/α-Series Accessories for better operation

#### ● Pistol Attachment for CL, SS, α drivers

Model	Order Code	Driver model
PA-65	PA-65	CL-6000, CL-6500, CL-7000, SS-6500, SS-7000, α-6500

#### ● Angle attachment for CL, α drivers

Model	Order Code	Driver model
ANGL-Z (Hios shank)	ANGL-Z	CL-6000/CL-6500, CL-7000/α-6500
ANGLX-Z (Hex shank)	ANGLX-Z	(lever Start type only)

#### ● Push-start grip attachment for CL, SS, α drivers

Model	Order Code	Driver model
PS-1	PS-1	CL-4000, SS-4000, α-4500, α-5000
PS-2	PS-2	CL-3000, SS-3000

pp.7-8

## Power Units for DC drivers

#### ● CLT-30

Model	Order Code	Plug
CLT-30	CLT-30	A
	CLT-30-UL	A-2
	CLT-30-EU-HK	C
	CLT-30-UK-SP	BF
	CLT-30-CN	S

## Order codes

pp.7-8

### Power Units for DC drivers

#### ● CL

## Order codes

pp.13-14

### Digital Torque Meter Series

#### HP series

##### ● HP-10

Model	Voltage	Order Code	Measuring	Shank
HP-10	AC100V	HPN-10-A1	N•m/N•cm	HIOS
		HPN-10X-A1		HEX
		HPN-10-A2		HIOS
	AC120V	HPN-10X-A2	N•m/lbf•in	HEX
		HPN-10-A3		HIOS
		HPN-10X-A3		HEX
AC220V-AC240V	HPN-10-C1	N•m/N•cm	HIOS	
			HEX	
			HPN-10-C2	HIOS
	HPN-10X-C2	N•m/lbf•in	HEX	
			HIOS	
			HPN-10X-C3	HEX
HPN-10-D	N•m/lbf•in	HIOS		
		HEX		
		HPN-10X-D	HEX	

##### ● HP-100

Model	Voltage	Order Code	Measuring	Shank
HP-100	AC100V	HPN-100-A1	N•m/N•cm	HIOS
		HPN-100X-A1		HEX
		HPN-100-A2		HIOS
	AC120V	HPN-100X-A2	N•m/lbf•in	HEX
		HPN-100-A3		HIOS
		HPN-100X-A3		HEX
AC220V-AC240V	HPN-100-C1	N•m/N•cm	HIOS	
			HEX	
			HPN-100-C2	HIOS
	HPN-100X-C2	N•m/lbf•in	HEX	
			HIOS	
			HPN-100X-C3	HEX
HPN-100-D	N•m/lbf•in	HIOS		
		HEX		
		HPN-100X-D	HEX	

### HDP series

##### ● HDP-5

Model	Voltage	Order Code	Measuring	Shank
HDP-5	AC100V	HDPN-5-A1	N•m/N•cm	HIOS
		HDPN-5X-A1		HEX
		HDPN-5-A2		HIOS
		HDPN-5X-A2		HEX
		HDPN-5-A3		HIOS
		HDPN-5X-A3		HEX
	AC220V-AC240V	HDPN-5-C1	N•m/N•cm	HIOS
				HEX
				HDPN-5-C2
		HDPN-5X-C2	N•m/lbf•in	HEX
				HIOS
				HDPN-5-C3
HDPN-5X-C3	N•m/kgf•cm	HEX		
		HIOS		
		HDPN-5-D	HIOS	
HDPN-5X-D	HEX			

##### ● HDP-50

Model	Voltage	Order Code	Measuring	Shank
HDP-50	AC100V	HDPN-50-A1	N•m/N•cm	HIOS
		HDPN-50X-A1		HEX
		HDPN-50-A2		HIOS
		HDPN-50X-A2		HEX
		HDPN-50-A3		HIOS
		HDPN-50X-A3		HEX
	AC220V-AC240V	HDPN-50-C1	N•m/N•cm	HIOS
				HEX
				HDPN-50-C2
		HDPN-50X-C2	N•m/lbf•in	HEX
				HIOS
				HDPN-50-C3
	HDPN-50X-C3	N•m/kgf•cm	HEX	
			HIOS	
			HDPN-50-D	HIOS
	HDPN-50X-D	HEX		

pp.13-14

### Digital Torque Meter Series

#### HDP series

##### ● HDP-100 (Option)

Model	Voltage	Order Code	Measuring	Shank
HDP-100	AC100V	HDPN-100-A1	N•m/N•cm	HIOS
		HDPN-100X-A1		HEX
		HDPN-100-A2		HIOS
		HDPN-100X-A2		HEX
		HDPN-100-A3		HIOS
		HDPN-100X-A3		HEX
	AC220V-AC240V	HDPN-100-C1	N•m/N•cm	HIOS
				HEX
				HDPN-100-C2
		HDPN-100X-C2	N•m/lbf•in	HEX
				HIOS
				HDPN-100X-C3
HDPN-100-D	N•m/lbf•in	HIOS		
		HEX		
		HDPN-100X-D	HEX	

### HM series

##### ● HM-10/HM-100

Model	Order Code	Voltage
HM-10	HM-10	AC100V
	HM-10-120	AC110-120V
	HM-10-220	AC220-240V
HM-100	HM-100	AC100V
	HM-100-120	AC110-120V
	HM-100-220	AC220-240V

### HIT series

##### ● HIT-200/HIT-500/HIT-2000

Model	Order Code	Voltage
HIT-200	HIT-200	AC100V
	HIT-200-120	AC110-120V
	HIT-200-220	AC220-240V
HIT-500	HIT-500	AC100V
	HIT-500-120	AC110-120V
	HIT-500-220	AC220-240V
HIT-2000	HIT-2000	AC100V
	HIT-2000-120	AC110-120V
	HIT-2000-220	AC220-240V

### Digital Torque Meter Series Accessories

##### ● Battery Charger for HP & HDP series

Plug	Order Code	Plug
TCH-MULTI	TCH-MULTI	A plug
TCH-EU	TCH-EU	C plug

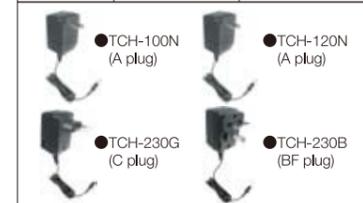


##### ● Detector cord for HDP series

Model	Order Code	Plug
DPC-0506	DPC-0506	For HDP Series

##### ● Battery Charger for HM & HIT series

Plug	Order Code	Voltage
TCH-100N	TCH-100N	AC100V(Japan)
TCH-120N	TCH-120N	AC110-120V (Korea, Taiwan, U.S.A., Canada)
TCH-230G	TCH-230G	AC220-240V (Hong Kong, Europe, China)
TCH-230B	TCH-230B	AC220-240V (Singapore, U.K., Australia)



pp.13-14

### Digital Torque Meter Series Accessories

##### ● HP Series Accessories

Model	Order Code	Measuring range: N•m	Bit type
Fidaptor for HP-10	Standard	TF4G-Z	0.15-0.6 H4
		TF6SG-Z	0.15-0.6 ※2
	Option	TF4S-Z ※1	Less than 0.25 H4
		TF6U-Z ※1	3-9 1/4HEX
Fidaptor for HP-100	Standard	TF5G-Z	0.5-3 H5
		TF6XG-Z	0.5-3 ※2
	Option	TF6UP-Z ※1	3-9 1/4HEX
		TF6XG-0010	※2
Driver Shaft	TF5G-0010-4	H4	
Fidaptor Buffer Spring	CL65-0040	0.15-0.6	
Grease	TF-G3		

※1: Without Safety Guard

※2: Hex shank (Convertible Shaft) 5mm Subtense (Upper), 6.35mm Subtense (Lower)

##### ● HM Series Accessories

Model	Standard	Order Code	Measuring range: N•m	Screw size
Fidaptor for HM-10	Standard	TFM26-Z	0.15-0.6	M2.6
	Option	TFM20-Z	Less than 0.25	M2.0
Fidaptor for HM-100	Standard	TFM40-Z	0.5-3	M4.0
		CL65-0040	0.15-0.6	

##### ● Detector cord for HDP/HM/HIT Series

Model	Order Code
Detector cord	DPC-0506

pp.15-16

### Automatic Screw Feeder

##### ● HSF series

Model	Order Code	Nominal dia.	Order Code	Nominal dia.
HSF-10	HSF-10	M1.0	HS-WR10	M1.0
HSF-12	HSF-12	M1.2	HS-WR12	M1.2
HSF-14	HSF-14	M1.4	HS-WR14	M1.4
HSF-17	HSF-17	M1.7	HS-WR17	M1.7
HSF-20	HSF-20	M2.0	HS-WR20	M2.0
HSF-26	HSF-26	M2.6	HS-WR26	M2.6
HSF-30	HSF-30	M3.0	HS-WR30	M3.0

##### ● Rails

##### ● HS series

Model	Order Code	Nominal dia.	Order Code	Nominal dia.
HS-40	HS-40-EC	M4.0	HS-R40	M4.0
HS-50	HS-50-EC	M5.0	HS-R50	M5.0

##### ● Rails

##### ● HSIII series

Model	Order Code	Nominal dia.	Order Code	Nominal dia.
HSIII-10C	HS-10-3-EC	M1.0	HS-SR10	M1.0
HSIII-12C	HS-12-3-EC	M1.2	HS-SR12	M1.2
HSIII-14C	HS-14-3-EC	M1.4	HS-SR14	M1.4
HSIII-17C	HS-17-3-EC	M1.7	HS-SR17	M1.7
HSIII-20	HS-20-3-EC	M2.0	HS-SR20	M2.0
HSIII-23	HS-23-3-EC	M2.3	HS-SR23	M2.3
HSIII-26	HS-26-3-EC	M2.6	HS-SR26	M2.6
HSIII-30	HS-30-3-EC	M3.0	HS-SR30	M3.0

##### ● Rails

##### ● HS-RB series

Model	Order Code	Nominal dia.	Order Code	Nominal dia.
HS-40RB	HS-40RB-EC	M4.0	HS-R40RB	M4.0
HS-50RB	HS-50RB-EC	M5.0	HS-R50RB	M5.0

##### ● Rails

##### ● HSIII-RB series

Model	Order Code	Nominal dia.	Order Code	Nominal dia.
HSIII-14CRB	HS-14-3RB-EC	M1.4	HS-SR14RB	M1.4
HSIII-17CRB	HS-17-3RB-EC	M1.7	HS-SR17RB	M1.7
HSIII-20RB	HS-20-3RB-EC	M2.0	HS-SR20RB	M2.0
HSIII-23RB	HS-23-3RB-EC	M2.3	HS-SR23RB	M2.3
HSIII-26RB	HS-26-3RB-EC	M2.6	HS-SR26RB	M2.6
HSIII-30RB	HS-30-3RB-EC	M3.0	HS-SR30RB	M3.0

##### ● Rails

## Order codes

pp.15-16

### Automatic Screw Feeder Standard Accessories

##### ● AC Adaptor

Voltage	Order Code	Screw Feeder model
AC100V-240V	HSF-AD	HSF
AC100V	HS-AD	HS, HS III, HS-RB, HS III-RB
AC220V-240V	HS-AD220	

## HIOS Product Catalogs

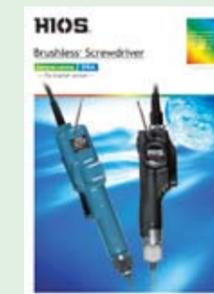
### Brushless Driver clean to the environment.

Introducing high quality Brushless motor, no more emission of carbon contamination. Simple design helps to use less consumables and also increased durability. Brushless drivers are harmless to the people and the environments.

- Increase of driver temperature is 30% less.
- Power consumption is 50% less (for VB series).
- EMI p-p level is 65 to 85% less (for BL series).

(with HIOS internal data comparison)

#### ● Brushless Screwdriver General Catalog



Full of variation from DC type to AC type drivers.

#### ● PG Brushless Screwdriver General Catalog



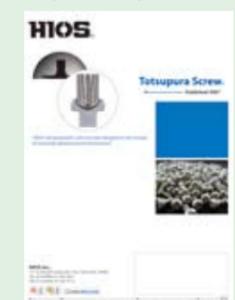
3 functions: [Fasten], [Judging], [Recording] are available with this driver. Monitoring and controlling.

### HIOS PAT. SCREW

The HIOS's unique fastening system, which was developed with demand of functionality, durability and workability, solves screw fastening errors and offers highly reliable fastening and stable Quality Control.

- Prevention of Cam out phenomenon
- Excellent fit with driver bits
- Less thrust required
- Improvement in durability of driver bits
- Reduction in worker's fatigue
- Perfect match with automatic screw fastening machines
- Improvement in Quality Control and productivity
- Easy to loosen in recycling process and maintenance of your products

#### ● TOTSUPURA SCREW PAT. (Cross recess)



#### ● CLOVER SCREW D.PAT. (Cross recess)



#### ● INTR HEX US PAT. (Hexagonal hole)



#### ● INTER-TPRO US PAT. (Hexalobura)



Catalog is available by downloading from HIOS web site.

➔ [www.hios.com](http://www.hios.com)