



Electric Screwdriver General Catalog 23A

innovative technology
for Turning The World

HIOS®



HIOS®



Since its establishment in 1970, HIOS has researched and developed a series of systems related to fastening technologies including screws, electric screwdrivers, and torque measuring instruments, and has manufactured and provided products that are one step ahead of the market. We will continue to take on new challenges without being bound by conventional ways of thinking in order to achieve the world's best quality.



HIOS PRODUCTS

DC Type

Electric Screwdrivers

Brushless Screwdrivers

Supports Precision Assembly
Standard/Built-in Pulse System
BLG Series P.9



Supports precision Assembly
Built-in Torque Sensor
PG Series P.15



Brushed Screwdrivers

Supports Precision Assembly
Standard
CL Series P.19



Supports Speedy Production by Pressure
Screw Feeding
Reciprocating
RN53 Series P.37



Supports Precision Assembly
Standard
BL Series P.17



Supports Automation of Assembly Lines
For Automated Machines
PGF/BLF Series P.31-33



Supports Precision Assembly
For Automated Machines
CLF / αF / CL-A Series P.35



AC Type

Electric Screwdrivers

Brushless Screwdrivers

Supports Heavy-duty Operations
Standard
VB Series P.23



Supports Ultra-high Torque Fastening
Hammer-head
VBH Series P.23



Brushed Screwdrivers

Supports Heavy-duty Operations
Standard
VZ Series P.27



Supports Ultra-high Torque Fastening
Hammer Head
VZH Series P.27



Related Products

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- Power Supply for Manual Screwdriver
- Controller for Automatic Screwdriver

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- Vacuum Pump
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- HSF Series

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DC Type

Power Tools

Brushless

Supports tapping of pilot holes

Electric Tappers

BL-SB Series

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Brushed

Supports tapping of pilot holes

Electric Tappers

SB Series

P.49



Certification

List of Certified Products

- European Safety Standards (CE)
- China Quality Certification (CQC)
- China Compulsory Certification (CCC)
- US and Canadian Safety Standards (UL/cUL)
- ESD Control (IEC 61340)
- Electro-Static Discharge (ESD)
- RoHS
- China RoHS

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FEATURES OF ELECTRIC

Features of Electric Screwdriver



1 Detachable Cord (DC Type)

The cord is detachable with the connector. This makes maintenance easy. (AC-type cords are not detachable.)



2 Start (ST) Types

- Lever start: trigger the lever on the unit with your finger to start.
- Push-to-start: push the screwdriver gently to start.
- Push and Lever: you can select either Lever start or Push-to-start.

3 Torque Adjustment Nut That Can be Fine Tuned

The fastening torque range is wide, and stepless adjustment is possible. In addition, since the repetitive torque accuracy is high, screws can be accurately and stably fastened.

4 Brushless Motor (for Brushless Screwdrivers)

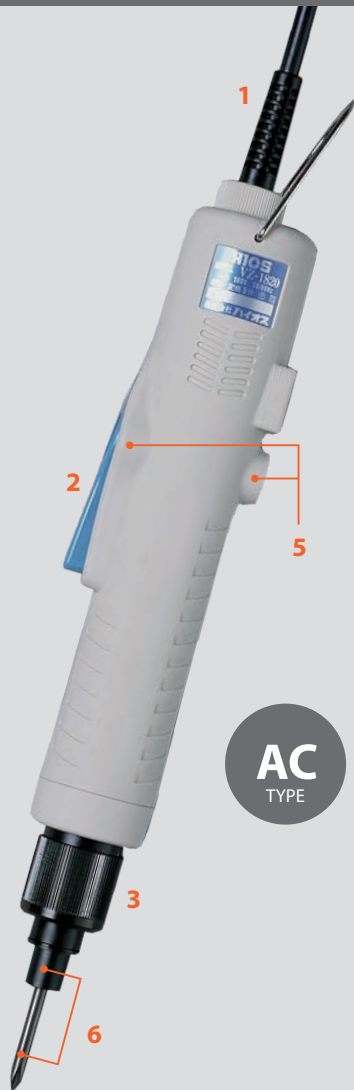
Since a carbon brush is not used, carbon particles are not generated, and the torque accuracy and durability of the screwdriver are greatly improved. Stable quality control can be achieved.

5 External Carbon Brush (for Brushed Screwdrivers)

The design of external carbon brush facilitates its easy replacement. The carbon brush can endure about one million screw fastening*.

*This may vary depending on usage conditions.

SCREWDRIVERS



DC Type Low Voltage DC

Driven in combination with a low voltage DC power unit.



AC Type Without Transformer

Driven by direct connection with AC power source.



Icon Guide



Anti-electrostatic body case
(Surface resistance: less than $3 \times 10^{12}\Omega$)

Anti-electrostatic resin is employed for the body case of the screwdriver to prevent the generation of static electricity. This makes the screwdriver suitable for assembly of precision equipment and electronic parts.



Anti-electrostatic
IEC61340 certified.

VARIATION

Suction

Q



Suction Part
(Optional Item)

It sucks up screws with negative pressure and you don't have to pick up screws. It also sucks up non-ferrous screws such as plastic ones. In addition, dust generated during screw fastening can be removed.

For Clean Room / Anti-electrostatic

Q-CR-ESD



Electrostatic proof. Two vacuum units on the main body and the suction part make sure to suck up dust generated during screw fastening.

[Equivalent to Class 100]
[Surface resistance: less than $10^9\Omega$]

Anti-electrostatic

ESD



An anti-electrostatic resin is employed for the body case through the switch lever. It protects components from static electricity.

[Surface resistance: $10^9\Omega$ or smaller]

Supporting Screw Counter

OPC



Can be connected to the screw counter to prevent screw fastening skipping. The screwdriver is featured with clockwise / counterclockwise rotation and torque-up (completion) signal outputs.



Noiseless

NL



Electrostatic noises can be reduced better than standard products.

6 Bits

There are three drive types: HIOS Shank, Two-way Shank, and HEX Shank. Please specify your desired bit drive type from the order code.

•For HIOS Shank type, please use the HIOS bit. See [P.57](#)

•For HEX Shank type, please purchase commercially available bits.

| Drive | HIOS Shank Type (H4 or H5) | | Two-way Type (H5 and 5HEX) | |
|---------------|--|-------------------------------|----------------------------|---|
| | H4 | H5 | H5 | 5HEX (commercially available) |
| Type | | | | |
| Standard | $\varnothing 4$ | $\varnothing 5$ | $\varnothing 5$ | $\varnothing 5 \times \rightarrow 14.0$ |
| Drive | HEX Shank Type | | | |
| | Obtain commercially available bits matching with the specified dimensions. | | | |
| Type | 1/4HEX (Commercially Available) | 5HEX (Commercially Available) | | |
| Special Order | | | | |
| | $6.35 \times \rightarrow 19.0$ | $5 \times \rightarrow 14.0$ | | |

Unit: mm

Selection Chart of Electric Screwdrivers

Please use this chart as a guide for model selection.

| Screwdriver classification | Model | Output Torque Range | | | | | | | | | | Unloaded Rotation Speed (r.p.m) (HI/LOW) | Guide for Screw Size (mm) | | Applications | |
|---------------------------------|----------------------|---------------------|---------|-----|-----|-----|---|-----|-----|-----|-----------|--|---------------------------|---------------|---|---------|
| | | N·m | | | | | | | | | | | Machine Screw | Tapping Screw | | |
| | | 0.05 | 0.2 | 0.4 | 0.6 | 0.8 | 1 | 1.2 | 1.4 | 1.6 | 1.8 | | | | | 2 |
| BC2 / BC1 / ZERO 1 / BLG Series | Standard | 0.1-0.55 | | | | | | | | | | 1,000 / 690 | 1.4-2.6 | 1.4-2.3 | Cell phones, watches, cameras, TVs, glasses, optical pickups, PCs, HDD players, CD players, car navigation systems, car audio systems, air conditioners, fan heaters, etc. | |
| | BLG-4000 Series | 0.1-0.55 | | | | | | | | | | | | | | |
| | BLG-4000BC2-LT | 0.03-0.2 | | | | | | | | | | 1.0-2.3 | 1.0-2.0 | | | |
| | Standard | 0.2-1.2 | | | | | | | | | | 1,000 / 690 | 2.0-3.0 | 2.0-3.0 | | |
| | BLG-5000 Series | 0.2-1.2 | | | | | | | | | | | | | | |
| | HI Speed | BLG-5000-15 Series | 0.3-1 | | | | | | | | | | 1,500 / 1,000 | 2.3-3.0 | | 2.0-2.6 |
| | HI Torque | BLG-5000-18 Series | 0.5-1.5 | | | | | | | | | | 1,800 / 1,200 | 2.3-3.0 | | 2.0-2.6 |
| BLG-5000-HT Series | | 0.5-2 | | | | | | | | | | 730 / — | 2.0-4.0 | 2.0-3.0 | | |
| PG Series | Standard | 0.2-0.55 | | | | | | | | | | 980 / 680 | 1.7-2.3 | 2.0-2.3 | Electric components, automobile components, pneumatic components, etc. | |
| | PG-3000 | 0.2-0.55 | | | | | | | | | | | | | | |
| | PG-5000 | 0.4-1.2 | | | | | | | | | | 900 / 590 | 2.3-3.0 | 2.0-2.3 | | |
| BL Series | Standard | 0.02-0.2 | | | | | | | | | | 990 / 650 | 1.0-2.3 | 1.0-2.0 | Cell phones, watches, cameras, glasses, hard discs, CD players, optical pickups, car navigation systems, car audio systems, video cameras, compact calculators, etc. | |
| | BL-2000 | 0.02-0.2 | | | | | | | | | | | | | | |
| | BL-2000SS* | 0.02-0.2 | | | | | | | | | | 1.0-2.3 | 1.0-2.0 | | | |
| | Standard | 0.2-0.55 | | | | | | | | | | 980 / 680 | 1.7-2.3 | 2.0-2.3 | | |
| | BL-3000 | 0.2-0.55 | | | | | | | | | | | | | | |
| | BL-3000SS* | 0.2-0.35 | | | | | | | | | | 1.7-2.3 | 2.0-2.3 | | | |
| | Standard | 0.2-1.2 | | | | | | | | | | 900 / 590 | 2.0-3.0 | 2.0-3.0 | | |
| | BL-5000 | 0.2-1.2 | | | | | | | | | | | | | | |
| | BL-5000SS* | 0.2-1.2 | | | | | | | | | | 2.0-3.0 | 2.0-3.0 | | | |
| | HI Speed | BL-5000-15 | 0.3-1.0 | | | | | | | | | | 1,500 / 1,000 | 2.0-3.0 | | 2.0-2.6 |
| HI Torque | BL-5020 | 0.5-2 | | | | | | | | | | 750 / 500 | 2.0-4.0 | 2.0-3.0 | | |
| | Standard | 0.7-2.8 | | | | | | | | | | 960 / 630 | 2.6-5.0 | 2.6-4.0 | | |
| CL Series | Standard | 0.02-0.2 | | | | | | | | | | 680 / 490 | 1.0-2.3 | 1.0-2.0 | Automobile components, PCs, printers, TVs, air conditioners, fan heaters, video game consoles, facsimiles, communication devices, copy machines, scanners, satellite antennas, video recorders, door mirrors, toys, electronic thermometers, etc. | |
| | CL-2000 | 0.02-0.2 | | | | | | | | | | | | | | |
| | Standard | 0.03-0.2 | | | | | | | | | | 1,000 / 670 | 1.0-2.0 | 1.0-1.7 | | |
| | CL-3000 | 0.03-0.2 | | | | | | | | | | | | | | |
| | Standard | 0.1-0.55 | | | | | | | | | | 1,000 / 690 | 1.4-2.6 | 1.4-2.3 | | |
| | CL-4000 | 0.1-0.55 | | | | | | | | | | | | | | |
| | Standard | 0.2-1 | | | | | | | | | | 800 / 500 | 2.0-3.0 | 2.0-2.6 | | |
| CL-6000 | 0.2-1 | | | | | | | | | | | | | | | |
| Standard | 0.3-1.6 | | | | | | | | | | 900 / 600 | 2.0-4.0 | 2.0-3.0 | | | |
| CL-6500 | 0.3-1.6 | | | | | | | | | | | | | | | |
| Standard | 0.3-2.5 | | | | | | | | | | 750 / — | 2.0-5.0 | 2.0-4.0 | | | |
| CL-7000 | 0.3-2.5 | | | | | | | | | | | | | | | |
| HI Torque | CL-9000 | 1.2-5 | | | | | | | | | | 530 | 4.0-6.0 | 4.0-6.0 | | |
| VB Series | Standard | 0.25-1.5 | | | | | | | | | | 970 | 2.0-4.0 | 2.0-3.0 | Lighting equipment, washing machines, vacuum cleaners, gas equipment, microwaves, door mirrors, electric automobile components, rear lamps, headlights, video game consoles, copy machines, communication devices, pneumatic components, electric tools, etc. | |
| | VB-1510 | 0.25-1.5 | | | | | | | | | | | | | | |
| | HI Speed | VB-1510-18 | 0.2-1 | | | | | | | | | | 1,800 | 2.0-4.0 | | 2.0-3.0 |
| | Standard | 0.4-1.8 | | | | | | | | | | 2,000 | 2.6-4.0 | 2.6-3.0 | | |
| | VB-1820 | 0.4-1.8 | | | | | | | | | | | | | | |
| | HI Torque | VB-2008 | 0.4-2 | | | | | | | | | | 800 | 2.0-4.0 | | 2.0-3.0 |
| | Standard | 0.5-3 | | | | | | | | | | 1,200 | 3.0-5.0 | 3.0-4.0 | | |
| | VB-3012 | 0.5-3 | | | | | | | | | | | | | | |
| | HI Torque / HI Speed | VB-3020 | 1-3 | | | | | | | | | | 2,000 | 3.0-5.0 | | 3.0-4.0 |
| Standard | VB-4504 | 1-4.5 | | | | | | | | | | 400 | 3.0-5.0 | 3.0-4.0 | | |
| Ultra HI Torque | VBH-1820PS | 3-7 | | | | | | | | | | 470 | 5.0-6.0 | 5.0-6.0 | | |
| | VBH-3012PS | 4-10 | | | | | | | | | | 270 | 5.0-6.0 | 5.0-6.0 | | |

You can select the suitable model according to your production system.

Supports precision assembly Supports heavy-duty operations Supports automation of assembly line Supports speedy production by pressure feeding

DC Screwdriver (electric powered) AC Screwdriver (AC powered) Screwdriver for Automated Machine Recipro Screwdriver

| Screwdriver Classification | Model | Output Torque Range | | | | | | | | | | Unloaded Rotation Speed (r.p.m) (HI/LOW) | Guide for Screw Size (mm) | | Applications | | | | | | | | |
|----------------------------|---|---------------------|-----|-----|----------|----------|----------|---------|-------|-----|---------|--|---------------------------|---------------|--------------|---|---------------|---------------------------|---------------------------|---|--|---|---------|
| | | N·m | | | | | | | | | | | Machine Screw | Tapping Screw | | | | | | | | | |
| | | 0.05 | 0.2 | 0.4 | 0.6 | 0.8 | 1 | 1.2 | 1.4 | 1.6 | 1.8 | | | | | 2 | 4 | 8 | 10 | | | | |
| AC Type / Brushed | VZ Series Standard | VZ-1510 | | | 0.15-1.5 | | | | | | | | | | | | | | 1,000 | 2.0-4.0 | 2.0-3.0 | Automobile components, car audio systems. LCD car navigation systems, air conditioners, lighting equipment, door mirrors, rear lamps, headlights, gas equipment, vacuum cleaners, washing machines, video game consoles, VTRs, communication devices, copy machines, laser beam printers, microwaves, TVs, electric tools, etc. | |
| | | VZ-1820 | | | | 0.4-1.8 | | | | | | | | | | | | | | 2,000 | 2.6-4.0 | | 2.6-3.0 |
| | | VZ-3012 | | | | | 0.9-3 | | | | | | | | | | | | | 1,200 | 3.0-5.0 | | 3.0-4.0 |
| | | VZ-4506 | | | | | | 1-4.5 | | | | | | | | | | | | 600 | 3.0-5.0 | | 3.0-4.0 |
| | | VZ-1812 | | | | 0.4-1.8 | | | | | | | | | | | | | | 1,200 | 2.6-4.0 | | 2.6-3.0 |
| | | VZ-3007 | | | | | | 0.9-3 | | | | | | | | | | | | 700 | 3.0-5.0 | | 3.0-4.0 |
| | | VZ-4504 | | | | | | | 1-4.5 | | | | | | | | | | | 400 | 3.0-5.0 | | 2.6-4.0 |
| | | VZH-1820 | | | | | | | | | | | | | | | | | | 470 | 5.0-6.0 | | 5.0-6.0 |
| | VZH-3012 | | | | | | | | | | | | | | | | | | 270 | 5.0-6.0 | 5.0-6.0 | | |
| DC Type / Brushless | Screwdrivers for Automated Machines PGF Series | PGF-3000 | | | 0.2-0.55 | | | | | | | | | | | | | | HI 625-950 LOW 115-325 | 1.7-2.3 | 2.0-2.3 | Electric components, automobile components, pneumatic components, etc. | |
| | | PGF-5000 | | | | 0.4-1.2 | | | | | | | | | | | | | HI 690-985 LOW 115-320 | 2.3-3.0 | 2.0-2.3 | | |
| | | PGF-7000 | | | | | | 1.0-2.8 | | | | | | | | | | | HI 645-935 LOW 210-595 | 2.6-5.0 | 2.6-4.0 | | |
| | BLF Series | BLF-2000 | | | | | | | | | | | | | | | | | HI 690-975 LOW 120-345 | 1.0-2.3 | 1.0-2.0 | Automobile / Motorcycle components (car navigation systems, headlights, junction boxes, sensor, carburetor mounting, resin panel mounting) | |
| | | BLF-5000 | | | | 0.3-1 | | | | | | | | | | | | | HI 660-940 LOW 115-320 | 2.0-3.0 | 2.0-2.6 | | |
| | | BLF-7000 | | | | | 0.7-2 | | | | | | | | | | | | HI 495-735 LOW 150-450 | 3.0-4.0 | 3.0-4.0 | | |
| | | BLF-7000X | | | | | 0.7-2 | | | | | | | | | | | | HI 495-735 LOW 150-450 | 3.0-4.0 | 3.0-4.0 | | |
| BLF-7025X | | | | | | | 1.2-2.5 | | | | | | | | | | | HI 400-600 LOW 120-350 | 3.0-4.0 | 3.0-4.0 | | | |
| DC Type / Brushed | Screwdrivers for Automated Machines CLF Series | CLF-3000 | | | | | | | | | | | | | | | | 560-1,000 | 1.0-2.0 | 1.0-1.7 | Cameras, cell phones, copy machines, TVs, audio devices, lighting equipment, air conditioners, health appliances, switches, pneumatic components, power meters, etc. | | |
| | | CLF-4000 | | | | 0.1-0.35 | | | | | | | | | | | | 560-1,000 | 1.4-2.6 | 1.4-2.3 | | | |
| | | CLF-6000 | | | | 0.3-0.6 | | | | | | | | | | | | 400-750 | 2.0-3.0 | 2.0-2.6 | | | |
| | | CLF-6500 | | | | | 0.4-1 | | | | | | | | | | | 440-850 | 2.0-3.0 | 2.0-3.0 | | | |
| | | CLF-7000 | | | | | | 0.5-1.5 | | | | | | | | | | 420-780 | 2.0-4.0 | 2.0-4.0 | | | |
| | aF Series | aF-4500 | | | | | 0.4-0.6 | | | | | | | | | | | 940-1,700 | 2.0-3.0 | 2.0-2.6 | | | |
| | | aF-5000 | | | | | 0.4-0.75 | | | | | | | | | | | 600-1,100 | 2.0-3.0 | 2.0-3.0 | | | |
| | | aF-6500 | | | | | | 0.5-1.1 | | | | | | | | | | 950-1,700 | 3.0-4.0 | 2.6-3.0 | | | |
| | CL-A Series | CL-816A | | | | | | | | | 1.5-2.5 | | | | | | | 310-550 | 3.0-4.0 | 3.0-4.0 | | Automobile-related components, sashes, gas meters, electromagnetic valves, seat belts, etc. | |
| | | CL-825A | | | | | | | | | | | | | | | | 210-370 | 4.0-5.0 | 4.0-5.0 | | | |
| CL-850A | | | | | | | | | | | | | | | | | 320-570 | 4.0-5.0 | 4.0-5.0 | | | | |
| DC Type / Brushed | Recipro Screwdrivers | RD-4000 | | | | | | | | | | | | | | | 1,000 / 690 | 1.4-2.6 | 1.4-2.3 | Automobile components, lighting equipment, PCs, video game consoles, TVs, electric tools, wireless devices, gas equipment, VTRs, medical devices, pneumatic components, electronic components, etc. | | | |
| | | RD-4500 | | | | | | | | | | | | | | | 1,700 / 1,200 | 2.0-3.0 | 2.0-2.6 | | | | |
| | | RD-10 | | | | | | | | | | | | | | | 1,500 | 2.0-4.0 | 2.0-3.0 | | | | |
| | | RD-15 | | | | | | | | | | | | | | | 1,000 | 2.0-4.0 | 2.0-3.0 | | | | |
| | | RD-20 | | | | | | | | | | | | | | | 1,600 | 3.0-5.0 | 3.0-4.0 | | | | |
| | | RD-30 | | | | | | | | | | | | | | | 1,000 | 3.0-5.0 | 3.0-4.0 | | | | |

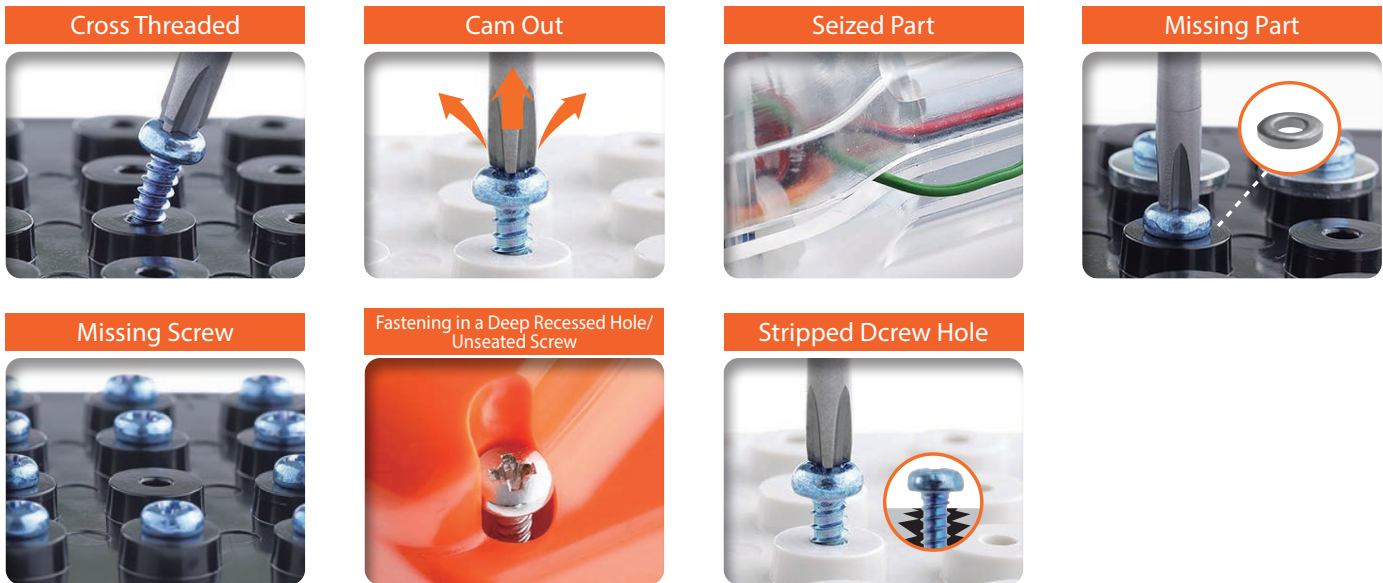
Some products may take some time to deliver. If you wish to expedite delivery, please consult the HIOS distributor before placing an order.

BLG-BC2 Series (DC Type)

Real-time error detection helps anyone becoming a Skilled Craftperson.
IoT realizes the visualization of screw fastening.

Screw fastening errors that are difficult to detect visually can be detected in real time.

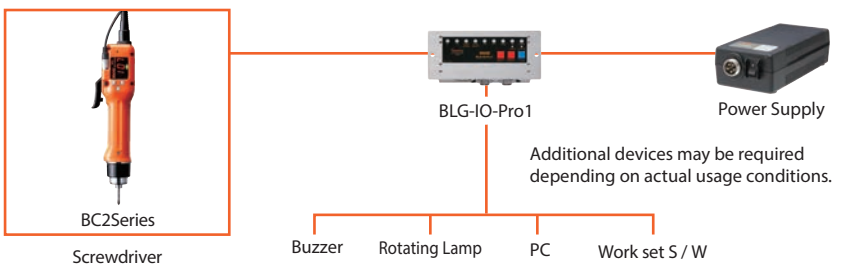
The pulse system that judges if a screw is fastened correctly or not can detect various screw fastening errors. It detects “abnormal” conditions to prevent serious problems without depending on workers’ proficiency.



Prevent mixing of Wrong Screws!



BLG-IO-Pro1 [Example of connection with external devices]



RELATED PRODUCTS

External I/O Box
BLG-IO-Pro1

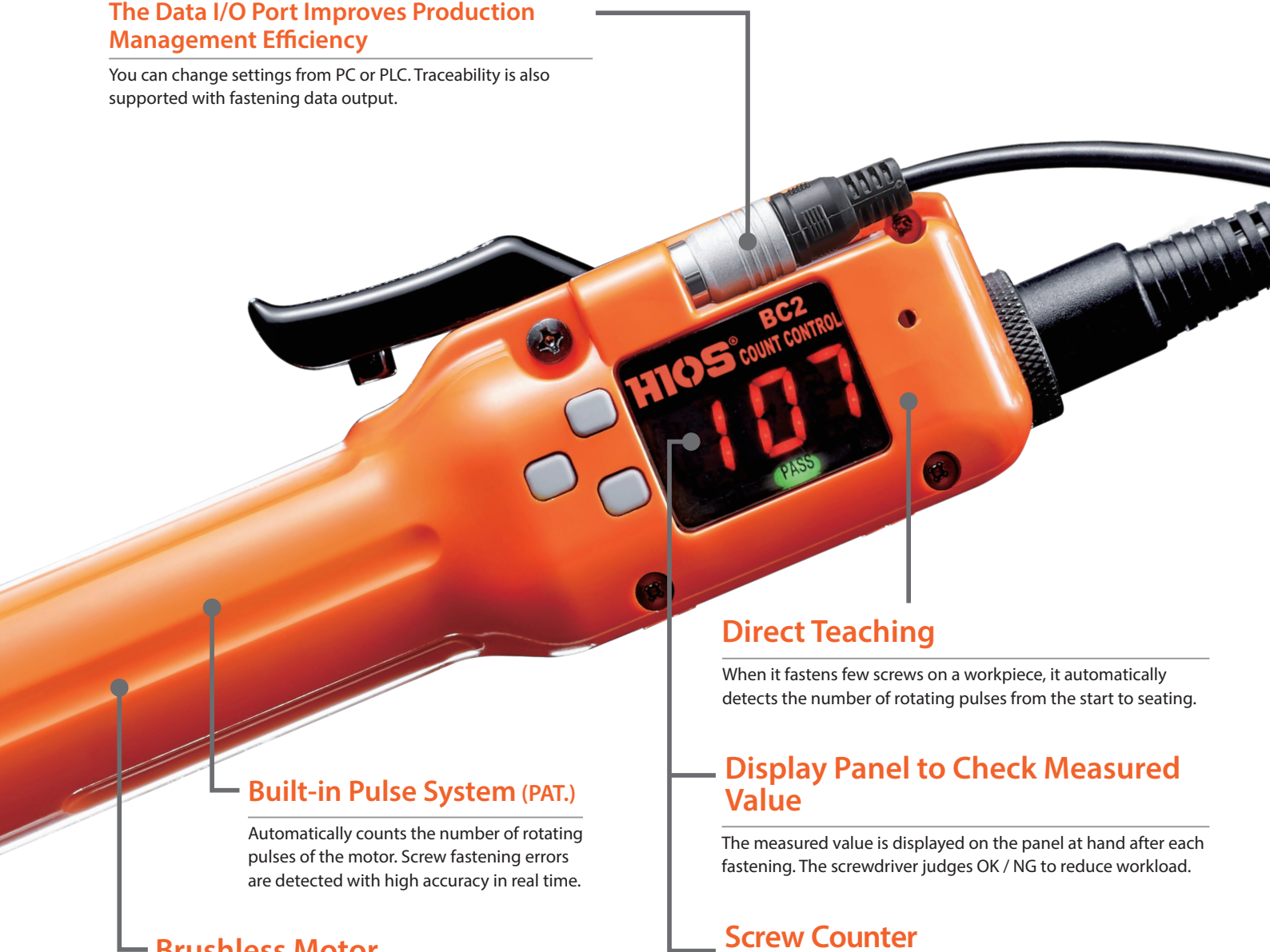
By connecting this box to the screwdriver, you can control screw fastening easily such as error detection.

* Please separately purchase an external I / O cable.

DC Screwdrivers | Brushless Screwdrivers BLG-BC2 Series

The Data I/O Port Improves Production Management Efficiency

You can change settings from PC or PLC. Traceability is also supported with fastening data output.



Built-in Pulse System (PAT.)

Automatically counts the number of rotating pulses of the motor. Screw fastening errors are detected with high accuracy in real time.

Brushless Motor

Because carbon particles are not generated, it is environmentally friendly with improved durability and stability.

Direct Teaching

When it fastens few screws on a workpiece, it automatically detects the number of rotating pulses from the start to seating.

Display Panel to Check Measured Value

The measured value is displayed on the panel at hand after each fastening. The screwdriver judges OK / NG to reduce workload.

Screw Counter

The number of screws for fastening can be set from 1 to 99. It reminds you about the number of remaining screws through counting down.

BLGIF2 [Image of linkage with external devices]



BC2Series
Screwdriver



BLG-IF2

Serial communication

| Pattern | No of screws / rotations |
|---------|--------------------------|
| 1 ▶ | 2 screws, 150 rotations |
| 2 ▶ | 3 screws, 130 rotations |
| 3 ▶ | 2 screws, 130 rotations |
| 4 ▶ | 1 screw, 120 rotations |

Parallel communication



PLC

RELATED PRODUCTS

Serial-to-parallel Conversion Box

BLG-IF2

The communication mode with an external device such as a PLC can be converted from serial to parallel. Up to 4 setting patterns including the number of screws and pulses can be saved and switched on the PLC.



BLG-BC2 Series (DC Type)



BLG-4000BC2



Lever

Low Torque
BLG-4000BC2-LT



Lever

BLG-5000BC2



Push and Lever

HI Speed
BLG-5000BC2-15
BLG-5000BC2-18
HI Torque
BLG-5000BC2-HT

HI Torque
BLG-7000BC2



Push and Lever

SPECIFICATIONS

| Start type | | Lever | | Push and Lever | | | | Push | |
|--|---------------------|-------------|---|------------------------------------|---|--------------------------------|----------------|--------------------------------|-------------------------|
| Model | | BLG-4000BC2 | BLG-4000BC2-LT | BLG-5000BC2 | BLG-5000BC2-15 | BLG-5000BC2-18 | BLG-5000BC2-HT | BLG-7000BC2 | BLG-7000BC2-GT |
| Output torque range (N-m) | | 0.1 - 0.55 | 0.03 - 0.2 | 0.2 - 1.2 | 0.3 - 1.0 | 0.5 - 1.5 | 0.5 - 2.0 | 0.7 - 2.8 | 2.0 - 5.0 |
| Unloaded rotation speed (r.p.m)±10% [HI / LOW] | | 1,000 / 690 | | 1,000 / 690 | 1,500 / 1,000 | 1,800 / 1,200 | 730 / — | 1,200 / 800 | 600 / — |
| Screw size (mm) | Machine screw | 1.4 - 2.6 | 1.0 - 2.3 | 2.0 - 3.0 | 2.3 - 3.0 | 2.3 - 3.0 | 2.0 - 4.0 | 2.6 - 5.0 | 4.0 - 6.0 |
| | Tapping screw | 1.4 - 2.3 | 1.0 - 2.0 | 2.0 - 3.0 | 2.0 - 2.6 | 2.0 - 2.6 | 2.0 - 3.0 | 2.6 - 4.0 | 4.0 - 6.0 |
| Outer dimensions | Grip diameter (Max) | ø32.7 | | ø38 | | ø38 | | ø40 | S: ø44 HANDLE: ø40 |
| | Length (mm) | 206 | 207 | 235 | | 235 | | 238 | 242.7 |
| Weight (g) | | 370 | 312 | 425 | | 425 | | 670 | S: 1915 HANDLE: 1000 |
| Power supply | T-45BL | ○ | ○ | ○ | ○* | — | ○* | — | — |
| | T-70BL | ○ | ○ | ○ | ○* | ○* | ○* | ○* | — |
| | T-80BL | ○ | ○ | ○ | ○* | ○* | ○* | ○* | ○* |
| Bit drive selection | Standard | H4 | | H4 | | H5 and 5HEX (compatible) | | | 1/4HEX |
| | Special Order | 1/4HEX | — | H5 and 5HEX (compatible) or 1/4HEX | | 1/4HEX | | | — |
| Accessories | Bit (one each) | HIOS Shank | H4 | +#0 (ø2.5×40) +#1 (ø4.0×40) | +#0 (ø2.0×40) +#0 (ø2.5×40) | +#1 (ø4.0×40) +#2 (ø4.0×40) | | — | — |
| | | | H5 | — | | +#1 (ø5.0×60) +#2 (ø5.0×60) | | +#1 (ø5.0×60) +#2 (ø5.0×60) | |
| | HEX Shank | 1/4HEX | +#1 (ø5.0×50) +#2 (ø5.0×50) - (ø5.0×50) | — | +#1 (ø5.0×50) +#2 (ø5.0×50) - (ø5.0×50) | | | +#2 (7.0×100) +#3 (7.0×100) | |
| Torque adjustment spring | | White | Yellow | — | | — | | | — |
| Cord length | | 2m (6P) | | 2m (6P) | | 2m (6P) | | | 2m (6P) |
| L-shaped HEX wrench | | — | | Width across flat: 5mm, 1 pc | | Width across flat: 5mm, 1 pc | | | — |
| Variations | BLGQ | HIOS Shank | ● | ● | | ● | | | — |
| | | HEX Shank | — | — | | — | | | — |

● For the models with the ★ mark, use with output power HI (DC 30V). With LOW (DC 20V) output, the screwdriver features may not be fully performed.

Power supply [P.21](#) → Spec. [P.55](#) →

HI Torque
BLG-7000BC2-GT

Stand Type
BLG-7000BC2-GT-S



Push

Grip Type
BLG-7000BC2-GT-HANDLE



Push and Lever

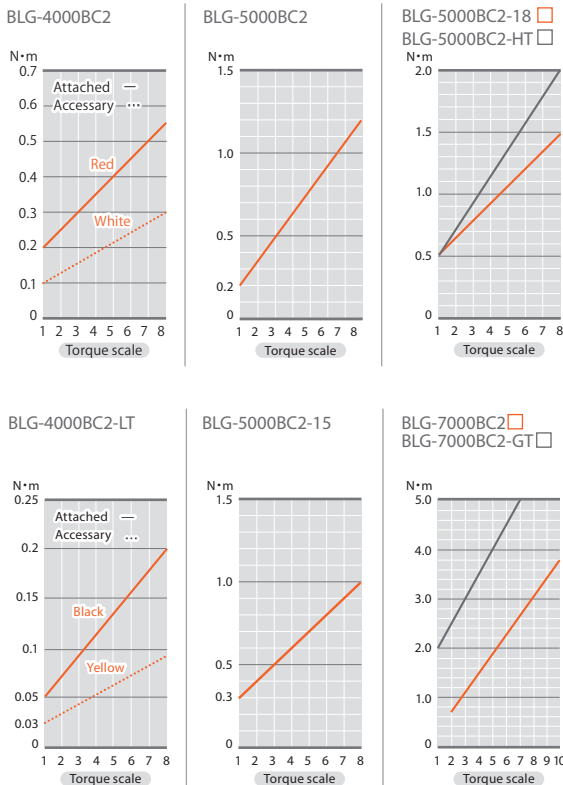
A range of torque types, from low to high, applicable to various production lines

Main features

- Error detection (number of rotations)
- Direct teaching
- Screw fastening count (1 to 99)
- Error warning (sound and lamp)
- Data I/O port (RS232C)
- Count error prevention (for retightening)
- Reverse rotation count up
- Maintenance reminder (accumulated total count)



Output Torque Guide (HI Input) ❖



*The colors in the chart indicate the spring colors.

❖For some models, two torque adjustment springs, for HI torque (installed) and for LOW torque (accessory), are included. Please use a suitable one for your operation.

APPLICABLE DRIVERS

Suction

BLGQ



POWER SUPPLY

T-45BL

T-70BL

T-80BL



See [P.21](#) →

See [P.21](#) →

See [P.21](#) →

ACCESSORIES

Stand for Vertical Operations

VMS-40 / VMS-50

Keeps the screwdriver in a vertical position, allowing accurate screw fastening.

Applicable models:
BLG-4000BC2
BLG-5000BC2 Series

See [P.40](#) →



Cord for External I/O

BLG-BC2-3012

The plug design has renewed to enhance robustness by a one-touch lock.



BLG-ZERO1 熟練工 / BLG-BC1 /

Screw Counter / Pulse System

BLG-ZERO1 Series 熟練工



Even a beginner can be a skilled craftsman in only 30 seconds. The direct teaching function automatically learns correct fastening just by fastening a few screws into a workpiece. Also fastening errors are detected in real time.

Main features

- Error detection (No. of rotations)
- Direct teaching
- Screw fastening count (1 to 99)
- Error warning (sound and lamp)

4000 Series



Lever

5000 Series



Push and Lever

With Screw Counter Built-in

BLG-BC1 Series



It supports correct fastening by measuring the time until seating. The built-in counter can prevent human errors in operations.

Main features

- Error detection (time)
- Counter ON / OFF
- Screw fastening count (1 to 99)
- Error warning (sound and lamp)
- Count error prevention (for check fastening, double fastening and retightening)

4000 Series



Lever

5000 Series



Push and Lever

SPECIFICATIONS

| Start type | | Lever | Push and Lever | | | |
|--|---------------------------|---------------|---|------------------|--------------------------------|------------------|
| BLG-ZERO1 Series | | BLG-4000ZERO1 | BLG-5000ZERO1 | BLG-5000ZERO1-15 | BLG-5000ZERO1-18 | BLG-5000ZERO1-HT |
| BLG-BC1 Series | | BLG-4000BC1 | BLG-5000BC1 | BLG-5000BC1-15 | BLG-5000BC1-18 | BLG-5000BC1-HT |
| BLG Series | | BLG-4000 | BLG-5000 | BLG-5000-15 | BLG-5000-18 | BLG-5000-HT |
| Output torque range (N·m) | | 0.1 - 0.55 | 0.2 - 1.2 | 0.3 - 1.0 | 0.5 - 1.5 | 0.5 - 2.0 |
| Unloaded rotation speed (r.p.m)±10% [HI / LOW] | | 1,000 / 690 | 1,000 / 690 | 1,500 / 1,000 | 1,800 / 1,200 | 730 / — |
| Screw size (mm) | Machine screw | 1.4 - 2.6 | 2.0 - 3.0 | 2.3 - 3.0 | | 2.0 - 4.0 |
| | Tapping screw | 1.4 - 2.3 | 2.0 - 3.0 | 2.0 - 2.6 | | 2.0 - 3.0 |
| Outer dimensions | Grip diameter (Max) | ∅32.7 | ∅38 | | ∅38 | |
| | Length (mm) | 206 | 235 | | 235 | |
| Weight (g) | | 370 | 425 | | 425 | |
| Power supply | T-45BL | ○ | ○ | ○★ | — | ○★ |
| | T-70BL | ○ | ○ | ○★ | ○★ | ○★ |
| Bit drive selection | Standard | H4 | H4 | | H5 and 5HEX (compatible) | |
| | Special Order | 1/4HEX | H5 and 5HEX (compatible) or 1/4HEX | | 1/4HEX | |
| Accessories | Bit (one each) | H4 | +#1 (∅4.0×40) +#2 (∅4.0×40) | | — | |
| | | H5 | — | | +#1 (∅5.0×60) +#2 (∅5.0×60) | |
| | HEX Shank | 1/4HEX | +#1 (∅5.0×50) +#2 (∅5.0×50) - (∅5.0×50) | | — | |
| Torque adjustment spring | | White | — | | — | |
| Cord length | | 2m (6P) | 2m (6P) | | 2m (6P) | |
| L-shaped HEX wrench | | — | Width across flat: 5mm, 1 pc | | Width across flat: 5mm, 1 pc | |
| Variations | BLGQ | HIOS Shank | ● | ● | ● | ● |
| | BLG-OPC (BLG Series only) | HEX Shank | — | — | — | — |
| ● (BLG-ZERO1 and BC1 have the screw counter built-in.) | | | | | | |

● For the models with the ★ mark, use with output power HI (DC 30V). With LOW (DC 20V) output, the screwdriver features may not be fully performed.

Power supply **P.21** Spec. **P.55**

BLG Series (DC Type)

BLG

Standard

BLG Series



Brushless version of our long-seller CL Series. Improved durability contributes to stable screw fastening quality. With an easy-to-handle compact body, it achieves excellent cost performance.

The orange body is a symbol of the trustworthiness of HIOS. The BLG Series has a rich lineup from which you can choose one based on the function most suitable for your operation.

4000 Series



Lever

5000 Series



Push and Lever

RELATED PRODUCTS BLG Series

Relay Box for Completion Signal

BLOP-AF

The signal from the screwdriver can be used by an external device via this box.



See [P.40](#)

Relay Box for I/O Signal

BLOP-OST2

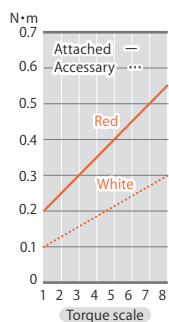
The signal from the screwdriver can be relayed to an external device via this box. Switching ON / OFF the power is also possible.



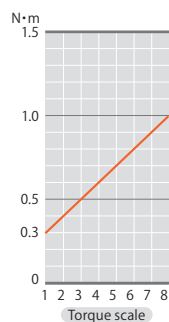
See [P.40](#)

Output Torque Guide (HI Input) ❖

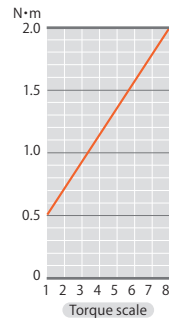
BLG-4000 Series



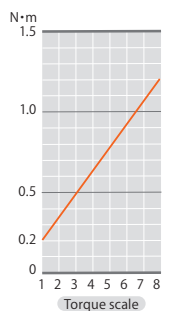
BLG-5000-15 Series



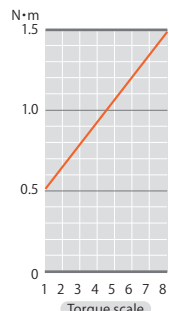
BLG-5000-HT Series



BLG-5000 Series



BLG-5000-18 Series



*The colors in the chart indicate the spring colors.

❖For some models, two torque adjustment springs, for HI torque (installed) and for LOW torque (accessory), are included. Please use a suitable one for your operation.

APPLICABLE DRIVERS Variations

Suction

BLGQ



See [P.51](#)

Suction Part
(Optional Item)

Supporting Screw Counter

BLG-OPC



See [P.41](#)

POWER SUPPLY

T-45BL



See [P.21](#)

T-70BL



See [P.21](#)

ACCESSORIES

Stand for Vertical Operations

VMS-40 / VMS-50

The stand keeps the screwdriver in a vertical position, allowing accurate screw fastening.



See [P.40](#)

DC Screwdrivers

Brushless Screwdrivers BLG-ZERO1 / BLG-BC1 / BLG Series

PG Series (DC Type)

PG-3000



Lever

PG-5000



Lever

PG-7000



Lever

SPECIFICATIONS

| Model | | PG-3000 | PG-5000 | PG-7000 | |
|---|---------------------|--|--|--------------------------|---|
| Output torque range (N·m) | | 0.2 - 0.55 | 0.4 - 1.2 | 1.0 - 2.8 | |
| Unloaded rotation speed (r.p.m) ±10% [HI / LOW] | | 980 / 680 | 900 / 590 | 960 / 630 | |
| Screw size (mm) | Machine screw | 1.7 - 2.3 | 2.3 - 3.0 | 2.6 - 5.0 | |
| | Tapping screw | 2.0 - 2.3 | 2.0 - 2.3 | 2.6 - 4.0 | |
| Outer dimensions | Grip diameter (Max) | ∅32.5 | ∅33 | ∅39 | |
| | Length (mm) | 245 | 260 | 298 | |
| Weight (g) | | 345 | 509 | 807 | |
| Power supply | | T-70BL ○ | ○ | ○ | |
| Bit drive selection | Standard | H4 | | H5 and 5HEX (compatible) | |
| | Special Order | — | | 1/4HEX | |
| Accessories | Bit (one each) | H4 | + #0 (∅2.5×40), + #1 (∅4.0×40), + #2 (∅4.0×40) | | |
| | | H5 | — | | |
| | | HEX Shank | 1/4HEX | | |
| Cord length | | 2m (6P) | | | |
| Sensor cord (m) | | 1.7m (8P) | | | |
| Others | | CD-ROM of Software, RS232C cable 1 piece, USB-serial conversion cable 1 piece, AC adaptor (for AC100-240V) 1 piece | | | |
| Variations | PGQ | HIOS Shank | ● | ● | ● |
| | | HEX Shank | — | — | — |

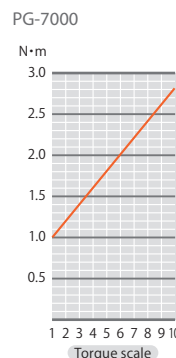
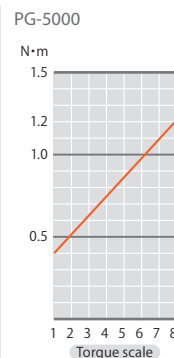
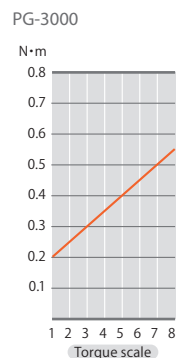
Power supply [P.21](#) [Spec. P.55](#)

PPG-01 I / O Connector / Output (open collector)

| | | |
|-----------|---|---------------------------------------|
| I/O | Shared by plus COM and minus COM, Output: Sink type | |
| Connector | Male connector | (Part No.: Hirose HIF3BA-20PA-2.54DS) |
| | External connector | (Part No.: Hirose HIF3BA-20D-2.54R) |
| Type | Minus COM (Supporting NPN) *Plus COM PNP is not applicable. | |

* An external connector is not included. Please prepare it by yourself.

Output Torque Guide (HI Input)



Workflow of Pass Guard System Use

Setting the reference values for OK / NG criteria

- Memorizing acceptance criteria (teaching)
- The acceptance criteria are determined by conducting an actual fastening procedure. The minimum and the maximum values of fastening torque and work time are then saved.
- Set the acceptable range (error rate setting)
- The acceptable range for the minimum and maximum values of fastening torque and work time can be selected from 0, 2, 5, 10, 15 and 20%.

Actual operation

Every screw fastening is inspected in real time.

Judgement

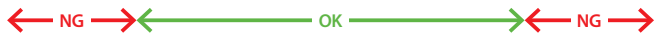
OK / NG results are indicated by LED light and buzzer of PG-01.

Record and save the data with a PC

The measurement data can be checked and recorded by using the bundled software.

OK / NG Criteria

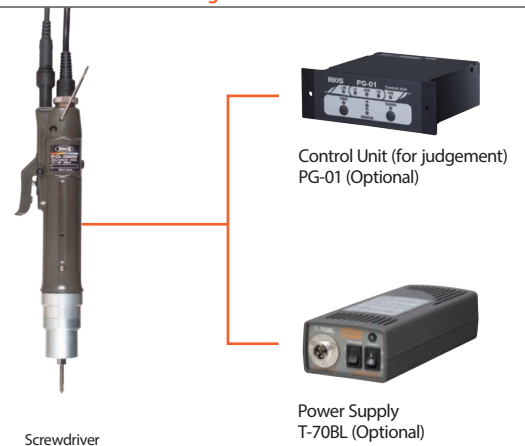
| NG (L. NG) | Acceptable range (L. G.) | GOOD | Acceptable range (H. G.) | NG (H. NG) |
|-------------------------|---|--|---|--------------------------|
| Lower than L. G. value. | Within the specified % from the Good lower limit value. | Between the Good lower and upper limit values. | Within the specified % from the Good upper limit value. | Higher than H. G. value. |



Judging screw fastening quality and saving the data. For error detection, you can rely on the Pass Guard System

- The built-in torque sensor automatically judges every fastening (OK / NG).
- The errors that are difficult to be found visually (such as insufficient torque, unseated or cross threaded) can be detected automatically.
- All the operation data can be saved by connecting PG-01 to an external device.

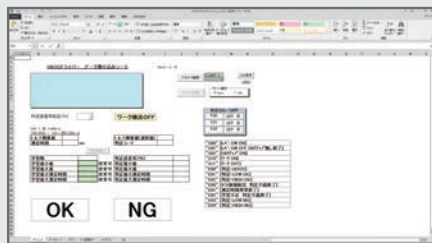
Configuration



Saving Data with Software

By using the bundled software, you can check the OK / NG judgment of screw fastening and save the measurement data in real time.

Data Import Sheet / EXCEL



Screwdriver Data Collection / Application



APPLICABLE DRIVERS

Variation

Suction

PGQ



See [P.51](#)

RELATED PRODUCTS

Control Unit (for judgement)

PG-01 (optional)

Reads the signals from the screwdriver to decide OK / NG in real time.

- Standard: RS-232C
- Input voltage: AC100-240V (50/60Hz)
- Outer dimensions: W149×D120×H49
- Weight: 520g



POWER SUPPLY

T-70BL



See [P.21](#)

BL Series (DC Type)

BL-2000

Shock Absorbing

BL-2000SS



Side view

Lever

BL-3000

Shock Absorbing

BL-3000SS



Push and Lever



BL-5000

Shock Absorbing

BL-5000SS

HI Speed

BL-5000-15

HI Torque

BL-5020



Push and Lever



SPECIFICATIONS

| Lever start model | | BL-2000 BL-2000SS | — | — | — | — | — |
|---|---------------------|----------------------|--|------------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Push and Lever | | — | BL-3000 BL-3000SS | BL-5000 BL-5000SS | BL-5000-15 | BL-5020 | BL-7000 |
| Output torque range (N·m) | | 0.02 - 0.2 | 0.2-0.55 0.2-0.35 (SS) | 0.2 - 1.2 | 0.3 - 1.0 | 0.5 - 2.0 | 0.7 - 2.8 |
| Unloaded rotation speed (r.p.m)±10% [HI / LOW] | | 990 / 650 | 980 / 680 | 900 / 590 | 1,500 / 1,000 | 750 / 500 | 960 / 630 |
| Screw size (mm) | Machine screw | 1.0 - 2.3 | 1.7 - 2.3 | 2.0 - 3.0 | | 2.0 - 4.0 | 2.6 - 5.0 |
| | Tapping screw | 1.0 - 2.0 | 2.0 - 2.3 | 2.0 - 3.0 | 2.0 - 2.6 | 2.0 - 3.0 | 2.6 - 4.0 |
| Outer dimensions | Grip diameter (Max) | ∅26 | ∅32.5 | ∅38 | ∅38 | ∅38 | ∅40 |
| | Length (mm) | 172 | 192 | 207 | 207 | 207 | 239 |
| Weight (g) | | 254 | 320 | 360 | 360 | 360 | 640 |
| Power supply | T-45BL | ○ | ○ | ○ | ○★ | ○★ | — |
| | T-70BL | ○ | ○ | ○ | ○★ | ○★ | ○ |
| Bit drive selection | Standard | H4 | | H4 | | H5 and 5HEX (compatible) | |
| | Special Order | — | 1/4HEX | H5 and 5HEX (compatible) or 1/4HEX | | 1/4HEX | |
| Accessories | Bit (one each) | HIOS Shank | H4 +#0 (∅2.0×40) +#0 (∅2.5×40) | +#0 (∅2.5×40) +#1 (∅4.0×40) | | +#1 (∅4.0×40) +#2 (∅4.0×40) | |
| | | H5 | — | | +#1 (∅5.0×60) +#2 (∅5.0×60) | | +#1 (∅5.0×60) +#2 (∅5.0×60) |
| | HEX Shank | 1/4HEX | +#1 (∅5.0×50), #2 (∅5.0×50) - (∅5.0×50) | | | | |
| Torque adjustment spring | | Yellow | — | — | | — | |
| Cord length | | 2m (5P) ESD | 1.5m (5P) | 1.5m (5P) | | 1.5m (5P) | 2m (5P) |
| L-shaped HEX wrench | | — | | Width across flat: 5mm, 1 pc | | Width across flat: 5mm, 1 pc | |
| Variations | BLQ | HIOS Shank | ● | ● | ● | ● | ● |
| | | HEX Shank | — | — | — | — | — |
| | BLQ-ESD | Anti-electrostatic | ● | ● | ● | ● | ● |
| | BLQ-CR | ● | ● | ● | ● | ● | ● |
| | BL-ESD | Anti-electrostatic | ● | ● | ● | ● | ● |
| | BLQ-CR-ESD | ● | ● | ● | ● | ● | ● |
| BL-OPC | ● | ● | ● | ● | ● | ● | |

For the models with the ★ mark, use with output power HI (DC 30V). With LOW (DC 20V) output, the screwdriver features may not be fully performed.

Power supply [P.21](#) Spec. [P.55](#)

BL-7000



Employs an ultra-strong brushless motor that improves durability and stability

- Maintains a clean environment with a brushless motor that does not generate carbon particles.
- The temperature increase of the motor is suppressed by about 30%. With improved durability, maintenance cost is significantly reduced.
- Both start types, push and lever, are available on one model (except BL-2000).



Push and Lever

RELATED PRODUCTS

Pistol Attachment

PAB-70

Can be converted to a pistol type. Optimal for horizontal fastening.



Applicable model:
BL-7000 Series

Relay Box for Completion Signal

BLOP-AF

Signal from the screwdriver can be used by an external device via this box.



See [P.40](#)

Relay Box for I/O Signal

BLOP-OST2

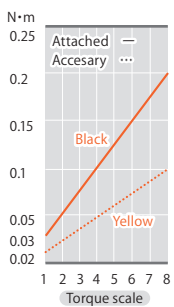
Signal from the screwdriver can be relayed to an external device via this box. Switching ON/OFF the power is also possible.



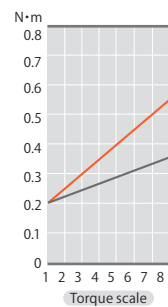
See [P.40](#)

Output Torque Guide (HI Input) ❖

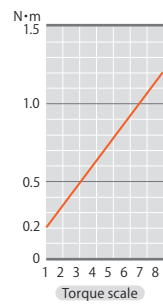
BL-2000
BL-2000SS



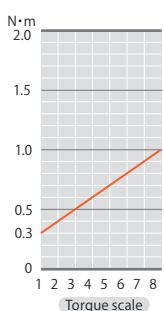
BL-3000
BL-3000SS



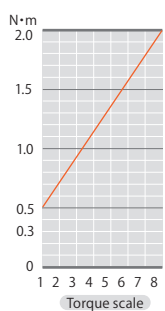
BL-5000
BL-5000SS



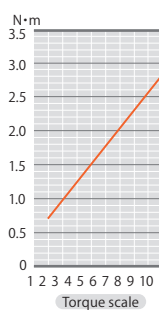
BL-5000-15



BL-5020



BL-7000



* The colors in the chart indicate the spring colors.

❖ For some models, two torque adjustment springs, for HI torque (installed) and for LOW torque (accessory), are included. Please use a suitable one for your operation.

APPLICABLE DRIVERS Variation

Suction

BLQ



Suction Part
(Optional Item)

See [P.51](#)

Suction/Anti-electrostatic

BLQ-ESD



For Clean Room /
Anti-electrostatics

BLQ-CR-ESD



For Clean Room

BLQ-CR



Anti-electrostatics

BL-ESD



Supporting Screw Counter

BL-OPC



See [P.41](#)

CL Series (DC Type)

CL-2000



Lever

CL-3000



Lever

CL-4000



Lever



Push

CL-6000



Lever

CL-6500



Push

SPECIFICATIONS

| Lever start model | | CL-2000 | CL-3000 | CL-4000 | CL-6000 | CL-6500 | CL-7000 | — |
|--|---------------------|------------|-------------|--------------------------------|---|--------------------------------|--------------------------------|---------------|
| Push-to-start model | | — | — | CL-4000PS | CL-6000PS | CL-6500PS | CL-7000PS | CL-9000 |
| Output torque range (N·m) | | 0.02 - 0.2 | 0.03 - 0.2 | 0.1 - 0.55 | 0.2 - 1 | 0.3 - 1.6 | 0.3 - 2.5 | 1.2 - 5 |
| Unloaded rotation speed (r.p.m)±10% [HI / LOW] | | 680 / 490 | 1,000 / 670 | 1,000 / 690 | 800 / 500 | 900 / 600 | 750 / — | 530 |
| Screw size (mm) | Machine screw | 1.0 - 2.3 | 1.0 - 2.0 | 1.4 - 2.6 | 2.0 - 3.0 | 2.0 - 4.0 | 2.0 - 5.0 | 4.0 - 6.0 |
| | Tapping screw | 1.0 - 2.0 | 1.0 - 1.7 | 1.4 - 2.3 | 2.0 - 2.6 | 2.0 - 3.0 | 2.0 - 4.0 | 4.0 - 6.0 |
| Outer dimensions | Grip diameter (Max) | ∅26 | ∅32.5 | ∅32.5 / ∅37.5 (PS) | ∅37 | ∅37 | ∅37 | ∅52 |
| | Length (mm) | 166 | 183 | 197 | 220 / 221 (PS) | 235 / 236 (PS) | 255 / 256 (PS) | 250 |
| Weight (g) | | 200 | 350 | 380 / 430 (PS) | 600 | 660 | 750 | 3,010 (total) |
| Power supply | CLT-45 | ○ | ○ | ○ | ○ | ○ | — | CLT-80 |
| | CLT-60 | ○ | ○ | ○ | ○ | ○ | ○ | |
| Bit drive selection | Standard | H4 | | | H5 | | | 1/4HEX |
| | Special Order | — | | | 1/4HEX or 5HEX | | 1/4HEX or 5HEX | |
| Accessories | Bit (one each) | HIOS Shank | H4 | +#0 (∅2.0×40) +#0 (∅2.5×40) | | +#0 (∅2.5×40) +#1 (∅4.0×40) | | — |
| | | | H5 | — | | +#1 (∅5×60) +#2 (∅5×60) | | — |
| | HEX Shank | 1/4HEX | — | | +#1 (∅5.0×50) +#2 (∅5.0×50) - (∅5.0×50) | | +#2 (7.0×100) +#3 (7.0×100) | |
| Torque adjustment spring | | Yellow | Gold | Blue | — | White | Yellow | — |
| Cord length | | 1.5m (5P) | | | 2m (5P) | | | 2m (5P) |
| Carbon brush order code (Optional / 2 pcs per set) | | — | A45-0420 | CL4-0420 | CL65-0490 | | | CL9-0410 |
| Variations | CLQ | HIOS Shank | ● | ● | ● | ● | ● | — |
| | | HEX Shank | — | — | — | — | — | — |
| | CL-ESD | ● | ● | ● | ● | ● | ● | — |
| | CL-NL | — | ● | ● | ● | ● | ● | ● |

Notes: ● The carbon brush for CL-2000 is enclosed in the motor and cannot be replaced. Although the life of the carbon brush depends on use conditions, as a guide, if you fasten about 6,000 screws a day, you need to replace the carbon brush 3 to 4 years after you start using it. Please contact a HIOS distributor for maintenance and repair.

Power supply [P.21](#) Spec. [P.55](#)

CL-7000



Lever

Push

CL-9000 (with Shockless Stand)



Push

A long seller with a wide range of torque and reliable operability

- A wide range of torque enables accurate fastening.
- Easy-to-hold small diameter grip reduces workload.
- Supports high torque screw fastening up to 5N·m (CL-9000).

RELATED PRODUCTS

Power Supply with Screw Counter

CLT-70STC3

With screw counter that prevents screw skipping by displaying remaining No. of screws.

See [P.41](#)



Separate Counter

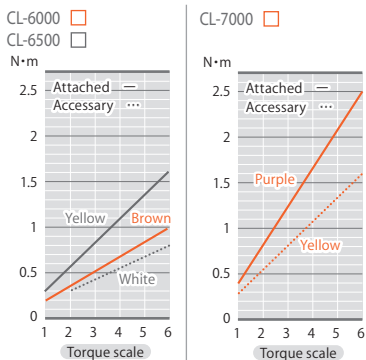
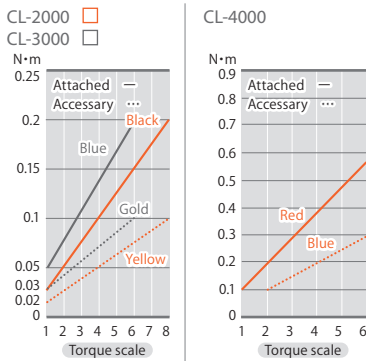
CLOP-SC1

The counter can be used by connecting it to existing HIOS power supply.

See [P.41](#)



Output Torque Guide (HI Input) ❖



* The colors in the chart indicate the spring colors. CL-9000: For torque adjustment, refer to the torque scale sticker affixed to the main body.

❖ For some models, two torque adjustment springs, for HI torque (installed) and for LOW torque (accessory), are included. Please use a suitable one for your operation.

APPLICABLE DRIVERS Variations

Suction

CLQ



See [P.51](#)

Anti-electrostatic

CL-ESD



For Clean Room/Anti-electrostatic

CLQ-CR-ESD



See [P.51](#)

Noiseless

CL-NL



ACCESSORIES

Pistol Attachment

PA-65

Can be converted to a pistol type, which is optimal for horizontal fastening.



Applicable models: CL-6000, CL-6500, CL-7000 (including Push-to start type)

Angle Attachment

ANGL-Z (H5) ANGLX-Z (1/4HEX)

By attaching this to the tip, you can work smoothly in a narrow space.



Set the output to 1.2 N·m or smaller attachment.

Applicable models: CL-6000, CL-6500, CL-7000 (Lever start type only)

Grip Attachment for Push-to-start

PS-1 PS-1-ESD (Anti-electrostatic)

This attachment changes start type from Lever to Push.



Applicable model: CL-4000



When attached

Power Supply / Controller

Exclusive quiet power supply for DC screwdrivers to drive them safely.

- Connected to an AC outlet. It converts power to low output for DC screwdrivers.
- Please use HIOS screwdrivers in combination with a HIOS power supply for safe screw fastening.

Power Supplies for Brushless Screwdrivers

T-45BL (for one screwdriver)

Applicable to:
BLG Series
BL Series (including OPC)



T-70BL (for one screwdriver)

Applicable to:
BLG Series
BL Series
PGSeries (including OPC)



T-80BL

Applicable to:
BLG-BC2 Series



SPECIFICATIONS

| Model | T-45BL | T-70BL | T-80BL |
|----------------------------|---|---|---|
| Primary input power supply | AC100-240V (47-63Hz) | AC100-240V (47-63Hz) | AC100-240V (47-63Hz) |
| Secondary output voltage | HI (2): DC30V, LOW (1): DC20V (2-step switch) | HI (2): DC30V, LOW (1): DC20V (2-step switch) | HI (2): DC30V, LOW (1): DC20V (2-step switch) |
| Outer dimensions (mm) | 71.5 (W)×146 (D)×42.6 (H) | 88 (W)×210 (D)×52 (H) | 116 (W)×210 (D)×55 (H) |
| Weight (g) | 320 | 685 | 1,370 |
| Accessories | Power supply cord 1.8m (1 pc), flat 2P conversion plug (1 pc) (only for 100V), mounting hardware, mounting screws | Power supply cord 1.8m (1 pc), flat 2P conversion plug (1 pc) (only for 100V), mounting hardware, mounting screws | Power supply cord 1.8m (1 pc), flat 2P conversion plug (1 pc) (only for 100V), mounting hardware, mounting screws |
| Plug type | A / A-2 / A-3 / C / BF / S | A / A-2 / A-3 / C / BF / S | A / A-2 / A-3 / C / BF / S |
| Applicable screwdrivers | BLG | BLG-4000 Series / BLG-5000 Series (except for BLG-5000-18) | BLG-4000 Series / BLG-5000 Series / BLG-7000 |
| | BL | BL-2000 Series/BL-3000 Series/BL-5000 Series | BL-2000 Series/BL-3000 Series/BL-5000 Series/BL-7000 |
| | PG | — | PG-3000 / PG-5000 / PG-7000 |

Note: Use the HI speed and/or HI torque power supplies with HI setting only.

Power Supplies For Brushed Screwdrivers

CLT-45 (for one screwdriver)

Applicable to:
CL Series



CLT-60 (for one screwdriver)

Applicable to:
CL Series



CLT-80 (for one screwdriver)

Applicable to:
CL Series



SPECIFICATIONS

| Model | CLT-45 | CLT-60 | CLT-80 |
|----------------------------|---|---|---|
| Primary input power supply | AC100-240V (47-63Hz) | AC100-240V (47-63Hz) | AC100-240V (47-63Hz) |
| Secondary output voltage | HI (2): DC30V, LOW (1): DC20V (2-step switch) | HI (2): DC30V, LOW (1): DC20V (2-step switch) | HI (2): DC30V, LOW (1): DC20V (2-step switch) |
| Outer dimensions (mm) | 71.5 (W)×146 (D)×42.6 (H) | 88 (W)×210 (D)×52 (H) | 116 (W)×210 (D)×60 (H) |
| Weight (g) | 330 | 715 | 1,400 |
| Accessories | Power supply cord 1.8m (1 pc), flat 2P conversion plug (1 pc) (only for 100V), mounting hardware, mounting screws | Power supply cord 1.8m (1 pc), flat 2P conversion plug (1 pc) (only for 100V), mounting hardware, mounting screws | Power supply cord 1.8m (1 pc), flat 2P conversion plug (1 pc) (only for 100V), mounting hardware, mounting screws |
| Plug type | A / A-2 / A-3 / C / BF / S | A / A-2 / A-3 / C / BF / S | A / A-2 / A-3 / C / BF / S |
| Applicable screwdrivers | CL-2000, CL-3000, CL-4000, CL-6000, CL-6500 | CL-2000, CL-3000, CL-4000, CL-6000, CL-6500, CL-7000 | CL-2000, CL-3000, CL-4000, CL-6000, CL-6500, CL-7000, CL-9000 |

Exclusive controllers for brushless screwdrivers for automated machines

Controllers featuring screwdriver rotation speed and direction switching functions as standard. The rotation speed can be chosen from 22 levels. The controllers can be used for various screw fastening operations. They can be controlled from an external device such as PLC.

BLT-AY-61 (for one screwdriver)

Applicable to:
PGF Series
BLF Series



BLT-AY-71 (for one screwdriver)

Applicable to:
PGF Series
BLF Series



SPECIFICATIONS

| Model | BLT-AY-61 | BLT-AY-71 |
|----------------------------|---|--------------------|
| Primary input power supply | AC100-240V, 47-63Hz | |
| Secondary output voltage | HI: DC20-30V, LOW: DC5-15V (switchable in 11 steps for both HI and LOW) | |
| Outer dimensions (mm) | 202 (W)×143 (D)×87 (H) | |
| Weight (kg) | 1.75 | |
| Accessories | Power supply cord 1.8m with ground wire 1 pc, connector terminal block 1 pc | |
| Plug Type | A-1 / A-2 / A-3 / C / BF / S | |
| Applicable screwdrivers | PGF | PGF-3000, PGF-5000 |
| | BLF | BLF-2000, BLF-5000 |
| | | PGF-7000 |
| | | BLF-7000 Series |

Exclusive controllers for brushed screwdrivers for automated machines

CLT-AY-61 (for one screwdriver)

Applicable to:
CLF Series, αF Series



CLT-AY-81 (for one screwdriver)

Applicable to:
CL-A Series



SPECIFICATIONS

| Model | CLT-AY-61 | CLT-AY-81 |
|----------------------------|---|---|
| Primary input power supply | AC100V, 120V, 220-240V ±5% 50/60Hz | AC100V±5% 50/60Hz |
| Secondary output voltage | About DC17-30V (stepless) | About DC17-30V (stepless) |
| Outer dimensions (mm) | 232 (W)×177 (D)×106 (H) | 320 (W)×220 (D)×154 (H) |
| Weight (kg) | 4.2 | 13.5 |
| Accessories | Power supply cord 1.8m with ground wire 1 pc, spare fuse 1 pc, fork terminals 5 pcs | Power supply cord 1.8m with ground wire 1 pc, spare fuse 1 pc, fork terminals 5 pcs |
| Plug type | A-1 / A-2 / A-3 / C / BF / S | A-1 |
| Applicable screwdrivers | CLF Series, αF Series | CL-A Series |

Optional Specifications

2WV

Models: CLT-AY-61-2WV
CLT-AY-81-2WV

Low torque rotation (5-15V) can be controlled externally.

REV

Models: CLT-AY-61-REV
CLT-AY-81-REV

Reverse rotation can be controlled externally.

2WV+REV

Models: CLT-AY-61-REV-2WV
CLT-AY-81-REV-2WV

Note: These functions cannot be added after purchase.

Plug Types

| Voltage | 100V | | 120V | | 220-240V | | |
|------------|--------|----------|----------|----------|----------|---------|--------|
| | Type A | Type A-1 | Type A-2 | Type A-3 | Type C | Type BF | Type S |
| Plug Shape | | | | | | | |

VB Series (AC Type)

100V

VB-1510

Hi Speed

VB-1510-18

Hi Torque

VB-2008



VB-1820

VB-3012

VB-4504



VB-4504 has a Shockless Stand

Hi Speed / Hi Torque

VB-3020



Lever

Push



Lever

Push

SPECIFICATIONS

| Lever start model | | VB-1510 | VB-1510-18 | VB-1820 | VB-2008 | VB-3012 | VB-3020 | VB-4504 | VBH-1820 | VBH-3012 |
|-------------------------------------|---------------------|------------------------------------|--|----------------------------|-------------------------------|----------------------------|----------------------------|-------------------------------|-------------------------|--------------------------------------|
| Push-to-start model | | VB-1510PS | VB-1510PS-18 | VB-1820PS | VB-2008PS | VB-3012PS | VB-3020PS | VB-4504PS | VBH-1820PS | VBH-3012PS |
| AC input power (±5%) | | 100V | | | 100V | | | 100V | | 100V |
| Power consumption (W)*1 | | 20W | | | 40W | 20W | 40W | 40W | | 40W |
| Output torque range (N·m) | | 0.25 - 1.5 | 0.2 - 1 | 0.4 - 1.8 | 0.4 - 2 | 0.5 - 3 | 1 - 3 | 1 - 4.5 | 3 - 7 | 4 - 10 |
| Unloaded rotation speed (r.p.m)±10% | | 970 | 1,800 | 2,000 | 800 | 1,200 | 2,000 | 400 | 470 | 270 |
| Screw size (mm) | Machine screw | 2.0 - 4.0 | | 2.6 - 4.0 | 2.0 - 4.0 | 3.0 - 5.0 | 3.0 - 5.0 | | 5.0 - 6.0 | |
| | Tapping screw | 2.0 - 3.0 | | 2.6 - 3.0 | 2.0 - 3.0 | 3.0 - 4.0 | 3.0 - 4.0 | | 5.0 - 6.0 | |
| Outer dimensions | Grip diameter (Max) | ∅33 | ∅33 | ∅39 / ∅41 (PS) | ∅33 | ∅39 / ∅41 (PS) | ∅39 / ∅41 (PS) | ∅39 / ∅45 (PS) | ∅39 / ∅45 (PS) | ∅39 / ∅45 (PS) |
| | Length (mm) | 255 | | 263 / 286 (PS) | 255 | 263 / 286 (PS) | 263 / 286 (PS) | 263 / 286 (PS) | 343 / 361 (PS) | |
| Weight (g) | | 526 | | 750 | 526 | 750 | 750 | 750 / *2 | 2,550 (total) | |
| AC cord length | | 3m | | 3m | | | 3m | | 3m | |
| Bit drive selection | Standard | H4 | | H5 and 5HEX (compatible) | | | H5 and 5HEX (compatible) | 1/4HEX | 1/4HEX | |
| | Special Order | H5 and 5HEX (compatible) or 1/4HEX | | 1/4HEX | | | 1/4HEX | — | — | |
| Accessories | Bit (one each) | HIOS Shank | H4 | +#1 (∅4×40) +#2 (∅4×40) | | — | | — | | — |
| | | | H5 | +#1 (∅5×60) +#2 (∅5×60) | | +#1 (∅5×60) +#2 (∅5×60) | +#1 (∅5×60) +#2 (∅5×60) | — | | |
| | HEX Shank | 1/4HEX | +#1 (∅5.0×50), #2 (∅5.0×50) - (∅5.0×50) | | | | | | — | |
| Torque adjustment spring | | Silver | — | | — | | | — | | — |
| Plus screw for adjustment | | — | | | M2.6 (pan head machine screw) | | | M2.6 (pan head machine screw) | — | M4×6 (hexagon socket head set screw) |
| Flat 2P conversion plug | | 1 pc (with ground wire) | | 1 pc (with ground wire) | | | 1 pc (with ground wire) | | 1 pc (with ground wire) | |
| Shockless Stand | | — | | | — | | | — | ● | ● |
| Variations | VZQ | HIOS Shank | — | — | ● | — | ● | — | — | — |
| | | HEX Shank | — | — | — | — | — | — | — | — |
| VB / VBH-OPC | | ● | ● | ● | ● | ● | ● | ● | ● | ● |

*1 Power consumption is an approximate value. *2 VB-4504PS(with Shockless Stand)2,080g (total)

Ultra HI Torque

VBH-1820 (with Shockless Stand)

Ultra HI Torque

VBH-3012 (with Shockless Stand)



Lever



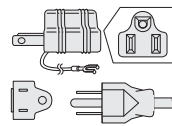
Push

Supports screw fastening of large equipment. HI speed & HI torque, and energy saving

- Can be directly connected to an AC outlet.
- Reduced power consumption by about 50% saves power cost.
- Hammer head stabilizes ultra-high torque screw fastening (VBH).

Plug Type

Type A / 100V



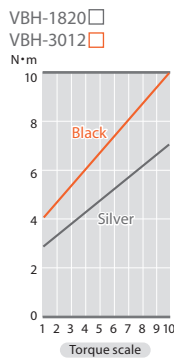
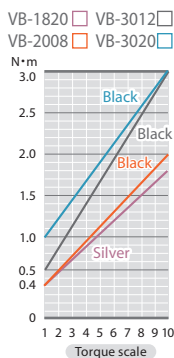
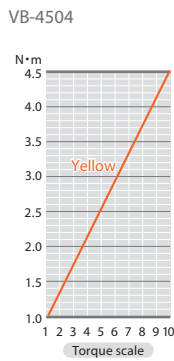
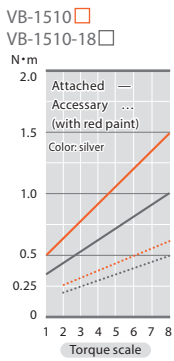
Connection with PLC

Cut the tip of the OPC dedicated cord and connect its internal lead wire to PLC.

*Applicable models: VB / VZSeries (OPC)

Depending on the model type, the time chart slightly varies. For details, please visit the HIOS website and refer to either "VB-OPC" or "VZ-OPC".

Output Torque Guide ❖



* The colors in the chart indicate the spring colors.

❖* For some models, two torque adjustment springs, for HI torque (installed) and for LOW torque (accessory), are included. Please use a suitable one for your operations.

APPLICABLE DRIVERS Variations

Suction Attachment

VZQ



See [P.51](#) ↗

Screwdrivers with Screw Counter Supported:

VB-OPC



See [P.41](#) ↗

VBH-OPC



See [P.41](#) ↗

ACCESSORIES

Pistol Attachment

PAB-18 (For Lever Start)

PAB-18PS (for Push-to-Start)

Can be converted to a pistol type. Ideal for horizontal fastening.



Applicable model:
PAB-18...VB-1820, VB-3012, VB-3020
PAB-18PS...VB-1820PS, VB-3012PS, VB-3020PS

Angle Attachment

ANGLV-Z-CH1 (For H5 & 5HEX)*

ANGLV-Z-XX1 (1/4HEX)

By attaching this to the tip, you can work smoothly in a narrow space.



Set the output to 1.8 N·m or smaller

Applicable model:
VB-1820, VB-3012, VB-3020 (Lever Start type only)
*Angle attachment Use H5 bit when this attachment is attached. If you want to use 5HEX with the above models, please contact the HIOS distributor.

VB Series (AC Type)

120V / 220-240V

VB-1510

Hi Speed

VB-1510-18



VB-1820

VB-3012

VB-4504



Lever

Push



VB-4504 has a shockless stand.



Lever

Push

SPECIFICATIONS

| Lever start model | | VB-1510 | VB-1510-18 | VB-1820 | VB-3012 | VB-4504 | VBH-1820 | VBH-3012 | | | | | | |
|--|---------------------|------------------------------------|---|-------------------------------|-----------------|-----------------|--|-----------------|---|---|---|---|---|---|
| Push-to-start model | | VB-1510PS | VB-1510PS-18 | VB-1820PS | VB-3012PS | VB-4504PS | VBH-1820PS | VBH-3012PS | | | | | | |
| AC input power (±5%)*1 | | 120V 220-240V | 120V 220-240V | 120V 220-240V | 120V 220-240V | 120V 220-240V | 120V 220-240V | 120V 220-240V | | | | | | |
| Power consumption (W) | | 20W 25W | 20W 25W | 40W | 40W 32W | 40W 32W | 40W 32W | 40W 32W | | | | | | |
| Output torque range (N·m) | | 0.25 - 1.5 | 0.2 - 1 | 0.4 - 1.8 | 0.5 - 3 | 1 - 4.5 | 3 - 7 | 4 - 10 | | | | | | |
| Unloaded rotation speed (r.p.m)±10% [HI / LOW] | | 970 | 1,800 | 2,000 | 1,200 | 400 | 470 | 270 | | | | | | |
| Screw size (mm) | Machine screw | 2.0 - 4.0 | | 2.6 - 4.0 | 3.0 - 5.0 | | 5.0 - 6.0 | | | | | | | |
| | Tapping screw | 2.0 - 3.0 | | 2.6 - 3.0 | 3.0 - 4.0 | | 5.0 - 6.0 | | | | | | | |
| Outer dimensions | Grip diameter (Max) | ∅33 | ∅33 | ∅39 / ∅41 (PS) | ∅39 / ∅41 (PS) | ∅39 / ∅45 (PS) | ∅39 / ∅45 (PS) | ∅39 / ∅45 (PS) | | | | | | |
| | Length (mm) | 255 | 255 | 263 / 286 (PS) | | 263 / 286 (PS) | 343 / 361 (PS) | | | | | | | |
| Weight (g) | | 526 | 526 | 750 | | 750 / *2 | 2,550 (total) | | | | | | | |
| ACCord length | | 3m | | 3m | | 3m | | | | | | | | |
| Bit drive selection | Standard | H4 | | H5 and 5HEX (compatible) | | 1/4HEX | 1/4HEX | | | | | | | |
| | Special Order | H5 and 5HEX (compatible) or 1/4HEX | | 1/4HEX | | — | — | | | | | | | |
| Accessories | Bit (one each) | HIOS Shank | H4 | +#1 (∅4×40) +#2 (∅4×40) | | — | — | | | | | | | |
| | | H5 | H5 | +#1 (∅5×60) +#2 (∅5×60) | | — | — | | | | | | | |
| | HEX Shank | 1/4HEX | +#1 (∅5.0×50) +#2 (∅5.0×50) - (∅5.0×50) | | — | | — | | | | | | | |
| Torque adjustment spring | | Silver | — | — | | — | — | | | | | | | |
| Plus screw for adjustment | | — | | M2.6 (pan head machine screw) | | — | M4 x 6 (Hexagon socket head set screw) | | | | | | | |
| Shockless Stand | | — | | — | | ● | ● | | | | | | | |
| Variations | VZQ | HIOS Shank | — | — | — | — | ● | ● | ● | ● | — | — | — | — |
| | | HEX Shank | — | — | — | — | — | — | — | — | — | — | — | — |
| | VB/VBH-OPC | ● | ▲ | ● | ▲ | ● | ▲ | ● | ▲ | ● | ▲ | ● | ▲ | ● |

*1 Power consumption is an approximate value. *2 VB-4504PS (with Shockless Stand): 2,080g (total weight)

120V / 220-240V

VB

Ultra HI Torque

VBH-1820 (with Shockless Stand)

Ultra HI Torque

VBH-3012 (with Shockless Stand)



Lever

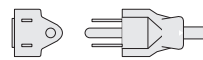
Push

**Supports screw fastening of large equipment.
Energy saving AC type brushless
screwdriver.**

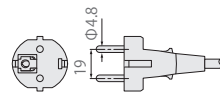
- Can be directly connected to an AC outlet.
- Reduced power consumption by about 50% saves power cost.
- Hammer head stabilizes ultra-high torque screw fastening (VBH)

Plug Types

Type A-2 / 120V



Type C / 220V-240V



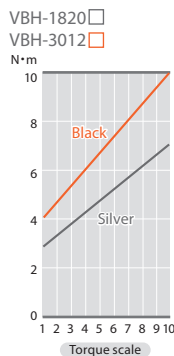
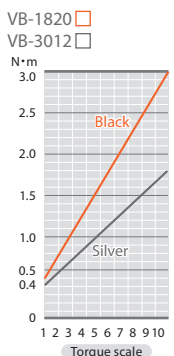
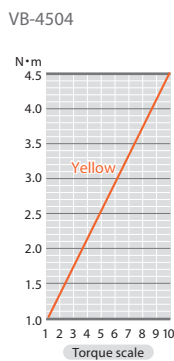
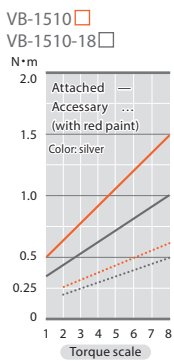
Connection with PLC

Cut the tip of the OPC dedicated cord and connect its internal lead wire to PLC.

*Applicable models:VB and VZ Series (OPC)

Depending on the model type, the time chart slightly varies. For details, please visit the HIOS website and refer to either "VB-OPC" or "VZ-OPC".

Output Torque Guide



* The colors in the chart indicate the spring colors.

❖ For some models, two torque adjustment springs, for HI torque (installed) and for LOW torque (accessory), are included. Please use a suitable one for your operations.

APPLICABLE DRIVERS Variations

Suction

VZQ



See [P.51](#)

Screwdrivers with Screw Counter Supported:

VB-OPC



See [P.41](#)

VBH-OPC



See [P.41](#)

ACCESSORIES

Pistol Attachment

PAB-18 (for Lever Start)

PAB-18PS (for Push-to-Start)

Can be converted to a pistol type.
Ideal for horizontal fastening.



Applicable models:
PAB-18... VB-1820 and VB-3012
PAB-18PS... VB-1820PS and VB-3012PS

Angle Attachment

ANGLV-Z-CH1 (for H5 & 5HEX)*

ANGLV-Z-XX1 (for 1/4HEX)

By attaching this to the tip, you can work smoothly in a narrow space.



Set the output to
1.8 N·m or smaller

Applicable models:
VB-1820, VB-3012 (Lever-to-start-type only)

* The bit should be H5 when the angle attachment is used. If you want to use 5HEX with the above models, please contact the HIOS distributor.

AC Screwdrivers

Brushless Screwdrivers VB Series

VZ Series (AC Type)

100V

VZ-1510



Lever

Push

VZ-1820

VZ-3007

VZ-3012

VZ-4506



VZ-4506 has a shockless stand.



Lever

Push

SPECIFICATIONS

| Lever start model | | VZ-1510 | VZ-1820 | VZ-3007 | VZ-3012 | — | VZH-1820 | VZH-3012 |
|-------------------------------------|---------------------|-------------------------|--|--------------------------|---------------|--------------------------------------|------------------|------------------|
| Push-to-start model | | VZ-1510PS | VZ-1820PS | VZ-3007PS | VZ-3012PS | VZ-4506PS | VZH-1820PS | VZH-3012PS |
| AC input power (±5%) | | 100V | 100V | | | 100V | | |
| Power consumption (W)*1 | | 26W | 40W | | | 40W | | |
| Output torque range (N·m) | | 0.15 - 1.5 | 0.4 - 1.8 | 0.9 - 3 | | 1 - 4.5 | 3 - 7 | 4 - 10 |
| Unloaded rotation speed (r.p.m)±10% | | 1,000 | 2,000 | 700 | 1,200 | 600 | 470 | 270 |
| Screw size (mm) | Machine screw | 2.0 - 4.0 | 2.6 - 4.0 | 3.0 - 5.0 | | 3.0 - 5.0 | 5.0 - 6.0 | |
| | Tapping screw | 2.0 - 3.0 | 2.6 - 3.0 | 3.0 - 4.0 | | 3.0 - 4.0 | 5.0 - 6.0 | |
| Outer dimensions | Grip diameter (Max) | ∅33 | ∅37.8 | ∅37.8 | ∅37.8 | ∅45 | ∅37.8 / ∅45 (PS) | ∅37.8 / ∅45 (PS) |
| | Length (mm) | 236 / 243 (PS) | 276 / 280 (PS) | | 280 | 361 | | |
| Weight (g) | | 497 / 502 (PS) | 660 | | 1,990 (total) | 2450 (total) | | |
| ACCord length | | 3m | 3m | | 3m | | | |
| Bit drive selection | Standard | H4 | H5 and 5HEX (compatible) | | | 1/4HEX | | |
| | Special Order | 5HEX or 1/4HEX | 1/4HEX | | | — | | |
| Accessories | Bit (one each) | HIOS Shank | H4 | +1 (∅4×40) +2 (∅4×40) | | — | | |
| | | H5 | — | +1 (∅5×60) +2 (∅5×60) | | — | | |
| | HEX Shank | 1/4HEX | +1 (5.0×50) +2 (5.0×50) - (5.0×50) | | | — | | |
| Torque adjustment spring | | Red | — | | | — | | |
| Plus screw for adjustment | | — | M2.6 (pan head machine screw) | | | M4×6 (hexagon socket head set screw) | | |
| Carbon brush (1 pair per model) | | ACL10-0490 | VZ18-0480 | | | VZ18-0480 | | |
| Flat 2P conversion plug | | 1 pc (with ground wire) | 1 pc (with ground wire) | | | 1 pc (with ground wire) | | |
| Shockless Stand | | — | — | | | ● | ● | |
| Variations | VZQ | HIOS Shank | ● | ● | ● | ● | — | — |
| | | HEX Shank | — | — | — | — | — | — |
| VZ/VZH-OPC | | | ● | ● | ● | ● | ● | ● |

*1 Power consumption is an approximate value.

Ultra HI Torque

VZH-1820 (with Shockless Stand)

Ultra HI Torque

VZH-3012 (with Shockless Stand)



Lever

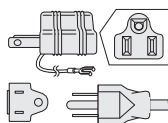
Push

Transformerless screwdrivers suitable for heavy-duty operations

- Transformerless screwdriver with a built-in controller.
- Can be directly connected to an AC outlet for input.
- Thin and lightweight design reduces workload of long-time operation.

Plug Type

Type A / 100V



Connection with PLC

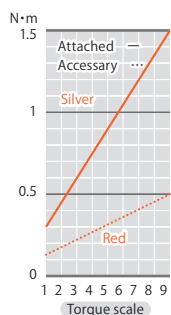
Cut the tip of the OPC dedicated cord and connect its internal lead wire to PLC.

* Applicable model: VB/VZSeries (OPC)

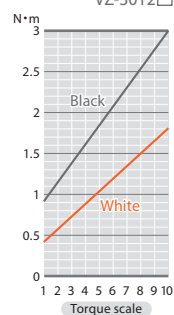
Depending on the model type, the time chart slightly varies. For details, please visit the HIOS website and refer to either "VB-OPC" or "VZ-OPC".

Output Torque Guide ❖

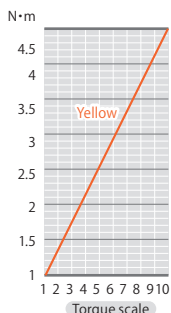
VZ-1510



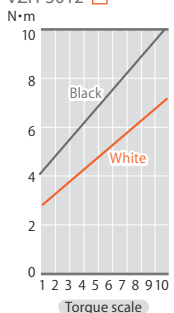
VZ-1820 VZ-3007
VZ-3012



VZ-4506



VZH-1820
VZH-3012



* The colors in the chart indicate the spring colors.

❖ For some models, two torque adjustment springs, for HI torque (installed) and for LOW torque (accessory), are included. Please use a suitable one for your operations.

APPLICABLE DRIVERS Variations

Suction

VZQ



See **P.51** →

Screwdrivers with Screw Counter Supported

VZ-OPC



See **P.41** →

VZH-OPC



See **P.41** →

ACCESSORIES

Pistol Attachment

PA-18³ (For Lever Start)

PA-18PS³ (for Push-to-Start)

Can be converted to a pistol type. Ideal for horizontal fastening.



PS Front Cover Ring

VZ18-0960³

Easy to apply load in the axial direction and the workload is reduced.



Angle Attachment

ANGLV-Z-CH1 (For H5 & 5HEX*)

ANGLV-Z-XX1 (1/4HEX)

By attaching this to the tip, you can work smoothly in a narrow space.



Applicable models:
VZ-1820 / 3007 / 3012 (Lever Start type only)

Set the output to 1.8 N·m or smaller
*4 Use H5 bit when this attachment is attached.

Protection Cover for Torque Adjustment Nut

VZ18-0970³

Prevents unexpected misalignment of the set torque position.



Shockless Stand

VZ18PS-SAS

Absorbs shock, and reduces workload. (Only for Push-to-start type)



³ Not supported for VZ-1510/VZ-4506.

VZ Series (AC Type)

120V

VZ-1820

VZ-3012

VZ-4506



Lever



Push

Ultra HI Torque

VZH-1820 (with Shockless Stand)

Ultra HI Torque

VZH-3012 (with Shockless Stand)



Lever



Push

SPECIFICATIONS

| Lever start model | | VZ-1812 | VZ-1820 | VZ-3007 | VZ-3012 | VZ-4504 | VZ-4506 | VZH-1820 | VZH-3012 |
|---|---------------------------|--------------------------|-------------------------------|--|----------------|----------------|----------------|--------------------------------------|------------------|
| Push-to-start model | | VZ-1812PS | VZ-1820PS | VZ-3007PS | VZ-3012PS | VZ-4504PS | VZ-4506PS | VZH-1820PS | VZH-3012PS |
| AC input power (±5%) | | 220-240V | 120V | 220-240V | 120V | 220-240V | 120V | 120V | 120V |
| Power consumption (W)*1 | | 72W | 60W | 72W | 60W | 72W | 60W | 60W | |
| Output torque range (N·m) | | 0.4 - 1.8 | | 0.9 - 3 | | 1 - 4.5 | | 3 - 7 | 4 - 10 |
| Unloaded rotation speed (r.p.m.)±10% [HI / LOW] | | 1,200 | 2,000 | 700 | 1,200 | 400 | 600 | 470 | 270 |
| Screw size (mm) | Machine screw | 2.6 - 4.0 | | 3.0 - 5.0 | | 3.0 - 5.0 | | 5.0 - 6.0 | |
| | Tapping screw | 2.6 - 3.0 | | 3.0 - 4.0 | | 2.6 - 4.0 | 3.0 - 4.0 | 5.0 - 6.0 | |
| Outer dimensions | Grip diameter (Max) | ∅37.8 | ∅37.8 | ∅37.8 | ∅37.8 | ∅37.8 | ∅37.8 | ∅37.8 / ∅45 (PS) | ∅37.8 / ∅45 (PS) |
| | Length (mm) | 276 / 280 (PS) | 276 / 280 (PS) | 276 / 280 (PS) | 276 / 280 (PS) | 276 / 280 (PS) | 276 / 280 (PS) | 361 | |
| Weight (g) | | 660 | 660 | 660 | 660 | 660 | 660 / *2 | 2,450 (total) | |
| AC cord length | | 3m | | 3m | | 3m | | 3m | |
| Bit drive selection | Standard | H5 and 5HEX (compatible) | | H5 and 5HEX (compatible) | | 1/4HEX | | 1/4HEX | |
| | Special Order | 1/4HEX | | 1/4HEX | | — | | — | |
| Accessories | Bit (one each) | HIOS Shank | H5 | +#1 (∅5×60) +#2 (∅5×60) | | — | | — | |
| | | HEX Shank | 1/4HEX | +#1 (5.0×50) +#2 (5.0×50) - (5.0×50) | | — | | — | |
| | Plus screw for adjustment | — | M2.6 (pan head machine screw) | M2.6 (pan head machine screw) | | — | | M4×6 (hexagon socket head set screw) | |
| Carbon brush (model) | | VZ18-0481B | VZ18-0480 | VZ18-0481B | VZ18-0480 | VZ18-0481B | VZ18-0480 | VZ18-0480 | |
| Shockless Stand | | — | — | — | — | — | ● | ● | ● |
| Variations | VZQ | HIOS Shank | ● | ● | ● | ● | — | — | — |
| | | HEX Shank | — | — | — | — | — | — | — |
| | VZ/VZH-OPC | ▲ | ● | ▲ | ● | ▲ | ● | ● | ● |

Notes: ▲220-240V types can be used by PLC connection. Please contact the HIOS distributor for details.

*1 Power consumption is an approximate value. *2 VZ-4506PS(with Shockless Stand)1,990g (total)

Spec. P.55 →

120V / 220-240V



220-240V

VZ-1812

VZ-3007

VZ-4504



Lever



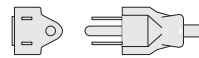
Push

Transformerless screwdrivers applicable to different voltage zone countries and suitable for heavy-duty operations

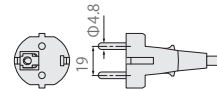
- Transformerless screwdriver with a built-in controller.
- Can be directly connected to an AC outlet.
- Thin and lightweight design reduces workload of long-time operation.

Plug Types

Type A-2 / 120V



Type C / 220V-240V



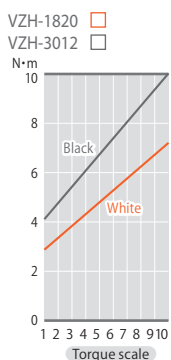
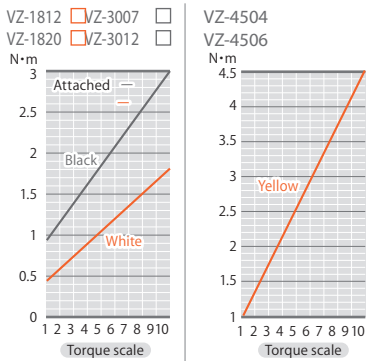
Connection with PLC

Cut the tip of the OPC dedicated cord and connect its internal lead wire to PLC.

*Applicable model: VB / VZ Series (OPC)

Depending on the model type, the time chart slightly varies. For details, please visit the HIOS website and refer to either "VB-OPC" or "VZ-OPC".

Output Torque Guide



* The colors in the chart indicate the spring colors.

APPLICABLE DRIVERS Variations

Suction

VZQ



See [P.51](#) Suction Part (Optional Item)

Screwdrivers with Screw Counter Supported:

VZ-OPC



See [P.41](#)

VZH-OPC



See [P.41](#)

ACCESSORIES

Pistol Attachment

PA-18^{*3} (For Lever Start)

PA-18PS^{*3} (for Push-to-start)

Can be converted to a pistol type. Ideal for horizontal fastening.



PS Front Cover Ring

VZ18-0960^{*3}

Easy to apply load in the axial direction and the workload is reduced.



Angle Attachment

ANGLV-Z-CH1 (For H5 & 5HEX⁺)

ANGLV-Z-XX1 (1/4HEX)

By attaching this to the tip, you can work smoothly in a narrow space.



Applicable models:
VZ-1812, VZ-1820, VZ-3007,
VZ-3012 (Lever Start type only)

Set the output to 1.8 N · m or smaller

*4 Use H5 bit when this attachment is attached.

Protection Cover for Torque

Adjustment Nut

VZ18-0970^{*3}

Prevents unexpected misalignment of the set torque position.



Shockless Stand

VZ18PS-SAS (for Push-to-start)

Absorbs shock, and reduces workload. (Only for Push-to-start type)



*³ Not supported for VZ-1510/VZ-4506.

PGF Series (DC Type)

PGF-3000



PGF-5000



PGF-7000



Screwdrivers for Automated Machines(DC Type)

Brushless Screwdrivers for Automated Machines PGF Series

SPECIFICATIONS

| Lever start model | | PGF-3000 | PGF-5000 | PGF-7000 |
|--------------------------------------|----------------|---|-----------|--------------------------|
| Output torque range (N·m) | | 0.2 - 0.55 | 0.4 - 1.2 | 1.0 - 2.8 |
| Unloaded Rotation Speed (r.p.m) ±10% | HI (11 steps) | 625 - 950 | 690 - 985 | 645 - 935 |
| | LOW (11 steps) | 115 - 325 | 115 - 320 | 210 - 595 |
| Screw Size (mm) | Machine Screw | 1.7 - 2.3 | 2.3 - 3.0 | 2.6 - 5.0 |
| | Tapping Screw | 2.0 - 2.3 | | 2.6 - 4.0 |
| Outer dimension to the flange (mm) | | 148, Ø40 | 179, Ø40 | 179, Ø40 |
| Weight (g) | | 363 | 494 | 809 |
| Applicable Controller | BLT-AY-61 | ● | ● | — |
| | BLT-AY-71 | — | — | ● |
| Bit Drive Selection | Standard | H4 | | H5 and 5HEX (compatible) |
| | Special Order | — | | 1/4HEX |
| Accessories | | Screwdriver cord (3m), PG-01 (optional), AC adaptor (1.5m), Sensor cord (3m), I / O flat cable (30cm), PGF-SUBBOX (optional), cord dedicated to PGF-SUBBOX (40cm), Start Torque-up Cable (40cm), converter (USB to RS-232C) (35cm), RS-232C Cable (2m), inch screws for replacement 4 pieces, software CD-ROM | | |
| Variations | PGFQ | HIOS Shank | ● | ● |
| | | HEX Shank | — | — |
| | PGFR | HIOS Shank | — | ● |
| | | HEX Shank | — | ● |

Controller [P.21](#)

RELATED PRODUCTS

Control Unit (for Judgment)

PG-01 (Optional)

Reads signals from the screwdriver to decide OK / NG in real time.

- Standard: RS-232C
- Input voltage: AC100-240V (50/60Hz)
- External dimensions: 149(W)×120(D)×49(H)
- Weight: 520g



Relay Box

PGF-SUBBOX (Optional)

A relay interface that connects devices.



Controller

BLT-AY-61 / BLT-AY-71 (Optional)

Features screwdriver rotation speed and direction switching as standard.



See [P.22](#)

Workflow of Pass Guard System Use

Setting the reference values for OK / NG criteria

•Memorizing acceptance criteria (teaching)
The acceptance criteria are determined by conducting an actual fastening procedure. The minimum and the maximum values of fastening torque and work time are then saved.

•Set the acceptable range (error rate setting)

The acceptable range for the minimum and maximum values of fastening torque and work time can be selected from 0, 2, 5, 10, 15 and 20%.

Actual operation

Every screw fastening is inspected in real time.

Judgment

OK / NG results are indicated by LED light and buzzer of PG-01.

Record and save the data with a PC

The measurement data can be checked and recorded by using the bundled software.

OK / NG Criteria

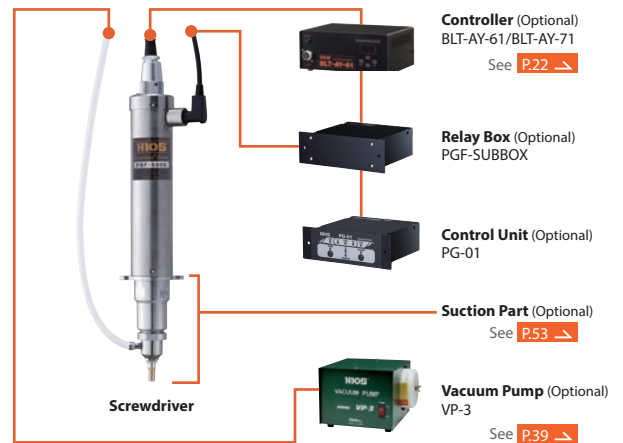
| NG (L. NG) | Acceptable range (L. G.) | GOOD | Acceptable range (H. G.) | NG (H. NG) |
|-------------------------|---|--|---|--------------------------|
| Lower than L. G. value. | Within the specified % from the Good lower limit value. | Between the Good lower and upper limit values. | Within the specified % from the Good upper limit value. | Higher than H. G. value. |

← NG → ← OK → ← NG →

Judging screw fastening quality and saving the data. For error detection, you can rely on the Pass Guard System

- The built-in torque sensor automatically judges every fastening (OK / NG).
- The errors that are difficult to be found visually (such as insufficient torque, unseated or cross threaded) can be detected automatically.
- All the operation data can be saved by connecting PG-01 to an external device.

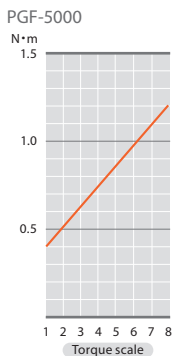
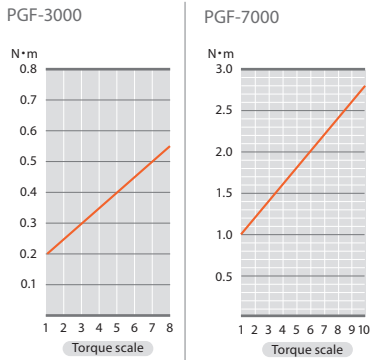
Configuration of Suction Screwdriver



Screwdrivers for Automated Machines (DC Type)

Brushless Screwdrivers for Automated Machines PGF Series

Output Torque Guide (HI Input)



APPLICABLE DRIVERS Variations

Suction

PGFQ



For Deep Recessed Hole

PGFR (Special Order)



ACCESSORIES

Screwdriver Cord (Attached)

BLF7-0612-VI

Strong against breaking and bending.



Length: 3m (10P)
Weight: 320g

Damper Unit

BLF-DP

Absorbs impact against the workpiece while the Z-axis is descending and reduces the load on a screw and the screwdriver.



Thrust load
● Initial load: approx. 21.4 N
● Maximum load: approx. 80.4 N



When attached

BLF Series (DC Type)

BLF-2000



BLF-5000



BLF-7000

BLF-7000X

BLF-7025X



Screwdrivers for Automated Machines(DC Type)

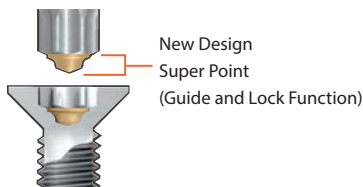
Brushless Screwdrivers for Automated Machines BLF Series

SPECIFICATIONS

| Model | | BLF-2000 | BLF-5000 | BLF-7000 | BLF-7000X | BLF-7025X |
|--------------------------------------|------------------|---------------|--------------------------|-----------|-----------|-----------|
| Output torque range (N·m) | | 0.03 - 0.35 | 0.3 - 1 | 0.7 - 2 | 0.7 - 2 | 1.2 - 2.5 |
| Unloaded Rotation Speed (r.p.m) ±10% | LOW (11 steps) | 120 - 345 | 115 - 320 | 150 - 450 | 150 - 450 | 120 - 350 |
| | HI (11 steps) | 690 - 975 | 660 - 940 | 495 - 735 | 495 - 735 | 400 - 600 |
| Screw Size (mm) | Machine screw | 1.0 - 2.3 | 2.0 - 3.0 | 3.0 - 4.0 | 3.0 - 4.0 | 3.0 - 4.0 |
| | Tapping screw | 1.0 - 2.0 | 2.0 - 2.6 | 3.0 - 4.0 | 3.0 - 4.0 | 3.0 - 4.0 |
| Outer Dimension to the Flange (mm) | | 124, ∅38 | 148, ∅40 | 160, ∅42 | 160, ∅42 | 160, ∅42 |
| Weight (g) | | 315 | 470 | 700 | | |
| Controller | BLT-AY-61 | ● | ● | — | — | — |
| | BLT-AY-71 | — | — | ● | ● | ● |
| Bit Drive Selection | Standard | H4 | H5 and 5HEX (compatible) | H5 | 1/4HEX | |
| Accessories | Screwdriver Cord | 3m (10P) | | | | |
| | Spring | Silver | — | | | |
| Variations | BLFQ | HIOS Shank | ● | ● | ● | — |
| | | HEX Shank | — | — | — | — |
| | BLFR | Screw type ∅4 | — | ● | — | ● |

Controller [P.21](#) →

Total support for automation of screw fastening.
Please feel free to consult us solve your problems.



The highest ever quality for automatic screw fastening

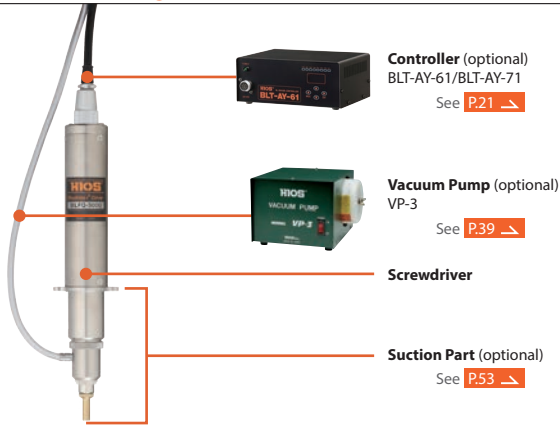
INTRTORQUE® PAT.



With the high fitting accuracy that prevents wobbling, it is possible to fasten a screw by just turning it. It reduces damage to the workpiece and bit wear due to thrust, and always provides stable screw fastening quality.



Configuration of Suction Screwdriver



Simple structure and high durability constantly support stable torque accuracy!

- Simple control circuit and stable torque accuracy offer uniform fastening quality.
- You can externally manipulate the forward, reverse and low-speed rotations of the screwdriver (standard specification).
- Optional suction, BLFR (special order) is available - this reduces wobbling and is ideal for screw fastening in a deep recessed hole. (Special order)

RELATED PRODUCTS

Controller

BLT-AY-61 / BLT-AY-71 (Optional)

Features screwdriver rotation speed and direction switching functions as standard.

See [P.22](#)



APPLICABLE DRIVERS Variations

Suction

BLFQ



See [P.51](#)

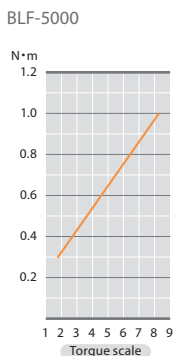
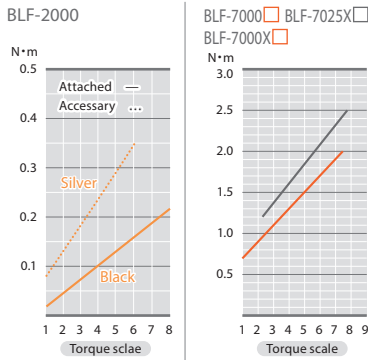
For Deep Recessed Hole

BLFR (Special order)



See [P.53](#)

Output torque guide (HI input)*



Notes:

- The torque lines in the chart show the measurements taken at the rotation speed of 30. Please refer to them as guides.
- The measurements were taken in a combination of HIOS torque meter (HP) and fidaptor (special adaptor).

* The colors in the chart indicate the spring colors.

❖ For some models, two torque adjustment springs, for HI torque (installed) and for LOW torque (accessory), are included. Please use a suitable one for your operation.

ACCESSORIES

Screwdriver Cord (Attached)

BLF7-0612-VI

Strong against breaking and bending.



Length: 3m (10P)
Weight: 320g

Damper Unit

BLF-DP

Absorbs impact against the workpiece while the Z-axis is descending and reduces the load on a screw and the screwdriver.



Thrust load
● Initial load: approx. 21.4 N
● Maximum load: approx. 80.4 N



When attached

CLF / αF / CL-A Series (DC Type)

Low Torque

CLF Series

CLF-3000 **CLF-6000**
CLF-4000 **CLF-6500**
CLF-7000



HI Speed

αF Series

αF-4500 **αF-6500**
αF-5000



Screwdrivers for Automated Machines(DC Type)

Brushed Screwdrivers for Automated Machines CLF / αF / CL-A Series

SPECIFICATIONS

| Model | CLF-3000 | CLF-4000 | CLF-6000 | CLF-6500 | CLF-7000 | αF-4500 | αF-5000 | αF-6500 | CL-816A | CL-825A | CL-850A |
|--|-------------------|------------|-----------|-----------|-----------|-------------|-------------|-------------|-----------|------------|-----------|
| Output Torque Range (N·m) | 0.03 - 0.15 | 0.1 - 0.35 | 0.3 - 0.6 | 0.4 - 1 | 0.5 - 1.5 | 0.4 - 0.6 | 0.4 - 0.75 | 0.5 - 1.1 | 1.5 - 2.5 | 2 - 4 | 2.4 - 4.5 |
| Unloaded Rotation Speed (r.p.m)±10% [HI/LOW] | 1,000 / 560 | | 750 / 400 | 850 / 440 | 780 / 420 | 1,700 / 940 | 1,100 / 600 | 1,700 / 950 | 550 / 310 | 370 / 210 | 570 / 320 |
| Screw Size(mm) | Machine Screw | 1.0 - 2.0 | 1.4 - 2.6 | 2.0 - 3.0 | 2.0 - 3.0 | 2.0 - 4.0 | 2.0 - 3.0 | 2.0 - 3.0 | 3.0 - 4.0 | 3.0 - 4.0 | 4.0 - 5.0 |
| | Tapping Screw | 1.0 - 1.7 | 1.4 - 2.3 | 2.0 - 2.6 | 2.0 - 3.0 | 2.0 - 4.0 | 2.0 - 2.6 | 2.0 - 3.0 | 2.6 - 3.0 | 3.0 - 4.0 | 4.0 - 5.0 |
| External Dimensions | Grip Diameter | ∅32.5 | | ∅37 | | ∅32.5 | | ∅37 | ∅50 | | ∅62 |
| | Total Length (mm) | 182 | 197 | 234 | | 266 | 207 | 248 | 251 | | 261 |
| Weight (g) | 400 | 430 | 610 | 670 | 754 | 430 | 670 | 670 | 1,270 | | 1,700 |
| Bit Drive Selection | Standard | H4 | | H5 | | H4 | | H5 | — | | |
| | Special Order | — | 1/4HEX | 1/4HEX | | 1/4HEX | | 1/4HEX | | 1/4HEX | |
| Accessories | Spring | Gold | Blue | White | Yellow | — | | White | | Yellow | |
| | Cord Length | 3m (5P) | | 3m (5P) | | 3m (5P) | | 3m (4P5P) | | 3m (4P4P) | |
| Carbon Brush Order Code (optional) 2 pcs per set | A45-0420 | CL4-0420 | CL65-0490 | | A45-0420 | | CL65-0490 | CL9-0410 | | CL850-0381 | |
| Variations | Q | HIOS Shank | ● | ● | ● | ● | ● | ● | ● | — | — |
| | | HEX Shank | — | — | — | — | — | — | — | — | — |
| | R/O/OW | HIOS Shank | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | | HEX Shank | ● | ● | ● | ● | ● | ● | ● | ● | ● |

* The rotation speed in the table may have some error due to fluctuations in input voltage. Please refer to the rotation speed as a guide.

* Please be careful about the flange shape because it varies depending on the wiring inside the driver or the model.

Order Code Guide for Screwdrivers for Automated Machines



Combination List

| Combination Symbols | Bit Drive | Controller |
|---------------------|------------|------------------|
| HH | HIOS Shank | HIOS controller |
| HN | HIOS Shank | Nitto controller |
| XH | HEX Shank | HIOS controller |
| XN | HEX Shank | Nitto controller |

Bit drive..... HIOS Shank (H) or HEX Shank (X)

Controller Manufactured by HIOS (H) or Nitto Seiko (N)

CLF/αF/CL-A

HI Torque

CL-A Series

CL-816A

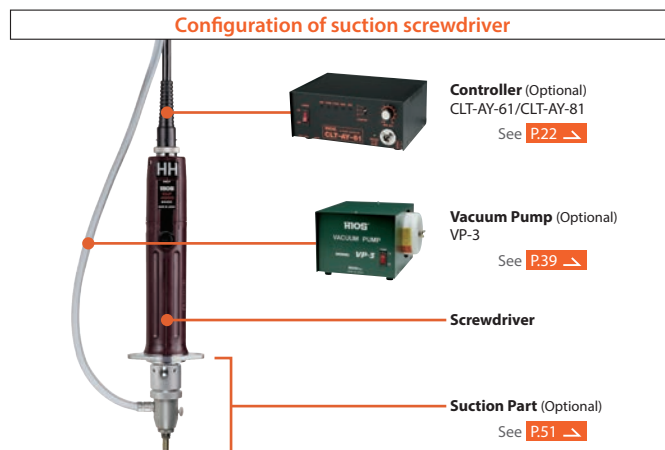
CL-850A

CL-825A



Can be mounted to an orthogonal robot. Ideal for assembly line automation

- Stable torque accuracy helps uniform screw fastening for automation.
- With compact light weighted body, easy to install to an existing assembly system.
- Rich lineup for model selection according to the application.

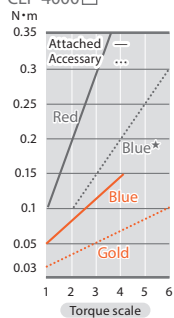


Screwdrivers for Automated Machines(DC Type)

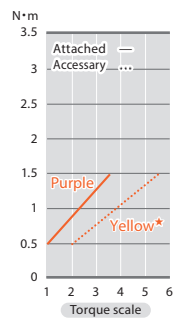
Brushed Screwdrivers for Automated Machines CLF / αF / CL-A Series

Output Torque Guide (HI Input)❖

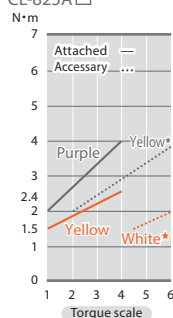
CLF-3000 □
CLF-4000 □



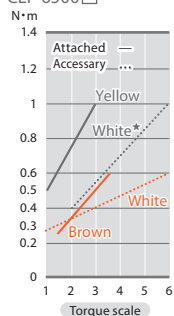
CLF-7000



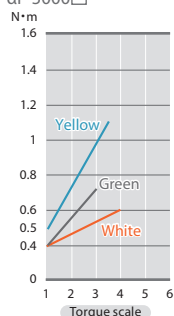
CL-816A □
CL-825A □



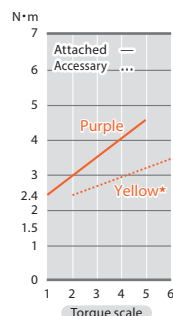
CLF-6000 □
CLF-6500 □



αF-4500 □ αF-6500 □
αF-5000 □



CL-850A



*The colors in the chart indicate the spring colors.

❖For some models, two torque adjustment springs, for HI torque (installed) and for LOW torque (accessory), are included. Please use a suitable one for your operation. Notes *1 and *2: Please note that the torque adjustment springs with ★ mark are not included in the Nitto Seiko screwdriver package.

RELATED PRODUCTS

Exclusive control unit for brushed screwdrivers for automated machines

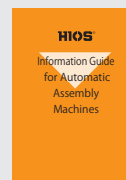
CLT-AY-61 / CLT-AY-81

In addition to excellent durability and maintainability, this controller can adjust the rotation speed steplessly with the voltage adjustment dial. You can select I / O mode for easier control according to your system.



See [P.22](#)

About Automated Machine



For details, please refer to the document "Screwdriver for Automated Machine Information Guide" or visit the HIOS website. www.hios.com

APPLICABLE DRIVERS Variations

Suction

Q-SET



See [P.51](#)

R Left-hand screw

The screwdriver is for left-hand screws (CCW rotation).

O Oil seal

The screwdriver has a mechanism to prevent gear grease penetration into the motor when it is installed facing upward.

OW One-way clutch

If both forward and reverse rotations are required in a line, reverse rotation achieves larger torque than forward rotation.

Other special specifications

We also supply screwdrivers with low-speed rotation (gear ratio: 25:1) or noiseless.

*When you order a product with the special specifications (R / OL / OW) other than suction screwdriver (Q-SET), please contact the HIOS distributor.

RN53 Series (DC Type / AC Type)

DC Type (Supporting RN53-200)
RD-4000



Lever

DC Type (Supporting RN53-260)
RD-4500



Lever

AC Type (Supporting RN53-300)
RD-10 / RD-15



Lever

AC Type (Supporting RN53-400)
RD-20 / RD-30



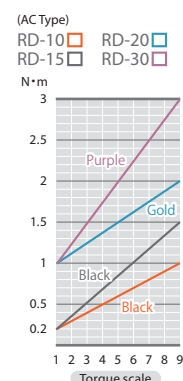
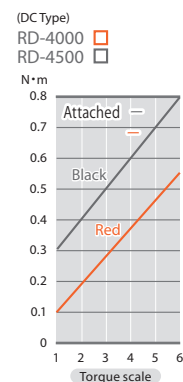
Lever

SPECIFICATIONS

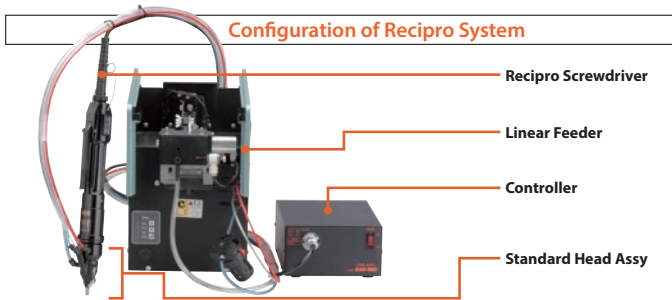
| Model | | DC Type | | AC Type | | | | |
|--------------------------------------|-------------------|---|---------------------------|----------------------------|-----------|----------|-------|--|
| | | Recipro Model RN53-200 | Recipro Model RN53-260 | RN53-300 | | RN53-400 | | |
| Recipro Model RD-4000 | | RD-4000 | RD-4500 | RD-10 | RD-15 | RD-20 | RD-30 | |
| Output torque Range (N·m) | | 0.1 - 0.55 | 0.3 - 0.8 | 0.2 - 1 | 0.2 - 1.5 | 1 - 2 | 1 - 3 | |
| Unloaded Rotation Speed (r.p.m) ±10% | HI | 1,000 | 1,700 | 1,500 | 1,000 | 1,600 | 1,000 | |
| | LOW | 690 | 1,200 | — | — | — | — | |
| Screw Size (mm) | Screw Type | Machine and tapping screws | | Machine and tapping screws | | | | |
| | Nominal Diameter | M2.0 | M2.6 | M3.0 | | M4.0 | | |
| | Max. Length | 14 | | 14 | | 14 | | |
| | Min. Length | Pan | 6.0 | 7.0 | 8.0 | | 8.0 | |
| | | Binding | 6.0 | 7.0 | 8.0 | | 8.0 | |
| Flat head | | 8.0 | 9.0 | 9.0 | | 12.0 | | |
| External Dimensions | Grip Diameter (∅) | 32.5 | 32.5 | 33.5 | | 39 | | |
| | Length (mm) | 310 | 320 | 340 | | 390 | | |
| Weight (g) | | 680 | 745 | 825 | | 1,140 | | |
| Bit Drive (base diameter) | | ∅3 | ∅3*, ∅4* | ∅4 | | ∅4 | | |
| Controller | RDT-30 | ○ | | — | | — | | |
| | RAC-100 | — | | ○ | | ○ | | |
| Cord Length | | 2m (6P) | | 2m (7P) | | 2m (7P) | | |
| Accessories | | Mouthpiece, bit, hand screwdriver, L-shaped HEX wrench, hose and driver cord (with mist regulator), power cable, O-ring (1 pc each) | | | | | | |

* The bit type (∅ 3) (base diameter) of RN53-260 is for M2.6 (pan head) and bit type (∅ 4) is for M2.6 (binding head).
Note: AC-type reciprocating screwdrivers can be selected based on screw diameter.

Output Torque Guide



* The colors in the chart indicate the spring colors.



Instant screw feeding to the screwdriver bit with pressure. This helps speed-up of operations

- A linear feeder that can optimize screw feeding depending on the screw size and type.
- Supports screw fastening in a narrow place and a deep recessed hole as well.
- Parts can be easily disassembled and that contributes to great maintainability.

Combination table

| Type | DC Type | | AC Type | |
|---------------------|----------|----------|----------------|----------------|
| Model | RN53-200 | RN53-260 | RN53-300 | RN53-400 |
| Recipro Screwdriver | RD-4000 | RD-4500 | RD-10 RD-15 | RD-20 RD-30 |
| Controller | RDT-30 | | RAC-100 | |
| Linear feeder | FF503H | | FF503H | |

CONTROLLER

RDT-30 (DC20V/30V)

Applicable models
RD-4000 / RD-4500

DC Type



RAC-100 (DC100V)

Applicable models
RD-10 / RD-15
RD-20 / RD-30

AC Type



RELATED PRODUCTS

Linear Feeder
FF503H



SPECIFICATIONS

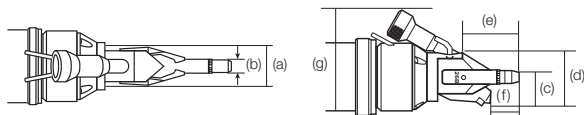
| Model | RDT-30 | RAC-100 |
|------------------------------------|--------------------------------|---------|
| Primary input power source | AC100V 50/60Hz | |
| Secondary output voltage | DC20/30V | DC100V |
| Screwdriver rotation speed setting | HI/LOW | — |
| External dimensions (mm) | 170 (W) × 240 (D) × 100 (H) | |
| Weight (kg) | 4.2 | 2.5 |
| AC power cord (m) | 1.8m with a ground wire (3L2P) | |

SPECIFICATIONS

| Model | FF503H | |
|--------------------------|-------------------------------|----------------------|
| Pneumatic control unit | Air pressure (Mpa) | 0.4 |
| | Input power source | AC100-240V (50/60Hz) |
| | Screw feeding hose length (m) | 2.5m |
| Hopper capacity (cc) | About 450 | |
| External dimensions (mm) | 220 (W) × 412 (D) × 334.6 (H) | |
| Weight (kg) | About 18 | |

ACCESSORIES

| Standard head Assy | Recipro Model | Screw Type | Detailed Dimensions (mm) | | | | | | |
|--|--------------------|--------------------|--------------------------|------|------|------|------|------|-----|
| | | | (a) | (b) | (c) | (d) | (e) | (f) | (g) |
| The dimensions (a) to (g) in the table indicate (a) to (g) in the drawing. | RN53-200 | Pan head / binding | 19.8 | ∅7.0 | 11.8 | 25 | 43 | 23.5 | 60 |
| | RN53-260 | Pan head | 19.8 | ∅7.0 | 11.8 | 25 | 43 | 23.5 | 60 |
| | | Binding | 23 | ∅8.0 | 15.5 | 30.5 | 37 | 18 | 62 |
| | RN53-300 | Pan head / binding | 23 | ∅8.0 | 15.5 | 30.5 | 37 | 18 | 62 |
| RN53-400 | Pan head / binding | 27 | ∅10 | 17.5 | 32.8 | 46 | 28.5 | 69 | |



Cylinder Variations

| Recipro model | Screw type | Standard (mm) | Long (mm) | Super long (mm) |
|---------------|--------------------|---------------|-----------|-----------------|
| RN53-200 | Pan head / binding | | | — |
| RN53-260 | Pan head | | | — |
| RN53-260 | Binding | | | |
| RN53-300 | Pan head / binding | | | |
| RN53-400 | Pan head / binding | | — | |

Note to a customer who considers purchasing the Recipro Series: Please feel free to consult the HIOS distributor in charge of Recipro.

Peripherals and Accessories

Screwdriver Cord

BLG Series (BLG only) / BL Series / CL Series



5P (pin)



Screwdriver Cord
1.5m / 2m / 2m (anti-electrostatic) / 3m



Flex screwdriver Cord 2m
Strong against breaking and bending.



Curled Cord Max. Stretching Length 7.5m
Versatile and stretchable cord.



Extension Cord 3m / 5m
Use this when the existing cord is not long enough.

PG Series / BLG-BC2 Series / BLG-BC1 Series
BLG-ZERO1 Series / BLG-OPC Series / BL-OPC Series



6P (pin)



Screwdriver Cord 2m



Flex Cord 3m
Strong against breaking and bending.

For Suction-type Screwdrivers

Vacuum Pump

VP-3

Picks up a screw to the bit tip with vacuum pressure.



| Model | VP-3 |
|------------------------|-----------------------------|
| Primary Input power | AC100V, 120V, 220V-240V ±5% |
| Max. Power Consumption | 39W±20% |
| Ultimate Vacuum | -350mm Hg |
| Air Capacity | 25L / min |
| Dimensions (mm) | 200×188×142 (H) |
| Weight (kg) | 3.8 |
| Plug Type | A-1/A-2/A-3/C/BF/S |

Rescuing Screws

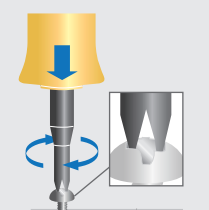
HIOS Spike® Bit D.PAT (for Precision Screws)

SPK Series

A specially designed tool to remove screws with damaged recesses. Ideal for unscrewing high-end products because its tip can bite into the recess without causing cam out.



How to Use
Hook the spike on the damaged cross, make sure the spike gets into the recess, and turn the bit while pushing the spike vertically.

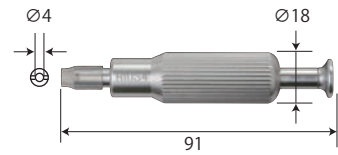


| | Description | | |
|-------------------------------------|-------------|-----------|-----------|
| Grip Color | Yellow | Blue | Red |
| Applicable Screw Size | M1.2-M1.4 | M1.4-M1.7 | M1.7-M2.0 |
| 3-pc Set of Spike Bits (order code) | SPK-SET01 | | |
| Single Bit (order code) | SPK-1214 | SPK-1417 | SPK-1720 |

Aluminum Handle Screwdriver

WOOD-4AL

Applicable bit
HIOS Bit H4

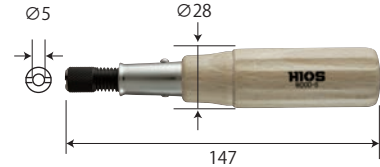


Unit: mm

Wooden Handle Screwdriver

WOOD-5

Applicable bit
HIOS Bit H5



Unit: mm

Screwdriver can be securely gripped and doesn't slip!

Grip Ring TM.D.PAT

Reduces fatigue due to grip slip and improves work efficiency.

Applicable models
All models
(Except BL-2000 and CL-2000)



When attached

Dimensions of Grip Ring

Unit: mm



| | Description | | | | |
|--------------------------------------|-----------------|----------------|----------------|----------------|--------------|
| Color Single color (10 pcs per pack) | Yellow GRIP-Y10 | Blue GRIP-BL10 | White GRIP-W10 | Green GRIP-G10 | Red GRIP-R10 |

Carbon Brush

The carbon brush should be replaced when abrasion reaches the groove on its side. Replace 2 carbon brushes at the same time.



List of carbon brushes and applicable screwdrivers (1 pair: 2 pcs)

| | Applicable models | Order code |
|------------------------|--------------------------------------|--------------------------------------|
| CL Series SB Series | CL-3000 | A45-0420 |
| | CL-4000, SB-400C | CL4-0420 |
| | CL-6000, CL-6500, CL-7000 SB-650C | CL65-0490 |
| | CL-9000 | CL9-0410 |
| | VZ Series | 100V |
| 100V / 120V | | VZ-1820, VZ-3007 VZ-3012, VZ-4506 |
| 220V-240V | | VZ-1812, VZ-3007 VZ-4504 |

● Note: The carbon brushes for CL-2000 are enclosed type and cannot be replaced by a user. When a replacement is required, please contact the HIOS distributor.

[Guide for Replacement] Although the life of the carbon brush depends on use conditions, if you fasten about 6,000 screws a day, you have to replace the carbon brush 3 to 4 years after you started using it.

Vertical Screwdriver Operating Stand

VMS-40

For BLG Series / BL / CL / VZ-1510

VMS-50

For PG / BLG Series / BL / CL / VZ-1510

VMS-50VZ

For PG / VB / VZ (except VZ-1510)

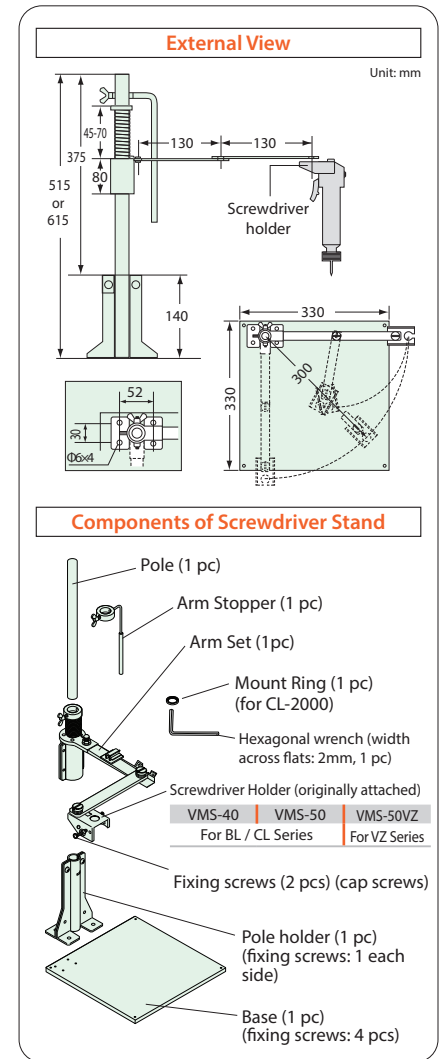
Always keeps the screwdriver vertical to support accurate screw fastening.



SPECIFICATIONS

| Model | VMS-40 | VMS-50 | VMS-50VZ | Model No. of Screwdriver Holder |
|------------------|---|---------------------|-----------------------|---------------------------------|
| Pole Height (mm) | 515 | 615 | 615 | Model No. of Screwdriver Holder |
| Weight (kg) | 2.5 | 2.65 | 2.65 | |
| BL Series | BL-2000 / BL-3000 / BL-5000 | | | |
| CL Series | CL-2000 / CL-3000 / CL-4000 / CL-6000 / CL-6500 / CL-7000 | | | VMS40-0180 |
| VZ Series | — | | | All (except VZ-1510 Series) |
| | | | | VMS-0900-VZ18 |
| PG Series | — | PG-3000 | PG-5000 | VMS-0900-PG3 |
| | | | PG-7000 | VMS-3910-PG5 |
| BLG-BC2 | BLG-4000BC2 / BLG-5000BC2 | | | VMS-0900-BLG45 |
| BLG-BC1 | BLG-4000BC1 / BLG-5000BC1 | | | |
| BLG-ZERO1 | BLG-4000ZERO1 / BLG-5000ZERO1 | | | |
| BLG Series | BLG-4000 / BLG-5000 | | | |
| BL Series | BL-7000 | | | |
| | | | | VMS-0900-BL7 |
| VB Series | — | VB-1510 / VB-1510PS | VB-1820 / VB-3012 | VMS-0910-PG5 |
| | | | VB-1820PS / VB-3012PS | VMS-0900-PG7 |
| | | | | VMS-0900-VB18PS |
| VZ Series | VZ-1510 / VZ-1510PS | | | VMS50-0190 |
| Accessories | Pole 1 pc, arm stopper 1 pc, arm set 1 pc, pole holder 1 pc, base 1 pc, mount ring 1 pc (for CL-2000)*, hexagonal wrench* | | | |

* Not included in VMS-50VZ.



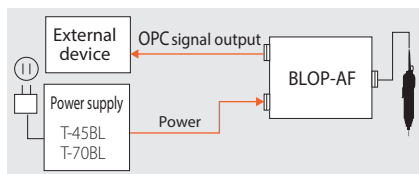
Relay Box

A relay box relays output signals from a screwdriver to an external device. Please use it to control external devices, such as screw counter.

BLOP-AF

Output signal FOR (forward), REV (reverse), T-UP (complete)

The signals (FOR, REV and T-UP) from the screwdrivers of OPC-type screwdriver with signal output function, can be extracted with this unit to connect to an external unit such as a sequencer.

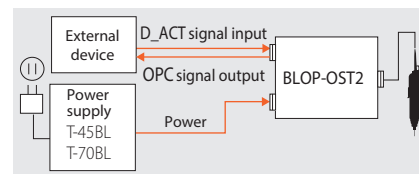


BLOP-OST2

Input signal D_ACT (start)

Output signal FOR (forward), REV (reverse), T-UP (complete)

The signals (FOR, REV and T-UP) from the OPC-type screwdriver can be output with this box to connect to an external device such as a sequencer. Also power delivery to the screwdriver can be controlled.



SPECIFICATIONS

| Model | BLOP-AF | BLOP-OST2 |
|----------------------------|--|--|
| Primary Input Power Source | | DC30V |
| Secondary Output Voltage | | Same as that of the primary input |
| External Dimensions (mm) | | 70(W)×42(D)×100(H)mm |
| Weight (g) | | 160 |
| Accessories | Screwdriver cord 1.5m (1 pc), mounting hardware (2 pcs), plug for external I/O | |
| Applicable Models | BLG Series | BLG-4000-OPC, BLG-5000 Series-OPC |
| | BL Series | BL-2000-OPC, BL-3000-OPC, BL-5000 Series-OPC, BL-7000-OPC (BLOP-AF only) |

STC3 / SC1 Series

Compact size counter that prevents human error of skipping

The remaining number of screws is displayed after each fastening by counting down so that skipping can be prevented. The number of screws to be fastened can be set up to 99.

- A buzzer notifies completion when the final screw has been fastened. Automatic reset enables continuous operation.
- You feel safe because it controls erroneous operations of the screwdriver and excludes unnecessary count such as reasuring fastening or retightening.
- There is a special type which you can connect with your existing HIOS power supply to use it as a counter (SC1 Series).

Screw Counter STC3 Series

BLOP-STC3 (for 1 screwdriver)

Applicable screwdrivers:
BL Series (Model: BL-OPC)
BLG Series (Model: BLG-OPC)

DC Type



CLT-70STC3 (for 1 screwdriver)

Applicable screwdrivers:
CL Series (except CL-9000)

DC Type



VZOP-STC (for 1 screwdriver)

Applicable screwdrivers:
VB Series (VB-OPC / VBH-OPC)
VZ Series (VZ-OPC / VZH-OPC)
* Except AC220-240V models

AC Type



SPECIFICATIONS

| Model | BLOP-STC3 | CLT-70STC3 | VZOP-STC | |
|----------------------------|--|------------|--|------------------|
| Primary Input Power Source | AC100-240V, 47-63Hz | | AC100V (50/60Hz) | AC120V (50/60Hz) |
| Secondary Output Voltage | HI(2): Approx. DC30V, LOW(1): Approx DC20V 2 steps | | — | |
| External Dimensions (mm) | 127(W)×208(D)×76(H) | | 160(W)×175(D)×84(H) | |
| Weight (kg) | 1.8 | | 1.5 | |
| Connector Type | 6P | 5P | — | |
| Accessories | Power cord 1.8m (with ground wire), crimp-type terminals 8 pcs | | Power cord 1.8m (with ground wire), crimp-type terminals 8 pcs | |
| Plug Type | A-1/A-2/A-3/C/BF/S | | A-1 | A-2 |

* These counters don't interlock with the built-in counter.

Separate Counter SC1 Series

BLOP-SC1 (for 1 screwdriver)

Applicable screwdrivers:
BL Series (BL-OPC)
BLG Series (BLG-OPC)

DC Type



CLOP-SC1 (for 1 screwdriver)

Applicable screwdrivers:
CL Series

DC Type



Example of Configuration



You need to prepare another power supply for the separate counter.

SPECIFICATIONS

| Model | BLOP-SC1 | CLOP-SC1 |
|----------------------------|--|--------------------------|
| Primary Input Power Source | DC20/31V | |
| Secondary Output Voltage | Same as the connected power supply | |
| External Dimensions (mm) | 110(W)×100(D)×55(H) | |
| Weight (g) | 600 | |
| Connector Type | 6P | 5P |
| Accessories | Power cord 1.5m 1 pc, crimp-type terminals 8 pcs | |
| Connectable Power Supply | T-45BL / T-70BL | CLT-45 / CLT-60 / CLT-80 |

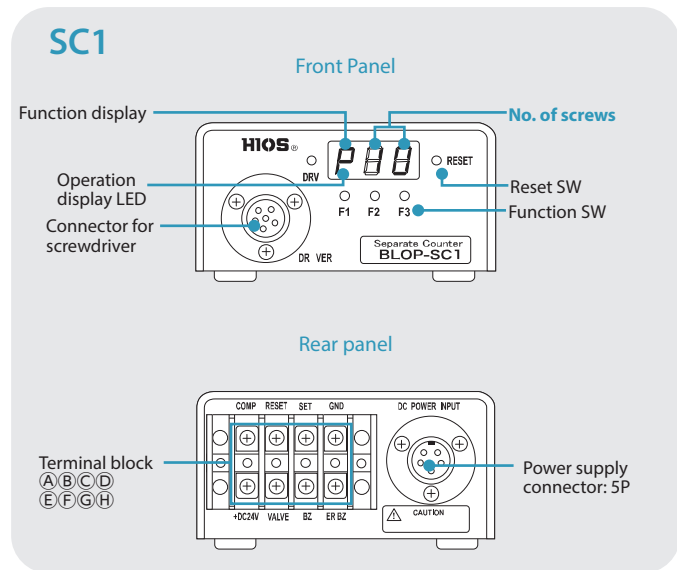
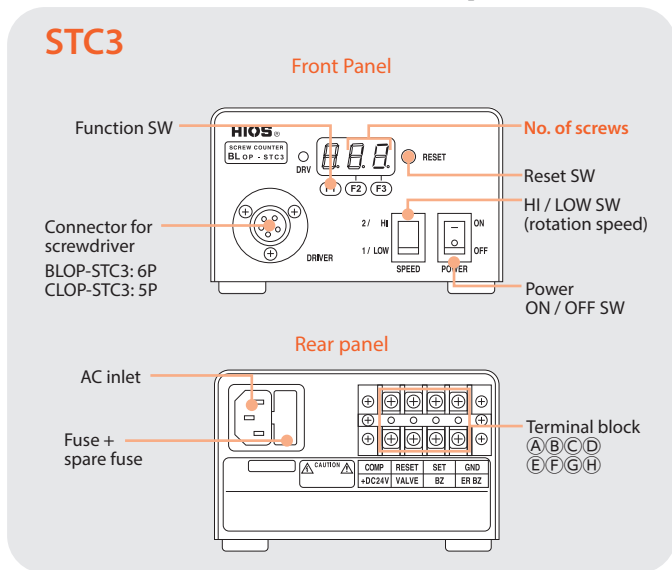
* These counters don't interlock with the built-in counter.

STC3 / SC1

| Model | Screw Counter | | | Separate Counter (external type) | | |
|---------------------|---------------------------------------|--------------------------------|------------|----------------------------------|----------|---|
| | STC3 Series | | STC Series | SC1 Series | | |
| | BLOP-STC3 (power supply type) | CLT-70STC3 (power supply type) | VZOP-STC | BLOP-SC1 | CLOP-SC1 | |
| Function | | | | | | |
| Counting | Fastener count (1 to 99) | ● | ● | ● | ● | |
| | Counting Direction | Forward (count-down) | ● | ● | ● | ● |
| | | Reverse (count-up*) | ● | — | ● | — |
| | Display | LED | ● | ● | ● | ● |
| | | Count timer | ● | ● | ● | ● |
| | Built-in Timer | Workpiece set timer | ● | ● | ● | ● |
| | | Workpiece reset timer | ● | ● | ● | ● |
| Reverse count timer | | ● | — | ● | — | |
| External I/O | Power supply for external devices (E) | ● | ● | ● | ● | |
| | Control output (A, F, G) | ● | ● | ● | ● | |
| | Control input (B, C) | ● | ● | ● | ● | |
| | Error output (H) | ● | ● | ● | ● | |

*1 If you unscrew during operation, the count number will go back by one.

Names and functions of components of screw counter



| Function SW | Function | Terminal block | Signal | Description | |
|-------------|---|--------------------|--------|--|--|
| F1 | Set fastener count (1 to 99) | A B C D E F G H | A | COMP | "Work complete" signal output terminal, open collector output |
| | Set count timer | | B | RESET | Resets the count timer, input terminal for the "workpiece fixing release" signal from an external device |
| | Set workpiece set timer | | C | SET | Input terminal for the "workpiece set confirmation" signal |
| | Set workpiece reset timer | | D | GND | — |
| | Set reverse count timer | | E | +DC24V | Power supply terminal for external device, open collector output |
| F2 | Display the number of screws remaining. Control the sound of buzzer. Setting of ON/OFF of the reverse count control | F | VALVE | Output terminal for external device, open collector output | |
| | | G | BZ | Work complete output terminal, open collector output | |
| F3 | Control the normal counter operation. Setting ON/OFF of the torque-up buzzer sound control | H | ER BZ | Warning for a removed workpiece before operation complete, open collector output | |

Notes:
 • Display and functions of VZOP-STC operation panel are partially different from the above.
 • CLT-70STC3 and CLOP-SC1 don't have a reverse count timer.

Plug Types

| Voltage | 100V | | 120V | 220-240V | | | |
|------------|--------|----------|----------|----------|--------|---------|--------|
| Plug Shape | Type A | Type A-1 | Type A-2 | Type A-3 | Type C | Type BF | Type S |
| | | | | | | | |

HDP / HP Series

World-class measuring devices that support a wide range of torque

- Up to 100 data items can be stored in the memory and controlled. The measurement data can also be imported into your PC for management.
- With one unit of torque meter, the max, min and average torque values can be checked.
- We promptly respond to your request for calibration and maintenance services. "Inspection Report, Traceability Chart, and Calibration Certificate" is attached to all the torque meters.

HDP

Ideal for measuring the torques of loose screws and additional fastening

HDP-5



HDP-50



HDP-100 (Available on request)



SPECIFICATIONS

| Model | | HDP-5 | HDP-50 | HDP-100 |
|--|---------------------|--|--|--|
| Peak Measuring Range | N-m | 0.015 - 0.500 | 0.15 - 5.00 | 0.15 - 10.00 |
| | N-cm | 1.5 - 50.0 | 15 - 500 | 15 - 1000 |
| Accuracy | | Within $\pm 0.5\%$ (F.S.) | Within $\pm 0.5\%$ (F.S.) | Within $\pm 0.5\%$ (F.S.) |
| Measuring Mode | | Track, Peak, First Peak | Track, Peak, First Peak | Track, Peak, First Peak |
| External Dimensions (mm) | Display Unit | 125×95.6×42 (H) | 125×95.6×42 (H) | 125×95.6×42 (H) |
| | Detector | 104 (L)× \varnothing 21 | 160 (L)× \varnothing 34.5 | 160 (L)× \varnothing 34.5 |
| | Detector Bit Socket | H4 | H5 | 1/4HEX |
| Weight (g) | Display Unit | 780 | 780 | 780 |
| | Detector | 68 | 250 | 250 |
| Detector Cord | | 1.7m (P/N: DPC-0506) | 1.7m (P/N: DPC-0506) | 1.7m (P/N: DPC-0506) |
| Battery Pack (charging time) | | 1.2V NiMH x 5 cells 1,000mA (within 6 hours) | 1.2V NiMH x 5 cells 1,000mA (within 6 hours) | 1.2V NiMH x 5 cells 1,000mA (within 6 hours) |
| Continuous Operating Time on Full Charge | | 8 hours | 8 hours | 8 hours |
| Battery Life | | About 300 charges | About 300 charges | About 300 charges |
| Exclusive Battery Charger | | Input: AC 100-240V (50/60Hz) Output: DC 7.3-8V 0.5A | Input: AC 100-240V (50/60Hz) Output: DC 7.3-8V 0.5A | Input: AC 100-240V (50/60Hz) Output: DC 7.3-8V 0.5A |

Standard Accessories

| Model | HDP-5 | HDP-50 | HDP-100 | HDP-5 | HDP-50 | HDP-100 |
|-----------------|---|---|--|--|--------|---------|
| Shank | H4 | H5 | 1/4HEX | 1/4HEX | | |
| Bit (1 pc each) | HIOS Shank (H4) +#0×40mm +#1×40mm +#2×40mm | HIOS Shank (H5) +#0×60mm +#1×60mm +#2×60mm | HEX Shank (1/4HEX) +#1×50mm +#2×50mm | HEX Shank (1/4HEX) +#1×50mm +#2×50mm | | |
| Auxiliary Arm | — | 1 pc | 1 pc | — | 1 pc | |
| Others | ● Exclusive battery charger* 1 pc Part code: TCH-MULTI ● Detector cord 1.7m 1 pc Part code: DPC-0506 ● Inspection Report 1 copy * For a battery charger to be used outside Japan, see the list on P.67, because an applicable battery charger varies depending on the country. | | | | | |

About Data Output

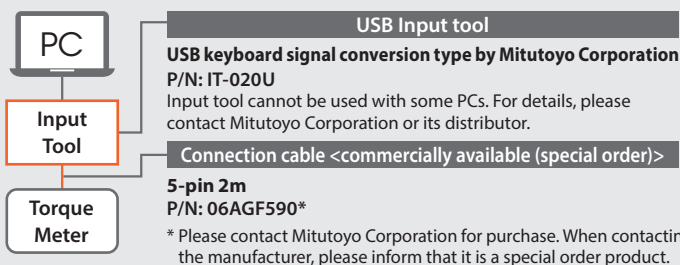
When you import the data into your PC, please use the input tool by Mitutoyo. Since the cord for connection is not included, please purchase it separately.

For the configuration, please inquire to the HIOS distributor.

An analog output cord is optional.

● Cord exclusively used for analog output: 1.5m (optional) P/N: HP-8060
Analog units connectable to Torque Meter: Pen Recorder, Visilite Recorder, Oscilloscope, Voltmeter, etc.

*Before use, please read the instruction manual attached to each device carefully for proper operations.



HP

This series covers a various usages including torque settings on electric screwdrivers, torque control of other tools, etc.

HP-1 (Available on request)



HP-10



HP-100







SPECIFICATIONS





| Model | | HP-1* | HP-10 | HP-100 |
|--|------|--|--|--|
| Peak measuring range | N-m | — | 0.015 - 1.000 | 0.15 - 10.00 |
| | N-cm | 0.15 - 10.00 | 1.5 - 100.0 | 15 - 1000 |
| | N-mm | 1.5 - 100.0 | — | — |
| Accuracy | | Within ±0.5% (F.S.) | Within ±0.5% (F.S.) | Within ±0.5% (F.S.) |
| Measuring Mode | | Track, Peak, First Peak | Track, Peak, First Peak | Track, Peak, First Peak |
| External Dimensions (mm) | | 230×124×65.2 (H) | 230×124×65.2 (H) | 230×124×65.2 (H) |
| Weight (kg) | | 1.8 | 1.8 | 1.8 |
| Battery Pack (Charging Time) | | 6V NiMH 1,000mA (within 6 hours) | 6V NiMH 1,000mA (within 6 hours) | 6V NiMH 1,000mA (within 6 hours) |
| Continuous Operating Time on Full Charge | | 8 hours | 8 hours | 8 hours |
| Battery Life | | About 300 charges | About 300 charges | About 300 charges |
| Exclusive Battery Charger | | Input: AC 100-240V (50 / 60Hz) Output: DC 7.3-8V 0.5A | Input: AC 100-240V (50 / 60Hz) Output: DC 7.3-8V 0.5A | Input: AC 100-240V (50 / 60Hz) Output: DC 7.3-8V 0.5A |

* Please ask HIOS distributor for fidaptor.

Standard Accessories

| Model | HP-1 | HP-10 | HP-100 | | HP-10X | HP-100X |
|----------------------------|--|------------------------------|---|---|-------------------------------|---|
| Fidaptor with Safety Cover | — | P/N: TF4G-Z (yellow) 1 pc | P/N: TF5G-Z (black) 1 pc | | P/N: TF6SG-Z (yellow) 1 pc | P/N: TF6XG-Z (black) 1 pc |
| Shaft with Screw | — | — | P/N: TF5G-0010-4 1 pc  HIOS Shank H4 | P/N: TF6XG-0010 1 pc  HEX Shank (2-step shaft) Upper: 5HEX Lower: 1/4HEXmm | — | — |
| Buffer Spring | — | — | P/N: CL65-0040 (yellow) 1 pc Measuring range: 0.15 - 0.6N•m  | — | — | P/N: CL65-0040 (yellow) 1 pc Measuring range: 0.15 - 0.6N•m  |
| Others | ●Exclusive battery charger* 1 pc Part code: TCH-MULTI ●Grease (only for HP-100) Part code: TF-G3 1 pc ●Inspection Report 1 copy * For a battery charger to be used outside Japan, see the list on P. 67, because an applicable battery charger varies depending on the country. | | | | | |

List of Applicable Fidaptors

| Model | HP-10 | | | | HP-100 | | | |
|-----------------------|---|---|---|---|---|---|--|--|
| | Standard Accessories | Optional Accessories | | | Standard Accessories | Optional Accessories | | |
| P/N | TF4G-Z | TF6SG-Z | TF4SG-Z | TF4S-Z | TF5G-Z | TF6XG-Z | TF6U-Z* ¹ | TF6UP-Z* ² |
| Measuring Range (N•m) | 0.15 - 0.6 | 0.15 - 0.6 | 0.25 or smaller | 0.25 or smaller | 0.5 - 3 | 0.5 - 3 | 3 - 9 | 3 - 9 |
| Bit Drive |  HIOS Shank H4 |  HEX Shank (2-step shaft) Upper: 5HEX, Lower: 1/4HEX |  HIOS Shank H4 | Without safety cover  HIOS Shank H4 |  HIOS Shank H5 |  HEX Shank (2-step shaft) Upper: 5HEX, Lower: 1/4HEX | 15mm  HEX Shank 1/4HEX | 35mm  HEX Shank 1/4HEX |

*1 For measuring hi-torque screwdriver (Lever Start) *2 For CL-9000

HM / HIT Series

Controls measurement by various tools with appropriate quality and precision

- Easily measures in CW (clockwise) and CCW (counterclockwise). Two units, N·m and N·cm are available.
- The measurement data can be imported into your PC for management. Data output and analog output are included in the standard specifications.
- We promptly respond to your request for calibration and maintenance services. "Inspection Report" is attached to every product.

HM

For torque control of automatic assembly machines

HM-10


HM-100



SPECIFICATIONS

| Model | | HM-10 | HM-100 |
|--|----------------|--------------------------------------|--------------------------------------|
| Peak Measuring Range | N-m | 0.015 - 1.000 | 0.15 - 10.00 |
| | N-cm | 1.5 - 100.0 | 15 - 1000 |
| Accuracy | | Within $\pm 0.5\%$ (F.S.) | Within $\pm 0.5\%$ (F.S.) |
| Measuring Mode | | Track, Peak | Track, Peak |
| External Dimensions (mm) | Torque Display | 165 × 95 × 55 (H) | 165 × 95 × 55 (H) |
| | Detector | 119 × 45 × 33 (H) | 119 × 45 × 33 (H) |
| Weight (kg) | Torque Display | 1 | 1 |
| | Detector | 0.35 | 0.35 |
| Detector Cord | | 1.7m (P/N: DPC-0506) | 1.7m (P/N: DPC-0506) |
| Battery Pack (charging Time) | | 6V NiMH (within 8 hours) | 6V NiMH (within 8 hours) |
| Continuous Operating Time on Full Charge | | 30 hours | 30 hours |
| Battery Life | | About 300 charges | About 300 charges |
| Exclusive Battery Charger | | Input: AC100V, Output: DC 7.2V 120mA | Input: AC100V, Output: DC 7.2V 120mA |

Standard Accessories

| Model | HM-10 | HM-100 |
|---------------------|--|--|
| Fidaptor with screw | P/N: TFM26-Z (Yellow) 1 pc | P/N: TFM40-Z (Black) 1 pc |
| Buffer Spring | — | P/N: CL65-0040 Measuring range: 0.15 - 0.6 N·m  |
| Screw | Replacement screws on the top of fidaptor: 5 pcs Hexagon socket head set screw for fixing: 2 pcs | |
| L-shaped Wrench | Width across flats 1.5mm 1 pc | Width across flats 1.5mm/2mm 1 pc |
| Others | <ul style="list-style-type: none"> ● Exclusive battery charger* 1 pc P/N: TCH-100N ● Detector cord 1.7m 1 pc P/N: DPC-0506 ● Inspection Report 1 copy | |

List of Applicable Fidaptors

| Model | HM-10 | | HM-100 |
|-----------------------|--|---|---|
| Category | Standard Accessories | Optional | Standard Accessories |
| P/N | TFM26-Z | TFM20-Z | TFM40-Z |
| Measuring Range (N·m) | 0.15 - 0.6 | 0.25 or smaller | 0.5 - 3 |
| |  |  |  |
| Spring Color | Yellow | Red | Black |
| Applicable tip No. | + #1 | + #0 | + #2 |
| Screw Head Diameter | M2.6 | M2.6 | M4.0 |

* For a battery charger to be used outside Japan, see the list on P. 67, because an applicable battery charger varies depending on the country.

HIT

For torque control of impact screwdrivers and torque wrenches

HIT-200 (Available on request)

HIT-500 (Available on request)

HIT-2000 (Available on request)



SPECIFICATIONS

| Model | | HIT-200 | HIT-500 | HIT-2000 |
|--|----------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Peak Measuring Range | N·m | 0.15 - 18.00 | 1.5 - 50.0 | 25.0 - 180.0 |
| Accuracy | | Within ± 1% (F.S.) | Within ± 1% (F.S.) | Within ± 1% (F.S.) |
| Measuring Mode | | Track, Peak, First Peak | Track, Peak, First Peak | Track, Peak, First Peak |
| Dimensions of Torque Display (mm) | | 165×95×55 (H) | 165 ×95 ×55 (H) | 165 ×95 ×55 (H) |
| Weight (kg) | Torque Display | 1 | 1 | 1 |
| | Detector | 0.85 | 1.65 | 1.65 |
| Socket Mating Diameter | | 9.5 square | 12.7 square | 12.7 square |
| Detector Cord | | 1.7m (P/N: DPC-0506) | 1.7m (P/N: DPC-0506) | 1.7m (P/N: DPC-0506) |
| Battery Pack (Charging Time) | | 6V NiMH (within 8 hours) | 6V NiMH (within 8 hours) | 6V NiMH (within 8 hours) |
| Continuous Operating Time on Full Charge | | 30 hours | 30 hours | 30 hours |
| Battery Life | | About 300 charges | About 300 charges | About 300 charges |
| Exclusive Battery Charger | | Input: AC 100V, Output: DC 7.2V 120mA | Input: AC 100V, Output: DC 7.2V 120mA | Input: AC 100V, Output: DC 7.2V 120mA |

* If your tool does not fit with the socket shape, please use a commercially available adaptor.

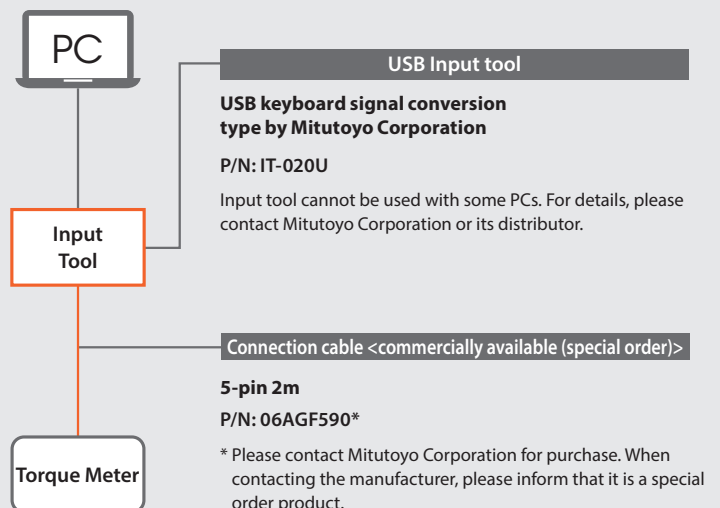
About Data Output

When you import the data into your PC, please use the input tool by Mitutoyo. Since the cord for connection is not included, please purchase it separately.

For the configuration, please inquire to the HIOS distributor.

An analog output cord is optional.

- Cord exclusively used for analog output: 1.5m (optional) P/N: HP-8060
- Analog units connectable to Torque Meter: Pen Recorder, Visilite Recorder, Oscilloscope, Voltmeter, etc.
*Before use, please read the instruction manual attached to each device carefully for proper operations.



HS Series (For Manual Operation/Automated Machines)

Neji Taro aligns screws!

The work efficiency of a production line will be dramatically improved.

- A single unit can handle different screw sizes by changing rails. Easy rail replacement.
- Screws are accurately aligned and quickly fed to a line. Feeding speed can be adjusted depending on operational conditions.
- Special screws can be also handled.

- A single unit can handle eight screw sizes by simply replacing the rail.
- The Rotary Escaper has been adopted to take out screws. It has realized stable chucking of screws by eliminating tangling of screws.
- Quickly catches unstable screws. For example, countersunk screws, screws with washer and thinner head screws can be handled.
- Can be used with the vacuum pick up screwdriver (for automated machines).

- A single unit can handle three screw sizes by replacing the rail.
- A large screw capacity of approx. 150 cc.
- Can be used with the vacuum pick up screwdriver (for automated machines).

HSV Series

(for Manual Operation)



HSV-RB Series

(for Automated Machines)



HS Series

(for Manual Operation)



HS-RB Series

(for Automated Machines)



SPECIFICATIONS

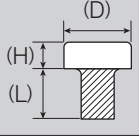
| Category | | HSV Series (for Manual Operation) | HSV-RB Series (for Automated Machines) | HS Series (for Manual Operation) | HS-RB Series (for Automated Machines) |
|------------------------------|--------|---|---|--|--|
| Take Out Screws by: | | Rotary escaper | | Linear rail | Slide escaper |
| Power Supply (AC adaptor) | Input | AC100-240V (50/60Hz) | | | |
| | Output | DC15V 1A | | | |
| Dimensions (mm) | | 123(W)×181(D)×145(H) | | 130(W)×215(D)×136(H) | 134(W)×275(D)×136(H) |
| Weight | | Approx. 3 kg (including the rail) | | Approx. 3.2 kg (including the rail) | Approx. 4.2 kg (including the rail) |
| Screw Capacity | | 80cc | | 150cc | |
| Overload Protection Circuit | | Reverse rotation when overloaded, Forward rotation when restored | | Reverse rotation when overloaded, Forward rotation when restored | |
| Accessories | | Hexagonal wrench (width across flats 2mm) 1 pc, screwdriver 1 pc (for timer adjustment), AC adaptor 1 pc, GND wire 1 pc, CD-ROM | | | |

Range of Feedable Screws

| Model | Nominal Screw Diameter | (D) Head Diameter (∅) | (H) Head Thickness (mm) | (L) Thread Length (mm) | Replacement Rail Model No. | | |
|--------------------|------------------------|-----------------------|-------------------------|------------------------|----------------------------|-----------|-----------|
| HSV (Main Unit) | HSV-10 | M1.0 | 1.8 - 4.5 | 0.35 - 1.0 | 1.6 - 10 | HSV-BI-10 | |
| | HSV-12 | M1.2 | 1.8 - 4.5 | 0.35 - 1.0 | 1.9 - 10 | HSV-BI-12 | |
| | HSV-14 | M1.4 | 2.0 - 4.5 | 0.35 - 1.0 | 2.2 - 10 | HSV-BI-14 | |
| | HSV-17 | M1.7 | 2.5 - 4.5 | 0.35 - 1.0 | 2.7 - 10 | HSV-BI-17 | |
| | HSV-20 | M2.0 | 3.0 - 6 | 0.35 - 4.5 | 3.2 - 20 | HSV-BI-20 | |
| | HSV-23 | M2.3 | 3.3 - 6 | 0.35 - 4.5 | 3.7 - 20 | HSV-BI-23 | |
| | HSV-26 | M2.6 | 3.6 - 6 | 0.35 - 4.5 | 4.2 - 20 | HSV-BI-26 | |
| | HSV-30 | M3.0 | 4.0 - 6 | 0.35 - 4.5 | 4.8 - 20 | HSV-BI-30 | |
| | HSV-RB (Main Unit) | HSV-10RB | M1.0 | 1.8 - 4.5 | 0.35 - 1.0 | 1.6 - 10 | HSV-RI-10 |
| | | HSV-12RB | M1.2 | 1.8 - 4.5 | 0.35 - 1.0 | 1.9 - 10 | HSV-RI-12 |
| HSV-14RB | | M1.4 | 2.0 - 4.5 | 0.35 - 1.0 | 2.2 - 10 | HSV-RI-14 | |
| HSV-17RB | | M1.7 | 2.5 - 4.5 | 0.35 - 1.0 | 2.7 - 10 | HSV-RI-17 | |
| HSV-20RB | | M2.0 | 3.0 - 6 | 0.35 - 4.5 | 3.2 - 20 | HSV-RI-20 | |
| HSV-23RB | | M2.3 | 3.3 - 6 | 0.35 - 4.5 | 3.7 - 20 | HSV-RI-23 | |
| HSV-26RB | | M2.6 | 3.6 - 6 | 0.35 - 4.5 | 4.2 - 20 | HSV-RI-26 | |
| HSV-30RB | | M3.0 | 4.0 - 6 | 0.35 - 4.5 | 4.8 - 20 | HSV-RI-30 | |

| Model | Nominal Screw Diameter | (D) Head Diameter (∅) | (H) Head Thickness (mm) | (L) Thread Length (mm) | (Replacement Rail Model No.) | |
|-------------------------|------------------------|-----------------------|-------------------------|------------------------|------------------------------|----------|
| HS-450 (Main Unit) | HS-35 | M3.5 | 4.8 - 8.0 | 0.5 - 8.0 | 5.6 - 18 | HS-R35 |
| | HS-40 | M4.0 | 5.4 - 8.0 | 0.5 - 8.0 | 6.4 - 18 | HS-R40 |
| | HS-50 | M5.0 | 6.2 - 10.0 | 0.5 - 8.0 | 8.0 - 18 | HS-R50 |
| HS-450RB (Main Unit) | HS-35RB | M3.5 | 4.8 - 8.0 | 0.5 - 8.0 | 5.6 - 18 | HS-R35RB |
| | HS-40RB | M4.0 | 5.4 - 8.0 | 0.5 - 8.0 | 6.4 - 18 | HS-R40RB |
| | HS-50RB | M5.0 | 6.2 - 10.0 | 0.5 - 8.0 | 8.0 - 18 | HS-R50RB |




Screw Dimensions

|  | (D) | (H) | (L) |
|---|-------------------|---------------------|--------------------|
| | Head diameter (∅) | Head thickness (mm) | Thread length (mm) |

- A single unit of this model can handle different screw diameters by replacing rails (8 screw sizes for the manual operation type, 6 screw sizes for the automated machines).
- High-speed feeding: 120 screws (M3 x 8) per minute on average (for automated machines)
- Can be used with the suction type (for automated machines).

- A single unit can handle different screw diameters by replacing rails (HSF-01 handles 5 screw sizes, and HSF-02 handles 3 screw sizes).
- Low-profile design with the width 55 mm is most suitable for cell production.
- It can handle screws with thin heads by adjusting the sensor.

Configuration of Screw Feeder

| Main unit model | Model | Replacement rail |
|---|--|--|
|  Main unit only |  Main unit + applicable rail (1 pc) |  Specify the rail's model No. for ordering a rail. |

HSIII Series

(for Manual Operation)



HSIII-RB Series

(for Automated Machines)



HSF Series

(for Manual Operation)



SPECIFICATIONS

| Category | | HSIII Series (for Manual Operation) | HSIII-RB Series (for Automated Machines) | HSF Series (for Manual Operation) |
|------------------------------|--------|--|---|---|
| Take out screws by: | | ⇒ ⇒ ⇒ Linear rail | ↳ Slide escaper | ⇒ ⇒ ⇒ Linear rail |
| Power supply (AC Adaptor) | Input | AC100V-240V (50/60Hz) | | AC100-240V (50 / 60Hz) |
| | Output | DC15V 1A | | DC15V 1A |
| Dimensions (mm) | | 123(W)×181(D)×145(H) | 123(W)×181(D)×144(H) | 55(W)×205(D)×142.5(H) |
| Weight | | 3kg (including the rail) | | Approx. 2.4kg (including the rail) |
| Screw Capacity | | 80cc | | 40cc |
| Overload Protection Circuit | | Reverse rotation when overloaded, Forward rotation when restored | | Reverse rotation when overloaded, Forward rotation when restored |
| Accessories | | Hexagonal wrench (width across flats 2 mm) 1 pc, screwdriver 1 pc (for timer adjustment), AC adaptor 1 pc, gauge plate (only for manual HSIII), ground wire 1 pc, CD-ROM | | Hexagonal wrench (width across flats 2 mm) 1 pc, screwdriver 1 pc (for timer adjustment), AC adaptor 1 pc, ground wire 1 pc, CD-ROM |

Range of Feedable Screws

| Model | Nominal Screw Diameter | (D) Head Diameter (∅) | (H) Head Thickness (mm) | (L) Thread Length (mm) | (Replacement Rail Model No.) | |
|----------------------------------|------------------------|-----------------------|-------------------------|------------------------|------------------------------|-----------|
| HSIII-300 (Main Unit Model) | HSIII-10 | M1.0 | 1.8 - 4.5 | 0.35 - 1.0 | 1.6 - 10 | HS-SR10 |
| | HSIII-12 | M1.2 | 1.8 - 4.5 | 0.35 - 1.0 | 1.9 - 10 | HS-SR12 |
| | HSIII-14 | M1.4 | 2.0 - 4.5 | 0.35 - 1.0 | 2.2 - 10 | HS-SR14 |
| | HSIII-17 | M1.7 | 2.5 - 4.5 | 0.35 - 1.0 | 2.7 - 10 | HS-SR17 |
| | HSIII-20 | M2.0 | 3.0 - 6 | 0.35 - 4.5 | 3.2 - 20 | HS-SR20 |
| | HSIII-23 | M2.3 | 3.3 - 6 | 0.35 - 4.5 | 3.7 - 20 | HS-SR23 |
| | HSIII-26 | M2.6 | 3.6 - 6 | 0.35 - 4.5 | 4.2 - 20 | HS-RS26 |
| | HSIII-30 | M3.0 | 4.0 - 6 | 0.35 - 4.5 | 4.8 - 20 | HS-SR30 |
| HSIII-300RB (Main Unit Model) | HSIII-14RB | M1.4 | 2.0 - 4.5 | 0.35 - 1.0 | 2.2 - 10 | HS-SR14RB |
| | HSIII-17RB | M1.7 | 2.5 - 4.5 | 0.35 - 1.0 | 2.7 - 10 | HS-SR17RB |
| | HSIII-20RB | M2.0 | 3.0 - 6 | 0.35 - 4.5 | 3.2 - 20 | HS-SR20RB |
| | HSIII-23RB | M2.3 | 3.3 - 6 | 0.35 - 4.5 | 3.7 - 20 | HS-SR23RB |
| | HSIII-26RB | M2.6 | 3.6 - 6 | 0.35 - 4.5 | 4.2 - 20 | HS-SR26RB |
| | HSIII-30RB | M3.0 | 4.0 - 6 | 0.35 - 4.5 | 4.8 - 20 | HS-SR30RB |

| Model | Nominal Screw Diameter | (D) Head Diameter (∅) | (H) Head Thickness (mm) | (L) Thread Length (mm) | (Replacement Rail Model No.) | |
|-----------------------------|------------------------|-----------------------|-------------------------|------------------------|------------------------------|---------|
| HSF-01 (Main Unit Model) | HSF-10 | M1.0 | 1.8 - 2.0 | 0.35 - 1.0 | 1.6 - 10 | HS-WR10 |
| | HSF-12 | M1.2 | 1.8 - 2.3 | 0.35 - 1.0 | 1.9 - 10 | HS-WR12 |
| | HSF-14 | M1.4 | 2.0 - 2.5 | 0.35 - 1.0 | 2.2 - 10 | HS-WR14 |
| | HSF-17 | M1.7 | 2.5 - 3.0 | 0.35 - 1.0 | 2.7 - 10 | HS-WR17 |
| | HSF-20 | M2.0 | 3.0 - 4.0 | 0.35 - 1.3 | 3.2 - 16 | HS-WR20 |
| HSF-02 (Main Unit Model) | HSF-23 | M2.3 | 3.5 - 4.0 | 0.35 - 1.5 | 3.7 - 16 | HS-WR23 |
| | HSF-26 | M2.6 | 4.0 - 4.5 | 0.35 - 1.7 | 4.2 - 16 | HS-WR26 |
| | HSF-30 | M3.0 | 5.0 - 5.5 | 0.35 - 2.0 | 4.8 - 16 | HS-WR30 |

About Dimensions of Screw Feeders

The dimensions in the chart don't include projections and depressions. See HIOS website for details.

www.hios.com

DOWNLOAD ► DXF ► Automatic screw feeder

BL-SB / SB Series (DC Type)

Brushless Screwdriver
BL-5000SB



The tap penetrates to the depth set by the stopper.

Lever

Brushless Screwdriver
BL-7000SB



Lever

Brushed Screwdrivers
SB-400C



The tap penetrates to the depth set by the stopper.

Lever

SPECIFICATIONS

| Lever Start Model | | BL-5000SB | BL-7000SB | SB-400C | SB-650C |
|--|--------------------|------------------------------|------------------------------|------------------------------|-------------------------------|
| Tapping Capacity (mm) | | 0.9 - 2.6 | 2.0 - 4.0 | 0.9 - 2.6 | 2.0 - 4.0 |
| Chuck Diameter (mm) | | Max. 4mm | Max. 6.5mm | Max.4mm | Max.6.5mm |
| Safe Load Torque Adjustable Range (N-m) | | 0.2 - 1.2 | 0.7 - 2.8 | 0.1 - 0.55 | 0.3 - 1.6 |
| Unloaded Rotation Speed (r.p.m.) ±10% (HI/LOW) | | 900 / 590 | 1,500 / 1,000 | 1,000 / 670 | 900 / 600 |
| External Dimensions | Grip Diameter(∅) | Max : 38 Min : 32 | Max : 40 Min : 36 | 32 | 37 |
| | Length (mm) | 233 | 280 | 220 | 295 |
| | Width (mm) | 48.8 | 57.5 | — | — |
| Weight (g) | | 405 | 765 | 450 | 750 |
| Applicable Power Supply | T-45BL | ● | — | ● | ● |
| | T-70BL | ● | ● | — | — |
| Carbon Brush Model (Optional) | | — | | CL4-0420 (2 pieces per pair) | CL65-0490 (2 pieces per pair) |
| Accessories | Stopper (one each) | ∅2.0mm / ∅2.3mm / ∅2.6mm | ∅2.6mm / ∅3.0mm / ∅4.0mm | ∅2.0mm / ∅2.3mm / ∅2.6mm | ∅2.6mm / ∅3.0mm / ∅4.0mm |
| | Chuck key 1 pc | | | | |
| | Cord length | 1.5m (5P) | 2m (5P) | 1.5m (5P) | 2m (5P) |
| | L-shaped Wrench | Width Across Flat 5 mm 1 pc | | | |

BL-SB / SB

Brushed Screwdriver SB-650C



Lever

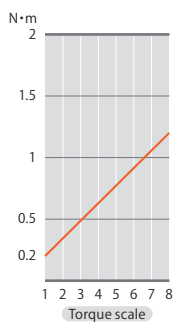
With an automatic reversal mechanism, this tool detects overloading and prevents tap damage.

- A tapping tool for components with pilot holes.
- Automatically detects excessive load on the tap and the pilot hole width, and prevents tap damage.
- Thread deburring to remove paint or adhesive residue in the thread can be easily done.

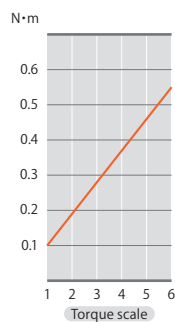


Output torque Guide (HI Input)

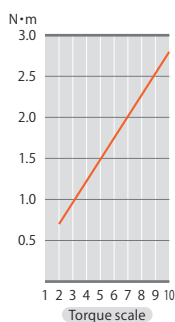
BL-5000SB



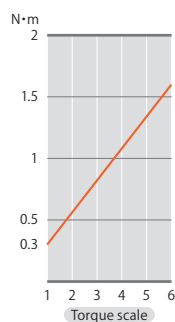
SB-400C



BL-7000SB



SB-650C



RELATED PRODUCTS

Controller SBC-1



The rotation reverses when tapping is complete or when overloading is detected to prevent tap breakage.

Specifications

| Model | SBC-1 |
|--------------------------|--------------------------------------|
| External Dimensions (mm) | 70×100×42 |
| Weight (g) | 153.5 |
| Applicable Tapper | SB-400C, SB-650C |
| Applicable Power Supply | T-45BL |
| Accessories | Brackets x 2, Double-sided tapes x 2 |

POWER SUPPLY

T-45BL



Applicable models: BL-5000SB, SB-400C, SB-650C

See [P.21](#) →

T-70BL



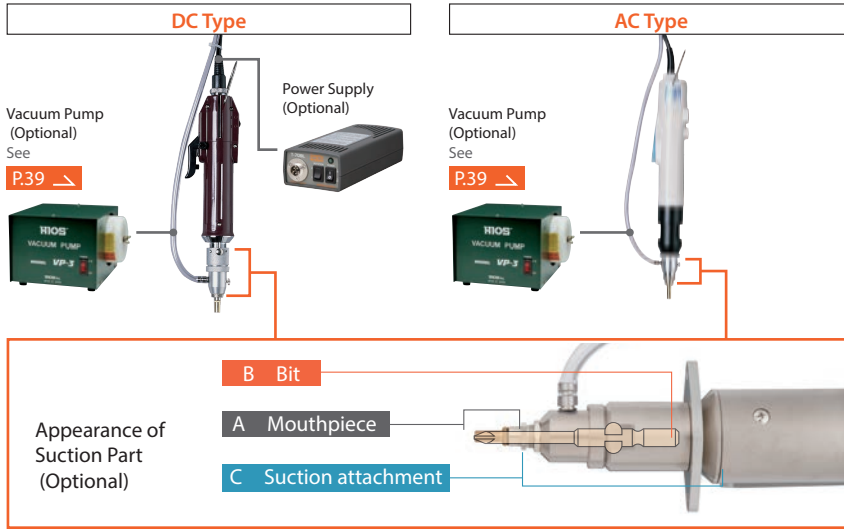
Applicable models: BL-5000SB, BL-7000SB

See [P.21](#) →

Accessories for Suction Screwdrivers

The size varies depending on the model, please refer to the compatible accessory chart.

Configuration



PGF Series / BLF Series / CL Series / CLF Series / aF Series / VZ Series

- Suction attachments are included in standard models. Therefore, please purchase **A** and **B** while checking the order code.
- If you want to use an existing screwdriver with the suction attachment, please purchase **A**, **B**, and **C**.

BLG Series / PG Series / BL Series / VB Series

- If you want to use a purchased screwdriver with the suction attachment, please purchase **A**, **B**, and **C**.

Compatible Accessory Chart

| Category | Model | A Mouthpiece | B Applicable Bit | C Suction Attachment | | | |
|--|--|--------------------------------------|---------------------|-------------------------|---------------|-------------|-----------|
| | | | | Standard | ESD | Appearance | |
| | | | | Suction Attachment | | | |
| BLG-BC2 Series BLG-BC1 Series BLG-ZERO1 Series BLG Series | BLG-4000 Series | F3 Std.18mm | H4 60mm | BLGQ4-SET | — | | |
| | BLG-4000BC2-LT | F3 Std.18mm | H4 60mm | CLQ2-SET | CLQ2-SET-ESD | | |
| | BLG-5000 Series BLG-5000-15 Series | F3 Std.18mm | H4 40mm | BLQ5-SET | BLQ5-SET-ESD | | |
| | | | H4 60mm | BLQ5N-SET | BLQ5N-SET-ESD | | |
| | BLG-5000-18 Series BLG-5000-HT Series | Please contact the HIOS distributor. | | | | | |
| | BLG-7000BC2 | F6 Std. 31mm | H5 80mm | BLQ7-SET | BLQ7-SET-ESD | | |
| PG Series | PG-3000 | F3Std.18mm | H4 60mm | PGQ3-SET | — | | |
| | PG-5000 | F3Std.18mm | H4 60mm | PGQ5-SET | — | | |
| | PG-7000 | F6Std.31mm | H5 80mm | PGQ7-SET | — | | |
| BL Series | BL-2000 Series | F3 Std.18mm | H4 60mm | CLQ2-SET | CLQ2-SET-ESD | | |
| | BL-300 Series | | H4 60mm | BLQ3N-SET | BLQ3N-SET-ESD | | |
| | BL-5000 Series | F3 Std.18mm | H4 40mm | BLQ5-SET | BLQ5-SET-ESD | | |
| | | | H4 60mm | BLQ5N-SET | BLQ5N-SET-ESD | | |
| | BL-7000 | F6 Std. 31mm | H5 80mm | BLQ7-SET | BLQ7-SET-ESD | | |
| PGF Series | PGFQ | PGFQ-3000 | F3 Std.18mm | H4 80mm | PGFQ3-SET | — | |
| | | PGFQ-5000 | | | PGFQ5-SET | — | |
| | | PGFQ-7000 | | | PGFQ7-SET | — | |
| | PGFR (Special Order) | PGFR-5000 / PGFR-7000 | ▶ See P. 54 | ▶ See P. 54 | ▶ See P. 53 | ▶ See P. 53 | |
| BLF Series | BLFQ | BLFQ-2000 | F3 Std.18mm | H4 60mm | BLFQ2-SET | — | |
| | | BLFQ-5000 | F6 Std. 31mm | H5 100mm | BLFQ5-SET | — | |
| | | BLFQ-7000 | | | BLFQ7-SET | — | |
| | BLFR (Special Order) | BLFR-5000 / 7000X / 7025X | ▶ See P. 54 | ▶ See P. 54 | ▶ See P. 53 | ▶ See P. 53 | |
| CL Series | CLQ-2000 | F3 Std.18mm | H4 60mm | CLQ2-SET | CLQ2-SET-ESD | | |
| | CLQ-3000 / 4000 | | | CLQ4-SET | CLQ4-SET-ESD | | |
| | CLQ-6000 / 6500 / 7000 | | | F6 Std. 31mm | H5 80mm | | CLQ65-SET |
| CLF Series aF Series | CLFQ-3000 / 4000 aFQ-4500 / 5000 | F3 Std.18mm | H4 60mm | CLFQ4-SET | — | | |
| | CLFQ-6000 / 6500 / 7000 / aFQ-6500 | F6 Std. 36mm | H5 100mm | CLFQ65-SET | — | | |
| VB Series | VB-3020 | F6 Std. 31mm | H5 100mm | VZQ18-SET | — | | |
| | VB-1820 / 3012 | | | VZQ10-SET | | | |
| VZ Series | VZQ-1510 | F3 Std. 18mm | H4 60mm | VZQ10-SET | — | | |
| | VZQ-1812 / 1820 3007 / 3012 | F6 Std. 31mm | H5 100mm | VZQ18-SET | | | |

Related Products Accessories for Suction Screwdrivers (Suction Attachment / Mouthpiece / Bit)

A Mouthpiece

F3 Std. 18mm (Total Length)

Cross-sectional view of a mouthpiece

The material of the mouthpiece is BS (brass) only.

| Order Code | Mouthpiece Reference Dimensions (mm) | | | Screw Head Shape and Screw Size | | |
|------------|--------------------------------------|-----|-----|---|-----------------------------|---|
| | D | d | d1 | JIS Plus (Machine Screw) | JCIS Plus | JIS Minus (Machine Screw) |
| F3-00 | 7.5 | — | — | Custom screw | Custom screw | Custom screw |
| F3-01 | 3.3 | 2.1 | 2.1 | | Class 1 M1.4 | |
| F3-02 | 3.6 | 2.6 | 2.6 | | Class 1 M1.7 / Class 3 M1.4 | |
| F3-03 | 4.1 | 3.1 | 3.1 | | Class 1 M2.0 / Class 3 M1.7 | |
| F3-04 | 4.6 | 3.6 | 3.6 | Pan, round M2.0 | Class 1 M2.3 / Class 3 M2.0 | Pan, round, flat M2.0 / countersunk, round countersunk M1.7 |
| F3-05 | 5.1 | 4.1 | 4.1 | Pan, round M2.3 / countersunk, round countersunk M2.0 | Class 1 M2.6 / Class 3 M2.3 | countersunk, round countersunk M2.0 |
| F3-06 | 5.8 | 4.3 | 4.5 | Pan, round M2.6 | Class 3 M2.6 | Binding M2.0 |
| F3-07 | 7.0 | 4.3 | 5.5 | Pan, round M3.0 / Binding 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 M2.3 | | 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, round countersunk, M1.2 |
| F3-17 | 4.3 | 3.3 | 3.3 | | | Pan, round, flat M1.7 |

● For different specifications, please contact the HIOS distributor. ● 3 mouthpieces per pack.

B Applicable bit

| H4 | Screw Recess | Screw Size | Bit | Order Code |
|----|--------------|--------------|-----------------------------|-----------------------|
| | JIS plus | M2.0-M2.6 | BP-H4-#1-3.0-40 (60)(80) | BP4130040(60)(80) |
| | | M3.0 | BP-H4-#2-4.0-40 (60)(80) | BP4240040(60)(80) |
| | JCIS plus | M1.4 Class 1 | BP-H4-#0-1.8-40 (S)(60)(80) | BP4018040 (S)(60)(80) |
| | | M1.4-M1.7 | BP-H4-#0-2.0-40(60)(80) | BP4020040(60)(80) |
| | JIS minus | M2.0-M2.6 | BP-H4-#0-2.5-40(60)(80) | BP4025040(60)(80) |
| | | M1.2 | BS-H4-2.0-40(60)(80) | BS420040(60)(80) |
| | | M1.4 | BS-H4-2.5-40(60)(80) | BS425040(60)(80) |
| | | M1.7-M2.0 | BS-H4-3.0-40(60)(80) | BS430040(60)(80) |
| | | M2.3-M3.0 | BS-H4-4.0-40(60)(80) | BS440040(60)(80) |

● The () in the list means total length of the bit.
● For special order item 1.8 x 40, please contact the HIOS distributor.

A Mouthpiece

F6 Std. 31mm (Total length)

Cross-sectional view of mouthpiece A

Cross-sectional view of mouthpiece B

The material of a mouthpiece is BS (brass) only.

| Drawing | Order Code | Mouthpiece Reference Dimensions (mm) | | | | | Screw Head Shape and Screw Size | |
|---------|------------|--------------------------------------|-----|-----|-----|-----|---|--------------------------------|
| | | D | D1 | d | d1 | d2 | JIS Plus (Machine screw) | JIS Minus (Machine Screw) |
| B | F6-00 | 8.0 | — | — | — | — | Custom screw | Custom screw |
| A | F6-01 | 4.6 | 7.0 | 3.5 | 3.6 | 5.5 | Pan, round M2.0 | Pan, round M2.0 |
| | F6-02 | 5.1 | 7.0 | 3.5 | 4.1 | 5.5 | Pan, round M2.3 / countersunk, round 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, round countersunk M3.0 | Truss M2.6 |
| | F6-06 | 8.5 | — | 5.5 | 7.0 | — | Pan, round M4.0 / truss M3.0 | Pan, round M4.0 / truss M3.0 |
| A | F6-09 | 6.5 | 7.0 | 3.5 | 5.2 | 5.5 | Countersunk, round countersunk M2.6 | Truss M2.3 |
| | F6-10 | 14.0 | — | — | — | — | Custom screw | Custom screw |
| | F6-11 | 7.7 | — | 5.5 | 6.3 | — | Binding M3.0 | Binding M3.0 |
| B | F6-13 | 9.7 | — | 5.5 | 8.3 | — | Binding M4.0 | |
| | F6-16* | 9.4 | — | 5.5 | 8.0 | — | Countersunk, round countersunk M4.0 | |
| | F6-22* | 9.7 | — | 7.5 | 8.3 | — | | Binding M4.0 |

* Special order ● For different specifications, please contact the HIOS distributor. ● 3 mouthpieces per pack.

B Applicable Bit

| H5 | Screw Recess | Screw Size | Bit | Order Code |
|-----------|--------------|--------------|------------------|------------|
| | JIS plus | M2.0-M2.6 | BP-H5-#1-3.0x80 | BP5130080 |
| | | M3.0-M5.0 | BP-H5-#2-5.0x80 | BP5250080 |
| | JIS minus | M2.0-M2.3 | BS-H5-3.0x80 | BS530080 |
| M3.0-M4.0 | | BS-H5-5.0x80 | BS550080 | |
| | JIS plus | M2.0-M2.6 | BP-H5-#1-3.0-100 | BP5130100 |
| | | M3.0-M5.0 | BP-H5-#2-5.0-100 | BP5250100 |
| | JIS minus | M3.0-M4.0 | BS-H5-5.0-100 | BS550100 |

● Truss: For M3.0, use #1.

For Automatic Assembly
Special Order

Accessories for Suction Screwdrivers

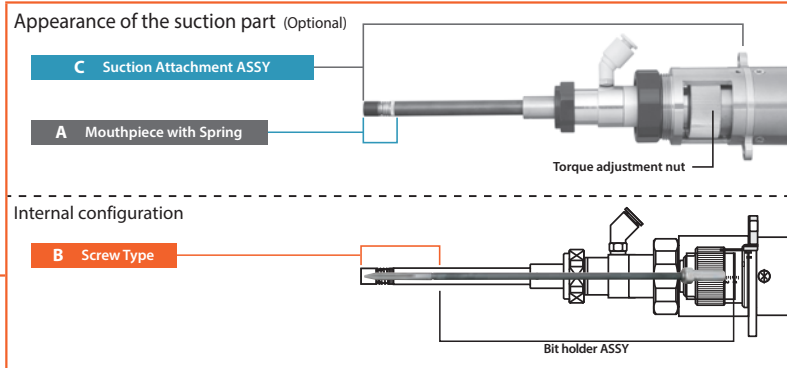
Suction attachments for screwdrivers for automated machines, PGF and BLF series. Suitable for fastening screws in deep recessed holes (FR specifications)

- Suction attachment ideal for robot operation. Torque adjustment and bit replacement can be done while the attachment is attached to the screwdriver.
- A spring is built in the mouthpiece. There are a self-adjustable inner mouthpiece type, a self-adjustable outer mouthpiece type and a non-contact type that prevents workpiece damage.
- Compared with the existing HIOS Mouthpiece, the ultimate vacuum of the FR Mouthpiece is higher and that helps to reduce screw vacuum errors.
- The edge of the FR Mouthpiece touches parallel to the screw head for better uprightness of the screw.
- A long bit holder prevents cross threaded screws.

Configuration

PGF Series / BLF Series

- Suction attachments are included in standard models (PGFR / BLFR). Please purchase A and B while checking the order code.
- If you want to use an existing screwdriver with the suction attachment, please purchase A, B and C.



C Suction Attachment ASSY

SPECIFICATIONS

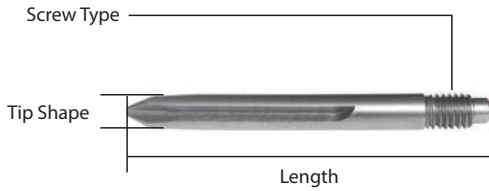
| Model | Mode and Appearance | External Dimensions |
|--------------------------|---------------------|---|
| PGFR-5000 | PGFR5-SA | Tilt angle 45 degrees, 360 degrees rotation Dimensions: 2.4, 102, 35.1, 17.4, 70, 17, 196.2, 4, 08, 012 |
| BLFR-5000 | BLFR5-SA | Bit Holder ASSY Specifications For PGFR-5000: Holder length 122.8 mm; bit drive H4 (P/N: PGFR5-3060) For BLFR-5000: Holder length 122.8 mm; bit drive 5HEX (P/N: BLFR5-3060) |
| PGFR-7000 | PGFR7-SA | Tilt angle 45 degrees, 360 degrees rotation Dimensions: 2.4, 102, 35.1, 17.4, 70, 17, 162.8, 3.7, 08, 012 |
| BLFR-7000X BLFR-7025X | BLFR7-SA | Bit holder ASSY Specifications Bit holder Assy specifications Holder length 122.8 mm; bit drive 1/4HEX (P/N: BLFR7-3060) |

*The hose is optional. Please order it separately. Order code: RM-0850 (Please specify the length in one-meter increments.) [Hose specifications] Inner diameter $\varnothing 4$ x outer diameter $\varnothing 6$

Related Products
Accessories for Suction Screwdrivers for Automated Machines (Suction Attachment / Mouthpiece / Bit)

B Screw-on-type Bit

Bit can be replaced easily by reversing itself.

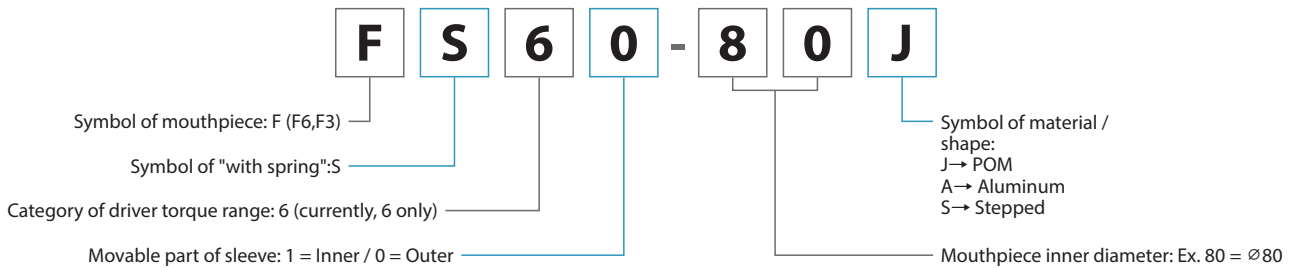


Specifications

| Model | Tip Shape | Length (L) | Tip Diameter | P/N |
|-------------------------------------|-----------|------------|--------------|----------|
| PGFR-5000 PGFR-7000 BLFR-5000 | +#1 | 40mm | ø4 | RBP4140S |
| BLFR-7000X BLFR-7025X | | | | |
| | +#2 | 40mm | ø4 | RBP4240S |

A Mouthpiece with Spring

Identification of mouthpiece P/N



SPECIFICATIONS

| P/N | Self-adjustable Inner Mouthpiece Type | Model | Self-adjustable Outer Mouthpiece Type |
|----------|---------------------------------------|---------------------|---|
| FS61-68 | | FS60-68J / FS60-68A | |
| FS61-68S | | | <p>POM: FS60-68J Aluminum: FS60-68A</p> |
| FS61-74 | | FS60-80J | |

Applicable screw guide chart for Mouthpiece with Spring

| Screw Size | M2.6 | | | M3.0 | | | M4.0 | | |
|------------|---------------------------------------|---------------------|---------------------|---------------------|---------------------|---|---|----------|-------|
| | Pan | Binding | Truss | Pan | Binding | Truss | Pan | Binding | Truss |
| Model | PGFR-5000 BLFR-5000 | FS61-68 FS61-68S | FS61-68 FS61-68S | FS61-68 FS61-68S | FS61-68 FS61-68S | FS60-68J FS60-68A FS61-68S FS61-74 | FS60-68J FS60-68A FS61-68S FS61-74 | — | — |
| | PGFR-7000 BLFR-7000X BLFR-7025X | | | | | | | FS60-80J | |

Cautions

- Different order code system applies to China CQC mark certified products. Please contact the HIOS distributor before ordering.
- For the GB Safety Standard(UKCA), please contact the HIOS distributor.

| | | | |
|---|---|-------------------------|-------------------------------|
| 5 | 6 | 7 | 8 |
| ESD | ESD | RoHS | 10 |
| Anti-electrostatic IEC61340 compliant products | Supporting anti-electrostatic (Surface resistance: 3 x 10 ¹² Ω or less) | RoHS compliant products | China RoHS compliant products |

| Model | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| VZ-4506PS | — | — | — | — | — | ○ | ○ | ○ |
| VZH-1820PS | — | — | — | — | — | ○ | ○ | ○ |
| VZH-3012PS | — | — | — | — | — | ○ | ○ | ○ |
| OPC screwdrivers supporting OPC Screw Counter | | | | | | | | |
| VZ-OPC Series | — | — | — | — | — | ○ | ○ | ○ |
| VZH-OPC Series | — | — | — | — | — | ○ | ○ | ○ |

220-240V

VZ Series (Lever ST)

| | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|
| VZ-1812 | — | ○ | — | — | — | ○ | ○ | ○ |
| VZ-3007 | — | ○ | — | — | — | ○ | ○ | ○ |
| VZ-4504 | — | ○ | — | — | — | ○ | ○ | ○ |

VZ Series (Push ST)

| | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|
| VZ-1812PS | — | ○ | — | — | — | ○ | ○ | ○ |
| VZ-3007PS | — | ○ | — | — | — | ○ | ○ | ○ |
| VZ-4504PS | — | ○ | — | — | — | ○ | ○ | ○ |

OPC screwdrivers supporting OPC Screw Counter

| | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|
| VZ-OPC Series | — | — | — | — | — | ○ | ○ | ○ |
|---------------|---|---|---|---|---|---|---|---|

Electric Tapper

| | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|
| BL-5000SB | ○ | — | — | — | — | ○ | ○ | ○ |
| BL-7000SB | ○ | — | — | — | — | ○ | ○ | ○ |
| SB-400C | — | — | — | — | — | ○ | ○ | ○ |
| SB-650C | — | — | — | — | — | ○ | ○ | ○ |

Controller for SB Series

| | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|
| SBC-1 | — | — | — | — | — | ○ | ○ | ○ |
|-------|---|---|---|---|---|---|---|---|

Automatic Screw Feeder

| | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|
| HSV Series | — | — | — | — | — | ○ | ○ | ○ |
| HSV-RB Series | — | — | — | — | — | ○ | ○ | ○ |
| HS Series | — | — | — | — | — | ○ | ○ | ○ |
| HS-RB Series | — | — | — | — | — | ○ | ○ | ○ |
| HSIII Series | — | — | — | — | — | ○ | ○ | ○ |
| HSIII-RB Series | — | — | — | — | — | ○ | ○ | ○ |
| HSF Series | — | — | — | — | — | ○ | ○ | ○ |

AC Adaptor

| | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|
| HS-AD (AC100V) | — | — | — | — | — | ○ | ○ | ○ |
| HS-AD220 (AC220V) | ○ | — | ○ | ○ | — | ○ | ○ | ○ |

Torque Meter

| | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|
| HP-100 | ○ | — | — | — | — | ○ | ○ | ○ |
| HP-10 | ○ | — | — | — | — | ○ | ○ | ○ |
| HP-1 | ○ | — | — | — | — | ○ | ○ | ○ |
| HDP-50 | ○ | — | — | — | — | ○ | ○ | ○ |
| HDP-5 | ○ | — | — | — | — | ○ | ○ | ○ |
| HDP-100 | ○ | — | — | — | — | ○ | ○ | ○ |
| HM-10 | — | — | — | — | — | ○ | ○ | ○ |
| HM-100 | — | — | — | — | — | ○ | ○ | ○ |
| HIT-200 | — | — | — | — | — | ○ | ○ | ○ |
| HIT-500 | — | — | — | — | — | ○ | ○ | ○ |
| HIT-1000 | — | — | — | — | — | ○ | ○ | ○ |

Fidaptor (HP Series / HM Series)

| | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|
| Fidaptor | — | — | — | — | — | ○ | ○ | ○ |
|----------|---|---|---|---|---|---|---|---|

Battery Charger for HP / HDP Series

| | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|
| TCH-MULTI | — | — | — | — | — | ○ | ○ | ○ |
| TCH-MULTI-CN | — | ○ | — | — | — | ○ | ○ | ○ |
| TCH-MULTI-CE | ○ | — | — | — | — | ○ | ○ | ○ |

| Model | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--|---|---|---|---|---|---|---|---|
| Battery Charger for HM / HIT Series | | | | | | | | |
| TCH-100N | — | — | — | — | — | ○ | ○ | ○ |
| TCH-120N | — | — | — | ○ | — | ○ | ○ | ○ |
| TCH-230G | ○ | — | — | — | — | ○ | ○ | ○ |

Power Supply for DC Screwdrivers

| | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|
| T-45BL | ○ | — | ○ | ○ | ○ | — | ○ | ○ |
| T-70BL | ○ | — | ○ | ○ | ○ | — | ○ | ○ |
| T-80BL | ○ | — | ○ | ○ | ○ | — | ○ | ○ |
| CLT-45 | ○ | — | ○ | ○ | ○ | — | ○ | ○ |
| CLT-60 | ○ | — | ○ | ○ | ○ | — | ○ | ○ |
| CLT-80 | ○ | — | ○ | ○ | ○ | — | ○ | ○ |

Power Supply for Screwdrivers for Automated Machines

| | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|
| BLT-AY-61 | ○ | — | — | — | — | ○ | ○ | ○ |
| BLT-AY-71 | ○ | — | — | — | — | ○ | ○ | ○ |
| CLT-AY-61 (AC100V) | — | — | — | — | — | ○ | ○ | ○ |
| CLT-AY-61 (AC120V) | — | — | — | — | — | ○ | ○ | ○ |
| CLT-AY-61 (AC220V) | — | — | — | — | — | ○ | ○ | ○ |
| CLT-AY-81 (AC100V) | — | — | — | — | — | ○ | ○ | ○ |

Screw Counter

| | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|
| BLOP-STC3 | ○ | — | — | — | — | ○ | ○ | ○ |
| CLT-70STC3 | ○ | — | — | — | — | ○ | ○ | ○ |
| VZOP-STC | — | — | — | — | — | ○ | ○ | ○ |
| BLOP-SC1 | — | — | — | — | — | ○ | ○ | ○ |
| CLOP-SC1 | — | — | — | — | — | ○ | ○ | ○ |

PGF Series

| | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|
| PGF-3000 | — | — | — | — | — | ○ | ○ | ○ |
| PGF-5000 | — | — | — | — | — | ○ | ○ | ○ |
| PGF-7000 | — | — | — | — | — | ○ | ○ | ○ |

Q suction

| | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|
| PGFQ Series | — | — | — | — | — | ○ | ○ | ○ |
|-------------|---|---|---|---|---|---|---|---|

For fastening in FR deep recessed holes

| | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|
| PGFR Series | — | — | — | — | — | ○ | ○ | ○ |
|-------------|---|---|---|---|---|---|---|---|

BLF Series

| | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|
| BLF-2000 | ○ | — | — | — | — | ○ | ○ | ○ |
| BLF-5000 | ○ | — | — | — | — | ○ | ○ | ○ |
| BLF-7000 | ○ | — | — | — | — | ○ | ○ | ○ |
| BLF-7000X | ○ | — | — | — | — | ○ | ○ | ○ |
| BLF-7025X | ○ | — | — | — | — | ○ | ○ | ○ |

Q suction

| | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|
| BLFQ Series | ○ | — | — | — | — | ○ | ○ | ○ |
|-------------|---|---|---|---|---|---|---|---|

For fastening in FR deep recessed holes

| | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|
| BLFR Series | ○ | — | — | — | — | ○ | ○ | ○ |
|-------------|---|---|---|---|---|---|---|---|

CLF / αF Series

| | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|
| CLF-3000 | — | — | — | — | — | ○ | ○ | ○ |
| CLF-4000* | — | — | — | — | — | ○ | ○ | ○ |
| CLF-6000* | — | — | — | — | — | ○ | ○ | ○ |
| CLF-6500* | — | — | — | — | — | ○ | ○ | ○ |
| CLF-7000* | — | — | — | — | — | ○ | ○ | ○ |

Q suction

| | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|
| CLFQ Series | — | — | — | — | — | ○ | ○ | ○ |
|-------------|---|---|---|---|---|---|---|---|

* The noiseless type is CE certified.

CL-A Series

| | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|
| CL-816A | — | — | — | — | — | ○ | ○ | ○ |
| CL-825A | — | — | — | — | — | ○ | ○ | ○ |

| Model | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------|---|---|---|---|---|---|---|---|
| CL-850A | — | — | — | — | — | ○ | ○ | ○ |

αF Series

| | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|
| αF-4000 | ○ | — | — | — | — | ○ | ○ | ○ |
| αF-6000 | ○ | — | — | — | — | ○ | ○ | ○ |
| αF-6500 | ○ | — | — | — | — | ○ | ○ | ○ |

Q suction

| | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|
| αFQ Series | ○ | — | — | — | — | ○ | ○ | ○ |
|------------|---|---|---|---|---|---|---|---|

Recipro Series RN53

| | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|
| RD-4000 | — | — | — | — | — | ○ | ○ | ○ |
| RD-4500 | — | — | — | — | — | ○ | ○ | ○ |
| RD-10 | — | — | — | — | — | ○ | ○ | ○ |
| RD-15 | — | — | — | — | — | ○ | ○ | ○ |
| RD-20 | — | — | — | — | — | ○ | ○ | ○ |
| RD-30 | — | — | — | — | — | ○ | ○ | ○ |

Power Supply

| | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|
| RDT-30 (AC100V) | — | — | — | — | — | ○ | ○ | ○ |
| RAC-100 (AC100V) | — | — | — | — | — | ○ | ○ | ○ |

Linear Feeder

| | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|---|
| FF503H (AC100-240V) | — | — | — | — | — | ○ | ○ | ○ |
|---------------------|---|---|---|---|---|---|---|---|

Screwdriver Cord

| | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|
| Screwdriver cord | — | — | — | — | — | ○ | ○ | ○ |
| Flexible cord | — | — | — | — | — | ○ | ○ | ○ |
| Curled cord | — | — | — | — | — | ○ | ○ | ○ |
| Extension cord | — | — | — | — | — | ○ | ○ | ○ |

Spike Bit

| | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|
| SPK Series | — | — | — | — | — | ○ | ○ | ○ |
|------------|---|---|---|---|---|---|---|---|

Vacuum Pump

| | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|
| VP-3 (AC100V) | — | — | — | — | — | ○ | ○ | ○ |
| VP-3 (AC120V) | — | — | — | — | — | ○ | ○ | ○ |
| VP-3 (AC220V) | ○ | — | — | — | — | ○ | ○ | ○ |

Aluminum Handle Screwdriver

| | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|
| WOOD-4AL | — | — | — | — | — | ○ | ○ | ○ |
| WOOD-5 | — | — | — | — | — | ○ | ○ | ○ |

Grip Ring

| | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|
| Grip Ring | — | — | — | — | — | ○ | ○ | ○ |
|-----------|---|---|---|---|---|---|---|---|

Vertical Screwdriver Operating Stand

| | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|
| VMS-40 | — | — | — | — | — | ○ | ○ | ○ |
| VMS-50 | — | — | — | — | — | ○ | ○ | ○ |
| VMS-50VZ | — | — | — | — | — | ○ | ○ | ○ |

Carbon Brush

| | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|
| Carbon Brush | — | — | — | — | — | ○ | ○ | ○ |
|--------------|---|---|---|---|---|---|---|---|

Relay Box

| |
|--------|
| BLOP-A |
|--------|

Electric Screwdriver Bit for Exchange

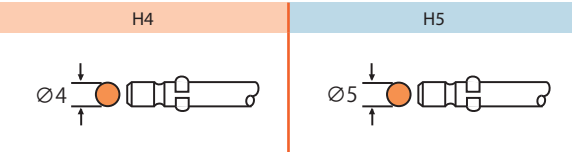
There are three drive types: HIOS Shank, two-way Shank and HEX Shank.
If your screwdriver uses HIOS Shank, please use a HIOS standard bit.

Screwdriver Bit Drive

Unit: mm



HIOS Shank Type (H4 / H5)
Please use HIOS standard bits.



Compatible Bits by Model Quick Reference Chart

| DC Type | | Bit Drive | | |
|----------------|------------------|------------|----|---|
| Classification | Model | H4 | H5 | |
| Brushless | BLG-4000 Series | ● | — | |
| | BLG-BC2 Series | ● | ● | |
| | BLG-BC1 Series | ● | ● | |
| | BLG-ZERO1 Series | — | ● | |
| | BLG Series | — | ● | |
| | PG Series | ● | — | |
| | PG Series | PG-3000 | ● | — |
| Brushless | BL Series | ● | — | |
| | BL Series | ● | — | |
| | BL Series | ● | ● | |
| | BL Series | ● | ● | |
| | BL Series | BL-5000-15 | ● | ● |
| | BL Series | BL-5020 | ● | ● |
| | BL Series | BL-7000 | — | ● |
| Brushed | CL Series | ● | — | |
| | CL Series | ● | — | |
| | CL Series | ● | — | |
| | CL Series | — | ● | |
| | CL Series | — | ● | |
| | CL Series | — | ● | |
| | CL Series | CL-6500 | — | ● |
| | CL Series | CL-7000 | — | ● |
| | CL Series | CL-9000 | — | — |

(These models include the push-to-start type.)

| AC Type | | Bit Drive | |
|----------------|-----------|-----------|----|
| Classification | Model | H4 | H5 |
| Brushless | VB Series | ● | ● |
| | VB Series | ● | ● |
| | VB Series | — | ● |
| | VB Series | — | ● |
| | VB Series | — | ● |
| | VB Series | — | — |
| | VB Series | — | ● |
| | VB Series | — | — |
| | VB Series | — | — |
| | VB Series | — | — |
| Brushed | VZ Series | ● | — |
| | VZ Series | — | ● |
| | VZ Series | — | ● |
| | VZ Series | — | ● |
| | VZ Series | — | — |
| | VZ Series | — | — |
| | VZ Series | — | — |
| | VZ Series | — | — |
| | VZ Series | — | — |
| | VZ Series | — | — |

(These models include the push-to-start type.)

How to Fill in the Order Form

Please fill in the form while referring to the items in the specification table on the right.

Bit for Cross Screws

BP - H4 - #1 - 3.0 - 40mm

Bit Shape Bit drive Tip No. Tip dia. Total length

Bit for Slotted Head Screws

BS - H4 - 3.0 - 0.4 - 40mm

Bit Shape Bit drive Blade width Blade thickness Total length

Bit for Hexagon Socket Head Screws

BH - H4 - 1.5 - 60mm

Bit Shape Bit drive Nut width across flat Total length

Bit for Nut Boxes

BN - H4 - 2.3 - 40mm

Bit Shape Bit drive Nut width across flat Total length

Bit for Nut Catches

BC - H4 - 4.5 - 60mm

Bit Shape Bit drive Nut width across flat Total length

* Please note that minimum order unit of standard bits is 10 pieces per type.

| Bit shape BP Bit for Cross Screws | | Bit Drive | Tip No. (cross screw diameter) | Tip Diameter (φ) | Shaft Shape | Total Length (mm) Standard | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------------------------|--------------------------------|--|-------------------------------------|----------------------------|-----------|----|----|--|--|--------------------|-----------|-----|-----|-----|---------------|----|----|----|-----|----|---------------------|-----|---|------------|
| | <table border="1"> <thead> <tr> <th colspan="5">Dimensions of Stepped Bit (B)</th> </tr> <tr> <th>Bit drive</th> <th>H4</th> <th colspan="3">H5</th> </tr> <tr> <td>(a) Tip diameter φ</td> <td>Each size</td> <td>2.0</td> <td>2.5</td> <td>3.0</td> </tr> <tr> <td>(b) Length mm</td> <td>20</td> <td>20</td> <td>25</td> <td>30*</td> </tr> </thead> </table> | Dimensions of Stepped Bit (B) | | | | | Bit drive | H4 | H5 | | | (a) Tip diameter φ | Each size | 2.0 | 2.5 | 3.0 | (b) Length mm | 20 | 20 | 25 | 30* | H4 | #00 (HIOS Standard) | 1.5 | B | 40, 60, 80 |
| | | Dimensions of Stepped Bit (B) | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Bit drive | H4 | H5 | | | | | | | | | | | | | | | | | | | | | | |
| | | (a) Tip diameter φ | Each size | 2.0 | 2.5 | 3.0 | | | | | | | | | | | | | | | | | | | | |
| | | (b) Length mm | 20 | 20 | 25 | 30* | | | | | | | | | | | | | | | | | | | | |
| | | #0* (M1.4-M2.6) | 1.2 | B | 40 | | | | | | | | | | | | | | | | | | | | | |
| | | | 1.5, 1.7 | B | 40, 60, 80 | | | | | | | | | | | | | | | | | | | | | |
| | | | 1.8 | B | 60, 80 | | | | | | | | | | | | | | | | | | | | | |
| | | | 2.0, 2.5 | B | 40, 60, 80, 100, 120 | | | | | | | | | | | | | | | | | | | | | |
| | | #1 (M2.0-M2.6) | 3.0 | B | 40, 60, 80, 100, 120 | | | | | | | | | | | | | | | | | | | | | |
| | | | 4.0 | A | 40, 60, 80, 100, 120, 150, 180, 200 | | | | | | | | | | | | | | | | | | | | | |
| | | H5 | #0 (M1.4-M2.6) | 4.0 | A | 40, 60, 80, 100, 120, 150 | | | | | | | | | | | | | | | | | | | | |
| 2.0 | B | | | 60 | | | | | | | | | | | | | | | | | | | | | | |
| 2.5 | B | | | 60, 80, 100, 120 | | | | | | | | | | | | | | | | | | | | | | |
| #1 (M2.0-M2.6) | 3.0 | | B | 40, 60, 80, 100, 120 | | | | | | | | | | | | | | | | | | | | | | |
| | 5.0 | | A | 40, 60, 80, 100, 120, 150, 180, 200, 250, 300 | | | | | | | | | | | | | | | | | | | | | | |
| #2 (M3.0-M5.0) | 5.0 | | A | 40, 60, 80, 100, 120, 150, 180, 200, 250, 300, 400 | | | | | | | | | | | | | | | | | | | | | | |
| | #3 (M6.0-M8.0) | | 7.0 | C | 60, 80, 100, 120 | | | | | | | | | | | | | | | | | | | | | |

* Only for (H5) - (#1) - (3.0 x 40mm), the length of the stepped section is 15 mm.

* Applicable to low-profile screws.

| Bit shape BS Bit for Slotted Head Screws | | Bit Drive | Blade Width (mm) | Blade Thickness | Shaft Shape | Total Length (mm) Standard | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|-------------------------------|------------------|----------------------------|-----------------|----------------------------|-----|-----------|----|----|--|--|--|--------------------|-----------|-----|-----|-----|-----|---------------|----|----|----|----|----|----|-----|------|---|--------|
| | <table border="1"> <thead> <tr> <th colspan="6">Dimensions of Stepped Bit (B)</th> </tr> <tr> <th>Bit drive</th> <th>H4</th> <th colspan="4">H5</th> </tr> <tr> <td>(a) Blade width mm</td> <td>Each size</td> <td>2.0</td> <td>2.5</td> <td>3.0</td> <td>4.0</td> </tr> <tr> <td>(b) Length mm</td> <td>20</td> <td>20</td> <td>25</td> <td>20</td> <td>30</td> </tr> </thead> </table> | Dimensions of Stepped Bit (B) | | | | | | Bit drive | H4 | H5 | | | | (a) Blade width mm | Each size | 2.0 | 2.5 | 3.0 | 4.0 | (b) Length mm | 20 | 20 | 25 | 20 | 30 | H4 | 1.1 | 0.28 | B | 60, 80 |
| | | Dimensions of Stepped Bit (B) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Bit drive | H4 | H5 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | (a) Blade width mm | Each size | 2.0 | 2.5 | 3.0 | 4.0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | (b) Length mm | 20 | 20 | 25 | 20 | 30 | | | | | | | | | | | | | | | | | | | | | | | |
| | | 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 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 4.0 | 0.6 | A | 40, 60, 80, 100 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | H5 | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Bit shape BH Bit for Hexagon Socket Head Screws | | Bit Drive | Nut Width Across Flat (mm) | Total Length (mm) Standard |
|--|----|---------------------|----------------------------|----------------------------|
| <p>For hexagon socket set screws and cap screws</p> | H4 | 0.89, 1.5, 2.0, 3.0 | 60 | |
| | | 1.27 | 60, 100 | |
| | | 2.5 | 60, 100, 120 | |
| | H5 | 1.27 | 70 | |
| | | 1.5, 3.0, 4.0, 6.0 | 70, 100 | |
| | | 2.0, 2.5, 5.0 | 70, 100, 120 | |

HEX 0.89 mm and 1.27 mm are A-type only. / HEX 1.5 mm is applicable to both types. (How to order) Example: BH-H4 or H5-1.5(A) x 60 mm

| Bit shape BN Bit for Nut Box (Hexagonal Nut) | | Bit Drive | Nut Width Across Flat (mm) | Total Length (mm) Standard |
|---|----|---|----------------------------|----------------------------|
| <p>For bolts & nuts</p> | H4 | 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 | |
| | H5 | 4.0, 4.5, 5.0, 5.5, 6.0, 6.35 | 60 | |
| | | 7.0, 8.0 | 80 | |
| | | 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 17.0 | 80 | |

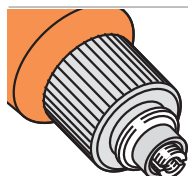
| Bit shape BC Bit for Nut Catch (for Picking Up) | | Bit Drive | Nut Width Across Flat (mm) | Total Length (mm) Standard |
|--|----|------------------------------|----------------------------|----------------------------|
| <p>For bolts & nuts</p> | H4 | 4.0, 4.5, 5.0, 5.5, 6.0, 7.0 | 60 | |
| | | 8.0 | 65 | |
| | H5 | 4.0, 4.5, 5.0, 5.5, 6.0, 7.0 | 60 | |
| | | 8.0 | 65 | |

Electric Screwdriver Bit for Exchange (Hexalobular)

The bit drive of this model is HIOS Shank type.
For the screwdriver with HIOS shank, please use HIOS standard bit.

Screwdriver Bit Drive

Unit: mm



HIOS Shank Type (H4 / H5)
Please use HIOS standard bits.

H4



H5



Compatible spec: [P.56](#)

| TX | Hexalobular | Bit Drive | Name | P/N | Dimensions (mm) | | | | | | |
|---------------------|-------------|--------------------|-------------------|---------------------|-------------------|----------|--------------------|----------|------------------|-----------|-----|
| | | | | | A | D | L | | | | |
| | | H4 | H4 HW T3(1.7)×60 | TX403060 | 1.1 | 1.7 | 60 | | | | |
| | | | H4 HW T4(1.8)×60 | TX404060 | 1.3 | 1.8 | 60 | | | | |
| | | | H4 HW T5(2.0)×60 | TX405060 | 1.4 | 2.0 | 60 | | | | |
| | | | H4 HW T6(2.5)×60 | TX406060 | 1.7 | 2.5 | 60 | | | | |
| | | | H4 HW T8(3.0)×60 | TX408060 | 2.3 | 3.0 | 60 | | | | |
| | | H4 | H4 HW T10(4.0)×60 | TX410060 | 2.7 | 4.0 | 60 | | | | |
| | | | | H5 | H5 HW T8 (3.0)×80 | TX508080 | 2.3 | 3.0 | 80 | | |
| | | | | | | H5 | H5 HW T10 (5.0)×80 | TX510080 | 2.7 | 5.0 | 80 |
| | | | | | | | H5 HW T20 (5.0)×80 | TX520080 | 3.8 | 5.0 | 80 |
| | | | | | | | | H4 | H4 HWT8H(3.0)×60 | TX408060H | 2.3 |
| H4 HW T10H (4.0)×60 | TX410060H | 2.7 | | | | | | | 4.0 | 60 | |
| | H5 | H5 HW T8H (3.0)×80 | TX508080H | 2.3 | 3.0 | 80 | | | | | |
| | | | H5 | H5 HW T10H (5.0)×80 | TX510080H | 2.7 | 5.0 | 80 | | | |
| | | | | H5 HW T20H (5.0)×80 | TX520080H | 3.8 | 5.0 | 80 | | | |

Related Products | Electric Screwdriver Bits for Exchange (HIOS Shank Type)

Electric Screwdriver Bit for Exchange (TORX® & TORX PLUS®)

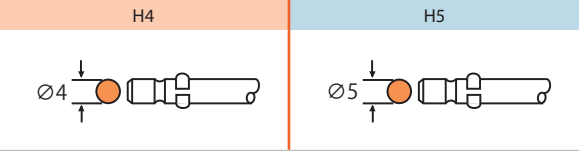
TORX®, TORX PLUS® Screwdriver bits are available on request.
For different specifications, please contact HIOS distributors.

Screwdriver Bit Drive

Unit: mm



HIOS Shank Type (H4 / H5)
Please use HIOS standard bits.



Compatible spec: [P.56](#)

| TORX® | For TORX® Screw | Bit Drive | Drive | Name | P/N | Dimensions (mm) | | | |
|-------|-----------------|-----------|-------|-------------------------|---------------|-----------------|-----|----|----------------------|
| | | | | | | A | D | B | L |
| | | H4 | T3 | TORX-H4-T3-X-() | TORX403() | 1.12 | 1.7 | 20 | 40, 60, 80, 100, 120 |
| | | | T4 | TORX-H4-T4-X-() | TORX404() | 1.30 | 1.8 | 20 | |
| | | | T5 | TORX-H4-T5-X-() | TORX405() | 1.37 | 2.0 | 20 | |
| | | | T6 | TORX-H4-T6-X-() | TORX406() | 1.65 | 2.5 | 20 | |
| | | | T8 | TORX-H4-T8-X-() | TORX408() | 2.30 | 3.0 | 20 | |
| | | | T10 | TORX-H4-T10-X-() | TORX410() | 2.72 | 3.0 | 20 | |
| | | H5 | T8 | TORX-H5-T8-X-() | TORX508() | 2.30 | 3.0 | 20 | 40, 60, 80, 100, 120 |
| | | | T10 | TORX-H5-T10-X-() | TORX510() | 2.72 | 3.0 | 20 | |
| | | | T15 | TORX-H5-T15-X-() | TORX515() | 3.26 | 3.5 | 20 | |
| | | | T20 | TORX-H5-T20-X-() | TORX520() | 3.84 | 4.0 | 20 | |
| | | | T25* | TORX-H5-T25-X-() | TORX525() | 4.40 | 5.0 | — | |
| | | | T25* | TORX-H5-T25-X-() | TORX525() | 4.40 | 5.0 | — | |
| | | H4 | 4IP | TORX PLUS H4-4IP-X-() | TORX404IP() | 1.28 | 1.8 | 20 | 40, 60, 80, 100, 120 |
| | | | 5IP | TORX PLUS H4-5IP-X-() | TORX405IP() | 1.40 | 2.0 | 20 | |
| | | | 6IP | TORX PLUS H4-6IP-X-() | TORX406IP() | 1.68 | 2.5 | 20 | |
| | | | 8IP | TORX PLUS H4-8IP-X-() | TORX408IP() | 2.29 | 3.0 | 20 | |
| | | | 10IP | TORX PLUS H4-10IP-X-() | TORX4010IP() | 2.71 | 3.0 | 20 | |
| | | | 10IP | TORX PLUS H4-10IP-X-() | TORX4010IP() | 2.71 | 3.0 | 20 | |
| | | H5 | 8IP | TORX PLUS H5-8IP-X-() | TORX508IP() | 2.29 | 3.0 | 20 | 40, 60, 80, 100, 120 |
| | | | 10IP | TORX PLUS H5-10IP-X-() | TORX510IP() | 2.71 | 3.0 | 20 | |
| | | | 15IP | TORX PLUS H5-15IP-X-() | TORX515IP() | 3.25 | 3.5 | 20 | |
| | | | 20IP | TORX PLUS H5-20IP-X-() | TORX520IP() | 3.83 | 4.0 | 20 | |
| | | | 25IP* | TORX PLUS H5-25IP-X-() | TORX525IP() | 4.39 | 5.0 | — | |
| | | | 25IP* | TORX PLUS H5-25IP-X-() | TORX525IP() | 4.39 | 5.0 | — | |

The () in the Part No. will be 3 digits.
ex. TORX-H4-T3X60 → TORX403060
ex. TORX-H4-T3X100 → TORX403100

The () in the Name means total length (L) of bit.

BLG-BC2 P.11

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|----------------|----------------|--------|
| BLG-4000BC2 | BLG-4000BC2 | H4 |
| | BLG-4000XBC2 | 1/4HEX |
| BLG-4000BC2-LT | BLG-4000BC2-LT | H4 |

Lever Start and Push-to-Start

| | | |
|-------------------------------|------------------------|-------------|
| BLG-5000BC2 | BLG-5000BC2 | H4 |
| | BLG-5000H5BC2 | H5 and 5HEX |
| | BLG-5000X5BC2 | H5 and 5HEX |
| | BLG-5000XBC2 | 1/4HEX |
| BLG-5000BC2-15 | BLG-5000BC2-15 | H4 |
| | BLG-5000H5BC2-15 | H5 and 5HEX |
| | BLG-5000X5BC2-15 | H5 and 5HEX |
| | BLG-5000XBC2-15 | 1/4HEX |
| BLG-5000BC2-18 | BLG-5000BC2-18 | H5 and 5HEX |
| | BLG-5000X5BC2-18 | H5 and 5HEX |
| | BLG-5000XBC2-18 | 1/4HEX |
| BLG-5000BC2-HT | BLG-5000BC2-HT | H5 and 5HEX |
| | BLG-5000XBC2-HT | 1/4HEX |
| BLG-7000BC2 | BLG-7000BC2 | H5 and 5HEX |
| | BLG-7000XBC2 | 1/4HEX |
| BLG-7000BC2-GT (Grip Type) | BLG-7000XBC2-GT-HANDLE | 1/4HEX |

Push-to-Start

| | | |
|--------------------------------|-------------------|--------|
| BLG-7000BC2-GT (Stand Type) | BLG-7000XBC2-GT-S | 1/4HEX |
|--------------------------------|-------------------|--------|

Dedicated Cable for External I/O

| | | |
|--------------|--------------|-----------------|
| BLG-BC2-3012 | BLG-BC2-3012 | One-touch Type |
| BLG-BC2-3010 | BLG-BC2-3010 | Phone Plug Type |

External I/O Box

| | | |
|-------------|-------------|---|
| BLG-IO-Pro1 | BLG-IO-Pro1 | — |
|-------------|-------------|---|

Serial-to-Parallel Conversion Box

| | | |
|---------|---------|---|
| BLG-IF2 | BLG-IF2 | — |
|---------|---------|---|

BLG-BC2 Variations P.12

Q Suction

If you wish to purchase a suction part, please select the screwdriver and the suction unit (suction attachment, mouthpiece and bit) on P. 51 before ordering.

BLG-BC1 P.13

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|-------------|--------------|--------|
| BLG-4000BC1 | BLG-4000BC1 | H4 |
| | BLG-4000XBC1 | 1/4HEX |

Lever start and Push-to-Start

| | | |
|----------------|------------------|-------------|
| BLG-5000BC1 | BLG-5000BC1 | H4 |
| | BLG-5000H5BC1 | H5 and 5HEX |
| | BLG-5000XBC1 | 1/4HEX |
| BLG-5000BC1-15 | BLG-5000BC1-15 | H4 |
| | BLG-5000H5BC1-15 | H5 and 5HEX |
| BLG-5000BC1-15 | BLG-5000XBC1-15 | 1/4HEX |

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start and Push-to-Start

| | | |
|----------------|-----------------|-------------|
| BLG-5000BC1-18 | BLG-5000BC1-18 | H5 and 5HEX |
| | BLG-5000XBC1-18 | 1/4HEX |
| BLG-5000BC1-HT | BLG-5000BC1-HT | H5 and 5HEX |
| | BLG-5000XBC1-HT | 1/4HEX |

BLG-BC1 Variations P.14

Q Suction

If you wish to purchase a suction part, please select the screwdriver and the suction part (suction attachment, mouthpiece and bit) on P. 51 before ordering.

BLG-ZERO1 P.13

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|---------------|----------------|--------|
| BLG-4000ZERO1 | BLG-4000ZERO1 | H4 |
| | BLG-4000XZERO1 | 1/4HEX |

Lever Start and Push-to-Start

| | | |
|------------------|--------------------|-------------|
| BLG-5000ZERO1 | BLG-5000ZERO1 | H4 |
| | BLG-5000H5ZERO1 | H5 and 5HEX |
| | BLG-5000XZERO1 | 1/4HEX |
| BLG-5000ZERO1-15 | BLG-5000ZERO1-15 | H4 |
| | BLG-5000H5ZERO1-15 | H5 and 5HEX |
| BLG-5000ZERO1-18 | BLG-5000ZERO1-18 | H5 and 5HEX |
| | BLG-5000XZERO1-18 | 1/4HEX |
| BLG-5000ZERO1-HT | BLG-5000ZERO1-HT | H5 and 5HEX |
| | BLG-5000XZERO1-HT | 1/4HEX |

BLG-ZERO1 Variations P.14

Q Suction

If you wish to purchase a suction part, please select the screwdriver and the suction unit (suction attachment, mouthpiece and bit) on P. 51 before ordering.

BLG P.13

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|----------|-------------|--------|
| BLG-4000 | BLG-4000BC1 | H4 |
| | BLG-4000X | 1/4HEX |

Lever Start and Push-to-Start

| | | |
|-------------|---------------|-------------|
| BLG-5000 | BLG-5000 | H4 |
| | BLG-5000H5 | H5 and 5HEX |
| | BLG-5000X | 1/4HEX |
| BLG-5000-15 | BLG-5000-15 | H4 |
| | BLG-5000H5-15 | H5 and 5HEX |
| BLG-5000-18 | BLG-5000X-15 | 1/4HEX |
| | BLG-5000-18 | H5 and 5HEX |
| BLG-5000-18 | BLG-5000X-18 | 1/4HEX |
| | BLG-5000-HT | H5 and 5HEX |
| BLG-5000-HT | BLG-5000X-HT | 1/4HEX |

BLG Variations P.14

Q Suction

If you wish to purchase a suction part, please select the screwdriver and the suction unit (suction attachment, mouthpiece and bit) on P. 51 before ordering.

OPC Screwdrivers Supporting Screw Counters

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|--------------|---------------|--------|
| BLG-4000-OPC | BLG-4000-OPC | H4 |
| | BLG-4000X-OPC | 1/4HEX |

Lever Start and Push-to-Start

| | | |
|-----------------|-------------------|-------------|
| BLG-5000-OPC | BLG-5000-OPC | H4 |
| | BLG-5000H5-OPC | H5 and 5HEX |
| | BLG-5000X5-OPC | H5 and 5HEX |
| BLG-5000-OPC-15 | BLG-5000X-OPC | 1/4HEX |
| | BLG-5000-OPC15 | H4 |
| | BLG-5000H5-OPC-15 | H5 and 5HEX |
| BLG-5000-OPC-18 | BLG-5000X5-OPC15 | H5 and 5HEX |
| | BLG-5000X-OPC15 | 1/4HEX |
| | BLG-5000-OPC-18 | H5 and 5HEX |
| BLG-5000-OPC-18 | BLG-5000X-OPC18 | 1/4HEX |
| | BLG-5000-OPC18 | H5 and 5HEX |
| BLG-5000-OPC18 | BLG-5000X-OPC18 | 1/4HEX |
| BLG-5000-OPC18 | BLG-5000X-OPC18 | 1/4HEX |
| BLG-5000-OPC18 | BLG-5000X-OPC18 | 1/4HEX |
| BLG-5000-OPC18 | BLG-5000X-OPC18 | 1/4HEX |

PG P.15

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|---------|----------|-------------|
| PG-3000 | PG-3000 | H4 |
| PG-5000 | PG-5000 | H4 |
| PG-7000 | PG-7000 | H5 and 5HEX |
| | PG-7000X | 1/4HEX |

Control Unit

| | | |
|-------|-------|---|
| PG-01 | PG-01 | — |
|-------|-------|---|

PG Variations P.16

Q Suction

If you wish to purchase a suction part, please select the screwdriver and the suction unit (suction attachment, mouthpiece and bit) on P. 51 before ordering.

BL P.17

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|-----------|-----------|----|
| BL-2000 | BL-2000 | H4 |
| BL-2000SS | BL-2000SS | H4 |

Lever Start and Push-to-Start

| | | |
|-----------|------------|-------------|
| BL-3000 | BL-3000 | H4 |
| | BL-3000X | 1/4HEX |
| BL-3000SS | BL-3000SS | H4 |
| | BL-3000SSX | 1/4HEX |
| BL-5000 | BL-5000 | H4 |
| | BL-5000H5 | H5 and 5HEX |
| | BL-5000X | 1/4HEX |

| Model | Order Code | Bit Drive |
|------------|--------------|-------------|
| BL-5000SS | BL-5000SS | H4 |
| | BL-5000SS-H5 | H5 and 5HEX |
| | BL-5000SSX | 1/4HEX |
| BL-5000-15 | BL-5000-15 | H4 |
| | BL-5000H5-15 | H5 and 5HEX |
| | BL-5000X-15 | 1/4HEX |
| BL-5020 | BL-5020 | H5 and 5HEX |
| | BL-5020X | 1/4HEX |
| BL-7000 | BL-7000 | H5 and 5HEX |
| | BL-7000X | 1/4HEX |

BL Variations

P.18

Q Suction

If you wish to purchase a suction part, please select the screwdriver and the suction unit (suction attachment, mouthpiece and bit) on P.51 before ordering.

Q-ESD Anti-electrostatic Suctions

BLQ-ESD has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P.51 before ordering.

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start and Push-to-Start

| | | |
|----------------|-------------------|-------------|
| BLQ-3000ESD | BLQ-3000ESD | H4 |
| BLQ-5000ESD | BLQ-5000ESD | H4 |
| | BLQ-5000H5-ESD | H5 and 5HEX |
| BLQ-5000ESD-15 | BLQ-5000ESD-15 | H4 |
| | BLQ-5000H5-ESD-15 | H5 and 5HEX |
| BLQ-7000ESD | BLQ-7000ESD | H5 and 5HEX |

Q-CR for Clean Room

BLQ-CR has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P.51 before ordering.

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|------------|------------|----|
| BLQ-2000CR | BLQ-2000CR | H4 |
|------------|------------|----|

Lever Start and Push-to-Start

| | | |
|---------------|------------------|-------------|
| BLQ-3000CR | BLQ-3000CR | H4 |
| BLQ-5000CR | BLQ-5000CR | H4 |
| | BLQ-5000H5-CR | H5 and 5HEX |
| BLQ-5000CR-15 | BLQ-5000CR-15 | H4 |
| | BLQ-5000H5-CR-15 | H5 and 5HEX |
| BLQ-7000CR | BLQ-7000CR | H5 and 5HEX |

ESD Anti-electrostatic

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start and Push-to-Start

| | | |
|---------------|------------------|-------------|
| BL-3000ESD | BL-3000ESD | H4 |
| | BL-3000X-ESD | 1/4HEX |
| | BL-5000ESD | H4 |
| BL-5000ESD | BL-5000H5-ESD | H5 and 5HEX |
| | BL-5000X-ESD | 1/4HEX |
| | BL-5000ESD-15 | H4 |
| BL-5000ESD-15 | BL-5000X5-ESD-15 | H5 and 5HEX |
| | BL-5000XESD-15 | 1/4HEX |

| Model | Order Code | Bit Drive |
|------------|--------------|-------------|
| BL-5020ESD | BL-5020-ESD | H5 |
| | BL-5020X-ESD | 1/4HEX |
| BL-7000ESD | BL-7000ESD | H5 and 5HEX |
| | BL-7000X-ESD | 1/4HEX |

Q-CR-ESD for Clean Room / Anti-electrostatic

BLQ-CR-ESD has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P.51 before ordering. (Also applicable to BLQ-2000CR.)

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|------------|------------|----|
| BLQ-2000CR | BLQ-2000CR | H4 |
|------------|------------|----|

Lever Start and Push-to-Start

| | | |
|-------------------|---------------------|-------------|
| BLQ-3000CR-ESD | BLQ-3000CR-ESD | H4 |
| BLQ-5000CR-ESD | BLQ-5000CR-ESD | H4 |
| | BLQ-5000H5-CR-ESD | H5 and 5HEX |
| BLQ-5000CR-ESD-15 | BLQ-5000CR-ESD-15 | H4 |
| | BLQ-5000H5CR-ESD-15 | H5 and 5HEX |
| BLQ-7000CR-ESD | BLQ-7000CR-ESD | H5 and 5HEX |

OPC Screwdrivers Supporting Screw Counters

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|-------------|-------------|----|
| BL-2000-OPC | BL-2000-OPC | H4 |
|-------------|-------------|----|

Lever Start and Push-to-Start

| | | |
|---------------|------------------|-------------|
| BL-3000-OPC | BL-3000-OPC | H4 |
| | BL-3000X-OPC | 1/4HEX |
| BL-5000-OPC | BL-5000-OPC | H4 |
| | BL-5000H5-OPC | H5 and 5HEX |
| BL-5000-15OPC | BL-5000X-OPC | 1/4HEX |
| | BL-5000-15OPC | H4 |
| BL-5000-15OPC | BL-5000X5-OPC-15 | H5 and 5HEX |
| | BL-5000X-OPC-15 | 1/4HEX |
| | BL-5020-OPC | H5 and 5HEX |
| BL-5020-OPC | BL-5020-OPC | H5 and 5HEX |
| | BL-5020X-OPC | 1/4HEX |
| BL-7000-OPC | BL-7000-OPC | H5 and 5HEX |
| | BL-7000X-OPC | 1/4HEX |

BL Accessories

P.18

| Order Code | Applicable Model |
|------------|------------------|
|------------|------------------|

Pistol Attachment

| | |
|--------|----------------|
| PAB-70 | BL-7000 Series |
|--------|----------------|

CL

P.19

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|---------|-----------|--------|
| CL-2000 | CL-2000 | H4 |
| CL-3000 | CL-3000 | H4 |
| CL-4000 | CL-4000 | H4 |
| | CL-4000X5 | 5HEX |
| | CL-4000X | 1/4HEX |
| CL-6000 | CL-6000 | H5 |
| | CL-6000X5 | 5HEX |
| | CL-6000X | 1/4HEX |

| Model | Order Code | Bit Drive |
|---------|------------|-----------|
| CL-6500 | CL-6500 | H5 |
| | CL-6500X5 | 5HEX |
| | CL-6500X | 1/4HEX |
| CL-7000 | CL-7000 | H5 |
| | CL-7000X5 | 5HEX |
| | CL-7000X | 1/4HEX |

Push-to-Start

| | | |
|-----------|--------------|--------|
| CL-4000PS | CL-4000PS | H4 |
| | CL-4000PS-X5 | 5HEX |
| | CL-4000PSX | 1/4HEX |
| CL-6000PS | CL-6000PS | H5 |
| | CL-6000PSX5 | 5HEX |
| | CL-6000PSX | 1/4HEX |
| CL-6500PS | CL-6500PS | H5 |
| | CL-6500PSX5 | 5HEX |
| | CL-6500PSX | 1/4HEX |
| CL-7000PS | CL-7000PS | H5 |
| | CL-7000PSX5 | 5HEX |
| | CL-7000PSX | 1/4HEX |
| CL-9000 | CL-9000 | 1/4HEX |

CL Variations

P.20

Q Suction

CLQ has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P.51 before ordering.

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|----------|----------|----|
| CLQ-2000 | CLQ-2000 | H4 |
| CLQ-3000 | CLQ-3000 | H4 |
| CLQ-4000 | CLQ-4000 | H4 |
| CLQ-6000 | CLQ-6000 | H5 |
| CLQ-6500 | CLQ-6500 | H5 |
| CLQ-7000 | CLQ-7000 | H5 |

Push-to-Start

| | | |
|------------|------------|----|
| CLQ-4000PS | CLQ-4000PS | H4 |
| CLQ-6000PS | CLQ-6000PS | H5 |
| CLQ-6500PS | CLQ-6500PS | H5 |
| CLQ-7000PS | CLQ-7000PS | H5 |

ESD Anti-electrostatic

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|------------|---------------|--------|
| CL-2000ESD | CL-2000ESD | H4 |
| CL-3000ESD | CL-3000ESD | H4 |
| CL-4000ESD | CL-4000ESD | H4 |
| | CL-4000X5-ESD | 5HEX |
| | CL-4000X-ESD | 1/4HEX |
| CL-6000ESD | CL-6000ESD | H5 |
| | CL-6000X5-ESD | 5HEX |
| | CL-6000X-ESD | 1/4HEX |
| CL-6500ESD | CL-6500ESD | H5 |
| | CL-6500X5-ESD | 5HEX |
| | CL-6500X-ESD | 1/4HEX |

Order Codes

| Model | Order Code | Bit Drive |
|------------|---------------|-----------|
| | CL-7000ESD | H5 |
| CL-7000ESD | CL-7000X5-ESD | 5HEX |
| | CL-7000X-ESD | 1/4HEX |

Push-to-Start

| | | |
|--------------|-----------------|--------|
| | CL-4000PS-ESD | H4 |
| CL-4000PSESD | CL-4000PSX5-ESD | 5HEX |
| | CL-4000PSX-ESD | 1/4HEX |
| | CL-6000PS-ESD | H5 |
| CL-6000PSESD | CL-6000PSX5-ESD | 5HEX |
| | CL-6000PSX-ESD | 1/4HEX |
| | CL-6500PS-ESD | H5 |
| CL-6500PSESD | CL-6500PSX5-ESD | 5HEX |
| | CL-6500PSX-ESD | 1/4HEX |
| | CL-7000PS-ESD | H5 |
| CL-7000PSESD | CL-7000PSX5-ESD | 5HEX |
| | CL-7000PSX-ESD | 1/4HEX |

Q-CR-ESD for Clean Room / Anti-electrostatic

CLQ-CR-ESD has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P. 51 before ordering.

| Model | Order Code | Bit Drive |
|----------------|----------------|-----------|
| | CLQ-2000CR-ESD | H4 |
| CLQ-2000CR-ESD | CLQ-2000CR-ESD | H4 |
| CLQ-3000CR-ESD | CLQ-3000CR-ESD | H4 |
| CLQ-4000CR-ESD | CLQ-4000CR-ESD | H4 |
| CLQ-6000CR-ESD | CLQ-6000CR-ESD | H5 |
| CLQ-6500CR-ESD | CLQ-6500CR-ESD | H5 |
| CLQ-7000CR-ESD | CLQ-7000CR-ESD | H5 |

Lever Start

| | | |
|----------------|----------------|----|
| CLQ-2000CR-ESD | CLQ-2000CR-ESD | H4 |
| CLQ-3000CR-ESD | CLQ-3000CR-ESD | H4 |
| CLQ-4000CR-ESD | CLQ-4000CR-ESD | H4 |
| CLQ-6000CR-ESD | CLQ-6000CR-ESD | H5 |
| CLQ-6500CR-ESD | CLQ-6500CR-ESD | H5 |
| CLQ-7000CR-ESD | CLQ-7000CR-ESD | H5 |

Push-to-Start

| | | |
|------------------|------------------|----|
| CLQ-6000PSCR-ESD | CLQ-6000PSCR-ESD | H5 |
| CLQ-6500PSCR-ESD | CLQ-6500PSCR-ESD | H5 |
| CLQ-7000PSCR-ESD | CLQ-7000PSCR-ESD | H5 |

NL Noiseless

| Model | Order Code | Bit Drive |
|-----------|------------|-----------|
| | CL-3000NL | H4 |
| CL-3000NL | CL-3000NL | H4 |
| CL-4000NL | CL-4000NL | H4 |
| CL-6000NL | CL-6000NL | H5 |
| CL-6500NL | CL-6500NL | H5 |
| CL-7000NL | CL-7000NL | H5 |

Push-to-start

| | | |
|-------------|-------------|--------|
| CL-4000PSNL | CL-4000PSNL | H4 |
| CL-6000PSNL | CL-6000PSNL | H5 |
| CL-6500PSNL | CL-6500PSNL | H5 |
| CL-7000PSNL | CL-7000PSNL | H5 |
| CL-9000NL | CL-9000NL | 1/4HEX |

CL Accessories

P.20

| Order Code | Applicable Model |
|--------------------------|---|
| Pistol Attachment | |
| PA-65 | CL-6000, CL-6500, CL-7000 (Including Push-to-start type) |
| Angle Attachments | |
| ANGL-Z*1 | CL-6000, CL-6500, CL-7000 (Only for Lever start type) |
| ANGLX-Z*2 | CL-6000X, CL-6500X, CL-7000X (Only for Lever start type) |

| Order Code | Applicable Model |
|---|-----------------------|
| Grip Attachments for Push-to-Start Type | |
| PS-1 | Applicable to CL-4000 |
| PS-1-ESD*3 | Applicable to CL-4000 |
| *1 Applicable to HIOS Shank H5. *2 Applicable to Hex Shank 1/4HEX. *3 Anti-electrostatic. | |

Power Supplies for DC Screwdrivers

P.21

| Model | Order Code | Plug & Note |
|--|--------------|---------------|
| Power Supplies for Brushless Screwdrivers | | |
| T-45BL | T-45BL | A (100V) |
| | T-45BL-UL | A2 (120V) |
| | T-45BL-TH | A3 (220-240V) |
| | T-45BL-EU-HK | C (220-240V) |
| | T-45BL-UK-SP | BF (220-240V) |
| T-70BL | T-45BL-CN | S (220-240V) |
| | T-70BL | A (100V) |
| | T-70BL-UL | A2 (120V) |
| | T-70BL-TH | A3 (220-240V) |
| | T-70BL-EU-HK | C (220-240V) |
| T-80BL | T-70BL-UK-SP | BF (220-240V) |
| | T-70BL-CN | S (220-240V) |
| | T-80BL | A (100V) |
| | T-80BL-UL | A2 (120V) |
| | T-80BL-TH | A3 (220-240V) |
| T-80BL | T-80BL-EU-HK | C (220-240V) |
| | T-80BL-UK-SP | BF (220-240V) |
| | T-80BL-CN | S (220-240V) |

Power Supplies for Brushed Screwdrivers

| | | |
|--------|--------------|----------------|
| CLT-45 | CLT-45 | A (100V) |
| | CLT-45-UL | A-2 (120V) |
| | CLT-45-TH | A-3 (220-240V) |
| | CLT-45-EU-HK | C (220-240V) |
| | CLT-45-UK-SP | BF (220-240V) |
| CLT-60 | CLT-45-CN | S (220-240V) |
| | CLT-60 | A (100V) |
| | CLT-60-UL | A-2 (120V) |
| | CLT-60-TH | A-3 (220-240V) |
| | CLT-60-EU-HK | C (220V-240) |
| CLT-80 | CLT-60-UK-SP | BF (220-240V) |
| | CLT-60-CN | S (220-240V) |
| | CLT-80 | A-1 (100V) |
| | CLT-80-UL | A-2 (120V) |
| | CLT-80-TH | A-3 (220-240V) |
| CLT-80 | CLT-80-EU-HK | C (220-240V) |
| | CLT-80-UK-SP | BF (220-240V) |
| | CLT-80-CN | S (220-240V) |

Dedicated Controllers for Brushless Screwdrivers for Automated Machines

| | | |
|-----------|----------------|----------------|
| BLT-AY-61 | BLT-AY61E | A-1 (100V) |
| | BLT-AY61E-USA | A-2 (120V) |
| | BLT-AY61E-TH | A-3 (220-240V) |
| | BLT-AY61E-EUHK | C (220-240V) |
| | BLT-AY61E-UKSP | BF (220-240V) |
| | BLT-AY61E-CN | S (220-240V) |

| Model | Order Code | Plug & Note |
|-----------|----------------|---------------|
| BLT-AY-71 | BLT-AY71E | A-1 (100V) |
| | BLT-AY71E-USA | A2 (120V) |
| | BLT-AY71E-TH | A3 (220-240V) |
| | BLT-AY71E-EUHK | C (220-240V) |
| | BLT-AY71E-UKSP | BF (220-240V) |
| | BLT-AY71E-CN | S (220-240V) |

Dedicated Controllers for Brushed Screwdrivers for Automated Machines

| | | |
|-----------|-----------------|----------------|
| CLT-AY-61 | CLT-AY61 | A-1 (100V) |
| | CLT-AY61-120 | A-2 (120V) |
| | CLT-AY61-230VDE | A-3 (220-240V) |
| | CLT-AY61-230SP | C (220-240V) |
| | CLT-AY61-220RCH | BF (220-240V) |

CLT-AY-61 Options

| | | |
|---------|-----------------|------------|
| 2WV | CLT-AY61-2WV | A-1 (100V) |
| REV | CLT-AY61REV | A-1 (100V) |
| 2WV+REV | CLT-AY61-2WVREV | A-1 (100V) |

Dedicated Controllers for Brushed Screwdrivers for Automated Machines

| | | |
|--------------------------|-----------------|------------|
| CLT-AY-81 | CLT-AY81 | A-1 (100V) |
| CLT-AY-81 Options | | |
| 2WV | CLT-AY81-2WV | A-1 (100V) |
| REV | CLT-AY81REV | A-1 (100V) |
| 2WV+REV | CLT-AY81-2WVREV | A-1 (100V) |

VB (100V)

P.23

| Model | Order Code | Bit Drive |
|--------------------|--------------|-------------|
| Lever Start | | |
| VB-1510 | VB-1510 | H4 |
| | VB-1510H5 | H5 and 5HEX |
| | VB-1510X5 | 5HEX |
| | VB-1510X | 1/4HEX |
| VB-1510-18 | VB-1510-18 | H4 |
| | VB-1510H5-18 | H5 and 5HEX |
| | VB-1510X5-18 | 5HEX |
| | VB-1510X-18 | 1/4HEX |
| VB-1820 | VB-1820 | H5 and 5HEX |
| | VB-1820X | 1/4HEX |
| VB-2008 | VB-2008 | H5 and 5HEX |
| | VB-2008X | 1/4HEX |
| VB-3012 | VB-3012 | H5 and 5HEX |
| | VB-3012X | 1/4HEX |
| VB-3020 | VB-3020 | H5 and 5HEX |
| | VB-3020X | 1/4HEX |
| VBH-1820 | VBH-1820X | 1/4HEX |
| VBH-3012 | VBH-3012X | 1/4HEX |

Push-to-Start

| | | |
|--------------|----------------|-------------|
| VB-1510PS | VB-1510PS | H4 |
| | VB-1510PSH5 | H5 and 5HEX |
| | VB-1510PSX | 5HEX |
| VB-1510PS-18 | VB1510PS-18 | H4 |
| | VB-1510PSH5-18 | H5 and 5HEX |
| | VB-1510PSX-18 | 1/4HEX |
| VB-1820PS | VB-1820PS | H5 and 5HEX |
| | VB-1820PSX | 1/4HEX |

| Model | Order Code | Bit Drive |
|------------|--------------|-------------|
| VB-2008PS | VB-2008PS | H5 and 5HEX |
| | VB-2008PSX | 1/4HEX |
| VB-3012PS | VB-3012PS | H5 and 5HEX |
| | VB-3012PSX | 1/4HEX |
| VB-3020PS | VB-3020PS | H5 and 5HEX |
| | VB-3020PSX | 1/4HEX |
| VB-4504PS | VB-4504PSX-S | 1/4HEX |
| VBH-1820PS | VBH-1820PSX | 1/4HEX |
| VBH-3012PS | VBH-3012PSX | 1/4HEX |

VB (100V) Variations P.24

For 120V and 220-240V, please contact the HIOS distributor.

Q Suction

If you wish to purchase a suction part, please select the screwdriver and the suction unit (suction attachment, mouthpiece and bit) on P. 51 before ordering.

OPC Screwdrivers Supporting Screw Counters

| Model | Order Code | Bit Drive |
|--------------------|------------------|---------------|
| Lever Start | | |
| VB-1510-OPC | VB-1510-OPC | H4 |
| | VB-1510H5-OPC | H5 and 5HEX |
| VB-1510-18-OPC | VB-1510-18-OPC | H4 |
| | VB-1510H5-18-OPC | H5 and 5HEX |
| VB-1820-OPC | VB-1820-OPC | H5 and 5HEX |
| | VB-1820X-OPC | 1/4HEX |
| VB-3012-OPC | VB-3012-OPC | H5 and 5HEX |
| | VB-3012X-OPC | 1/4HEX |
| VB-3020-OPC | VB-3020-OPC | H5 and 5HEX |
| | VB-3020X-OPC | 1/4HEX |
| VBH-1820-OPC | VBH-1820X-OPC | 1/4HEX |
| | VBH-3012-OPC | VBH-3012X-OPC |

Push-to-Start

| | | |
|------------------|--------------------|-------------|
| VB-1510PS-OPC | VB-1510PS-OPC | H4 |
| | VB-1510PSH5-OPC | H5 and 5HEX |
| | VB-1510PSX5-OPC | 5HEX |
| | VB-1510PSX-OPC | 1/4HEX |
| VB-1510PS-18-OPC | VB-1510PS-18-OPC | H4 |
| | VB-1510PSH5-18-OPC | H5 and 5HEX |
| | VB-1510PSX5-18-OPC | 5HEX |
| | VB-1510PSX-18-OPC | 1/4HEX |
| VB-1820PS-OPC | VB-1820PS-OPC | H5 and 5HEX |
| | VB-1820PSX-OPC | 1/4HEX |
| VB-3012PS-OPC | VB-3012PS-OPC | H5 and 5HEX |
| | VB-3012PSX-OPC | 1/4HEX |
| VB-3020PS-OPC | VB-3020PS-OPC | H5 and 5HEX |
| | VB-3020PSX-OPC | 1/4HEX |
| VB-4504PS-OPC | VB-4504PSX-S-OPC | 1/4HEX |
| VBH-1820PS-OPC | VBH-1820PSX-OPC | 1/4HEX |
| VBH-3012PS-OPC | VBH-3012PSX-OPC | 1/4HEX |

VB Accessories P.24

| Model | Applicable Model |
|-------|------------------|
|-------|------------------|

Pistol Attachment

| | |
|----------|---------------------------------|
| PAB-18 | VB-1820, VB-3012, VB-3020 |
| PAB-18PS | VB-1820PS, VB-3012PS, VB-3020PS |

Angle Attachment

| | |
|---------------|---|
| ANGLV-Z-CH1*1 | VB-1820, VB-3012, VB-3020 (Only for Lever start type) |
| ANGLV-Z-XX1*2 | VB-1820X, VB-3012X, VB-3020X (Only for Lever start type) |

*1 Applicable to HIOS Shank H5 and 5HEX.

*2 Applicable to HEX Shank 1/4HEX.

VB (120V) P.25

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|------------|------------------|-------------|
| VB-1510 | VB-1510-120 | H4 |
| | VB-1510X5-120 | H5 and 5HEX |
| | VB-1510X-120 | 1/4HEX |
| VB-1510-18 | VB-1510-18-120 | H4 |
| | VB-1510X5-18-120 | H5 and 5HEX |
| | VB-1510X-18-120 | 1/4HEX |
| VB-1820 | VB-1820-120 | H5 and 5HEX |
| | VB-1820X-120 | 1/4HEX |
| VB-3012 | VB-3012-120 | H5 and 5HEX |
| | VB-3012-120 | 1/4HEX |
| VB-4504 | VB-4504X-120 | 1/4HEX |
| VBH-1820 | VBH-1820X-120 | 1/4HEX |
| VBH-3012 | VBH-3012X-120 | 1/4HEX |

Push-to-Start

| | | |
|--------------|--------------------|-------------|
| VB-1510PS | VB-1510PS-120 | H4 |
| | VB-1510PSX5-120 | H5 and 5HEX |
| | VB-1510PSX-120 | 1/4HEX |
| VB-1510PS-18 | VB-1510PS-18-120 | H4 |
| | VB-1510PSX5-18-120 | H5 and 5HEX |
| | VB-1510PSX-18-120 | 1/4HEX |
| VB-1820PS | VB-1820PS-120 | H5 and 5HEX |
| | VB-1820PSX-120 | 1/4HEX |
| VB-3012PS | VB-3012PS-120 | H5 and 5HEX |
| | VB-3012PSX-120 | 1/4HEX |
| VB-4504PS | VB-4504PSX-120-S | 1/4HEX |
| VBH-1820PS | VBH-1820PSX-120 | 1/4HEX |
| VBH-3012PS | VBH-3012PSX-120 | 1/4HEX |

VB (220-240V) P.25

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|---------|--------------|-------------|
| VB-1510 | VB-1510-B | H4 |
| | VB-1510X5-B | H5 and 5HEX |
| | VB-1510X-B | 1/4HEX |
| | VB-1510XB-CE | 1/4HEX |

| Model | Order Code | Bit Drive |
|------------|----------------|-------------|
| VB-1510-18 | VB-1510-18-B | H4 |
| | VB-1510X5-18-B | H5 and 5HEX |
| | VB-1510X-18-B | 1/4HEX |
| VB-1820 | VB-1820-B | H5 and 5HEX |
| | VB-1820XB-CE | 1/4HEX |
| VB-3012 | VB-3012-B | H5 and 5HEX |
| | VB-3012X-B | 1/4HEX |
| VB-4504 | VB-4504X-B | 1/4HEX |
| | VB-4504XB-CE | 1/4HEX |
| VBH-1820 | VBH-1820X-B | 1/4HEX |
| | VBH-3012 | VBH-3012X-B |

Push-to-Start

| | | |
|--------------|-----------------|-------------|
| VB-1510PS | VB-1510PS-B | H4 |
| | VB-1510PSX5-B | H5 and 5HEX |
| | VB-1510PSX-B | 1/4HEX |
| VB-1510PS-18 | VB-1510PS-18-B | H4 |
| | VB-1510PSX5-18B | H5 and 5HEX |
| | VB-1510PSX-18-B | 1/4HEX |
| VB-1820PS | VB-1820PS-B | H5 and 5HEX |
| | VB-1820PSX-B | 1/4HEX |
| VB-3012PS | VB-3012PS-B | H5 and 5HEX |
| | VB-3012PSX-B | 1/4HEX |
| VB-4504PS | VB-4504PSX-B | 1/4HEX |
| | VB-4504PSXB-CE | 1/4HEX |
| | VB-4504PSXBCE-S | 1/4HEX |
| VBH-1820PS | VBH-1820PSX-B | 1/4HEX |
| VBH-3012PS | VBH-3012PSX-B | 1/4HEX |

VZ (100V) P.27

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|----------|-----------|-------------|
| VZ-1510 | VZ-1510 | H4 |
| | VZ-1510X5 | 5HEX |
| | VZ-1510X | 1/4HEX |
| VZ-1820 | VZ-1820 | H5 and 5HEX |
| | VZ-1820X | 1/4HEX |
| VZ-3007 | VZ-3007 | H5 and 5HEX |
| | VZ-3007X | 1/4HEX |
| VZ-3012 | VZ-3012 | H5 and 5HEX |
| | VZ-3012X | 1/4HEX |
| VZH-1820 | VZH-1820X | 1/4HEX |
| | VZH-3012 | VZH-3012X |

Push-to-Start

| | | |
|-----------|-------------|-------------|
| VZ-1510PS | VZ-1510PS | H4 |
| | VZ-1510PSX5 | 5HEX |
| | VZ-1510PSX | 1/4HEX |
| VZ-1820PS | VZ-1820PS | H5 and 5HEX |
| | VZ-1820PSX | 1/4HEX |

Order Codes

| Model | Order Code | Bit Drive |
|------------|--------------|-------------|
| VZ-3007PS | VZ-3007PS | H5 and 5HEX |
| | VZ-3007PSX | 1/4HEX |
| VZ-3012PS | VZ-3012PS | H5 and 5HEX |
| | VZ-3012PSX | 1/4HEX |
| VZ-4506PS | VZ-4506PSX-S | 1/4HEX |
| VZH-1820PS | VZH-1820PSX | 1/4HEX |
| VZH-3012PS | VZH-3012PSX | 1/4HEX |

VZ (100V) Variations P.28

For 120V and 220-240V, please contact the HIOS distributor.

Q Suctions

VZQ has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P. 51 before ordering.

| Model | Order Code | Bit Drive |
|--------------------|------------|-------------|
| Lever Start | | |
| VZQ-1510 | VZQ-1510 | H4 |
| VZQ-1820 | VZQ-1820 | H5 and 5HEX |
| VZQ-3007 | VZQ-3007 | H5 and 5HEX |
| VZQ-3012 | VZQ-3012 | H5 and 5HEX |

Push-to-Start

| | | |
|------------|------------|-------------|
| VZQ-1510PS | VZQ-1510PS | H4 |
| VZQ-1820PS | VZQ-1820PS | H5 and 5HEX |
| VZQ-3007PS | VZQ-3007PS | H5 and 5HEX |
| VZQ-3012PS | VZQ-3012PS | H5 and 5HEX |

OPC Screwdrivers Supporting Screw Counters

| Model | Order Code | Bit Drive |
|--------------------|---------------|-------------|
| Lever Start | | |
| VZ-1510-OPC | VZ-1510-OPC | H4 |
| | VZ-1510X5-OPC | 5HEX |
| | VZ-1510X-OPC | 1/4HEX |
| VZ-1820-OPC | VZ-1820-OPC | H5 and 5HEX |
| | VZ-1820X-OPC | 1/4HEX |
| VZ-3007-OPC | VZ-3007-OPC | H5 and 5HEX |
| | VZ-3007X-OPC | 1/4HEX |
| VZ-3012-OPC | VZ-3012-OPC | H5 and 5HEX |
| | VZ-3012X-OPC | 1/4HEX |
| VZH-1820-OPC | VZH-1820X-OPC | 1/4HEX |
| VZH-3012-OPC | VZH-3012X-OPC | 1/4HEX |

Push-to-Start

| | | |
|----------------|-----------------|-------------|
| VZ-1510PS-OPC | VZ-1510PS-OPC | H4 |
| | VZ-1510PSX5-OPC | 5HEX |
| | VZ-1510PSX-OPC | 1/4HEX |
| VZ-1820PS-OPC | VZ-1820PS-OPC | H5 and 5HEX |
| | VZ-1820PSX-OPC | 1/4HEX |
| VZ-3007PS-OPC | VZ-3007PS-OPC | H5 and 5HEX |
| | VZ-3007PSX-OPC | 1/4HEX |
| VZ-3012PS-OPC | VZ-3012PS-OPC | H5 and 5HEX |
| | VZ-3012PSX-OPC | 1/4HEX |
| VZ-4506PS-OPC | VZ-4506PSXOPC-S | 1/4HEX |
| VZH-1820PS-OPC | VZH-1820PSX-OPC | 1/4HEX |
| VZH-3012PS-OPC | VZH-3012PSX-OPC | 1/4HEX |

VZ Accessories P.28

| Order Code | Applicable Model |
|------------|------------------|
|------------|------------------|

Pistol Attachment

| | |
|---------|-------------------------------|
| PA-18 | VZ Series: Lever start type*3 |
| PA-18PS | VZ Series: Push start type*3 |

Angle Attachment

| | |
|---------------|-------------------------------|
| ANGLV-Z-CH1*1 | VZ Series: Lever start type*3 |
| ANGLV-Z-XX1*2 | VZ Series: Lever start type*3 |

PS Front Cover Ring

| | |
|-----------|------------------------------|
| VZ18-0960 | VZ Series: Push start type*3 |
|-----------|------------------------------|

Protective Cover for Torque Adjustment Nut

| | |
|-----------|-------------|
| VZ18-0970 | VZ Series*3 |
|-----------|-------------|

Shockless Stand

| | |
|------------|------------------------------|
| VZ18PS-SAS | VZ Series: Push start type*3 |
|------------|------------------------------|

*1 Applicable to HIOS Shank H5 and 5HEX.

*2 Applicable to Hexagonal Shank 1/4HEX.

*3 Except VZ-1510/VZ-4506 Series.

VZ (120V) P.29

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|----------|---------------|-------------|
| VZ-1820 | VZ-1820-120 | H5 and 5HEX |
| | VZ-1820X-120 | 1/4HEX |
| VZ-3012 | VZ-3012-120 | H5 and 5HEX |
| | VZ-3012X-120 | 1/4HEX |
| VZ-4506 | VB-4506X-120 | 1/4HEX |
| VZH-1820 | VZH-1820X-120 | 1/4HEX |
| VZH-3012 | VZH-3012X-120 | 1/4HEX |

Push-to-start

| | | |
|------------|------------------|-------------|
| VZ-1820PS | VZ-1820PS-120 | H5 and 5HEX |
| | VZ-1820PSX-120 | 1/4HEX |
| VZ-3012PS | VZ-3012PS-120 | H5 and 5HEX |
| | VZ-3012PSX-120 | 1/4HEX |
| VZ-4506PS | VZ-4506PSX-120-S | 1/4HEX |
| VZH-1820PS | VZH-1820PSX-120 | 1/4HEX |
| VZH-3012PS | VZH-3012PSX-120 | 1/4HEX |

VZ (220-240V) P.29

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Lever Start

| | | |
|---------|------------|-------------|
| VZ-1812 | VZ-1812-B | H5 and 5HEX |
| | VZ-1812X-B | 1/4HEX |
| VZ-3007 | VZ-3007-B | H5 and 5HEX |
| | VZ-3007X-B | 1/4HEX |
| VZ-4504 | VZ-4504X-B | 1/4HEX |

Push-to-Start

| | | |
|-----------|--------------|-------------|
| VZ-1812PS | VZ-1812PS-B | H5 and 5HEX |
| | VZ-1812PSX-B | 1/4HEX |
| VZ-3007PS | VZ-3007PS-B | H5 and 5HEX |
| | VZ-3007PSX-B | 1/4HEX |
| VZ-4504PS | VZ-4504PSX-B | 1/4HEX |

PGF P.31

| Model | Order Code | Bit Drive |
|----------|------------|-------------|
| PGF-3000 | PGF-3000 | H4 |
| PGF-5000 | PGF-5000 | H4 |
| PGF-7000 | PGF-7000 | H5 and 5HEX |
| | PGF-7000X | 1/4HEX |

Control Unit (for Judgment)

| | | |
|-------|-------|---|
| PG-01 | PG-01 | — |
|-------|-------|---|

Relay Box

| | | |
|------------|------------|---|
| PGF-SUBBOX | PGF-SUBBOX | — |
|------------|------------|---|

Screwdriver Cord

| | | |
|----------|--------------|---|
| 3m (10P) | BLF7-0612-VI | — |
|----------|--------------|---|

Damper Unit

| | | |
|--------|--------|---|
| BLF-DP | BLF-DP | — |
|--------|--------|---|

Controllers (BLT-AY-61/BLT-AY-71) See P.63

PGF Variations P.32

Q Suction

PGFQ

PGFQ has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P. 51 before ordering.

| Model | Order Code | Bit Drive |
|-----------|------------|-----------|
| PGFQ-3000 | PGFQ-3000 | H4 |
| PGFQ-5000 | PGFQ-5000 | H4 |
| PGFQ-7000 | PGFQ-7000 | H5 |

PGFR Suction (Special Order)

PGFR has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P. 53 before ordering.

| Model | Order Code | Bit Drive |
|-----------|------------|---------------|
| PGFR-5000 | PGFR-5000 | Screw Type ø4 |
| PGFR-7000 | PGFR-7000 | Screw Type ø4 |

•For PGFR Model, please contact the HIOS distributor before ordering.

•PGFR does not include a tube. Please purchase a commercially available tube. Tube shape: inner diameter ø4×outer diameter ø6.

BLF P.33

| Model | Order Code | Bit Drive |
|-----------|------------|-------------|
| BLF-2000 | BLF-2000 | H4 |
| BLF-5000 | BLF-5000 | H5 and 5HEX |
| BLF-7000 | BLF-7000 | H5 |
| BLF-7000X | BLF-7000X | 1/4HEX |
| BLF-7025X | BLF-7025X | 1/4HEX |

Screwdriver Cord

| | | |
|----------|--------------|---|
| 3m (10P) | BLF7-0612-VI | — |
|----------|--------------|---|

Damper Unit

| | | |
|--------|--------|---|
| BLF-DP | BLF-DP | — |
|--------|--------|---|

Controllers (BLT-AY-61/BLT-AY-71) See P.63

BLF Variations P.34

Q Suction

BLFQ

BLFQ has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P. 51 before ordering.

| Model | Order Code | Bit Drive |
|-----------|------------|-----------|
| BLFQ-2000 | BLFQ-2000 | H4 |
| BLFQ-5000 | BLFQ-5000 | H5 |
| BLFQ-7000 | BLFQ-7000 | H5 |

BLFR Suction (Special Order)

BLFR has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P. 53 before ordering.

| Model | Order Code | Bit Drive |
|------------|------------|----------------------------|
| BLFR-5000 | BLFR-5000 | Screw Type $\varnothing 4$ |
| BLFR-7000X | BLFR-7000X | Screw Type $\varnothing 4$ |
| BLFR-7025X | BLFR-7025X | Screw Type $\varnothing 4$ |

*For BLFR Model, please contact the HIOS distributor before ordering.

*BLFR does not include a tube. Please purchase a commercially available tube. Tube shape: inner diameter $\varnothing 4 \times$ outer diameter $\varnothing 6$.

CLF / α F / CL-A P.35

HH: HIOS Shank + HIOS Power Supply
XH: HEX Shank + HIOS Power Supply

| Model | Order Code | Bit Drive |
|-----------------|-------------------|-----------|
| CLF-3000 | CLF-3000HH | H4 |
| CLF-4000 | CLF-4000HH | H4 |
| | CLF-4000XH | 1/4HEX |
| CLF-6000 | CLF-6000HH | H5 |
| | CLF-6000XH | 1/4HEX |
| CLF-6500 | CLF-6500HH | H5 |
| | CLF-6500XH | 1/4HEX |
| CLF-7000 | CLF-7000HH | H5 |
| | CLF-7000XH | 1/4HEX |
| α F-4500 | α F-4500HH | H4 |
| | α F-4500XH | 1/4HEX |
| α F-4500 | α F-4500HH | H4 |
| | α F-4500XH | 1/4HEX |
| α F-5000 | α F-5000HH | H4 |
| | α F-5000XH | 1/4HEX |
| α F-6500 | α F-6500HH | H5 |
| | α F-6500XH | 1/4HEX |
| CL-816A | CL-816AXH | 1/4HEX |
| | CL-816AXN | 1/4HEX |
| CL-825A | CL-825AXH | 1/4HEX |
| | CL-825AXN | 1/4HEX |
| CL-850A | CL-850AXH | 1/4HEX |
| | CL-850AXN | 1/4HEX |

For HN (HIOS Shank + Power Supply by Nitto Seiko) and XN (HEX Shank + Power Supply by Nitto Seiko), please contact the HIOS distributor. For CL-816A, CL-825A and CL-850A, XN is available in this catalog.

CLF / α F / CL-A Variations P.36

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Q Suctions

CLFQ and α FQ has a suction attachment as standard, but doesn't include a mouthpiece and a bit. Please select them on P. 51 before ordering.

| | | |
|------------------|--------------------|----|
| CLFQ-3000 | CLFQ-3000HH | H4 |
| CLFQ-4000 | CLFQ-4000HH | H4 |
| CLFQ-6000 | CLFQ-6000HH | H5 |
| CLFQ-6500 | CLFQ-6500HH | H5 |
| CLFQ-7000 | CLFQ-7000HH | H5 |
| α FQ-4500 | α FQ-4500HH | H4 |
| α FQ-5000 | α FQ-5000HH | H4 |
| α FQ-6500 | α FQ-6500HH | H5 |

CLF/ α F/CL-A Accessories P.35

| Model | Order Code | Note |
|-------|------------|------|
|-------|------------|------|

Carbon Brush

| | | |
|-----------------|------------|---|
| CLF-3000 | A45-0420 | — |
| CLF-4000 | CL4-0420 | — |
| α F-4500 | A45-0420 | — |
| α F-5000 | CL4-0420 | — |
| CLF-6000 | CL65-0490 | — |
| CLF-6500 | CL65-0490 | — |
| CLF-7000 | CL65-0490 | — |
| α F-6500 | CL65-0490 | — |
| CL-816A* | CL9-0410 | — |
| CL-825A* | CL9-0410 | — |
| CL-850A | CL850-0381 | — |

* Please note that the old types of CL-816A and CL-825A have internal carbon whose brush cannot be replaced. If you have any questions, please contact the HIOS distributor.

Recipro RN53 P.37

| Model | Order Code | Screwdriver |
|----------|------------|-------------|
| RN53-200 | RN53-200 | RD-4000 |
| RN53-260 | RN53-260 | RD-4500 |

AC100V (Plug A)

| | | |
|----------|-----------|----------------|
| RN53-300 | RN53-300* | RD-10 or RD-15 |
| RN53-400 | RN53-400* | RD-20 or RD-30 |

* Please note that for AC-Type Recipro Screwdrivers, HIOS will prepare the components after the screwdriver is specified by the customer.

Controllers

| Model | Order Code | Note |
|---------|------------|---------|
| RDT-30 | RDT-30NIT | DC Type |
| RAC-100 | RAC-100NIT | AC100V |

Carbon Brushes

| | | |
|---------|------------|---|
| RD-4000 | CL4-0420 | — |
| RD-4500 | A45-0420 | — |
| RD-10 | ACL10-0490 | — |
| RD-15 | ACL10-0490 | — |
| RD-20 | ACL20-0490 | — |
| RD-30 | ACL20-0490 | — |

Peripherals and Accessories P.39-40

| Model | Order Code | Applicable Model |
|-------|------------|------------------|
|-------|------------|------------------|

Screwdriver Cords

| | | |
|-----------|------------|--|
| 1.5m (5P) | CL4-0611 | BLG-4000, BLG-5000 Series, BL-3000, BL-5000 Series, CL-2000, CL-3000, CL-4000 |
| 2m (5P) | CL65-0660 | BL-7000 Series, CL-6000, CL-6500, CL-7000 |
| 2m (6P) | RP50-CL | PG, BLG-BC2, BLG-BC1, BLG-ZERO1, BLG-OPC, BL-OPC |
| 3m (5P) | CLF65-0620 | HH & XH of CLF-3000, 4000, 6000, 6500, 7000 and α F-6500 for automated machines |

Flexible Screwdriver Cords

| | | |
|---------|----------------|----------------------------------|
| 2m (5P) | CL4-0611H-5P-2 | BLG, BL, CL |
| 3m (6P) | CL4-0610H-6P-3 | BC2, BC1, ZERO1, BLG-OPC, BL-OPC |

Curled Screwdriver Cord

| | | |
|-----------|---------------|--------|
| 7.5m (5P) | CL65-0660-7.5 | BL, CL |
|-----------|---------------|--------|

Curled Screwdriver Cord

| | | |
|---------|------------|-------------|
| 3m (5P) | EXTCD-5P3M | BLG, BL, CL |
| 5m (5P) | EXTCD-5P5M | BLG, BL, CL |

| Model | Order Code | Plug |
|-------|------------|------|
|-------|------------|------|

Vacuum Pump

| | | |
|------|-------------|----------------|
| VP-3 | VP-3 | A-1 (100V) |
| | VP-3-120USA | A-2 (120V) |
| | VP-3-220RCH | S (220-240V) |
| | VP-3-TH | A-3 (220-240V) |
| | VP-3-230HK | C (220-240V) |
| | VP-3-230SP | BF (220-240V) |

| Model | Order Code | Screw Size |
|-------|------------|------------|
|-------|------------|------------|

HIOS Spike Bits [Yellow]

| | | |
|----------|----------|----------|
| SPK-1214 | SPK-1214 | M1.2-1.4 |
|----------|----------|----------|

HIOS Spike Bits [Blue]

| | | |
|----------|----------|----------|
| SPK-1417 | SPK-1417 | M1.4-1.7 |
|----------|----------|----------|

HIOS Spike Bits [Red]

| | | |
|----------|----------|----------|
| SPK-1720 | SPK-1720 | M1.7-2.0 |
|----------|----------|----------|

HIOS Spike Bits 3-piece Set

| | | |
|-----------|-----------|------------------------------------|
| SPK-SET01 | SPK-SET01 | A set of yellow, blue and red bits |
|-----------|-----------|------------------------------------|

| Model | Order Code | Bit Drive |
|-------|------------|-----------|
|-------|------------|-----------|

Aluminum Screwdrivers for Watches

| | | |
|----------|----------|------------------------|
| WOOD-4AL | WOOD-4AL | Applicable to HIOS H4. |
|----------|----------|------------------------|

Wood Handle

| | | |
|--------|--------|------------------------|
| WOOD-5 | WOOD-5 | Applicable to HIOS H5. |
|--------|--------|------------------------|

Order Codes

| Model | Order Code | Note |
|-------|------------|------|
|-------|------------|------|

Grip Ring [Red]

| | | |
|----------|----------|--------------------|
| GRIP-R10 | GRIP-R10 | 10 pieces per pack |
|----------|----------|--------------------|

Grip Ring [Green]

| | | |
|----------|----------|--------------------|
| GRIP-G10 | GRIP-G10 | 10 pieces per pack |
|----------|----------|--------------------|

Grip Ring [White]

| | | |
|----------|----------|--------------------|
| GRIP-W10 | GRIP-W10 | 10 pieces per pack |
|----------|----------|--------------------|

Grip Ring [Blue]

| | | |
|-----------|-----------|--------------------|
| GRIP-BL10 | GRIP-BL10 | 10 pieces per pack |
|-----------|-----------|--------------------|

Grip Ring [Yellow]

| | | |
|----------|----------|--------------------|
| GRIP-Y10 | GRIP-Y10 | 10 pieces per pack |
|----------|----------|--------------------|

| Model | Order Code |
|-------|------------|
|-------|------------|

Carbon Brushes (2 pcs per pack)

DC Type

| | |
|---------|-----------|
| CL-3000 | A45-0420 |
| CL-4000 | CL4-0420 |
| CL-6000 | CL65-0490 |
| CL-6500 | CL65-0490 |
| CL-7000 | CL65-0490 |
| CL-9000 | CL9-0410 |

AC Type

| | |
|---------|------------|
| VZ-1510 | ACL10-0490 |
| VZ-1820 | VZ18-0480 |
| VZ-3007 | VZ18-0480 |
| VZ-3012 | VZ18-0480 |
| VZ-4506 | VZ18-0480 |
| VZ-1812 | VZ18-0480 |
| VZ-3007 | VZ18-0480 |
| VZ-4504 | VZ18-0480 |

| Model | Order Code | Applicable Model |
|-------|------------|------------------|
|-------|------------|------------------|

Vertical Screwdriver Operating Stands

| | | |
|----------|----------|---|
| VMS-40 | VMS-40 | BC2, BC1, ZERO1, BLG, BL, CL, VZ-1510 |
| VMS-50 | VMS-50 | BC2, BC1, ZERO1, PG, BLG, BL, CL, VZ-1510 |
| VMS-50VZ | VMS-50VZ | VB, PG, VZ (Except VZ-1510) |

Please purchase a screwdriver holder if you use PG, BLG-BC2, BLG-BC1, BLG-ZERO1, BLG, BL-7000, VB, VZ-1510 or VZ-1510PS.

VMS Screwdriver Holders

| Model | Order Code |
|-------|------------|
|-------|------------|

PG

| | |
|---------|--------------|
| PG-3000 | VMS-0900-PG3 |
| PG-5000 | VMS-3910-PG5 |
| PG-7000 | VMS-0900-PG7 |

BLG-BC2

| | |
|-------------|----------------|
| BLG-4000BC2 | VMS-0900-BLG45 |
| BLG-5000BC2 | VMS-0900-BLG45 |

| Model | Order Code |
|-------|------------|
|-------|------------|

BLG-BC1

| | |
|-------------|----------------|
| BLG-4000BC1 | VMS-0900-BLG45 |
| BLG-5000BC1 | VMS-0900-BLG45 |

BLG-ZERO1

| | |
|---------------|----------------|
| BLG-4000ZERO1 | VMS-0900-BLG45 |
| BLG-5000ZERO1 | VMS-0900-BLG45 |

BLG

| | |
|----------|----------------|
| BLG-4000 | VMS-0900-BLG45 |
| BLG-5000 | VMS-0900-BLG45 |

BL

| | |
|---------|--------------|
| BL-7000 | VMS-0900-BL7 |
|---------|--------------|

VB

| | |
|-----------|-----------------|
| VB-1510 | VMS-0910-PG5 |
| VB-1510PS | VMS-0910-PG5 |
| VB-1820 | VMS-0900-PG7 |
| VB-3012 | VMS-0900-PG7 |
| VB-1820PS | VMS-0900-VB18PS |
| VB-3012PS | VMS-0900-VB18PS |

VZ

| | |
|-------------------------|---------------|
| VZ-1510 | VMS50-0190 |
| VZ-1510PS | VMS50-0190 |
| VMS-40/VMS-50: standard | VMS40-0180 |
| VMS-50VZ: standard | VMS-0900-VZ18 |

| Model | Order Code | Applicable Model |
|-------|------------|------------------|
|-------|------------|------------------|

Relay Boxes

| | | |
|-----------|-----------|---|
| BLOP-AF | BLOP-AF | BLG-4000-OPC, BLG-5000 Series-OPC, BL-2000-OPC, BL-3000-OPC, BL-5000 Series-OPC |
| BLOP-OST2 | BLOP-OST2 | |

STC3

P.41

| Model | Order Code | Plug |
|-------|------------|------|
|-------|------------|------|

Power Supplies with Screw Counters (DC Type)

| | | |
|------------|-----------------|----------------|
| BLOP-STC3 | BLOP-STC3 | A-1 (100V) |
| | BLOP-STC-3USA | A-2 (120V) |
| | BLOP-STC-3TH | A-3 (220-240V) |
| | BLOP-STC-3EUHK | C (220-240V) |
| | BLOP-STC-3UKSP | BF (220-240V) |
| | BLOP-STC-3-CN | S (220-240V) |
| CLT-70STC3 | CLT-70STC3 | A-1 (100V) |
| | CLT-70STC3-USA | A-2 (120V) |
| | CLT-70STC3-TH | A-3 (220-240V) |
| | CLT-70STC3-EUHK | C (220-240V) |
| | CLT-70STC3-UKSP | BF (220-240V) |
| | CLT-70STC3-CN | S (220-240V) |

Power Supplies with Screw Counter (AC Type)

| | | |
|----------|--------------|------------|
| VZOP-STC | VZOP-STC | A-1 (100V) |
| | VZOP-STC-120 | A-2 (120V) |

SC1

P.41

| Model | Order Code | Applicable Model |
|-------|------------|------------------|
|-------|------------|------------------|

Separate Screw Counter SC1

| | | |
|----------|----------|----------------------------------|
| BLOP-SC1 | BLOP-SC1 | BC2, BC1, ZERO1, BLG-OPC, BL-OPC |
| CLOP-SC1 | CLOP-SC1 | CL |

Torque Meters

P.43-46

[Measuring] -A2: N-m/lbf-in, -A3: N-m/kgf-cm, -C1: N-m/N-cm, -C2: N-m/lbf-in, -C3: N-m/kgf-cm, -D: kgf-cm/lbf-in

| Model | Order Code | Note |
|-------|------------|------|
|-------|------------|------|

HP

| | | |
|-------------------|----------------------|------|
| HP-1 | available on request | — |
| HP-10 (120V) | HPN-10-A2 | HIOS |
| | HPN-10X-A2 | HEX |
| | HPN-10-A3 | HIOS |
| HP-10 (220-240V) | HPN-10X-A3 | HEX |
| | HPN-10-C1 | HIOS |
| | HPN-10X-C1 | HEX |
| | HPN-10-C2 | HIOS |
| | HPN-10X-C2 | HEX |
| | HPN-10-C3 | HIOS |
| | HPN-10X-C3 | HEX |
| HP-100 (120V) | HPN-10-D | HIOS |
| | HPN-10X-D | HEX |
| | HPN-100-A2 | HIOS |
| HP-100 (220-240V) | HPN-100X-A2 | HEX |
| | HPN-100-A3 | HIOS |
| | HPN-100X-A3 | HEX |
| HP-100 (220-240V) | HPN-100-C1 | HIOS |
| | HPN-100X-C1 | HEX |
| | HPN-100-C2 | HIOS |
| | HPN-100X-C2 | HEX |
| | HPN-100-C3 | HIOS |
| | HPN-100X-C3 | HEX |
| | HPN-100-D | HIOS |
| HPN-100X-D | HEX | |

HDP

| | | |
|------------------|-------------|------|
| HDP-5 (120V) | HDPN-5-A2 | HIOS |
| | HDPN-5X-A2 | HEX |
| | HDPN-5-A3 | HIOS |
| HDP-5 (220-240V) | HDPN-5X-A3 | HEX |
| | HDPN-5-C1 | HIOS |
| | HDPN-5X-C1 | HEX |
| HDP-5 (220-240V) | HDPN-5-C2 | HIOS |
| | HDPN-5X-C2 | HEX |
| | HDPN-5-C3 | HIOS |
| | HDPN-5X-C3 | HEX |
| | HDPN-5-D | HIOS |
| | HDPN-5X-D | HEX |
| HDP-50 (120V) | HDPN-50-A2 | HIOS |
| | HDPN-50X-A2 | HEX |
| | HDPN-50-A3 | HIOS |
| HDP-50 (120V) | HDPN-50X-A3 | HEX |

| Model | Order Code | Note |
|--------------------|--------------|------|
| HDP-50 (220-240V) | HDPN-50-C1 | HIOS |
| | HDPN-50X-C1 | HEX |
| | HDPN-50-C2 | HIOS |
| | HDPN-50X-C2 | HEX |
| | HDPN-50-C3 | HIOS |
| | HDPN-50X-C3 | HEX |
| | HDPN-50-D | HIOS |
| | HDPN-50X-D | HEX |
| HDP-100 (100V) | HDPN-100X | HEX |
| HDP-100 (120V) | HDPN-100X-A2 | HEX |
| | HDPN-100X-A3 | HEX |
| HDP-100 (220-240V) | HDPN-100X-C1 | HEX |
| | HDPN-100X-C2 | HEX |
| | HDPN-100X-C3 | HEX |
| | HDPN-100X-D | HEX |

HM

| | | |
|--------|-------------|------------------|
| HM-10 | HM-10 | 100V |
| | HM-10-120 | 120V |
| | HM-10-230B | 220-240V BF Plug |
| HM-100 | HM-10-230G | 220-240V C Plug |
| | HM-100 | 100V |
| | HM-100-120 | 120V |
| | HM-100-230B | 220-240V BF Plug |
| | HM-100-230G | 220-240V C Plug |

HIT

| | | |
|----------|---------------|------------------|
| HIT-200 | HIT-200 | 100V |
| | HIT-200-120 | 120V |
| | HIT-200-220B | 220-240V BF Plug |
| | HIT-200-220G | 220-240V C Plug |
| HIT-500 | HIT-500 | 100V |
| | HIT-500-120 | 120V |
| | HIT-500-220B | 220-240V BF Plug |
| | HIT-500-220G | 220-240V C Plug |
| HIT-2000 | HIT-2000 | 100V |
| | HIT-2000-120 | 120V |
| | HIT-2000-220B | 220-240V BF Plug |
| | HIT-2000-220G | 220-240V C Plug |

The measuring jig for HP-1 should be prepared by the customer.

For details of HP-1 accessories, please contact the HIOS distributor.

Torque Meters Accessories P.43-46

HP Accessories

| Order Code | Meas. range N·m | Note |
|-----------------------|-----------------|------|
| HP-10 Fidaptor | | |
| TF4G-Z | 0.15-0.6 | H4 |
| TF65G-Z*2 | 0.15-0.6 | — |
| TF45G-Z | 0.25 or smaller | H4 |
| TF45-Z*1 | 0.25 or smaller | H4 |

HP-100 Fidaptor

| | | |
|-----------|-------|--------|
| TF5G-Z | 0.5-3 | H5 |
| TF6XG-Z*2 | 0.5-3 | — |
| TF6UP-Z*1 | 3-9 | 1/4HEX |
| TF6U-Z*1 | 3-9 | 1/4HEX |

| Order Code | Meas. range N·m | Note |
|----------------------------------|-----------------|------|
| HP-100 Shaft with a Screw | | |
| TF6XG-0010*2 | — | — |
| TF5G-0010-4 | — | H4 |

Buffer Spring

| | | |
|-----------|----------|---|
| CL65-0040 | 0.15-0.6 | — |
|-----------|----------|---|

Grease

| | | |
|-------|---|---|
| TF-G3 | — | — |
|-------|---|---|

*1 This type has no safety cover.

*2 HEX Shank with 2 steps: (upper) 5HEX, (lower) 1/4HEX.

HDP Accessories

| Order Code | Meas. range N·m | Note |
|----------------------|-----------------|------|
| Detector Cord | | |
| DPC-0506 | — | — |

HM Accessories

| Order Code | Meas. range N·m | Note |
|-----------------------|-----------------|------|
| HM-10 Fidaptor | | |
| TFM26-Z | 0.15-0.6 | +#1 |
| TFM20-Z | 0.25 or smaller | +#0 |

HM-100 Fidaptor

| | | |
|---------|-------|-----|
| TFM40-Z | 0.5-3 | +#2 |
|---------|-------|-----|

Buffer Spring




| | | |
|-----------|----------|---|
| CL65-0040 | 0.15-0.6 | — |
|-----------|----------|---|



HIT Accessories

| Order Code | Meas. range N·m | Note |
|----------------------|-----------------|------|
| Detector Cord | | |
| DPC-0506 | — | — |

HP/HDP Battery Chargers

| Order Code | Meas. range N·m | Plug Shape |
|--------------|-----------------|--------------|
| TCH-MULTI | 100-240V | A Plug |
| TCH-MULTI-CN | 100-240V | A Plug (CQC) |
| TCH-MULTI-CE | 100-240V | C Plug |




| | |
|---|--|
|  | P/N: TCH-MULTI Certifications:  Japan, US, Canada, Mexico, Taiwan |
| | P/N: TCH-MULTI-CN Certifications:  China, Southeast Asia (1) (Thailand and Philippines) |



| | |
|---|---|
|  | P/N: TCH-MULTI-CE Certifications:  Southeast Asia (2) (Vietnam, Indonesia, India, Singapore, Malaysia, Korea and Hong Kong) |
|---|---|



For countries not listed above, please inquire at the HIOS distributor.

HM/HIT Battery Chargers

| Order Code | Voltage | Plug Shape |
|------------|------------|------------|
| TCH-100N | AC100V | A Plug |
| TCH-120N | AC110-120V | A Plug |
| TCH-230G | AC220-240V | C Plug |
| TCH-230B | AC220-240V | BF Plug |

| | |
|---|--|
|  | P/N: TCH-100N Certifications:  Japan |
| | P/N: TCH-120N Certifications:  Taiwan, US, Canada and Mexico |

| | |
|---|--|
|  | P/N: TCH-230G Certifications:  Hong Kong and China |
|---|--|

| | |
|---|--|
|  | P/N: TCH-230B Certifications:  Singapore, UK and Ireland |
|---|--|

Screw Feeders P.47-48

For Manual Operation

| Model | Order Code | Nominal dia. |
|------------|------------|--------------|
| HSV | | |
| HSV-10 | HSV-10 | M1.0 |
| HSV-12 | HSV-12 | M1.2 |
| HSV-14 | HSV-14 | M1.4 |
| HSV-17 | HSV-17 | M1.7 |
| HSV-20 | HSV-20 | M2.0 |
| HSV-23 | HSV-23 | M2.3 |
| HSV-26 | HSV-26 | M2.6 |
| HSV-30 | HSV-30 | M3.0 |

HS

| | | |
|-------|----------|------|
| HS-35 | HS-35-EC | M3.5 |
| HS-40 | HS-40-EC | M4.0 |
| HS-50 | HS-50-EC | M5.0 |

HSIII

| | | |
|----------|------------|------|
| HSIII-10 | HS-10-3-EC | M1.0 |
| HSIII-12 | HS-12-3-EC | M1.2 |
| HSIII-14 | HS-14-3-EC | M1.4 |
| HSIII-17 | HS-17-3-EC | M1.7 |
| HSIII-20 | HS-20-3-EC | M2.0 |
| HSIII-23 | HS-23-3-EC | M2.3 |
| HSIII-26 | HS-26-3-EC | M2.6 |
| HSIII-30 | HS-30-3-EC | M3.0 |

HSF

| | | |
|--------|--------|------|
| HSF-10 | HSF-10 | M1.0 |
| HSF-12 | HSF-12 | M1.2 |
| HSF-14 | HSF-14 | M1.4 |
| HSF-17 | HSF-17 | M1.7 |
| HSF-20 | HSF-20 | M2.0 |

Order Codes

| Model | Order Code | Nominal dia. |
|--------|------------|--------------|
| HSF-23 | HSF-23 | M2.3 |
| HSF-26 | HSF-26 | M2.6 |
| HSF-30 | HSF-30 | M2.6 |

For Automated Machines

| Model | Order Code | Nominal dia. |
|-------|------------|--------------|
|-------|------------|--------------|

HSV-RB

| | | |
|----------|----------|------|
| HSV-10RB | HSV-10RB | M1.0 |
| HSV-12RB | HSV-12RB | M1.2 |
| HSV-14RB | HSV-14RB | M1.4 |
| HSV-17RB | HSV-17RB | M1.7 |
| HSV-20RB | HSV-20RB | M2.0 |
| HSV-23RB | HSV-23RB | M2.3 |
| HSV-26RB | HSV-26RB | M2.6 |
| HSV-30RB | HSV-30RB | M3.0 |

HS-RB

| | | |
|---------|------------|------|
| HS-35RB | HS-35RB-EC | M3.5 |
| HS-40RB | HS-40RB-EC | M4.0 |
| HS-50RB | HS-50RB-EC | M5.0 |

HSIII-RB

| | | |
|------------|--------------|------|
| HSIII-14RB | HS-14-3RB-EC | M1.4 |
| HSIII-17RB | HS-17-3RB-EC | M1.7 |
| HSIII-20RB | HS-20-3RB-EC | M2.0 |
| HSIII-23RB | HS-23-3RB-EC | M2.3 |
| HSIII-26RB | HS-26-3RB-EC | M2.6 |
| HSIII-30RB | HS-30-3RB-EC | M3.0 |

For a screw feeder with overseas specifications, please inquire at the HIOS distributor.

Screw Accessories P.47-48

Replacement Rails for Manual Operation

| Order Code | Nominal dia. |
|------------|--------------|
|------------|--------------|

HSV

| | |
|-----------|------|
| HSV-BI-10 | M1.0 |
| HSV-BI-12 | M1.2 |
| HSV-BI-14 | M1.4 |
| HSV-BI-17 | M1.7 |
| HSV-BI-20 | M2.0 |
| HSV-BI-23 | M2.3 |
| HSV-BI-26 | M2.6 |
| HSV-BI-30 | M3.0 |

HS

| | |
|--------|------|
| HS-R35 | M3.5 |
| HS-R40 | M4.0 |
| HS-R50 | M5.0 |

HSIII

| | |
|---------|------|
| HS-SR10 | M1.0 |
| HS-SR12 | M1.2 |
| HS-SR14 | M1.4 |
| HS-SR17 | M1.7 |
| HS-SR20 | M2.0 |
| HS-SR23 | M2.3 |
| HS-SR26 | M2.6 |
| HS-SR30 | M3.0 |

HSF

| | |
|---------|------|
| HS-WR10 | M1.0 |
| HS-WR12 | M1.2 |

| Model | Order Code | Nominal dia. |
|---------|------------|--------------|
| HS-WR14 | M1.4 | |
| HS-WR17 | M1.7 | |
| HS-WR20 | M2.0 | |
| HS-WR23 | M2.3 | |
| HS-WR26 | M2.6 | |
| HS-WR30 | M3.0 | |

Replacement rail for Automated Machines

| Order Code | Nominal dia. |
|------------|--------------|
|------------|--------------|

HSV-RB

| | |
|-----------|------|
| HSV-RI-10 | M1.0 |
| HSV-RI-12 | M1.2 |
| HSV-RI-14 | M1.4 |
| HSV-RI-17 | M1.7 |
| HSV-RI-20 | M2.0 |
| HSV-RI-23 | M2.3 |
| HSV-RI-26 | M2.6 |
| HSV-RI-30 | M3.0 |

HS-RB

| | |
|----------|------|
| HS-R35RB | M3.5 |
| HS-R40RB | M4.0 |
| HS-R50RB | M5.0 |

HSIII-RB

| | |
|-----------|------|
| HS-SR14RB | M1.4 |
| HS-SR17RB | M1.7 |
| HS-SR20RB | M2.0 |
| HS-SR23RB | M2.3 |
| HS-SR26RB | M2.6 |
| HS-SR30RB | M3.0 |

AC Adaptors

The AC adapter is now common to all models. The old type will be unavailable when our stock runs out. Also, the new type is not compatible with the old type. Please be careful about this when ordering.

| Order Code | Voltage | Plug Shape |
|------------|---------|------------|
|------------|---------|------------|

New Type

All Models

| | | |
|------------|------------|--------|
| HSV-AD-PSE | AC100-240V | A Plug |
|------------|------------|--------|

Old Type

HS/HSIII

| | | |
|--------|--------|--------|
| HSV-AD | AC100V | A Plug |
|--------|--------|--------|

HSF

| | | |
|--------|------------|--------|
| HSF-AD | AC100-240V | A Plug |
|--------|------------|--------|

HSV

| | | |
|-------------|------------|--------|
| HSV-AD-PSE* | AC100-240V | A Plug |
|-------------|------------|--------|

* The HSV Series is already compatible with the new type.

HS/HSIII

| | | |
|---------|--------|--------|
| HSV-AD* | AC100V | A Plug |
|---------|--------|--------|

HSV

| | | |
|-------------|------------|--------------|
| HSV-AD-PSE | AC100-240V | A Plug |
| HSV-AD-CN | AC100-240V | A Plug (CCC) |
| HSV-AD-EUHK | AC100-240V | C Plug |
| HSV-AD-UL | AC100-240V | A Plug (CCC) |

| Order Code | Voltage | Plug Shape |
|------------|------------|------------|
| HSV-AD-KC | AC100-240V | C Plug |

* Please contact the HIOS distributor before ordering. If you order the old type of AC Adaptor for HS and HSIII for EU, you will need HSV-AD-EUHK and the conversion cable (HSV-AD-CONVERSIONCABLE). Please let us know as such.

BL-SB P.49

| Model | Order Code | Note |
|-------|------------|------|
|-------|------------|------|

Brushless Screwdrivers

| | | |
|-----------|-----------|---|
| BL-5000SB | BL-5000SB | — |
| BL-7000SB | BL-7000SB | — |

Power Supplies (T-45BL / T-70BL) See P.62

SB-C P.49-50

| Model | Order Code | Note |
|-------|------------|------|
|-------|------------|------|

Brushed Screwdrivers

| | | |
|---------|---------|---|
| SB-400C | SB-400C | — |
| SB-650C | SB-650C | — |

Power Supplies (T-45BL) See P.62

Controller

| | | |
|-------|-------|---|
| SBC-1 | SBC-1 | — |
|-------|-------|---|

Carbon Brushes

| | | |
|---------|-----------|---|
| SB-400C | CL4-0420 | — |
| SB-650C | CL65-0490 | — |

Suction Attachments for Suction Screwdrivers P.51

Note: The order codes below are for the suction attachments alone. If you want a suction screwdriver, please select the screwdriver body and the suction unit (suction attachment, mouthpiece and bit) on P. 51 before ordering.

| Model | Order Code | Bit |
|-------|------------|-----|
|-------|------------|-----|

Brushless Screwdrivers (DC Type)

BLG-BC2/BLG-BC1/BLG-ZERO1/BLG

| | | |
|--------------------------------|---------------|---------|
| BLG-4000 Series | BLGQ4-SET | H4 60mm |
| BLG-4000BC2-LT | CLQ2-SET | H4 60mm |
| | CLQ2SET-ESD* | H4 60mm |
| BLG-5000 Series BLG-5000-15 | BLQ5-SET | H4 40mm |
| | BLQ5-SET-ESD* | H4 40mm |
| | BLQ5N-SET | H4 60mm |
| BLG-7000BC2 | BLQ7-SET | H5 80mm |
| | BLQ7-SET-ESD | H5 80mm |

BL

| | | |
|---------|----------------|---------|
| BL-2000 | CLQ2-SET | H4 60mm |
| | CLQ2-SET-ESD* | H4 60mm |
| BL-3000 | BLQ3N-SET | H4 60mm |
| | BLQ3N-SET-ESD* | H4 60mm |

| Model | Order Code | Bit |
|---------|----------------|---------|
| BL-5000 | BLQ5-SET | H4 40mm |
| | BLQ5-SET-ESD* | H4 40mm |
| | BLQ5N-SET | H4 60mm |
| | BLQ5N-SET-ESD* | H4 60mm |
| BL-7000 | BLQ7-SET | H5 80mm |
| | BLQ7-SET-ESD* | H5 80mm |

Brushed Screwdriver (DC Type)

| Model | Order Code | Bit |
|-------|------------|-----|
|-------|------------|-----|

CL

| | | |
|---------|----------------|---------|
| CL-2000 | CLQ2-SET | H4 60mm |
| | CLQ2-SET-ESD* | H4 60mm |
| CL-3000 | CLQ4-SET | H4 60mm |
| | CLQ4-SET-ESD* | H4 60mm |
| CL-4000 | CLQ4-SET | H4 60mm |
| | CLQ4-SET-ESD* | H4 60mm |
| CL-6000 | CLQ65-SET | H5 80mm |
| | CLQ65-SET-ESD* | H5 80mm |
| CL-6500 | CLQ65-SET | H5 80mm |
| | CLQ65-SET-ESD* | H5 80mm |
| CL-7000 | CLQ65-SET | H5 80mm |
| | CLQ65-SET-ESD* | H5 80mm |

Brushless Screwdrivers (AC Type)

VB

| | | |
|---------|-----------|----------|
| VB-1820 | VZQ18-SET | H5 100mm |
| VB-3012 | VZQ18-SET | H5 100mm |
| VB-3020 | VZQ18-SET | H5 100mm |

Brushed Screwdrivers (AC Type)

VZ

| | | |
|----------|-----------|----------|
| VZQ-1510 | VZQ10-SET | H4 60mm |
| VZQ-1820 | VZQ18-SET | H5 100mm |
| VZQ-3007 | VZQ18-SET | H5 100mm |
| VZQ-3012 | VZQ18-SET | H5 100mm |

* Anti-electrostatic types.

Brushless Screwdrivers for Automated Machines (DC Type)

| Model | Order Code | Bit & Note |
|-------|------------|------------|
|-------|------------|------------|

PGF

| | | |
|----------|-----------|----------|
| PGF-3000 | PGFQ3-SET | H4 80mm |
| PGF-5000 | PGFQ5-SET | H4 80mm |
| PGF-7000 | PGFQ7-SET | H5 100mm |

| Model | Order Code | Bit & Note |
|-------|------------|------------|
|-------|------------|------------|

BLF

| | | |
|----------|-----------|----------|
| BLF-2000 | BLFQ2-SET | H4 60mm |
| BLF-5000 | BLFQ5-SET | H5 100mm |
| BLF-7000 | BLFQ7-SET | H5 100mm |

Suction Attachments for Screws for Deep Recessed Holes P.53

Note: The order codes below are for the suction attachments alone. If you want a suction screwdriver, please select the screwdriver body and the suction unit (suction attachment, mouthpiece and bit) on P. 51 before ordering.

| Model | Order Code |
|-------|------------|
|-------|------------|

Brushless Screwdrivers for Automated Machines (DC Type)

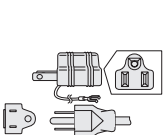
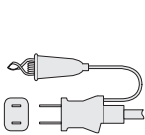
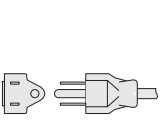
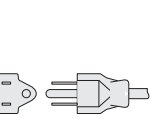
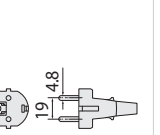
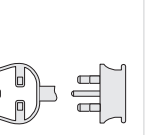
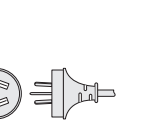
PGFR (Special Order)

| | |
|-----------|----------|
| PGF-5000 | PGFR5-SA |
| PGF-7000X | PGFR7-SA |

BLFR (Special Order)

| | |
|-----------|----------|
| BLF-5000 | BLFR5-SA |
| BLF-7000X | BLFR7-SA |
| BLF-7025X | BLFR7-SA |

Plug Types

| Voltage | 100V | | 120V | 220-240V | | | |
|------------|---|---|---|---|---|---|---|
| | Type A | Type A-1 | Type A-2 | Type A-3 | Type C | Type BF | Type S |
| Plug Shape |  |  |  |  |  |  |  |

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- The information presented in this catalog is current as of June 2023.
- Catalog number: EK-A001



Cautions for Safety

Read the instruction manual carefully before use and operate the screwdriver for its intended purposes.
Always use the specified current and voltage.



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