

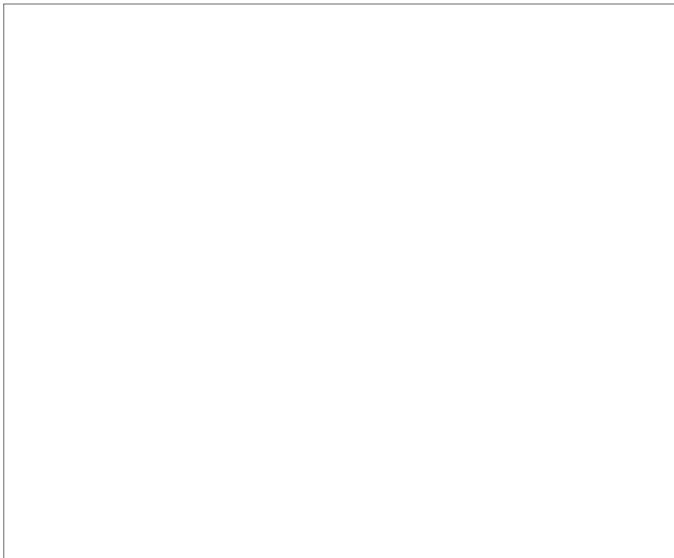



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 Cautions for safety	Cautions for safety. Read the instruction manual carefully before use and operate the screwdriver for its intended purpose. Always use the specified current and voltage.
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- Please note that the specifications and appearance may change as improvements are made.
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- The information presented in this catalog are current as of August 2008.
- Catalog number : EK-A002



HIOS®

Brushless® Screwdriver

General catalog 08A

—The English version—



HIOS Products

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DC drivers

Connects to power controller

AC drivers

Does not require power controller

DC drivers (Pass/Fail Checking type)

Connects to power controller

BLOP-STC3

For BL-OPC screwdriver

VZOP-STC

For VB-OPC screwdriver

BL-ESD

Anti-electrostatic specifications

BLQ-CR-ESD

Clean room and anti-electrostatic specifications

BLQ

Suction

BLQ-CR

Suction and Clean room specifications

BL-OPC

Can be used with screw counter for BLOP-STC3

VB-OPC

Can be used with screw counter for VZOP-STC

VBH-OPC

Can be used with screw counter for VZOP-STC

SUCTION TYPE

Pistol attachment

Angle attachment

Vertical stand

Spring balancer

Cord

HP Series

Measure the torque of torque drivers

HDP Series

Check the torque of tightened screws

HM Series

Measure the torque of drivers for automated equipment

HIT Series

Use for control of torque of impact drivers and torque wrenches

Manually operated

HSF Series

HS Series

HSⅢ Series

For automatic line and vacuum pick up

HS-RB Series

HSⅢ-RB Series

DC Type

BL Series

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AC Type

VB Series

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Ultrahigh torque type

VBH Series

p.10

Pass/Fail Checking type

PG Series

p.12

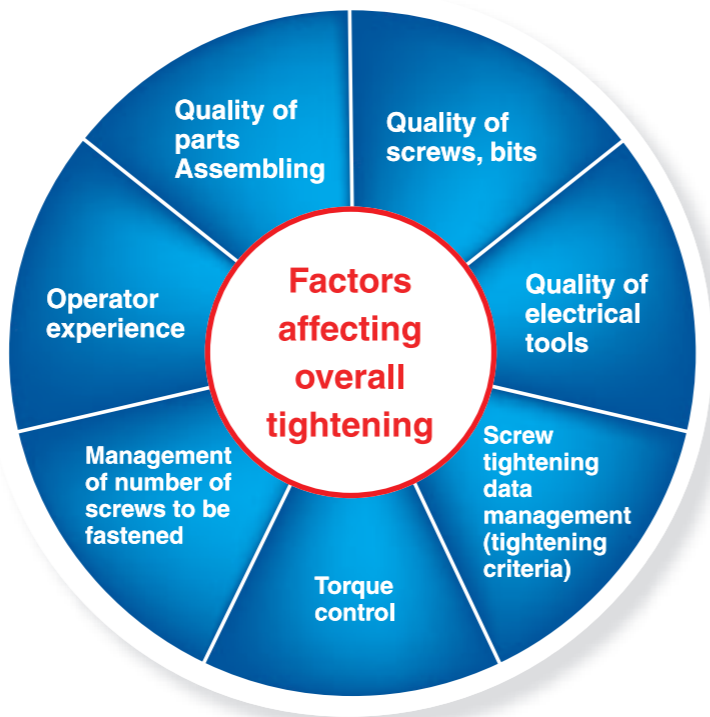
Brushless Screwdriver List

Model		Output Torque Range																								Unloaded Rotation Speed (r.p.m) (HI/LOW)	Screw Size (mm)		Used in assembling			
		(kgf • cm)																									Small Size Screw	Tapping Screw				
		N • m																														
		0	0.5	1	2	3	4	5	6	7	8	9	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2	3	4	5	8	9	10			
DC Type	BL-2000	<div></div>																								990/650	1.0-2.3	1.0-2.0	Cell phones, clocks, glasses, digital cameras, LCD televisions, PDP televisions, optical pickups, computers HDDs, CDs, car navigation systems, car audio systems, air-conditioners, fans, heaters			
	BL-3000	<div></div>																								980/680	1.7-2.3	2.0-2.3				
	BL-5000	<div></div>																								900/590	2.0-3.0	2.0-3.0				
	BL-5000-15	<div></div>																								1,500/1,000	2.0-3.0	2.0-2.6				
	BL-5000-20	<div></div>																								2,200/1,500	2.0-3.0	2.0-2.6				
	BL-5020	<div></div>																								750/500	2.0-4.0	2.0-3.0				
	BL-7000	<div></div>																								960/630	2.6-5.0	2.6-4.0				
	BL-7000HT	<div></div>																								700/500	2.6-4.0	2.6-4.0				
	BL-7000-20	<div></div>																								2,200/1,500	2.6-4.0	2.6-4.0				
AC Type	VB-1510 VB-1510PS	<div></div>																								970	2.0-4.0	2.0-3.0	Residential lighting, lights, vacuum cleaners, gas equipment, microwave ovens, electronic parts, for automobiles, tail lamps, head lamps, TV game consoles, printers, communication, equipment, photocopiers, pneumatic equipment, electronic tool			
	VB-1510-18 VB-1510PS-18	<div></div>																								1,800	2.0-4.0	2.0-3.0				
	VB-1820 VB-1820PS	<div></div>																								2,000	2.6-4.0	2.6-3.0				
	VB-3012 VB-3012PS	<div></div>																								1,200	3.0-5.0	3.0-4.0				
	VB-4504 VB-4504PS	<div></div>																								400	3.0-5.0	3.0-4.0				
AC Type	VBH-1820PS	<div></div>																								470	5.0-6.0					
	VBH-3012PS	<div></div>																								270	5.0-6.0					
DC Type	PG-3000	<div></div>																								980/680	1.7-2.3	2.0-2.3	Electronic parts, parts for automobiles, pneumatic equipment			
	PG-5000	<div></div>																								900/590	2.3-3.0	2.0-2.3				
	PG-7000	<div></div>																								960/630	2.6-5.0	2.6-4.0				

There are many factors that affect the overall quality of screw tightening

Hios is continuously working hard to apply our vast experience and technical expertise to make constant modifications and improvements to our tightening tools and other parts renowned for their precision and accuracy.

HIOS New Fastening System is a highly efficient system that overcomes roblems affecting variations in tightening, offering the operator exceptional reliability and quality control.



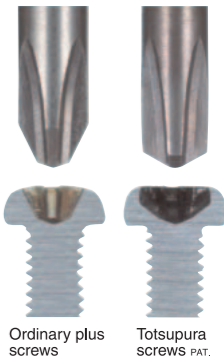
Improvements to the screw and screwdriver are the first step in reducing the number of defects.

Issues related to cam-out are all the more serious as equipment becomes more precise with the advancement of technology.

The shape of plus screws, regarded as the current global standard, often suffered from damaged heads and worn screw material from excess torque when accurate torque control was unavailable. A V-shaped design similar to the tip of a pencil forces the bit to rise out from the head (* cam-out) when excess torque is applied. However, developments in peripheral tools now allow extremely accurate torque control, such that the V-shaped design that forces the bit to rise can now result in damage to the head and screw material. This in turn affects the quality of the final product.

* The bit rises out from the groove in the head when tightening plus screws.

Comparison of screw cross sections

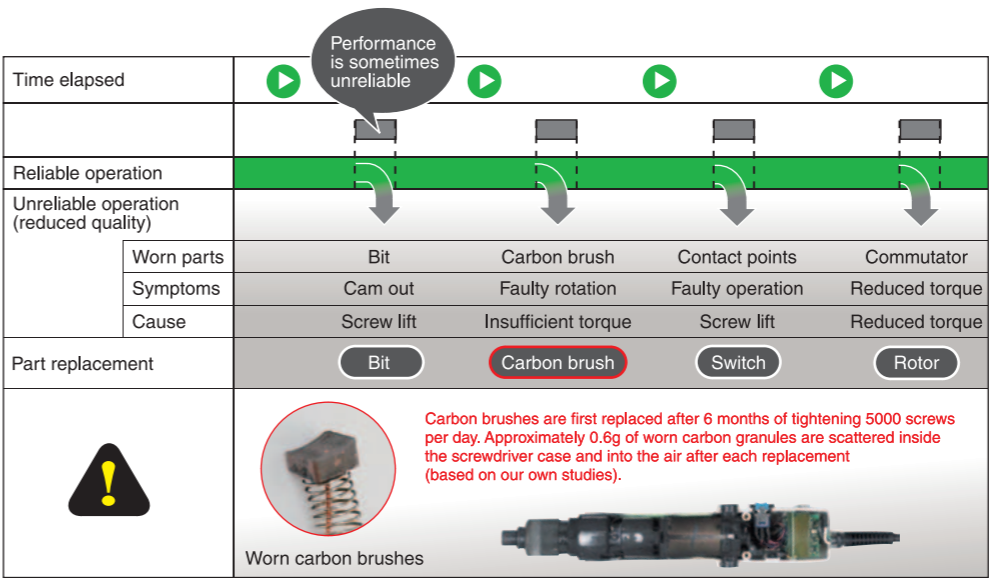


Totsupura screws PAT.

While retaining compatibility with plus screws, the V-shaped design has been changed to a U-shaped design that does not allow the bit to rise, preventing cam out and allowing extremely high reliability and precision. When products are recycled or sent in for maintenance, removal and reinsertion of screws can now be performed much more simply, resulting in the manufacture of more environmentally friendly products.

Ordinary screwdrivers that use brushes can stop occasionally

Wear on expendable parts (carbon brushes, commutators, switches and other contact points) and heat generated by the motor in brushed screwdrivers can shorten the operating life of the whole screwdriver. Wear of the expendable parts can affect performance, causing the screwdriver to stop operating. Regular replacement and maintenance of the expendable parts differs with operating time and environment, meaning management of replacement and maintenance can be difficult.



..... Unreliable performance
..... Reliable performance



Determining the replacement interval is up to the operator's skill level and feeling.

Brushless® screwdriver

Screwdrivers with brushless motors have an extremely long operating life with no need for regular replacement or maintenance of expendable parts (carbon brushes, rotor, switches and other contact points). Heat generated by the motor is reduced and screwdriver performance is always at the maximum level, resulting in reliable product quality.

Problems with ordinary tools

Phillips screws → Worn grooves

Screwdrivers with carbon brushes → Occasionally stop operating (Carbon emissions)

Torque control → Insufficient torque (Can be difficult to identify screws with insufficient torque)

Management of number of screws to be tightened → Forgetting to tighten screws

Screw tightening data management (tightening criteria) → Improper screw tightening (Can be difficult to identify screws that are not tightened properly)

Improvements introduced with the New Fastening System

☐ Totsupura screws, totsupura bits PAT. No more cam out issues! Exceptionally reliable tightening and constant quality control are now a reality. (For more information, refer to our homepage [HIOS PAT. SCREW])

☐ Environmentally friendly Brushless® screwdriver The elimination of carbon brushes has eliminated carbon emissions! This results in completely clean work surroundings and reduces environmental pollution (BL Series/VB Series).

☐ Torque meter Screwdriver torque control and screw torque checks allows total quality control of screw tightening. (HP Series/HDP Series).

☐ Screw counter Counts the number of screws to be tightened for the particular job, so that the operator does not have to worry about missing any screws. (Screw counter Series).

☐ Pass/Fail Checking PG brushless screwdriver A single unit that performs three tasks: tightening, determination and recording. Provides total quality control of screw tightening.

No carbon powder emissions!

The brushless screwdriver design eliminates the need for expendable parts, providing reliable and environmentally friendly performance as well as a high level of product quality control.



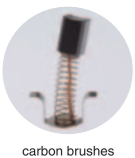
Completely safe
『Brushless screwdrivers』

- Free from troublesome maintenance
- Better and Long performance with accurate torque
- Pollution-free environment
- Relax and no fatigues operation with low weight design

- Extended periods of highly precise torque control and superior durability lead to reliable product quality control.
- Expendable parts have been eliminated while the design allows a long operating life with a vastly reduced number of operating problems and malfunctions
- There are no external carbon powder emissions, resulting in clean electrical parts and operating environment.
- There is no heat generated by the motor, with no heat related problems with extended periods of use. The driver is also energy efficient.

Comparative data provided by HIOS

- Temperature rises (BL/VB Series) reduced approximately 30%
- Power consumption (VB Series) Energy consumption reduced approximately 50%
- Noise, RFI (BL Series) reduction in peak values 64% ~ 85%



Ordinary
Brush screwdriver

Expendable carbon brushes wear out, sending carbon powder throughout the motor, in turn causing operating problems, faults and reducing overall screwdriver performance. Powder can cause various problems in the work place if released from the driver case.

NEW
Brushless screwdriver

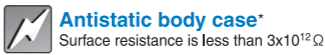
With almost no expendable parts and a simple design, the brushless screwdrivers life cycle is extended and maintains a clean working environment. The screwdriver is also more environmentally friendly due to the reduction in expendable parts and provides consistently reliable performance.

Standard specifications

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



The starting procedure is simple and can be switched from the lever type to push type.



The screwdriver body uses an antistatic body case to prevent the generation of static electricity, which is suitable for the assembly of precision equipment and electronic parts.



The screwdriver is RoHS compliant.



Products meet European safety standards

* The grip section of the VB-1820 and VB-3012 are made of rubber and do not completely prevent static electricity.

Features of brushless screwdrivers

Low voltage DC type
BL Series

Operates when connected to low voltage DC power (power hereinafter)



DC type

Transformer-less type
VB Series

Operates directly from AC power outlet



AC type

Quick release cord (DC type)

The screwdriver cord features a quick release allowing maintenance to be performed easily (The cord on the VB Series is permanently connected and cannot be detached).

5P (pin)
standard screwdriver



6P (pin)
screwdriver for use with screw counter



Employs an antistatic body case (standard specifications)

The brushless series uses an antistatic body case to prevent the accumulation of static electricity (excluding the VB-1820PS, VB-3012PS, VB-4504PS)

Trigger type

Lever start type screwdrivers are operated by pulling the lever with your finger. Push-to start type (PS) screwdrivers are operated by pushing the button. Certain models of the BL Series allow either start method to be selected (excluding the BL-2000).

Torque adjustment nut for fine tuning

The tightening torque can be steplessly adjusted across a wide range. Repeatable high precision provides reliable screw tightening.

Bit

The types of bits that can be connected to the screwdriver include the HIOS bit and hexagonal bit. Refer to the performance chart of each screwdriver for bit shape.

HIOS shank shape (bit socket) * Please purchase our standard bits.	H4 (Ø4)	
	H5 (Ø5)	
Hexagonal shank shape (bit socket) * Please purchase standard sized hexagonal bits from commercial stores.	Width across flats 6.35mm (1/4 HEX)	
	Width across flats 5mm (5 HEX)	



Low voltage DC type

Operates when connected to low voltage DC power

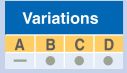
BL Series

Lever start type

BL-2000



anti-static electricity is standard.



*The switch uses expendable parts.



Anti-electrostatic specifications
Surface resistance is less than $10^4 \Omega$

Conductive resin is used throughout the body case, switch lever and screwdriver cord.

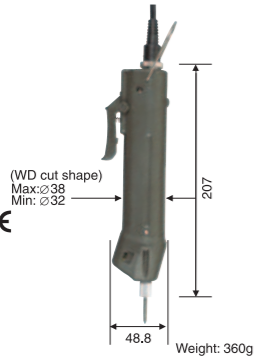
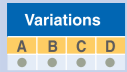
Two-way start type

BL-3000



Two-way start type

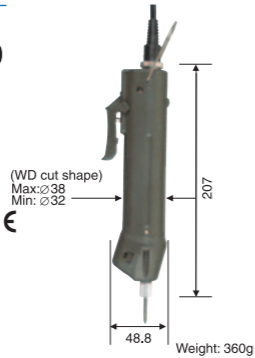
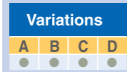
BL-5000



High speed type

Two-way start type

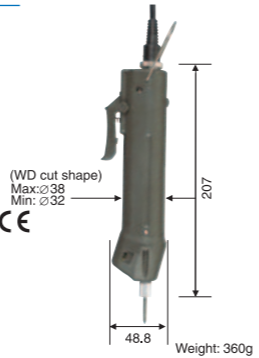
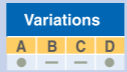
BL-5000-15
BL-5000-20



High torque type

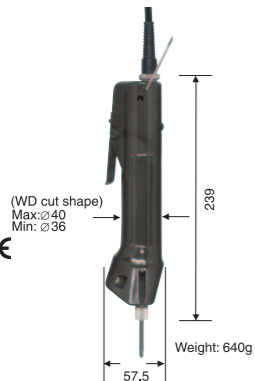
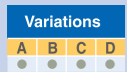
Two-way start type

BL-5020



Two-way start type

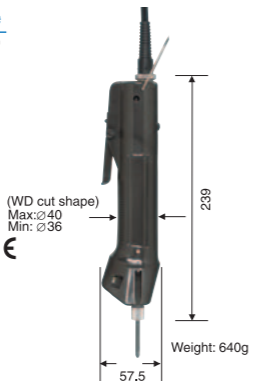
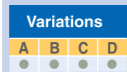
BL-7000



High torque type

Two-way start type

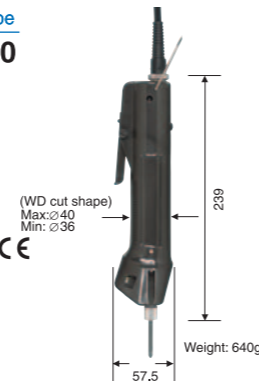
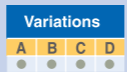
BL-7000HT



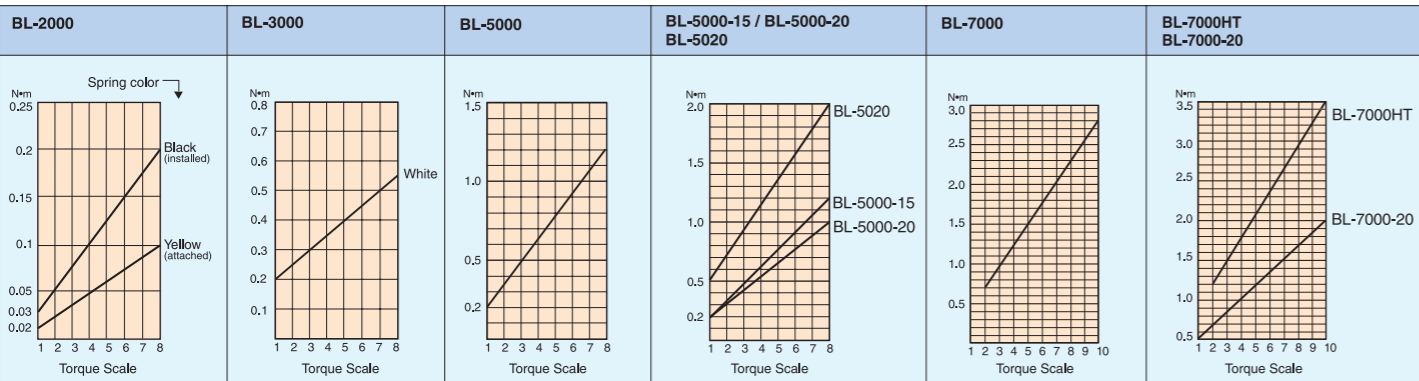
High speed type

Two-way start type

BL-7000-20



Output torque guide (during HI input)



Variation chart

A	ESD	B	Q	C	Q-CR-ESD	D	OPC
	Anti-static electricity features		Suction		Clean room and anti-static electricity features		Screwdriver for screw counter
* The suction attachment sold separately.				* Refer to p.9 for screw counters			

DXF File



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

*Special software is required to view DXF files.

[Go to Electric Driver](#) [DC Driver](#) [DXF File](#)

www.hios.com

Multi input type (AC 100V-240V)

Power supply for BL Series

Dedicated power supply ensures maximum performance from the screwdriver.

- Low voltage output (HI: approximately 30V, LOW: approximately 20V) means reliable yet quiet operating noise.
- Power capacity has been increased over the previous model, providing a reliable source of power.
- Two switchable stages HI/LOW are available for more accurate screw operations.

T-30BL

(Single power point)

Compatible models

BL-2000/BL-3000



T-70BL

(Single power point)

Compatible models

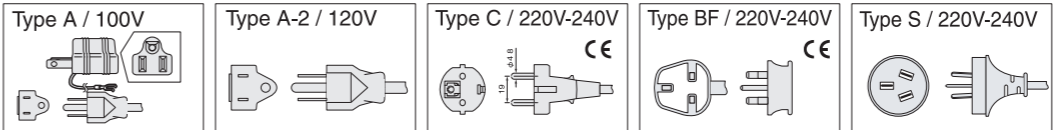
BL-2000/BL-3000/BL-5000
BL-5000-15/BL5000-20/BL-5020
BL-7000/BL-7000HT/BL-7000-20



Specifications

Primary side	Input power	AC 100V-240V (47-63Hz)
	Power capacity	30W
Secondary side output	HI/LOW 2 stage switchable	
External dimensions (mm)	62 x 134 x 40 (H) mm	
Weight (g)	300g	
Length of power cord	1.8m (inlet type)	
Accessories	2 mounting points, 4 mounting screws	

Plug



Specifications

Lever start type Model		BL-2000	BL-3000	BL-5000	BL-5000-15 BL-5000-20*	BL-5020	BL-7000	BL-7000HT BL-7000-20*	
Push-to start type Model		—							
Output Torque Range	N·m	0.02-0.2	0.2-0.55	0.2-1.2	0.2-1.2 / 0.2-1*	0.5-2	0.7-2.8	0.7-3.5 / 0.5-1.5*	
	lbf·in	0.17-1.7	1.7-4.8	1.7-10	1.7-10 / 1.7-8.7*	4.3-17.4	6.1-24	6.1-30 / 4.3-13*	
	(kgf·cm)	(0.2-2)	(2-5.5)	(2-12)	(2-12) / (2-10)*	(5-20)	(7-28)	(7-35) / (5-15)*	
Torque Switching		Stepless Adjustment							
Unloaded Rotation Speed (r.p.m) ±10%	HI	990	980	900	1,500 / 2,200*	750	960	700 / 2,200*	
	LOW	650	680	590	1,000 / 1,500*	500	630	500 / 1,500*	
Screw Size (mm)	Small Size Screw	1.0-2.3	1.7-2.3	2.0-3.0	2.0-3.0 / 2.0-3.0	2.0-4.0	2.6-5.0	2.6-4.0	
	Tapping Screw	1.0-2.0	2.0-2.3	2.0-3.0	2.0-2.6 / 2.0-2.6	2.0-3.0	2.6-4.0	2.6-4.0	
Bit Type		Hios H4	Hios H4 or 1/4 HEX	Hios H4 or 5 HEX or 1/4 HEX	Hios H4 or 5 HEX or 1/4 HEX	Hios H5 or 5 HEX or 1/4 HEX	Hios H5 & 5 HEX or 1/4 HEX	Hios H5 & 5 HEX or 1/4 HEX※1	
Power Pack	T-30BL	○	○	—	—	—	—	—	
	T-70BL	○	○	○	○	○	○	○	
Accessories	Bit, 1 of each	Hios H4	+ #0(φ2×40mm) + #0(φ2.5×40mm)	+ #0(φ2.5×40mm) + #1(φ4×40mm)	+ #1(φ4×40mm) + #2(φ4×40mm)				
		Hios H5							
		1/4 HEX	—	+ #1(φ5×50mm) + #2(φ5×50mm) — (φ5×50mm)	+ #1(φ5×50mm) + #2(φ5×50mm) — (φ5×50mm)	+ #1(φ5×50mm) + #2(φ5×50mm) — (φ5×50mm)	+ #1(φ5×50mm) + #2(φ5×50mm) — (φ5×50mm)	+ #1(φ5×50mm) + #2(φ5×50mm) — (φ5×50mm)	
	Spring		yellow	—	—	—	—	—	
	Cord Length		2m (5P) ESD Design	1.5m (5P)	1.5m (5P)	1.5m (5P)	1.5m (5P)	2m (5P)	2m (5P)
	Hexagonal L-shaped wrench		—	—	5mm, 1piece	5mm, 1piece	5mm, 1piece	5mm, 1piece	5mm, 1piece

*1 Only 1/4 HEX is available for BL-7000HT.



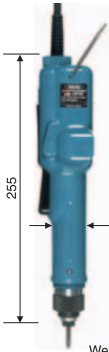
Transformer-less AC type

Plugs directly into an AC power point

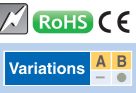
VB Series

Lever start type

VB-1510

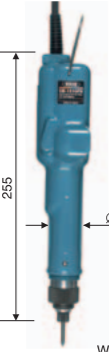


Weight: 526g

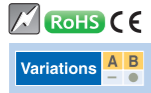


Push-to start type

VB-1510PS



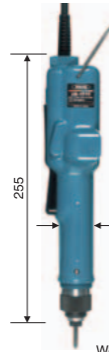
Weight: 526g



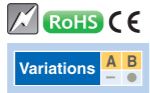
High speed type

Lever start type

VB-1510-18

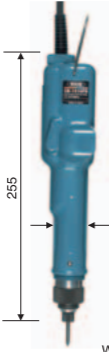


Weight: 526g

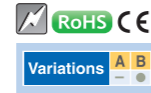


Push-to start type

VB-1510PS-18



Weight: 526g

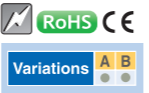


Lever start type

VB-1820
VB-3012



Weight: 750g

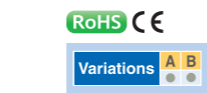


Push-to start type

VB-1820PS
VB-3012PS



Weight: 750g



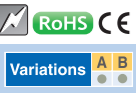
Unit: mm

Lever start type

VB-4504



Weight: 750g

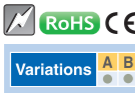


Push-to start type

VB-4504PS

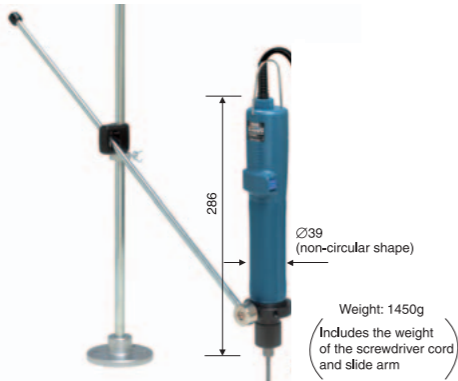


Weight: 750g

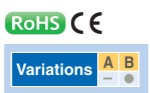


Push-to start type (100V only)

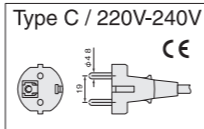
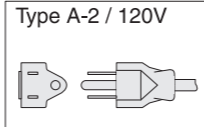
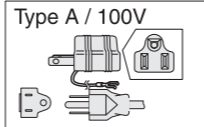
VB-4504PS
(with shockless stand)



Weight: 1450g
(Includes the weight of the screwdriver cord and slide arm)



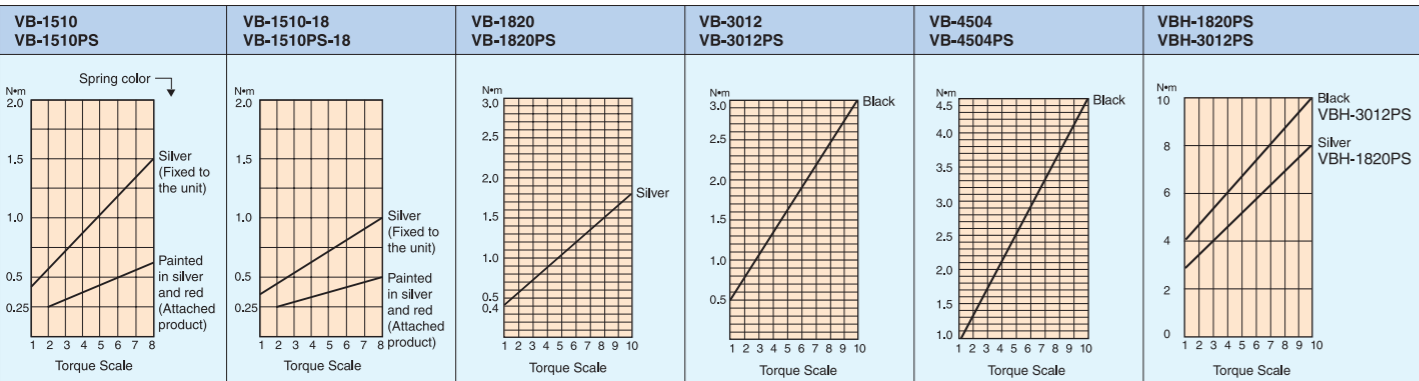
● Plug



●The VB-4504 can be used with 120V and 220-240V.

●See p.10 for specifications for the VB-4504PS (100V) shockless stand.

●Output torque guide (during HI input)



Variation chart

A

Q

B

OPC

Suction

Screwdriver
for screw
counter

* Refer to p9 for screw counters
* The suction attachment sold separately.

DXF File



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

*Special software is required to view DXF files.

[Go to Electric Driver](#) [DC Driver](#) [DXF File](#)

[www.hios.com](#)

(NEW)

Hammerhead shape/ultrahigh torque

VBH Series (with shockless stand)

Push-to start type

VBH-1820PS
VBH-3012PS

Variations A B

RoHS CE



Ideal for working with products requiring high torque levels.

- High torque screw applications that were previously only possible with air-powered screwdrivers can now be performed with a brushless screwdriver.
- Tightening to the same torque level can now be done reliably.
- Recoils when tightening the screws are absorbed by the shockless stand to reduce operator fatigue.
- Features a light action push trigger for improved usability.

■ Specifications

Model	VBH-1820PS	VBH-3012PS
Control torque range N·m (kgf·cm)	3.0~8.0 (30~80)	4.0~10.0 (40~100)
Unloaded Rotation speed (r.p.m) ±10%	470	270
Screw Size (mm)	5.0~6.0	5.0~6.0
Dimensions (mm)	Grip Max Ø41, Min Ø39 (non-circular) Length 366	Max Ø41, Min Ø39 (non-circular) 366
Weight (kg)	1.9kg (includes the screwdriver cord and slide arm)	
Bit Type	1/4 HEX	
AC Cord Length (m)	3m	
Accessories	3 Hollow set screws (M4 x 6mm) 1 hexagonal L-shaped wrench (width between flats 2mm)	

■ Shockless stand specifications

Length of slide arm	Usable slide range	Brace height	Stand		
			Stand height	Mounting bolt hole diameter	Mounting bolt hole spacing
530	475	570	8	6	52 (Equilateral triangle, length of 1 side)

●Please inquire about purchases of VBH Series products.

■ Specifications

Lever start type Model		VB-1510	VB-1510-18	VB-1820	VB-3012	VB-4504
Push-to start type Model		VB-1510PS	VB-1510PS-18	VB-1820PS	VB-3012PS	VB-4504PS
Power Input / Power consumptin (W)	AC 100V ±5%	Approx. 20W	Approx. 20W	Approx. 40W	Approx. 40W	Approx. 40W
	AC 120V ±5%	Approx. 20W	Approx. 20W	Approx. 40W	Approx. 40W	Approx. 40W
	AC 220-240V ±5%	Approx. 25W	Approx. 25W	Approx. 32W	Approx. 32W	Approx. 32W
	AC 220-240V ±5%	Approx. 25W	Approx. 25W	Approx. 32W	Approx. 32W	Approx. 32W
Output Torque Range	N·m	0.25-1.5	0.2-1.0	0.4-1.8	0.5-3	1-4.5
	lbf·in (kgf·cm)	2.2-13 (2.5-15)	2.2-10 (2-10)	3.5-16 (4-18)	4.3-26 (5-30)	8.7-39 (10-45)
Torque Switching		Stepless Adjustment				
Unloaded Rotation Speed (r.p.m) ±10%		970	1,800	2,000	1,200	400
Screw Size (mm)	Small Size Screw	2.0-4.0	2.0-4.0	2.6-4.0	3.0-5.0	3.0-5.0
	Tapping Screw	2.0-3.0	2.0-3.0	2.6-3.0	3.0-4.0	3.0-4.0
Bit Type		Hios 4 or 5 HEX or 1/4 HEX	Hios 4 or 5 HEX or 1/4 HEX	Hios 5 & 5 HEX or 1/4 HEX	Hios 5 & 5 HEX or 1/4 HEX	1/4 HEX
AC Cord Length (m)		3m	3m	3m	3m	3m
Accessories	Bit, ※ 1 of each	Hios H4	+ #1 (φ 4×40mm) + #2 (φ 4×40mm)	—	—	—
		Hios H5	—	+ #1 (φ 5×60mm) + #2 (φ 5×60mm)	+ #1 (φ 5×60mm) + #2 (φ 5×60mm)	—
		1/4 HEX	+ #1 (φ 5×50mm) + #2 (φ 5×50mm) — (φ 5×50mm)	+ #1 (φ 5×50mm) + #2 (φ 5×50mm) — (φ 5×50mm)	+ #1 (φ 5×50mm) + #2 (φ 5×50mm) — (φ 5×50mm)	+ #1 (φ 5×50mm) + #2 (φ 5×50mm) — (φ 5×50mm)
	Screw for adjustment		—	—	M2.6 (panhead screw)	M2.6 (panhead screw)
	3PIN to 2PIN power cable adaptor is attached		1 piece	1 piece	1 piece	1 piece

Real-Time OK/Error Detecting Screwdriver

PG Brushless

All fastening operations are monitored and checked with the criteria which value is saved in the PG system. The problems in fastening operations such us insufficient torque, wrong thread joint and screw going askew are monitored and prevented from going through the production line. PG Brushless drivers which has data collecting function are a part of the "New Fastening System" that meets the demand of modern era where the zero defects control is required.

- Instantly determines if a screw passes or fails (OK/NG). (Items checked: torque and time)
- All items can be checked at the same time as the operation is completed.
- Torque can be monitored for each tightening procedure.
- Can be connected to a PC for data recording.
- Job data can be checked at a glance.



Setting the Pass/Fail values

Screw tightening quality can be controlled by setting the checking criteria.

[Teaching]

The checking criteria (learned values) are set by conducting an actual screw tightening procedure, the torque value, minimum work time (Min), maximum work time (Max) are then remembered.

[Percentage Setting]

Range selection ± (2%, 5%, 10%, 20%)

The acceptable range of passing values for torque, work time minimum and work time maximum can be set individually.



All data is saved as Job is done

By managing data, it is possible to verify past work details.

[Data display]

Measurement data can be displayed in Excel's numerical display. Graphs are also generated automatically. We can also develop customized programs to meet the current needs and the current work environment of the customer. Additional extension features are possible id used with a PLC.

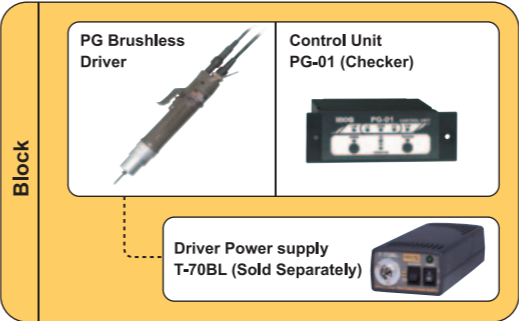
Indications during every tightening procedure

OK/NG results are confirmed with an LED and buzzer while work is being done.

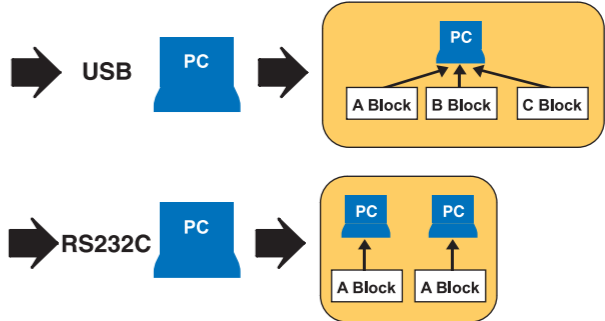
OK/NG is displayed on the PC and measurement values are displayed in the datasheet.

Pass-guard System Setup and Connections

■ Setup



■ Connections



Options

- It is possible to use Ethernet connections to manage multiple PG drivers together through a PC. (Software compatible with the communications specifications is required)
- Models with LAN output are available. Contact Hios for more information.

PG Brushless driver

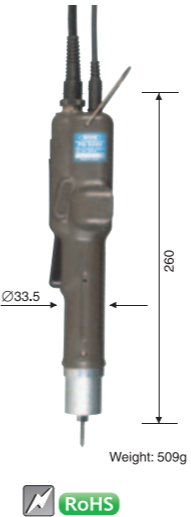
Lever start type

PG-3000



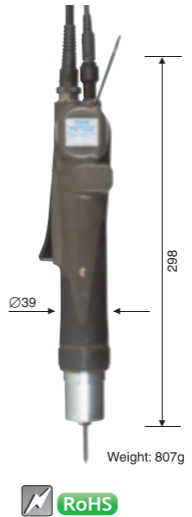
Lever start type

PG-5000



Lever start type

PG-7000



■ Specifications

Model		PG-3000	PG-5000	PG-7000
Output Torque Range	N·m	0.2-0.55	0.4-1.2	0.7-2.8
	lbf·in	1.7-4.8	3.5-10	6.1-24
	(kgf·cm)	(2-5.5)	(4-12)	(7-28)
Torque Switching		Stepless Adjustment		
Unloaded Rotation Speed (r.p.m) ±10%	High	980	900	960
	Low	680	590	630
Screw Size (mm)	Small Size 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
Bit Type		Hios 4	Hios 4	Hios 5 or 1/4HEX
Driver cord length / Sensor cord length (m)		2m(6P) / 2m	2m(6P) / 2m	2m(6P) / 2m
Included accessories		Hios bit, Sampling Demo Software (Windows XP Excel), RS232C cable, USB cable, AC adapter (AC100-240V compatible)		

*PG Drivers are available only lever-start type

Driver Power Supply T-70BL (Sold separately)

■ Specifications

Model	T-70BL (Supports 1 driver)
Input voltage	AC100V-240V (47-63 Hz)
Power consumption	70W
Secondary output	2 step HI / LOW
External Dimensions (mm)	88 x 210 x 52 (H) mm
Weight (g)	830g
Power cord length (m)	1.8m (Insulated)
Accessories	Mounting brackets (2), Mounting screws (4)

Control Unit PG-01(checker)

■ Specifications

Model		PG-01
RS232C Communication	Communication speed	4800BPS
	Start Bit	1 Bit
	Stop Bit	1 Bit
	Data	8 Bit
	Data format	ASCII
External Dimensions (mm)		<p>*Dimensions do not include protrusions</p>
Weight (g)		520g
AC Adaptor		Input : AC100V-240V, Output : DC12V (50 / 60 Hz)

■ I/O input/output connector

Pin No.	Output Signal	Description
13	L.NG (Fail)	Torque is below the LOW GOOD value (L.G)
14	L.G (Pass)	Torque is within the allowed percentage range of the LOW GOOD value
15	GOOD (Pass)	Within the HI and LOW values
16	H.G (Pass)	Torque is within the allowed percentage range of the HI GOOD value
17	H.NG (Fail)	Torque is above the HI GOOD value (H.G)
18	COM GND	—

With counting functions to ensure that all screws are tightened!

Power supply with screw counter

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

Main functions

Buzzer to indicate screw tightening complete

A buzzer will sound when the final screw has been tightened to allow a check of complete screw tightening.

Auto reset function

The count down number is automatically reset after all screws have been tightened so that work can start on the next job immediately. The screwdriver will not be operable until the "next work set" confirmation SET signal is input.

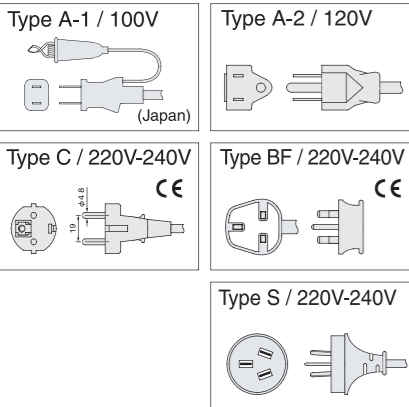
Count timer function

Prevents confirmation tightening, supplemental tightening and secondary tightening from being counted.

Normal power mode

In normal power mode the count function is disabled.

●Plug



NEW Multi input (AC100V to 240V)

BLOP-STC3 (BL-OPC screwdriver single power point)

The power supply has been made smaller and lighter than the previous model, with touch panel controls to prevent operating errors.



Model		BLOP-STC3
Primary side	Power input	AC 100V-240V
	Fuse rating	3A / 250V(with spare fuses)
Power consumption (W)		75W output with DC31V input
Secondary side	Output voltage	HI: DC31V±5% (with overload protection) LOW: DC20V±5%
	External dimensions (mm)	127×208×76(H)mm
Weight (kg)		1.8kg
Power cord length		1.8m
Accessories		8 crimp terminals

AC100V Only

VZOP-STC (VB-OPC screwdriver or VBH screwdriver single power point)



Model		VZOP-STC
Primary side	Power input	AC100V ±5% 50/60 Hz
	Fuse rating	6A / 250V(with spare fuses)
Power consumption (W)		2W / load free
External dimensions (mm)		160×175×84(H) mm
Weight (kg)		1.5kg
Power cord length		1.8m
Accessories		8 crimp terminals, 1 minus screwdriver

Part names and functions

●BLOP-STC3 (Front panel)



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

Function	Operation mode, operation time, buzzer settings etc
F1	Set number of screws to be tightened (01 to 99) COUNT NUMBER
F2	Set count timer (0.0 to 0.99 seconds) COUNT TIMER (CN-T)
F3	Set work set timer (0.0 to 3.9 seconds) WORK SET TIMER (WS-T)
	Set work reset timer (0.0 to 3.9 seconds) WORK RESET TIMER (WR-T)
	Set reverse count timer (0.1 to 1.0 seconds) REVERSE COUNT TIMER (RCN-T)

■Metal connector

Connects to the BL-OPC screwdriver

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

●BLOP-STC3 (Rear panel)



■Terminal block

Terminal	Function
A	COMP
B	RESET
C	SET
D	GND
E	+DC24V
F	VALVE
G	BZ
H	ER BZ

Variations for a range of applications

Variations

Anti-static electricity features



BL-ESD

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

●Surface resistance: 10⁴Ω

Two-way start type

BL-3000ESD
BL-5000ESD
BL-5000ESD-15
BL-5000ESD-20
BL-5020ESD
BL-7000ESD
BL-7000ESD-20

Suction, anti-static electricity features



BLQ

Lever start type

BLQ-2000

Two-way start type

BLQ-3000
BLQ-5000
BLQ-5000-15
BLQ-5000-20
BLQ-7000
BLQ-7000-20

Clean room, anti-static electricity features



BLQ-CR-ESD

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

●Surface resistance: 10⁴Ω

●Cleanliness class 100

Lever start type

BLQ-2000CR

Two-way start type

BLQ-3000CR-ESD
BLQ-5000CR-ESD
BLQ-5000CR-ESD-15
BLQ-5000CR-ESD-20
BLQ-7000CR-ESD
BLQ-7000CR-ESD-20

Clean room



BLQ-CR

Lever start type

BLQ-2000CR

Two-way start type

BLQ-3000CR
BLQ-5000CR
BLQ-5000CR-15
BLQ-5000CR-20
BLQ-7000CR
BLQ-7000CR-20

Screwdriver for screw counter

Operates with the screw counter BLOP-STC3 to ensure that all screws are tightened. The screwdriver can be operated in ordinary and reverse directions as well as providing torque increase signals (after screw tightening is complete).

Compatible with BLOP-STC3



BL-OPC

Lever start type

BL-2000-OPC



BL-OPC

Two-way start type

BL-3000-OPC
BL-5000-OPC
BL-5020-OPC
BL-7000-OPC

Compatible with VZOP-STC



VB-OPC

Lever start type

VB-1510-OPC
VB-1510-18-OPC
VB-1820-OPC
VB-3012-OPC



VB-OPC

Push-to start type

VB-1510PS-OPC
VB-1510PS-18-OPC
VB-1820PS-OPC
VB-3012PS-OPC
VB-4504PS-OPC

VBH-OPC

Push-to start type

VBH-1820PS-OPC
VBH-3012PS-OPC

Digital Torque Meter Series

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

HP

HP-10
HP-100



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

Model		HP-10	HP-100
Peak measuring range	N • m	0.015 - 1.000	0.15 - 10.00
	lbf • in	0.15 - 9.00	1.5 - 90.0
	(kgf • cm)	(0.15 - 10.00)	(1.5 - 100.0)
Accuracy		Up to ± 0.5% (F.S.)	
Measuring modes		track, peak, first peak	
Dimensions (mm)		230 × 124 × 65.2 (H)	
Weight		1.8kg	
Battery pack (charging time)		1.2V NiMH cells 1,000mA (6 hours)	
Continuous running time on a full charge		8 hours	
Battery life		Approx. 300 charges	
Exclusive battery charger		AC 100V-240V input (50 or 60Hz)	
		DC 7.3V-8V output 0.5 A	
Accessories		See p. 18	

HDP

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



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

Model		HDP-5	HDP-50
Peak measuring range	N • m	0.015 - 0.500	0.15 - 5.00
	lbf • in	0.15 - 4.40	1.5 - 44.0
	(kgf • cm)	(0.15 - 5.00)	(1.5 - 50.0)
Accuracy		Up to ± 0.5% (F.S.)	
Measuring modes		track, peak	
Dimensions (mm)	Display unit	125 × 95.6 × 42(H)	
	Detector	104(L) × Ø21	
	Detector bit socket	Hios 4 or 1/4 Hex	
Weight	Display unit	780g	
	Detector	68g	
Detector cord		1.7m (No.: DPC-0506)	
Battery pack (charging time)		1.2V NiMH cells 1,000mA (6 hours)	
Continuous running time on a full charge		8 hours	
Battery life		Approx. 300 charges	
Exclusive battery charger		AC 100V-240V input (50 or 60Hz)	
		DC7.3V-8V output 0.5A	
Accessories		See p. 18	

HM

HM-10
HM-100



Use for control of torque of automatic drivers.

Model		HM-10	HM-100
Peak measuring range	N • m	0.015 - 1.000	0.15 - 10.00
	lbf • in	0.15 - 9.0	1.5 - 90.0
	(kgf • cm)	(0.15 - 10.0)	(1.5 - 100.0)
Accuracy		Up to ± 0.5% (F.S.)	
Measuring modes		track, peak	
Dimensions (mm)		165 × 95 × 55(H)	
Weight		1.0kg	
Detector cord		1.7m (No.: DPC-0506)	
Battery pack (charging time)		1.2V Nicd cell (8 hours)	
Continuous running time on a full charge		12 hours	
Battery life		Approx. 300 charges	
Exclusive battery charger		AC 100V, 120V or 220V-240V input	
		DC7.2V output 120mA	
Accessories		See p. 18	

HIT

HIT-200
HIT-500
HIT-2000



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

Model		HIT-200	HIT-500	HIT-2000
Peak measuring range	N • m	0.15 - 18.00	1.5 - 50.0	25.0 - 180.0
	lbf • in	1.5 - 160.0	15 - 440	250 - 1600
	(kgf • cm)	(1.5 - 180.0)	(15 - 500)	(250 - 1800)
Accuracy		Up to ± 1% (F.S.)		
Measuring modes		peak, track, first peak		
Dimensions of display (mm)		165 × 95 × 55(H)		
Weight	Display unit	1.0kg		
	Detector	0.85kg	1.65kg	1.65kg
Socket dimensions		9.5sq mm	12.7sq mm	12.7sq mm
Detector cord		1.7m (No.: DPC-0506)		
Battery pack (charging time)		1.2V Nicd cell (8 hours)		
Continuous running time on a full charge		12 hours		
Battery life		Approx. 300 charges		
Exclusive battery charger		AC 100V, 120V or 220V-240V input		
		DC7.2V output 120mA		

●HP Standard Accessories

Market Areas	Model	Fidaptor with Safety Guard	Driver Shaft	Fidaptor Buffer Spring	Grease	Exclusive Battery Charger
China Japan Korea Taiwan Hong Kong Singapore	HP-10	Hios shank Ø4 Measuring range: 0.15-0.6 N • m (Yellow Spring) 1 piece Part No.TF4G-Z				Part No. TCH-MULTI 1 piece (A plug) 100V-240V
	HP-100	Hios shank Ø5 Measuring range: 0.5-3 N • m (Black Spring) 1 piece Part No.TF5G-Z				Part No. TCH-EU 1 piece (C plug) 100V-240V
Europe U.S.A. Canada U.K. Australia	HP-10	Hex. shank (convertible shaft) Measuring range: 0.15-0.6 N • m (Yellow Spring) 1 piece 5 mm subtense (upper) 6.35 mm subtense (Lower) Part No.TF6SG-Z			Grease 1 piece Part No. TF-G3	*Attached one type based on countries.
	HP-100	Hex. shank (convertible shaft) Measuring range: 0.5-3 N • m (Black Spring) 1 piece 5 mm subtense (upper) 6.35 mm subtense (Lower) Part No.TF6XG-Z				Calibration Sheet (quantity: 3)

●Fidaptor

An adaptor that checks the torque value preset on an electric driver and absorbs inertia created by high speed rotation, giving nearly the same torque effect as an actual tap screw.

●Threaded shaft

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

●Optional Fidaptors

Model	Measuring range	Bit type	Applicable drivers
TF4S-Z	less than 0.25 N • m	Hios shank Ø4	BL-2000, BL-3000, CL-2000, CL-3000, CL-4000, SS-2000, SS-3000, SS-4000 screwdriver
TF6U-Z	3 - 9 N • m	6.35 mm hex shank	Driver model 6.35mm hex shank

●HDP Standard Accessories

Market Areas	Model	Bit	Detector cord	Auxiliary Arm	Exclusive Battery Charger	*Attached one type based on countries.
China Japan Korea Taiwan Hong Kong Singapore	HDP-5	Hios shank Ø4 +Bit #0 × 40 mm #1 × 40 mm #2 × 40 mm 1 piece each	1 piece Part No. DPC-0506	1 piece	Part No. TCH-MULTI 1piece (A plug) 100V-240V	Part No. TCH-EU 1piece (C plug) 100V-240V
	HDP-50	Hios shank Ø5 +Bit #0 × 60 mm #1 × 60 mm #2 × 60 mm 1 piece each			Calibration Sheet (quantity: 3)	
Europe U.S.A. Canada U.K. Australia	HDP-5	6.35 mm hex shank +Bit #1 × 50 mm #2 × 50 mm 1 piece each	1 piece		220Volt Adaptor Plug*	*Users in Japan, South Korea, Taiwan, Mexico, the United States and Canada do not need an adaptor plug.
	HDP-50	6.35 mm hex shank +Bit #1 × 50 mm #2 × 50 mm 1 piece each				

●Accessories with HM series

model: TFM26-Z	model: TFM40-Z	model: TFM20-Z

Select the Fidaptor model that fits the measurement needs of your automatic operation screwdriver.

Accessories to standard Fidaptors

HM-10
Phillips head #1 bit
measuring range:
0.15-0.6 N • m
one yellow spring
model: TFM26-Z

HM-100
Phillips head #2 bit
measuring range:
0.5-3 N • m
one black spring
model: TFM40-Z

Optional Fidaptor

Phillips head #0 bit
measuring range: 0.25 N • m
(for measurement)
one red spring
model: TFM20-Z

HM and HIT standard accessories

(Power units and countries where they can be used)

TCH-100N
100V
Japan



TCH-120N
120V
Korea
Taiwan
U.S.A.
Canada



TCH-230G
220V-240V
Hong Kong
Europe
China



TCH-230B
220V-240V
Singapore
U.K.
Australia

































Free from picking up the screws!

Peripheral equipment

Automatic screw feeder

Model selection chart

Automatic screw feeder models (with replaceable rail)	Screw size										Screw transport type	Model features
	M1.0	M1.2	M1.4	M1.7	M2.0	M2.3	M2.6	M3.0	M4.0	M5.0		
HSF Series 											Horizontal transport type	● Slim and compact body ● Can be used with a range of screw sizes
Neji Taro II HS Series 											Horizontal transport type	● Can be used with two screw sizes
Neji Taro III HS III Series 											Horizontal transport type	● Can be used with eight screw sizes
Automatic Neji Taro II HS-RB Series 											Horizontal transport type	● Can be used with suction tip
Automatic Neji Taro III HS III-RB Series 											Horizontal transport type	● Can be used with suction tip

Neji Taro

Speeding up your assembly lines

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



Neji Taro II

HS Series

RoHS CE

HS-40 [M4.0]

HS-50 [M5.0]



Neji Taro III

HS III Series

RoHS CE

HS III-10C [M1.0]

HS III-20 [M2.0]

HS III-12C [M1.2]

HS III-23 [M2.3]

HS III-14C [M1.4]

HS III-26 [M2.6]

HS III-17C [M1.7]

HS III-30 [M3.0]

Specifications

Power (AC Adapter)	Power input	AC:100V±5% 50/60Hz
	Power output	DC:12V 500mA
Dimensions (mm)/weight (kg)		130(W)×215(D)×136(H)/approximately 3.2kg (including the rail)
Screw capacity		150cc
Protection circuits		Motor overload stop function

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

Specifications

Power (AC Adapter)	Power input	AC:100V±5% 50/60Hz
	Power output	DC:12V 500mA
Dimensions (mm)/weight (kg)		123(W)×181(D)×145(H)/approximately 3kg (including the rail)
Screw capacity		80cc
Protection circuits		Motor overload stop function

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

Number of screws that can be supplied

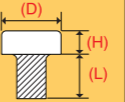
Model		Neji Taro II HS-450		Neji Taro III HS III-300							
Model number		HS-40	HS-50	HS III-10C	HS III-12C	HS III-14C	HS III-17C	HS III-20	HS III-23	HS III-26	HS III-30
Number of screws that can be supplied	Screw size	M4.0	M5.0	M1.0	M1.2	M1.4	M1.7	M2.0	M2.3	M2.6	M3.0
	Head diameter (D)	4.3~10.7	5.3~10.7	1.2~9	1.4~9	1.6~9	1.9~9	2.2~9	2.5~9	2.8~9	3.2~9
	Head thickness (H)	More than 0.5	More than 0.5	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35	More than 0.35
	Shaft length (L)	5~18	6~18	1.6~20	1.8~20	2.0~20	2.3~20	2.6~20	2.9~20	3.2~20	3.6~20

Replacement rail model number

Model		Neji Taro II HS-450		Neji Taro III HS III-300							
Rail model number		R-40	R-50	SR-10	SR-12	SR-14	SR-17	SR-20	SR-23	SR-26	SR-30
Screw size		M4.0	M5.0	M1.0	M1.2	M1.4	M1.7	M2.0	M2.3	M2.6	M3.0

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

Number of screws that can be supplied

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

Dimensions provided in specification charts

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

DXF File



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

*Special software is required to view DXF files.

[Go to Peripheral Units](#)

[Screw Feeders](#)

[DXF File](#)

[www.hios.com](#)

NEW HSF

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

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



HSF Series

RoHS CE

HSF-10 [M1.0]

HSF-20 [M2.0]

HSF-12 [M1.2]

HSF-26 [M2.6]

HSF-14 [M1.4]

HSF-30 [M3.0]

HSF-17 [M1.7]

Specifications

Power (AC Adapter)	Power input	AC:100V~240V 50/60Hz
	Power output	DC:12V 1A
Dimensions (mm)/weight (kg)		55(W)×205(D)×14.25(H)/approximately 2.4kg (including the rail)
Screw capacity		40cc

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

Number of screws that can be supplied

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

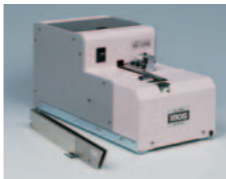
Replacement rail model number

Model		HSF-01					HSF-02	
Rail model number		WR-10	WR-12	WR-14	WR-17	WR-20	WR-26	WR-30
Screw size		M1.0	M1.2	M1.4	M1.7	M2.0	M2.6	M3.0

Neji Taro (for automatic line and vacuum pick up)

Speeding up your automated lines

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



Neji Taro II

HS-RB Series

RoHS CE

HS-40RB [M4.0]

HS-50RB [M5.0]



Neji Taro III

HS III-RB Series

RoHS CE

HS III-14CRB [M1.4]

HS III-20RB [M2.0]

HS III-17CRB [M1.7]

HS III-23RB [M2.3]

HS III-26RB [M2.6]

HS III-30RB [M3.0]

Specifications

Power (AC Adapter)	Power input	AC:100V±5% 50/60Hz
	Power output	DC:12V 500mA
Dimensions (mm)/weight (kg)		134(W)×275(D)×136(H)/approximately 4.2kg (including the rail)
Screw capacity		150cc
Protection circuits		Motor overload stop function

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

Specifications

Power (AC Adapter)	Power input	AC:100V±5% 50/60Hz
	Power output	DC:12V 500mA
Dimensions (mm)/weight (kg)		124(W)×181(D)×144(H)/approximately 3kg (including the rail)
Screw capacity		80cc
Protection circuits		Motor overload stop function

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

Number of screws that can be supplied

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

Replacement rail model number

Model		Neji Taro II HS-450RB		Neji Taro III HS III-300RB							
Rail model number		R-40RB	R-50RB	SR-14RB	SR-17RB	SR-20RB	SR-23RB	SR-26RB	SR-30RB		
Screw size		M4.0	M5.0	M1.4	M1.7	M2.0	M2.3	M2.6	M3.0		

Mouthpieces

●Table of Mouthpieces and Fasteners (Mini Type) Standard parts are of BS only.

F3

Mouthpiece 18mm

(Driver model)

BL-2000, BL-3000
BL-5000

Diagram of Mouthpiece

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

●Mouthpieces are supplied in packs of three.

Bit

●H4 40mm (Overall length)

(Driver model)

BL-5000

●H4 60mm (Overall length)

(Driver model)

BL-2000
BL-3000

●Table of Bits and Fasteners

Head recess	Screw size	Adaptive screwdriver bit	Order code
JIS +	M2.0-M2.6	BP-H4-#1-3.0×40 (or 60mm)	BP4130040(60)
	M3.0	BP-H4-#2-4.0×40 (or 60mm)	BP4240040(60)
JCIS +	M1.4 type 1	BP-H4-#0-1.8×40 (S)	BP4018040(S)
	M1.4-M1.7	BP-H4-#0-2.0×40 (or 60mm)	BP4020040(60)
JCIS -	M2.0-M2.6	BP-H4-#0-2.5×40 (or 60mm)	BP4025040(60)
	M1.2	BS-H4-2.0×40 (or 60mm)	BS420040(60)
	M1.4	BS-H4-2.5×40 (or 60mm)	BS425040(60)
	M1.7-M2.0	BS-H4-3.0×40 (or 60mm)	BS430040(60)
	M2.3-M3.0	BS-H4-4.0×40 (or 60mm)	BS440040(60)

• (60) on the list means 60mm. Final number (40 or 60) of order code depends on entire length of driver bit.

• Please contact us for the special order item (S) 1.8×4.0.

●Table of Mouthpieces and Fasteners (Standard Type) Standard parts are of BS only.

F6

Standard Type Mouthpiece

(Driver model)

BL-7000
VB-1820, VB-1820PS
VB-3012, VB-3012PS

Diagram A

Diagram B

Dia-gram	Order No. (Standard)	Standard Mouthpiece Dimensions (mm)				
		D	D1	d	d1	d2
B	F6-00	8.0				
	F6-01	4.6	7.0	3.5	3.6	5.5
A	F6-02	5.1	7.0	3.5	4.1	5.5
	F6-03	5.8	7.0	3.5	4.5	5.5
	F6-04	7.0		5.5	5.5	
B	F6-05	7.5		5.5	6.0	
	F6-06	8.5		5.5	7.0	
	F6-09	6.5	7.0	3.5	5.2	5.5
A	F6-10	14.0				
	F6-11	7.7		5.5	6.3	
B	F6-13	9.7		5.5	8.3	
	F6-16	9.4		5.5	8.0	
	F6-22	9.7		7.5	8.3	

Type of screw head configuration	
JIS Phillips head	JIS Slotted head
Small Screw	Small Screw
User-finished part	User-finished part
Pan, Round M2.0	Pan, Round M2.0
Pan, Round M2.3/Countersunk, Oval countersunk M2.0	Pan, Round M2.3
Pan, Round M2.6/Binding, Truss M2.0	Binding, Truss M2.0
Pan, Round M3.0/Binding M2.6	Pan, Round M3.0/Binding M2.6
Countersunk, Oval countersunk M3.0	Truss M2.6
Pan, Round M4.0/Truss M3.0	Pan, Round M4.0/Truss M3.0
Countersunk, Oval countersunk M2.6	Truss M2.3
User-finished part	User-finished part
Binding M3.0	Binding M3.0
Binding M4.0	
Countersunk, Oval countersunk M4.0	
	Binding M4.0

●Mouthpieces are supplied in packs of three.

Bit

●H5 80mm (Overall length)

(Driver model) BL-7000

●Table of Bits and Fasteners

Head recess	Screw size	Adaptive screwdriver bit	Order code
JIS +	M2.0—M2.6	BP—H5 #1—3.0×80	BP5130080
	M3.0—M5.0	BP—H5 #2—5.0×80	BP5250080

(Use + #1 for Truss M3.0)

Head recess	Screw size	Adaptive screwdriver bit	Order code
JIS -	M2.0—M2.3	BS—H5—3.0×80	BS530080
	M2.6—M4.0	BS—H5—5.0×80	BS550080

(Use H5 7.0 x 80 mm for Binding M4.0)

●H5 100mm (Overall length)

(Driver model) VB-1820
VB-1820PS
VB-3012
VB-3012PS

Head recess	Screw size	Adaptive screwdriver bit	Order code
JIS +	M2.0—M2.6	BP—H5 #1—3.0×100	BP5130100
	M3.0—M5.0	BP—H5 #2—5.0×100	BP5250100
JIS -	M3.0—M5.0	BP—H5 5.0×100	BS550100

Please contact Hios concerning model BLQ-7000.

●Blank Mouthpiece Order Code No.

Model	Order Code	Size (mm)	Package
Blank Mouthpiece	F3-00	Ø8×18	3 pieces/1 PACK
	F6-00	Ø8×31	3 pieces/1 PACK
	F6-10	Ø14.0×31	3 pieces/1 PACK

Bit Series

(Driver model)



H4(Ø4) [BL-2000, BL-3000, BL-5000 BL-5000-15, BL-5000-20 VB-1510, VB-1510PS, VB-1510-18 VB-1510-18PS

H5(Ø5) [BL-5020, BL-7000, BL-7000-20 VB-1820, VB-1820PS, VB-3012 VB-3012PS

* Please address inquiries to your Hios dealer for hexagonal bit.

Bit for Cross-Slotted Screws BP					Type (Dia. at base mm)	Specifications			Overall Length (mm) (standard type)	Shape
					Point size No.	Shaft dia. (mm)	Shape of shaft type			
◇ Straight (A)		H4 (Ø4)	#00	1.5	B	40, 60, 80	◆			
			#0	1.2	B	40				
				1.5, 1.7	B	40, 60, 80				
				1.8	B	60				
◆ Stepped (B)			#1	2.0, 2.5	B	40, 60, 80, 100, 120	◇			
				3.0	B	40, 60, 80, 100, 120				
◇ Stepped (B)			H5 (Ø5)	4.0	A	40, 60, 80, 100, 120, 150, 180, 200	◇			
				#2	4.0	A		40, 60, 80, 100, 120, 150		
				#0	2.0	B		60		
					2.5	B		60, 80, 100, 120		
					3.0	B		40, 60, 80, 100, 120		
				5.0	A	40, 60, 80, 100, 120, 150, 180, 200, 250, 300				
		#2	5.0	A	40, 60, 80, 100, 120, 150, 180, 200, 250, 300, 400	◇				
			#3	7.0	B		60, 80, 100, 120			
					*Relationship between point size No. and shape of shaft size #00→M0.8—M1.0 #0→M1.4—M2.6 #1→M2.0—M2.6 #2→M3.0—M5.0 #3→M6.0—M8.0					
					*Only the stepped part of H5 + #1 3.0×4.0 is 15mm in length.					

Bit for Slotted Screws BS		Type (Dia. at base mm)	Specifications			Overall Length (mm) (standard type)	Shape	
			Blade width (mm)	Blade thickness (mm)	Shape of shaft type			
(Shape of shaft)		H4 (Ø4)	1.1	0.28	B	60, 80	◆	
			1.3	0.28	B	60, 80		
			1.5	0.3	B	40, 60, 80		
			1.7	0.3	B	40, 60, 80		
1.8	0.4		B	60, 80				
2.0	0.4		B	40, 60, 80				
◆ Stepped (B)			2.3	0.4	B	60, 80	◇	
			2.5	0.4	B	40, 60, 80		
◇ Stepped (B)			2.8	0.4	B	60, 80		
			3.0	0.4	B	40, 60, 80		
			4.0	0.6	A	40, 60, 80, 100		
			2.0	0.4	B	60		
			2.5	0.4	B	60		
			3.0	0.4	B	60, 80		
Dimension of stepped part	H4	H5	2.0	2.5	3.0	4.0	◆	
			(a) Blade Width	Refer to the left list.				
			(b) Length	20	25	30		30
*Only the stepped part of H5 + #1 3.0×4.0 is 15mm in length.								

Bit for Hexagonal Socket Head Screws BH ※1		Type (Dia. at base mm)	Specifications	Overall Length (mm) (standard type)
			Hex. across flat (mm)	
 (A) type		H4 (Ø4)	0.89, 1.5, 2.0, 3.0	60
			1.27	60, 100
			2.5	60, 100, 120
		H5 (Ø5)	1.27	70
			1.5, 3.0, 4.0, 6.0	70, 100
			2.0, 2.5, 5.0	70, 100, 120

Order codes

pp.7-8

Brushless screwdriver

■BL Series

Model	Order Code	Bit
BL-2000	BL-2000	H4
BL-3000	BL-3000	H4
	BL-3000X	1/4HEX
BL-5000	BL-5000	H4
	BL-5000X5	5HEX
	BL-5000X	1/4HEX
BL-5000-15	BL-5000-15	H4
	BL-5000X5-15	5HEX
	BL-5000X-15	1/4HEX
BL-5000-20	BL-5000-20	H4
	BL-5000X5-20	5HEX
	BL-5000X-20	1/4HEX
BL-5020	BL-5020	H5
	BL-5020X5	5HEX
	BL-5020X	1/4HEX
BL-7000	BL-7000	H5 & 5HEX
	BL-7000X	1/4HEX
BL-7000HT	BL-7000X-HT	1/4HEX
BL-7000-20	BL-7000-20	H5 & 5HEX
	BL-7000X-20	1/4HEX

Power supply for BL Series

■T-30BL

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

■T-70BL

Model	Order Code	Plug
T-70BL	T-70BL	A
	T-70BL-UL	A-2
	T-70BL-EU-HK	C
	T-70BL-UK-SP	BF
	T-70BL-CN	S

pp.9-10

Brushless screwdriver

■VB Series ●Plug: A Type (AC100V)

Model	Order Code	Bit
VB-1510	VB-1510	H4
	VB-1510X5	5HEX
VB-1510PS	VB-1510PS	H4
	VB-1510PSX5	5HEX
VB-1510-18	VB-1510-18	H4
	VB-1510X5-18	5HEX
VB-1510PS-18	VB-1510PS-18	H4
	VB-1510PSX5-18	5HEX
VB-1820	VB-1820	H5 & 5HEX
	VB-1820X	1/4HEX
VB-1820PS	VB-1820PS	H5 & 5HEX
	VB-1820PSX	1/4HEX
VB-3012	VB-3012	H5 & 5HEX
	VB-3012X	1/4HEX
VB-3012PS	VB-3012PS	H5 & 5HEX
	VB-3012PSX	1/4HEX
VB-4504PS*	VB-4504PSX	1/4HEX

*Shockless Stand Attached

pp.9-10

Brushless screwdriver

■VB Series ●Plug: A-2 Type (AC120V)

Model	Order Code	Bit
VB-1510	VB-1510-120	H4
	VB-1510X5-120	5HEX
	VB-1510X-120	1/4HEX
VB-1510PS	VB-1510PS-120	H4
	VB-1510PSX5-120	5HEX
	VB-1510PSX-120	1/4HEX
VB-1510-18	VB-1510-18-120	H4
	VB-1510X5-18-120	5HEX
	VB-1510PSX-18-120	1/4HEX
VB-1510PS-18	VB-1510PS-18-120	H4
	VB-1510PSX5-18-120	5HEX
	VB-1510PSX-18-120	1/4HEX
VB-1820	VB-1820-120	H5 & 5HEX
	VB-1820X-120	1/4HEXH
VB-1820PS	VB-1820PS-120	H5 & 5HEX
	VB-1820PSX-120	1/4HEX
VB-3012	VB-3012-120	H5 & 5HEX
	VB-3012X-120	1/4HEXH
VB-3012PS	VB-3012PS-120	5 & 5HEX
	VB-3012PSX-120	1/4HEX
VB-4504	VB-4504X-120	1/4HEX
VB-4504PS	VB-4504PSX-120	1/4HEX

■VB Series ●Plug: C Type (AC 220V)

Model	Order Code	Bit
VB-1510	VB-1510-B	H4
	VB-1510X5-B	5HEX
	VB-1510X-B	1/4HEX
VB-1510PS	VB-1510PS-B	H4
	VB-1510PSX5-B	5HEX
	VB-1510PSX-B	1/4HEX
VB-1510-18	VB-1510-18-B	H4
	VB-1510X5-18-B	5HEX
	VB-1510X-18-B	1/4HEX
VB-1510PS-18	VB-1510PS-18-B	H4
	VB-1510PSX5-18-B	5HEX
	VB-1510PSX-18-B	1/4HEX
VB-1820	VB-1820-B	H5 & 5HEX
	VB-1820X-B	1/4HEXH
VB-1820PS	VB-1820PS-B	H5 & 5HEX
	VB-1820PSX-B	1/4HEX
VB-3012	VB-3012-B	H5 & 5HEX
	VB-3012X-B	1/4HEXH
VB-3012PS	VB-3012PS-B	H5 & 5HEX
	VB-3012PSX-B	1/4HEX
VB-4504	VB-4504X-B	1/4HEX
VB-4504PS	VB-4504PSX-B	1/4HEX

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PG Brushless screwdriver

■PG Series (only Lever start type)

Model	Order Code	Bit
PG-3000	PG-3000	H4
PG-5000	PG-5000	H4
PG-7000	PG-7000	H5 & 5HEX
	PG-7000X	1/4HEX

■Control Unit PG-01

Model	Order Code	
PG-01	PG-01-E	

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Power supply with screw counter series

■BLOP-STC3

Model	Order Code	Plug
BLOP-STC3	BLOP-STC3	A-1
	BLOP-STC-3USA	A-2
	BLOP-STC-3EUHK	C
	BLOP-STC-3UKSP	BF
	BLOP-STC-3-CN	S

■VZOP-STC

Model	Order Code	Plug
VZOP-STC	VZOP-STC	A-1
	VZOP-STC-USA	A-2
	VZOP-STC-EUHK	C
	VZOP-STC-UKSP	BF
	VZOP-STC-CN	S

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Brushless screwdriver Variations

■BL-ESD Series

Model	Order Code	Bit
BL-3000ESD	BL-3000ESD	H4
	BL-3000X-ESD	1/4HEX
BL-5000ESD	BL-5000ESD	H4
	BL-5000X5-ESD	5HEX
	BL-5000X-ESD	1/4HEX
BL-5000ESD-15	BL-5000ESD-15	H4
	BL-5000X5-ESD-15	5HEX
	BL-5000X-ESD-15	1/4HEX
BL-5000ESD-20	BL-5000ESD-20	H4
	BL-5000X5-ESD-20	5HEX
	BL-5000X-ESD-20	1/4HEX
BL-5020ESD	BL-5020ESD	H5
	BL-5020X5-ESD	5HEX
	BL-5020X-ESD	1/4HEX
BL-7000ESD	BL-7000ESD	H5 & 5HEX
	BL-7000X-ESD	1/4HEX
BL-7000HTESD	BL-7000X-HT-ESD	1/4HEX
BL-7000ESD-20	BL-7000ESD-20	H5 & 5HEX
	BL-7000X-ESD-20	1/4HEX

■BLQ-CR-ESD Series

Model	Order Code	Bit
BLQ-2000CR-ESD	BLQ-2000CR	H4
BLQ-3000CR-ESD	BLQ-3000CR-ESD	H4
BLQ-5000CR-ESD	BLQ-5000CR-ESD	H4
BLQ-5000CR-ESD-15	BLQ-5000CR-ESD-15	H4
BLQ-7000CR-ESD	BLQ-7000CR-ESD	H5 & 5HEX

■BLQ Series

Model	Order Code	Bit
BLQ-2000	BLQ-2000	H4
	BLQ-2000-ESD	H4 ESD
BLQ-3000	BLQ-3000	H4
BLQ-5000	BLQ-5000	H4
BLQ-7000	BLQ-7000	H5 & 5HEX

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Brushless screwdriver Variations

■BLQ-CR Series

Model	Order Code	Bit
BLQ-2000CR	BLQ-2000CR	H4
BLQ-3000CR	BLQ-3000CR	H4
BLQ-5000CR	BLQ-5000CR	H4
BLQ-5000CR-15	BLQ-5000CR-15	H4
BLQ-7000CR	BLQ-7000CR	H5 & 5HEX

Screwdriver for screw counter

■BL-OPC Series

Model	Order Code	Bit
BL-2000-OPC	BL-2000-OPC	H4
BL-3000-OPC	BL-3000-OPC	H4
	BL-3000X-OPC	1/4HEX
BL-5000-OPC	BL-5000-OPC	H4
	BL-5000X5-OPC	5HEX
	BL-5000X-OPC	1/4HEX
BL-5000-15-OPC	BL-5000-15-OPC	H4
	BL-5000X5-15-OPC	5HEX
	BL-5000X-15-OPC	1/4HEX
BL-5000-20-OPC	BL-5000-20-OPC	H4
	BL-5000X5-20-OPC	5HEX
	BL-5000X-20-OPC	1/4HEX
BL-5020-OPC	BL-5020-OPC	H5
	BL-5020X5-OPC	5HEX
	BL-5020X-OPC	1/4HEX
BL-7000-OPC	BL-7000-OPC	H5 & 5HEX
	BL-7000X-OPC	1/4HEX
BL-7000HT-OPC	BL-7000HT-OPC	1/4HEX
BL-7000-20-OPC	BL-7000-20-OPC	H5 & 5HEX

■VB-OPC Series ●Plug: A type (AC 100V)

Model	Order Code	Bit
VB-1510-OPC	VB-1510-OPC	H4
	VB-1510X5-OPC	5HEX
VB-1510PS-OPC	VB-1510PS-OPC	H4
	VB-1510PSX5-OPC	5HEX
VB-1510-18-OPC	VB-1510-18-OPC	H4
	VB-1510X5-18-OPC	5HEX
VB-1510PS-18-OPC	VB-1510PS-18-OPC	H4
	VB-1510PSX5-18-OPC	5HEX
VB-1820-OPC	VB-1820-OPC	H5 & 5HEX
	VB-1820X-OPC	1/4HEX
VB-1820PS-OPC	VB-1820PS-OPC	H5 & 5HEX
	VB-1820PSX-OPC	1/4HEX
VB-3012-OPC	VB-3012-OPC	H5 & 5HEX
	VB-3012X-OPC	1/4HEX
VB-3012PS-OPC	VB-3012PS-OPC	H5 & 5HEX
	VB-3012PSX-OPC	1/4HEX
VB-4504PS-OPC*	VB-4504PSX-OPC	1/4HEX

*Shockless Stand Attached

■VBH-PS-OPC Series

Model	Order Code	Bit
VBH-1820PS-OPC	VBH-1820PSX-OPC	1/4HEX
VBH-3012PS-OPC	VBH-3012PSX-OPC	1/4HEX

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Suction Attachment

Model	Order Code
BLQ-2000	CLQ2-SET
	CLQ2-SET-ESD
BLQ-3000	BLQ3N-SET
BLQ-5000	BLQ5-SET
BLQ-7000	BLQ7-SET
VB-1820	VZQ18-SET
(100V, 120V & 220-240V)	
VB-3012	
(100V, 120V & 220-240V)	
VB-4504	
(120V & 220-240V)	

●Include PS type

Screw range for suction Head-equipped driver

Model	Type	Order Code	Nominal Dia.
Screw Range Plates	Steel Plates	SRP-F1.4	1.4
		SRP-F1.7	1.7
		SRP-F2.0	2.0
		SRP-F2.3	2.3
		SRP-F2.6	2.6
		SRP-F3.0	3.0
		SRP-F4.0	4.0
		SRP-R1.4	1.2-1.4
		SRP-R1.7	1.7
		SRP-R2.0	2.0
	Rubber-Plate	SRP-R2.3	2.3
		SRP-R2.6	2.6
		SRP-R3.0	3.0
		SRP-R4.0	4.0
		Screw Range Box	
		SRBOX	

Vacuum Pump VP-3

Model	Order Code	Plug
VP-3	VP-3	A-1
	VP-3-120USA	A-2
	VP-3-220	C

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Peripherals and Accessories

Pistol Attachment

Model	Order Code	Driver model
PAB-70	PAB-70	BL-7000
PAB-18PS	PAB-18PS	VB-1820PS & VB-3012PS

Angle attachment

Order Code	Driver model
ANGLV-Z-CH (Hios shank H5)	VB-1820 /
ANGLV-Z-XX (Hex shank)	VB-3012

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Vertical screwdriver Operating Stand

Model	Order Code	Driver model
VMS-40	VMS-40	BL driver &
VMS-50	VMS-50	VB driver

NOTE: The attachment holder with BL-7000 and VB driver is optional item. Please contact Hios distributor before ordering VMS for BL-7000 and VB drivers.

Flexible screwdriver cord

Model	Order Code	Driver model
Flexible cord 2m	CL4-0610H-5P-2	BL driver(5P)
Flexible cord 3m	CL4-0610H-6P-3	BL-OPC driver(6p)

Screwdriver extension cord

Model	Order Code	Driver model
Extension cord 2m	EXTCD-5P3M	BL driver(5P)
Extension cord 3m	EXTCD-5P5M	

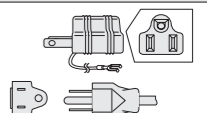
Spring balancer

Model	Order Code	Driver model
Spring balancer	SPBL-S	BL driver*
	SPBL-H	BL-7000 & VB driver

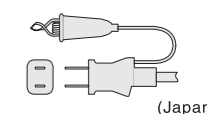
*Excluding the BL-7000

●Plug

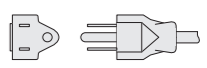
Type A / 100V



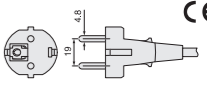
Type A-1 / 100V


(Japan)

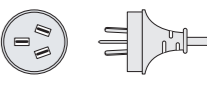
Type A-2 / 120V



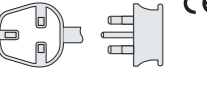
Type C / 220V-240V



Type S / 220V-240V



Type BF / 220V-240V



Order codes

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Digital Torque Meter series

HP series

■HP-10 AC 100V

Model	Order Code	Measuring	Shank
HP-10	HPN-10-A1	N•m/N•cm	HIOS
	HPN-10X-A1		HEX

■HP-10 AC 120V

Model	Order Code	Measuring	Shank
HP-10	HPN-10-A2	N•m/lbf•in	HIOS
	HPN-10X-A2		HEX
	HPN-10-A3	N•m/kgf•cm	HIOS
	HPN-10X-A3		HEX

■HP-10 AC 220V-240V

Model	Order Code	Measuring	Shank
HP-10	HPN-10-C1	N•m/N•cm	HIOS
	HPN-10X-C1		HEX
	HPN-10-C2	N•m/lbf•in	HIOS
	HPN-10X-C2		HEX
	HPN-10-C3	N•m/kgf•cm	HIOS
	HPN-10X-C3		HEX
	HPN-10-D	N•m/lbf•in	HIOS
	HPN-10X-D		HEX

■HP-100 AC 100V

Model	Order Code	Measuring	Shank
HP-100	HPN-100-A1	N•m/N•cm	HIOS
	HPN-100X-A1		HEX

■HP-100 AC 120V

Model	Order Code	Measuring	Shank
HP-100	HPN-100-A2	N•m/lbf•in	HIOS
	HPN-100X-A2		HEX
	HPN-100-A3	N•m/kgf•cm	HIOS
	HPN-100X-A3		HEX

■HP-100 AC 220V-240V

Model	Order Code	Measuring	Shank
HP-100	HPN-100-C1	N•m/N•cm	HIOS
	HPN-100X-C1		HEX
	HPN-100-C2	N•m/lbf•in	HIOS
	HPN-100X-C2		HEX
	HPN-100-C3	N•m/kgf•cm	HIOS
	HPN-100X-C3		HEX
	HPN-100-D	N•m/lbf•in	HIOS
	HPN-100X-D		HEX

HDP series

■HDP-5 AC 100V

Model	Order Code	Measuring	Shank
HDP-5	HDPN-5-A1	N•m/N•cm	HIOS
	HDPN-5X-A1		HEX

■HDP-5 AC 120V

Model	Order Code	Measuring	Shank
HDP-5	HDPN-5-A2	N•m/lbf•in	HIOS
	HDPN-5X-A2		HEX
	HDPN-5-A3	N•m/kgf•cm	HIOS
	HDPN-5X-A3		HEX

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Digital Torque Meter series

HDP series

■HDP-50 AC 100V

Model	Order Code	Measuring	Shank
HDP-50	HDPN-50-A1	N•m/N•cm	HIOS
	HDPN-50X-A1		HEX

■HDP-50 AC 120V

Model	Order Code	Measuring	Shank
HDP-50	HDPN-50-A2	N•m/lbf•in	HIOS
	HDPN-50X-A2		HEX
	HDPN-50-A3	N•m/kgf•cm	HIOS
	HDPN-50X-A3		HEX

■HDP-50 AC 220V-240V

Model	Order Code	Measuring	Shank
HDP-50	HDPN-50-C1	N•m/N•cm	HIOS
	HDPN-50X-C1		HEX
	HDPN-50-C2	N•m/lbf•in	HIOS
	HDPN-50X-C2		HEX
	HDPN-50-C3	N•m/kgf•cm	HIOS
	HDPN-50X-C3		HEX
	HDPN-50-D	N•m/lbf•in	HIOS
	HDPN-50X-D		HEX

■HDP-100 (Option) AC 100V

Model	Order Code	Measuring	Shank
HDP-100	HDPN-100-A1	N•m/N•cm	HIOS
	HDPN-100X-A1		HEX

■HDP-100 (Option) AC 120V

Model	Order Code	Measuring	Shank
HDP-100	HDPN-100-A2	N•m/lbf•in	HIOS
	HDPN-100X-A2		HEX
	HDPN-100-A3	N•m/kgf•cm	HIOS
	HDPN-100X-A3		HEX

■HDP-100 (Option) AC 220V-240V

Model	Order Code	Measuring	Shank
HDP-100	HDPN-100-C1	N•m/N•cm	HIOS
	HDPN-100X-C1		HEX
	HDPN-100-C2	N•m/lbf•in	HIOS
	HDPN-100X-C2		HEX
	HDPN-100-C3	N•m/kgf•cm	HIOS
	HDPN-100X-C3		HEX
	HDPN-100-D	N•m/lbf•in	HIOS
	HDPN-100X-D		HEX

Standard Accessories

■Battery Charger For HP Series and HDP Series

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

■Detector cord

Model	Order Code	
DPC-0506	HDPN-100-C1	Detector cord for HDP-5, HDP-50, HDP-100

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Digital Torque Meter series

HM series

■HM-10

Model	Order Code	Voltage
HM-10	HM-10	100V
	HM-10-120	110V-120V
	HM-10-220	220V-240V

■HM-100

Model	Order Code	Voltage
HM-100	HM-100	100V
	HM-100-120	110V-120V
	HM-100-220	220V-240V

HIT series

■HIT-200

Model	Order Code	Voltage
HIT-200	HIT-200	100V
	HIT-200-120	110V-120V
	HIT-200-220	220V-240V

■HIT-500

Model	Order Code	Voltage
HIT-500	HIT-500	100V
	HIT-500-120	110V-120V
	HIT-500-220	220V-240V

■HIT-2000

Model	Order Code	Voltage
HIT-2000	HIT-2000	100V
	HIT-2000-120	110V-120V
	HIT-2000-220	220V-240V

Standard Accessories Battery Charger

■HM Series, HIT Series

Model	Order Code	Voltage
TCH-100N	TCH-100N	100V, (JAPAN)
TCH-120N	TCH-120N	110V-120V (Korea, Taiwan, U.S.A, Canada)
TCH-230G	TCH-230G	220V-240V (Hong Kong, Europe, China)
TCH-230B	TCH-230B	220V-240V (Singapore, U.K., Australia)

■Power Units and countries where they can be used



HP and HDP series

TCH-MULTI (A plug)

TCH-EU (C plug)



HM and HIT series

TCH-100N 100V Japan

TCH-120N 120V Korea, Taiwan, U.S.A., Canada

TCH-230G 220V-240V Hong Kong, Europe, China

TCH-230B 220V-240V Singapore, U.K., Australia

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Automatic Screw Feeder

■HSF series

Model	Order Code	Nominal dia.	Order Code	Nominal dia.
HSF-10	HSF-10	M1.0	WR-10	M1.0
HSF-12	HSF-12	M1.2	WR-12	M1.2
HSF-14	HSF-14	M1.4	WR-14	M1.4
HSF-17	HSF-17	M1.7	WR-17	M1.7
HSF-20	HSF-20	M2.0	WR-20	M2.0
HSF-26	HSF-26	M2.6	WR-26	M2.6
HSF-30	HSF-30	M3.0	WR-30	M3.0

●Rails

■HS series

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

●Rails

■HSⅢ series

Model	Order Code	Nominal dia.	Order Code	Nominal dia.
HSⅢ-10C	HS-10-3-EC	M1.0	SR-10	M1.0
HSⅢ-12C	HS-12-3-EC	M1.2	SR-12	M1.2
HSⅢ-14C	HS-14-3-EC	M1.4	SR-14	M1.4
HSⅢ-17C	HS-17-3-EC	M1.7	SR-17	M1.7
HSⅢ-20	HS-20-3-EC	M2.0	SR-20	M2.0
HSⅢ-23	HS-23-3-EC	M2.3	SR-23	M2.3
HSⅢ-26	HS-26-3-EC	M2.6	SR-26	M2.6
HSⅢ-30	HS-30-3-EC	M3.0	SR-30	M3.0

●Rails

■HS-RB series

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

●Rails

■HSⅢ-RB series

Model	Order Code	Nominal dia.	Order Code	Nominal dia.
HSⅢ-14CRB	HS-14-3RB-EC	M1.4	SR-14RB	M1.4
HSⅢ-17CRB	HS-17-3RB-EC	M1.7	SR-17RB	M1.7
HSⅢ-20RB	HS-20-3RB-EC	M2.0	SR-20RB	M2.0
HSⅢ-23RB	HS-23-3RB-EC	M2.3	SR-23RB	M2.3
HSⅢ-26RB	HS-26-3RB-EC	M2.6	SR-26RB	M2.6
HSⅢ-30RB	HS-30-3RB-EC	M3.0	SR-30RB	M3.0

●Rails

Standard Accessories

■AC Adaptor

Model	Order Code	Screw Feeder model
100V-240V	HSF	HSF
100V	HS-AD	HS, HSⅢ, HS-RB,
220V-240V	HS-AD220	HSⅢ-RB