

## BLG Series -The New Industry Benchmark in Electric Torque Drivers

Our new brushless screwdriver hasn't only achieved enhanced performance, quality and durability, but also easiness of disassembling and reassembling for maintenance owing to unitization of internal components. In addition, our new screwdriver is highly cost-competitive and can be used anywhere in the world

## Brushless® Screwdriver BLG Series

# BLG-4000

# BLG-5000



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ISO 9001: Headquarters/ Yamagata Factory  
ISO 14001: Headquarters/ Yamagata Factory

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

\* Specifications and appearance of the products are subject to change without notice.  
\* The contents in the catalog are based on information available as of June 2013. Catalog number: EK-A025 (13A).


## Exclusive power supply for our brushless screwdrivers

Low-voltage output (30V/20V) achieves safe and quiet operation. There is always a stable voltage supply.

Model: T-30BL (for one screwdriver)		Model: T-70BL (for one screwdriver)	
Multiple input (AC100V-240V) Compatible models: BLG-4000 BLG-4000-OPC			
Multiple input (AC100V-240V) Compatible models: BLG-4000 BLG-4000-OPC BLG-5000 BLG-5000-OPC			
Primary input power source	AC100-240V (47-63Hz)		AC100-240V (47-63Hz)
Secondary output voltage	HI (2): DC30V, LOW (1): DC20V Two-step switching type		HI (2): DC30V, LOW (1): DC20V Two-step switching type
External dimensions (mm)	62 (W) x 134 (D) x 40 (H)		88 (W) x 210 (D) x 52 (H)
Weight (g)	300g		685g
Accessories	Power supply cord 1.8m (1pc), Flat 2P conversion plug 1 (only for 100V), Mounting hardware 2, Mounting screw 4		Power supply cord 1.8m (1 pc), Flat 2P conversion plug 1 (only for 100V), Mounting hardware 2, Mounting screw 4
Plug type	A	A-2	A-3/C/BF/S

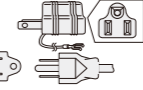
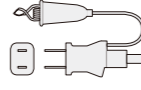
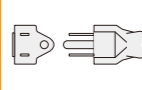
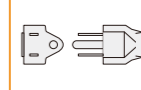
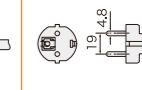
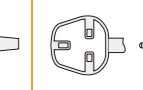

## Screw counter Series

You can set the number of screws to be fastened between 1 and 99. The screw counter displays the remaining number after every fastening action. You can easily use a separate screw counter by connecting it to the existing HIOS power supply. The mini screw counter can be used by connecting it directly to the screwdriver.

Power supply with screw counter	Separate counter (external)	Mini separate counter (external)
Model: BLOP-STC3 (for one screwdriver)	Model: BLOP-SC1 (for one screwdriver)	Model: BLOP-SC3 (for one screwdriver)
Multiple input (AC100V-240V) Compatible models: BLG-4000-OPC BLG-5000-OPC	Compatible models: BLG-4000-OPC BLG-5000-OPC	Compatible models: BLG-4000-OPC BLG-5000-OPC
		
Primary input power source	DC20-31V	DC20-31V
Secondary output voltage	Same as the primary input power source	Same as the primary input power source
External dimensions (mm)	110 (W) x 100 (D) x 55 (H)	67 (W) x 25 (D) x 25 (H)*
Weight (kg)	600g	125g
Accessories	T-30BL/T-70BL	T-30BL/T-70BL
Plug type	A-1 A-2 A-3/C/BF/S	A-1 A-2 A-3/C/BF/S
	Accessories	Accessories
	Screwdriver cord: 1.5m: 1 Crimping terminals: 8	Hangers for mounting: 1 set

\* Not including dents of the connector  
Notes: Hang BLOP-SC3 with a balancer when you use it.  
Do not use BLOP-SC3 for horizontal fastening.

## Plug

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



Lever Start  
**BLG-4000**      Two-way Start System (switchable between Push-to Start and Lever Start)  
**BLG-5000**



Unit: mm

**Compatible power supply**

Power supplies for the Brushless screwdrivers

T-30BL      T-70BL

Combinations

Screwdriver	+	Power supply
BLG-4000	+	T-30BL or T-70BL
BLG-5000	+	T-70BL

**Accessories** Suction attachment for BLG Series

**Accessories**

Vertical screwdriver operating stand The stand constantly keeps the screwdriver in a vertical position, allowing accurate screw tightening through minimal operation.

Models:	VMS-40	VMS-50
Supporting pole height (mm)	515	615
Weight (kg)	1.5	2.65
Compatible screwdrivers	BLG-4000/BLG-5000	

**Holder for BLG screwdriver (optional)**  
The holder to fix the screwdriver to the stand is optional. Please purchase it separately.  
Model number: VMS-0900-BLG

## Suction attachment for BLG Series

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

Compatible screwdrivers: BLG-4000/BLG-5000

**Configuration of a suction screwdriver**

**Outline of the suction parts**

**Guide for ordering**  
(A)(B) and (C) need to be purchased separately if you would like to mount this suction device to your BLG screwdriver.  
\* The type of (A) and (B) depends on the screw size.  
For more information on that, please visit our website at [http://hios.com/EN/product/index\\_mouthpiece.html](http://hios.com/EN/product/index_mouthpiece.html)

Model name	A Mouthpiece			B Driver Bits			C Suction attachment	
	Type	Total length	External dimensions	Type (a)	Total length (b)	External dimensions	Standard	Anti-static
BLG-4000	F3	18mm		Hios H4 (Φ4)	60mm		BLGQ4-SET	
BLG-5000	F3	18mm		Hios H4 (Φ4)	40mm		BLQ5-SET	BLQ5-SET-ESD
					60mm		BLQ5N-SET	BLQ5N-SET-ESD



**Eco-friendly brushless motor is used.**  
Because of no emissions of carbon particles, it provides a clean environment for electronic components as well as for work places. There is no risk of electric leakage.



**Low voltage (DC 30V) is reassuring for safe use.**  
Because of the low voltage design, you can use it safely and at ease. The low voltage also allows for easier maintenance.



**2WAY Two-way Start System (Switchable)**  
You can switch between Push-to-Start and Lever Start (this is only for BLG-5000).



**Antistatic (applied for EPA Certification)**  
The body case is made of antistatic resin. Therefore, it does not easily get a static charge and is suitable for assembling of precision devices and electronic components.



**The screwdriver heat generation has been reduced by approx. 40%.** (Compared with the conventional HIOS products)  
Use of the brushless motor has significantly reduced the screwdriver heat generation. The screwdriver heat generation is low and does not impair screwdriver performance.



**Easy maintenance unit**  
Because the internal structure is unitized, maintenance can be done with only one screwdriver.



**Reliable screw-tightening quality**  
We have realized stable screw-tightening quality by maintaining high-precision torque for a long time.



**Outstanding durability**  
Durability has been significantly enhanced by eliminating malfunctions and failures due to wear of the consumable parts.

**Comparison of our products**

HI

Easy maintenance Reasonable price

Brushless Screwdriver BLG-5000

Brushless Screwdriver BL-5000

Brush screwdriver (carbon brush) CL-6000 α-5000

LOW Price range HI

※ You can smoothly change from a brushed screwdriver (e.g., CL and α series) to a brushless screwdriver (e.g., BLG Series) without a significant cost increase.

## Screwdrivers with screw counter

These screwdrivers prevent you from skipping screw fastening in combination with the screw counter. They have the ability to output positive rotation, reverse rotation and torque- increase signals.

Lever start  
**BLG-4000-OPC**      Two-way Start System (switchable)  
**BLG-5000-OPC**



Unit: mm

**Compatible HIOS screw counters**

Power supply with the screw counter BLOP-STC3

Combinations

Screwdriver	+	Power supply with screw counter
BLG-4000-OPC	+	BLOP-STC3
BLG-5000-OPC	+	BLOP-STC3

**Separate screw counters**

BLOP-SC1      BLOP-SC3

Combinations

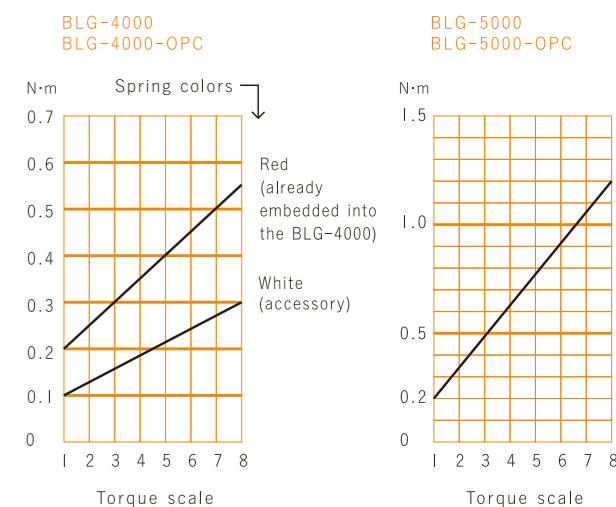
Screwdriver	+	Separate screw counter	+	Power supply
BLG-4000-OPC	+	BLOP-SC1 or BLOP-SC3	+	T-30BL T-70BL
BLG-5000-OPC	+	BLOP-SC3	+	T-70BL

## Specifications of screwdriver

Model	BLG-4000	BLG-5000		
	BLG-4000-OPC	BLG-5000-OPC		
Start system	Lever Start	Two-way Start(switchable)		
Output torque range	N·m	0.1-0.55	0.2-1.2	
	lbf·in	0.9-4.8	1.7-10	
	(kgf·cm)	(1-5.5)	(2-12)	
Torque adjusting	Stepless adjustment	Stepless adjustment		
Unloaded rotation speed (r.p.m.) +/-10%	HI	1,000	1,000	
	LOW	690	690	
Screw size (mm)	Machine screw	1.4-2.6	2.0-3.0	
	Tapping screw	1.4-2.3	2.0-3.0	
Bit type	HIOS Shank	H4	H4	
	Hexagonal shank	1/4HEX	H5 & 5HEX or 1/4HEX	
Compatible power supply	T-30BL	○	—	
	T-70BL	○	○	
Accessories	HIOS Shank bit (1pc each)	H4	+ #1 (Φ2.5×40mm) + #2 (Φ4.0×40mm)	+ #1 (Φ4.0×40mm) + #2 (Φ4.0×40mm)
		Hexagonal shank bit (1pc each)	+ #1 (5.0×50mm) + #2 (5.0×50mm) — (5.0×50mm)	+ #1 (5.0×50mm) + #2 (5.0×50mm) — (5.0×50mm)
	Torque Spring	White spring		
	Cord length (m)	BLG	1.5m(5P)	1.5m(5P)
BLG-OPC		2m(6P)	2m(6P)	
HEX L -wrench	WAF 5mm 1 pc			

Note: If you would like to order hexagonal shank (special order), no bit would be attached. Please purchase standard measure bit in the markets. The power supply CLT-30 \* and CLT-60 are compatible with BLG except BLG-OPC Series. (\* CLT-30 is not compatible with BLG-5000.)

## Torque output (at HI input)



\* For adjusting torque of BLG-4000, two types of torque springs are available. The red one is for large torque (already embedded into the BLG-4000) and the white one is for small torque (accessory). Please select a suitable one for your work.