

**Direct teaching allows a simple setting**

By installing several fasteners into the assembly the driver learns the number of motor revolutions required to correctly tighten the fasteners to the desired torque. The driver then establishes the minimum to maximum revolutions for process acceptance. The reference values of Pass/Fail can be set with the acceptance range of ±0 up to 20%.

**Drastically increases the error detection rate**

Screws that were once difficult to judge visually, (misplaced screws of different type or length, recessed screws or floating screws due to seized cables) are now detected.

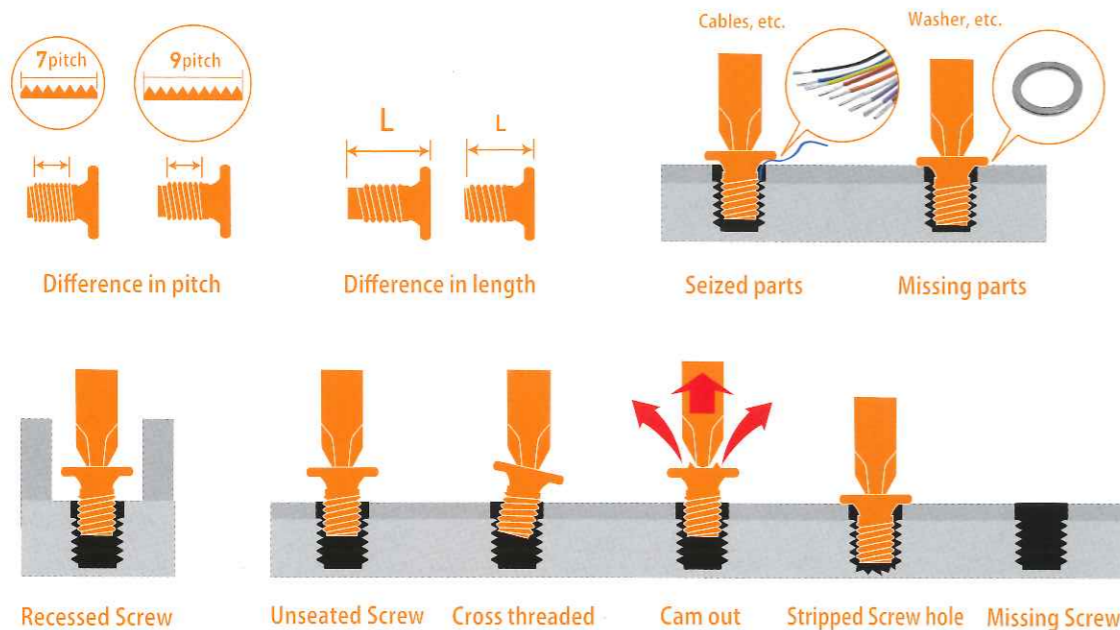
**Display panel indicates the measured values**

The user can check the measured values on their display panel, enhancing the user's sense of security at work.

**Installed serial port (RS-232C) makes it possible to set the driver by remote control and record pulse values of each screw tightening for traceability.**

Data transmission and reception are enabled by connecting with external devices, including PC and PLC.

Detectable Errors



Lever start type  
BLG-4000BC2



Lever and Push-to start (two-way)  
BLG-5000BC2



Lever and Push-to start (two-way)  
BLG-5000BC2-15  
(Rotation Speed: 1.500r.p.m)



Lever and Push-to start (two-way)  
BLG-5000BC2-20  
(Rotation Speed: 2.000r.p.m)



High torque type

Lever and Push-to start (two-way)  
BLG-5000BC2-HT  
(Torque Range 0.5-2.0N·m)



Model		BLG-4000BC2	BLG-5000BC2	BLG-5000BC2-15	BLG-5000BC2-20	BLG-5000BC2-HT
Output Torque Range	N·m	0.1-0.55	0.2-1.2	0.3-1.0	0.3-0.8	0.5-2.0
	lbf·in (kgf·cm)	0.9-4.8 (1-5.5)	1.7-10 (2-12)	2.6-10 (3-10)	2.6-7 (3-8)	4.3-17 (5-20)
Torque Switching		Stepless adjustment	Stepless adjustment	Stepless adjustment	Stepless adjustment	Stepless adjustment
Unloaded Rotation Speed (rpm) ±10%	HI	1,000	1,000	1,500	2,000	730
	LOW	690	690	940	1,400	-
Screw Size (mm)	Machine	1.4-2.6	2.0-3.0	2.3-3.0	2.3-3.0	2.0-4.0
	Screw Tapping	1.4-2.3	2.0-3.0	2.0-2.6	2.0-2.6	2.0-3.0
Drive size	HIOS Shank	H4	H4	H4	H4	H5 & 5HEX
	Tapping Screw	1/4HEX	H5 & 5HEX or 1/4HEX	H5 & 5HEX or 1/4HEX	H5 & 5HEX or 1/4HEX	1/4HEX
Power Supply	T-45BL	○	○	○*	○*	○*
	T-70BL	○	○	○	○*	○*
	Bit type	H4: +#0(Φ2.5×40mm) +#1(Φ4.0×40mm) H5: +#1(Φ4.0×40mm) +#2(Φ4.0×40mm)	H4: +#1(Φ4.0×40mm) +#2(Φ4.0×40mm) H5: +#1(5.0×50mm) +#2(5.0×50mm) - (5.0×50mm)	H4: +#1(Φ4.0×40mm) +#2(Φ4.0×40mm) H5: +#1(5.0×50mm) +#2(5.0×50mm) - (5.0×50mm)	H4: +#1(Φ4.0×40mm) +#2(Φ4.0×40mm) H5: +#1(5.0×50mm) +#2(5.0×50mm) - (5.0×50mm)	H4: +#1(Φ4.0×40mm) +#2(Φ4.0×40mm) H5: +#1(5.0×60mm) +#2(Φ5.0×60mm)
Spring		White	White	White	White	White
Cord length (m)		2m(6P)	2m(6P)	2m(6P)	2m(6P)	2m(6P)
HEX L-wrench			WAF: 5mm (1pc)	WAF: 5mm (1pc)	WAF: 5mm (1pc)	WAF: 5mm (1pc)

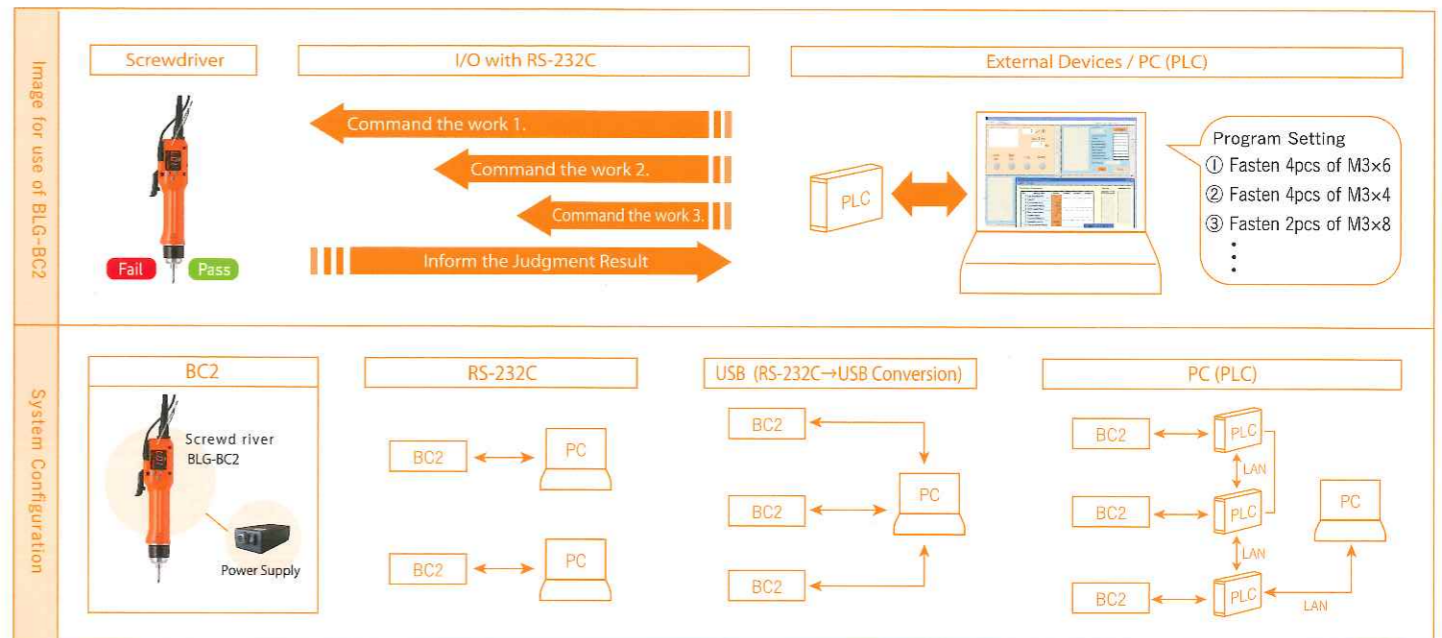
(Note) Use only 2(HI) power outlet with the \*models. These models may not perform properly on 1(LOW) power outlet.

Comparison Table of the BLG Series with a Built-In Screw Counter

Screwdrivers	熟練工 BLG-BC2 Series Built-In Screw Counter + Pulse Counter	BLG-BC1 Series Built-In Screw Counter
Direct teaching (Set the pulse values only)	●	—
Count settings (1 to 99)	●	●
Work/Reset Timer	●	●
Reverse Count Timer	●	●
On/Off Setting of Buzzer and Reverse Count	●	●
Overtime / Short time	●	●
Count Timer (time)	—	●
Pulse Number Counter <small>Refer to Fig. 1</small>	●	—
Detect Results (Pass / Fail) <small>Refer to Fig. 1</small>	●	●
Total Number of "Torque-Up" (Shutting off the driver automatically when the preset torque has been reached.)	●	●
Number of Counts	●	●
Number of Pulse	●	●
External I/O Serial Port RS-232C	Multiple settings can be changed at once from external PC Output the data of screw tightening Interlock with external devices (rotating warning light, workstation address switch, etc.) Available with RS-232C, PLC, I/O board, etc.	—
Fig. 1 Range of Pass/Fail criteria		

For External I/O

To use external I/O, the special cable with the sample application software is available as an option.





## Power Supply for Brushless screwdriver

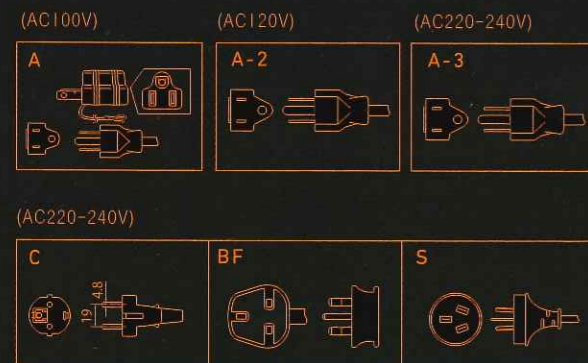
Number of connectable screwdrivers		
Power supply	T-45BL	T-70BL
Screwdriver		
BLG-4000BC2	●	●
BLG-5000BC2	●	●
BLG-5000BC2-15	●*	●
BLG-5000BC2-20	●*	●
BLG-5000BC2-HT	●*	●*

(Note) Use only 2(HI) power outlet with the \*models. These models may not perform properly on 1(LOW) power outlet.

Model: T-45BL (for one screwdriver)			
Primary input power source	AC100-240V (47-63 Hz)		
Secondary output voltage	HI(2): DC30V, LOW(1): DC20V 2-step switchable		
External dimensions (mm)	72(W)×146(D)×43(H) mm		
Weight (g)	320 g		
Accessories	Power supply cord 1.8m (1pc), Flat 2P conversion plug (1pc) (only for 100V), Mounting bracket (1 pcs), Mounting screw (1 pcs)		
Plug Type	A	A-2	A-3/C/BF/S

Model: T-70BL (for one screwdriver)			
Primary input power source	AC100-240V (47-63 Hz)		
Secondary output voltage	HI(2): DC30V, LOW(1): DC20V 2-step switchable		
External dimensions (mm)	88(W)×210(D)×52(H) mm		
Weight (g)	685 g		
Accessories	Power supply cord 1.8m (1pc), Flat 2P conversion plug (1pc) (only for 100V), Mounting bracket (2 pcs), Mounting screw (4 pcs)		
Plug Type	A	A-2	A-3/C/BF/S

### ■ Plug type



# HIOS®

NEW



## With This No Mistakes

# 熟練工

JYUKUREN®

JYUKUREN=Proficient

### “Evolving BLG Series” Part 2

Detect errors in screw fastening in real time with high accuracy by counting the pulse of the motor. No need to rely on the experience or logic of operators any longer. The screwdriver itself will enhance the quality of screw fastening.

Brushless® Screwdriver

Built-in Screw Counter / Pulse Counter

# BLG-4000BC2

# BLG-5000BC2

## HIOS Inc.

Head Office: 111-6 Akiyama, Matsudo City, Chiba Pref., Japan 270-2223 Phone: +81 (Japan) 47-392-2001  
 Osaka Office: 18F Naniwasuji SIA Bldg., 2-4-2 Shinmachi, Nishi-ku, Osaka City, Japan 550-0013 Phone: +81 (Japan) 6-6533-0903  
 Nagoya Office: 9F Kirix Marunouchi Bldg., 1-17-19 Marunouchi, Naka-ku, Nagoya, Aichi Pref., Japan 460-0002 Phone: +81 (Japan) 52-219-5566  
 Yamagata Factory: 5 Takagi, Yamagata City, Yamagata Pref., Japan 990-2346 Phone: +81 (Japan) 23-645-8100  
 HIOS (Shenzhen) Co., LTD. 11CD Room New Times Plaza, 1 Taizi Road, Shekou Nanshan District, Shenzhen, Guangdong Province, China 518067 Phone: +86 (China) 755-26674278



\* Specifications and appearance of the products are subject to change without notice. \* The contents in the catalog are based on information available as of August 2015. Catalog number: EK-A034 (14A)

www.hios.com