

Brushless Motors

BLH Series

BLH Series

Overview

AC Input
BMU

AC Input
BLE2

AC Input
BXII

DC Input
BLH

DC Input
BLV

Brushless Motors and Driver BLH Series



For detailed information about regulations and standards, please see the Oriental Motor website.



- Combines a slim, high-power brushless motor with a 24 VDC board-type driver.
- Speed control range is 100 to 3000 r/min.
- Output power is 15 W to 100 W (1/50 HP to 1/8 HP).



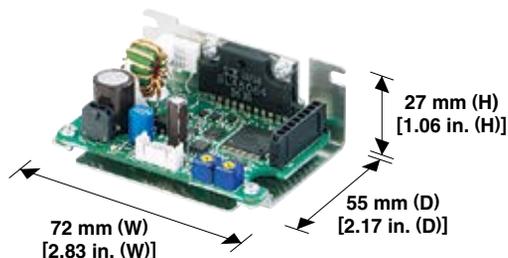
See Full Product Details Online
www.orientalmotor.com

- Manual
- Specifications
- Dimensions
- CAD
- Characteristics
- Connection and Operation

Features

Compact Board-Type Driver

The product with an output of 15 to 50 W (1/50 to 1/15 HP) adopt a compact, board-type driver smaller than the size of a business card. This will help to reduce the size of your equipment.



The 100 W (1/8 HP) driver has dimensions of 71 mm (D) × 131 mm (W) × 37.5 mm (H) [2.80 in. (D) × 5.16 in. (W) × 1.48 in. (H)]

◇ Full Range of Driver Functions

The compact driver is packed with a full range of functions.

- Instantaneous stop
- Speed control by potentiometer
- Speed control by DC voltage
- Acceleration/deceleration time setting
- Alarm output

Speed Control Range

100 to 3000 r/min (speed ratio 30:1)

Wide Variety

The series offers a wide range of models from compact packages with a motor output of 15 W (1/50 HP), to larger ones producing a high output of 100 W (1/8 HP). Choose one that best suits your specific requirements.

IP65 Motor Structure*

The motor is protected against water intrusion, should water come into contact with the motor.

*IP40 for 15 W (1/50 HP) motor

- The motor must not be washed with water, and is not suitable for use in an environment where it constantly comes into contact with water.

Long Life Gearhead Rating of 10000 Hours*

The rated life of the parallel shaft gearhead and hollow shaft flat gearhead is 10000 hours. The parallel shaft gearhead achieves a rated life of twice as long as that of a conventional gearhead.

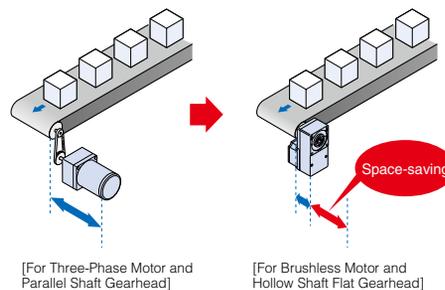
*5000 hours for gearhead equipped with 15 W (1/50 HP) geared motor.

- The 50 W (1/15 HP) and 100 W (1/8 HP) parallel shaft gearhead has a tapped hole at the output shaft end.

Features of Hollow Shaft Flat Gearhead

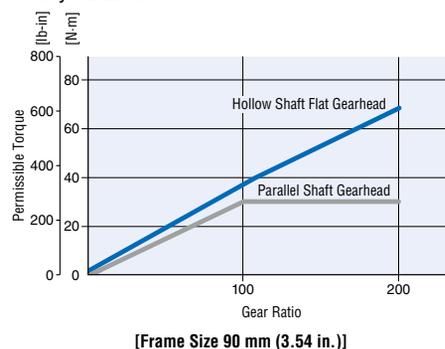
◇ Space-Saving and Low-Cost

The output shaft can be coupled directly to a driven shaft without using a coupling, which allows you to reduce the size and installation space of your equipment. Since no shaft-coupling parts are needed, the parts cost and labor will also decrease.

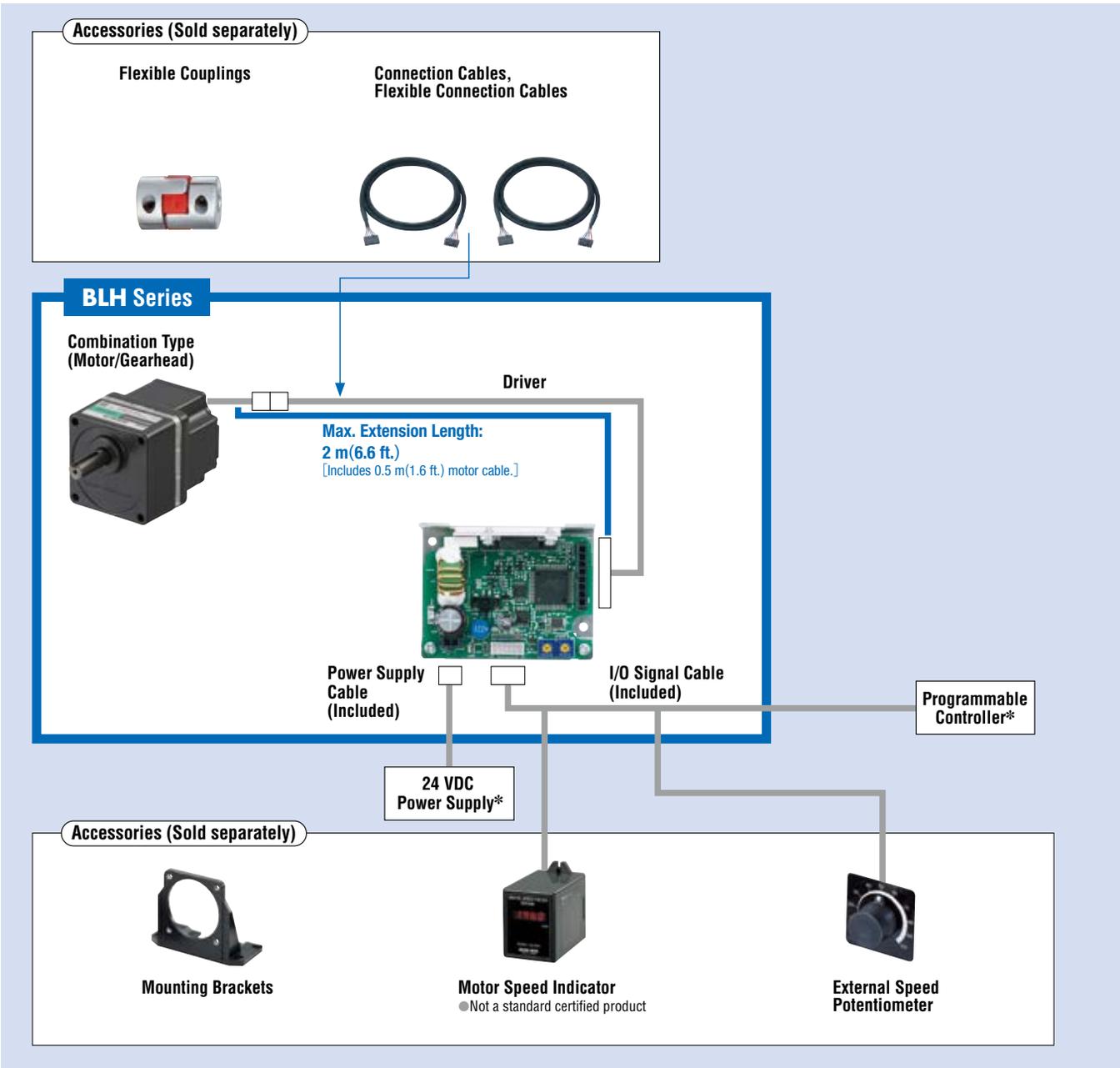


◇ High Permissible Torque

While the permissible torque of the parallel shaft gearhead saturates at high gear ratios, the hollow shaft flat gearhead enables the motor torque to be fully utilized.



System Configuration



- Overview
- AC Input BMU
- AC Input BLE2
- AC Input BXII
- DC Input BLH
- DC Input BLV

* Not supplied

Product Number

BLH 2 30 K C - 5 FR

① ② ③ ④ ⑤ ⑥ ⑦

①	Series	BLH: BLH Series
②	Motor Frame Size	0: 42 mm (1.65 in.) 2: 60 mm (2.36 in.) 4: 80 mm (3.15 in.) 5: 90 mm (3.54 in.)
③	Output Power (W)	(Example) 30: 30 W (1/25 HP)
④	Power Supply Voltage	K: 24 VDC
⑤	C: Cable Type	
⑥	Gear Ratio/Shaft Type	Number: Gear ratio for combination types: 8 types from 5 to 200 Gear ratio for geared types: 7 types from 5 to 100 A: Round Shaft Type
⑦	Blank: Combination Type – Parallel Shaft Gearhead FR: Combination Type – Hollow Shaft Flat Gearhead	

Product Line

- Combination Type** | The combination type comes with a motor and gearhead pre-assembled. The combination of motors and gearheads can be changed, and they are also available separately. In addition, the gearhead can be removed and the assembly position can be changed in 90° increments.
- Geared Type** | The geared type has an integrated motor and gearhead. The combination of motor and gearhead cannot be changed.

Geared Type/Combination Type – Parallel Shaft Gearhead

Type	Output Power	Product Name	Gear Ratio	List Price
Geared Type	15 W (1/50 HP)	BLH015K-□	5, 10, 15, 20	\$359.00
			30, 50, 100	\$366.00
			5, 10, 15, 20	\$413.00
Combination Type	30 W (1/25 HP)	BLH230KC-□	30, 50, 100	\$422.00
			200	\$431.00
			5, 10, 15, 20	\$452.00
	50 W (1/15 HP)	BLH450KC-□	30, 50, 100	\$460.00
			200	\$470.00
			5, 10, 15, 20	\$550.00
100 W (1/8 HP)	BLH5100KC-□	30, 50, 100	\$561.00	
		200	\$572.00	

The following items are included with each product.
 Motor, Driver, Gearhead, I/O Signal Cable, Power Supply Cable, Installation Screws*1, Parallel Key*2, Operating Manual
 *1 Only for combination type
 *2 Only for the products with a key slot on the output shaft

Combination Type – Hollow Shaft Flat Gearhead

Output Power	Product Name	Gear Ratio	List Price
30 W (1/25 HP)	BLH230KC-□FR	5, 10, 15, 20	\$471.00
		30, 50, 100	\$483.00
		200	\$495.00
50 W (1/15 HP)	BLH450KC-□FR	5, 10, 15, 20	\$544.00
		30, 50, 100	\$556.00
		200	\$568.00
100 W (1/8 HP)	BLH5100KC-□FR	5, 10, 15, 20	\$653.00
		30, 50, 100	\$665.00
		200	\$677.00

The following items are included with each product.
 Motor, Driver, Gearhead, I/O Signal Cable, Power Supply Cable, Installation Screws, Parallel Key, Safety Cover (with screws), Operating Manual

Round Shaft Type

Output Power	Product Name	List Price
15 W (1/50 HP)	BLH015K-A	\$264.00
30 W (1/25 HP)	BLH230KC-A	\$287.00
50 W (1/15 HP)	BLH450KC-A	\$311.00
100 W (1/8 HP)	BLH5100KC-A	\$371.00

The following items are included with each product.
 Motor, Driver, I/O Signal Cable, Power Supply Cable, Operating Manual

For details (specifications, characteristics, dimensions and more) on these products, please either refer to our website or contact technical support or your nearest Oriental Motor sales office. www.orientalmotor.com

● A number indicating the gear ratio is entered where the box □ is located within the product name.