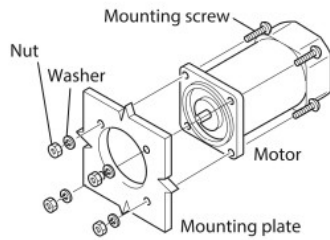


● **Round shaft type**

Secure the motor with hexagonal socket head screws (not supplied) through the four mounting holes provided. Do not leave a gap between the motor and mounting plate.

Model	Screw size	Tightening torque
BH162	M8	15.5 N-m (137 lb-in)



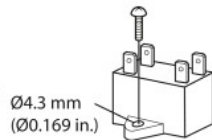
● **Motor with cooling fan**

When installing a motor with cooling fan onto a device, leave 10 mm (0.39 in.) or more behind the fan cover or open a ventilation hole so that the cooling inlet on the back of the motor cover is not blocked.

■ **Mounting the capacitor (only for single-phase motors)**

Before mounting the provided capacitor, check that the capacitor's capacitance matches that stated on the motor's nameplate.

Mount the capacitor securely by using M4 screws (not provided).



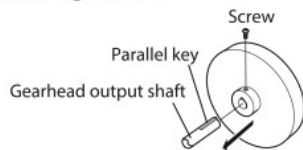
- Note**
- Do not let the screw fastening torque exceed 1 N-m (8.8 lb-in) to prevent damage to the mounting foot.
  - Mount capacitor at least 10 cm (3.94 in.) away from the motor. If it is located closer, the life of the capacitor will be shortened.

■ **Installing a load**

**Note** When the hollow-shaft gearhead or solid-shaft gearhead with a low gear ratio (5, 6, 7.5 or 9) is combined with a single-phase motor, noise (resonance sound) may occur during operation under no or light load. This noise can be reduced by adding a frictional load.

● **Combination type: parallel shaft gearhead, Combination type: right-angle shaft (solid shaft) gearhead**

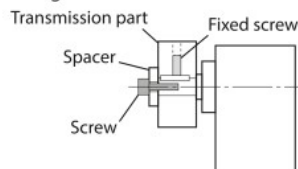
The gearhead shaft is provided with a key slot for connecting the transmission parts. When connecting the transmission parts, ensure that the shaft and parts have a clearance fit, and always fix the parallel key to the output shaft with a screw to prevent the parts from rattling or spinning.



**Note** Do not apply excessive force onto the output shaft of the gearhead using a hammer or other tools. Doing so may cause damage to the output shaft or bearings.

● **Combination type: right-angle shaft (hollow shaft) gearhead**

When using the output shaft end tapped hole of a gearhead Use a tapped hole [M6, Effective depth 12 mm (0.47 in.)] provided at the end of the output shaft of BH6G2-□ and BH6G2-□RA as an auxiliary means for preventing the transfer mechanism from disengaging.



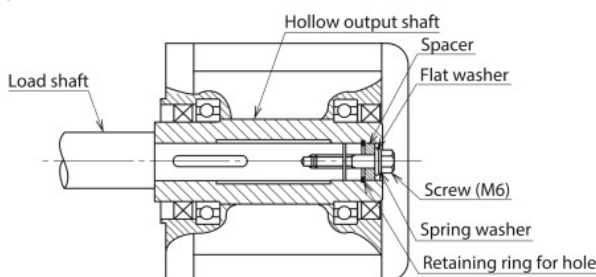
Mounting method of the load varies depending on the load shaft conditions. See the following figures.

The hollow output shaft inside dimension is processed to a tolerance of H8, and incorporates a key slot for load shaft attachment. A load shaft tolerance of h7 is recommended. Also, apply anti-seizing agent such as molybdenum disulfide grease on the surface of the load shaft and the bore of the hollow output shaft. After attaching the load, attach the safety cover.

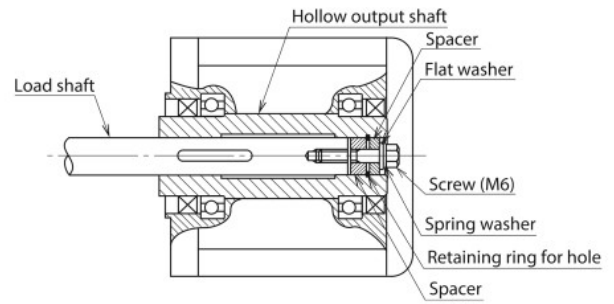
● **Recommended load shaft dimensions** [Unit: mm (in.)]

Gearhead model	Hollow shaft Inside dimensions (H8)	Recommended load shaft dimensions (h7)
BH6G2-□RH	Ø25 <sup>+0.033</sup> <sub>0</sub> (Ø0.9843 <sup>+0.0013</sup> <sub>0</sub> )	Ø25 <sup>0</sup> <sub>-0.021</sub> (Ø0.9843 <sup>0</sup> <sub>-0.0008</sub> )

● **Stepped load shaft**



● **Non-stepped load shaft**



**Note** Do not apply excessive force when inserting the load shaft into the gearhead. Excessive or abrupt force may damage the gearhead internal bearings.

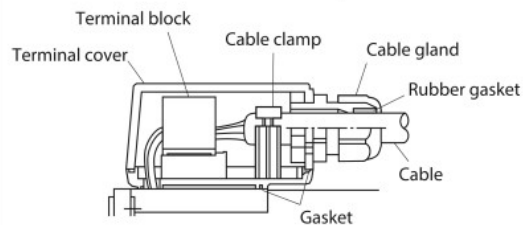
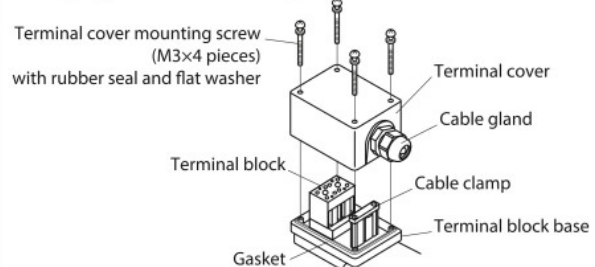
**Connection**

Insulate all the wire connections such as the connecting part between the motor lead wires and the power supply. Be sure to ground the product using the Protective Earth Terminal on the motor.

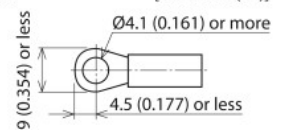
■ **Connection method to a terminal box**

- Note**
- To make shielding function fully effective, use a cable of an appropriate diameter.
  - Securely affix the cable exposed outside the motor so that it does not receive stress.

● **Single-phase motors, three-phase 200 VAC/220 VAC/230 VAC motors**



- To ensure safety, ground the motor using the Protective Earth Terminal (⊕) inside the terminal box. On the BH162ST-A, refer to the following specifications. [Unit: mm (in.)]  
 Applicable crimp terminal: Insulated round crimp terminal  
 Terminal screw size: M4  
 Tightening torque: 1.0 to 1.3 N-m (8.8 to 11.5 lb-in)  
 Applicable lead wire: AWG18 (0.75 mm<sup>2</sup>) or thicker



- For wiring, be sure to use cable (not provided) that meets the following specifications.  
 Applicable cable diameter: Ø6 to Ø12 mm (Ø0.236 to Ø0.472 in.)  
 Applicable lead wire: AWG24 to 12 (0.2 to 3.5 mm<sup>2</sup>)  
 Length of strip is 8 mm (0.31 in.)

- When sealing the terminal box cover, ensure that no scraps or particles get caught between the contact surfaces.
- The terminal cover mounting screws are specifically designed for mounting the terminal cover. They are provided with a rubber seal and flat washer that keep the terminal box dust-resistant and splashproof. In order to maintain a tight seal around the terminal box, use only the provided screws. Also, this terminal box is constructed to hold a gasket. If this gasket comes out of the box, please reseal it correctly on the box. Also refer to the tightening torque table (below) to determine the appropriate tightening torque to use when fastening the terminal cover and cable gland.

Terminal cover	0.3 to 0.4 N-m (42 to 56 oz-in)
Cable gland	2.5 to 3.8 N-m (350 to 530 oz-in)
Cable clamp	0.2 to 0.3 N-m (28 to 42 oz-in)
Terminal block	0.5 to 0.8 N-m (71 to 113 oz-in)