

Planetary Gearbox Operation Manual

ISO 9001
ISO 14001

1. Note

1.1 Preparation before installation

- Please read this operation manual before using this gearbox. Any problems caused by inappropriate operation contrary with the manual, or damage caused by natural disasters, or restructure the gearbox without our permission, DieQua will not hold any responsibility nor will the gearbox be covered by warranty.
- ◆ Warranty is one year after purchase of the gearbox. Within warranty period, if gearbox damage is not caused by operation error nor by natural disaster, then please send back the gearbox, we should replace the damage spare part at free of charge.
 - ◆ Installation, disassemble, maintenance on the gearbox, needed to be performed by trained technicians.
 - ◆ According to the application and operation environment, the gearbox temperature might be raising after period of running. Please do not touch the gearbox directly during operation, or right off from operation.
 - ◆ Do not touch any rotating components when the gearbox is running. Ensure that the plugs of the gearbox were inserted after installation. Avoid any small object fall into the gearbox.
 - ◆ Handle the gearbox gently during installation, do not knock the gearbox by any tool, to avoid the influence of running accuracy.
 - ◆ Do not disassemble or modify gearbox to prevent injury or equipment damage.
 - ◆ Synthetic lubricant is sealed in gearbox, there is no need to change lubricant.

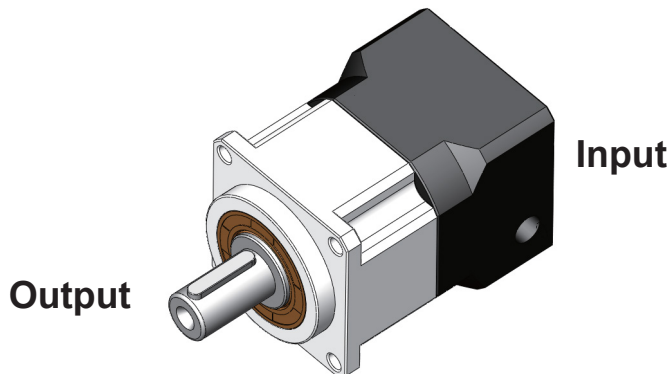
1.2 Installation environment limitation

Gearbox must be installed under following terms to prevent damages which are not covered by warranty.

- ◆ Gearbox is designed or manufactured to be used with other mechanical equipment .
- ◆ Avoid gearbox used in flammable gas or corrosion gas environment.
- ◆ Operate temperature is between -10 to + 90℃.
- ◆ Humidity: no more than 85%, in order to avoid condensation.
- ◆ Operate altitude may not be higher than 1000m above sea-level
- ◆ Avoid direct sunlight, dust accumulation.
- ◆ Avoid continuity vibration or impact.
- ◆ Used in good ventilated place.

2. Gearbox Introduction

As shown below, the input side is for installing the servo motor and the output is mounted to application equipment.



To ensure the product performance, both the input and output ends must be protected carefully to avoid any damage or improper operation.

3. Mounting Instructions

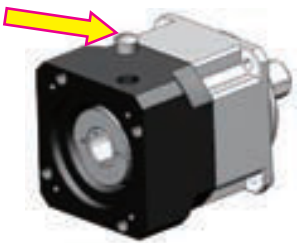
3.1 Parallel Type

◆ 1



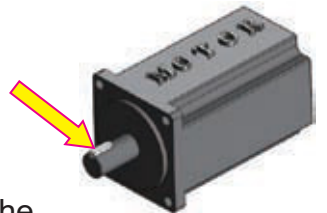
Check the motor and gearbox size. Clean the mounting surface.

◆ 2



Take off the plug from the adapter plate. Revolve the set collar until the bolt is aligned with the hole.

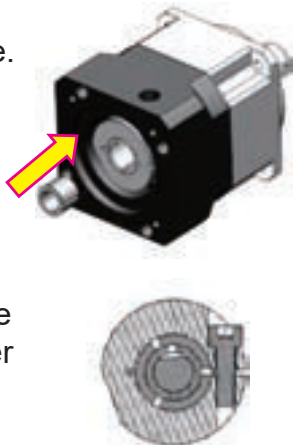
◆ 3



Remove the key from the motor shaft. Mounting the balance key if necessary.

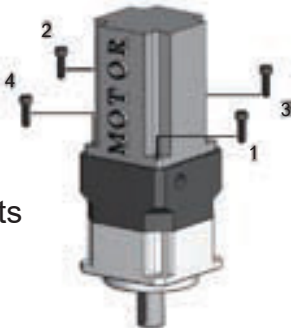
◆ 4

Make sure the motor shaft size. Choose the right bushing if necessary.



As installing on flatted shaft, be sure to align the collet gap over the flat and the set collar bolt perpendicular to the flat.

◆ 5



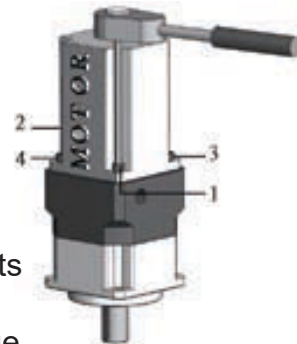
Tighten the mounting bolts in 1~4 order with torque wrench to 5% specified torque.

◆ 6



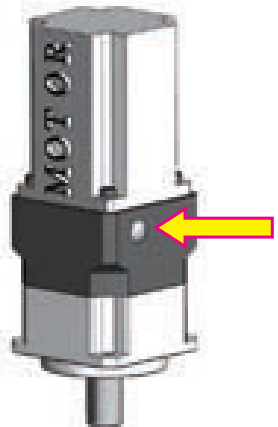
Install gearbox and motor vertically. Tighten the set collar bolt with torque wrench to specified torque.

◆ 7



Tighten the mounting bolts in 1~4 order with torque wrench to specified torque.

◆ 8



Put the plug back .

3.2 Hollow Spindle Type

◆ 1



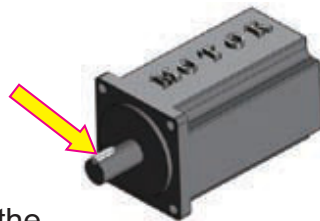
Check the motor and gearbox size. Clean the mounting surface.

◆ 2



Take off the plug from the adapter plate. Revolve the set collar until the bolt is aligned with the hole.

◆ 3

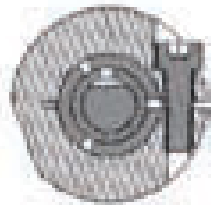


Remove the key from the motor shaft. Mounting the balance key if necessary.

◆ 4

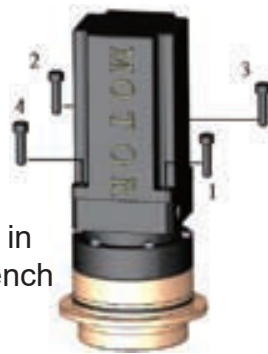


Make sure the motor shaft size. Choose the right bushing if necessary.



As installing on flatted shaft, be sure to align the collet gap over the flat and the set collar bolt perpendicular to the flat.

◆ 5



Tighten the mounting bolt in 1~4 order with torque wrench to 5% specified torque.

◆ 6



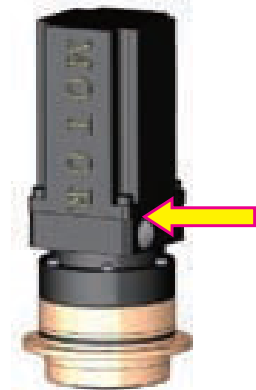
Install gearbox and motor vertically. Tighten the set collar bolt with torque wrench to specified torque.

◆ 7



Tighten the mounting bolts in 1~4 order with torque wrench to specified torque.

◆ 8



Put the plug back.

Tightening Torque

Bolt Size	Width Across Flats	Strength 12.9 Tightening Torque	
		N-m	In-lb
M3*0.5P	2.5	2.1	19
M4*0.7P	3	4.9	44
M5*0.8P	4	9.8	87
M6*1P	5	17	151
M8*1.25P	6	41	364
M10*1.5P	8	80	709
M12*1.75P	10	139	1232
M14*2P	12	223	1976
M16*2P	14	343	3038

5. Test Run & Trouble Shooting Guides

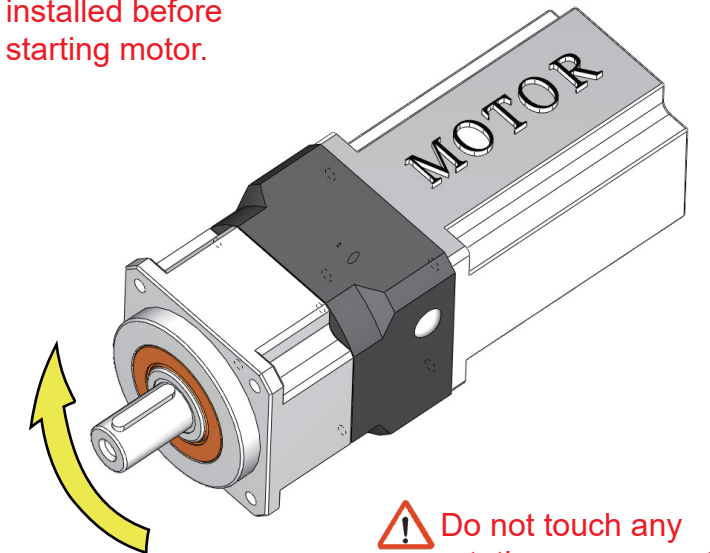
◆ 5.1

Power on the motor. Slowly drive the motor and adjust its mounting status until the gearbox is driven smoothly.

⚠ Ensure the plug was installed before starting motor.

◆ 5.2

If smooth operation is not available after mounting adjustment, re-install motor and gearbox again as per mounting instructions. If the problem could not be solved via the procedures above, please DO NOT take apart of the gearbox, contact DieQua for technical support right away.



⚠ Do not touch any rotating component when the gearbox is running.

⚠ Attention

- ❑ Specification compatibility check is required before applying both products to other machinery or equipment.
- ❑ DieQua is not responsible for any cause there might occur if user's neglects of specification compatibility checking.
- ❑ Incorrect installation will damage gears and results in abnormal noise , short lifespan or accident. Please be alert.

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