

# Assembly instructions

planetroll® planetary gearheads

planetdrive® PD

**planetroll®**  
the driving power

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## General:

The torsional-strengthened and aligning connection of the components is achieved by means of the drive hollow shaft (6) of the planetary gearhead planetdrive® PD, if necessary by using a reduction socket, clamping element (5) and motor shaft journal.

A safe and sophisticated connection between motor and planetdrive® PD is to be realized without problems and in best time. In particular, please make sure that only motors with a flange and true running accuracy acc. to DIN EN IEC 60072-1 will find use.

In order to avoid deformation by misalignment of drive train, the adapter flange (4) with "open centring" has been manufactured. Therefore, a true to size centring by means of the flange is no longer necessary. When assembling planetdrive® PD to the motor it is to be noted, independently of the used adapter flange (4), that after joining motor with planetdrive® PD **primarily the clamping screw (7)** has always to be screwed at first and thereafter you have to screw the planetdrive® PD on the adapter flange (4) and/or adapter flange (4) on the motor (1).

The planetdrive® PD planetary gearheads are filled with lifetime lubrication and thus they are maintenance-free.

## Motor mounting:

1. If there is a key in the keyway (2) of motor shaft journal, remove it. For applications with motor speeds over 3000 r.p.m., we recommend inserting a half key to completely fill the keyway (2). The key may not stick out above the groove in the motor shaft journal.
2. Remove screw plug (3) of the assembly drilling on adapter flange (4) and put it aside for later use.
3. Turn the clamping element (5) with drive hollow shaft (6) until the head of clamping bolt (7) appears through access hole of adapter flange (4).
4. If the planetdrive® PD with the adapter flange (4) screwed on the planetdrive® PD is **not directly mounted** on the motor by using an adapter flange (4), then the adapter flange (4) must be separated from the planetdrive® PD. Remove 4 pieces of hexagonal socket-head bolts (8). In the following, draw off adapter flange (4) from the planetdrive® PD.
5. Examine and smooth if necessary, carefully clean and degrease the flat contact surfaces on motor flange, adapter flange (4), if necessary on the planetdrive® PD itself, drive hollow shaft (6) as well as motor shaft journal for possible damage (burrs, scoring etc.).
6. Place motor (1) **vertically** and secure it from falling down. With slotted motor shaft journal you have to ensure that the keyway (2) is positioned **opposite** (180° shifted) the groove of the drive hollow shaft (6).
7. If slotted reduction sockets will find use, please take care that the slot of the reduction socket and the drive hollow shaft (6) as well as of the clamping element (5) are **congruently** aligned.
8. If motor connection is effected according to point 4., then you have to put on the removed adapter flange (4) to the **whole surface** of motor end shield and in the following you have to screw it on this.
9. Attach the planetdrive® PD to the motor shaft carefully and evenly. **Do not press or strike.** If the planetdrive® PD is too heavy, then a suitable hoisting machine should be used. The planetdrive® PD now must rest upon the adapter flange (4) and/or the adapter flange (4) upon the end shield of motor (1) over the **whole surface**!
10. Tighten clamping screw (7) to **prescribed torque** (see table starting torque) by means of a suitable torque wrench (9).
11. Thereafter you have to bolt directly together planetdrive® PD including screwed adapter flange (4) with motor (1) - **or** you have to bolt together planetdrive® PD with adapter flange (4), like motor mounting acc. to point 4. Screws (8) must be diagonally transferred and evenly tightened.
12. Insert screw plug (3) into the assembly drilling of adapter flange (4).

**Note:** Inappropriate proceeding or ignoring assembly instructions may lead to gearbox and/or motor damage and will void any warranty.

| tightening torque for the clamping screw (7) |                   |
|--|-------------------|
| clamping screw DIN 912                       | tightening torque |
| M3   | 2.1 Nm            |
| M4   | 4.2 Nm            |
| M5   | 8.3 Nm            |
| M8   | 43 Nm             |

