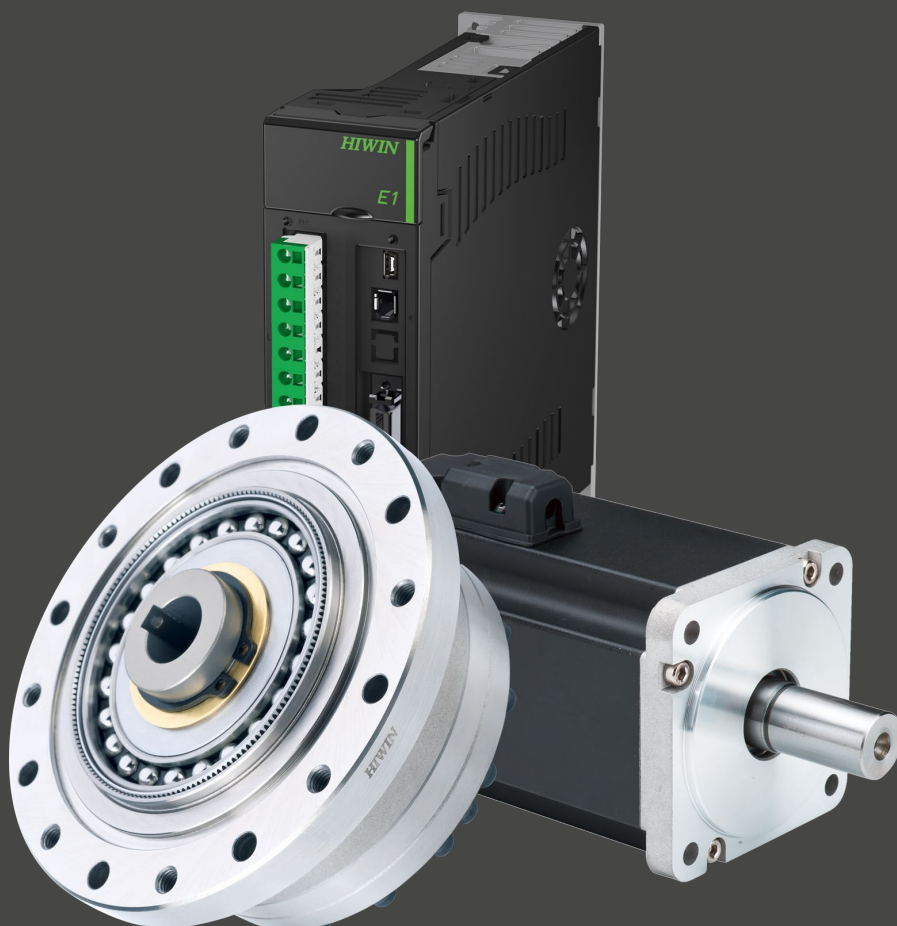


HIWIN®



ASSEMBLY INSTRUCTIONS

DT adapter

DT-Adapter-02-0-EN-2509-MA

Imprint

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1 General

1.1 About these assembly instructions

These assembly instructions are intended for planners, developers and operators of systems who plan and install the named products as machine elements. It is also addressed to the persons who carry out the following work in connection with the named adapters:

- Transport
- Assembly
- Retrofitting or upgrading
- Setup
- Commissioning
- Operation
- Cleaning
- Maintenance
- Troubleshooting
- Decommissioning, disassembly and disposal

1.1.1 Requirements

We assume that

- ▶ The operating personnel have been instructed in the safe operation of the named products and have read and understood these assembly instructions in full.

1.1.2 Availability

The assembly instructions must always be available to all persons working with or on the named products. The assembly instructions are also available at hiwin.de.

1.2 Presentation and layout conventions used in these assembly instructions

1.2.1 Instructions for actions

Instructions for actions are provided in sequential order and identified with a triangle symbol. The results of the actions are accompanied by a tick symbol.

Example:

- ▶ Instruction 1
- ▶ Instruction 2
- ✓ Result

1.2.2 Lists

Lists are identified through the use of bullet points.

Example:

The products must not be operated:

- Outdoors
- In areas where there is a risk of explosion
- ...

1.2.3 Information

Note:

Notes describe general advice and recommendations.

1.3 Warranty and liability

The manufacturer's "General Terms and Conditions of Sale and Delivery" apply.

1.4 Manufacturer information

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E-mail	support@hiwin.de
Internet	hiwin.de

1.5 Product monitoring

Please inform HIWIN GmbH, as manufacturer of the named products, about:

- Accidents
- Possible sources of danger on the products
- Any unclear information in these assembly instructions

1.6 General functional principle

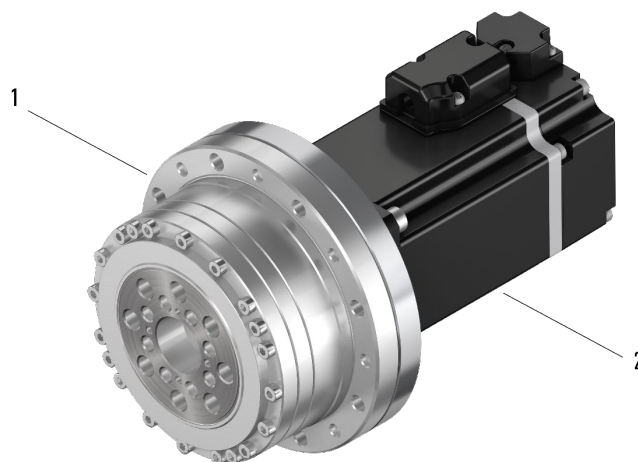
The HIWIN adapters for DATORKER® strain wave gears make it possible to easily connect HIWIN servo motors to DATORKER® strain wave gears. Forces and torques are safely transmitted through force and form closure.

1.7 Scope of delivery

All adapters are supplied ready for installation including fixing material.

2 DT adapter

Adapter for connecting the AC servo motor to the shaft generator of the DATORKER® strain wave gear.



1 DATORKER®

2 AC servo motor

2.1 General assembly instructions

Note

The quantity and type of fixing material vary according to the size of the strain wave gear used.

Note

When tightening the screws, always use the tightening torques specified in the individual chapters of these assembly instructions.

Note

All the screws used have an adhesive coating, which hardens shortly after the screw has been screwed into the thread.

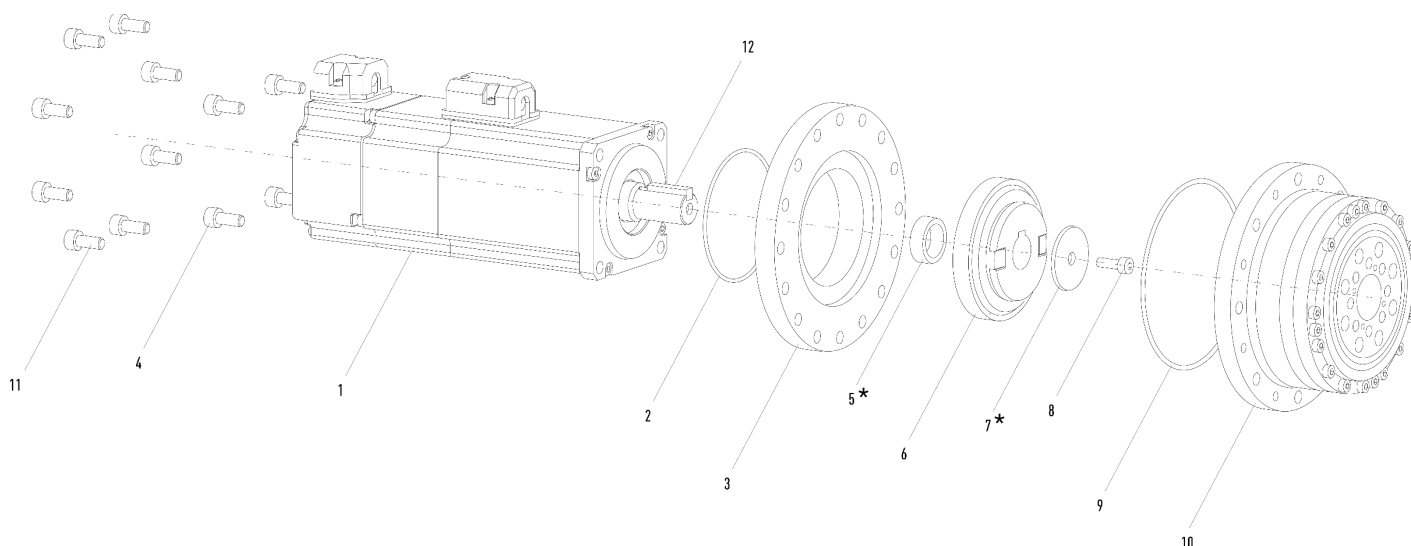
Please note the following conditions:

- 5 minutes flexible for adjustment and tightening procedures
- Functional after approx. 6 hours
- Final strength after 24 hours

Note

Note that the thread locker only works for one use. If the screw is reused, a new adhesive coating must be applied to the screw.

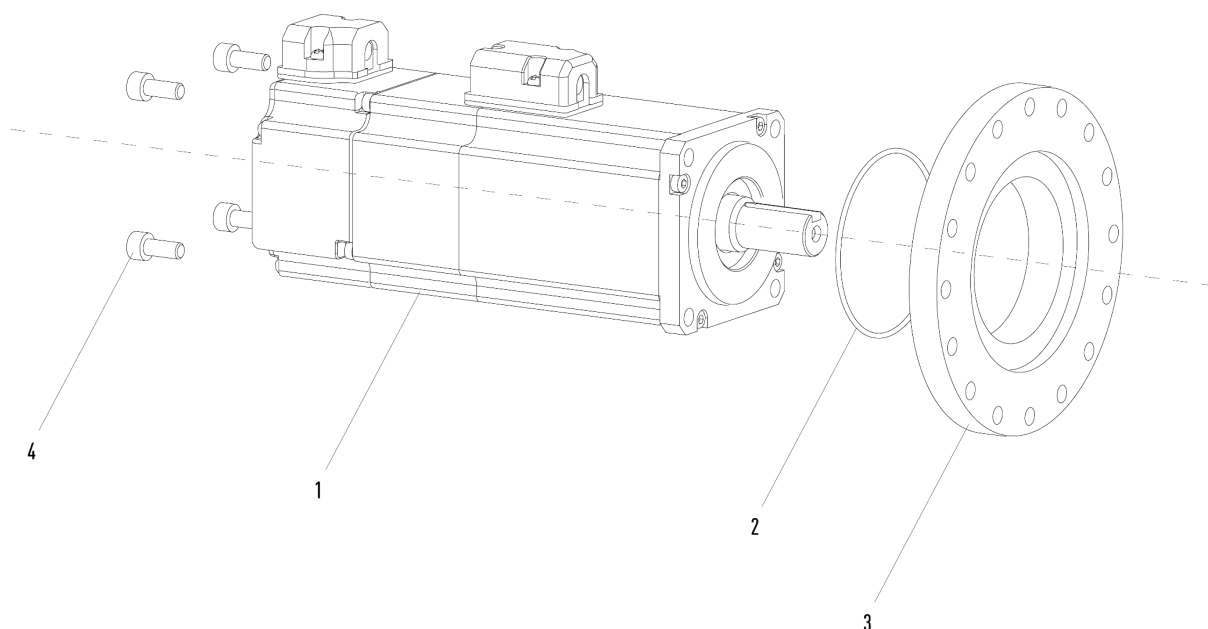
2.2 General assembly



1	Motor	7	Mounting washer *
2	O-ring 1	8	Shaft generator mounting bolt
3	Motor adapter flange	9	O-ring 2
4	Motor mounting bolts	10	DATORKER® strain wave gear
5	Spacer *	11	Strain wave gear mounting bolts
6	Shaft generator	12	Feather keys

* Only DSC-20/DSC-25

2.2.1 Assembly of motor adapter flange



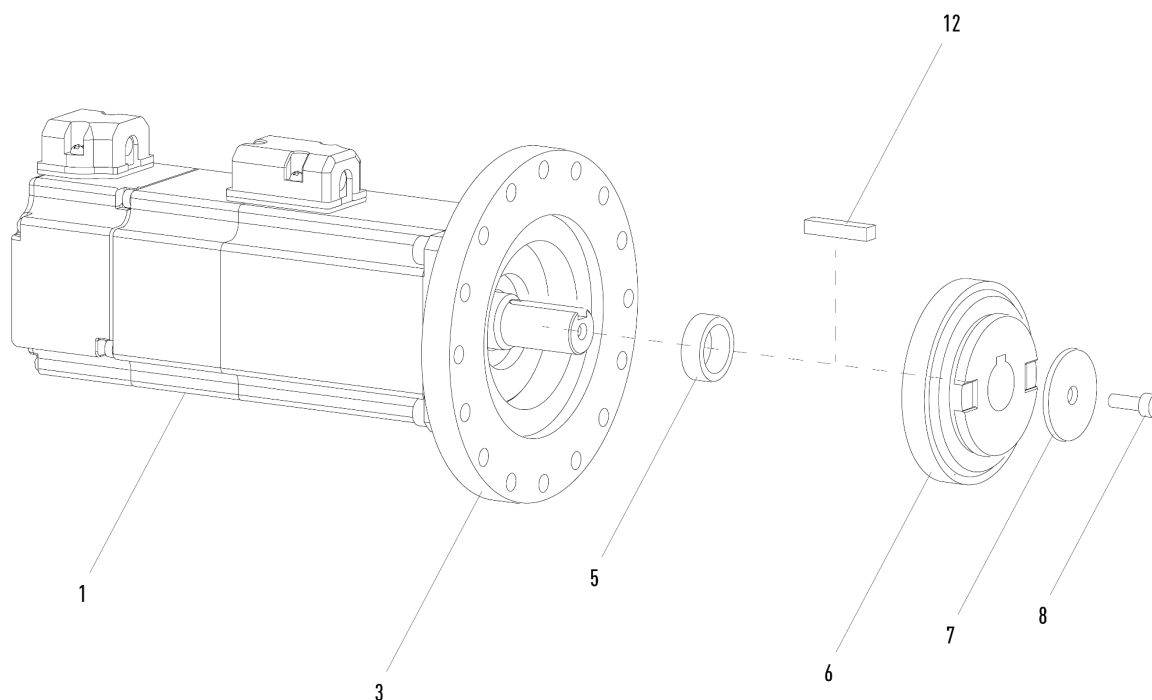
- ▶ Remove the feather keys [12] from the motor shaft [1].
- ▶ O-ring 1 [2] is inserted into the groove of the motor adapter flange [3].
- ▶ Place the motor adapter flange [3] on the motor [1].
- ▶ Working in a criss-cross fashion and in three steps, tighten motor mounting bolts [4] to the tightening torque specified in [Table 2.1](#).
- ✓ The motor adapter flange is mounted.

Table 2.1: Quantity and tightening torques of motor mounting bolts depending on the gearbox-motor combination used.

Gearbox	Motor	Article number	Motor mounting bolt		
			Bolt size ¹⁾	Torque [Nm]	Quantity [pcs.]
DSC-20	EM1-20	20-002510	M5 × 16	4.6	4
DSC-25	EM1-40	20-002507	M5 × 12	4.6	4
DSC-32	EM1-75	80022310	M6 × 20	7.2	4

¹⁾ Strength class 8.8

2.2.2 Mounting of shaft generator



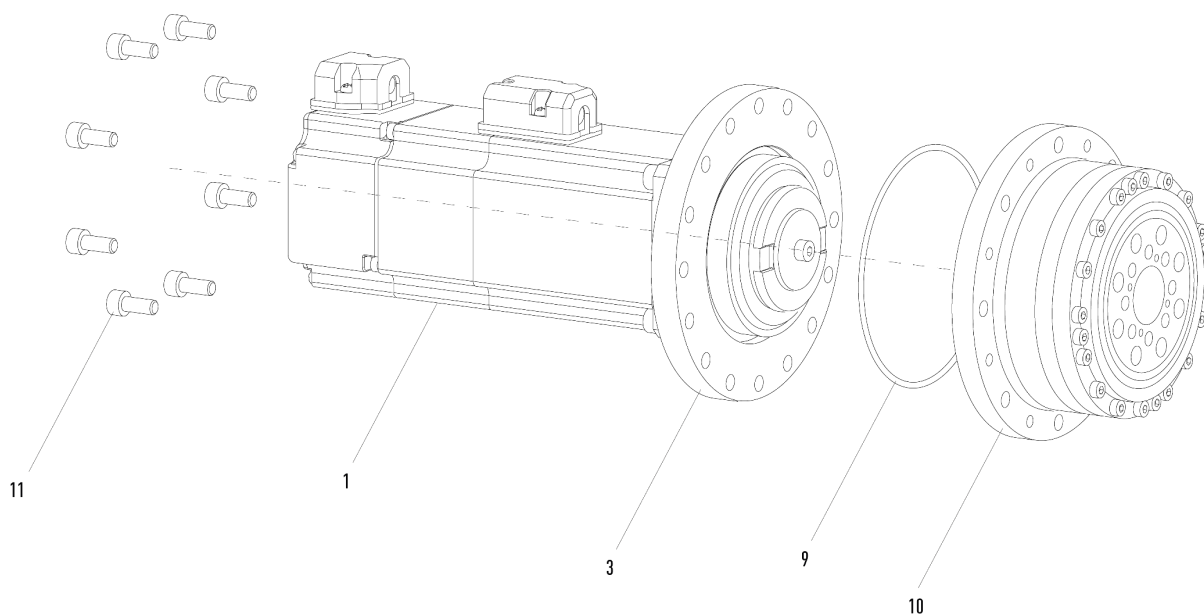
- ▶ Fill the inside of the motor adapter flange [3] with grease.
 - ▶ Only DSC-20/DSC-25: Place the spacer [5] on the motor shaft [1].
 - ▶ Place the feather keys [12] on the motor shaft [1].
 - ▶ Place the shaft generator [6] from the motor shaft [1].
 - ▶ Only DSC-20/DSC-25: Fasten the mounting washer [7] with the shaft generator mounting bolt [8].
 - ▶ Tighten the shaft generator mounting bolt [8] to the tightening torque specified in [Table 2.2](#).
- ✓ The shaft generator is mounted.

Table 2.2: Quantity and tightening torques of shaft generator mounting bolt depending on the gearbox-motor combination used.

Gearbox	Motor	Article number	Shaft generator mounting bolt		
			Screw size ¹⁾	Torque [Nm]	Quantity [pcs.]
DSC-20	EM1-20	20-002495	M4 × 12	4.3	1
DSC-25	EM1-40	20-002495	M4 × 12	4.3	1
DSC-32	EM1-75	20-002507	M5 × 12	9.3	1

¹⁾ Strength class 12.9

2.2.3 Mounting of strain wave gear



- ▶ Insert O-ring 2 [9] into the groove of the strain wave gear [10].
- ▶ Place the strain wave gear [10] on the motor adapter flange [3].
- ▶ Working in a criss-cross fashion and in three steps, tighten strain wave gear mounting bolts [11] to the tightening torque specified in [Table 2.3](#).
- ✓ The shaft generator is fully assembled.

Table 2.3: Quantity and tightening torques of strain wave gear mounting bolts depending on the gearbox-motor combination used.

Gearbox	Motor	Article number	Strain wave gear mounting bolt		
			Screw size ¹⁾	Torque [Nm]	Quantity [pcs.]
DSC-20	EM1-20	20-002513	M5 × 20	9.0	6
DSC-25	EM1-40	20-002507	M5 × 12	9.0	8
DSC-32	EM1-75	20-002280	M6 × 25	15.3	12

¹⁾ Strength class 12.9

WE LIVE MOTION

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