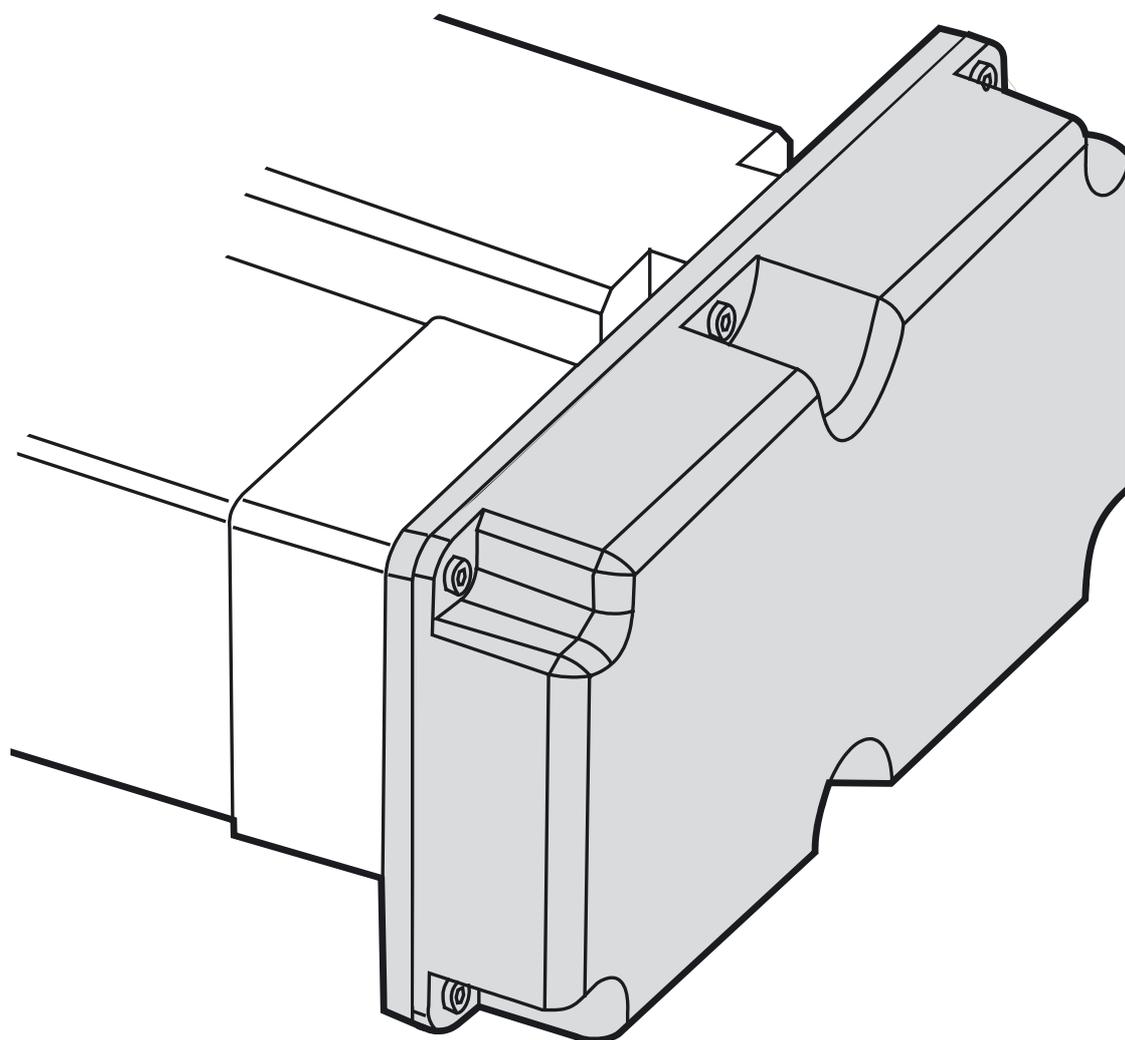


## Beltgear type BGM09, BGM41 and BGM81



**Installation Manual**  
**Edition: 1**  
**DW110500gb-0450**

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### Version History

Edition Number	Edition Date	Reason for Revision
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## 1. Mounting instructions

### 1.1 Position of type designation plate and mounting of the belt gear plate

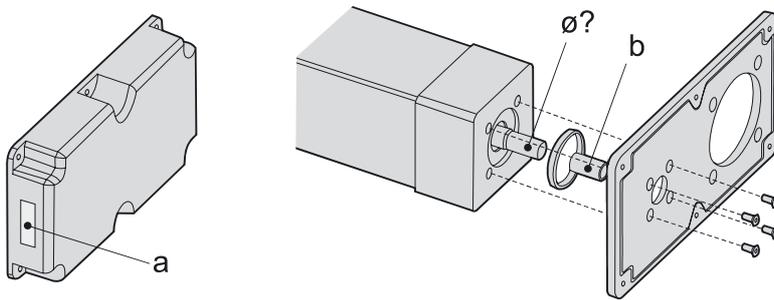


Figure 1: designation plate and belt plate

The designation of the belt gear can be found on the type designation plate (a). Measure the diameter of the unit shaft before mounting. Mount the belt gear plate and the spacer ring to the unit. Some belt gear models require a sleeve (b) to be mounted to the shaft of the unit. In such case a sleeve is included in the shipment. Tighten the screws according to table 1, page 6.

### 1.2 Mounting of the motor coupling

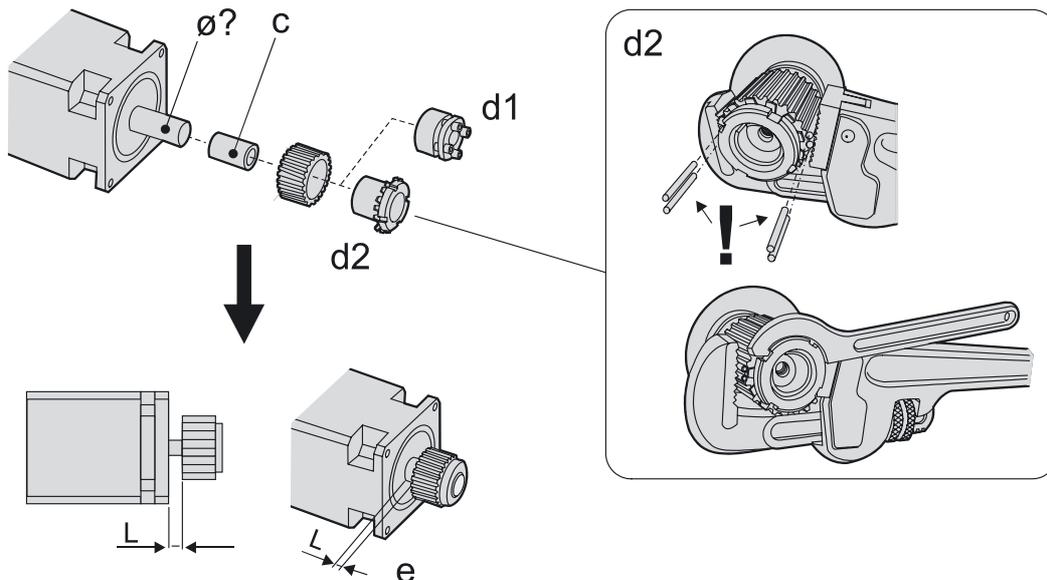


Figure 2: motor coupling mounting

Measure the diameter of the motor shaft. Some belt gear models require a sleeve (c) to be mounted to the motor shaft before mounting the motor coupling. In such case a sleeve is included in the shipment. Insert the coupling in the belt wheel and put the two on the motor shaft/sleeve. Tighten the coupling at the correct L dimension (see table 2, page 6) between the coupling and the motor flange. The supplied coupling can be one of two types (d1 or d2).

#### Coupling type d1:

This type of coupling use four tightening screws. The coupling tends to move out of the shaft when being tightened. To avoid this, tighten the screws in small steps and re-adjust the position of the coupling between each step until the correct tightening torque is set (see table 3, page 6).

#### Coupling type d2:

This type of coupling uses a tightening ring. Use four pins (supplied with the belt gear) when tightening the ring to avoid damaging the belt wheel. Tighten the ring until the correct tightening torque is set (see table 3, page 6).

### 1.3 Mounting of the coupling to the unit

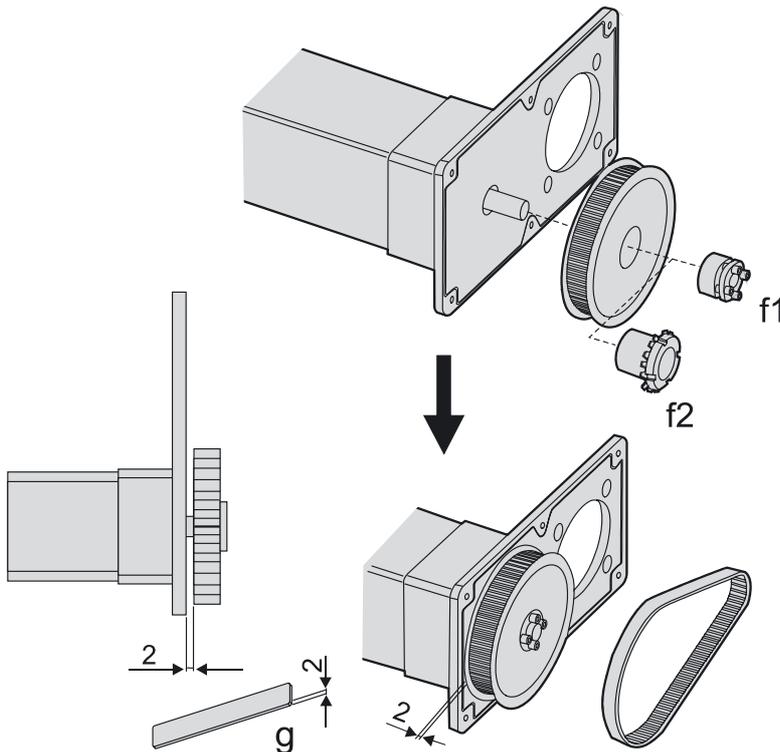


Figure 3: coupling to the unit

Insert the coupling in the belt wheel and put the two on the shaft/sleeve of the unit. The supplied coupling can be one of two types (f1 or f2). The correct distance between the belt wheel and the belt gear plate is 2 mm. Use the measuring stick (g) to ensure that the distance is 2 mm.

#### Coupling type f1:

This type of coupling use four tightening screws. The coupling tends to move out of the shaft when being tightened. To avoid this, tighten the screws in small steps and re-adjust the position of the coupling between each step until correct tightening torque is set (see table 4, page 6).

#### Coupling type f2:

This type of coupling uses a tightening ring. Tighten the ring until the correct tightening torque is set (see table 4, page 6).

### 1.4 Mounting of the belt

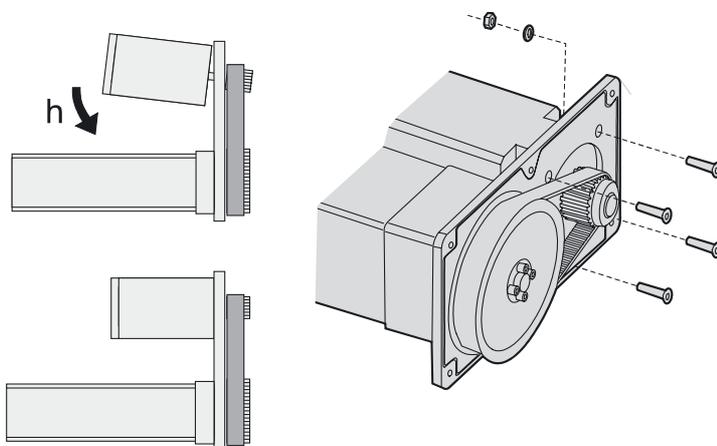


Figure 4: mounting of the belt

Put the belt around the belt wheel of the unit and then insert the motor (h). Mount the motor to the belt plate using four screws. Tighten screws according to table 1, page 6.

### 1.5 Mounting of the cover

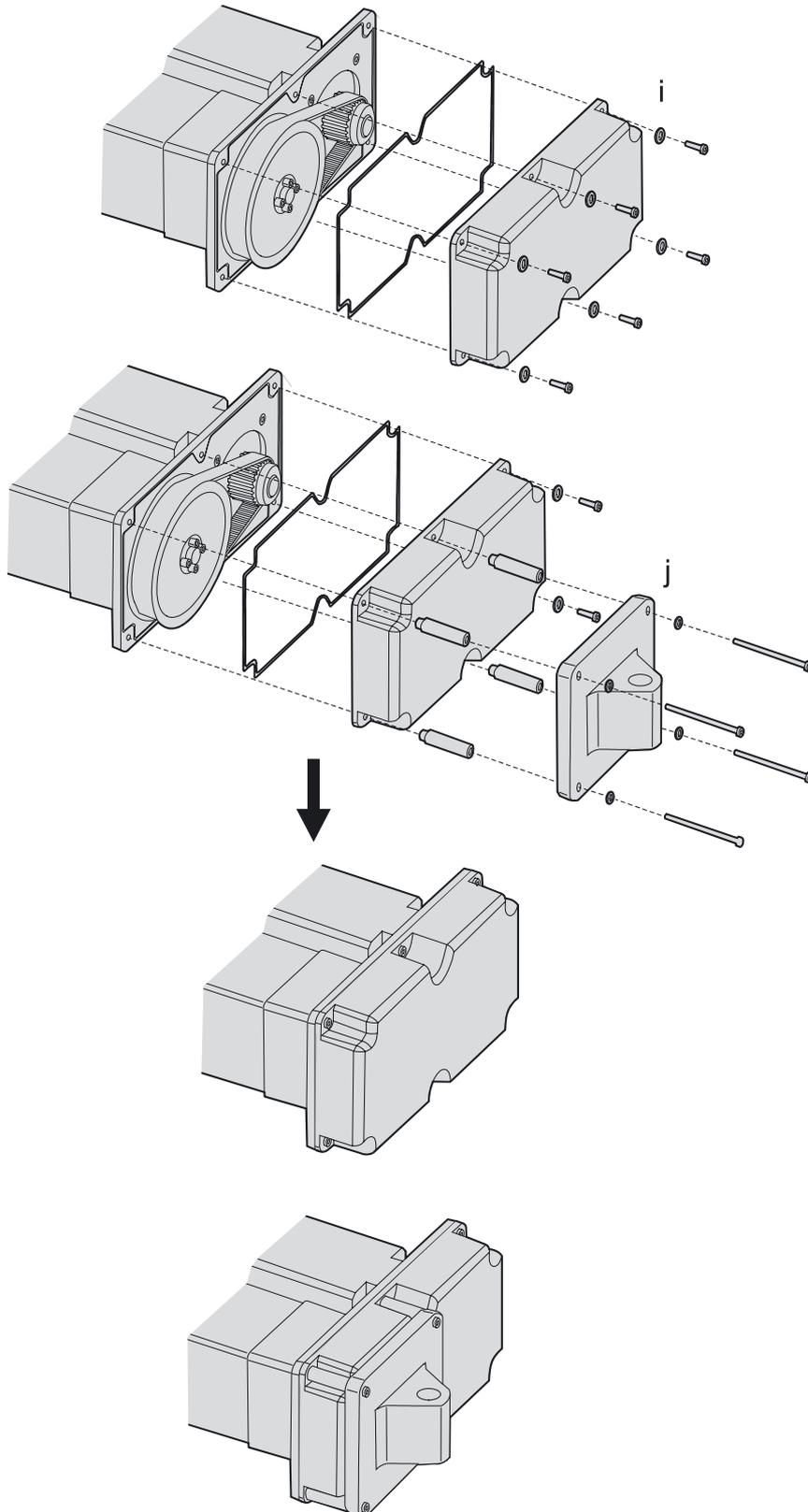


Figure 5: mounting of the cover

Mount the cover (i) and the sealing using the six screws. If the belt gear comes with a clevis (j), mount the clevis and the cover using the four distance sleeves, the four long and the two short screws. Tighten all screws according to table 1, page 6.

## 2. Tables

### 2.1 Tightening torque for screws

Screw size	Tightening torque [Nm]
M5	6,5
M6	9,4
M8	23
M10	52
M16	150

Table 1: tightening torque for screws

### 2.2 Dimension L

Type of gear	L [mm]
BGM09	9,5
BGM41	13,5
BGM81	16

Table 2: dimension L

### 2.3 Tightening torque for motor shaft couplings

Beltgear model	Coupling type	Motor shaft diameter [mm]	Sleeve required on the motor shaft	Tightening torque [Nm]
BGM09	d2	11	yes	100
BGM09	d2	14	yes	100
BGM09	d2	19	no	100
BGM41	d1	14	no	5
BGM41	d2	19	yes	140
BGM41	d2	24	no	140
BGM81	d2	24	no	140
BGM81	d2	28	no	140
BGM81	d2	32	no	140

Table 3: motor shaft couplings

### 2.4 Tightening torque for unit shaft couplings

Beltgear model	Coupling type	Unit shaft diameter [mm]	Sleeve required on the unit shaft	Tightening torque [Nm]
BGM09	f1	11	no	5
BGM09	f1	16	no	5
BGM41	f1	16	no	5
BGM41	f1	20	no	14
BGM41	f2	20	no	140
BGM81	f1	25	no	14
BGM81	f2	25	no	140

Table 4: unit shaft couplings

### 3. Technical data

#### 3.1 Technical data

	Belt gear model		
	BGM09	BGM41	BGM81
Weight [kg]	1,9	4,6	12,1
Weight of clevis option [kg]	1,2	2,4	5,1
Max. input speed [rpm]	5000	5000	5000
Protection class	IP65	IP65	IP65

Table 5: technical data

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