Assembly instructions (Original: de)
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1510NH
[8048256]

Axial kit EAMM-A-S...-...A/P-G2

FESTO

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1. Intended use

Axial kit EAMM-A-S...-...A/P-G2:
Connecting an axis to a motor in axial configuration to the driven shaft (➔ Section 9).

2. Safety instructions and notes on mounting

Warning

Unexpected movement of components.
Injury due to impacts or pinching.
- Switch off power supply before mounting work.
- Observe the safety instructions (➔ Applicable documents).

Note

Incorrect mounting can cause malfunction and material damage.
- Observe tightening torques (➔ Section 7).
- Leave lubricant film on the screws.
- Clean shafts. The coupling only grips without sliding on a dry and grease-free shaft surface.
- Maintain alignment of the coupling hubs 1 (➔ Section 6).
- Support combination (➔ Section 8):

– if there are far-protruding and heavy motor attachments
– in the event of severe vibrations and oscillation/shock loads.

Each time after disconnecting or turning the motor:
- Start homing of the shaft.

Information

Applicable documents
➔ Motor operating instructions
➔ Shaft operating instructions

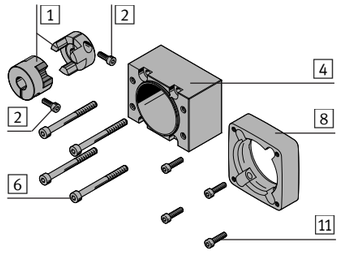
The kit contains the maximum mounting attachments that may be required.
- Select required mounting components (➔ Section 7).

There are two mounting variants (A/B).

EAMM-A-...-G2	Mounting variant
S38-40A/-40P/-42A	B
S38-55A/-57A/-60P/-67A	A
S48-55A/-57A	B
S48-60P /70A/-87A	A
S62-70A/-80P/-87A	B
S62-100A/-140A	A
S95-100A	B
S95-140A	A

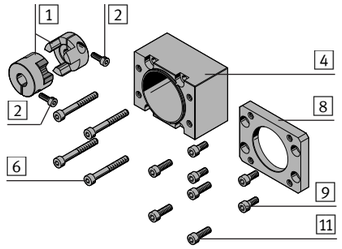
3. Parts lists

3a. Parts list EAMM-A-S...-...A/P-G2 mounting variant A



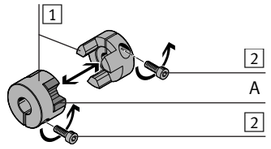
1	Coupling hub	(2x)
2	Clamping screw	(2x)
4	Coupling housing	(1x)
6	Screw	(4x)
8	Motor flange	(1x)
11	Screw	(4x)

3b. Parts list EAMM-A-S...-...A/P-G2 mounting variant B

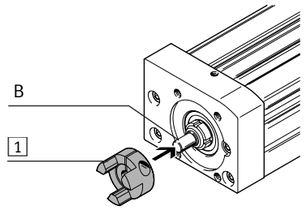


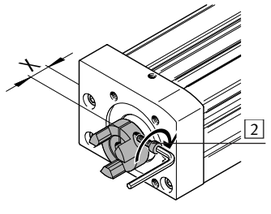
1	Coupling hub	(2x)
2	Clamping screw	(2x)
4	Coupling housing	(1x)
6	Screw	(4x)
8	Motor flange	(1x)
9	Screw	(4x)
11	Screw	(4x)

4. Preassembly of the coupling



- Pull apart the coupling.
- Press the ring gear (A) onto one of the two coupling hubs 1.
- Unscrew clamping screws 2.
- Push the coupling hub 1 with the matching drill hole onto the drive shaft (B).

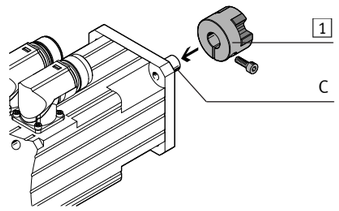




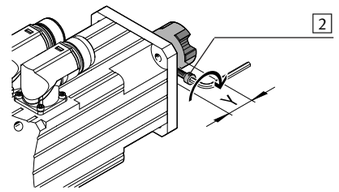
For accurate alignment:
- Maintain distance (X) (➔ Section 6).
- Tighten clamping screw 2.

Check: The coupling hub 1 fits through the motor flange 8 (➔ Section 4a) otherwise (➔ Section 4b).

4a. In the case of motor flange 8 with large drill hole

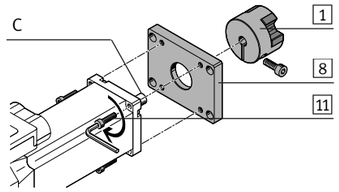


- Push the coupling hub 1 with the matching drill hole onto the drive shaft (C).

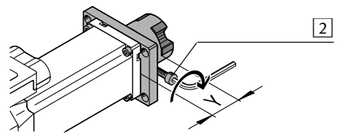


For accurate alignment:
- Maintain distance (Y) (➔ Section 6).
- Tighten clamping screw 2.

4b. In the case of motor flange 8 with small drill hole



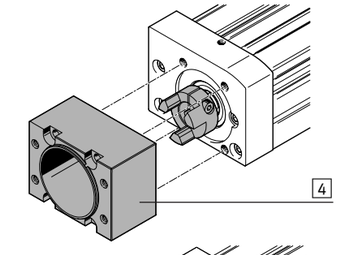
- Fasten the motor with the screws 11 to the motor flange 8. [1)]
- Push the coupling hub 1 with the matching drill hole onto the drive shaft (C).



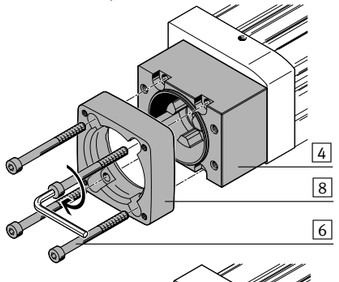
For accurate alignment:
- Maintain distance (Y) (➔ Section 6).
- Tighten clamping screw 2.

5. Mounting

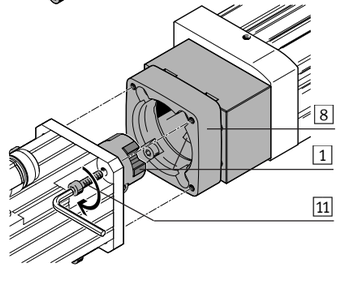
5a. Mounting variant A



- Place the coupling housing 4 on the shaft.



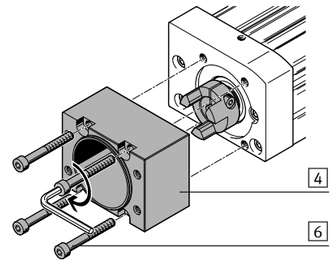
- Fasten the motor flange 8 and the coupling housing 4 to the axis with the screws 6.



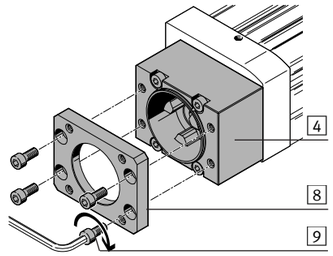
- Push motor and the shaft together.

Check: correct position of the coupling hubs 1 in relation to each other.
- Fasten the motor with the screws 11 to the motor flange 8.

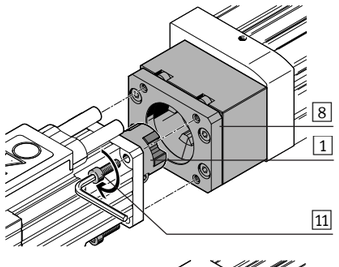
5b. Mounting variant B



- Fasten the coupling housing 4 to the shaft with the screws 6.

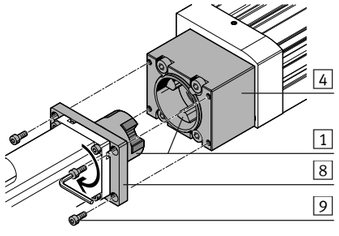


In the case of motor flange 8 with large drill hole:
- Fasten the motor flange 8 to the coupling housing 4 with the screws 9.



- Push motor and the shaft together.

Check: correct position of the coupling hubs 1 in relation to each other.
- Fasten the motor with the screws 11 to the motor flange 8.



In the case of motor flange 8 with small drill hole:
- Push motor and the shaft together.

Check: correct position of the coupling hubs 1 in relation to each other.
- Fasten the motor via the motor flange 8 to the coupling housing 4 with the screws 9.

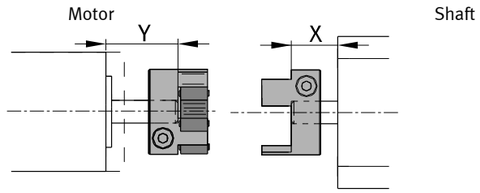
Continuation on the reverse side!

[1)] For kit ...-42A, the motor flange 8 is fastened to the motor with the screws 11.

6. Alignment of the coupling hubs 1

➔ Note

Axial forces on the shafts of motor and shaft can result in failure of the encoder/brake or increased wear on the bearings.
- Maintain the distances X and Y.



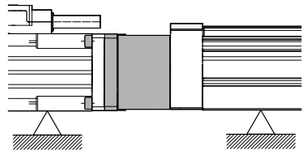
EAMM-A-	Y ±0.3 [mm]	X ±0.3 [mm]
S38-40A-G2	16.3	16.3
S38-40P-G2	20	
S38-42A-G2	24.3	
S38-55A-G2	20.3	
S38-57A-G2		
S38-60P-G2	30.3	
S38-67A-G2	25.3	
S48-55A-G2	20	15.8
S48-57A-G2		
S48-60P-G2	30	
S48-70A-G2	23	
S48-87A-G2	26.8	
S62-70A-G2	29.5	33
S62-80P-G2	36	25
S62-87A-G2	32.5	33
S62-100A-G2	40	25
S62-140A-G2	50	
S95-100A-G2	40	27.4
S95-140A-G2	50	

7. Screw sizes and tightening torques M_A [2)]

EAMM-A-	2	[Nm]	6	[Nm]	9	[Nm]	11	[Nm]
S38-40A-G2	M4x12	4	M5x40	6	M3x8	1.2	M3x12	1.2
S38-40P-G2					M3x12			
S38-42A-G2					M3x16			
S38-55A-G2			M5x50		—	—	M5x16	6
S38-57A-G2							M4x12	3
S38-60P-G2			M5x55				M4x16	
S38-67A-G2							M6x16	8
S48-55A-G2	M4x12	4	M5x40	6	M5x12	6	M5x16	6
S48-57A-G2							M4x12	3
S48-60P-G2			M5x55		—	—	M4x16	
S48-70A-G2			M5x50				M5x20	6
S48-87A-G2			M5x55				M6x22	10
S62-70A-G2	M5x18	8	M6x70	10	M6x16	10	M5x20	6
S62-80P-G2					M6x12			
S62-87A-G2					M6x16		M6x22	10
S62-100A-G2			M6x80		—	—	M8x20	18
S62-140A-G2			M6x90				M10x35	30
S95-100A-G2	M6x20	15	M8x75	18	M8x25	18	M8x25	18
S95-140A-G2			M8x100		—	—	M10x30	30

[2)] Tolerance for tightening torques M_A without indication of tolerance ± 20 %

8. Support of the shaft-motor combination



To avoid damage:
- Support the combination so it is free from tension.

9. Permissible shafts and motors

➔ Note

Malfunction and material damage due to overloading.
The output variables of the motor must not exceed the permissible values of the components used.
Permitted values ➔ www.festo.com/catalogue
- Limit motor output variables accordingly.

- Derive the shaft and motor from the interface codes.

Example: EAMM-A-**S38**-**40A**
- Shaft interface **S38**
- Motor interface **40A**

Shaft interface	Shaft[3)]
S38	EGC-70-...BS, EGC-HD-125-...-BS, ELGA-BS-70
S48	EGC-80-...BS, EGC-HD-160-...-BS, ELGA-BS-80
S62	EGC-120-...-BS, EGC-HD-220-...-BS, ELGA-BS-120
S95	EGC-185-...-BS, ELGA-BS-150

Motor interface	Motor[4)]
40A	EMMS-AS-40
40P	EMME-AS-40
42A	EMMS-ST-42
55A	EMMS-AS-55
57A	EMMS-ST-57
60P	EMME-AS-60
67A	EMCA-EC-67
70A	EMMS-AS-70
80P	EMME-AS-80
87A	EMMS-ST-87
100A	EMME-AS-100, EMMS-AS-100
140A	EMMS-AS-140

[3)] Spindle axis EGC-BS/ELGA-BS-KF

[4)] Servo motor EMME-AS/EMMS-AS, stepper motor EMMS-ST, integrated drive EMCA-EC