

**FESTO**

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## Axial kit EAMM-A-P...-...A/P

### 1. Intended usage

Axial kit EAMM-A-P...-...A/P:

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 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 will only grip without slipping on a drive shaft which is dry and free of grease.
- Observe proper alignment of the coupling hubs [1] (→ Section 6).
- Support the combination (→ Section 8):
  - if there are far-protruding or heavy motor attachments
  - if there are severe vibrations or oscillation/shock loads

Each time after disconnecting or turning the motor:

- Perform a homing of the axis.

#### Info

##### Applicable documents

- Motor operating instructions
- Axis operating instructions

The kit contains all the mounting components that may be required.

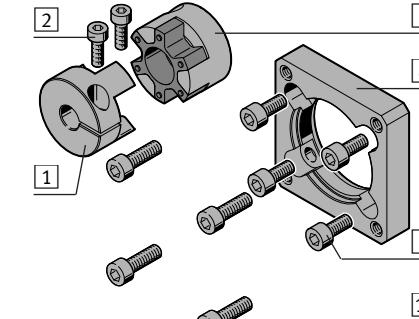
- Select required mounting components (→ Section 7).

There are 3 mounting variants (A/B/C).

EAMM-A-	Mounting variant
P3-28D-	28A/40P
P4-28B-	28A
P4-28B-	40A/40P/42A
P5-28B-	28A
P5-28B-	40A/40P/42A
P6-38A-	40A/40P
P6-38A-	42A
P6-38A-	55A/57A/60P/67A
P8-38A-	40A/40P
P8-38A-	42A
P8-38A-	55A/57A/60P/67A/70A/87A
P10-38A-	55A/57A/60P/67A/70A/87A

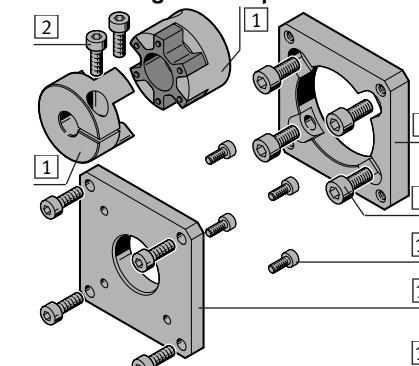
### 3. Parts lists

#### 3a. Mounting variant A parts list



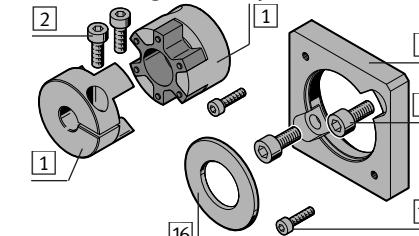
- |      |                     |      |
|------|---------------------|------|
| [1]  | Coupling hub        | (2x) |
| [2]  | Clamping screw      | (2x) |
| [9]  | Screw <sup>1)</sup> | (4x) |
| [8]  | Motor flange        | (1x) |
| [13] | Screw               | (4x) |

#### 3b. Mounting variant B parts list



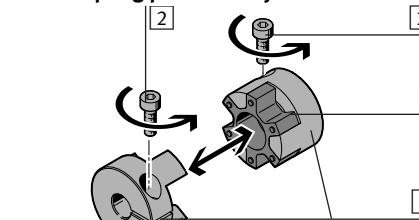
- |      |                |      |
|------|----------------|------|
| [1]  | Coupling hub   | (2x) |
| [2]  | Clamping screw | (2x) |
| [8]  | Motor flange   | (1x) |
| [9]  | Screw          | (4x) |
| [11] | Screw          | (4x) |
| [12] | Motor flange   | (1x) |
| [13] | Screw          | (4x) |

#### 3c. Mounting variant C parts list

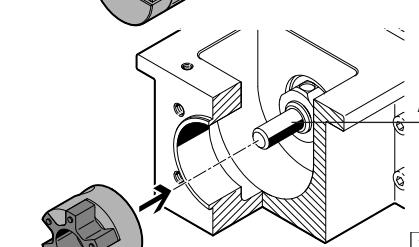


- |      |                |      |
|------|----------------|------|
| [1]  | Coupling hub   | (2x) |
| [2]  | Clamping screw | (2x) |
| [8]  | Motor flange   | (1x) |
| [9]  | Screw          | (2x) |
| [11] | Screw          | (2x) |
| [16] | Centring ring  | (1x) |

### 4. Coupling preassembly

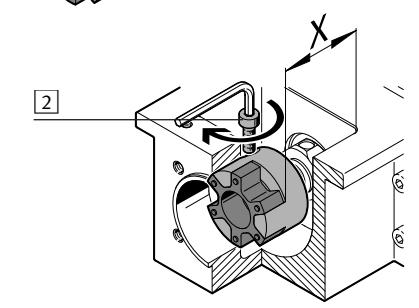


- Pull apart coupling.
- Place ring gear [B] on one of the two coupling hubs [1].
- Loosen clamping screws [2].



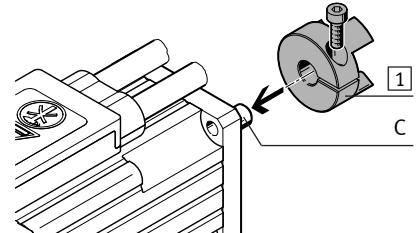
- Slide coupling hub [1] with the matching drill hole onto the drive shaft [A].

- For accurate alignment:
- Observe distance (X) (→ Section 6).
  - Tighten axis-side clamping screw [2].

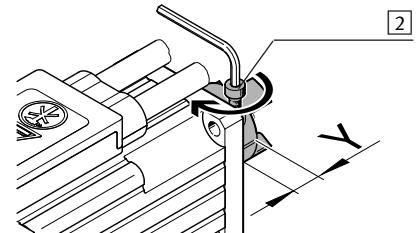


### 5. Mounting

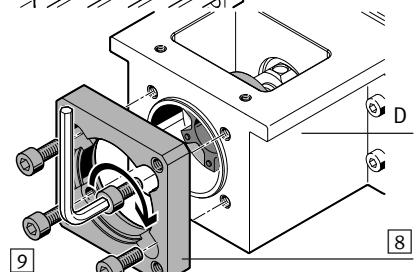
#### 5a. Mounting variant A



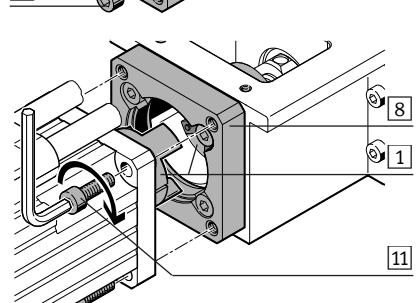
- Slide coupling hub [1] with the matching drill hole onto the drive shaft [C].



- For accurate alignment:
- Observe distance (Y) (→ Section 6).
  - Tighten clamping screw [2].

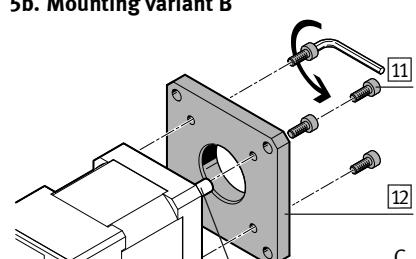


- Fasten motor flange [8] to the coupling housing [D] using the screws [9]<sup>1)</sup>.

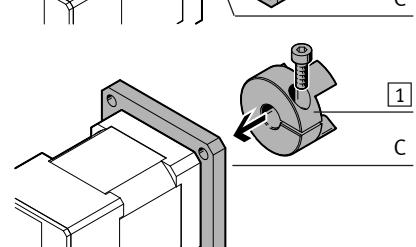


- Connect motor and axis by pushing.  
Check: correct relative position of coupling hubs [1].
- Fasten motor to motor flange [8] using the screws [11]<sup>2)</sup>.

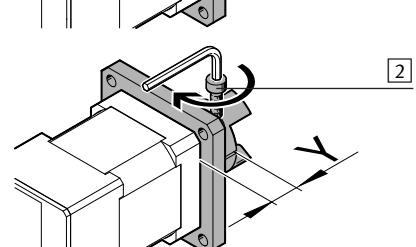
#### 5b. Mounting variant B



- Fasten motor flange [12] to the motor using the screws [11].



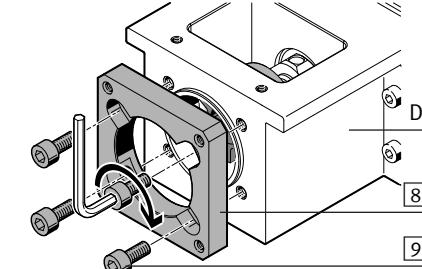
- Slide coupling hub [1] with the matching drill hole onto the drive shaft [C].



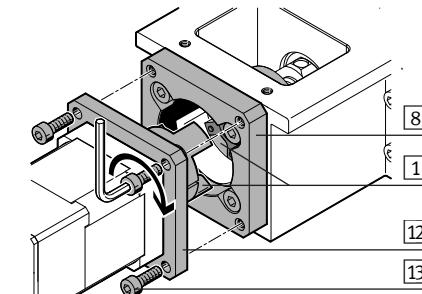
- For accurate alignment:
- Observe distance (Y) (→ Section 6).
  - Tighten motor-side clamping screw [2].

<sup>1)</sup> For EAMM-A-P3-28D-..., screw [9] is only required (2x).

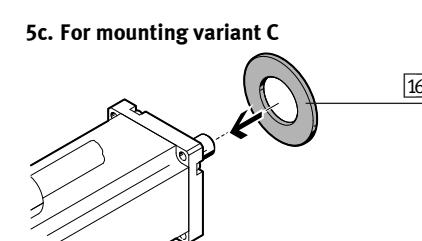
<sup>2)</sup> For EAMM-A-P4/P5-28B-42A, the motor flange [8] is fastened to the motor using the screws [11].



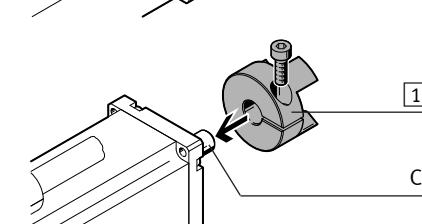
- Fasten motor flange [8] to the axis's coupling housing [D] using the screws [9].



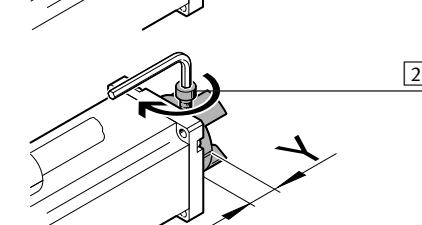
- Connect motor and axis by pushing.  
Check: correct relative position of coupling hubs [1].
- Fasten the motor to the motor flange [8] using motor flange [12] and the screws [13].



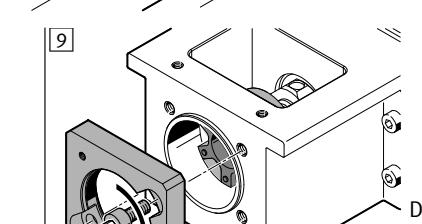
- Place centring ring [16] on the motor.



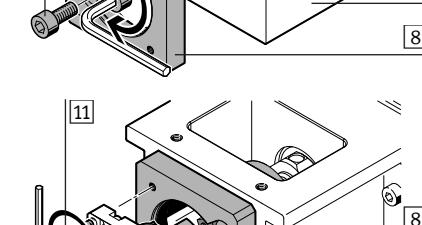
- Slide coupling hub [1] with the matching drill hole onto the drive shaft [C].



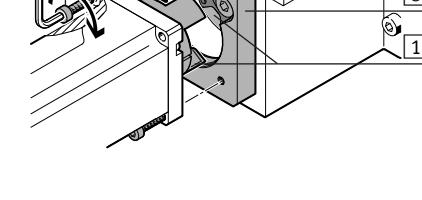
- For accurate alignment:
- Observe distance (Y) (→ Section 6).
  - Tighten motor-side clamping screw [2].



- Fasten motor flange [8] to the axis's coupling housing [D] using the screws [9].



- Connect motor and axis by pushing.  
Check: correct relative position of coupling hubs [1].
- Fasten the motor to the motor flange [8] using the screws [11].



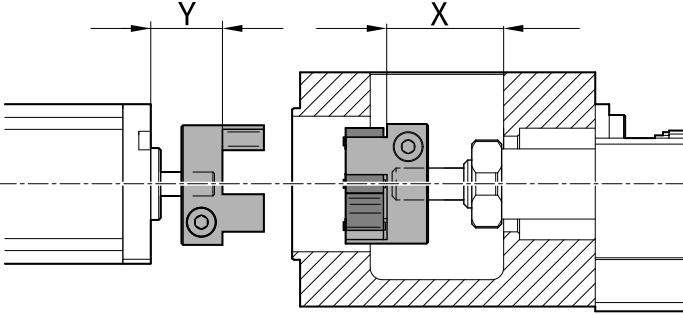
Continuation on the reverse side!

## 6. Alignment of the coupling hubs <sup>1)</sup>

### → Note

Axial forces on the motor and axis shafts can result in failure of the encoder/brake or increased bearings wear.

- Observe distances X and Y.

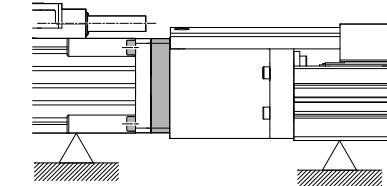


EAMM-A-	Axis	X <sup>±0.3</sup> [mm]	Y <sup>±0.3</sup> [mm]
P3-28D-28A	EGSK-15	12.5	20.2
P3-28D-40P			19.7
P4-28B-28A	EGSK-/EGSP-20	14.0	20.0
P4-28B-40A		15.0	16.5
P4-28B-40P		14.5	20.0
P4-28B-42A		15.0	24.7
P5-28B-28A	EGSK-/EGSP-26	17.0	20.0
P5-28B-40A		17.5	16.8
P5-28B-40P		17.0	20.5
P5-28B-42A		17.5	25.0
P6-38A-40A	EGSK-33	13.3	20.3
P6-38A-40P			22.0
P6-38A-42A			26.3
P6-38A-55A			22.3
P6-38A-57A			
P6-38A-60P			13.8
P6-38A-67A			27.3
P8-38A-40A	EGSK-46	26.5	18.6
P8-38A-40P	EGSP-33	17.3	16.7
P8-38A-42A	EGSK-46	26.5	20.3
P8-38A-42A	EGSP-33	17.3	18.0
P8-38A-55A	EGSP-33	17.3	22.3
P8-38A-55A	EGSK-46	26.5	24.6
P8-38A-55A	EGSK-46	26.5	20.6
P8-38A-55A	EGSP-33	17.3	18.7
P8-38A-57A	EGSK-46	26.5	20.6
P8-38A-57A	EGSP-33	17.3	18.7
P8-38A-60P	EGSK-46	26.5	30.6
P8-38A-60P	EGSP-33	17.3	28.3
P8-38A-67A	EGSK-46	26.5	25.6
P8-38A-67A	EGSP-33	17.3	23.3
P8-38A-70A	EGSK-46	26.5	23.3
P8-38A-70A	EGSP-33	17.3	21.0
P8-38A-87A	EGSK-46	26.5	27.6
P8-38A-87A	EGSP-33	17.3	25.3
P10-38A-55A	EGSP-46	28.0	19.1
P10-38A-57A			29.1
P10-38A-60P			24.1
P10-38A-67A			21.7
P10-38A-70A			26.0
P10-38A-87A			

## 7. Screw sizes and tightening torques M<sub>A</sub><sup>3)</sup>

EAMM-A-	[2]	[Nm]	[9]	[Nm]	[11]	[Nm]	[13]	[Nm]
P3-28D-28A	M2x6	0.5	M3x12	1.2	M2.5x8	0.8	—	—
P3-28D-40P			M3x10		M3x10	1.2		
P4-28B-28A	M2x6	0.5	M3x10	1.2	M2.5x6	0.8	M3x10	1.2
P4-28B-40A			M3x14		M3x14	1.2	—	—
P4-28B-40P			M3x12		M3x12			
P4-28B-42A			M3x20		M3x10			
P5-28B-28A	M2x6	0.5	M3x10	1.2	M2.5x6	0.8	M3x10	1.2
P5-28B-40P			M3x12		M3x12	1.2	—	—
P5-28B-42A			M3x20		M3x10			
P6-38A-40A	M4x12	4	M5x12	6	M3x12	1.2	—	—
P6-38A-40P			M5x14					
P6-38A-42A			M5x12		M3x8		M4x12	3
P6-38A-55A					M5x16	6	—	—
P6-38A-57A					M4x12	3		
P6-38A-60P					M5x18		M4x16	
P6-38A-67A					M5x16	8	M6x16	
P8-38A-40A	M4x12	4	M5x12	6	M3x12	1.2	—	—
P8-38A-40P			M5x14					
P8-38A-42A			M5x12		M3x8		M4x12	3
P8-38A-55A					M5x16	6	—	—
P8-38A-57A					M4x12	3		
P8-38A-60P					M5x18		M4x16	
P8-38A-67A					M5x16	8	M6x16	
P8-38A-70A					M5x14	6	M5x20	6
P8-38A-87A					M5x18	10	M6x20	10
P10-38A-55A	M4x12	4	M5x12	6	M5x16	6	—	—
P10-38A-57A			M5x14		M4x12	3		
P10-38A-60P			M5x18		M4x16			
P10-38A-67A			M5x16		M6x16	8		
P10-38A-70A			M5x14		M5x20	6		
P10-38A-87A			M5x18		M6x20	10		

## 8. Supporting the axis-motor combination



To avoid damage:

- Support the combination so it is free from tension.

## 9. Permissible axes 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.

Permissible values → [www.festo.com/catalogue](http://www.festo.com/catalogue)

- Limit the motor's output variables accordingly.

- Derive the axis and motor from the interface codes.

Example: EAMM-A-P8-38A-55A

– Axis interface P8-38A

– Motor interface 55A

Axis interface	Axis <sup>4)</sup>
P3-28D	EGSK-15
P4-28B	EGSK-20, EGSP-20
P5-28B	EGSK-26, EGSP-26
P6-38A	EGSK-33
P8-38A	EGSK-46, EGSP-33
P10-38A	EGSP-46

Motor interface	Motor <sup>5)</sup>
28A	EMMS-ST-28
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
87A	EMMS-ST-87

<sup>3)</sup> Tolerance for tightening torques M<sub>A</sub> with no indication of tolerance ± 20 %

<sup>4)</sup> Electric slide EGSK/EGSP

<sup>5)</sup> Servo motor EMME-AS/EMMS-AS, stepper motor EMMS-ST,integrated drive EMCA-EC