FESTO

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

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1. Intended use

Axial kit EAMM-A-D...-...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 electric shock, impact, squeezing.
- Switch off power supply before mounting work.
- Observe the safety instructions (➔ applicable documents).

➔ **Note**

Incorrect mounting can cause malfunction and material damage.
- Select correct screw length[1] of the screws ⑥.
- Observe tightening torques (➔ section 7).
- Leave lubricant film on the screws.
- Clean shafts. The coupling ① only grips dry and grease-free drive shafts.
- Observe alignment of the coupling hubs (➔ 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:
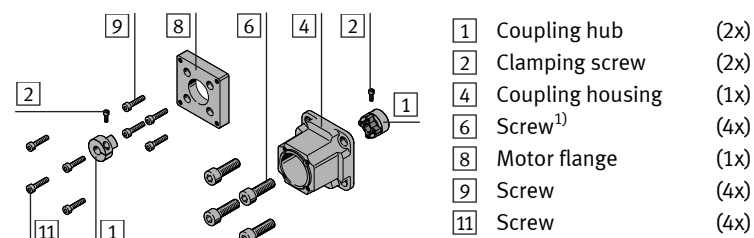- Perform homing of the axis.

ℹ **Information**

Applicable documents
➔ Motor operating instructions
➔ Axis operating instructions

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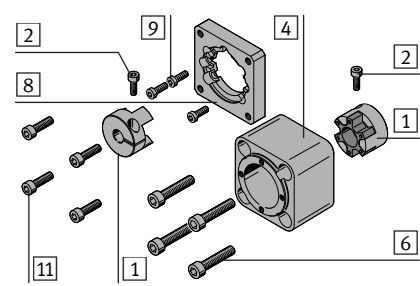- Select required mounting components (➔ section 7).

3. Parts lists
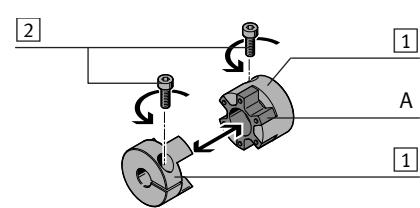### 3a. EAMM-A-D19/D32-28A/-40A/-40P/-42A

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

3b. EAMM-A-D...-...A/P

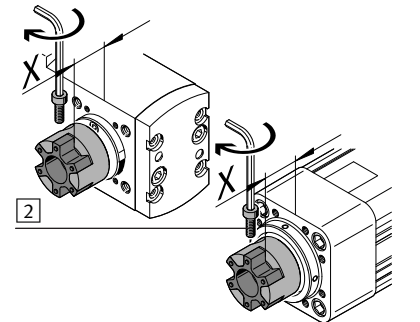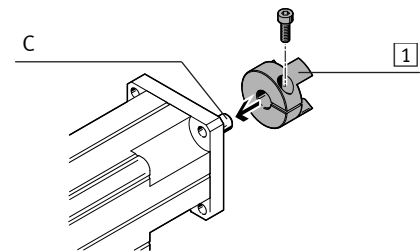| ① | Coupling hub | (2x) |
②	Clamping screw	(2x)
④	Coupling housing	(1x)
⑥	Screw[1]	(4x)
⑧	Motor flange	(1x)
⑨	Screw	(3x/4x)
⑪	Screw	(4x)

4. Preassembly of the coupling

- Pull apart the coupling.
- Press the ring gear (A) onto one of the two coupling hubs ①.
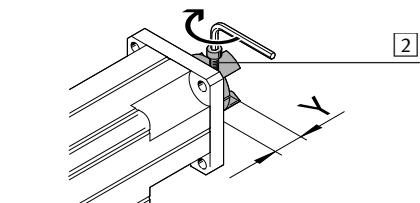- Screw on clamping screws ②.

- Push the coupling hub ① with the matching drill hole onto the drive shaft (B).
  (D) EHMB, ERMB
  (E) DNCE, EGSL, ESBF

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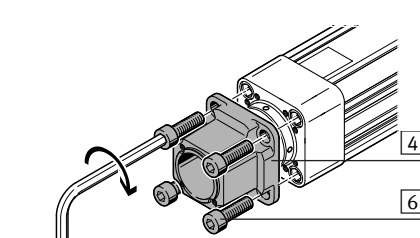- Maintain distance (X) (➔ section 6).
- Tighten clamping screw ②.

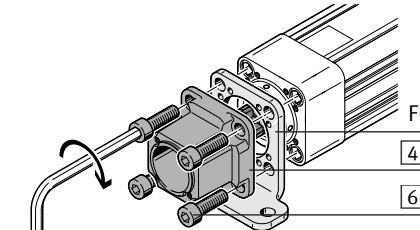- Push the coupling hub ① with the matching drill hole onto the drive shaft (C).

For accurate alignment:
- Maintain distance (Y) (➔ section 6).
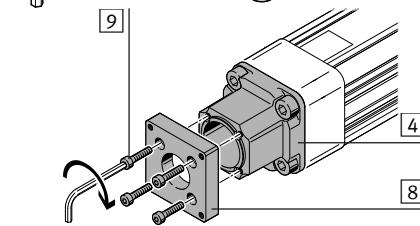- Tighten clamping screw ②.
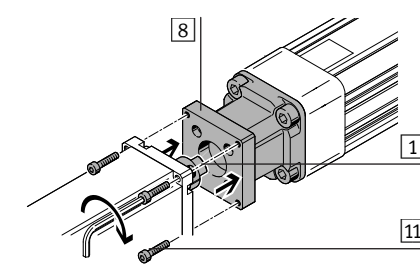
5. Mounting
5a. Mounting DNCE, EGSL, ESBF

Without foot mounting:
- Fasten the coupling housing ④ to the axis with the screws ⑥[1].

With foot mounting HNCE (F)[2]:
- Fasten the coupling housing ④ and foot mounting (F) to the axis with the screws ⑥[1].

- Fasten the motor flange ⑧ to the coupling housing ④ with all screws ⑨.

- Push motor and the axis together.
  Check: correct position of the coupling hubs ① in relation to each other.
- Fasten the motor to the motor flange ⑧ with the screws ⑪[3].

5b. Mounting EHMB, ERMB

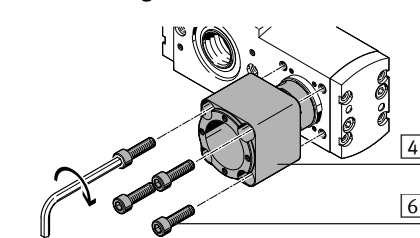- Fasten the coupling housing ④ to the axis with the screws ⑥[1].

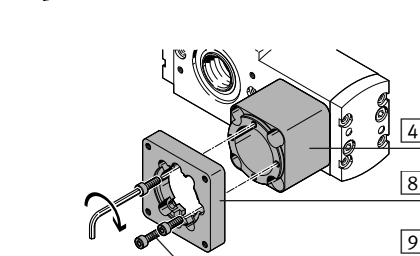- Fasten the motor flange ⑧ to the coupling housing ④ with all screws ⑨.

- Push motor and the axis together.
  Check: correct position of the coupling hubs ① in relation to each other.
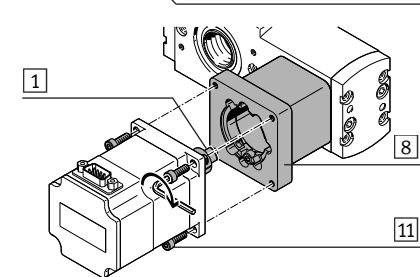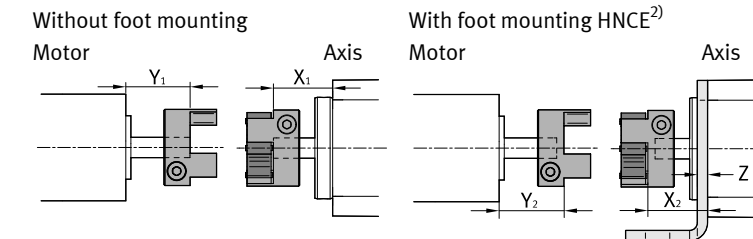- Fasten the motor to the motor flange ⑧ with the screws ⑪[3].

6. Alignment of the coupling hubs ①

➔ **Note**

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

Without foot mounting

With foot mounting HNCE[2]

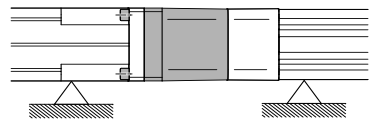| EAMM-A-	Y_1 ±0,5 [mm]	X_1 ±0,5 [mm]	Y_2 ±0,5 [mm]	X_2 ±0,5 [mm]	Z [mm]
D19-28A	19,7	18,5	–	–	–
D19-40A	16,2				
D19-40P	19,2				
D19-42A	23,5				
D32-40A	15,1	16,7	17,1	18,7	4
D32-40P	19,3		21,3		
D32-42A	23,3		25,3		
D32-55A	19,6	18,2	21,6	20,2	
D32-57A	20,9		22,9		
D32-60P	30,1		32,1		
D32-67A	25		27		
D40-55A	19,1	18,7	21,1	20,7	4
D40-57A	20,4		22,4		
D40-60P	29,6		31,6		
D40-67A	24,5		26,5		
D40-70A	21,9		23,9		
D40-87A	23,9		25,9		
D50-70A	24,5	27,7	–	–	–
D50-80P	36				
D50-87A	26				
D50-100A	39,5				
D60-70A	23,7	23,5	26,2	26	5
D60-80P	35,2		37,7		
D60-87A	25,2		27,7		
D60-100A	38,7		41,2		
D80-100A	40,3	33,5	–	–	–
D80-140A	50,3				
D100-100A	40,2	41,1	–	–	–
D100-140A	48,4		–	–	–

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[1] The screws ⑥ are labelled correspondingly.

[2] Only with DNCE
[3] For EAMM-A-D...-...-42A, the motor flange ⑧ is fastened to the motor with the screws ⑪.

7. Screw sizes and tightening torques M_A [4)]

EAMM-A-	2	[Nm]	6 [5)]	[Nm]	9	[Nm]	11	[Nm]
D19-28A	M2x6	0,5	M4x16	2,5	M3x12	1,2	M2,5x8	0,6
D19-40A							M3x16	1,2
D19-40P					M3x10		M3x10	
D19-42A					M3x12			
D32-40A[6)]	M2x6	0,5	M6x20	5/6[7)]	M3x14	1,2	M3x14	1,2
D32-40P[6)]					M3x12		M3x12	
D32-42A			M6x12/M6x20[1)]		M3x20		M3x10	
D32-55A	M4x12	4	M6x22/M6x30[1)]		M4x12	2,4	M5x18	6
D32-57A						3	M4x12	3
D32-60P					M4x20		M4x16	
D32-67A					M4x12		M6x16	8
D40-55A	M4x12	4	M6x30	5/6[7)]	M4x12	2,4	M5x18	6
D40-57A						3	M4x12	3
D40-60P					M4x20		M4x16	3
D40-67A					M4x12		M6x16	8
D40-70A						2,4	M5x18	6
D40-87A					M4x16	3	M6x22	10
D50-70A	M5x18	8	M8x50	12	M6x12	8	M5x20	6
D50-80P			M8x65		M6x16	10		
D50-87A			M8x50				M6x22	10
D50-100A			M8x65		M6x20		M8x25	18
D60-70A	M5x18	8	M8x22/M8x30[1)]	9/	M6x12	8	M5x20	6
D60-80P			M8x33/M8x40[1)]	12[8)]	M6x16	10		
D60-87A			M8x22/M8x30[1)]				M6x22	10
D60-100A			M8x33/M8x40[1)]		M6x20		M8x25	18
D80-100A	M6x20	15	M10x70	25	M6x20	10	M8x20	18
D80-140A					M6x25		M10x35	30
D100-100A	M6x20	15	M10x80	25	M6x20	10	M8x20	18
D100-140A	M8x25	35			M6x25		M10x35	30

8. Support of 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.
Permitted values → www.festo.com/catalogue
- Limit motor output variables accordingly.

- Derive the axis and motor from the interface codes.

Example: EAMM-A-**D40**-**42A**
- Axis interface **D40**
- Motor interface **42A**

Axis interface	Axis[9)]
D19	EGSL-35
D32	DNCE-32, ESBF-32, EGSL-45, EHMB-20[6)], ERMB-20[6)]
D40	DNCE-40, ESBF-40, EGSL-55, EHMB-25, ERMB-25
D50	ESBF-50
D60	DNCE-63, ESBF-63, EGSL-75, EHMB-32, ERMB-32
D80	ESBF-80
D100	ESBF-100

Motor interface	Motor[10)]
28A	EMMS-ST-28
40A	EMMS-AS-40, MTR-AC-40
40P	EMME-AS-40
42A	EMMS-ST-42, MTRE-ST-42
55A	EMMS-AS-55, MTR-AC-55
57A	EMMS-ST-57
60P	EMME-AS-60
67A	EMCA-EC-67
70A	EMMS-AS-70, MTR-AC-70
80P	EMME-AS-80
87A	EMMS-ST-87
100A	EMME-AS-100, EMMS-AS-100, MTR-AC-100
140A	EMMS-AS-140

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

[5)] Do not exceed the tightening torque of the screw 6 . Otherwise, the cover screws of the axis will loosen during disassembly.

[6)] EAMM-A-D32-40A/40P is not permissible for ERMB/EHMB-20.

[7)] For DNCE-32/-40, EGSL-45/55:   5 Nm
   For EHMB-20/25, ERMB-20/-25, ESBF-32/40:   6 Nm

[8)] For DNCE-63, EGSL-75:   9 Nm
   For EHMB-32, ESBF-63, ERMB-32:   12 Nm

[9)] Rotary-linear module EHMB, rotary module ERMB, electric cylinder DNCE/ESBF, mini slide EGSL

[10)] Servo motor EMME-AS/EMMS-AS/MTR-AC, stepper motor EMMS-ST/MTRE-ST, motor unit EMCA-EC