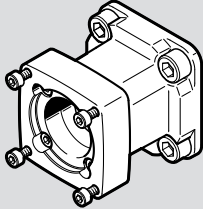


EAMM-A-D...-...A/P/R-3

Axial kit



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Assembly instructions

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[8165325]



Translation of the original instructions

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1 Applicable documents

All available documents for the product → www.festo.com/sp.

Document	Product
Operating instructions	Motor
Operating instructions	Axis

Tab. 1: Applicable documents

2 Safety

2.1 Safety instructions

- Only mount the product on components that are in a condition to be safely operated.
- Clean the shafts. The coupling hubs [1] grip without slipping only on dry and grease-free shaft journals.
- Maintain the proper alignment of the coupling hubs [1].
- Support the combination in the following cases:
 - If there are protruding or heavy motor attachments.
 - In the event of severe vibrations, vibration loads or shock loads.
- If the motor is loosened or turned, homing must be carried out on the axis.
- Select required mounting components. The kit contains all the mounting components that may be required.
- Select the correct screw length for the screws [7] depending on the axis. The screws [7] are labelled correspondingly.
- Observe the tightening torques. Unless otherwise specified, the tolerance is ± 20%.
If the tightening torques are exceeded, the cover screws of the axis will loosen during disassembly.

2.2 Intended use

2.2.1 Use

The axial kit connects an axis to a motor configured axially to the driven shaft.

2.2.2 Permissible axes and motors

NOTICE

Overloading can cause malfunction and material damage.
The motor's output variables must not exceed the permissible values of the components used.
Permissible values → www.festo.com/catalogue.

- Limit the motor's output variables accordingly.

- Take the axis and the motor from the interface codes.
Example: EAMM-A-D40-67A
D40: axis interface
67A: motor interface

Axis interface	Axis
D19	EGSL-35
D32	ESBF-32, EGSL-45, EHMB-20, ERMB-20 ¹⁾
D40	ESBF-40, EGSL-55, EHMB-25, ERMB-25
D50	ESBF-50
D60	ESBF-63, EGSL-75, EHMB-32, ERMB-32

Axis interface	Axis
D80	ESBF-80
D100	ESBF-100

1) EAMM-A-D32-40A/40P is not permissible for ERMB/EHMB-20.
Tab. 2: Permissible axes

Motor interface	Motor
28A	EMMS-ST-28
38AA	Third-party motor
40A	EMMS-AS-40
40P	EMMB-/EMME-AS-40
40R	Third-party motor
40RA	Third-party motor
55A	EMMS-AS-55, third-party motor
58AA	Third-party motor
60AA	Third-party motor
60P	EMMB-/EMME-/EMMT-AS-60, third-party motor
67A	EMCA-EC-67
70AA	Third-party motor
80P	EMMB-/EMME-/EMMT-AS-80, third-party motor
80PB	Third-party motor
82AA	Third-party motor
84AA	Third-party motor
87A	EMMS-ST-87
92RA	Third-party motor
100A	EMME-/EMMS-/EMMT-AS-100, third-party motor
140A	EMMS-AS-140

Tab. 3: Permissible motors

i
It is the responsibility of users to qualify third-party motors with the matching mechanical interface for the combination.
To find out which third-party motors are suitable, consult your regional Festo contact or → www.festo.com/sp.

2.3 Training of qualified personnel

Work on the product may only be carried out by qualified personnel who can evaluate the work and detect dangers. Personnel must have the relevant mechanical training.

3 Additional information

- Contact the regional Festo contact if you have technical problems.
- Accessories → www.festo.com/catalogue.

4 Scope of delivery

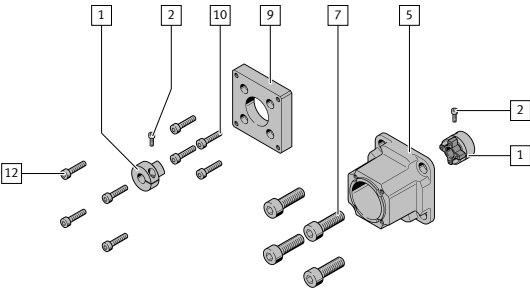


Fig. 1: Scope of delivery EAMM-A-D19/D32-28A/-40A/-40P

- | | |
|-------------------------|---------------------|
| 1 Coupling hub (2x) | 9 Motor flange (1x) |
| 2 Locking screw (2x) | 10 Screw (4x) |
| 5 Coupling housing (1x) | 12 Screw (4x) |
| 7 Screw (4x) | |

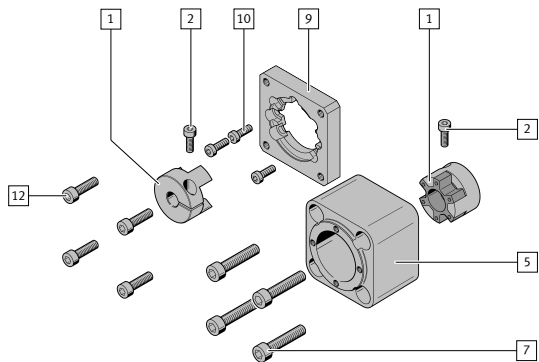


Fig. 2: Scope of delivery EAMM-A-D....A/P

- | | |
|-------------------------|---------------------|
| 1 Coupling hub (2x) | 9 Motor flange (1x) |
| 2 Locking screw (2x) | 10 Screw (3x/4x) |
| 5 Coupling housing (1x) | 12 Screw (4x) |
| 7 Screw (4x) | |

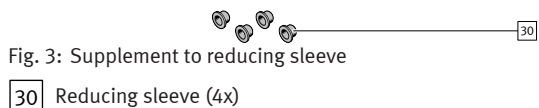


Fig. 3: Supplement to reducing sleeve

- 30 Reducing sleeve (4x)

5 Assembly

5.1 Assembly

5.1.1 Preassembly of reducing sleeve



The reducing sleeves [30] are only required if the mounting holes on the output flange of the motor are too large for the supplied retaining screws.

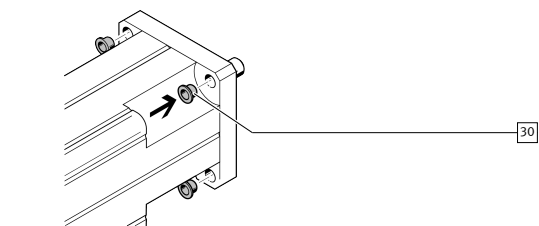


Fig. 4: Insert reducing sleeves

- Insert reducing sleeves [30] into the mounting holes of the motor.

5.1.2 Preassembly of coupling

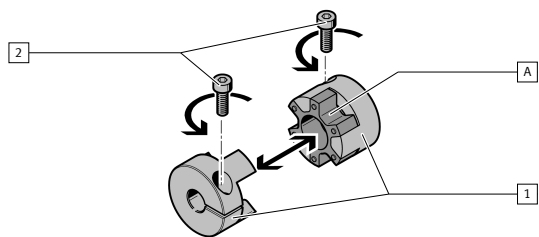


Fig. 5: Disconnecting coupling

- Pull coupling apart.
- Place the elastomer spider [A] on one of the two coupling hubs [1].
- Unscrew locking screws [2].

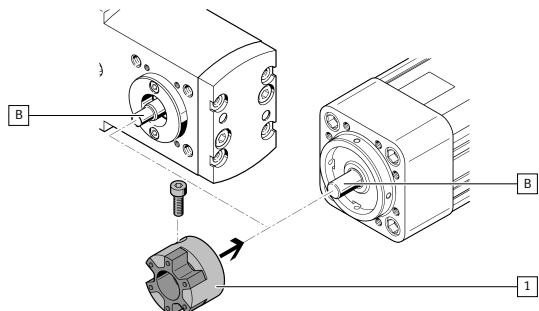


Fig. 6: Pushing on coupling hub, axis side

- Push the coupling [1] with the matching drill hole onto the shaft journal [B].

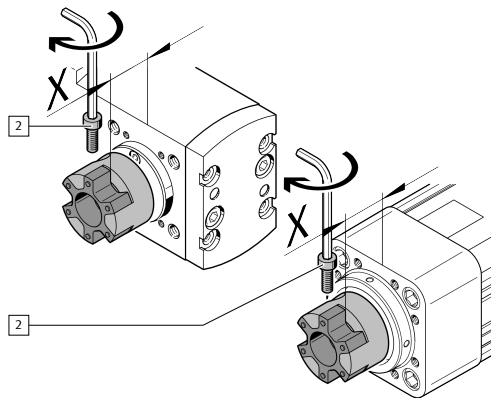


Fig. 7: Align coupling hub, axis-side

- Observe distance (X) → 5.1.3 Coupling alignment.
- Tighten axis-side locking screw [2].

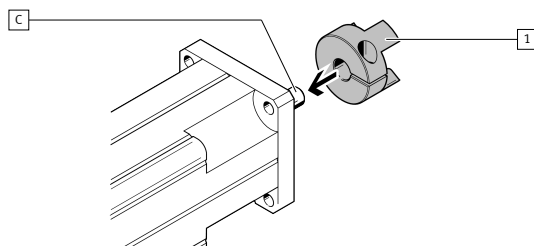


Fig. 8: Push on coupling hub, motor side

- Push the coupling [1] with the matching drill hole onto the shaft journal [C].

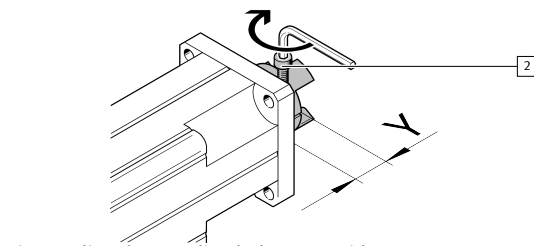


Fig. 9: Align the coupling hub, motor side

- Maintain distance (Y) → 5.1.3 Coupling alignment.
- Tighten all clamping screws [2] on the motor side.

5.1.3 Coupling alignment

NOTICE

Axial forces on the shafts of motor and axis.

Axial forces result in failure of the encoder/brake or increased wear.

- Maintain distances.

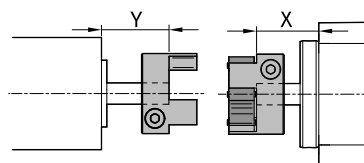


Fig. 10: Aligning coupling hubs

EAMM-A	motor side	axis side
	Y ± 0.5 [mm]	X ± 0.5 [mm]
D19-28A	19.7	18.5
D19-38AA	24.7	18.5
D19-40A	16.2	18.5
D19-40P	19.2	18.5
D19-40R	24.7	18.5
D32-40A	15.1	16.7
D32-40P	19.3	16.7
D32-40R	20.2	18.2
D32-40RA	20.2	18.2
D32-55A	19.6	18.2
D32-58AA	21.6	18.2
D32-60AA	21.6	18.2
D32-60P	30.1	18.2
D32-67A	25	18.2
D40-55A	19.1	18.7
D40-58AA	21.1	18.7

EAMM-A	motor side	axis side
	Y ± 0.5 [mm]	X ± 0.5 [mm]
D40-60AA	20.6	18.7
D40-70AA	23.4	18.7
D40-60P	29.6	18.7
D40-67A	24.5	18.7
D40-87A	23.9	18.7
D50-80P	36	27.7
D50-80PB	36	27.7
D50-82AA	24.5	27.7
D50-84AA	36	27.7
D50-87A	26	27.7
D50-100A	39.5	27.7
D60-80P	35.2	23.5
D60-80PB	35.2	23.5
D60-84AA	35.2	23.5
D60-87A	25.2	23.5
D60-92RA	35.5	23.5
D60-100A	38.7	23.5
D80-84AA	33.5	33.5
D80-100A	40.3	33.5
D80-140A	50.3	33.5
D100-100A	40.2	41.1
D100-140A	48.4	41.1

Tab. 4: Coupling distances X and Y

5.1.4 Connection of motor and axis EGSL, ESBF

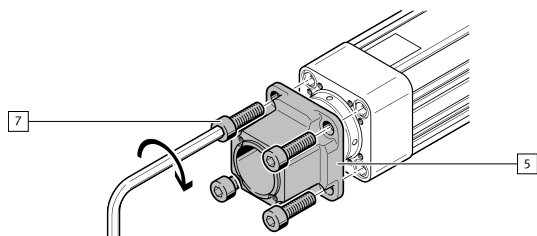


Fig. 11: Mount the coupling housing

- Mount the coupling housing [5] to the axis using the screws [7].

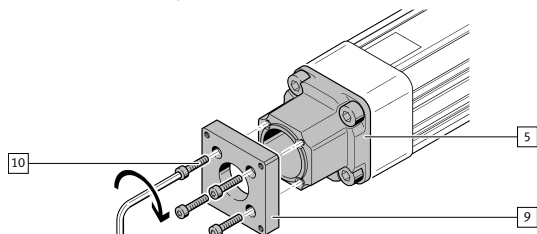


Fig. 12: Mount the motor flange

- Mount the motor flange [9] to the coupling housing [5] using the screws [10].

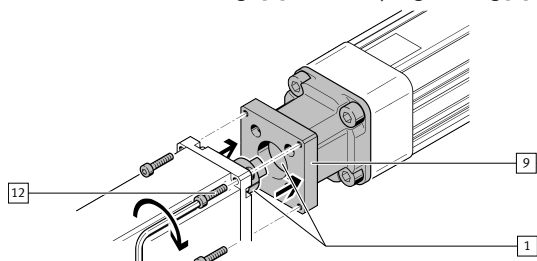


Fig. 13: Mounting the motor

- Push motor and axis together completely. Pay attention to the correct relative position of the coupling hubs [1].
 ↳ There is no gap between the motor and motor flange [9].
- Fasten the motor to the motor flange [9] using the screws [12].

5.1.5 Connection of motor and axis EHMB, ERMb

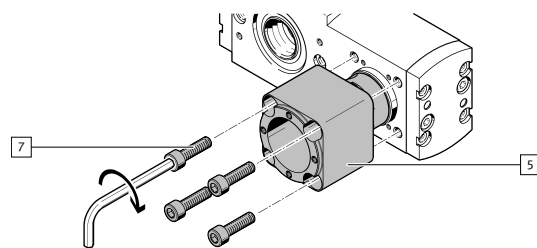


Fig. 14: Mount the coupling housing

- Mount the coupling housing [5] to the axis using the screws [7].

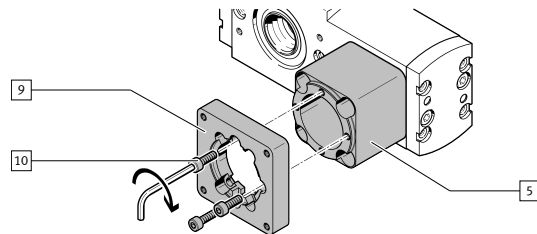


Fig. 15: Mount the motor flange

- Mount the motor flange [9] to the coupling housing [5] using the screws [10].

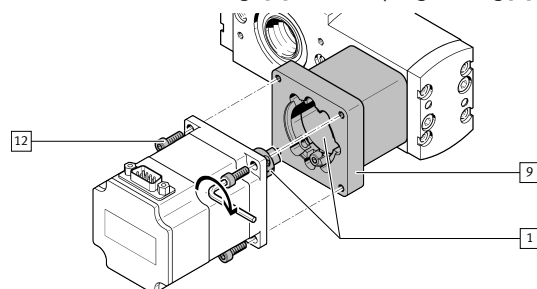


Fig. 16: Mounting the motor

- Push motor and axis together completely. Pay attention to the correct relative position of the coupling hubs [1].
 ↳ There is no gap between the motor and motor flange [9].
- Fasten the motor to the motor flange [9] using the screws [12].

5.2 Supporting frame for the axis-motor combination

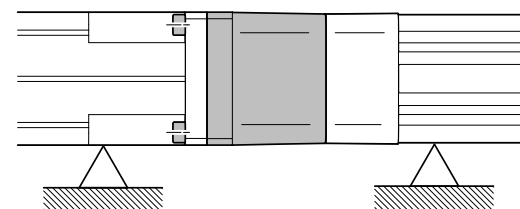


Fig. 17: Supporting frame for the axis-motor combination

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

6 In operation

⚠ CAUTION

Risk of injury from touching hot surfaces.

The motor connecting kit becomes hot due to the heat dissipation of the motor.

- Do not touch the motor connecting kit during operation or immediately afterward.

7

Technical data

7.1

Screw sizes and tightening torques

EAMM-A-	[2]	[Nm]	[7]	[Nm]	[10]	[Nm]	[12]	[Nm]
D19-28A	M2x6	0.5	M4x16	2.5	M3x12	1.2	M2.5x8	0.6
D19-38AA	M2x6	0.5	M4x16	2.5	M3x14	1.2	M3x14	1.2
D19-40A	M2x6	0.5	M4x16	2.5	M3x12	1.2	M3x16	1.2
D19-40P	M2x6	0.5	M4x16	2.5	M3x10	1.2	M3x10	1.2
D19-40R	M2x6	0.5	M4x16	2.5	M3x14	1.2	M4x12	3
D32-40A	M2x6	0.5	M6x20	5/6 ¹⁾	M3x14	1.2	M3x14	1.2
D32-40P	M2x6	0.5	M6x20	5/6 ¹⁾	M3x12	1.2	M3x12	1.2
D32-40R	M4x12	4	M6x22/ M6x30	5/6/10 ²⁾	M4x12	3	M4x14	3
D32-40RA	M4x12	4	M6x22/ M6x30	5/6/10 ²⁾	M4x12	3	M4x14	3
D32-55A	M4x12	4	M6x22/ M6x30	5/6 ¹⁾	M4x12	2.4	M5x18	6
D32-58AA	M4x12	4	M6x22/ M6x30	5/6/10 ²⁾	M4x12	3	M4x16	3
D32-60AA	M4x12	4	M6x22/ M6x30	5/6/10 ²⁾	M4x12	3	M4x16	3
D32-60P	M4x12	4	M6x22/ M6x30	5/6 ¹⁾	M4x20	3	M4x16	3
D32-67A	M4x12	4	M6x22/ M6x30	5/6 ¹⁾	M4x12	3	M4x18	8
D40-55A	M4x12	4	M6x30	5/6 ¹⁾	M4x12	2.4	M5x18	6
D40-58AA	M4x12	4	M6x30	5/6 ¹⁾	M4x12	3	M4x16	3
D40-60AA	M4x12	4	M6x30	5/6 ¹⁾	M4x12	3	M4x16	3
D40-60P	M4x12	4	M6x30	5/6 ¹⁾	M4x20	3	M4x16	3
D40-67A	M4x12	4	M6x30	5/6 ¹⁾	M4x12	3	M6x16	8
D40-70AA	M4x12	4	M6x30	5/6 ¹⁾	M4x12	3	M5x18	6
D40-87A	M4x12	4	M6x30	5/6 ¹⁾	M4x16	3	M6x22	10
D50-80P	M5x18	8	M8x65	12	M6x16	10	M5x20	6
D50-80PB	M5x18	8	M8x65	12	M6x16	10	M5x20	6
D50-82AA	M5x18	8	M8x50	12	M6x16	10	M6x20	10
D50-84AA	M5x18	8	M8x65	12	M6x16	10	M6x25	10
D50-87A	M5x18	8	M8x50	12	M6x16	10	M6x22	10
D50-100A	M5x18	8	M8x65	12	M6x20	10	M8x25	18
D60-80P	M5x18	8	M8x33/ M8x40	9/12 ³⁾	M6x16	10	M5x20	6
D60-80PB	M5x18	8	M8x33/ M8x40	9/12 ³⁾	M6x16	10	M5x20	6
D60-84AA	M5x18	8	M8x33/ M8x40	9/12 ³⁾	M6x16	10	M6x25	10
D60-87A	M5x18	8	M8x22/ M8x30	9/ 12 ³⁾	M6x16	10	M6x22	10
D60-92RA	M5x18	8	M8x22/ M8x30	9/ 12 ³⁾	M6x20	10	M6x20	10
D60-100A	M5x18	8	M8x33/ M8x40	9/12 ³⁾	M6x20	10	M8x25	18
D80-84AA	M6x20	15	M10x70	25	M6x16	10	M6x20	10
D80-100A	M6x20	15	M10x70	25	M6x20	10	M8x20	18
D80-140A	M6x20	15	M10x70	25	M6x25	10	M10x35	30
D100-100A	M6x20	15	M10x80	25	M6x20	10	M8x20	18
D100-140A	M8x25	35	M10x80	25	M6x25	10	M10x35	30

1) With axis EGSL: 5 Nm; EHMB, ERMB, ESBF: 6 Nm

2) With axis EGSL: 5 Nm; ESBF: 6 Nm; EHMB/ERMB: 10 Nm

3) With axis EGSL: 9 Nm; EHMB, ERMB, ESBF: 12 Nm

Tab. 5: Screws [2] ... [12]