EAMM-A-V...-...A/P/R-1
Axial kit

FESTO

Assembly instructions

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[8133023]

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Translation of the original instructions

1 Applicable documents

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

Document	Product	Table of contents
Operating instruction	Motor	–
Operating instruction	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.
– Observe the tightening torques. Unless otherwise specified, the tolerance is ± 20%.

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-V25-40P
V25: axis interface
40P: motor interface

Axis interface	Axis
V20	EGSC-BS-25, EPCC-BS-25
V25	EGSC-BS-32, ELGC-BS-32, EPCC-BS-32
V32	EGSC-BS-45, ELGC-BS-45, ELGC-TB-45, EPCC-BS-45

Tab. 2: Permissible axes

Motor interface	Motor
28A	EMMS-ST-28
28AA	Third-party motor
35A	EMMB-ST-35, third-party motor
38AA	Third-party motor

Motor interface	Motor
40P	EMMB-/EMME-AS-40
40R	Third-party motor
40RA	Third-party motor
42A	EMCS-/EMMS-ST-42, third-party motor
42AB	Third-party motor
57A	EMCS-/EMMS-ST-57, third-party motor
58AA	Third-party motor
60AA	Third-party motor
60P	EMMB-/EMME-/EMMT-AS-60, third-party motor
60PA	Third-party motor
60RA	Third-party motor

Tab. 3: Permissible motors

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.
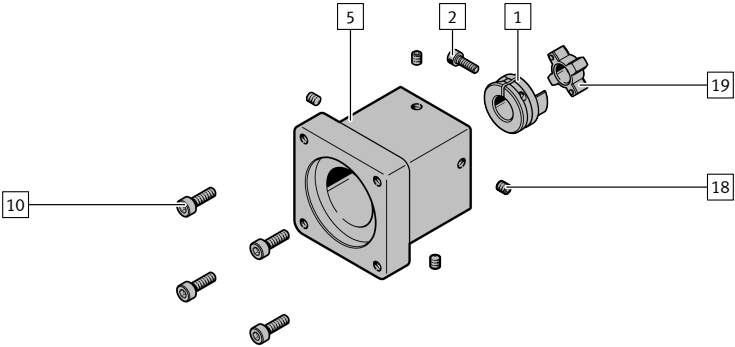
4 Scope of delivery

Fig. 1: Scope of delivery

1	Coupling hub (1x)	10	Screw (4x)
2	Clamping screw (1x)	18	Threaded pin (4x)
5	Coupling housing (1x)	19	Elastomer spider (1x)

Fig. 2: 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.
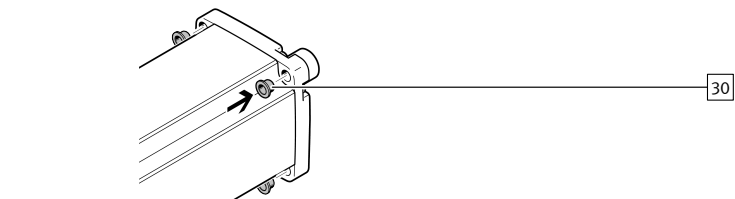

Fig. 3: Inserting reducing sleeves

• Insert the reducing sleeves [30] into the mounting holes of the motor.
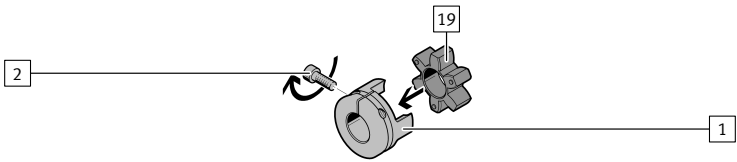
5.1.2 Preassembly of coupling

Fig. 4: Push on elastomer spider

1. Place the elastomer spider [19] on the coupling hub [1].
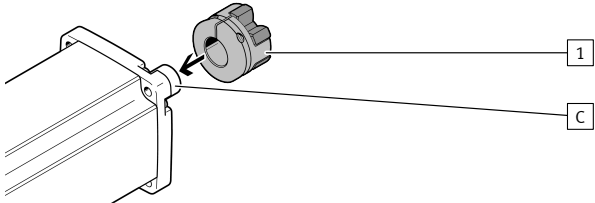2. Screw on the clamping screw [2].

Fig. 5: Push on the coupling hub, motor side

- Slide the coupling hub [1] with the appropriate hole onto the drive shaft adapter [C].
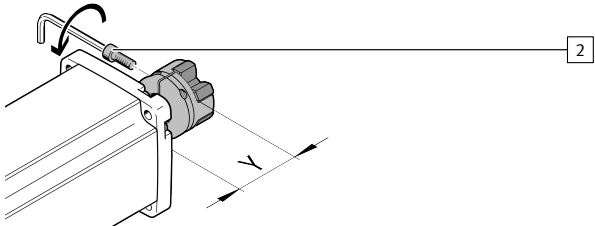

Fig. 6: Align coupling hub, motor side

1. Maintain distance (Y) ➜ 5.1.3 Alignment of coupling.
2. Tighten motor-side clamping screw [2].

5.1.3 Alignment of coupling

NOTICE

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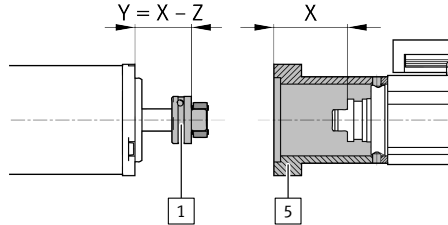- Maintain distances.

Fig. 7: Aligning coupling hub

1. Measure dimension X from the flat surface of the coupling housing [5] to the cam base of the axis-side coupling hub [1].
2. Calculate the motor-side dimension Y = X − Z ➜ Tab. 4 Dimension Z.
3. Adjust the motor-side coupling hub [1] to dimension Y ± 0.3 mm.

EAMM-A-	Z [mm]
V20-...	5.1
V25/V32-...	6.2

Tab. 4: Dimension Z

i

The theoretical nominal value Y may only be directly used if the dimension X cannot be measured ➜ Tab. 5 Theoretical nominal value Y.

EAMM-A-	Y [mm]
V20-28A	20.8
V20-28AA	15.8
V25-35A	19.3
V25-38AA	25.3
V25-40P	20.3
V25-40R	25.3
V25-40RA	18.3
V25-42A	19.3
V25-42AB	15.3
V32-38AA	25.3
V32-40P	20.3

EAMM-A-	Y [mm]
V32-40R	25.3
V32-40RA	18.3
V32-42A	19.3
V32-42AB	15.3
V32-57A	20.8
V32-58AA	20.3
V32-60AA	21.3
V32-60P	34.4
V32-60PA	34.3
V32-60RA	34.3

Tab. 5: Theoretical nominal value Y
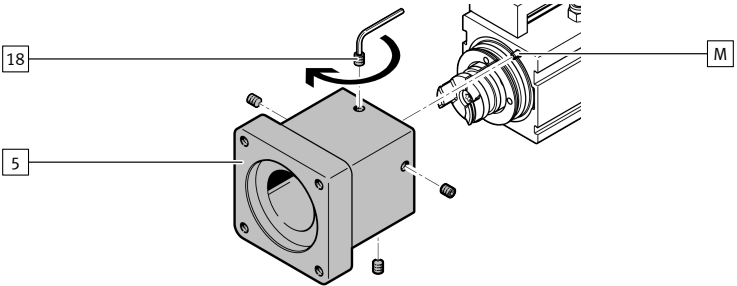
5.1.4 Motor and axis connection

Fig. 8: Mounting of the coupling housing

1. Place the coupling housing [5] on the centring collar of the axis.
   ↳ The anti-twist pin [M] of the axis latches into the drilled hole of the coupling housing [5].
2. Mount the coupling housing [5] in the V-slot of the centring collar with the threaded pins [18].

Exception: for EAMM-A-V32-42A/42AB the coupling housing [5] is first fastened to the motor with the screws [10].
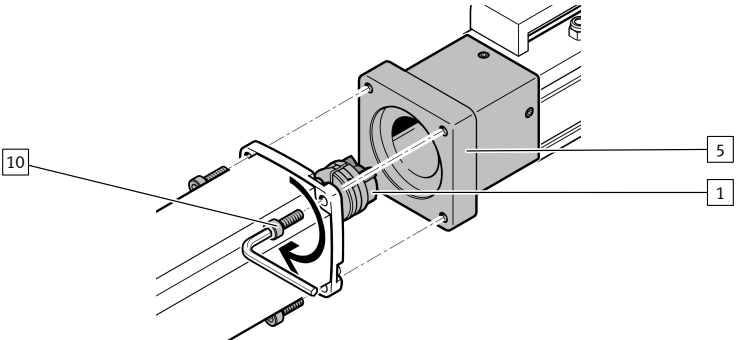

Fig. 9: Connection of motor and axis

1. Push the motor and the axis together completely. Ensure that the coupling hubs [1] are in the correct relative position.
   ↳ There is no gap between motor and coupling housing [5].
2. Mount the motor on the coupling housing [5] with the screws [10].

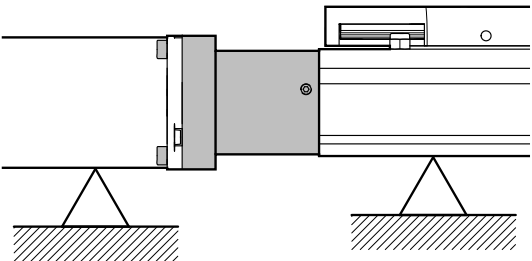### 5.2 Supporting frame for the axis-motor combination

Fig. 10: 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]	[10]	[Nm]	[18]	[Nm]
V20-28A	M1.6x5	0.25	M2.5x8	0.8	M2.5x3	0.5
V20-28AA	M1.6x5	0.25	M2.5x8	0.8	M2.5x3	0.5
V25-35A	M2.5x8	1	M3x10	1.2	M3x6	0.8
V25-38AA	M2.5x8	1	M3x12	1.2	M3x4	0.8
V25-40P	M2.5x8	1	M3x10	1.2	M3x4	0.8
V25-40R	M2.5x8	1	M4x12	3	M3x4	0.8
V25-40RA	M2.5x8	1	M4x12	3	M3x4	0.8
V25-42A	M2.5x8	1	M3x10	1.2	M3x4	0.8
V25-42AB	M2.5x8	1	M3x10	1.2	M3x4	0.8
V32-38AA	M2.5x8	1	M3x12	1.2	M3x6	0.8
V32-40P	M2.5x8	1	M3x10	1.2	M3x6	0.8
V32-40R	M2.5x8	1	M4x12	3	M3x6	0.8
V32-40RA	M2.5x8	1	M4x12	3	M3x6	0.8
V32-42A	M2.5x8	1	M3x30	1.2	M3x6	0.8
V32-42AB	M2.5x8	1	M3x30	1.2	M3x6	0.8
V32-57A	M2.5x8	1	M4x16	3	M3x6	0.8
V32-58AA	M3x10	1.2	M4x16	3	M3x6	0.8
V32-60AA	M2.5x8	1	M4x16	3	M3x6	0.8
V32-60P	M3x10	1.2	M4x16	3	M3x6	0.8
V32-60PA	M3x10	1.2	M4x16	3	M3x6	0.8
V32-60RA	M3x10	1.2	M4x16	3	M3x6	0.8

Tab. 6: Screws [2] ... [18]