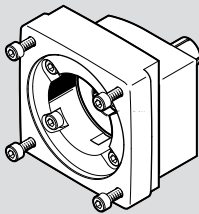


EAMM-A-L/N...-...A/P/R-2

Axial kit



FESTO

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Assembly instructions

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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 and hollow shafts. The coupling only grips without slipping on a dry and grease-free shaft surface.
- Clean the coupling hub [1]:
 - Degrease the clamping pivot [G] on the outside diameter. Do not degrease the expanding mandrel cone [H].
 - Degrease the clamping hole.
- Maintain the alignment of the coupling hub [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-L48-70A

L48: axis interface

70A: motor interface

Axis interface	Axis ¹⁾
L27	EGC-50-...-TB
L38	EGC-70-...-TB
L48	EGC-80-...-TB
L62	EGC-120-...-TB
L95	EGC-185-...-TB, ELGA-TB-...-150, ELCC-TB-...-110
N38	ELGA-TB-...-70

Axis interface	Axis ¹⁾
N48	ELGA-TB-...-80
N80	ELGA-TB-...-120, ELCC-TB-...-90

1) Toothed belt axis EGC/ELGA/ELCC
Tab. 2: Permissible axes

Motor interface	Motor
55A	EMMS-AS-55, third-party motor
57A	EMCS-/EMMS-ST-57, third-party motor
57AA	Third-party motor
58AA	Third-party motor
60AA	Third-party motor
60P	EMMB-/EMME-/EMMT-AS-60, third-party motor
60PA	Third-party motor
60R	Third-party motor
60RB	Third-party motor
67A	EMCA-EC-67
70A	EMMS-AS-70, third-party motor
70AA	Third-party motor
80P	EMMB-/EMME-/EMMT-AS-80, third-party motor
82AA	Third-party motor
84AA	Third-party motor
87A	EMMS-ST-87
88A	Third-party motor
90R	Third-party motor
92RA	Third-party motor
100A	EMME-/EMMS-/EMMT-AS-100, third-party motor
108AA	Third-party motor
140A	EMMS-AS-140
150A	EMMS-AS-140, EMMT-AS-150
190A	EMMS-AS-190
190B	EMMS-/EMMT-AS-190

Tab. 3: Permissible motors

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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

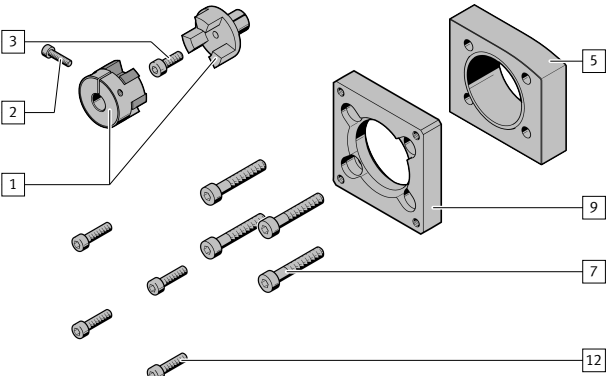


Fig. 1: Basic scope of delivery

- 1 Coupling hub (2x)

2 Locking screw (1x)

3 Locking screw (1x)

5 Coupling housing (1x)
- 7 Screw (4x)

9 Motor flange (1x)

12 Screw (4x)



Fig. 2: Supplement to reducing sleeve

- 30 Reducing sleeve (4x)

5 Assembly

5.1 Preparation

The motor can be mounted in 4 positions with these kits for the axis EGC-...-TB, ELGA.

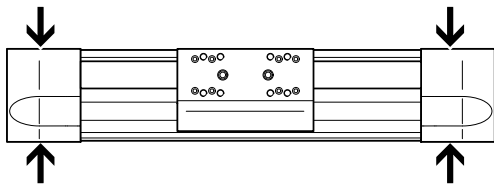


Fig. 3: Connection options

The motor can be mounted in 2 positions with these kits for the axis EGC-...-TB-KF-...-Z.

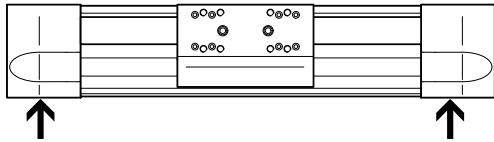


Fig. 4: Connection options

- Select one of the connection options.

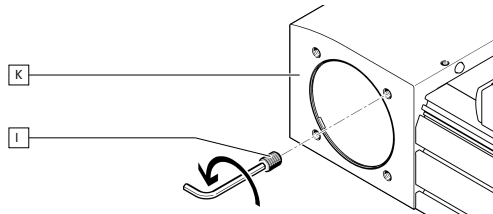


Fig. 5: Remove threaded pin

- Unscrew the existing threaded pins [I] from the drive cover [K].

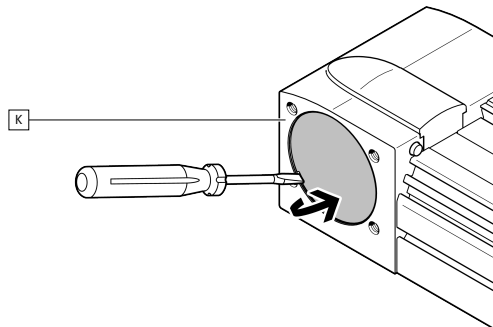


Fig. 6: Lever off the cover

1. Insert a screwdriver into the recess in the drive cover [K].
2. Lever off the cover.

5.2 Assembly

5.2.1 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.

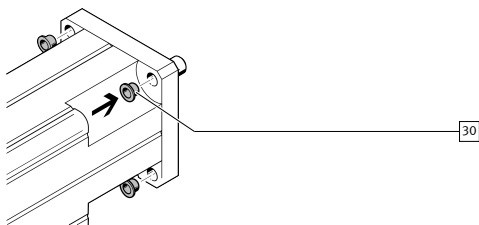


Fig. 7: Insert reducing sleeves

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

5.2.2 Preassembly of coupling

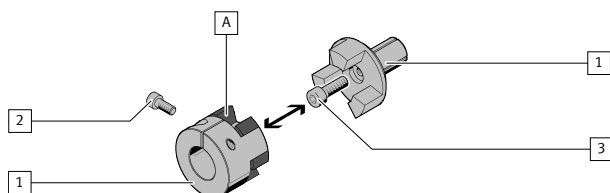


Fig. 8: Disconnect the coupling

1. Pull apart coupling.
2. Place the elastomer spider [A] on one of the two coupling hubs [1].
3. Unscrew locking screws [2] and [3].

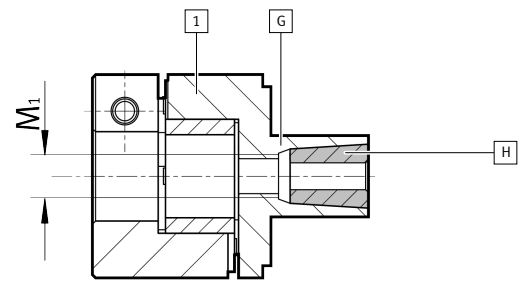


Fig. 9: Expanding mandrel cone in the clamping pivot

- Check the expanding mandrel cone [H].
 ↳ The expanding mandrel cone [H] must sit loosely in the clamping pivot [G], otherwise it cannot be mounted.

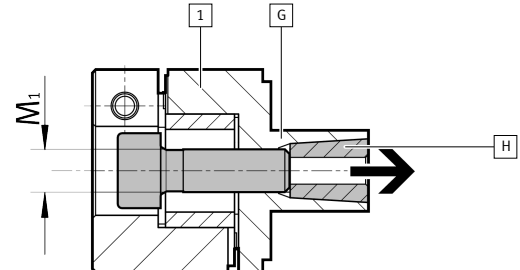


Fig. 10: Press out the stuck expanding mandrel cone

The extraction thread M1 is provided for loosening

- Screw a screw into the M1 thread and push out the jammed expanding mandrel cone [H] → 7 Technical data.

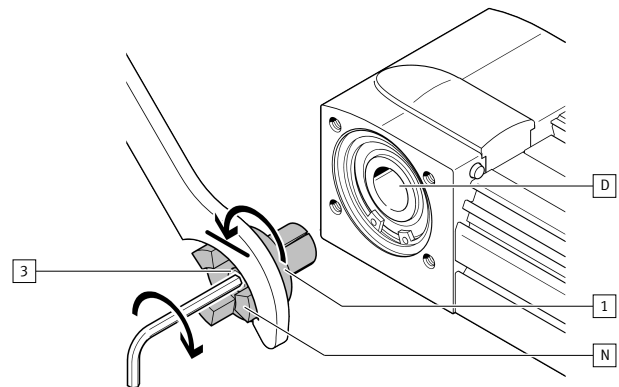


Fig. 11: Mount the coupling hub, axis side

1. Push the coupling hub [1] with the clamping pivot into the hollow shaft [D] up to the stop.
2. Counterhold the coupling hub [1] on the coupling cams [N] with a suitable tool. Tool: e.g. hook spanner
 ↳ The counter holding prevents the hollow shaft [D] from rotating and exerting excessive tensile forces on the toothed belt of the axis.
3. Tighten the clamping screw [3].
 • Push the coupling [1] with the matching drill hole onto the shaft journal [C].

1. Maintain distance (Y) → 5.2.3 Coupling alignment.
2. Tighten all clamping screws [2] on the motor side.

5.2.3 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.

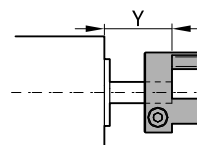


Fig. 12: Align coupling hub

EAMM-A-	$Y \pm 0.3$ [mm]
L27-55A	20
L27-57A	20
L27-67A	24.9
L38-55A	20
L38-57A	20
L38-57AA	20
L38-58AA	19

EAMM-A-	Y ± 0.3 [mm]
L38-60AA	20.5
L38-60P	29
L38-60PA	29
L38-60R	30
L38-60RB	22
L38-70A	22.7
L38-70AA	29
L38-84AA	39
L38-87A	27
L38-88A	29
L48-70A	22.3
L48-70AA	29
L48-80P	26.1
L48-82AA	29
L48-84AA	39
L48-87A	29
L48-88A	35
L48-90R	34
L48-92RA	39
L48-100A	40
L62-100A	40
L62-108AA	49
L62-140A	50
L95-140A-G2	50
L95-150A-G2	50
L95-190A-G2	60
L95-190B-G2	59
N38-70A	22.7
N38-87A	27.3
N48-100A	40
N80-140A	50

Tab. 4: Coupling distance Y

5.2.4 Connection, motor and axis - Variant B

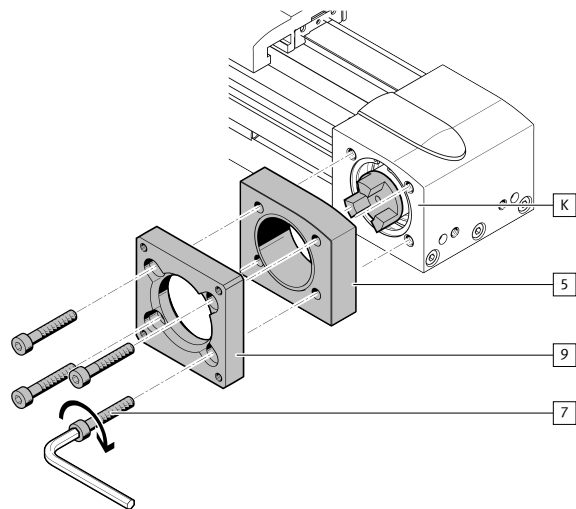


Fig. 13: Mounting the motor flange and coupling housing

1. Place the coupling housing [5] on the drive cover [K].
2. Mount the motor flange [9] and the coupling housing [5] on the axis with the screws [7].

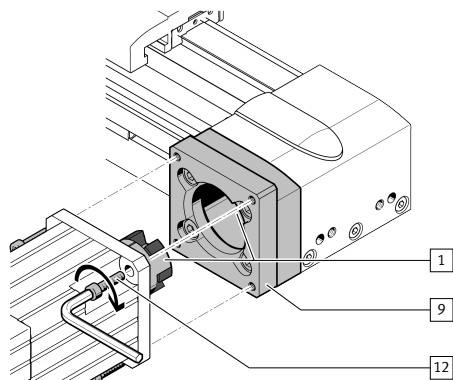


Fig. 14: Mounting the motor

1. 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].

2. Use the screws [12] to mount the motor on the motor flange [9].

5.3 Supporting frame for the axis-motor combination

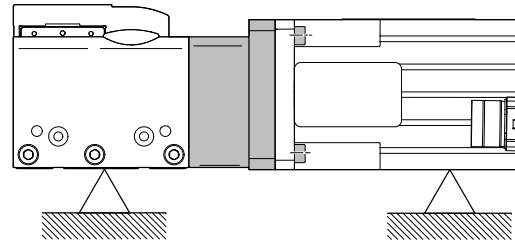


Fig. 15: Supporting frame for the axis-motor combination

- 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]	[3]	[Nm]	[7]	[Nm]	[12]	[Nm]
L27-55A	M2x6	0.5	M3x10	1	M3x20	1.2	M5x16	6
L27-57A	M2x6	0.5	M3x10	1	M3x25	1.2	M4x12	3
L27-67A	M2x6	0.5	M3x10	1	M3x25	1.2	M6x16	8
L38-55A	M3x12	2	M4x12	1.5	M5x30	6	M5x16	6
L38-57A	M3x12	2	M4x12	1.5	M5x30	6	M4x12	3
L38-57AA	M3x12	2	M4x12	1.5	M5x30	6	M4x16	3
L38-58AA	M3x12	2	M4x12	1.5	M5x30	6	M4x16	3
L38-60AA	M3x12	2	M4x12	1.5	M5x30	6	M4x16	3
L38-60P	M3x12	2	M4x12	1.5	M5x35	6	M4x16	3
L38-60PA	M3x12	2	M4x12	1.5	M5x30	6	M5x16	6
L38-60R	M3x12	2	M4x12	1.5	M5x35	6	M4x16	3
L38-60RB	M3x12	2	M4x12	1.5	M5x30	6	M5x16	6
L38-70A	M3x12	2	M4x12	1.5	M5x30	6	M5x20	6
L38-70AA	M3x12	2	M4x12	1.5	M5x30	6	M5x16	6
L38-84AA	M3x12	2	M4x12	1.5	M5x30	6	M6x20	10
L38-87A	M3x12	2	M4x12	1.5	M5x35	6	M6x20	10
L38-88A	M3x12	2	M4x12	1.5	M5x30	6	M6x20	10
L48-70A	M4x12	4	M5x18	7	M5x40	6	M5x20	6
L48-70AA	M4x12	4	M5x18	7	M5x40	6	M5x16	6
L48-80P	M5x18	8	M6x20	8.5	M5x55	6	M5x20	6
L48-82AA	M4x12	4	M5x18	7	M5x40	6	M6x20	10
L48-84AA	M5x18	8	M6x20	8.5	M5x40	6	M6x20	10
L48-87A	M4x12	4	M5x18	7	M5x45	6	M6x22	10
L48-88A	M4x12	4	M5x18	7	M5x40	6	M6x20	10
L48-90R	M4x12	4	M5x18	7	M5x40	6	M6x20	10
L48-92RA	M4x12	4	M5x18	7	M5x40	6	M6x20	10
L48-100A	M5x18	8	M6x20	8.5	M5x55	6	M8x25	18
L62-100A	M6x20	15	M8x25	14	M6x65	10	M8x20	18
L62-108AA	M6x20	15	M8x25	14	M6x70	10	M8x25	18
L62-140A	M6x20	15	M8x25	14	M6x70	10	M10x35	30
L95-140A-G2	M8x25	35	M10x30	60	M8x70	18	M10x20	30
L95-150A-G2	M8x25	35	M10x30	60	M8x75	18	M10x30	30
L95-190A-G2	M8x25	35	M10x30	60	M8x80	18	M12x30	45
L95-190B-G2	M6x20	15	M10x30	60	M8x80	18	M12x40	45
N38-70A	M4x12	4	M5x18	7	M6x35	10	M5x20	6
N38-87A	M4x12	4	M5x18	7	M6x35	10	M6x20	10
N48-100A	M5x18	8	M6x20	8.5	M6x50	10	M8x25	18
N80-140A	M6x20	15	M8x25	14	M8x75	18	M10x30	30

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

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The tightening torque of the clamping screw [3] specified here is sufficient for the max. driving torque of the permissible axis. The required tightening torque is also specified on the coupling packaging.

7.2 Extraction thread M1

EAMM-A-	M1
L27	M4
L38	M5
L48	M6

EAMM-A-	M1
L62	M10
L95	M12
N38	M6
N48	M8
N80	M10

Tab. 6: Extraction thread M1