EAMM-A-L/N...-...G/H-7
Axial kit

Assembly instructions

Original instructions

1 Applicable documents

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

Document	Product	Table of contents
Operating instruction	Gear unit	–
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 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 with a gear unit configured axially to the driven shaft.

2.2.2 Permissible axes and gear units

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 gear unit from the interface codes.
Example: EAMM-A-N38-40G
N38: axis interface
40G: gear unit interface

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

Tab. 2: Permissible axes

Gear unit interface	Gear unit
40G	EMGA-40, third-party gear unit
50GA	Third-party gear unit
60G	EMGA-60-...-SAS/-SST, third-party gear unit
60H	EMGA-60-...-EAS, EMGC-60, third-party gear unit
70GA	Third-party gear unit
80G	EMGA-80, third-party gear unit
90GA	Third-party gear unit
90GB	Third-party gear unit
120G	EMGA-120, third-party gear unit

Tab. 3: Permissible gear units

It is the responsibility of users to qualify third-party gear units with the matching mechanical interface for the combination.
To find out which third-party gear units are suitable, contact your regional Festo contact or call ➔ 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.
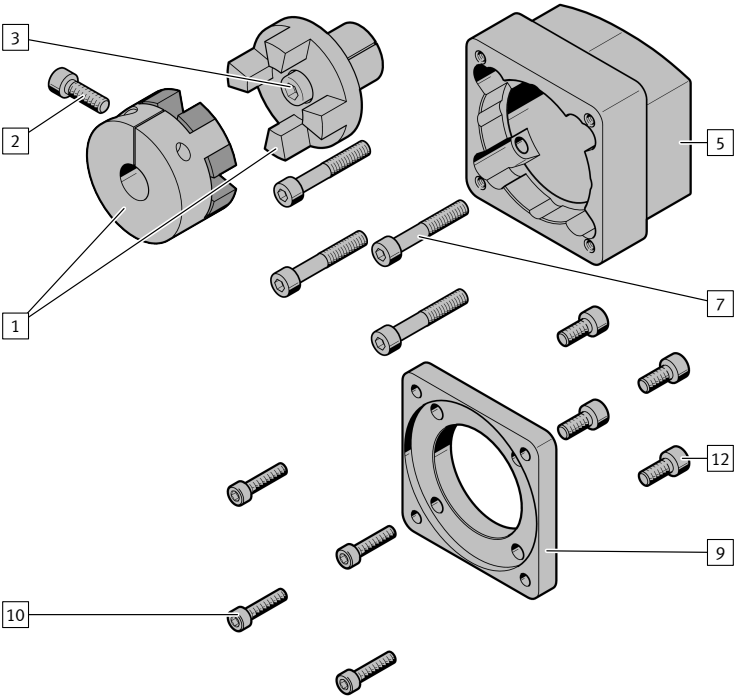– Accessories ➔ www.festo.com/catalogue.

4 Scope of delivery

Fig. 1: Scope of delivery

1	Coupling hub (2x)	7	Screw (4x)
2	Clamping screw (1x)	9	Motor flange (1x)
3	Clamping screw (1x)	10	Screw (4x)
5	Coupling housing (1x)	12	Screw (4x)

5 Mounting

5.1 Preparation

The motor can be mounted in 4 positions with these kits for the axis EGC-...-TB, ELGA.
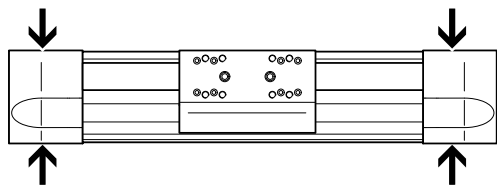
Fig. 2: Connection options

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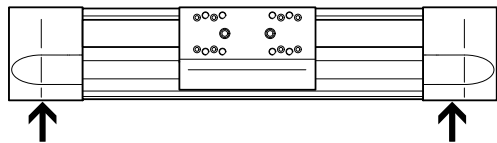

Fig. 3: Connection options
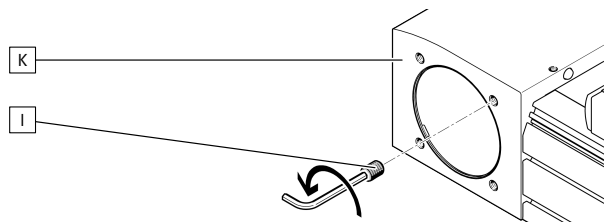
• Select one of the connection options.

Fig. 4: Remove threaded pin

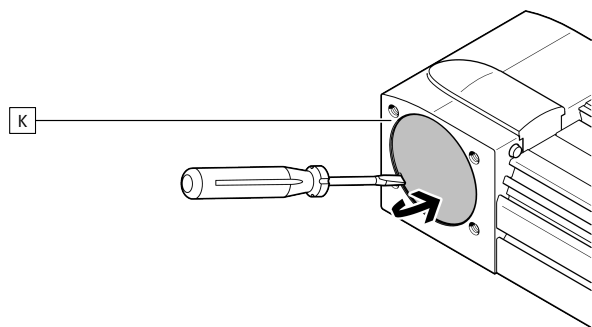• Unscrew the existing threaded pins [I] from the drive cover [K].

Fig. 5: Lever off the covering

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

5.2 Assembling

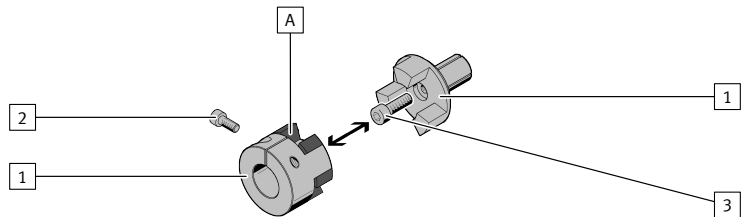### 5.2.1 Preassembly of coupling

Fig. 6: Disconnecting coupling

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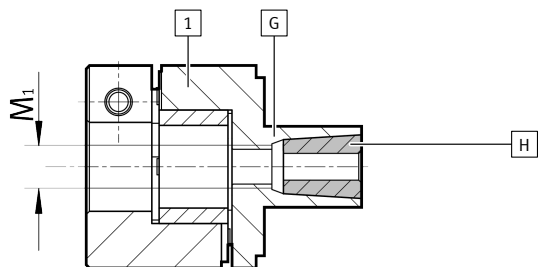3. Unscrew the clamping screws [2] and [3].

Fig. 7: 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.
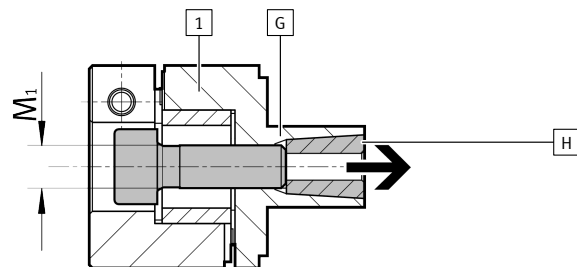

Fig. 8: Pressing out jammed expanding mandrel cone

The extraction thread M_1 is provided for loosening

• Screw a screw into the M_1 thread and press out the jammed expanding mandrel cone [H] ➔ 7 Technical data.
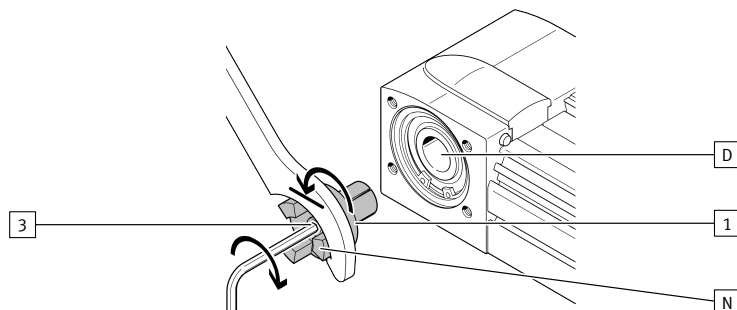
Fig. 9: Mounting coupling hub, axis side

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].
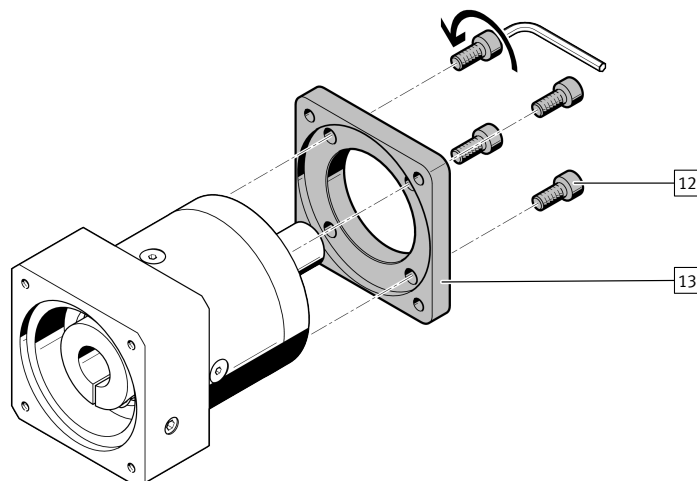
Fig. 10: Mounting motor flange, gear unit side

• Mount the motor flange [13] on the gear unit with the screws [12].

Fig. 11: Pushing on coupling hub, gear unit side

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

Fig. 12: Aligning coupling hub, gear unit side

1. Maintain distance (Y) ➜ 5.2.2 Alignment of coupling.
2. Tighten the clamping screw [2] on the gear unit side.

5.2.2 Alignment of coupling

> **NOTICE**
>
> **Axial forces on the shafts of gear unit and axis.**
> Increased wear.
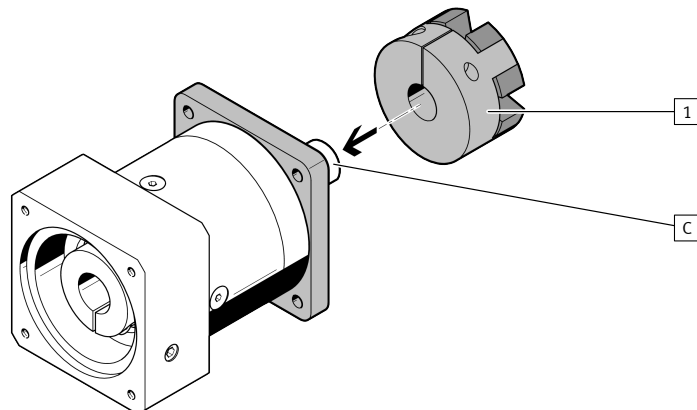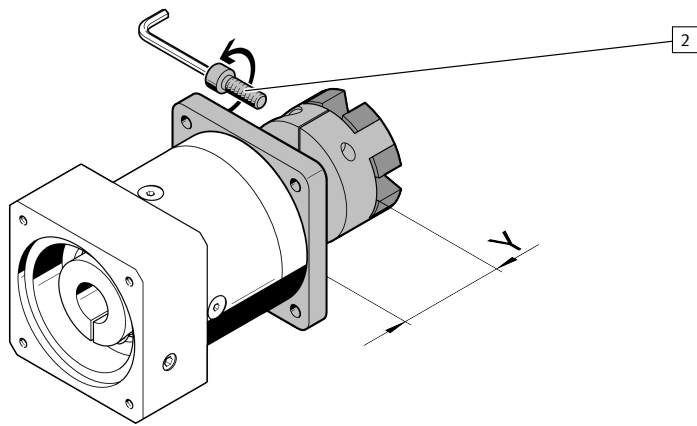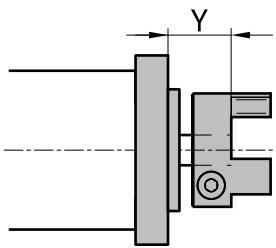> • Maintain distances.

Fig. 13: Aligning coupling hub

EAMM-A-	Y ± 0.3 [mm]
L27-40G	17.1
L27-50GA	17.2
L27-60G	26.7
L38-40G	12.8
L38-40G-G2	19.3
L38-50GA	12.8
L38-60G-G2	29.3
L38-60H-G2	29.3
L38-70GA	16
L38-70GA-G2	26.3
L48-50GA-G2	22
L48-60G-G2	22
L48-60H-G2	22
L48-70GA-G2	25
L48-80G-G2	35
L62-60H	20.4
L62-80G-G2	40
L62-90GA	20.4
L62-90GB	20.4
L62-120G	21.5
L95-80G-G2	23.3
L95-90GA	23.0
N38-40G	13.3
N38-50GA	13.3
N38-60G-G2	21.5
N38-60H-G2	21.5
N38-70GA	21.7
N48-40G	23.3
N48-50GA	18.2
N48-60G-G2	22
N48-60H-G2	22
N48-70GA	21.3
N48-70GA-G2	25
N48-80-G2	35
N48-90GA	21.6
N48-90GB	16.5

EAMM-A-	Y ± 0.3 [mm]
N80-70GA	18.5
N80-90GA	11.5
N80-90GB	11.5

Tab. 4: Coupling distance Y

5.2.3 Gear unit and axis connection
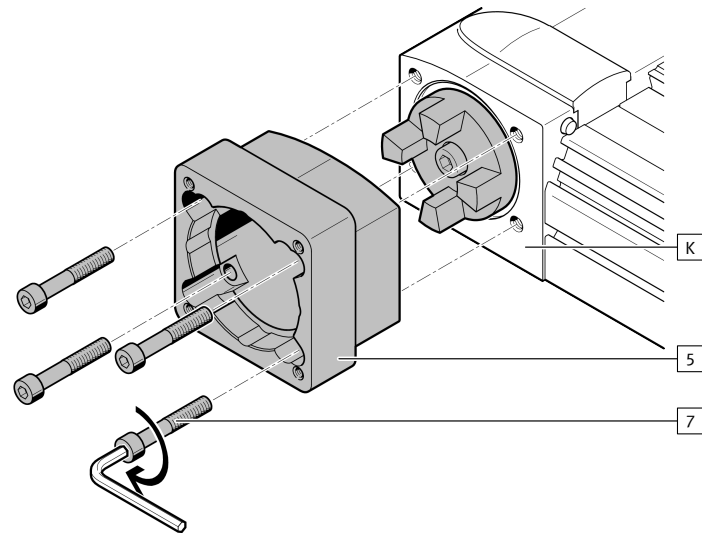
Fig. 14: Mounting coupling housing

• Mount the coupling housing [5] on the drive cover [7] with the screws [K].
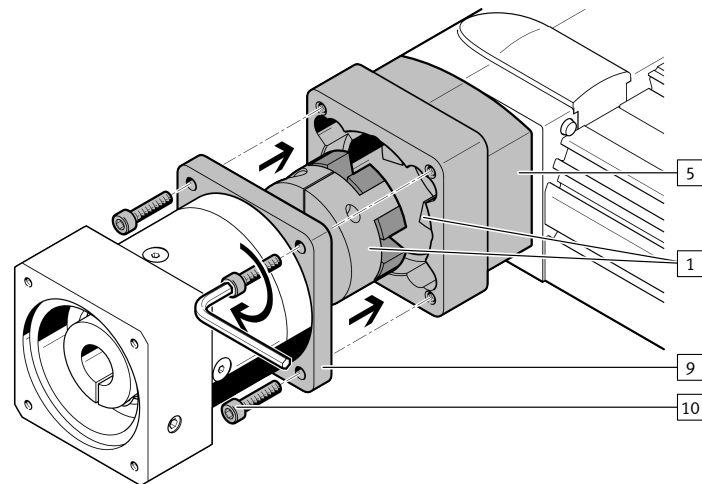
Fig. 15: Mounting gear unit

1. Push the gear unit and the axis completely together. Ensure that the coupling hubs [1] are in the correct relative position.
   ↳ There is no gap between the motor flange [9] and coupling housing [5].
2. Mount the gear unit on the coupling housing [5] via the motor flange [9] with the screws [10].

5.3 Support of the axis/gear unit combination

Fig. 16: Support of the axis/gear unit 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

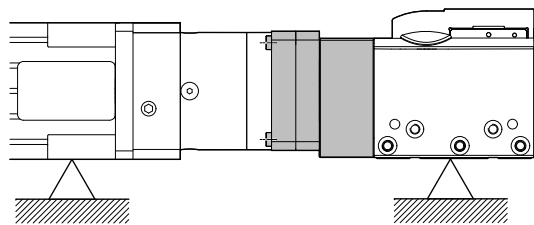| EAMM-A-	[2]	[Nm]	[3]	[Nm]	[7]	[Nm]	[10]	[Nm]
L27-40G	M2x6	0.5	M3x10	1	M3x25	1.2	M4x12	3
L27-50GA	M2x6	0.5	M3x10	1	M3x20	1.2	M4x16	3
L27-60G	M2x6	0.5	M3x10	1	M3x25	1.2	M4x16	3
L38-40G	M3x12	2	M4x12	1.5	M5x25	6	M4x12	3
L38-40G-G2	M3x12	2	M4x12	1.5	M5x25	6	M5x16	6
L38-50GA	M3x12	2	M4x12	1.5	M5x25	6	M4x12	3
L38-60G-G2	M3x12	2	M4x12	1.5	M5x35	6	M4x18	3
L38-60H-G2	M3x12	2	M4x12	1.5	M5x35	6	M4x18	3
L38-70GA	M3x12	2	M4x12	1.5	M5x25	6	M5x20	6
L38-70GA-G2	M3x12	2	M4x12	1.5	M5x30	6	M6x20	10
L48-50GA-G2	M5x18	8	M6x20	8.5	M5x35	6	M4x18	3
L48-60G-G2	M5x18	8	M6x20	8.5	M5x35	6	M4x18	3
L48-60H-G2	M5x18	8	M6x20	8.5	M5x35	6	M4x18	3
L48-70GA-G2	M5x18	8	M6x20	8.5	M5x40	6	M6x20	10
L48-80G-G2	M5x18	8	M6x20	8.5	M5x50	6	M5x20	6
L62-60H	M6x20	15	M8x25	14	M6x35	10	M5x16	6
L62-80G-G2	M6x20	12	M8x20	14	M6x60	10	M8x25	18
L62-90GA	M6x20	15	M8x25	14	M6x45	10	M6x25	10
L62-90GB	M6x20	15	M8x25	14	M6x45	10	M6x20	10
L62-120G	M6x20	15	M8x25	14	M6x30	10	M10x35	30
L95-80G-G2	M8x25	35	M10x30	60	M8x50	18	M8x25	18
L95-90GA	M8x25	35	M10x30	60	M8x50	18	M8x25	18
N38-40G	M4x12	4	M5x18	7	M6x25	10	M5x16	6
N38-50GA	M4x12	4	M5x18	7	M6x25	10	M5x16	6
N38-60G-G2	M4x12	4	M5x18	7	M6x35	10	M4x18	3
N38-60H-G2	M4x12	4	M5x18	7	M6x35	10	M4x18	3
N38-70GA	M4x12	4	M5x18	7	M6x25	10	M5x25	6
N48-40G	M4x12	4	M5x18	7	M6x35	10	M4x18	3
N48- 50GA	M5x18	8	M6x20	8.5	M6x40	10	M5x12	6
N48-60G-G2	M5x18	8	M6x20	8.5	M6x35	10	M4x18	3
N48-60H-G2	M5x18	8	M6x20	8.5	M6x35	10	M4x18	3
N48-70GA	M5x18	8	M6x20	8.5	M6x40	10	M5x20	6
N48-70GA-G2	M5x18	8	M6x20	8.5	M6x40	10	M6x20	10
N48-80G-G2	M5x18	8	M6x20	8.5	M6x50	10	M5x20	6
N48-90GA	M5x18	8	M6x20	8.5	M6x40	10	M6x20	10
N48-90GB	M5x18	8	M6x20	8.5	M6x40	10	M6x20	10
N80-70GA	M6x20	15	M8x25	14	M8x35	18	M6x25	10
N80-90GA	M6x20	15	M8x25	14	M8x35	18	M8x30	18
N80-90GB	M6x20	15	M8x25	14	M8x35	18	M8x30	18

Tab. 5: Screws [2] … [10]

EAMM-A-	[12]	[Nm]
L27-40G	M4x8	3
L27-50GA	M4x12	3
L27-60G	M5x12	6
L38-40G	M4x12	3
L38-40G-G2	M4x14	3
L38-50GA	M4x12	3
L38-60G-G2	M5x12	6
L38-60H-G2	M5x12	6
L38-70GA	M5x16	6
L38-70GA-G2	M5x14	6
L48-50GA-G2	M4x10	3
L48-60G-G2	M5x12	6
L48-60H-G2	M5x12	6
L48-70GA-G2	M5x14	6
L48-80G-G2	M6x14	10
L62-60H	M5x12	6
L62-80G-G2	M6x12	10
L62-90GA	M6x25	10
L62-90GB	M8x20	18
L62-120G	M10x35	30
L95-80G-G2	M6x16	10
L95-90GA	M6x20	10
N38-40G	M4x16	3
N38-50GA	M4x16	3
N38-60G-G2	M5x12	6
N38-60H-G2	M5x12	6
N38-70GA	M5x16	6
N48-40G	M4x10	3
N48-60G-G2	M5x12	6
N48-60H-G2	M5x12	6
N48- 50GA	M4x12	3
N48-70GA	M5x16	6
N48-70GA-G2	M5x14	6
N48-80G-G2	M6x14	10
N48-90GA	M6x20	10
N48-90GB	M8x20	18
N80-70GA	M5x16	6
N80-90GA	M6x30	10
N80-90GB	M8x30	18

Tab. 6: Screw [12]

ℹ

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

7.2 Extraction thread M_1

EAMM-A-	M_1
L27	M4
L38	M5
L62	M10
L95	M12
N38	M6
N48	M8
N80	M10

Tab. 7: Extraction thread M_1