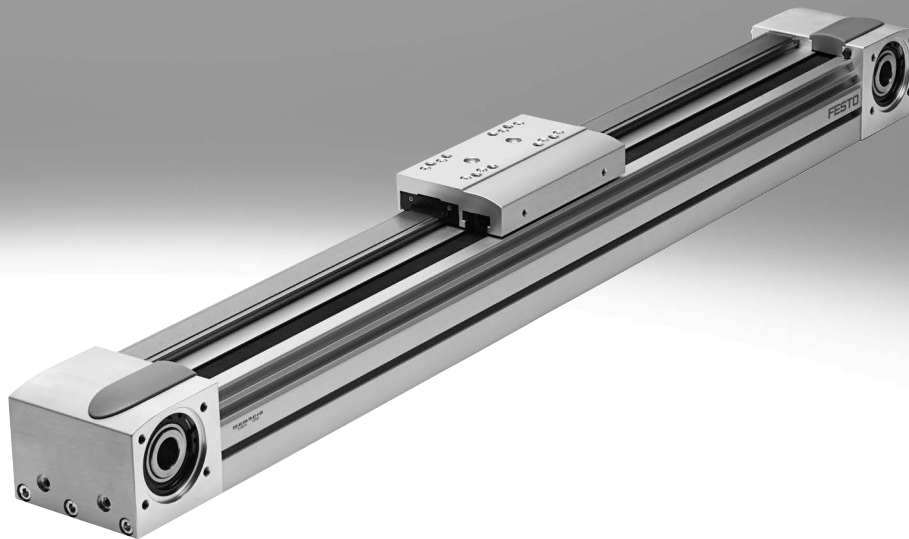


## Toothed belt axes EGC-TB-KF, with recirculating ball bearing guide

**FESTO**



## Selection aid

## Overview of toothed belt and ball screw axes

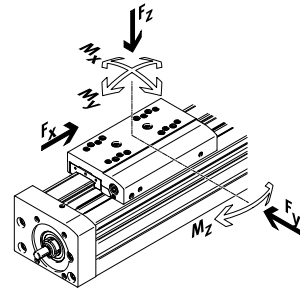
## Toothed belt axes

- Speeds of up to 10 m/s
- Acceleration of up to 50 m/s<sup>2</sup>
- Repetition accuracy of up to ±0.08 mm
- Strokes of up to 8500 mm (longer strokes on request)
- Flexible motor mountings

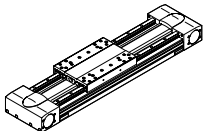
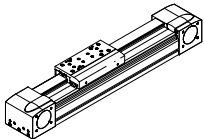
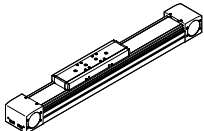
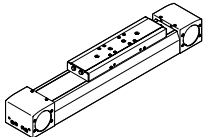
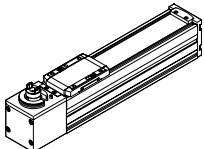
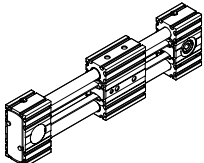
## Ball screw axes

- Speeds of up to 2 m/s
- Acceleration of up to 20 m/s<sup>2</sup>
- Repetition accuracy of up to ±0.003 mm
- Strokes up to 3000 mm

## Coordinate system



## Toothed belt axes

| Type                                                                                | F <sub>x</sub><br>[N] | v<br>[m/s] | M <sub>x</sub><br>[Nm] | M <sub>y</sub><br>[Nm] | M <sub>z</sub><br>[Nm] | Characteristics                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------|-----------------------|------------|------------------------|------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Heavy-duty recirculating ball bearing guide                                         |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                       |
| EGC-HD-TB                                                                           |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                       |
|    | 450                   | 3          | 140                    | 275                    | 275                    | <ul style="list-style-type: none"><li>• Flat drive unit with rigid, closed profile</li><li>• Precision DUO guide rail with high load capacity</li><li>• Ideal as a base axis for linear gantries and cantilever axes</li></ul>                                                                        |
|                                                                                     | 1000                  | 5          | 300                    | 500                    | 500                    |                                                                                                                                                                                                                                                                                                       |
|                                                                                     | 1800                  | 5          | 900                    | 1450                   | 1450                   |                                                                                                                                                                                                                                                                                                       |
| Recirculating ball bearing guide                                                    |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                       |
| EGC-TB-KF                                                                           |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                       |
|  | 50                    | 3          | 3.5                    | 10                     | 10                     | <ul style="list-style-type: none"><li>• Rigid, closed profile</li><li>• Precision guide rail with high load capacity</li><li>• Small drive pinions reduce required driving torque</li><li>• Space-saving position sensing</li></ul>                                                                   |
|                                                                                     | 100                   | 5          | 16                     | 132                    | 132                    |                                                                                                                                                                                                                                                                                                       |
|                                                                                     | 350                   | 5          | 36                     | 228                    | 228                    |                                                                                                                                                                                                                                                                                                       |
|                                                                                     | 800                   | 5          | 144                    | 680                    | 680                    |                                                                                                                                                                                                                                                                                                       |
|                                                                                     | 2500                  | 5          | 529                    | 1820                   | 1820                   |                                                                                                                                                                                                                                                                                                       |
| ELGA-TB-KF                                                                          |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                       |
|  | 350                   | 5          | 16                     | 132                    | 132                    | <ul style="list-style-type: none"><li>• Internal guide and toothed belt</li><li>• Precision guide rail with high load capacity</li><li>• Guide and toothed belt protected by cover strip</li><li>• High feed forces</li></ul>                                                                         |
|                                                                                     | 800                   | 5          | 36                     | 228                    | 228                    |                                                                                                                                                                                                                                                                                                       |
|                                                                                     | 1300                  | 5          | 104                    | 680                    | 680                    |                                                                                                                                                                                                                                                                                                       |
|                                                                                     | 2000                  | 5          | 167                    | 1150                   | 1150                   |                                                                                                                                                                                                                                                                                                       |
| ELGA-TB-KF-F1                                                                       |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                       |
|  | 260                   | 5          | 16                     | 132                    | 132                    | <ul style="list-style-type: none"><li>• Suitable for use in the food zone</li><li>• "Clean look": smooth, easy-to-clean surfaces</li><li>• Internal guide and toothed belt</li><li>• Precision guide rail with high load capacity</li><li>• Guide and toothed belt protected by cover strip</li></ul> |
|                                                                                     | 600                   | 5          | 36                     | 228                    | 228                    |                                                                                                                                                                                                                                                                                                       |
|                                                                                     | 1000                  | 5          | 104                    | 680                    | 680                    |                                                                                                                                                                                                                                                                                                       |
| ELGC-TB-KF                                                                          |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                       |
|  | 75                    | 1.2        | 5.5                    | 4.7                    | 4.7                    | <ul style="list-style-type: none"><li>• Internal guide and toothed belt</li><li>• Precision guide rail with high load capacity</li><li>• Guide and toothed belt protected by cover strip</li></ul>                                                                                                    |
|                                                                                     | 120                   | 1.5        | 29.1                   | 31.8                   | 31.8                   |                                                                                                                                                                                                                                                                                                       |
|                                                                                     | 250                   | 1.5        | 59.8                   | 56.2                   | 56.2                   |                                                                                                                                                                                                                                                                                                       |
| ELGR-TB                                                                             |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                       |
|  | 50                    | 3          | 2.5                    | 20                     | 20                     | <ul style="list-style-type: none"><li>• Cost-optimised rod guide</li><li>• Ready-to-install unit</li><li>• Linear ball bearings with high load capacity for dynamic operation</li></ul>                                                                                                               |
|                                                                                     | 100                   | 3          | 5                      | 40                     | 40                     |                                                                                                                                                                                                                                                                                                       |
|                                                                                     | 350                   | 3          | 15                     | 124                    | 124                    |                                                                                                                                                                                                                                                                                                       |

## Selection aid

## Overview of toothed belt and ball screw axes

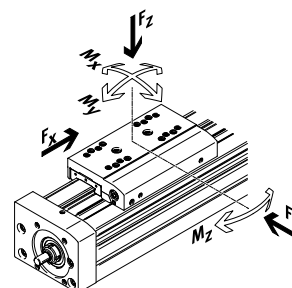
## Toothed belt axes

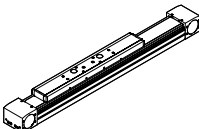
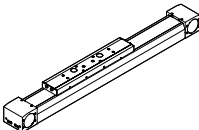
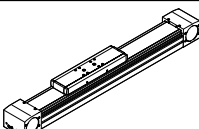
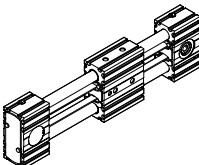
- Speeds of up to 10 m/s
- Acceleration of up to 50 m/s<sup>2</sup>
- Repetition accuracy of up to ±0.08 mm
- Strokes of up to 8500 mm (longer strokes on request)
- Flexible motor mountings

## Ball screw axes

- Speeds of up to 2 m/s
- Acceleration of up to 20 m/s<sup>2</sup>
- Repetition accuracy of up to ±0.003 mm
- Strokes up to 3000 mm

## Coordinate system



| Toothed belt axes                                                                   |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|-----------------------|------------|------------------------|------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type                                                                                | F <sub>x</sub><br>[N] | v<br>[m/s] | M <sub>x</sub><br>[Nm] | M <sub>y</sub><br>[Nm] | M <sub>z</sub><br>[Nm] | Characteristics                                                                                                                                                                                                                                                                                  |
| Roller bearing guide                                                                |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                  |
| ELGA-TB-RF                                                                          |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                  |
|    | 350                   | 10         | 11                     | 40                     | 40                     | <ul style="list-style-type: none"><li>• Heavy-duty roller bearing guide</li><li>• Guide and toothed belt protected by cover strip</li><li>• Speeds of up to 10 m/s</li><li>• Lower weight than axes with guide rails</li></ul>                                                                   |
|                                                                                     | 800                   | 10         | 30                     | 180                    | 180                    |                                                                                                                                                                                                                                                                                                  |
|                                                                                     | 1300                  | 10         | 100                    | 640                    | 640                    |                                                                                                                                                                                                                                                                                                  |
| ELGA-TB-RF-F1                                                                       |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                  |
|  | 260                   | 10         | 8.8                    | 32                     | 32                     | <ul style="list-style-type: none"><li>• Suitable for use in the food zone</li><li>• "Clean look": smooth, easy-to-clean surfaces</li><li>• Heavy-duty roller bearing guide</li><li>• Guide and toothed belt protected by cover strip</li><li>• Lower weight than axes with guide rails</li></ul> |
|                                                                                     | 600                   | 10         | 24                     | 144                    | 144                    |                                                                                                                                                                                                                                                                                                  |
|                                                                                     | 1000                  | 10         | 80                     | 512                    | 512                    |                                                                                                                                                                                                                                                                                                  |
| Plain-bearing guide                                                                 |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                  |
| ELGA-TB-G                                                                           |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                  |
|  | 350                   | 5          | 5                      | 30                     | 10                     | <ul style="list-style-type: none"><li>• Guide and toothed belt protected by cover strip</li><li>• For simple handling tasks</li><li>• As a drive component for external guides</li><li>• Insensitive to harsh ambient conditions</li></ul>                                                       |
|                                                                                     | 800                   | 5          | 10                     | 60                     | 20                     |                                                                                                                                                                                                                                                                                                  |
|                                                                                     | 1300                  | 5          | 120                    | 120                    | 40                     |                                                                                                                                                                                                                                                                                                  |
| ELGR-TB-GF                                                                          |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                  |
|  | 50                    | 1          | 1                      | 10                     | 10                     | <ul style="list-style-type: none"><li>• Cost-optimised rod guide</li><li>• Ready-to-install unit</li><li>• Heavy-duty plain bearings for use in harsh ambient conditions</li></ul>                                                                                                               |
|                                                                                     | 100                   | 1          | 2.5                    | 20                     | 20                     |                                                                                                                                                                                                                                                                                                  |
|                                                                                     | 350                   | 1          | 1                      | 40                     | 40                     |                                                                                                                                                                                                                                                                                                  |

## Selection aid

## Overview of toothed belt and ball screw axes

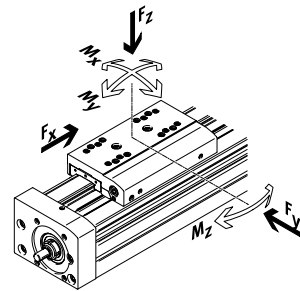
## Toothed belt axes

- Speeds of up to 10 m/s
- Acceleration of up to 50 m/s<sup>2</sup>
- Repetition accuracy of up to ±0.08 mm
- Strokes of up to 8500 mm (longer strokes on request)
- Flexible motor mountings

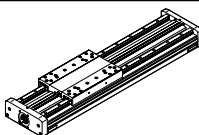
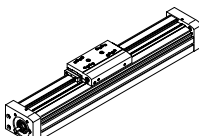
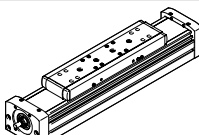
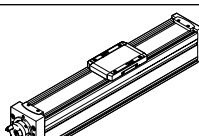
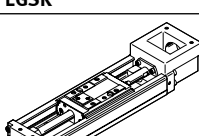
## Ball screw axes

- Speeds of up to 2 m/s
- Acceleration of up to 20 m/s<sup>2</sup>
- Repetition accuracy of up to ±0.003 mm
- Strokes up to 3000 mm

## Coordinate system



## Ball screw axes

| Type                                                                                | F <sub>x</sub><br>[N] | v<br>[m/s] | M <sub>x</sub><br>[Nm] | M <sub>y</sub><br>[Nm] | M <sub>z</sub><br>[Nm] | Characteristics                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------|-----------------------|------------|------------------------|------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Heavy-duty recirculating ball bearing guide                                         |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                                   |
| EGC-HD-BS                                                                           |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                                   |
|    | 400                   | 0.5        | 140                    | 275                    | 275                    | <ul style="list-style-type: none"><li>• Flat drive unit with rigid, closed profile</li><li>• Precision DUO guide rail with high load capacity</li><li>• Ideal as a base axis for linear gantries and cantilever axes</li></ul>                                                                                    |
|                                                                                     | 650                   | 1.0        | 300                    | 500                    | 500                    |                                                                                                                                                                                                                                                                                                                   |
|                                                                                     | 1500                  | 1.5        | 900                    | 1450                   | 1450                   |                                                                                                                                                                                                                                                                                                                   |
| Recirculating ball bearing guide                                                    |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                                   |
| EGC-BS-KF                                                                           |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                                   |
|  | 400                   | 0.5        | 16                     | 132                    | 132                    | <ul style="list-style-type: none"><li>• Rigid, closed profile</li><li>• Precision guide rail with high load capacity</li><li>• For the highest requirements in terms of feed force and accuracy</li><li>• Space-saving position sensing</li></ul>                                                                 |
|                                                                                     | 650                   | 1.0        | 36                     | 228                    | 228                    |                                                                                                                                                                                                                                                                                                                   |
|                                                                                     | 1500                  | 1.5        | 144                    | 680                    | 680                    |                                                                                                                                                                                                                                                                                                                   |
|                                                                                     | 3000                  | 2.0        | 529                    | 1820                   | 1820                   |                                                                                                                                                                                                                                                                                                                   |
| ELGA-BS-KF                                                                          |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                                   |
|  | 650                   | 0.5        | 16                     | 132                    | 132                    | <ul style="list-style-type: none"><li>• Internal guide and ball screw</li><li>• Precision guide rail with high load capacity</li><li>• For the highest requirements in terms of feed force and accuracy</li><li>• Guide and ball screw protected by cover strip</li><li>• Space-saving position sensing</li></ul> |
|                                                                                     | 1600                  | 1.0        | 36                     | 228                    | 228                    |                                                                                                                                                                                                                                                                                                                   |
|                                                                                     | 3400                  | 1.5        | 104                    | 680                    | 680                    |                                                                                                                                                                                                                                                                                                                   |
|                                                                                     | 6400                  | 2.0        | 167                    | 1150                   | 1150                   |                                                                                                                                                                                                                                                                                                                   |
| ELGC-BS-KF                                                                          |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                                   |
|  | 40                    | 0.6        | 1.3                    | 1.1                    | 1.1                    | <ul style="list-style-type: none"><li>• Internal guide and ball screw</li><li>• Guide and ball screw protected by cover strip</li><li>• Space-saving position sensing</li></ul>                                                                                                                                   |
|                                                                                     | 100                   | 0.6        | 5.5                    | 4.7                    | 4.7                    |                                                                                                                                                                                                                                                                                                                   |
|                                                                                     | 200                   | 0.8        | 29.1                   | 31.8                   | 31.8                   |                                                                                                                                                                                                                                                                                                                   |
|                                                                                     | 350                   | 1.0        | 59.8                   | 56.2                   | 56.2                   |                                                                                                                                                                                                                                                                                                                   |
| EGSK                                                                                |                       |            |                        |                        |                        |                                                                                                                                                                                                                                                                                                                   |
|  | 57                    | 0.33       | 13                     | 3.7                    | 3.7                    | <ul style="list-style-type: none"><li>• Ball screw axes with maximum precision, compactness and rigidity</li><li>• Recirculating ball bearing guide and ball screw without caged ball bearings</li><li>• Standard designs in stock</li></ul>                                                                      |
|                                                                                     | 133                   | 1.10       | 28.7                   | 9.2                    | 9.2                    |                                                                                                                                                                                                                                                                                                                   |
|                                                                                     | 184                   | 0.83       | 60                     | 20.4                   | 20.4                   |                                                                                                                                                                                                                                                                                                                   |
|                                                                                     | 239                   | 1.10       | 79.5                   | 26                     | 26                     |                                                                                                                                                                                                                                                                                                                   |
|                                                                                     | 392                   | 1.48       | 231                    | 77.3                   | 77.3                   |                                                                                                                                                                                                                                                                                                                   |

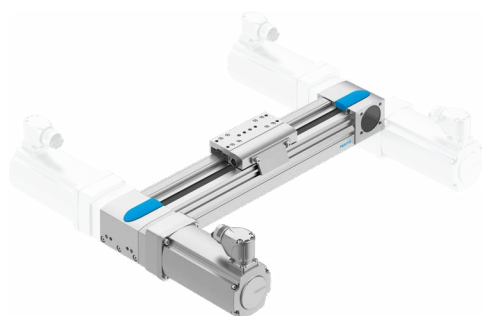
## Key features

### At a glance

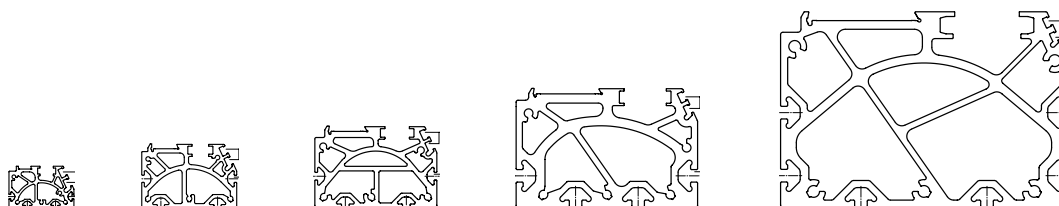
- Generously sized profiles with an optimised cross section enable maximum rigidity and load capacity
- Speed, acceleration and torque resistance set a new standard
- Numerous sizes and variants such as protected guides open up a broad range of applications
- Due to the EGC's high performance it is often possible to use a smaller size
- Space-saving position sensing with proximity switch in the profile slot is possible
- Toothed belt material can be selected from:
  - Chloroprene rubber for long service life
  - Coated PU with steel reinforcement cords for long service life and resistance to certain cooling lubricants
- Wide range of adaptation options on the drives
- Extensive mounting accessories for multi-axis combinations
- EX3: for use in potentially explosive areas

### Flexible motor mounting

The motor position can be freely selected on 4 sides and can be changed at any time.



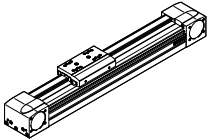
### Wide range for various load cases

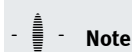


### Characteristic values of the axes

The specifications shown in the table are maximum values.

The precise values for each of the variants can be found in the relevant data sheet in the catalogue.

| Version                                                                             | Size | Working stroke<br>[mm] | Speed<br>[m/s] | Repetition accuracy<br>[mm] | feed force<br>[N] | Guide characteristics |                       |                        |                        |                        |
|-------------------------------------------------------------------------------------|------|------------------------|----------------|-----------------------------|-------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|
|                                                                                     |      |                        |                |                             |                   | Forces and torques    |                       |                        |                        |                        |
|                                                                                     |      |                        |                |                             |                   | F <sub>y</sub><br>[N] | F <sub>z</sub><br>[N] | M <sub>x</sub><br>[Nm] | M <sub>y</sub><br>[Nm] | M <sub>z</sub><br>[Nm] |
| <b>Recirculating ball bearing guide</b>                                             |      |                        |                |                             |                   |                       |                       |                        |                        |                        |
|  | 50   | 50 ... 1900            | 3              | ±0.08                       | 50                | 650                   | 650                   | 3.5                    | 10                     | 10                     |
|                                                                                     | 70   | 50 ... 5000            | 5              | ±0.08                       | 100               | 1850                  | 1850                  | 16                     | 132                    | 132                    |
|                                                                                     | 80   | 50 ... 8500            | 5              | ±0.08                       | 350               | 3050                  | 3050                  | 36                     | 228                    | 228                    |
|                                                                                     | 120  | 50 ... 8500            | 5              | ±0.08                       | 800               | 6890                  | 6890                  | 144                    | 680                    | 680                    |
|                                                                                     | 185  | 50 ... 8500            | 5              | ±0.1                        | 2500              | 15200                 | 15200                 | 529                    | 1820                   | 1820                   |



#### Note

Engineering software  
Electric Motion Sizing  
[www.festo.com/x/electric-motion-sizing](http://www.festo.com/x/electric-motion-sizing)

## Key features

### Slide variants

Standard slide



Extended slide



Additional slide



### Guide options

Protected version



- The protected guide cleans the guide rail and protects the recirculating ball bearing guide with the aid of an additional wiper

With central lubrication

→ Page 22



- The lubrication adapters enable the guide to be permanently lubricated using semi- or fully automatic relubrication devices
- The adapters are suitable for oils and greases
- All lubrication connections must be connected

Displacement encoder

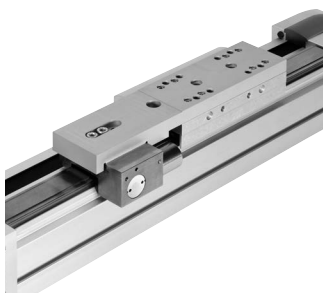
→ Page 13



- The position of the slide can be sensed directly when using the incremental displacement encoder. This means that all elasticities of the drivetrain can be detected and corrected by the motor controller.

Clamping unit

→ Page 14



- 1- or 2-channel design, for holding loads
- Reliable holding is guaranteed since the forces act directly on the slide
- A limited number of emergency braking operations are permissible with sizes 120 and 185

## Key features

### Complete system comprising toothed belt axis, motor, motor controller and motor mounting kit

Toothed belt axis with recirculating ball bearing guide



### Motor



Servo motor:  
EMMT-AS  
Stepper motor:  
EMMB-ST, EMMT-ST



#### Note

There are specially matched complete solutions for the toothed belt axis EGC and the motors.

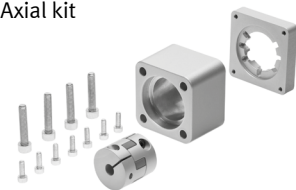
### Servo drives



Servo drive:  
CMMT-AS  
Servo drive for extra-low voltage:  
CMMT-ST

### Motor mounting kit

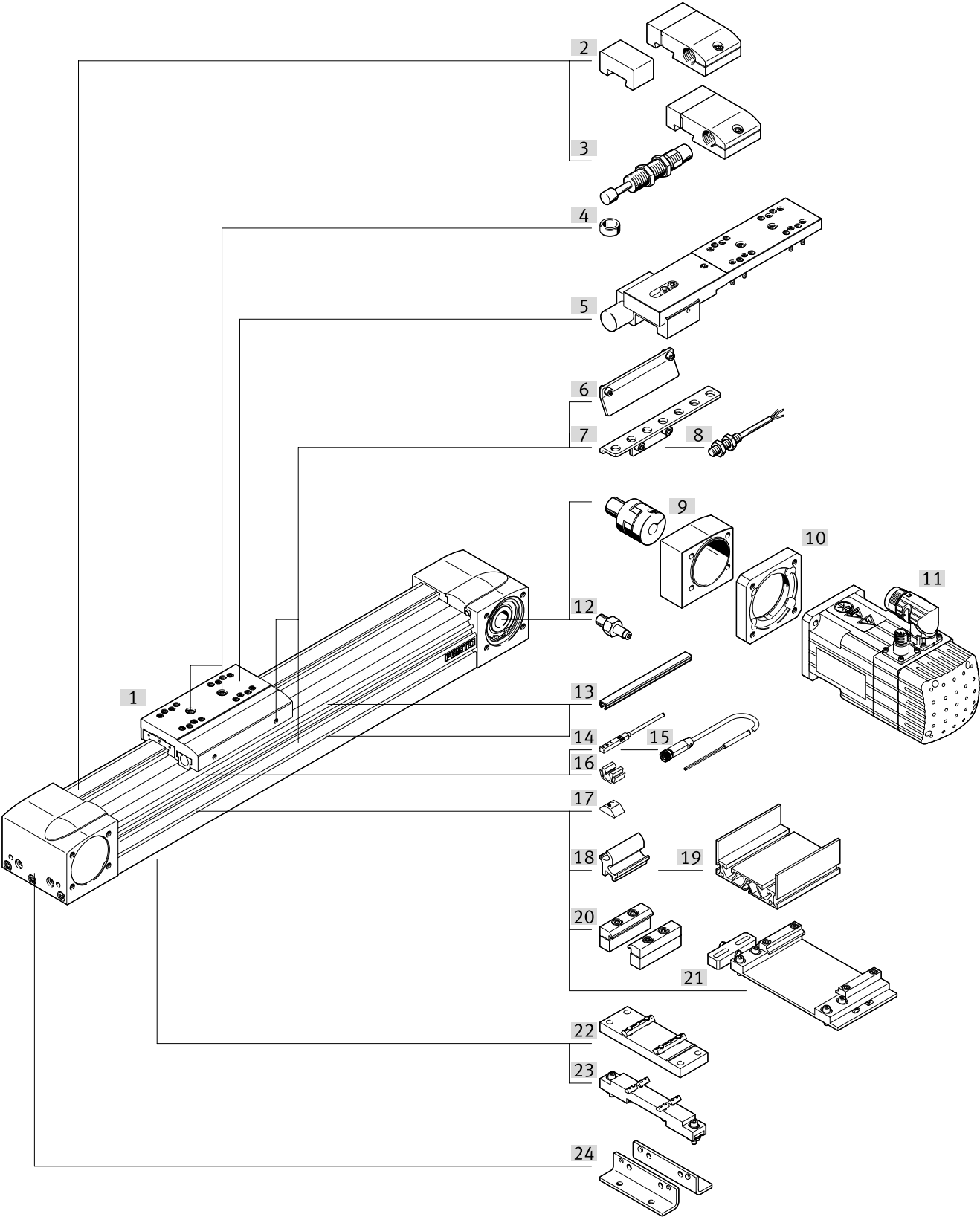
#### Axial kit



Kit consists of:

- Motor flange
- Coupling housing
- Coupling
- Screws

Peripherals overview



## Peripherals overview

| Variants and accessories                              |                                                                                                                                                                                                                                                                       |                        |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Type                                                  | Description                                                                                                                                                                                                                                                           | → Page/Internet        |
| [1] Toothed belt axis<br>EGC-TB-KF                    | Electric drive                                                                                                                                                                                                                                                        | 10                     |
| [2] Emergency buffer with retaining<br>bracket<br>NPE | For avoiding damage at the end stop in the event of malfunction                                                                                                                                                                                                       | 54                     |
| [3] Shock absorber with retaining<br>bracket<br>KYE   | For avoiding damage at the end stop in the event of malfunction                                                                                                                                                                                                       | 54                     |
| [4] Centring pin/sleeve<br>ZBS, ZBH                   | <ul style="list-style-type: none"> <li>For centring loads and attachments on the slide</li> <li>Included in the scope of delivery: <ul style="list-style-type: none"> <li>With size 50, 70: 2x ZBS-5</li> <li>With size 80, 120, 185: 2x ZBH-9</li> </ul> </li> </ul> | 54                     |
| [5] Clamping unit<br>1H...-PN, 2H-PN                  | For holding loads                                                                                                                                                                                                                                                     | 14                     |
| [6] Switch lug<br>SF-EGC-1                            | For sensing the slide position                                                                                                                                                                                                                                        | 51                     |
| [7] Sensor bracket<br>HWS-EGC                         | Adapter for mounting the inductive proximity switches (round design) on the axis                                                                                                                                                                                      | 52                     |
| [8] Proximity switch, M8<br>SIEN                      | Inductive proximity switch, round design                                                                                                                                                                                                                              | 55                     |
| [9/<br>10]] Axial kit<br>EAMM                         | For axial motor mounting (comprising coupling, coupling housing and motor flange)                                                                                                                                                                                     | <a href="#">eamm-a</a> |
| [11] Motor<br>EMMT                                    | Motors specially matched to the axis, with or without gear unit, with or without brake                                                                                                                                                                                | <a href="#">emmt</a>   |
| [12] Drive shaft adapter<br>EAMB                      | <ul style="list-style-type: none"> <li>Can be used as an alternative interface, as required</li> <li>No drive shaft adapter is required for the axis/motor combinations → page 46 onwards</li> </ul>                                                                  | 53                     |
| [13] Slot cover<br>ABP                                | <ul style="list-style-type: none"> <li>For protection against contamination</li> </ul>                                                                                                                                                                                | 54                     |
| [14] Proximity switch, T-slot<br>SIES                 | Inductive proximity switch, for T-slot                                                                                                                                                                                                                                | 55                     |
| [15] Connecting cable<br>NEBA                         | For proximity switches                                                                                                                                                                                                                                                | 56                     |
| [16] Clip<br>SMBK                                     | For mounting the proximity switch cable in the slot                                                                                                                                                                                                                   | 54                     |
| [17] Slot nut<br>NST                                  | For mounting attachments                                                                                                                                                                                                                                              | 54                     |
| [18] Adapter kit<br>DHAM                              | For mounting the support profile on the axis                                                                                                                                                                                                                          | 55                     |
| [19] Support profile<br>HMIA                          | For mounting and guiding an energy chain                                                                                                                                                                                                                              | 55                     |
| [20] Profile mounting<br>MUE                          | For mounting the axis on the side of the profile                                                                                                                                                                                                                      | 47                     |
| [21] Adjusting kit<br>EADC-E16                        | For mounting the axis on a vertical surface. Once mounted, the axis can be aligned horizontally                                                                                                                                                                       | 50                     |
| [22] Central support<br>EAHF-L5                       | For mounting the axis on the profile from underneath                                                                                                                                                                                                                  | 48                     |
| [23] Adjusting kit<br>EADC-E15                        | Height-adjustable. Can be used to easily compensate for any unevenness in the bearing surface                                                                                                                                                                         | 49                     |
| [24] Foot mounting<br>HPE                             | For mounting the axis on the end cap                                                                                                                                                                                                                                  | 46                     |
| – Guide axis<br>EGC-FA                                | Axis without drive                                                                                                                                                                                                                                                    | egc-fa                 |
| – Connecting shaft<br>KSK                             | For connecting two toothed belt axes EGC-TB in three-dimensional gantries                                                                                                                                                                                             | ksk                    |

## Type codes

| 001 | Series               |  |
|-----|----------------------|--|
| EGC | Electric linear axis |  |

| 002 | Size |  |
|-----|------|--|
| 50  | 50   |  |
| 70  | 70   |  |
| 80  | 80   |  |
| 120 | 120  |  |
| 185 | 185  |  |

| 003  | Stroke [mm] |  |
|------|-------------|--|
| 300  | 300         |  |
| 400  | 400         |  |
| 500  | 500         |  |
| 600  | 600         |  |
| 800  | 800         |  |
| 1000 | 1000        |  |
| 1200 | 1200        |  |
| 1500 | 1500        |  |
| ...  | 50 ... 8500 |  |

| 004 | Drive system |  |
|-----|--------------|--|
| TB  | Toothed belt |  |

| 005 | Guide                            |  |
|-----|----------------------------------|--|
| KF  | Recirculating ball bearing guide |  |

| 006 | Stroke reserve [mm] |  |
|-----|---------------------|--|
| ... | 0 ... 999           |  |

| 007 | Slide                     |  |
|-----|---------------------------|--|
| GK  | Standard slide            |  |
| GP  | Standard slide, protected |  |
| GV  | Extended slide            |  |
| GQ  | Extended slide, protected |  |

| 008 | Additional slide left            |  |
|-----|----------------------------------|--|
|     | None                             |  |
| KL  | Additional slide, standard, left |  |

| 009 | Additional slide, right          |  |
|-----|----------------------------------|--|
|     | None                             |  |
| KR  | Additional slide standard, right |  |

| 010 | Lubrication function |  |
|-----|----------------------|--|
|     | None                 |  |
| C   | Lubrication adapter  |  |

| 011 | Displacement encoder                                      |  |
|-----|-----------------------------------------------------------|--|
|     | None                                                      |  |
| M1  | With displacement encoder, incremental, resolution 2.5 µm |  |
| M2  | With displacement encoder, incremental, resolution 10 µm  |  |

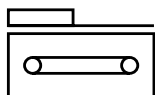
| 012 | Clamping unit                          |  |
|-----|----------------------------------------|--|
|     | None                                   |  |
| 1HL | Holding function, 1-channel, left      |  |
| 1HR | Single-channel holding function, right |  |
| 2H  | Holding function, 2-channel            |  |

| 013 | Actuation type         |  |
|-----|------------------------|--|
|     | None                   |  |
| PN  | Pneumatically actuated |  |

| 014 | Toothed belt material |  |
|-----|-----------------------|--|
|     | Chloroprene rubber    |  |
| PU2 | Coated PU             |  |

| 015 | EU certification |  |
|-----|------------------|--|
|     | None             |  |
| EX3 | II 2G            |  |

## Datasheet



-  Size  
50 ... 185
-  Stroke length  
50 ... 8500 mm
-  [www.festo.com](http://www.festo.com)
-  Repair service



| General technical data                            |                     |                                          |             |             |             |             |
|---------------------------------------------------|---------------------|------------------------------------------|-------------|-------------|-------------|-------------|
| Size                                              |                     | 50                                       | 70          | 80          | 120         | 185         |
| Design                                            |                     | Electromechanical axis with toothed belt |             |             |             |             |
| Guide                                             |                     | Recirculating ball bearing guide         |             |             |             |             |
| Mounting position                                 |                     | Any                                      |             |             |             |             |
| Working stroke                                    |                     |                                          |             |             |             |             |
| EGC-...-GK/-GP                                    | [mm]                | 50 ... 1900                              | 50 ... 5000 | 50 ... 8500 | 50 ... 8500 | 50 ... 8500 |
| EGC-...-GV/-GQ                                    | [mm]                | –                                        | 50 ... 5000 | 50 ... 8500 | 50 ... 8400 | 50 ... 8400 |
| Max. feed force F <sub>x</sub>                    | [N]                 | 50                                       | 100         | 350         | 800         | 2500        |
| Max. no-load torque <sup>1)</sup>                 | [Nm]                | 0.072                                    | 0.18        | 0.4         | 1.4         | 4.05        |
| Max. no-load resistance to shifting <sup>1)</sup> | [N]                 | 8                                        | 14.5        | 28          | 70          | 110         |
| Max. driving torque                               | [Nm]                | 0.46                                     | 1.24        | 5           | 16          | 93          |
| Max. speed                                        | [m/s]               | 3                                        | 5           |             |             |             |
| Max. acceleration                                 | [m/s <sup>2</sup> ] | 50                                       |             |             |             |             |
| Repetition accuracy                               | [mm]                | ±0.08                                    |             |             |             | ±0.1        |

1) At 0.2 m/s, with variant GK or GV and toothed belt made of chloroprene rubber

| Operating and environmental conditions       |                             |
|----------------------------------------------|-----------------------------|
| Ambient temperature                          | [°C] –10 ... +60            |
| Degree of protection                         | IP40                        |
| Duty cycle                                   | [%] 100                     |
| UKCA marking (see declaration of conformity) | To UK explosion regulations |

| Weight [g]                                  |  |     |      |      |       |       |
|---------------------------------------------|--|-----|------|------|-------|-------|
| Size                                        |  | 50  | 70   | 80   | 120   | 185   |
| Basic weight with 0 mm stroke <sup>1)</sup> |  |     |      |      |       |       |
| EGC-...-GK/-GP                              |  | 620 | 1850 | 3000 | 10500 | 32600 |
| EGC-...-GV/-GQ                              |  | –   | 2470 | 3900 | 12600 | 36800 |
| Additional weight per 10 mm stroke          |  | 19  | 44   | 62   | 150   | 300   |
| Moving mass                                 |  |     |      |      |       |       |
| EGC-...-GK/-GP                              |  | 130 | 370  | 620  | 2180  | 6500  |
| EGC-...-GV/-GQ                              |  | –   | 550  | 900  | 2730  | 7720  |
| Additional slide                            |  |     |      |      |       |       |
| EGC-...-KL/-KR                              |  | 80  | 300  | 550  | 2000  | 6000  |
| Clamping unit                               |  |     |      |      |       |       |
| EGC-...-1H...-PN                            |  | –   | –    | 700  | 2300  | 4900  |
| EGC-...-2H-PN                               |  | –   | –    | 1300 | 4000  | 8300  |

1) Including slide

## Datasheet

| ATEX <sup>1)</sup>                                |                                             |    |    |     |
|---------------------------------------------------|---------------------------------------------|----|----|-----|
| Size                                              | 50                                          | 70 | 80 | 120 |
| ATEX category for gas                             | II 2G                                       |    |    |     |
| Type of (ignition) protection for gas             | c IIB T4 X                                  |    |    |     |
| Explosion-proof ambient temperature               | -10°C ≤ Ta ≤ +60°C                          |    |    |     |
| CE marking (see declaration of conformity)        | To EU Explosion Protection Directive (ATEX) |    |    |     |
| Explosion protection certification outside the EU | EPL Db (GB)                                 |    |    |     |
|                                                   | EPL Gb (GB)                                 |    |    |     |

1) Note the ATEX certification of the accessories.

| Toothed belt            |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|
| Size                    | 50    | 70    | 80    | 120   | 185   |
| Pitch [mm]              | 2     | 3     | 3     | 5     | 8     |
| Width [mm]              | 10    | 15    | 19.3  | 30.3  | 50.5  |
| Effective diameter [mm] | 18.46 | 24.83 | 28.65 | 39.79 | 73.85 |
| Feed constant [mm/rev]  | 58    | 78    | 90    | 125   | 232   |

| Mass moment of inertia                                  |       |       |        |      |        |
|---------------------------------------------------------|-------|-------|--------|------|--------|
| Size                                                    | 50    | 70    | 80     | 120  | 185    |
| J <sub>0</sub>                                          |       |       |        |      |        |
| EGC-...-GK [kg mm <sup>2</sup> ]                        | 16.94 | 83.34 | 205.9  | 1241 | 17976  |
| EGC-...-GV [kg mm <sup>2</sup> ]                        | –     | 110   | 265    | 1465 | 19690  |
| J <sub>H</sub> per metre stroke [kg mm <sup>2</sup> /m] | 2.6   | 10.6  | 18.8   | 93   | 760    |
| J <sub>L</sub> per kg payload [kg mm <sup>2</sup> /Kg]  | 85    | 154   | 205    | 396  | 1363.5 |
| J <sub>W</sub> Additional slide [kg mm <sup>2</sup> ]   | 3.56  | 56.32 | 126.73 | 861  | 8846   |
| J <sub>F</sub> Clamping unit                            |       |       |        |      |        |
| EGC-...-1H...-PN [kg mm <sup>2</sup> ]                  | –     | –     | 143.5  | 911  | 6681   |
| EGC-...-2H-PN [kg mm <sup>2</sup> ]                     | –     | –     | 266.5  | 1584 | 11317  |

The mass moment of inertia J<sub>A</sub> of the entire axis is calculated as follows:

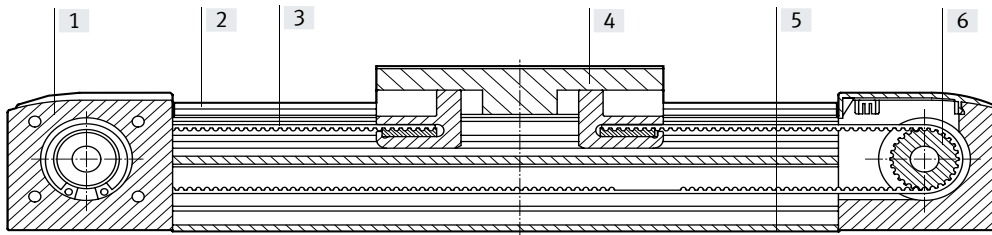
$$J_A = J_0 + K \times J_W + J_H \times \text{working stroke [m]} + J_L \times m_{\text{payload [kg]}} + J_F$$

K= Number of additional slides

## Datasheet

### Materials

#### Sectional view



| Size                    | 50                                                       | 70 | 80 | 120 | 185                             |
|-------------------------|----------------------------------------------------------|----|----|-----|---------------------------------|
| [1] Drive cover         | Anodised wrought aluminium alloy                         |    |    |     | Painted wrought aluminium alloy |
| [2] Guide rail          | High-alloy steel                                         |    |    |     |                                 |
| [3] Toothed belt        |                                                          |    |    |     |                                 |
| EGC-...                 | Polychloroprene or NBR with glass cord and nylon coating |    |    |     |                                 |
| EGC-...-PU2             | Polyurethane with steel cord and nylon cover             |    |    |     |                                 |
| [4] Slide               | Anodised wrought aluminium alloy                         |    |    |     |                                 |
| [5] Profile             | Anodised wrought aluminium alloy                         |    |    |     |                                 |
| [6] Toothed belt pulley | High-alloy stainless steel                               |    |    |     |                                 |
| Note on materials       | RoHs-compliant                                           |    |    |     |                                 |
|                         | Contains paint-wetting impairment substances             |    |    |     |                                 |

### Technical data – Displacement encoder

Dimensions → page 41

| Type                                              | EGC-...-M1                                                                   | EGC-...-M2 |
|---------------------------------------------------|------------------------------------------------------------------------------|------------|
| Resolution [μm]                                   | 2.5                                                                          | 10         |
| Max. travel speed with displacement encoder [m/s] | 4                                                                            | 4          |
| Encoder signal                                    | 5 V TTL; A/A, B/B; reference signal (N/N) cyclically every 5 mm (zero pulse) |            |
| Signal output                                     | Line driver, alternating, resistant to sustained short circuit               |            |
| Electrical connection                             | 8-pin plug connector, round design, M12                                      |            |
| Cable length [mm]                                 | 160                                                                          |            |

### Operating and environmental conditions – Displacement encoder

|                                            |                                   |
|--------------------------------------------|-----------------------------------|
| Ambient temperature [°C]                   | -10 ... +70                       |
| Degree of protection                       | IP64                              |
| CE marking (see declaration of conformity) | To EU EMC Directive <sup>1)</sup> |

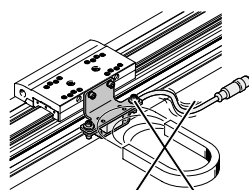
1) For information about the area of use, see the EC declaration of conformity at: [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

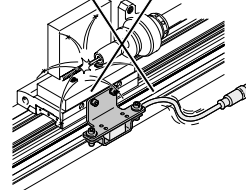
### Application note

The toothed belt axis with displacement encoder is not designed for the following application examples

- Magnetic field



- Welding application



## Datasheet

| Technical data – Clamping unit                                                   |                                   | Dimensions → page 37                                  |           |           |
|----------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------|-----------|-----------|
| Size                                                                             |                                   | 80                                                    | 120       | 185       |
| Pneumatic connection                                                             |                                   | M5                                                    | M5        | M5        |
| Clamping type                                                                    |                                   | Clamping via spring force, release via compressed air |           |           |
| Static holding force                                                             |                                   |                                                       |           |           |
| EGC-...-1H-...-PN                                                                | [N]                               | 320                                                   | 1200      | 1500      |
| EGC-...-2H-PN                                                                    | [N]                               | 640                                                   | 2400      | 3000      |
| Max. number of emergency braking operations <sup>1)</sup><br>at reference energy | [J]                               | –                                                     | 750<br>35 | 750<br>70 |
| Number of clamping operations under rated<br>load                                | [millions of<br>switching cycles] | 0.45                                                  | 0.05      | > 1.4     |

1) Emergency braking refers to braking the payload if the drive axis loses power.

| Operating and environmental conditions – Clamping unit |       |                                           |
|--------------------------------------------------------|-------|-------------------------------------------|
| Operating medium                                       |       | Compressed air to ISO 8573-1:2010 [7:4:4] |
| Operating pressure                                     |       |                                           |
| Clamping unit open                                     | [bar] | 4.5 ... 8                                 |
| Clamping unit closed                                   | [bar] | Unpressurised                             |
| Ambient temperature                                    | [°C]  | −10 ... +60                               |

**Note**

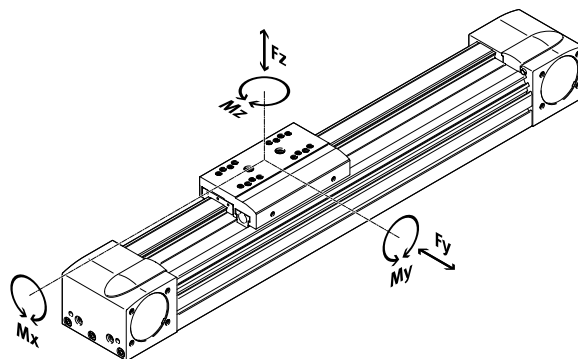
The axis can only be relubricated with the lubrication adapter (EGC-...-C) when used in combination with the clamping unit.

## Datasheet

### Characteristic load values

The indicated forces and torques refer to the slide surface. The point of application of force is the point where the centre of the guide and the longitudinal centre of the slide intersect.

These values must not be exceeded during dynamic operation. Special attention must be paid to the deceleration phase.



| Max. permissible forces and torques at reference service life  |      |      |      |      |      |       |
|----------------------------------------------------------------|------|------|------|------|------|-------|
| Size                                                           |      | 50   | 70   | 80   | 120  | 185   |
| Reference service life                                         | [km] | 5000 |      |      |      |       |
| F <sub>y</sub> <sub>max.</sub>                                 | [N]  | 650  | 1850 | 3050 | 6890 | 15200 |
| F <sub>z</sub> <sub>max.</sub>                                 | [N]  | 650  | 1850 | 3050 | 6890 | 15200 |
| M <sub>x</sub> <sub>max.</sub>                                 | [Nm] | 3.5  | 16   | 36   | 144  | 529   |
| M <sub>y</sub> <sub>max.</sub> /M <sub>z</sub> <sub>max.</sub> |      |      |      |      |      |       |
| EGC-...-GK/-GP                                                 | [Nm] | 10   | 51   | 97   | 380  | 1157  |
| M <sub>y</sub> <sub>max.</sub> /M <sub>z</sub> <sub>max.</sub> |      |      |      |      |      |       |
| EGC-...-GV/-GQ                                                 | [Nm] | –    | 132  | 228  | 680  | 1820  |

### Note

For a guide system to have a service life of 5000 km, the load comparison factor must have a value of  $f_v \leq 1$ , based on the maximum permissible forces and torques for a service life of 5000 km.

If the axis is subjected to two or more of the indicated forces and torques simultaneously, the following equation must be satisfied in addition to the indicated maximum loads:

Calculating the load comparison factor:

$$f_v = \frac{|F_{y1}|}{F_{y2}} + \frac{|F_{z1}|}{F_{z2}} + \frac{|M_{x1}|}{M_{x2}} + \frac{|M_{y1}|}{M_{y2}} + \frac{|M_{z1}|}{M_{z2}} \leq 1$$

$F_1/M_1$  = dynamic value

$F_2/M_2$  = maximum value

## Datasheet

### Calculating the service life

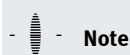
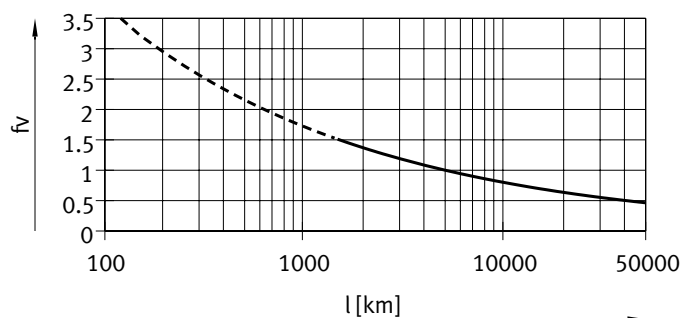
The service life of the guide depends on the load. To be able to make a statement as to the service life of the guide, the graph below plots the load comparison factor  $f_v$  against the service life.

These values are only theoretical. You must consult your local Festo contact for a load comparison factor  $f_v$  greater than 1.5.

#### Load comparison factor $f_v$ as a function of service life

Example:

A user wants to move an X kg load. Using the formula (→ page 15) gives a value of 1.5 for the load comparison factor  $f_v$ . According to the graph, the guide would have a service life of approx. 1500 km. Reducing the acceleration reduces the  $M_z$  and  $M_y$  values. A load comparison factor  $f_v$  of 1 now results in a service life of 5000 km.



#### Note

Engineering software  
Electric Motion Sizing  
[www.festo.com/x/electric-motion-sizing](http://www.festo.com/x/electric-motion-sizing)

The engineering software can be used to calculate the guide workload for a service life of 5000 km.

$f_v > 1.5$  are only theoretical comparison values for the recirculating ball bearing guide.

### Comparison of the characteristic load values for 5000 km with dynamic forces and torques of recirculating ball bearing guides

The characteristic load values of the bearing guides are standardised to ISO and JIS using dynamic and static forces and torques. These forces and torques are based on an expected service life of the guide system of 100 km to ISO or 50 km to JIS.

As the characteristic load values are dependent on the service life, the maximum permissible forces and torques for a 5000 km service life cannot be compared with the dynamic forces and torques of bearing guides to ISO/JIS.

To make it easier to compare the guide capacity of linear axes EGC with bearing guides, the table below lists the theoretically permissible forces and torques for a calculated service life of 100 km. This corresponds to the dynamic forces and torques to ISO.

These 100 km values have been calculated mathematically and are only to be used for comparing with dynamic forces and torques to ISO. The drives must not be loaded with these characteristic values as this could damage the axes.

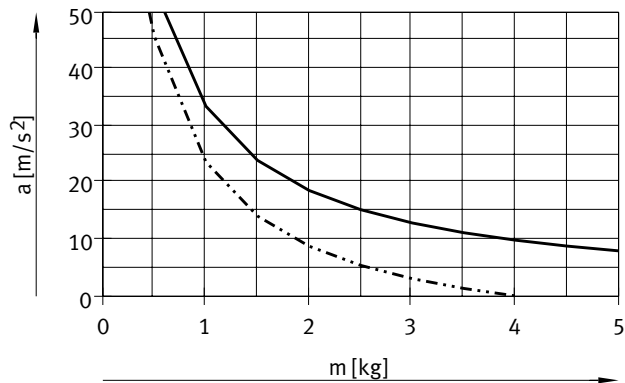
#### Max. permissible forces and torques for a theoretical service life of 100 km (from a guide perspective only)

| Size                      |      | 50   | 70   | 80    | 120   | 185   |
|---------------------------|------|------|------|-------|-------|-------|
| $F_{y_{max}}$             | [N]  | 2395 | 6815 | 11236 | 25383 | 55997 |
| $F_{z_{max}}$             | [N]  | 2395 | 6815 | 11236 | 25383 | 55997 |
| $M_{x_{max}}$             | [Nm] | 13   | 59   | 133   | 531   | 1949  |
| $M_{y_{max}}/M_{z_{max}}$ |      |      |      |       |       |       |
| EGC-...-GK/-GP            | [Nm] | 37   | 188  | 357   | 1400  | 4262  |
| $M_{y_{max}}/M_{z_{max}}$ |      |      |      |       |       |       |
| EGC-...-GV/-GQ            | [Nm] | –    | 486  | 840   | 2505  | 6705  |

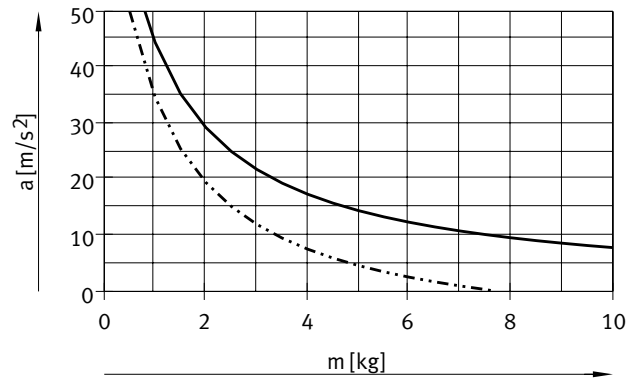
## Datasheet

Max. acceleration  $a$  as a function of payload  $m$ 

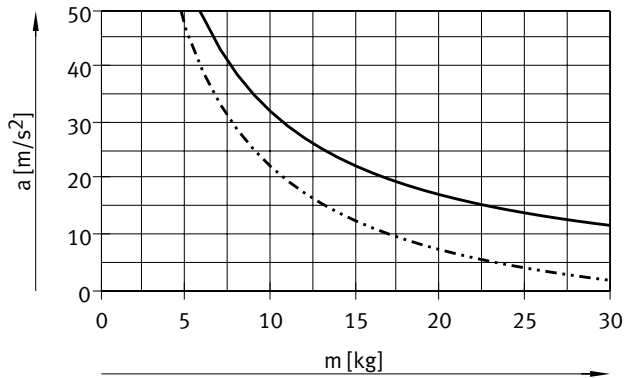
Size 50



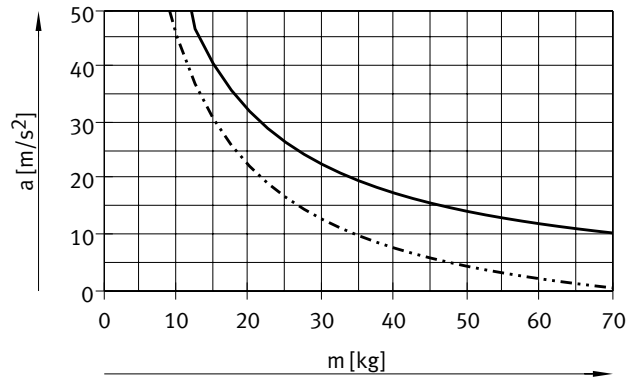
Size: 70



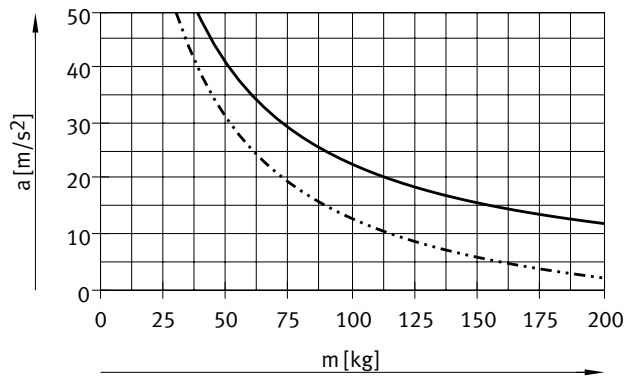
Size: 80



Size: 120



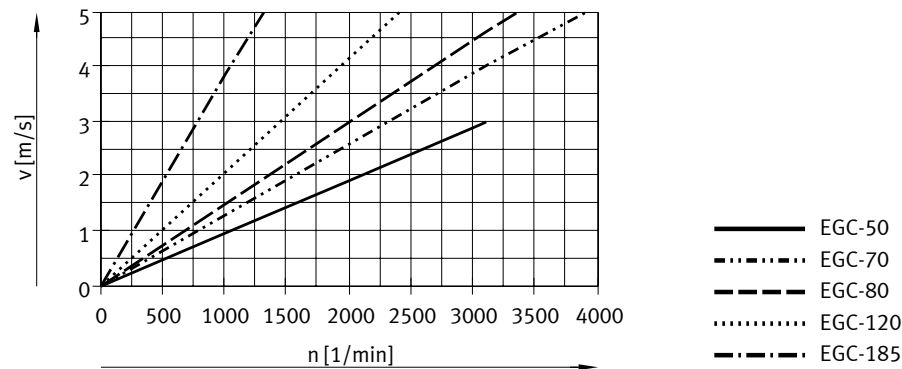
Size: 185



— Horizontal mounting position  
 - - - Vertical mounting position

Datasheet

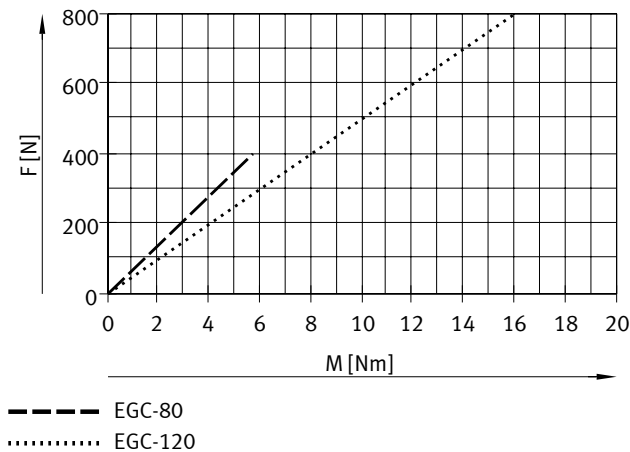
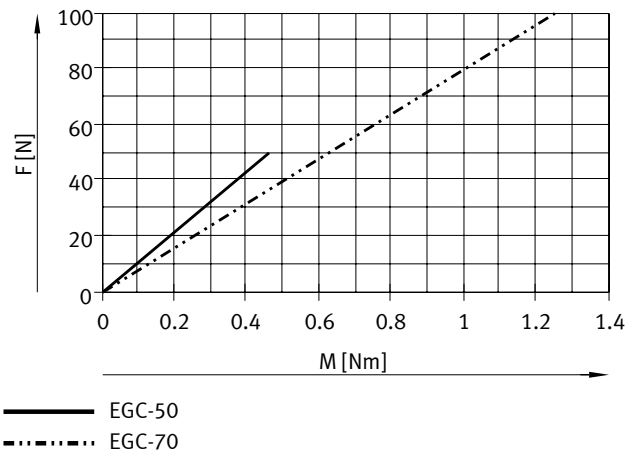
Speed  $v$  as a function of rotational speed  $n$



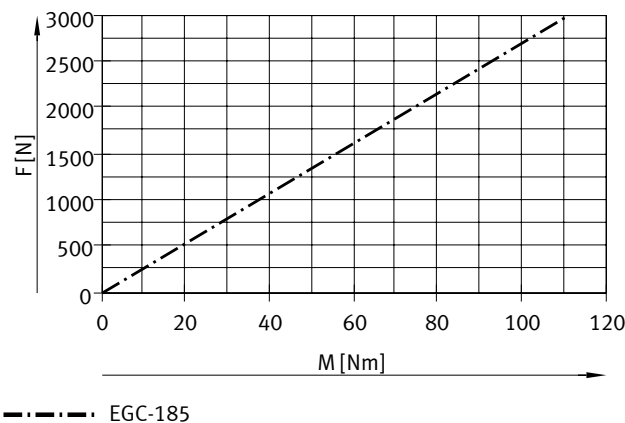
Theoretical feed force  $F$  as a function of the input torque  $M$

Size 50/70

Size 80/120



Size 185



## Datasheet

### Stroke reserve

Stroke length                      Stroke reserve

The selected stroke corresponds in principle to the required working stroke. The variants GK/GV do not have a wiper seal on the guide. These variants therefore have an additional safety distance between the drive cover and slide that is not designated as part of the working stroke.

A safety distance (similar to GK/GV) between the drive cap and slide can be defined for the variants GP/GQ and GK-C/GV-C using the modular product system via the "stroke reserve" feature. With the variants GK/GV, the stroke reserve and safety distance are added for each end position.

- The stroke reserve length can be freely selected
- The sum of the stroke length and 2x stroke reserve must not exceed the maximum working stroke

#### Example:

EGC-70-500-TB-KF-20H-...  
 Working stroke        = 500 mm  
 2x stroke reserve    = 40 mm  
 Total stroke           = 540 mm  
 (540 mm = 500 mm + 2x 20 mm)

| Size                                                    | 50 | 70   | 80 | 120 | 185 |
|---------------------------------------------------------|----|------|----|-----|-----|
| L9 = safety distance with GK/GV (per end position) [mm] | –  | 10.5 | 13 | 18  | 21  |

### Working stroke reduction

With standard slide GK/GP / extended slide GV/GQ with additional slide KL/KR

- For a toothed belt axis with additional slide, the working stroke is reduced by the length of the additional slide and the distance between the two slides
- If the variant GP/GQ is ordered, the additional slide is also protected
- If the variant GV/GQ is ordered, the additional slide is not extended
- If the variant GK-C/GV-C is ordered, the additional slide is also supplied with lubrication adapters

L16 = Slide length

L17 = Additional slide length

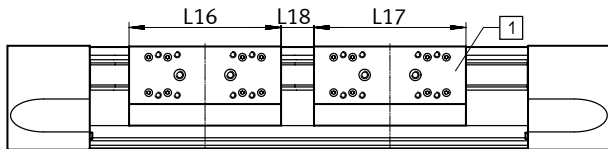
L18 = Distance between the two slides

[1] Additional slide

#### Example:

Type EGC-70-500-TB-...-GK-KL/KR  
 Working stroke without additional slide = 500 mm  
 L18 = 20 mm  
 L16, L17 = 100 mm

Working stroke with additional slide = 380 mm  
 (500 mm – 20 mm – 100 mm)



### Dimensions – Additional slide

| Size            | 50    | 70    | 80                 | 120                | 185                |
|-----------------|-------|-------|--------------------|--------------------|--------------------|
| Variant         | GK/GV | GK/GV | GP/GQ or GK-C/GV-C | GP/GQ or GK-C/GV-C | GP/GQ or GK-C/GV-C |
| Length L17 [mm] | 65    | 100   | 125                | 146                | 200                |

## Datasheet

### Working stroke reduction per side

With integrated emergency buffer NPE/shock absorber YSRW with shock absorber retainer KYE

- The working stroke is reduced by the total dimension of the emergency buffer/shock absorber and shock absorber retainer.
- The rubber buffer in the cap must be removed.
- Shock absorbers must not be used in combination with lubrication adapters.

| Size                  |      | 50 | 70 | 80 | 120 | 185 |
|-----------------------|------|----|----|----|-----|-----|
| With emergency buffer | [mm] | 30 | 43 | 68 | 98  | 133 |
| With shock absorber   | [mm] | 26 | 42 | 63 | 84  | 107 |

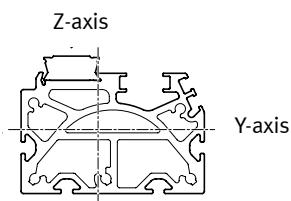
### Working stroke reduction

With integrated clamping unit

- The working stroke is reduced by the length of the clamping unit.
- With 1-channel clamping units, the stroke is reduced on one side with respect to the mounting surface
- With 2-channel clamping units, the stroke is reduced symmetrically with respect to the mounting surface of the load
- Shock absorbers must not be used in combination with the clamping unit.

| Size             |      | 80  | 120 | 185 |
|------------------|------|-----|-----|-----|
| EGC-...-1H...-PN | [mm] | 87  | 124 | 131 |
| EGC-...-2H...-PN | [mm] | 174 | 248 | 262 |

### 2nd moment of area



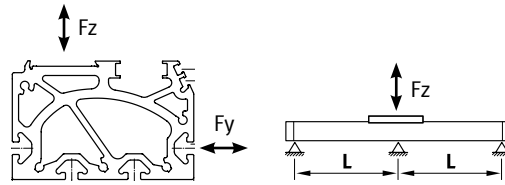
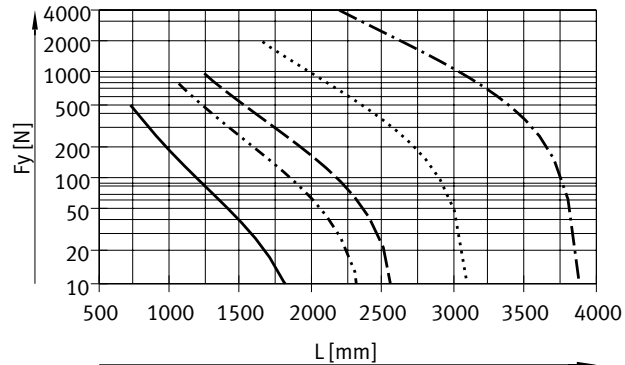
| Size           |                    | 50                   | 70                   | 80                   | 120                  | 185                  |
|----------------|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| I <sub>y</sub> | [mm <sup>4</sup> ] | 8.4x10 <sup>4</sup>  | 3.95x10 <sup>5</sup> | 8.44x10 <sup>5</sup> | 4.62x10 <sup>6</sup> | 2.34x10 <sup>7</sup> |
| I <sub>z</sub> | [mm <sup>4</sup> ] | 1.14x10 <sup>5</sup> | 5.77x10 <sup>5</sup> | 1.16x10 <sup>6</sup> | 5.65x10 <sup>6</sup> | 2.74x10 <sup>7</sup> |

## Datasheet

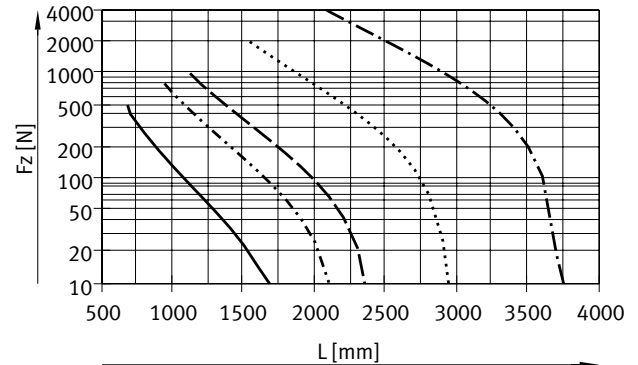
### Maximum permissible support spacing $L$ (without profile mounting MUE/central support EAHF) as a function of force $F$

The axis may need to be supported in order to limit deflection in the case of long strokes.

The following graphs can be used to determine the maximum permissible support spacing  $l$  as a function of force  $F$  acting on the axis. The deflection is  $f = 0.5$  mm.

Force  $F_y$ 

- EGC-50
- · - · - EGC-70
- - - EGC-80
- EGC-120
- · - · - EGC-185

Force  $F_z$ 

### Recommended deflection limits

Adherence to the following deflection limits is recommended so as not to impair the functionality of the axes. Greater deformation can result in increased friction, greater wear and reduced service life.

| Size       | Dynamic deflection<br>(load moves)    | Static deflection<br>(stationary load) |
|------------|---------------------------------------|----------------------------------------|
| 50 ... 185 | 0.05% of the axis length, max. 0.5 mm | 0.1% of the axis length                |

## Datasheet

### Central lubrication

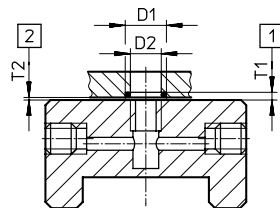
The lubrication adapters enable the guide of the toothed belt axis EGC-TB to be permanently lubricated in applications in humid or wet ambient conditions using semi or fully automatic relubrication devices.

- For size 70, 80, 120, 185
- The modules are suitable for oils and greases.
- The dimensions of the toothed belt axis EGC-TB are the same with and without central lubrication modules.
- There are three connection options on each side
- Can be used in combination with:
  - Standard slide GK
  - Extended slide GV
  - Additional slide KL, KR
- Cannot be used in combination with:
  - Protected recirculating ball bearing guide GP, GP

Slide dimensions  
→ page 31

### Connection option for customer design

The drawing on the right shows the connection option on the top lubrication interface using a customer design.



D1  $8^{+0.2}$  mm  
D2 6 mm  
T1  $0.6_{-0.05}$  mm  
T2  $0.1^{+0.2}$  mm  
O-ring  $\varnothing 6 \times 1$  mm (DIN3771)

[1] Slot depth for O-ring  
[2] Required air gap

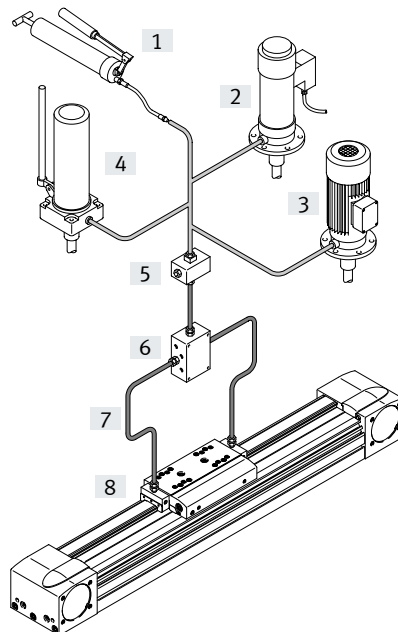
Additional dimensions → page 31

### Design of a central lubrication system

A central lubrication system requires various additional components. The illustration shows different options (using a hand pump, pneumatic container pump or electric container pump) required as a minimum for designing a central lubrication system. Festo does not sell these additional components; however, they can be obtained from the following companies:

- Lincoln
- Bielomatik
- SKF (Vogel)

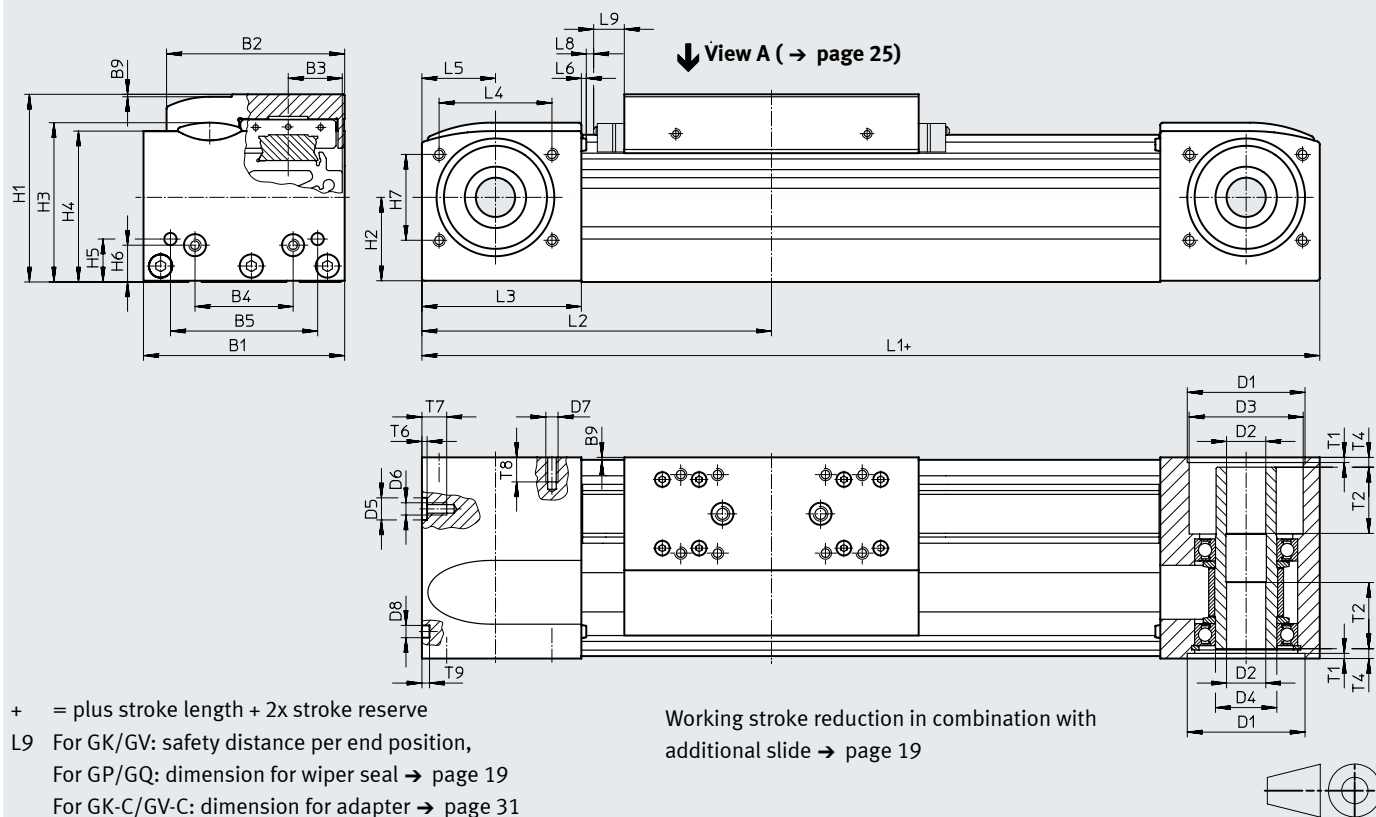
Festo recommends these companies because they can supply all the necessary components.



- [1] Hand pump
- [2] Pneumatic container pump
- [3] Electric container pump
- [4] Manually operated container pump
- [5] Nipple block
- [6] Distributor block
- [7] Tubing or piping
- [8] Fittings

## Datasheet

## Dimensions

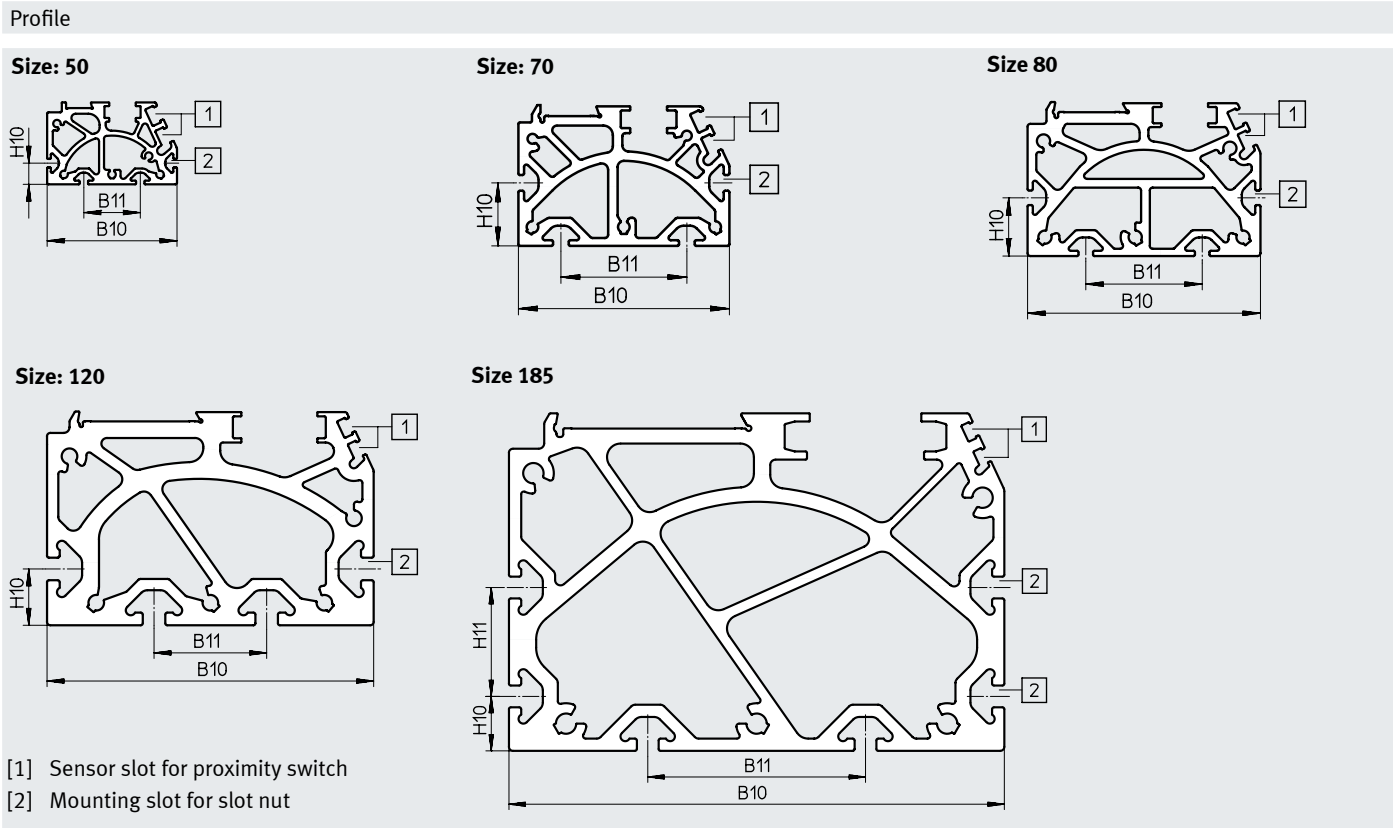
Download CAD data → [www.festo.com](http://www.festo.com)

| Size | B1  | B2   | B3   | B4  | B5 | B9 | D1<br>H7 | D2<br>ø<br>H7 | D3<br>ø | D4<br>ø | D5<br>ø<br>H7 | D6  |
|------|-----|------|------|-----|----|----|----------|---------------|---------|---------|---------------|-----|
| 50   | 48  | 39   | 11.5 | 20  | 35 | 1  | 27       | 8             | 20      | 15      | –             | M4  |
| 70   | 69  | 58.6 | 16.5 | 30  | 45 | 1  | 38       | 10            | 28      | 20      | –             | M5  |
| 80   | 82  | 72.6 | 22   | 40  | 60 | 1  | 48       | 16            | 46.5    | 25      | 9             | M5  |
| 120  | 120 | 107  | 33   | 80  | 40 | 1  | 62       | 23            | 59      | 35      | –             | M8  |
| 185  | 186 | 169  | 53   | 120 | 80 | 1  | 95       | 32            | 90      | 60      | –             | M10 |

| Size | D7 | D8<br>ø<br>H7 | H1    | H2   | H3    | H4   | H5   | H6   | H7 | L1  |     | L2   |     |
|------|----|---------------|-------|------|-------|------|------|------|----|-----|-----|------|-----|
|      |    |               |       |      |       |      |      |      |    | GK  | GV  | GK   | GV  |
| 50   | M3 | 5             | 42.5  | 16.5 | 37.6  | 35.5 | 10.5 | 10.5 | 18 | 155 | –   | 77.5 | –   |
| 70   | M5 | 5             | 64    | 28   | 53.7  | 50.8 | 13   | 13   | 29 | 246 | 346 | 123  | 173 |
| 80   | M5 | 5             | 76.5  | 34.5 | 65    | 61.5 | 17.5 | 15   | 35 | 286 | 386 | 143  | 193 |
| 120  | M6 | 9             | 111.5 | 51.6 | 95.9  | 91.1 | 22   | 22   | 54 | 446 | 546 | 223  | 273 |
| 185  | M8 | 9             | 172.5 | 80.5 | 152.6 | 143  | 25   | 25   | 80 | 612 | 712 | 306  | 356 |

| Size | L3   | L4 | L5   | L6  | L8 | L9   | T1  | T2   | T4   | T6  | T7 | T8 | T9  |
|------|------|----|------|-----|----|------|-----|------|------|-----|----|----|-----|
| 50   | 40   | 26 | 20   | 1.8 | 3  | –    | 1.5 | –    | 5.9  | –   | 7  | 8  | 3.1 |
| 70   | 57.5 | 36 | 27.5 | 1.8 | 3  | 10.5 | 2.1 | 18   | 7.15 | –   | 10 | 12 | 3.1 |
| 80   | 65   | 46 | 30   | 2   | 3  | 13   | 2.1 | 27   | 4    | 2.1 | 10 | 12 | 3.1 |
| 120  | 100  | 64 | 50   | 2   | 3  | 18   | 3.1 | 29.5 | 4    | –   | 16 | 14 | 2.1 |
| 185  | 140  | 80 | 70   | 2   | 3  | 21   | 2.8 | 34.5 | 4    | –   | 20 | 17 | 2.1 |

Datasheet



| Size | B10 | B11 | H10 | H11 |
|------|-----|-----|-----|-----|
| 50   | 46  | 20  | 7.5 | –   |
| 70   | 67  | 40  | 20  | –   |
| 80   | 80  | 40  | 20  | –   |
| 120  | 116 | 40  | 20  | –   |
| 185  | 182 | 80  | 20  | 40  |

 **Note**  
Requirements for the flatness of the bearing surface and of attachments as well as for use in parallel structures can be found at [www.festo.com/sp](http://www.festo.com/sp) → User documentation

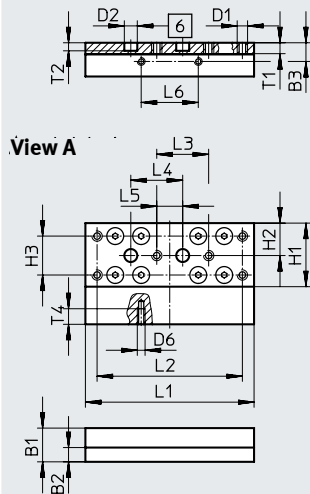
## Datasheet

## Dimensions

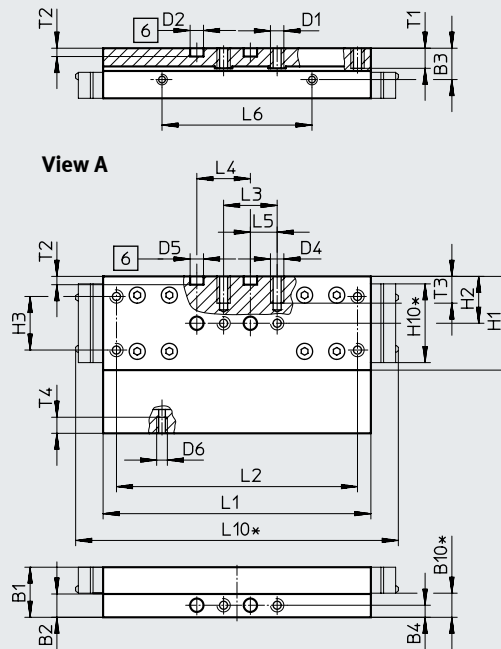
Download CAD data → [www.festo.com](http://www.festo.com)

GK – Standard slide / GP – Standard slide, protected

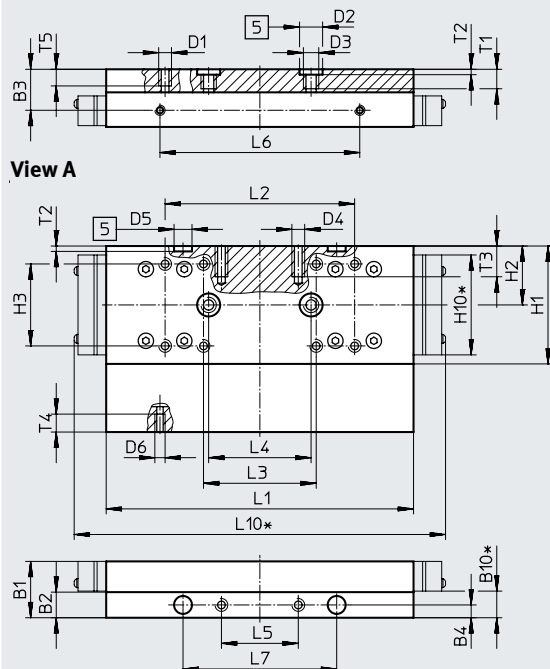
## Size 50



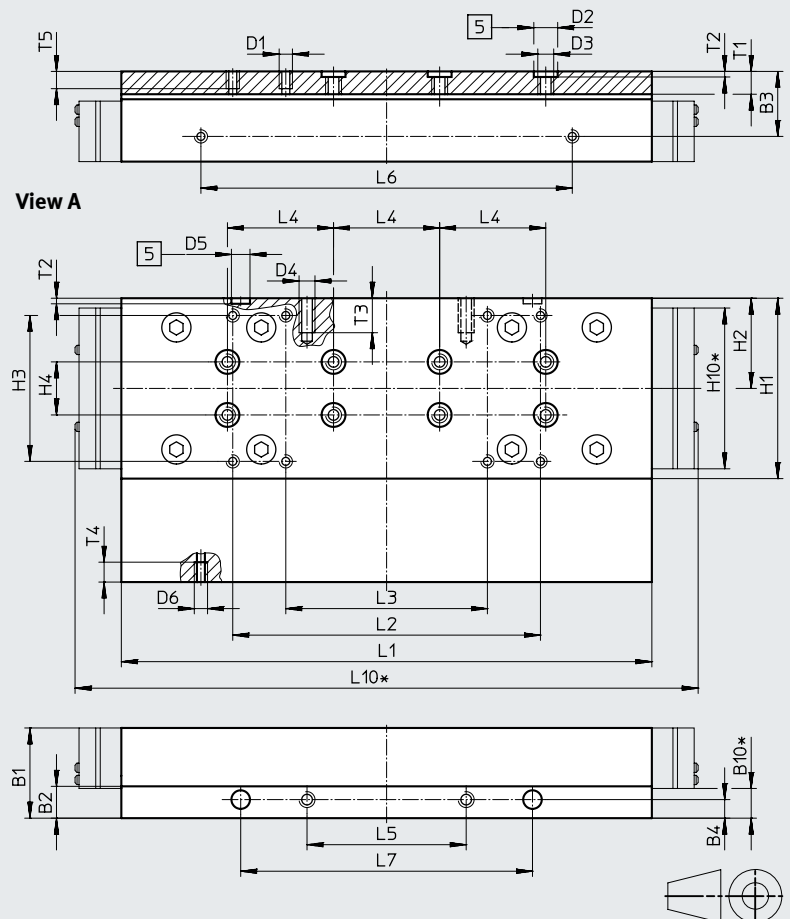
## Size 70



## Size 80



## Size: 120



[5] Drill hole for centring sleeve

[6] Drilled hole for centring pin

\* Protected version

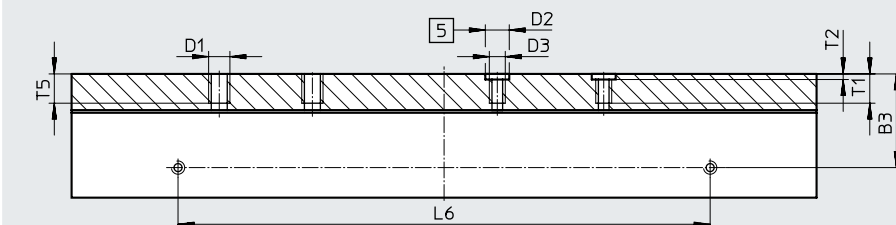
## Datasheet

## Dimensions

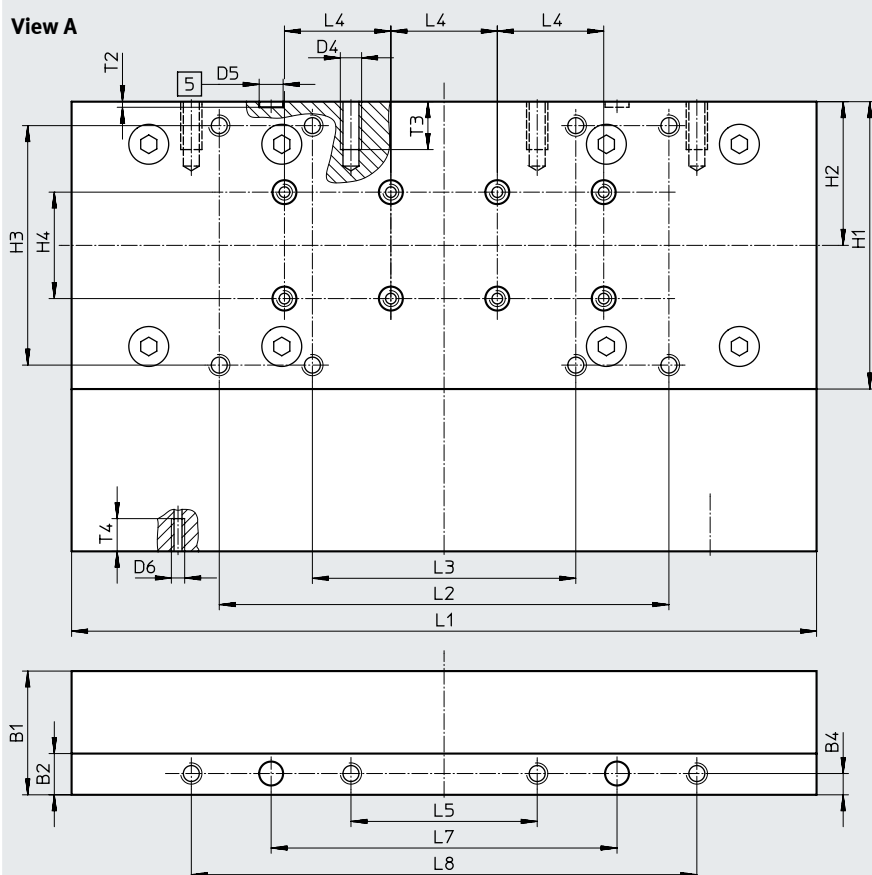
Download CAD data → [www.festo.com](http://www.festo.com)

GK – Standard slide

## Size 185



## View A



[5] Drill hole for centring sleeve



| Size | B1   | B2   | B3   | B4  | B10* | D1 | D2<br>Ø<br>H7 | D3 | D4 | D5<br>Ø<br>H7 | D6 | H1   | H2   | H3      | H4<br>±0.03 |
|------|------|------|------|-----|------|----|---------------|----|----|---------------|----|------|------|---------|-------------|
| 50   | 13   | 5.5  | 7.2  | –   | –    | M4 | 5             | –  | –  | –             | M3 | 24.5 | 12.5 | 15 ±0.1 | –           |
| 70   | 18.7 | 8.7  | 11.7 | 4.5 | 9    | M5 | 5             | –  | M5 | 5             | M4 | 35   | 17.5 | 20 ±0.1 | –           |
| 80   | 22   | 10   | 16   | 5   | 10.4 | M5 | 9             | M6 | M5 | 7             | M4 | 46   | 23   | 32 ±0.2 | –           |
| 120  | 34   | 12   | 24.5 | 7   | 11.2 | M5 | 9             | M6 | M6 | 7             | M5 | 68   | 34   | 55 ±0.2 | 20          |
| 185  | 46.5 | 15.5 | 35.2 | 8   | –    | M8 | 9             | M6 | M8 | 9             | M5 | 108  | 54   | 90 ±0.2 | 40          |

| Size | H10* | L1<br>±0.1 | L2       | L3      | L4<br>±0.03 | L5      | L6<br>±0.1 | L7<br>±0.05 | L8<br>±0.2 | L10* | T1  | T2<br>+0.1 | T3 | T4   | T5  |
|------|------|------------|----------|---------|-------------|---------|------------|-------------|------------|------|-----|------------|----|------|-----|
| 50   | –    | 65         | 56 ±0.1  | 20 ±0.1 | 20          | 10 ±0.1 | 22         | –           | –          | –    | 4.2 | 3.1        | –  | 6    | –   |
| 70   | 29.4 | 100        | 90 ±0.1  | 20 ±0.1 | 20          | 10 ±0.1 | 56         | –           | –          | 121  | 7.5 | 3.1        | 10 | 6    | –   |
| 80   | 39   | 120        | 74 ±0.2  | 44 ±0.2 | 40          | 30 ±0.1 | 78         | 60          | –          | 145  | 8.6 | 2.1        | 12 | 7    | 7.5 |
| 120  | 60.6 | 203.3      | 116 ±0.2 | 76 ±0.2 | 40          | 60 ±0.1 | 140        | 110         | –          | 235  | 8.6 | 2.1        | 13 | 7.5  | 7.5 |
| 185  | –    | 282.8      | 169 ±0.2 | 99 ±0.2 | 40          | 70 ±0.2 | 200        | 130         | 190        | –    | 11  | 2.1        | 18 | 12.3 | 12  |

\* Protected version

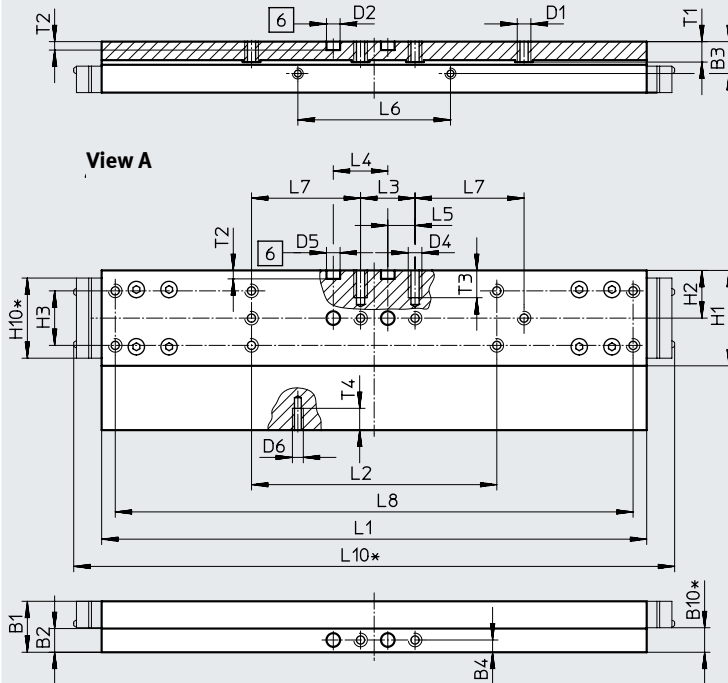
## Datasheet

## Dimensions

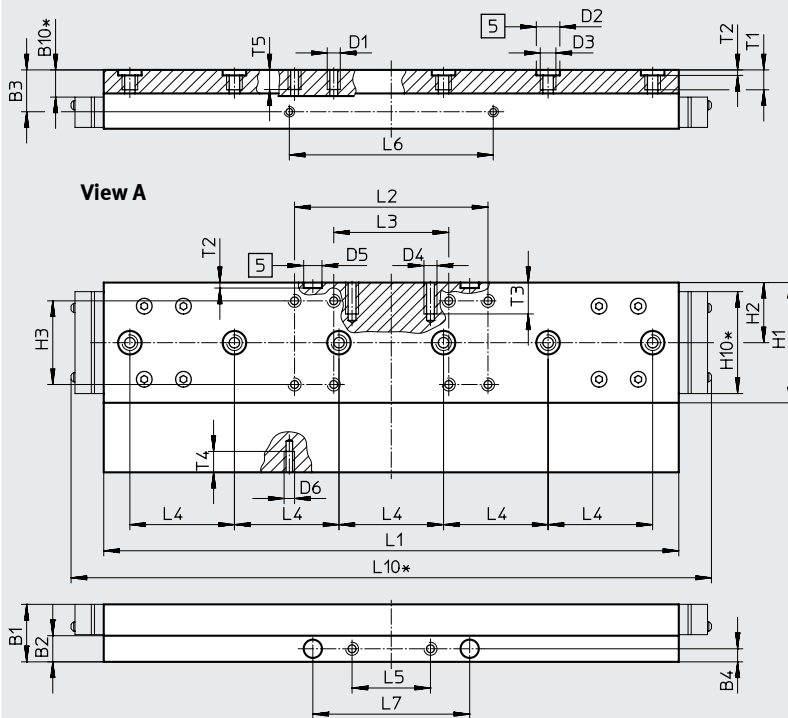
Download CAD data → [www.festo.com](http://www.festo.com)

GV – Extended slide / GQ – Extended slide, protected

## Size 70



## Size 80



[5] Drill hole for centring sleeve

[6] Drilled hole for centring pin

\* Protected version



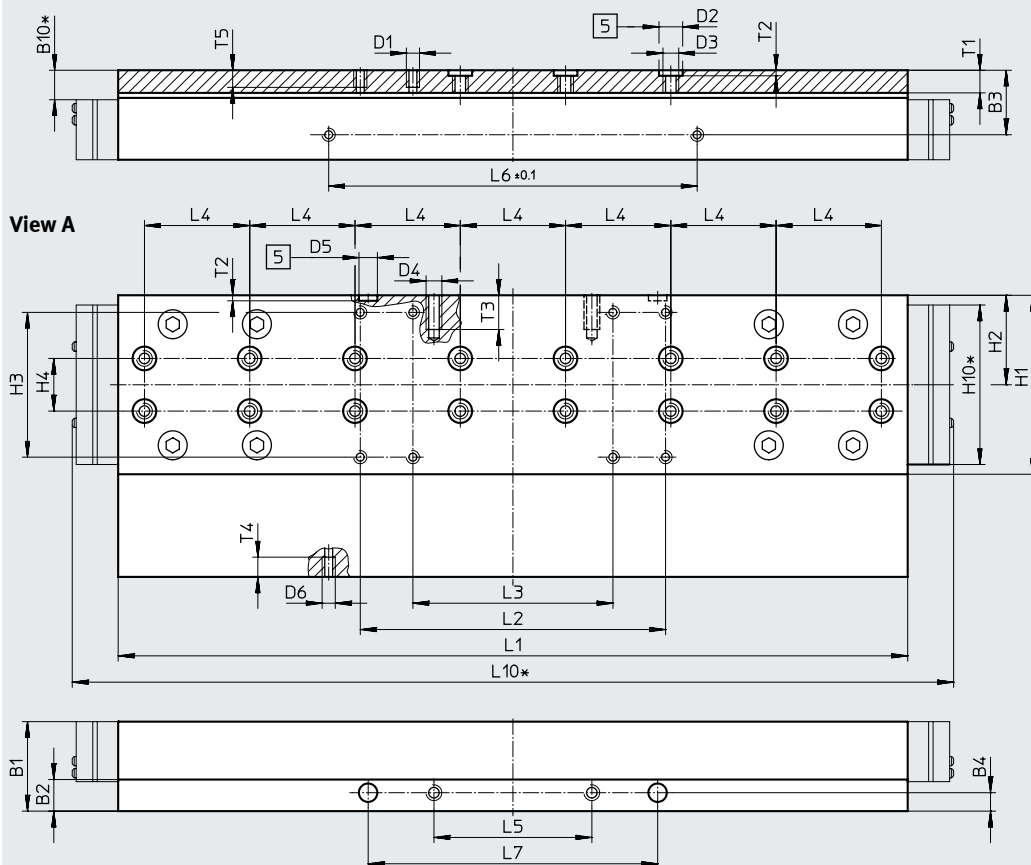
## Datasheet

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

GV – Extended slide / GQ – Extended slide, protected

## Size 120



[5] Drill hole for centring sleeve  
\* Protected version



| Size | B1   | B2  | B3   | B4  | B10* | D1 | D2<br>ø<br>H7 | D3 | D4 | D5<br>ø<br>H7 |
|------|------|-----|------|-----|------|----|---------------|----|----|---------------|
| 70   | 18.7 | 8.7 | 11.7 | 4.5 | 9    | M5 | 5             | –  | M5 | 5             |
| 80   | 22   | 10  | 16   | 5   | 10.4 | M5 | 9             | M6 | M5 | 7             |
| 120  | 34   | 12  | 24.5 | 7   | 11.2 | M5 | 9             | M6 | M6 | 7             |

| Size | D6 | H1 | H2   | H3      | H4<br>±0.03 | H10* | L1<br>±0.1 | L2       | L3      | L4<br>±0.03 |
|------|----|----|------|---------|-------------|------|------------|----------|---------|-------------|
| 70   | M4 | 35 | 17.5 | 20 ±0.1 | –           | 29.4 | 200        | 90 ±0.1  | 20 ±0.1 | 20          |
| 80   | M4 | 46 | 23   | 32 ±0.2 | –           | 39   | 220        | 74 ±0.2  | 44 ±0.2 | 40          |
| 120  | M5 | 68 | 34   | 55 ±0.2 | 20          | 60.6 | 303.3      | 116 ±0.2 | 76 ±0.2 | 40          |

| Size | L5<br>±0.1 | L6<br>±0.1 | L7        | L8<br>±0.2 | L10* | T1  | T2<br>+0.1 | T3 | T4  | T5  |
|------|------------|------------|-----------|------------|------|-----|------------|----|-----|-----|
| 70   | 10         | 56         | 40 ±0.1   | 190        | 221  | 7.5 | 3.1        | 10 | 6   | –   |
| 80   | 30         | 78         | 60 ±0.05  | –          | 245  | 8.6 | 2.1        | 12 | 7   | 7.5 |
| 120  | 60         | 140        | 110 ±0.05 | –          | 335  | 8.6 | 2.1        | 13 | 7.5 | 7.5 |

\* Protected version



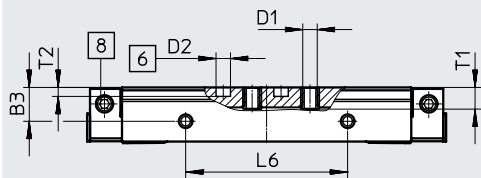
Datasheet

Dimensions

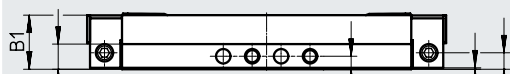
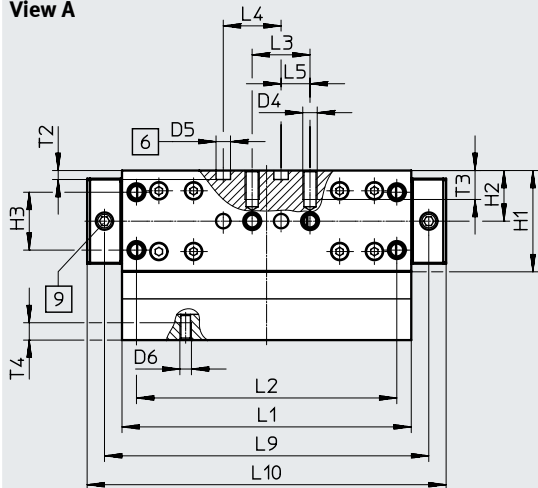
Download CAD data → [www.festo.com](http://www.festo.com)

GK-C – Standard slide with lubrication adapter

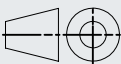
Size 70



View A



- [6] Drilled hole for centring pin
- [8] Lubricating hole for lubrication adapter  
M6 threaded connection, 6 mm deep
- [9] Lubricating hole for lubrication adapter  
M6 threaded connection, 5.5 mm deep



| Size | B1   | B2  | B3   | B4  | B5  | B6  | D1 | D2<br>Ø<br>H7 | D4 |
|------|------|-----|------|-----|-----|-----|----|---------------|----|
| 70   | 18.7 | 8.7 | 11.7 | 4.5 | 0.5 | 5.7 | M5 | 5             | M5 |

| Size | D5<br>Ø<br>H7 | D6 | H1 | H2   | H3 | L1  | L2 | L3 | L4 |
|------|---------------|----|----|------|----|-----|----|----|----|
| 70   | 5             | M4 | 35 | 17.5 | 20 | 100 | 90 | 20 | 20 |

| Size | L5 | L6         | L9    | L10   | L11 | T1  | T2          | T3 | T4 |
|------|----|------------|-------|-------|-----|-----|-------------|----|----|
| 70   | 10 | 56<br>±0.1 | 112.1 | 124.1 | 30  | 7.5 | 3.1<br>+0.1 | 10 | 6  |

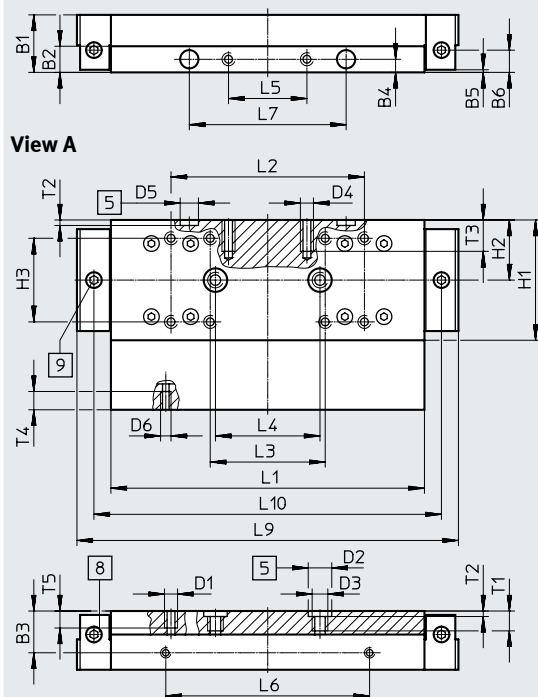
## Datasheet

## Dimensions

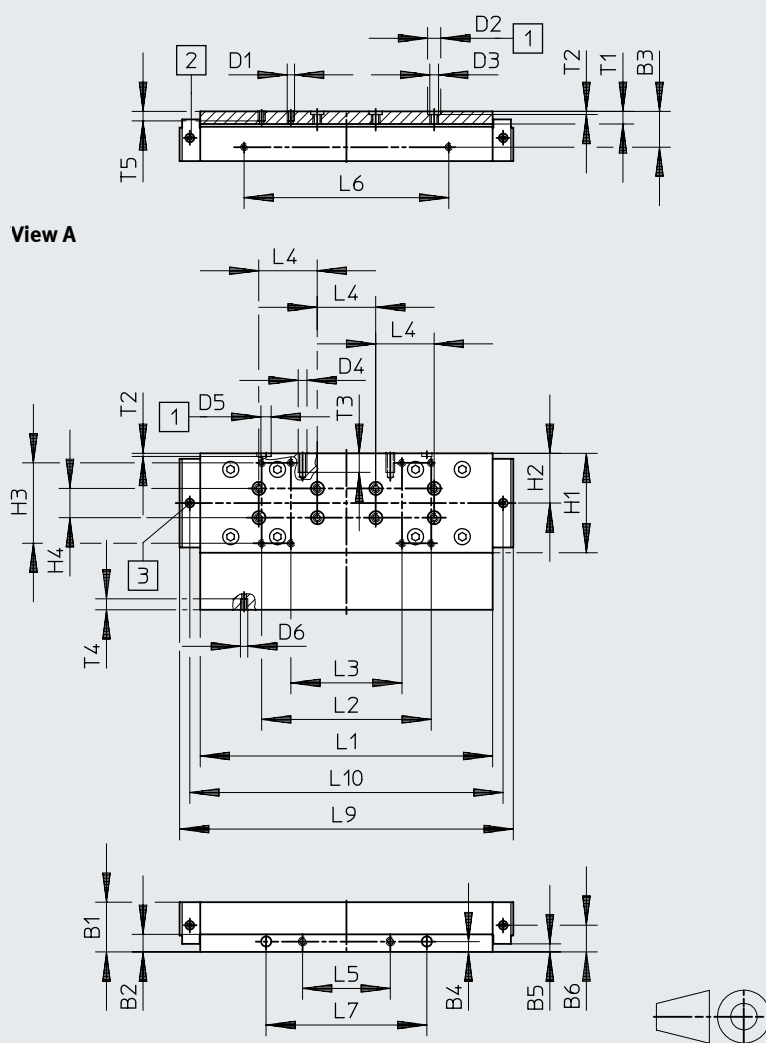
Download CAD data → [www.festo.com](http://www.festo.com)

GK-C – Standard slide with lubrication adapter

## Size 80



## Size 120



- [5] Drilled hole for centring sleeve  
 [8] Lubricating hole for lubrication adapter  
 M6 threaded connection, 6 mm deep  
 [9] Lubricating hole for lubrication adapter  
 M6 threaded connection, 5.5 mm deep

| Size | B1 | B2 | B3   | B4 | B5  | B6   | D1 | D2<br>ø<br>H7 | D3 | D4 |
|------|----|----|------|----|-----|------|----|---------------|----|----|
| 80   | 22 | 10 | 16   | 5  | 1   | 8.5  | M5 | 9             | M6 | M5 |
| 120  | 34 | 12 | 24.5 | 7  | 5.5 | 13.9 | M5 | 9             | M6 | M6 |

| Size | D5<br>ø<br>H7 | D6 | H1 | H2 | H3 | H4 | L1    | L2  | L3 | L4 |
|------|---------------|----|----|----|----|----|-------|-----|----|----|
| 80   | 7             | M4 | 46 | 23 | 32 | –  | 120   | 74  | 44 | 40 |
| 120  | 7             | M5 | 68 | 34 | 55 | 20 | 203.3 | 116 | 76 | 40 |

| Size | L5   | L6   | L7    | L9    | L10   | T1  | T2   | T3 | T4  | T5  |
|------|------|------|-------|-------|-------|-----|------|----|-----|-----|
|      | ±0.1 | ±0.1 | ±0.05 |       |       |     | +0.1 |    |     |     |
| 80   | 30   | 78   | 60    | 146   | 133   | 8.6 | 2.1  | 12 | 7   | 7.5 |
| 120  | 60   | 140  | 110   | 228.3 | 214.3 | 8.6 | 2.1  | 13 | 7.5 | 7.5 |

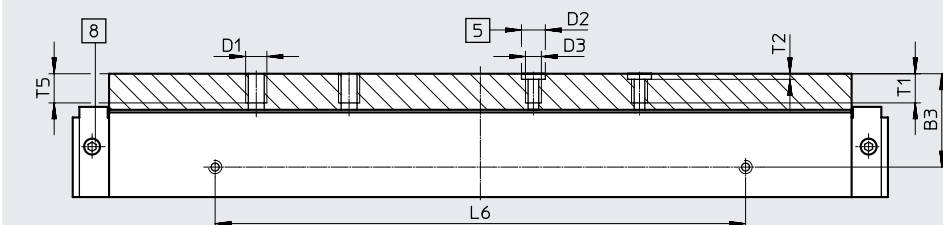
## Datasheet

## Dimensions

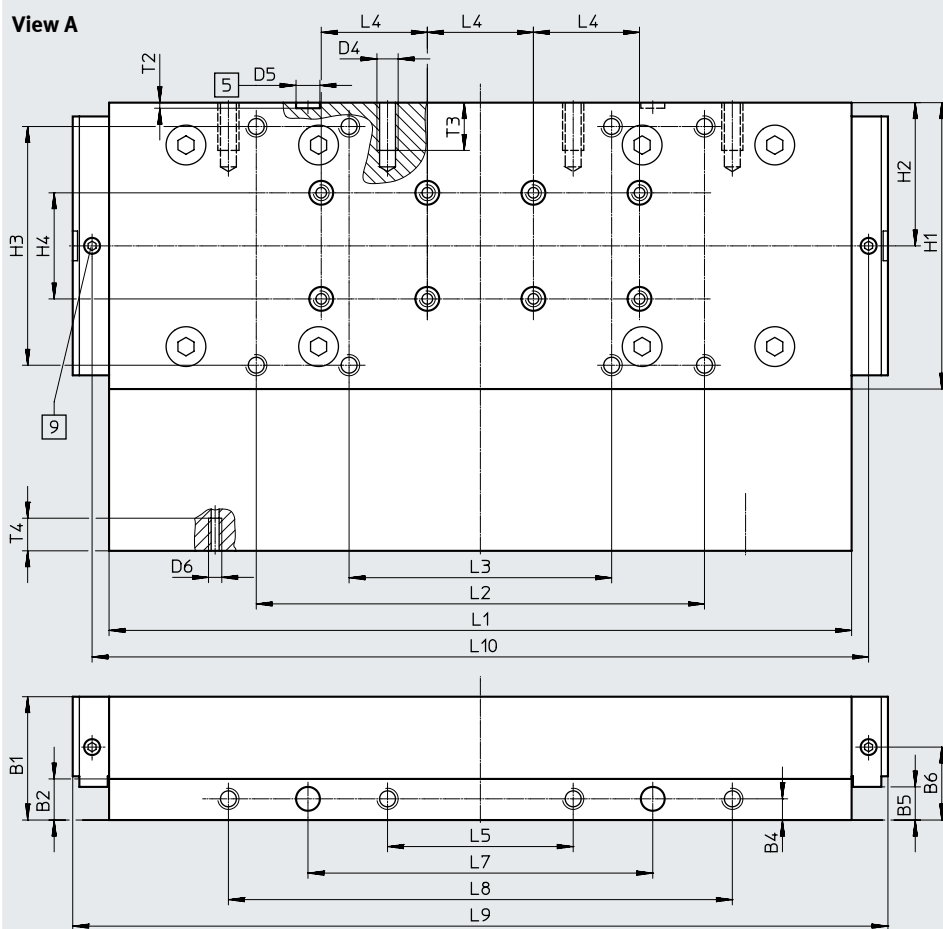
Download CAD data → [www.festo.com](http://www.festo.com)

GK-C – Standard slide with lubrication adapter

## Size 185



## View A

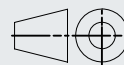


[5] Drilled hole for centring sleeve

[9] Lubricating hole for lubrication adapter

[8] Lubricating hole for lubrication adapter  
M6 threaded connection, 6 mm deep

M6 threaded connection, 5.5 mm deep



| Size | B1            | B2          | B3           | B4          | B5           | B6          | D1            | D2<br>Ø<br>H7 | D3         | D4          |    |
|------|---------------|-------------|--------------|-------------|--------------|-------------|---------------|---------------|------------|-------------|----|
| 185  | 46.5          | 15.5        | 35.2         | 8           | ±0.1<br>12.5 | 27.5        | M8            | 9             | M6         | M8          |    |
| Size | D5<br>Ø<br>H7 | D6          | H1           | H2          | H3           | H4          | L1            | L2            | L3         | L4          |    |
| 185  | 9             | M5          | 108          | 54          | ±0.2<br>90   | ±0.03<br>40 | ±0.1<br>282.8 | ±0.2<br>169   | ±0.2<br>99 | ±0.03<br>40 |    |
| Size | L5            | L6          | L7           | L8          | L9           | L10         | T1            | T2            | T3         | T4          | T5 |
| 185  | ±0.2<br>70    | ±0.1<br>200 | ±0.05<br>130 | ±0.2<br>190 | 307.4        | 292.8       | 11            | ±0.1<br>2.1   | 18         | 12.3        | 12 |

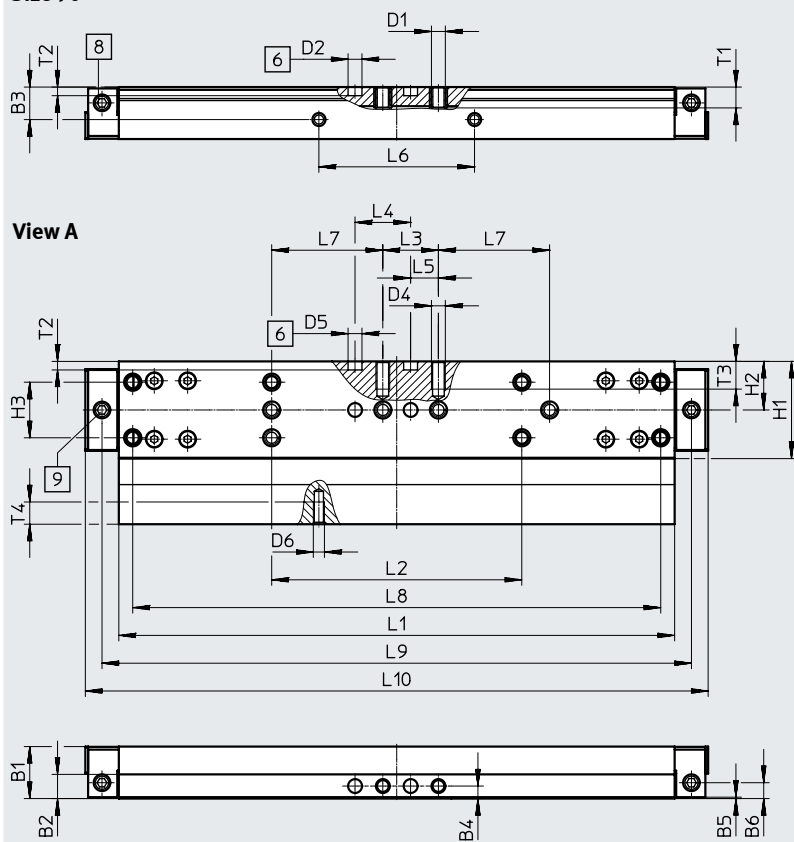
## Datasheet

### Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

GV-C – Extended slide with lubrication adapter

### Size 70



- [6] Drilled hole for centring pin
- [8] Lubricating hole for lubrication adapter  
M6 threaded connection, 6 mm deep
- [9] Lubricating hole for lubrication adapter  
M6 threaded connection, 5.5 mm deep

| Size | B1   | B2   | B3    | B4    | B5   | B6   | D1   | D2<br>∅<br>H7 | D4 | D5<br>∅<br>H7 |
|------|------|------|-------|-------|------|------|------|---------------|----|---------------|
| 70   | 18.7 | 8.7  | 11.7  | 4.5   | 0.5  | 5.7  | M5   | 5             | M5 | 5             |
| Size | D6   | H1   | H2    | H3    | L1   | L2   | L3   | L4            | L5 | L6            |
|      |      |      |       | ±0.1  | ±0.1 | ±0.1 | ±0.1 | ±0.03         |    |               |
| 70   | M4   | 35   | 17.5  | 20    | 200  | 90   | 20   | 20            | 10 | 56            |
| Size | L7   | L8   | L9    | L10   | L11  | T1   | T2   | T3            | T4 |               |
|      | ±0.1 | ±0.2 |       |       |      |      | +0.1 |               |    |               |
| 70   | 40   | 190  | 212.1 | 224.1 | 30   | 7.5  | 3.1  | 10            | 6  |               |

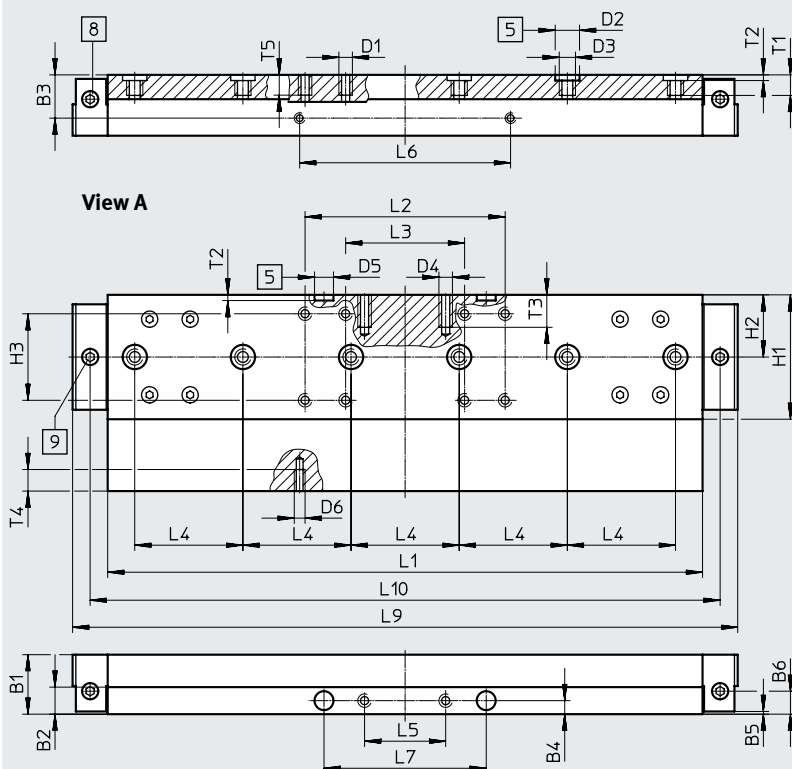
## Datasheet

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

GV-C – Extended slide with lubrication adapter

Size: 80



[5] Drilled hole for centring sleeve

[8] Lubricating hole for lubrication adapter  
M6 threaded connection, 6 mm deep[9] Lubricating hole for lubrication adapter  
M6 threaded connection, 5.5 mm deep

| Size | B1            | B2          | B3  | B4  | B5         | B6          | D1         | D2<br>∅<br>H7 | D3          | D4         |
|------|---------------|-------------|-----|-----|------------|-------------|------------|---------------|-------------|------------|
| 80   | 22            | 10          | 16  | 5   | ±0.1<br>1  | 8.5         | M5         | 9             | M6          | M5         |
| Size | D5<br>∅<br>H7 | D6          | H1  | H2  | H3         | L1          | L2         | L3            | L4          | L5         |
| 80   | 7             | M4          | 46  | 23  | ±0.2<br>32 | ±0.1<br>220 | ±0.2<br>74 | ±0.2<br>44    | ±0.03<br>40 | ±0.1<br>30 |
| Size | L6            | L7          | L9  | L10 | T1         | T2          | T3         | T4            | T5          |            |
| 80   | ±0.1<br>78    | ±0.05<br>60 | 246 | 233 | 8.6        | +0.1<br>2.1 | 12         | 7             | 7.5         |            |

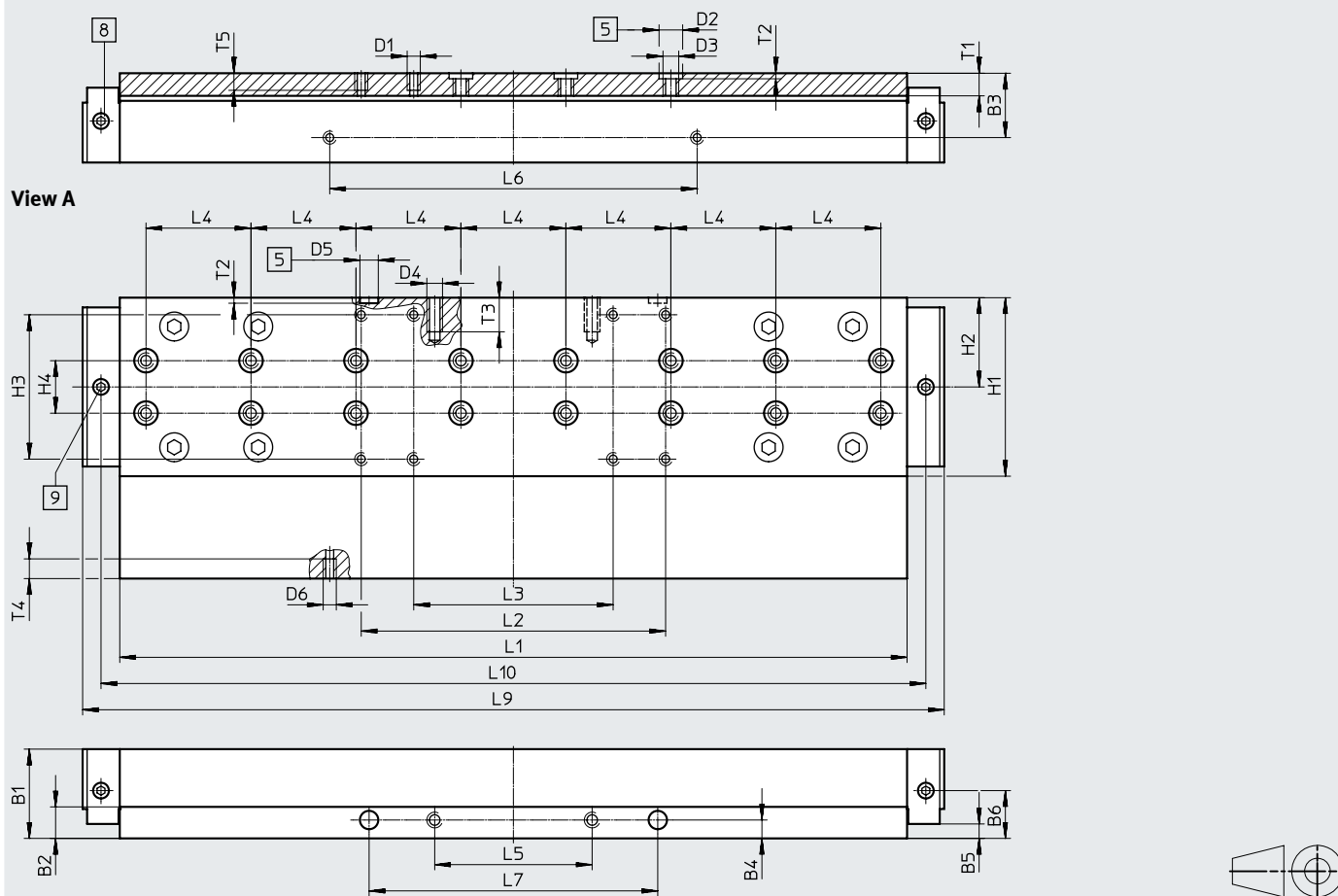
## Datasheet

### Dimensions

[Download CAD data → www.festo.com](http://www.festo.com)

GV-C – Extended slide with lubrication adapter

Size: 120



- [5] Drilled hole for centring sleeve  
 [8] Lubricating hole for lubrication adapter  
 M6 threaded connection, 6 mm deep  
 [9] Lubricating hole for lubrication adapter  
 M6 threaded connection, 5.5 mm deep

| Size | B1            | B2          | B3           | B4    | B5          | B6          | D1            | D2<br>∅<br>H7 | D3         | D4          |
|------|---------------|-------------|--------------|-------|-------------|-------------|---------------|---------------|------------|-------------|
| 120  | 34            | 12          | 24.5         | 7     | 5.5<br>±0.1 | 13.9        | M5            | 9             | M6         | M6          |
| Size | D5<br>∅<br>H7 | D6          | H1           | H2    | H3          | H4          | L1            | L2            | L3         | L4          |
| 120  | 7             | M5          | 68           | 34    | 55<br>±0.2  | 20<br>±0.03 | 303.3<br>±0.1 | 116<br>±0.2   | 76<br>±0.2 | 40<br>±0.03 |
| Size | L5            | L6          | L7           | L9    | L10         | T1          | T2            | T3            | T4         | T5          |
| 120  | 60<br>±0.1    | 140<br>±0.1 | 110<br>±0.05 | 328.3 | 314.3       | 8.6         | 2.1<br>±0.1   | 13            | 7.5        | 7.5         |

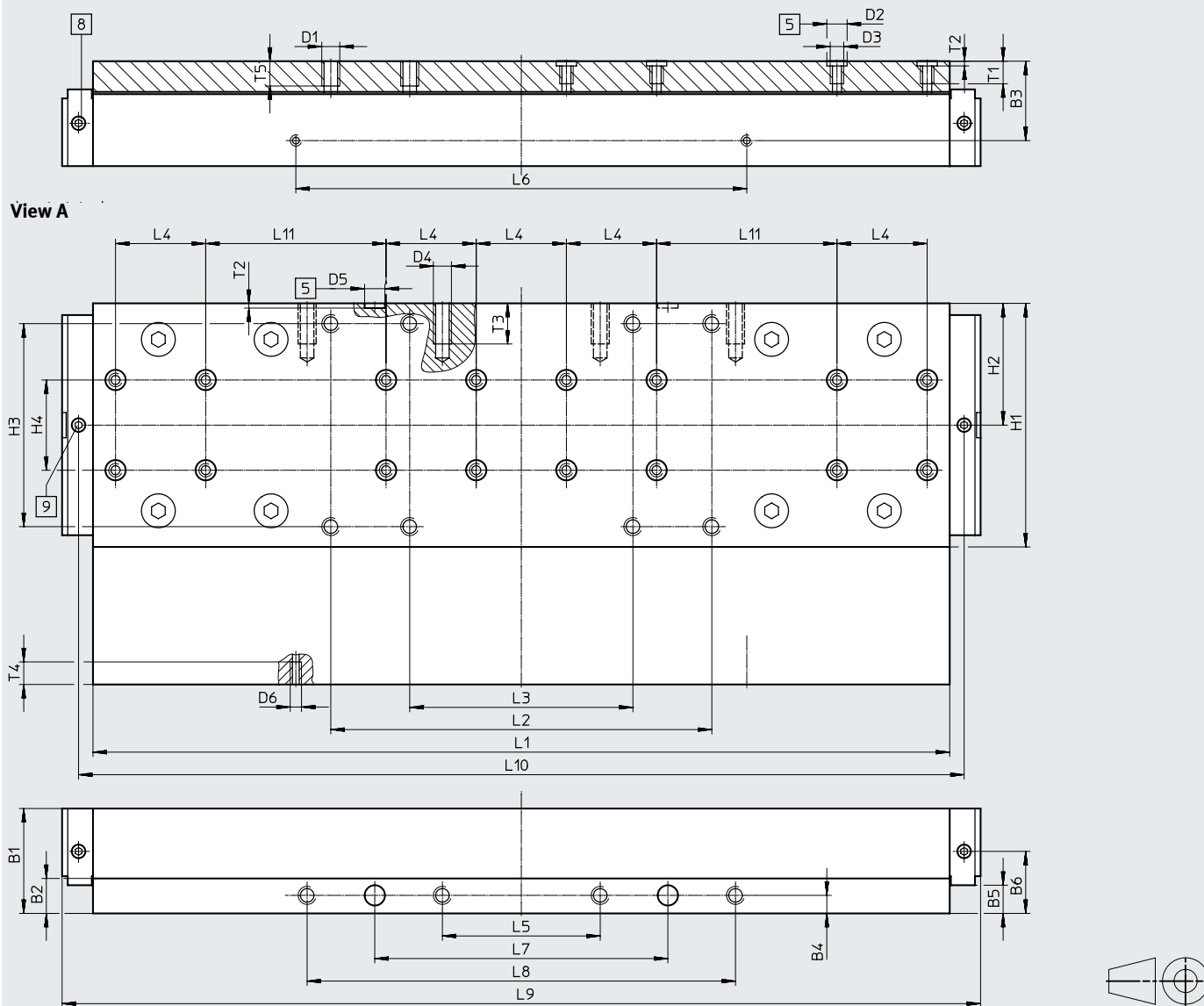
## Datasheet

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

GV-C – Extended slide with lubrication adapter

## Size 185



[5] Drill hole for centring sleeve

[9] Lubricating hole for lubrication adapter

[8] Lubricating hole for lubrication adapter

M6 threaded connection, 5.5 mm deep

M6 threaded connection, 6 mm deep

| Size | B1   | B2   | B3   | B4 | B5           | B6   | D1 | D2<br>ø<br>H7 | D3 | D4 |
|------|------|------|------|----|--------------|------|----|---------------|----|----|
| 185  | 46.5 | 15.5 | 35.2 | 8  | ±0.1<br>12.5 | 27.5 | M8 | 9             | M6 | M8 |

| Size | D5<br>ø<br>H7 | D6 | H1  | H2 | H3         | H4          | L1            | L2          | L3         | L4          | L5         |
|------|---------------|----|-----|----|------------|-------------|---------------|-------------|------------|-------------|------------|
| 185  | 9             | M5 | 108 | 54 | ±0.2<br>90 | ±0.03<br>40 | ±0.1<br>382.8 | ±0.2<br>169 | ±0.2<br>99 | ±0.03<br>40 | ±0.2<br>70 |

| Size | L6          | L7           | L8          | L9    | L10   | L11         | T1 | T2          | T3 | T4 | T5 |
|------|-------------|--------------|-------------|-------|-------|-------------|----|-------------|----|----|----|
| 185  | ±0.1<br>200 | ±0.05<br>130 | ±0.2<br>190 | 407.4 | 392.8 | ±0.03<br>80 | 11 | +0.1<br>2.1 | 18 | 10 | 12 |

## Datasheet

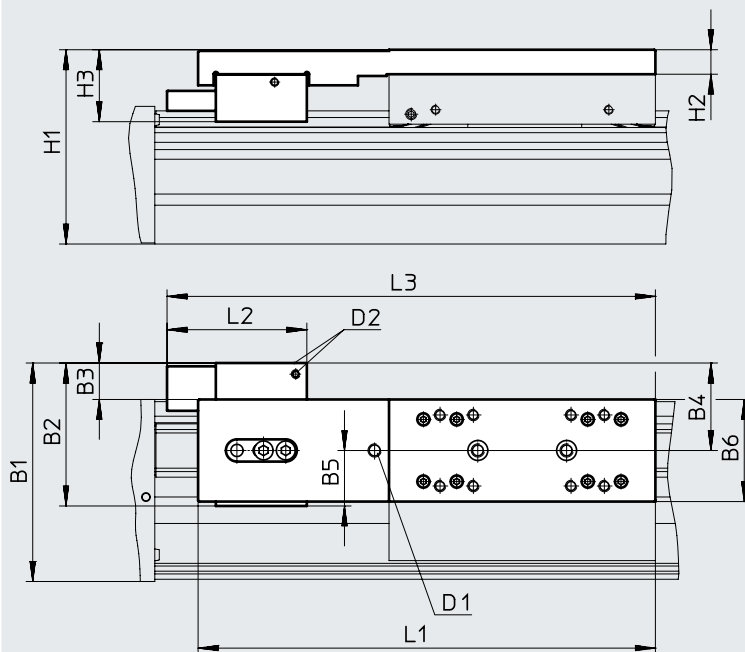
## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

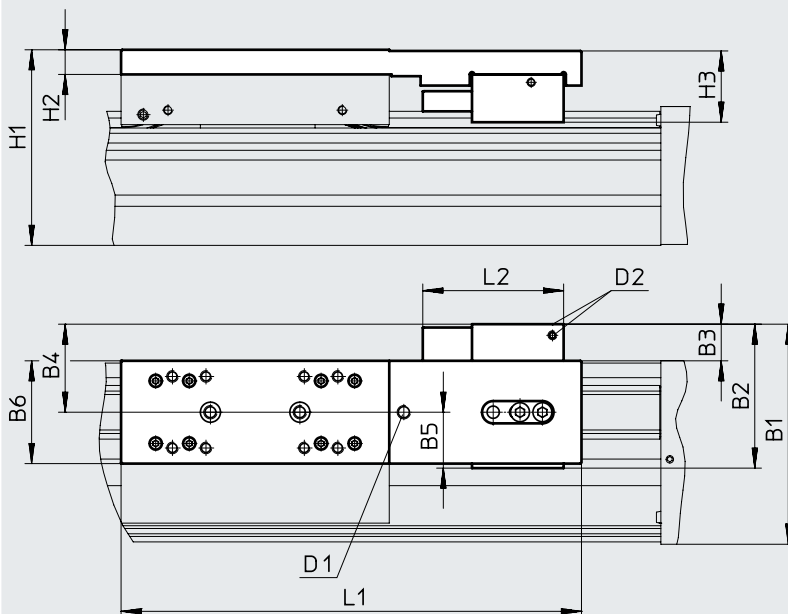
1HL/1HR – With clamping unit

## Size 80

## 1-channel, left

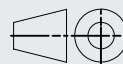


## 1-channel, right



D1 Optional: threaded connection for lubrication adapter

D2 Compressed air supply ports



Working stroke reduction in combination with clamping unit → page 20

Datasheet

**Dimensions**

2H – With clamping unit

**Size 80**

**2-channel**

Download CAD data → [www.festo.com](http://www.festo.com)

D1 Optional: threaded connection for lubrication adapter  
D2 Compressed air supply ports

Working stroke reduction in combination with clamping unit → page 20

| Type                 | B1   | B2   | B3   | B4   | B5 | B6 | H1   | H2 | H3   | D1 | D2 | L1  | L2 | L3  |
|----------------------|------|------|------|------|----|----|------|----|------|----|----|-----|----|-----|
| EGC-80-....-1HL-PN   | 98.4 | 64.4 | 17.4 | 39.4 | 25 | 46 | 87.5 | 11 | 32.4 | M6 | M5 | 206 | 63 | 220 |
| EGC-80-....-1HR-PN   |      |      |      |      |    |    |      |    |      |    |    |     |    | –   |
| EGC-80-....-C-1HL-PN |      |      |      |      |    |    |      |    |      |    |    |     |    | 220 |
| EGC-80-....-C-1HR-PN |      |      |      |      |    |    |      |    |      |    |    |     |    | –   |
| EGC-80-....-2H-PN    |      |      |      |      |    |    |      |    |      |    |    | 292 | 63 | 306 |
| EGC-80-....-C-2H-PN  |      |      |      |      |    |    |      |    |      |    |    |     |    |     |

## Datasheet

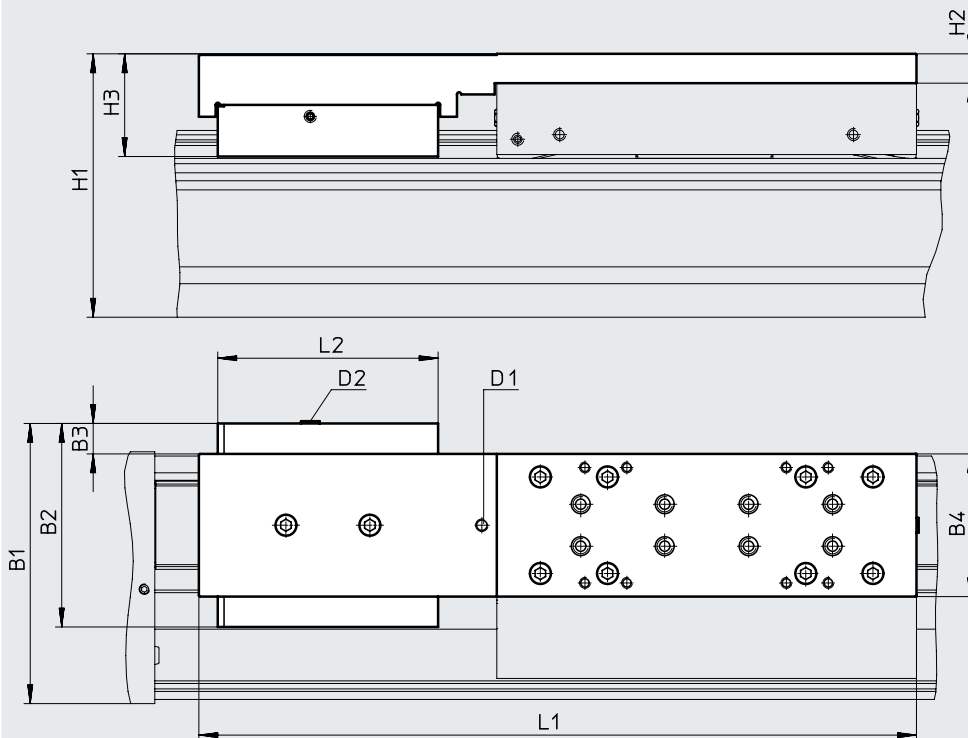
### Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

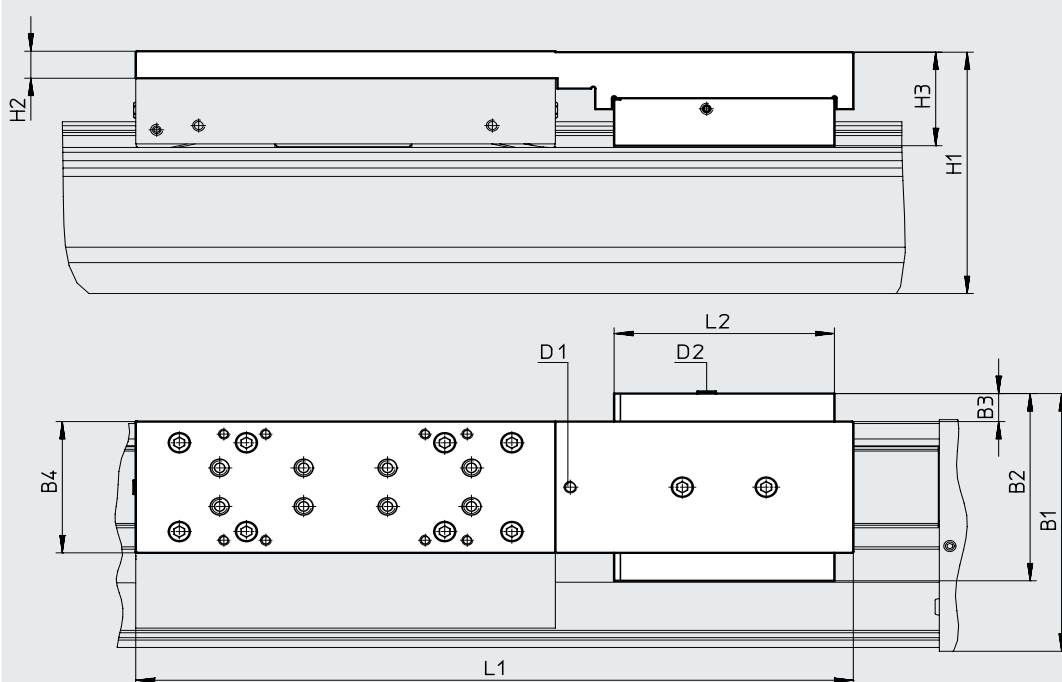
1HL/1HR – With clamping unit

Size 120/185

1-channel, left



1-channel, right



D1 Optional: threaded connection for lubrication adapter

D2 Compressed air supply port

Working stroke reduction in combination with clamping unit → page 20

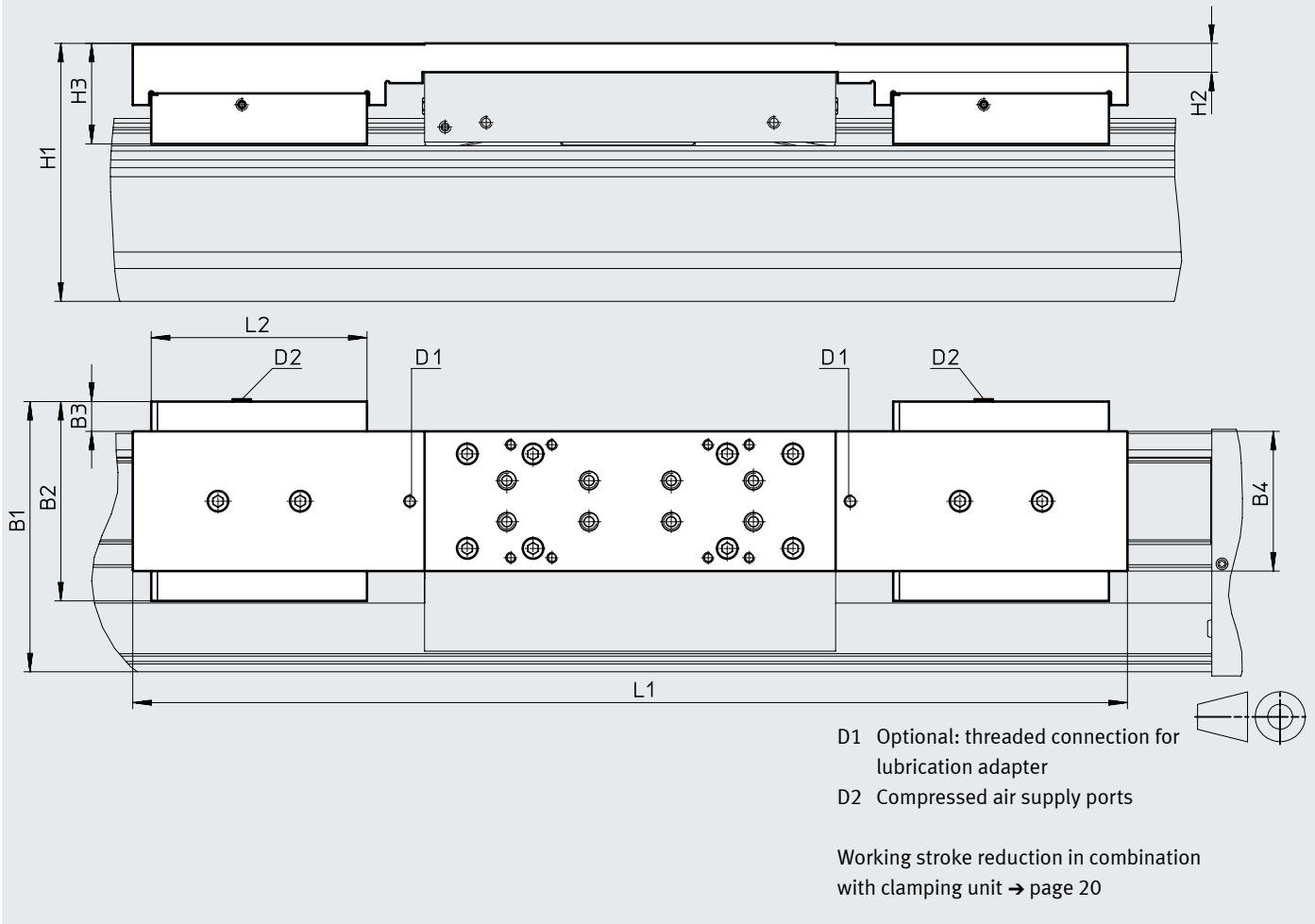
Datasheet

**Dimensions** Download CAD data → [www.festo.com](http://www.festo.com)

2H – With clamping unit

**Size 120/185**

**2-channel**



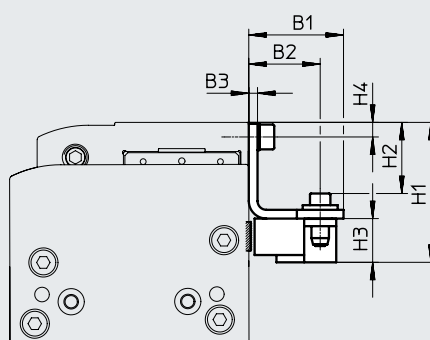
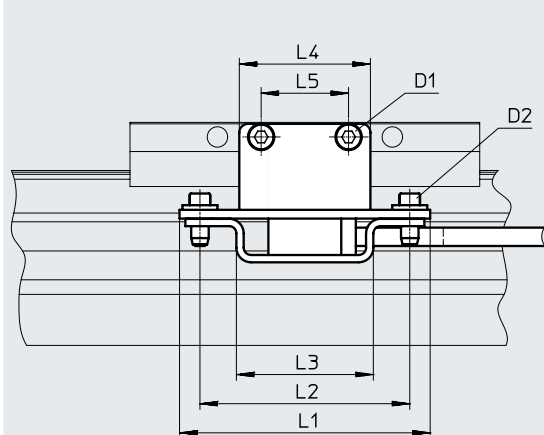
| Type                 | B1    | B2  | B3   | B4  | H1    | H2 | H3   | D1 | D2 | L1  | L2  |
|----------------------|-------|-----|------|-----|-------|----|------|----|----|-----|-----|
| Size: 120            |       |     |      |     |       |    |      |    |    |     |     |
| EGC-120-...-1HL-PN   | 133.5 | 97  | 15.5 | 68  | 125.5 | 14 | 48.9 | M6 | M5 | 342 | 105 |
| EGC-120-...-1HR-PN   |       |     |      |     |       |    |      |    |    |     |     |
| EGC-120-...-C-1HL-PN |       |     |      |     |       |    |      |    |    |     |     |
| EGC-120-...-C-1HR-PN |       |     |      |     |       |    |      |    |    |     |     |
| EGC-120-...-2H-PN    |       |     |      |     |       |    |      |    |    |     |     |
| EGC-120-...-C-2H-PN  |       |     |      |     |       |    |      |    |    |     |     |
| Size: 185            |       |     |      |     |       |    |      |    |    |     |     |
| EGC-185-...-1HL-PN   | 196.5 | 131 | 12.5 | 108 | 189.5 | 17 | 64.1 | M6 | M5 | 432 | 109 |
| EGC-185-...-1HR-PN   |       |     |      |     |       |    |      |    |    |     |     |
| EGC-185-...-C-1HL-PN |       |     |      |     |       |    |      |    |    |     |     |
| EGC-185-...-C-1HR-PN |       |     |      |     |       |    |      |    |    |     |     |
| EGC-185-...-2H-PN    |       |     |      |     |       |    |      |    |    |     |     |
| EGC-185-...-C-2H-PN  |       |     |      |     |       |    |      |    |    |     |     |

## Datasheet

## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

M1/M2 – With incremental displacement encoder

Encoder cable  
(connection to the motor controller/  
safety system) → page 56

| Type           | B1   | B2   | B3 | H1   | H2   | H3 | H4  |
|----------------|------|------|----|------|------|----|-----|
| EGC-70-...-M1  | 32.5 | 24.5 | 3  | 39   | 18.4 | 15 | 4.5 |
| EGC-70-...-M2  |      |      |    | 39   | 18.4 |    | 4.5 |
| EGC-80-...-M1  |      |      |    | 48   | 24.4 |    | 5   |
| EGC-80-...-M2  |      |      |    | 48   | 24.4 |    | 5   |
| EGC-120-...-M1 |      |      |    | 60   | 36.4 |    | 7   |
| EGC-120-...-M2 |      |      |    | 60   | 36.4 |    | 7   |
| EGC-185-...-M1 |      |      |    | 78.5 | 54.9 |    | 8   |
| EGC-185-...-M2 |      |      |    | 78.5 | 54.9 |    | 8   |

| Type           | D1    | D2    | L1 | L2 | L3 | L4 | L5 |
|----------------|-------|-------|----|----|----|----|----|
| EGC-70-...-M1  | M5x8  | M4x14 | 86 | 72 | 47 | 35 | 20 |
| EGC-70-...-M2  | M5x8  |       |    |    |    | 35 | 20 |
| EGC-80-...-M1  | M5x8  |       |    |    |    | 45 | 30 |
| EGC-80-...-M2  | M5x8  |       |    |    |    | 45 | 30 |
| EGC-120-...-M1 | M6x10 |       |    |    |    | 86 | 60 |
| EGC-120-...-M2 | M6x10 |       |    |    |    | 86 | 60 |
| EGC-185-...-M1 | M8x12 |       |    |    |    | 86 | 70 |
| EGC-185-...-M2 | M8x12 |       |    |    |    | 86 | 70 |

## Datasheet

## Ordering data

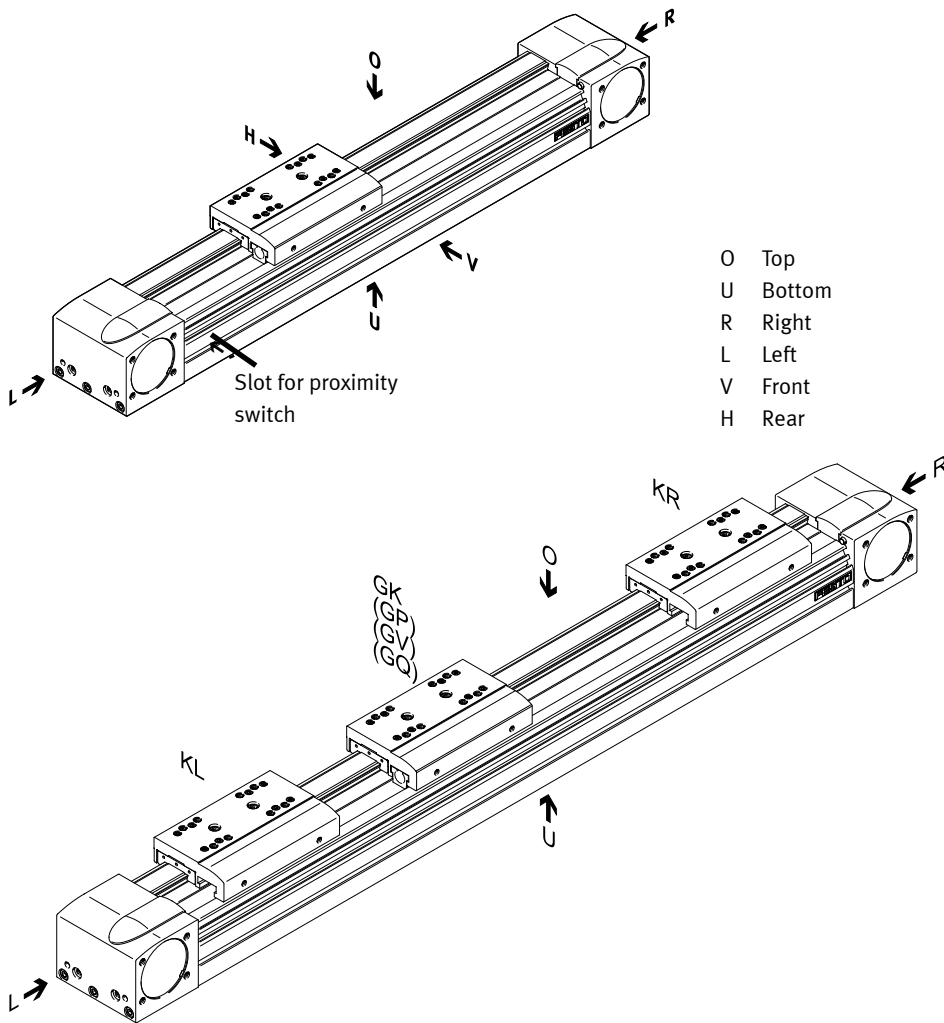
Key features:

- Stroke reserve: 0 mm
- Standard slide

| Size | Stroke<br>[mm] | Part no. | Type                     |
|------|----------------|----------|--------------------------|
| 70   | 300            | 3012492  | EGC-70-300-TB-KF-0H-GK   |
|      | 400            | 3012493  | EGC-70-400-TB-KF-0H-GK   |
|      | 500            | 3012494  | EGC-70-500-TB-KF-0H-GK   |
|      | 600            | 3012495  | EGC-70-600-TB-KF-0H-GK   |
|      | 800            | 3012496  | EGC-70-800-TB-KF-0H-GK   |
|      | 1000           | 3012497  | EGC-70-1000-TB-KF-0H-GK  |
|      | 1200           | 3012498  | EGC-70-1200-TB-KF-0H-GK  |
| 80   | 400            | 575832   | EGC-80-400-TB-KF-0H-GK   |
|      | 500            | 3013354  | EGC-80-500-TB-KF-0H-GK   |
|      | 600            | 3013355  | EGC-80-600-TB-KF-0H-GK   |
|      | 800            | 3013356  | EGC-80-800-TB-KF-0H-GK   |
|      | 1000           | 3013357  | EGC-80-1000-TB-KF-0H-GK  |
|      | 1200           | 3013359  | EGC-80-1200-TB-KF-0H-GK  |
| 120  | 400            | 3013364  | EGC-120-400-TB-KF-0H-GK  |
|      | 500            | 3013365  | EGC-120-500-TB-KF-0H-GK  |
|      | 600            | 3013366  | EGC-120-600-TB-KF-0H-GK  |
|      | 800            | 3013367  | EGC-120-800-TB-KF-0H-GK  |
|      | 1000           | 3013368  | EGC-120-1000-TB-KF-0H-GK |
|      | 1200           | 3013369  | EGC-120-1200-TB-KF-0H-GK |
|      | 1500           | 3013370  | EGC-120-1500-TB-KF-0H-GK |

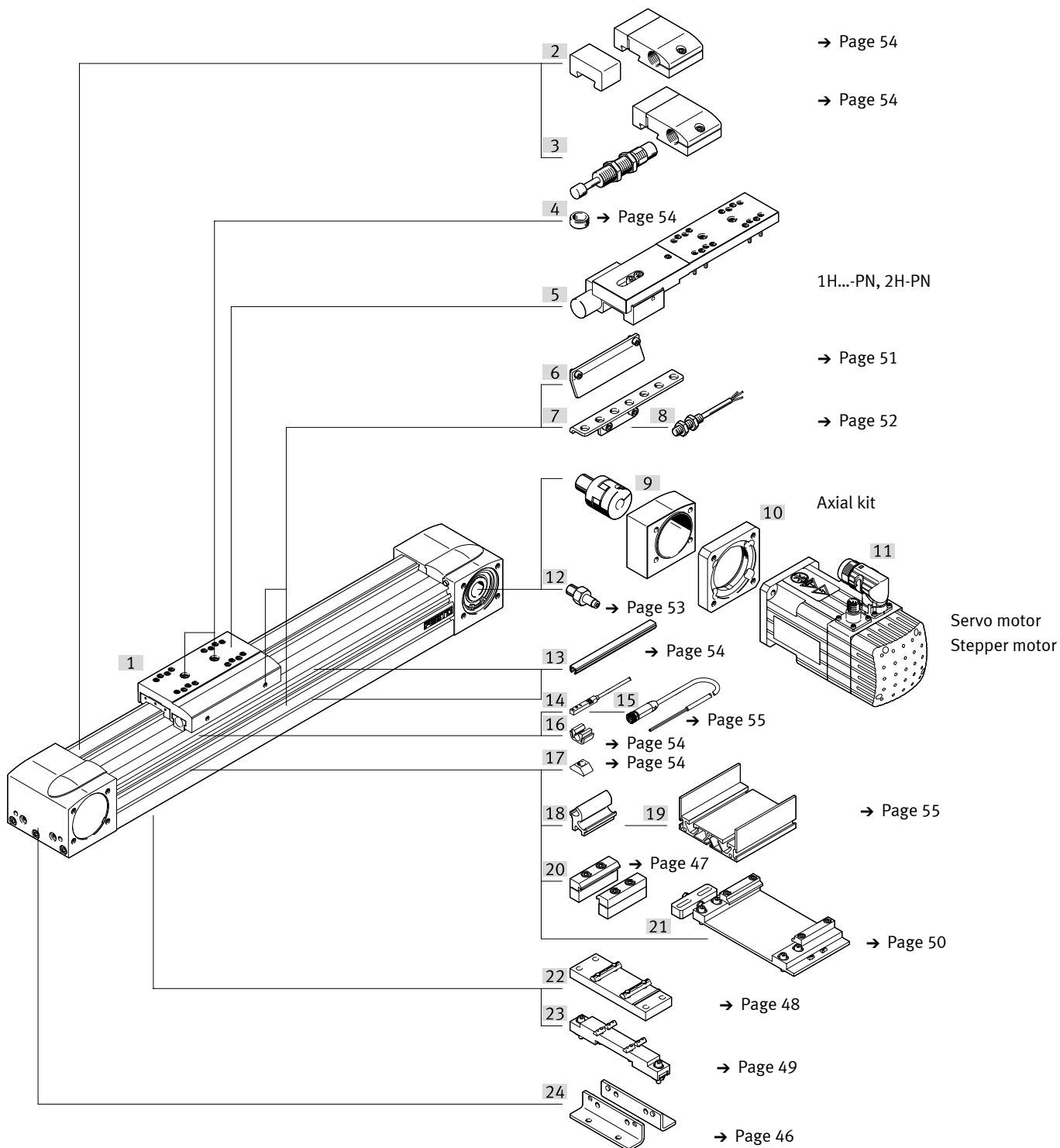
## Ordering data – Modular product system

### Orientation guide



## Ordering data – Modular product system

### Accessories



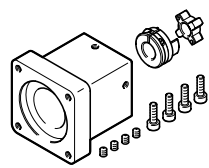
## Ordering data – Modular product system

| Ordering table                    |                                   |                                   |             |                                          |                                          |            |       |            |
|-----------------------------------|-----------------------------------|-----------------------------------|-------------|------------------------------------------|------------------------------------------|------------|-------|------------|
| Size                              | 50                                | 70                                | 80          | 120                                      | 185                                      | Conditions | Code  | Enter code |
| Module no.                        | 556812                            | 556813                            | 556814      | 556815                                   | 556817                                   |            |       |            |
| Design                            | Linear axis                       |                                   |             |                                          |                                          |            | EGC   | EGC        |
| Size                              | 50                                | 70                                | 80          | 120                                      | 185                                      |            | -...  | -...       |
| Stroke length [mm]                | 50 ... 1900                       | 50 ... 5000                       | 50 ... 8500 | 50 ... 8500<br>(50 ... 8400 with GV, GQ) | 50 ... 8500<br>(50 ... 8400 with GV, GQ) | [1]        | -...  | -...       |
| Function                          | Toothed belt                      |                                   |             |                                          |                                          |            | -TB   | -TB        |
| Guide                             | Recirculating ball bearing guide  |                                   |             |                                          |                                          |            | -KF   | -KF        |
| Stroke reserve [mm]               | 0 ... 999 (0 = no stroke reserve) |                                   |             |                                          |                                          | [1]        | -...H |            |
| Slide                             | Standard slide                    |                                   |             |                                          |                                          |            | -GK   |            |
|                                   | –                                 | Extended slide, protected         |             |                                          | –                                        |            | -GQ   |            |
|                                   | –                                 | Standard slide, protected         |             |                                          | –                                        |            | -GP   |            |
|                                   | –                                 | Extended slide                    |             |                                          |                                          |            | -GV   |            |
| Additional slide                  | Left                              | Additional slide, standard, left  |             |                                          |                                          | [2]        | -KL   |            |
|                                   | Right                             | Additional slide, standard, right |             |                                          |                                          | [2]        | -KR   |            |
| Lubrication function              | Standard                          |                                   |             |                                          |                                          |            |       |            |
| Displacement encoder, incremental | –                                 | Lubrication adapter               |             |                                          |                                          | [3]        | -C    |            |
|                                   | –                                 | None                              |             |                                          |                                          |            |       |            |
|                                   | –                                 | Resolution: 2.5 ìm                |             |                                          |                                          |            | -M1   |            |
|                                   | –                                 | Resolution: 10 ìm                 |             |                                          |                                          |            | -M2   |            |
| Clamping unit                     | –                                 | None                              |             |                                          |                                          |            |       |            |
|                                   | –                                 | 1-channel, left                   |             |                                          |                                          | [4]        | -1HL  |            |
|                                   | –                                 | 1-channel, right                  |             |                                          |                                          | [4]        | -1HR  |            |
|                                   | –                                 | 2-channel                         |             |                                          |                                          | [4]        | -2H   |            |
| Actuation type                    | –                                 | None                              |             |                                          |                                          |            |       |            |
|                                   | –                                 | Pneumatic                         |             |                                          |                                          |            | -PN   |            |
| Toothed belt material             | Chloroprene rubber                |                                   |             |                                          |                                          |            |       |            |
|                                   | –                                 | Coated PU                         |             |                                          |                                          |            | -PU2  |            |
| EU certification                  | II 2G                             |                                   |             |                                          | –                                        | [5]        | -EX3  |            |

- [1] ~... The sum of the nominal stroke and 2x stroke reserve must not exceed the maximum stroke length
- [2] **KL, KR** If the protected slide variant (GQ, GP) is selected, the additional slide (KL, KR) is also protected  
If the extended slide variant (GQ, GV) is selected, the additional slide (KL, KR) is not extended  
If the slide with lubrication adapter (GK-C) is selected, the additional slide (KL, KR) is also supplied with lubrication adapter  
Working stroke reduction in combination with additional slide (KL, KR) → page 19
- [3] **C** Not with standard slide, protected GP and extended slide, protected GQ
- [4] **1HL, 1HR, 2H** Not with slide GQ, GV or with additional slide KL, KR  
Only with PN  
Working stroke reduction in combination with clamping unit (1HL, 1HR, 2H) → page 20
- [5] **EX3** Not with M1, M2, 1HL, 1HR, 2H, PN

Accessories

Permitted axis/motor combinations for axial kits



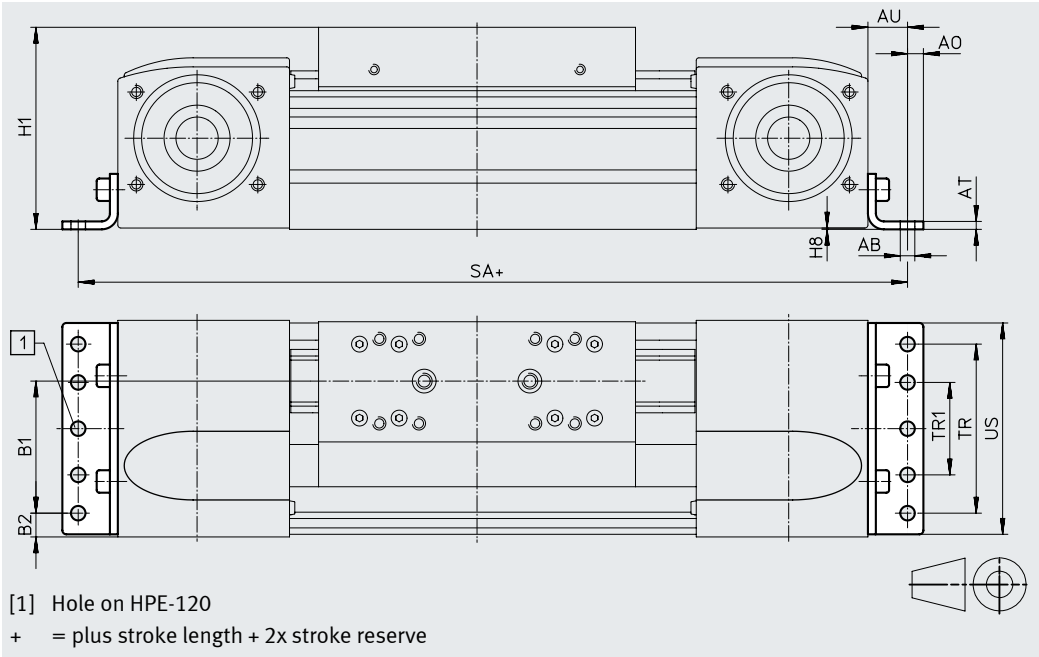
Under the following links you will find all information about:

- Axis/motor combinations
- Permitted third-party motors
- Technical data
- Dimensions

For axial kits → Internet: [eamm-a](http://eamm-a)

Foot mounting HPE

Material:  
Galvanised steel  
RoHS-compliant



| Dimensions and ordering data |         |     |    |      |      |      |       |     |
|------------------------------|---------|-----|----|------|------|------|-------|-----|
| For size                     | AB<br>ø | A0  | AT | AU   | B1   | B2   | H1    | H8  |
| 50                           | 4.5     | 4.5 | 2  | 10.5 | 21.5 | 14   | 42.5  | 0.5 |
| 70                           | 5.5     | 6   | 3  | 13   | 37   | 14.5 | 64    | 0.5 |
| 80                           | 5.5     | 6   | 3  | 15   | 38   | 21   | 76.5  | 0.5 |
| 120                          | 9       | 8   | 6  | 22   | 65   | 20   | 111.5 | 0.6 |
| 185                          | 9       | 12  | 8  | 25   | 118  | 13   | 172.5 | 0.5 |

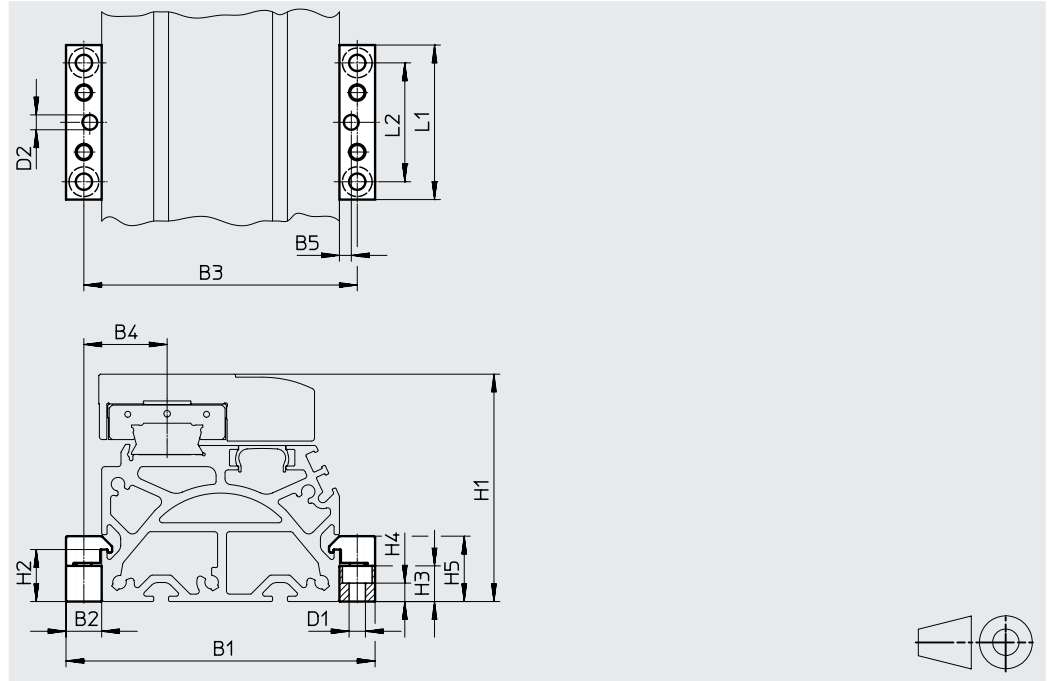
| For size | SA         |            | TR  | TR1 | US  | Weight<br>[g] | Part no. | Type <sup>1)</sup> |
|----------|------------|------------|-----|-----|-----|---------------|----------|--------------------|
|          | EGC-...-GK | EGC-...-GV |     |     |     |               |          |                    |
| 50       | 176        | –          | 20  | –   | 46  | 44            | 558320   | HPE-50             |
| 70       | 272        | 372        | 40  | –   | 67  | 115           | 558321   | HPE-70             |
| 80       | 316        | 416        | 40  | –   | 80  | 150           | 558322   | HPE-80             |
| 120      | 490        | 590        | 80  | –   | 116 | 578           | 558323   | HPE-120            |
| 185      | 662        | 762        | 160 | 80  | 182 | 1438          | 558325   | HPE-185            |

1) Suitable for ATEX

## Accessories

### Profile mounting MUE

Material:  
Anodised aluminium  
RoHS-compliant



#### Dimensions and ordering data

| For size | B1  | B2 | B3  | B4   | B5 | D1<br>ø | D2<br>ø<br>H7 | H1    | H2   |
|----------|-----|----|-----|------|----|---------|---------------|-------|------|
| 50       | 62  | 8  | 54  | 15.5 | 4  | 3.4     | 5             | 42.5  | 6    |
| 70       | 91  | 12 | 79  | 22.5 | 4  | 5.5     | 5             | 64    | 17.5 |
| 80       | 104 | 12 | 92  | 28   | 4  | 5.5     | 5             | 76.5  | 17.5 |
| 120      | 154 | 19 | 135 | 42.5 | 4  | 9       | 5             | 111.5 | 16   |
| 185      | 220 | 19 | 201 | 62.5 | 4  | 9       | 5             | 172.5 | 16   |

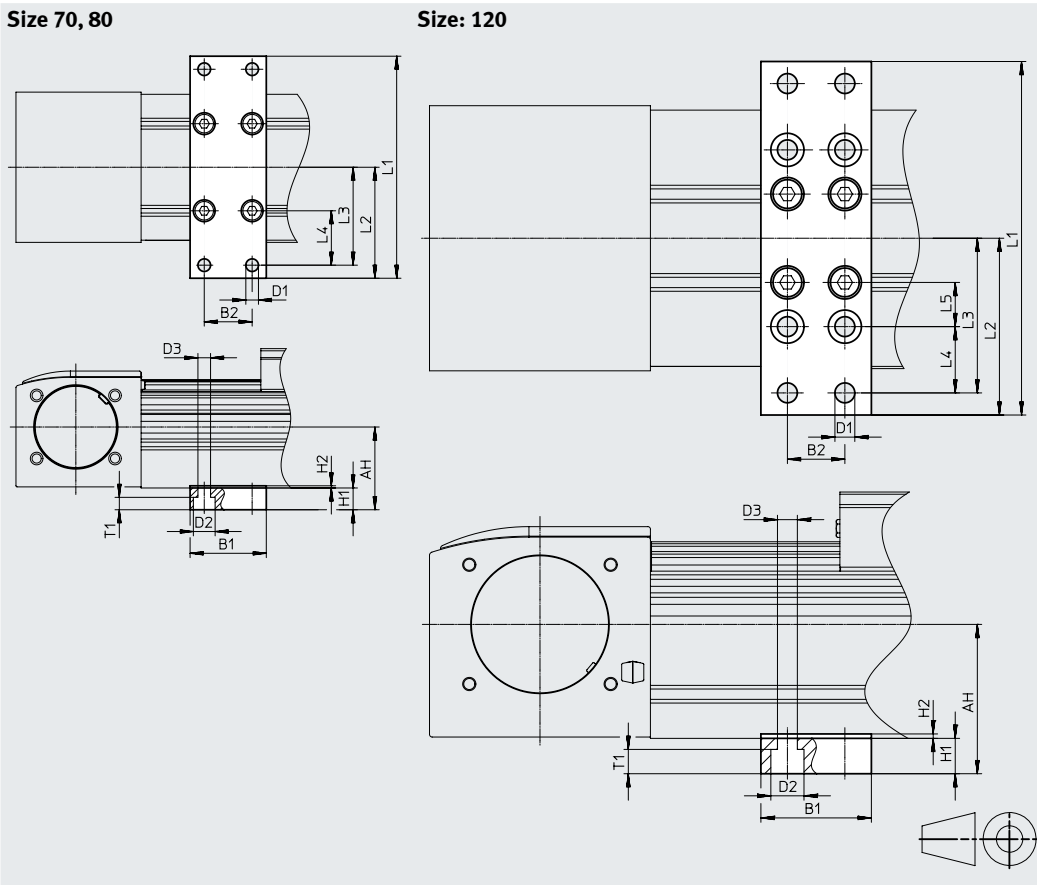
| For size | H3  | H4  | H5   | L1 | L2 | Weight<br>[g] | Part no. | Type <sup>1)</sup> |
|----------|-----|-----|------|----|----|---------------|----------|--------------------|
| 50       | 5.5 | 2.3 | 11   | 40 | 20 | 20            | 558042   | MUE-50             |
| 70       | 12  | 6.2 | 22   | 52 | 40 | 80            | 558043   | MUE-70/80          |
| 80       | 12  | 6.2 | 22   | 52 | 40 | 80            | 558043   | MUE-70/80          |
| 120      | 14  | 5.5 | 29.5 | 90 | 40 | 290           | 558044   | MUE-120/185        |
| 185      | 14  | 5.5 | 29.5 | 90 | 40 | 290           | 558044   | MUE-120/185        |

1) Suitable for ATEX

Accessories

Central support EAHF

Material:  
Anodised aluminium  
RoHs-compliant



| Dimensions and ordering data |      |    |    |         |         |         |    |     |
|------------------------------|------|----|----|---------|---------|---------|----|-----|
| For size                     | AH   | B1 | B2 | D1<br>ø | D2<br>ø | D3<br>ø | H1 | L1  |
| 70                           | 38   | 35 | 22 | 5.8     | 10      | 5.8     | 10 | 102 |
| 80                           | 44.5 |    |    |         |         |         |    | 112 |
| 120                          | 67.6 | 50 | 26 | 9       | 15      | 9       | 16 | 160 |

| For size | L2 | L3 | L4 | L5 | T1  | Weight<br>[g] | Part no. | Type                       |
|----------|----|----|----|----|-----|---------------|----------|----------------------------|
| 70       | 51 | 45 | 25 | –  | 5.7 | 113           | 2349256  | EAHF-L5-70-P <sup>1)</sup> |
| 80       | 56 | 50 | 30 |    |     | 123           | 3535188  | EAHF-L5-80-P <sup>1)</sup> |
| 120      | 80 | 70 | 30 | 20 | 11  | 384           | 2410274  | EAHF-L5-120-P              |

1) Suitable for ATEX

## Accessories

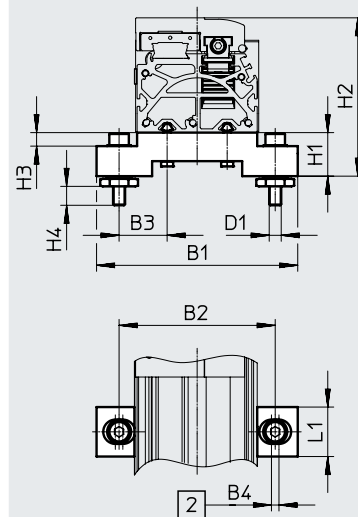
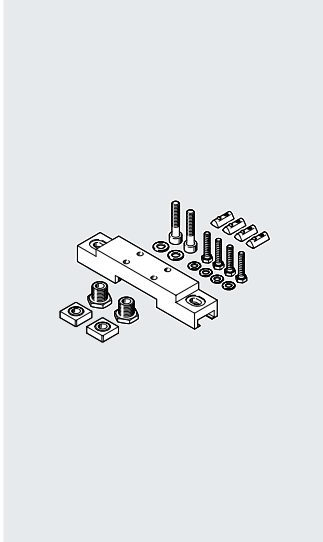
### Adjusting kit EADC-E15

Material:

EADC-E15-50/80/120: Wrought aluminium alloy

EADC-E15-185: Steel

RoHS-compliant



[2] Width of elongated hole

#### Dimensions and ordering data

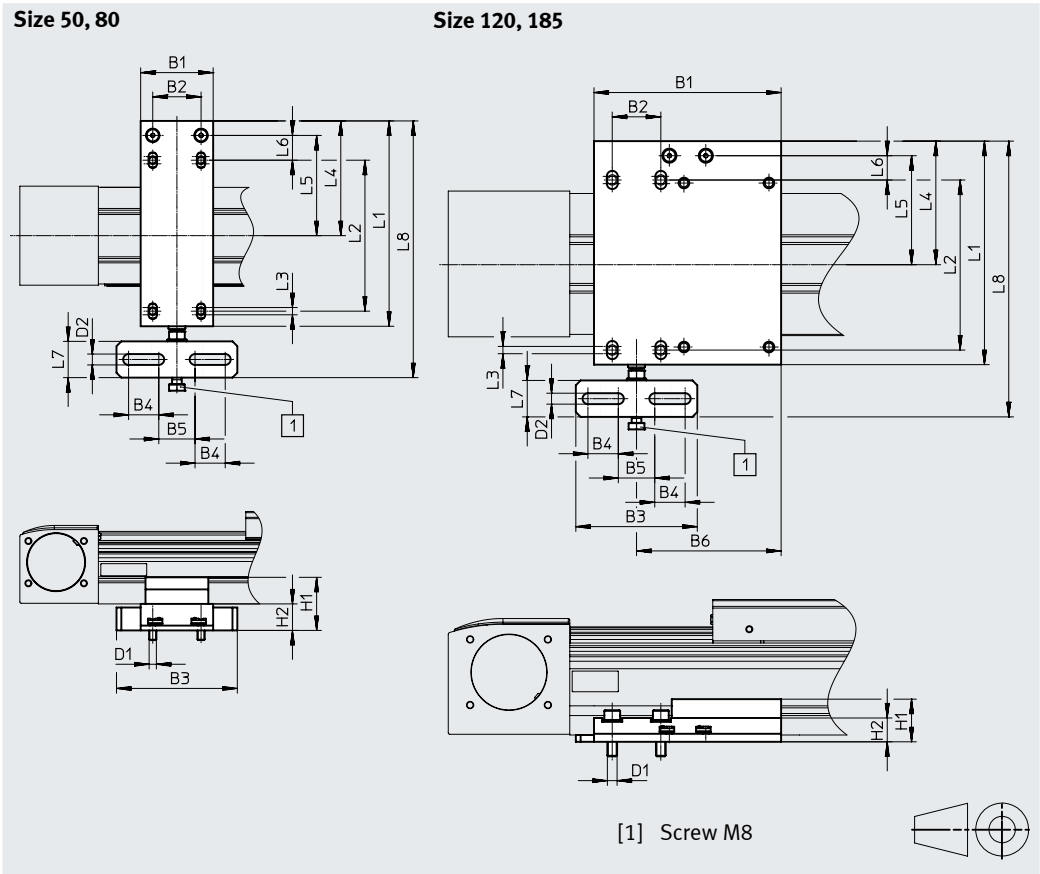
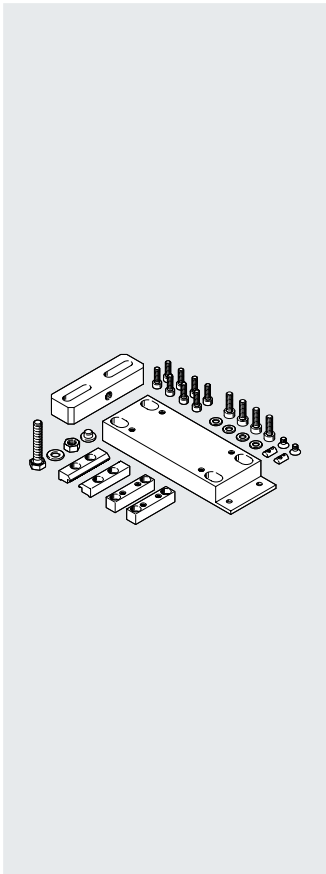
| For size | B1  | B2  | B3   | B4 | D1 | H1 |
|----------|-----|-----|------|----|----|----|
| 50       | 84  | 62  | 21   | 5  | M5 | 20 |
| 70       | 134 | 104 | 32   | 5  | M8 | 29 |
| 80       | 134 | 104 | 32   | 5  | M8 | 29 |
| 120      | 170 | 140 | 50   | 5  | M8 | 29 |
| 185      | 236 | 209 | 64.5 | 5  | M8 | 29 |

| For size | H2    | H3 | H4   | L1 | Weight [g] | Part no. | Type            |
|----------|-------|----|------|----|------------|----------|-----------------|
| 50       | 62.5  | 5  | 9.6  | 25 | 126        | 8047565  | EADC-E15-50-E7  |
| 70       | 93    | 9  | 12.6 | 33 | 386        | 8047566  | EADC-E15-80-E7  |
| 80       | 105.5 | 9  | 12.6 | 33 | 386        | 8047566  | EADC-E15-80-E7  |
| 120      | 140.5 | 9  | 12.6 | 33 | 388        | 8047567  | EADC-E15-120-E7 |
| 185      | 201.5 | 9  | 12.6 | 33 | 569        | 8047568  | EADC-E15-185-E7 |

Accessories

Adjusting kit EADC-E16

Material:  
Wrought aluminium alloy  
RoHs-compliant



| Dimensions and ordering data |     |    |     |    |    |     |    |    |      |      |     |     |
|------------------------------|-----|----|-----|----|----|-----|----|----|------|------|-----|-----|
| For size                     | B1  | B2 | B3  | B4 | B5 | B6  | D1 | D2 | H1   | H2   | L1  | L2  |
| 50                           | 60  | 40 | 100 | 25 | 30 | –   | M4 | 9  | 25.1 | 19.6 | 130 | 80  |
| 80                           | 60  | 40 | 100 | 25 | 30 | –   | M6 | 9  | 44   | 22   | 170 | 125 |
| 120                          | 154 | 40 | 100 | 25 | 30 | 119 | M8 | 9  | 35.1 | 19.6 | 184 | 140 |
| 185                          | 150 | 40 | 100 | 25 | 30 | 119 | M8 | 9  | 35.1 | 19.6 | 272 | 220 |

| For size | L3 | L4    | L5   | L6   | L7 | L8    | Weight [g] | Part no. | Type            |
|----------|----|-------|------|------|----|-------|------------|----------|-----------------|
| 50       | 6  | 78    | 66   | 26   | 30 | 173   | 498        | 8047576  | EADC-E16-50-E7  |
| 80       | 6  | 95    | 83   | 20.5 | 30 | 212.5 | 828        | 8047577  | EADC-E16-80-E7  |
| 120      | 6  | 101.7 | 89.7 | 20   | 30 | 227   | 1134       | 8047578  | EADC-E16-120-E7 |
| 185      | 6  | 150   | 138  | 28   | 30 | 315   | 1457       | 8047579  | EADC-E16-185-E7 |

## Accessories

### Shock absorber retainer KYE

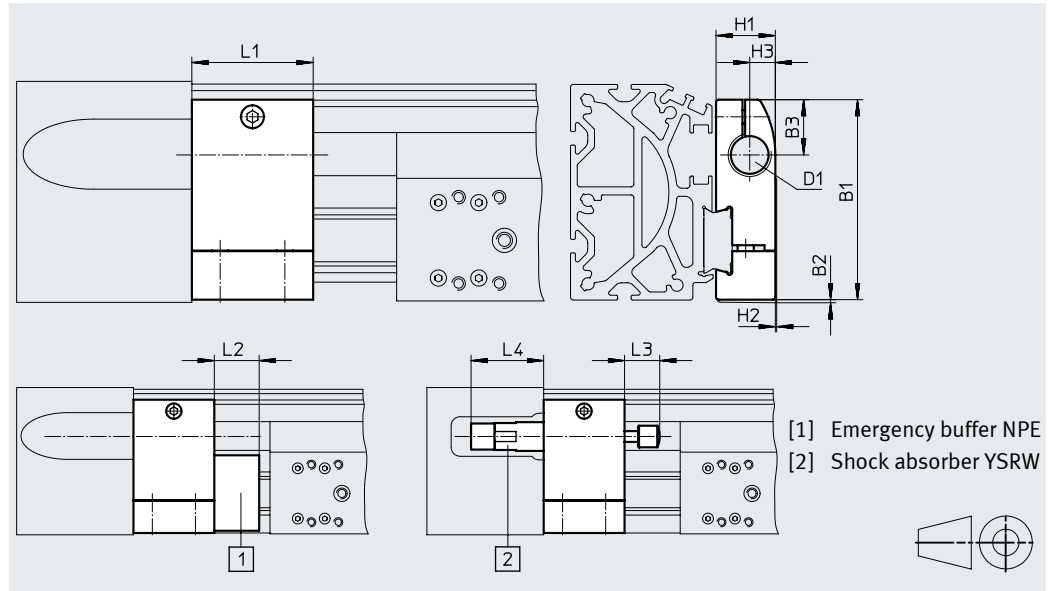
Emergency buffer NPE → page 54

Shock absorber YSRW → page 54

Material:

Anodised aluminium  
RoHS-compliant

**Cannot be used in combination with the variants GP and GQ or GK-C and GV-C and 1H...-PN, 2H-PN.**



#### Dimensions and ordering data

| For size | B1    | B2 | B3   | D1      | H1   | H2  | H3  | L1 | L2 | L3 | L4<br>min. | Weight<br>[g] | Part no. | Type <sup>1)</sup> |
|----------|-------|----|------|---------|------|-----|-----|----|----|----|------------|---------------|----------|--------------------|
| 50       | 38    | 1  | 13.5 | M8X1    | 12   | 0.4 | 5   | 20 | 12 | 8  | 20         | 20            | 557583   | KYE-50             |
| 70       | 57.5  | 1  | 16.5 | M12X1   | 18.2 | 0.5 | 7.5 | 30 | 15 | 14 | 32         | 75            | 557584   | KYE-70             |
| 80       | 74.2  | 1  | 20.5 | M16X1   | 22   | 0.5 | 9.5 | 45 | 25 | 20 | 41         | 170           | 557585   | KYE-80             |
| 120      | 108.5 | 1  | 26   | M22X1.5 | 31   | 1   | 14  | 60 | 40 | 26 | 48.5       | 680           | 557586   | KYE-120            |
| 185      | 168   | 1  | 37   | M26X1.5 | 42   | 4   | 18  | 75 | 60 | 34 | 58.5       | 1075          | 557587   | KYE-185            |

1) Suitable for ATEX

### Switch lug SF-EGC-1

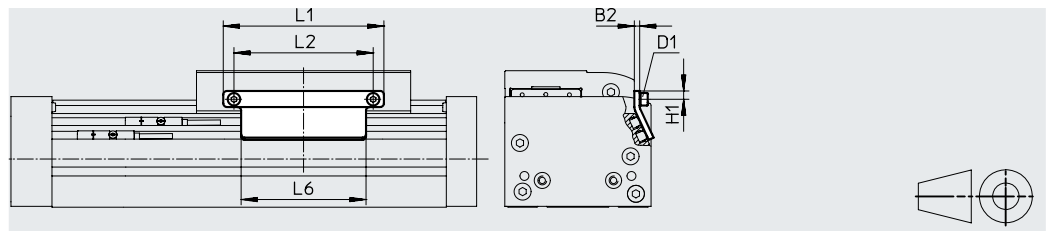
For sensing via proximity switch  
SIES-8M

Material:

Galvanised steel  
RoHS-compliant

- With size 50, max. 3 proximity switches can be supported when sensing both end positions.

A stroke reserve of 25 mm is required for additional proximity switches.



#### Dimensions and ordering data

| For size | B2 | D1 | H1   | L1  | L2  | L6  | Weight<br>[g] | Part no. | Type <sup>1)</sup> |
|----------|----|----|------|-----|-----|-----|---------------|----------|--------------------|
| 50       | 2  | M3 | 3.5  | 45  | 22  | 45  | 20            | 558046   | SF-EGC-1-50        |
| 70       | 3  | M4 | 4.65 | 70  | 56  | 50  | 50            | 558047   | SF-EGC-1-70        |
| 80       | 3  | M4 | 4.65 | 90  | 78  | 70  | 63            | 558048   | SF-EGC-1-80        |
| 120      | 3  | M5 | 8    | 170 | 140 | 170 | 147           | 558049   | SF-EGC-1-120       |
| 185      | 3  | M5 | 10   | 230 | 200 | 230 | 246           | 558051   | SF-EGC-1-185       |

1) Suitable for ATEX

## Accessories

### Switch lug SF-EGC-2

For sensing with proximity sensor  
SIEN-M8B or SIES-8M

Material:

Galvanised steel  
RoHs-compliant

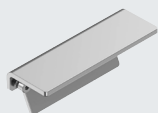
### Sensor bracket HWS-EGC

For proximity switch SIEN-M8B

Material:

Galvanised steel  
RoHS-compliant

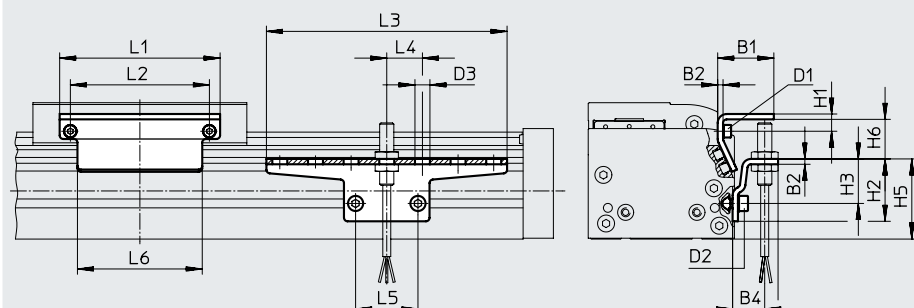
Switch lug SF-EGC-2



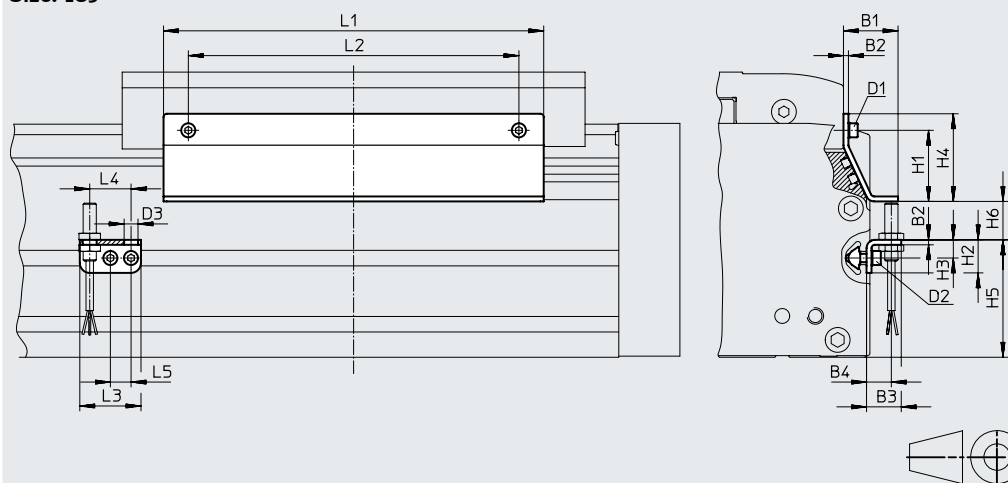
Sensor bracket HWS-EGC



Size 70 ... 120



Size: 185



### Dimensions and ordering data

| For size | B1   | B2 | B3   | B4 | D1 | D2 | D3<br>ø | H1   | H2 |
|----------|------|----|------|----|----|----|---------|------|----|
| 70       | 31.5 | 3  | 25.5 | 18 | M4 | M5 | 8.4     | 9.5  | 35 |
| 80       | 31.5 | 3  | 25.5 | 18 | M4 | M5 | 8.4     | 9.5  | 35 |
| 120      | 32   | 3  | 25.5 | 18 | M5 | M5 | 8.4     | 13.2 | 65 |
| 185      | 33   | 3  | 25.5 | 15 | M5 | M5 | 8.4     | 43   | 20 |

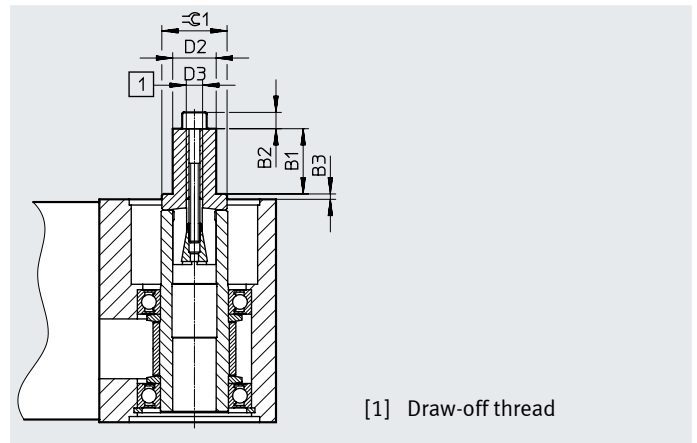
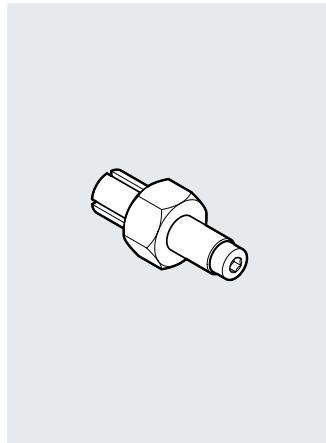
| For size | H3 | H4 | H5 | H6<br>max. | L1  | L2  | L3  | L4 | L5   | L6  |
|----------|----|----|----|------------|-----|-----|-----|----|------|-----|
| 70       | 25 | –  | 45 | 13.5       | 70  | 56  | 135 | 20 | 35   | 50  |
| 80       | 25 | –  | 45 | 23.5       | 90  | 78  | 135 | 20 | 35   | 70  |
| 120      | 55 | –  | 75 | 24         | 170 | 140 | 215 | 20 | 35   | 170 |
| 185      | 11 | 53 | 71 | 25.5       | 230 | 200 | 37  | 25 | 12.5 | 230 |

| For size   | Weight<br>[g] | Part no. | Type         | For size       | Weight<br>[g] | Part no. | Type                       |
|------------|---------------|----------|--------------|----------------|---------------|----------|----------------------------|
| Switch lug |               |          |              | Sensor bracket |               |          |                            |
| 70         | 100           | 558052   | SF-EGC-2-70  | 70             | 110           | 558057   | HWS-EGC-M5                 |
| 80         | 130           | 558053   | SF-EGC-2-80  | 80             | 110           | 558057   | HWS-EGC-M5                 |
| 120        | 277           | 558054   | SF-EGC-2-120 | 120            | 217           | 570365   | HWS-EGC-M8-B               |
| 185        | 390           | 558056   | SF-EGC-2-185 | 185            | 58            | 560517   | HWS-EGC-M8:KURZ<br>(SHORT) |

## Accessories

### Drive shaft adapter EAMB

Alternative interface

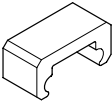
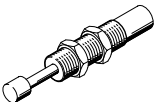
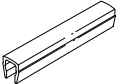
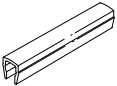


#### Dimensions and ordering data

| For size | B1 | B2 | B3   | D2<br>Ø | D3  | ≈D1 | Weight<br>[g] | Part no. | Type <sup>1)</sup>    |
|----------|----|----|------|---------|-----|-----|---------------|----------|-----------------------|
| 50       | 12 | 3  | 1.1  | 8       | M4  | 12  | 20            | 558034   | EAMB-16-7-8X15-8X10   |
| 70       | 12 | 4  | 1.85 | 8       | M5  | 15  | 29            | 558035   | EAMB-18-9-8X16-10X12  |
| 80       | 21 | –  | 2    | 15      | M6  | 21  | 70            | 558036   | EAMB-24-6-15X21-16X20 |
| 120      | 26 | –  | 2    | 25      | M10 | 30  | 201           | 558037   | EAMB-34-6-25X26-23X27 |
| 185      | 30 | –  | 3    | 35      | M12 | 36  | 463           | 558038   | EAMB-44-7-35X30-32X32 |

1) Suitable for ATEX

## Accessories

| Ordering data                                                                      |              |                                                         |                             |                    |                  |  |
|------------------------------------------------------------------------------------|--------------|---------------------------------------------------------|-----------------------------|--------------------|------------------|--|
|                                                                                    | For size     | Description                                             | Part no.                    | Type <sup>2)</sup> | PU <sup>1)</sup> |  |
| Emergency buffer NPE                                                               |              |                                                         |                             |                    |                  |  |
|    | 50           | For use in combination with shock absorber retainer KYE | 564897                      | NPE-50             | 1                |  |
|                                                                                    | 70           |                                                         | 562581                      | NPE-70             |                  |  |
|                                                                                    | 80           |                                                         | 562582                      | NPE-80             |                  |  |
|                                                                                    | 120          |                                                         | 562583                      | NPE-120            |                  |  |
|                                                                                    | 185          |                                                         | 562584                      | NPE-185            |                  |  |
| Shock absorber YSRW                                                                |              |                                                         | Datasheets → Internet: ysrw |                    |                  |  |
|    | 50           | For use in combination with shock absorber retainer KYE | 191192                      | YSRW-5-8           | 1                |  |
|                                                                                    | 70           |                                                         | 191194                      | YSRW-8-14          |                  |  |
|                                                                                    | 80           |                                                         | 191196                      | YSRW-12-20         |                  |  |
|                                                                                    | 120          |                                                         | 191197                      | YSRW-16-26         |                  |  |
|                                                                                    | 185          |                                                         | 191198                      | YSRW-20-34         |                  |  |
| Slot nut NST                                                                       |              |                                                         |                             |                    |                  |  |
|    | 50           | For mounting slot                                       | 558045                      | ABAN-3-1 M3-4-M-P1 | 1                |  |
|                                                                                    |              |                                                         |                             |                    |                  |  |
|    | 70, 80       | For mounting slot                                       | 150914                      | NST-5-M5           | 1                |  |
|                                                                                    |              |                                                         | 8047843                     | NST-5-M5-10        | 10               |  |
|                                                                                    |              |                                                         | 8047878                     | NST-5-M5-50        | 50               |  |
|                                                                                    | 120, 185     | For mounting slot                                       | 150915                      | NST-8-M6           | 1                |  |
|                                                                                    |              |                                                         | 8047868                     | NST-8-M6-10        | 10               |  |
| 8047869                                                                            |              |                                                         | NST-8-M6-50                 | 50                 |                  |  |
| Centring pin/sleeve ZBS/ZBH                                                        |              |                                                         |                             |                    |                  |  |
|  | 50, 70       | For slide                                               | 150928                      | ZBS-5              | 10               |  |
|                                                                                    | 80, 120, 185 |                                                         | 8137184                     | ZBH-9-B            |                  |  |
| Slot cover ABP                                                                     |              |                                                         |                             |                    |                  |  |
|  | 70, 80       | For mounting slot<br>Every 0.5 m                        | 151681                      | ABP-5              | 2                |  |
|                                                                                    | 120, 185     |                                                         | 151682                      | ABP-8              |                  |  |
| Slot cover ABP-S                                                                   |              |                                                         |                             |                    |                  |  |
|  | 50 ... 185   | For sensor slot<br>Every 0.5 m                          | 563360                      | ABP-5-S1           | 2                |  |

1) Packaging unit

2) Suitable for ATEX

| Ordering data                                                                      |            | For size | Description                                               | Part no.      | Type          | PU <sup>1)</sup> |
|------------------------------------------------------------------------------------|------------|----------|-----------------------------------------------------------|---------------|---------------|------------------|
| <b>Clip SMBK</b>                                                                   |            |          |                                                           |               |               |                  |
|  | 50 ... 185 |          | For sensor slot, for mounting the proximity switch cables | <b>534254</b> | <b>SMBK-8</b> | 10               |

1) Packaging unit

## Accessories

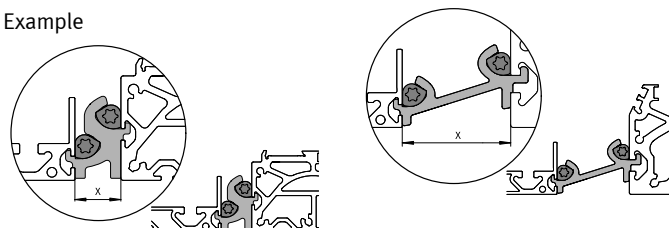
### Mounting options between axis and support profile

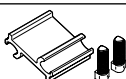
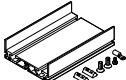
Depending on the adapter kit, the spacing between the axis and the support profile is:

$x = 20 \text{ mm}$  or  $50 \text{ mm}$

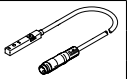
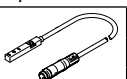
The support profile must be mounted using at least 2 adapter kits. For longer strokes, an adapter kit must be used every 500 mm.

Example



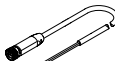
| Ordering data                                                                       |            |                                                                                                                                                    |          |                  |                  |
|-------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------|------------------|
|                                                                                     | For size   | Description                                                                                                                                        | Part no. | Type             | PU <sup>1)</sup> |
| Adapter kit DHAM                                                                    |            |                                                                                                                                                    |          |                  |                  |
|    | 70, 80     | <ul style="list-style-type: none"><li>• For mounting the support profile on the axis</li><li>• Spacing between axis and profile is 20 mm</li></ul> | 562241   | DHAM-ME-N1-CL    | 1                |
|                                                                                     | 120, 185   |                                                                                                                                                    | 562242   | DHAM-ME-N2-CL    |                  |
|    | 70, 80     | <ul style="list-style-type: none"><li>• For mounting the support profile on the axis</li><li>• Spacing between axis and profile is 50 mm</li></ul> | 574560   | DHAM-ME-N1-50-CL |                  |
|                                                                                     | 120, 185   |                                                                                                                                                    | 574561   | DHAM-ME-N2-50-CL |                  |
| Support profile HMIA                                                                |            |                                                                                                                                                    |          |                  |                  |
|  | 70 ... 185 | <ul style="list-style-type: none"><li>• For guiding an energy chain</li></ul>                                                                      | 539379   | HMIA-E07-        | 1                |

1) Packaging unit

| Ordering data – Proximity switches for T-slot, inductive                            |                                                                  |                       |                  |                     |          | Datasheets → Internet: sies |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------|------------------|---------------------|----------|-----------------------------|
|                                                                                     | Type of mounting                                                 | Electrical connection | Switching output | Cable length<br>[m] | Part no. | Type                        |
| N/O                                                                                 |                                                                  |                       |                  |                     |          |                             |
|  | Inserted in the slot from above, flush with the cylinder profile | Cable, 3-core         | PNP              | 7.5                 | 551386   | SIES-8M-PS-24V-K-7.5-OE     |
|                                                                                     |                                                                  | Plug M8x1, 3-pin      |                  | 0.3                 | 551387   | SIES-8M-PS-24V-K-0.3-M8D    |
|                                                                                     |                                                                  | Cable, 3-core         | NPN              | 7.5                 | 551396   | SIES-8M-NS-24V-K-7.5-OE     |
|                                                                                     |                                                                  | Plug M8x1, 3-pin      |                  | 0.3                 | 551397   | SIES-8M-NS-24V-K-0.3-M8D    |
| N/C                                                                                 |                                                                  |                       |                  |                     |          |                             |
|  | Inserted in the slot from above, flush with the cylinder profile | Cable, 3-core         | PNP              | 7.5                 | 551391   | SIES-8M-PO-24V-K-7.5-OE     |
|                                                                                     |                                                                  | Plug M8x1, 3-pin      |                  | 0.3                 | 551392   | SIES-8M-PO-24V-K-0.3-M8D    |
|                                                                                     |                                                                  | Cable, 3-core         | NPN              | 7.5                 | 551401   | SIES-8M-NO-24V-K-7.5-OE     |
|                                                                                     |                                                                  | Plug M8x1, 3-pin      |                  | 0.3                 | 551402   | SIES-8M-NO-24V-K-0.3-M8D    |

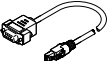
## Accessories

| Ordering data – Proximity switch M8 (round design), inductive                    |                       |                                                                                   |                  |                  |          | Datasheets → Internet: sien |
|----------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------|------------------|------------------|----------|-----------------------------|
|                                                                                  | Electrical connection | LED                                                                               | Switching output | Cable length [m] | Part no. | Type                        |
| N/O                                                                              |                       |                                                                                   |                  |                  |          |                             |
|  | Cable, 3-core         |  | PNP              | 2.5              | 150386   | SIEN-M8B-PS-K-L             |
|                                                                                  |                       |                                                                                   | NPN              | 2.5              | 150384   | SIEN-M8B-NS-K-L             |
|  | Plug M8x1, 3-pin      |  | PNP              | –                | 150387   | SIEN-M8B-PS-S-L             |
|                                                                                  |                       |                                                                                   | NPN              | –                | 150385   | SIEN-M8B-NS-S-L             |
| N/C                                                                              |                       |                                                                                   |                  |                  |          |                             |
|  | Cable, 3-core         |  | PNP              | 2.5              | 150390   | SIEN-M8B-PO-K-L             |
|                                                                                  |                       |                                                                                   | NPN              | 2.5              | 150388   | SIEN-M8B-NO-K-L             |
|  | Plug M8x1, 3-pin      |  | PNP              | –                | 150391   | SIEN-M8B-PO-S-L             |
|                                                                                  |                       |                                                                                   | NPN              | –                | 150389   | SIEN-M8B-NO-S-L             |

| Ordering data – Connecting cables                                                  |                                                |                                       |                                                |                                               |                  | Datasheets → Internet: neba |                              |
|------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------------|------------------------------------------------|-----------------------------------------------|------------------|-----------------------------|------------------------------|
|                                                                                    | Electrical connection 1, connection technology | Electrical connection 1, cable outlet | Electrical connection 2, connection technology | Electrical connection 2, number of pins/cores | Cable length [m] | Part no.                    | Type                         |
|    | M8x1 A-coded to EN 61076-2-104                 | Straight                              | Open end                                       | 3                                             | 2.5              | <b>8078223</b>              | <b>NEBA-M8G3-U-2.5-N-LE3</b> |
|                                                                                    |                                                |                                       |                                                |                                               | 5.0              | <b>8078224</b>              | <b>NEBA-M8G3-U-5-N-LE3</b>   |
|                                                                                    |                                                |                                       |                                                |                                               |                  |                             |                              |
|  | M8x1 A-coded to EN 61076-2-104                 | Angled                                | Open end                                       | 3                                             | 2.5              | <b>8078230</b>              | <b>NEBA-M8W3-U-2.5-N-LE3</b> |
|                                                                                    |                                                |                                       |                                                |                                               | 5.0              | <b>8078231</b>              | <b>NEBA-M8W3-U-5-N-LE3</b>   |
|                                                                                    |                                                |                                       |                                                |                                               |                  |                             |                              |

| Ordering data – Encoder cables for displacement encoder, EGC-...-M1/-M2            |                                     |                                       |                  |                | Datasheets → Internet: nebm     |  |
|------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------|------------------|----------------|---------------------------------|--|
|                                                                                    | Electrical connection, left         | Electrical connection, right          | Cable length [m] | Part no.       | Type                            |  |
|  | Displacement encoder EGC-...-M1/-M2 | Motor controllers CMMP-AS and CMMT-AS | 5.0              | <b>1599105</b> | <b>NEBM-M12G8-E-5-S1G9-V3</b>   |  |
|                                                                                    |                                     |                                       | 10               | <b>1599106</b> | <b>NEBM-M12G8-E-10-S1G9-V3</b>  |  |
|                                                                                    |                                     |                                       | 15               | <b>1599107</b> | <b>NEBM-M12G8-E-15-S1G9-V3</b>  |  |
|                                                                                    |                                     |                                       | X <sup>1)</sup>  | <b>1599108</b> | <b>NEBM-M12G8-E-...-S1G9-V3</b> |  |

1) Max. cable length: 25 m.

| Ordering data – Adapter                                                            |                                                                                                                                               |                |                             |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------|
|                                                                                    | Description                                                                                                                                   | Part no.       | Type                        |
|  | Required in combination with the servo drive CMMT-AS as adapter between encoder cable NEBM-M12G8-...-V3 and interface X3 (position encoder 2) | <b>8106112</b> | <b>NEFM-S1G9-K-0.5-R3G8</b> |