

## Guide axes EGC-FA, without drive

**FESTO**

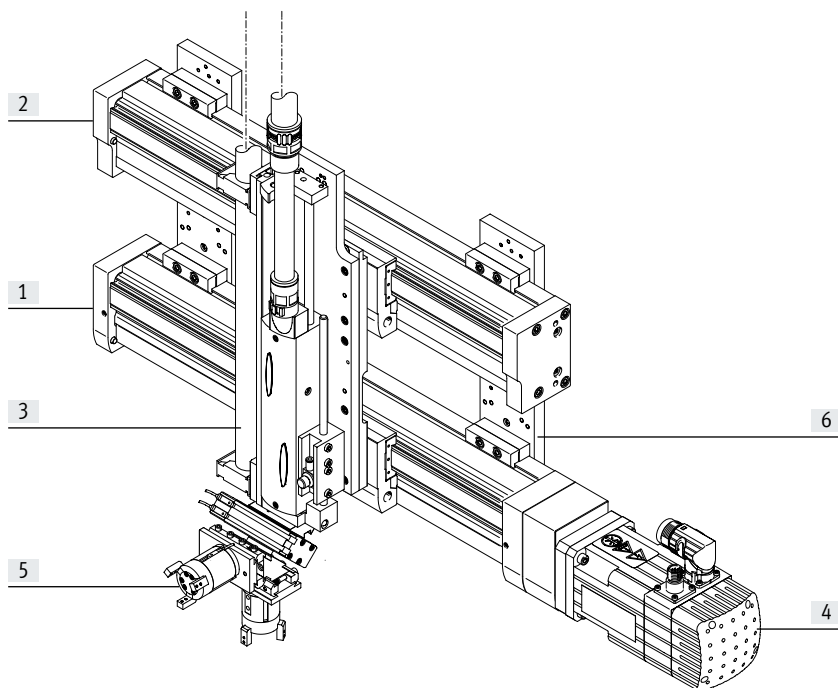


## Characteristics

### At a glance

- Driveless linear guide units with guide and freely movable slide
- The guide axis is designed to support force and torque capacity in multi-axis applications
- Higher torsional resistance
- Reduced vibrations with dynamic loads
- Drive axis and guide axis can be placed adjacent to or above one another

### System product for handling and assembly technology



### System components and accessories

	Description	→ Page/Internet
[1] Axes	Wide range of combinations possible within handling and assembly technology	axis
[2] Guide axes	To support force and torque capacity in multi-axis applications	guide axis
[3] Drives	Wide range of combinations possible within handling and assembly technology	drive
[4] Motors	Servo and stepper motors, with or without gear unit	motor
[5] Grippers	Wide range of variations possible within handling and assembly technology	gripper
[6] Adapters	For drive/drive and drive/gripper connections	adapter kit

## Characteristics

### 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 seal

With central lubrication



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

### Clamping unit

→ Page 8



- 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

### Guide axes and the corresponding axes/drives

Guide axis ELFA-RF



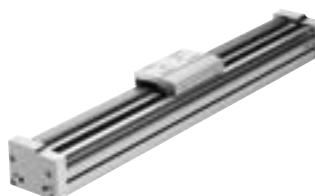
- Can be combined with:
  - Toothed belt axis ELGA-TB-RF
- For size 70, 80
- Load capacity up to max. 800 N or 180 Nm

Guide axis DGC-FA



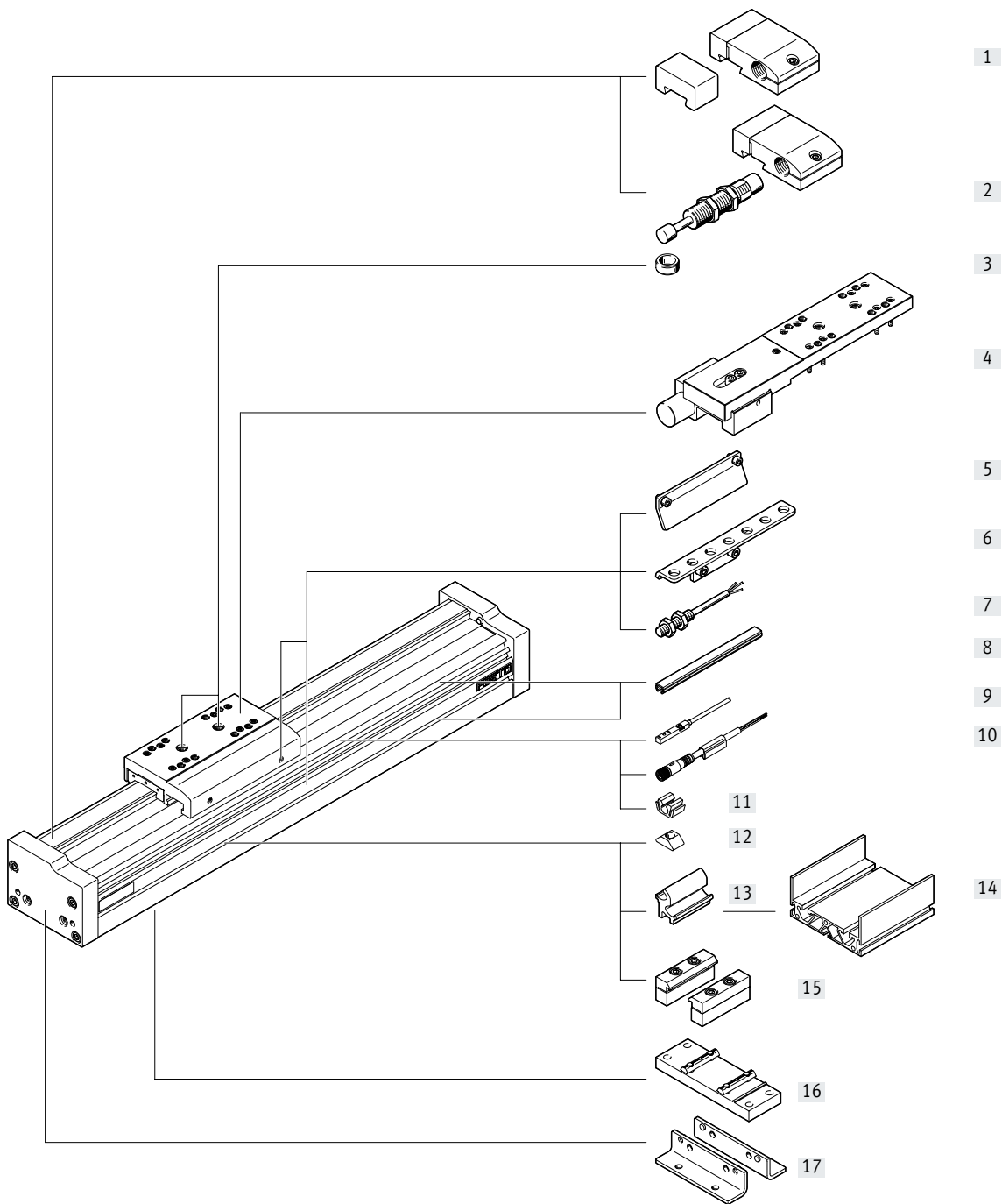
- Can be combined with:
  - Linear drive DGC-KF
- For size 8 ... 63
- Load capacity up to max. 15200 N or 1157 Nm

Guide axis EGC-FA



- Can be combined with:
  - Toothed belt axis EGC-TB
  - Spindle axis EGC-BS
- For size 70 ... 185
- Load capacity up to max. 15200 N or 1157 Nm

Peripherals overview



## Peripherals overview

Variants and accessories			
Type/order code	Description		→ Page/Internet
[1] Emergency buffer with retaining bracket A	For avoiding damage at the end stop in the event of a malfunction		33
[2] Shock absorber with retaining bracket C	For avoiding damage at the end stop in the event of a malfunction		33
[3] Centring pin/sleeve 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 70: 2x ZBS-5</li> <li>With size 80, 120, 185: 2x ZBH-9</li> </ul> </li> </ul>		33
[4] Clamping unit 1H...PN, 2H-PN	For holding loads		8
[5] Switch lug X, Z, O, P, W, R	For sensing the slide position		31
[6] Sensor bracket O, P, W, R	Adapter for mounting the inductive proximity sensors (round design) on the axis		32
[7] Proximity sensor, M8 O, P, W, R	<ul style="list-style-type: none"> <li>Inductive proximity sensor, round design</li> <li>The order code O, P, W, R includes 1 switch lug and max. 2 sensor brackets in the scope of delivery</li> </ul>		35
[8] Slot cover B, S	<ul style="list-style-type: none"> <li>For protection against dirt</li> </ul>		33
[9] Proximity sensor, slot type 8 X, Z	<ul style="list-style-type: none"> <li>Inductive proximity sensor, for slot type 8</li> <li>The order code X, Z includes 1 switch lug in the scope of delivery</li> </ul>		34
[10] Plug socket with cable V	For proximity sensor (order code W and R)		35
[11] Clip CL	For mounting the proximity sensor cable in the slot		33
[12] Slot nut Y	For mounting attachments		33
[13] Adapter kit DHAM	For mounting the support profile on the axis		34
[14] Support profile HMIA	For mounting and guiding an energy chain		34
[15] Profile mounting M	For mounting the axis on the side of the profile		29
[16] Central support EAHF	For mounting the axis on the bottom of the profile		30
[17] Foot mounting F	For mounting the axis on the end cap		28




## Type codes

<b>001</b>	<b>Series</b>	
<b>EGC</b>	Electric linear axis	
<b>002</b>	<b>Size</b>	
<b>70</b>	70	
<b>80</b>	80	
<b>120</b>	120	
<b>185</b>	185	
<b>003</b>	<b>Stroke</b>	
<b>...</b>	50 ... 8500	
<b>004</b>	<b>Guide</b>	
<b>FA</b>	Guide axis	
<b>005</b>	<b>Stroke reserve</b>	
<b>OH</b>	None	
<b>...H</b>	0 ... 999 mm	
<b>006</b>	<b>Slide</b>	
<b>GK</b>	Standard slide	
<b>GP</b>	Standard slide, protected	
<b>007</b>	<b>Additional slide</b>	
<b>...K</b>	1 ... 2 pieces	
<b>008</b>	<b>Lubrication function</b>	
	None	
<b>C</b>	Lubrication adapter	
<b>009</b>	<b>Actuation type</b>	
	None	
<b>PN</b>	Pneumatically actuated	
<b>010</b>	<b>Accessories</b>	
	None	
<b>ZUB</b>	Accessories supplied loose	
<b>011</b>	<b>Foot mounting</b>	
	None	
<b>F</b>	1 record	
<b>012</b>	<b>Profile mounting</b>	
	None	
<b>...M</b>	1 - 50 pieces	
<b>013</b>	<b>Mounting slot covering</b>	
	None	
<b>...B</b>	1 ... 50 pieces	
<b>014</b>	<b>Slot cover, sensor slot</b>	
	Without	
<b>...S</b>	1 - 50 pieces	

<b>015</b>	<b>Slot nut, mounting slot</b>	
	Without	
<b>...Y</b>	1 ... 99 pieces	
<b>016</b>	<b>Proximity switch, inductive, slot 8, PNP, N/O contact, cable 7.5 m</b>	
	None	
<b>...X</b>	1 ... 6 pieces	
<b>017</b>	<b>Proximity switch, inductive, slot 8, N/C contact, cable 7.5 m</b>	
	None	
<b>...Z</b>	1 ... 6 pieces	
<b>018</b>	<b>Emergency buffer with retaining bracket</b>	
	Without	
<b>...A</b>	1 ... 2 pieces	
<b>019</b>	<b>Shock absorber with retaining bracket</b>	
	None	
<b>...C</b>	1 ... 2 pieces	
<b>020</b>	<b>Proximity switch, inductive, M8, PNP, N/O contact, cable 2.5 m</b>	
	Without	
<b>...O</b>	1 ... 99 pieces	
<b>021</b>	<b>Proximity switch, inductive, M8, PNP, N/C contact, cable 2.5 m</b>	
	None	
<b>...P</b>	1 ... 99 pieces	
<b>022</b>	<b>Proximity switch, inductive, M8, PNP, N/C contact, M8 plug</b>	
	None	
<b>...R</b>	1 ... 99 pieces	
<b>023</b>	<b>Proximity switch, inductive, M8, PNP, N/O contact, M8 plug</b>	
	Without	
<b>...W</b>	1 ... 99 pieces	
<b>024</b>	<b>Connecting cable 2.5 m, M8, 3-wire</b>	
	None	
<b>...V</b>	1 ... 99 pieces	
<b>025</b>	<b>Cable clip</b>	
	None	
<b>10CL</b>	10 pieces	
<b>20CL</b>	20 pieces	
<b>30CL</b>	30 pieces	
<b>40CL</b>	40 pieces	
<b>50CL</b>	50 pieces	
<b>60CL</b>	60 pieces	
<b>70CL</b>	70 pieces	
<b>80CL</b>	80 pieces	
<b>90CL</b>	90 pieces	
<b>100CL</b>	100 units	
<b>026</b>	<b>Operating instructions</b>	
	With operating instructions	
<b>DN</b>	Without operating instructions	

## Data sheet



-  Size  
70 ... 185
-  Stroke length  
50 ... 8500 mm
-  [www.festo.com](http://www.festo.com)



General technical data					
Size		70	80	120	185
Design		Guide			
Guide		Recirculating ball bearing guide			
Mounting position		Any			
Working stroke					
EGC-...-GK/-GP	[mm]	50 ... 5000	50 ... 8500	50 ... 8500	50 ... 8500
Max. speed	[m/s]	5			
Max. acceleration	[m/s <sup>2</sup> ]	50			

Operating and environmental conditions		
Ambient temperature	[°C]	-10 ... +60
Degree of protection		IP40

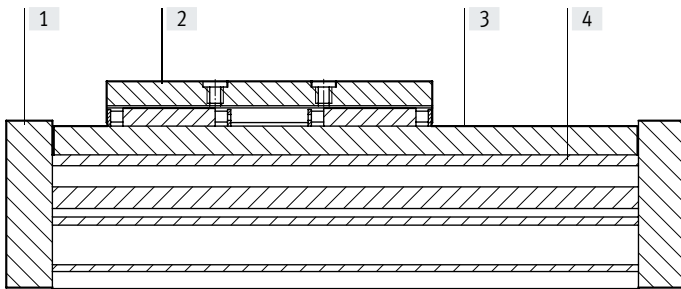
Weight [kg]					
Size		70	80	120	185
Basic weight with 0 mm stroke <sup>1)</sup>					
EGC-...-GK/-GP		1.20	2.00	7.30	20.80
Additional weight per 1000 mm stroke		4.20	6.20	15.00	29.00
Moving load					
EGC-...-GK/-GP		0.30	0.55	2.00	6.00
Additional slide					
EGC-...-K		0.30	0.55	2.00	6.00
Clamping unit					
EGC-...-1H...-PN		-	0.70	2.30	4.90
EGC-...-2H-PN		-	1.30	4.00	8.30

1) Including slide

## Data sheet

### Materials

#### Sectional view



Axis	
[1] End cap	Anodised wrought aluminium alloy
[2] Slide	Anodised wrought aluminium alloy
[3] Guide rail	High-alloy steel
[4] Profile	Anodised wrought aluminium alloy
Note on materials	RoHS-compliant Contains paint-wetting impairment substances

### Technical data – Clamping unit

Dimensions → page 20

Size	80	120	185
Pneumatic connection	M5	M5	M5
Clamping type	Clamping via spring force, compressed air to release		
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> at reference energy [J]	–	750 35	750 70
Number of clamping operations under rated load [millions of 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

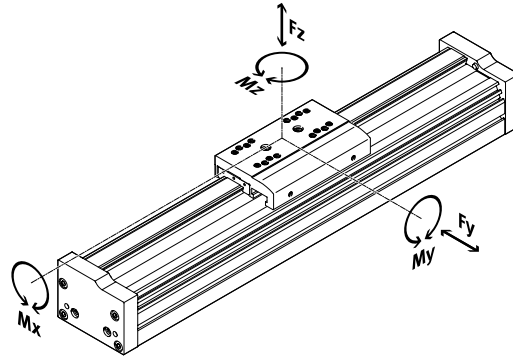
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Operating pressure	
Clamping unit open [bar]	4.5 ... 8
Clamping unit closed [bar]	Unpressurised
Ambient temperature [°C]	–10 ... +60



## Data sheet

### 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.



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:

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

Permissible forces and torques			70	80	120	185
Size						
F <sub>y</sub> max.	[N]		1850	3050	6890	15200
F <sub>z</sub> max.	[N]		1850	3050	6890	15200
M <sub>x</sub> max.	[Nm]		16	36	144	529
M <sub>y</sub> max.	GK/GP [Nm]		51	97	380	1157
M <sub>z</sub> max.	GK/GP [Nm]		51	97	380	1157

### Service life

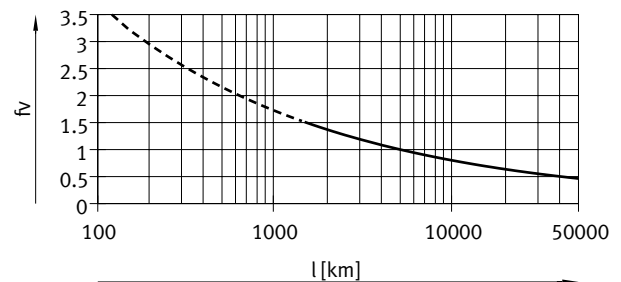
The service life of the guide depends on the load. To provide a rough indication of the service life of the guide, the graph below plots the load comparison factor  $f_v$  against the service life.

These values are only theoretical. You must consult your local contact person at Festo for load comparison factors  $f_v$  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 above formula gives a value of 1.5 for the load comparison factor. According to the graph, the guide would have a service life of approx. 1500 km. Reducing the acceleration reduces the M<sub>z</sub> and M<sub>y</sub> values. A load comparison factor of 1 now gives a service life of 5000 km.



#### Note

Engineering software  
PositioningDrives  
www.festo.com

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.

## Data sheet

### Stroke reserve

Stroke length

Stroke reserve

The selected stroke corresponds in principle to the required working stroke. The variant GK does not have a wiper seal on the guide. This variant therefore additionally has a safety distance between the drive cover and slide that is not designated as part of the working stroke.

It is possible to define a safety distance (similar to that for GK) between the drive cover and slide for the variants GP and GK-C using the “stroke reserve” characteristic in the modular product system. For the variant GK, 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-FA-20H-...  
 Working stroke = 500 mm  
 2x stroke reserve = 40 mm  
 Total length = 540 mm  
 (540 mm = 500 mm + 2x 20 mm)

Size	70	80	120	185
L9 = safety distance for GK (per end position) [mm]	10.5	13	18	21

### Working stroke reduction

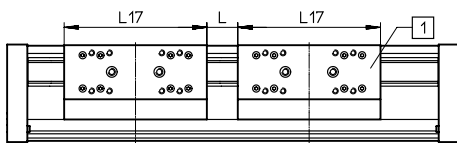
For standard slide GK/GP with additional slide K

- In the case of a guide axis with additional slide, the working stroke is reduced by the length of the additional slide and the distance between the two slides
- For the variant GP, the additional slide is also protected
- If the variant GK-C is ordered, the additional slide is also supplied with lubrication adapters

L17 = slide length

L = distance between the two slides

[1] = additional slide



#### Example:

Type EGC-70-500-FA-...-GK-1K

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	70		80		120		185	
	GK	GP	GK	GP or GK-C	GK	GP or GK-C	GK	GK-C
Length L17 [mm]	100	121	120	146	203.3	236	282.8	322
Min. distance between the slides [mm]	–	21	–	26	–	36	–	42
L18								

## Data sheet

### 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 cover must be removed.
- Shock absorbers must not be used in combination with GK-C.

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

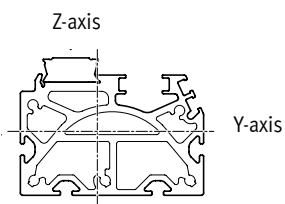
### Working stroke reduction

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 moments of area



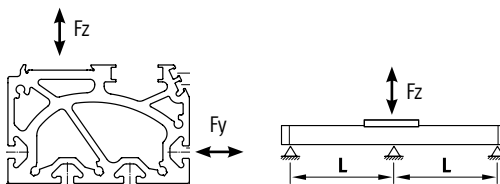
Size		70	80	120	185
I <sub>y</sub>	[mm <sup>4</sup> ]	3.95x10 <sup>5</sup>	8.44x10 <sup>5</sup>	4.62x10 <sup>6</sup>	2.34x10 <sup>7</sup>
I <sub>z</sub>	[mm <sup>4</sup> ]	5.77x10 <sup>5</sup>	1.16x10 <sup>6</sup>	5.65x10 <sup>6</sup>	2.74x10 <sup>7</sup>

## Data sheet

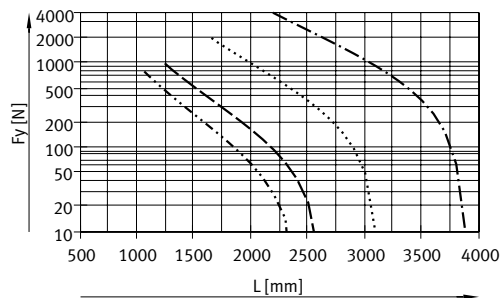
### Maximum permissible support spacing L (without profile mounting MUE/central support EAHF) as a function of force F

In order to limit deflection in the case of large strokes, the axis may need to be supported.

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  $f = 0.5 \text{ mm}$ .

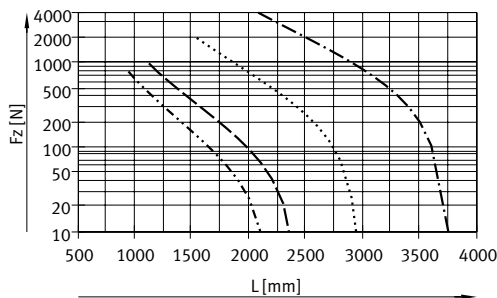


Force  $F_y$



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

Force  $F_z$



### Recommended deflection limits

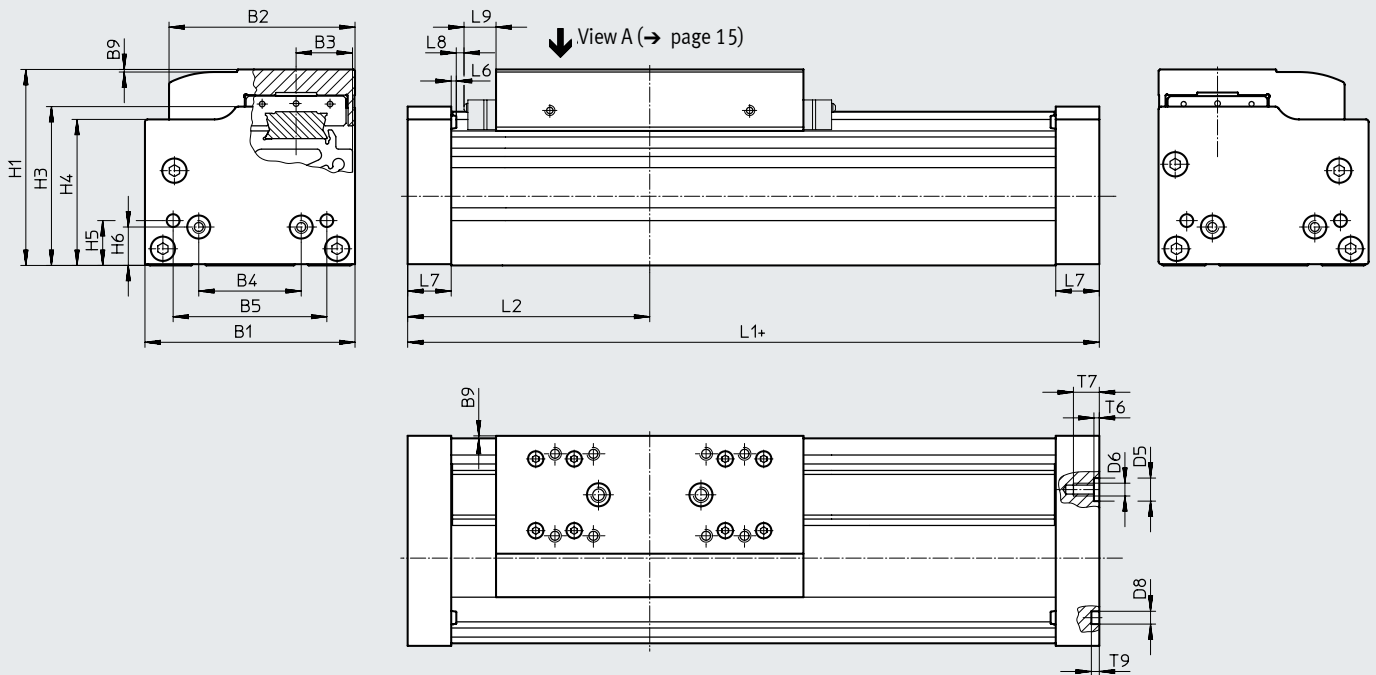
Adherence to the following deflection limits is recommended so as not to impair the functionality of the axes. Greater deformation can result in increased friction, greater wear and reduced service life.

Size	Dynamic deflection (moving load)	Static deflection (stationary load)
70 ... 185	0.05% of the axis length, max. 0.5 mm	0.1% of the axis length

Data sheet

Dimensions

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



- + = plus stroke length + 2x stroke reserve
- L9 = for GK: safety distance per end position;  
for GP: dimension for wiper seal → page 10;  
for GK-C/GV-C: dimension for adapter → page 18

Size	B1	B2	B3	B4	B5	B9	D5 ∅ H7
70	69	58.6	16.5	30	45	1	-
80	82	72.6	22	40	60	1	9
120	120	107	33	80	40	1	-
185	186	169	53	120	80	1	-

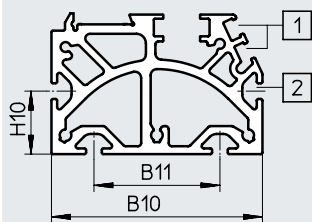
Size	D6	D8 ∅ H7	H1	H3	H4	H5	H6	L1
70	M5	5	64	50.5	47	13	13	163
80	M5	5	76.5	62	57	17.5	15	190
120	M8	9	111.5	89	82	22	22	306
185	M10	9	172.5	141	131.5	25	25	406

Size	L2	L6	L7	L8	L9	T6	T7	T9
70	81.5	1.8	16	3	10.5	-	10	3.1
80	95	2	17	3	13	2.1	10.1	3.1
120	153	2	30	3	18	-	16	2.1
185	203	2	37	3	21	-	20	2.1

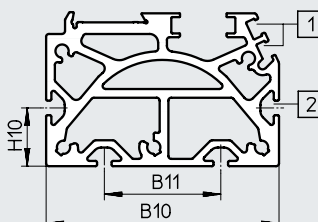
## Data sheet

### Profile

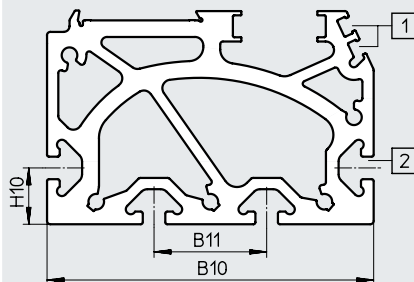
Size 70



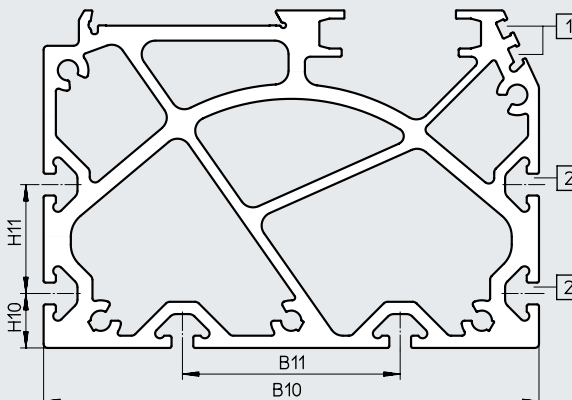
Size 80



Size 120



Size 185



- [1] Sensor slot for proximity sensor
- [2] Mounting slot for slot nut

Size	B10	B11	H10	H11
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  
 → [www.festo.com/sp](http://www.festo.com/sp) User documentation

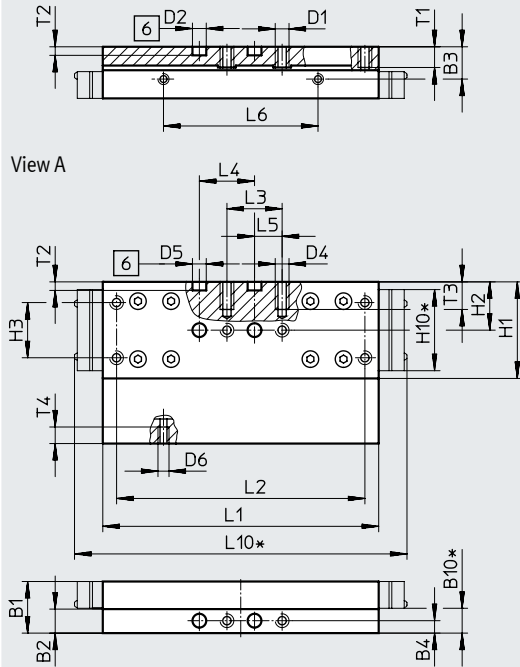
Data sheet

Dimensions

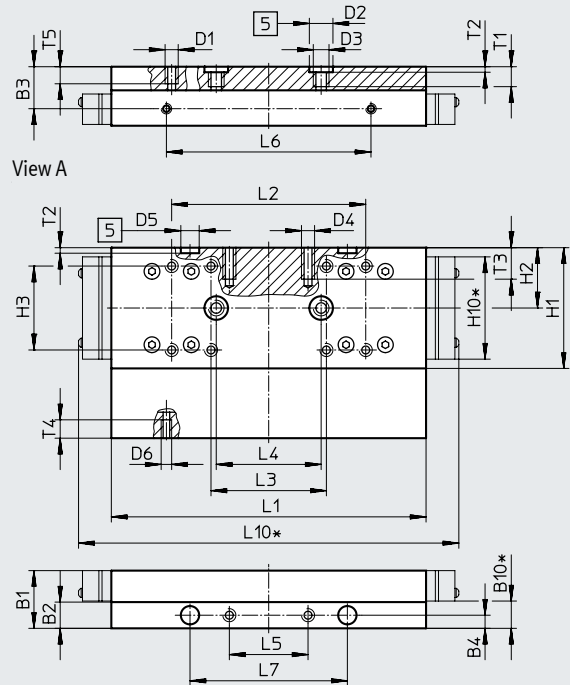
Download CAD data → [www.festo.com](http://www.festo.com)

GK – Standard slide / GP – Standard slide, protected

Size 70



Size 80



- [5] Drilled hole for centring sleeve
- [6] Drilled hole for centring pin
- \* Protected version

Size	B1	B2	B3	B4	B10*	D1	D2 ∅ H7	D3	D4	D5 ∅ H7	D6	H1	H2	H3
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

Size	H10*	L1	L2	L3	L4	L5	L6	L7	L10*	T1	T2	T3	T4	T5
		±0.1			±0.03		±0.1	±0.05			+0.1			
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

\* Protected version

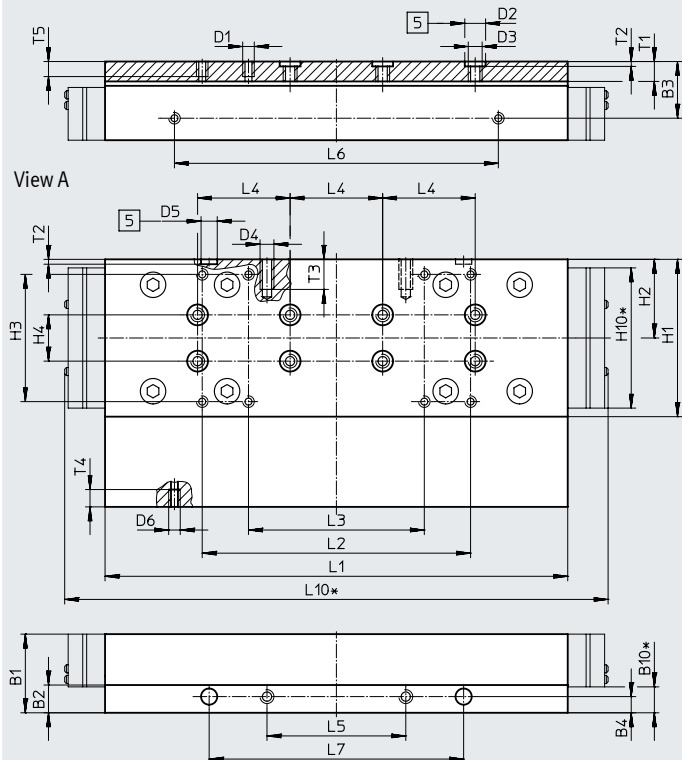
Data sheet

Dimensions

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

GK – Standard slide / GP – Standard slide, protected

Size 120



[5] Drilled hole for centring sleeve

[6] Drilled hole for centring pin

\* Protected version

Size	B1	B2	B3	B4	B10*	D1	D2 ∅ H7	D3	D4	D5 ∅ H7	D6	H1	H2	H3	H4 ±0.03
120	34	12	24.5	7	11.2	M5	9	M6	M6	7	M5	68	34	55 ±0.2	20

Size	H10*	L1 ±0.1	L2	L3	L4 ±0.03	L5	L6 ±0.1	L7 ±0.05	L10*	T1	T2 +0.1	T3	T4	T5
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

\* Protected version



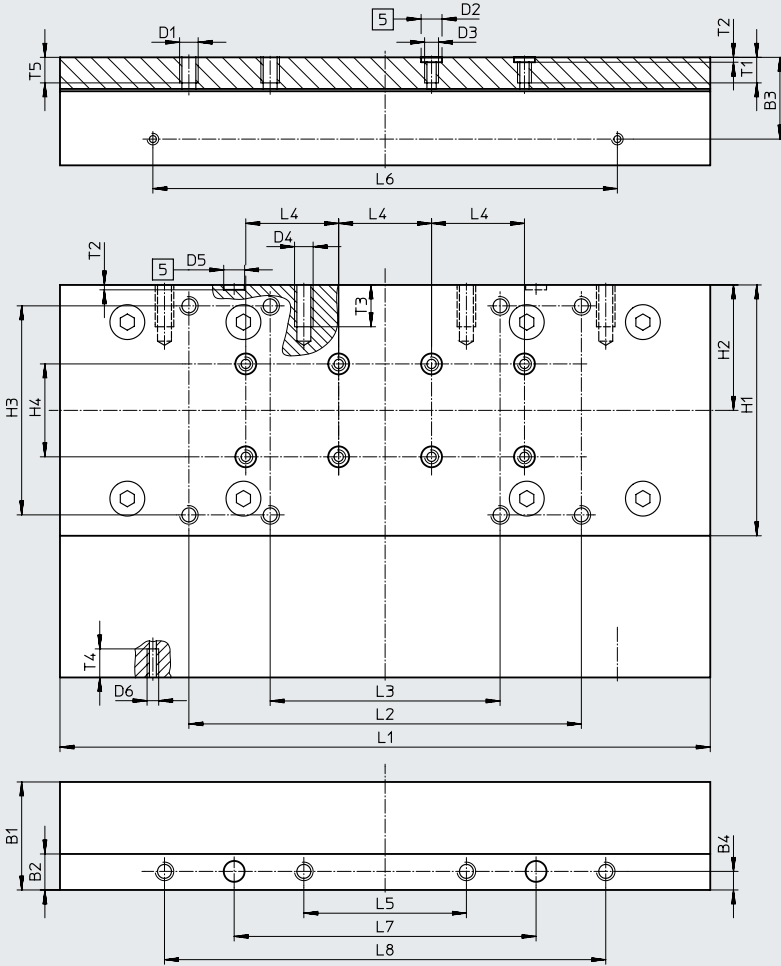
Data sheet

Dimensions

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

GK – Standard slide

Size 185



[5] Drilled hole for centring sleeve

Size	B1	B2	B3	B4	D1	D2 ∅ H7	D3	D4	D5 ∅ H7	D6	H1	H2	H3	H4
185	46.5	15.5	35.2	8	M8	9	M6	M8	9	M5	108	54	90 ±0.2	40 ±0.03

Size	L1	L2	L3	L4	L5	L6	L7	L8	T1	T2	T3	T4	T5
185	282.8 ±0.1	169 ±0.2	99 ±0.2	40 ±0.03	70 ±0.2	200 ±0.1	130 ±0.05	190 ±0.2	11	2.1 ±0.1	18	12.3	12

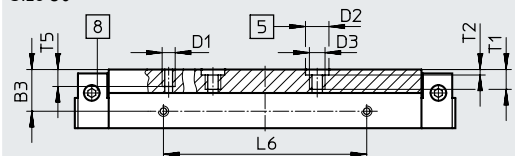
Data sheet

Dimensions

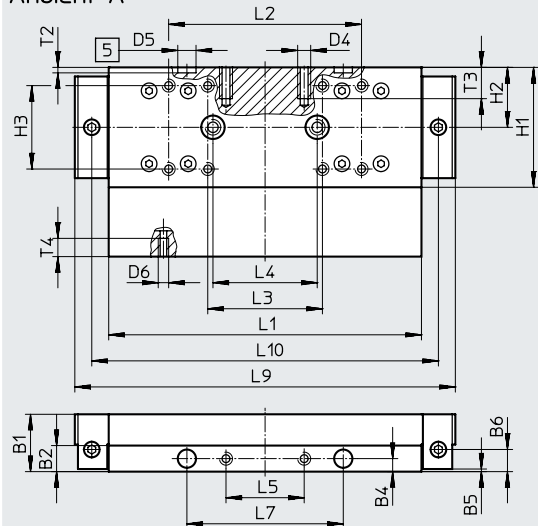
Download CAD data → [www.festo.com](http://www.festo.com)

GK-C – Standard slide with lubrication adapter

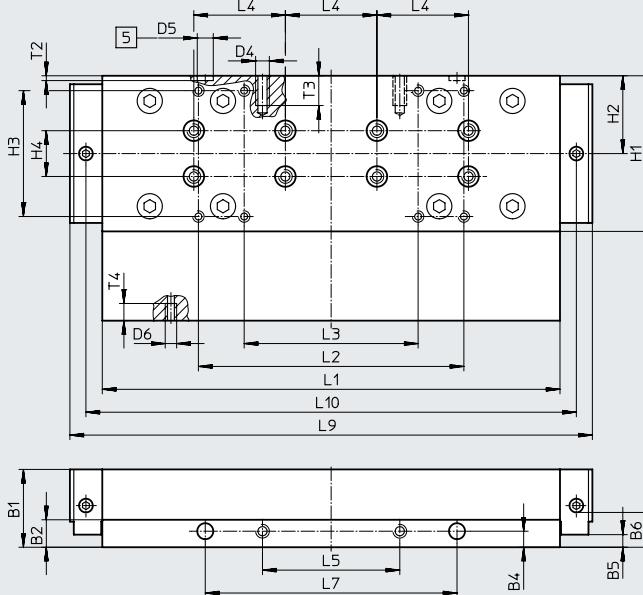
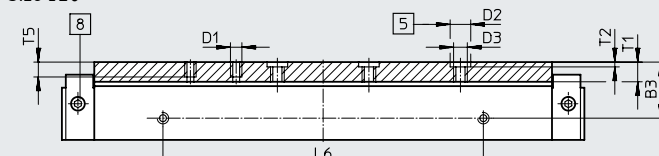
Size 80



Ansicht A



Size 120



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

Size	B1	B2	B3	B4	B5	B6	D1	D2 ∅ H7	D3	D4
					±0.1					
80	22	10	16	5	1	8.5	M5	9	M6	M5
120	34	12	24.5	7	5.5	18.2	M5	9	M6	M6

Size	D5 ∅ H7	D6	H1	H2	H3	H4	L1	L2	L3	L4
					±0.2	±0.03	±0.1	±0.2	±0.2	±0.03
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	Size	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	

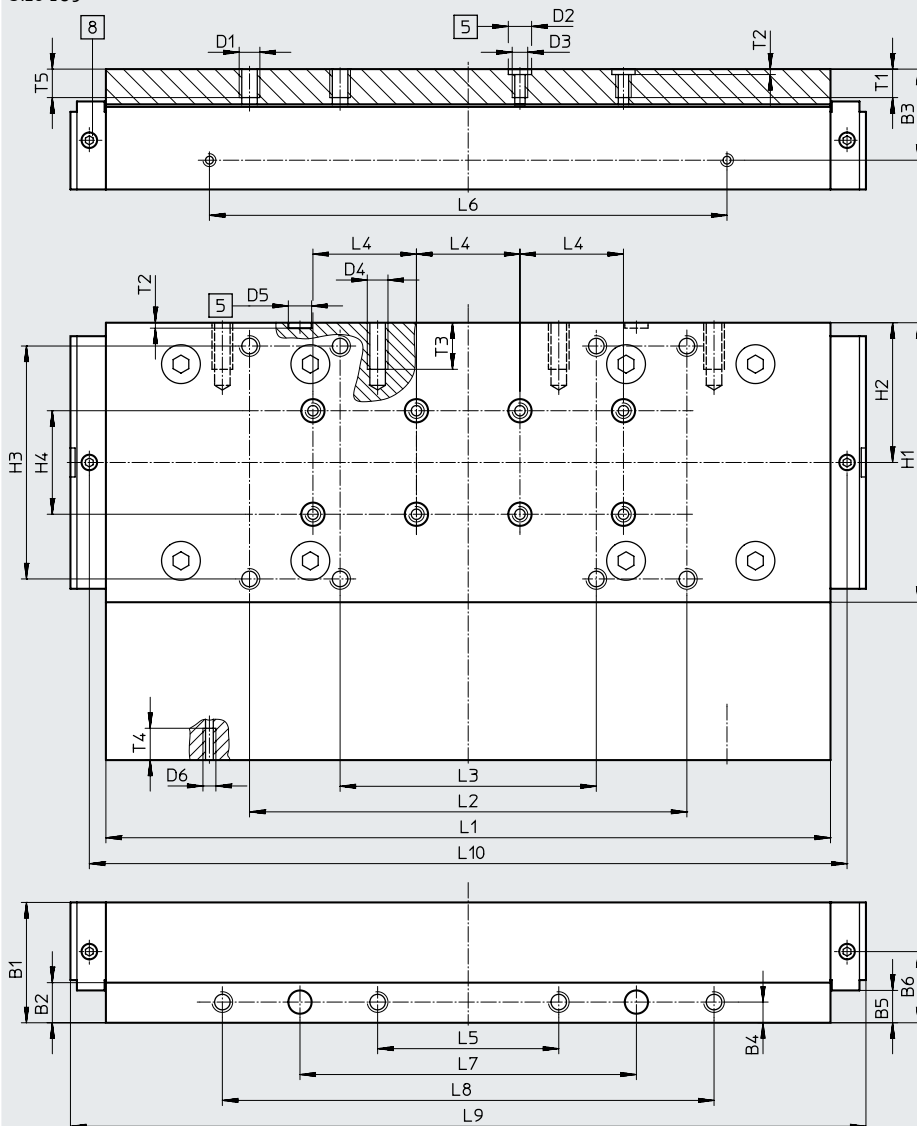
Data sheet

Dimensions

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

GK-C – Standard slide with lubrication adapter

Size 185



[5] Drilled hole for centring sleeve

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

Size	B1	B2	B3	B4	B5	B6	D1	D2 ∅ H7	D3	D4
185	46.5	15.5	35.2	8	±0.1 12.5	27.5	M8	9	M6	M8

Size	D5 ∅ H7	D6	H1	H2	H3	H4	L1	L2	L3	L4
185	9	M5	108	54	±0.2 90	±0.03 40	±0.1 282.8	±0.2 169	±0.2 99	±0.03 40

Size	L5	L6	L7	L8	L9	L10	T1	T2	T3	T4	T5
185	±0.2 70	±0.1 200	±0.05 130	±0.2 190	307.4	292.8	11	+0.1 2.1	18	12.3	12

## Data sheet

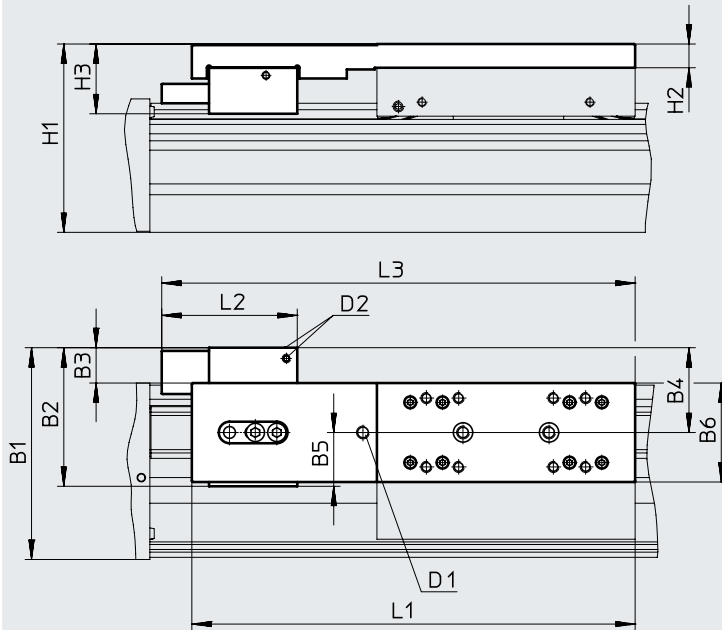
### Dimensions

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

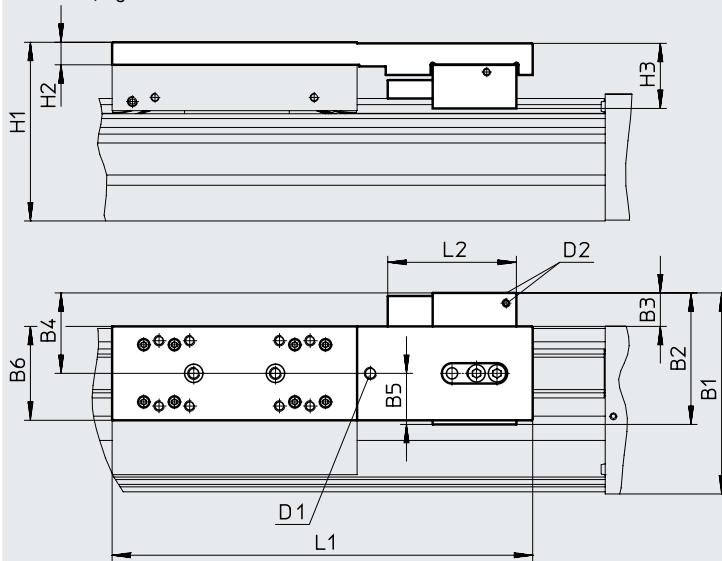
1HL/1HR/2H – With clamping unit

Size 80

1-channel, left



1-channel, right



D2 Compressed air supply port

Data sheet

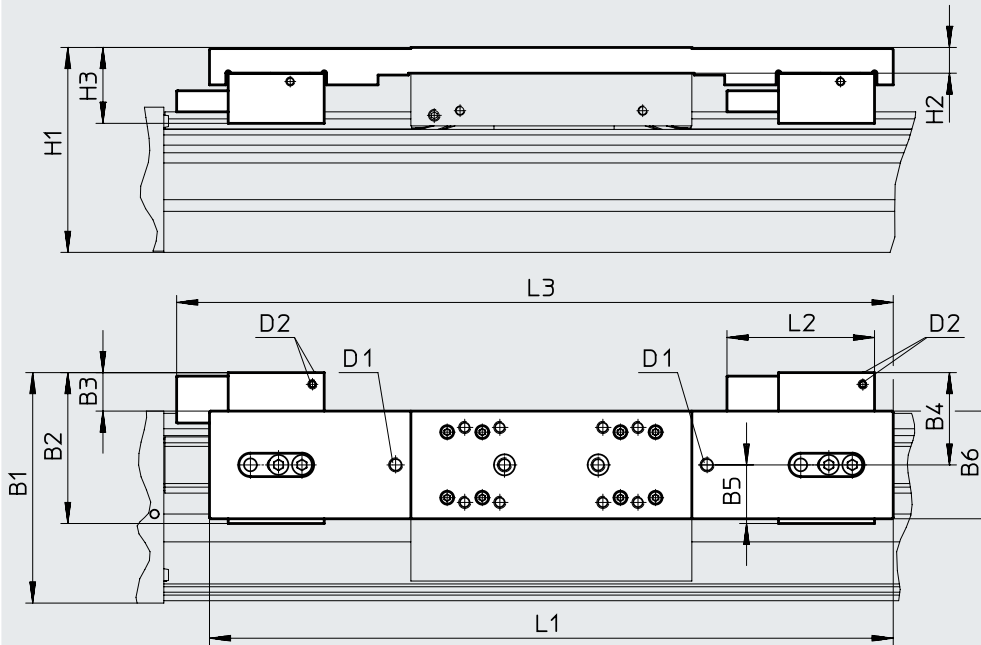
Dimensions

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

1HL/1HR/2H – With clamping unit

Size 80

2-channel



D2 Compressed air supply port

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														306
EGC-80-...-C-2H-PN												292		

Data sheet

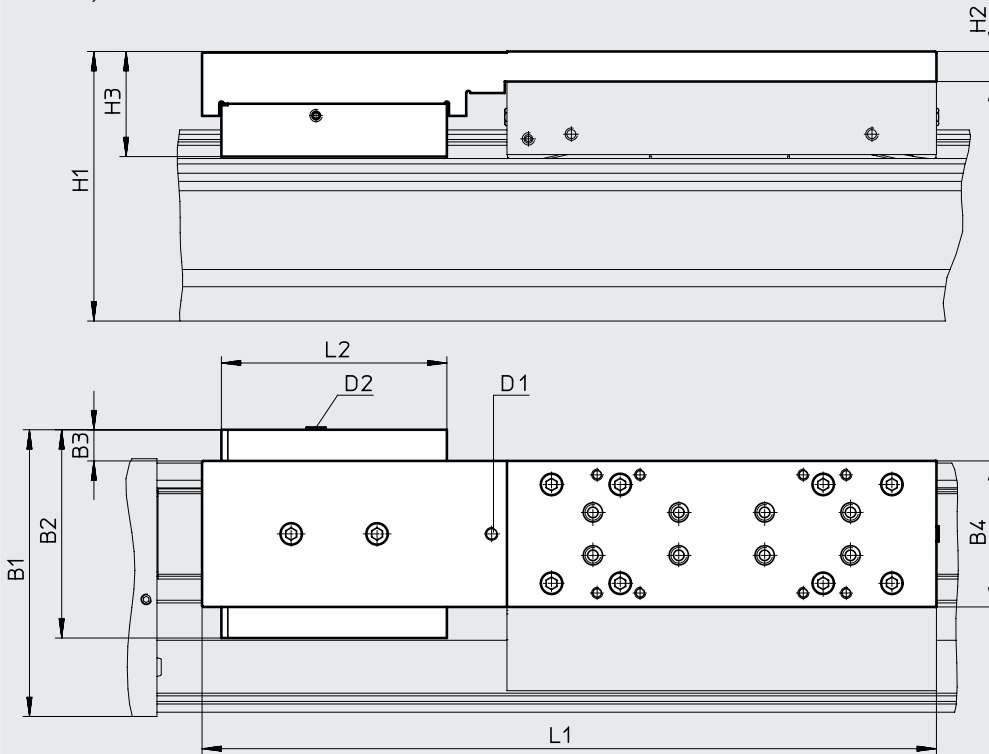
**Dimensions**

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

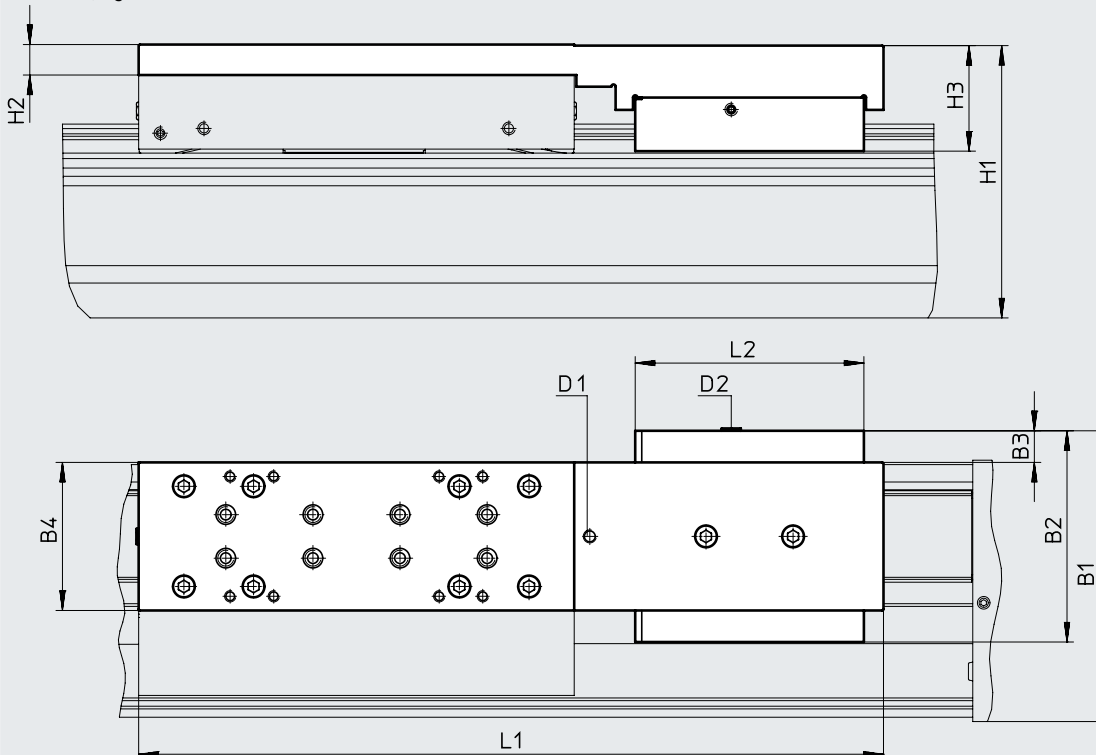
1HL/1HR/2H – With clamping unit

Size 120/185

1-channel, left



1-channel, right



D2 Compressed air supply port

Data sheet

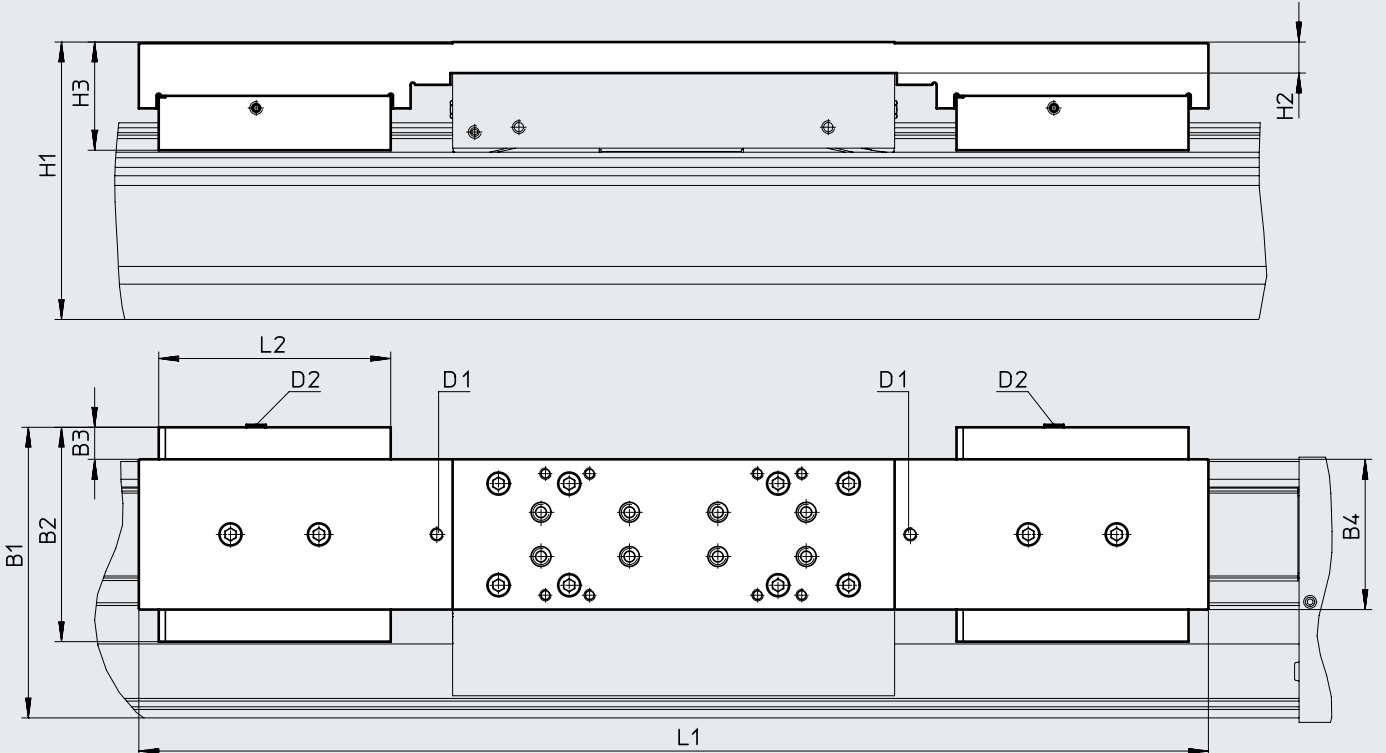
Dimensions

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

1HL/1HR/2H – With clamping unit

Size 120/185

2-channel



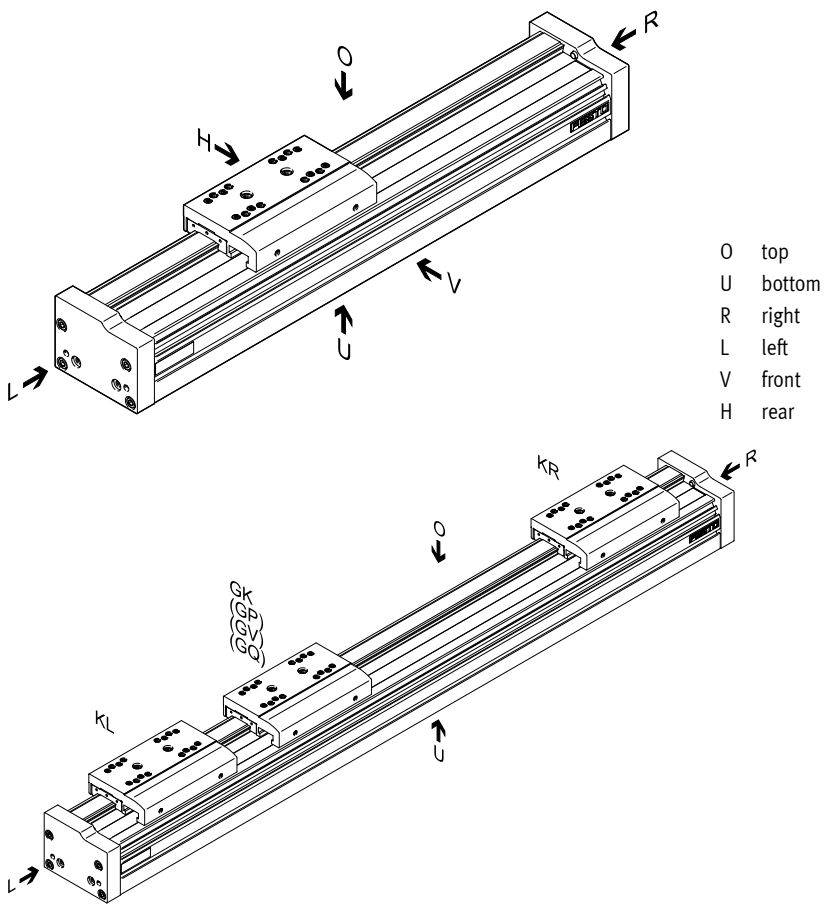
D2 Compressed air supply port

Type	B1	B2	B3	B4	H1	H2	H3	D1	D2	L1	L2
<b>Size 120</b>											
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										484	
EGC-120-...-C-2H-PN											
<b>Size 185</b>											
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										584	
EGC-185-...-C-2H-PN											

## Ordering data – Modular product system

### Order code

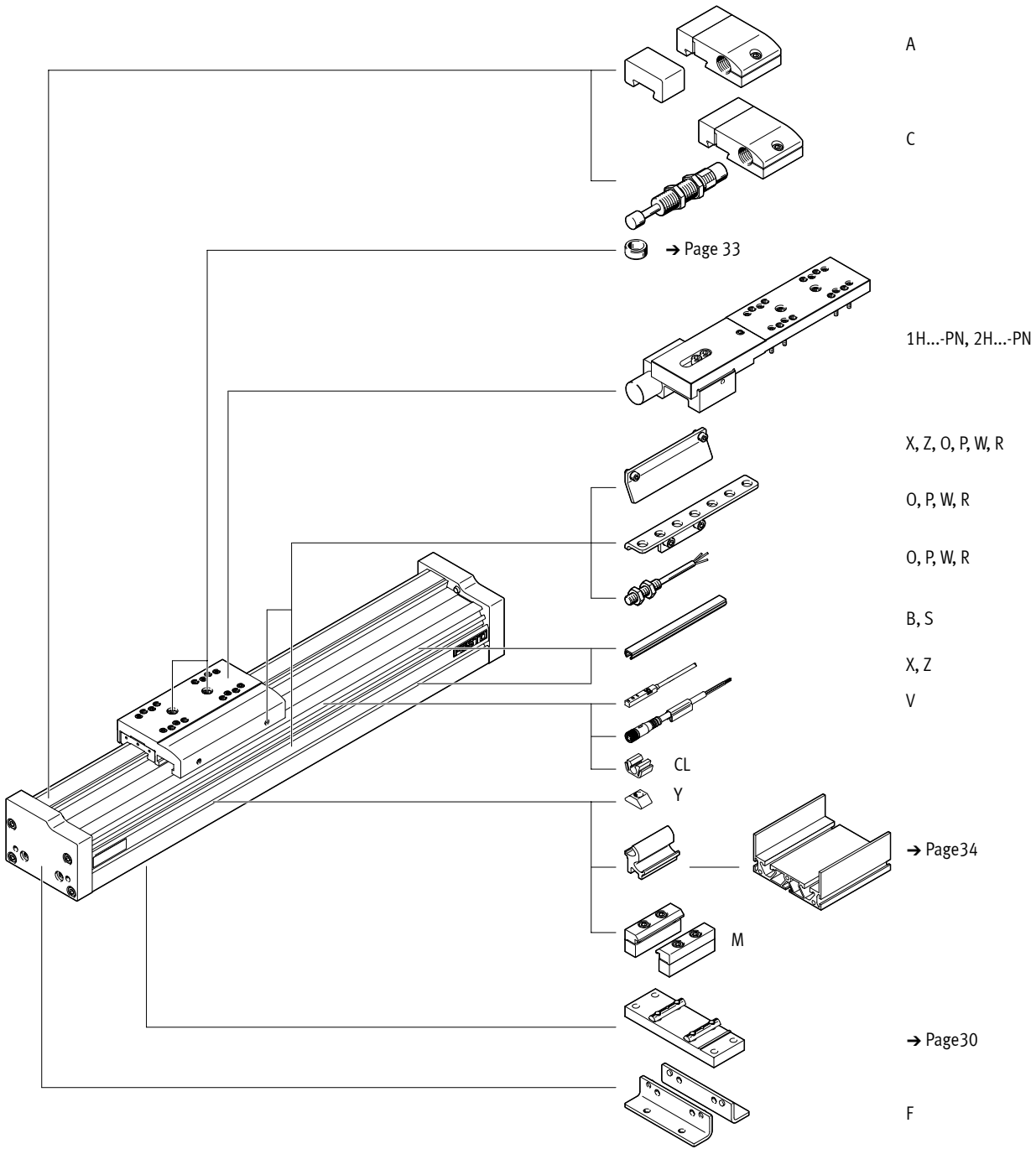
Mandatory data





# Ordering data – Modular product system

Order code  
Accessories



## Ordering data – Modular product system

Ordering table								
Size	70	80	120	185	Conditions	Code	Enter code	
Module no.	<b>558864</b>	<b>558865</b>	<b>558866</b>	<b>558868</b>				
Design	Guide axis					<b>EGC</b>	EGC	
Size	70	80	120	185		-...	-...	
Stroke [mm]	50 ... 5000	50 ... 8500	50 ... 8500	50 ... 8500	[1]	-...	-...	
Guide	Guide axis					<b>-FA</b>	-FA	
Stroke reserve [mm]	0 ... 999 (0 = no stroke reserve)				[1]	<b>-...H</b>		
Slide	Standard slide					<b>-GK</b>		
	Standard slide, protected			-		<b>-GP</b>		
Additional slide	1 ... 2				[2]	<b>-...K</b>		
Lubrication function	Standard							
	-	Lubrication adapter					<b>-C</b>	
Clamping unit	-	1-channel, left			[3]		<b>-1HL</b>	
	-	1-channel, right			[3]		<b>-1HR</b>	
	-	2-channel			[3]		<b>-2H</b>	
Actuation type	-	Pneumatic					<b>-PN</b>	

[1] -... The sum of the stroke length and 2x stroke reserve must not exceed the maximum stroke length

[2] ... K If the protected slide variant (GP) is selected, then the additional slide is also protected

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 (K) → page 10

[3] 1HL, 1HR, 2H Not with additional slide K

Only with PN

Working stroke reduction in combination with clamping unit (1HL, 1HR, 2H) → page 10

## Ordering data – Modular product system

Ordering table		70	80	120	185	Conditions	Code	Enter code
Size								
Accessories		Accessories enclosed separately					ZUB-	ZUB-
Foot mounting		1					F	
Profile mounting		1 ... 50					...M	
Covering	Mounting slot	1 ... 50 (1 = 2 pieces, 500 mm length)					...B	
	Sensor slot	1 ... 50 (1 = 2 pieces, 500 mm length)					...S	
Slot nut for mounting slot		1 ... 99					...Y	
Proximity sensor (SIES), inductive, slot type 8, PNP, incl. switch lug	N/O contact, 7.5 m cable	1 ... 6					...X	
	N/C contact, 7.5 m cable	1 ... 6					...Z	
Emergency buffer with retaining bracket		1 ... 2				[4]	...A	
Shock absorber with retaining bracket		1 ... 2				[5]	...C	
Proximity sensor (SIEN), inductive, M8, PNP, incl. switch lug with sensor bracket	N/O contact, 2.5 m cable	1 ... 99					...O	
	N/C contact, 2.5 m cable	1 ... 99					...P	
	N/O contact, M8 plug	1 ... 99					...W	
	N/C contact, M8 plug	1 ... 99					...R	
Plug socket with cable 2.5 m, M8, 3-wire		1 ... 99					...V	
Cable clip		10, 20, 30, 40, 50, 60, 70, 80, 90					...CL	
Operating instructions		Express waiver – no operating instructions to be included as they are already available (operating instructions in PDF format are available free of charge on the Internet at <a href="http://www.festo.com">www.festo.com</a> )					-DN	

[4] ... A Emergency buffer with retaining bracket A cannot be combined with slide GP, GK-C, shock absorber with retaining bracket C and clamping unit 1H...-PN, 2H-PN

[5] ... C Shock absorber with retaining bracket C cannot be combined with slide GP, GK-C, emergency buffer with retaining bracket A and clamping unit 1H...-PN, 2H-PN

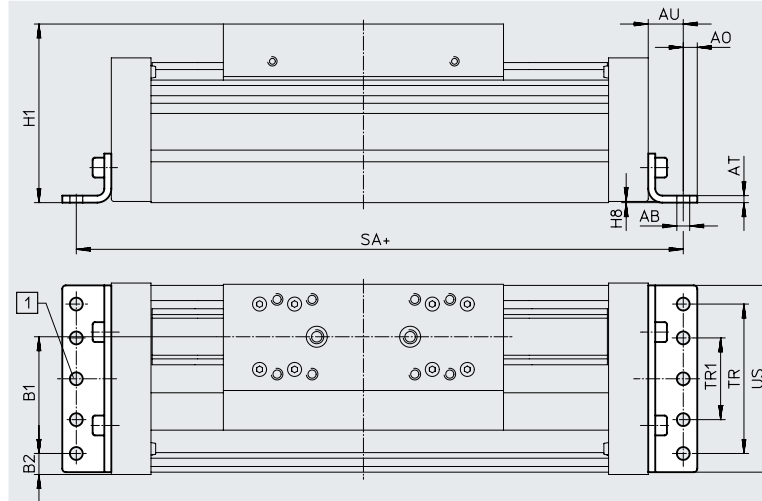
**Note**

The code X, Z includes a switch lug in the scope of delivery. The code O, P, W, R includes one switch lug and max. two sensor brackets in the scope of delivery.

## Accessories

**Foot mounting HPE**  
(order code F)

Material:  
Galvanised steel  
RoHS-compliant



[1] Drilled hole for HPE-120  
+ = plus stroke length + 2x stroke reserve

### Dimensions and ordering data

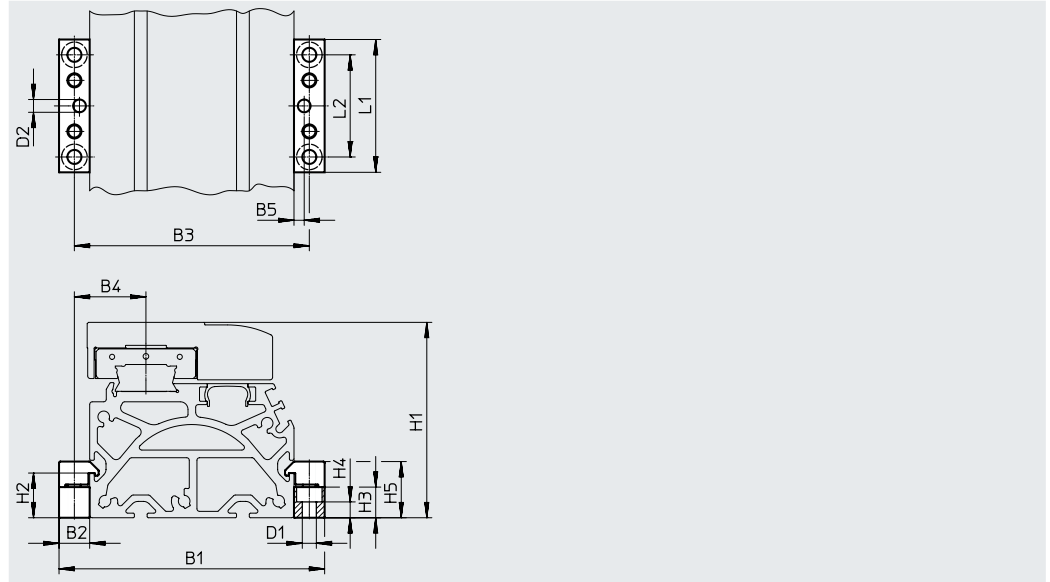
For size	AB ∅	A0	AT	AU	B1	B2	H1	H8
70	5.5	6	3	13	37	14.5	64	0.5
80	5.5	6	3	15	38	21	76.5	0.5
120	9	8	6	22	65	20	111.5	0.6
185	9	12	8	25	118	13	172.5	0.5

For size	SA	TR	TR1	US	Weight [g]	Part no.	Type
70	189	40	–	67	115	558321	HPE-70
80	220	40	–	80	150	558322	HPE-80
120	350	80	–	116	578	558323	HPE-120
185	456	160	80	182	1438	558325	HPE-185

## Accessories

### Profile mounting MUE (order code M)

Material:  
Anodised aluminium  
RoHS-compliant



#### Dimensions and ordering data

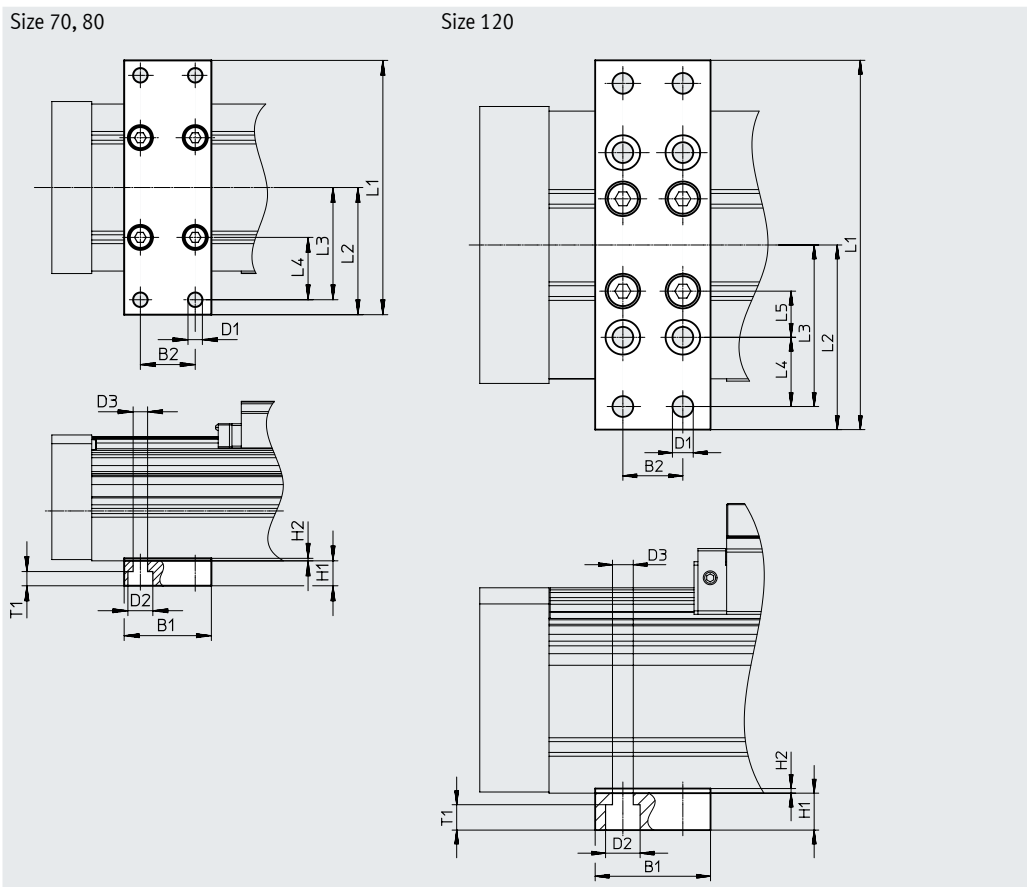
For size	B1	B2	B3	B4	B5	D1 ∅	D2 ∅ H7	H1	H2
70	91	12	79	22.5	4	5.5	5	64	17.5
80	104	12	92	28	4	5.5	5	76.5	17.5
120	154	19	135	42.5	4	9	5	111.5	16
185	220	19	201	62.5	4	9	5	172.5	16

For size	H3	H4	H5	L1	L2	Weight [g]	Part no.	Type
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

Accessories

Central support EAHF

Material:  
Anodised aluminium  
RoHS-compliant



Dimensions and ordering data

For size	B1	B2	D1 ∅	D2 ∅	D3 ∅	H1	L1
70	35	22	5.8	10	5.8	10	102
80							112
120	50	26	9	15	9	16	160

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

## Accessories

### Shock absorber retainer KYE

Emergency buffer NPE → page 33

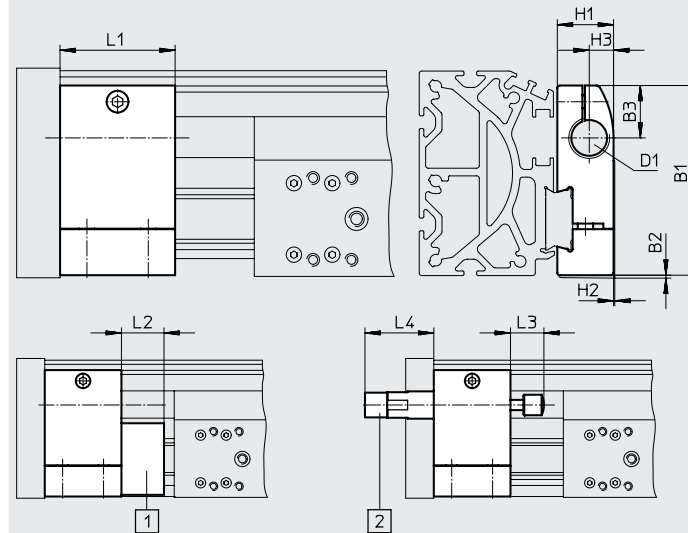
Shock absorber YSRW → page 33  
(order code A or C)

Material:

Anodised aluminium

RoHS-compliant

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



[1] Emergency buffer NPE

[2] Shock absorber YSRW

#### Dimensions and ordering data

For size	B1	B2	B3	D1	H1	H2	H3	L1	L2	L3	L4	Weight [g]	Part no.	Type
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

### Switch lug SF-EGC-1

for sensing via proximity sensor

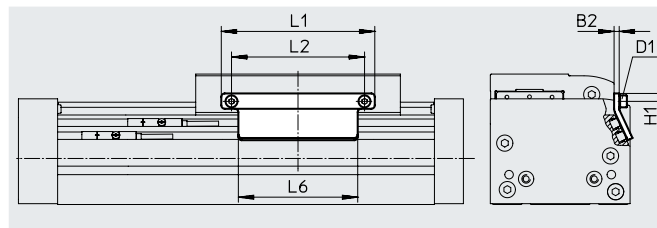
SIES-8M

(order code X or Z)

Material:

Galvanised steel

RoHS-compliant



#### Dimensions and ordering data

For size	B2	D1	H1	L1	L2	L6	Weight [g]	Part no.	Type
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

## Accessories

### Switch lug SF-EGC-2

for sensing via proximity sensor  
SIEN-M8B (order code O, P, W or R) or  
SIES-8M (order code X or Z)

Material:

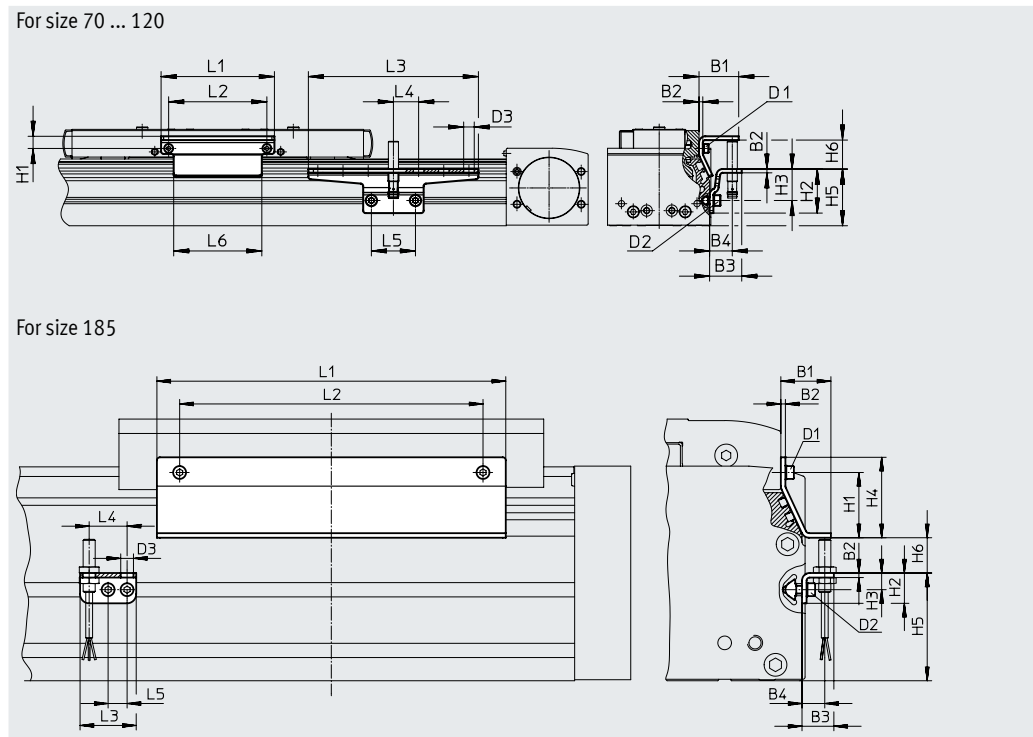
Galvanised steel  
RoHS-compliant

### Sensor bracket HWS-EGC

for proximity sensor SIEN-M8B (order  
code O, P, W or R)

Material:

Galvanised steel  
RoHS-compliant



Dimensions and ordering data										
For size	B1	B2	B3	B4	D1	D2	D3 ∅	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	

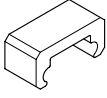
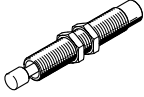





For size	H3	H4	H5	H6 max.	L1	L2	L3	L4	L5	L6
70	25	–	45	13.5	70	56	135	20	35	50
80	25	–	45	23.5	90	78	135	20	35	70
120	55	–	75	24	170	140	215	20	35	170
185	11	53	71	25.5	230	200	37	25	12.5	230

For size	Weight [g]	Part no.	Type
<b>Switch lug</b>			
70	100	558052	SF-EGC-2-70
80	130	558053	SF-EGC-2-80
120	277	558054	SF-EGC-2-120
185	390	558056	SF-EGC-2-185

For size	Weight [g]	Part no.	Type
<b>Sensor bracket</b>			
70	110	558057	HWS-EGC-M5
80	110	558057	HWS-EGC-M5
120	217	570365	HWS-EGC-M8-B
185	58	560517	HWS-EGC-M8-KURZ (SHORT)



## Accessories

Ordering data		For size	Description	Order code	Part no.	Type	PJ <sup>1)</sup>
<b>Emergency buffer NPE</b>							
	70	For use in combination with shock absorber retainer KYE	A	562581	NPE-70	1	
	80			562582	NPE-80		
	120			562583	NPE-120		
	185			562584	NPE-185		
<b>Shock absorber YSRW</b> <span style="float: right;">Data sheets → Internet: ysrw</span>							
	70	For use in combination with shock absorber retainer KYE	C	191194	YSRW-8-14	1	
	80			191196	YSRW-12-20		
	120			191197	YSRW-16-26		
	185			191198	YSRW-20-34		
<b>Slot nut NST</b>							
	70, 80	For mounting slot	Y	150914	NST-5-M5	1	
				8047843	NST-5-M5-10	10	
				8047878	NST-5-M5-50	50	
	120, 185	For mounting slot	Y	150915	NST-8-M6	1	
				8047868	NST-8-M6-10	10	
				8047869	NST-8-M6-50	50	
<b>Centring pin/sleeve ZBS/ZBH</b>							
	70	For slide	-	150928	ZBS-5	10	
	80, 120, 185			150927	ZBH-9		
<b>Slot cover ABP</b>							
	70, 80	For mounting slot Each 0.5 m	B	151681	ABP-5	2	
	120, 185			151682	ABP-8		
<b>Slot cover ABP-S</b>							
	70 ... 185	For sensor slot Each 0.5 m	S	563360	ABP-5-S1	2	
<b>Clip SMBK</b>							
	70 ... 185	For sensor slot, for mounting the proximity sensor cables	CL	534254	SMBK-8	10	

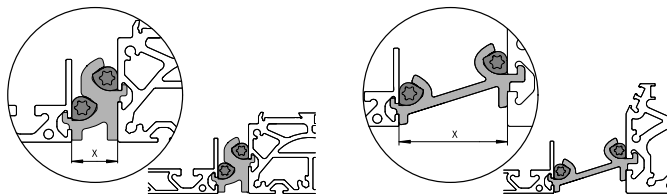
1) Packaging unit

## 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.

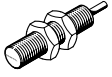
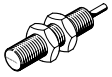




Ordering data					
	For size	Description	Part no.	Type	PU <sup>1)</sup>
<b>Adapter kit DHAM</b>					
	80	<ul style="list-style-type: none"> <li>For mounting the support profile on the axis</li> <li>Spacing between axis and profile is 20 mm</li> </ul>	562241	DHAM-ME-N1-CL	1
	120		562242	DHAM-ME-N2-CL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

1) Packaging unit

Ordering data – Proximity sensors for T-slot, inductive							Data sheets → Internet: sies
	Type of mounting	Electrical connection	Switching output	Cable length [m]	Order code	Part no.	Type
<b>N/O contact</b>							
	Insertable in the slot from above, flush with the cylinder profile	Cable, 3-wire	PNP	7.5	X	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-wire	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
<b>N/C contact</b>							
	Insertable in the slot from above, flush with the cylinder profile	Cable, 3-wire	PNP	7.5	Z	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-wire	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 sensors M8 (round design), inductive							Data sheets → Internet: sien
	Electrical connection	LED	Switching output	Cable length [m]	Order code	Part no.	Type
<b>N/O contact</b>							
	Cable, 3-wire	■	PNP	2.5	O	150386	SIEN-M8B-PS-K-L
	Plug M8x1, 3-pin	■	PNP	–	W	150387	SIEN-M8B-PS-S-L
<b>N/C contact</b>							
	Cable, 3-wire	■	PNP	2.5	P	150390	SIEN-M8B-PO-K-L
	Plug M8x1, 3-pin	■	PNP	–	R	150391	SIEN-M8B-PO-S-L
<b>Ordering data – Connecting cables</b>							Data sheets → Internet: nebu
	Electrical connection, left	Electrical connection, right		Cable length [m]	Part no.	Type	
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire		2.5	159420	SIM-M8-3GD-2.5-PU	
				2.5	541333	NEBU-M8G3-K-2.5-LE3	
				5	541334	NEBU-M8G3-K-5-LE3	
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire		2.5	541338	NEBU-M8W3-K-2.5-LE3	
				5	541341	NEBU-M8W3-K-5-LE3	