

## Toothed belt axes ELGG

**FESTO**

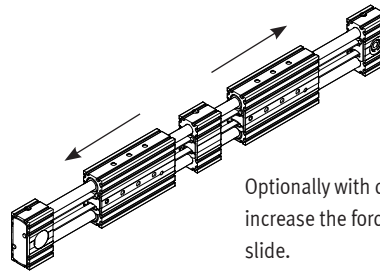
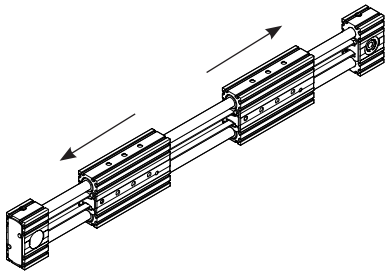


## Characteristics

### At a glance

- Toothed belt axis with two opposing slides
- Optimum price/performance ratio
- Ready-to-install unit for quick and easy design
- High reliability thanks to tested service life of 2500 km per slide
- Motor mounting possible on 4 sides with identical mounting accessories
- Complete kit for a simple and space-saving solution for end-position sensing
- Plain-bearing guide
  - For small loads
  - Restricted operating behaviour with torque load
  - Guide not backlash-free
- Recirculating ball bearing guide
  - For medium loads
  - Very good operating behaviour with torque load
  - Backlash-free guide (preloaded guide elements)

### Opposing movement, controlled via a motor



Optionally with central support to increase the forces and torques per slide.

### Application examples

- Suitable for sorting, separating and spreading
- For opening doors
- For gripping tasks with small loads
- Positioning and handling with low process forces
- Centring and aligning

### 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.

Design	Size	Working stroke per slide [mm]	Velocity [m/s]	Repetition accuracy [mm]	Feed force <sup>1)</sup> [N]	Guide characteristics Forces and torques				
						F <sub>y</sub> [N]	F <sub>z</sub> [N]	M <sub>x</sub> [Nm]	M <sub>y</sub> [Nm]	M <sub>z</sub> [Nm]
	35	50 ... 700	3	±0.1	50	50	50	2.5	20	20
	45	50 ... 900	3	±0.1	100	100	100	5	40	40
	55	50 ... 1200	3	±0.1	350	300	300	15	124	124

1) Combined feed force of both slides

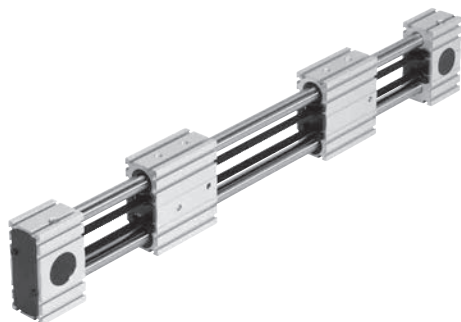
### Note

Engineering software  
PositioningDrives  
[www.festo.com](http://www.festo.com)

## Characteristics

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

Toothed belt axis with recirculating ball bearing guide or plain-bearing guide



#### Motor

→ Page 18



Servo motor:  
EMMT-AS, EMME-AS  
Stepper motor:  
EMMS-ST



#### Note

A range of specially matched complete solutions is available for the toothed belt axis ELGG and the motors.

#### Servo drive



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

#### Motor mounting kit

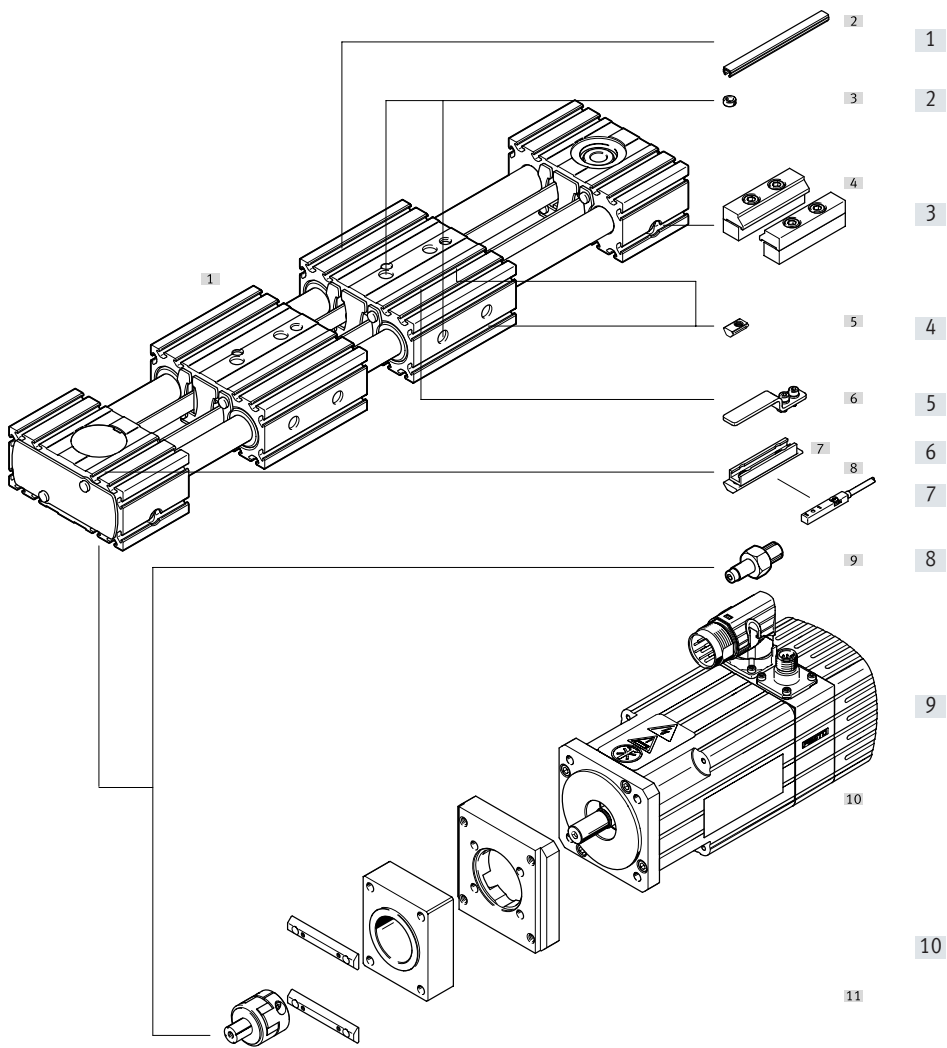
→ Page 18



Kit comprising:

- Motor flange
- Coupling housing
- Coupling
- Screws
- Slot nuts

Peripherals overview



## Peripherals overview

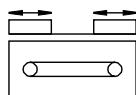
Variants and accessories			
	Type/order code	Description	→ Page/Internet
[1]	Slot cover NC	<ul style="list-style-type: none"> <li>For protection against contamination</li> </ul>	23
[2]	Centring sleeve ZBH	<ul style="list-style-type: none"> <li>For centring loads and attachments on the slide</li> <li>4 centring sleeves included in the scope of delivery of the axis</li> </ul>	23
[3]	Profile mounting MA	For mounting the axis on the bearing cap	22
[4]	Slot nut NM	For mounting attachments	23
[5]	Switch lug SA, SB	For sensing the slide position	22
[6]	Sensor bracket SA, SB	Adapter for mounting the inductive proximity switches on the axis	22
[7]	Proximity switch, T-slot SA, SB	<ul style="list-style-type: none"> <li>Inductive proximity switch, for T-slot</li> <li>1 switch lug and 1 sensor bracket are included in the scope of delivery with the order code SA, SB</li> </ul>	24
[8]	Drive shaft EA	<ul style="list-style-type: none"> <li>Can, if required, be used as an alternative interface</li> <li>No drive shaft is required for the axis/motor combinations → page 18</li> </ul>	23
[9]	Motor EMME, EMMS	Motors specially matched to the axis, with or without brake	18
[10]	Axial kit EAMM	For axial motor mounting (comprises: coupling, coupling housing and motor flange)	18
–	Connecting cable NEBU	For proximity switch (order code SA and SB)	24




## Type codes

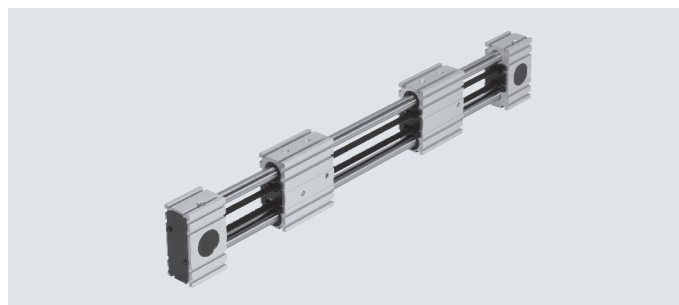
001	Series	
ELGG	Linear axis	
002	Drive system	
TB	Toothed belt	
003	Guide	
GF	Plain bearing	
	Recirculating ball bearing guide	
004	Size	
35	35	
45	45	
55	55	
005	Stroke	
...	50 ... 1200	
006	Stroke reserve	
...H	0 ... 999 mm	
007	Slide design	
	Standard	
L	Slide, long	
008	Additional slide	
	None	
ZB	Additional slide 1x left, 1x right	

009	Additional function	
	None	
M	With central support	
010	Proximity sensor, inductive, slot 8, N/O contact, cable 7.5 m	
	Without	
...SA	1 ... 6 units	
011	Proximity sensor, inductive, slot 8, N/C contact, cable 7.5 m	
	Without	
...SB	1 ... 6 units	
012	Mounting slot covering	
	None	
...NC	1 ... 50 units	
013	Slot nut for mounting slot	
	None	
...NM	1 ... 50 units	
014	Drive shaft	
	None	
...EA	1 ... 4 pieces	
015	Profile mounting	
	None	
...MA	1 ... 2 units	

## Data sheet



-  Size  
35 ... 55
-  Stroke length  
50 ... 1200 mm
-  [www.festo.com](http://www.festo.com)



## General technical data

Size	35	45	55
Design	Electromechanical linear axis with toothed belt		
Guide	Recirculating ball bearing guide Plain-bearing guide		
Mounting position	Any		
Working stroke per slide [mm]	50 ... 700	50 ... 900	50 ... 1200 <sup>1)</sup>
Max. feed force $F_x^{2)}$ [N]	50	100	350
Max. no-load torque [Nm]	0.18	0.3	0.5
Max. driving torque [Nm]	0.46	1.24	5
Max. no-load resistance to shifting [N]	10.8	16.1	27.9
Max. velocity			
Recirculating ball bearing guide [m/s]	3		
Plain-bearing guide [m/s]	1		
Max. acceleration <sup>3)</sup> [m/s <sup>2</sup> ]	50		
Repetition accuracy [mm]	±0.1		

1) The maximum stroke is 1190 mm in combination with extended slide

2) Combined feed force of both slides

3) The max. acceleration is dependent on the moving mass, the driving torque and the max. feed force

## Operating and environmental conditions

Ambient temperature		
Recirculating ball bearing guide [°C]	-10 ... +50	
Plain-bearing guide [°C]	0 ... +40	
Degree of protection	IP20	
Duty cycle [%]	100	

## Weight [kg]

Size	35	45	55
<b>Recirculating ball bearing guide</b>			
Basic weight with 0 mm stroke <sup>1)</sup>			
Standard slide	1.9	4.2	7.2
Long slide	2.6	6.0	10.3
Additional weight per 1000 mm stroke	4.9	10.0	15.6
Moving mass	0.8	1.7	2.9
Slide			
Standard slide	0.8	1.7	2.9
Long slide	1.3	3.0	5.2
Additional slide	0.6	1.5	2.6
Central support	0.2	0.5	0.7

1) Including 2 slides, without central support

## Data sheet

<b>Weight [kg]</b>			
Size	35	45	55
<b>Plain-bearing guide</b>			
Basic weight with 0 mm stroke <sup>1)</sup>			
Standard slide	1.9	4.3	7.2
Long slide	2.7	6.2	10.8
Additional weight per 1000 mm stroke	4.9	10.0	15.6
Moving mass	0.8	1.7	3.0
Slide			
Standard slide	0.8	1.7	3.0
Long slide	1.5	3.2	5.6
Additional slide	0.6	1.5	2.6
Central support	0.2	0.5	0.7

1) Including 2 slides, without central support

<b>Toothed belt</b>			
Size	35	45	55
Pitch [mm]	2	3	3
Elongation [%]	0.094	0.08	0.21
Width [mm]	10	15	19.3
Effective diameter [mm]	18.46	24.83	28.65
Feed constant [mm/rev]	58	78	90

<b>Mass moment of inertia</b>			
Size	35	45	55
$J_0$			
Standard slide [kg mm <sup>2</sup> ]	76.12	289.55	656.98
Long slide [kg mm <sup>2</sup> ]	128.6	522.01	1212.78
$J_S$ per meter stroke [kg mm <sup>2</sup> /m]	0.26	1.1	1.9
$J_L$ per kg payload [kg mm <sup>2</sup> /kg]	85	154	205
$J_W$ Additional slide [kg mm <sup>2</sup> ]	55	224	533

The mass moment of inertia  $J_A$  of the entire axis is calculated as follows:

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

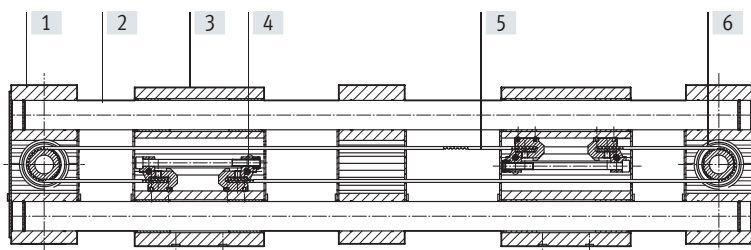
$K$  = Number of additional slides



## Data sheet

## Materials

## Sectional view



Axis		
[1]	Bearing cap, profile	Anodised wrought aluminium alloy
[2]	Guide rods	Hardened and hard-chromium plated tempered steel
[3]	Slide, profile	Anodised wrought aluminium alloy
[4]	Toothed belt clamping component	Beryllium copper
[5]	Toothed belt	Polychloroprene with glass cord and nylon coating
[6]	Belt pulley	High-alloy stainless steel
	Note on materials	RoHS-compliant
		Contains paint-wetting impairment substances

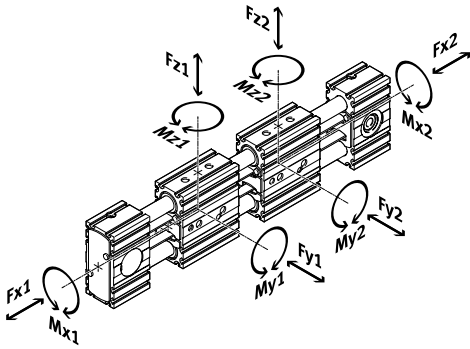
## Data sheet

### Characteristic load values

The indicated forces and torques refer to the centre of the guide. 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.

#### Without central support



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:

#### Without central support

Calculating the load comparison factor:

$$f_v = \frac{|F_{y1} + F_{y2}|}{F_{y3}} + \frac{|F_{z1} + F_{z2}|}{F_{z3}} + \frac{|M_{x1} + M_{x2}|}{M_{x3}} + \frac{|M_{y1} + M_{y2}|}{M_{y3}} + \frac{|M_{z1} + M_{z2}|}{M_{z3}} \leq 1$$

$F_1/M_1$  dynamic values  
 $F_2/M_2$  dynamic values  
 $F_3/M_3$  maximum values

#### With central support

Calculating the load comparison factor:

$$f_v = \frac{|F_{y1}|}{F_{y3}} + \frac{|F_{z1}|}{F_{z3}} + \frac{|M_{x1}|}{M_{x3}} + \frac{|M_{y1}|}{M_{y3}} + \frac{|M_{z1}|}{M_{z3}} \leq 1 \quad f_v = \frac{|F_{y2}|}{F_{y3}} + \frac{|F_{z2}|}{F_{z3}} + \frac{|M_{x2}|}{M_{x3}} + \frac{|M_{y2}|}{M_{y3}} + \frac{|M_{z2}|}{M_{z3}} \leq 1$$

$F_1/M_1$  dynamic values  
 $F_2/M_2$  dynamic values  
 $F_3/M_3$  maximum values

### Permissible forces and torques for a service life of 2500 km per slide

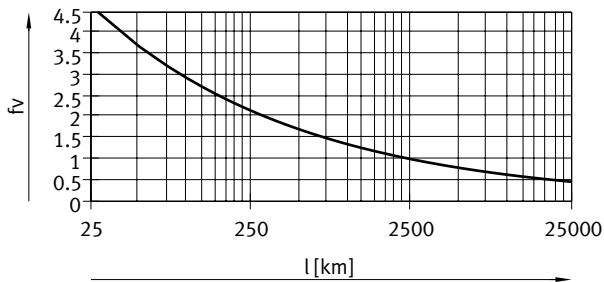
Guide	Plain-bearing guide			Recirculating ball bearing guide		
	35	45	55	35	45	55
$F_{y_{max}}, F_{z_{max}}$ [N]	50	100	300	50	100	300
Standard slide						
$M_{x_{max}}$ [Nm]	1	2.5	5	2.5	5	15
$M_{y_{max}}$ [Nm]	4	8	16	8	16	48
$M_{z_{max}}$ [Nm]	4	8	16	8	16	48
Long slide						
$M_{x_{max}}$ [Nm]	1	2.5	5	2.5	5	15
$M_{y_{max}}$ [Nm]	10	20	40	20	40	124
$M_{z_{max}}$ [Nm]	10	20	40	20	40	124

## Data sheet

## Service life

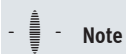
The service life of the guide depends on the load. To provide a rough indication of the service life of the guide, the graph below plots the load comparison factor  $f_v$  against the service life.

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 formula → page 10 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. 750 km. Reducing the acceleration reduces the  $M_z$  and  $M_y$  values. A load comparison factor of 1 now gives a service life of 2500 km.

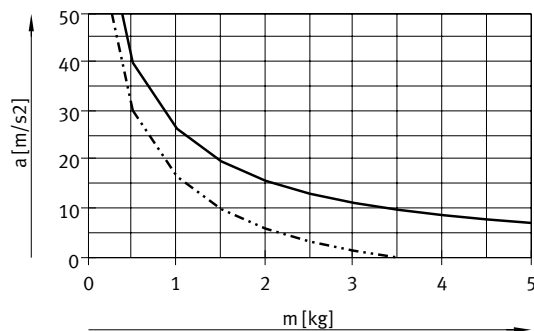


## Note

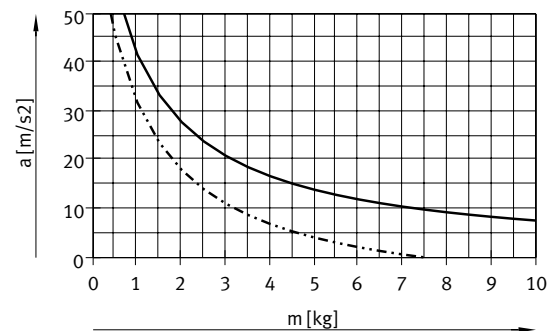
Engineering software  
PositioningDrives  
www.festo.com

Max. acceleration  $a$  as a function of applied load  $m$ 

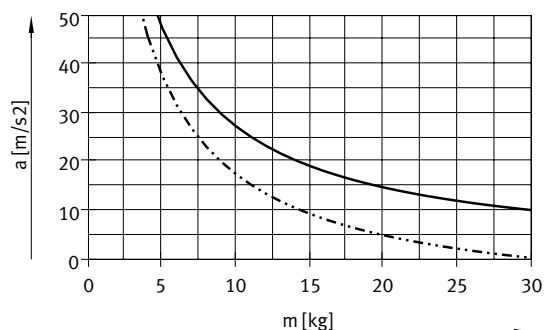
ELGG-35



ELGG-45



ELGG-55



## Note

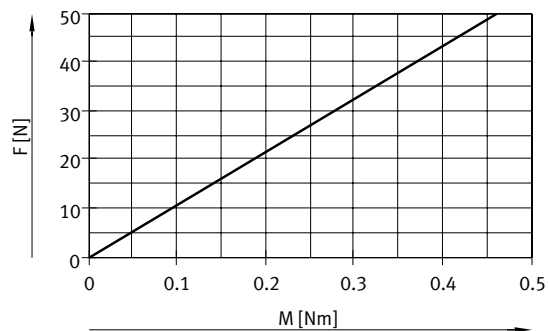
For the plain-bearing guide (GF) it is recommended to reduce the acceleration to minimise overshings and increase positioning accuracy.

— Horizontal  
- - - Vertical

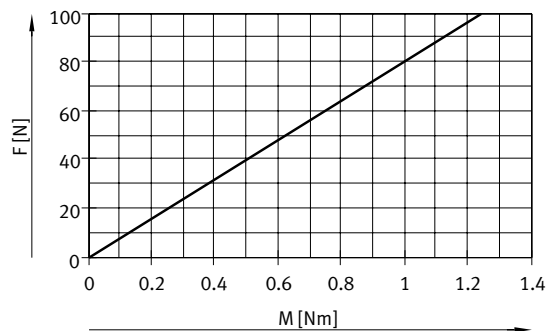
Data sheet

Feed force  $F_x$  as a function of input torque  $M$

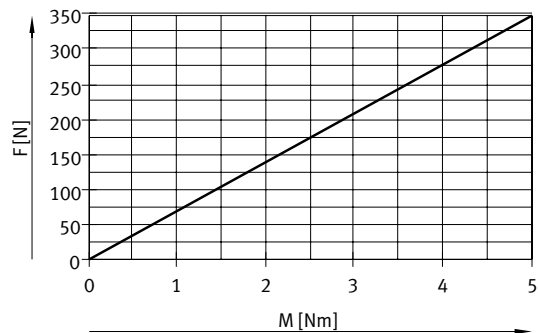
ELGG-35



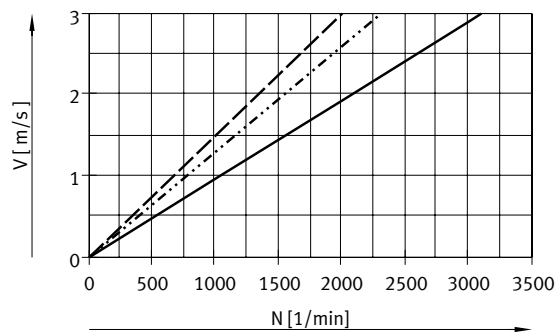
ELGG-45



ELGG-55



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



— ELGR-TB-35  
 ..... ELGR-TB-45  
 - - - ELGR-TB-55

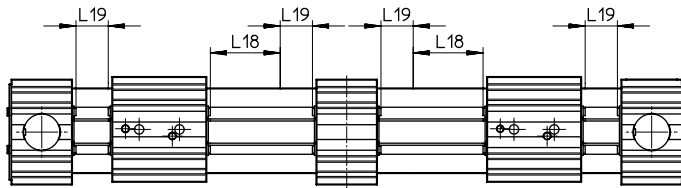
Minimum nominal stroke

With standard slide or long slide L with additional slide ZB

Size	35		45		55		
Variant	-/L	ZB	-/L	ZB	-/L	ZB	
Min. nominal stroke	[mm]	50	126	50	146	50	166

## Data sheet

## Stroke reserve



L18 = Nominal stroke  
L19 = Stroke reserve

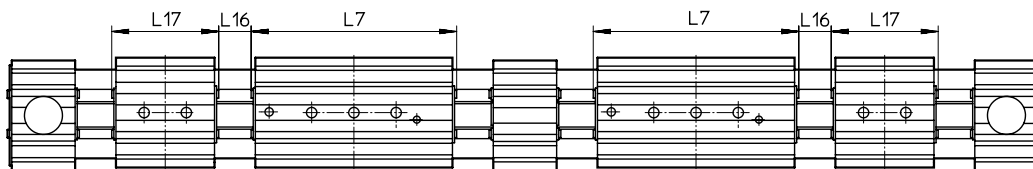
- The stroke reserve is a safety distance from the mechanical end position and is not used in normal operation
- The sum of the nominal stroke and 2x stroke reserve must not exceed the maximum permissible working stroke per slide
- The stroke reserve length can be freely selected
- The stroke reserve is defined via the "stroke reserve" characteristic in the modular product system.

**Example:**

Type ELGG-TB-45-500-20H-...  
Nominal stroke = 500 mm  
2x stroke reserve = 40 mm  
Working stroke per slide = 540 mm  
(540 mm = 500 mm + 2x 20 mm)

## Working stroke reduction

With standard slide or long slide L with additional slide ZB



L7 = Slide length  
L16 = Distance between the two slides  
L17 = Additional slide length

- 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 long slide L is ordered, the additional slide is not extended

**Example:**

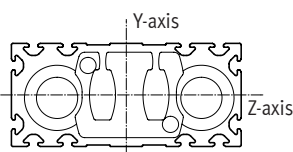
Type ELGG-TB-35-500-...-ZR  
Working stroke = 500 mm  
L16 = 10 mm  
L7 = 146 mm  
L17 = 76 mm

Working stroke per slide with additional slide = 414 mm  
(500 mm – 10 mm – 76 mm)

## Dimensions – Additional slide

Size	35	45	55
Length L17 [mm]	76	96	116
Distance between the slides L16 [mm]	≥ 0		

## 2nd moments of area



Size	35	45	55
$I_y$ [mm <sup>4</sup> ]	$4.19 \times 10^3$	$17.95 \times 10^3$	$41.18 \times 10^3$
$I_z$ [mm <sup>4</sup> ]	$3.77 \times 10^3$	$15.71 \times 10^3$	$38.35 \times 10^3$

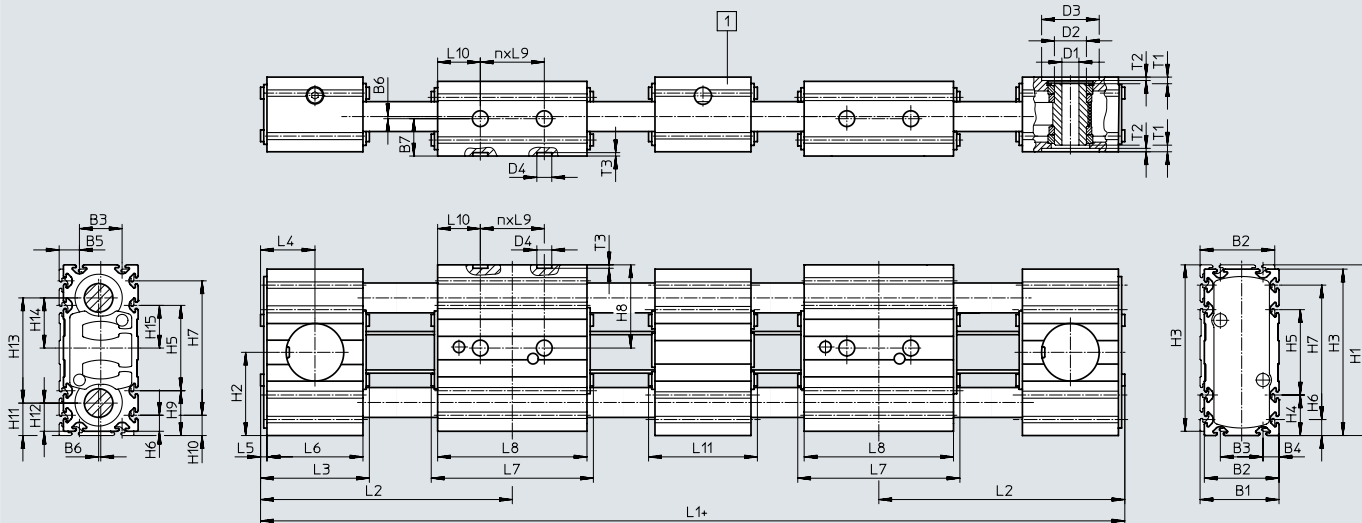
## Recommended deflection limits

Adherence to a maximum deflection of 0.5 mm 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.

Data sheet

Dimensions

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

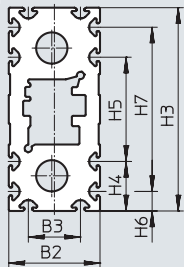


With size 35 and stroke > 350 mm,  
 size 45 and stroke > 450 mm,  
 size 55 and stroke > 700 mm,  
 the toothed belt axis is always supplied with central support M.

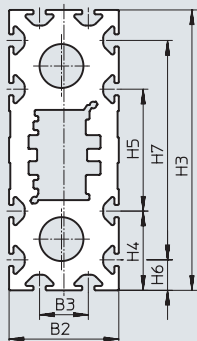
+ = plus 2x stroke + 4x stroke reserve + L11  
 [1] Central support

Profile

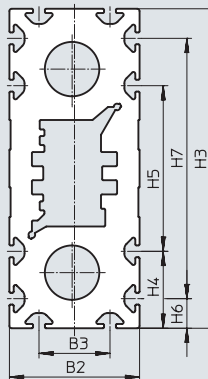
ELGG-35



ELGG-45



ELGG-55



## Data sheet

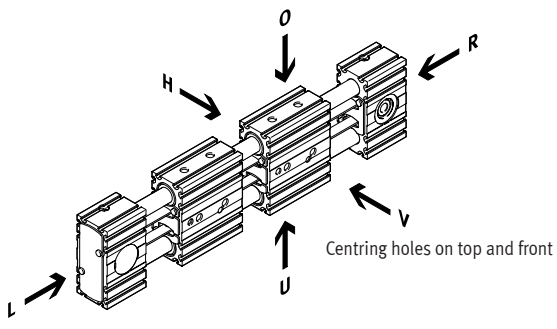
Size	B1	B2	B3	B4	B5	B6	B7	D1 ∅ H7	D2 ∅	D3 ∅ H7	D4 ∅ H7	H1	H2	H3
ELGG-35	37	35	20	7.5	9.5	1	17.5	8	15	27	7	80	39	78
ELGG-35-L							22.5	10	20	38		117	57.5	115
ELGG-45	47	45	20	12.5	14.5							137	67.5	135
ELGG-45-L						57	55	30	12.5	14.5	27.5	16	25	48
ELGG-55	57	55	30	12.5	14.5									
ELGG-55-L														

Size	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	L1	L2
ELGG-35	19	40	7.5	63	39	21	9.5	15.5	13.5	49	23.5	20	259	89
ELGG-35-L													399	124
ELGG-45	32.5	50	12.5	90	57.5	34.5	14.5	23	21	71	34.5	25	317	108
ELGG-45-L													497	153
ELGG-55	32.5	70	12.5	110	67.5	34.5	14.5	25.5	23.5	86	42	35	361	120
ELGG-55-L													581	175

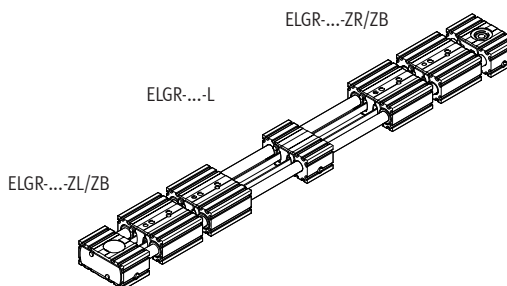
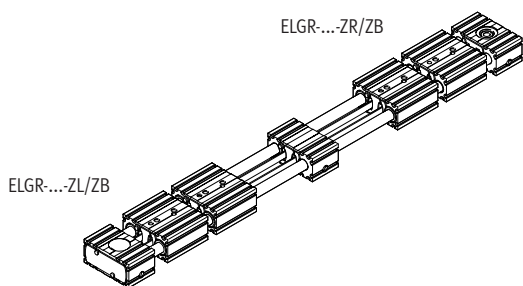
Size	L3	L4	L5	L6	L7	L8	L9	L10	L11	n	T1	T2	T3 +0.1
ELGG-35	51	25.5	3	45	76	70	30	20	51	1	3.1	1.6	1.6
ELGG-35-L					146	140		40		2			
ELGG-45	60	30		54	96	90	40	25	60	1	3	1.7	
ELGG-45-L			186		180	50		2					
ELGG-55	62	31	56	116	110	40	35	62	1	4.5	2		
ELGG-55-L					226		220		70			2	

## Ordering data – Modular product system

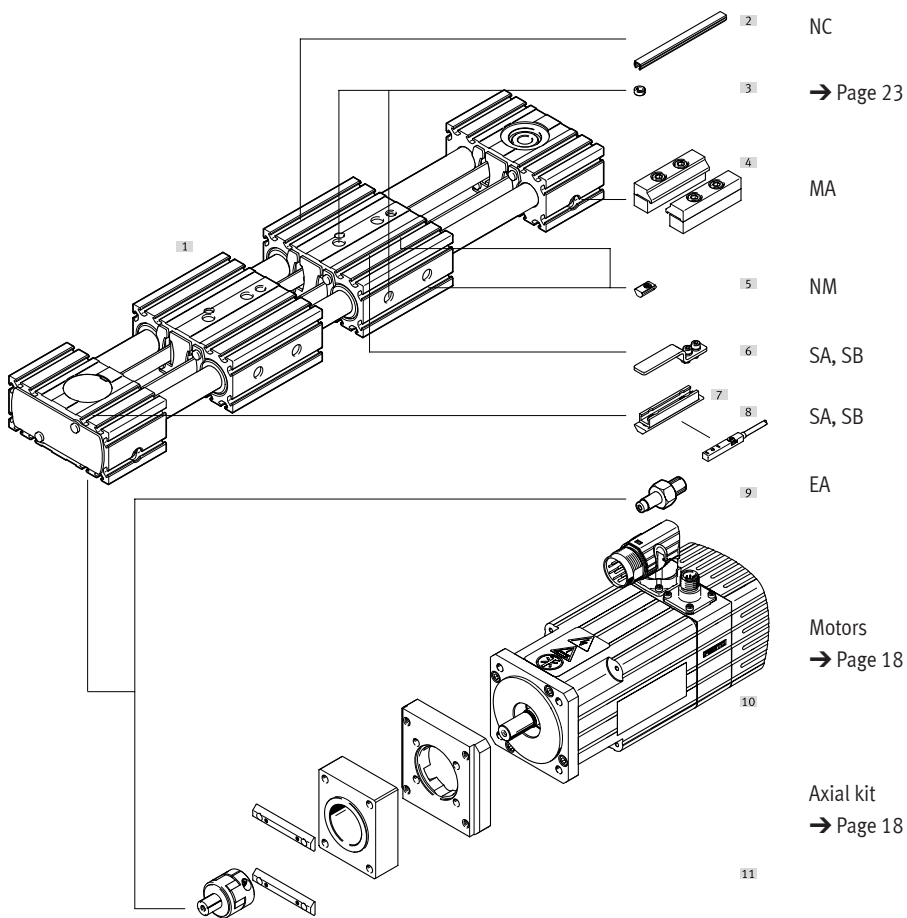
### Orientation guide



- O top
- U bottom
- R right
- L left
- V front
- H rear



### Accessories





## Ordering data – Modular product system

Ordering table										
Size	35		45		55		Conditions	Code	Enter code	
Module no.	<b>571058</b>		<b>571059</b>		<b>571060</b>					
Design	Linear axis							ELGG	ELGG	
Function	Toothed belt							-TB	-TB	
Guide	Recirculating ball bearing guide									
	Plain-bearing guide							-GF		
Size [mm]	35		45		55			-...	-...	
Stroke length per slide [mm]	1 ... 700		1 ... 900		1 ... 1200			-...	-...	
Stroke reserve per slide	0 ... 999 (0 = no stroke reserve)							[1]	-...H	
Slide design	Standard slide									
	Long slide								-L	
Additional slide	No additional slide									
	1 slide on right, 1 slide on left							[2]	-ZB	
Additional function	Without									
	Central support							[3]	-M	
Accessories	Accessories enclosed separately								+	+
Proximity switch (SIES), inductive, slot type 8, PNP, including switch lug	N/O contact, 7.5 m cable		1 ... 6					...SA		
	N/C contact, 7.5 m cable		1 ... 6					...SB		
Mounting slot cover	-		1 ... 50 (1 = 2 units, 500 mm length)					...NC		
Slot nut for mounting slot	1 ... 99								...NM	
Drive shaft	1 ... 4								...EA	
Profile mounting	1 ... 2								...MA	


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

[2] ZB Working stroke reduction → page 13

[3] M With size 35 and stroke > 350 mm, size 45 and stroke > 450 mm, size 55 and stroke > 700 mm, the toothed belt axis is always supplied with central support M.

Size	35		45		55	
Variant	-/L	ZB	-/L	ZB	-/L	ZB
Min. nominal stroke [mm]	50	126	50	146	50	166

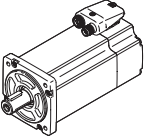
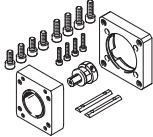
## Accessories

 **Note**

Depending on the combination of motor and drive, it may not be possible to reach the maximum feed force of the drive.

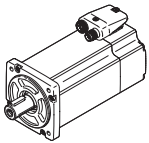
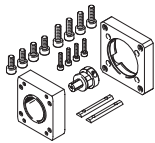
**Permissible axis/motor combinations with axial kit**

Data sheets → Internet: eamm-a

Motor / gear unit <sup>1)</sup>	Axial kit	
		• Kits for third-party motors → Internet: eamm-a
Type	Part no.	Type
<b>ELGG-35</b>		
<b>with servo motor and gear unit</b>		
EMME-AS-40-...	1456622	EAMM-A-R27-40G
EMGA-40-P-G...-EAS-40		
<b>with stepper motor</b>		
EMMS-ST-57-...	★ 1133403	EAMM-A-R27-57A
<b>with stepper motor and gear unit</b>		
EMMS-ST-42-...	1456622	EAMM-A-R27-40G
EMGA-40-P-G...-SST-42		
<b>with integrated drive</b>		
EMCA-EC-67-...	1456619	EAMM-A-R27-67A
<b>with integrated drive and gear unit</b>		
EMCA-EC-67-...	1456622	EAMM-A-R27-40G
EMGC-40-...		

1) The input torque must not exceed the max. permissible transferable torque of the axial kit.

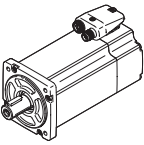
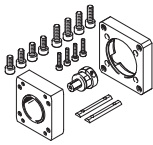
## Accessories

Permissible axis/motor combinations with axial kit		Data sheets → Internet: eamm-a	
Motor / gear unit <sup>1)</sup>	Axial kit		
	 <ul style="list-style-type: none"> <li>Kits for third-party motors → Internet: eamm-a</li> </ul>		
Type	Part no.	Type	
<b>ELGG-45</b>			
<b>with servo motor</b>			
EMMT-AS-60-..., EMME-AS-60-...	☆ 2224996	EAMM-A-R38-60P	
<b>with servo motor and gear unit</b>			
EMME-AS-40-...	1456623	EAMM-A-R38-40G	
EMGA-40-P-G...-EAS-40			
EMMT-AS-60-..., EMME-AS-60-...	1456630	EAMM-A-R38-60H	
EMGA-60-P-G...-EAS-60			
<b>with stepper motor</b>			
EMMS-ST-57-...	☆ 1578138	EAMM-A-R38-57A	
EMMS-ST-87-...	☆ 1133404	EAMM-A-R38-87A	
<b>with stepper motor and gear unit</b>			
EMMS-ST-42-...	1456623	EAMM-A-R38-40G	
EMGA-40-P-G...-SST-42			
EMMS-ST-57-...	2310075	EAMM-A-R38-60G	
EMGA-60-P-G...-SST-57			
<b>with integrated drive and gear unit</b>			
EMCA-EC-67-...	1456623	EAMM-A-R38-40G	
EMGC-40-...			
EMCA-EC-67-...	1456630	EAMM-A-R38-60H	
EMGC-60-...			

1) The input torque must not exceed the max. permissible transferable torque of the axial kit.

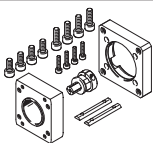
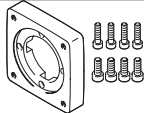
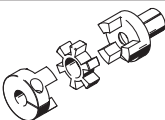
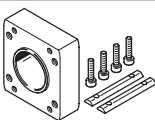
## Accessories

Data sheets → Internet: eamm-a

Permissible axis/motor combinations with axial kit			
Motor / gear unit <sup>1)</sup>	Axial kit		
			• Kits for third-party motors → Internet: eamm-a
Type	Part no.	Type	
<b>ELGG-55</b>			
<b>with servo motor</b>			
EMMT-AS-80-..., EMME-AS-80-...	☆ 2225090	EAMM-A-R48-80P	
EMMT-AS-100-..., EMME-AS-100-...	☆ 1133402	EAMM-A-R48-100A	
<b>with servo motor and gear unit</b>			
EMMT-AS-60-..., EMME-AS-60-... EMGA-60-P-G...-EAS-60	1456633	EAMM-A-R48-60H	
<b>with stepper motor</b>			
EMMS-ST-87-...	☆ 1133405	EAMM-A-R48-87A	
<b>with stepper motor and gear unit</b>			
EMMS-ST-57-... EMGA-60-P-G...-SST-57	2374780	EAMM-A-R48-60G	
<b>with integrated drive and gear unit</b>			
EMCA-EC-67-... EMGC-60-...	1456633	EAMM-A-R48-60H	

1) The input torque must not exceed the max. permissible transferable torque of the axial kit.

## Accessories

Permissible axis/motor combinations with axial kit			
Axial kit	Comprising: Motor flange	Coupling	Coupling housing
			
Part no. Type	Part no. Type	Part no. Type	Part no. Type
<b>ELGG-35</b>			
1456622 EAMM-A-R27-40G	1460097 EAMF-A-38A-40G	557998 EAMD-19-15-10-8X10	1133397 EAMK-A-R27-38A
1133400 EAMM-A-R27-55A	558176 EAMF-A-38A-55A	557999 EAMD-19-15-9-8X10	1133397 EAMK-A-R27-38A
★ 1133403 EAMM-A-R27-57A	560692 EAMF-A-38A-57A	561292 EAMD-16-15-6.35-8X10	1133397 EAMK-A-R27-38A
1456619 EAMM-A-R27-67A	1490100 EAMF-A-38A-67A	557999 EAMD-19-15-9-8X10	1133397 EAMK-A-R27-38A
<b>ELGG-45</b>			
1456623 EAMM-A-R38-40G	1460097 EAMF-A-38A-40G	1453860 EAMD-25-22-10-10X12	1133398 EAMK-A-R38-38A
★ 1578138 EAMM-A-R38-57A	560692 EAMF-A-38A-57A	561293 EAMD-25-22-6.35-10X12	1133398 EAMK-A-R38-38A
2310075 EAMM-A-R38-60G	558017 EAMF-A-38A-60G/H	558000 EAMD-25-22-11-10X12	1133398 EAMK-A-R38-38A
1456630 EAMM-A-R38-60H	558017 EAMF-A-38A-60G/H	1453861 EAMD-28-22-14-10X12	1133398 EAMK-A-R38-38A
★ 2224996 EAMM-A-R38-60P	1987412 EAMF-A-38A-60P	1453861 EAMD-28-22-14-10X12	1133398 EAMK-A-R38-38A
1133401 EAMM-A-R38-70A	558018 EAMF-A-38A-70A	558000 EAMD-25-22-11-10X12	1133398 EAMK-A-R38-38A
★ 1133404 EAMM-A-R38-87A	560693 EAMF-A-38A-87A	558000 EAMD-25-22-11-10X12	1133398 EAMK-A-R38-38A
<b>ELGG-55</b>			
2374780 EAMM-A-R48-60G	558019 EAMF-A-48A-60G/H	558001 EAMD-32-32-11-16X20	1133399 EAMK-A-R48-48A
1456633 EAMM-A-R48-60H	558019 EAMF-A-48A-60G/H	1377840 EAMD-32-32-14-16X20	1133399 EAMK-A-R48-48A
1578139 EAMM-A-R48-70A	558025 EAMF-A-48A-70A	558001 EAMD-32-32-11-16X20	1133399 EAMK-A-R48-48A
★ 2225090 EAMM-A-R48-80P	2043427 EAMF-A-48A-80P	558002 EAMD-42-40-19-16X25	1133399 EAMK-A-R48-48A
★ 1133405 EAMM-A-R48-87A	560695 EAMF-A-48A-87A	558001 EAMD-32-32-11-16X20	1133399 EAMK-A-R48-48A
★ 1133402 EAMM-A-R48-100A	558020 EAMF-A-48A-100A	558002 EAMD-42-40-19-16X25	1133399 EAMK-A-R-48-48A

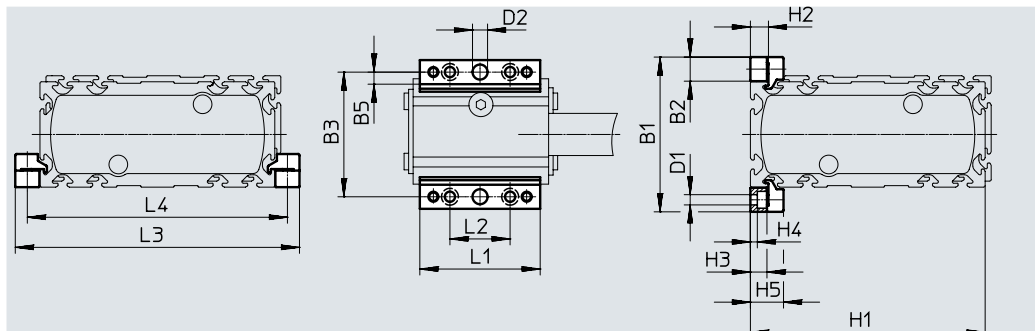
## Accessories

### Profile mounting MUE (order code MA)

Material:  
Anodised aluminium  
RoHS-compliant

 **Note**

The central support can also be attached using the profile mounting.




#### Dimensions and ordering data

For size	B1	B2	B3	B5	D1 ∅	D2 ∅ H7	H1	H2	H3	H4
35	51	8	43	4	3.4	5	78	6	5.5	2.3
45	69	12	57	4	5.5	5	115	10	9	3.2
55	79	12	67	4	5.5	5	135	10	9	3.2

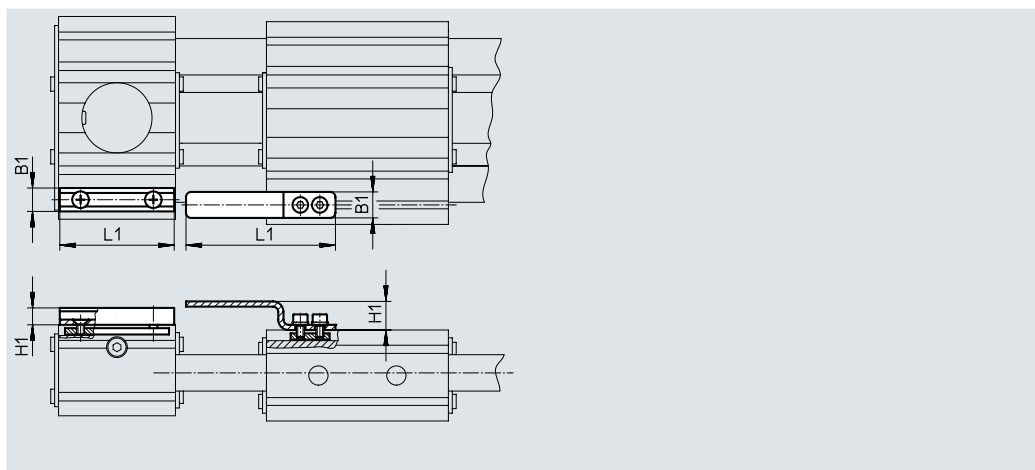
For size	H5	L1	L2	L3	L4	Weight [g]	Part no.	Type
35	11	40	20	94	86	20	558042	MUE-50
45	17.5	52	40	139	127	32	562238	MUE-45
55	17.5	52	40	159	147	32	562238	MUE-45

### Sensor bracket EAPM-...-SHS, switch lug EAPM-...-SLS (order code SA/SB)

Material:  
Switch lug: galvanised steel  
Sensor bracket: anodised wrought  
aluminium alloy  
RoHS-compliant

 **Note**

The sensor bracket can also be mounted on the central support.

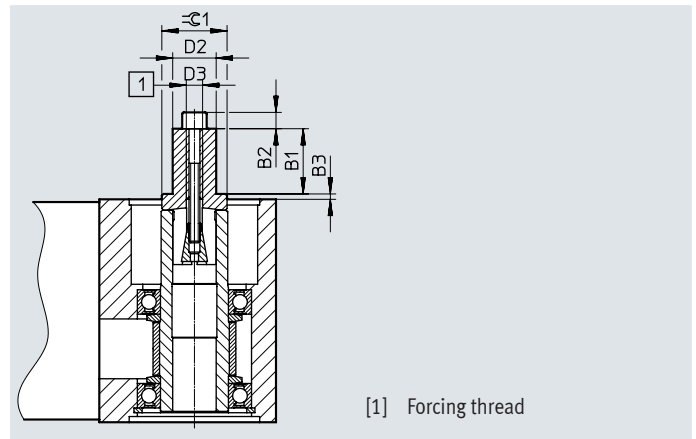
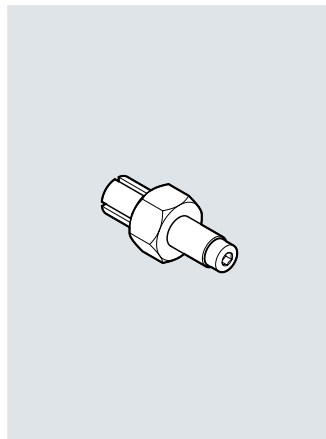


#### Dimensions and ordering data

For size	B1	H1	L1	Weight [g]	Part no.	Type
<b>Sensor bracket</b>						
35, 45, 55	9	6.5	44	20	567537	EAPM-L4-SHS
<b>Switch lug</b>						
35, 45, 55	10	11	57.5	15	567538	EAPM-L4-SLS

## Accessories

**Drive shaft EAMB**  
Alternative interface  
(order code EA)






[1] Forcing thread

## Dimensions and ordering data

For size	B1	B2	B3	D2 $\varnothing$	D3	$\pm C1$	Weight [g]	Part no.	Type
35	12	3	3.9	8	M4	12	20	558034	EAMB-16-7-8X15-8X10
45	12	4	6	8	M5	15	29	558035	EAMB-18-9-8X16-10X12
55	21	–	1.5	15	M6	21	70	558036	EAMB-24-6-15X21-16X20

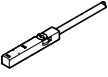
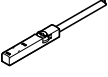


## Ordering data

	For size	Comment	Order code	Part no.	Type	PU <sup>1)</sup>
<b>Slot nut NST</b>						
	35	For mounting slot	NM	558045	NST-3-M3	1
	45, 55			150914	NST-5-M5	
			–	8047843	NST-5-M5-10	10
				8047878	NST-5-M5-50	50
<b>Centring sleeve ZBH<sup>2)</sup></b>						
	35, 45, 55	For slide	–	8146544	ZBH-7-B	10
<b>Slot cover ABP</b>						
	45, 55	For mounting slot Each 0.5 m	NC	151681	ABP-5	2

1) Packaging unit

2) 4 centring sleeves included in the scope of delivery of the axis

## Accessories

Ordering data – Proximity switches 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	SA	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	SB	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
Ordering data – Connecting cables							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	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		



# Festo - Your Partner in Automation



**1 Festo Inc.**  
5300 Explorer Drive  
Mississauga, ON L4W 5G4  
Canada

**Festo Customer Interaction Center**  
Tel: 1 877 463 3786  
Fax: 1 877 393 3786  
Email: [customer.service.ca@festo.com](mailto:customer.service.ca@festo.com)



**2 Festo Pneumatic**  
Av. Ceylán 3,  
Col. Tequesquináhuac  
54020 Tlalnepantla,  
Estado de México

**Multinational Contact Center**  
01 800 337 8669  
[ventas.mexico@festo.com](mailto:ventas.mexico@festo.com)



**3 Festo Corporation**  
1377 Motor Parkway  
Suite 310  
Islandia, NY 11749

**Festo Customer Interaction Center**  
1 800 993 3786  
1 800 963 3786  
[customer.service.us@festo.com](mailto:customer.service.us@festo.com)



**4 Regional Service Center**  
7777 Columbia Road  
Mason, OH 45040

Connect with us



[www.festo.com/socialmedia](http://www.festo.com/socialmedia)



[www.festo.com](http://www.festo.com)

Subject to change