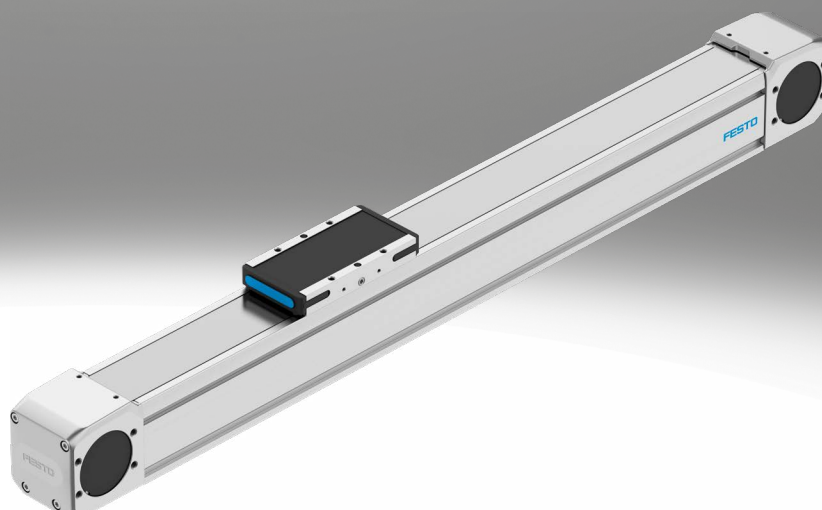


## Toothed belt axes ELGD-TB

**FESTO**



## Key features

### At a glance

#### ELGD-TB (standard design)

- Profile with a square cross section and sturdy drive elements for high feed forces

#### ELGD-TB-WD (wide design)

- Reduced profile height offers smaller installation dimensions for handling systems and applications that do not require such high feed forces
- 30% lighter, while rigidity and guide load capacity are still similar to the axis in standard design

#### Innovative guide technology

- Excellent rigidity and load capacity of the guide for higher loads in the same installation space
- Less vibration and smoother slide movement protect sensitive workpieces
- High speeds ensure short cycle times and a very long service life minimises downtime

#### Powerful drive elements

- High feed forces and acceleration for shorter process times
- Long service life and increased reliability reduce TCO

#### Innovative stainless steel cover strip solution

- Abrasion-free and clean surface protects workpieces from particles
- Minimised number of particles for use in cleanrooms
- Reduced ingress of dirt for use in harsh ambient conditions

#### Options:

- Extended or additional slide for higher axial and lateral torques and higher loads
- Two freely selectable motor positions at one end of the axis

#### Sealing air connection:

- Air is exchanged between the interior of the cylinder and the environment via the sealing air connection. This prevents negative pressure or excess pressure from building up inside the cylinder.
- Application of slight negative pressure prevents the emission of particles
- Application of slight excess pressure prevents the ingress of particles

### Engineering tools

More information → [electric-motion-sizing](#)



Save time with smart engineering tools for the optimal solution. Our goal is to increase your productivity. Our engineering tools play an integral part in this. They help you size your system correctly, tap into unimagined productivity reserves and generate additional productivity along the entire value chain. In every phase of your project, from the initial contact to the modernisation of your machine, you will come across a number of different tools which will be of use to you.

#### Electric Motion Sizing

- Create the optimum drive package quickly and reliably. Electric Motion Sizing calculates suitable combinations of electric axis, electric motor and servo drive using just a few application details. It provides all the relevant data including the bill of materials and documentation for your selected combination. This avoids design errors and results in significantly improved energy efficiency for the system. A seamless connection to the Festo Automation Suite also makes commissioning easier for you.

### Icons

More information → [elgd-tb](#)



The icons shown in this document are also available online. There, precise values can be displayed.

## Key features

### Drive system

[TB] Toothed belt

- For applications requiring a high dynamic response and short positioning times
- For long strokes

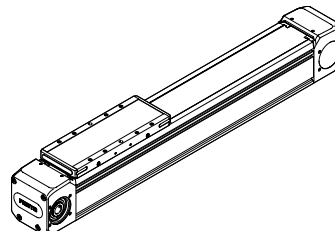
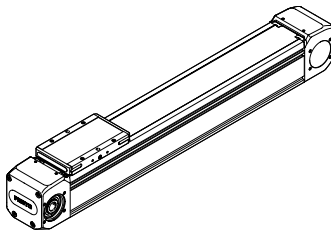
### Stroke reserve

- The stroke reserve is a safety distance from the mechanical end position and is not used in normal operation.
- The sum of the stroke length and 2x stroke reserve must not exceed the maximum working stroke.

### Slide design

[ ] Standard

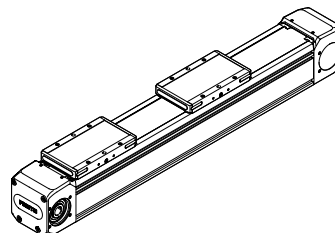
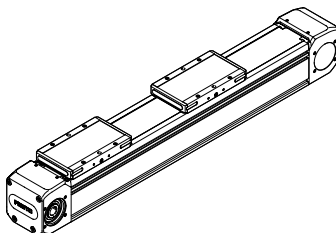
[L] Long



### Additional slide

[ZL] Left

[ZR] Right



- The additional slide is always a standard slide

### Lubrication

[ ] Standard

[GN] Lubrication nipple

With lifetime lubrication. Lubrication nipple not included in delivery.

- 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

### Toothed belt material

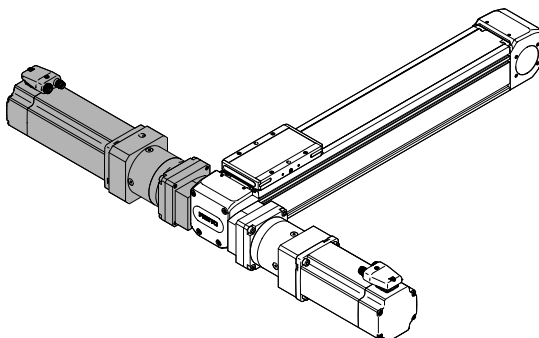
[PU2] Coated PU

[PU1] Uncoated PU, FDA-compliant

- With steel reinforcements for high rigidity
- Fabric coating for a long service life and low abrasion
- Polyurethane material for resistance to many cooling lubricants

- With steel reinforcements for high rigidity
- Blue, FDA-compliant polyurethane for use in the food industry

### Motor attachment



- The motor can be attached to the left end of the axis at the front or rear.
- The position of the motor does not have to be specified when ordering and can be changed later
- Note: Unlike other Festo axes, the motor for the ELGD can only be mounted on the left hand end of the axis, as this is the location of the drive pulley. However, the mechanical axis has a symmetrical design so that the axis can be rotated and the motor can be mounted in the required location.

## Type codes

001	Series
ELGD	Gantry axis

002	Drive system
TB	Toothed belt

003	Guide
KF	Recirculating ball bearing guide

004	Size
60	60
80	80

005	Stroke [mm]
200	200
300	300
500	500
600	600
800	800
1000	1000
1200	1200
1500	1500
1800	1800
2000	2000
...	50 ... 2850

006	Stroke reserve
OH	None
...H	0 ... 999 mm

007	Slide design
	Standard
L	Slide, long

008	Additional slide
	None
ZL	1 slide left
ZR	1 slide right

009	Lubrication
	Standard
GN	Lubrication nipple

010	Material of toothed belt
PU1	Uncoated PU, FDA-compliant
PU2	Coated PU

## Datasheet

General technical data				
Size		60		80
Slide design			L	L
Design	Electromechanical axis with toothed belt			
Guide	Recirculating ball bearing guide			
Mounting position	Any			
Working stroke	[mm]	50 ... 2850	50 ... 2800	50 ... 2850 50 ... 2750
Max. feed force $F_x$	[N]	350		800
Max. no-load torque <sup>1)</sup>				
ELGD-...-PU1	[Nm]	0.5		1
ELGD-...-PU2	[Nm]	0.5		1.2
Max. no-load resistance to shifting <sup>1)</sup>	[N]	29.8		55.8
Max. driving torque	[Nm]	5.5		17.2
Max. speed	[m/s]	3		
Max. acceleration	[m/s <sup>2</sup> ]	50		
Repetition accuracy	[mm]	±0.04		
Position sensing	For inductive sensors			

1) At 0.2 m/s

Operating and environmental conditions		
Ambient temperature <sup>1)</sup>	[°C]	0 ... +60
Storage temperature	[°C]	-20 ... +60
Degree of protection		IP40
Duty cycle	[%]	100
Maintenance interval		Lifetime lubrication

1) Note operating range of proximity switches

Weight [g]				
Size		60		80
Slide design			L	L
Basic weight with 0 mm stroke <sup>1)</sup>		2486	2909	4715 6030
Additional weight per 10 mm stroke		49	49	79 79
Moving mass		490	710	1110 1810

1) Including slide

Toothed belt				
Size		60		80
Pitch	[mm]	3		5
Elongation <sup>1)</sup>				
ELGD-...-PU2	[%]	0.16		0.12
ELGD-...-PU1	[%]	0.16		0.12
Effective diameter	[mm]	31.51		42.97
Feed constant	[mm/rev]	99		135

1) At max. feed force

## Datasheet

Mass moments of inertia					
Size		60		80	
Slide design			L		L
$J_0$	[kg mm <sup>2</sup> ]	210.16	267.49	752.16	1056.47
$J_H$ per metre stroke	[kg mm <sup>2</sup> /m]	31.28	31.28	112.63	112.63
$J_L$ per kg payload	[kg mm <sup>2</sup> /kg]	248.22	248.22	461.61	431.61

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

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

## Homing

Homing can be carried out in two ways:

- Against a fixed stop
- Using a reference switch

The following values must be observed:

Size		60	80
Max. impact energy	[J]	0.125	0.25
Note on the impact energy in the end positions	[m/s]	At maximum homing speed of 0.01 m/s	

## Materials

Axis	
Drive cover	Gravity die-cast aluminium, painted
Slide	Wrought aluminium alloy
Cover strip	High-alloy stainless steel
Toothed belt	
ELGD-...-PU2	Polyurethane with steel cord and nylon cover
ELGD-...-PU1	Polyurethane with steel cord
Guide	Steel
Profile	Anodised wrought aluminium alloy
Belt	High-alloy stainless steel
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III

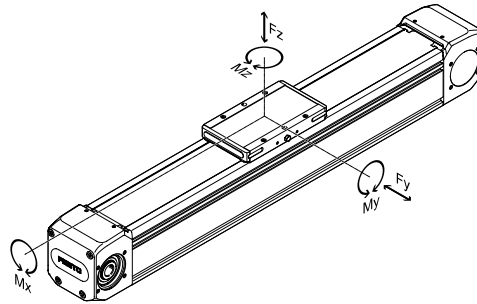
# Datasheet

## Load values

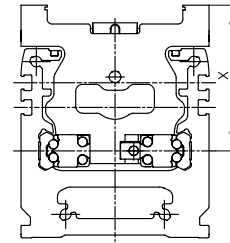
The indicated forces and torques refer to the centre of the guide. The point of application of force is the point where the centre of the guide and the longitudinal centre of the slide intersect.

The appropriate size is selected using the following three steps:

1. Check the maximum permissible values (must not be exceeded)
2. Calculate the load comparison factor
3. Determine the service life



Distance from the slide surface to the centre of the guide



### Distance from the slide surface to the centre of the guide

Size	60	80
Dimension x [mm]	49	62

## 1. Check the maximum permissible values

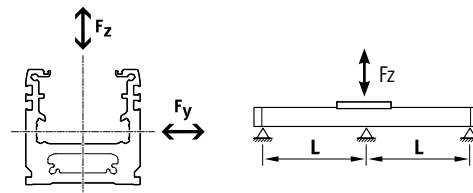
### Max. permissible forces and torques for the overall axis (strength limits)

Size	60		80	
	L		L	
Max. force $F_y$ , overall axis [N]	1513	3026	2291	4581
Max. force $F_z$ , overall axis [N]	2200	3200	3500	5600
Max. torque $M_x$ , overall axis [Nm]	38	75	109	200
Max. torque $M_y$ , overall axis [Nm]	15	128	42	356
Max. torque $M_z$ , overall axis [Nm]	15	133	42	294

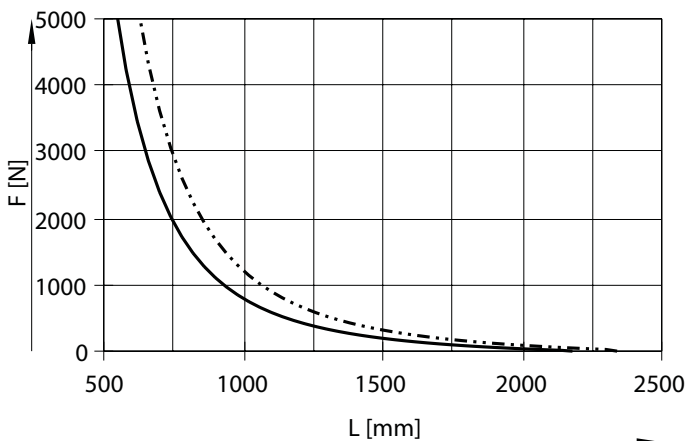
### Maximum permissible support spacing L as a function of force F

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  $f = 0.5 \text{ mm}$ .

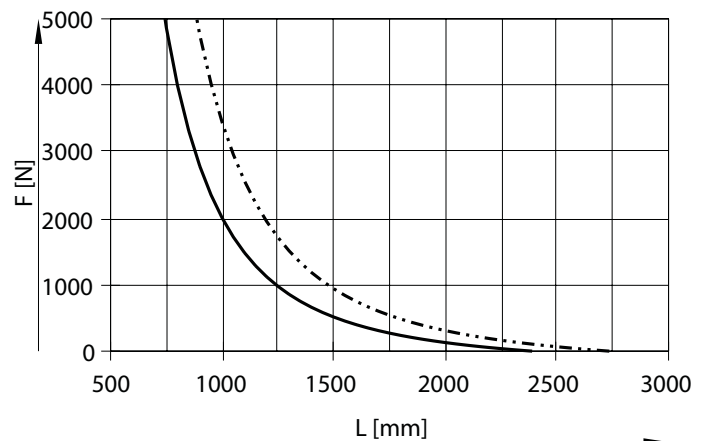


Size 60



—  $F_y$   
- - -  $F_z$

Size 80



—  $F_y$   
- - -  $F_z$

Datasheet

**2. Calculate the load comparison factor**

**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.  
 This formula can be used to calculate a guide value.  
 The engineering software "Electric Motion Sizing" is available for more precise calculations → [www.festo.com/x/electric-motion-sizing](http://www.festo.com/x/electric-motion-sizing)

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:

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

$F_1/M_1$  = values occurring in the application

$F_2$  = Permissible values at 5000 km from the graph of support spacing over load

$M_2$  = maximum permissible values (see table)

**Max. permissible torques for the guide calculation with reference service life**

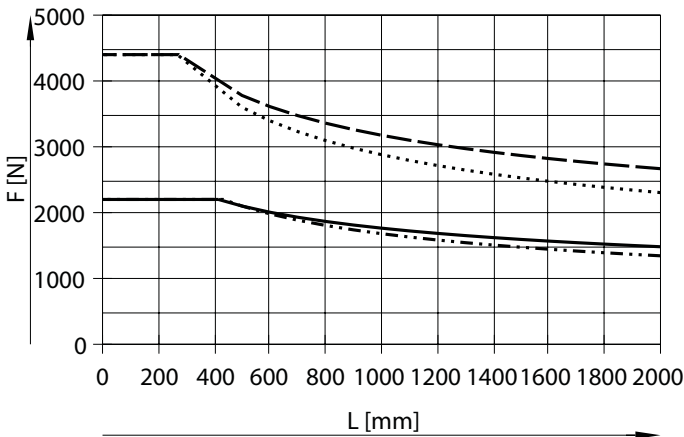
Size		60		80	
Slide design			L		L
Reference service life	[km]	5000			
Max. torque Mx	[Nm]	38	75	106	200
Max. torque My	[Nm]	15	150	42	390
Max. torque Mz	[Nm]	15	140	42	390

**Max. permissible support spacing L as a function of the force F**

Depending on how firmly the axis is supported, the maximum permissible forces vary due to the design of the guide system.

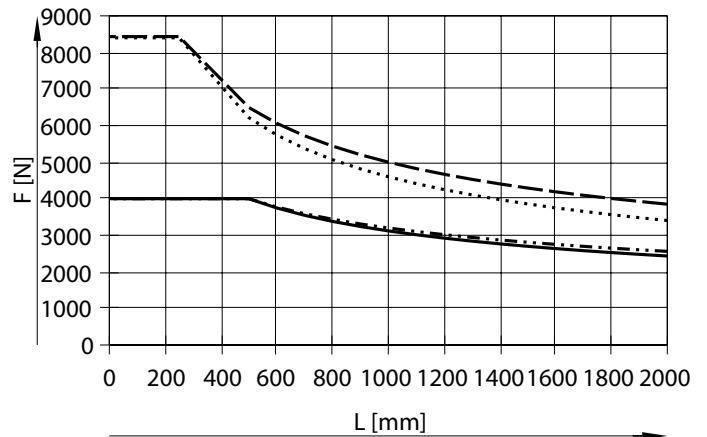
If the axis is used as a cantilever or in yoke operation, the values for a support spacing of 2000 mm can be selected.

Size 60



- Fy - ELGD-60
- - Fz - ELGD-60
- Fy - ELGD-60-L
- ... Fz - ELGD-60-L

Size 80



- Fy - ELGD-80
- - Fz - ELGD-80
- Fy - ELGD-80-L
- ... Fz - ELGD-80-L



## Datasheet

### 3. Determine the service life

The service life of the guide depends on the load. To be able to provide an 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 Festo contact for a load comparison factor  $f_v$  greater than 1.3.

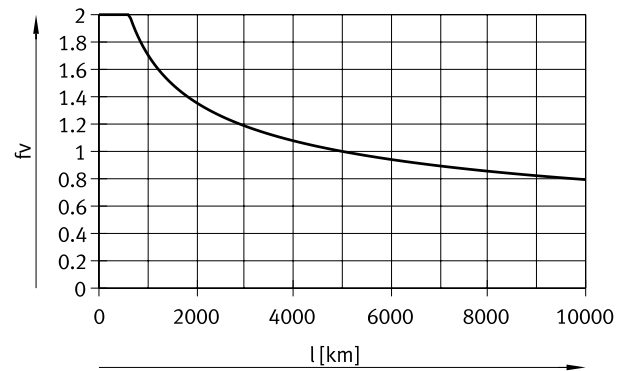
#### Load comparison factor $f_v$ as a function of service life $l$

##### Example:

A user wants to move an  $x$  kg load. Using the formula (→ page 8) gives a value of 1.3 for the load comparison factor  $f_v$ . According to the graph, the guide would have a service life of approx. 2500 km. Reducing the acceleration reduces the  $M_z$  and  $M_y$  values. A load comparison factor  $f_v$  of 1 now gives a service life of 5000 km.

##### Note:

If the application has been calculated using “Electric Motion Sizing”, the average guide comparison index represents the workload of the guide. (100% average guide comparison index corresponds to  $f_v = 1$ ). With this value, the service life can be estimated using the service life graph



### Comparison of the characteristic load values for 100 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 ELGD 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.

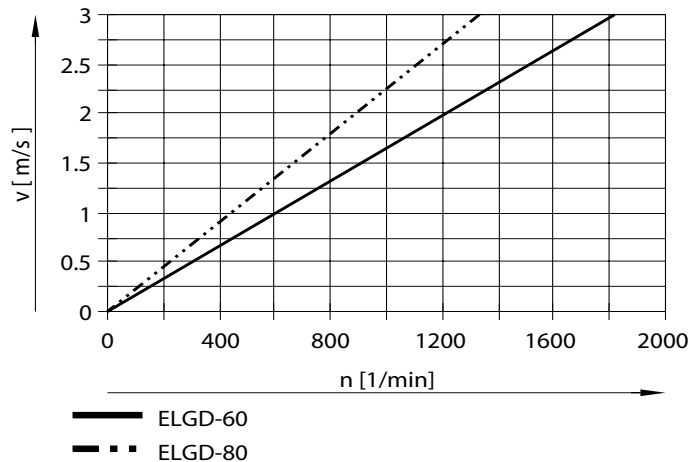
These 100 km values have been calculated mathematically and are only to be used for comparing with dynamic forces and torques to ISO. The drives must not be loaded with these characteristic values as this could damage the axes.

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

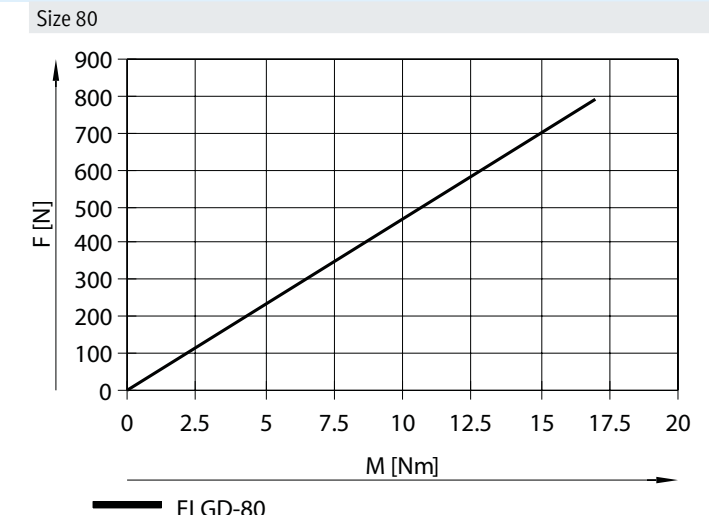
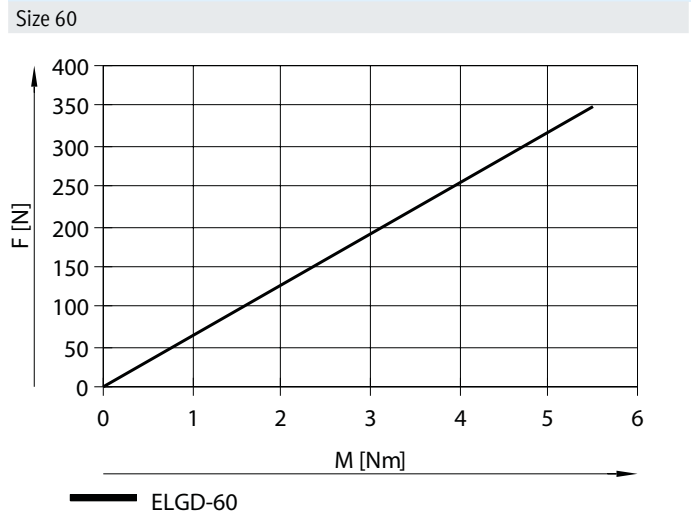
Size	60		80	
		L		L
$F_{y_{max}}$ [N]	9208	18415	17576	35153
$F_{z_{max}}$ [N]	9208	18415	17576	35153
$M_{x_{max}}$ [Nm]	157	314	422	844
$M_{y_{max}}$ [Nm]	60	500	162	1356
$M_{z_{max}}$ [Nm]	60	500	162	1356

Datasheet

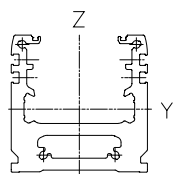
Speed  $v$  as a function of rotational speed  $n$



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



2nd moment of area



Size		60	80
$I_y$	[mm <sup>4</sup> ]	$0.485 \times 10^6$	$1.213 \times 10^6$
$I_z$	[mm <sup>4</sup> ]	$0.731 \times 10^6$	$2.052 \times 10^6$

Recommended deflection limits

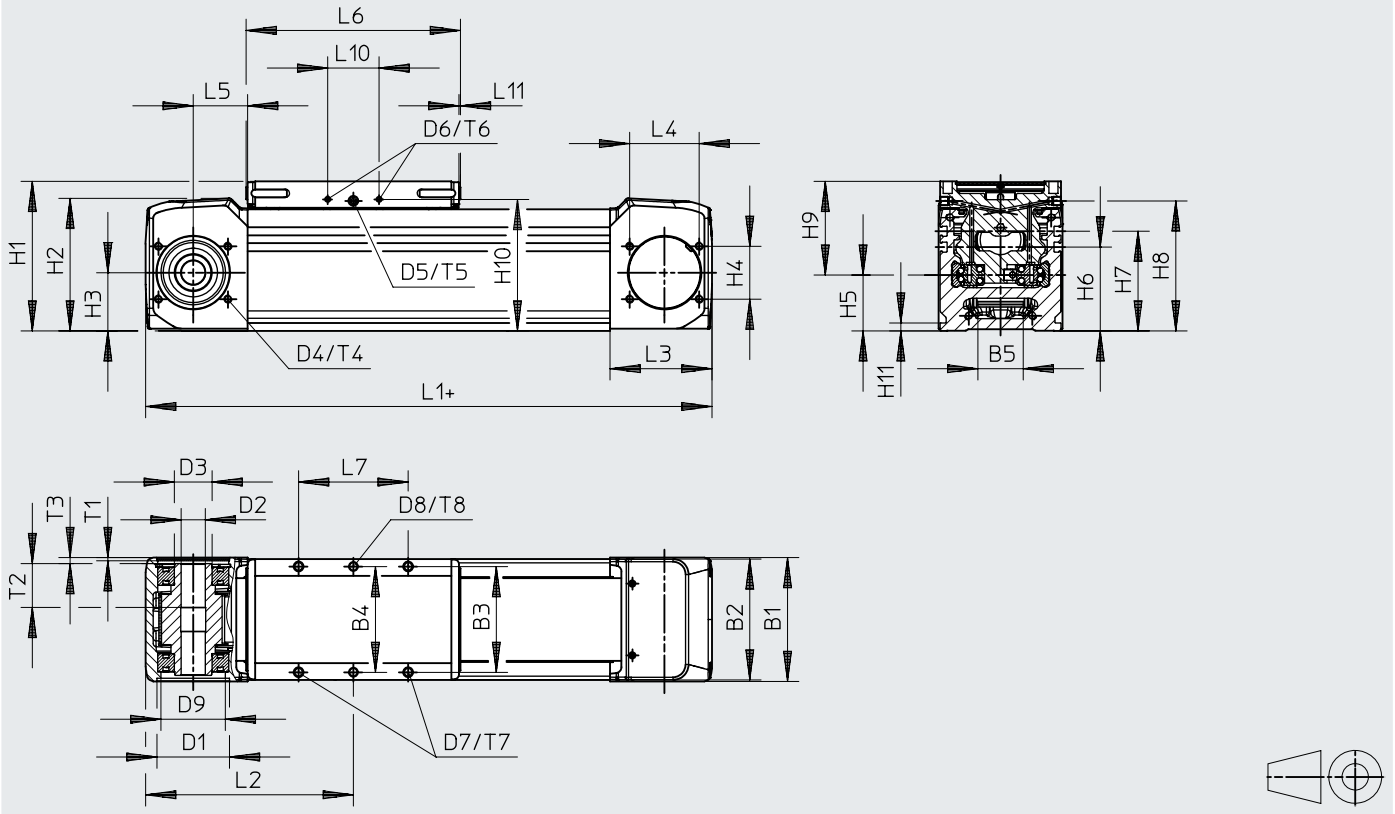
To avoid impairing the functionality of the axes, we recommend that the following deflection limits are observed. Greater deformation can result in increased friction, greater wear and reduced service life.

Size	Dynamic deflection (moving load)	Static deflection (stationary load)
60, 80	0.05% of the axis length, max. 0.5 mm	0.1% of the axis length

Datasheet

Dimensions – ELGD-TB-...

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



+ = plus stroke length + 2x stroke reserve

	B1	B2	B3	B4	B5	D1	D2	D3	D4	D5	D6	D7	D8	D9	H1
				±0.03		∅ H7	∅ H7	∅ k5					∅ H7	∅	
ELGD-TB-60	62	60	52.5	52.5	20	48	16	25	M6	M6	M3	M5	5	37.3	82
ELGD-TB-80	82	80	70	70	30	48	16	25	M5	M6	M3	M6	6	42.7	99

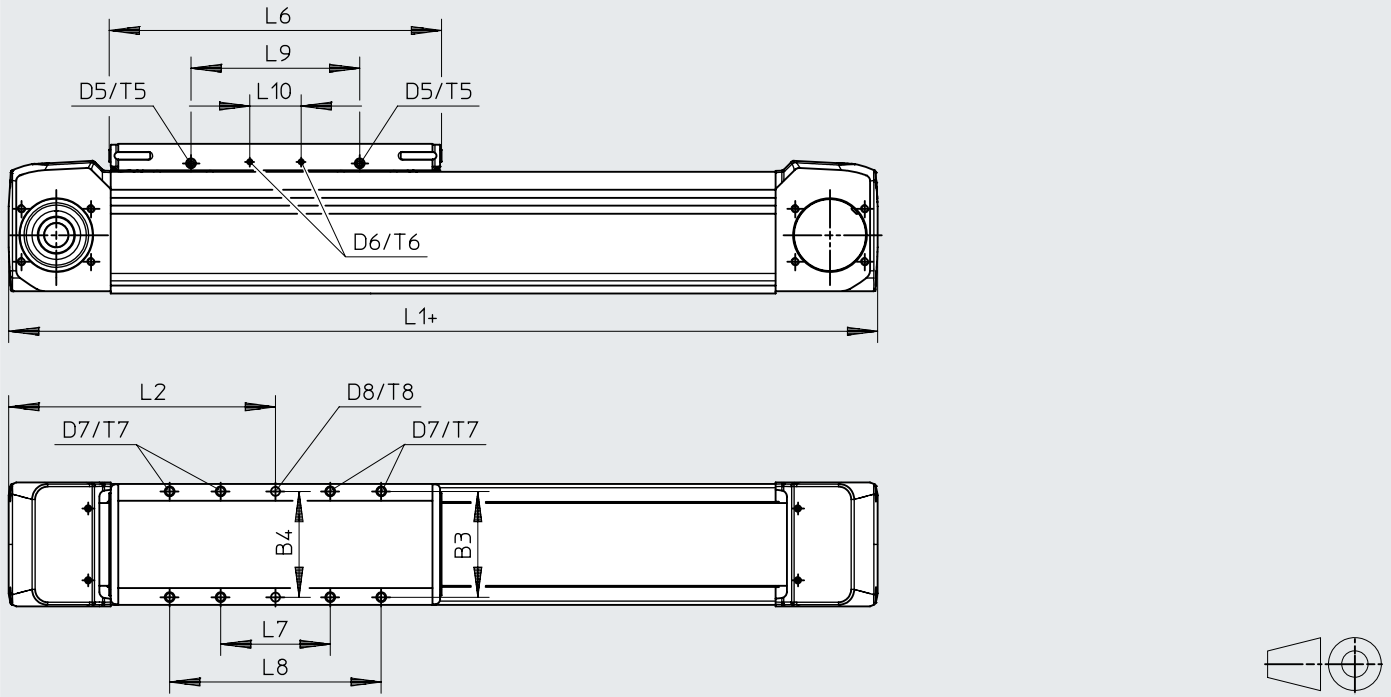
	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	L1	L2	L3	L4
												min.		
ELGD-TB-60	71.4	34	26	33	50	–	70	49	71	5.3	251	125.5	68	51
ELGD-TB-80	87.6	38.5	35	37	55.5	66	86	62	87	5.3	275	137.5	67.5	46

	L5	L6	L7	L10	L11		T1	T2	T3	T4	T5	T6	T7	T8
			±0.1		min.	max.								±0.05
ELGD-TB-60	35	118	50	34	1.5	4.5	2.2	26	4.2	12	6	7	16.5	6
ELGD-TB-80	36	142	72.5	34	1	4	2.2	29	4	12	6	7	17.5	8

Datasheet

Dimensions – ELGD-TB-...-L (with long slide)

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



+ = plus stroke length + 2x stroke reserve

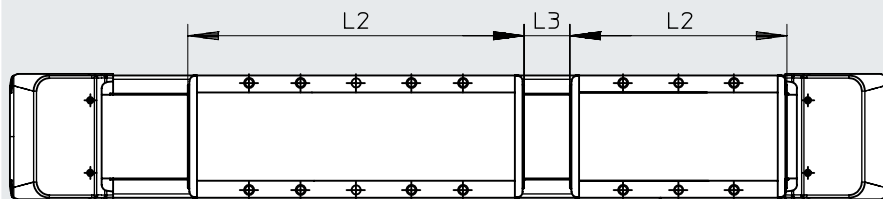
	B3	B4	D5	D6	D7	D8 ∅ H7	L1	L2 min.	L6
ELGD-TB-60-L	52.5	52.5 ±0.03	M6	M3	M5	5	292	146	159
ELGD-TB-80-L	70	70	M6	M3	M6	6	353	176.5	220

	L7	L8	L9	L10	T5	T6	T7	T8
	±0.1	±0.1						±0.05
ELGD-TB-60-L	50	95	81.2	34	6	7	16.5	6
ELGD-TB-80-L	72.5	140	111.6	34	6	7	17.5	8

Datasheet

Dimensions – ELGD-TB-...-ZL/-ZR (with additional slide)

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



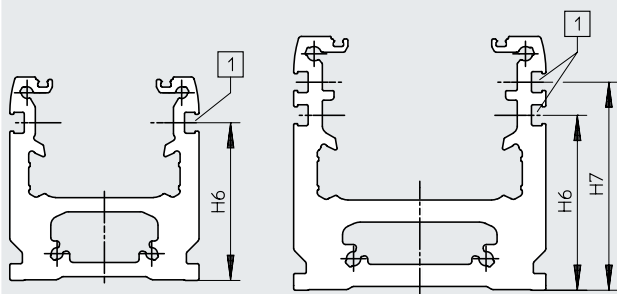
	L2	L3
ELGD-TB-60	118	50
ELGD-TB-80	142	50
ELGD-TB-60-L	159	50
ELGD-TB-80-L	220	50

Dimensions – ELGD-TB-...- (profile)

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

ELGD-TB-60

ELGD-TB-80

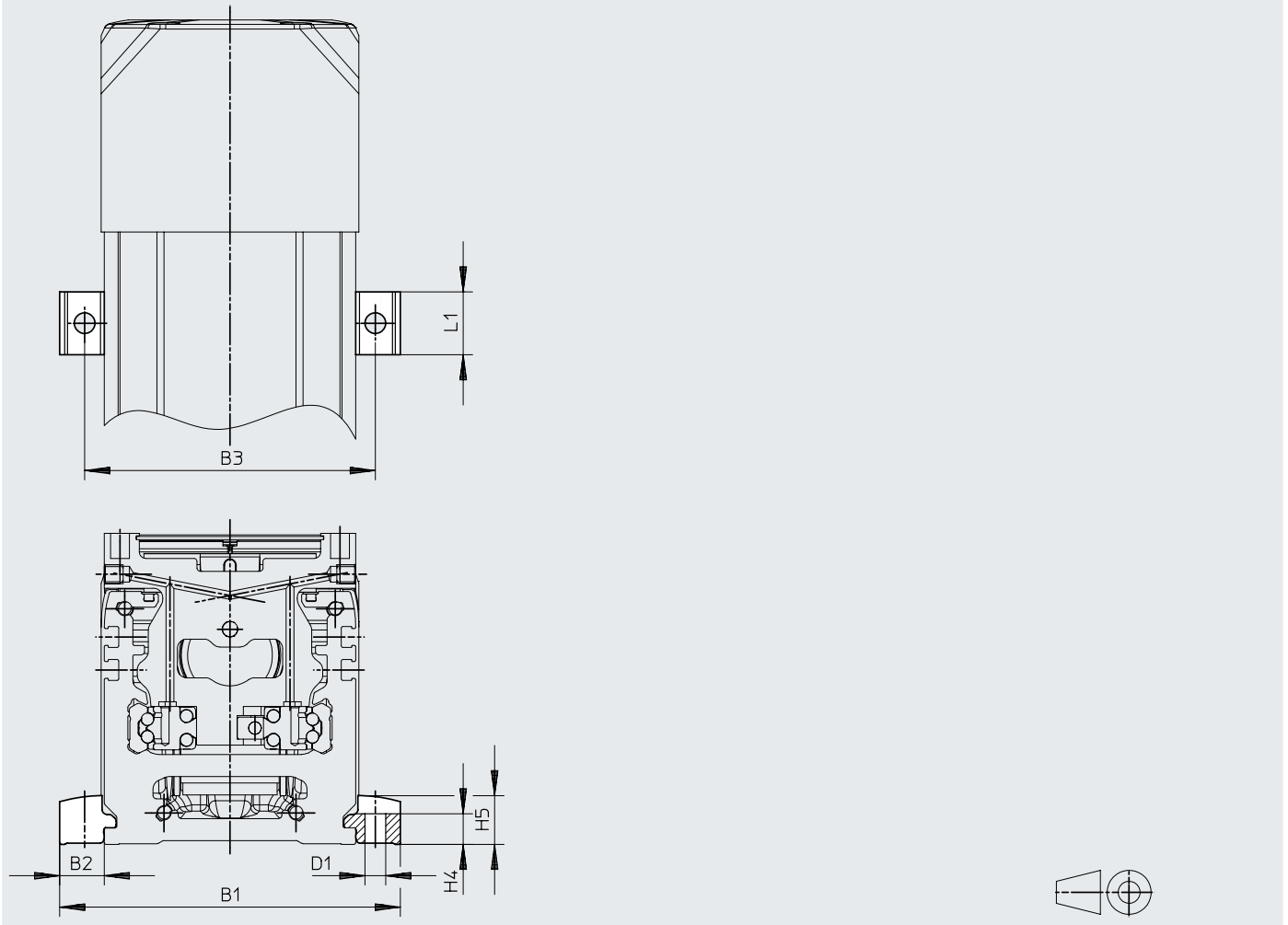


[1] Sensor slot for proximity switch

	H6	H7
ELGD-TB-60	50	–
ELGD-TB-80	55.5	66

## Datasheet

## Dimensions – Profile mounting EAHF-E24-60-P-S

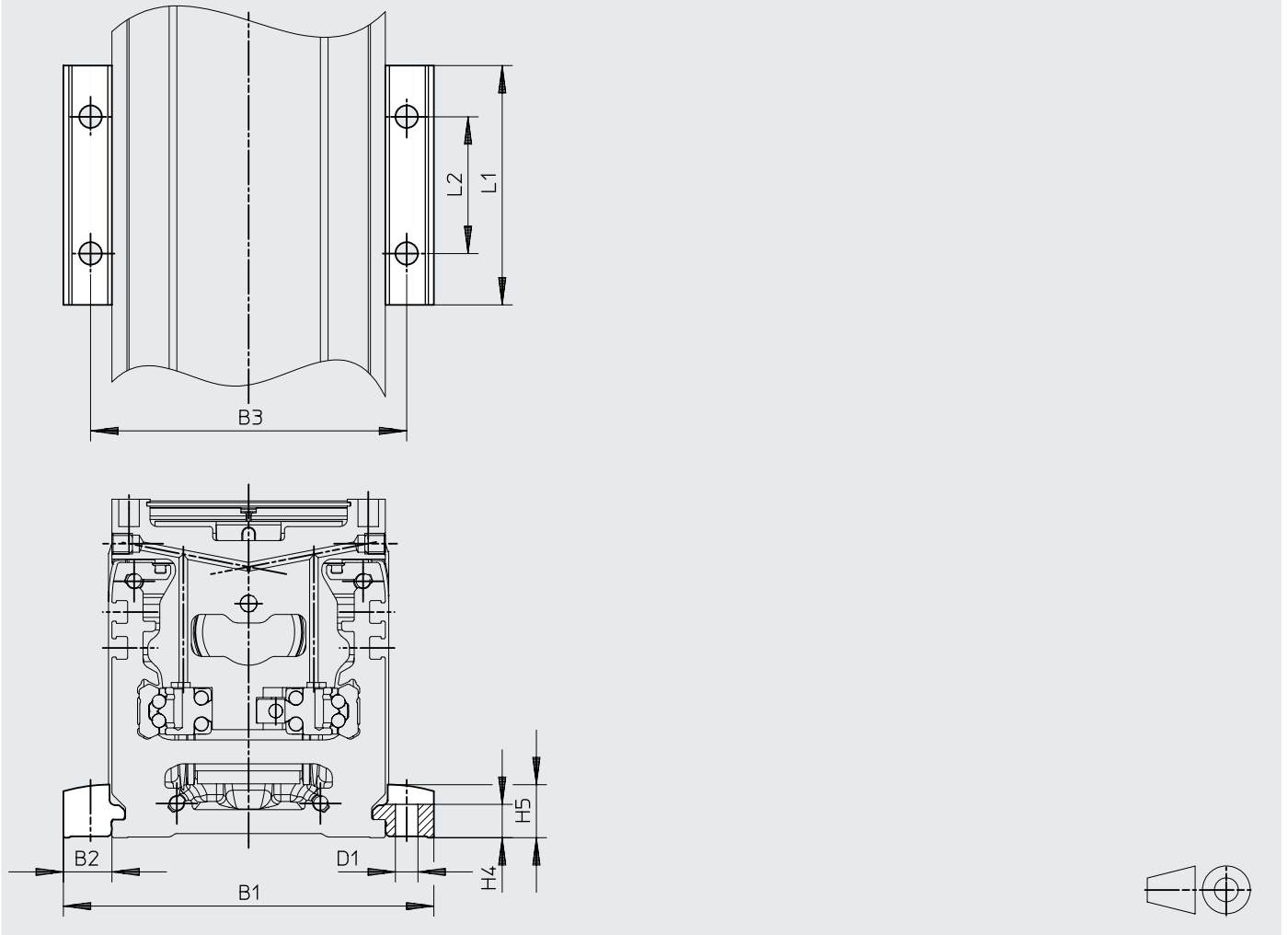
Download CAD data → [www.festo.com](http://www.festo.com)

		B1	B2	B3	D1 ∅ H13	H4 ±0.1	H5	L1
EAHF-E24-60-P-S	ELGD-TB-60	88.4	14.2	72.5	6.6	9.8	15.5	20
	ELGD-TB-80	108.4	14.2	92.5	6.6	9.8	15.5	20

Datasheet

Dimensions – Profile mounting EAHF-E24-60-P

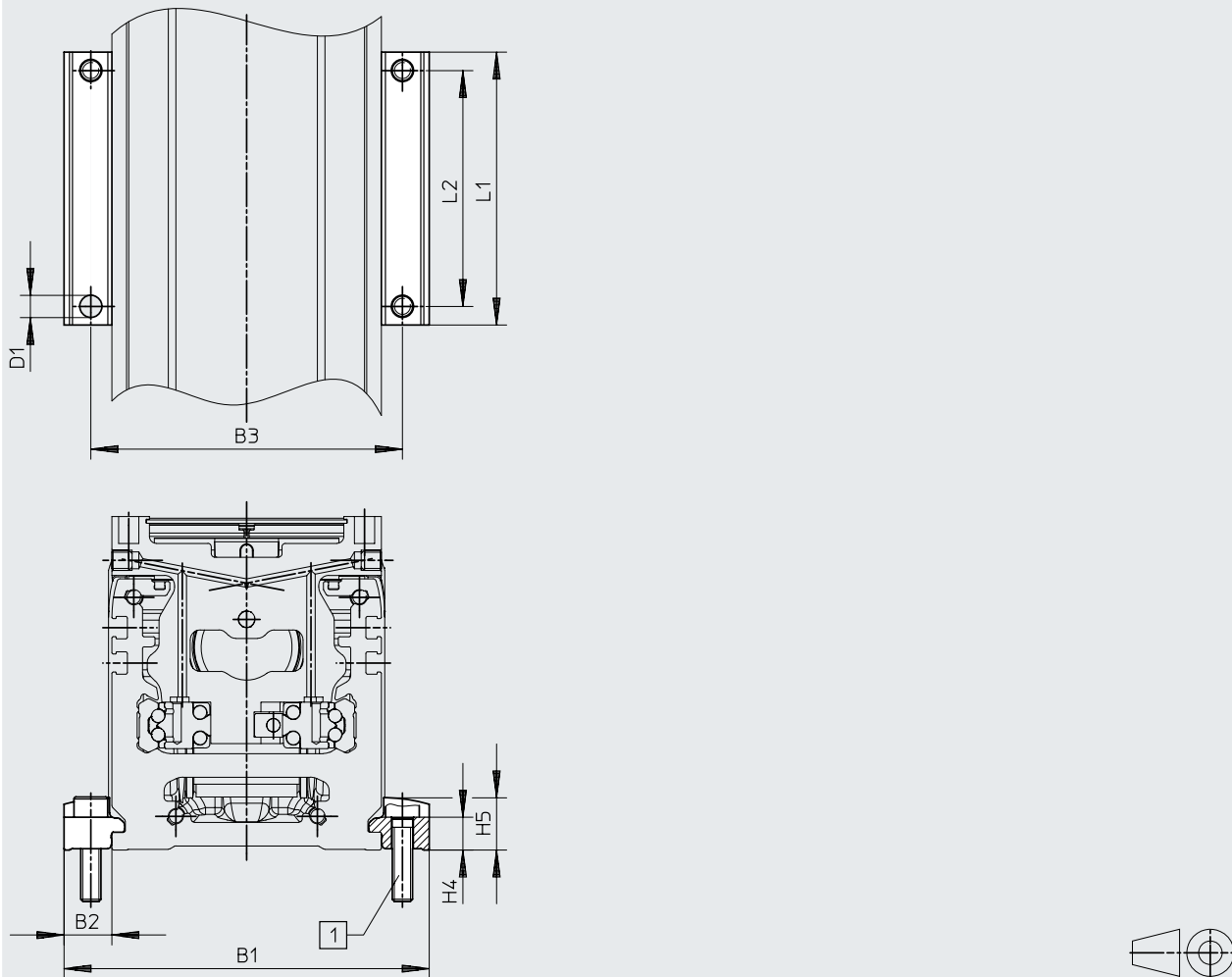
Download CAD data → [www.festo.com](http://www.festo.com)



		B1	B2	B3	D1	H4	H5	L1	L2
					$\varnothing$ H13	$\pm 0.1$			
EAHF-E24-60-P	ELGD-TB-60	88.4	14.2	72.5	6.6	9.8	15.5	70	40
	ELGD-TB-80	108.4	14.2	92.5	6.6	9.8	15.5	70	40

## Datasheet

## Dimensions – Profile mounting EAHF-E24-60-P-D

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

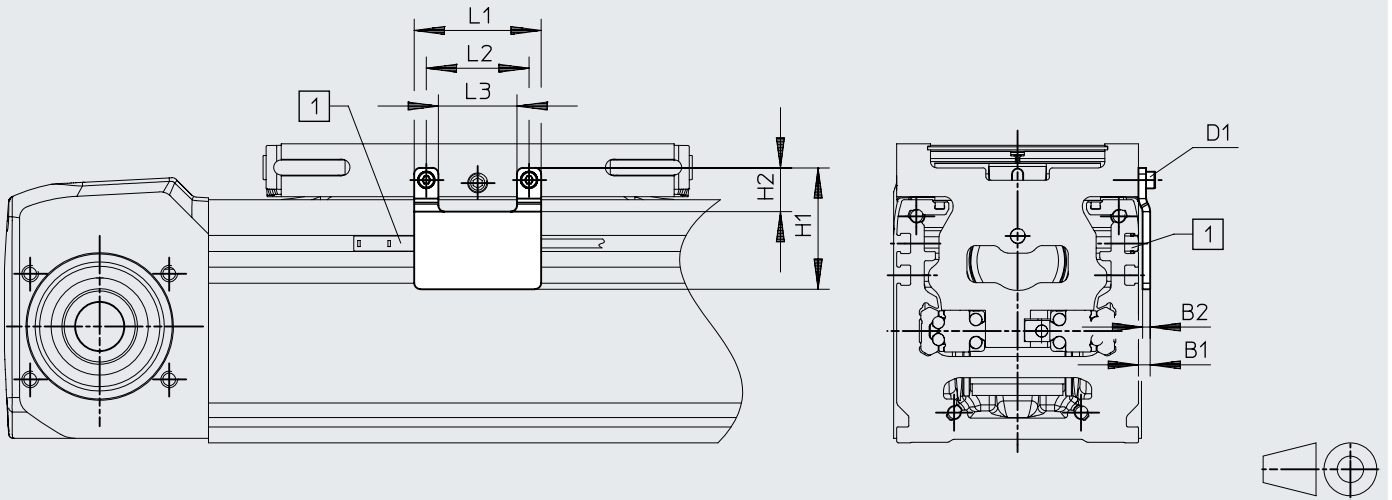
		B1	B2	B3	D1 ∅ H13	H4 ±0.1	H5	L1	L2
EAHF-E24-60-P-D5	ELGD-TB-60	88.4	14.2	72.5	5.5	9.8	15.5	62	52.5
EAHF-E24-60-P-D4	ELGD-TB-80	108.4	14.2	92.5	6.6	9.8	15.5	81	70
EAHF-E24-60-P-D6	ELGD-TB-100	128.4	14.2	112.5	5.5	9.8	15.5	102	91



Datasheet

Dimensions – Switch lug EAPM-E24-60-SLS

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



[1] Sensor slot for proximity switch SIES-8M

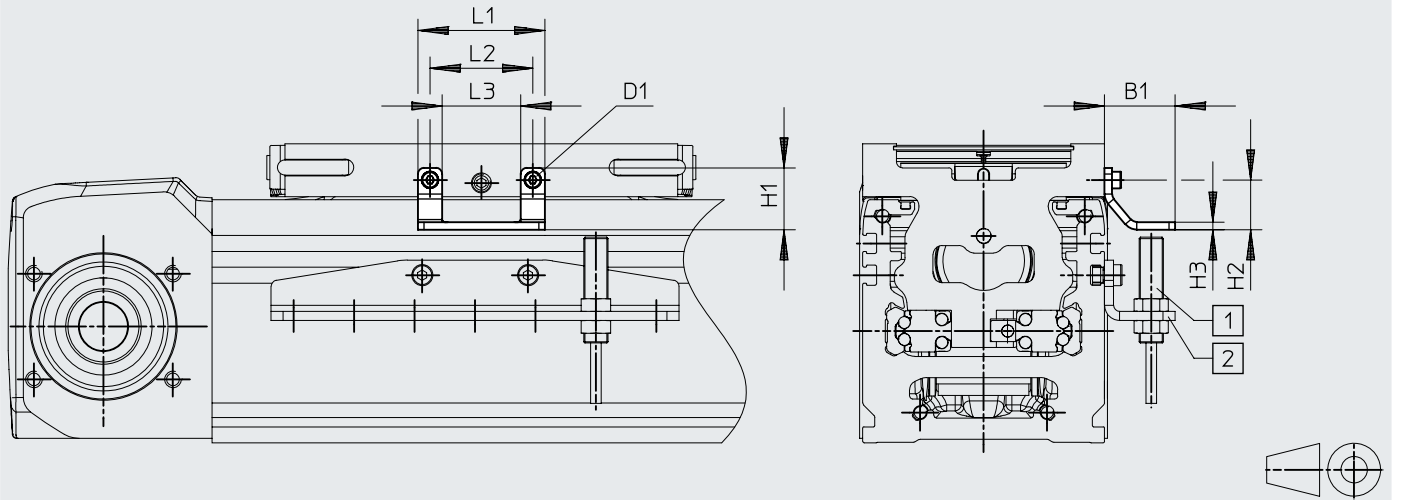
[2] Distance sleeve

		B1	B2	B3	D1		H1	H2	L1	L2	L3
					With distance sleeve	Without distance sleeve					
EAPM-E24-60-SLS	ELGD-TB-60	3.8	2.5	11.9	M3 x 20	M3 x 8	40.2	14.5	42	34	26
	ELGD-TB-80										

Datasheet

Dimensions – Switch lug EAPM-E24-...-SLE

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



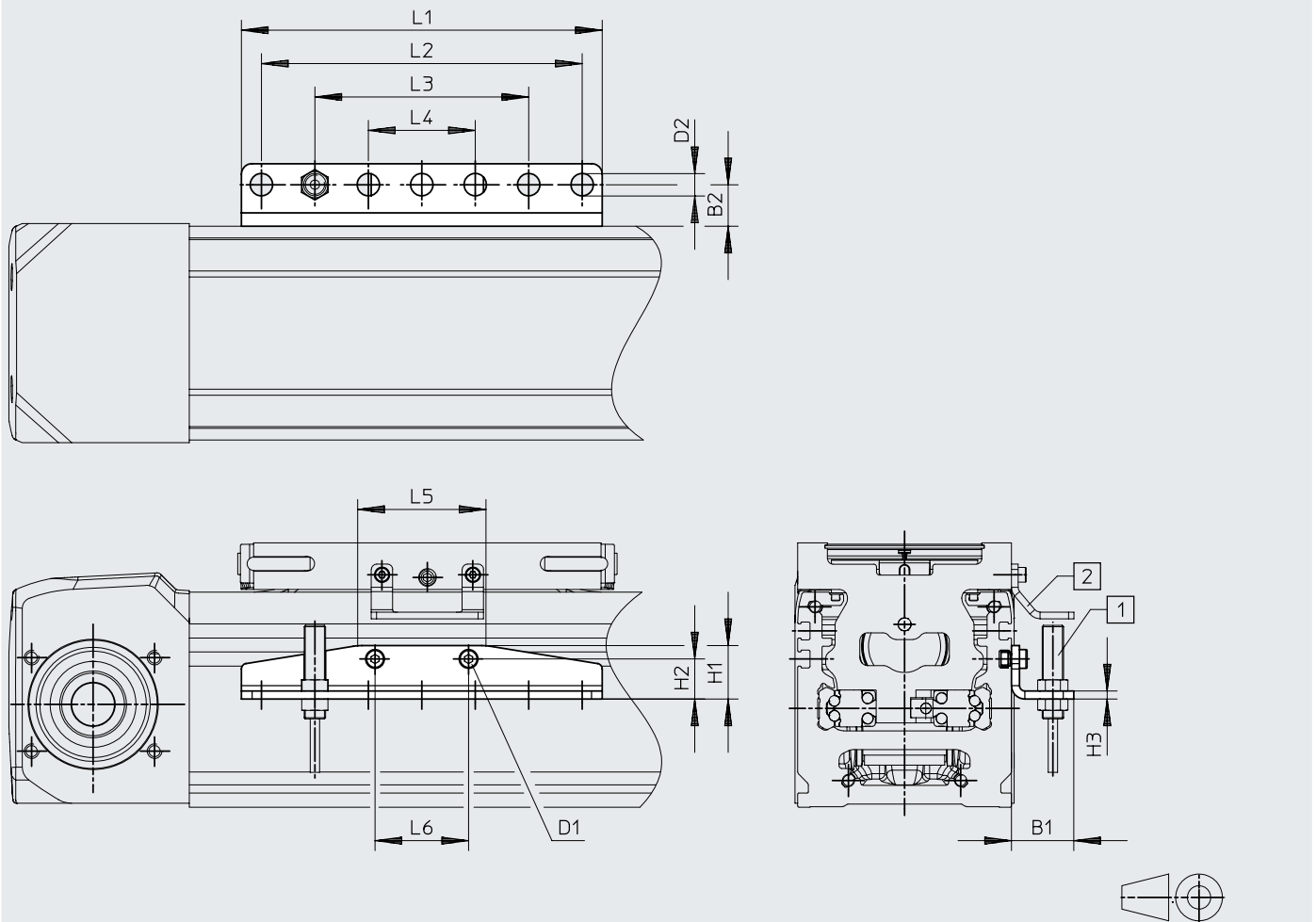
- [1] Proximity switch SIEN-M8
- [2] Sensor bracket EAPM-E24-60-SHE

		B1	D1	H1	H2	H3	L1	L2	L3
EAPM-E24-60-SLE	ELGD-TB-60	23.4	M3	20.5	16.5	2.5	42	34	26
	ELGD-TB-80								

Datasheet

Dimensions – Sensor bracket EAPM-E24-60-SHE

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



- [1] Proximity switch SIEN-8M
- [2] Switch lug EAPM-E24-60-SLE

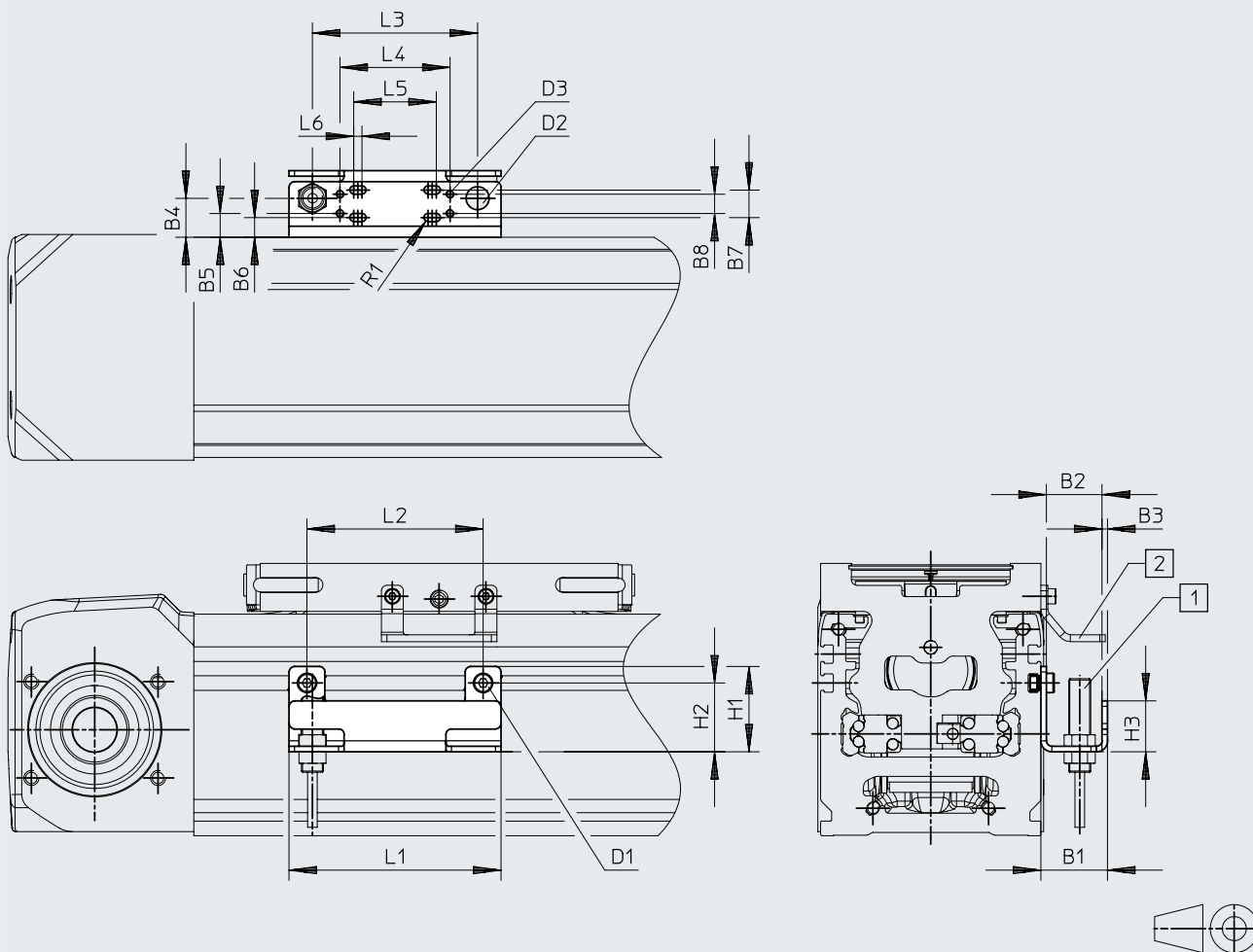
		B1	B2	D1	D2	H1	H2	H3
		±0.3			∅ H13	±0.3		
EAPM-E24-60-SHE	ELGD-TB-60	23.4	15.5	M4 x 6	8.4	20	15	3
	ELGD-TB-80							

		L1	L2	L3	L4	L5	L6
		±0.2					
EAPM-E24-60-SHE	ELGD-TB-60	135	120	80	40	48	35
	ELGD-TB-80						

Datasheet

Dimensions – Sensor bracket EAPM-E24-60-SHO

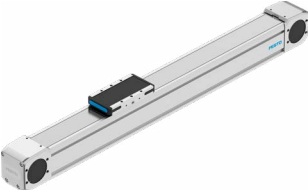
Download CAD data → [www.festo.com](http://www.festo.com)




- [1] Inductive sensor (Omron)
- [2] Switch lug EAPM-E24-60-SLE

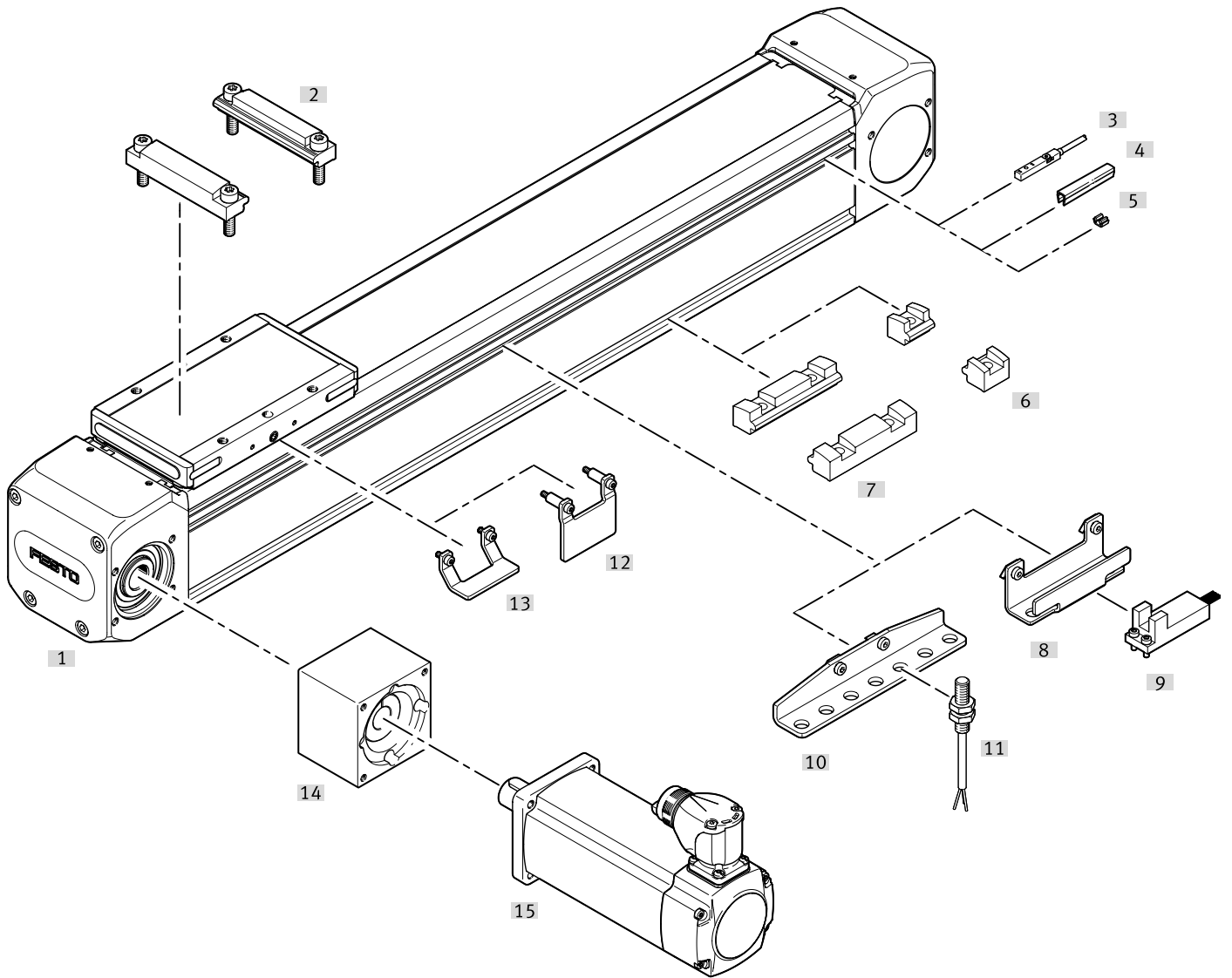
		B1	B2	B3	B4	B5	B6	B7
EAPM-E24-60-SHO	ELGD-TB-60	24.2	20.2	2	14.1	8.6	7.1	10
	ELGD-TB-80							
		B8	D1	D2 ∅	D3	H1	H2	H3
EAPM-E24-60-SHO	ELGD-TB-60	7	M3	8.4	M3	31	25	18.5
	ELGD-TB-80							
		L1	L2	L3	L4	L5	L6	R1
EAPM-E24-60-SHO	ELGD-TB-60	77	64	60	40	24	3	1.5
	ELGD-TB-80							

Datasheet

Ordering data	Size	Stroke [mm]	Part no.	Type
	60	200	<b>8192344</b>	ELGD-TB-KF-60-200-0H-PU2
		300	<b>8192345</b>	ELGD-TB-KF-60-300-0H-PU2
		500	<b>8192346</b>	ELGD-TB-KF-60-500-0H-PU2
		600	<b>8192347</b>	ELGD-TB-KF-60-600-0H-PU2
		800	<b>8192348</b>	ELGD-TB-KF-60-800-0H-PU2
		1000	<b>8192349</b>	ELGD-TB-KF-60-1000-0H-PU2
		1200	<b>8192350</b>	ELGD-TB-KF-60-1200-0H-PU2
		1500	<b>8192351</b>	ELGD-TB-KF-60-1500-0H-PU2
		1800	<b>8192352</b>	ELGD-TB-KF-60-1800-0H-PU2
		2000	<b>8192353</b>	ELGD-TB-KF-60-2000-0H-PU2
	80	200	<b>8192354</b>	ELGD-TB-KF-80-200-0H-PU2
		300	<b>8192355</b>	ELGD-TB-KF-80-300-0H-PU2
		500	<b>8192356</b>	ELGD-TB-KF-80-500-0H-PU2
		600	<b>8192357</b>	ELGD-TB-KF-80-600-0H-PU2
		800	<b>8192358</b>	ELGD-TB-KF-80-800-0H-PU2
		1000	<b>8192359</b>	ELGD-TB-KF-80-1000-0H-PU2
		1200	<b>8192360</b>	ELGD-TB-KF-80-1200-0H-PU2
		1500	<b>8192361</b>	ELGD-TB-KF-80-1500-0H-PU2
		1800	<b>8192362</b>	ELGD-TB-KF-80-1800-0H-PU2
		2000	<b>8192363</b>	ELGD-TB-KF-80-2000-0H-PU2

Ordering data – Modular product system	Size	Stroke [mm]	Part no.	Type	More information → <a href="#">elgd-tb</a>
	60	50 ... 2850	<b>8176884</b>	ELGD-TB-KF-60-...	
	80	50 ... 2850	<b>8176885</b>	ELGD-TB-KF-80-...	

Peripherals overview

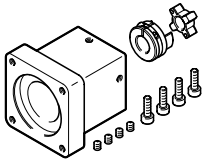


## Peripherals overview

Accessories			
	Type	Description	→ Page/Internet
[1]	Toothed belt axis ELGD-TB	Electric drive	elgd-tb
[2]	Profile mounting EAHF-E24-...-D...	For axis/axis mounting with adapter plate	24
[3]	Proximity switch, T-slot SIES-8M	Inductive proximity switch, for T-slot	25
[4]	Slot cover ABP-S	For protection against contamination	26
[5]	Clip SMBK	For mounting the proximity switch cable in the slot	26
[6]	Profile mounting EAHF-E24-...-S	For mounting the axis on the side of the profile	24
[7]	Profile mounting EAHF-E24-...	For mounting the axis on the side of the profile	24
[8]	Sensor bracket EAPM-E24-SHO	For mounting third-party sensors on the axis	25
[9]	Sensor OMRON	Third-party sensor OMRON, EE-SX674 series	–
[10]	Sensor bracket EAPM-E24-SHE	For mounting the inductive proximity switches SIEN-M8 (round design) on the axis	25
[11]	Proximity switch, M8 SIEN-M8	Inductive proximity switch, round design	26
[12]	Switch lug EAPM-E24-SLS	For sensing the slide position via inductive proximity switch SIES-8M or for optical sensors (Omron) with sensor bracket EAPM-E24-SHO	24
[13]	Switch lug EAPM-E24-SLE	For sensing the slide position via inductive proximity switch SIEN-M8 (round design) and sensor bracket EAPM-E24-SHE	25
[14]	Axial kit EAMM	For axial motor mounting	<a href="#">eamm-a</a>
[15]	Motor EMMT	Motors and kits specially matched to the axis Detailed information: <a href="http://www.festo.com/catalogue/eamm">www.festo.com/catalogue/eamm</a> Engineering tool: <a href="http://www.festo.com/x/electric-motion-sizing">www.festo.com/x/electric-motion-sizing</a>	<a href="#">emmt</a>

## Accessories

## Permissible axis/motor combinations for axial assembly kits

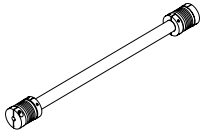


Below are the links where you can find all the information about:

- Axis/motor combinations
- Permissible external motors
- Technical data
- Dimensions

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

## Connecting shaft KSK

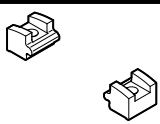


- For the synchronization of two base axes in portal systems

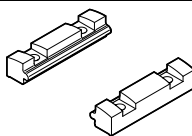
You will find all the information about at the following link:

Connecting shaft → [ksk](http://ksk)

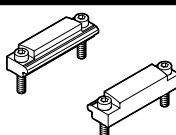
## Profile mounting EAHF-E24-...-P-S

	Description	Material	Product weight	Part no.	Type
	For size 60, 80	Anodised wrought aluminium alloy	18 g	<b>8197128</b>	<b>EAHF-E24-60-P-S</b>

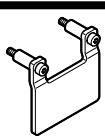
## Profile mounting EAHF-E24-...-P

	Description	Material	Product weight	Part no.	Type
	For size 60, 80	Anodised wrought aluminium alloy	71 g	<b>8197132</b>	<b>EAHF-E24-60-P</b>

## Profile mounting EAHF-E24-...-P-D...

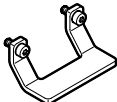
	Description	Material	Product weight	Part no.	Type
	ELGD-60 to ELGD-60	Anodised wrought aluminium alloy	87 g	<b>8197131</b>	<b>EAHF-E24-60-P-D5</b>
	ELGD-60 to ELGD-80		119 g	<b>8197129</b>	<b>EAHF-E24-60-P-D4</b>
	ELGD-80 to ELGD-100		133 g	<b>8197130</b>	<b>EAHF-E24-60-P-D6</b>

## Switch lug EAPM-E24-...-SLS

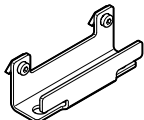
	Description	Material	Product weight	Part no.	Type
	For size 60, 80	Steel	32 g	<b>8197117</b>	<b>EAPM-E24-60-SLS</b>

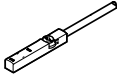
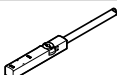


## Accessories





Switch lug EAPM-E24-...-SLE					
	Description	Material	Product weight	Part no.	Type
	For size 60, 80	Steel	20 g	<b>8197116</b>	<b>EAPM-E24-60-SLE</b>

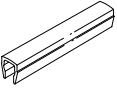
Sensor bracket EAPM-E24-...-SHE					
	Description	Material	Product weight	Part no.	Type
	For size 60, 80	Steel	103 g	<b>8197123</b>	<b>EAPM-E24-60-SHE</b>


Sensor bracket EAPM-E24-...-SHO					
	Description	Material	Product weight	Part no.	Type
	For size 60, 80	Steel	67 g	<b>8197121</b>	<b>EAPM-E24-60-SHO</b>

Proximity switch for T-slot, inductive						Datasheets → Internet: sies
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Type
<b>N/O</b>						
	Inserted in the slot from above, flush with the cylinder profile	PNP	Cable, 3-wire	7.5	<b>551386</b>	<b>SIES-8M-PS-24V-K-7.5-OE</b>
			Plug M8x 1, 3-pin	0.3	<b>551387</b>	<b>SIES-8M-PS-24V-K-0.3-M8D</b>
		NPN	Cable, 3-wire	7.5	<b>551396</b>	<b>SIES-8M-NS-24V-K-7.5-OE</b>
			Plug M8x 1, 3-pin	0.3	<b>551397</b>	<b>SIES-8M-NS-24V-K-0.3-M8D</b>
<b>N/C</b>						
	Inserted in the slot from above, flush with the cylinder profile	PNP	Cable, 3-wire	7.5	<b>551391</b>	<b>SIES-8M-PO-24V-K-7.5-OE</b>
			Plug M8x 1, 3-pin	0.3	<b>551392</b>	<b>SIES-8M-PO-24V-K-0.3-M8D</b>
		NPN	Cable, 3-wire	7.5	<b>551401</b>	<b>SIES-8M-NO-24V-K-7.5-OE</b>
			Plug M8x 1, 3-pin	0.3	<b>551402</b>	<b>SIES-8M-NO-24V-K-0.3-M8D</b>

## Accessories

Proximity switch M8 (round design), inductive						Datasheets → Internet: sien
	Switching output	Electrical connection	Cable length [m]	Part no.	Type	
<b>N/O</b>						
	PNP	Cable, 3-wire	2.5	150386	SIEN-M8B-PS-K-L	
	NPN		2.5	150384	SIEN-M8B-NS-K-L	
	PNP	Plug M8x 1, 3-pin	–	150387	SIEN-M8B-PS-S-L	
	NPN		–	150385	SIEN-M8B-NS-S-L	
<b>N/C</b>						
	PNP	Cable, 3-wire	2.5	150390	SIEN-M8B-PO-K-L	
	NPN		2.5	150388	SIEN-M8B-NO-K-L	
	PNP	Plug M8x 1, 3-pin	–	150391	SIEN-M8B-PO-S-L	
	NPN		–	150389	SIEN-M8B-NO-S-L	

Slot cover ABP-5-S1						
	Description	Material	Pack size	Product weight	Part no.	Type
	For size 60, 80	ABS	2 every 0.5 m	13 g	563360	ABP-5-S1

Clip SMBK						
	Description	Pack size	Product weight	Part no.	Type	
	For size 60, 80	10	1g	534254	SMBK-8	