Toothed belt axes ELGC-TB-KF





This drive is also available as a product unit as part of the Simplified Motion Series: Toothed belt axis ELGS-TB-KF



Key features

At a glance



- Optimal installation space to working space ratio
- Protected against external influences by internal guide
- Compact, integrated coupling, easy to service
- Unique assembly system
- Compact double bearing integrated in the axis to save space
- Stainless steel cover strip kept in place with magnetic strips
- · Easy to clean and less susceptible to contamination

Compact

Flexible

Optimum dimensions thanks to the integrated compact coupling and a very short slide Adapterless combination of ELGC and EGSC using the innovative "one size down" assembly system

Integrated

Simple position sensing with proximity switch SMT-8M and integrated positioning magnet

Protected

The cover strip and optional vacuum connection protect against particle emissions and atmospheric pollution

Modular and flexible with motor, motor mounting kit and servo drive

Motor Servo motor



Stepper motor

Servo drive Servo drive



Motor controller for stepper motor





Axial kit

Motor mounting kit



Simplicity in one unit

This product is also available as a product unit as part of the Simplified Motion Series:



- The Simplified Motion Series combines the simplicity of pneumatics with the benefits of electric automation. The perfect solution for all users who are looking for an electric alternative for very simple movement and positioning tasks, but don't want the commissioning process for traditional electric drive systems that can often be quite complex.
- Simplified functionality for simple movements between two end positions
- A variety of movements with different mechanical systems
- · Integrated products eliminate the need for a control cabinet
- · Quick and easy commissioning without software or special expertise
- Digital I/O and IO-Link integrated as standard

Key features

From individual axis to complete handling system



- The toothed belt and spindle axes ELGC and mini slide EGSC form a scalable modular system for compact automation
- The shared platform architecture creates a consistent range with matching interfaces. A large number of systems can be realised entirely without adapter plates
- Powerful drive and guide components ensure a long service life, as well as excellent load capacity and reliability
- The uniform and universal range of accessories reduces warehousing and design costs
- Two position sensing functions can be selected:
 - With magneto-resistive proximity switches (detection via integrated magnets)
 - With inductive proximity switches (detection via switch lug)



Typical handling systems

For applications where compact dimensions are essential, the axes ELGC can be combined into very space-saving handling systems that are suitable for assembly systems, test and inspection systems, small parts handling, the electronics industry and desktop applications. The very compact linear axes ELGC, mini slide EGSC and electric cylinder EPCC offer an optimal ratio between installation space and working space. They feature a common system approach and platform architecture and the connections are largely adapterless.

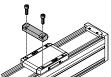
 Cantilever system
 Planar surface gantry
 3-dimensional gantry

Key features

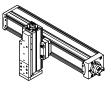
Matrix showing combinations between axis ELGC/ELGS-TB, ELGC/ELGS-BS, mini slide EGSC/EGSS-BS, electric cylinder EPCC/EPCS-BS and guide axis ELFC Mounting options with profile mounting and via angle kit

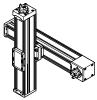
		Assembly axis ELGC-BS/-TB; ELFC; EGSC-BS; EPCC-BS; ELGS-BS/-TB; EGSS-BS, EPCS-BS				
	Size	25	32	45	60	
Base axis	32		-	-	-	
ELGC-BS/-TB; ELFC;	45	-		-	-	
ELGS-BS/-TB	60	-	-		-	
	80	-	-	-		

With profile mounting EAHF-L2-...-P-D...



· Mounting option: base axis with one-size-down assembly axis

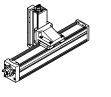


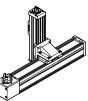


With angle kit EHAA-D-L2-...-AP



 Mounting option: base axis rotated through 90° with one-size-down assembly axis





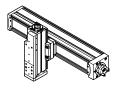
Matrix showing combinations between axis ELGC/ELGS-TB, ELGC/ELGS-BS, mini slide EGSC/EGSS-BS, electric cylinder EPCC/EPCS-BS and guide axis ELFC Assembly options with adapter kit or direct mounting

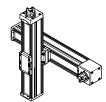
			axis ELGC- TB; EGSS-B			; EPCC-BS;
	Size	25	32	45	60	80
Base axis	32			-	-	-
ELGC-BS/-TB; ELFC;	45	-	- I		-	-
ELGS-BS/-TB	60	-	-			-
	80	-	-	-		

With adapter kit EHAA-D-L2

- · Mounting option: base axis with the same size assembly axis
- Mounting option: base axis with height adjustment for one-size-down assembly axis
- When motors are mounted using parallel kits, this may lead to interfering contours. In this case, the adapter plate is required for height compensation



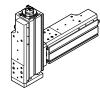




Assembly axis EGSC-BS; EGSS-BS Size 60 25 32 45 Base axis 25 EGSC-BS; 32 EGSS-BS 45 60

With direct mounting

· Mounting option: base axis with the same size assembly axis

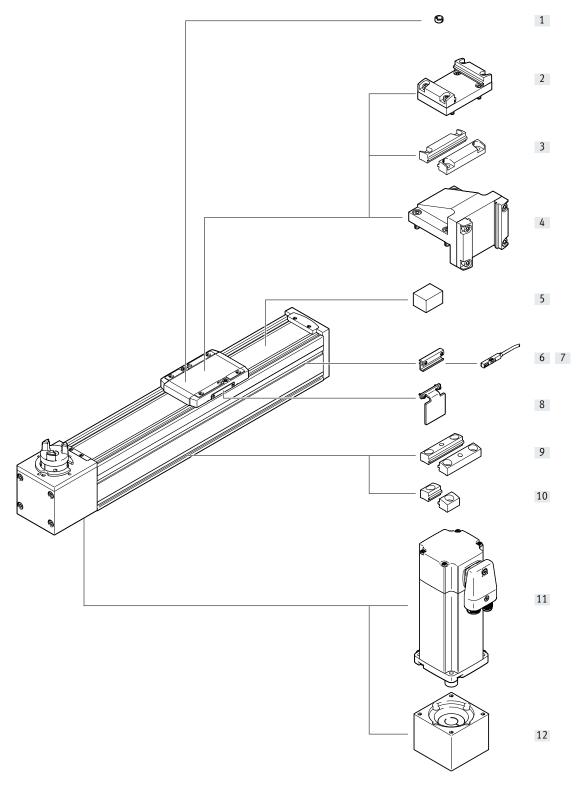


Type codes

001	Series
ELGC	Gantry axis
002	Drive system
ТВ	Toothed belt
003	Guide
KF	Recirculating ball bearing guide
004	Size
45	45
60	60
80	80

005	Stroke	
200	200	
300	300	
500	500	
600	600	
800	800	
1000	1000	
1200	1200	
1500	1500	
1800	1800	
2000	2000	

Peripherals overview



Peripherals overview

Acces	sories		
	Туре	Description	→ Page/Internet
1]	Centring pin/sleeve ZBS/ZBH	For centring loads and attachments on the slide	26
[2]	Adapter kit EHAA-D-L2	 For axis/axis mounting with adapter plate Mounting option: base axis with same size or one-size-down assembly axis (→ page 4) When motors are mounted using parallel kits, this may lead to interfering contours. In this case, the adapter plate is required for height compensation (download CAD data → www.festo.com) 	23
3]	Profile mounting EAHF-L2P-D	 For axis/axis mounting without adapter plate Mounting option: base axis with one-size-down assembly axis (→ page 4) 	22
[4]	Angle kit EHAA-D-L2AP	For mounting one-size-down vertical axes (assembly axes) on base axes with mounting position "slide at top" (\rightarrow page 4)	24
5]	Clamping element EADT-S-L5-32	Tool for retensioning the cover strip	26
[6]	Sensor bracket EAPM-L2-SH	For mounting the proximity switches on the axis. The proximity switches can only be mounted using the sensor bracket	25
[7]	Proximity switches SIES-8M	Inductive proximity switches, for T-slot	26
	Proximity switches SMT-8M	Magnetic proximity switches, for T-slot	26
8]	Switch lug EAPM-L2SHS	For sensing the slide position in conjunction with inductive proximity sensors SIES-8M	25
9]	Profile mounting EAHF-L2P	For mounting the axis on the side of the profile. The profile mounting can be fixed in place on the mounting surface using the drill hole in the centre	21
10]	Profile mounting EAHF-L2P-S	For mounting the axis on the side of the profile	20
[11]	Motor EMME-AS, EMMS-ST	Motors specially matched to the axis	19
[12]	Axial kit EAMM-A	For axial motor mounting	19

Sealing air connection



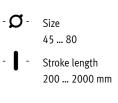
Air is exchanged between the interior of the cylinder and the environment via a sealing air connection. This prevents negative pressure or excess pressure arising in the interior of the cylinder.

Additional functions of the connection:

- Application of slight negative pressure prevents emission of particles
- Application of slight excess pressure prevents atmospheric pollution Suitable push-in fittings \rightarrow page 26

Data sheet









General technical data

Size		45	60	80
Design		Electromechanical axis with toothed belt		
Guide		Recirculating ball bearing guide		
Mounting position		Any		
Working stroke	[mm]	200, 300, 500, 600, 800, 1000, 1200,	200, 300, 500, 600, 800, 1000, 1200,	200, 300, 500, 600, 800, 1000, 1200,
		1500	1500, 1800, 2000	1500, 1800, 2000
Max. feed force F _x	[N]	75	120	250
Max. no-load torque ¹⁾	[Nm]	0.075	0.194	0.413
Max. no-load resistance to shifting ¹⁾	[N]	7.8	15.6	24.7
Max. driving torque	[Nm]	0.716	1.49	4.178
Max. speed	[m/s]	1.2	1.5	1.5
Max. acceleration	[m/s ²]	15		
Repetition accuracy	[mm]	±0.1		
Position sensing		Magneto-resistive, inductive		

1) At 0.2 m/s

Operating and environmental conditions

Operating and environmental conditions				
Ambient temperature ¹⁾	[°C]	0 +50		
Degree of protection		IP40		
Duty cycle	[%]	100		
Maintenance interval		Life-time lubrication		

1) Note operating range of proximity switches

Weight [g]

Size	45	60	80
Basic weight with 0 mm stroke ¹⁾	760	1775	3500
Additional weight per 10 mm stroke	23	43	73
Moving mass	169	482	901

1) Including slide

Toothed belt				
Size		45	60	80
Indexing	[mm]	2	3	3
Elongation ¹⁾	[%]	0.187	0.124	0.200
Effective diameter	[mm]	19.1	24.83	33.42
Feed constant	[mm/rev]	60	78	105

1) At max. feed force

I

Size 45 60 80 J ₀ [kg mm ²] 18.62 88.04 291.2 J _µ per metre stroke [kg mm ² /m] 2.81 8.51 19.27 J _µ per kg payload [kg mm ² /kg] 91.19 154.11 279.3								
J _H per metre stroke [kg mm ² /m] 2.81 8.51 19.27	Size		45	60	80			
	J ₀ [k	kg mm²]	18.62	88.04	291.2			
J _L per kg payload [kg mm²/kg] 91.19 154.11 279.3	J _H per metre stroke [k	kg mm²/m]	2.81	8.51	19.27			
	J _L per kg payload [k	kg mm²/kg]	91.19	154.11	279.3			

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

 $J_A = J_O + J_H x$ working stroke [m] + $J_L x m_{payload}$ [kg]

Homing

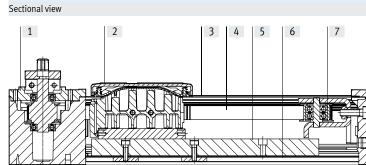
Homing can be carried out in two ways:

- Against a fixed stop
- Using a reference switch

The following values must be observed:

Size		45	60	80
Max. impact energy	[J]	0.5x10 ⁻³	1x10 ⁻³	2x10 ⁻³
At max. homing speed	[m/s]	0.01		

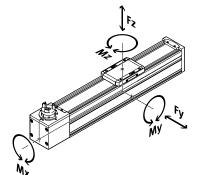
Materials



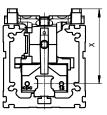
Axis					
[1]	Drive cover	Painted die-cast aluminium			
[2]	Slide	Die-cast aluminium			
[3]	Cover strip	High-alloy stainless steel			
[4]	Toothed belt	Polychloroprene with glass cord and nylon coating			
[5]	Guide	Steel			
[6]	Profile	Anodised wrought aluminium alloy			
[7]	Guide pulley	Aluminium			
	Note on materials	RoHS-compliant			
		Contains paint-wetting impairment substances			

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.



Distance from the slide surface to the centre of the guide



Max. permissible forces and torques on the slide (strength limits)

Size	-	45	60	80
Fy _{max.}	[N]	300	600	900
Fz _{max.}	[N]	600	1800	2700
Mx _{max.}	[Nm]	5.5	29.1	59.8
My _{max.}	[Nm]	4.7	31.8	56.2
Mz _{max.}	[Nm]	4.7	31.8	56.2

Distance from the slide surface to the centre of the guideSize4560

Dimension x [mm] 42.8 54.6 72.5	

Max. permissible forces and torques for the bearing calculation, for a service life of 5000 km or 5 x 10⁶ cycles

Size	•	45	60	80
Fy _{max.}	[N]	880	3641	5543
Fz _{max.}	[N]	880	3641	5543
Mx _{max.}	[Nm]	5.5	29.1	59.8
My _{max.}	[Nm]	4.7	31.8	56.2
Mz _{max.}	[Nm]	4.7	31.8	56.2

- 🛔 - Note

For a guide system to have a service life of 5000 km, the load comparison factor must have a value of $fv \le 1$, 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 "PositioningDrives" is available

for more precise calculations \rightarrow www.festo.com

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:

$$f_{\nu} = \frac{\left|F_{y1}\right|}{F_{y2}} + \frac{\left|F_{z1}\right|}{F_{z2}} + \frac{\left|M_{x1}\right|}{M_{x2}} + \frac{\left|M_{y1}\right|}{M_{y2}} + \frac{\left|M_{z1}\right|}{M_{z2}} \le 1$$

 F_1/M_1 = dynamic value F_2/M_2 = maximum value

Calculating the service life

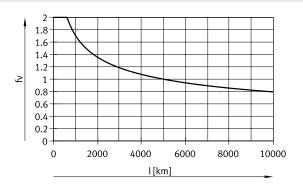
The service life of the guide depends on the load. To be able to make a statement as to the service life of the guide, the graph below plots the load comparison factor fv against the service life.

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 (\rightarrow 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. 1500 km. Reducing the acceleration reduces the Mz and My values. A load comparison factor f_v of 1 now gives a service life of 5000 km.

These values are only theoretical. You must consult your local Festo contact for a load comparison factor fv greater than 1.



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

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

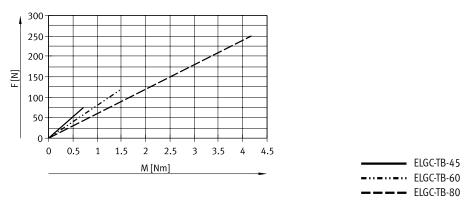
To make it easier to compare the guide capacity of linear axes ELGC with bearing guides, the table below lists the theoretically permissible forces and torques for a calculated service life of 100 km. This corresponds to the dynamic forces and torques to ISO.

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.

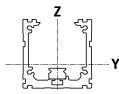
Max. permissible forces and torques for a theoretical service life of 100 km (from a guide perspective only)

Size		45	60	80
Fy _{max.}	[N]	3240	13400	20400
Fz _{max.}	[N]	3240	13400	20400
Mx _{max.}	[Nm]	20	107	220
My _{max.}	[Nm]	17	117	207
Mz _{max.}	[Nm]	17	117	207

Feed force F as a function of input torque M



Second moment of area



Size		45	60	80
ly	[mm ⁴]	140x10 ³	441x10 ³	1.37x10 ⁶
lz	[mm ⁴]	170x10 ³	542x10 ³	1.66x10 ⁶

Fy ↔ F

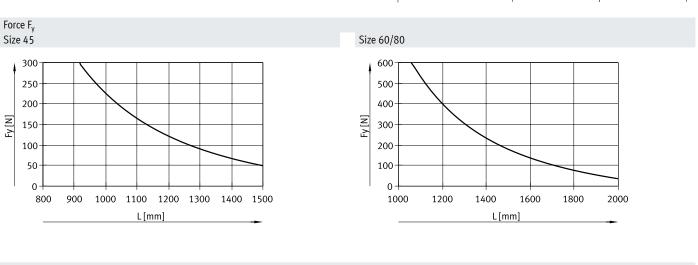
Data sheet

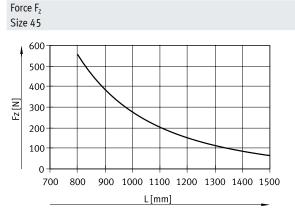
Maximum permissible support spacing L (without profile mounting) as a function of force F

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 mm.





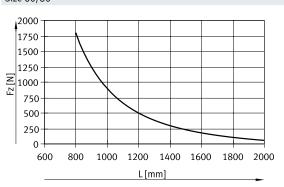
ELGC-TB-45 ELGC-TB-60 ELGC-TB-80

Recommended deflection limits

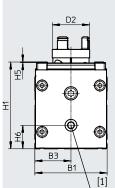
Adherence to the following deflection limits is recommended so as not to impair the functionality of the axes. Greater deformation can result in increased friction, greater wear and reduced service life.

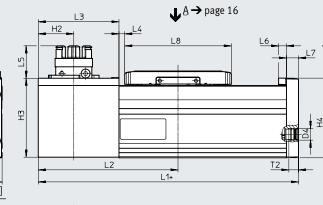
Size		Static deflection (stationary load)
45 80	0.05% of the axis length, max. 0.5 mm	0.1% of the axis length

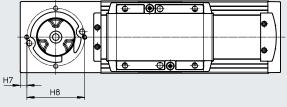
Size 60/80



Dimensions

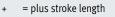






View B

, B Download CAD data → <u>www.festo.com</u>



[1] = Sealing air connection (D4)

push-in fittings \rightarrow page 26

L4 = End position zero stroke

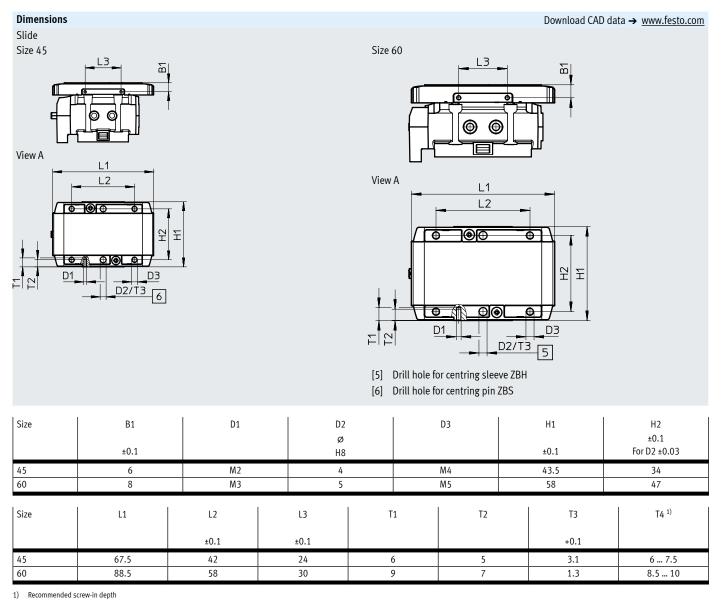
Size	B1	B2	B3	B4		2 ¹⁾ Ø	D3	D4	H1	H2
45	45	42.6	22.5	6.1	10	5.3	-	G1/8	54	22
60	60	57.1	30	6.1	3:	1.4	M4	G1/8	72	29.5
80	80	77.1	40	6.1	3	1.4	M6	G1/8	96	39.5
Size	H3	H4	H5	H6	ŀ	17	H8	H11	H12	H13
45	49	49.6	0.5	12.5	5	-	-	42.8	45	18.5
60	65.5	66.1	0.5	19.5	5 5	.5	48	54.6	60	32.5
80	85.5	88.1	0.5	20		7	65	72.5	80	41.5
Size	L1	L2	L3	L4 ²⁾	L5	L6	L7	L8	T1	T2
		min.		min.						
45	165	90	52	4.25	19.9	6.5	7	67.5	-	8
60	216	116	67	4.75	26.9	6.5	10	88.5	9.5	8
80	260	145	87	5	25.9	6.5	12	106	12.5	8

1) Coupling diameter or interference diameter of locking screw

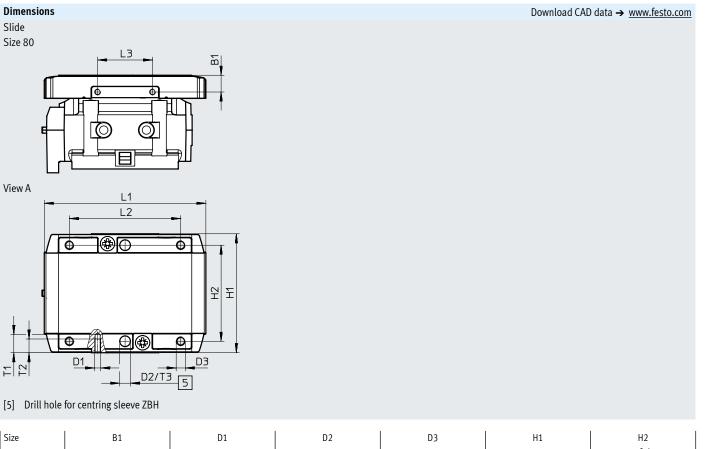
2) Includes a stroke reserve of approx. 3 mm

Dimensions Profile			D	ownload CAD data → <u>www.festo.com</u>
Size 45	2 1 2 2 ensor bracket ng slot	Size 60		
Size	B1	В5	Н9	H10
45	45	32.9	6.1	24.5
60 80	60 80	47.9 67.9	6.1	38.5 47.5

Data sheet



Data sheet



Size	B1	D1	D2		D3	H1	H2
			ø				±0.1
	±0.1		H8			±0.1	For D2 ±0.03
80	11	M4	7		M6	78	63
Size	L1	L2	L3	T1	T2	T3	T4 ¹⁾
		±0.1	±0.1			+0.1	
80	106	73	36	12	9	1.6	11 14

1) Recommended screw-in depth

Data sheet

Ordering data

Ordering data				
	Size	Stroke	Part no.	Туре
		[mm]		
	45	200	8062768	ELGC-TB-KF-45-200
		300	8062769	ELGC-TB-KF-45-300
		500	8062770	ELGC-TB-KF-45-500
		600	8062771	ELGC-TB-KF-45-600
		800	8062772	ELGC-TB-KF-45-800
		1000	8062773	ELGC-TB-KF-45-1000
		1200	8062774	ELGC-TB-KF-45-1200
		1500	8062775	ELGC-TB-KF-45-1500
	60	200	8062776	ELGC-TB-KF-60-200
		300	8062777	ELGC-TB-KF-60-300
		500	8062778	ELGC-TB-KF-60-500
		600	8062779	ELGC-TB-KF-60-600
		800	8062780	ELGC-TB-KF-60-800
		1000	8062781	ELGC-TB-KF-60-1000
		1200	8062782	ELGC-TB-KF-60-1200
		1500	8062783	ELGC-TB-KF-60-1500
		1800	8062784	ELGC-TB-KF-60-1800
		2000	8062785	ELGC-TB-KF-60-2000
	80	200	8062786	ELGC-TB-KF-80-200
		300	8062787	ELGC-TB-KF-80-300
		500	8062788	ELGC-TB-KF-80-500
		600	8062789	ELGC-TB-KF-80-600
		800	8062790	ELGC-TB-KF-80-800
		1000	8062791	ELGC-TB-KF-80-1000
		1200	8062792	ELGC-TB-KF-80-1200
		1500	8062793	ELGC-TB-KF-80-1500
		1800	8062794	ELGC-TB-KF-80-1800
		2000	8062795	ELGC-TB-KF-80-2000

- 🗍 - Note

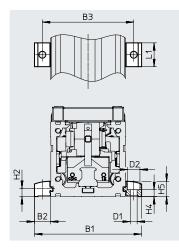
 $\bar{\bar{F}}$ Depending on the combination of motor and drive, it may not be possible to reach the maximum feed force of the drive.

Permissible axis/motor combi	nations with axial kit		Data sheets → Internet: eamm-a
Motor ¹⁾	Axial kit		
		III Det	
Туре	Part no.	Туре	
ELGC-TB-KF-45			
With servo motor			
EMME-AS-40	4595742	EAMM-A-V32-40P	
EMMT-AS-60	4608750	EAMM-A-V32-60P	
EMME-AS-60	4608750	EAMM-A-V32-60P	
With stepper motor	·		
EMMS-ST-42	4281142	EAMM-A-V32-42A	
EMMS-ST-57	4597016	EAMM-A-V32-57A	
ELGC-TB-KF-60			
With servo motor			
EMMT-AS-60	4133487	EAMM-A-T42-60P	
EMME-AS-60	4133487	EAMM-A-T42-60P	
EMMT-AS-80	4623788	EAMM-A-T42-80P	
EMME-AS-80	4623788	EAMM-A-T42-80P	
With stepper motor	ļ		
EMMS-ST-57	4327034	EAMM-A-T42-57A	
EMMS-ST-87	4610008	EAMM-A-T42-87A	
ELGC-TB-KF-80			
With servo motor			
EMMT-AS-60	4824833	EAMM-A-T46-60P	
EMME-AS-60	4824833	EAMM-A-T46-60P	
EMMT-AS-80	4624170	EAMM-A-T46-80P	
EMME-AS-80	4624170	EAMM-A-T46-80P	
EMMT-AS-100	4624227	EAMM-A-T46-100A	
EMME-AS-100	4624227	EAMM-A-T46-100A	
EMMS-AS-100	4624227	EAMM-A-T46-100A	
With stepper motor			
EMMS-ST-87	4048771	EAMM-A-T46-87A	

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

Profile mounting EAHF-L2-...-P-S

Material: Anodised wrought aluminium alloy RoHS-compliant



Dimensions and ordering data

Nº

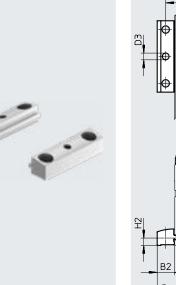
Dimensions and		1	1		1	1
For size	B1	B2	B3	D1	D2	H2
				ø	ø	
				H13	H13	
45	70.6	12.8	58	5.5	10	6.1
60	85.6	12.8	73	5.5	10	6.1
80	105.6	12.8	93	5.5	10	6.1
For size	H4	H5	11	1	1	
	±0.1		L1	Weight [g]	Part no. Type	2
45		12.2	19			e F-L2-45-P-S
45 60	±0.1			[g]	5184133 EAH	

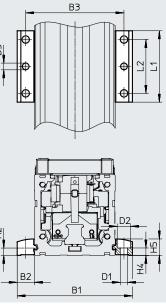
• For mounting the axis on the side of the profile

I

Profile mounting EAHF-L2-...-P

Material: Anodised wrought aluminium alloy RoHS-compliant





• For mounting the axis on the side of the profile. The profile mounting can be attached to the mounting surface using the drill hole in the centre.

Dimensions and ordering data

Differisions and	i oluening uata						
For size	B1	B2	B3	D1	D2	D3	H2
				ø	ø	ø	
				H13	H13		
45	70.6	12.8	58	5.5	10	5	6.1
60	85.6	12.8	73	5.5	10	5	6.1
80	105.6	12.8	93	5.5	10	5	6.1
For size	H4 ±0.1	H5	L1	L2	Weight Pa [g]	art no. Type	
45	5.5	12.2	53	40	35 4	835728 EAHF-L2-	-45-P
60	5.5	12.2	53	40	35 4	835728 EAHF-L2-	-45-P

Profile mounting EAHF-L2-...-P-D...

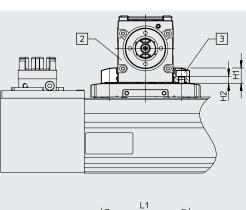
Material: Anodised wrought aluminium alloy RoHS-compliant

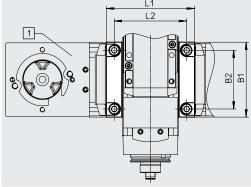
Combination matrix

- For axis/axis mounting without adapter plate
- Mounting option: base axis with one-size-down assembly axis (\rightarrow page 4)

Combination matrix									
		[2] Assembly axis ELGC-BS/-TB; ELFC; EG	الا axis ELGC-BS/-TB; ELFC; EGSC-BS						
	Size	32	45	60					
[1] Base axis	45	4759748	-	-					
ELGC-BS/-TB, ELFC	60	-	4759739	-					
	80	-	-	4759726					







[1] Base axis[2] Assembly axis

Dimensions and order	ing data					
For combination (size)	B1	E	B2			H1
4 5/32	45		34	M4		9
6 0/45	60		47	M5		12.2
8 0/60	78	(63	M6		12.2
For combination (size)	H2 ±0.1	L1	L2	Weight [g]	Part no.	Туре
4 5/32	3.7	51.4	42	24	4759748	EAHF-L2-25-P-D2
6 0/45	5.5	70.6	58	56	4759739	EAHF-L2-45-P-D3
8 0/60	4.5	85.6	73	77	4759726	EAHF-L2-45-P-D4

Adapter kit EHAA-D-L2

Material: Anodised wrought aluminium alloy **RoHS-compliant**

- For axis/axis mounting with adapter plate
- Mounting option: base axis with same size or one-size-down assembly axis (→ page 4)
- When motors are mounted using parallel kits, this may lead to interfering contours. In this case, the adapter plate is required for height compensation (download CAD data → www.festo.com)

Combination matrix										
		[2] Assembly axis ELGC-BS/-TB; ELFC; EGSC-BS								
	Size	32	45	60	80					
[1] Base axis	45	8066714	-	-	-					
ELGC-BS/-TB; ELFC	60	-	8066715		-					
	80	-	-	8066716						



[1] Base axis[2] Assembly axis

Dimensions and ordering data

For combination (size)	B1	B3 ±0.05	D1	H1	H	12	L1	L2	L3	T1	Weight [g]	Part no.	Туре
4 5/32	45	34	M4	19	1	.0	51.4	42	42	5.4	136	8066714	EHAA-D-L2-45-L2-45
6 0/45	60	47	M5	24.	2 1	.2	70.6	58	58	5.4	205	8066715	EHAA-D-L2-60-L2-60
8 0/60	78	63	M6	24.	2 1	.2	85.6	73	73	6.4	315	8066716	EHAA-D-L2-80-L2-80
For combination (size)	B1	B2	B3 ±0.05	D1	H1	H2	L1	L2	L3	T1	Weight [g]	Part no.	Туре
4 5/45	45	32	34	M4	22.2	10	71	58	42	5.4	136	8066714	EHAA-D-L2-45-L2-45
6 0/60	60	39	47	M5	24.2	12	86	73	58	5.4	205	8066715	EHAA-D-L2-60-L2-60
8 0/80	78	63	63	M6	24.2	12	106	93	73	6.4	315	8066716	EHAA-D-L2-80-L2-80

T

Angle kit EHAA-D-L2-...-AP

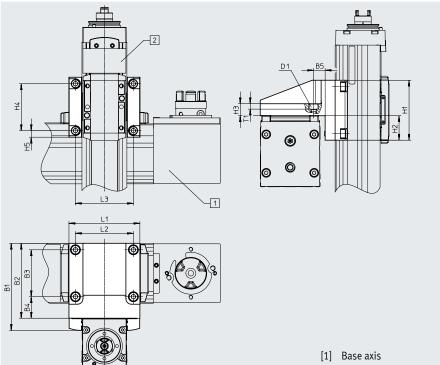
Material: Anodised wrought aluminium alloy RoHS-compliant

Combination matrix

- For mounting one-size-down vertical axes (assembly axes) on base axes with mounting position "slide at top"
 - (→ page 4)

Combination matrix				
		[2] Assembly axis ELGC-BS/-TB; ELFC; EG	SC-BS	
	Size	32	45	60
[1] Base axis	45	8066718	-	-
ELGC-BS/-TB; ELFC	60	-	8066719	-
	80	-	-	8066720





[2] Assembly axis

Dimensions and order	ring data									
For combination (size)	B1	B2	B3	B4	B5	D1	H1	H2	H3	H4
4 5/32	69	60	34	20.5	11.5	M4	45	17.5	10	34
6 0/45	87.2	75	47	21.5	21.5	M5	60	24.5	12	47
8 0/60	107.2	95	63	23.5	23.5	M6	78	33.5	12	63
For combination (size)	H5	L1	L2	L3	T1	Weight [g]	Part no	. Type		
4 5/32	5.5	52	42	42	5.4	222	80667	18 EHA	A-D-L2-45-L2-32	2-AP
6 0/45	6.5	71	58	58	5.4	433	80667	19 EHA	A-D-L2-60-L2-4	5-AP
8 0/60	7.5	86	73	73	6.4	768	80667	20 EHA	A-D-L2-80-L2-60)-AP

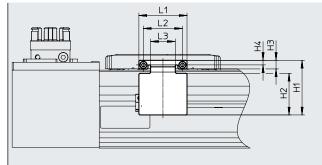
Accessories

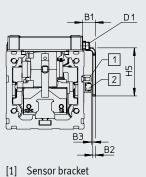
Switch lug EAPM-L2-SLS

For sensing using inductive proximity switches SIES-8M



Material: Galvanised steel RoHS-compliant





[2] Proximity switch

Dimensions and ordering data

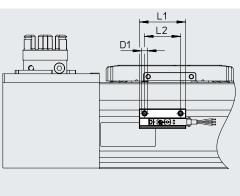
Dimensions and	oracing auto							
For size	B1	B2	B3	D1	H1	H2	H3	H4
					±0.2			
45	9.4	2	1.2±0.31	M2	37	28	5.5	3.3
60	9.7	2	1.3±0.31	M3	42	32	6.6	3.5
80	9.5	2	1.1±0.32	M4	53.5	42	8.3	4.5
For size	H5	L1	L2	L3	Weight	Part no.	Туре	
	±0.2	±0.2	±0.15		[g]			
45	33	30	24	14	18	8067260	EAPM-L2-45-SLS	
60	37	37	30	19	27	8067261	EAPM-L2-60-SLS	

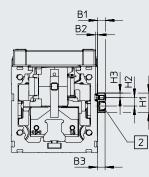
Sensor bracket EAPM-L2-SH

Material:

Anodised wrought aluminium alloy RoHS-compliant







[2] Proximity switch

Dimensions and ordering data

Dimensions and ord	ering uata						
For size	B1	B2	D1		H1		H2
45,60,80	5.5	1.3	M4		13.4		6
For size	H3	L1	L2	Weight [g]	Part no.	Туре	
45, 60, 80	3	32	25	4	4759852	EAPM-	L2-SH

Accessories

Ordering data					
	For size	Description	Part no.	Туре	PU ¹⁾
Centring pin ZE	3S/centring sleeve ZBH				
<u></u>	45	For slide	562959	ZBS-4	10
\bigcirc	60		189652	ZBH-5	
<u> </u>	80		186717	ZBH-7	
Clamping elem	ent EADT				
	45	Tool for retensioning the cover strip	8065818	EADT-S-L5-32	1
	60,80		8058451	EADT-S-L5-70	
Push-in fitting					
	45,60,80	For sealing air connection	186266	QSM-G1/8-4-I	10
0			186267	QSM-G1/8-6-I	

1) Packaging unit

Ordering data – Proximity switches for T-slot, inductive

e	PNP	Cable, 3-wire Plug M8x1, 3-pin Cable, 3-wire	7.5 0.3	551386 551387	SIES-8M-PS-24V-K-7,5-0E SIES-8M-PS-24V-K-0,3-M8D
e		Plug M8x1, 3-pin	0.3		
	NPN	0 ; 1		551387	SIES-8M-PS-24V-K-0,3-M8D
	NPN	Cable 3 wire			
		Cable, J-wile	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
ot from above, flush with 🛛	PNP	Cable, 3-wire	7.5	551391	SIES-8M-PO-24V-K-7,5-OE
e		Plug M8x1, 3-pin	0.3	551392	SIES-8M-PO-24V-K-0,3-M8D
Γ	NPN	Cable, 3-wire	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
	le	le	le Plug M8x1, 3-pin NPN Cable, 3-wire	le Plug M8x1, 3-pin 0.3 NPN Cable, 3-wire 7.5	Plug M8x1, 3-pin 0.3 551392 NPN Cable, 3-wire 7.5 551401

Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Туре
Insertable in the slot from above,	PNP	Cable, 3-wire	2.5	574335	SMT-8M-A-PS-24V-E-2,5-OE
flush with the cylinder profile,		Plug M8x1, 3-pin	0.3	574334	SMT-8M-A-PS-24V-E-0,3-M8D
short design					
	·				
Insertable in the slot from above,	PNP	Cable, 3-wire	7.5	574340	SMT-8M-A-PO-24V-E-7,5-OE
flush with the cylinder profile,					
short design					
	Insertable in the slot from above, flush with the cylinder profile, short design Insertable in the slot from above, flush with the cylinder profile,	output Insertable in the slot from above, flush with the cylinder profile, short design Insertable in the slot from above, flush with the cylinder profile,	Insertable in the slot from above, PNP Cable, 3-wire Plug M8x1, 3-pin short design PNP Cable, 3-wire flush with the slot from above, flush with the cylinder profile, Cable, 3-wire flush with the cylinder profile, PNP PNP Cable, 3-wire flush with the cylinder profile, PNP PNP PNP PNP PNP PNP PNP PNP PNP PN	Insertable in the slot from above, Fush of the slot from above, Fush with the cylinder profile, Fush wi	Insertable in the slot from above, flush with the cylinder profile, short design Insertable in the slot from above, flush with the cylinder profile, short design Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertable in the slot from above, flush with the cylinder profile, ST4340 Insertabl

Ordering	data – Connecting cables	Data sheets → Internet: nebu			
	Electrical connection, left	Electrical connection, right	Cable length	Part no.	Туре
			[m]		
TIR-	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