Guide axes ELFC, without drive

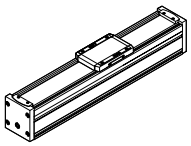
Characteristics

At a glance

- Driveless linear units with guide and freely movable slide
- The guide axis is designed to provide force and torque support in multi-axis applications
- Higher torsional resistance
- Reduced vibrations with dynamic loads
- Recommended for production systems for manufacturing lithium-ion batteries
- Drive axis and guide axis can be positioned adjacent to or above one another
- Two position sensing functions can be selected:
  – With magneto-resistive proximity switches SMT-8M (detection via integrated magnets)
  – With inductive proximity switches SIES-8M (detection via switch lug EAPM)

Characteristic values of the axes

The specifications shown in the table are maximum values.
The precise values for each of the variants can be found in the relevant data sheet in the catalogue.

Design	Can be combined with	Size	Working stroke	Guide characteristics Forces and torques				
				Fy	Fz	Mx	My	Mz
			[mm]	[N]	[N]	[Nm]	[Nm]	[Nm]
Recirculating ball bearing guide								
	Toothed belt axis ELGC-TB-KF Spindle axis ELGC-BS-KF	32	100, 200, 300, 400, 500, 600, 800	356	356	1.3	1.1	1.1
		45	100, 200, 300, 400, 500, 600, 800, 1000, 1200, 1500	880	880	5.5	4.7	4.7
		60	100, 200, 300, 400, 500, 600, 800, 1000, 1200, 1500, 1800, 2000	3641	3641	29.1	31.8	31.8
		80	100, 200, 300, 400, 500, 600, 800, 1000, 1200, 1500, 1800, 2000	5543	5543	59.8	56.2	56.2

Guide axes and the corresponding axes

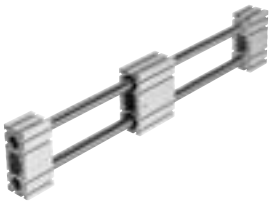
Guide axis EGC-FA

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

Guide axis ELFA

- Can be combined with:
  – Toothed belt axis ELGA-TB-KF, ELGA-TB-RF
  – Spindle axis ELGA-BS-KF
- For size 70 ... 120
- Load capacity up to max. 6890 N or 680 Nm

Guide axis ELFR



- Can be combined with:
  – Toothed belt axis ELGR
- For size 35 ... 55
- Load capacity up to max. 300 N or 124 Nm

Guide axis DGC-FA

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

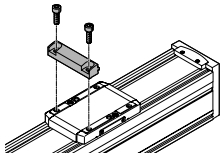
Characteristics

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

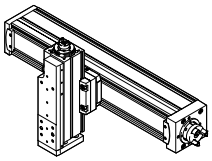
Mounting options with profile mounting and via angle kit

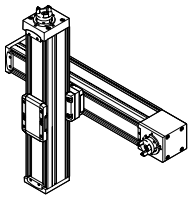
		Assembly axis ELGC-BS/-TB; ELFC; EGSC-BS; EPCC-BS; ELGS-BS/-TB; EGSS-BS, EPCS-BS			
	Size	25	32	45	60
Base axis ELGC-BS/-TB; ELFC; ELGS-BS/-TB	32	■	–	–	–
	45	–	■	–	–
	60	–	–	■	–
	80	–	–	–	■

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

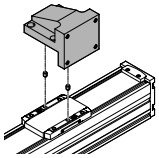


- Mounting option: base axis with one-size-down assembly axis

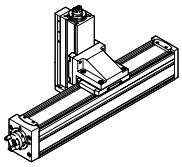


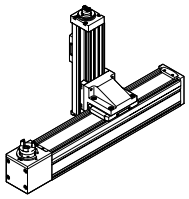


With angle kit EHAA-D-L2-...-AP



- 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

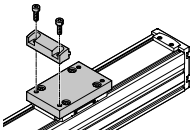
Assembly options with adapter kit or direct mounting

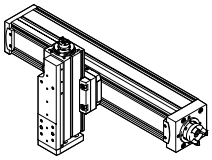
		Assembly axis ELGC-BS/-TB; ELFC; EGSC-BS; EPCC-BS; ELGS-BS/-TB; EGSS-BS, EPCS-BS				
	Size	25	32	45	60	80
Base axis ELGC-BS/-TB; ELFC; ELGS-BS/-TB	32	■		–	–	–
	45	–	■		–	–
	60	–	–	■		–
	80	–	–	–	■	

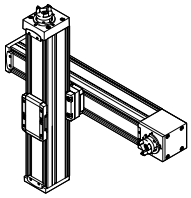
		Assembly axis EGSC-BS; EGSS-BS			
	Size	25	32	45	60
Base axis EGSC-BS; EGSS-BS	25	■	–	–	–
	32	–	■	–	–
	45	–	–	■	–
	60	–	–	–	■

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

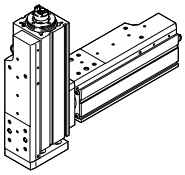




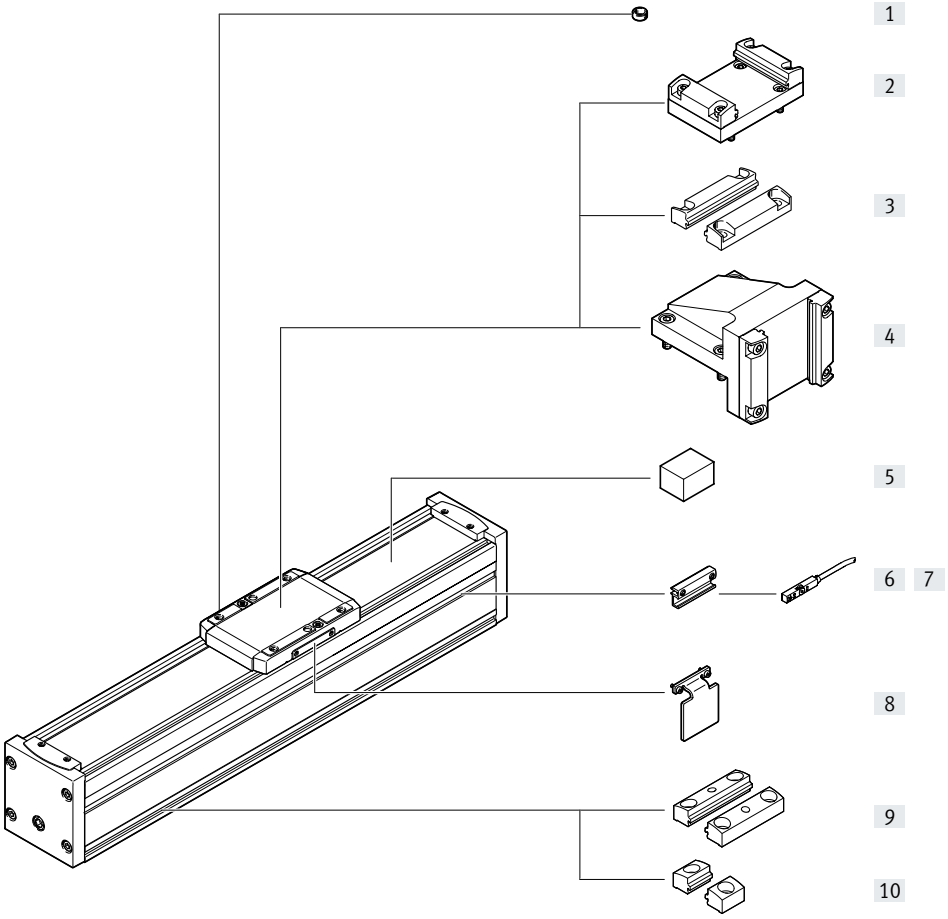


With direct mounting

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



Peripherals overview



Peripherals overview

Accessories

	Type	Description	→ Page/Internet
[1]	Centring pin/sleeve ZBS/ZBH	For centring loads and attachments on the slide	22
[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 • 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)	19
[3]	Profile mounting EAHF-L2-...-P-D...	• For axis/axis mounting without adapter plate • Mounting option: base axis with one-size-down assembly axis	18
[4]	Angle kit EHAA-D-L2-...-AP	For mounting one-size-down vertical axes (assembly axes) on base axes with mounting position "slide at top"	20
[5]	Clamping element EADT-S-L5-32	Tool for re-tensioning the cover strip	22
[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	21
[7]	Proximity switches SIES-8M	Inductive proximity switches, for T-slot	22
	Proximity switches SMT-8M	Magnetic proximity switches, for T-slot	22
[8]	Switch lug EAMP-L2-...-SLS	For sensing the slide position in conjunction with inductive proximity switches SIES-8M	21
[9]	Profile mounting EAHF-L2-...-P	For mounting the axis on the side of the profile. The profile mounting can be attached to the mounting surface using the drilled hole in the centre	17
[10]	Profile mounting EAHF-L2-...-P-S	For mounting the axis on the side of the profile	16

Type codes

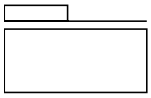
001	Series	
ELFC	Guide axis, without drive	

002	Guide	
KF	Recirculating ball bearing guide	

003	Size	
32	32	
45	45	
60	60	
80	80	

004	Stroke	
100	100	
200	200	
300	300	
400	400	
500	500	
600	600	
800	800	
1000	1000	
1200	1200	
1500	1500	
1800	1800	
2000	2000	

Data sheet



- Ø - Size
  32 ... 80
- | - Stroke length
  100 ... 2000 mm

General technical data					
Size		32	45	60	80
Design		Guide			
Guide		Recirculating ball bearing guide			
Mounting position		Any			
Working stroke	[mm]	100, 200, 300, 400, 500, 600, 800	100, 200, 300, 400, 500, 600, 800, 1000, 1200, 1500	100, 200, 300, 400, 500, 600, 800, 1000, 1200, 1500, 1800, 2000	100, 200, 300, 400, 500, 600, 800, 1000, 1200, 1500, 1800, 2000
Max. displacement force	[N]	2	4.5	6.75	15
Max. speed	[m/s]	1.5			
Max. acceleration	[m/s²]	15			
Position sensing		Magneto-resistive, inductive			

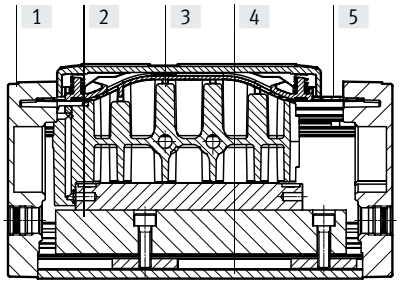
Operating and environmental conditions		
Ambient temperature	[°C]	0 ... +50
Degree of protection		IP40
Duty cycle	[%]	100
Cleanroom class		Class 7 according to ISO 14644-1
Maintenance interval		Life-time lubrication

Weight [g]					
Size		32	45	60	80
Basic weight with 0 mm stroke[1)]		168	384	1029	1905
Additional weight per 10 mm stroke		11	23	43	73
Moving mass		61	144	407	815

1) Including slide

Materials

Sectional view

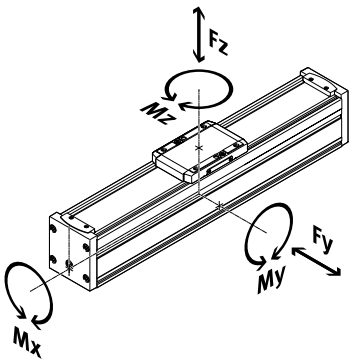


Axis		
[1]	End cap	Painted die-cast aluminium
[2]	Guide	Steel
[3]	Slide	Die-cast aluminium
[4]	Profile	Anodised wrought aluminium alloy
[5]	Cover strip	High-alloy stainless steel
	Note on materials	RoHS-compliant
	PWIS conformity	VDMA24364 zone III
	Suitable for the production of lithium-ion batteries	Metals with more than 1% copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils

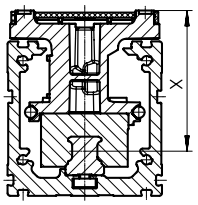
Data sheet

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.



Distance from the slide surface to the centre of the guide



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

Size		32	45	60	80
$Fy_{max.}$	[N]	150	300	600	900
$Fz_{max.}$	[N]	300	600	1800	2700
$Mx_{max.}$	[Nm]	1.3	5.5	29.1	59.8
$My_{max.}$	[Nm]	1.1	4.7	31.8	56.2
$Mz_{max.}$	[Nm]	1.1	4.7	31.8	56.2

Distance from the slide surface to the centre of the guide

Size		32	45	60	80
Dimension x	[mm]	31.4	42.8	54.6	72.5

Max. permissible forces and torques for the guide calculation, for a service life of 5000 km or 5x 10^6 cycles

Size		32	45	60	80
$Fy_{max.}$	[N]	356	880	3641	5543
$Fz_{max.}$	[N]	356	880	3641	5543
$Mx_{max.}$	[Nm]	1.3	5.5	29.1	59.8
$My_{max.}$	[Nm]	1.1	4.7	31.8	56.2
$Mz_{max.}$	[Nm]	1.1	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 ≤ 1, based on the maximum permissible forces and torques for a service life of 5000 km.

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

Calculating the load comparison factor:

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

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

Data sheet

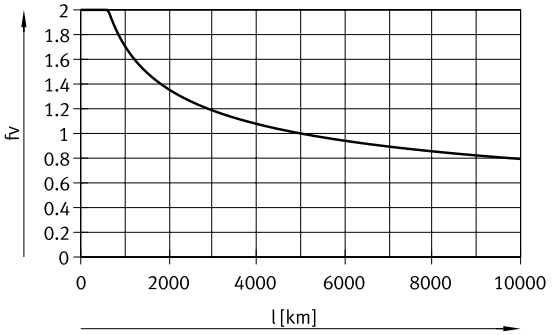
Calculating the service life

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.

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

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 1.5 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.



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

The characteristic load values of 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.

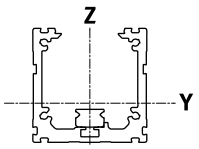
To make it easier to compare the guide capacity of guide axes ELFC with bearing guides, the table below lists the theoretically permissible forces and torques for a calculated service life of 100 km. This corresponds to the dynamic forces and torques to ISO.
These 100 km values have been calculated mathematically 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		32	45	60	80
$Fy_{max.}$	[N]	1310	3240	13400	20400
$Fz_{max.}$	[N]	1310	3240	13400	20400
$Mx_{max.}$	[Nm]	5	20	107	220
$My_{max.}$	[Nm]	4	17	117	207
$Mz_{max.}$	[Nm]	4	17	117	207

Data sheet

2nd moment of area

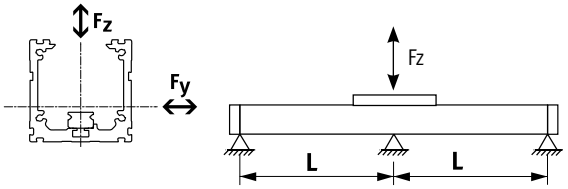


Size		32	45	60	80
Iy	[mm⁴]	38x10³	140x10³	441x10³	1.37x10⁶
Iz	[mm⁴]	45x10³	170x10³	542x10³	1.66x10⁶

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

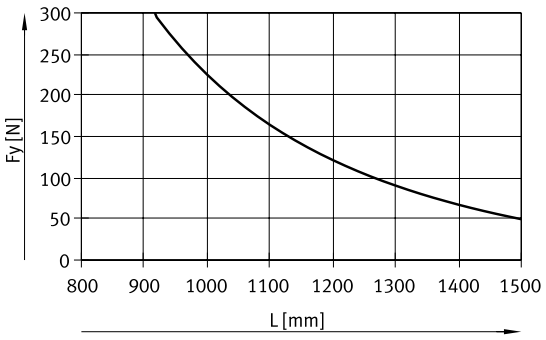
In order to limit deflection in the case of large strokes, the axis may need to be supported.
The following graphs can be used to determine the maximum permissible support spacing L as a function of force F acting on the axis. The deflection is f = 0.5 mm.

No support spacings are required for size 32.

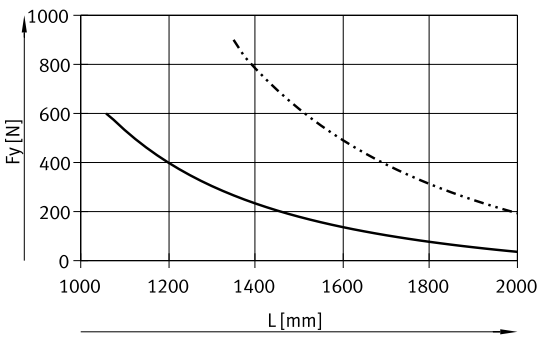


Force F_y

Size 45

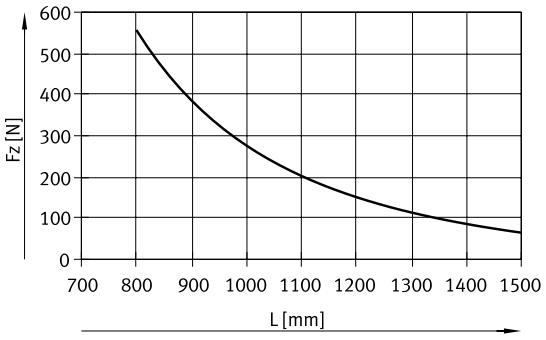


Size 60/80

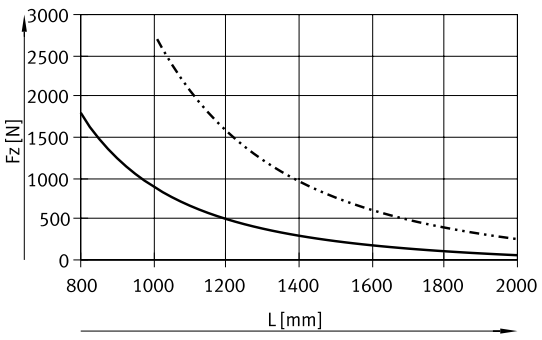


Force F_z

Size 45



Size 60/80



ELFC-KF-45

ELFC-KF-60

ELFC-KF-80

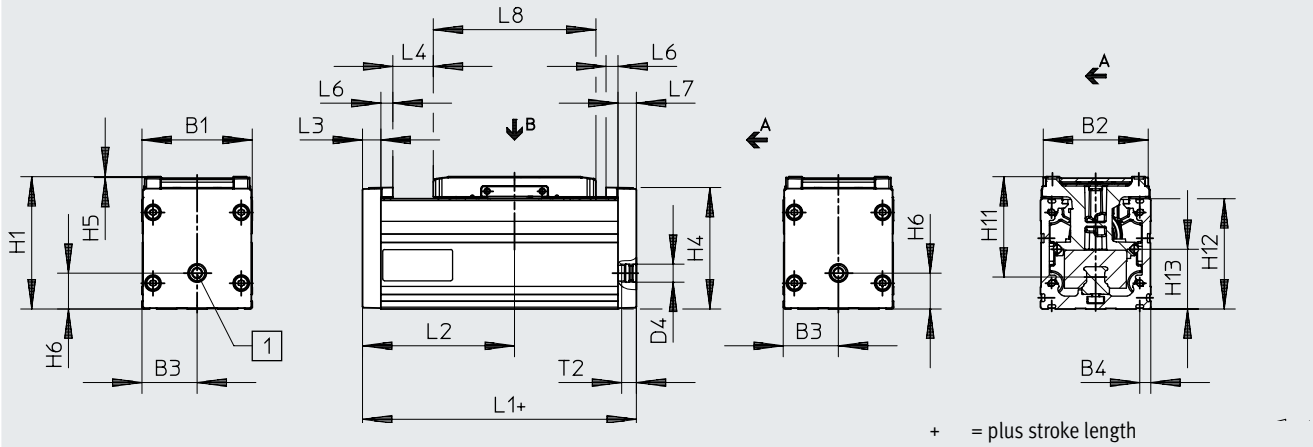
Recommended deflection limits

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	Dynamic deflection (moving load)	Static deflection
32 ... 80	0.05% of the axis length, max. 0.5 mm	0.1% of the axis length

Data sheet

Dimensions Download CAD data ➔ www.festo.com



\+ = plus stroke length
[1] Sealing air connection (D4)

Size	B1	B2	B3	B4	D4	H1	H4	H5	H6	H11	H12
32	32	29.6	16	4.9	M5	38.5	35.6	0.3	8	31.4	32
45	45	42.6	22.5	6.1	G1/8	54	49.6	0.5	12.5	42.8	45
60	60	57.1	30	6.1	G1/8	72	66.1	0.5	19.5	54.6	60
80	80	77.1	40	6.1	G1/8	96	88.1	0.5	20	72.5	80

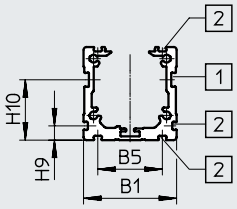
Size	H13	L1	L2 min.	L3	L4 min.	L6	L7	L8	T2
32	13.7	87	40.5	5	1.5	4.5	5	59	5.5
45	18.5	110.5	48.8	7	1.5	6.5	7	67.5	8
60	32.5	130.5	62.3	10	1.5	6.5	10	88.5	8
80	41.5	152	73	12	1.5	6.5	12	106	8

Data sheet

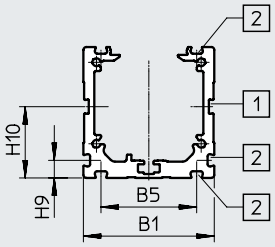
Dimensions Download CAD data ➔ www.festo.com

Profile

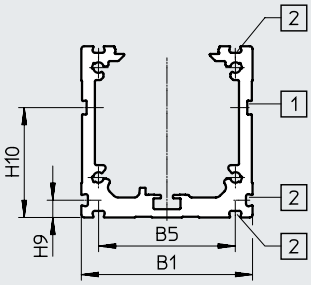
Size 32



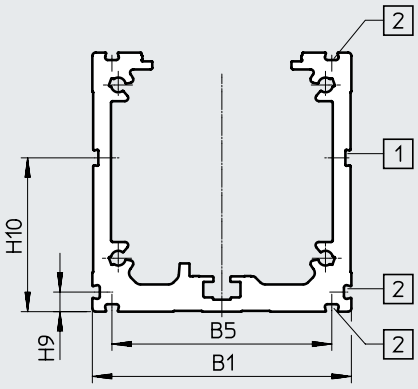
Size 45



Size 60



Size 80



[1] Slot for sensor bracket
[2] Mounting slot

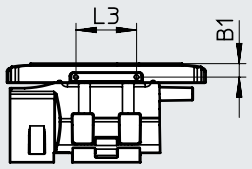
Size	B1	B5	H9	H10
32	32	22.2	4.9	20.8
45	45	32.9	6.1	24.5
60	60	47.9	6.1	38.5
80	80	67.9	6.1	47.5

Data sheet

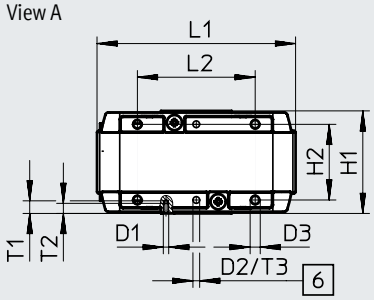
Dimensions Download CAD data ➔ www.festo.com

Slide

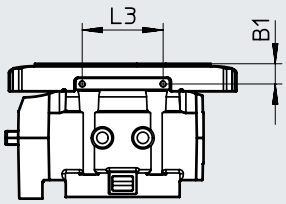
Size 32



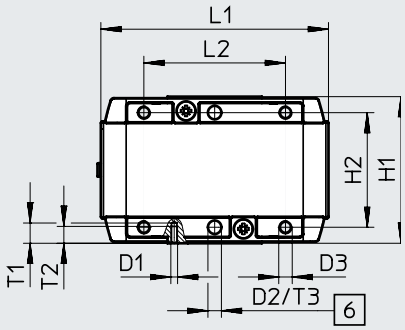
View A



Size 45



View A



[6] Drill hole for centring pin ZBS

Size	B1 ±0.1	D1	D2 Ø H8	D3	H1 ±0.1	H2 ±0.1 For D2 ±0.03
32	4	M1.6	2	M3	30.5	22.5
45	6	M2	4	M4	43.5	34

Size	L1	L2 ±0.1	L3 ±0.1	T1	T2	T3 +0.1	T4[1]
32	59	35	18	3.8	3	3.1	4 ... 5
45	67.5	42	24	6	5	3.1	6 ... 7.5

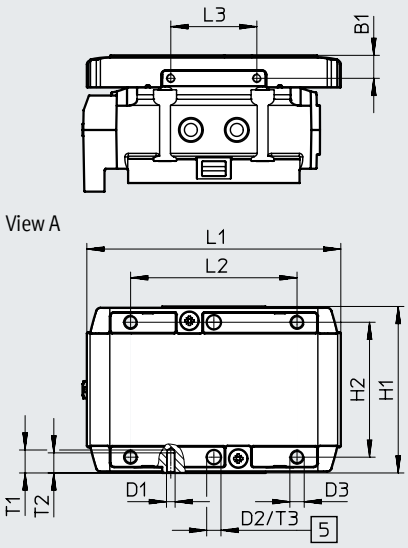
1) Recommended screw-in depth

Data sheet

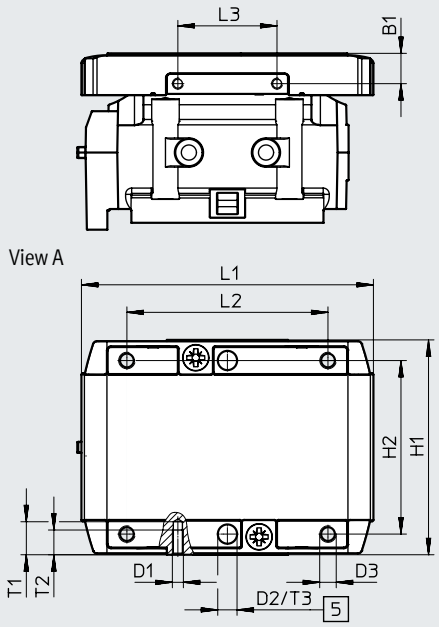
Dimensions Download CAD data ➔ www.festo.com

Slide

Size 60



Size 80



[5] Drill hole for centring sleeve ZBH

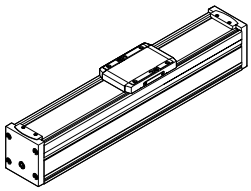
Size	B1 ±0.1	D1	D2 ø H8	D3	H1 ±0.1	H2 ±0.1 For D2 ±0.03
60	8	M3	5	M5	58	47
80	11	M4	7	M6	78	63

Size	L1	L2 ±0.1	L3 ±0.1	T1	T2	T3 +0.1	T4[1)]
60	88.5	58	30	9	7	1.3	8.5 ... 10
80	106	73	36	12	9	1.6	11 ... 14

1) Recommended screw-in depth

Data sheet

Ordering data

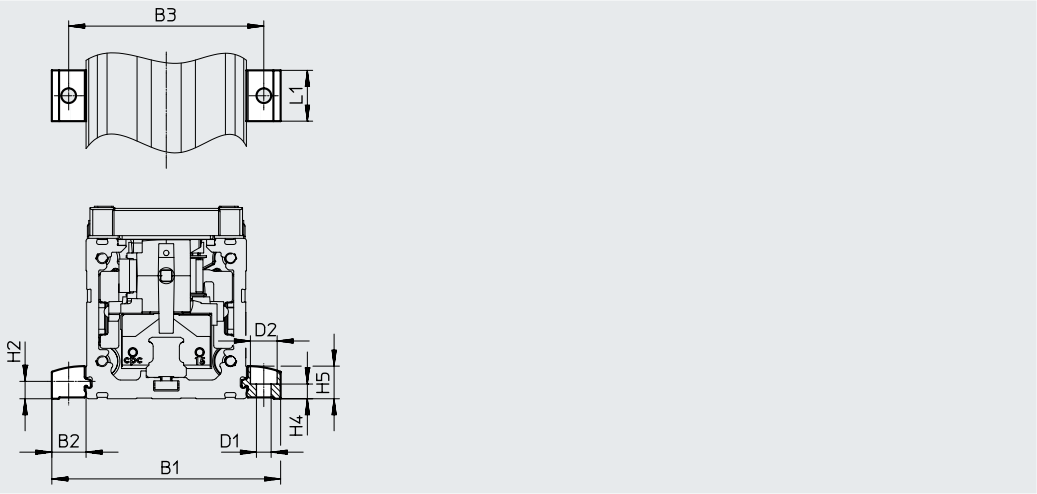


Size	Stroke [mm]	Part no.	Type
32	100	**8062796**	**ELFC-KF-32-100**
	200	**8062797**	**ELFC-KF-32-200**
	300	**8062798**	**ELFC-KF-32-300**
	400	**8062799**	**ELFC-KF-32-400**
	500	**8062800**	**ELFC-KF-32-500**
	600	**8062801**	**ELFC-KF-32-600**
	800	**8062876**	**ELFC-KF-32-800**
45	100	**8062802**	**ELFC-KF-45-100**
	200	**8062803**	**ELFC-KF-45-200**
	300	**8062804**	**ELFC-KF-45-300**
	400	**8062805**	**ELFC-KF-45-400**
	500	**8062806**	**ELFC-KF-45-500**
	600	**8062807**	**ELFC-KF-45-600**
	800	**8062808**	**ELFC-KF-45-800**
	1000	**8062809**	**ELFC-KF-45-1000**
	1200	**8062810**	**ELFC-KF-45-1200**
	1500	**8062811**	**ELFC-KF-45-1500**
60	100	**8062812**	**ELFC-KF-60-100**
	200	**8062813**	**ELFC-KF-60-200**
	300	**8062814**	**ELFC-KF-60-300**
	400	**8062815**	**ELFC-KF-60-400**
	500	**8062816**	**ELFC-KF-60-500**
	600	**8062817**	**ELFC-KF-60-600**
	800	**8062818**	**ELFC-KF-60-800**
	1000	**8062819**	**ELFC-KF-60-1000**
	1200	**8062820**	**ELFC-KF-60-1200**
	1500	**8062821**	**ELFC-KF-60-1500**
	1800	**8062822**	**ELFC-KF-60-1800**
	2000	**8062823**	**ELFC-KF-60-2000**
80	100	**8062824**	**ELFC-KF-80-100**
	200	**8062825**	**ELFC-KF-80-200**
	300	**8062826**	**ELFC-KF-80-300**
	400	**8062827**	**ELFC-KF-80-400**
	500	**8062828**	**ELFC-KF-80-500**
	600	**8062829**	**ELFC-KF-80-600**
	800	**8062830**	**ELFC-KF-80-800**
	1000	**8062831**	**ELFC-KF-80-1000**
	1200	**8062832**	**ELFC-KF-80-1200**
	1500	**8062833**	**ELFC-KF-80-1500**
	1800	**8062834**	**ELFC-KF-80-1800**
	2000	**8062835**	**ELFC-KF-80-2000**

Accessories

Profile mounting EAHF-L2-...-P-S
Material:
Anodised wrought aluminium alloy
RoHS-compliant

- For mounting the axis on the side of the profile



Dimensions and ordering data

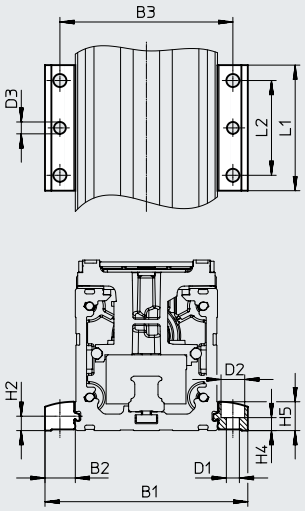
For size	B1	B2	B3	D1 ø H13	D2 ø H13	H2
32	51.4	9.7	42	4.5	8	4.9
45	70.6	12.8	58	5.5	10	6.1
60	85.6	12.8	73	5.5	10	6.1
80	105.6	12.8	93	5.5	10	6.1

For size	H4 ±0.1	H5	L1	Weight [g]	Part no.	Type
32	4.2	9	19	4	**5183153**	**EAHF-L2-25-P-S**
45	5.5	12.2	19	6	**5184133**	**EAHF-L2-45-P-S**
60	5.5	12.2	19	6	**5184133**	**EAHF-L2-45-P-S**
80	5.5	12.2	19	6	**5184133**	**EAHF-L2-45-P-S**

Accessories

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 drilled hole in the centre.



Dimensions and ordering data

For size	B1	B2	B3	D1 ø H13	D2 ø H13	D3 ø	H2
32	51.4	9.7	42	4.5	8	4	4.9
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 [g]	Part no.	Type
32	4.2	9	53	40	19	**4835684**	**EAHF-L2-25-P**
45	5.5	12.2	53	40	35	**4835728**	**EAHF-L2-45-P**
60	5.5	12.2	53	40	35	**4835728**	**EAHF-L2-45-P**
80	5.5	12.2	53	40	35	**4835728**	**EAHF-L2-45-P**

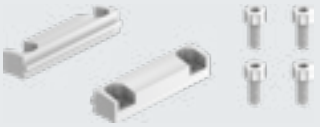
Accessories

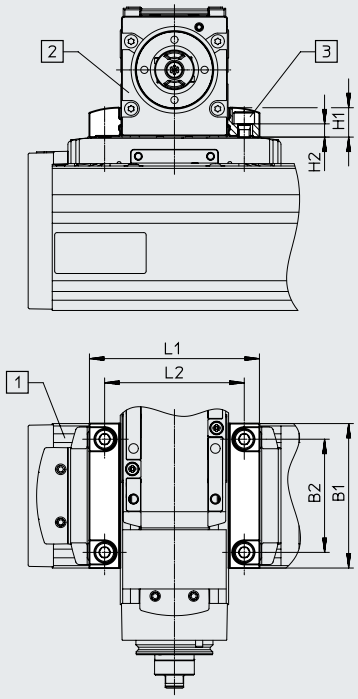
Profile mounting EAHF-L2-...-P-D...
Material:
Anodised wrought aluminium alloy
RoHS-compliant

- For axis/axis mounting without adapter plate
- Mounting option: base axis with one-size-down assembly axis

Combination matrix

		[2] Assembly axis ELGC-BS/-TB; ELFC; EGSC-BS			
	Size	25	32	45	60
[1] Base axis ELGC-BS/-TB; ELFC	32	4759753	–	–	–
	45	–	4759748	–	–
	60	–	–	4759739	–
	80	–	–	–	4759726





[1] Base axis
[2] Assembly axis

Dimensions and ordering data

For combination (size)	B1	B2	D1	H1
32/25	32	22.5	M3	9
45/32	45	34	M4	9
60/45	60	47	M5	12.2
80/60	78	63	M6	12.2

For combination (size)	H2 ±0.1	L1	L2	Weight [g]	Part no.	Type
32/25	5.1	44.4	35	16	**4759753**	**EAHF-L2-25-P-D1**
45/32	3.7	51.4	42	24	**4759748**	**EAHF-L2-25-P-D2**
60/45	5.5	70.6	56	56	**4759739**	**EAHF-L2-45-P-D3**
80/60	4.5	85.6	73	77	**4759726**	**EAHF-L2-45-P-D4**

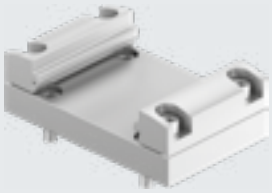
Accessories

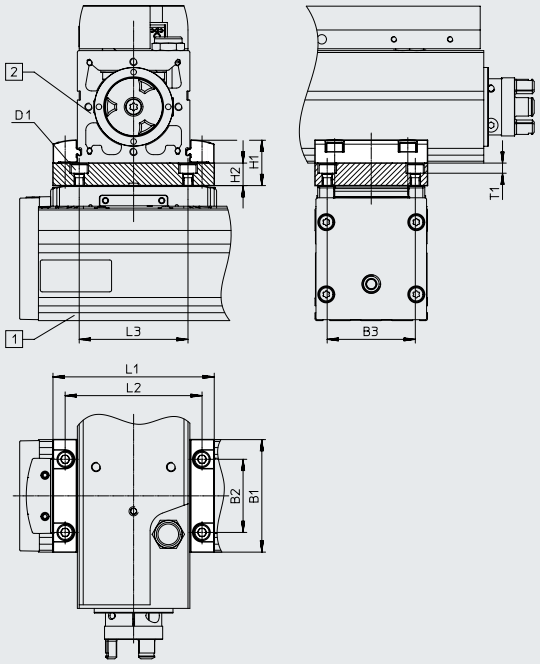
Adapter kit EHAA-D-L2
Material:
Anodised wrought aluminium alloy
RoHS-compliant

- For axis/axis mounting with adapter plate
- Mounting option: base axis with same size or one-size-down assembly axis
- 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	25	32	45	60	80
[1] Base axis ELGC-BS/-TB; ELFC	32	8066713		–	–	–
	45	–	8066714		–	–
	60	–	–	8066715		–
	80	–	–	–	8066716	





[1] Base axis
[2] Assembly axis

Dimensions and ordering data

For combination (size)	B1	B3 ±0.05	D1	H1	H2	L1	L2	L3	T1	Weight [g]	Part no.	Type
32/25	32	22.5	M3	19	10	44.4	35	35	4.2	60	**8066713**	**EHAA-D-L2-32-L2-32**
45/32	45	34	M4	19	10	51.4	42	42	5.4	136	**8066714**	**EHAA-D-L2-45-L2-45**
60/45	60	47	M5	24.2	12	70.6	58	58	5.4	205	**8066715**	**EHAA-D-L2-60-L2-60**
80/60	78	63	M6	24.2	12	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.	Type
32/32	32	14.5	22.5	M3	19	10	52	42	35	4.2	60	**8066713**	**EHAA-D-L2-32-L2-32**
45/45	45	32	34	M4	22.2	10	71	58	42	5.4	136	**8066714**	**EHAA-D-L2-45-L2-45**
60/60	60	39	47	M5	24.2	12	86	73	58	5.4	205	**8066715**	**EHAA-D-L2-60-L2-60**
80/80	78	63	63	M6	24.2	12	106	93	73	6.4	315	**8066716**	**EHAA-D-L2-80-L2-80**

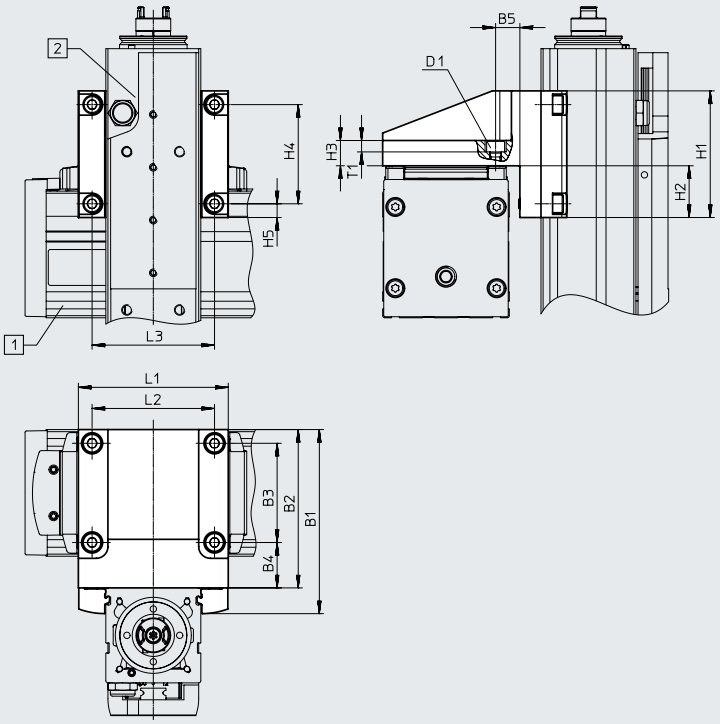
Accessories

Angle kit EHAA-D-L2-...-AP
Material:
Anodised wrought aluminium alloy
RoHS-compliant

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

Combination matrix

		[2] Assembly axis ELGC-BS/-TB; ELFC; EGSC-BS			
	Size	25	32	45	60
[1] Base axis ELGC-BS/-TB; ELFC	32	8066717	–	–	–
	45	–	8066718	–	–
	60	–	–	8066719	–
	80	–	–	–	8066720



[1] Base axis
[2] Assembly axis

Dimensions and ordering data

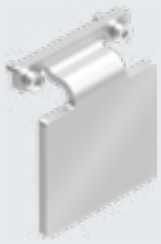
For combination (size)	B1	B2	B3	B4	B5	D1	H1	H2	H3
32	53	44	22.5	16.8	8.8	M3	32	11	10
45	69	60	34	20.5	11.5	M4	45	17.5	10
60	87.2	75	47	21.5	11.5	M5	60	24.5	12
80	107.2	95	63	23.5	13.5	M6	78	33.5	12

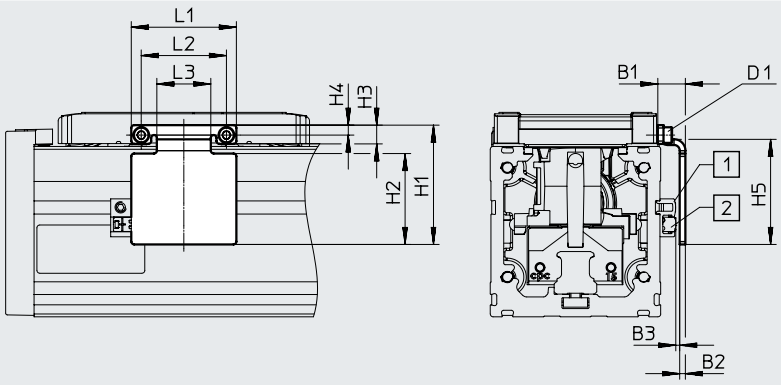
For combination (size)	H4	H5	L1	L2	L3	T1	Weight [g]	Part no.	Type
32	22.5	4.8	45	35	35	4.2	107	**8066717**	**EHAA-D-L2-32-L2-25-AP**
45	34	5.5	52	42	42	5.4	222	**8066718**	**EHAA-D-L2-45-L2-32-AP**
60	47	6.5	71	58	58	5.4	433	**8066719**	**EHAA-D-L2-60-L2-45-AP**
80	63	7.5	86	73	73	6.4	768	**8066720**	**EHAA-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





[1] Sensor bracket
[2] Proximity switch

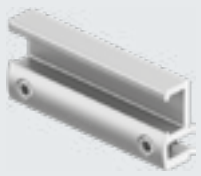
Dimensions and ordering data

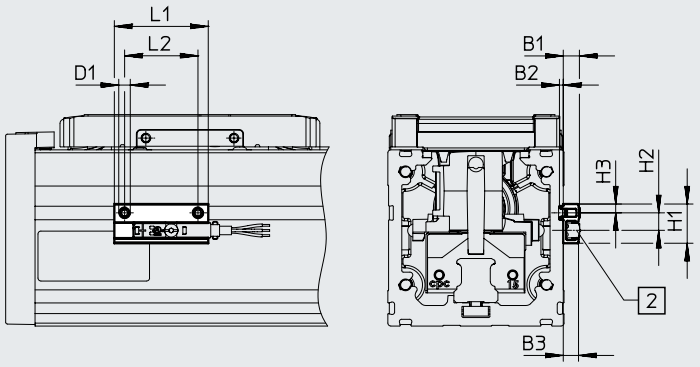
For size	B1	B2	B3	D1	H1 ±0.2	H2	H3	H4
32	9.2	2	1.0±0.31	M1.6	27	19	4.3	2.5
45	9.4	2	1.2±0.31	M2	37	28	5.5	3.3
60	9.7	2	1.3±0.31	M3	42	32	6.6	3.5
80	9.5	2	1.1±0.32	M4	53.5	42	8.3	4.5

For size	H5 ±0.2	L1 ±0.2	L2 ±0.15	L3	Weight [g]	Part no.	Type
32	24	22	18	10	10	**8067259**	**EAPM-L2-32-SLS**
45	33	30	24	14	18	**8067260**	**EAPM-L2-45-SLS**
60	37	37	30	19	27	**8067261**	**EAPM-L2-60-SLS**
80	47	44.6	36	23.4	42	**8067262**	**EAPM-L2-80-SLS**

Sensor bracket EAPM-L2-SH

Material:
Anodised wrought aluminium alloy
RoHS-compliant





[2] Proximity switch

Dimensions and ordering data

For size	B1	B2	D1	H1	H2
32, 45, 60, 80	5.5	1.3	M4	13.4	6

For size	H3	L1	L2	Weight [g]	Part no.	Type
32, 45, 60, 80	3	32	25	4	**4759852**	**EAPM-L2-SH**

Accessories

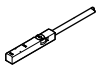
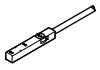
Ordering data

	For size	Description	Part no.	Type	PU[1]
Centring pin ZBS/centring sleeve ZBH					
	32	For slide	**525273**	**ZBS-2**	10
	45		**562959**	**ZBS-4**	
	60		**8146543**	**ZBH-5-B**	
	80		**8146544**	**ZBH-7-B**	
Clamping element EADT					
	32, 45	Tool for re-tensioning the cover strip	**8065818**	**EADT-S-L5-32**	1
	60, 80		**8058451**	**EADT-S-L5-70**	

1) Packaging unit

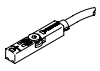
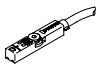
Ordering data – Proximity switches for T-slot, inductive

Data sheets → Internet: sies

	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Type
N/O contact						
	Insertable in the slot from above, flush with the cylinder profile	PNP	Cable, 3-wire	7.5	**551386**	**SIES-8M-PS-24V-K-7.5-OE**
			Plug M8x1, 3-pin	0.3	**551387**	**SIES-8M-PS-24V-K-0.3-M8D**
		NPN	Cable, 3-wire	7.5	**551396**	**SIES-8M-NS-24V-K-7.5-OE**
			Plug M8x1, 3-pin	0.3	**551397**	**SIES-8M-NS-24V-K-0.3-M8D**
N/C contact						
	Insertable in the slot from above, flush with the cylinder profile	PNP	Cable, 3-wire	7.5	**551391**	**SIES-8M-PO-24V-K-7.5-OE**
			Plug M8x1, 3-pin	0.3	**551392**	**SIES-8M-PO-24V-K-0.3-M8D**
		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**

Ordering data – Proximity switches for T-slot, magneto-resistive

Data sheets → Internet: smt

	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Type
N/O contact						
	Insertable in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-wire	2.5	**574335**	**SMT-8M-A-PS-24V-E-2.5-OE**
			Plug M8x1, 3-pin	0.3	**574334**	**SMT-8M-A-PS-24V-E-0.3-M8D**
N/C contact						
	Insertable in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-wire	7.5	**574340**	**SMT-8M-A-PO-24V-E-2.5-OE**

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**