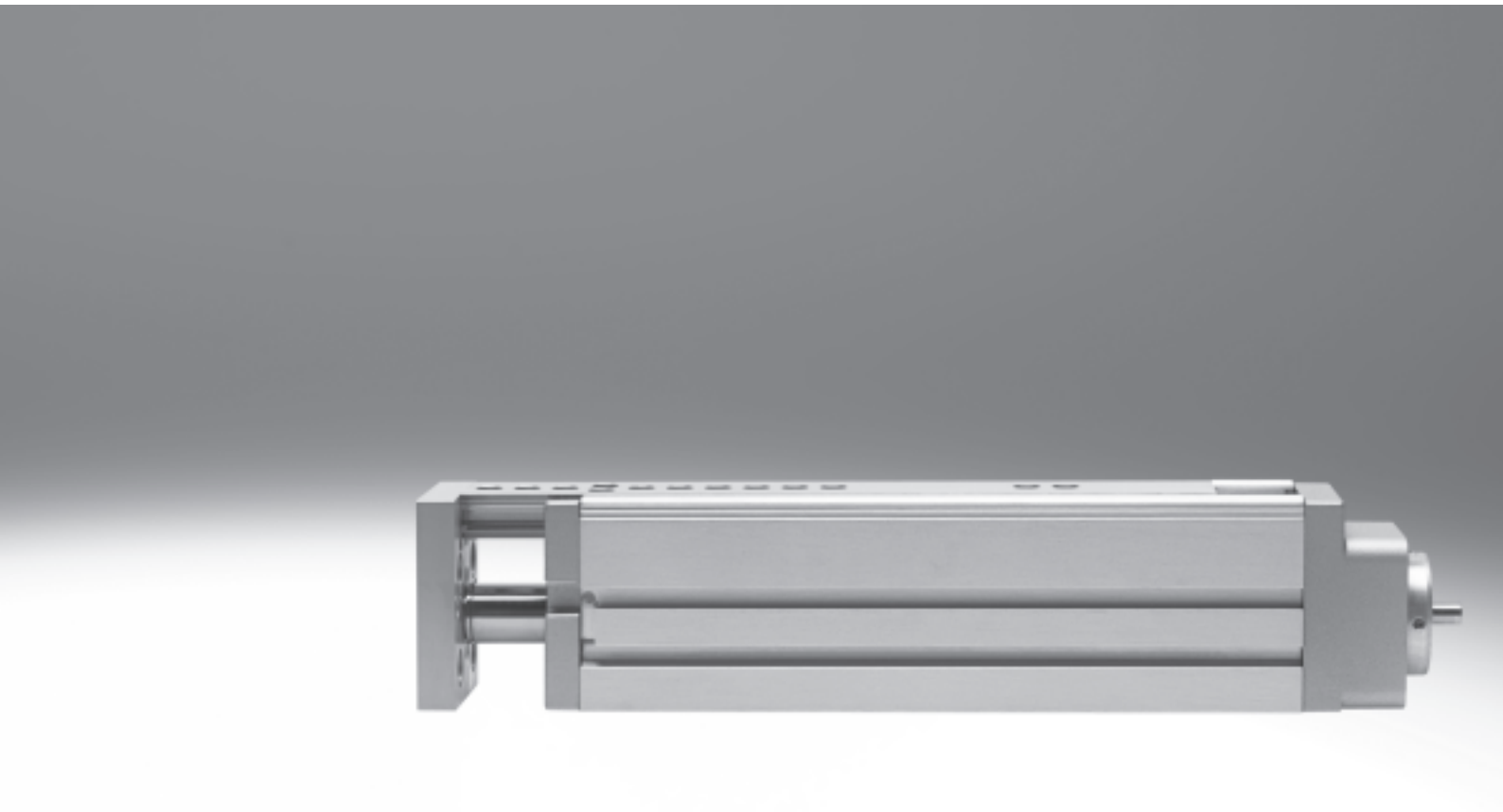
Mini slides EGSL, electric

FESTO



Mini slides EGSL, electric

Key features

At a glance

- Electric slide series
- Maximum performance in compact space:
  - Precision
  - Load capacity
  - Dynamic response
- Choice of homing:
  - To fixed stop
  - To reference switch
- Perfect for vertical applications
- System product for handling and assembly technology
- Wide range of options for mounting on drives

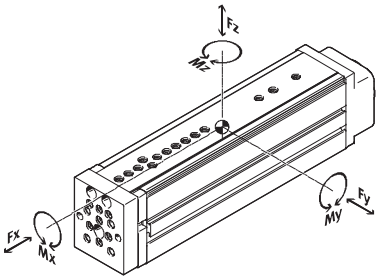
Motor mounting variants

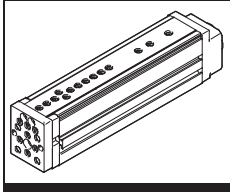
Axial

Parallel

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 technical data.



Version	Size	Working stroke [mm]	Speed [m/s]	Max. acceleration [m/s²]	Repetition accuracy [mm]	Feed force Fx [N]	Guide characteristics: Forces and torques Fy [N]	Fz [N]	Mx [Nm]	My [Nm]	Mz [Nm]
	35	50	0.5	25	±0.015	75	512	512	6.2	6.0	6.0
	45	100, 200	1.0	25	±0.015	150	631	631	18.6	16.3	16.3
	55	100, 200, 250	1.0	25	±0.015	300	1,047	1,047	33.1	33.3	33.3
	75	100, 200, 300	1.3	25	±0.015	450	1,539	1,539	67.4	47.1	47.1

Note

PositioningDrives
sizing software
www.festo.com

Mini slides EGSL, electric

Key features

Complete system comprising mini slide, motor, motor controller and motor mounting kit

Mini slide

Motor ➔ 27

1 Servo motor EMMS-AS
2 Stepper motor EMMS-ST

Note

A range of specially adapted complete solutions is available for the mini slide EGSL and the motors.

Motor controller — Technical data ➔ Internet: motor controller

1 Servo motor controller CMMP-AS, CMMS-AS
2 Stepper motor controller EMMS-ST

Motor mounting kit ➔27

Axial kit

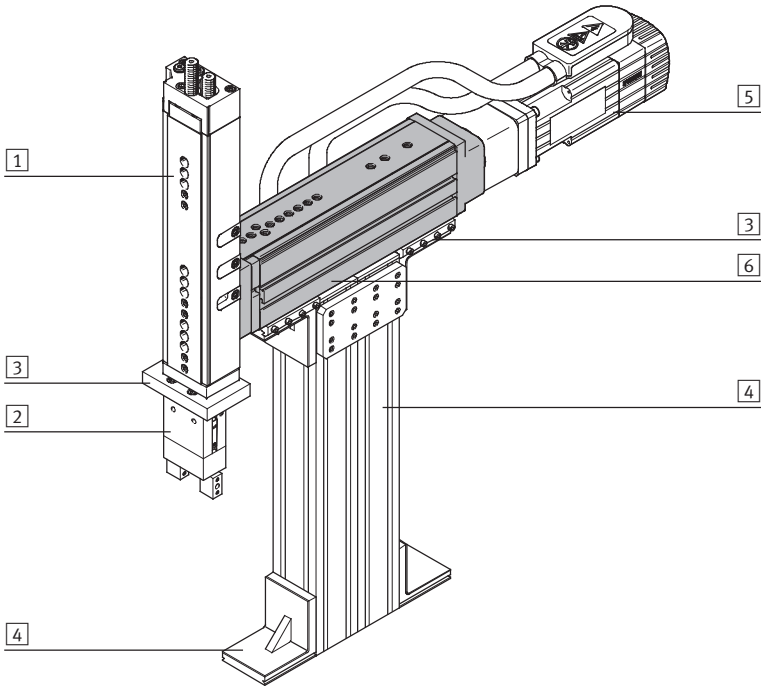
Parallel kit

There are complete kits for both parallel and axial motor mounting.

Mini slides EGSL, electric

Key features and type codes

System product for handling and assembly technology



System components and accessories			
		Brief description	**→ Page/Internet**
1	Drives	Wide range of combinations possible within handling and assembly technology	drive
2	Grippers	Wide range of variations possible within handling and assembly technology	gripper
3	Adapters	For drive/drive and drive/gripper connections	adapter kit
4	Basic components	Profiles and profile connections as well as profile/drive connections	basic component
5	Motors	Servo and stepper motors, with or without gearing	motor
6	Axes	Wide range of combinations possible within handling and assembly technology	axis
–	Installation components	For a clear, safe layout of electrical cables and tubing	installation component

Type codes

EGSL	–	BS	–	45	–	200	–	10P

Type	
EGSL	Mini slide

Drive function	
BS	Ball screw spindle

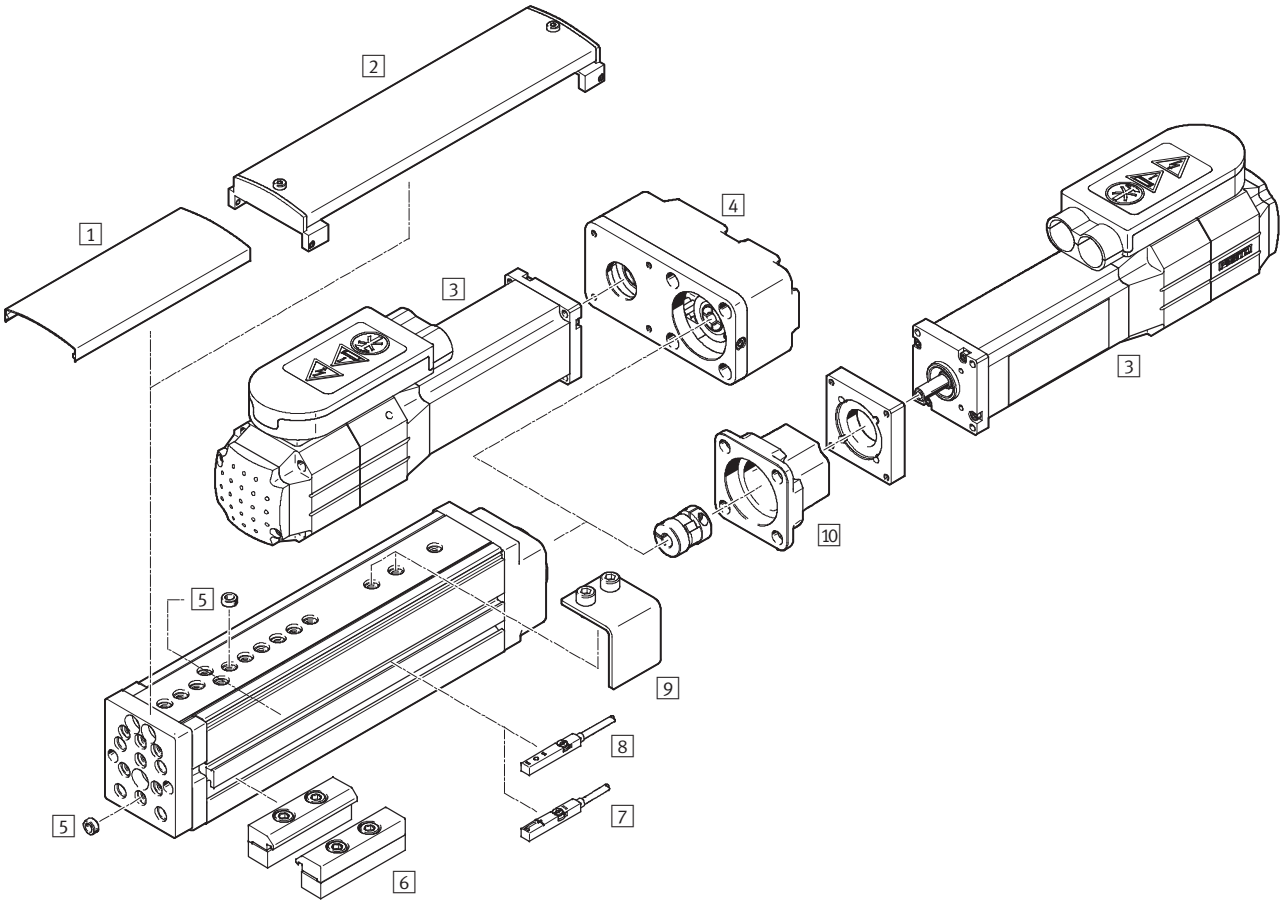
Size

Stroke [mm]

Spindle pitch [mm]

Mini slides EGSL, electric

Peripherals overview



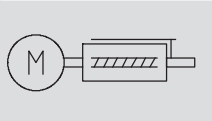
Variants and accessories			
	Type	**Brief description**	**→ Page/Internet**
1	Cover EASC-...	• For protection, so that no foreign parts can get into the guide • The cover can be shortened by the customer as required	32
2	Cover EASC-...-F	• This cover must be used in combination with the switching lug EAPM • For protection, so that no foreign parts can get into the guide	32
3	Motor EMMS	Motors specially matched to the axis, with or without brake	26
4	Parallel kit EAMM-U	• For parallel motor mounting • The motor can only be mounted at the side and underneath • (comprising: housing, clamping sleeve, toothed belt pulley, toothed belt)	27
5	Centring sleeve ZBH	• For centring loads and attachments • Makes lateral mounting on the slide much easier	34
6	Profile mounting EAHF, MUE	For mounting the axis	30
7	Proximity sensor SIES	Inductive proximity sensor, for slot type 8	34
8	Proximity sensor SMT-8-...-B	Magnetic proximity sensor, for slot type 8	34
9	Switching lug EAPM	For sensing the slide position via proximity sensors SIES	30
10	Axial kit EAMM-A	For axial motor mounting (comprising: coupling, coupling housing and motor flange)	26
–	Connecting cable NEBU	For proximity sensor SIES or SMT-8-...-B	34

Mini slides EGSL, electric

Technical data

FESTO

Function



-N- Size
35, 45, 55, 75
-T- Stroke length
50 ... 300 mm

Note

All values are based on a room temperature of 20 °C.

General technical data								
Size		35	45		55		75	
Spindle pitch	[mm]	8	3	10	5	12.7	10	20
Design		Electric mini slide						
		With recirculating ball spindle						
		With guide						
Guide		Ball bearing cage guide						
Type of mounting		Via female thread						
		Via centring sleeve						
		Via accessories						
Mounting position		Any						
Working stroke	[mm]	50	100, 200		100, 200, 250		100, 200, 300	
Max. permissible applied load, horizontal	[kg]	2	6		10		14	
Max. permissible applied load, vertical	[kg]	2	6		10		14	
Continuous feed force F_x	[N]	50	100		200		300	
Max. feed force F_x	[N]	75	150		300		450	
Max. no-load driving torque	[Nm]	0.015	0.055	0.050	0.100	0.135	0.265	0.165
Max. driving torque[1]	[Nm]	0.2	0.45	0.51	0.9	1.25	3.25	3.25
Max. radial force[2]	[N]	20	120		260		300	
Max. speed	[m/s]	0.5	0.3	1.0	0.4	1.0	0.65	1.3
Nominal acceleration	[m/s²]	15						
Max. acceleration[3]	[m/s²]	25						
Repetition accuracy	[mm]	±0.015						
Max. reversing backlash[4]	[µm]	≤50						

1) Friction and acceleration torque of the rotating load taken into consideration
2) At the drive shaft
3) The max. acceleration is dependent on the moving load, the driving torque and the max. feed force
4) In new condition

Operating and environmental conditions					
Size		35	45	55	75
Ambient temperature	[°C]	0 ... +60			
Protection class		IP40			
Duty cycle	[%]	100			
Noise level	[dB (A)]	60		65	
Maintenance interval		Maintenance-free			

Mini slides EGSL, electric

Technical data

Weight [kg]							
Size		35			45		
Stroke	[mm]	50			100		200
Product weight		0.6			1.6		2.2
Moving load		0.3			0.7		0.9
Dead weight of guide rail and yoke plate		0.13			0.4		0.58

Size		55			75		
Stroke	[mm]	100	200	250	100	200	300
Product weight		2.6	3.4	4.1	5.1	6.5	8.1
Moving load		1.2	1.5	1.8	2.3	2.9	3.4
Dead weight of guide rail and yoke plate		0.61	0.87	1.07	1.2	1.64	2.07

Mass moment of inertia – for sizing the motor						
Size		35		45		
Spindle pitch	[mm]	8		3	10	
Stroke	[mm]	50		100	200	100	200
J_O	[kg mm^2]	4.26		4.59	5.14	6.14	7.31
J_L per kg effective load	[kg mm^2/kg]	1.62		0.23	0.23	2.53	2.53

Size		55			75							
Spindle pitch	[mm]	5			12.7			10			20		
Stroke	[mm]	100	200	250	100	200	250	100	200	300	100	200	300
J_O	[kg mm^2]	13.52	14.77	15.74	18.27	21.13	23.27	86.95	96.49	106.67	105.12	119.45	134.59
J_L per kg effective load	[kg mm^2/kg]	0.63	0.63	0.63	4.09	4.09	4.09	2.53	2.53	2.53	10.13	10.13	10.13

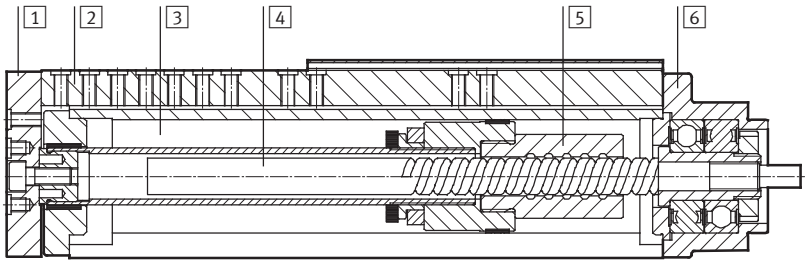
The mass moment of inertia J_A of the entire axis is calculated as follows:

$J_A = J_O + J_L \times m_{effective\ load}$ [kg]

The inertia of the motor mounting kit and motor is not taken into consideration here.

Materials

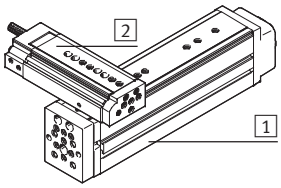
Sectional view



Axis		
1	Yoke plate	Anodised wrought aluminium alloy
2	Guide rail	Rolled steel
3	Housing	Anodised wrought aluminium alloy
4	Spindle	Rolled steel
5	Spindle nut	Rolled steel
6	End cap	Painted aluminium
	Note on materials	RoHS-compliant
		Contains PWIS (paint-wetting impairment substances)

Possible combinations

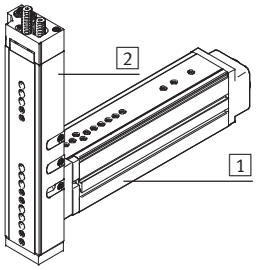
Via guide



Direct mounting

		1 Basic drive			
		EGSL-35	EGSL-45	EGSL-55	EGSL-75
2 Assembly drive	EGSL-35	**1088327 HMSV-73**	**1088338 HMSV-74**	**1088338 HMSV-74**	–
	EGSL-45	–	**1088338 HMSV-74**	**1088338 HMSV-74**	**1089092 HMSV-75**
	EGSL-55	–	–	**1088338 HMSV-74**	**1089092 HMSV-75**
	EGSL-75	–	–	–	**1089092 HMSV-75**
	DGSL-4	**1088327 HMSV-73**	–	–	–
	DGSL-6	**1088327 HMSV-73**	–	–	–
	DGSL-8	**1088327 HMSV-73**	**ZBV-M5-7**	**ZBV-M5-7**	–
	DGSL-10	**1088327 HMSV-73**	**ZBV-M5-7**	**ZBV-M5-7**	–
	DGSL-12	–	**M5x14 ZBH-7**	**M5x16 ZBH-7**	**ZBV-M6-9**
	DGSL-16	–	**M5x14 ZBH-7**	**M5x16 ZBH-7**	**ZBV-M6-9**
	DGSL-20	–	–	–	**M6x20 ZBH-9**

Via yoke plate



Direct mounting

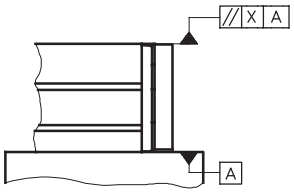
		1 Basic drive			
		EGSL-35	EGSL-45	EGSL-55	EGSL-75
2 Assembly drive	EGSL-35	**M4x12 ZBH-7**	**1088295 HMSV-71**	**1088295 HMSV-71**	–
	EGSL-45	–	**M5x12 ZBH-7**	**M5x14 ZBH-7**	**1088311 HMSV-72**
	EGSL-55	–	–	**M5x14 ZBH-7**	**1088311 HMSV-72**
	EGSL-75	–	–	–	**M6x18 ZBH-9**
	DGSL-4	**1088262 HMSV-70**	–	–	–
	DGSL-6	**1088262 HMSV-70**	–	–	–
	DGSL-8	**1088262 HMSV-70**	**ZBV-M5-7**	**ZBV-M5-7**	–
	DGSL-10	**1088262 HMSV-70**	**ZBV-M5-7**	**ZBV-M5-7**	–
	DGSL-12	–	**M5x14 ZBH-7**	**M5x12 ZBH-7**	**ZBV-M6-9**
	DGSL-16	–	**M5x14 ZBH-7**	**M5x12 ZBH-7**	**ZBV-M6-9**
	DGSL-20	–	–	–	**M6x20 ZBH-9**

Note

Ordering data for centring sleeves ZBH and connecting sleeves ZBV
➔ 30.

Parallelism [mm]

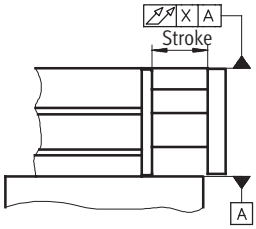
The term parallelism refers to the accuracy of alignment between the mounting surface and the slide surface.
Specifications apply in retracted state.



Size	Stroke [mm]	35	45	55	75
Parallelism X	50	0.03	–	–	–
	100	–	0.05	0.05	0.05
	200	–	0.1	0.1	0.1
	250	–	–	0.125	–
	300	–	–	–	0.15

Linearity [mm]

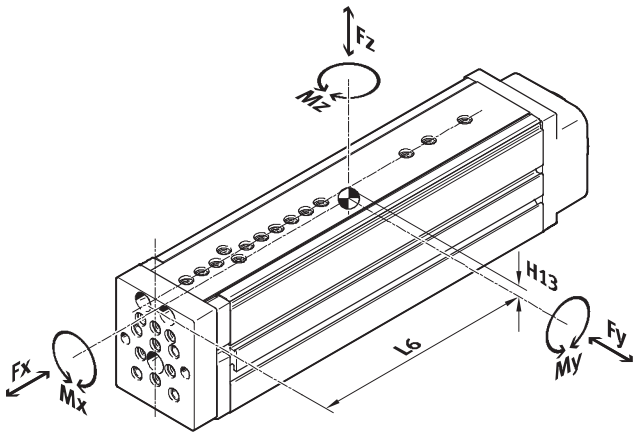
Linearity refers to the max. difference between normal position and the reference plane experienced at any point of the moving axis components when traversing the entire stroke.



Size	Stroke [mm]	35	45	55	75
Linearity X	50	0.02	–	–	–
	100	–	0.04	0.04	0.04
	200	–	0.08	0.08	0.08
	250	–	–	0.10	–
	300	–	–	–	0.12

Dynamic characteristic load values

The indicated forces and torques refer to the centre of the guide.
These values must not be exceeded during dynamic operation.



If the axis is subjected to more than two of the indicated forces and torques simultaneously, the following equation (guide comparison index fv) must be satisfied in addition to the indicated maximum loads:

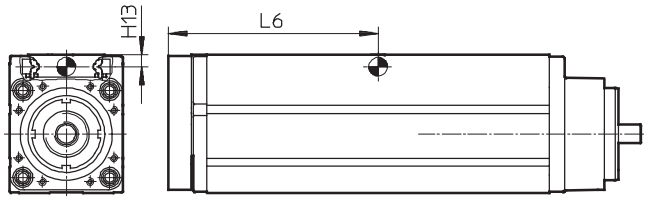
$$f_v = \frac{|F_{y,dyn}|}{Fy_{max.}} + \frac{|F_{z,dyn}|}{Fz_{max.}} + \frac{|M_{x,dyn}|}{Mx_{max.}} + \frac{|M_{y,dyn}|}{My_{max.}} + \frac{|M_{z,dyn}|}{Mz_{max.}}$$

Permissible forces and torques						Geometric characteristics	
Size	Stroke [mm]	Fy_{max} [N]	Fz_{max} [N]	Mx_{max} [Nm]	My_{max}, Mz_{max} [Nm]	H13 [mm]	L6 [mm]
35							
	50	512	512	6.2	6.0	4.2	106
45							
	100	631	631	18.6	16.3	6.4	162
	200	291	291	14.3	12.3	6.4	262
55							
	100	1,047	1,047	33.1	31.0	6.4	180
	200	490	490	24.2	22.6	6.4	280
	250	563	563	27.0	33.3	6.4	344
75							
	100	1,539	1,539	67.4	47.1	7.6	187
	200	714	714	48.5	33.8	7.6	287
	300	555	555	46.4	36.5	7.6	389

Note

PositioningDrives
sizing software
www.festo.com

Position of the guide centre



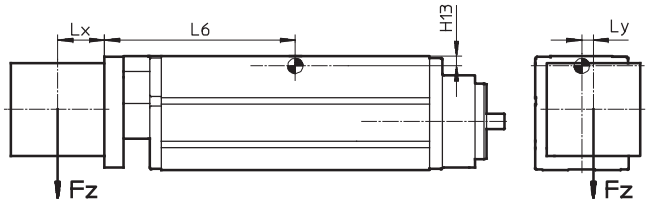
Calculation example

Given:

Type: EGSL-BS-45-100-10P
Stroke length = 100 mm
Lever arm L_x = 30 mm
Lever arm L_y = 10 mm
Mass F_z = 5 kg
Acceleration a = 0 m/s^2
Mounting position: Horizontal

To be calculated:

- F_y, F_z, Mx, My, Mz
- Verification of operation with combined load
- Service life estimate



Solution:

L6 = 0.162 m from table
F_y = 0 N

F_z = m x g
= 5 kg x 9.81 m/s^2 = 49.05 N

M_x = F_z x L_y
= 49.05 N x 0.01 m = 0.4905 Nm

M_y = F_z x (L6+L_x)
= 49.05 N x (0.162 m + 0.03 m) = 9.42 Nm

M_z = 0 Nm

Combined load:

$$\frac{|Fy|}{Fy_{max.}} + \frac{|Fz|}{Fz_{max.}} + \frac{|Mx|}{Mx_{max.}} + \frac{|My|}{My_{max.}} + \frac{|Mz|}{Mz_{max.}}$$

$$= 0 + \frac{49.05N}{631N} + \frac{0.49Nm}{18.6Nm} + \frac{9.42Nm}{16.3Nm} + 0 = 0.68$$

The diagram on page 12 shows a service life of approx. 30 million cycles when fv = 0.68.

Calculating service life

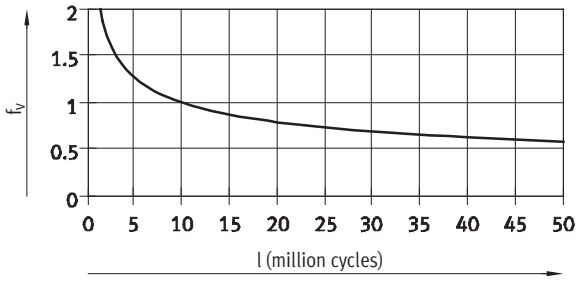
The service life of the guide depends on the load. To provide a rough indication of the service life of the guide, the graph below plots the load comparison factor f_v against the service life.

The spindle module even exceeds the guide's high load capacity and service life. The load characteristics of the spindle therefore need not be considered for the service life calculation.

These values are only theoretical. Consultation with your local contact person at Festo is mandatory for load comparison factors f_v greater than 1.5.

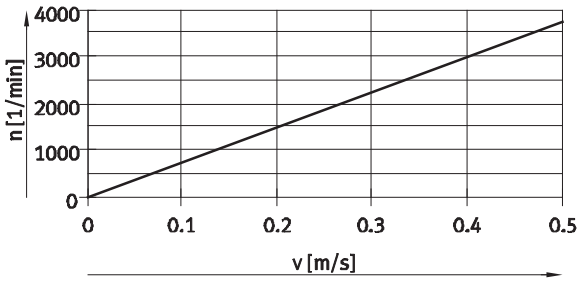
Load comparison factor f_v as a function of service life

Example:
A user wants to move an X kg load. Using the formula ➔ 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. 3 million cycles. Reducing the acceleration reduces the Mz and My values. A load comparison factor f_v of 1 now gives a service life of 10 million cycles.



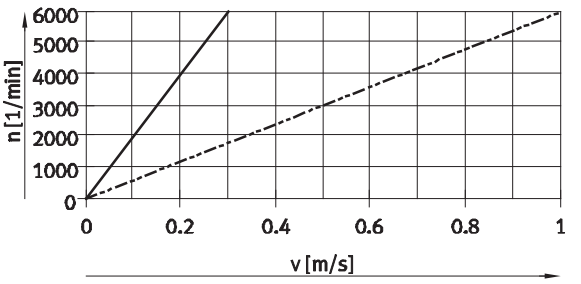
Rotational speed n as a function of feed speed v

EGSL-35



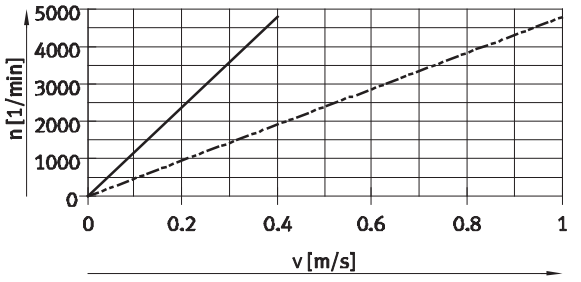
EGSL-BS-35- ... -8P

EGSL-45



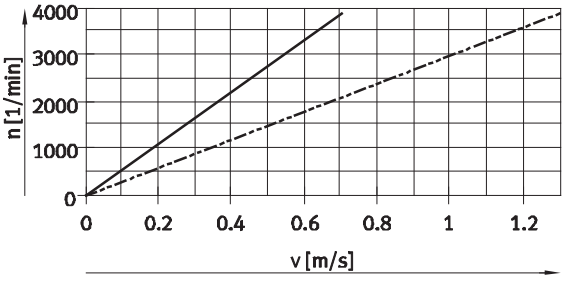
EGSL-BS-45- ... -3P
EGSL-BS-45- ... -10P

EGSL-55



EGSL-BS-55- ... -5P
EGSL-BS-55- ... -12.7P

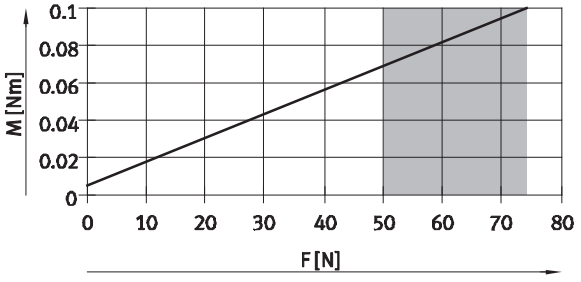
EGSL-75



EGSL-BS-75- ... -10P
EGSL-BS-75- ... -20P

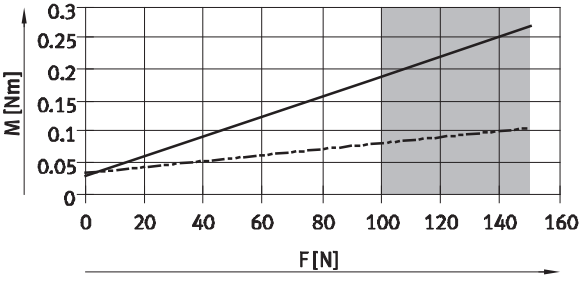
Driving torque M as a function of feed force F

EGSL-35



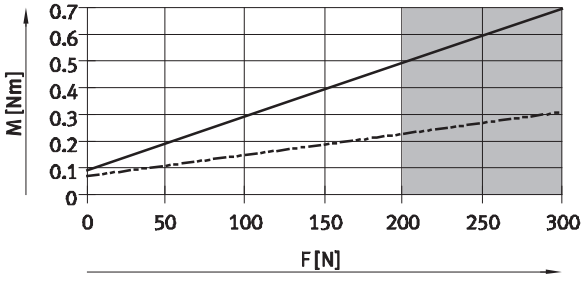
EGSL-BS-35- ... -8P

EGSL-45



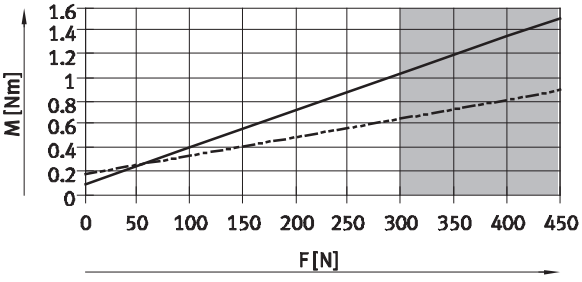
EGSL-BS-45- ... -10P
EGSL-BS-45- ... -3P

EGSL-55



EGSL-BS-55- ... -12.7P
EGSL-BS-55- ... -5P

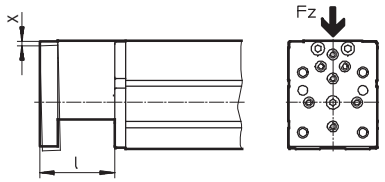
EGSL-75



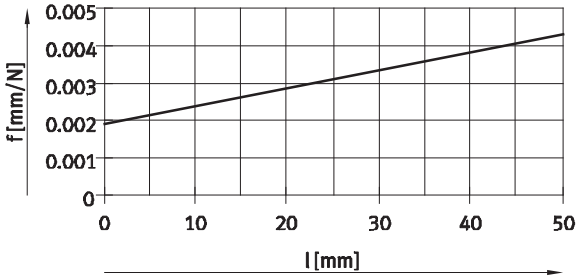
EGSL-BS-75- ... -20P
EGSL-BS-75- ... -10P

This range should be used only briefly.

Deflection x as a function of force Fz and stroke l

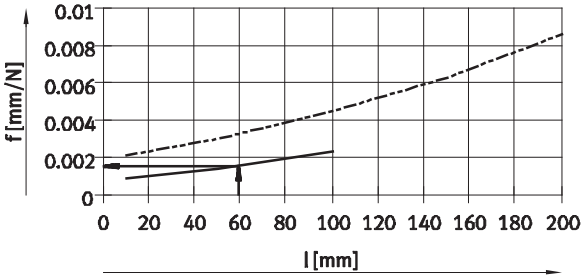


EGSL-35



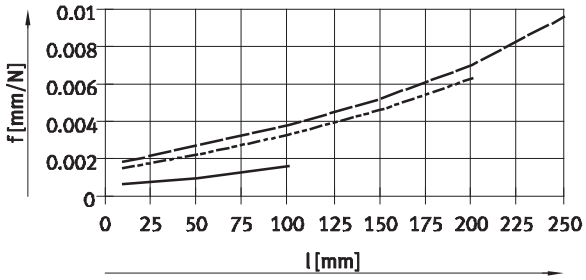
EGSL-BS-35-50

EGSL-45



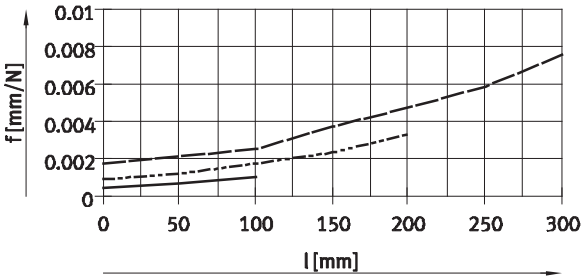
EGSL-BS-45-100
EGSL-BS-45-200

EGSL-55



EGSL-BS-55-100
EGSL-BS-55-200
EGSL-BS-55-250

EGSL-75



EGSL-BS-75-100
EGSL-BS-75-200
EGSL-BS-75-300

Calculation example

Given:
EGSL-BS-45-100
l = 60 mm
Fz = 30 N
Mounting position:
Horizontal

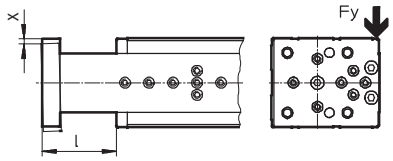
Result:
The graph shows a resilience of f = 0.0015 mm/N with a stroke of 60 mm.

$x = f \times F_z$

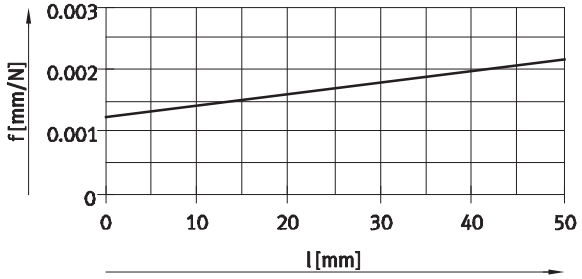
$x = 0.0015\text{mm/N} \times 30\text{N}$

$x = 0.045\text{mm}$

Deflection x as a function of force Fy and stroke l

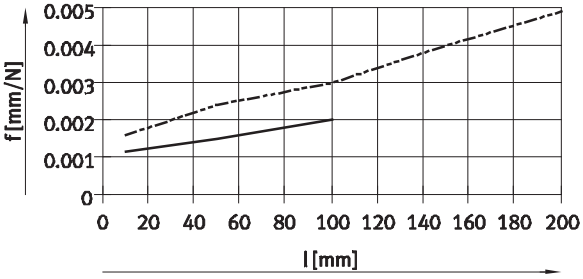


EGSL-35



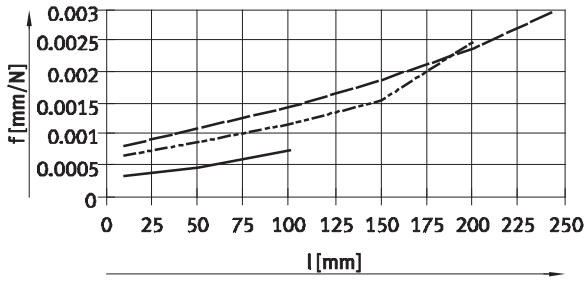
EGSL-BS-35-50

EGSL-45



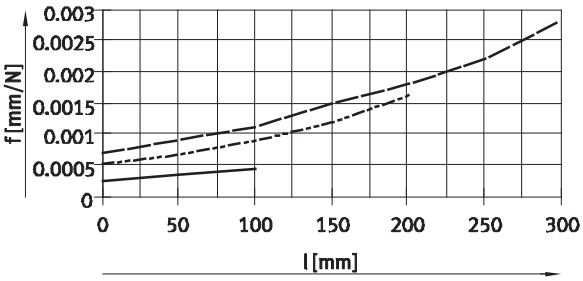
EGSL-BS-45-100
EGSL-BS-45-200

EGSL-55



EGSL-BS-55-100
EGSL-BS-55-200
EGSL-BS-55-250

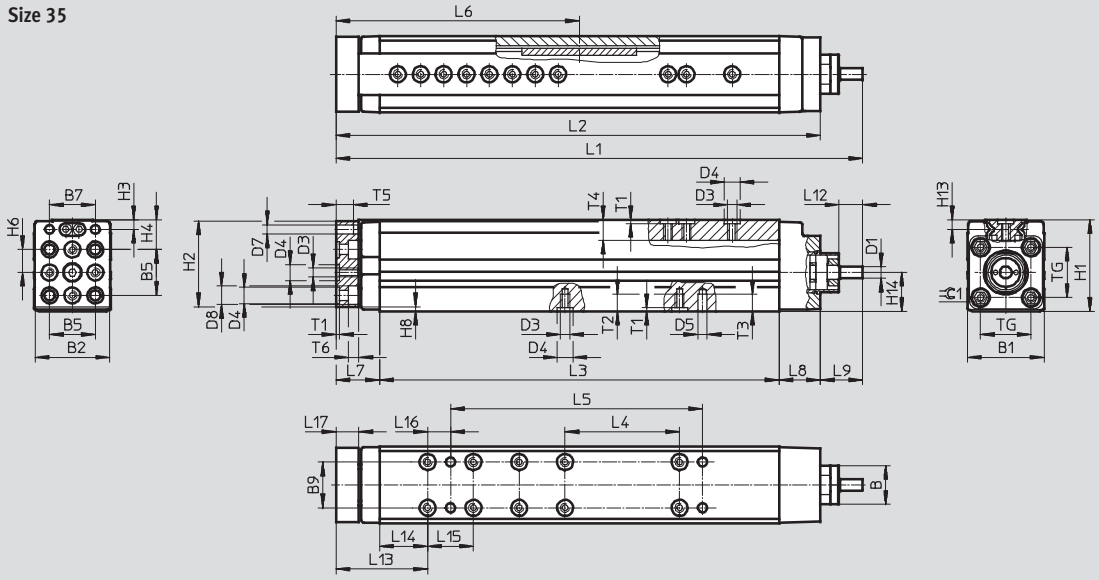
EGSL-75



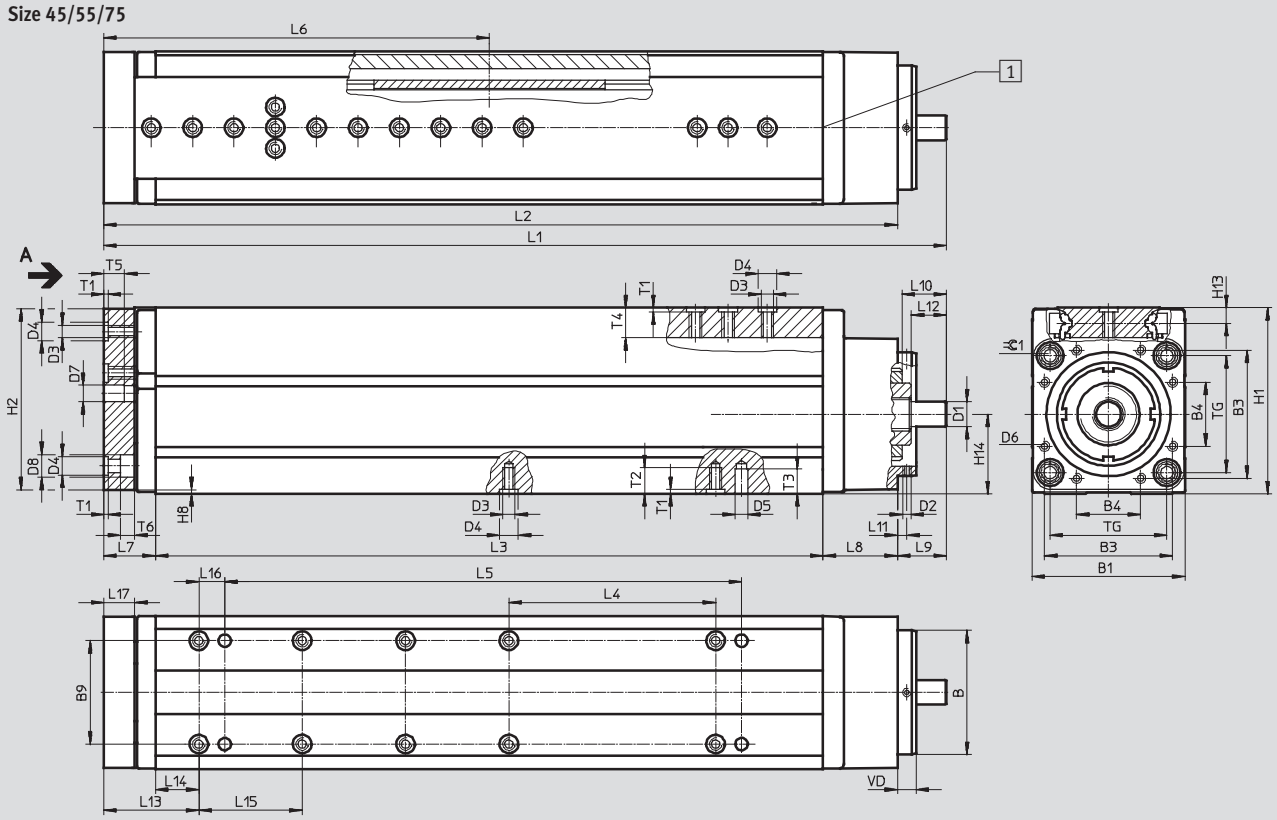
EGSL-BS-75-100
EGSL-BS-75-200
EGSL-BS-75-300

Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

Size 35

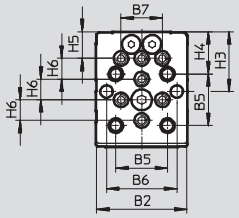


Size 45/55/75

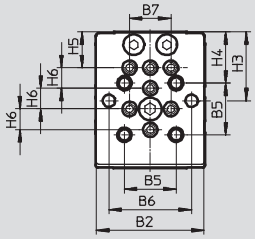


View A

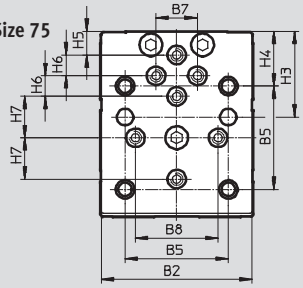
Size 45



Size 55



Size 75



1 Rubber buffers are integrated in the slide and can be removed for homing to the fixed stop.

Mini slides EGSL, electric

Technical data

Size	B ∅ g7	B1	B2	B3	B4	B5	B6	B7	B8	B9 ±0.5
35	19	33.5	33	–	–	20	–	20	–	20
45	32	44.5	43.5	32	19	25	34	20	–	25
55	40	53	52	42	20	25	40	20	–	25
75	60	74	73	62	31	50	–	20	40	50

Size	D1 ∅	D2	D3	D4 ∅ H7	D5 ∅ H7	D6	D7 ∅	D8 ∅	H1	H2
35	5	–	M4	7	4	–	4	8	40	37.5
45	6	M3	M5	7	6	M3	6	10	56	43.5
55	8	M3	M5	7	6	M4	6	10	66	63.5
75	12	M4	M6	9	6	M5	8	11	90	87.5

Size	H3	H4	H5	H6	H7	H8	H13	H14	L7	
									2) ±1	3) ±1
35	4.2	13	–	10	–	2	4.2	$17^{+0.09/-0.07}$	21	19
45	29	20.5	13	10	–	2	6.4	$23^{\pm 0.08}$	22	20
55	33.3	24.8	17.3	10	–	2	6.4	$28.7^{\pm 0.08}$	27	25
75	41.5	26.5	11.5	10	20	2	7.6	$38.5^{\pm 0.08}$	27	25

Size	L8	L9 ±1	L10	L11	L12 ±0.2	L13		L14[1]	L15[1]	L16 ±0.1
						2)	3)			
35	18	18.5	–	–	10.5	42	40	21	20	10
45	26	16	16.9	3.5	8	43	41	21	25	12.5
55	30	18.5	14.9	3.5	14	48	46	21	25	12.5
75	36	23.6	21.5	4.5	17	48	46	21	50	12.5

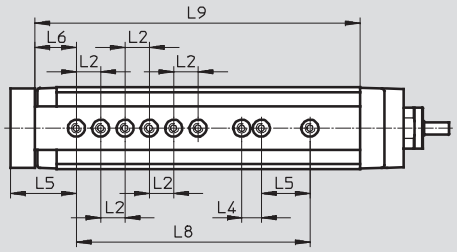
Size	L17	T1 ±0.1	T2	T3	T4	T5	T6	TG	VD	⌯ 1
35	10	1.6	7.6	7.5	9	7.5	4.6	22	–	5
45	10	1.6	8.1	7.5	12.4	7.5	5.7	32.5	7	6
55	15	1.6	8.6	8.5	12.4	10	8.7	38	7	6
75	15	2.1	12.6	12	14.5	10	6.8	56.5	9	8

Size	Stroke	L1		L2		L3	L4[1]	L5[1]	L6	
		2) ±1.5	3) ±1.5	2) ±1	3) ±1				2)	3)
	[mm]					−0.2		±0.05		
35	50	182	180	163.5	161.5	124.5	–	60	83	81
45	100	248	246	232	230	184	75	125	114	112
	200	348	346	332	330	284	100	175	164	162
55	100	284.5	282.5	266	264	209	100	150	132	130
	200	384.5	382.5	366	364	309	100	175	182	180
	250	463.5	461.5	445	443	388	100	175	221	219
75	100	309.6	307.6	286	284	223	–	150	139	137
	200	409.6	407.6	386	384	323	100	250	189	187
	300	514.6	512.6	491	489	428	150	350	241	239

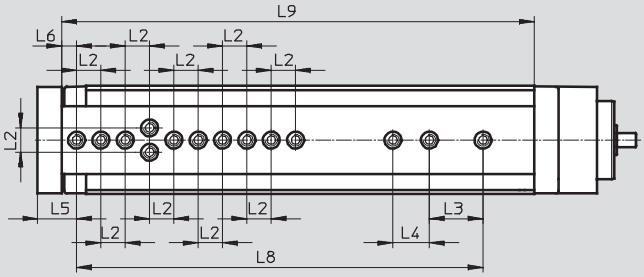
1) Tolerance for centring hole ±0.02 mm
Tolerance for thread ±0.1 mm
2) With rubber buffer
3) Without rubber buffer: for homing to the fixed stop

Hole pattern for mounting threads and centring holes

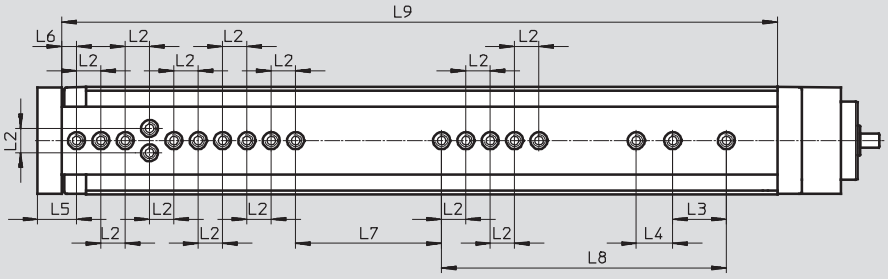
EGSL-35-50



EGSL-45-100



EGSL-45-200

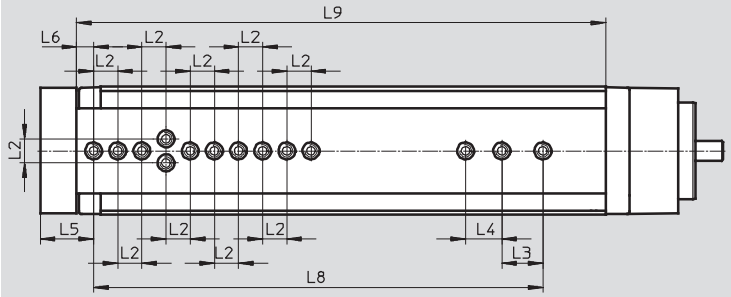


Size	Stroke [mm]	L2[1)]	L3[1)]	L4[1)]	L5	L6	L7[1)]	L8[1)]	L9
35	50	10	20	8	27	17	–	96	133.5
45	100	10	22	15	16	6	–	167	194
	200						60	117	294

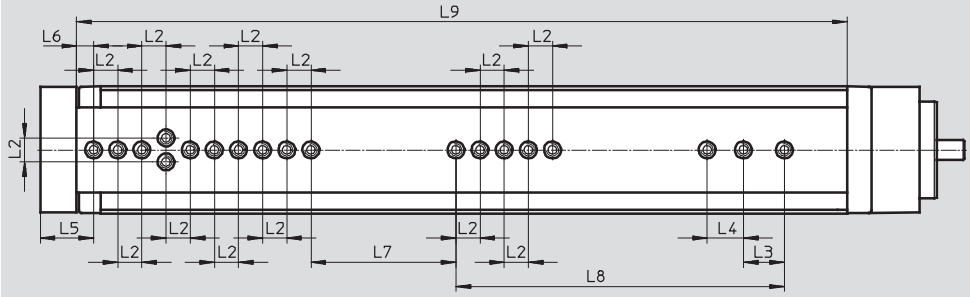
1) Tolerance for centring hole ±0.02 mm
Tolerance for thread ±0.1 mm

Hole pattern for mounting threads and centring holes

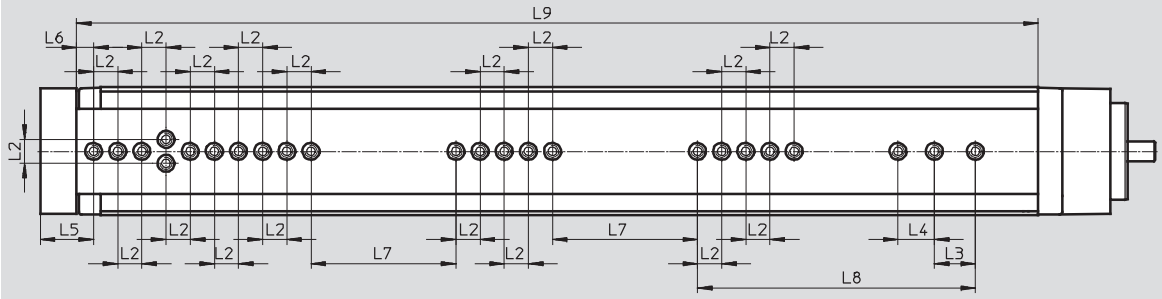
EGSL-55-100



EGSL-55-200



EGSL-55-250

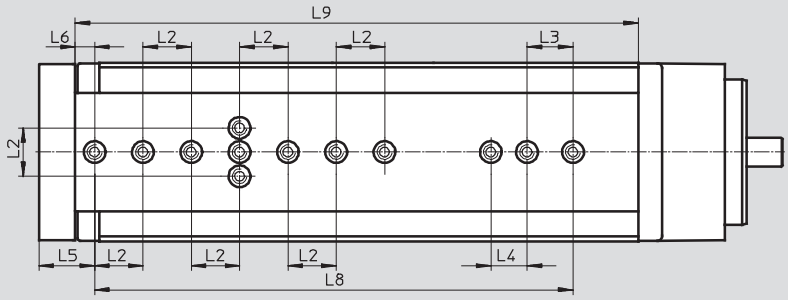


Size	Stroke [mm]	L2[1)]	L3[1)]	L4[1)]	L5	L6	L7[1)]	L8[1)]	L9
55	100	10	17	15	22	7	–	186	219
	200						60	136	319
	250						60	115	398

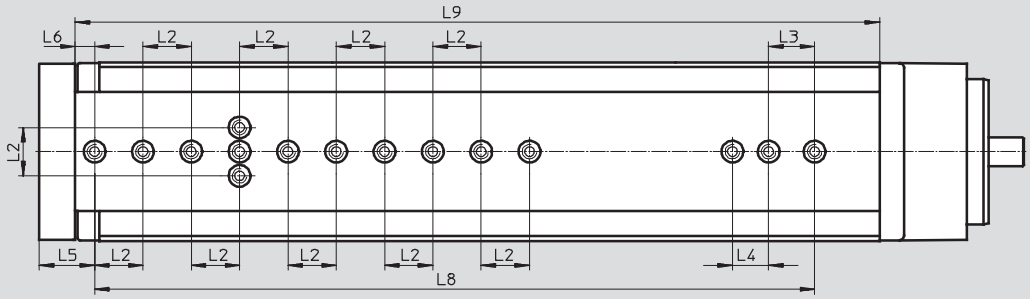
1) Tolerance for centring hole ±0.02 mm
Tolerance for thread ±0.1 mm

Hole pattern for mounting threads and centring holes

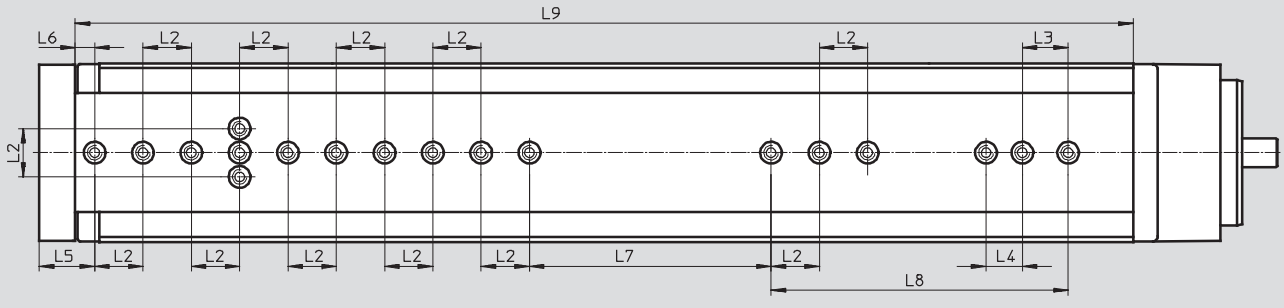
EGSL-75-100



EGSL-75-200



EGSL-75-300



Size	Stroke [mm]	L2[1)]	L3[1)]	L4[1)]	L5	L6	L7[1)]	L8[1)]	L9
75	100	20	19	15	23	8	–	198	233
	200						–	298	333
	300						100	123	438

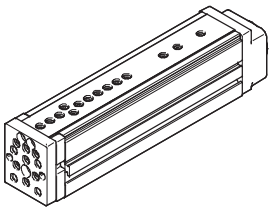
1) Tolerance for centring hole ±0.02 mm
Tolerance for thread ±0.1 mm

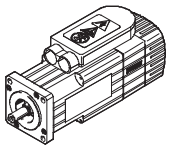
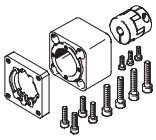
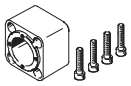
Mini slides EGSL, electric

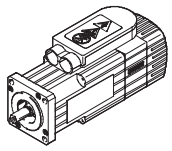
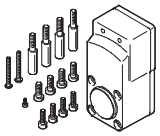
Technical data

FESTO

Ordering data

	Size	Spindle pitch	Stroke	Part No.	Type
	35	8	50	**562160**	**EGSL-BS-35-50-8P**
	45	3	100	**562225**	**EGSL-BS-45-100-3P**
			200	**562226**	**EGSL-BS-45-200-3P**
		10	100	**559335**	**EGSL-BS-45-100-10P**
			200	**559336**	**EGSL-BS-45-200-10P**
	55	5	100	**562227**	**EGSL-BS-55-100-5P**
			200	**562228**	**EGSL-BS-55-200-5P**
			250	**562229**	**EGSL-BS-55-250-5P**
		12.7	100	**559337**	**EGSL-BS-55-100-12.7P**
			200	**559338**	**EGSL-BS-55-200-12.7P**
			250	**559339**	**EGSL-BS-55-250-12.7P**
	75	10	100	**562230**	**EGSL-BS-75-100-10P**
			200	**562231**	**EGSL-BS-75-200-10P**
			300	**562232**	**EGSL-BS-75-300-10P**
		20	100	**559340**	**EGSL-BS-75-100-20P**
			200	**559341**	**EGSL-BS-75-200-20P**
			300	**559342**	**EGSL-BS-75-300-20P**

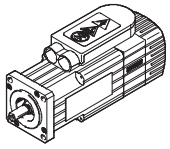
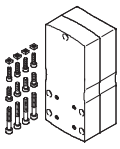
Permissible axis/motor combinations with axial kit				Technical data ➔ Internet: eamm-a
Motor/motor unit	Axial kit	Axial kit consisting of:		
		Motor flange	Coupling	Coupling housing
				
Type	Part No. Type	Part No. Type	Part No. Type	Part No. Type
EGSL-35				
With servo motor				
EMMS-AS-40-...	**1199152** **EAMM-A-D19-40A**	**1199144** **EAMF-A-28D-40A**	**543419** **EAMC-16-20-5-6**	**1087585** **EAMK-A-D19-28D**
With stepper motor				
EMMS-ST-28-...	**1081659** **EAMM-A-D19-28A**	**1087613** **EAMF-A-28D-28A**	**562676** **EAMC-16-20-5-5**	**1087585** **EAMK-A-D19-28D**
EMMS-ST-42-...	**1087642** **EAMM-A-D19-42A**	**1087630** **EAMF-A-28D-42A**	**562676** **EAMC-16-20-5-5**	**1087585** **EAMK-A-D19-28D**
EGSL-45				
With servo motor				
EMMS-AS-40-...	**543147** **EAMM-A-D32-40A**	**552163** **EAMF-A-28B-40A**	**543420** **EAMC-16-20-6-6**	**552155** **EAMK-A-D32-28B**
EMMS-AS-55-...	**550979** **EAMM-A-D32-55A**	**529942** **EAMF-A-44A/B-55A**	**551003** **EAMC-30-32-6-9**	**551006** **EAMK-A-D32-44A**
With stepper motor				
EMMS-ST-42-...	**543148** **EAMM-A-D32-42A**	**552164** **EAMF-A-28B-42A**	**543419** **EAMC-16-20-5-6**	**552155** **EAMK-A-D32-28B**
EMMS-ST-57-...	**550980** **EAMM-A-D32-57A**	**530081** **EAMF-A-44A/B-57A**	**551002** **EAMC-30-32-6-6.35**	**551006** **EAMK-A-D32-44A**
EGSL-55				
With servo motor				
EMMS-AS-55-...	**543153** **EAMM-A-D40-55A**	**529942** **EAMF-A-44A/B-55A**	**543423** **EAMC-30-32-8-9**	**552157** **EAMK-A-D40-44A**
EMMS-AS-70-...	**550981** **EAMM-A-D40-70A**	**529943** **EAMF-A-44A/B-70A**	**551004** **EAMC-30-32-8-11**	**552157** **EAMK-A-D40-44A**
With stepper motor				
EMMS-ST-57-...	**543154** **EAMM-A-D40-57A**	**530081** **EAMF-A-44A/B-57A**	**543421** **EAMC-30-32-6.35-8**	**552157** **EAMK-A-D40-44A**
EMMS-ST-87-...	**550982** **EAMM-A-D40-87A**	**530082** **EAMF-A-44A/B-87A**	**551004** **EAMC-30-32-8-11**	**552157** **EAMK-A-D40-44A**
EGSL-75				
With servo motor				
EMMS-AS-70-...	**543161** **EAMM-A-D60-70A**	**529945** **EAMF-A-64A/B-70A**	**543424** **EAMC-42-50-11-12**	**552160** **EAMK-A-D60-64B**
EMMS-AS-100-...	**550983** **EAMM-A-D60-100A**	**529947** **EAMF-A-64A/C/D-100A**	**551005** **EAMC-42-50-12-19**	**551007** **EAMK-A-D60-64C**
With stepper motor				
EMMS-ST-87-...	**543162** **EAMM-A-D60-87A**	**533140** **EAMF-A-64A/B-87A**	**543424** **EAMC-42-50-11-12**	**552160** **EAMK-A-D60-64B**

Permissible axis/motor combinations with parallel kit			Technical data ➔ Internet: eamm-u
Motor/motor unit	Parallel kit		
		• Space-saving gravity die-cast housing	
Type	Part No.	Type	
EGSL-45			
With servo motor			
EMMS-AS-40-...	**543150**	**EAMM-U-D32-40A**	
EGSL-55			
With servo motor			
EMMS-AS-55-...	**543157**	**EAMM-U-D40-55A**	
EGSL-75			
With servo motor			
EMMS-AS-70-...	**543165**	**EAMM-U-D60-70A**	

Note

The motor can only be mounted on the side and underneath when using these kits.

Permissible axis/motor combinations with parallel kit — Technical data ➔ Internet: eamm-u

Motor/motor unit	Parallel kit	
		• Increased housing rigidity • More flexible motor connection possible • Optionally with protection to IP65 • Use in combination with third-party motors on request

Type	Part No.	Type
EGSL-45		
With servo motor		
EMMS-AS-40-...	**1201591**	**EAMM-U-50-D32-40A-78**
EMMS-AS-55-...	**1210126**	**EAMM-U-60-D32-55A-91**
With stepper motor		
EMMS-ST-42-...	**1201607**	**EAMM-U-50-D32-42A-78**
EMMS-ST-57-...	**1210419**	**EAMM-U-60-D32-57A-91**
With motor		
MTR-DCI-32S-...	**1570862**	**EAMM-U-50-D32-32B-78**
MTR-DCI-42S-...	**1577393**	**EAMM-U-60-D32-42B/C-91**
With gear unit		
EMGA-40-P-...	**1577358**	**EAMM-U-60-D32-40G-91**
EGSL-55		
With servo motor		
EMMS-AS-55-...	**1210438**	**EAMM-U-60-D40-55A-91**
EMMS-AS-70-...	**1212826**	**EAMM-U-86-D40-70A-102**
With stepper motor		
EMMS-ST-57-...	**1210442**	**EAMM-U-60-D40-57A-91**
EMMS-ST-87-...	**1215802**	**EAMM-U-86-D40-87A-102**
With motor		
MTR-DCI-42S-...	**1570950**	**EAMM-U-60-D40-42B/C-91**
MTR-DCI-52S-...	**1537046**	**EAMM-U-86-D40-52B/C-102**
With gear unit		
EMGA-40-P-...	**1577165**	**EAMM-U-60-D40-40G-91**
EMGA-60-P-...	**1586445**	**EAMM-U-86-D40-60G-102**
EMGC-60-P-...	**1586496**	**EAMM-U-86-D40-60H-102**
EGSL-75		
With servo motor		
EMMS-AS-70-...	**1212477**	**EAMM-U-86-D60-70A-102**
EMMS-AS-100-...	**1202436**	**EAMM-U-110-D60-100A-120**
With stepper motor		
EMMS-ST-87-...	**1215784**	**EAMM-U-86-D60-87A-102**
With motor		
MTR-DCI-52S-...	**1537000**	**EAMM-U-86-D60-52B/C-102**
MTR-DCI-62S-...	**1536988**	**EAMM-U-110-D60-62B-120**
With gear unit		
EMGA-60-P-...	**1586347**	**EAMM-U-86-D60-60G-102**
EMGC-60-P-...	**1586276**	**EAMM-U-86-D60-60H-102**
EMGA-60-P-...	**1543240**	**EAMM-U-110-D60-60G-120**
EMGC-60-P-...	**1542264**	**EAMM-U-110-D60-60H-120**
EMGA-80-P-...	**1532949**	**EAMM-U-110-D60-80G-120**

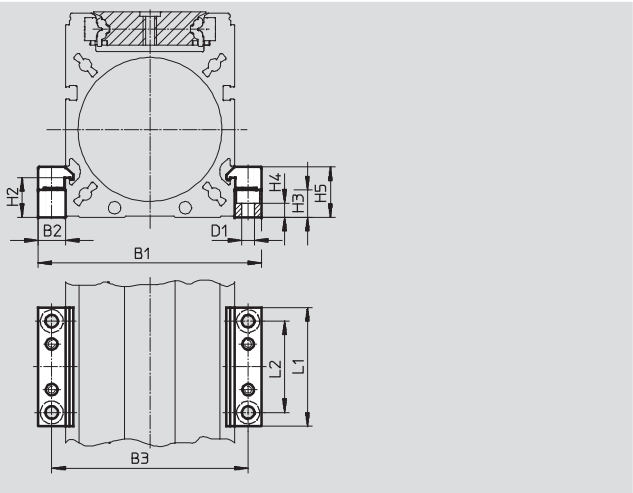
Note

The clamping component EADT is required to adjust the toothed belt pretension with EAMM-U-110.

The motor and/or axis shaft can optionally be supported with a counter bearing EAMG.

More information ➔ eamm-u

Profile mounting
EAHF/MUE
Material:
Anodised aluminium

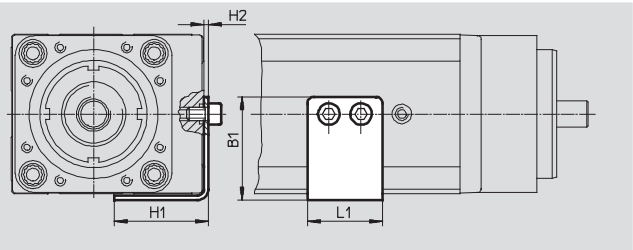


Dimensions and ordering data

For size	B1	B2	B3	D1 ∅	H2	H3
35	49.5	8	41.5	3.4	10.5	10
45	68.5	12	56.5	5.5	12.5	8.3
55	77	12	65	5.5	17.5	12
75	98	12	86	5.5	17.5	12

For size	H4	H5	L1	L2	Weight [g]	Part No.	Type
35	6.8	15.5	40	20	20	**1170211**	**EAHF-G1-35-P**
45	2.5	17	52	40	23	**1168859**	**EAHF-G1-45-P**
55	6.2	22	52	40	80	**558043**	**MUE-70/80**
75	6.2	22	52	40	80	**558043**	**MUE-70/80**

Switch lug EAPM
Material:
Galvanised steel



Dimensions and ordering data

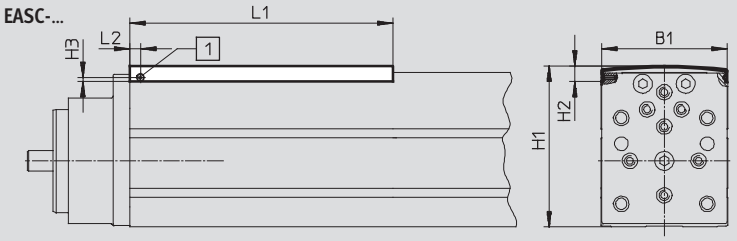
For size	B1	H1	H2	L1	Weight [g]	Part No.	Type
35	25.5	25	1.5	17	15	**1235029**	**EAPM-G1-35-SLS**
45	32	32.5	2	30	30	**1235033**	**EAPM-G1-45-SLS**
55	36	35	2	30	35	**1235035**	**EAPM-G1-55-SLS**
75	48	44	2	35	50	**1235036**	**EAPM-G1-75-SLS**

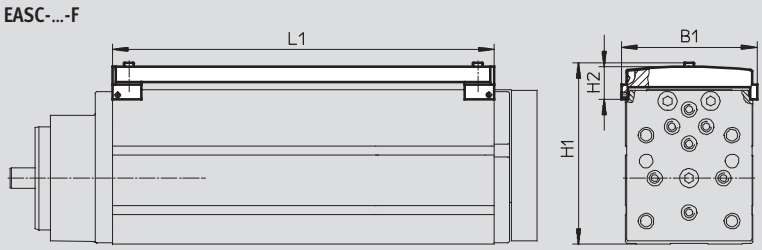
Note

The switch lug should only be attached to the designated threads (guide rail at the back).

Cover EASC

Material:
Anodised aluminium
Free of copper, PTFE and silicone





1 Countersunk screw M2

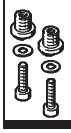
Dimensions and ordering data

For size	Length [mm]	B1	H1	H2	H3	L1 −0.5	L2 −0.3	Part No.	Type
For use without switch lug									
35	50	32.5	43.2	8.5	2.3	58	6	**570819**	**EASC-G1-35-50**
	500[1)]					500		**570874**	**EASC-G1-35-500**
45	100	43.5	59.7	9	2.3	108	6	**570822**	**EASC-G1-45-100**
	200					208		**570823**	**EASC-G1-45-200**
	500[1)]					500		**570875**	**EASC-G1-45-500**
55	100	52	69.7	9	2.3	108	6	**570824**	**EASC-G1-55-100**
	200					208		**570825**	**EASC-G1-55-200**
	250					258		**570826**	**EASC-G1-55-250**
	500[1)]					500		**570876**	**EASC-G1-55-500**
75	100	73	93.7	9	2.3	108	6	**570827**	**EASC-G1-75-100**
	200					208		**570828**	**EASC-G1-75-200**
	300					308		**570829**	**EASC-G1-75-300**
	500[1)]					500		**570877**	**EASC-G1-75-500**
For use with switch lug									
35	50	38.3	55	19.1	–	119.5	–	**570830**	**EASC-G1-35-50-F**
45	100	49.7	71.5	19.6		179		**570833**	**EASC-G1-45-100-F**
	200					279		**570834**	**EASC-G1-45-200-F**
55	100	58.2	81.5	19.6		204		**570835**	**EASC-G1-55-100-F**
	200					304		**570836**	**EASC-G1-55-200-F**
	250					383		**570837**	**EASC-G1-55-250-F**
75	100	78.9	105.5	19.4		218		**570838**	**EASC-G1-75-100-F**
	200					318		**570839**	**EASC-G1-75-200-F**
	300					423		**570840**	**EASC-G1-75-300-F**

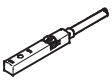
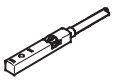
Note

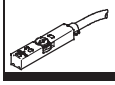
For covers with a length of 500 mm, the customer must bore the mounting hole on the side.

1) The cover can be shortened by the customer as required.

Ordering data					
	For size	Brief description	Part No.	Type	PU[1]
Centring sleeve ZBH					
	35, 45, 55	For slide and yoke plate	**186717**	**ZBH-7**	10
	75		**150927**	**ZBH-9**	
Connecting sleeve ZBV					
	45, 55	For connecting mini slide EGSL with mini slide DGSL	**548803**	**ZBV-M5-7**	3
	75		**548804**	**ZBV-M6-9**	

1) Packaging unit

Ordering data – Proximity sensors for T-slot, inductive						Technical data ➔ 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 sensors for T-slot, magneto-resistive						Technical data ➔ Internet: smt
	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with 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**

Ordering data – Connecting cables					Technical data ➔ 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**

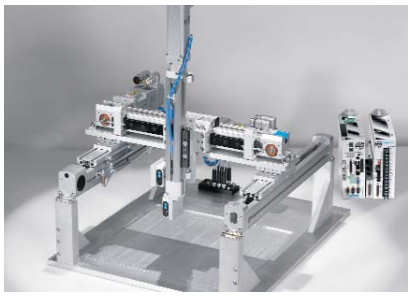
Product Range and Company Overview

A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.

Custom Automation Components
Complete custom engineered solutions

Custom Control Cabinets
Comprehensive engineering support and on-site services



Complete Systems
Shipment, stocking and storage services

The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.

Electromechanical
Electromechanical actuators, motors, controllers & drives

Pneumatics
Pneumatic linear and rotary actuators, valves, and air supply

PLCs and I/O Devices
PLC's, operator interfaces, sensors and I/O devices

Supporting Advanced Automation... As No One Else Can!
Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.

Printed on recycled paper at New Horizon Graphic, Inc., FSC certified as an environmentally friendly printing plant.

Festo North America

Festo Regional Contact Center

5300 Explorer Drive
Mississauga, Ontario L4W 5G4
Canada

USA Customers:

For ordering assistance,
Call: 1.800.99.FESTO (1.800.993.3786)
Fax: 1.800.96.FESTO (1.800.963.3786)
Email: customer.service@us.festo.com

For technical support,
Call: 1.866.GO.FESTO (1.866.463.3786)
Fax: 1.800.96.FESTO (1.800.963.3786)
Email: product.support@us.festo.com

Canadian Customers:

Call: 1.877.GO.FESTO (1.877.463.3786)
Fax: 1.877.FX.FESTO (1.877.393.3786)
Email: festo.canada@ca.festo.com

USA Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788, USA
www.festo.com/us

USA Sales Offices

Appleton
North 922 Tower View Drive, Suite N
Greenville, WI 54942, USA

Boston
120 Presidential Way, Suite 330
Woburn, MA 01801, USA

Chicago
1441 East Business Center Drive
Mt. Prospect, IL 60056, USA

Dallas
1825 Lakeway Drive, Suite 600
Lewisville, TX 75057, USA

Detroit – Automotive Engineering Center
2601 Cambridge Court, Suite 320
Auburn Hills, MI 48326, USA

New York
395 Moreland Road
Hauppauge, NY 11788, USA

Silicon Valley
4935 Southfront Road, Suite F
Livermore, CA 94550, USA

United States

USA Headquarters, East: Festo Corp., 395 Moreland Road, Hauppauge, NY 11788
Phone: 1.631.435.0800; Fax: 1.631.435.8026;
Email: info@festo-usa.com **www.festo.com/us**

Canada

Headquarters: Festo Inc., 5300 Explorer Drive, Mississauga, Ontario L4W 5G4
Phone: 1.905.624.9000; Fax: 1.905.624.9001;
Email: festo.canada@ca.festo.com **www.festo.ca**

Mexico

Headquarters: Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquinahuac,
54020 Tlalnepantla, Edo. de México
Phone: 011 52 [55] 53 21 66 00; Fax: 011 52 [55] 53 21 66 65;
Email: festo.mexico@mx.festo.com **www.festo.com/mx**

Central USA
Festo Corporation
1441 East Business
Center Drive
Mt. Prospect, IL 60056, USA
Phone: 1.847.759.2600
Fax: 1.847.768.9480

Western USA
Festo Corporation
4935 Southfront Road,
Suite F
Livermore, CA 94550, USA
Phone: 1.925.371.1099
Fax: 1.925.245.1286

Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark Estonia Finland France Germany Great Britain Greece Hong Kong Hungary India Indonesia Iran Ireland Israel Italy Japan Latvia Lithuania Malaysia Mexico Netherlands New Zealand Norway Peru Philippines Poland Romania Russia Serbia Singapore Slovakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

www.festo.com