

Linear drives SLG, flat design



# Linear drives SLG, flat design

Features

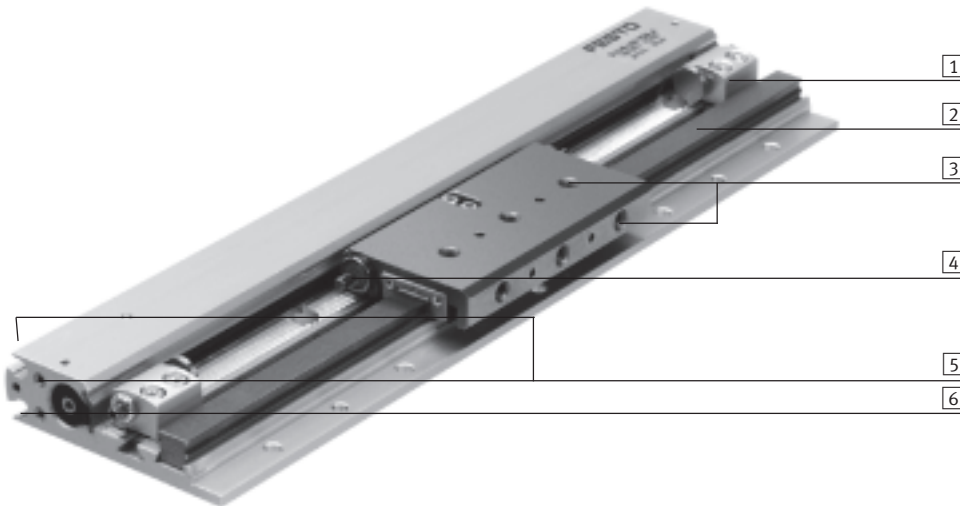
FESTO

## General information

- Piston  $\varnothing$  8, 12 and 18
- Stroke lengths of 100 ... 900 mm
- Two cushioning types selectable:
  - Elastic cushioning
  - Shock absorbers
- Direct mounting via centering holes
- Extremely flat design
- Built-in precision guide
- Slide with polished surface
- High load capacity
- Adjustable end stops
- Versatile supply port options
- Suitable for multiple-axis applications with other mini slides

## The technology in detail

→ 5

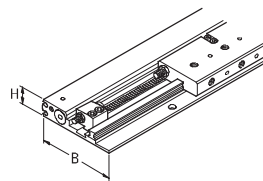


- |                                                                                                                                                                                                                  |                                                                                                                                 |                                                                                                                                            |                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <p><b>1</b> End stop<br/>Finely-adjustable end stops over entire stroke range</p> <p><b>2</b> Guide rail<br/>Highly accurate, rigid precision guide unit: stainless steel roller track pressed into aluminum</p> | <p><b>3</b> Slide<br/>Interface for attachments. Highly adaptable, thanks to wide choice of mounting and attachment options</p> | <p><b>4</b> Cushioning<br/>With rubber buffers or with shock absorbers. The cushioning elements are inserted into the slide and fixed.</p> | <p><b>5</b> Supply port<br/>Possible on three sides</p> <p><b>6</b> Slot<br/>for integrateable proximity sensors SME-/SMT-10</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

## Design

### The flat linear drive SLG

The height H remains the same even if the intermediate position module is used.



Piston $\varnothing$	Width (B)	Height (H)
8 mm	53.5	x 15 mm
12 mm	64.5	x 18.5 mm
18 mm	85.5	x 25.5 mm

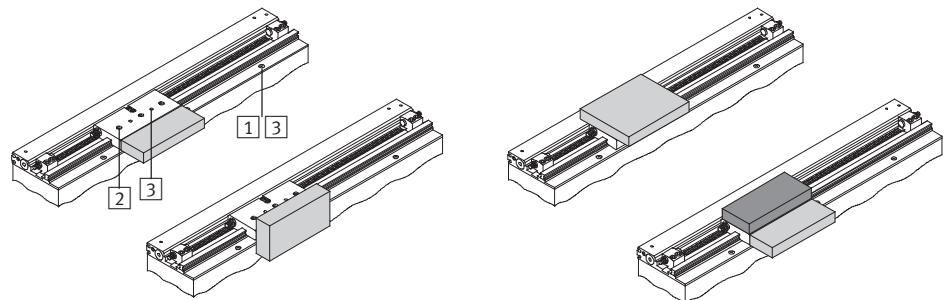
## Mounting and assembly options

### Drive

- 1** Through-holes
- 3** Locating hole for centering pin ZBS

### Slide

- 2** Threaded holes
- 3** Locating hole for centering pin ZBS



# Linear drives SLG, flat design

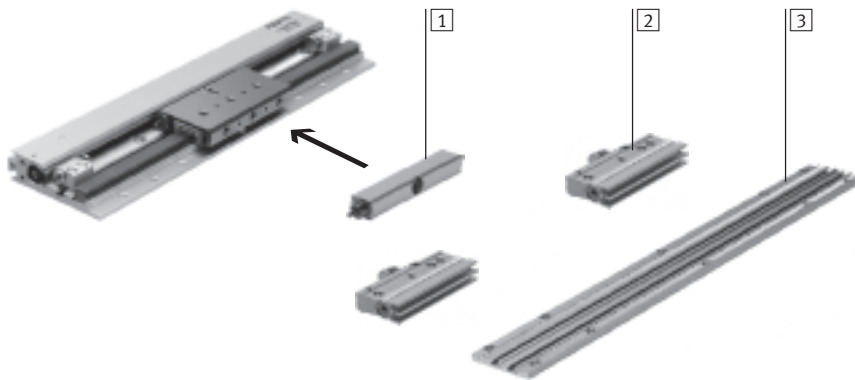
Features

## Intermediate positions – simple and inexpensive

→ 16

- The intermediate position module can be used for advancing to one or more intermediate positions
- It is mounted parallel to the linear drive SLG via an additional mounting rail. This means that it can also be easily retrofitted.
- Fine adjustment of the intermediate position is effected via a stop screw with lock nut
- With two modules the same position can be approached from either direction
- The intermediate positions can be freely selected across the entire stroke range (observe minimum distances)
- The module's symmetry means that it can advance to its right or left once mounted
- It can be activated and sensed before the movement starts
- Integratable proximity switches in the module housing mean that the intermediate position (activated or initial position) can be sensed contactlessly
- Up to 4 modules can be ordered via the SLG modular product system
- The slide must be retracted once the intermediate position is reached. The stop on the module can then swivel back into its initial position


## In combination with linear drive SLG




**1** Shock absorber retainer SLG-D  
The retainer accepts rubber buffers or shock absorbers and is attached to the slide of the SLG. The use of shock absorber YSRG (Accessories → 25) is recommended to ensure accurate positioning of stops and in the case of vertical assembly positions.

**2** Intermediate position module SLG-Z  
The stop with cushioning screw is retracted and extended by means of a 90° swivel motion based on a double-acting rotary drive (rack and pinion principle). The module is fastened to the mounting rail using screws and slot nuts.

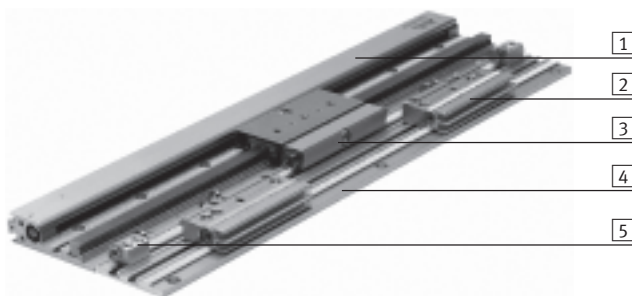
**3** Mounting rail SLG-S  
The rail is used for mounting the intermediate position modules. It can also accept the end stops of the linear drive SLG. The gear teeth on the rail and module permit rough pre-adjustment with respect to the drive part of the SLG.

 Note

The intermediate position module can also be used independently of the linear drive SLG. It is simply mounted on any even surface using mounting screws and locating pins and can then be used universally as an autonomous intermediate position module in numerous applications.



## Completely assembled with two intermediate positions



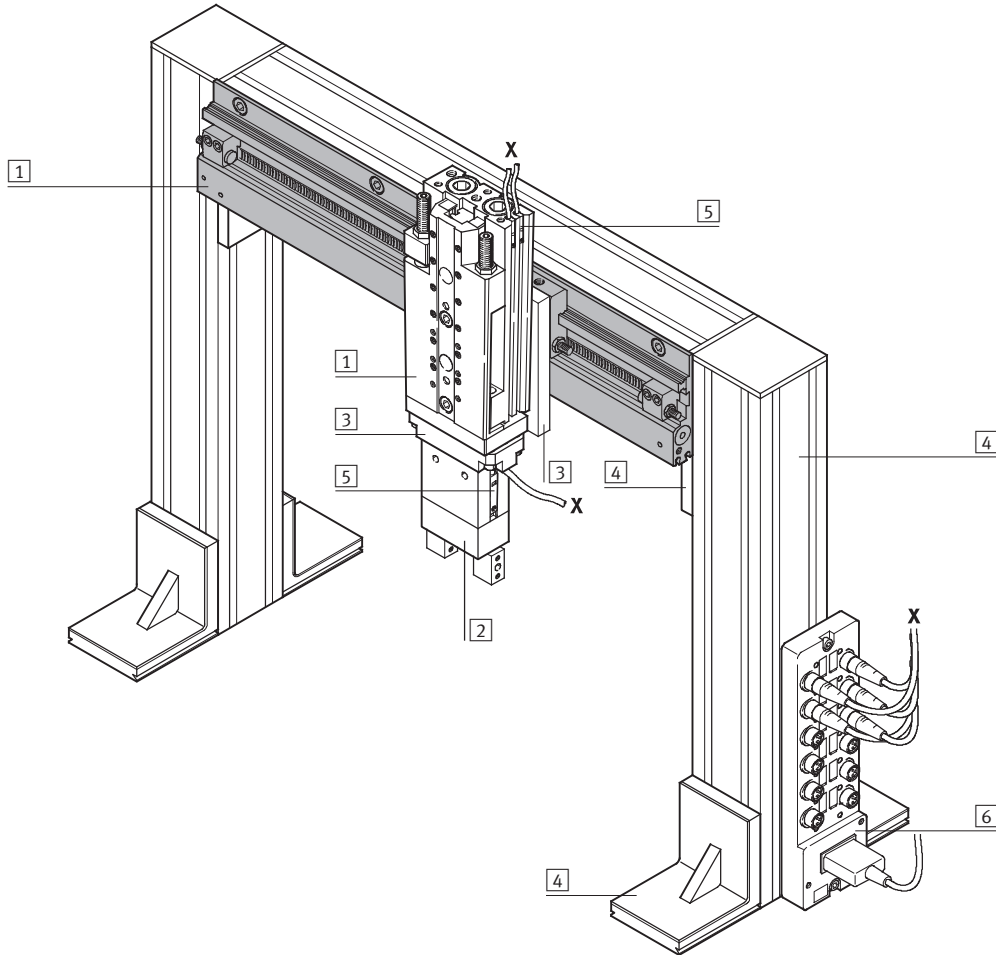
- 1** Linear drive SLG
- 2** Intermediate position module
- 3** Shock absorber retainer
- 4** Mounting rail
- 5** End stop

# Linear drives SLG, flat design

Features

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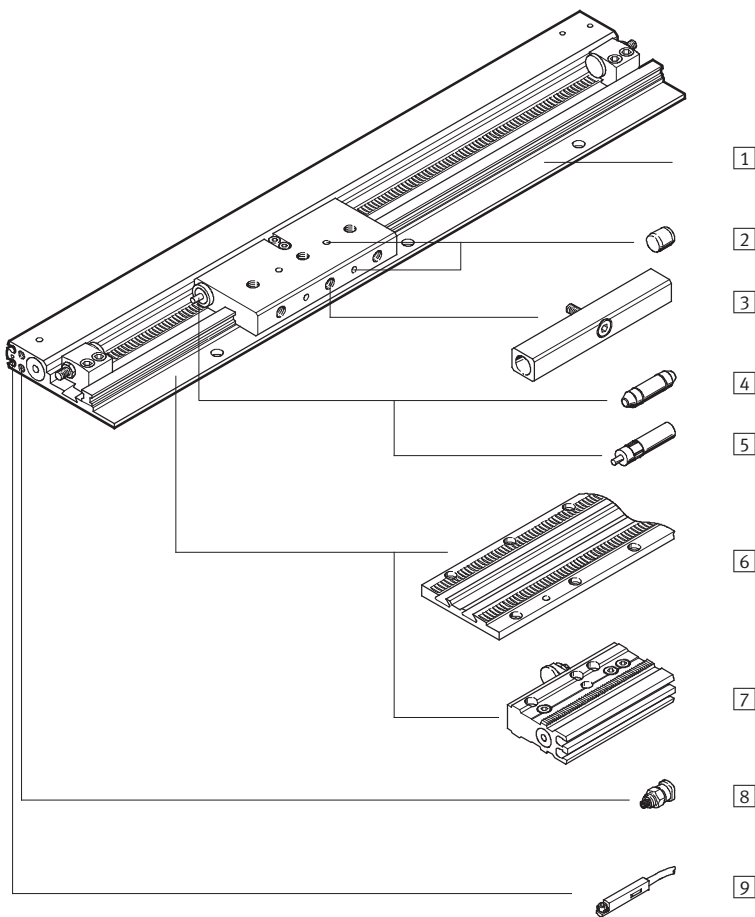
System product for handling and assembly technology



System elements and accessories		
Type	Brief description	→ Page/Internet
1	Drives	Diverse possible combinations in handling and assembly technology drive
2	Grippers	Diverse variation options in handling and assembly technology gripper
3	Adapters	For drive-drive and drive-gripper connections adapter kit
4	Basic components	Profiles and profile connections basic component
5	Proximity sensors	For position sensing proximity sensor
6	Multi-pin plug distributor	For bundling individual cables to form a multi-pin cable multi-pin plug distributor

# Linear drives SLG, flat design

Peripherals overview



Variants and accessories			
	Type	Brief description	→ Page/Internet
1	Linear drive SLG	Drive without accessories	7
2	Centering pin ZBS	For centering loads and attachments on the slide	25
3	Shock absorber retainer SLG-D	For fastening the rubber buffers or shock absorbers in combination with the intermediate position	23
4	Rubber buffer SLG	Non-adjustable, elastic cushioning. Used only at low speeds	25
5	Shock absorber YSRG	Self-adjusting hydraulic shock absorber with return spring and linear cushioning characteristic	25
6	Mounting rail SLG-S	For fastening the intermediate position modules and end stops	24
7	Intermediate position module SLG-Z	Fixed stop for the intermediate position	23
8	One-way flow control valve GRLA	The small distance between the supply ports means that only certain one-way flow control valves can be used	26
9	Proximity sensors SME-/SMT-10	The proximity switches are fitted in the profile slot. The switches therefore do not project	26

# Linear drives SLG, flat design

Type codes

SLG – 12 – 500 – YSR – A – Z2

**Type**

SLG	Linear drive
-----	--------------

**Piston Ø [mm]**

**Stroke [mm]**

**Cushioning**

P	Elastic cushioning, non-adjustable
YSR	Linear shock absorber, self-adjusting

**Position sensing**

A	Position sensing
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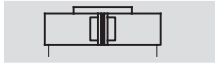
**Intermediate position**

Z1	1 intermediate position
Z2	2 intermediate positions
Z3	3 intermediate positions
Z4	4 intermediate positions

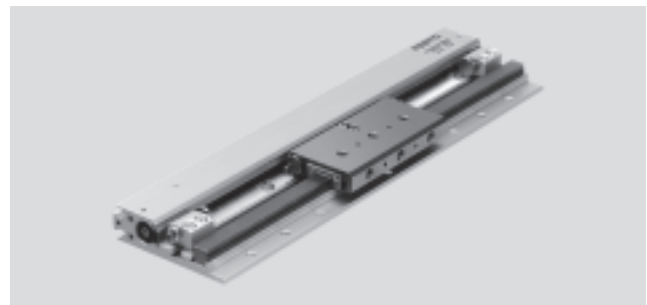
# Linear drives SLG, flat design

Technical data

Function



- $\varnothing$  - Diameter  
8 ... 18 mm
- | - Stroke length  
100 ... 900 mm



General technical data				
Piston $\varnothing$		8	12	18
Stroke <sup>1)</sup>	[mm]	100 ... 500	100 ... 700	100 ... 900
Pneumatic connection		M3		M5
Mode of operation		Double-acting		
Operating medium		Filtered compressed air, lubricated or unlubricated		
Constructional design		Rodless drive		
Cushioning		Flexible cushioning rings/plates at both ends		
→10		Self-adjusting at both ends		
Position sensing		For proximity sensing		
Type of mounting		Direct mounting		
Mounting position		Any		
Driver principle		Slotted cylinder, mechanically coupled		
Guide		Guide rail with slide		
Max. speed	[m/s]	1		1.5

1) Intermediate strokes are infinitely adjustable with stops.

Operating and environmental conditions				
Piston $\varnothing$		8	12	18
Operating pressure	[bar]	2.5 ... 8	2 ... 8	1 ... 8
Ambient temperature <sup>1)</sup>	[°C]	-10 ... +60		

1) Note operating range of proximity switches.

Forces [N]				
Piston $\varnothing$		8	12	18
Theoretical force at 6 bar		30	68	153

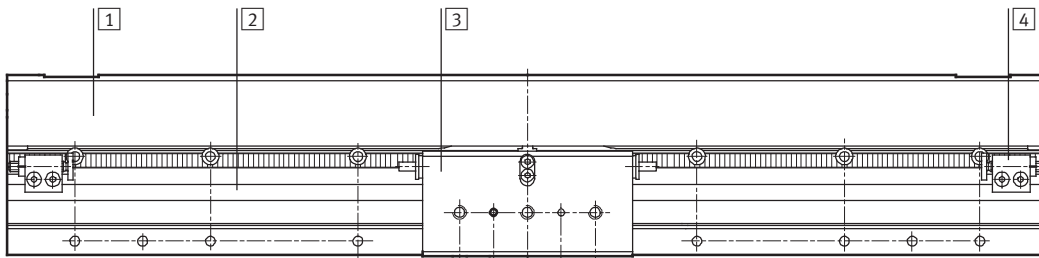
# Linear drives SLG, flat design

Technical data

Weights [g]			
Piston $\varnothing$	8	12	18
Basic weight per 0 mm stroke with P cushioning	215	410	965
Basic weight per 0 mm stroke with YSR cushioning	225	420	995
Additional weight per 10mm stroke	11.5	17.5	29.5
Moving load with P cushioning	80	160	440
Moving load with YSR cushioning	90	170	470

## Materials

Sectional view



Linear drives	
1	Profile barrel Anodized aluminum
2	Guide High-alloy steel
3	Slide High-alloy steel
4	Stop sleeve Anodized aluminum
-	Seals Polyurethane
Material note Free of copper, PTFE and silicone	

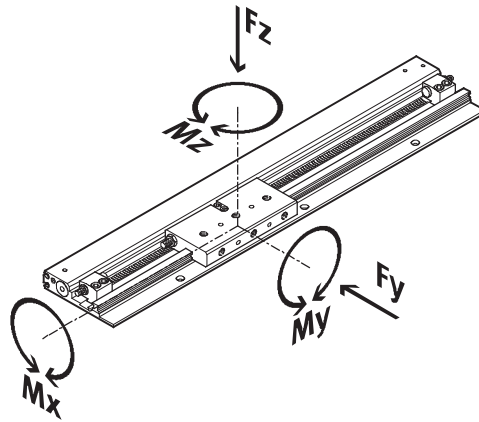


# Linear drives SLG, flat design

Technical data

## Characteristic load values

The forces and torques specified refer to the centre of the guide rail.




If the drive is subjected to several of the indicated forces and torques simultaneously, the following equations must be satisfied in addition to the indicated maximum loads:

$$\frac{F_y}{F_{y_{max}}} + \frac{F_z}{F_{z_{max}}} + \frac{M_x}{M_{x_{max}}} + \frac{M_y}{M_{y_{max}}} + \frac{M_z}{M_{z_{max}}} \leq 1$$

Permissible forces [N] and torques [Nm]				
Piston Ø		8	12	18
F <sub>y<sub>max.</sub></sub>	[N]	255	565	930
F <sub>z<sub>max.</sub></sub>	[N]	255	565	930
M <sub>x<sub>max.</sub></sub>	[Nm]	1	3	7
M <sub>y<sub>max.</sub></sub>	[Nm]	3.5	9	23
M <sub>z<sub>max.</sub></sub>	[Nm]	3.5	9	23

Torsional backlash [°] at the respective torques				
Piston Ø		8	12	18
at M <sub>x<sub>max.</sub></sub>		±0.03	±0.04	±0.05
at M <sub>y<sub>max.</sub></sub>		±0.005	±0.007	±0.007
at M <sub>z<sub>max.</sub></sub>		±0.005	±0.007	±0.007

-  - Note  
Sizing software  
ProDrive  
→ [www.festo.com](http://www.festo.com)

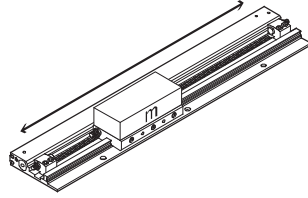
# Linear drives SLG, flat design

Technical data

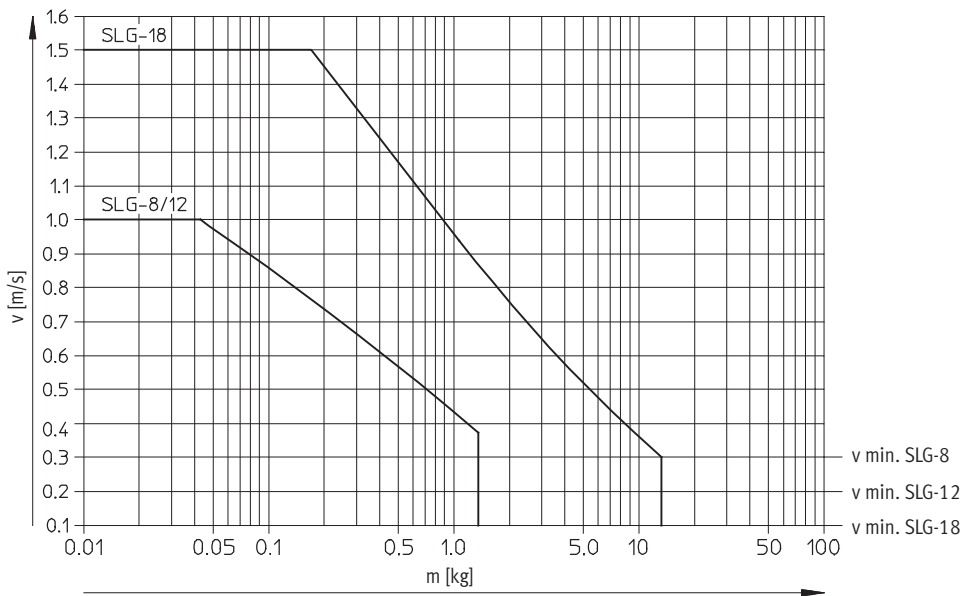
## Maximum permissible piston speed $v$ as a function of useful load $m$ when the unit is operated horizontally

As a function of operating pressure and end-position cushioning system

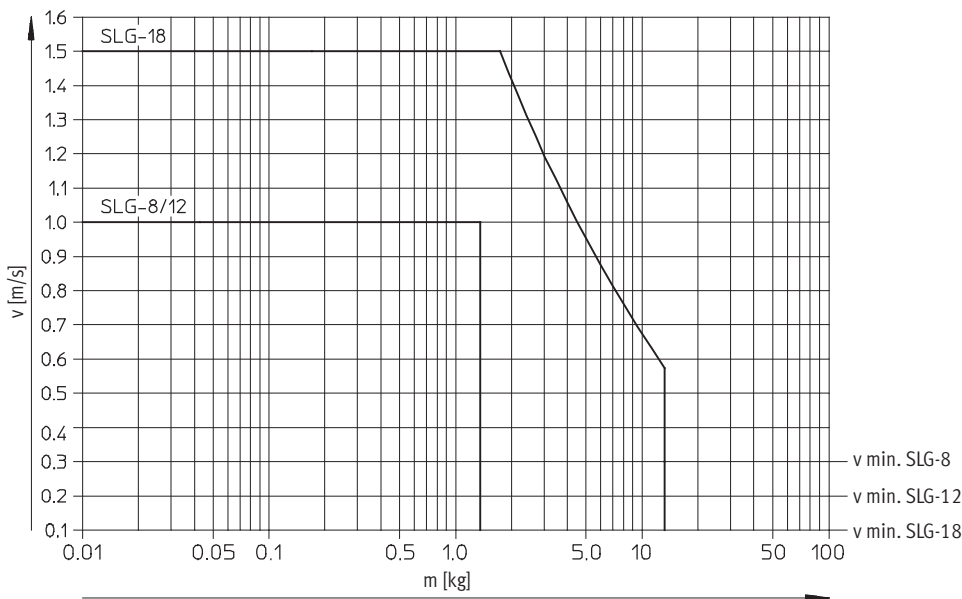
A linear drive SLG with YSR cushioning (YSRG shock absorbers) must be used in applications requiring very high repetition accuracy.



### Cushioning P



### YSR cushioning



# Linear drives SLG, flat design

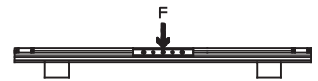
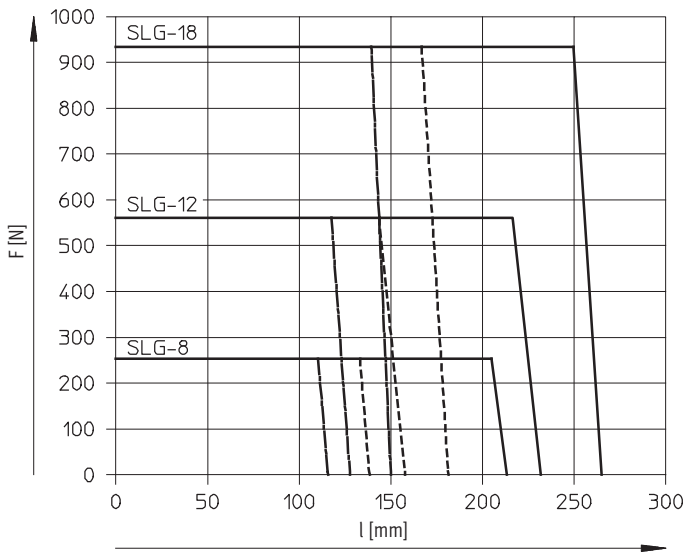
Technical data

## Determination of required points of support as a function of applied load F

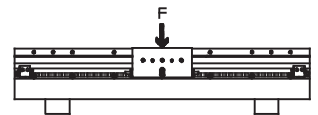
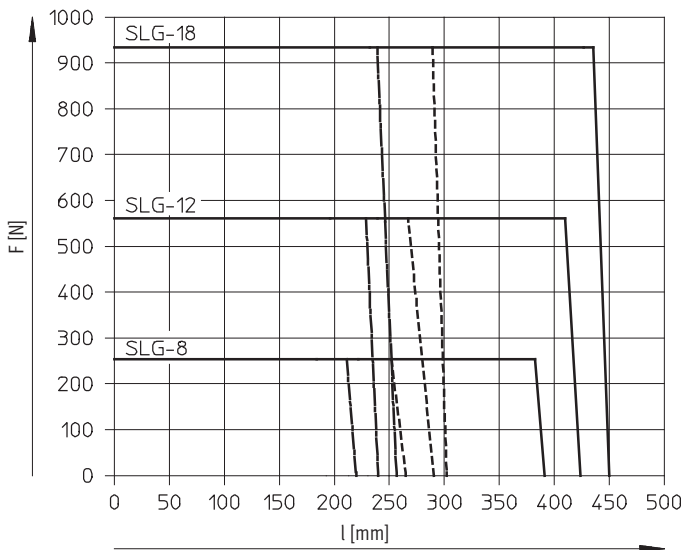


**Note**  
The support spacings L must be laid out in such a way that the mounting profile for the intermediate position module will exhibit less deflection than the drive itself.

## Deflection around the X axis



## Deflection around the Y axis



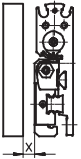
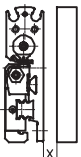
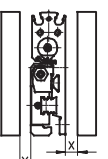
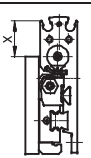
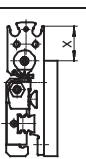
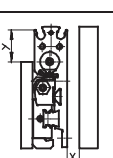
## Flatness of the bearing surface

Contact surfaces which support the linear drive SLG should be no farther than 100 mm apart, or over its entire length and should be flat to within at

least 0.1 mm. The support surface for the load on the slide should be flat to within at least 0.05 mm.

# Linear drives SLG, flat design

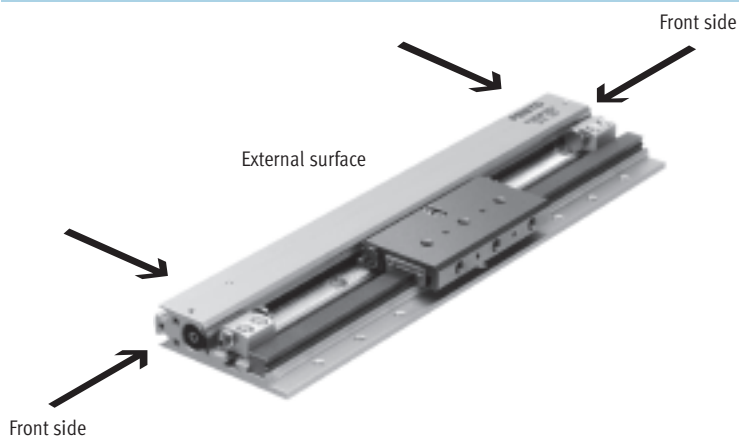
Technical data

Minimum clearances for linear drives SLG to ferrite materials for reliable proximity switch functioning				
	Slot 1	Slot 2	Minimum clearances in mm	
			x	y
	SLG-8	1	5	-
		2	5	-
	SLG-12	1	6	-
		2	5	-
	SLG-18	1	5	-
		2	5	-
	SLG-8	1	5	-
		2	10	-
	SLG-12	1	5	-
		2	6	-
	SLG-18	1	5	-
		2	5	-
	SLG-8	1	7	-
		2	10	-
	SLG-12	1	10	-
		2	10	-
	SLG-18	1	5	-
		2	5	-
	SLG-8	1	14	-
		2	12	-
	SLG-12	1	16	-
		2	1	-
	SLG-18	1	2	-
		2	2	-
	SLG-8	1	7	-
		2	17	-
	SLG-12	1	1	-
		2	17	-
	SLG-18	1	1	-
		2	12	-
	SLG-8	1	11	17
		2	15	17
	SLG-12	1	7	16
		2	10	16
	SLG-18	1	5	12
		2	5	12

# Linear drives SLG, flat design

Technical data

## Permissible spanner widths for the compressed air connectors



### In general

The following spanner widths can be used on the external surface and front side:

SLG-8:	≈ 5.5 ... 8
SLG-12:	≈ 5.5 ... 8
SLG-18:	≈ 8 ... 10

### Restrictions on the front sides

The threaded connectors protrude from the top or bottom of the profile with compressed air connections at both ends. The connector threads are too close to one another for the threaded fittings with compressed air connections at one end only.

For this reason, the following spanner widths can only be used in certain conditions:

SLG-8:	≈ 8
SLG-12:	≈ 8
SLG-18:	≈ 10

# Linear drives SLG, flat design

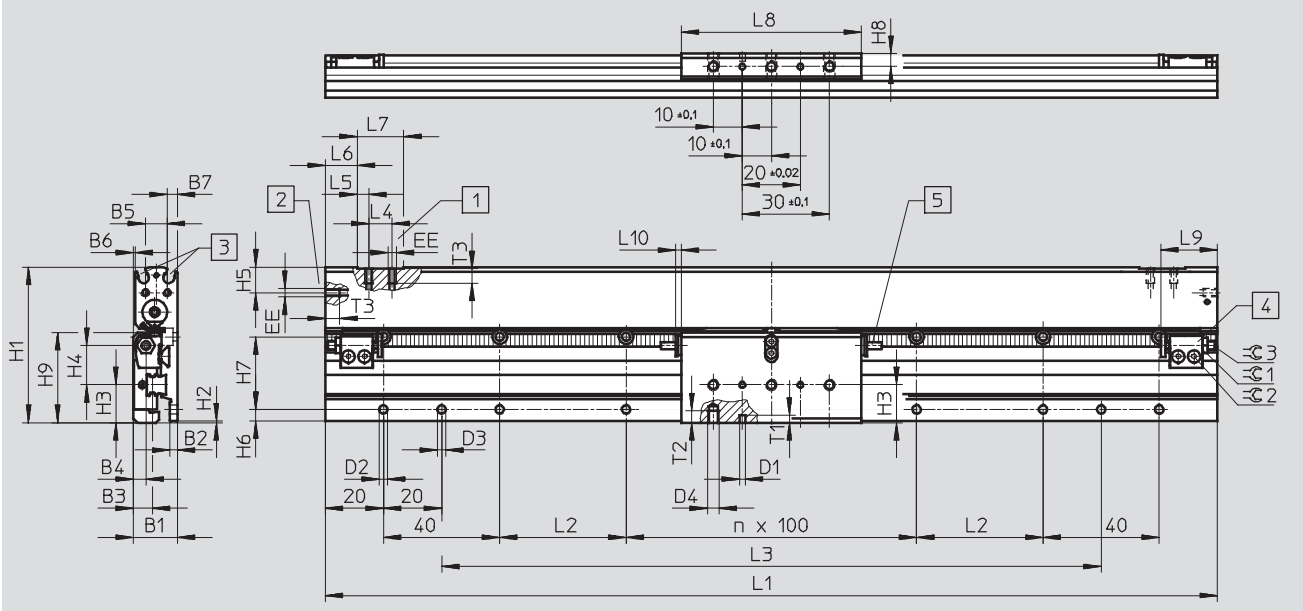
Technical data



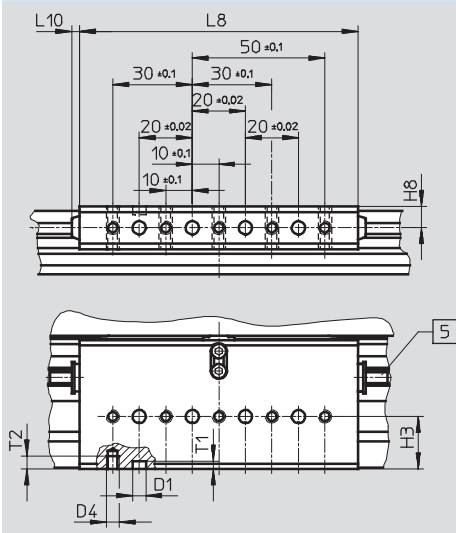
## Dimensions

SLG-8/-12/-18

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



## Slide SLG-18



- 1** Supply port, external surface
- 2** Supply port, front side
- 3** Slot for proximity sensor SME-/SMT-10
- 4** Stop
- 5** Shock absorber YSR or rubber buffer (P cushioning)

# Linear drives SLG, flat design

Technical data

	B1	B2	B3	B4	B5	B6	B7	D1 <sup>1)</sup> ∅ H7	D2 ∅	D3 <sup>1)</sup> ∅ H7	D4	EE	H1	H2	H3	H4	H5	H6	H7
SLG-8	15	2.5	6.6	4.4	7.5	0.65	3.5	2	3.4	3	M4	M3	53.5	0.5	13	13.6	8.8	3.9	25
SLG-12	18.5	2.6	7.9	5.2	8.5	0.5	4.75	2	3.4	3	M4	M3	64.5	0.5	15.9	16.5	9.5	4.3	30
SLG-18	25.5	3.5	13.3	8	13.2	1.6	5.4	5	4.5	5	M5	M5	85.5	0.5	19.8	21.7	11.5	4.1	40

	H8	H9	n	L1	L2	L3	L4	L5	L6	L7	L8	L9 min.	L10	T1	T2 min.	T3	≈C1	≈C2	≈C3
SLG-8-100	4.4	31	0	207	43.5	127	10	5	10	20	62	20	2	2.5	4	4.5	5.5	1.5	1.5
SLG-8-200			1	307		227													
SLG-8-300			2	407		327													
SLG-8-400			3	507		427													
SLG-8-500			4	607		527													
SLG-12-100	5.25	36.7	0	233	56.5	153	10	5	10	20	80	36.5	2	2.5	4	4.5	7	2	2
SLG-12-200			1	333		253													
SLG-12-300			2	433		353													
SLG-12-400			3	533		453													
SLG-12-500			4	633		553													
SLG-12-600			5	733		653													
SLG-12-700			6	833		753													
SLG-18-100	8	48.5	0	271	75.5	191	12	6	13	24	105	29	3	3	5	6	8	2.5	2.5
SLG-18-200			1	371		291													
SLG-18-300			2	471		391													
SLG-18-400			3	571		491													
SLG-18-500			4	671		591													
SLG-18-600			5	771		691													
SLG-18-700			6	871		791													
SLG-18-800			7	971		891													
SLG-18-900			8	1071		991													

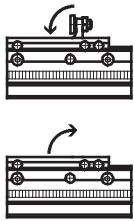
1) Locating hole for ZBS centering pins

# Linear drives SLG, flat design

Technical data – Intermediate position module SLG-Z

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Function



General technical data				
Piston $\varnothing$		8	12	18
Pneumatic connection		M3		
Mode of operation		Double-acting		
Operating medium		Filtered compressed air, lubricated or unlubricated		
Constructional design		Stop in the form of a semi-rotary device in accordance with the rack and pinion principle		
Fine adjustment of the intermediate position	[mm]	1.7		
Cushioning <sup>1)</sup>		→10		
Position sensing		For proximity sensor		
Type of mounting		Direct mounting		
Assembly position <sup>2)</sup>		Any		
Min. swivel time at 6 bar	[ms]	30		50
Max. frequency at 6 bar	[1/s]	16		10
Max. permissible impact velocity	[m/s]	1		1.5
Max. perm. end-stop impact force <sup>3)</sup>	[N]	320		600

1) The end position of the slide or another drive is not exactly defined when rubber buffers are used. Shock absorbers YSRG-... must be used for high repetition accuracy.

2) Shock absorbers YSRG-... must be used for high repetition accuracy as well as in non-horizontal movements.  
With vertical installation (where the stop moves upwards), it must be ensured that no foreign objects enter the swivel range of the stop.

3) The max. stop force must act on the centre of the cushioning screw disk. Lateral forces on the cushioning screw are not permissible.

Operating and environmental conditions				
Piston $\varnothing$		8	12	18
Operating pressure	[bar]	1 ... 8		
Ambient temperature <sup>1)</sup>	[°C]	-10 ... +60		

Max. permissible energy in the intermediate position				
Piston $\varnothing$		8	12	18
With P cushioning	[Nm]	0.1		0.6
With YSR cushioning	[Nm]	1		3



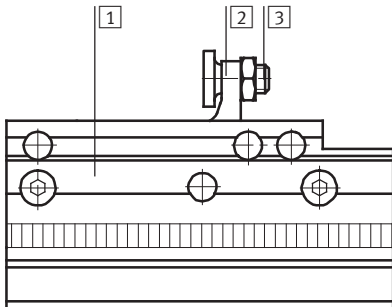
# Linear drives SLG, flat design

Technical data – Intermediate position module SLG-Z

Weights [g]			
Piston $\varnothing$	8	12	18
Basic weight	33.5		75
Moving load	6		14.5


## Materials

Sectional view



Intermediate position module	
1 Housing	Hard anodized aluminum
2 Stop	Nickel plated steel
3 Cushioning screw	High-alloy steel
- Seals	Polyurethane

Mounting options on linear drive				
Piston $\varnothing$		8	12	18
Through-holes for direct mounting with screws to DIN 912	Intermediate position module	M2.5		M3
	Shock absorber retainer	M4		M5
	Mounting rail	M3		M4
Centering pins	Intermediate position module	$\varnothing$ 4H7		$\varnothing$ 5H7
	Shock absorber retainer	$\varnothing$ 2H7		$\varnothing$ 5H7
	Mounting rail	$\varnothing$ 3H7		$\varnothing$ 5H7

 Note  
The module's symmetric design makes it suitable for both approach directions.

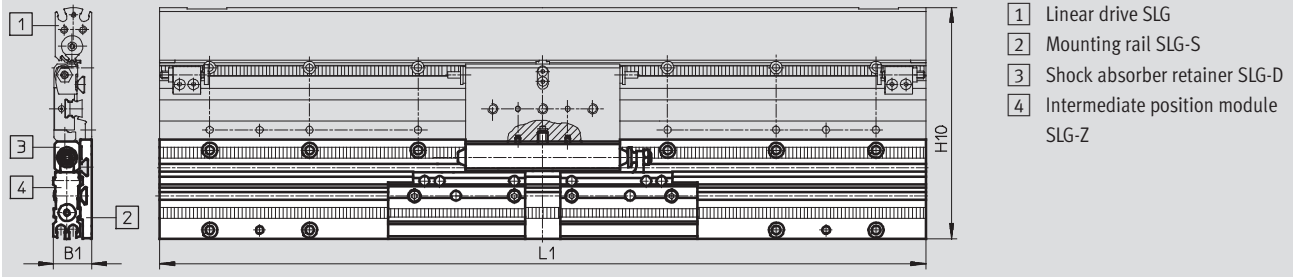
# Linear drives SLG, flat design

Technical data – Intermediate position module SLG-Z

## Dimensions

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

SLG-Z-.../SLG-D-.../SLG-S-...



Type	B1	H10	L1
SLG-8-100	15	93.1	207
SLG-8-200			307
SLG-8-300			407
SLG-8-400			507
SLG-8-500			607
SLG-12-100	18.5	104.1	233
SLG-12-200			333
SLG-12-300			433
SLG-12-400			533
SLG-12-500			633
SLG-12-600			733
SLG-12-700	25.5	135.5	833
SLG-18-100			271
SLG-18-200			371
SLG-18-300			471
SLG-18-400			571
SLG-18-500			671
SLG-18-600			771
SLG-18-700			871
SLG-18-800			971
SLG-18-900	1071		

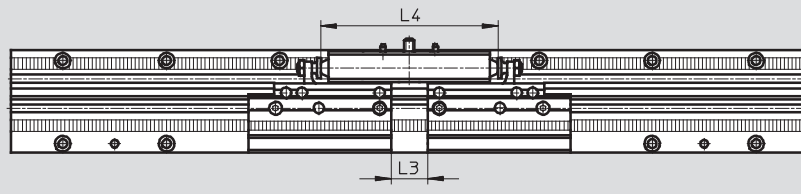
# Linear drives SLG, flat design

Technical data – Intermediate position module SLG-Z

## Dimensions

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

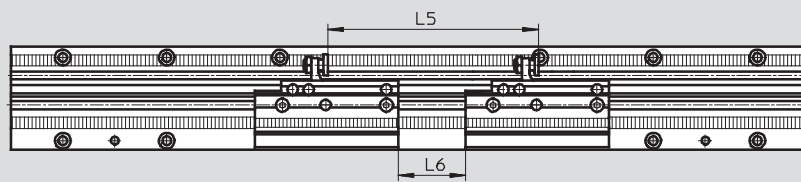
The same position approached from two directions



Piston $\varnothing$	L3 <sup>1)</sup>		L4
	min.	max.	
8 <sup>2)</sup>	21	27	68
12	39	45	86
18	50	56.5	111

- 1) Depends on the fine adjustment
- 2) Due to the narrowness of the space L3 only the following threaded connectors can be used for the compressed air connections:  
30 491 LCN-M3-PK-2-B

Two positions approached from the same direction



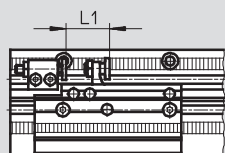
-  - Note

The space for 2 intermediate positions can be reduced to 0 mm by turning the second module by 90° in the same plane (→ 21).

Piston $\varnothing$	L5 min.	L6 <sup>3)</sup>
8	90	32
12	90	
18	97	

- 3) The space between the modules is such that the following threaded connectors can be used for the compressed air connections:  
153 330 QSML-M3-3  
153 332 QSML-M3-4  
30 491 LCN-M3-PK-2-B  
30 984 LCN-M3-PK-2

Space between end stop and intermediate position module



Piston $\varnothing$	L1 min.
8	20
12	
18	

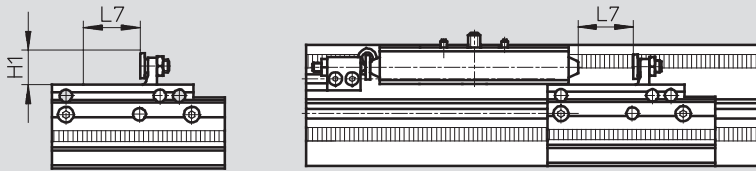
# Linear drives SLG, flat design

Technical data – Intermediate position module SLG-Z

## Dimensions

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

In different mounting planes



-  - Note

Care must be taken to ensure that each intermediate position module has sufficient space for the swivel movement in the specified range (both outwards and inwards) while it is swivelling. This corresponds to the distance (stroke) that the shock absorber retainer must travel from the intermediate position to ensure safe inward or outward swivelling of the stop (→ 21).

Piston Ø	H1	L7	
		Cushioning P	YSR cushioning
8	11	18	23
12	11	18	23
18	16	23	31

## Maximum number of intermediate position modules on one mounting rail

The number of intermediate position modules that can be ordered via the linear drive SLG modular product system is restricted to max. 4.

If additional intermediate positions are required, further modules can be ordered separately (→ 23) and fitted in another mounting plane.

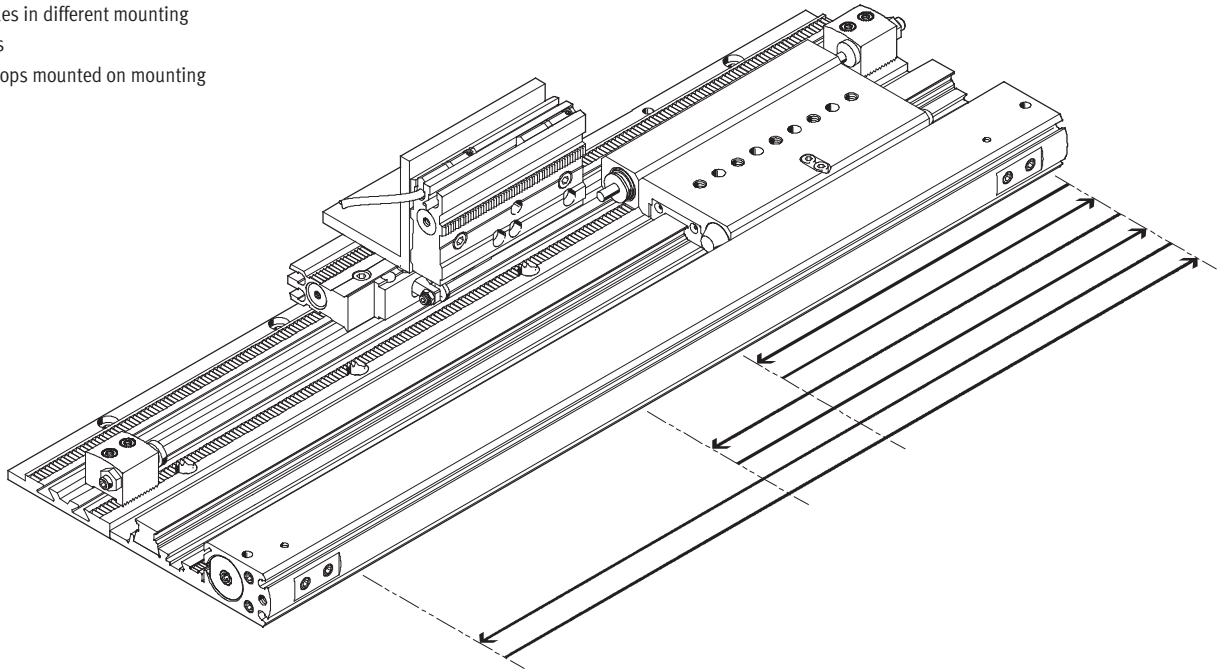
Piston Ø	Stroke length of the mounting rail [mm]									
	100	200	300	400	500	600	700	800	900	
8	2		3	4			–	–	–	–
12							4		–	–
18									4	

# Linear drives SLG, flat design

Technical data – Intermediate position module SLG-Z

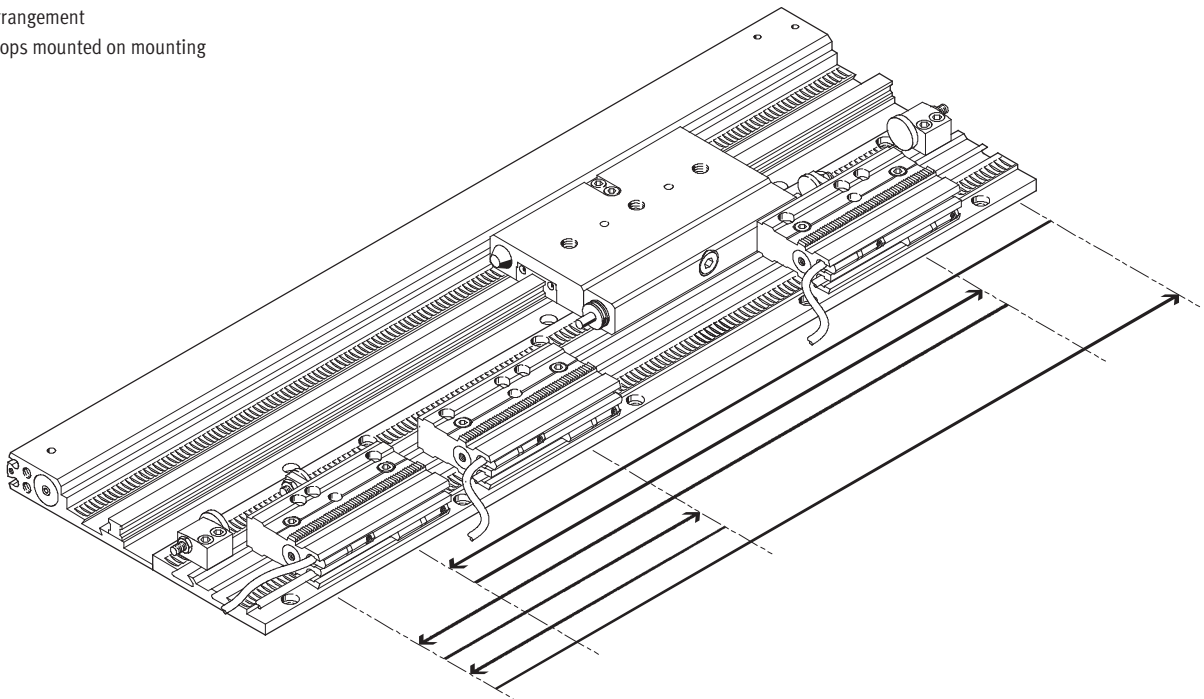
## Linear drive SLG with 2 intermediate positions

- Modules in different mounting planes
- End stops mounted on mounting rail



## Linear drive SLG with 3 intermediate positions

- Flat arrangement
- End stops mounted on mounting rail



# Linear drives SLG, flat design

Ordering data – Modular product system



M Mandatory data						O Options
Module No.	Drive function	Size	Stroke	Cushioning	Position sensing	Intermediate position
187 857 187 855 187 853	SLG	8 12 18	100 ... 900	P YSR	A	Z1 Z2 Z3 Z4
<b>Ordering example</b>						
<b>187 853</b>	<b>SLG</b>	<b>- 18</b>	<b>- 800</b>	<b>- P</b>	<b>- A</b>	<b>- Z4</b>

Ordering table						
Size	8	12	18	Condi- tions	Code	Enter code
M Module No.	<b>187 857</b>	<b>187 855</b>	<b>187 853</b>			
Drive function	Rodless linear drive unit				<b>SLG</b>	SLG
Size [mm]	8	12	18		...	
Stroke [mm]	100	100	100	[1]	<b>-100</b>	
	200	200	200	[1]	<b>-200</b>	
	300	300	300	[2]	<b>-300</b>	
	400	400	400		<b>-400</b>	
	500	500	500		<b>-500</b>	
	-	600	600		<b>-600</b>	
	-	700	700		<b>-700</b>	
	-	-	800		<b>-800</b>	
-	-	900		<b>-900</b>		
Cushioning	Flexible cushioning rings in the end positions				<b>-P</b>	
	Shock absorbers in the end positions				<b>-YSR</b>	
Position sensing	For proximity sensing				<b>-A</b>	-A
O Intermediate position	1 intermediate position				<b>-Z1</b>	
	2 intermediate positions				<b>-Z2</b>	
	3 intermediate positions				<b>-Z3</b>	
	4 intermediate positions				<b>-Z4</b>	

- [1] **100, 200** Max. 2 intermediate positions.
- [2] **300** Max. 3 intermediate positions.

Transfer order code

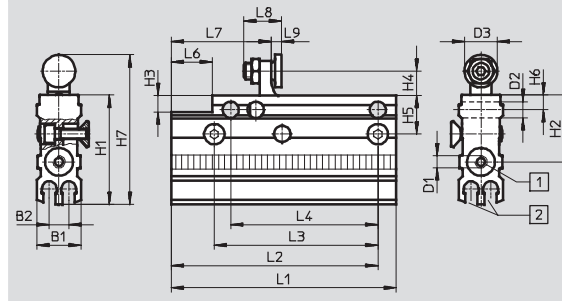
	SLG	-		-		-	A	
--	-----	---	--	---	--	---	---	--

# Linear drives SLG, flat design

Accessories



Intermediate position module SLG-Z Technical data → 16

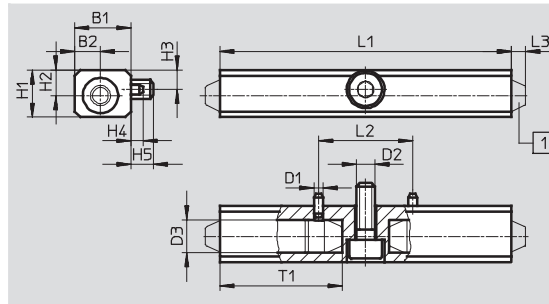


- 1 Air connections on both sides
- 2 Slot for proximity sensor SME-/SMT-10

Dimensions and ordering data													
For Ø	B1	B2	D1	D2 Ø H7	D3 Ø	H1	H2	H3	H4	H5	H6	H7	L1
8, 12	10.8	4.8	M3	4	8	26.6	16.2	4	6	9.5	3.5	36.6	55 +0.3
18	15.6	4.8	M3	5	10	29.6	19.2	-	9.6	11.5	4.3	44.2	62

For Ø	L2 ±0.1	L3 ±0.1	L4 ±0.02	L6	L7	L8	L9		Weights [g]	Part No.	Type
							min.	max.			
8, 12	50.5	40	36	10	24.4	9.25	2.5	4.2	39.5	525 680	SLG-Z-8/12-A
18	57.5	50	50	-	21.6	12	3.7	5.4	89.5	525 681	SLG-Z-18-A

Shock absorber retainer SLG-D Material: Hard anodized aluminum



- 1 Rubber buffer or shock absorber

Dimensions and ordering data								
For Ø	B1	B2	D1 Ø H7/h8	D2	D3 Ø	H1	H2	H3
8	11.5	5	2	M4	7.5 <sub>+0.05</sub>	10	5.4	4.1
12								
18	17	8	5	M5	10 <sub>+0.02</sub>	15	7.5	7.75

For Ø	H4	H5	L1	L2 ±0.02	L3	T1	Weights [g]	Part No.	Type		
										8	2.25
12	80	22.5/33 <sup>2)</sup>	525 704	SLG-D-12 <sup>1)</sup>							
18	105	60/104 <sup>2)</sup>			525 705	SLG-D-18 <sup>1)</sup>					

1) Shock absorber elements are not included in the scope of delivery  
 2) With P cushioning/with YSR cushioning

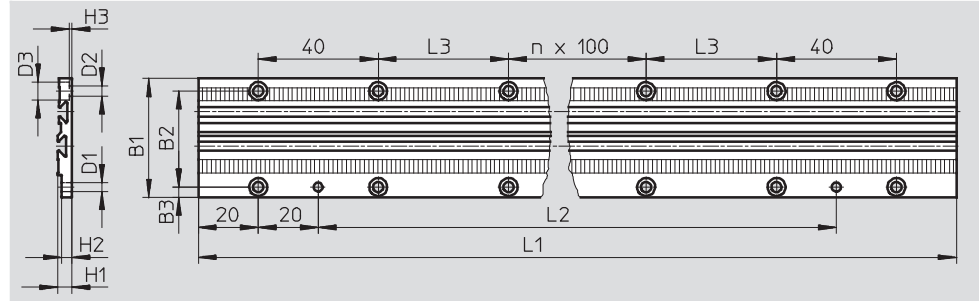
# Linear drives SLG, flat design

Accessories



## Mounting rail SLG-S

Material: Hard anodized aluminum



Dimensions and ordering data																	
For Ø	Stroke	B1	B2	B3	D1	D2	D3	H1	H2	H3	n	L1	L2	L3	Weights	Part No.	Type
	[mm]				∅	∅	∅								[g]		
8	100	39.6	32	3.4	3	3.4	6	4.8	3.5	0.9		207	127	43.5	73.5	525 682	SLG-S-8-100
	200														109	525 683	SLG-S-8-200
	300														144.5	525 684	SLG-S-8-300
	400														180	525 685	SLG-S-8-400
	500														215.5	525 686	SLG-S-8-500
12	100	39.6	32	3.5	3	3.4	6	7.2	1.9	1.9		233	153	56.5	110.4	525 687	SLG-S-12-100
	200														157.8	525 688	SLG-S-12-200
	300														205.2	525 689	SLG-S-12-300
	400														252.6	525 690	SLG-S-12-400
	500														300	525 691	SLG-S-12-500
	600														347.4	525 692	SLG-S-12-600
	700														394.8	525 693	SLG-S-12-700
18	100	50	40	4.75	5	4.5	7.5	10.3	9	2.5		271	191	75.5	245.6	525 694	SLG-S-18-100
	200														336.2	525 695	SLG-S-18-200
	300														426.8	525 696	SLG-S-18-300
	400														517.4	525 697	SLG-S-18-400
	500														608	525 698	SLG-S-18-500
	600														698.6	525 699	SLG-S-18-600
	700														789.2	525 700	SLG-S-18-700
	800														879.8	525 701	SLG-S-18-800
	900														970.4	525 702	SLG-S-18-900



# Linear drives SLG, flat design

Accessories

## Rubber buffer SLG



Ordering data			
For Ø	Weights [g]	Part No.	Type
8, 12	1.5	379 802	SLG-8/12
18	6	381 219	SLG-18

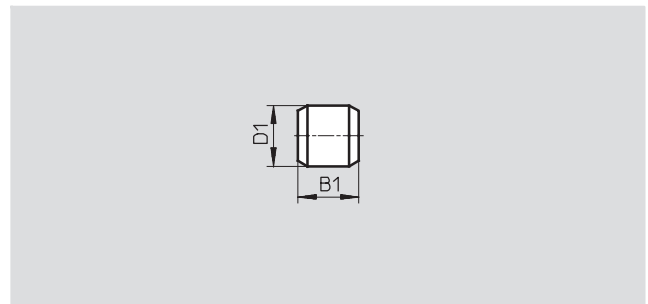
## Shock absorber YSRG



Ordering data			
For Ø	Weights [g]	Part No.	Type
8, 12	7	381 042	YSRG-5-5-C
18	27	384 581	YSRG-8-8-C

## Centering pin ZBS

Material:  
Stainless steel




Dimensions and ordering data						
For Ø	B1	D1	Weights	Part No.	Type	PE <sup>1)</sup>
[mm]	-0.2	Ø h8	[g]			
8, 12	5	2	1	525 273	ZBS-2	10
18	5	5	1	150 928	ZBS-5	10



1) Packaging unit quantity



# Linear drives SLG, flat design


Accessories

**FESTO**

Ordering data – Proximity sensors for C-slot, magneto-resistive						Technical data → Internet: smt
	Type of mounting	Switch output	Electrical connection, connection direction	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above	PNP	Cable, 3-wire, in-line	2.5	551 373	SMT-10M-PS-24V-E-2,5-L-OE
			Plug M8x1, 3-pin, in-line	0.3	551 375	SMT-10M-PS-24V-E-0,3-L-M8D
			Plug M8x1, 3-pin, lateral	0.3	551 376	SMT-10M-PS-24V-E-0,3-Q-M8D

Ordering data – Proximity sensors for C-slot, magnetic reed						Technical data → Internet: sme
	Type of mounting	Switch output	Electrical connection, connection direction	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above	Contacting	Plug M8x1, 3-pin, in-line	0.3	551 367	SME-10M-DS-24V-E-0,3-L-M8D
			Cable, 3-wire, in-line	2.5	551 365	SME-10M-DS-24V-E-2,5-L-OE
			Cable, 2-wire, in-line	2.5	551 369	SME-10M-ZS-24V-E-2,5-L-OE
	Insertable in the slot lengthwise	Contacting	Plug M8x1, 3-pin, in-line	0.3	173 212	SME-10-SL-LED-24
			Cable, 3-wire, in-line	2.5	173 210	SME-10-KL-LED-24

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	541 333	NEBU-M8G3-K-2.5-LE3
			5	541 334	NEBU-M8G3-K-5-LE3
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541 338	NEBU-M8W3-K-2.5-LE3
			5	541 341	NEBU-M8W3-K-5-LE3

Ordering data – One-way flow control valves				Technical data → Internet: grla	
	Connection		Material	Part No.	Type
	Thread	For tubing OD			
	M3	3	Metal design	175 041	GRLA-M3-QS-3
	M5	4		193 138	GRLA-M5-QS-4-D