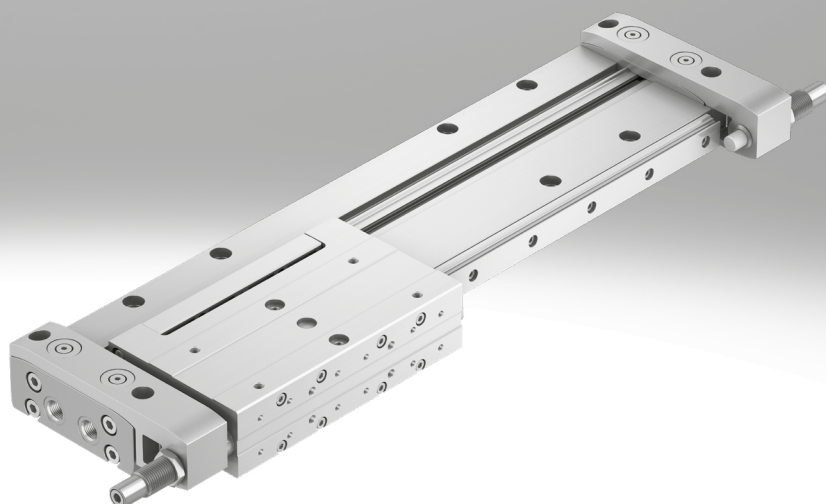


Linear drives DLGF

FESTO



Key features

- At a glance
- Very flat, rodless drive
 - Enabling very space-saving installation

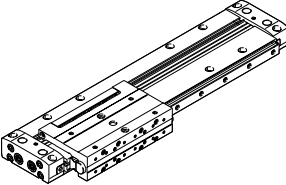
- Three pneumatic connection options:
 - On the left
 - On the right
 - At both ends
 - Alternatively, also from below

- Choice of two cushioning types:
 - PPS cushioning
 - External hydraulic shock absorbers

- Loads and machining jigs can be directly mounted on the slide
 - For DLGF-KF: two complete customer interfaces → page 13

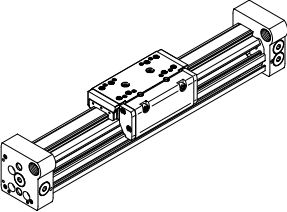
Comparison of linear drive DLGF and linear drive DGC

Recirculating ball bearing guide DLGF-KF



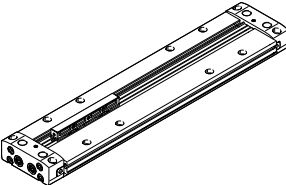
- Piston Ø 20 ... 40 mm
- Stroke lengths from 50 ... 1000 mm
- For small and medium loads
- Operating behaviour under torque load = very good
- Much smaller installation dimensions (approx. –46%)

Recirculating ball bearing guide DGC-KF



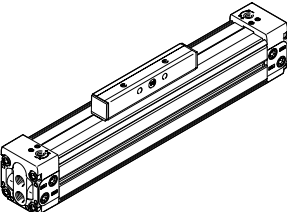
- Piston Ø 8 ... 63 mm
- Stroke lengths from 1 ... 8500 mm
- Guide backlash = 0 mm
- For medium and larger loads
- Operating behaviour under torque load = very good

Basic design DLGF-G

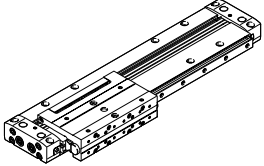
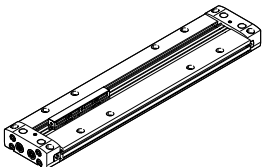


- Piston Ø 20 ... 40 mm
- Stroke lengths from 50 ... 1000 mm
- Low moving dead weight
- Much smaller installation dimensions (approx. –42%)

Compact design DGC-K



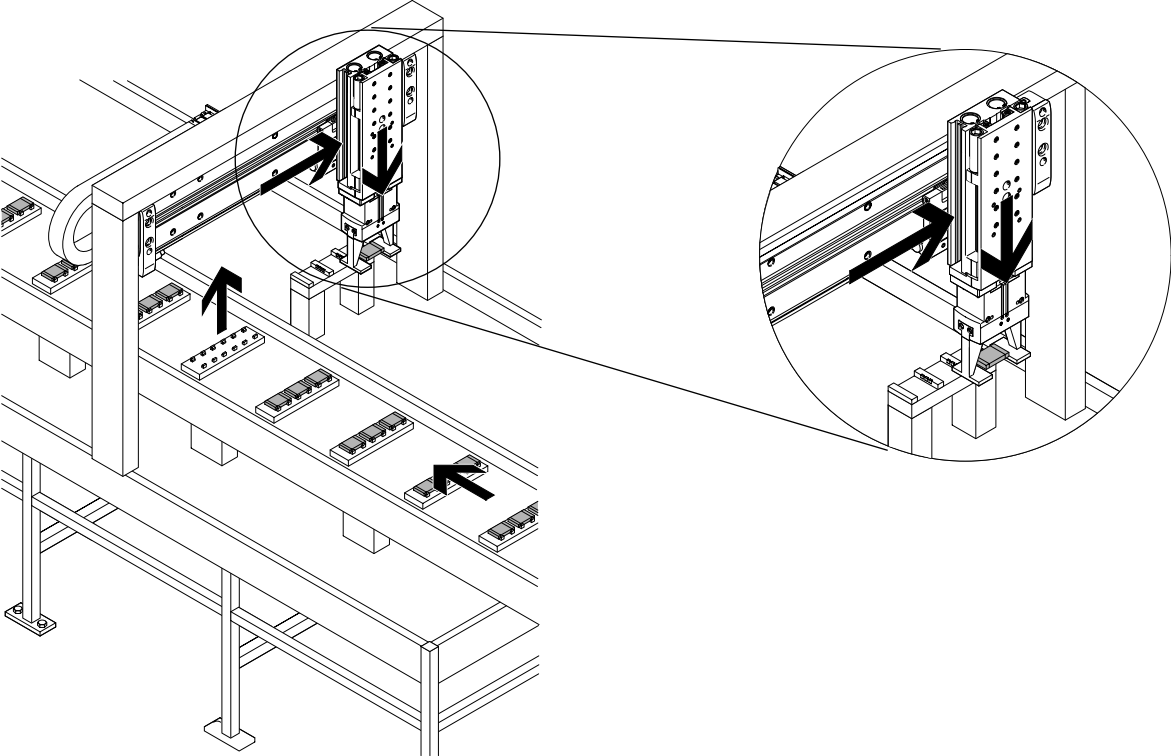
- Piston Ø 18 ... 80 mm
- Stroke lengths from 1 ... 8500 mm
- Low moving dead weight
- Symmetrical design

	Piston Ø [mm]	Theoretical force at 6 bar [N]	Guide characteristics						→ Page/ Internet
			Fy [N]	Fz+ [N]	Fz- [N]	Mx [Nm]	My [Nm]	Mz [Nm]	
Recirculating ball bearing guide DLGF-KF									
	20	188	600	400	700	5.4	15	15	9
	25	295	1000	700	1200	12.3	30	30	
	32	483	1300	950	1600	30	50	50	
	40	754	1700	1150	2000	54	90	90	
Basic design DLGF-G									
	20	188	–	54	98	0.6	2.2	0.7	20
	25	295	–	95	164	1.1	4.5	1.4	
	32	483	–	138	276	1.8	7.6	2.9	
	40	754	–	456	662	7.7	37.6	11.2	

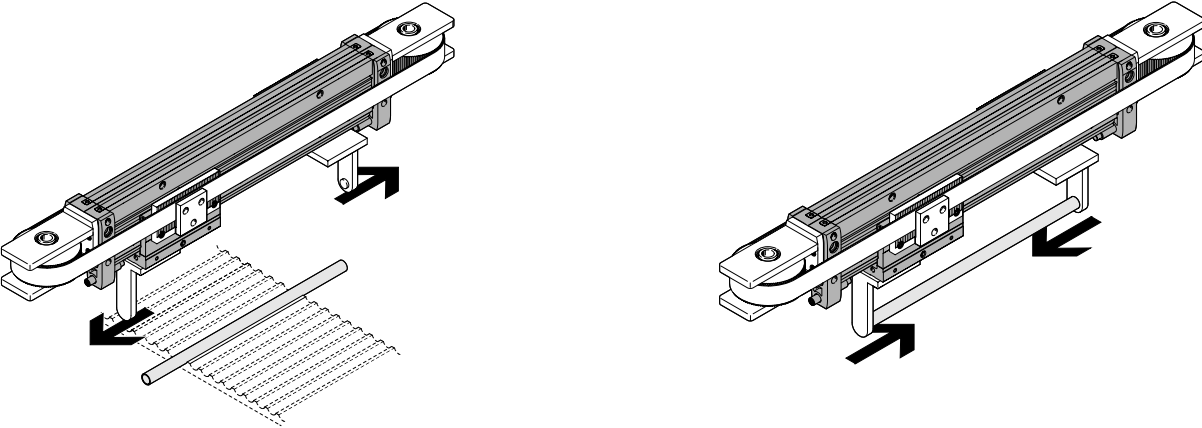
Key features

Application examples

As a space-optimised pick-and-place unit



As a long-stroke gripper

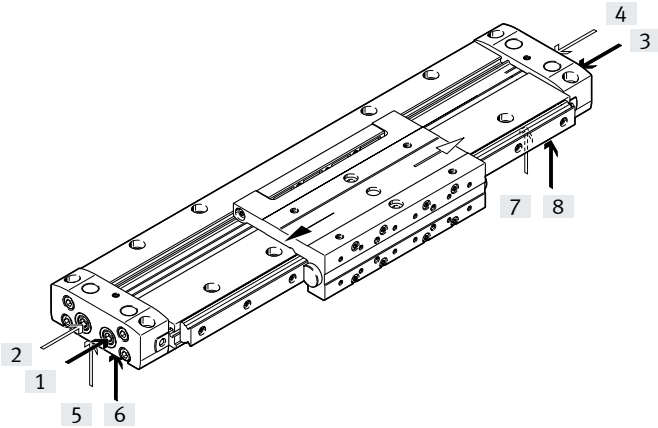


Key features

Compressed air supply variants

Supply ports at both ends:

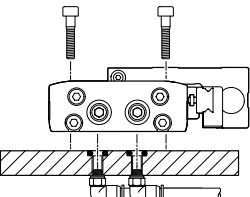
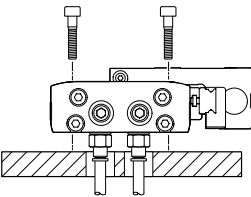
- On the end:
Option 1:
[1] Slide moves to the left
[4] Slide moves to the right
Option 2:
[3] Slide moves to the left
[2] Slide moves to the right
- From below:
Option 1:
[6] Slide moves to the left
[7] Slide moves to the right
Option 2:
[8] Slide moves to the left
[5] Slide moves to the right



Supply port at one end:

- On the end:
Option 1:
[1] Slide moves to the left
[2] Slide moves to the right
Option 2:
[3] Slide moves to the left
[4] Slide moves to the right
- From below:
Option 1:
[6] Slide moves to the left
[5] Slide moves to the right
Option 2:
[8] Slide moves to the left
[7] Slide moves to the right

Connection variants from below

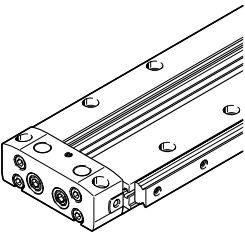


- Suitable O-rings:
For piston $\varnothing$ 20: $\varnothing$ 5x2
For piston $\varnothing$ 25: $\varnothing$ 12x2
For piston $\varnothing$ 32: $\varnothing$ 12x2
For piston $\varnothing$ 40: $\varnothing$ 16x2

Profile design

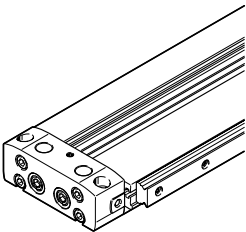
With mounting holes

- In the end cap: yes
- In the profile: yes



Without mounting holes

- In the end cap: yes
- In the profile: no

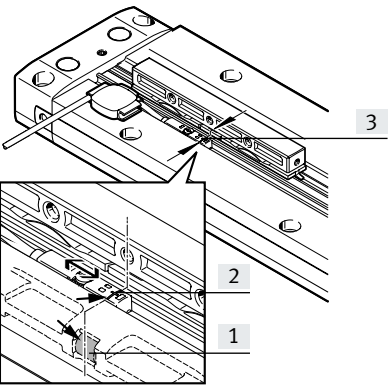


The maximum support spacing is 300 mm. For longer strokes, the drive must be supported accordingly.

Key features

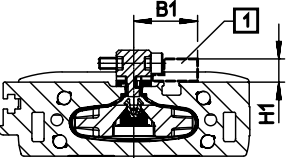
Easy preassembly of the proximity switches

The magnet [1] for sensing the slide position is located in the centre of the slide. The cross [2] on the proximity switch SMT-8M-A marks the location of the switching point. The switching point is set when both locations are at the same level [3].



Influence of ferritic materials on proximity switches

Ferritic materials (steel parts or panels) in the immediate vicinity of the proximity switches can cause sensing malfunctions. The following safety distances must be observed.
No ferritic materials should be used in the shaded area [1].

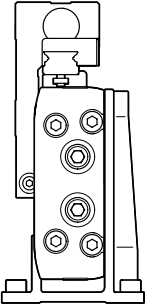


Piston $\varnothing$	B1	H1
20	22	8
25	22	8
32	27	13
40	27	13

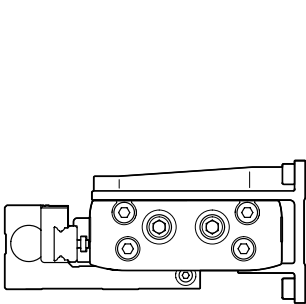
Possible installation variants

With profile mounting DAMH-L8-P

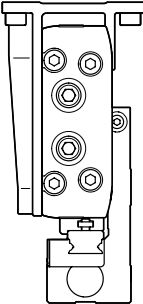
Slide on the left



Slide on the top



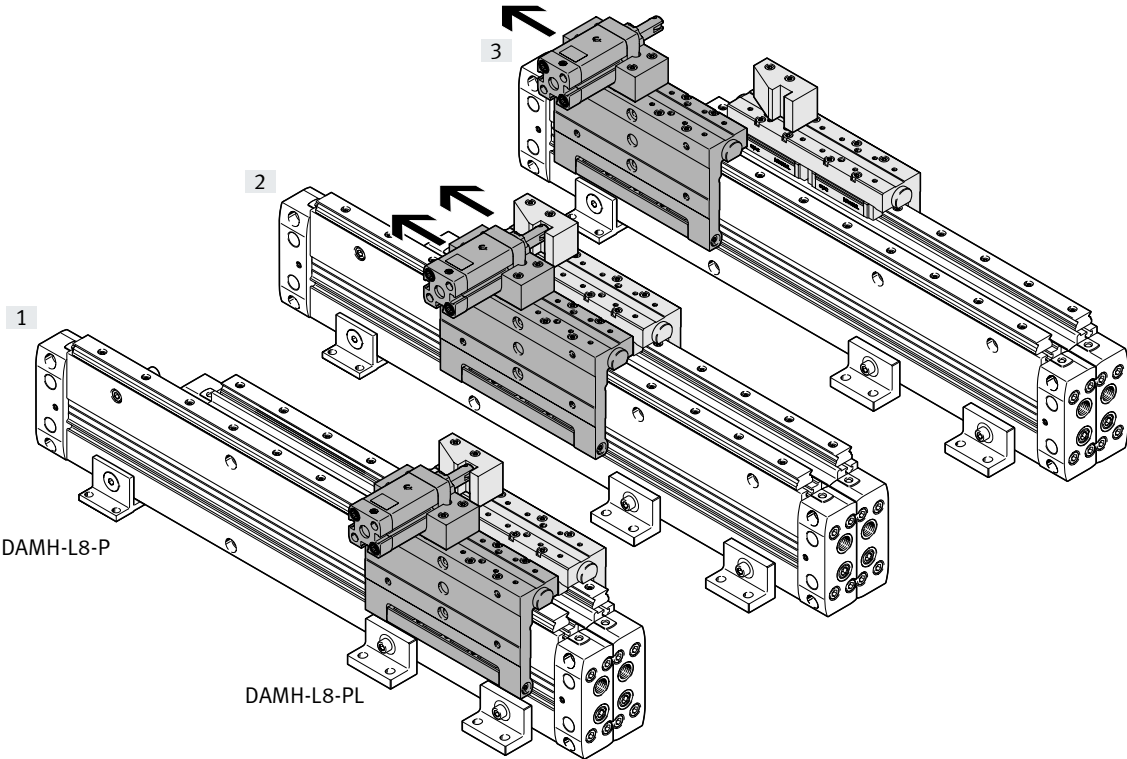
Slide on the right



Key features

Possible installation variants
With profile mountings DAMH-L8-PL and DAMH-L8-P

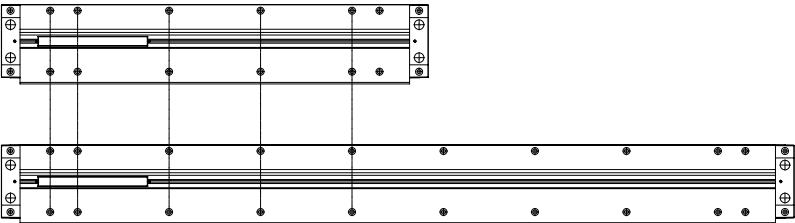
Application example:
Easy implementation of an intermediate position using two linear drives DLGF “back to back”



- [1] Both linear drives are in the initial position on the right. The stopper cylinder on the slide of the linear drive on the left is normally extended and thus locks the slide of the linear drive on the right.
- [2] The linear drive on the right is supplied with compressed air and takes the drive on the left with it as it moves. On reaching the end position of the linear drive on the right, the intermediate position is approached.
- [3] By supplying compressed air to the stopper cylinder, the two slides are released. The linear drive on the left is then supplied with compressed air and moves to its end position.

Key features

Possible installation variants
Number of matching mounting holes on the cover to attach the profile mountings DAMH-L8-PL



For piston ø 20, 25, 32																				
Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
50	3																			
100		3																		
150			3																	
200	2			4																
250		2			4															
300			2			4														
350	2			3			5													
400		2			3			5												
450			2			3			5											
500	2			3			4			6										
550		2			3			4			6									
600			2			3			4			6								
650	2			3			4			5			7							
700		2			3			4			5			7						
750			2			3			4			5			7					
800	2			3			4			5			6			8				
850		2			3			4			5			6			8			
900			2			3			4			5			6			8		
950	2			3			4			5			6			7			9	
1000		2			3			4			5			6			7			9

For piston ø 40																				
Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
50	5																			
100		5																		
150			5																	
200	3			5																
250		3			5															
300			3			5														
350	3			4			6													
400		3			4			6												
450			3			4			6											
500	3			4			5			7										
550		3			4			5			7									
600			3			4			5			7								
650	3			4			5			6			8							
700		3			4			5			6			8						
750			3			4			5			6			8					
800	3			4			5			6			7			9				
850		3			4			5			6			7			9			
900			3			4			5			6			7			9		
950	3			4			5			6			7			8			10	
1000		3			4			5			6			7			8			10

Type codes

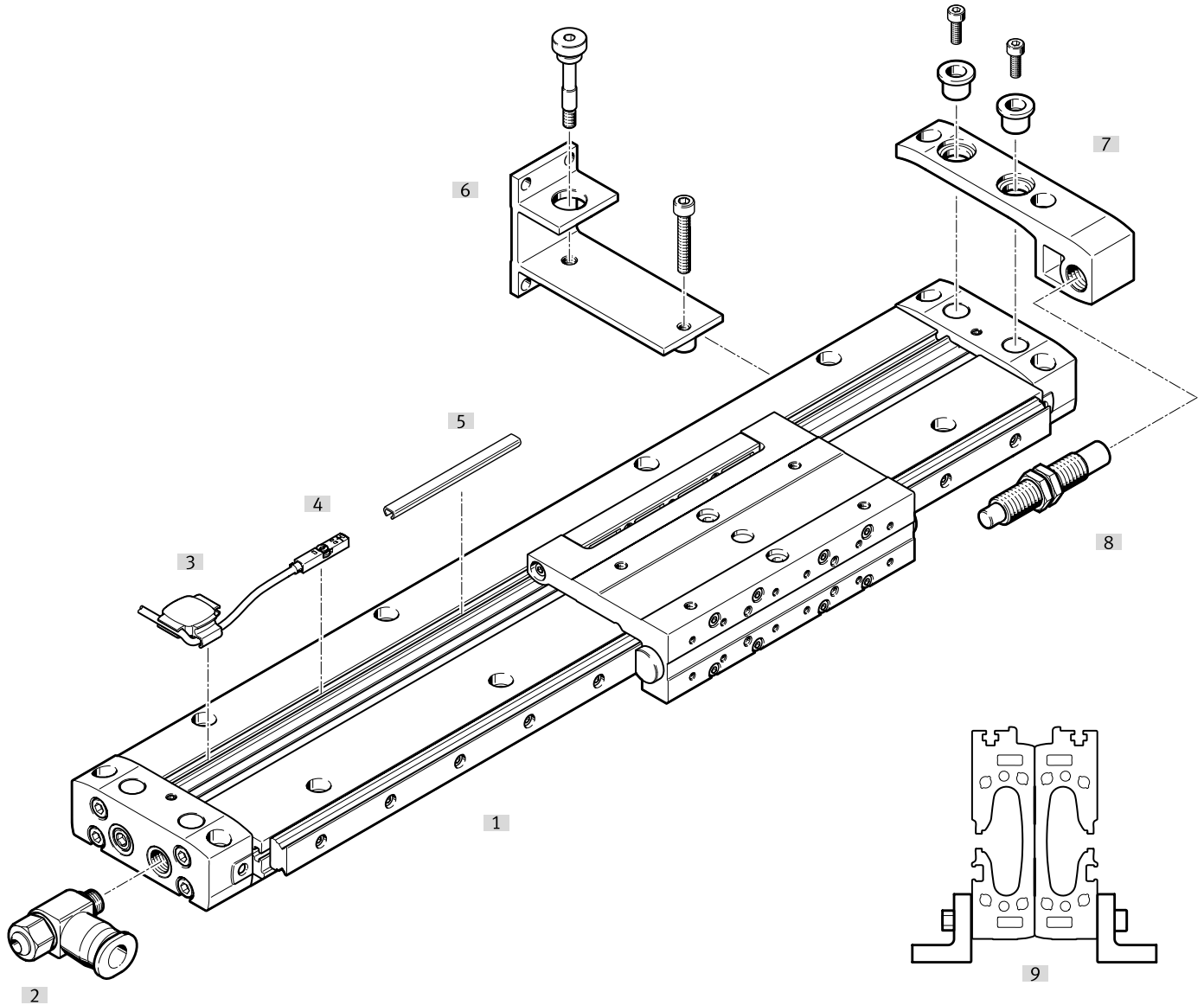
001	Series	004	Stroke
DLGF	Linear drive	50	50
		100	100
		150	150
		200	200
		250	250
		300	300
		350	350
		400	400
		450	450
		500	500
		550	550
		600	600
		650	650
		700	700
		750	750
		800	800
		850	850
		900	900
		950	950
		1000	1000

002	Guide	005	Cushioning
KF	Recirculating ball bearing guide	PPS	Pneumatic cushioning, self-adjusting at both ends
G	Basic variant		

003	Piston diameter	006	Position sensing
20	20	A	For proximity sensor
25	25		
32	32		
40	40		

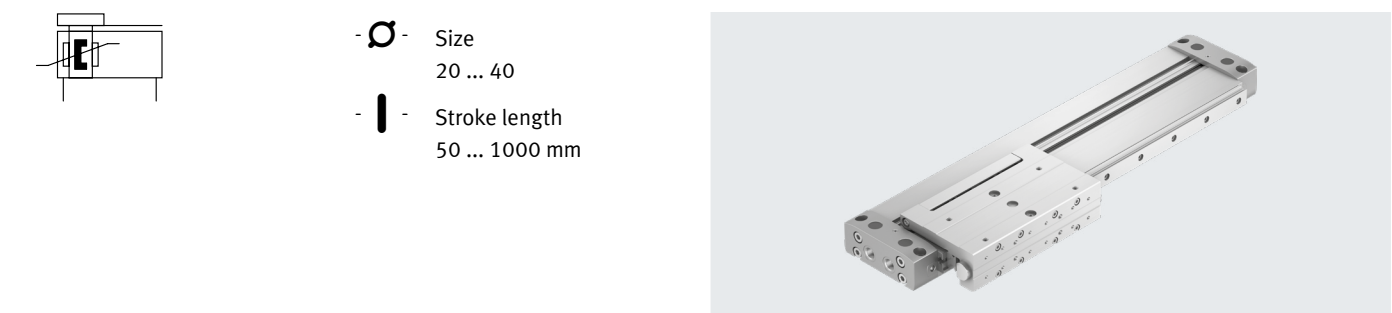
007	Profile design
	With mounting holes
W	Without mounting holes

Peripherals overview



Accessories			
	Type/order code	Description	→ Page/Internet
[1]	Linear drives DLGF-KF	With recirculating ball bearing guide	10
[2]	One-way flow control valve GRLA	For regulating speed	35
[3]	Cable holder DADG	For fitting the proximity switch cable	35
[4]	Proximity switch SMT-8M	For sensing the moment compensator position	35
[5]	Slot cover ABP-5-S1	For protection against contamination	35
[6]	Profile mounting DAMH-L8-P	For mounting the linear drive in a vertical position	30
[7]	Shock absorber retainer DAYP-L8	For mounting the shock absorbers on the linear drive Must be ordered separately as an accessory	34
[8]	Shock absorber DYSS	Self-adjusting hydraulic shock absorber with spring return and progressive cushioning characteristics Must be ordered separately as an accessory	34
[9]	Profile mounting DAMH-L8-PL	For mounting two linear drives back to back in a vertical position	31

Datasheet



General technical data				
Piston Ø	20	25	32	40
Design	Rodless actuator			
Driver principle	Positive-locking (slot)			
Guide	Recirculating ball bearing guide			
Operating mode	Double-acting			
Stroke				
Standard stroke	[mm]	100, 150, 200, 250, 300, 350, 400, 500, 600		200, 300, 400, 500, 600
Modular product system ¹⁾	[mm]	50 ... 1000		
Pneumatic connection		M5	G1/8	G1/8
Cushioning		Pneumatic cushioning, self-adjusting at both ends		
Cushioning length	[mm]	9.6	9	11.6
Min. speed	[m/s]	0.07		
Max. speed	[m/s]	1.5		
Repetition accuracy	[mm]	±0.05		
Position sensing		Via proximity switch		
Type of mounting		Direct mounting via through-hole		
		With accessories		
Mounting position		Any		

1) The drive can only be ordered in 50 mm increments.

Operating and environmental conditions				
Piston Ø	20	25	32	40
Operating pressure [bar]	2 ... 8	1.5 ... 8		
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]			
Note on the operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)			
Ambient temperature [°C]	0 ... 60			
Corrosion resistance class CRC ¹⁾	1 - Low corrosion stress			

1) More information www.festo.com/x/topic/crc

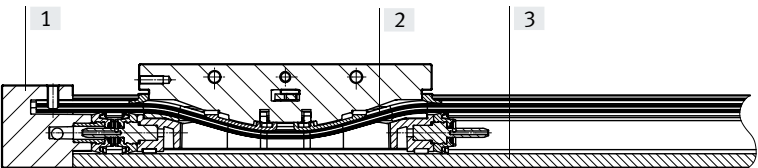
Forces and impact energy				
Piston Ø	20	25	32	40
Theoretical force at 6 bar [N]	188	295	483	754
Impact energy in the end positions				
DLGF-...-PPS [J]	0.17	0.27	0.44	0.69
DLGF-... with shock absorber [J]	2	3	6	10

Datasheet

Weight [g]				
Piston Ø	20	25	32	40
Basic weight with 0 mm stroke	1015	1640	2829	5585
Additional weight per 10 mm stroke	35.5	45.5	69.4	105.5
Moving mass	566	998	1622	3300

Materials

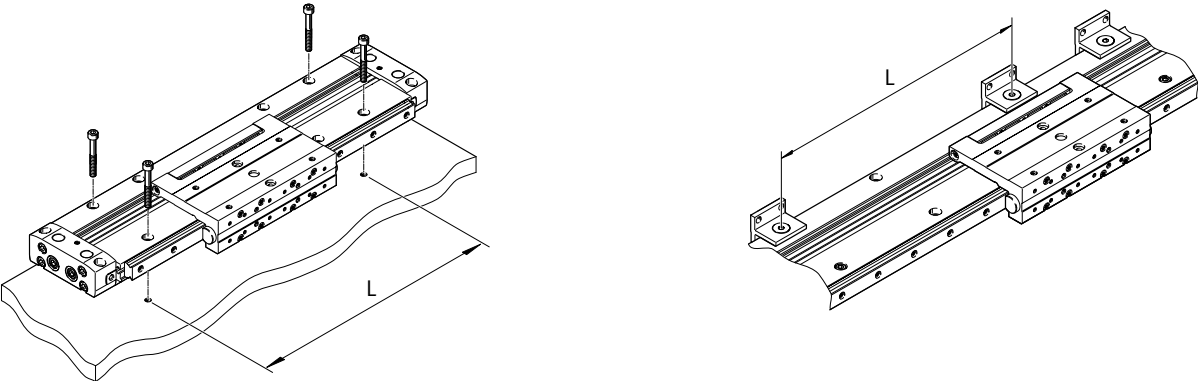
Sectional view



Linear drive	
[1] Cover	Coated die-cast aluminium
[2] Seals	NBR TPE-U(PU)
[3] Housing	Anodised aluminium
- Note on materials	RoHS-compliant Free of copper
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Cleanroom class	Class 6 according to ISO 14644-1

Direct mounting

In order to avoid strain, the drive must be mounted at varying intervals depending on the length. The maximum support spacing is 300 mm. Appropriate support should therefore also be used for the variant without mounting holes (feature W).

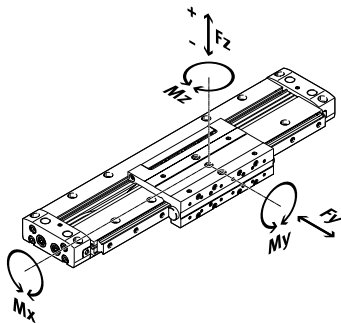


Stroke [mm]	Number of pairs of screws			
	DLGF-20	DLGF-25	DLGF-32	DLGF-40
50 ... 150	2	2	2	2
200	2	2	2	3
250	2	2	3	3
300	3	3	3	3
350 ... 450	3	3	3	4
500 ... 600	4	4	4	4
650 ... 750	4	4	4	5
800 ... 1000	5	5	5	5

Datasheet

Load values

The indicated forces and torques refer to the centre of the slide surface.
These values must not be exceeded during dynamic operation.
Special attention must be paid to the deceleration phase.



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

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

F₁/M₁ = dynamic value

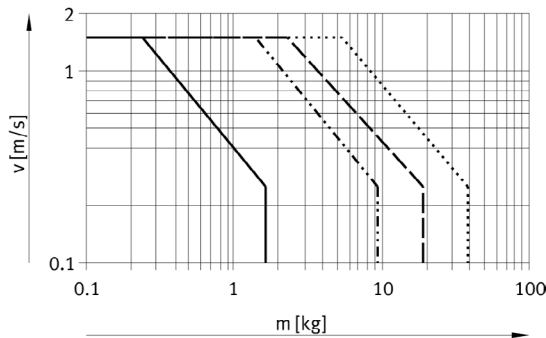
F₂/M₂ = maximum value

Permissible forces and torques

Piston ø	20	25	32	40
F _y _{max.} [N]	600	1000	1300	1700
F _z _{max. +} [N]	400	700	950	1150
F _z _{max. -} [N]	700	1200	1600	2000
M _x _{max.} [Nm]	5.4	12.3	30	54
M _y _{max.} [Nm]	15	30	50	90
M _z _{max.} [Nm]	15	30	50	90

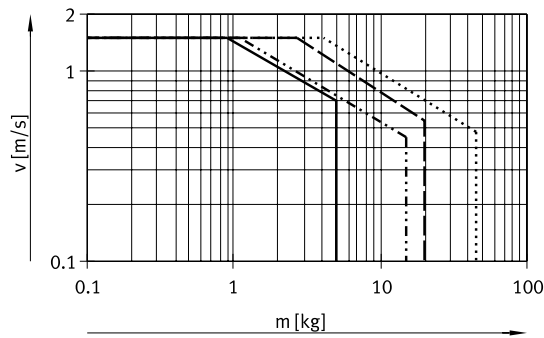
Maximum permissible speed v as a function of payload m

With PPS cushioning



- DLGF-KF-20
- DLGF-KF-25
- DLGF-KF-32
- DLGF-KF-40

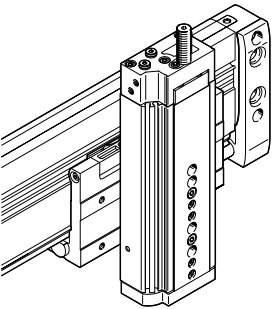
With shock absorber DYSS



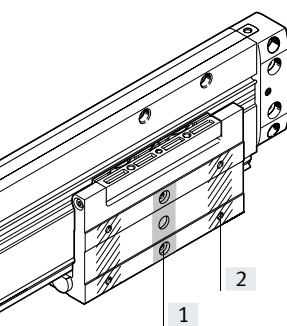
Datasheet

Direct mounting using Festo components or connection by the customer

With mini slide DGST or DGSL



For connection by the customer

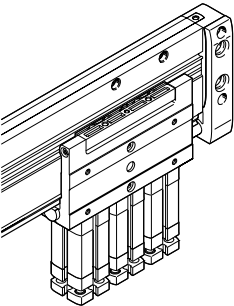


- [1] Interface for DGST/DGSL
- [2] Available interface

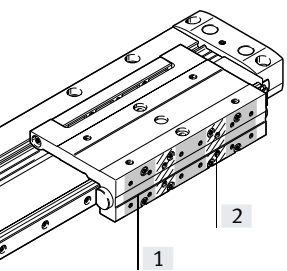
Linear drive DLGF	Mini slides DGST	Mini slides DGSL	Minimum stroke [mm]	Retaining screws	Connector sleeve for DGSL
Piston ø	Piston ø	Piston ø			
20	10	8	30	M4	—
	12 ¹⁾	10	20		
25, 32	16	12	30	M5	ZBV-9-7
		16	20		
40	20 ²⁾	20	20	M6	ZBV-12-9
	25 ²⁾	25	20		

- 1) Not with stroke 10 mm
- 2) Not with centring sleeve ZBH

With compact cylinder ADN or ADNGF



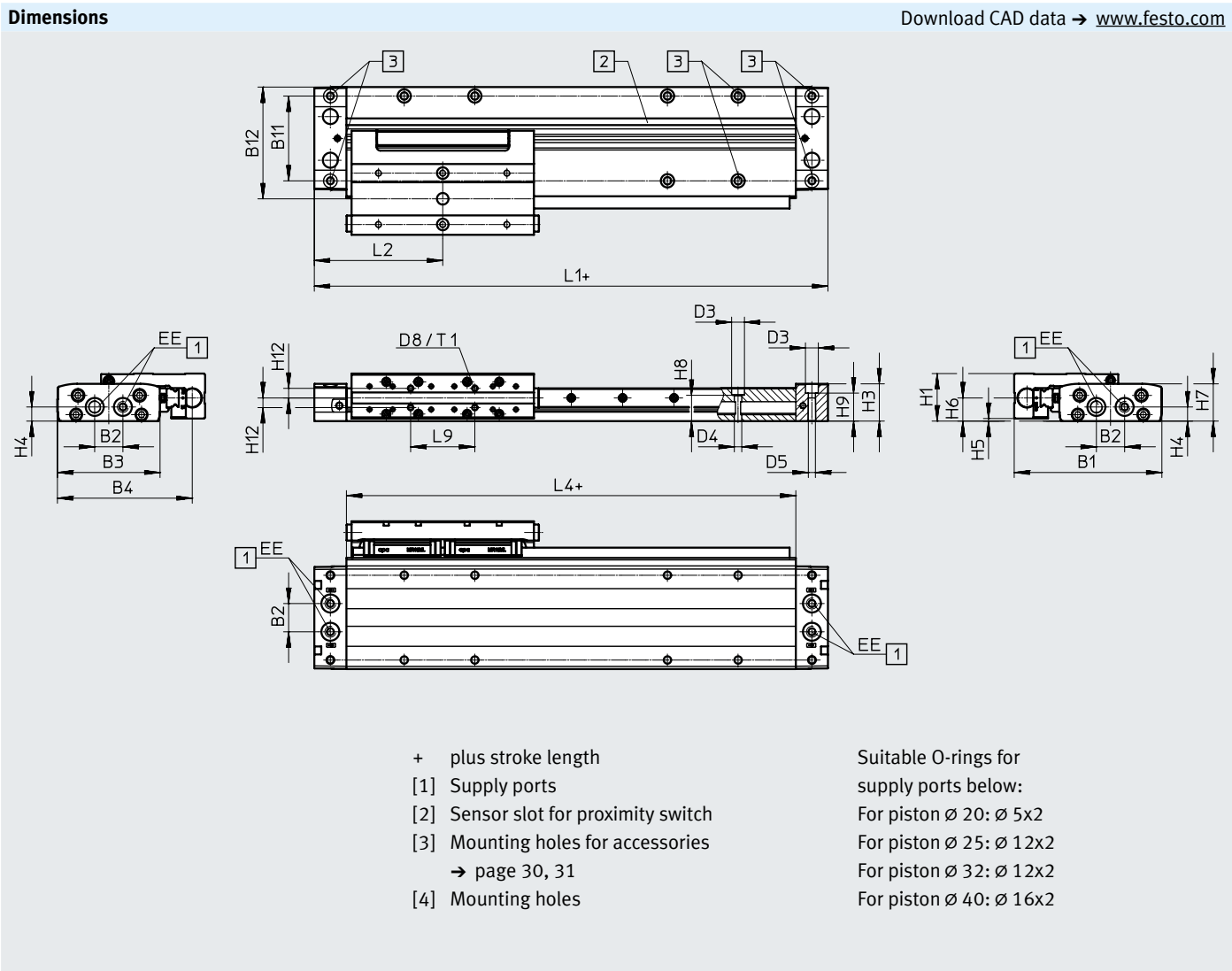
For connection by the customer



- [1] Interface for ADN/ADNGF
- [2] Available interface

Linear drive DLGF	Compact cylinder ADN/ADNGF	Max. stroke	Retaining screws
Piston ø	Piston ø		
20	12	20	M3
25	16	20	M3
32	20	40	M4
40	25	50	M4

Datasheet

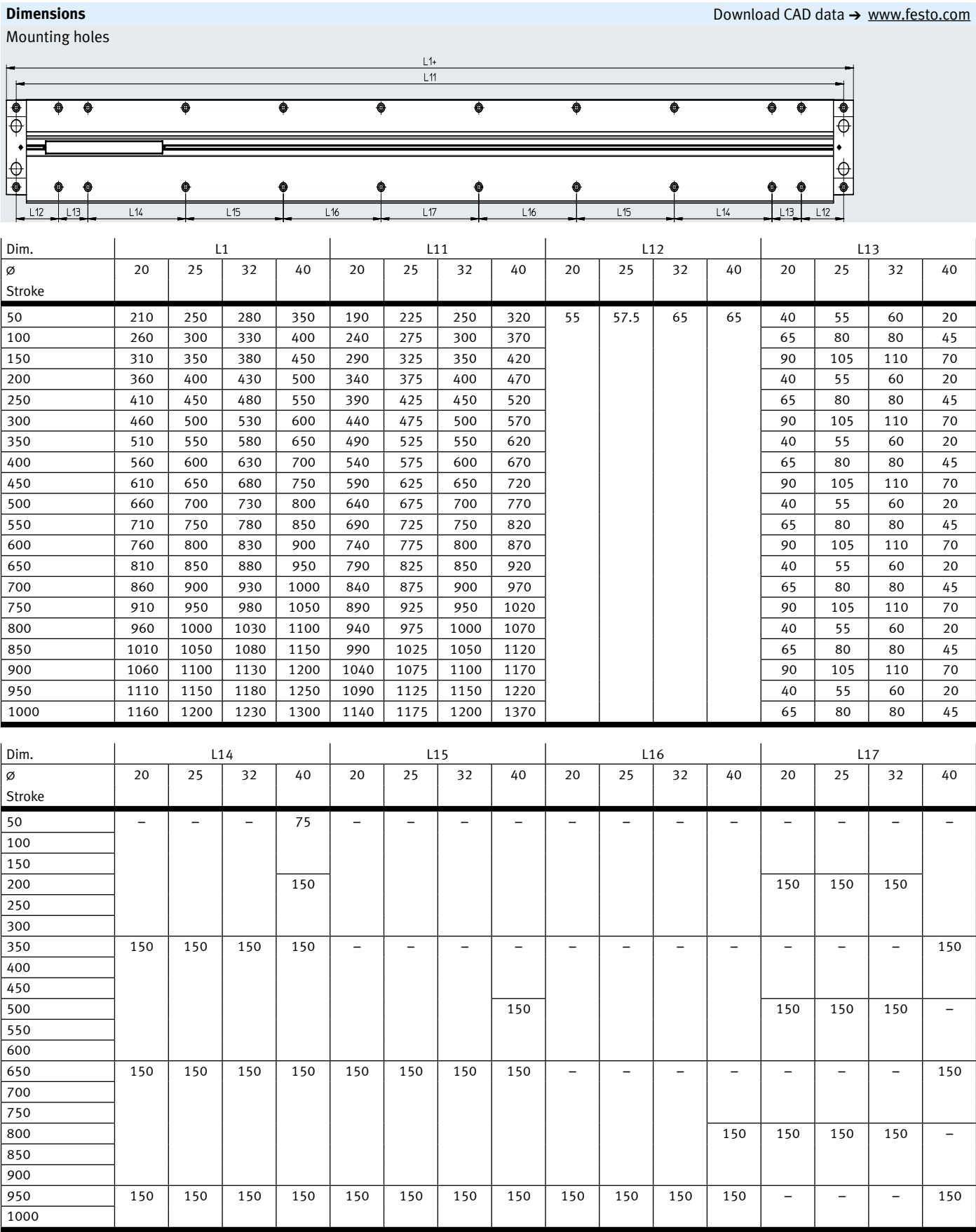


Ø	B1	B2	B3	B4	B11	B12	D3 Ø	D4 Ø
[mm]								
20	105	17	71.8	95	60	78	8	4.7
25	115	22	79.8	105	66	87	10	5.8
32	145	26	99.6	134.5	82	115	11	6.8
40	175	32	119.8	160.5	100	141	11	6.8

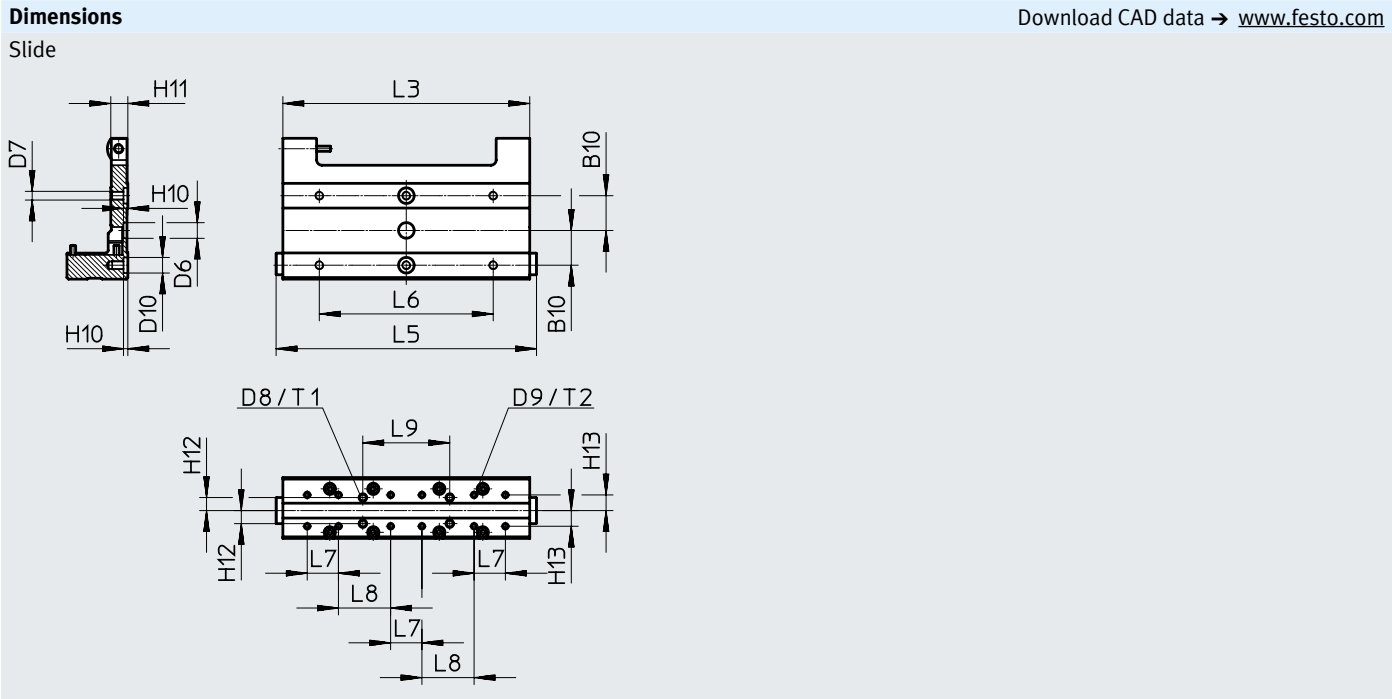
Ø	D5 Ø	D8	EE	H1	H3	H4	H5	H6	H7
[mm]									
20	4.5	M4	M5	32	21	9	1.5	15	24
25	5.5	M4	G1/8	37	25.5	11	2	18	29
32	6.5	M5	G1/8	45	32	14	2	19	35
40	6.6	M6	G1/4	52	39.5	19.5	3	24	42.7

Ø	H8	H9	H12	L1	L2	L4	L9	T1	Stroke tolerance
[mm]				±0.35					
20	15.6	17.6	7.5	160	80	120	45	7	+1.5
25	20.1	21.8	7.5	200	100	150	50	9	
32	24.6	26.5	10	230	115	170	80	10	
40	32.1	34.7	12.5	300	150	238.8	125	10	

Datasheet



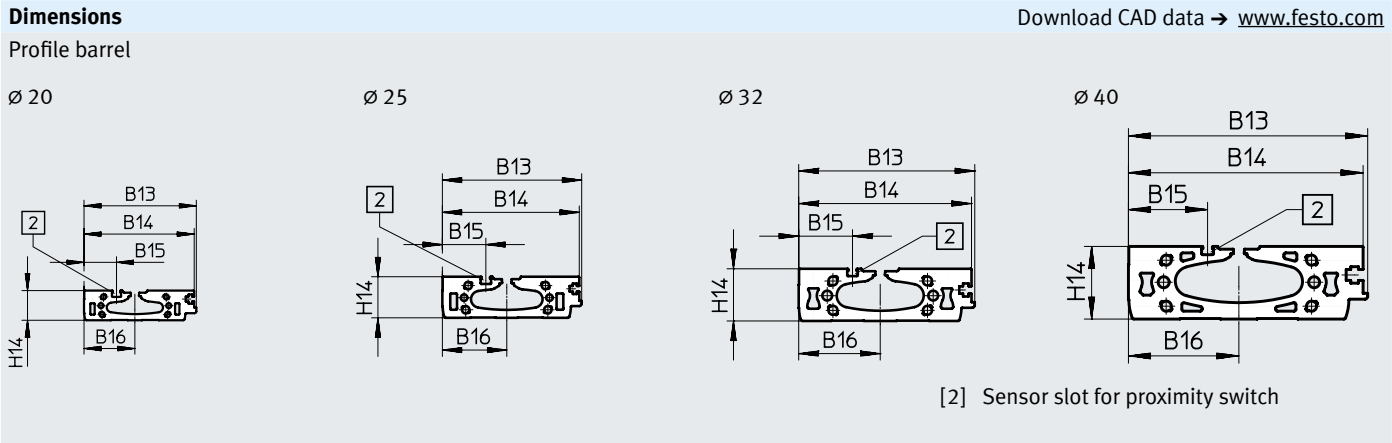
Datasheet



∅	B10	D6 ∅ H7	D7	D8	D9	D10 ∅ H7	H10	H11	H12
[mm]									
20	20	7	M4	M4	M3	7	1.6	8.8	7.5
25	20	9	M5	M4	M3	9	2	9.8	7.5
32	20	9	M5	M5	M4	9	2	10.3	10
40	20	–	M6	M6	M4	12	2.6	10.3	12.5

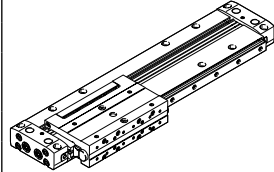
∅	H13	L3	L5	L6	L7	L8	L9	T1	T2
[mm]									
20	8	112	119.8	64	16	20	45	7	7
25	9	142	149.8	100	18	30	50	9	7
32	11	161	170	100	22	35	80	10	7.5
40	13	230.6	239.6	140	26	62	125	10	8

Datasheet



∅	B13	B14	B15	B16	H14
[mm]					
20	79.5	78	23	36	21
25	86.5	85	27	40	25.5
32	108	106	33	50	32
40	130	127.5	43	60	39.5

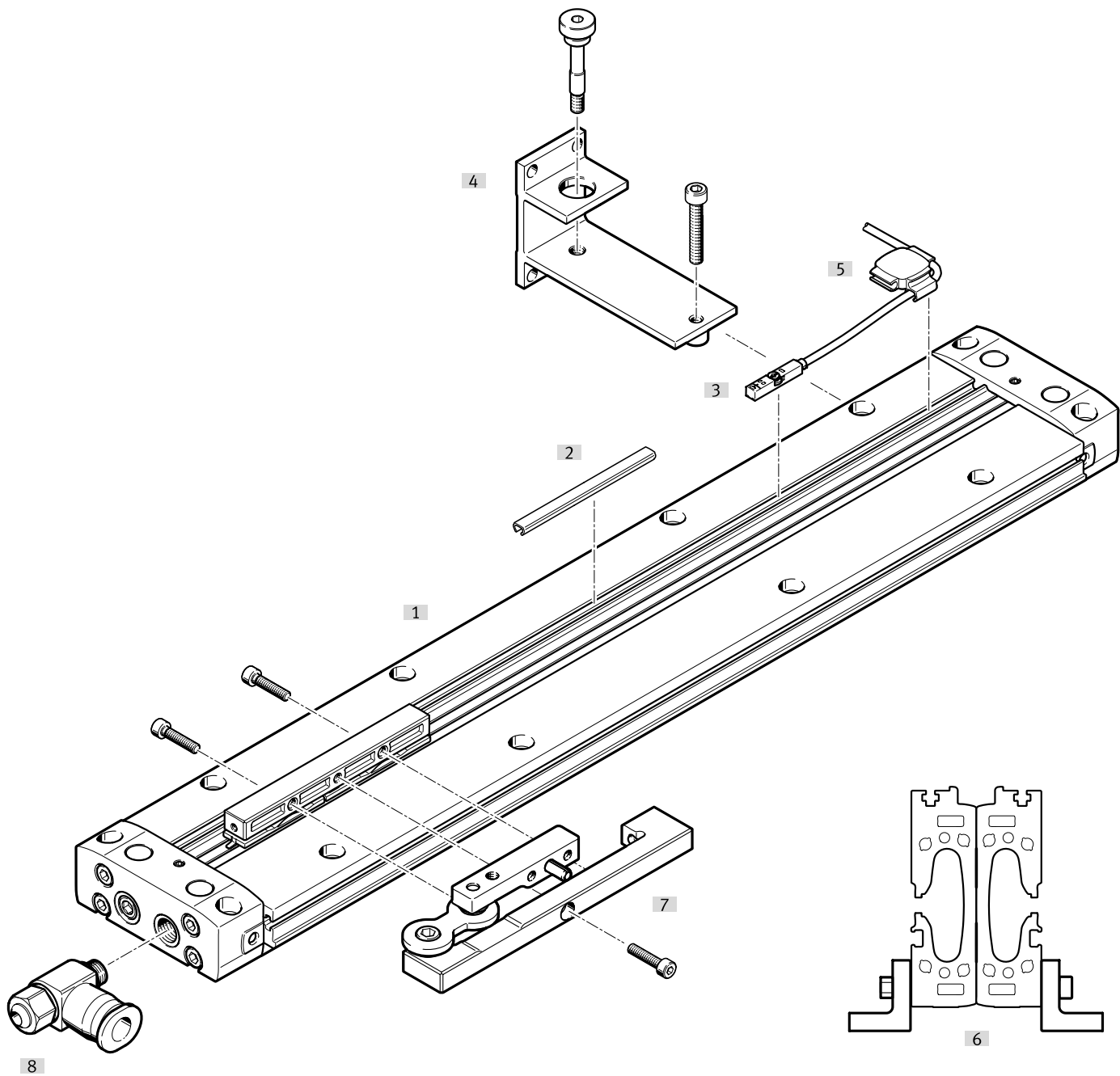
Datasheet

Ordering data	Piston ø	Stroke [mm]	Part no.	Type
	20	100	5074938	DLGF-KF-20-100-PPSA
		150	5074939	DLGF-KF-20-150-PPSA
		200	5074940	DLGF-KF-20-200-PPSA
		250	5074941	DLGF-KF-20-250-PPSA
		300	5074942	DLGF-KF-20-300-PPSA
		350	5074943	DLGF-KF-20-350-PPSA
		400	5074944	DLGF-KF-20-400-PPSA
		500	5074946	DLGF-KF-20-500-PPSA
	25	600	5074948	DLGF-KF-20-600-PPSA
		100	5072370	DLGF-KF-25-100-PPSA
		150	5072371	DLGF-KF-25-150-PPSA
		200	5072372	DLGF-KF-25-200-PPSA
		250	5072373	DLGF-KF-25-250-PPSA
		300	5072374	DLGF-KF-25-300-PPSA
		350	5072375	DLGF-KF-25-350-PPSA
		400	5072376	DLGF-KF-25-400-PPSA
	32	500	5072378	DLGF-KF-25-500-PPSA
		600	5072380	DLGF-KF-25-600-PPSA
		200	5074802	DLGF-KF-32-200-PPSA
		300	5074804	DLGF-KF-32-300-PPSA
		400	5074806	DLGF-KF-32-400-PPSA
	40	500	5074808	DLGF-KF-32-500-PPSA
		600	5074810	DLGF-KF-32-600-PPSA
		200	5074756	DLGF-KF-40-200-PPSA
		300	5074758	DLGF-KF-40-300-PPSA
		400	5074760	DLGF-KF-40-400-PPSA
		500	5074762	DLGF-KF-40-500-PPSA
		600	5074764	DLGF-KF-40-600-PPSA

Ordering data – Modular product system

	20	25	32	40	Condi-tions	Code	Enter code
Module no.	8063799	8063800	8063801	8063802			
Function	Linear drives					DLGF	DLGF
Guide	Recirculating ball bearing guide					-KF	-KF
Piston ø [mm]	20	25	32	40		-...	
Stroke [mm]	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000					-...	
Cushioning	Pneumatic cushioning, self-adjusting at both ends					-PPS	-PPS
Position sensing	Via proximity switch					A	A
Profile design	With mounting holes						
	Without mounting holes					-W	

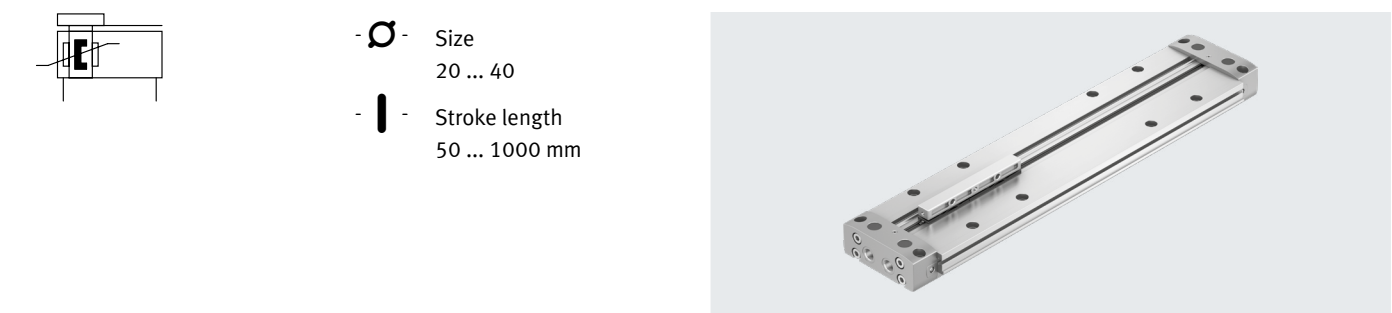
Peripherals overview



Peripherals overview

Accessories			
	Type/order code	Description	→ Page/Internet
[1]	Linear drives DLGF-G	Basic design	22
[2]	Slot cover ABP-5-S1	For protection against contamination	35
[3]	Proximity switch SMT-8M	For sensing the moment compensator position	35
[4]	Profile mounting DAMH-L8-P	For mounting the linear drive in a vertical position	30
[5]	Cable holder DADG	For fitting the proximity switch cable	35
[6]	Profile mounting DAMH-L8-PL	For mounting two linear drives back to back in a vertical position	31
[7]	Moment compensator DARD-L8	For compensating misalignments when using external guides	32
[8]	One-way flow control valve GRLA	For regulating speed	35

Datasheet



General technical data					
Piston Ø		20	25	32	40
Design		Rodless actuator			
Driver principle		Positive-locking (slot)			
Guide		Basic design			
Operating mode		Double-acting			
Stroke					
Standard stroke	[mm]	100, 150, 200, 250, 300, 350, 400, 500, 600		200, 300, 400, 500, 600	
Modular product system ¹⁾	[mm]	50 ... 1000			
Pneumatic connection		M5	G1/8	G1/8	G1/4
Cushioning		Pneumatic cushioning, self-adjusting at both ends			
Cushioning length	[mm]	9.6	9	11.6	12.9
Min. speed	[m/s]	0.07			
Max. speed	[m/s]	1.5			
Repetition accuracy	[mm]	±0.05			
Position sensing		Via proximity switch			
Type of mounting		Direct mounting via through-hole			
		With accessories			
Mounting position		Any			

1) The drive can only be ordered in 50 mm increments.

Operating and environmental conditions				
Piston Ø	20	25	32	40
Operating pressure	[bar]	2 ... 8	1.5 ... 8	
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]			
Note on the operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)			
Ambient temperature	[°C]	0 ... 60		
Corrosion resistance class CRC ¹⁾	1 - Low corrosion stress			

1) More information www.festo.com/x/topic/crc

Forces and impact energy				
Piston ø	20	25	32	40
Theoretical force at 6 bar	[N]	188	295	483
Impact energy in the end positions	[J]	0.17	0.27	0.44

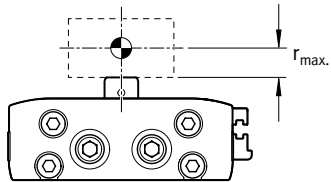
Weight [g]				
Piston ø	20	25	32	40
Basic weight with 0 mm stroke	590	957	1703	3234
Additional weight per 10 mm stroke	28.2	35.3	54.7	80.6
Moving mass	66	110	208	450

Datasheet

Operating range of the cushioning

The end-position cushioning is adjusted to ensure jerk-free operation. If the operating conditions are outside the permissible range, the moving mass must be cushioned using suitable equipment (external shock absorbers), preferably at the centre of mass.
The values apply to:

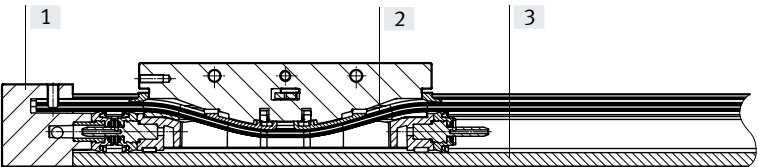
- horizontal mounting position
- Payload at top



Piston ø	20	25	32	40
Distance r _{max}	[mm]	6	6	8

Materials

Sectional view



Linear drive	
[1] Cover	Coated die-cast aluminium
[2] Seals	NBR TPE-U(PU)
[3] Housing	Anodised aluminium
– Note on materials	RoHS-compliant Free of copper
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Cleanroom class	Class 6 according to ISO 14644-1

Direct mounting

In order to avoid strain, the drive must be mounted at varying intervals depending on the length. The maximum support spacing is 300 mm.

Appropriate support should therefore also be used for the variant without mounting holes (feature W).



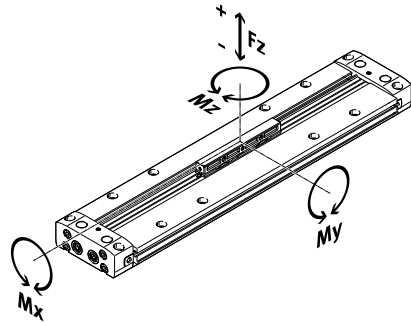
Stroke [mm]	Number of pairs of screws			
	DLGF-20	DLGF-25	DLGF-32	DLGF-40
50 ... 150	2	2	2	2
200	2	2	2	3
250	2	2	3	3
300	3	3	3	3
350 ... 450	3	3	3	4
500 ... 600	4	4	4	4
650 ... 750	4	4	4	5
800 ... 1000	5	5	5	5

Datasheet

Load values

The indicated forces and torques refer to the centre of the moment compensator.

These values must not be exceeded during dynamic operation. Special attention must be paid to the deceleration phase.



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

$$0,4 \cdot \frac{F_{z1}}{F_{z2}} + \frac{M_{x1}}{M_{x2}} + \frac{M_{y1}}{M_{y2}} + 0,2 \cdot \frac{M_{z1}}{M_{z2}} \leq 1$$

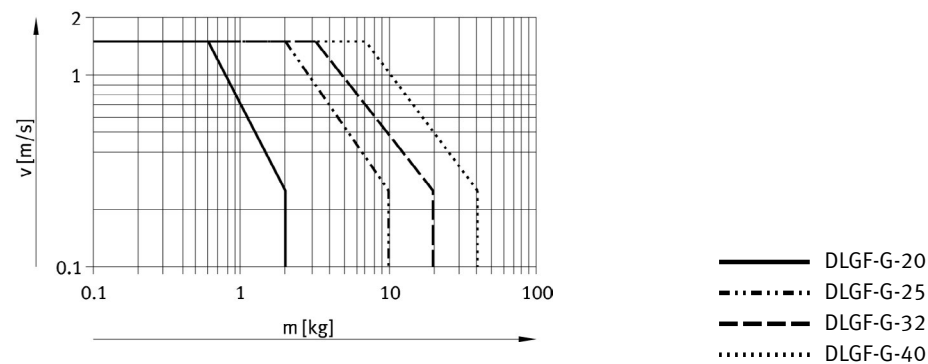
$$\frac{F_{z1}}{F_{z2}} \leq 1 \qquad \frac{M_{z1}}{M_{z2}} \leq 1$$

$$F_1/M_1 = \text{dynamic value}$$
$$F_2/M_2 = \text{maximum value}$$

Permissible forces and torques					
Piston Ø		20	25	32	40
F _{zmax} +	[N]	54	95	138	456
F _{zmax} -	[N]	98	164	276	662
M _{xmax}	[Nm]	0.6	1.1	1.8	7.7
M _{ymax}	[Nm]	2.2	4.5	7.6	37.6
M _{zmax}	[Nm]	0.7	1.4	2.9	11.2

Maximum permissible speed v as a function of payload m

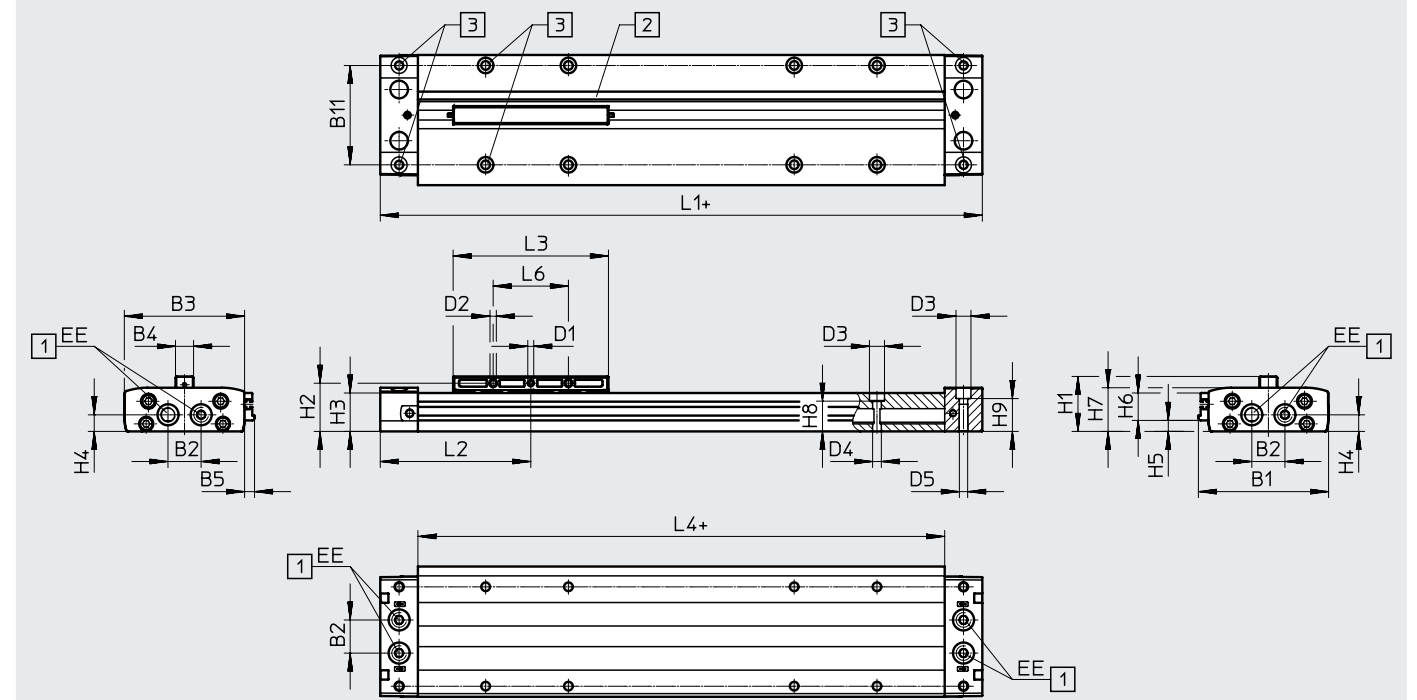
With PPS cushioning



Datasheet

Dimensions

Download CAD data → www.festo.com



- + plus stroke length
- [1] Supply ports
- [2] Sensor slot for proximity switch
- [3] Mounting holes for accessories
 - page 30, 31
- [4] Mounting holes

Suitable O-rings for
supply ports below:
For piston $\varnothing$ 20: $\varnothing$ 5x2
For piston $\varnothing$ 25: $\varnothing$ 12x2
For piston $\varnothing$ 32: $\varnothing$ 12x2
For piston $\varnothing$ 40: $\varnothing$ 16x2

Ø [mm]	B1	B2	B3	B4	B5	B11	D1	D2 Ø	D3 Ø
20	79.5	17	71.8	12	7.6	60	M4	4.2	8
25	86.5	22	79.8	12	6.6	66	M4	4.2	10
32	108	26	99.6	16	8.2	82	M4	4.2	11
40	130	32	119.8	16	10.1	100	M4	4.2	11

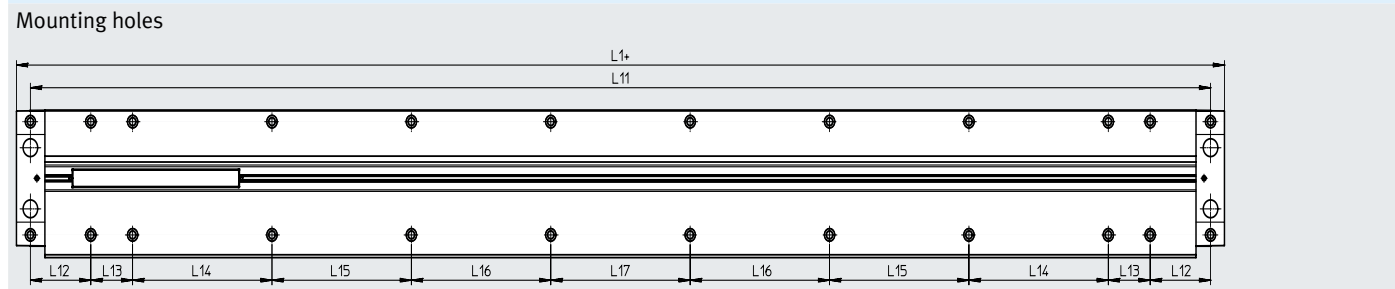
Ø [mm]	D4 Ø	D5 Ø	EE	H1	H2	H3	H4	H5	H6
20	4.7	4.5	M5	31.5	27	21	9	5	16
25	5.8	5.5	G1/8	36.5	32	25.5	11	7.3	18.2
32	6.8	6.5	G1/8	44.5	40	32	14	8.1	23.9
40	6.8	6.6	G1/4	51.5	46.5	39.5	19.5	10.8	28.7

Ø	H7	H8	H9	L1	L2	L3	L4	L6	Stroke tolerance
[mm]				±0.35					
20	24	15.6	17.6	160	80	87.6	120	40	+1.5
25	29	20.1	21.8	200	100	103.2	150	50	
32	35	24.6	26.5	230	115	121.6	170	60	
40	42.7	32.1	34.7	300	150	180	238.8	70	

Datasheet

Dimensions

Download CAD data → www.festo.com



Dim.	L1				L11				L12				L13			
Ø Stroke	20	25	32	40	20	25	32	40	20	25	32	40	20	25	32	40
50	210	250	280	350	190	225	250	320	55	57.5	65	65	40	55	60	20
100	260	300	330	400	240	275	300	370					65	80	80	45
150	310	350	380	450	290	325	350	420					90	105	110	70
200	360	400	430	500	340	375	400	470					40	55	60	20
250	410	450	480	550	390	425	450	520					65	80	80	45
300	460	500	530	600	440	475	500	570					90	105	110	70
350	510	550	580	650	490	525	550	620					40	55	60	20
400	560	600	630	700	540	575	600	670					65	80	80	45
450	610	650	680	750	590	625	650	720					90	105	110	70
500	660	700	730	800	640	675	700	770					40	55	60	20
550	710	750	780	850	690	725	750	820					65	80	80	45
600	760	800	830	900	740	775	800	870					90	105	110	70
650	810	850	880	950	790	825	850	920					40	55	60	20
700	860	900	930	1000	840	875	900	970					65	80	80	45
750	910	950	980	1050	890	925	950	1020					90	105	110	70
800	960	1000	1030	1100	940	975	1000	1070					40	55	60	20
850	1010	1050	1080	1150	990	1025	1050	1120	65	80	80	45				
900	1060	1100	1130	1200	1040	1075	1100	1170	90	105	110	70				
950	1110	1150	1180	1250	1090	1125	1150	1220	40	55	60	20				
1000	1160	1200	1230	1300	1140	1175	1200	1370	65	80	80	45				

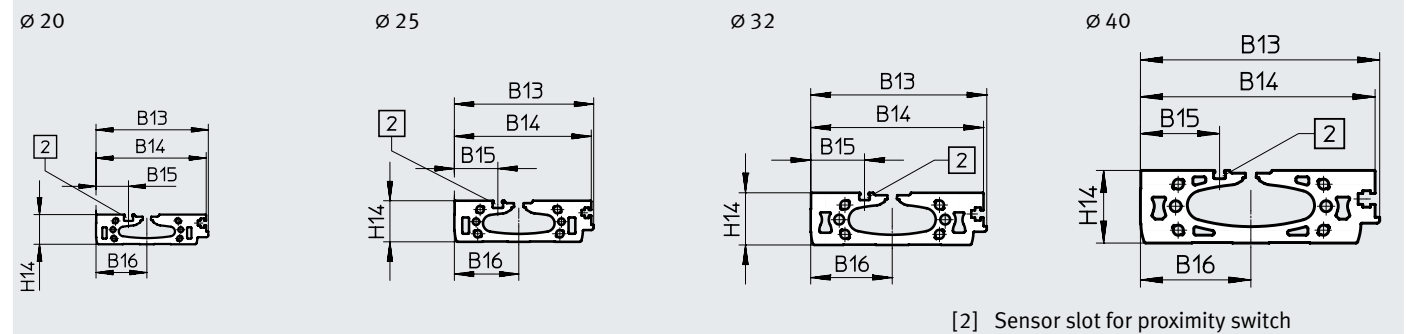
Dim.	L14				L15				L16				L17			
Ø	20	25	32	40	20	25	32	40	20	25	32	40	20	25	32	40
Stroke																
50	-	-	-	75	-	-	-	-	-	-	-	-	-	-	-	-
100																
150																
200			150	150									150			
250																
300	150	150	150	150	-	-	-	-	-	-	-	-	-	150		
350																
400																
450																
500															150	
550																
600	150	150	150	150	150	150	150	-	-	-	-	-	-	-		
650																
700																
750																
800																
850	150	150	150	150	150	150	150	-	-	-	-	-	-	-	-	
900																
950	150	150	150	150	150	150	150	150	150	150	150	150	-	-	-	150
1000																

Datasheet

Dimensions

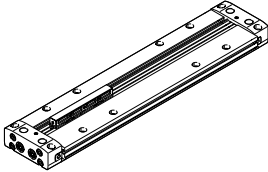
Download CAD data → www.festo.com

Profile barrel



Ø	B13	B14	B15	B16	H14
[mm]					
20	79.5	78	23	36	21
25	86.5	85	27	40	25.5
32	108	106	33	50	32
40	130	127.5	43	60	39.5

Datasheet

Ordering data	Piston ø	Stroke [mm]	Part no.	Type
	20	100	5074918	DLGF-G-20-100-PPSA
		150	5074919	DLGF-G-20-150-PPSA
		200	5074920	DLGF-G-20-200-PPSA
		250	5074921	DLGF-G-20-250-PPSA
		300	5074922	DLGF-G-20-300-PPSA
		350	5074923	DLGF-G-20-350-PPSA
		400	5074924	DLGF-G-20-400-PPSA
		500	5074926	DLGF-G-20-500-PPSA
	25	600	5074928	DLGF-G-20-600-PPSA
		100	5072350	DLGF-G-25-100-PPSA
		150	5072351	DLGF-G-25-150-PPSA
		200	5072352	DLGF-G-25-200-PPSA
		250	5072353	DLGF-G-25-250-PPSA
		300	5072354	DLGF-G-25-300-PPSA
		350	5072355	DLGF-G-25-350-PPSA
		400	5072356	DLGF-G-25-400-PPSA
	32	500	5072358	DLGF-G-25-500-PPSA
		600	5072360	DLGF-G-25-600-PPSA
		200	5074782	DLGF-G-32-200-PPSA
		300	5074784	DLGF-G-32-300-PPSA
		400	5074786	DLGF-G-32-400-PPSA
	40	500	5074788	DLGF-G-32-500-PPSA
		600	5074790	DLGF-G-32-600-PPSA
		200	5074736	DLGF-G-40-200-PPSA
		300	5074738	DLGF-G-40-300-PPSA
		400	5074740	DLGF-G-40-400-PPSA
		500	5074742	DLGF-G-40-500-PPSA
		600	5074744	DLGF-G-40-600-PPSA

Ordering data – Modular product system

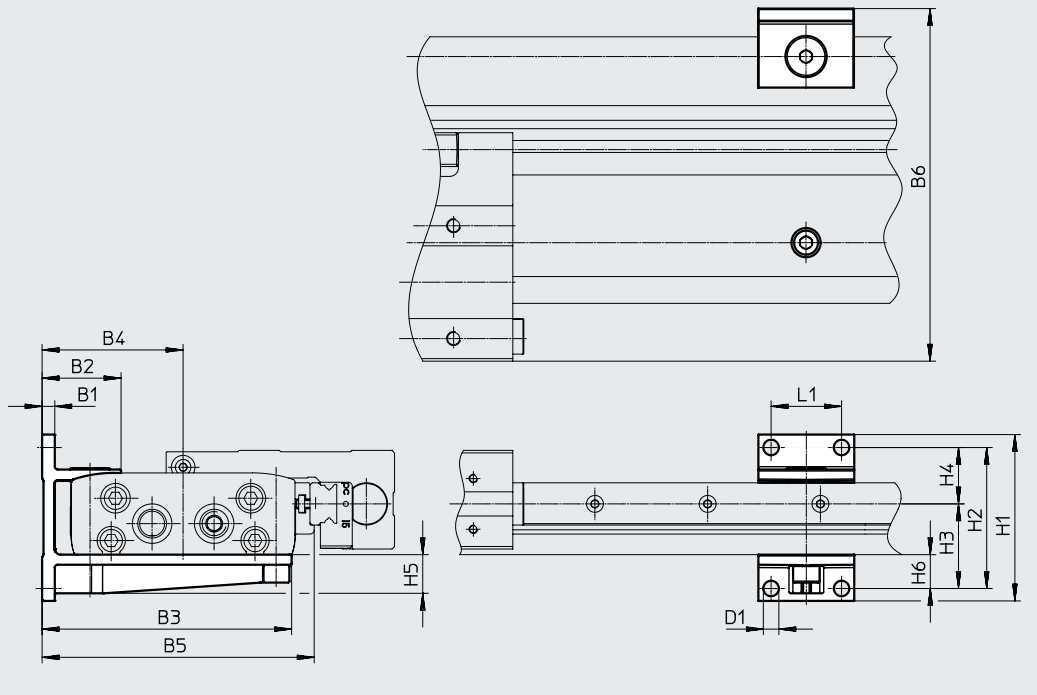
	20	25	32	40	Condi-tions	Code	Enter code
Module no.	8063799	8063800	8063801	8063802			
Function	Linear drives					DLGF	DLGF
Guide	Basic design					-G	-G
Piston ø [mm]	20	25	32	40		-...	
Stroke [mm]	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000					-...	
Cushioning	Pneumatic cushioning, self-adjusting at both ends					-PPS	-PPS
Position sensing	Via proximity switch					A	A
Profile design	With mounting holes						
	Without mounting holes					-W	

Accessories

Profile mounting DAMH-L8-P

For DLGF-G/-KF

Material:
High-alloy stainless steel
RoHS-compliant



Dimensions and ordering data									
For ø	B1	B2	B3	B4	B5 ¹⁾	B6 ²⁾	D1 ø	H1	
[mm]									
20	4.5	27	80.5	46	89.5	115	4.5	50	
25	4.5	28	88.5	50	96.5	125	5.5	59	
32	5.5	32	108	60	118	155	6.6	73	
40	5.7	33.7	127	70	140	185	6.6	80	

For ø	H2	H3 ²⁾	H4 ²⁾	H5	H6	L1	Weight	Part no.	Type
[mm]							[g]		
20	40	25	15	10.7	10	25	169	8069009	DAMH-L8-20-P-1
25	50	30	20	13.7	12	25	204	8069010	DAMH-L8-25-P-1
32	60	30	30	14	11	30	373	8069011	DAMH-L8-32-P-1
40	65	35	30	14.8	11	30	438	8069012	DAMH-L8-40-P-1

1) Only in combination with DLGF-...-G
2) Only in combination with DLGF-...-KF

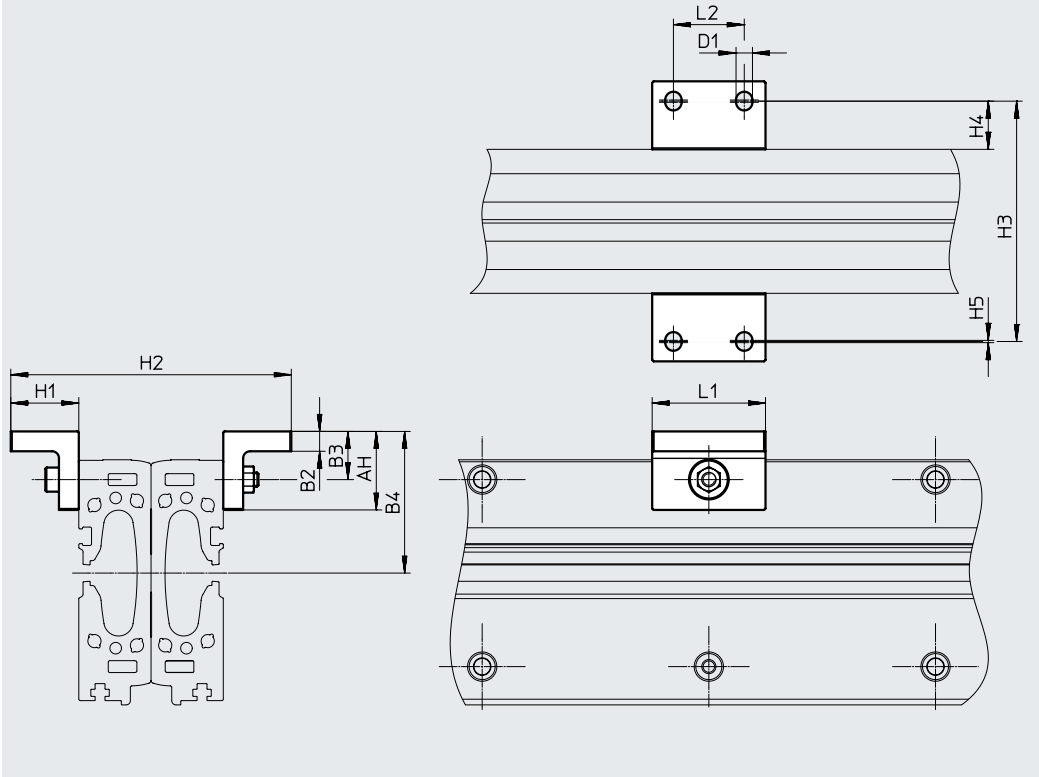
Accessories

Profile mounting DAMH-L8-PL

For mounting two linear drives
back to back in a vertical position.

Material:
Anodised wrought aluminium
alloy
RoHS-compliant

For DLGF-G/-KF



Dimensions and ordering data								
For ø	AH	B2	B3	B4	D1 ø	H1	H2	H3
[mm]								
20	25.2	6.5	16	46	4.6	19.5	81	70
25	27.7	7	17	50	5.8	24	99	85
32	32.5	9	19	60	6.7	26	116	100
40	32.5	9	20	70	6.7	26	131	115

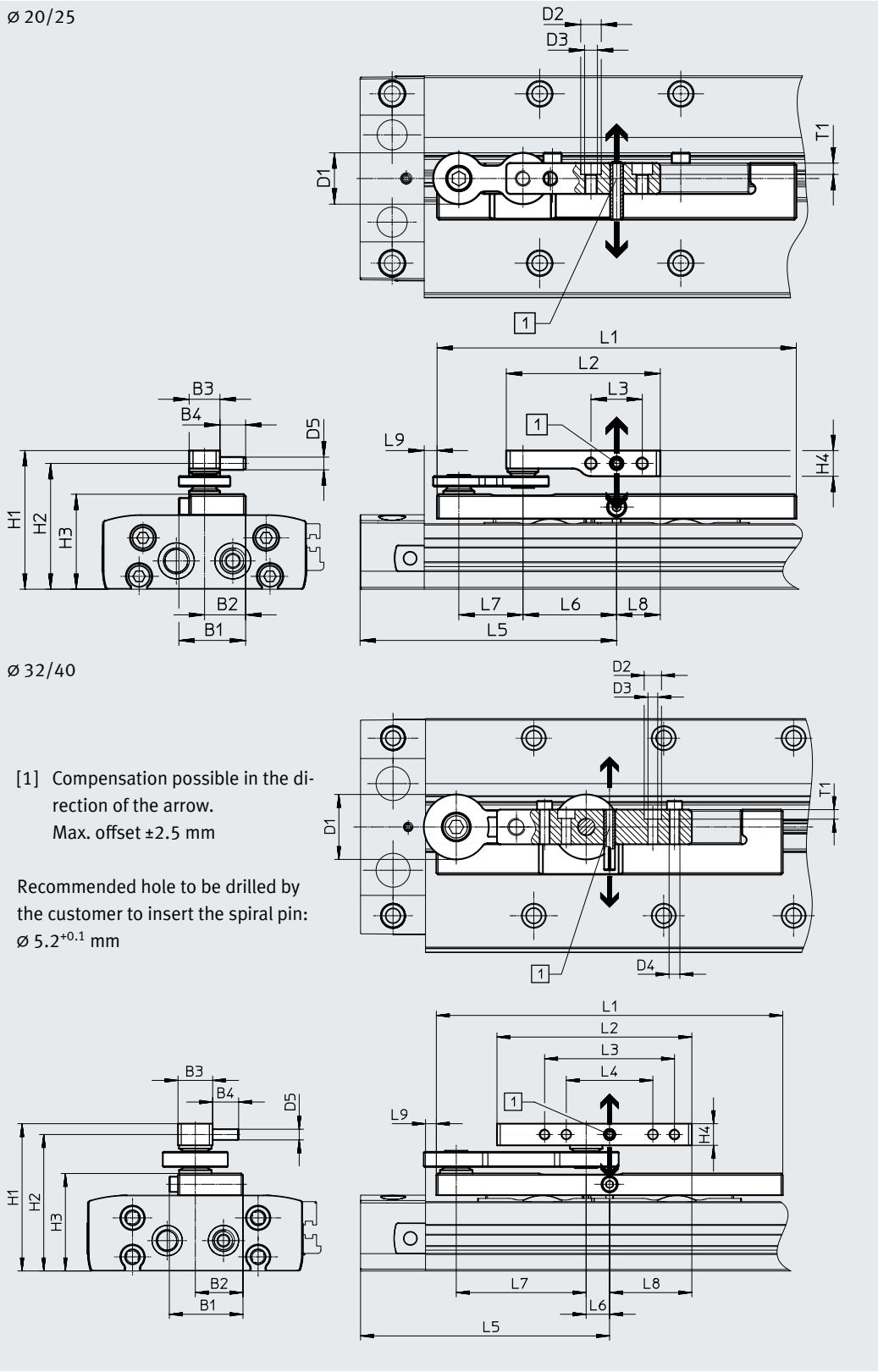
For ø	H4	H5	L1	L2	Weight	Part no.	Type
[mm]					[g]		
20	14	1	35	20	64	8069013	DAMH-L8-20-PL-1
25	17	1	40	25	99	8069014	DAMH-L8-25-PL-1
32	18	1	45	30	160	8069015	DAMH-L8-32-PL-1
40	18	1	45	30	166	8069016	DAMH-L8-40-PL-1

Accessories

Moment compensator DARD-L8
For compensating misalignments
when using external guides.

Material:
Anodised aluminium
RoHS-compliant

For DLGF-G



Accessories

Dimensions and ordering data

For ø	Max. offset between linear drive and external guide	Max. permissible load in the direction of force		Ambient temperature
[mm]	[mm]	[N]		[°C]
20, 25	±2.5	550	Low backlash	0 ... +60
32, 40	±2.5	1500		

For ø	B1	B2	B3	B4	D1 ø	D2 ø	D3	D4	D5 ø
[mm]									
20	26	16	12	10	20	8	M5 ²⁾	–	5.2
25	26	16	12	10	20	8	M5 ²⁾	–	5.2
32	34	22	16	12	30	8	4.5	M5	5.2
40	34	22	16	12	30	8	4.5	M5	5.2

For ø	H1	H2	H3	L1	L2	L3	L4	L5	L6
[mm]						±0.1	±0.1		
20	49	44	32	114	60	20	–	80	25.8
25	54	49	37	140	60	20	–	100	36.5
32	68	63	45	160	90	60	40	115	10.8
40	75	70	52	228	90	60	40	150	43

For ø	L7	L8	L9	T1	CRC ¹⁾	Weight	Part no.	Type
[mm]						[g]		
20	25	17	2.2	4.4	1	137	8081466	DARD-L8-20-S
25	25	17	5	4.4		166	4134871	DARD-L8-25-S
32	60	38	5	4.4		294	8081467	DARD-L8-32-S
40	60	38	5	4.4		440	4448222	DARD-L8-40-S

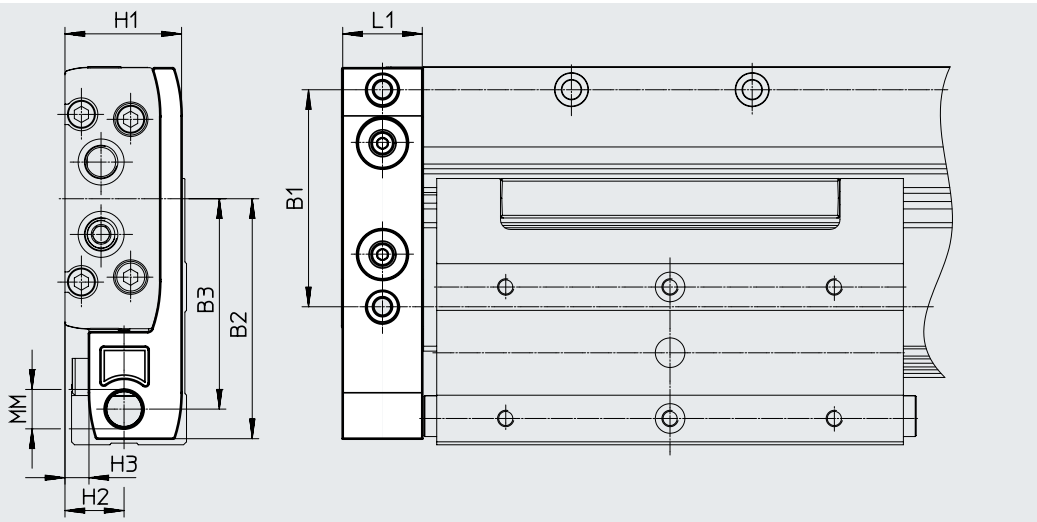
1) More information www.festo.com/x/topic/crc
2) The threaded hole can also be used as a through-hole for screws with M4 thread.

Accessories

Shock absorber retainer DAYP-L8
For shock absorber DYSS

Material:
High-alloy stainless steel
RoHS-compliant

For DLGC-KF

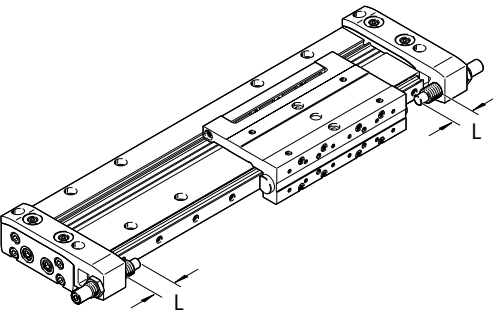


Dimensions and ordering data						
For ø	B1	B2	B3	H1	H2	
[mm]						
20	60	67.1	59	30.5	14.9	
25	66	73	64	35.5	18	
32	82	92.3	83.4	43.5	19	
40	100	113	100.5	50.5	24	

For ø	H3	L1	MM	Weight	Part no.	Type
[mm]				[g]		
20	5	19.5	M10x1	165	8069005	DAYP-L8-20
25	7.3	24.2	M12x1	224	8069006	DAYP-L8-25
32	8	29	M14x1	429	8069007	DAYP-L8-32
40	10.8	29.5	M16x1	560	8069008	DAYP-L8-40

Stroke adjustment with the aid of the shock absorbers DYSS

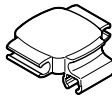
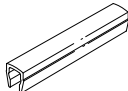
The shock absorbers can be moved by up to L = 25 mm at each end. This means that the stroke can be reduced by max. 50 mm.



Ordering data						
	For Ø	Comment	Part no.	Type	PU ¹⁾	
Shock absorber DYSS			Datasheets → Internet: dyss			
	20	For DLGC-KF	8069001	DYSS-7-5-Y1F	1	
	25		8069002	DYSS-8-8-Y1F		
	32		8069003	DYSS-10-10-Y1F		
	40		8069004	DYSS-12-12-Y1F		

1) Packaging unit

Accessories

Ordering data						
	For ø	Comment	Part no.	Type	PU ¹⁾	
One-way flow control valve GRLA						
	20	Metal design	193137	GRLA-M5-QS-3-D	1	
	25, 32		193138	GRLA-M5-QS-4-D		
			193142	GRLA-1/8-QS-3-D		
			193143	GRLA-1/8-QS-4-D		
			193144	GRLA-1/8-QS-6-D		
			193146	GRLA-1/4-QS-6-D		
	40		193147	GRLA-1/4-QS-8-D		
			193148	GRLA-1/4-QS-10-D		
Connector sleeve ZBV						
	25, 32	For centring in combination with direct mounting of mini slides	548805	ZBV-9-7	10	
	40	DGSL	548806	ZBV-12-9		
Cable holder DADG						
	20 ... 40	For mounting the proximity switch cable at a 90° angle	8069000	DADG-HL-N8-P2	2	
Slot cover ABP						
	20 ... 40	For sensor slot, 0.5 mm each	563360	ABP-5-S1	2	

1) Packaging unit

Ordering data – Proximity switch for T-slot, magneto-resistive						
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Type
N/O						
	Inserted in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-core	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
		NPN	Cable, 3-core	2.5	574338	SMT-8M-A-NS-24V-E-2.5-OE
			Plug M8x1, 3-pin	0.3	574339	SMT-8M-A-NS-24V-E-0.3-M8D

Connecting cables NEBA, straight						
	Electrical connection 1, connection technology	Electrical connection 2, connection technology	Electrical connection 2, number of pins/cores	Cable length	Part no.	Type
	M8x1 A-coded to EN 61076-2-104	Open end	3	2.5 m	8078223	NEBA-M8G3-U-2.5-N-LE3
				5 m	8078224	NEBA-M8G3-U-5-N-LE3

Connecting cables NEBA, angled						
	Electrical connection 1, connection technology	Electrical connection 2, connection technology	Electrical connection 2, number of pins/cores	Cable length	Part no.	Type
	M8x1 A-coded to EN 61076-2-104	Open end	3	2.5 m	8078230	NEBA-M8W3-U-2.5-N-LE3
				5 m	8078231	NEBA-M8W3-U-5-N-LE3