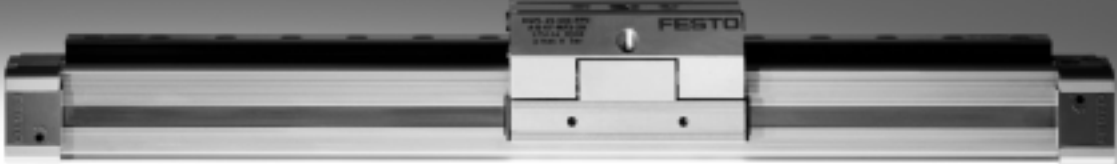


Linear drives DGPL



Linear drives DGPL

Selection aid

FESTO

General

- Compact, fitting length relative to stroke
- Highly adaptable thanks to wide choice of mounting and attachment options
- Adjustable end-position cushioning systems
- Can be combined with the modular system for handling and assembly technology
- Maintenance-free (for up to 5000 km with a recirculating ball bearing guide)
- Wide choice of variants:
 - Extended slide
 - Air connections on both sides
 - Electronic cushioning with SoftStop SPC11

With recirculating ball bearing guide DGPL-KF-GK/-GV

- Piston \varnothing 18 ... 80 mm
- Stroke lengths from 10 ... 3000 mm
- Backlash-free
- DGPL-GK: standard slide
- DGPL-GV: extended slide
- Precise and rigid guide
- For high loads and torques



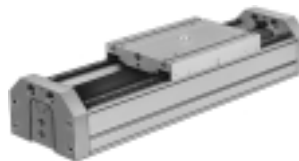
Protected version DGPL-GA

- Piston \varnothing 18 ... 40 mm
- Stroke lengths from 10 ... 2000 mm
- Guide and slide are fitted with a cover to protect against the ingress of particles from above and from the side
- Backlash-free
- Precise and rigid guide
- For high loads and torques



With heavy-duty guide DGPL-HD

- Piston \varnothing 18 ... 40 mm
- Stroke lengths from 10 ... 2160 mm
- Backlash-free
- Maximum precision



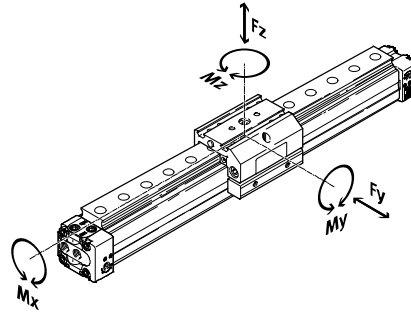
Linear drives DGPL

Selection aid

Guide characteristics

The specifications for forces and torques are based on the variant with standard slide (GK).

The values for the other variants can be found in the relevant technical data in the catalogue.



Version	Piston \varnothing [mm]	Stroke ¹⁾ [mm]	Theoretical force at 6 bar [N]	Forces and torques					→ Page/Internet
				Fy [N]	FZ [N]	Mx [Nm]	My [Nm]	Mz [Nm]	
With recirculating ball bearing guide DGPL-KF									
	18	10 ... 1800	153	930	930	7	23	23	5
	25	10 ... 3000	295	3080	3080	45	85	85	
	32	10 ... 3000	483	3080	3080	63	127	127	
	40	10 ... 3000	754	7300	7300	170	330	330	
	50	10 ... 3000	1178	7300	7300	240	460	460	
	63	10 ... 3000	1870	14050	14050	580	910	910	
	80	10 ... 3000	3016	14050	14050	745	1545	1545	
With heavy-duty guide DGPL-HD									
	HD18	10 ... 1710	153	1820	1820	70	115	112	24
	HD25	10 ... 2160	295	5400	5600	260	415	400	
	HD40	10 ... 2110	754	5400	5600	375	560	540	

1) For effective strokes of over 2000 mm, the drive must be installed with the sealing band facing downwards; longer strokes on request.

Note

Piston \varnothing 8 and 12: linear drives DGC → Internet: dgc

Alternatives to DGPL-...-GF: linear drives DGC-...-GF → Internet: dgc

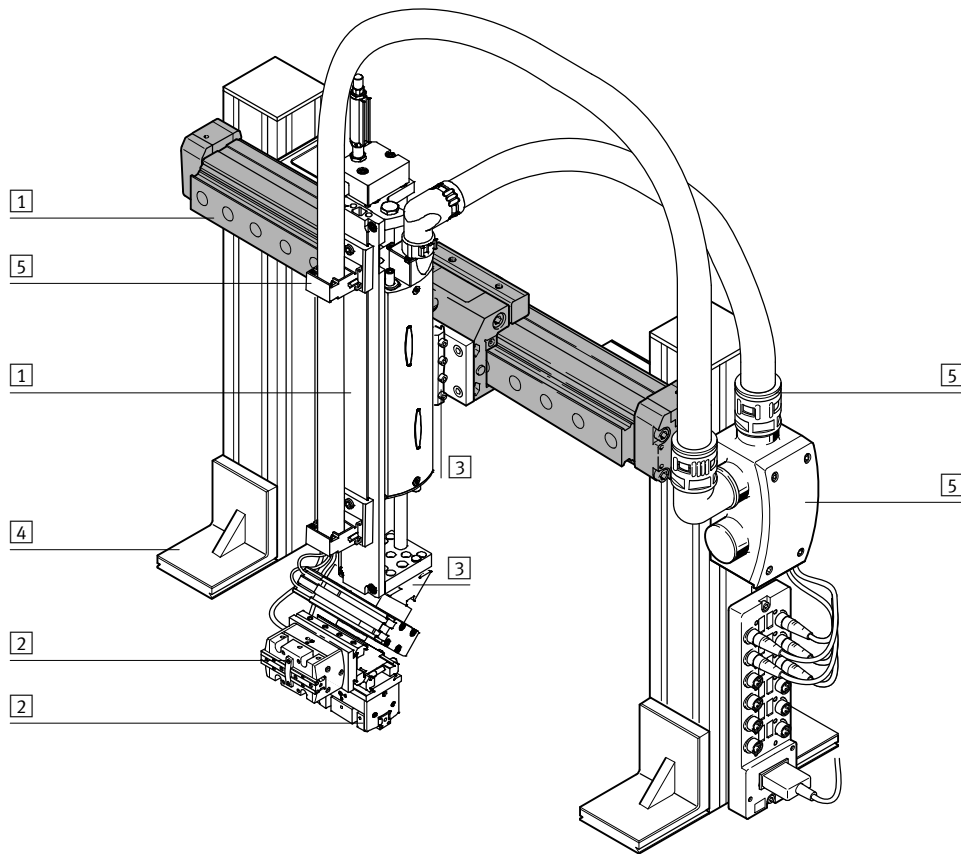
Alternatives to DGP: linear drives DGC-K → Internet: dgc

Linear drives DGPL

Feature

FESTO

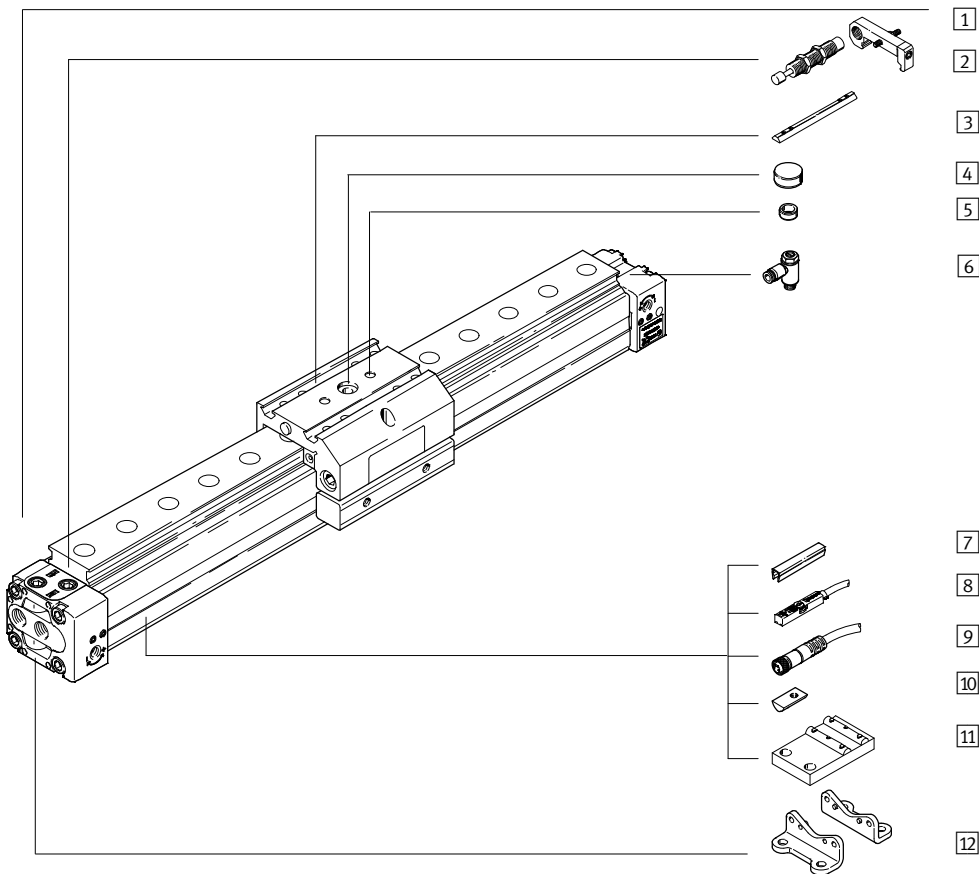
System product for handling and assembly technology



System components and accessories		
	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 connections 44
		For drive/gripper connections gripper
4	Basic components	Profiles and profile connections as well as profile/drive connections basic component
5	Installation components	For a clear, safe layout of electrical cables and tubing Installation component
-	Axes	Wide range of combinations possible within handling and assembly technology axis
-	Motors	Servo and stepper motors, with or without gear unit motor

Linear drives DGPL, with guide

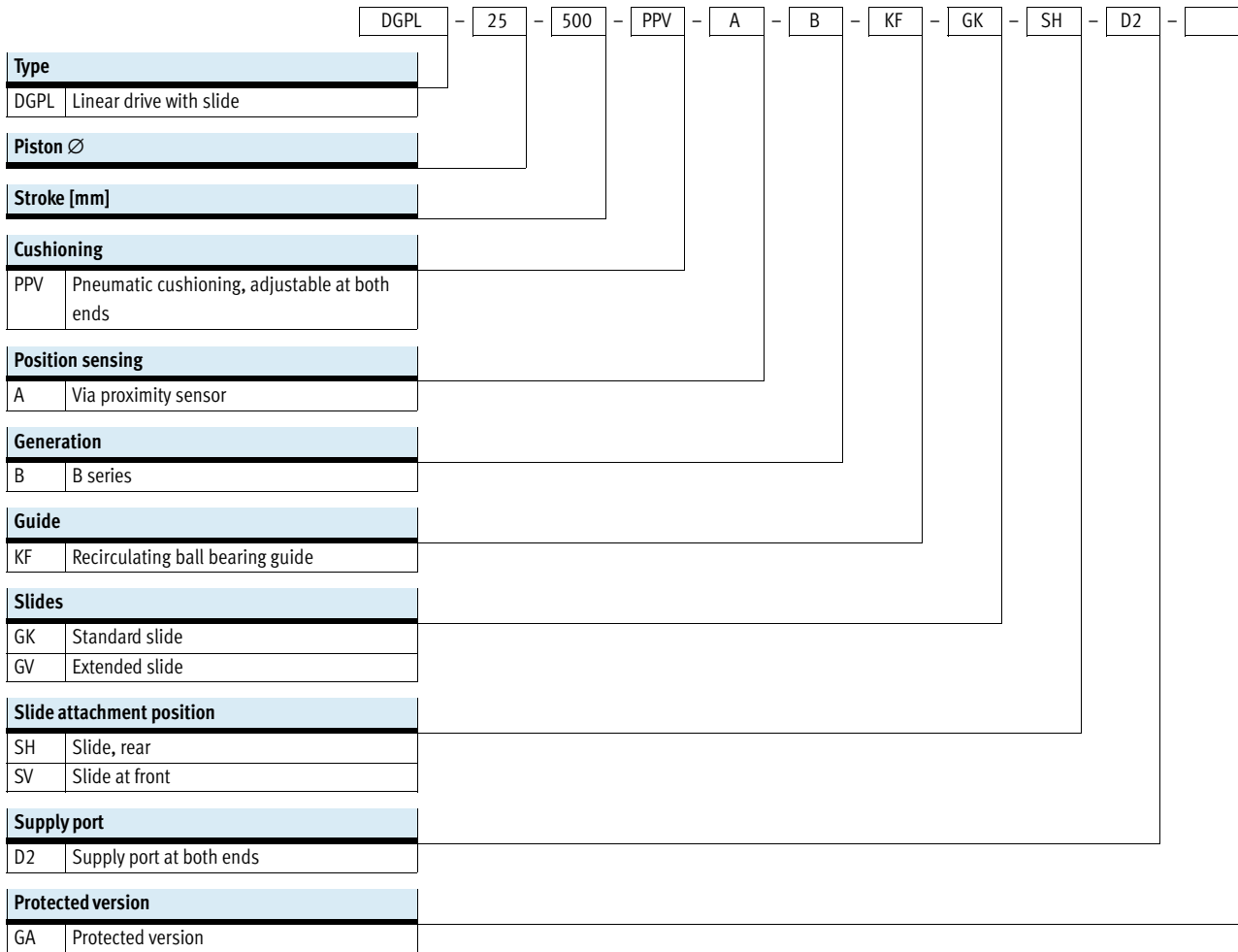
Peripherals overview



Variants and accessories				
Type	Description	DGPL		→ Page/Internet
		KF	GA	
1	Linear axis DGPL	■	■	6
2	Shock absorber kit C	■	-	39
2	Shock absorber kit E	-	■	40
3	Slot nut for slide X	■	■	41
4	Central mounting Q	■	■	41
5	Centring pins/sleeves Z	■	■	41
6	One-way flow control valve GRLA	■	■	40
7	Slot cover B/S	■	■	41
8	Proximity sensor G/H/I/J/N	■	■	43
9	Connecting cable V	■	■	43
10	Slot nut for profile barrel Y	■	■	41
11	Central support M	■	■	37
12	Foot mounting F	■	■	36

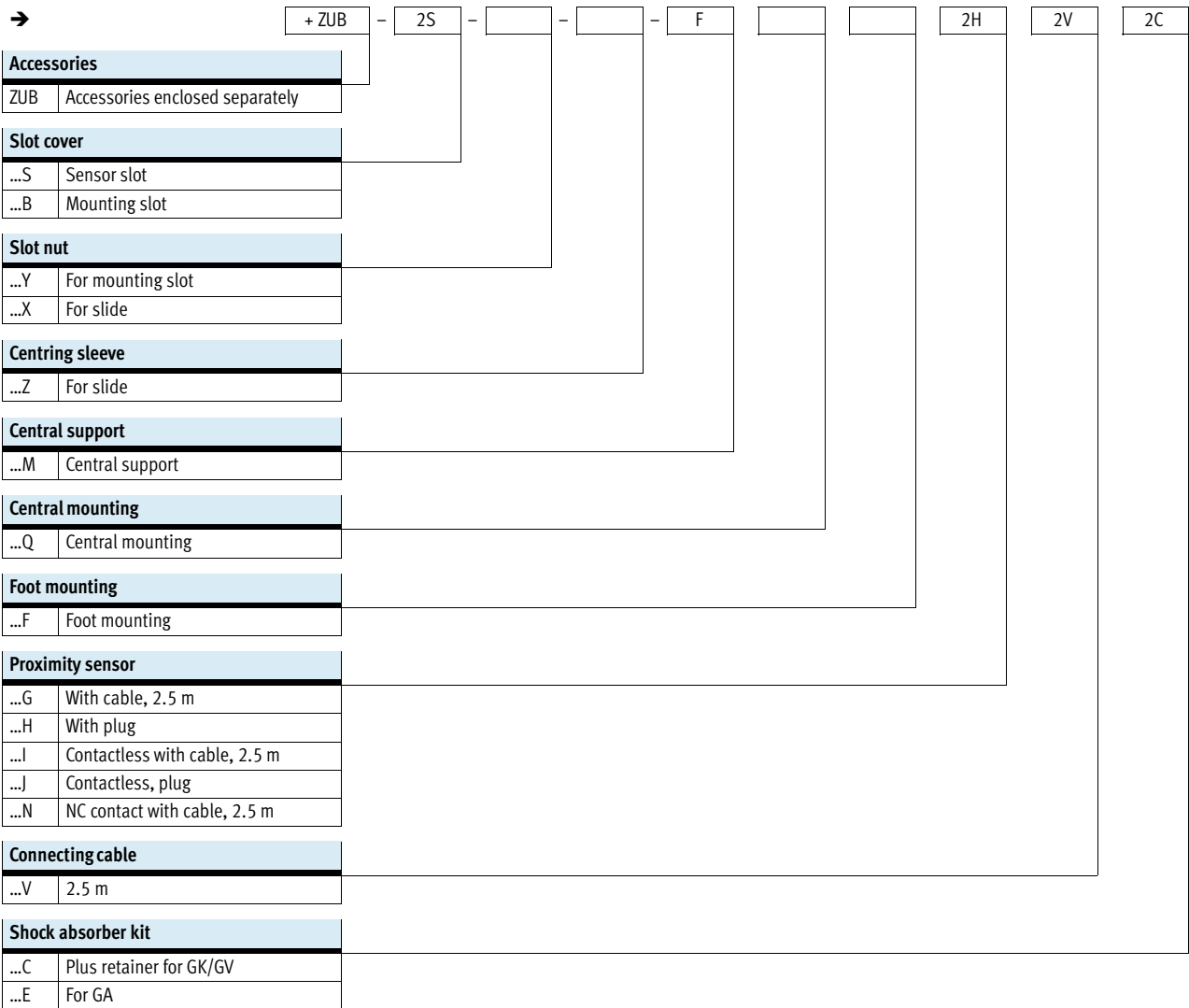
Linear drives DGPL, with guide

Type codes



Linear drives DGPL, with guide

Type code

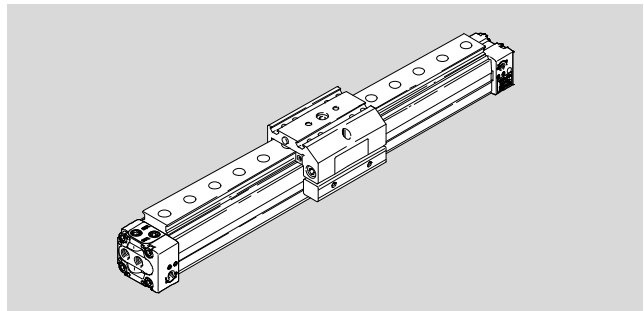
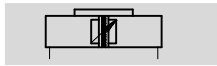


Linear drives DGPL, with guide

FESTO

Technical data

Function



- \varnothing - Diameter
18 ... 80 mm
- | - Stroke length
1 ... 3000 mm

General technical data								
Piston \varnothing	18	25	32	40	50	63	80	
Design	Pneumatic linear drive with slide							
Guide	Recirculating ball bearing guide							
Mode of operation	Double-acting							
Moment compensator principle	Positive-locking (slot)							
Assembly position	Any							
Pneumatic connection	M5	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{1}{2}$			
Stroke length [mm]	10 ... 1800	10 ... 3000 ¹⁾						
Cushioning	Adjustable at both ends Self-adjusting at both ends							
Cushioning length (PPV) [mm]	16	18	20	30	83			
Position sensing	Via proximity sensor							
Max. speed								
DGPL-KF [m/s]	3							
DGPL-GA [m/s]	3						-	

1) For effective strokes of over 2000 mm, the drive must be installed with the sealing band facing downwards; longer strokes on request.

Operating and environmental conditions							
Piston \varnothing	18	25	32	40	50	63	80
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]						
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)						
Operating pressure [bar]	2 ... 8			1.5 ... 8			
Ambient temperature ¹⁾ [°C]	-10 ... +60						
Corrosion resistance class CRC ²⁾	0						
ATEX	Specified types → www.festo.com						

1) Note operating range of proximity sensors.

2) Corrosion resistance class CRC 0 to Festo standard FN 940070

No corrosion stress. Applies to small, optically irrelevant standard parts such as threaded pins, circlips and clamping sleeves which are usually only available in a phosphated or burnished version (and possibly oiled) as well as to ball bearings (for components < CRC 3) and plain bearings.

Forces [N] and impact energy [Nm]							
Piston \varnothing	18	25	32	40	50	63	80
Theoretical force at 6 bar	153	295	483	754	1178	1870	3016
Impact energy	→ 11						

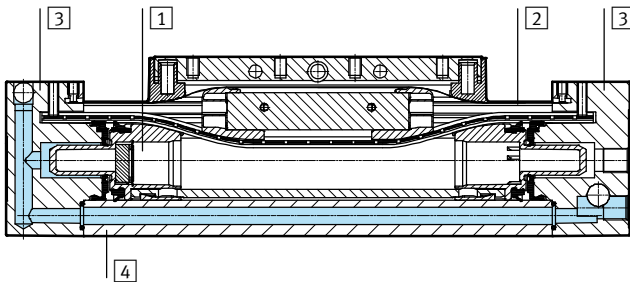
Linear drives DGPL, with guide

Technical data

Weight [kg]							
Piston Ø	18	25	32	40	50	63	80
Basic weight with 0 mm stroke	0.83	1.52	2.72	4.48	9.6	15.37	28.7
Additional weight per 10 mm stroke	0.026	0.053	0.069	0.097	0.167	0.236	0.27
Moving mass	0.29	0.43	0.58	1.15	1.96	3.22	7.50

Materials

Sectional view



Linear drives		
1	Slide	Anodised aluminium
2	Sealing band/cover band	Polyurethane/steel
3	Cover	Painted aluminium
4	Cylinder barrel	Anodised aluminium
-	Piston seal	Polyurethane
-	Slide elements	Polyacetal
	Note on materials	RoHS-compliant

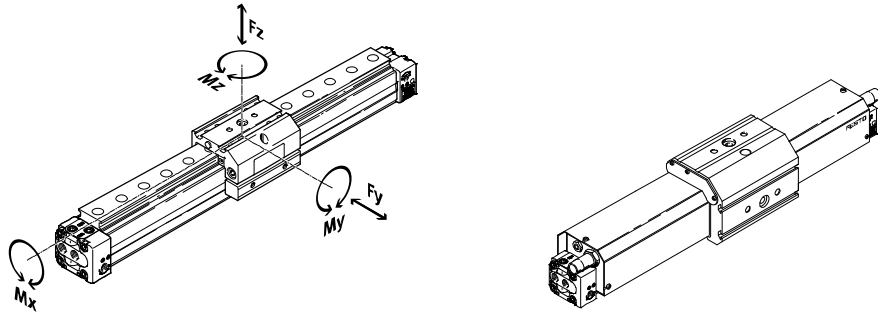
Linear drives DGPL, with guide

Technical data



Characteristic load values for axis with recirculating ball bearing guide KF or protected version GA

The indicated forces and torques refer to the centre of the guide rail. 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 indicated forces and torques, the following equation must be satisfied in addition to the indicated maximum loads:

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

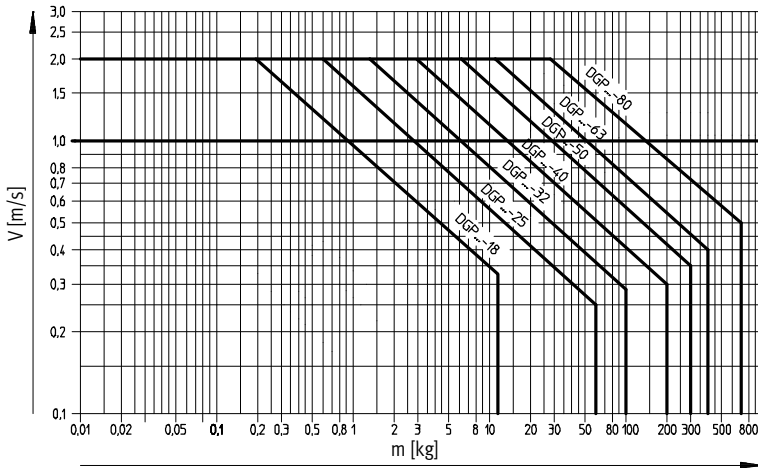
Permissible forces and torques								
Piston Ø		18	25	32	40	50	63	80
DGPL-GK/-GA (standard slide, protected)								
F _y _{max.}	[N]	930	3080	3080	7300	7300	14050	14050
F _z _{max.}	[N]	930	3080	3080	7300	7300	14050	14050
M _x _{max.}	[Nm]	7	45	63	170	240	580	745
M _y _{max.}	[Nm]	23	85	127	330	460	910	1545
M _z _{max.}	[Nm]	23	85	127	330	460	910	1545
DGPL-GV (extended slide)								
F _y _{max.}	[N]	930	3080	3080	7300	7300	14050	–
F _z _{max.}	[N]	930	3080	3080	7300	7300	14050	–
M _x _{max.}	[Nm]	7	45	63	170	240	580	–
M _y _{max.}	[Nm]	45	170	250	660	920	1820	–
M _z _{max.}	[Nm]	45	170	250	660	920	1820	–

Linear drives DGPL, with guide

Technical data

Operating range of the integrated end-position cushioning PPV

Maximum permissible speed v as a function of the moving load M

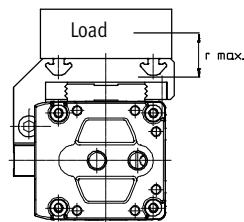


Note
 The data applies to a horizontal mounting position, applied load on top.
 m = Applied load + moving mass
 → 9
 The following diagram refers to r_{max} .

Pneumatic linear drives

With slide DGPL

The end-position cushioning must be adjusted to ensure jerk-free operation. If the operating conditions are outside the permissible range, the load to be moved must be externally cushioned using suitable equipment (shock absorbers, stops, etc), preferably at the centre of gravity of the load.



$r_{max} = 20$ mm
 for piston $\varnothing 18$ mm

$r_{max} = 50$ mm
 for piston $\varnothing 25 \dots 80$ mm
 (data for larger load distances on request)

Note
 Evenness of applied loads for pneumatic linear drives with slide DGPL: to prevent the guide elements from tightening or slackening, the support surface for the assembly must maintain an evenness of 0.03 mm.

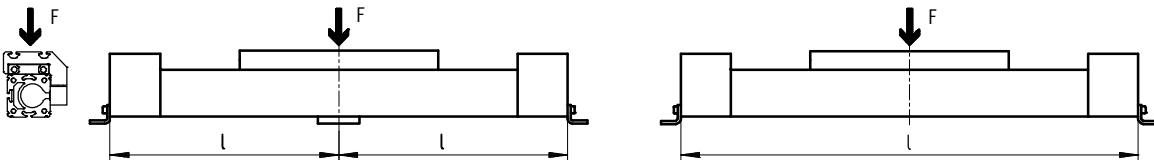
Maximum permissible support span l as a function of the force F

The axis may need to be supported with central supports MUP in order to limit deflection in the case of long

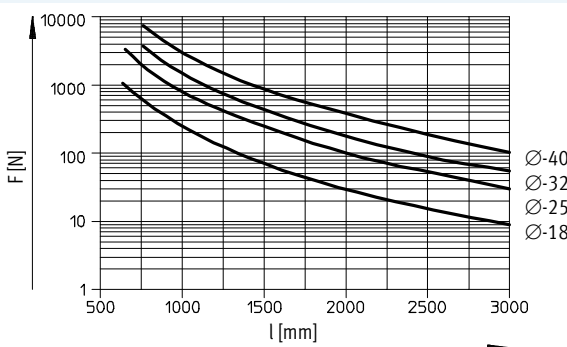
strokes. The following graphs can be used to determine the maximum

permissible support span l as a function of force F acting on the axis.

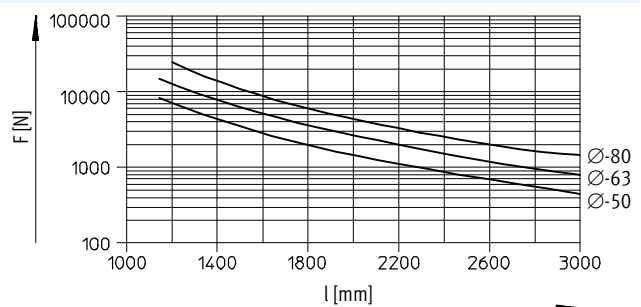
Force on the surface of the slide



Piston $\varnothing 18 \dots 40$



Piston $\varnothing 50 \dots 80$



Linear drives DGPL, with guide

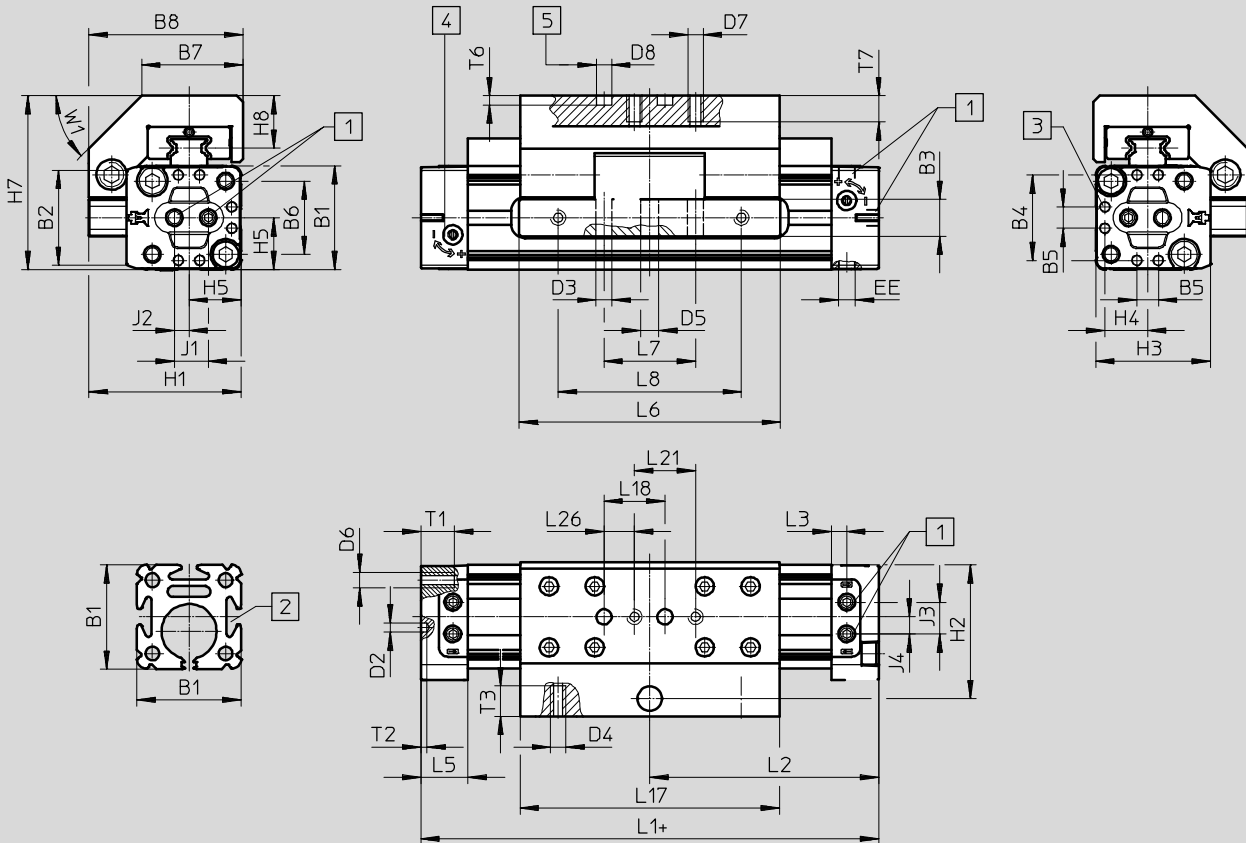
Technical data

Dimensions

Download CAD data → www.festo.com

Standard slide GK

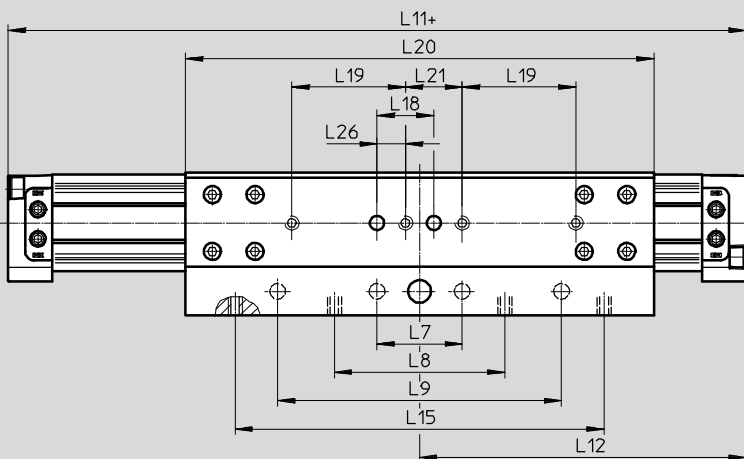
Piston Ø 18



- | | | | |
|---|--|--|-------------------------------|
| <p>1 DGPL-...: Supply ports on one end cap, freely selectable on 3 sides
DGPL-...-D2: Supply ports at both ends, freely selectable on 3 sides</p> | <p>2 Sensor slot for proximity sensor
3 Centring hole for foot mounting HP-...</p> | <p>4 Regulating screw for adjustable end-position cushioning
5 Hole for centring pin ZBS-5</p> | <p>+ = plus stroke length</p> |
|---|--|--|-------------------------------|

Extended slide GV

Piston Ø 18



Linear drives DGPL, with guide

Technical data

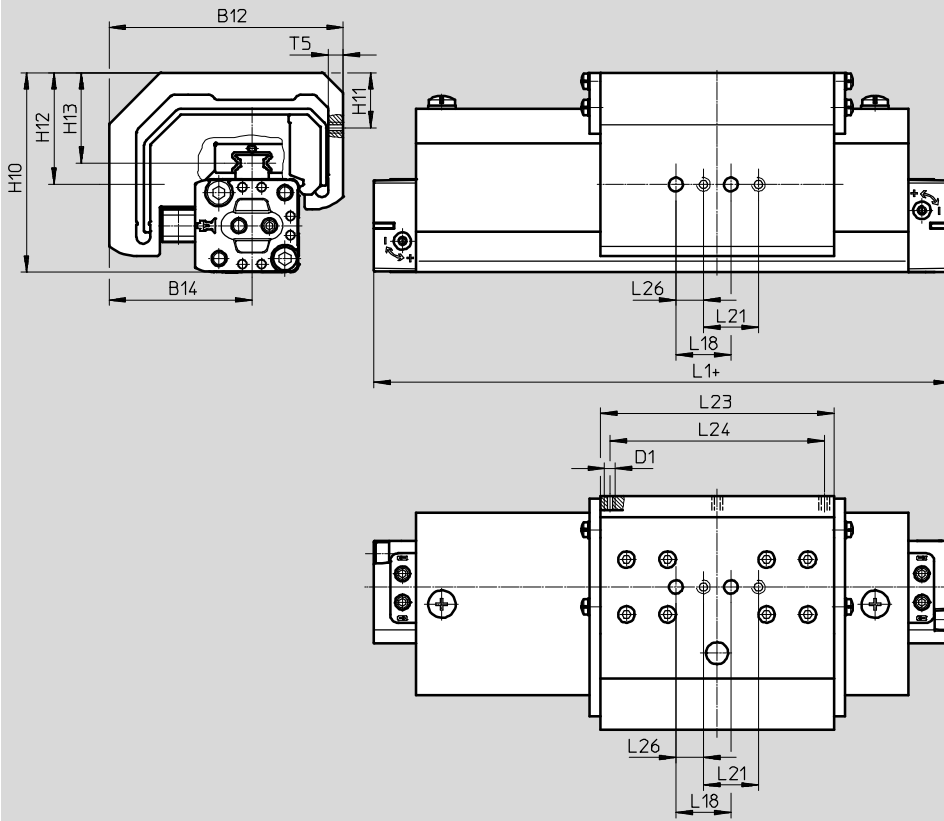
FESTO

Dimensions

Download CAD data → www.festo.com

Protected version GA

Piston Ø 18



Ø	B1	B2	B3	B4	B5	B6	B7	B8	B12	B14	D1	D2
[mm]			±0.1									Ø
18	34	31.2	12	28	7	24	32	50.5	85.25	52.05	M4	3

Ø	D3	D4	D5	D6	D7	D8	EE	H1	H2	H3	H4	H5
[mm]	Ø		Ø			Ø						
18	5.2	M5	6	M5	M5	5	M5	49.8	43.8	37.6	14	17

Ø	H7	H8	H10	H11	H12	H13	J1	J2	J3	J4	L1	L2
[mm]												
18	57	17	72.7	20	40.7	32.8	11.1	4.8	10.4	5.6	150	75

Ø	L3	L5	L6	L7	L8	L9	L11	L12	L15	L17	L18
[mm]				±0.1	±0.1	±0.1	+0.9/-0.2	+0.3/-0.6	±0.1	±1	±0.03
18	5	15.5	85	30	60	100	230	115	130	85	20

Ø	L19	L20	L21	L23	L24	L26	T1	T2	T3	T5	T6	T7	W1
[mm]	±0.03		±0.1			±0.1					+0.2	max.	
18	40	165	20	85	78	10	11	2	10	5.35	3	10	45°

Linear drives DGPL, with guide

Technical data

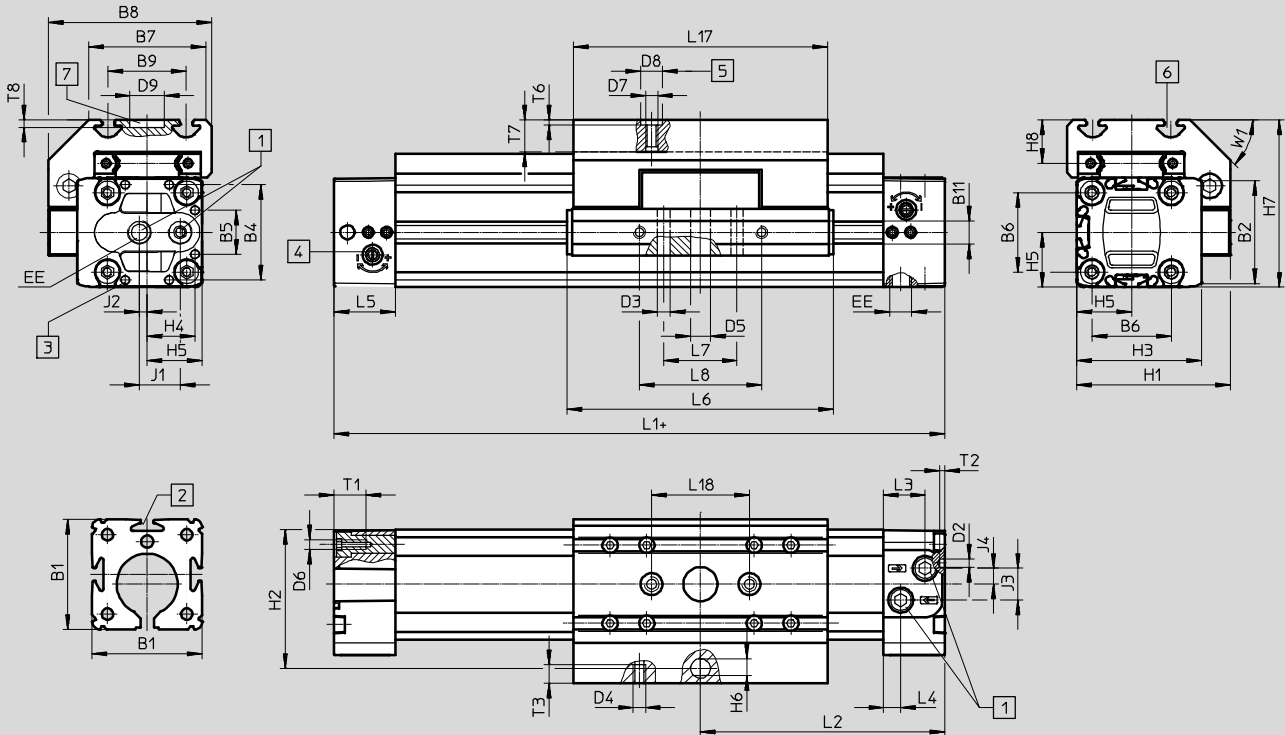
FESTO

Dimensions

Standard slide GK

Download CAD data → www.festo.com

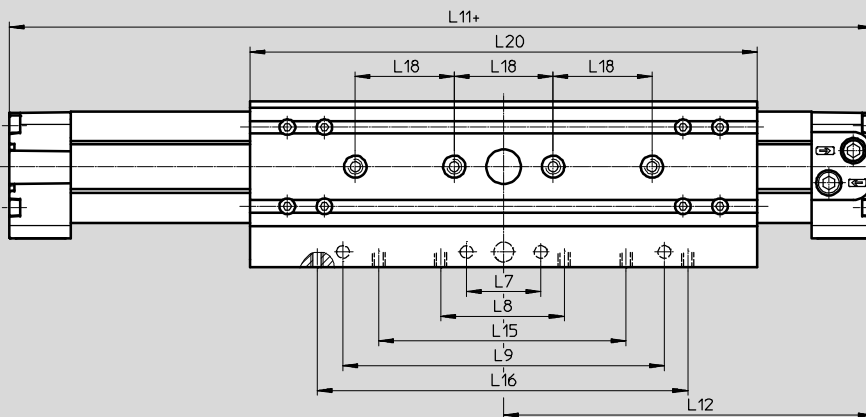
Piston Ø 25



- | | | | |
|---|--|---|-------------------------------|
| <p>1 DGPL-...: Supply ports on one end cap, freely selectable on 3 sides
DGPL-...-D2: Supply ports at both ends, freely selectable on 3 sides</p> | <p>2 Sensor slot for proximity sensor
3 Centring hole for foot mounting HP-...
4 Regulating screw for adjustable end-position cushioning</p> | <p>5 Hole for centring sleeve ZBH-9
6 Mounting slot for slot nut NSTL-25
7 Hole for central mounting SLZZ</p> | <p>+ = plus stroke length</p> |
|---|--|---|-------------------------------|

Extended slide GV

Piston Ø 25



Linear drives DGPL, with guide

Technical data

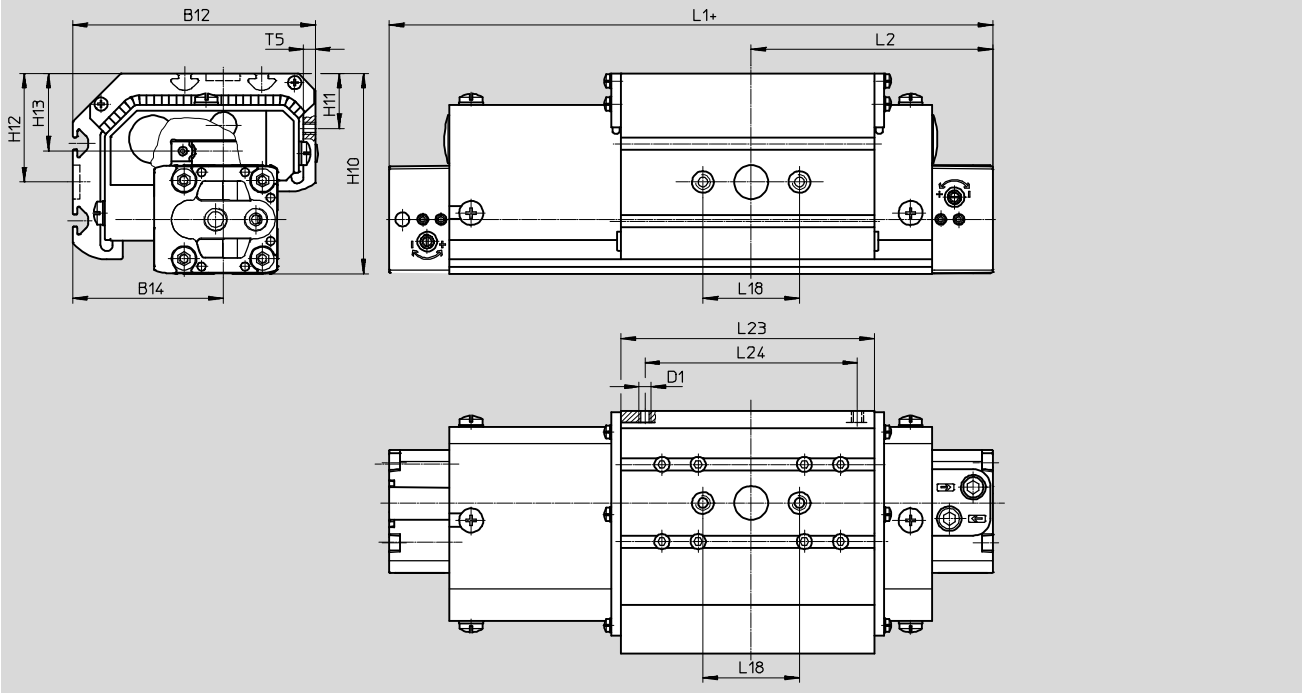
FESTO

Dimensions

Download CAD data → www.festo.com

Protected version GA

Piston Ø 25



Ø	B1	B2	B3	B4	B5	B6	B7	B8	B9	B11	B12	B14
[mm]			+0.2									
25	45	42.2	19	39.1	18	32.5	48	67	32	9.5	100.5	62.4

Ø	D1	D2	D3	D4	D5	D6	D7	D8	D9	EE	H1	H2	H3
[mm]		Ø	Ø		Ø			Ø	Ø				
25	M5	3.3	5.2	M5	8	M4	M6	9	14	G $\frac{1}{8}$	63	57	51

Ø	H4	H5	H6	H7	H8	H10	H11	H12	H13	J1	J2	J3	J4
[mm]													
25	19.6	22.5	5.8	68.5	18.5	83.1	22.8	45	33.1	16.7	3.2	13	6.5

Ø	L1	L2	L3	L4	L5	L6	L7	L8	L9	L11	L12	L15
[mm]	+0.9/-0.2									+0.9/-0.2	+0.3/-0.6	±0.1
25	200	100	17	7	25	109	30	50	130	300	150	100

Ø	L16	L17	L18	L20	L23	L24	T1	T2	T3	T5	T6	T7	T8	W1
[mm]	±0.1	+2	±0.03	±0.1	+0.2						+0.2			
25	150	105	40	205	105	88	13	2	7.5	4.9	2.1	12.5	3	45°

Linear drives DGPL, with guide

Technical data

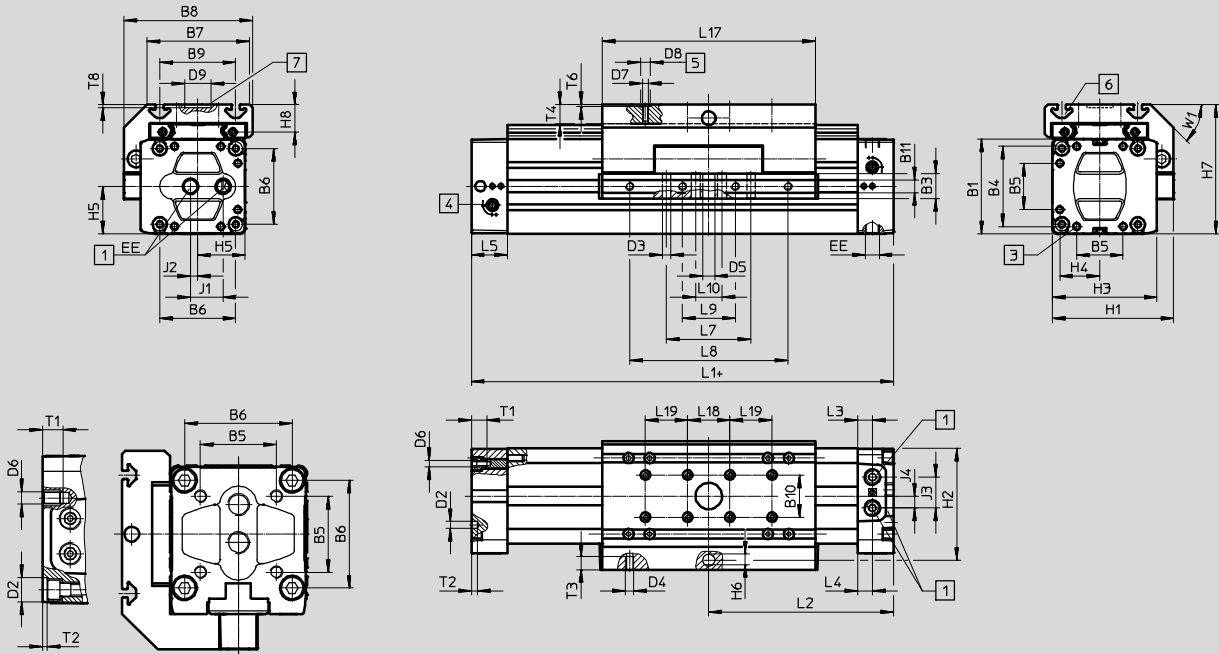


Dimensions

Download CAD data → www.festo.com

Standard slide GK

Piston Ø 32 ... 80



1 DGPL-...: Supply ports on one end cap, freely selectable on 3 sides
 DGPL-...-D2: Supply ports at both ends, freely selectable on 3 sides

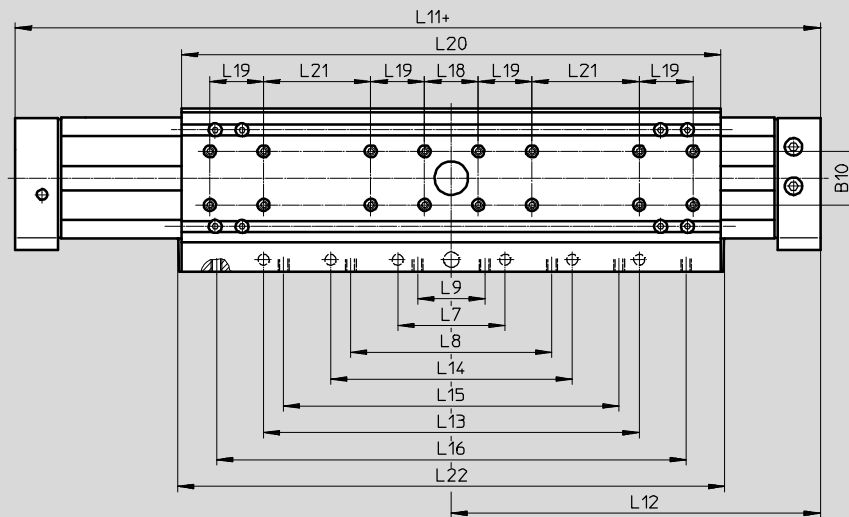
3 Centring hole for foot mounting type HP-...
4 Regulating screw for adjustable end-position cushioning

5 Hole for centring sleeve ZBH-9
6 Mounting slot for slot nut NSTL-25
7 Hole for central mounting SLZZ

+ = plus stroke length

Extended slide GV

Piston Ø 32 ... 63



Linear drives DGPL, with guide

Technical data

∅ [mm]	B1	B3 +0.2	B4	B5	B6	B7	B8	B9	B10 ±0.03	B11	D2 ∅	D3 ∅ +0.2
32	54 +0.4	19	46	21	40	63	79	47 ±0.15	20	9.5	4.3	5.2
40	64 +0.4	21	53	28	49	78.5	96.5	55 ±0.2	20	9.5	4.3	6.5
50	90 +0.4	24	76	44	72	97	122	72 ±0.2	40	12	6.3	8.5
63	106 +0.4	24	89	44	83	121	142	90 ±0.25	40	12	6.3	8.5
80	130 +0.8	36	–	72	102	151.5	188	112 +0.5/-0.2	40	–	23	12.2

∅ [mm]	D4	D5 ∅ H10	D6	D7	D8 ∅ H7	D9 ∅ G7	EE	H1	H2	H3	H4	H5	H6
32	M5	8	M5	M6	9	25	G1/8	72	66	61.8	23	27	5.8
40	M6	10	M5	M6	9	25	G1/4	86	78	71.8	26.5	32	7.7
50	M8	12	M6	M6	9	25	G1/4	115	106	99	38	45	9.7
63	M8	12	M8	M6	9	25	G3/8	131	122	115	44.5	53	9.7
80	M12	20	M12	M6	9	25	G1/2	174	158	140.5	51	85	–

∅ [mm]	H7	H8	J1	J2	J3	J4	L1 +0.9/-0.2	L2	L3	L4	L5	L6	L7
32	77.5	18.5	19	4.2	14	4.1	250	125	18.5	8.5	31	135	50 ±0.1
40	90.5	20	22	5	21	8.5	300	150	11.5	11.5	31	171	70 ±0.1
50	122.5	26	30.8	6.8	29.3	11.3	350	175	14	14	34	206	80 ±0.1
63	144.5	30	36	8	33	12	400	200	13.5	13.5	34	234	110 ±0.1
80	175	36.5	36	8	33.3	36.9	520	260	19	19	45	334	180 ±0.15

∅ [mm]	L8	L9	L10 ±0.15	L11 +0.9/-0.2	L12 +0.9/-0.2	L13 ±0.1	L14 ±0.1	L15 ±0.1	L16 ±0.1	L17	L18 ±0.03
32	100 ±0.1	30 ±0.1	–	380	190	180	–	160	230	131 +0.2	40
40	130 ±0.1	40 ±0.1	–	470	235	160	250	220	–	167 +0.2	40
50	150 ±0.1	50 ±0.1	–	550	275	280	–	250	350	202 +0.2	40
63	190 ±0.1	70 ±0.1	–	650	325	380	–	310	430	230 +0.2	40
80	230 ±0.15	115 ±0.15	60	–	–	–	–	–	–	320 -0.3	40

∅ [mm]	L19 ±0.03	L20	L21 ±0.1	L22	T1	T2	T3	T4 max.	T6 +0.1	T8	W1
32	–	261	40	265	13.2	3	7.5	12.5	2.1	3	45°
40	40	337	40	341	13.2	4	10.5	12.5	2.1	3	45°
50	40	402	80	406	15.2	6	12.5	18.5	2.1	3	45°
63	40	480	120	484	21.2	6	12.5	20.5	2.1	3	45°
80	40	–	–	–	18	4	19	27	2.1	3	45°

Linear drives DGPL, with guide

Technical data

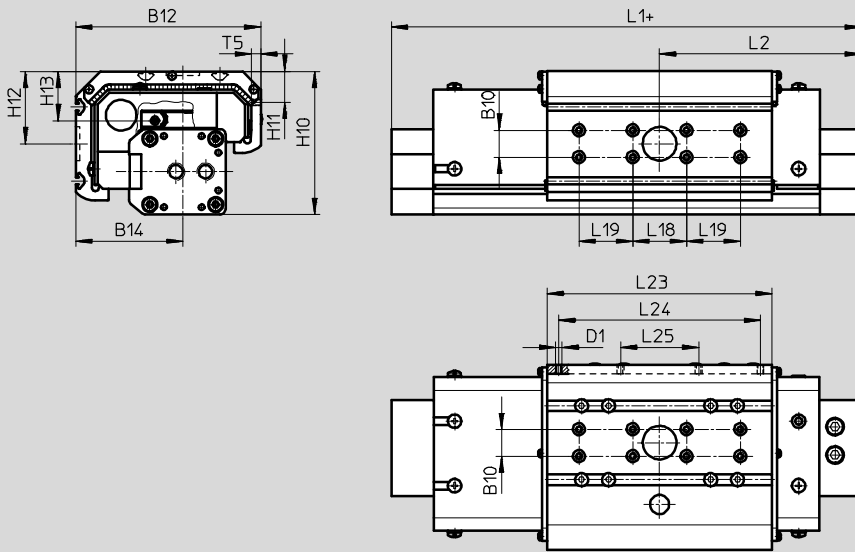
FESTO

Dimensions

Download CAD data → www.festo.com

Protected version GA

Piston Ø 32 ... 40



Ø	B10	B12	B14	D1	H10	H11	H12	H13
[mm]	±0.03							
32	20	112.1	67.6	–	93.1	–	49.5	34.1
40	20	137.6	79.6	□M5	106.6	23.1	54	36.1


Ø	L1	L2	L18	L19	L23	L24	L25	T5
[mm]	+0.9/–0.2	+0.3/–0.6	±0.03	±0.03				
32	250	125	40	–	131	–	–	–
40	300	150	40	40	167	150	58	7

Linear drives DGPL, with guide

Ordering data

Ordering data – Standard strokes		
Piston \varnothing	Part No.	Type
25	526649	DGPL-25-250-PPV-A-B-KF
	526650	DGPL-25-400-PPV-A-B-KF
	526651	DGPL-25-500-PPV-A-B-KF
	526652	DGPL-25-1000-PPV-A-B-KF
32	526657	DGPL-32-250-PPV-A-B-KF
	526658	DGPL-32-400-PPV-A-B-KF
	526659	DGPL-32-500-PPV-A-B-KF
	526660	DGPL-32-1000-PPV-A-B-KF
40	526665	DGPL-40-250-PPV-A-B-KF
	526666	DGPL-40-400-PPV-A-B-KF
	526667	DGPL-40-500-PPV-A-B-KF
	526668	DGPL-40-1000-PPV-A-B-KF

Ordering data – Variable strokes for recirculating ball bearing guide KF		
Piston \varnothing	Part No.	Type
18	161977	DGPL-18-...-PPV-A-KF-B
25	161792	DGPL-25-...-PPV-A-KF-B
32	161793	DGPL-32-...-PPV-A-KF-B
40	161794	DGPL-40-...-PPV-A-KF-B
50	161795	DGPL-50-...-PPV-A-KF-B
63	161796	DGPL-63-...-PPV-A-KF-B
80	161797	DGPL-80-...-PPV-A-KF-B

 Note
 Piston \varnothing 8 and 12
 Linear drives DGC
 → Internet: dgc

Linear drives DGPL, with guide

Ordering data – Modular product

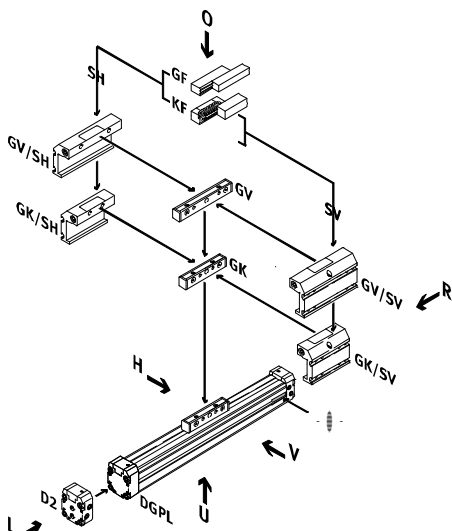
Order code

Mandatory data

GK	Standard slide	D2	Supply port
GV	Extended slide		
SH	Slide at rear		
SV	Slide at front		

Standard slide GK

Extended slide GV



-  Note

The insertion point for the proximity sensor is located on the right-hand side of the pneumatic linear drive DGPL.

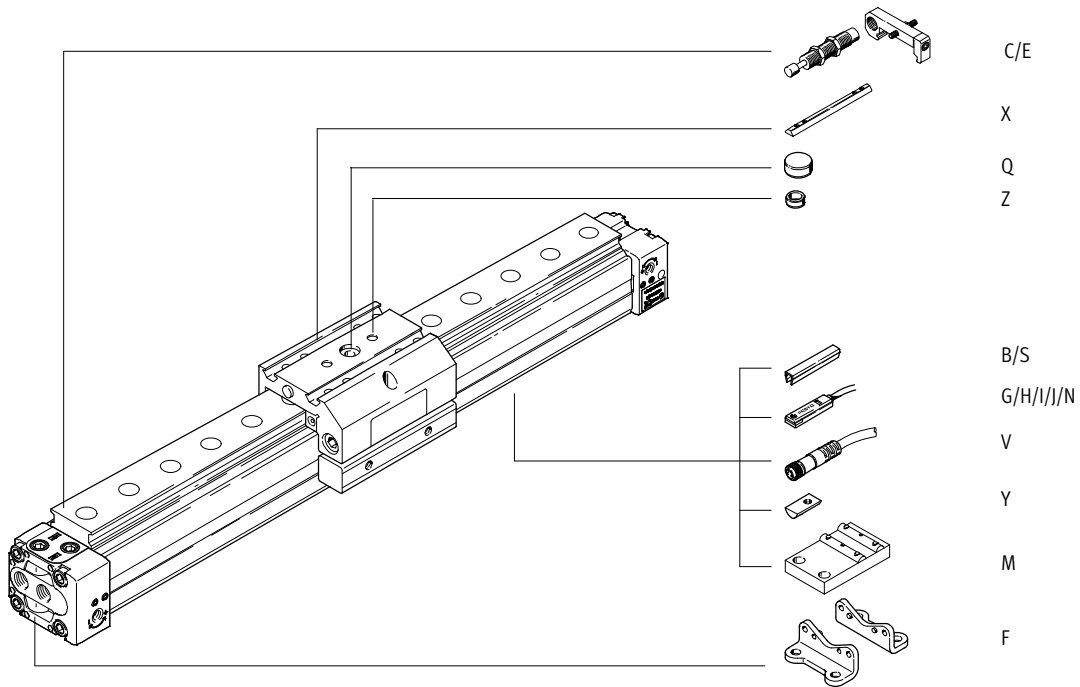
- O top
- U underneath
- R right
- L left
- V front
- H rear

Linear drives DGPL, with guide

Ordering data – Modular product

Order code

Options



Linear drives DGPL, with guide



Ordering data – Modular product

M Mandatory data								O Options →		
Module No.	Function	Piston Ø	Stroke	Cushioning	Position sensing	Generation	Guide	Basic design	Slide attachment position	Supply port
175133	DGPL	18	10 ... 3000	PPV	A	B	KF	GK	SV	D2
175134		25						GV	SH	
175135		32								
175136		40								
175137		50								
175138		63								
175139		80								
Ordering example										
175138	DGPL	- 63	- 800	- PPV	- A	- B	- KF	- GK	- SH	- D2

Ordering table												
Piston Ø	18	25	32	40	50	63	80	Condi- tions	Code	Entry code		
M Module No.	175133	175134	175135	175136	175137	175138	175139					
Function	Linear drive with slide									DGPL	DGPL	
Piston Ø [mm]	18	25	32	40	50	63	80		-...			
Stroke [mm]	10 ... 1800	10 ... 3000						1		-...		
Cushioning	Pneumatic cushioning adjustable at both ends									-PPV	-PPV	
Position sensing	Via proximity sensor									-A	-A	
Generation	B series									-B	-B	
Guide	Recirculating ball bearing guide									-KF		
O Basic design	Standard piston/slide									-GK		
	Extended piston/slide								-	-GV		
Slide attachment position	At rear									-SH		
	Slide at front									-SV		
Compressed air supply port	Compressed air supply port at both ends									-D2		

1 Stroke For piston-Ø 18 with extended piston/slide GV: restricted stroke 10 ... 1750 mm.

Transfer order code

Linear drives DGPL, with guide

Ordering data – Modular product



Options										
Protection	Accessories	Slot cover	Slot nut	Centring sleeve	Central support	Central mounting	Foot mounting	Proximity sensor	Connecting cable	Shock absorber
GA	ZUB	...S ...B	...X ...Y	...Z	...M	...Q	...F	...G ...H ...I ...J ...N	...V	...C ...E
-	: ZUB	- 2S2B	5Y2X	20Z		Q	F	2G		2C

Ordering table													
Piston Ø		18	25	32	40	50	63	80	Conditions	Code	Entry code		
Protection	Protected version						-	-	-	[2]	-GA		
Accessories	Enclosed separately										:ZUB-	:ZUB-	
Slot cover, 2 pcs., 0.5 m	Sensor slot	1 ... 10									...S		
	Mounting slot	-	-	1 ... 10							...B		
Slot nut	Slides	-	1 ... 10								...X		
	Mounting slot	-	-	1 ... 10							...Y		
Centring sleeve (pack of 10)	10, 20, 30, 40, 50, 60, 70, 80, 90										...Z		
Central support	1 ... 10										...M		
Central mounting	-		1 ... 10								...Q		
Foot mounting	1 ... 10										...F		
Proximity sensor	With cable, 2.5 m										...G		
	1 ... 10											...H	
Proximity sensor, contactless	With plug M8										...I		
	1 ... 10											...J	
Proximity sensor, magnetic	N/C contact with cable, 2.5 m										...N		
	1 ... 10											...V	
Connecting cable	M8, 2.5 m										...V		
Shock absorber	Self-adjusting, with retainer	1 ... 10										...C	
		1 ... 10						-	-	-	[3]	...E	

[2] E Only with protected version GA.

Transfer order code

- [] : ZUB - [] [] [] [] [] [] [] [] [] [] [] []

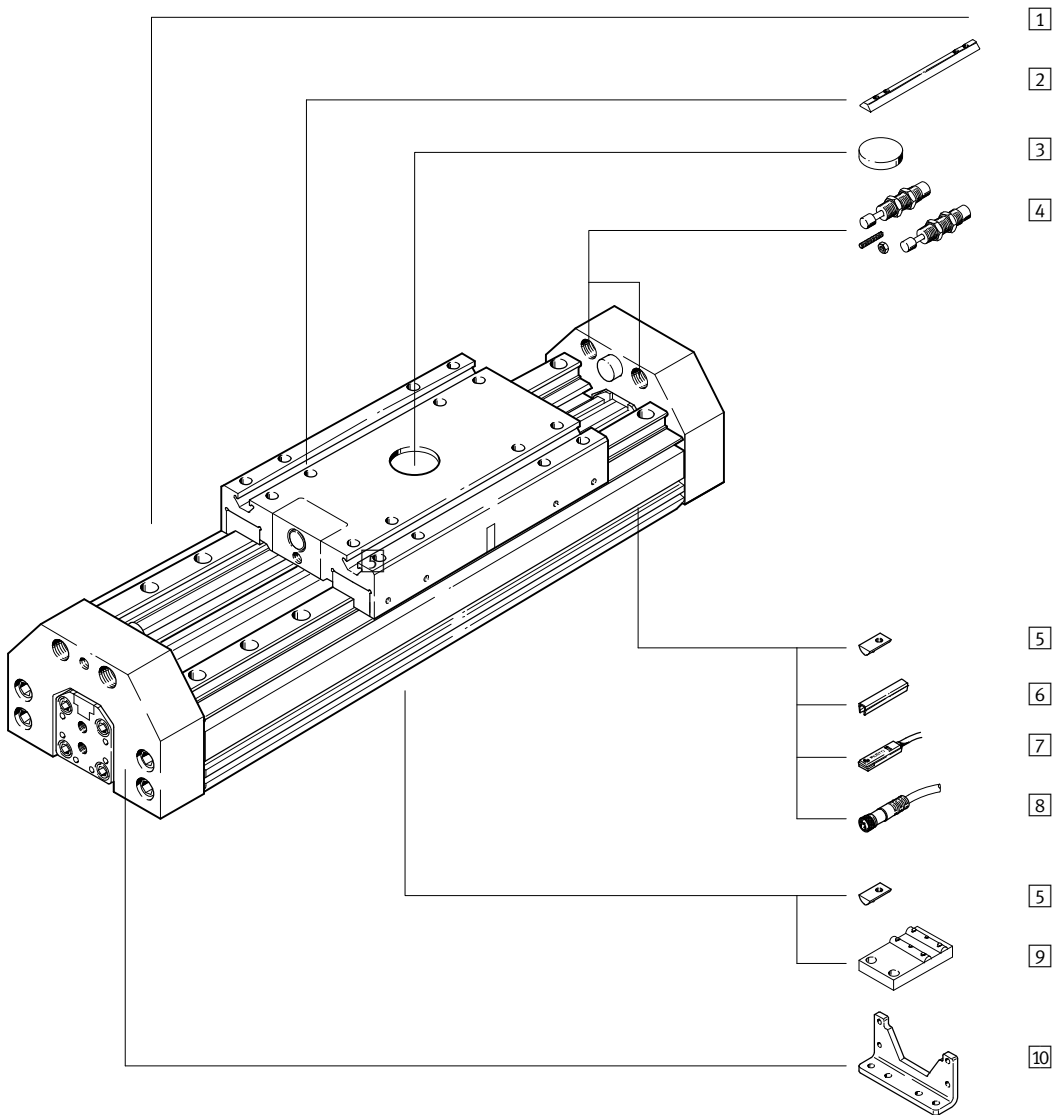
Do not use for new designs!

- I - Type discontinued

Linear drives DGPL-HD, with heavy-duty guide

Peripherals overview

FESTO



Do not use for new designs!

- 1 - Type discontinued

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Linear drives DGPL-HD, with heavy-duty guide

Peripherals overview

Variants and accessories		
Type	Description	→ Page/Internet
1 Linear axis DGPL-HD	Pneumatic linear drive with heavy-duty guide	26
2 Slot nut for slide X	For mounting loads and attachments on the slide	42
3 Central mounting Q	For centring loads and attachments on the slide	42
4 Shock absorber kit D	For slowing higher speeds to a stop	40
5 Slot nut for side mounting slot Y	For mounting attachments	42
6 Slot cover B/S	For protecting against ingress of dirt	42
7 Proximity sensor G/H/I/J/N	For sensing the slide position	43
8 Connecting cable V	For proximity sensor	43
5 Slot nut for mounting slot underneath U	For mounting attachments	42
9 Central support M	For mounting the axis	38
10 Foot mounting F	For mounting the axis	38

Do not use for new designs!

-  - Type discontinued

Linear drives DGPL-HD, with heavy-duty guide

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Type codes

	DGPL	-	25	-	500	-	PPV	-	A	-	B	-	GK	-	D2
Type															
DGPL	Linear drive with heavy-duty guide														
Piston Ø															
25															
Stroke [mm]															
500															
Cushioning															
PPV	Adjustable end position cushioning														
Position sensing															
A	With magnet														
Generation															
B	B series														
Basic design															
GK	Standard slide														
Supply port															
D2	Supply port at both ends														

Do not use for new designs!

- 2 - Type discontinued

FESTO

Linear drives DGPL-HD, with heavy-duty guide

Type codes

→		+ ZUB	- 2S	-	- F			2H	2V	2D
Accessories										
ZUB	Accessories enclosed separately									
Slot cover										
...S	Sensor slot									
...B	Mounting slot									
Slot nut										
...Y	For side mounting slot									
...X	For slide									
...U	For mounting slot underneath									
Central support										
...M	Central support									
Central mounting										
...Q	Central mounting									
Foot mounting										
...F	Foot mounting									
Proximity sensor										
...G	With cable, 2.5 m									
...H	With plug									
...I	Contactless with cable, 2.5 m									
...J	Contactless, plug									
...N	NC contact with cable, 2.5 m									
Connecting cable										
...V	2.5 m									
Shock absorber kit										
...D	For heavy-duty guide									

Do not use for new designs!

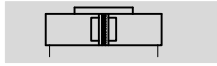
-  - Type discontinued

FESTO

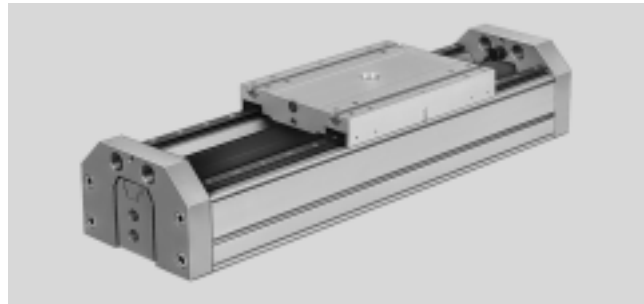
Linear drives DGPL-HD, with heavy-duty guide



Technical data

Function



-  - www.festo.com



-  - Diameter
18 ... 40 mm
-  - Stroke length
10 ... 2160 mm

General technical data						
Piston \varnothing	18-HD18	18-HD25	25-HD25	25-HD40	32-HD40	40-HD40
Design	Pneumatic linear drive with heavy-duty guide					
Protection against rotation/guide	Slotted profile barrel/recirculating ball bearing guide					
Mode of operation	Double-acting					
Moment compensator principle	Positive-locking (slot)					
Mounting position	Any					
Pneumatic port	M5			G $\frac{1}{8}$		G $\frac{1}{4}$
Stroke length [mm]	10 ... 1710	10 ... 1640	10 ... 2160	10 ... 2110		
Cushioning P	Non-adjustable at both ends					
	Self-adjusting at both ends					
Cushioning length [mm]	-					
Position sensing	With magnet					
Max. speed [m/s]	3					

Operating and environmental conditions						
Piston \varnothing	18-HD18	18-HD25	25-HD25	25-HD40	32-HD40	40-HD40
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]					
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)					
Operating pressure [bar]	2 ... 8					1.5 ... 8
Ambient temperature ¹⁾ [°C]	-10 ... +60					

1) Note operating range of proximity sensors.

Forces [N]						
Piston \varnothing	18-HD18	18-HD25	25-HD25	25-HD40	32-HD40	40-HD40
Theoretical force at 6 bar	153		295		483	754

Weight [kg]						
Piston \varnothing	18-HD18	18-HD25	25-HD25	25-HD40	32-HD40	40-HD40
Basic weight with 0 mm stroke	3.7	4.4	5.1	13.9	14.4	15.4
Additional weight per 10 mm stroke	0.089	0.133	0.152	0.212	0.217	0.233
Moving mass	0.53	1.86	1.96	3.48	3.615	3.85

Do not use for new designs!

- 2 - Type discontinued

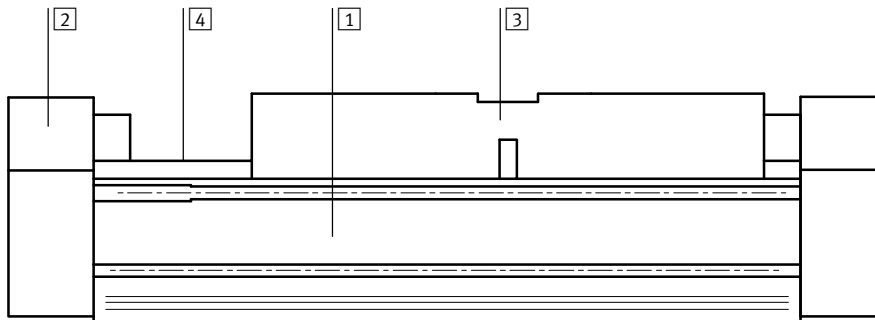
FESTO

Linear drives DGPL-HD, with heavy-duty guide

Technical data

Materials

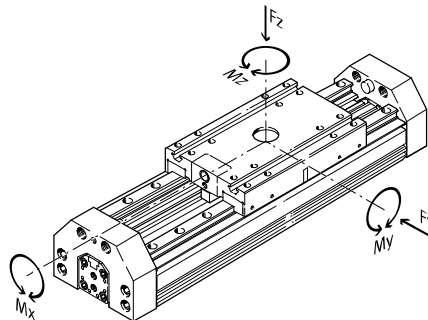
Sectional view



Axis		
1	Profile	Anodised aluminium
2	End cap	Anodised aluminium
3	Slide	Anodised aluminium
4	Guide rail	Steel
-	Seals	Nitrile rubber, polyurethane

Characteristic load values for drive with heavy-duty guide HD

The indicated forces and torques refer to the centre of the heavy-duty guide. 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 indicated forces and torques, the following equation 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 and torques				
Piston Ø		HD-18	HD25	HD-40
$F_{y_{\max}}$	[N]	1820	5400	5400
$F_{z_{\max}}$	[N]	1820	5600	5600
$M_{x_{\max}}$	[Nm]	70	260	375
$M_{y_{\max}}$	[Nm]	115	415	560
$M_{z_{\max}}$	[Nm]	112	400	540

Do not use for new designs!

- I - Type discontinued

Linear drives DGPL-HD, with heavy-duty guide

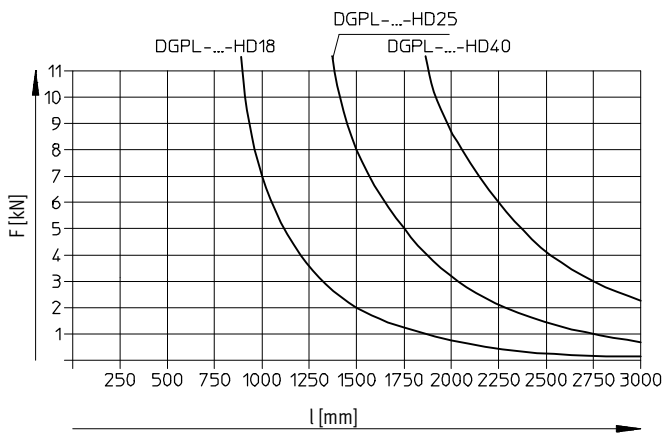
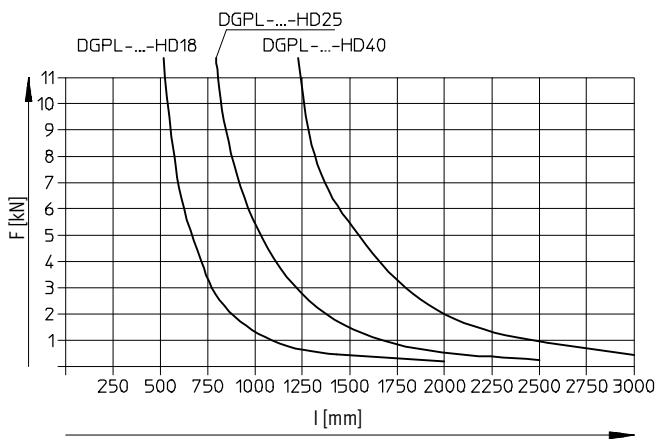
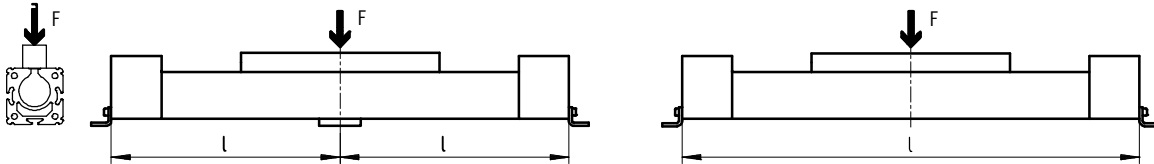
Technical data

FESTO

Maximum permissible support span l as a function of the force F

The axis may need to be supported with central supports MUP in order to limit deflection in the case of long strokes. The following graphs can be used to determine the maximum permissible support span l as a function of force F acting on the axis.

Force on the surface of the slide



Do not use for new designs!

- Type discontinued

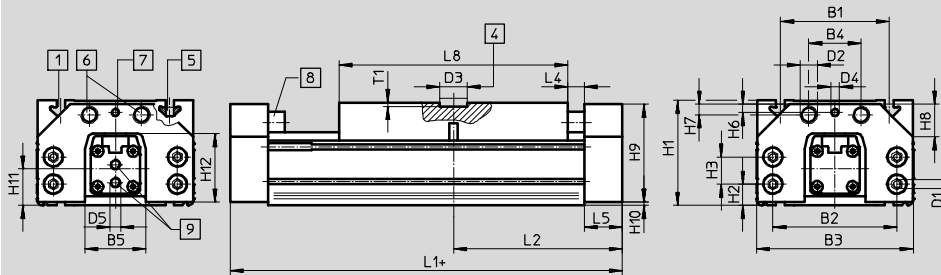
FESTO

Linear drives DGPL-HD, with heavy-duty guide

Technical data

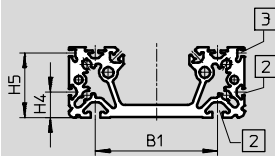
Dimensions

Download CAD data → www.festo.com



- 1 Mounting slot for slot nut NSTH
 - 2 Mounting slot for slot nut NST
 - 3 Sensor slot for proximity sensor
 - 4 Central mounting SLZZ
 - 5 Slot nut NSTH
 - 6 Thread for shock absorber YHD or YSR...-C
 - 7 Thread for threaded pin (shock absorber kit)
 - 8 Rubber buffer
 - 9 Supply port at one end (D2 variant: supply port at both ends)
- + = plus stroke length

Profile



Heavy-duty guide [mm]	B1	B2 ±0.2	B3	B4	B5	D1	D2	D3 ∅ G7	D4	D5	H1	H2	H3	H4
18-HD18	80 ±0.3	85	116	40	36	M5	M12x1	25	M6	M5	70	12.8	19.5 ±0.1	15
18-HD25	100 ±0.3	114	144	48	56 ±0.5	M8	M16x1		M8	G1/8	93.5	18.5	25 ±0.2	22
25-HD25	140 ±0.35	156	185	54	68		M22x1.5			G1/4	124.5	21	48 ±0.2	36
25-HD40														
32-HD40														
40-HD40														

Heavy-duty guide [mm]	H5	H6	H7	H8	H9	H10	H11	H12	L1	L2	L4	L5	L8	T1
18-HD18	43.3	5.9	8.7	20x45°	68	0.8	25.5	49	240	120	15	25	160	3.5
18-HD25	53.8	9	9.8	30x45°	90	2	33	63	310	155		35	210	
25-HD25	83.8	5.5	15.5	34x45°	120		59	89	354	177		32	260	4
25-HD40														
32-HD40														
40-HD40														

Do not use for new designs!

-  - Type discontinued

Linear drives DGPL-HD, with heavy-duty guide

Ordering data– Modular products

FESTO

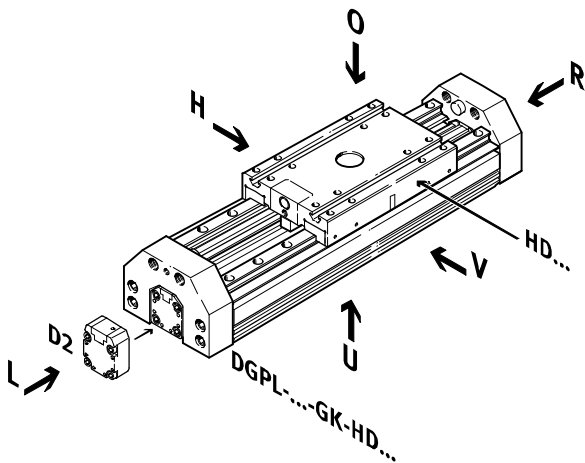
Order code

Mandatory data

GK Standard slide

D2 Supply port

With heavy-duty guide HD



-  - Note

The insertion point for the proximity sensor is located on the right side of the heavy-duty guide.

O top
U underneath
R right
L left
V front
H rear

Do not use for new designs!
- 2 - Type discontinued

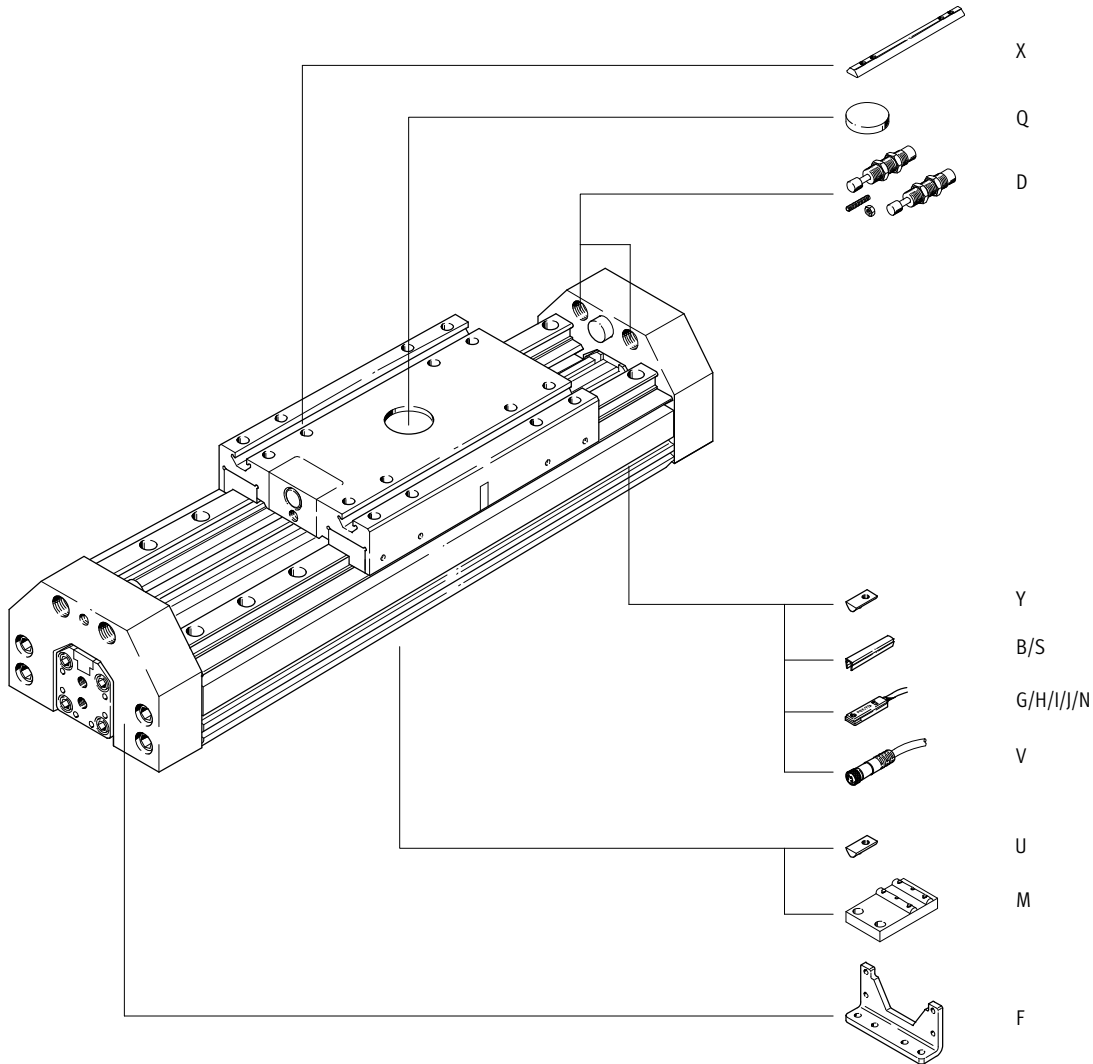
FESTO

Linear drives DGPL-HD, with heavy-duty guide

Ordering data – Modular products

Order code

Options



Do not use for new designs!

-  - Type discontinued

Linear drives DGPL-HD, with heavy-duty guide

FESTO

Ordering data – Modular products

M Mandatory data						O Options →		
Module No.	Function	Size	Stroke	Cushioning	Position sensing	Guide	Basic design	Supply port
175133	DGPL	18	10 ... 2160	PPV	A	HD18	GK	D2
175134		25				HD25		
175135		32				HD40		
175136		40						
Ordering example								
175134	DGPL	25	800	PPV	A	HD25	GK	D2

Ordering table										
Size	18	25	32	40	Condi- tions	Code	Entry code			
M	Module No.	175133	175134	175135	175136					
	Function	Pneumatic linear drive with heavy-duty guide						DGPL	DGPL	
	Size	18	25	32	40		-...			
	Stroke [mm]	HD18	10 ... 1710	-	-		-...			
		HD25	10 ... 1650	10 ... 2160	-		-...			
		HD40	-	10 ... 2110			-...			
	Cushioning	Pneumatic cushioning, adjustable at both ends						-PPV	-PPV	
	Position sensing	With magnet						-A	-A	
	Guide Heavy-duty guide HD	HD18	-	-	-		-HD18			
		HD25		-	-		-HD25			
		-	HD40				-HD40			
O	Basic design	Standard piston/slide						-GK		
↓	Supply port	At both ends						-D2		

Transfer order code

DGPL - - - PPV - A - - - -

Do not use for new designs!

- 2 - Type discontinued

Linear drives DGPL-HD, with heavy-duty guide

FESTO

Ordering data – Modular products

Options								
Accessories	Slot cover	Slot nut	Central support	Central mounting	Foot mounting	Proximity sensor, magnetic	Connecting cable	Shock absorber kit
ZUB	...S ...B	...X ...Y ...U	...M	...Q	...F	...G ...H ...I ...J ...N	...V	...D
: ZUB	- 2S2B	2X5Y5U		2Q	F	2G		2D

Ordering table									
Size		18	25	32	40	Condi- tions	Code	Entry code	
↓	Accessories	Enclosed separately						:ZUB-	:ZUB-
0	Slot cover, 2 pcs., 0.5 m	Sensor slot	1 ... 10					...S	
		Mounting slot	1 ... 10					...B	
	Slot nut	Slide	1 ... 10					...X	
		Mounting slot	1 ... 10					...Y	
		Mounting slot underneath	1 ... 10					...U	
	Central support	1 ... 10					...M		
	Central mounting	1 ... 10					...Q		
	Foot mounting	1 ... 10					...F		
	Proximity sensor, magnetic	With cable, 2.5 m	1 ... 10					...G	
		With plug M8	1 ... 10					...H	
	Proximity sensor, magnetic, contactless	With cable, 2.5 m	1 ... 10					...I	
		With plug M8	1 ... 10					...J	
	Proximity sensor, magnetic	N/C contact with cable, 2.5 m					...N		
	Connecting cable	M8, 2.5 m	1 ... 10					...V	
			1 ... 10						
	Shock absorber kit	1 ... 10					...D		

Transfer order code

: ZUB - [] [] [] [] [] [] [] [] [] []

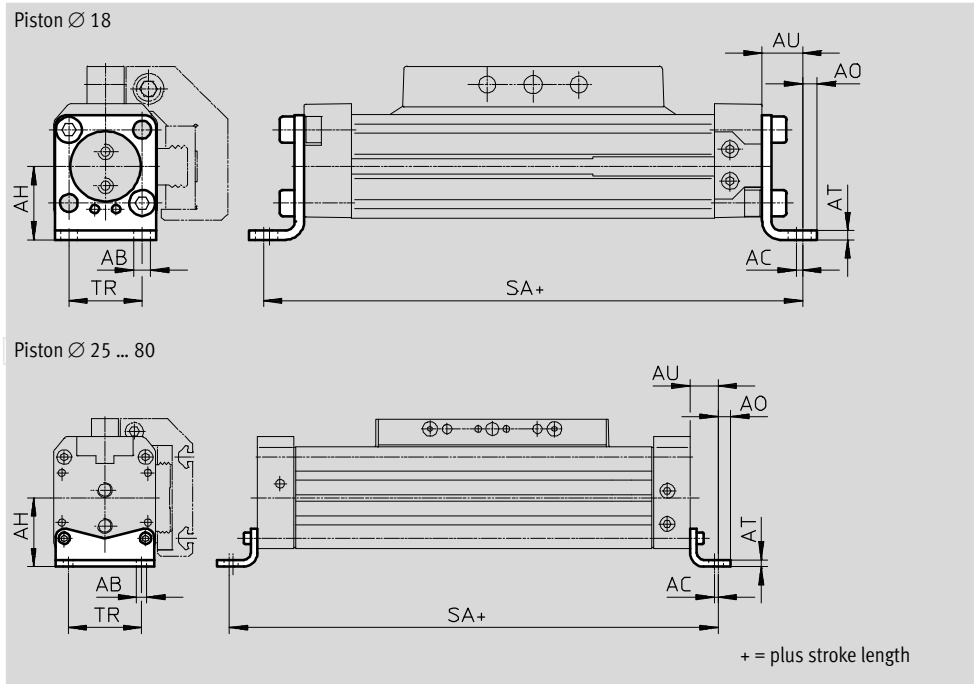
Linear drives DGPL

Accessories



Foot mounting HP
(order code F)

Material:
Galvanised steel
Free of copper, PTFE and silicone



Dimensions and ordering data												
For Ø	AB Ø	AC	AH	AO	AT	AU	SA		TR	Weight [g]	Part No.	Type
							GK	GV				
[mm]												
18	5.5	2	24	4.8	3	13.2	176.5	256.4	24	59	158472	HP-18
25	5.5	2	29.5	6	3	13	226	326	32.5	61	150731	HP-25
32	6.6	2	37	7	4	17	284	414	38	117	150732	HP-32
40	6.6	2	46	8.5	5	17.5	335	505	45	188	150733	HP-40
50	9	3	61	11	6	25	400	600	65	243	150734	HP-50
63	11	3	69	13.5	6	28	456	706	75	305	150735	HP-63
80	13	3	85	12	8	28	576	-	72	620	158453	HP-80

Linear drives DGPL

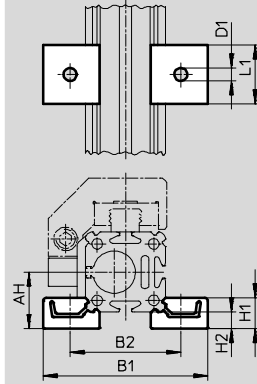
Accessories

Central support MUP (order code: M)

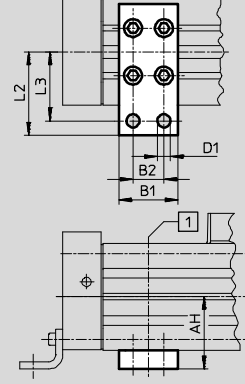
Material:
Galvanised steel
Free of copper, PTFE and silicone



Piston Ø 18 and 25



Piston Ø 32 ... 63



1 Position of the central support along the profile barrel is freely selectable

Dimensions and ordering data

For Ø	AH	B1	B2	D1	H1	H2	L1	L2	L3	Weight	Part No.	Type
[mm]				Ø						[g]		
18	24	70.5	47	5.5	13	7	25	-	-	29	150736	MUP-18/25
25	29.5	81	58	5.5	13	7	25	-	-	33	150736	MUP-18/25
32	37	35	22	6.6	-	-	-	41.5	35	89	150737	MUP-32
40	46	35	22	6.6	-	-	-	47	40	126	150738	MUP-40
50	61	50	26	11	-	-	-	70	58	241	150739	MUP-50
63	69	50	26	11	-	-	-	77	65	340	150800	MUP-63
80	85	50	26	11	-	-	-	88	76	590	158455	MUP-80

Linear drives DGPL

Accessories



Foot mounting HHP

For heavy-duty guide
(order code F)

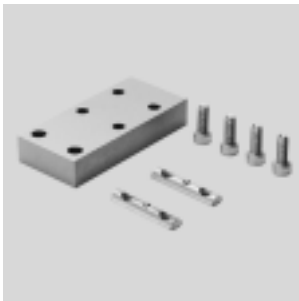
Material:
Galvanised steel



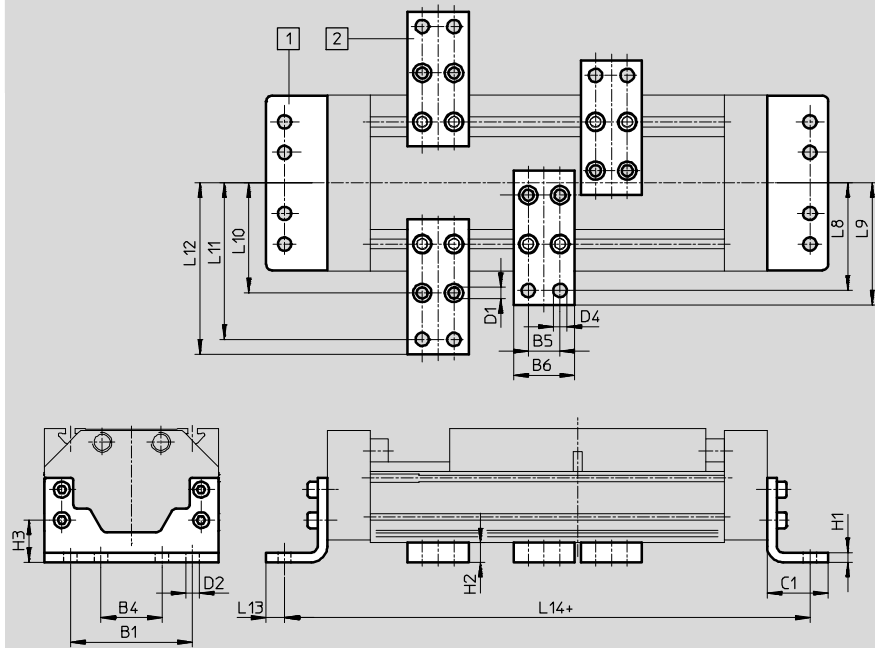
Central support MUP

For heavy-duty guide
(order code M)

Material:
Galvanised steel
Free of copper, PTFE and silicone



DGPL-...-HD18/-HD25/-HD40



- 1 Foot mounting HHP
- 2 Central support MUP

+ = plus stroke length

Dimensions and ordering data											
For heavy-duty guide [mm]	B1	B4	B5	B6	C1	D1 ∅	D2 ∅	D4 ∅	H1	H2	H3
HD18	80	40	22	35	34	5.5	6.6	6.6	8	14	26.8
HD25	100	50	26	50	50	9	11	11	8	16	34.5
HD40	140	70	26	50	50	9	11	11	10	16	37

For heavy-duty guide [mm]	L8	L9	L10	L11	L12	L13	L14	Weight [g]	Part No.	Type
HD18	68	75	64	92	99	9	290	357	161993	HHP-18
								126	150738	MUP-40
HD25	88	100	90	128	140	15	380	794	161994	HHP-25
								347	150739	MUP-50
HD40	108	120	110	148	160	15	424	1318	161995	HHP-40
								347	150739	MUP-50


Linear drives DGPL

Accessories

Shock absorber YSR-...-C
(order code: C)

Materials:
Housing: Galvanised steel
Piston rod: High-alloy steel
Seals: Nitrile rubber, polyurethane
Free of copper, PTFE and silicone



 Note
Shock absorber YSRW with progressive characteristic curve
→ Internet: ysrw

Ordering data		Part No.	Type
For Ø [mm]	Weight [g]		
18	50	34571	YSR-8-8-C
25	70	34572	YSR-12-12-C
32	70	34572	YSR-12-12-C
40	140	34573	YSR-16-20-C
50	140	34573	YSR-16-20-C
63	240	34574	YSR-20-25-C
80	240	34574	YSR-20-25-C

Shock absorber retainer KYP
(order code: C)

Material:
Retainer: Aluminium
Sleeve: Corrosion-resistant steel

Shock absorber not included in scope of delivery.



1 Shock absorber retainer KYP (if the retainer is in contact with the front cap, the cap serves as position retainer, the entire stroke length can be utilised)

2 Shock absorber YSR-...-C

3 Position retainer (included in the scope of delivery) either behind or underneath the shock absorber retainer KYP

Dimensions and ordering data							
For Ø	B8	D1	D5	H2	H4	Weight [g]	Part No. Type
18	14	M12x1	M4	50.5	4.5	65	158907 KYP-18
25	19	M16x1	M5	69.5	6	95	158908 KYP-25
32	25	M16x1	M5	80	8	130	158909 KYP-32
40	32	M22x1.5	M5	102	8	209	158910 KYP-40
50	35	M22x1.5	M8	124	10	415	158911 KYP-50
63	44	M26x1.5	M10	152.5	11.5	609	158912 KYP-63
80	44	M26x1.5	M10	179.5	11.5	774	158913 KYP-80

Linear drives DGPL

Accessories

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Shock absorber DG-GA

in end position

Protected version GA

(order code: E)

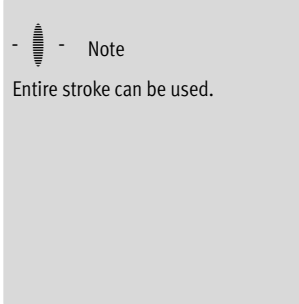
Material:

Housing: Galvanised steel

Piston rod: High-alloy steel

Seals: Nitrile rubber, polyurethane

Free of copper, PTFE and silicone



Ordering data			
For Ø	Weight [g]	Part No.	Type
25	70	192875	DG-GA-25-YSR
32	93	192876	DG-GA-32-YSR
40	140	192877	DG-GA-40-YSR

Shock absorber kit YHD

For heavy-duty guide

(order code: D)

Materials:

Housing: Galvanised steel

Seals: TPE-U(PU) NBR

Free of copper, PTFE and silicone






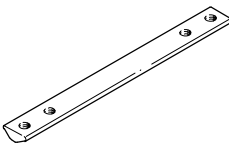


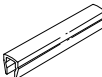
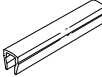
Ordering data			
For size	Weight [g]	Part No.	Type
18	203	174544	YHD-18
25	293	174545	YHD-25
40	515	174546	YHD-40

Ordering data – One-way flow control valves			Technical data → Internet: grla		
	Port	For tubing O.D.	Material	Part No.	Type
	Thread				
	M5	3	Metal design	193137	GRLA-M5-QS-3-D
		4		193138	GRLA-M5-QS-4-D
	G1/8	4		193143	GRLA-1/8-QS-4-D
		6		193144	GRLA-1/8-QS-6-D
	G1/4	6		193146	GRLA-1/4-QS-6-D
		8		193147	GRLA-1/4-QS-8-D
	G3/8	8		193150	GRLA-3/8-QS-8-D
		10		193151	GRLA-3/8-QS-10-D
	G1/2	12		193152	GRLA-1/2-QS-12-D

Linear drives DGPL

Accessories

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Ordering data for DGPL				Technical data → Internet: mounting component		
	For Ø [mm]	Comment	Order code	Part No.	Type	PU ¹⁾
Slot nut ABAN/NST						
	18, 25	For mounting slot	Y	8003032	ABAN-1M4-5	4
	18, 25			526091	NST-HMV-M4²⁾	10
	32, 40			150914	NST-5-M5	1
	50, 63, 80			150915	NST-8-M6	
Slot nut NSTL						
	25	For slide	X	158410	NSTL-25	1
	32			158411	NSTL-32	
	40			158412	NSTL-40	
	50			158413	NSTL-50	
	63			158414	NSTL-63	
	80			161356	NSTL-80	
Centring pin/sleeve ZBS/ZBH						
	18	For slide	Z	150928	ZBS-5	10
	25 ... 80			150927	ZBH-9	
Central mounting SLZZ						
	25	For slide	Q	150900	SLZZ-16/10	1
	32, 40			150901	SLZZ-25/16	
	50 ... 80			150904	SLZZ-50/40	
Slot cover ABP						
	32, 40	For mounting slot Every 0.5 m	B	151681	ABP-5	2
	50, 63, 80			151682	ABP-8	
Slot cover ABP-S						
	18 ... 80	For sensor slot Every 0.5 m	S	563360	ABP-5-S1	2


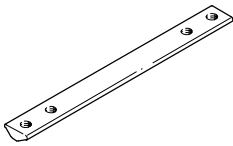

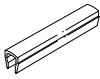
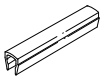
1) Packaging unit

2) Piston Ø 18 and 25: cannot be used with DGPL-...-D2 (compressed air connection at both ends)

Linear drives DGPL

Accessories

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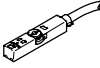
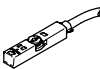
Ordering data for heavy-duty guide DGPL-HD				Technical data → Internet: mounting component		
	For heavy-duty guide [mm]	Comments	Order code	Part No.	Type	PU ¹⁾
Slot nut NST						
	18, 25	For profile barrel at side	Y	150914	NST-5-M5	1
	40			150915	NST-8-M6	
	18	For profile barrel underneath	U	150914	NST-5-M5	
	25, 40			150915	NST-8-M6	
Slot nut NSTH						
	18	For slide	X	161020	NSTH-18	1
	25			161021	NSTH-25	
	40			161022	NSTH-40	
Central mounting SLZZ						
	18 ... 40	For slide	Q	150901	SLZZ-25/16	1
Slot cover ABP						
	18, 25 underneath	For mounting slot on the side and underneath, each 0.5 m	B	151681	ABP-5	2
	25 on the side, 40			151682	ABP-8	
Slot cover ABP-S						
	18 ... 40	For sensor slot Every 0.5 m	S	151680	ABP-5-S	2

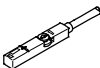
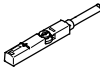
1) Packaging unit



Linear drives DGPL

Accessories

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Ordering data – Proximity sensor for T-slot, magneto-resistive					Technical data → Internet: smt	
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Inserted in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-wire	2.5	574335	SMT-8M-A-PS-24V-E-2,5-OE
			Plug M8x1, 3-pin	0.3	574334	SMT-8M-A-PS-24V-E-0,3-M8D
			Plug M12x1, 3-pin	0.3	574337	SMT-8M-A-PS-24V-E-0,3-M12
		NPN	Cable, 3-wire	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
N/C contact						
	Inserted in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-wire	7.5	574340	SMT-8M-A-PO-24V-E-7,5-OE

Ordering data – Proximity sensors for T-slot, magnetic reed					Technical data → Internet: sme	
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Inserted in the slot from above, flush with the cylinder profile	Contacting	Cable, 3-wire	2.5	543862	SME-8M-DS-24V-K-2,5-OE
				5.0	543863	SME-8M-DS-24V-K-5,0-OE
			Cable, 2-wire	2.5	543872	SME-8M-ZS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543861	SME-8M-DS-24V-K-0,3-M8D
N/C contact						
	Inserted in the slot from above, flush with the cylinder profile	Contacting	Cable, 3-wire	7.5	546799	SME-8M-DO-24V-K-7,5-OE

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
	Straight socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	541363	NEBU-M12G5-K-2.5-LE3
			5	541364	NEBU-M12G5-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
	Angled socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	541367	NEBU-M12W5-K-2.5-LE3
			5	541370	NEBU-M12W5-K-5-LE3


Linear drives DGPL

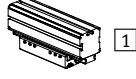
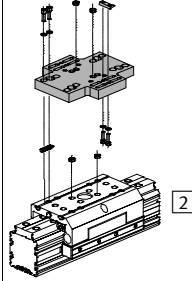
Accessories



**Adapter kit
HMVK**

Materials:
Wrought aluminium alloy
Free of copper and PTFE
RoHS-compliant

 Note
The kit includes the individual mounting interface as well as the necessary mounting material.

Permissible drive/drive combinations with adapter kit			Download CAD data → www.festo.com		
Combination	[1] Drive	[2] Drive	Adapter kit		
	Size	Size	CRC ¹⁾	Part No.	Type
DGP(l)L, DGE, DGEA/DGPL	DG...	DGPL	HMVK		
 	Direct slide/slide mounting				
	18, 25	25	2	196779	HMVK-DL25-DL18/25
	25	32		196781	HMVK-DL32/40-DLA18-32
	18 ²⁾ , 25, 32 ³⁾	40		196781	HMVK-DL32/40-DLA18-32
	25 ²⁾ , 40	63		196783	HMVK-DL63-DLA25/40
	Direct slide/profile mounting				
	18	18	2	196780	HMVK-DL18/25-DL-18/25
	25	25		196780	HMVK-DL18/25-DL-18/25
	25	32, 40		196782	HMVK-DL32/40-DL-18/25
	32 ³⁾ , 40	40		196781	HMVK-DL32/40-DLA18-32

- 1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.
- 2) Only for DGEA-...
- 3) Only for DGPL/DGPL-...