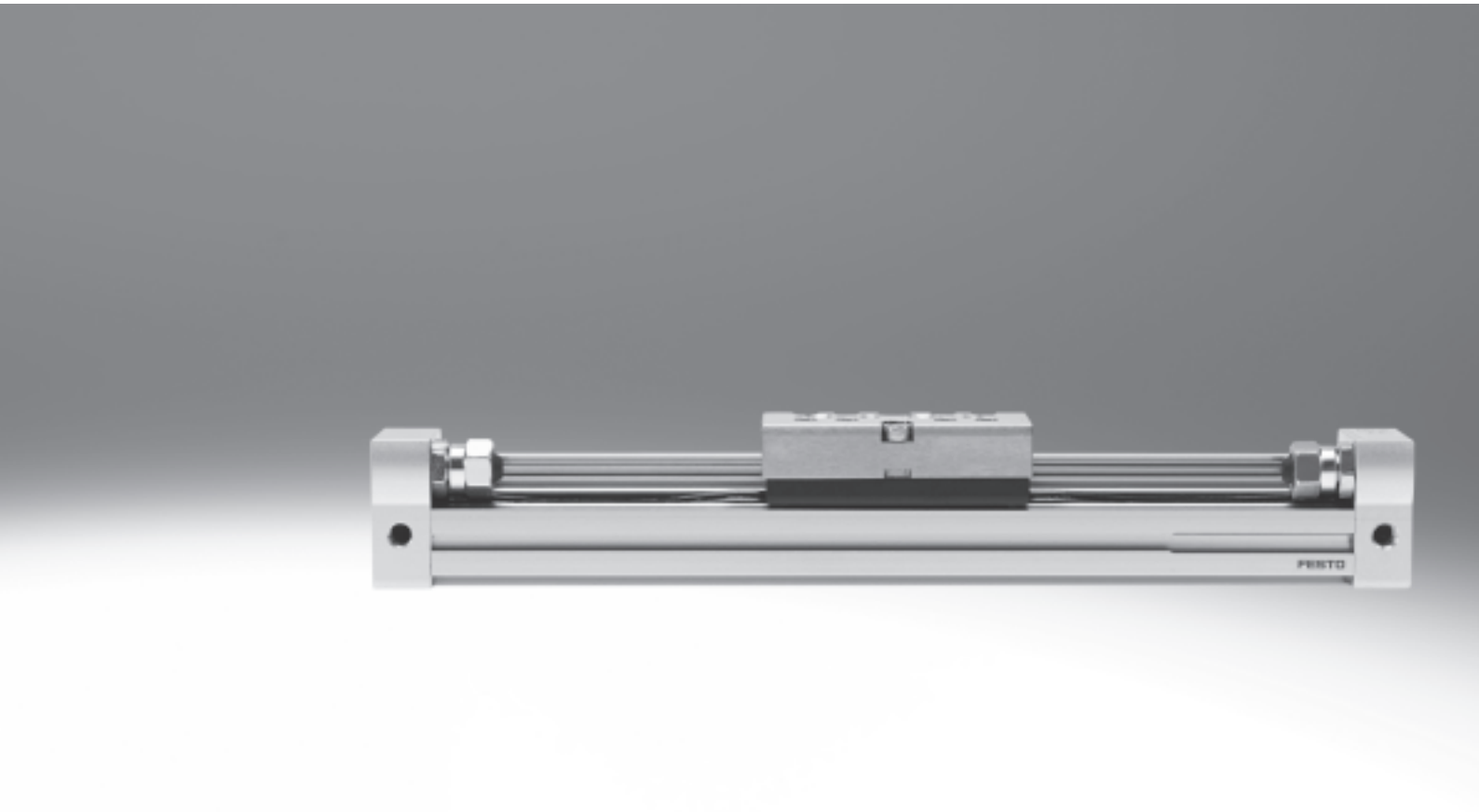
Linear drives DGC

FESTO



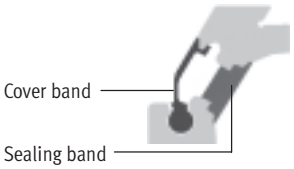
New
Lubrication adapter

Linear drives DGC

Key features

General information

- Compact – fitting length relative to stroke
- Loads and devices can be directly mounted on the slide
- Three types of cushioning available:
  - Elastic cushioning
  - Pneumatic cushioning
  - Hydraulic cushioning
- All settings accessible from one side:
  - Precision end-position adjustment
  - Position of proximity sensors
  - Mounting of drive
  - Speed regulation
  - Pneumatic end-position cushioning
- Sealing system



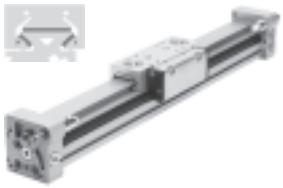
Advantages of the sealing system:
- Long strokes with no restrictions
- Virtually no leakage

Wide choice of variants

Basic design DGC-G

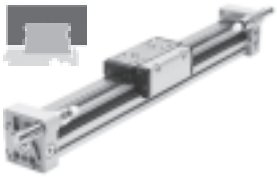
- Piston ∅ 8 ... 63 mm
- Stroke lengths from 1 ... 8,500 mm
- Guide backlash = 0.2 mm
- For small loads
- Operating behaviour with torque load = average

Plain-bearing guide DGC-GF



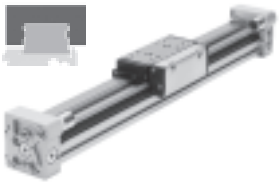
- Piston ∅ 18 ... 63 mm
- Stroke lengths from 1 ... 8,500 mm
- Guide backlash = 0.05 mm
- For small and medium loads
- Operating behaviour with torque load = average

Recirculating ball bearing guide DGC-KF



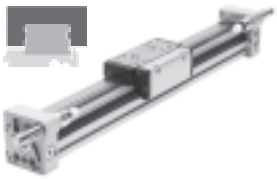
- Piston ∅ 8 ... 63 mm
- Stroke lengths from 1 ... 8,500 mm
- Guide backlash = 0 mm
- For medium and large loads
- Precision mounting interface with stainless steel slide
- Operating behaviour under torque load = very good

Recirculating ball bearing guide with protected guide DGC-KF-GP



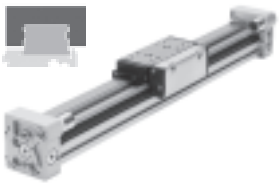
- Piston ∅ 18 ... 40 mm
- Stroke lengths from 1 ... 8,500 mm
- Guide backlash = 0 mm
- The protected guide cleans the guide rail and protects the recirculating ball bearing guide by means of an additional wiper seal and lubrication unit

Passive guide axis DGC-FA



- Without drive
- Piston ∅ 8 ... 63 mm
- Stroke lengths from 1 ... 8,500 mm
- Guide backlash = 0 mm
- Precision guide, suitable for DGC-KF. Can be used as machine component or as twin guide with DGC-KF

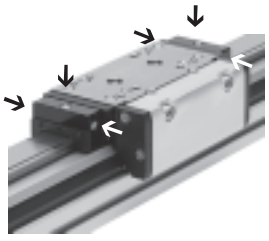
Passive guide axis with protected guide DGC-FA-GP



- Without drive
- Piston ∅ 18 ... 40 mm
- Stroke lengths from 1 ... 8,500 mm
- Guide backlash = 0 mm
- The protected guide cleans the guide rail and protects the recirculating ball bearing guide by means of an additional wiper seal and lubrication unit

Central lubrication system

For DGC-KF with recirculating ball bearing guide



The lubrication adapter enables the guide of the linear drive DGC-KF to be permanently lubricated in applications in humid or wet ambient conditions using semi or fully automatic relubrication devices.
The adapters are suitable for oils and greases.

- For piston ∅ 25, 32, 40, 63 mm
- Connections:
  - On both sides of the slide
  - In three places (front, top, rear) on each side

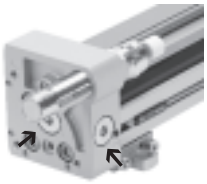
Technical data ➔ 51
Order code C in the modular product system ➔ 65

Linear drives DGC

Key features

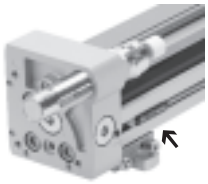
Versatile

1 Supply ports



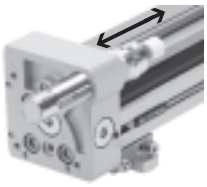
- Options on two sides (on the end face or at the front)
- For DGC-G/DGC-GF/DGC-KF

2 Proximity sensor G/H/I/J



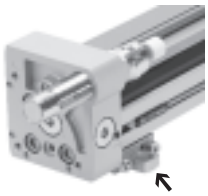
- Proximity sensors can be integrated, which means there is no projection. Cable can be guided through the slot behind a second sensor
- For DGC-G/DGC-GF/DGC-KF

3 Precision end-position adjustment



- Between 0 ... 25 mm per side
- For DGC-GF/DGC-KF/DGC-FA

4 Profile mounting M

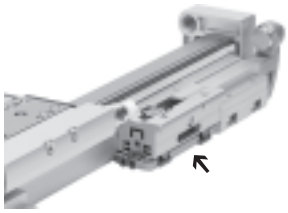


- Profile mounting remains on the base plate after the drive is dismantled. This means faster assembly and removal without repeat adjustment
- For DGC-G/DGC-GF/DGC-KF/DGC-FA

5 Mechanical end-position limiter YWZ

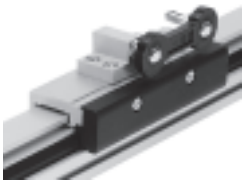
- For variable stroke adjustment, e.g. for format adjustments
- The end stop can be mounted at any position along the stroke
- For DGC-GF/DGC-KF/DGC-FA

6 Intermediate position module Z1/Z2/Z3



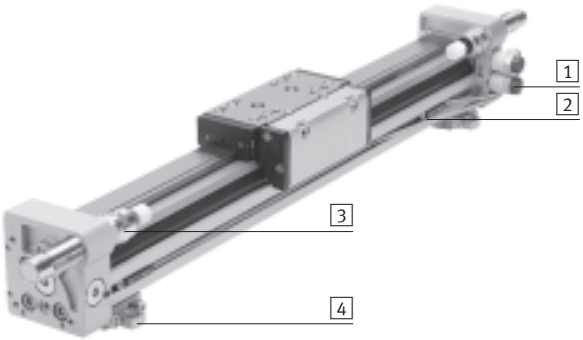
- Enables variable intermediate positions
- The intermediate position module can be mounted at any position along the stroke
- Precision repetition accuracy (0.02 mm) with high dynamic response
- For DGC-KF

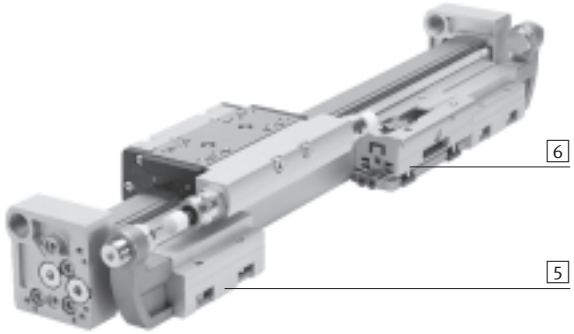
Moment compensator FK



- Compensates for inaccuracies during mounting of the linear drive and external guide
- Max. offset 2.5 mm
- For DGC-G

Example

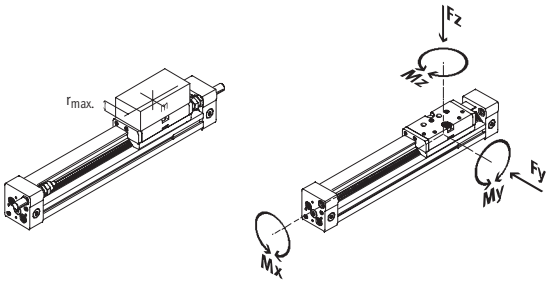




Linear drives DGC

Key features

Product variants



	Piston ∅ [mm]	Theoretical force at 6 bar [N]	Max. perm. effective load[1] m [kg]/ at max. load distance r [mm]	Guide characteristics Fy [N]	Fz [N]	Mx [Nm]	My [Nm]	Mz [Nm]	➔ Page/ Internet
Basic design DGC-G									
	8	30	0.06/25	150	150	0.5	2	2	8
	12	68	0.1/35	300	300	1.3	5	5	
	18	153	–/–	70	340	1.9	12	4	
	25	295	–/–	180	540	4	20	5	
	32	483	–/–	250	800	9	40	12	
	40	754	–/–	370	1,100	12	60	25	
	50	1,178	–/–	480	1,600	20	150	37	
	63	1,870	–/–	650	2,000	26	150	48	
Plain-bearing guide DGC-GF									
	18	153	3/35	440	540	3.4	20	8.5	24
	25	295	8/50	640	1,300	8.5	40	20	
	32	483	11/50	900	1,800	15	70	33	
	40	754	15/50	1,380	2,000	28	110	54	
	50	1,178	48/50	1,500	2,870	54	270	103	
	63	1,870	75/50	2,300	4,460	96	450	187	
Recirculating ball bearing guide DGC-KF/DGC-KF-GP									
	8	30	0.7/25	300	300	1.7	4.5	4.5	42
	12	68	1.8/35	650	650	3.5	10	10	
	18	153	10/35	1,850	1,850	16	51	51	
	25	295	30/50	3,050	3,050	36	97	97	
	32	483	30/50	3,310	3,310	54	150	150	
	40	754	50/50	6,890	6,890	144	380	380	
	50	1,178	90/50	6,890	6,890	144	634	634	
	63	1,870	130/50	15,200	15,200	529	1,157	1,157	
Passive guide axis without drive DGC-FA/DGC-FA-GP									
	8	0	0.7/25	300	300	1.7	4.5	4.5	dgc-fa
	12	0	1.8/35	650	650	3.5	10	10	
	18	0	10/35	1,850	1,850	16	51	51	
	25	0	30/50	3,050	3,050	36	97	97	
	32	0	30/50	3,310	3,310	54	150	150	
	40	0	50/50	6,890	6,890	144	380	380	
	50	0	90/50	6,890	6,890	144	634	634	
	63	0	130/50	15,200	15,200	529	1,157	1,157	

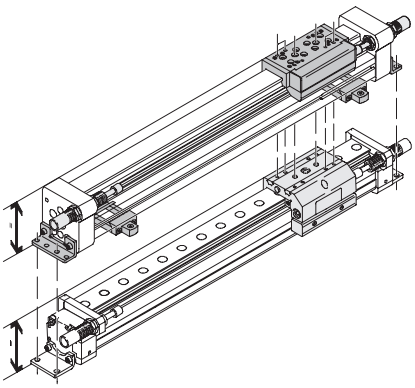
1) At v = 0.5 m/s with shock absorber YSR or YSRW

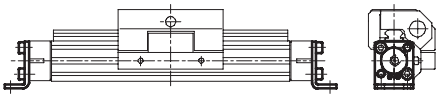
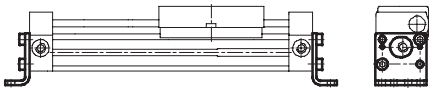
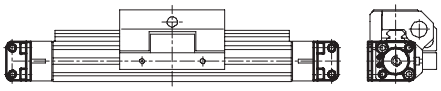
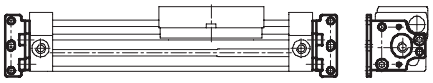
Linear drives DGC

Key features

Interchangeability with linear drive DGPL

Special foot mountings for the drive DGC enable the linear drive DGPL to be replaced with the linear drive DGC-GF/-KF with identical slide position and identical interfaces.



Slide position	Linear drive DGPL	Linear drive DGC-GF/-KF	Foot mounting required ➔ Internet: hpc
On the top			Type HPC-...-SO/ HPC-...-S
At the rear			Type HPC-...-SH/ HPC-...-S

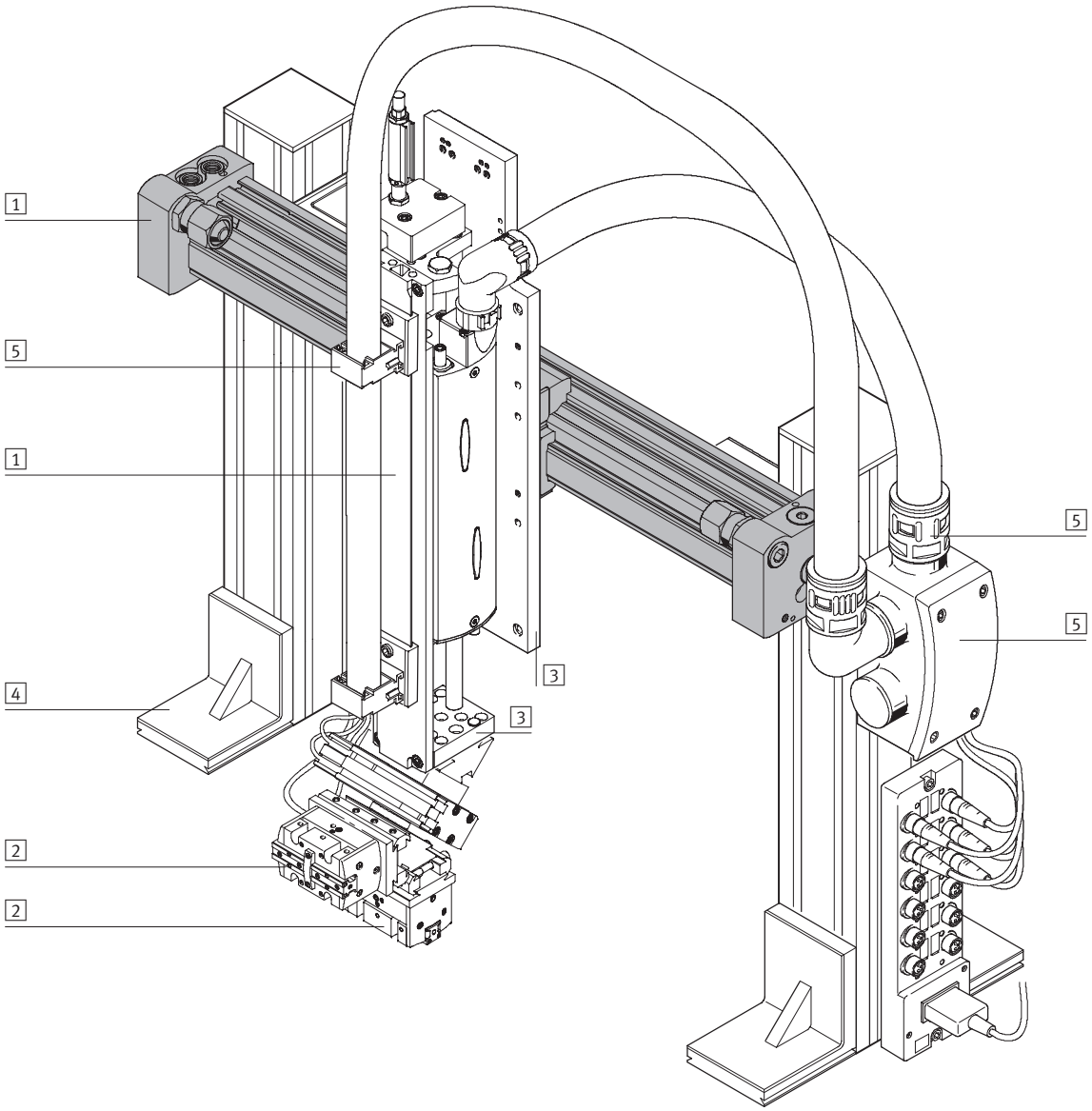
Alternatives

Electromechanical drives		Rodless cylinders, magnetically coupled
Toothed belt axes EGC-TB	Spindle axes EGC-BS	Linear drives DGO
		
Advantages: Positioning drive for approaching several positions ➔ Internet: egc-tb	Positioning drive for approaching several positions ➔ Internet: egc-bs	Hermetically sealed drive ➔ Internet: dgo

Linear drives DGC

Key features

System product for handling and assembly technology



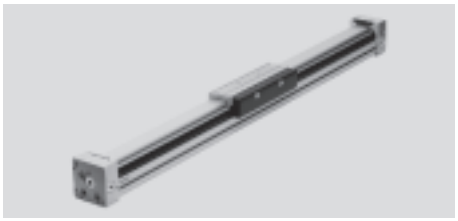
Linear drives DGC

Key features

System components and accessories			
		Brief description	**➔ Page/Internet**
1	Drives	Wide range of combinations possible within handling and assembly technology	drive
2	Grippers	Wide range of variations possible within handling and assembly technology	gripper
3	Adapters	For drive/drive and drive/gripper connections	adapter kit
4	Basic components	Profiles and profile connections as well as profile/drive connections	basic component
5	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 gearing	motor

Linear drives DGC-G

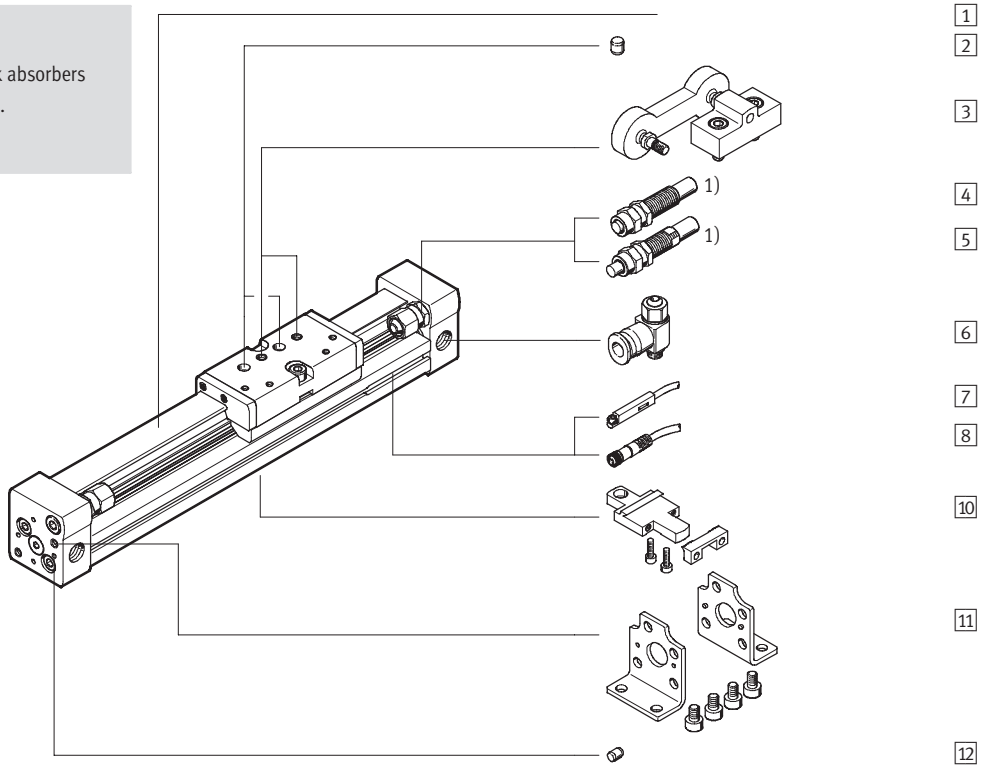
Peripherals overview



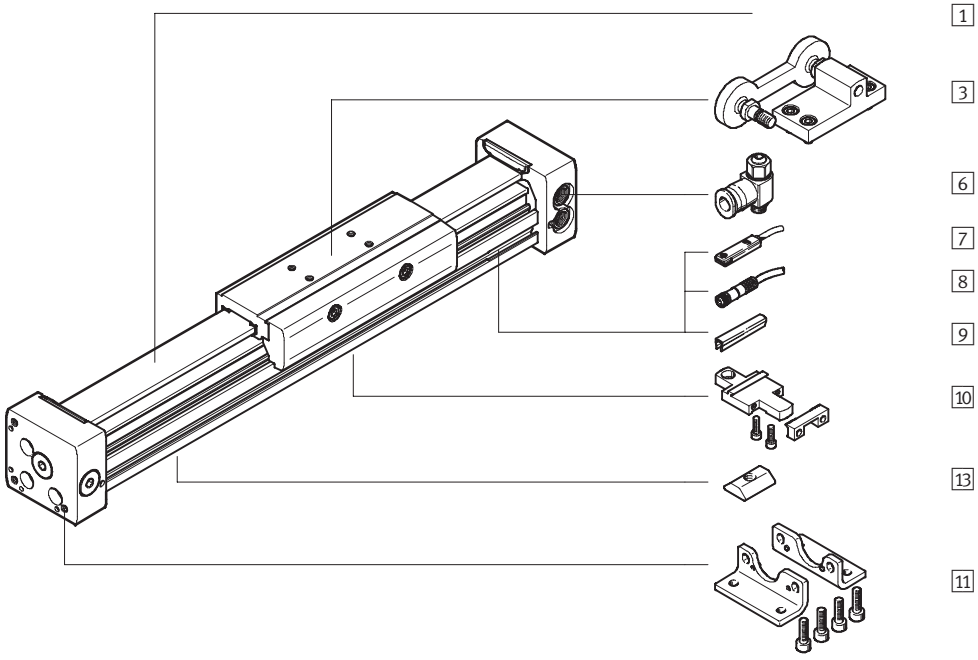
DGC-8/-12

Note

1) End stops or shock absorbers must not be removed.



DGC-18 ... 63



Linear drives DGC-G

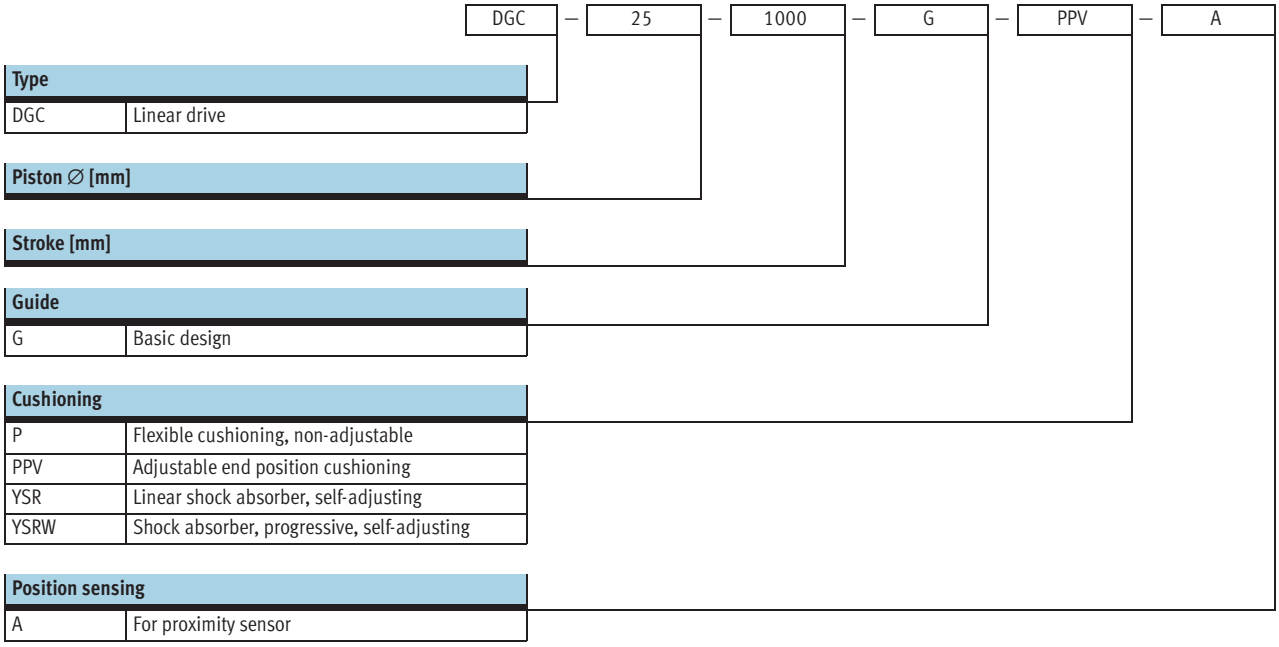
Peripherals overview

Variants and accessories				
	Type	For piston ∅	Brief description	➔ Page/Internet
1	Linear drive DGC-G	8 … 63	Linear drive without accessories, basic design	12
2	Centring pin[1)] ZBS	8, 12	For centring loads and attachments on the slide	78
3	Driver FK	8 … 63	Compensates inaccuracies in the mounting of the linear drive and external guide	72
–	Cushioning P	8, 12	Non-adjustable, flexible cushioning. Used only at low speeds	23
–	Cushioning PPV	18 … 63	Adjustable pneumatic end position cushioning. Used at medium speeds	23
4	Shock absorber YSR	8, 12	Self-adjusting hydraulic shock absorber with spring return and linear cushioning characteristic	23
5	Shock absorber YSRW	8, 12	Self-adjusting hydraulic shock absorber with spring return and progressive cushioning characteristic	23
6	One-way flow control valve GRLA	8 … 63	For regulating speed	78
7	Proximity sensor G/H/I/J	8 … 63	For sensing the slide position	79
8	Cable with socket V	8 … 63	For proximity sensor	79
9	Slot cover L	18 … 63	For protecting against ingress of dirt and securing proximity sensor cables	78
10	Profile mounting M	8 … 63	Simple and precise mounting option via dovetail connection	70
11	Foot mounting F	8 … 63	For mounting on end cap	66
12	Centring pin[1)] ZBS	8, 12	For centring the drive without foot mountings (user-specific)	78
13	Slot nut B	25 … 63	For mounting attachments	78

1) Included in the scope of delivery of the drive

Linear drives DGC-G

Type codes



Type	
DGC	Linear drive

Piston ∅ [mm]

Stroke [mm]

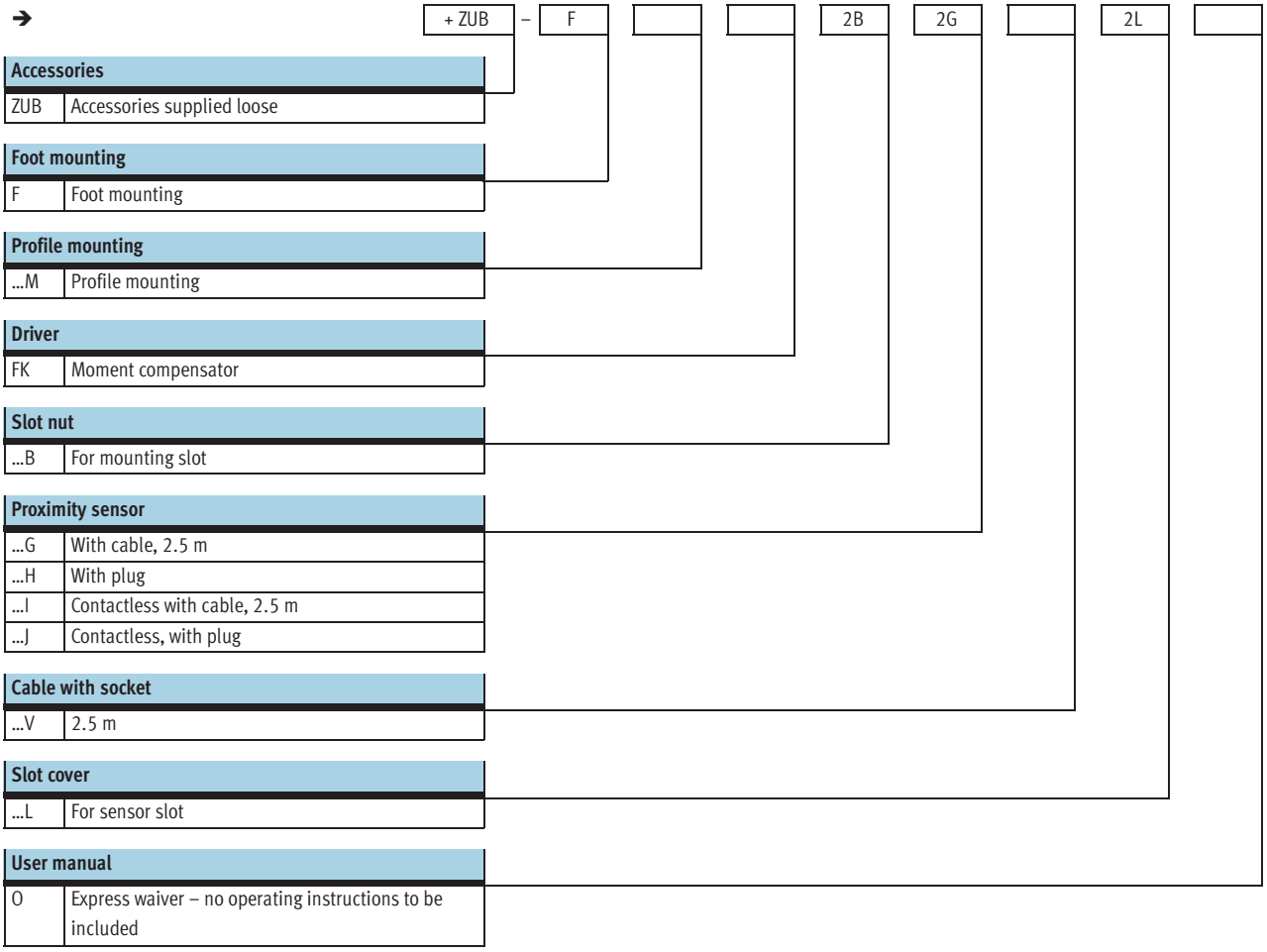
Guide	
G	Basic design

Cushioning	
P	Flexible cushioning, non-adjustable
PPV	Adjustable end position cushioning
YSR	Linear shock absorber, self-adjusting
YSRW	Shock absorber, progressive, self-adjusting

Position sensing	
A	For proximity sensor

Linear drives DGC-G

Type codes



Linear drives DGC-G

Technical data

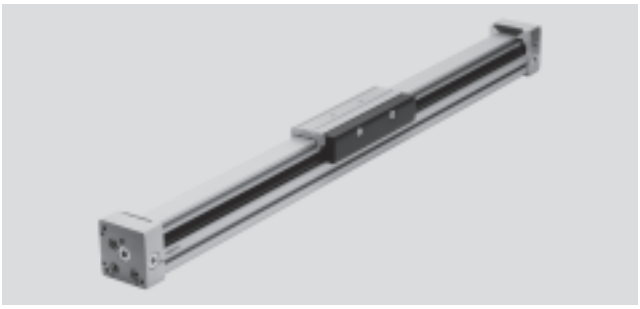
FESTO

Function

- ⌀ - Diameter
  8 … 63 mm
- l - Stroke length
  1 … 8,500 mm

www.festo.com/en/Spare_parts_service

Wearing parts kits
➔ 23



General technical data									
Piston ∅		8	12	18	25	32	40	50	63
Stroke	[mm]	1 … 1,500	1 … 2,000	1 … 3,000	1 … 8,500			1 … 5,000	
Pneumatic connection		M5			G1/8		G1/4		G3/8
Mode of operation		Double-acting							
Design		Rodless drive							
Moment compensator principle		Slotted cylinder, mechanically coupled							
Guide		Basic design							
Mounting position		Any							
Cushioning	P	Non-adjustable at both ends		–					
➔15	PPV	–		Adjustable at both ends					
	YSR...	Self-adjusting at both ends		–					
Cushioning length with PPV cushioning	[mm]	–		16.5	15.5	17.5	29.5	29.8	31.1
Position sensing		Via proximity sensor							
Type of mounting		Profile mounting							
		Foot mounting							
		Direct mounting							
Max. speed	[m/s]	1	1.2	3					

Note: This product conforms to ISO 1179-1 and to ISO 228-1

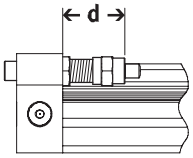
Operating and environmental conditions									
Piston ∅		8	12	18	25	32	40	50	63
Operating pressure	[bar]	2.5 … 8		2 … 8			1.5 … 8		
Operating medium		Filtered compressed air, lubricated or unlubricated							
Ambient temperature[1]	[°C]	+5 … +60	–10 … +60						
Corrosion resistance class CRC[2]		2							
ATEX		Specified types ➔ www.festo.com							

1) Note operating range of proximity sensors
2) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Forces [N] and impact energy [J]								
Piston ∅	8	12	18	25	32	40	50	63
Theoretical force at 6 bar	30	68	153	295	483	754	1,178	1,870
Impact energy in the end positions	➔ 15							

Weight [g]								
Piston ∅	8	12	18	25	32	40	50	63
Basic weight with 0 mm stroke	170	290	546	1,004	2,126	4,121	9,050	14,040
Additional weight per 10 mm stroke	9	12	22	34	54	77	116	150
Moving load	36	65	178	287	508	1,312	2,850	4,330

Adjustable end-position range d [mm]



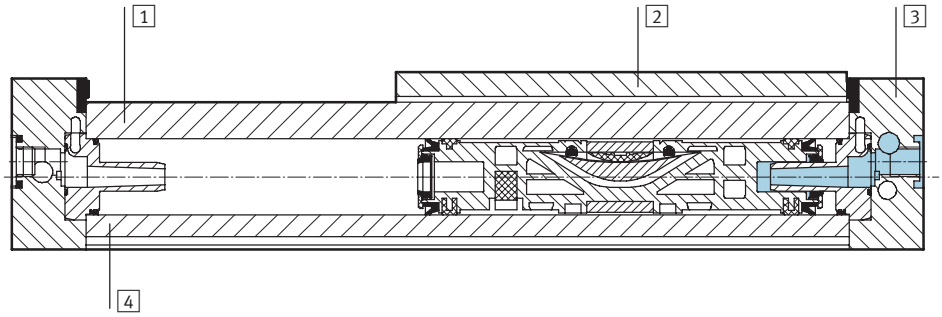
Note

The permissible kinetic energy decreases if the stroke is reduced with PPV adjustable cushioning at both ends.

Piston ∅	8	12	18	25	32	40	50	63
Cushioning P/PPV	11.3 ... 16.3	12.7 ... 17.7	–					
Cushioning YSR/YSRW	12.8 ... 22.8	14 ... 24	–					

Materials

Sectional view

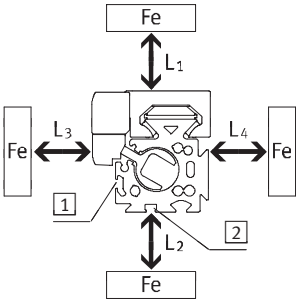


Linear drives		
1	Guide rail	Anodised aluminium
2	Slide	Anodised aluminium
3	End cap	Anodised aluminium
4	Cylinder barrel	Anodised aluminium
–	Piston seal	Polyurethane
–	Sealing band/cover band	Polyurethane
–	Slide elements	Polyacetal

Influence of ferritic materials on proximity sensors

Ferritic materials (steel parts or panels) directly next to the proximity sensors can cause sensing malfunctions. The following safety distances must be observed.

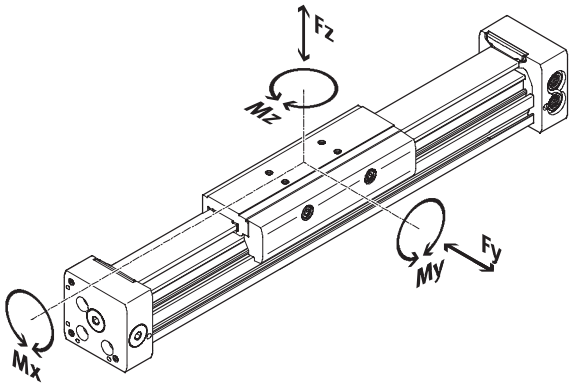
The distance depends on the position of the proximity sensor (see 1 and 2).



Piston ∅			8	12	18	25	32	40	50	63
Distance L1	1	[mm]	0	0	0	0	0	0	0	0
	2	[mm]	–	–	0	0	0	0	0	0
Distance L2	1	[mm]	20	10	10	10	0	0	0	0
	2	[mm]	–	–	25	25	25	25	25	25
Distance L3	1	[mm]	30	25	25	25	25	25	25	25
	2	[mm]	–	–	10	10	0	0	0	0
Distance L4	1	[mm]	0	0	0	0	0	0	0	0
	2	[mm]	–	–	0	0	0	0	0	0

Characteristic 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 cushioning phase.



Note

In order to avoid frictional restraint of the guide in the case of the basic drive DGC-G when used in vertical mode and with a high torque load, the variant with the recirculating ball bearing guide DGC-KF ➔ 42 is recommended.

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:

$$\frac{Fy}{Fy_{max.}} + \frac{Fz}{Fz_{max.}} + \frac{Mx}{Mx_{max.}} + \frac{My}{My_{max.}} + \frac{Mz}{Mz_{max.}} \leq 1$$

Permissible forces and torques

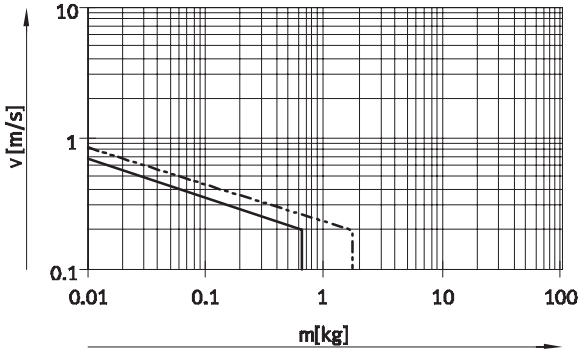
Piston ∅		8	12	18	25	32	40	50	63
$Fy_{max.}$	[N]	150	300	70	180	250	370	480	650
$Fz_{max.}$	[N]	150	300	340	540	800	1,100	1,600	2,000
$Mx_{max.}$	[Nm]	0.5	1.3	1.9	4	9	12	20	26
$My_{max.}$	[Nm]	2	5	12	20	40	60	150	150
$Mz_{max.}$	[Nm]	2	5	4	5	12	25	37	48

Note

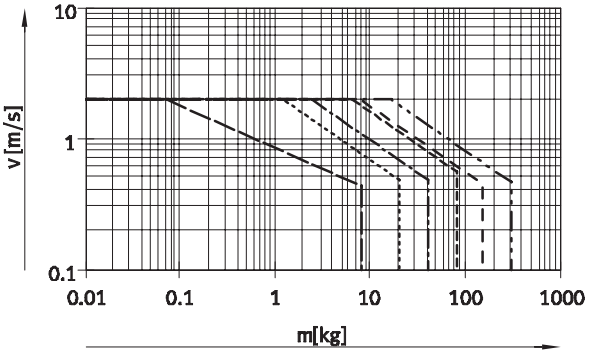
ProDrive
sizing software
➔ www.festo.com

Maximum permissible piston speed v as a function of effective load m

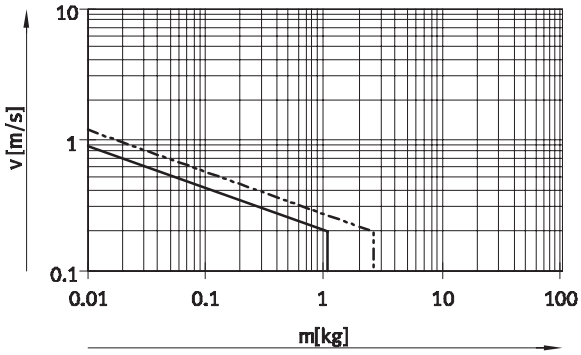
Piston ∅ 8/12 with P cushioning



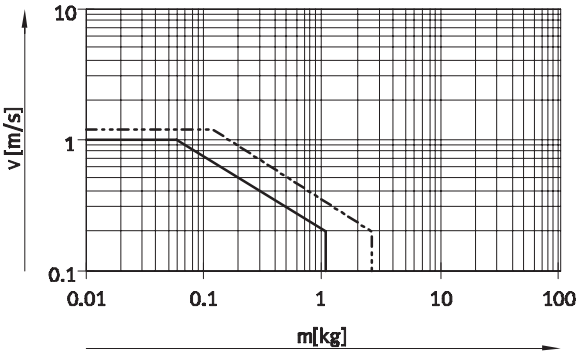
Piston ∅ 18 ... 63 with PPV cushioning



Piston ∅ 8/12 with YSR cushioning



Piston ∅ 8/12 with YSRW cushioning



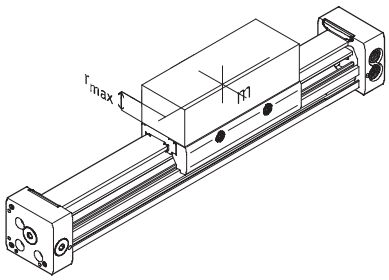
∅ 8 ∅ 12 ∅ 18 ∅ 25 ∅ 32 ∅ 40 ∅ 50 ∅ 63

Note

This data represents the maximum values that can be achieved. In practice, values fluctuate relative to the position of the effective load and mounting position.

Operating range of cushioning

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 cushioned using suitable equipment (external shock absorbers), preferably at the centre of gravity of the load.



Note

To avoid distortion in the slide, the bearing surfaces of the attachments must maintain a flatness of at least 0.03 mm.

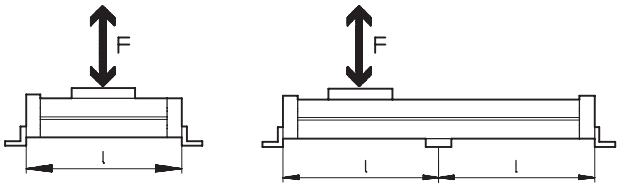
Specifications for horizontal mounting position:

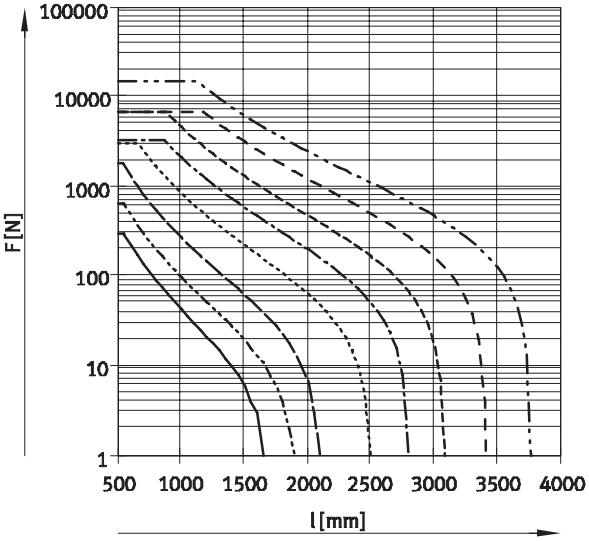
Piston ∅	8	12	18	25	32	40	50	63
Distance $r_{max.}$ [mm]	25	35	35	50	50	50	50	50

Number of profile mountings MUC as a function of force due to weight F and support span l

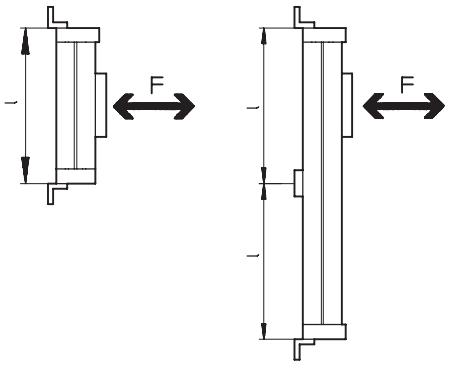
In order to limit deflection in the case of large strokes, the drive may need to be supported. The following graphs help to determine the maximum permissible support span as a function of mounting position, force due to weight and normal force.

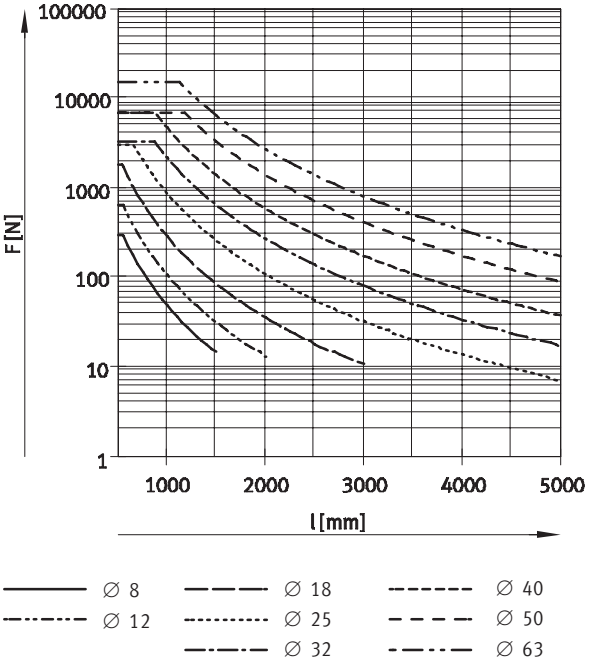
Horizontal mounting position





Vertical mounting position





Example:

The drive DGC-25-1500 is subjected to a force of 300 N in a horizontal mounting position.

The drive has an overall length of:
l = stroke length + L1 (see dimensions)
= 1,500 mm + 200 mm
= 1,700 mm

According to the graph, the max. support span for the drive DGC-25 with a force of 300 N is 1,300 mm.

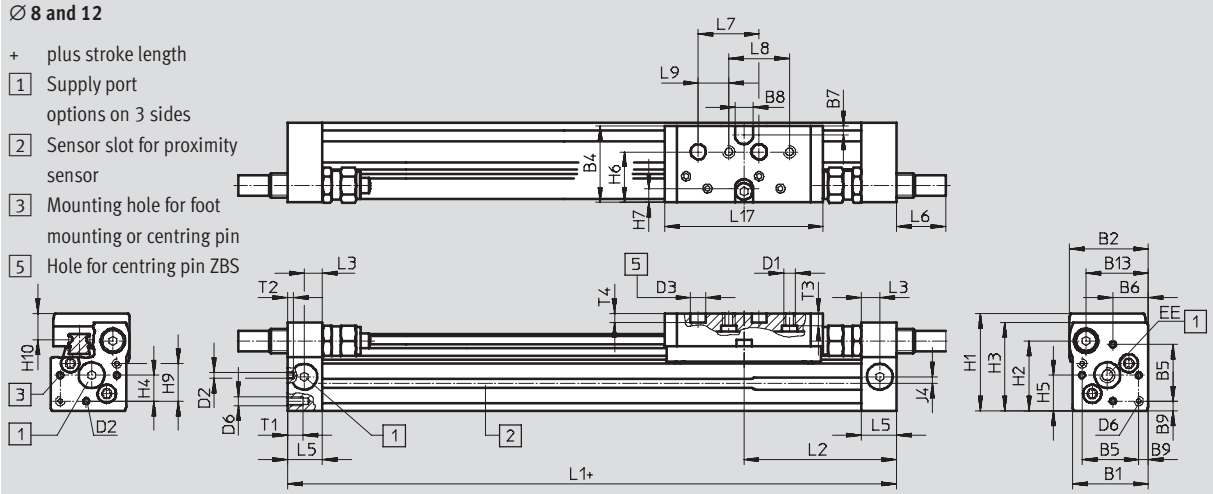
In this example, profile mountings are required as the max. support span (1,300 mm) is smaller than the overall length of the drive (1,700 mm).

Dimensions

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

∅ 8 and 12

\+ plus stroke length
[1] Supply port options on 3 sides
[2] Sensor slot for proximity sensor
[3] Mounting hole for foot mounting or centring pin
[5] Hole for centring pin ZBS



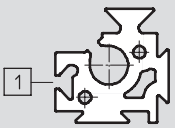
∅ [mm]	B1	B2	B4	B5	B6	B7	B8 ±0.05	B9 ±0.1	B13	D1	D2 ∅ H8	D3 ∅ H7	D6
8	25	26	25.5	18.6	11.7	3	6	3.2	20.5	M4	2	5	M3
12	30.2	31	30.5	20.6	13.5	3	8	4.8	25	M4	2	5	M4

∅ [mm]	EE	H1	H2	H3	H4	H5	H6	H7	H9	H10	J4	L1	L2
8	M5	32	23	29	8.5	11.7	16.5	4.5	12.3	8.7	2.2	100	50.1
12	M5	37.5	28.5	34.5	8.7	13.5	20.5	5	14.7	9.8	3	125	62.1

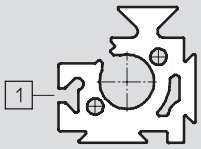
∅ [mm]	L3	L5	L6			L7 ±0.03	L8 ±0.1	L9 ±0.1	L17	T1	T2	T3	T4 +0.2	Stroke tolerance
			P	YSR	YSRW									
8	6	11.5	0	16	16.2	20	20	10	52	5	2	4	3	0 ... 1.7
12	8	16	0	11.3	12.3	20	20	10	65	6	2	5	3	

Profile barrel

∅ 8



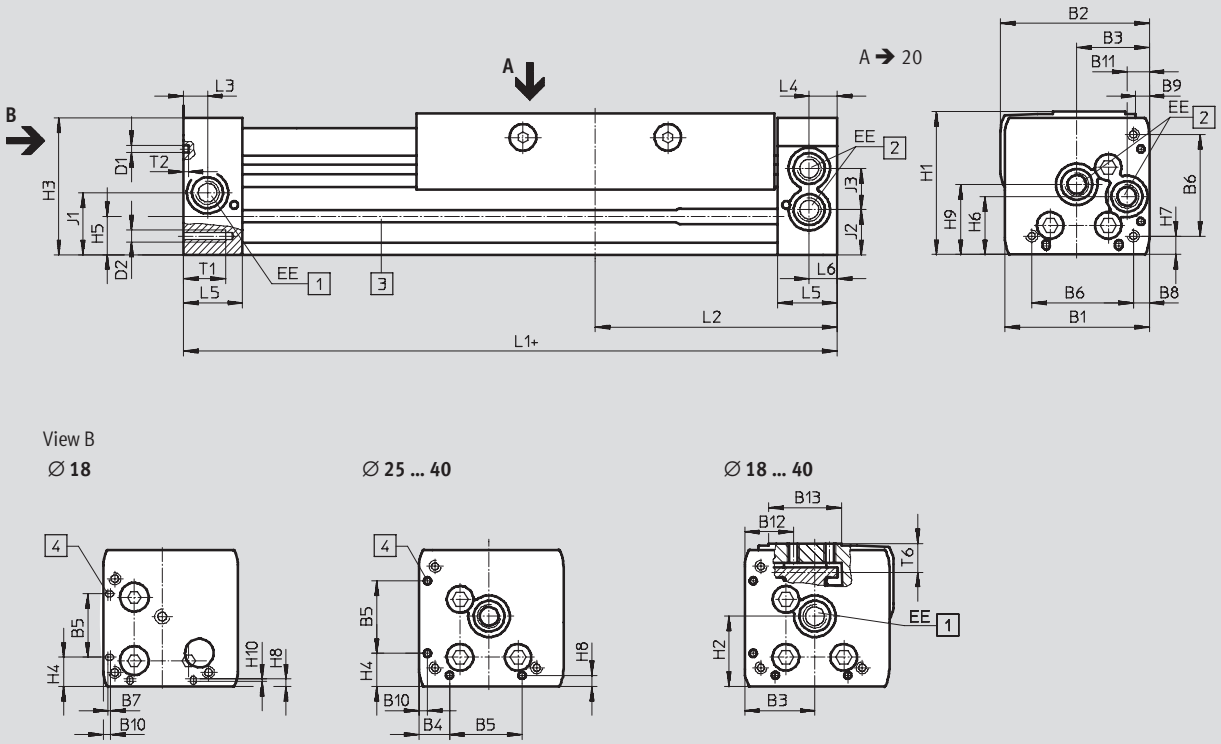
∅ 12



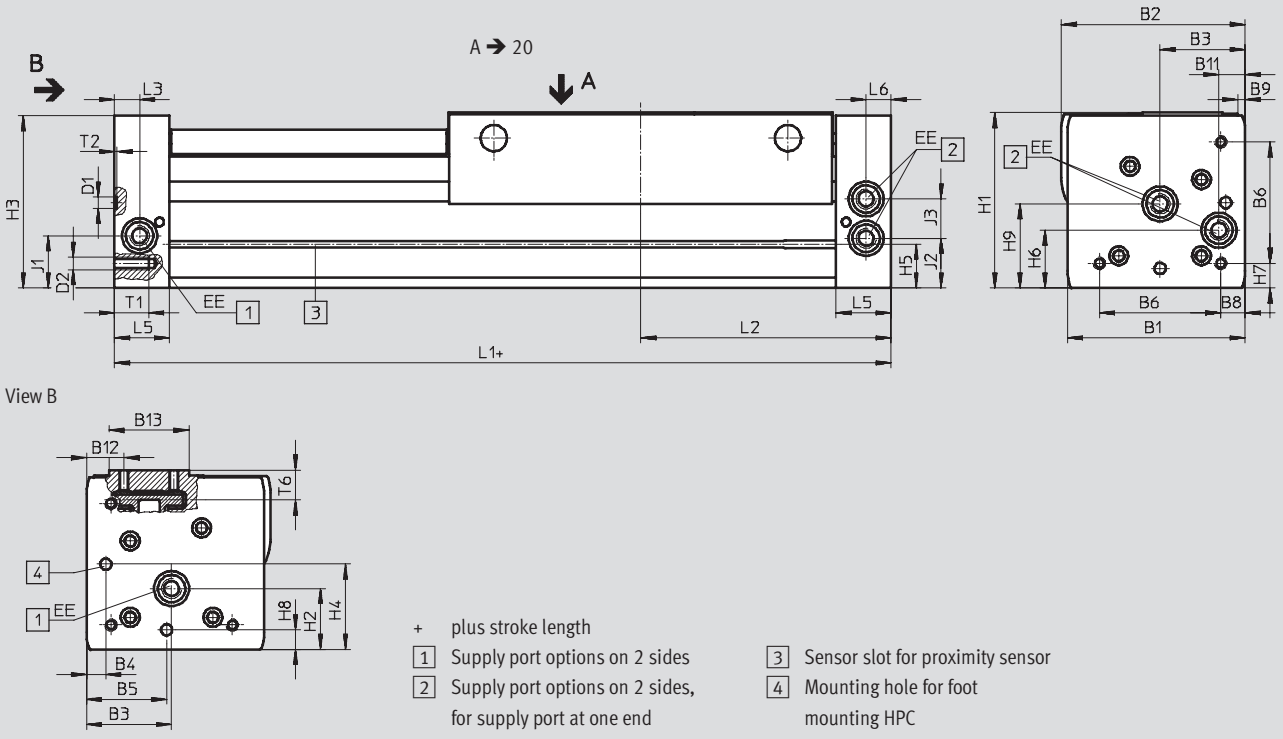
[1] Sensor slot for proximity sensor

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

∅ 18 ... 40



∅ 50/63



\+ plus stroke length
1 Supply port options on 2 sides
2 Supply port options on 2 sides, for supply port at one end
3 Sensor slot for proximity sensor
4 Mounting hole for foot mounting HPC

∅ [mm]	B1	B2	B3	B4	B5 ±0.05	B6	B7	B8	B9	B10
18	44.5	46.3	19.5	8.8	21	31	0.3	3.8	3.3	2.4
25	59.8	61.6	30	12.65	30	42		6.65	5.6	3.5
32	73	75.5	38.5	5.7	63.1	57.5		8.5	5	14
40	91	94.5	45	17.2	55	65		12.2	5.3	8
50	113	127	60	8	52.8	81.6		12	0	–
63	142	147	68	15.5	68	97		19.5	6	–

∅ [mm]	B11	B12	B13	D1 ∅	D2	EE	H1	H2	H3	H4 ±0.2
18	5.5	19.3	20	$2_{\pm 0.05}$	M4	M5	49.8	23.1	48.3	10.3
25	9.3	20.15	30	$3_{\pm 0.05}$	M5	G⅛	58.5	29	56.5	13
32	14.9	20.5	35	$3_{\pm 0.05}$	M6	G⅛	73	30	71.5	5.7
40	16.5	19.8	45	$4_{\pm 0.05}$	M6	G¼	88	41.5	85	17.2
50	21	24	64	9^{H7}	M8	G¼	120	38.5	116	52.8
63	21	30	64	9^{H7}	M10	G⅜	140	48.5	137.5	68

∅ [mm]	H5	H6	H7	H8	H9	H10	J1	J2	J3	L1
18	13.4	20	5.3	2.4	25.2	0.4	20	16.5	11	150
25	15.8	24	7	4.5	29		26.1	18.6	17	200
32	17	27.7	8.5	14	35.2		30	22	18.5	250
40	25	36.5	12.2	8	44		35	26	26	300
50	29.3	36	12	8	53		30.5	30.5	28	350
63	34.8	46	19.5	15.5	67		41.5	39.5	31.5	400

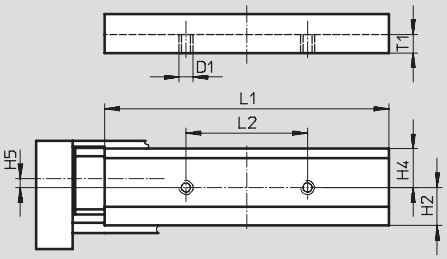
∅ [mm]	L2	L3	L4	L5	L6	T1	T2	T6	Stroke tolerance
18	74.5	5.7	5.8	15	5.5	9	2	10.7	0 … 2.5
25	100	10.5	10.6	24.5	10.6	17.5	2	12	
32	124.8	14.5	14.5	30.5	14.5	15	2	13.8	
40	150	14.6	14.6	33.5	14.6	20	3	16.8	
50	175	17	–	41	17	24	$2.1^{+0.2}$	20.75	
63	200	20	–	44	20	27.5	$2.1^{+0.2}$	20.75	

Note: This product conforms to ISO 1179-1 and to ISO 228-1

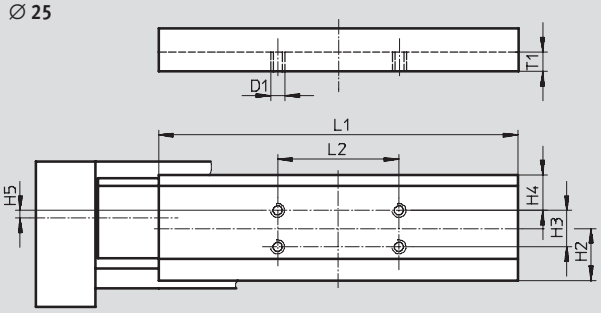
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

Slide – View A

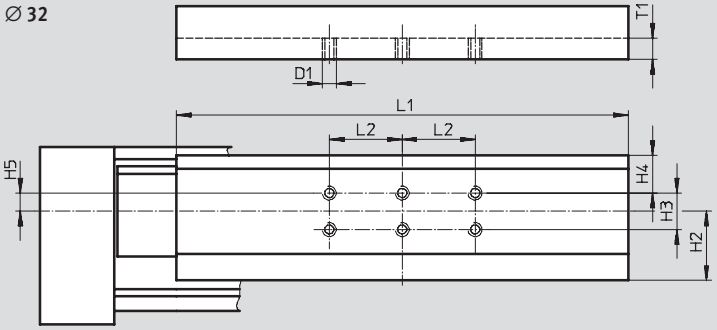
Ø 18



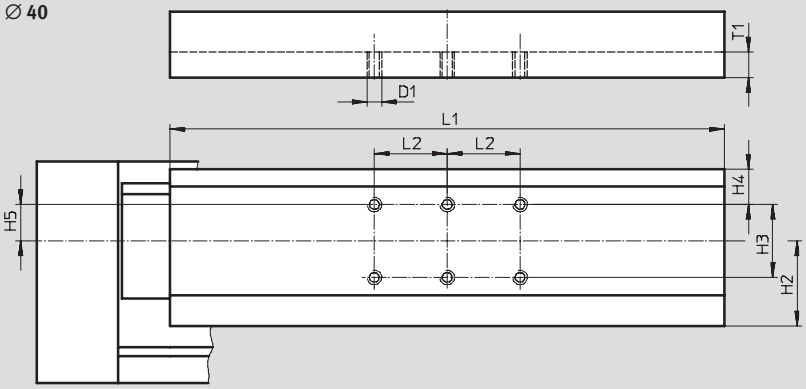
Ø 25



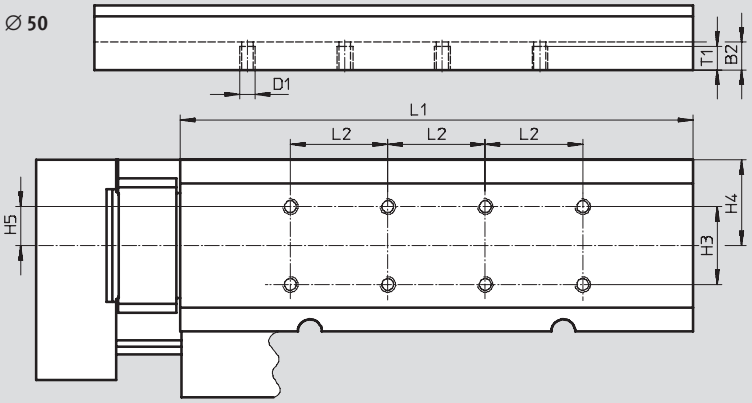
Ø 32



Ø 40



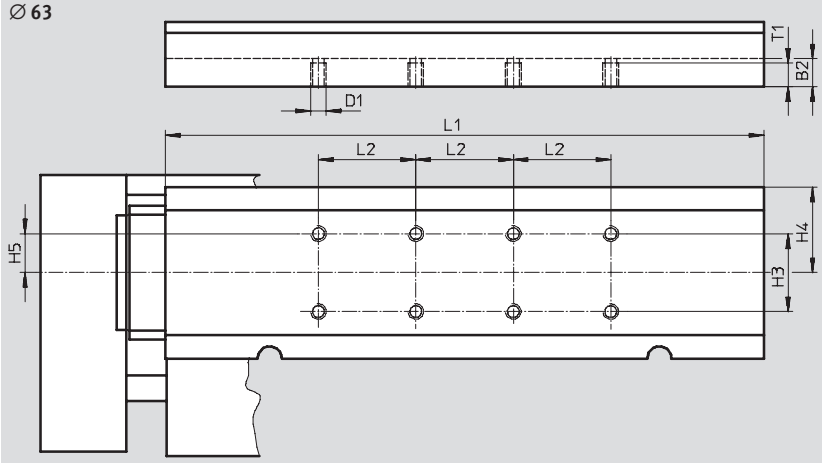
Ø 50



Dimensions Download CAD-Daten ➔ **www.festo.com**

Slide – View A

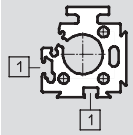
∅ 63



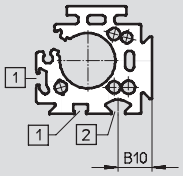
∅ [mm]	B2	D1	H2 ±0.1	H3 ±0.1	H4	H5	L1	L2	T1
18	–	M5	15.6	–	16	2	117±0.05	50	7
25	–	M5	21.35	15	14.55	4.85	148±0.05	50	8
32	–	M5	28.5	15	15.5	7.5	186±0.05	30	8.6
40	–	M6	35	30	14.5	15	228±0.05	30	10.5
50	14	M8	–	40	44	20	263±0.1	50	13
63	14	M8	–	40	44	20	307±0.1	50	13

Profile barrel

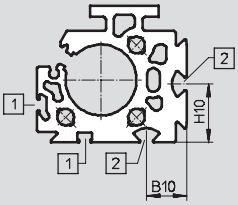
∅ 18



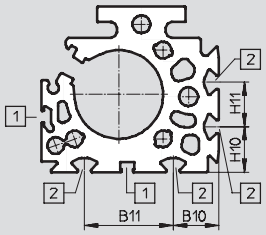
∅ 25



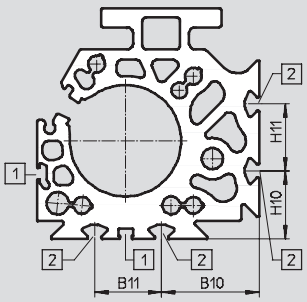
∅ 32



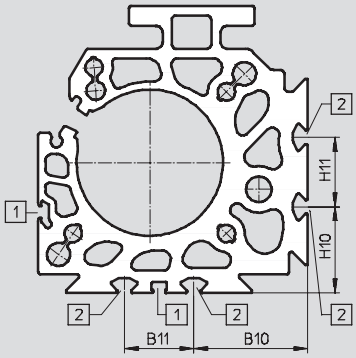
∅ 40



∅ 50



∅ 63



1 Sensor slot for proximity sensor
2 Mounting slot for slot nut

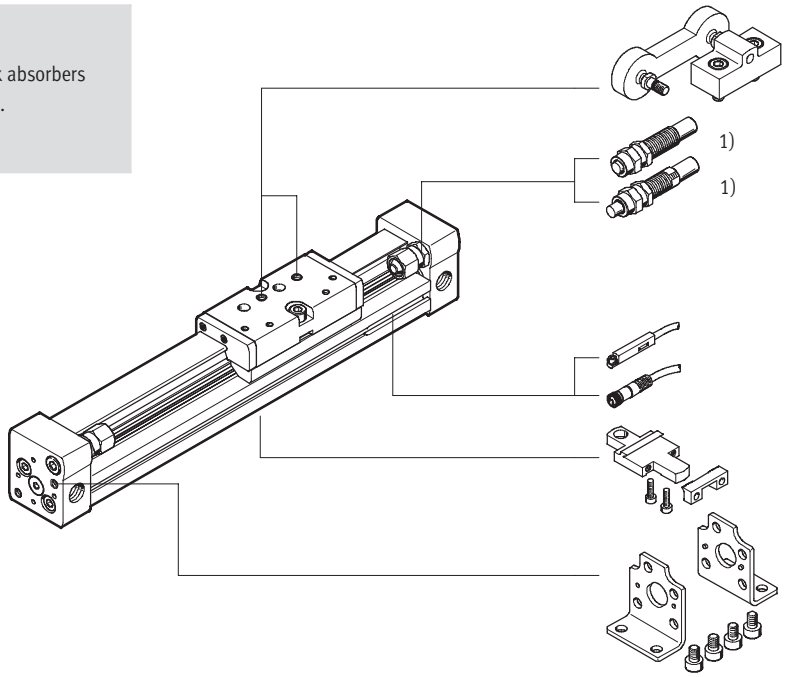
∅ [mm]	B10	B11	H10	H11
25	15.23	–	–	–
32	18	–	26.5	–
40	20.5	40	20.5	20
50	43.8	30	30.5	30
63	49	30	37	30

Order code
Mandatory data/options

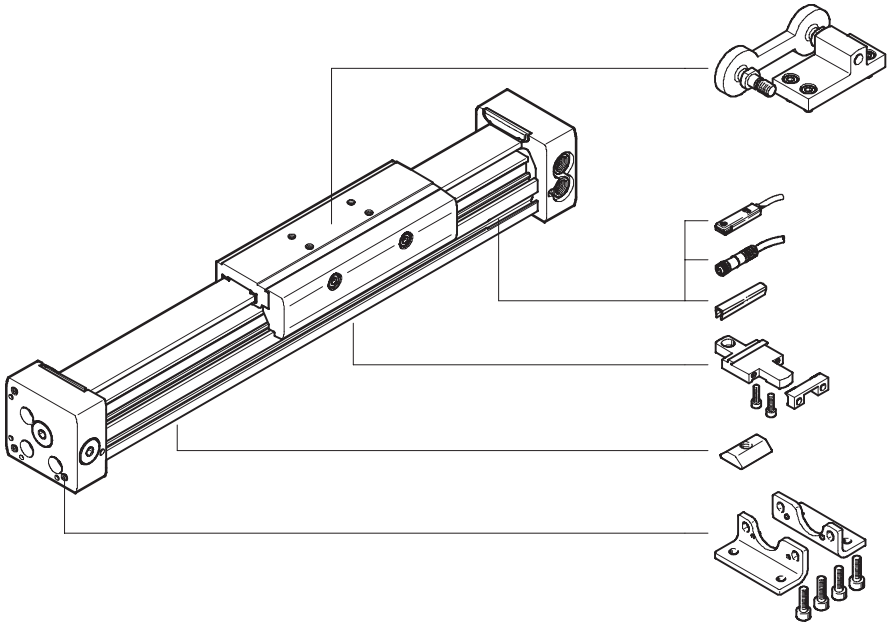
DGC-8/-12

Note

1) End stops or shock absorbers must not be removed.



DGC-18 ... 63



M Mandatory data								O Options		
Module No.	Function		Stroke		Cushioning			Accessories		
	Piston ∅		Guide		Position sensing			Accessories supplied loose		User manual
530 906	DGC	8	1 … 8500	G	P	A			F, …M,	O
530 907		12			PPV				FK, …B,	
532 446		18			YSR				…G, …H,	
532 447		25			YSRW				…I, …J,	
532 448		32							…V, …L	
532 449		40								
532 450		50								
532 451		63								
Order example										
530 906	DGC	– 8	– 300	– G	– P	– A		ZUB	– F2M	–

Ordering table

Size			8	12	18	25	32	40	50	63	Conditions	Code		Enter code
M	Module No.		**530 906**	**530 907**	**532 446**	**532 447**	**532 448**	**532 449**	**532 450**	**532 451**				
	Function		Linear drive									**DGC**		DGC
	Piston ∅	[mm]	8	12	18	25	32	40	50	63		**-…**		
	Stroke	[mm]	1 … 1500	1 … 2000	1 … 3000	1 … 8500			1 … 5000			**-…**		
	Guide		Basic design									**-G**		-G
	Cushioning	At both ends	Flexible cushioning rings/plates		–	–	–	–	–	–		**-P**		
		Adjustable at both ends	–	–	Pneumatic cushioning							**-PPV**		
		Self-adjusting	Shock absorber		–	–	–	–	–	–		**-YSR**		
			Shock absorber, progressive		–	–	–	–	–	–		**-YSRW**		
	Position sensing		For proximity sensor									**-A**		-A
O	Accessories		Supplied loose (can be retrofitted)									**ZUB-**		ZUB-
	Foot mounting		1									**F**		
	Profile mounting		1 … 9									**…M**		
	Driver		Moment compensator									**FK**		
	Slot nut for mounting slot		–	–	–	1 … 9						**…B**		
	Proximity sensor	Cable, 2.5 m	1 … 9									**…G**		
		M8 plug	1 … 9									**…H**		
	Proximity sensor, contactless, PNP	Cable, 2.5 m	1 … 9									**…I**		
		M8 plug	1 … 9									**…J**		
	Cable with socket	M8, 2.5 m	1 … 9									**…V**		
	Slot cover for sensor slot		–	–	1 … 9							**…L**		
	User manual		Express waiver – no operating instructions to be included (already available)									**-O**		

Transfer order code

	DGC	–	–	–	G	–	–	A	ZUB	–	–

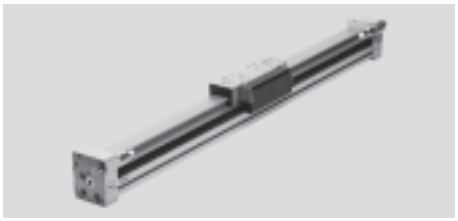
Ordering data – Wearing parts kits

Piston ∅	Part No.	Type
8	665 333	DGC-8-G
12	665 334	DGC-12-G
18	684 486	DGC-18
25	684 487	DGC-25

Piston ∅	Part No.	Type
32	684 488	DGC-32
40	684 489	DGC-40
50	719 825	DGC-50
63	719 826	DGC-63

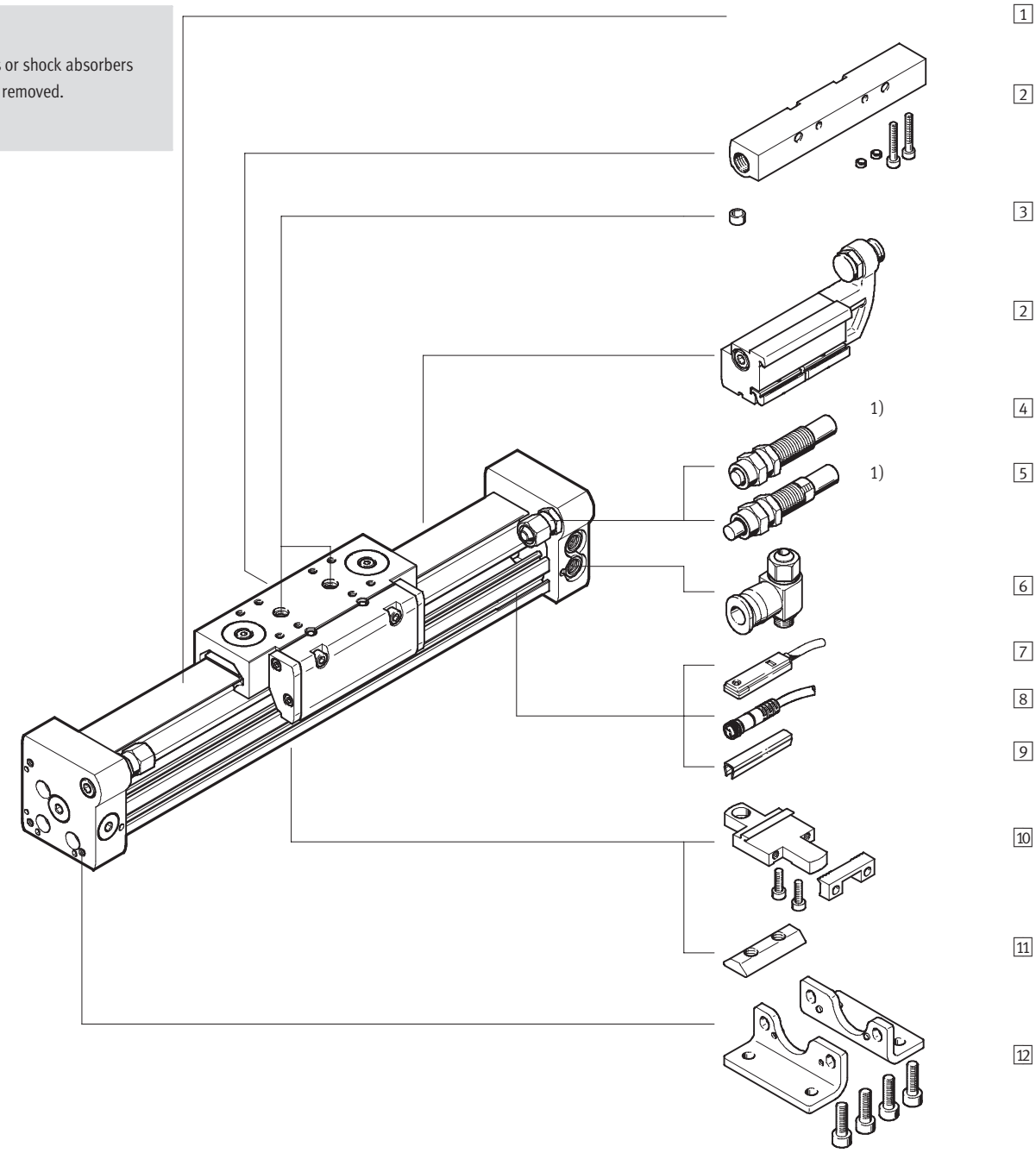
Linear drives DGC-GF, with plain-bearing guide

Peripherals overview



Note

1) End stops or shock absorbers must not be removed.



Linear drives DGC-GF, with plain-bearing guide

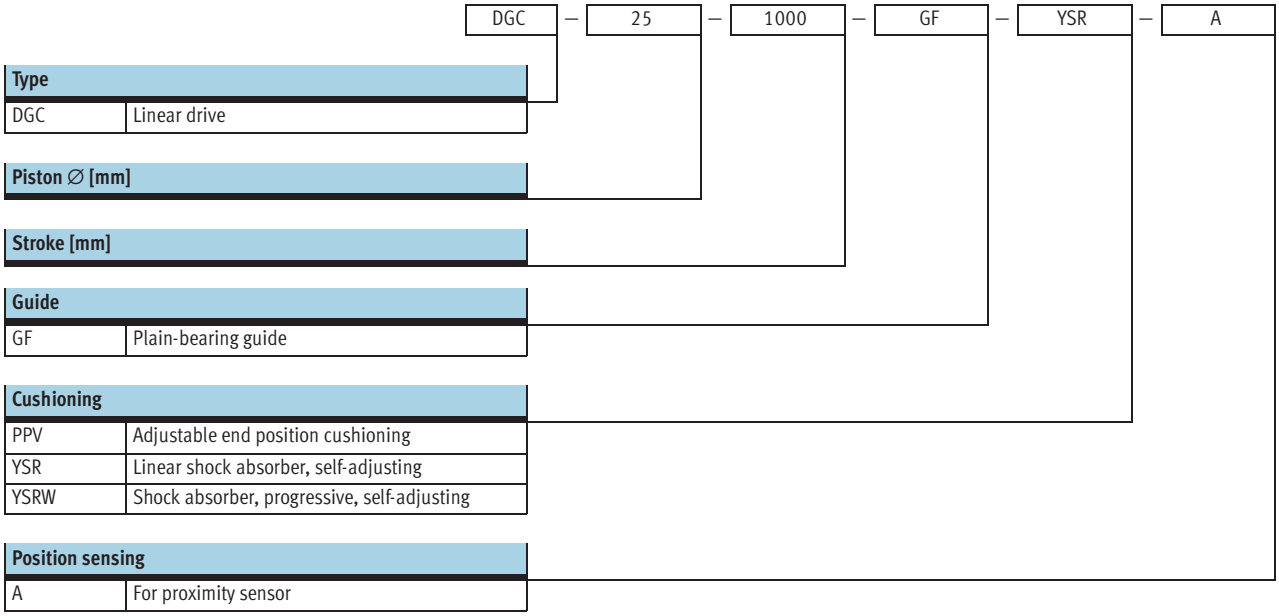
Peripherals overview

Variants and accessories				
	Type	For piston ∅	Brief description	➔ Page/Internet
1	Linear drive DGC-GF	18 … 63	Linear drive without accessories, plain-bearing guide	28
2	Mechanical end position limiter YWZ	18 … 63	For variable end position adjustment, e.g. for format adjustments	74
3	Centring pin/sleeve[1)] ZBS/ZBH	18 … 63	For centring loads and attachments on the slide	78
–	Cushioning PPV	18 … 63	Adjustable pneumatic end position cushioning. Used at medium speeds	41
4	Shock absorber YSR	18 … 63	Self-adjusting hydraulic shock absorber with spring return and linear cushioning characteristic	41
5	Shock absorber YSRW	18 … 63	Self-adjusting hydraulic shock absorber with spring return and progressive cushioning characteristic	41
6	One-way flow control valve GRLA	18 … 63	For regulating speed	78
7	Proximity sensor G/H/I/J	18 … 63	For sensing the slide position	79
8	Cable with socket V	18 … 63	For proximity sensor	79
9	Slot cover L	18 … 63	For protecting against ingress of dirt and securing proximity sensor cables	78
10	Profile mounting M	18 … 63	Simple and precise mounting option via dovetail connection	70
11	Slot nut B	25 … 63	For mounting attachments	78
12	Foot mounting F	18 … 63	For mounting on end cap	66

1) Included in the scope of delivery of the drive

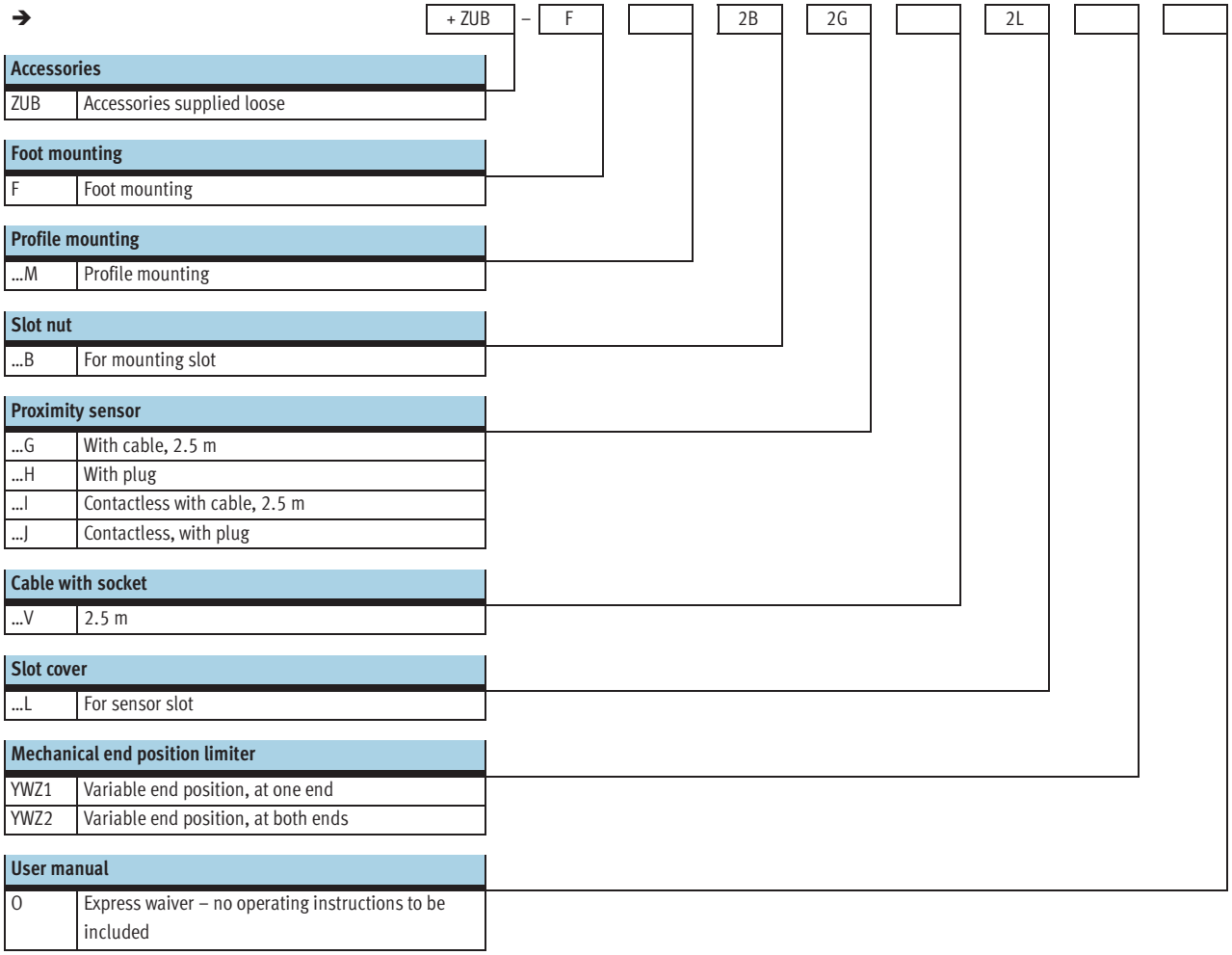
Linear drives DGC-GF, with plain-bearing guide

Type codes



Linear drives DGC-GF, with plain-bearing guide

Type codes



Accessories	
ZUB	Accessories supplied loose

Foot mounting	
F	Foot mounting

Profile mounting	
...M	Profile mounting

Slot nut	
...B	For mounting slot

Proximity sensor	
...G	With cable, 2.5 m
...H	With plug
...I	Contactless with cable, 2.5 m
...J	Contactless, with plug

Cable with socket	
...V	2.5 m

Slot cover	
...L	For sensor slot

Mechanical end position limiter	
YWZ1	Variable end position, at one end
YWZ2	Variable end position, at both ends

User manual	
O	Express waiver – no operating instructions to be included

Linear drives DGC-GF, with plain-bearing guide

Technical data

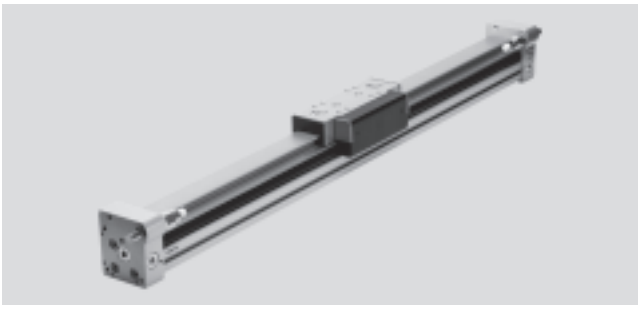
FESTO

Function

- Ø - Diameter
  18 ... 63 mm
- l - Stroke length
  1 ... 8,500 mm

www.festo.com/en/Spare_parts_service

Wearing parts kits
➔ 41



General technical data							
Piston Ø		18	25	32	40	50	63
Stroke	[mm]	1 ... 3,000	1 ... 8,500			1 ... 5,000	
Pneumatic connection		M5	G1⁄8		G1⁄4		G3⁄8
Mode of operation		Double-acting					
Design		Rodless drive					
Moment compensator principle		Slotted cylinder, mechanically coupled					
Guide		Plain-bearing guide					
Mounting position		Any					
Cushioning	PPV	Adjustable at both ends					
➔31	YSR...	Self-adjusting at both ends					
Cushioning length with PPV cushioning	[mm]	16.5	15.5	17.5	29.5	29.8	31.1
Position sensing		Via proximity sensor					
Type of mounting		Profile mounting					
		Foot mounting					
		Direct mounting					
Max. speed	[m/s]	3					

Note: This product conforms to ISO 1179-1 and to ISO 228-1

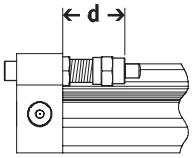
Operating and environmental conditions							
Piston Ø		18	25	32	40	50	63
Operating pressure	[bar]	2 ... 8			1.5 ... 8		
Operating medium		Filtered compressed air, lubricated or unlubricated					
Ambient temperature[1]	[°C]	–10 ... +60					
Corrosion resistance class CRC[2]		2					
ATEX		Specified types ➔ www.festo.com					

1) Note operating range of proximity sensors
2) Corrosion resistance class 2 according to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Forces [N] and impact energy [J]						
Piston Ø	18	25	32	40	50	63
Theoretical force at 6 bar	153	295	483	754	1,178	1,870
Impact energy in the end positions	➔ 31					

Weight [g]						
Piston Ø	18	25	32	40	50	63
Basic weight with 0 mm stroke	763	1,609	2,532	5,252	10,065	16,308
Additional weight per 10 mm stroke	23	35	55	76	117	180
Moving load	267	526	824	1,725	3,319	5,226

Adjustable end-position range d [mm]



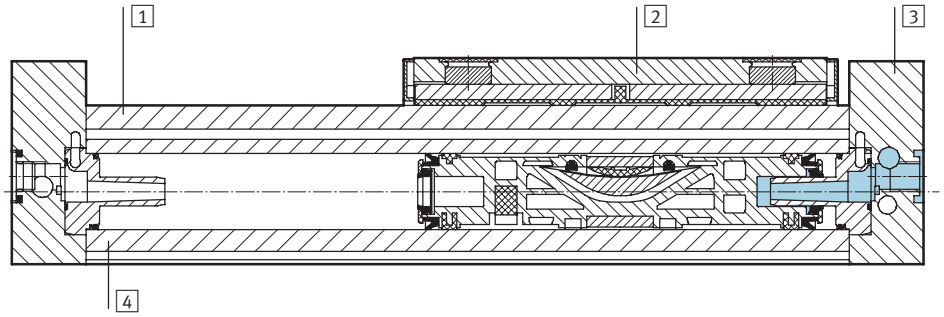
Note

The permissible kinetic energy decreases if the stroke is reduced with PPV adjustable cushioning at both ends.

Piston ∅	18	25	32	40	50	63
Cushioning PPV	13.8 … 15.8	21.1 … 25.1	25.2 … 30.2	28.7 … 33.7	28.7 … 33.7	38.8 … 43.8
Cushioning YSR/YSRW	14.5 … 24.5	22.5 … 32.5	27.3 … 37.3	31 … 41	31 … 56	41 … 76

Materials

Sectional view

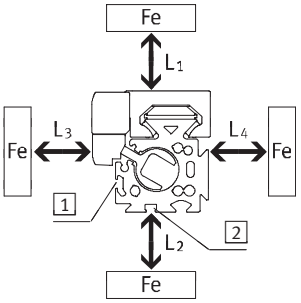


Linear drives		
1	Guide rail	Anodised aluminium
2	Slide	Anodised aluminium
3	End cap	Anodised aluminium
4	Cylinder barrel	Anodised aluminium
–	Piston seal	Polyurethane
–	Sealing band/cover band	Polyurethane
–	Slide elements	Polyacetal

Influence of ferritic materials on proximity sensors

Ferritic materials (steel parts or panels) directly next to the proximity sensors can cause sensing malfunctions. The following safety distances must be observed.

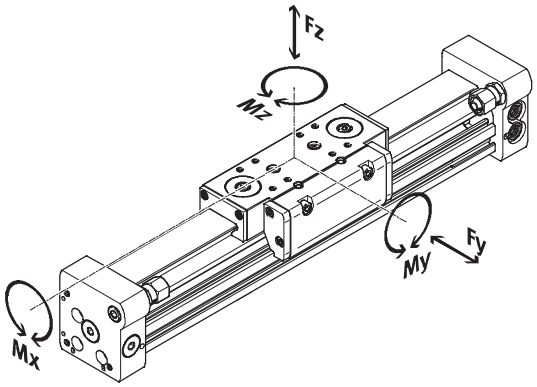
The distance depends on the position of the proximity sensor (see 1 and 2).



Piston ∅			8	12	18	25	32	40	50	63
Distance L1	1	[mm]	0	0	0	0	0	0	0	0
	2	[mm]	–	–	0	0	0	0	0	0
Distance L2	1	[mm]	20	10	10	10	0	0	0	0
	2	[mm]	–	–	25	25	25	25	25	25
Distance L3	1	[mm]	30	25	25	25	25	25	25	25
	2	[mm]	–	–	10	10	0	0	0	0
Distance L4	1	[mm]	0	0	0	0	0	0	0	0
	2	[mm]	–	–	0	0	0	0	0	0

Characteristic 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 cushioning phase.



Note

In order to avoid frictional restraint of the guide in the case of the drive DGC-GF with plain-bearing guide when used in vertical mode and with a high torque load, the variant with the recirculating ball bearing guide DGC-KF ➔ 42 is recommended.

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:

$$\frac{Fy}{Fy_{max.}} + \frac{Fz}{Fz_{max.}} + \frac{Mx}{Mx_{max.}} + \frac{My}{My_{max.}} + \frac{Mz}{Mz_{max.}} \leq 1$$

Permissible forces and torques in relation to a travel speed of 0.2 m/s

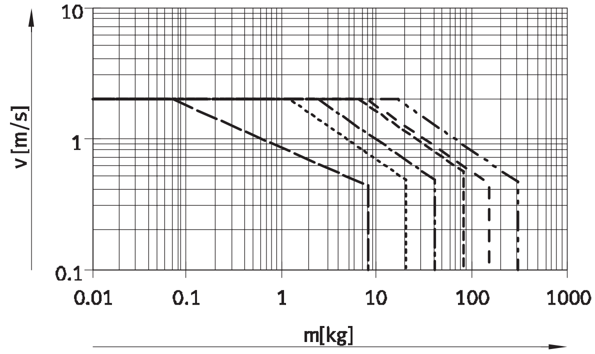
Piston ∅		18	25	32	40	50	63
$Fy_{max.}$	[N]	440	640	900	1,380	1,500	2,300
$Fz_{max.}$	[N]	540	1,300	1,800	2,000	2,870	4,460
$Mx_{max.}$	[Nm]	3.4	8.5	15	28	54	96
$My_{max.}$	[Nm]	20	40	70	110	270	450
$Mz_{max.}$	[Nm]	8.5	20	33	54	103	187

Note

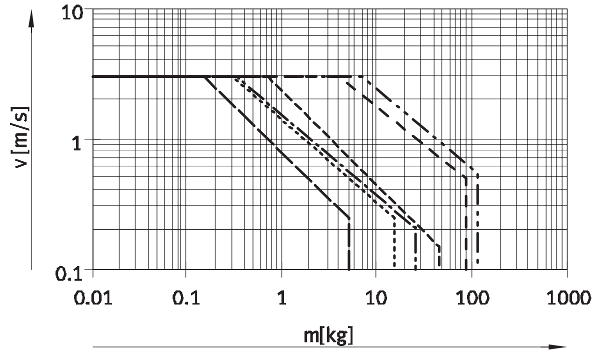
ProDrive
sizing software
➔ www.festo.com

Maximum permissible piston speed v as a function of effective load m

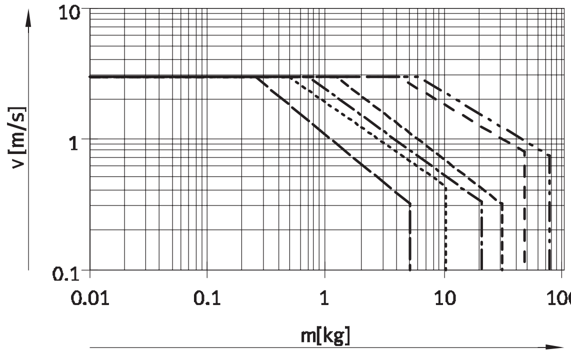
With PPV cushioning

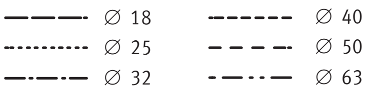


With YSR cushioning



With YSRW cushioning



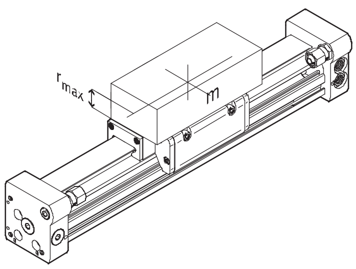


Note

This data represents the maximum values that can be achieved. In practice, values fluctuate relative to the position of the effective load and mounting position.

Operating range of cushioning

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 cushioned using suitable equipment (external shock absorbers), preferably at the centre of gravity of the load.



Note

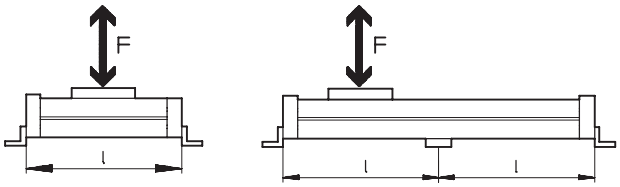
To avoid distortion in the slide, the bearing surfaces of the attachments must maintain a flatness of at least 0.03 mm.

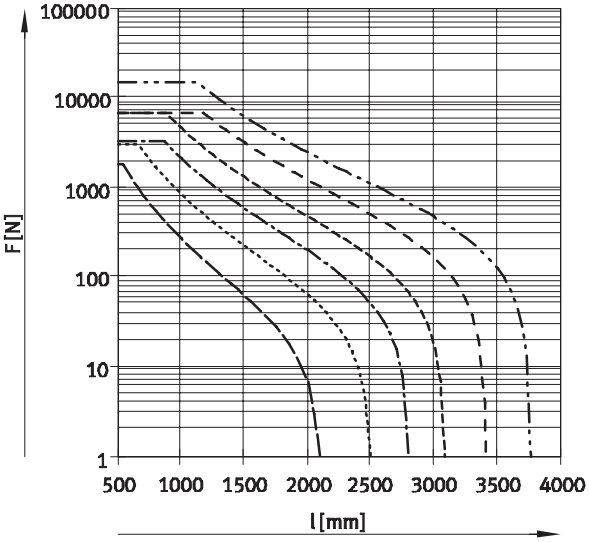
Piston ∅	8	12	18	25	32	40	50	63
Distance $r_{max.}$ [mm]	25	35	35	50	50	50	50	50

Number of profile mountings MUC as a function of force due to weight F and support span l

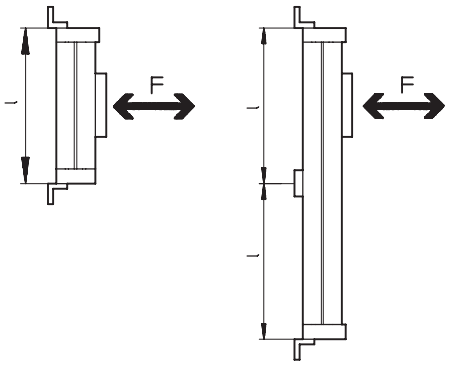
In order to limit deflection in the case of large strokes, the drive may need to be supported. The following graphs help to determine the maximum permissible support span as a function of mounting position, force due to weight and normal force.

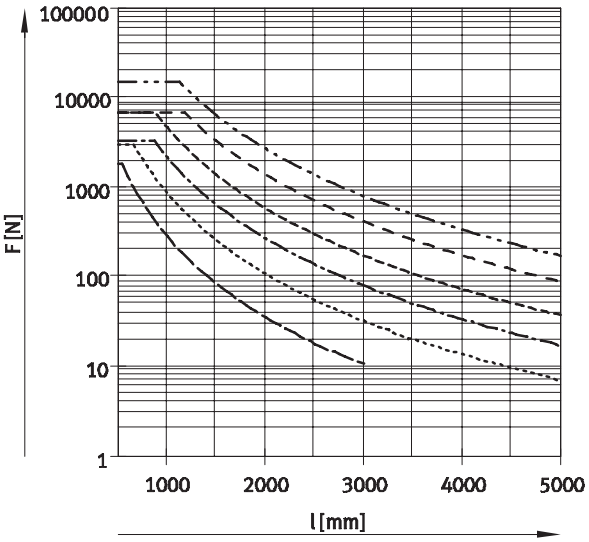
Horizontal mounting position





Vertical mounting position





——— ∅ 18 – – – – – – ∅ 40
---------- ∅ 25 – – – – ∅ 50
—·—·— ∅ 32 -·-·— ∅ 63

Example:

The drive DGC-25-1500 is subjected to a force of 300 N in a horizontal mounting position.

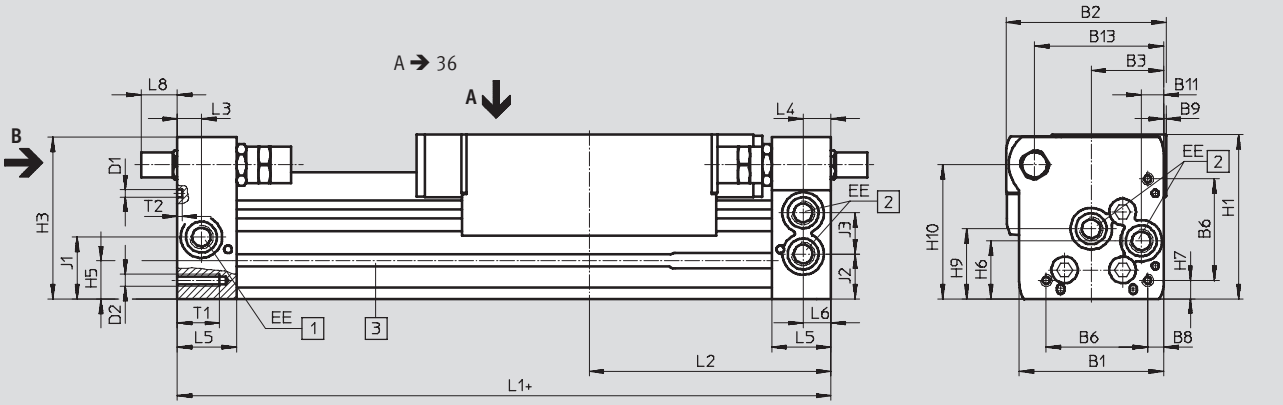
The drive has an overall length of:
l = stroke length + L1 (see dimensions)
= 1,500 mm + 200 mm
= 1,700 mm

According to the graph, the max. support span for the drive DGC-25 with a force of 300 N is 1,300 mm.

In this example, profile mountings are required as the max. support span (1,300 mm) is smaller than the overall length of the drive (1,700 mm).

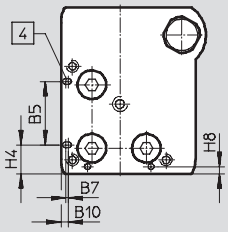
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

∅ 18 ... 40

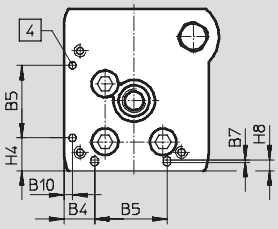


View B

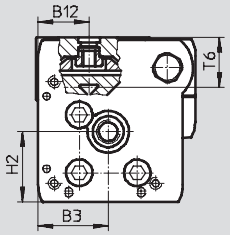
∅ 18



∅ 25 ... 40



∅ 18 ... 40



\+ plus stroke length
1 Supply port optional on two faces
2 Supply port optional on two faces, for supplying from one end
3 Sensor slot for proximity sensor
4 Mounting hole for foot mounting HPC

∅ [mm]	B1	B2	B3	B4	B5 ±0.05	B6	B7	B8	B9	B10	B11	B12	B13	D1 ∅ ±0.05
18	44.5	49.9	19.5	8.8	21	31	0.8	3.8	1	2.4	5.5	15.5	39	2
25	59.8	66	30	12.65	30	42	1	6.65	1	3.5	9.3	21	53.5	3
32	73	79	38.5	5.7	63.1	57.5	–	8.5	1.5	14	14.9	18	66.5	3
40	91	98.5	45	17.2	55	65	–	12.2	2	8	16.5	24.8	80.5	4

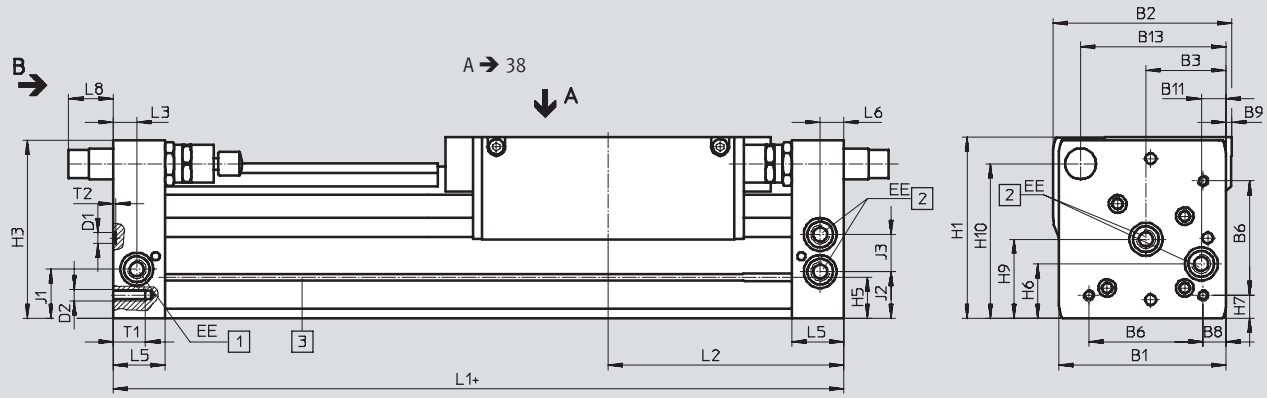
∅ [mm]	D2	EE	H1	H2	H3	H4 ±0.2	H5	H6	H7	H8	H9	H10	J1	J2
18	M4	M5	56.3	23.1	55	9.6	13.4	20	4.6	2.4	25.2	46	20	16.5
25	M5	G1/8	68	29	67	13.65	15.8	24	7.65	4.5	29	55.5	26.1	18.6
32	M6	G1/8	78.5	30	77	5.7	17	27.7	8.5	14	35.2	63.8	30	22
40	M6	G1/4	99.5	41.5	97.5	17.2	25	36.5	12.2	8	44	81.5	35	26

∅ [mm]	J3	L1	L2	L3	L4	L5	L6	L8			T1	T2	T6	Stroke tolerance
								PPV	YSR	YSRW				
18	11	150	74.5	5.7	5.8	15	5.5	0	15.9	19.4	9	2	17.1	0 ... 2.5
25	17	200	100	10.5	10.6	24.5	10.6	0	12.5	15	17.5	2	20.5	
32	18.5	250	124.8	14.5	14.5	30.5	14.5	0	8.5	15.5	15	2	21.3	
40	26	300	150	14.6	14.6	33.5	14.6	0	12.8	21	20	3	30.7	

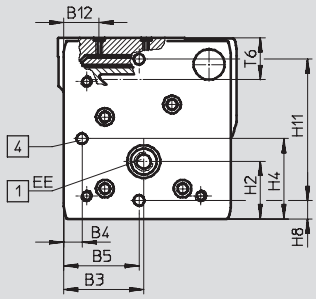
Note: This product conforms to ISO 1179-1 and to ISO 228-1

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

∅ 50/63



View B



\+ plus stroke length
1 Supply port options on 2 sides
2 Supply port options on 2 sides, for supply port at one end
3 Sensor slot for proximity sensor
4 Mounting hole for foot mounting HPC

Linear drives DGC-GF, with plain-bearing guide

Technical data

∅ [mm]	B1	B2	B3	B4	B5 ±0.05	B6	B8	B9	B11	B12	B13	D1 ∅ H7	D2
50	113	126.5	60	8	52.8	81.6	12	–	21	24	97	9	M8
63	142	149	68	15.5	68	97	19.5	5	21	30	123.5	9	M10

∅ [mm]	EE	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11 ±0.05	J1
50	G¼	124.5	38.5	122.5	52.8	29.3	36	12	8	53	104.5	100	30.5
63	G⅜	153.5	48.5	151	68	34.8	46	19.5	15.5	67	131	120	41.5

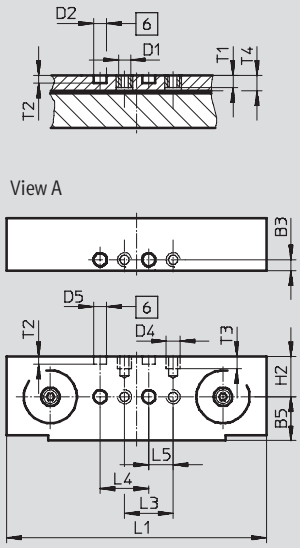
∅ [mm]	J2	J3	L1	L2	L3	L5	L6	L8			T1	T2 +0.2	T6	Stroke tolerance
								PPV	YSR	YSRW				
50	30.5	28	350	175	17	41	17	0	31	36.3	24	2.1	30.4	0 … 2.5
63	39.5	31.5	400	200	20	44	20	0	38.3	48.3	27.5	2.1	36.2	

Note: This product conforms to ISO 1179-1 and to ISO 228-1

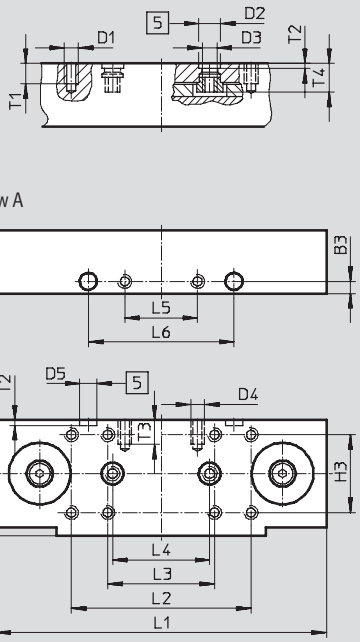
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

Slide

∅ 18



∅ 25



5 Hole for centring sleeve ZBH
6 Hole for centring pin ZBS

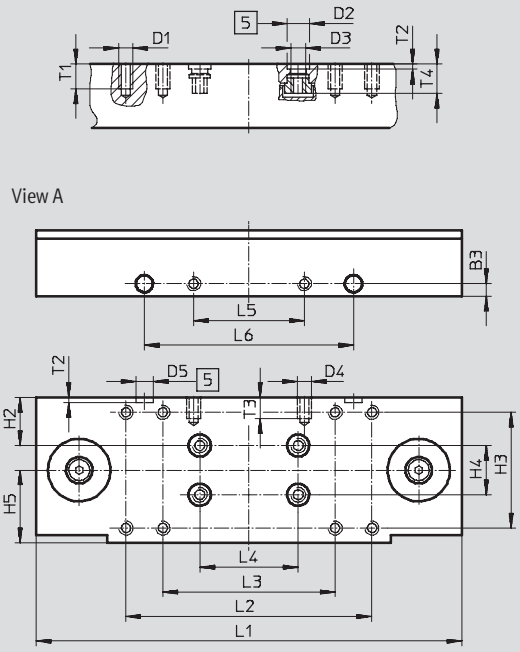
∅	B3	D1	D2 ∅	D3	D4	D5 ∅	H2	H3	H4	H5	L1
[mm]	±0.05		H7			H7			±0.03	±0.1	±0.1
18	4.5	M5	5	–	M5	5	16.5	–	–	18	107
25	5	M5	9	M6	M5	7	22	32±0.2	–	25.5	136

∅	L2	L3	L4	L5	L6	L7	T1	T2	T3	T4
[mm]	±0.1		±0.03	±0.1	±0.05	±0.1				
18	–	20±0.1	20	10	–	–	5	3.1±0.1	5	6.3
25	74	44±0.2	40	30	60	–	8.5	2.1+0.2	10	11.8

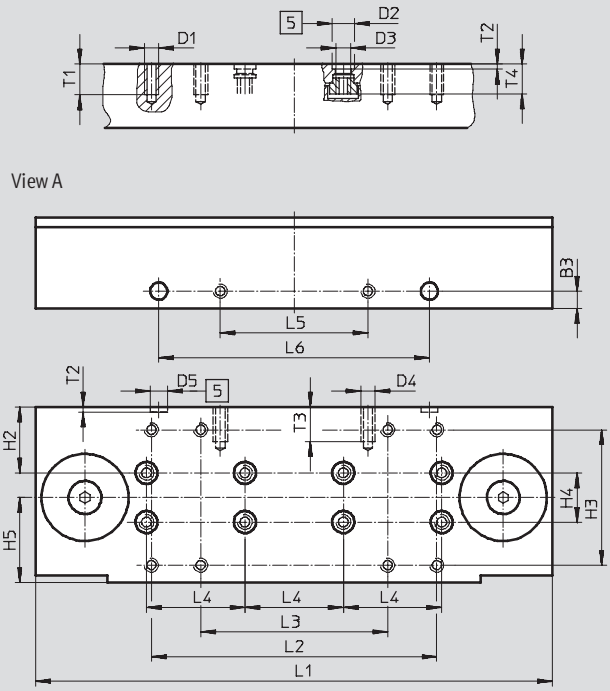
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

Slide

∅ 32



∅ 40



5 Hole for centring sleeve ZBH

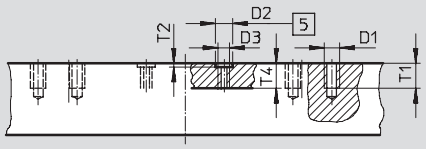
∅ [mm]	B3 ±0.05	D1	D2 ∅ H7	D3	D4	D5 ∅ H7	H2	H3	H4 ±0.03	H5 ±0.1	L1 ±0.1
32	5	M5	9	M6	M5	7	19.5	47±0.2	20	29.5	173
40	7	M5	9	M6	M6	7	26.8	55±0.2	20	34.7	210

∅ [mm]	L2 ±0.1	L3	L4 ±0.03	L5 ±0.1	L6 ±0.05	L7 ±0.1	T1	T2	T3	T4
32	100	70±0.2	40	45	85	–	10	2.1+0.2	8.5	11.8
40	116	76±0.2	40	60	110	–	12.5	2.1+0.2	14	12.1

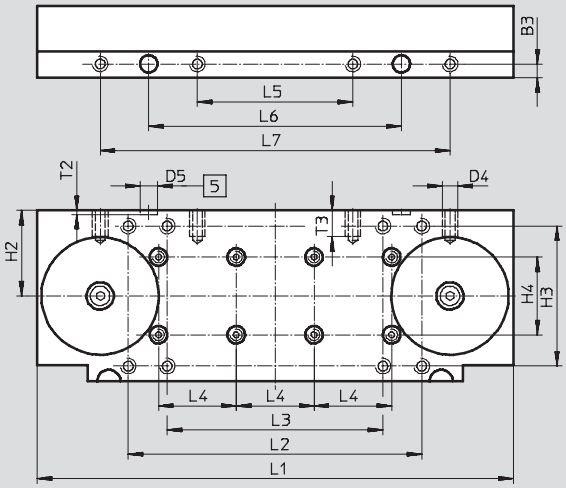
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

Slide

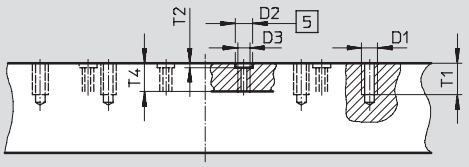
∅ 50



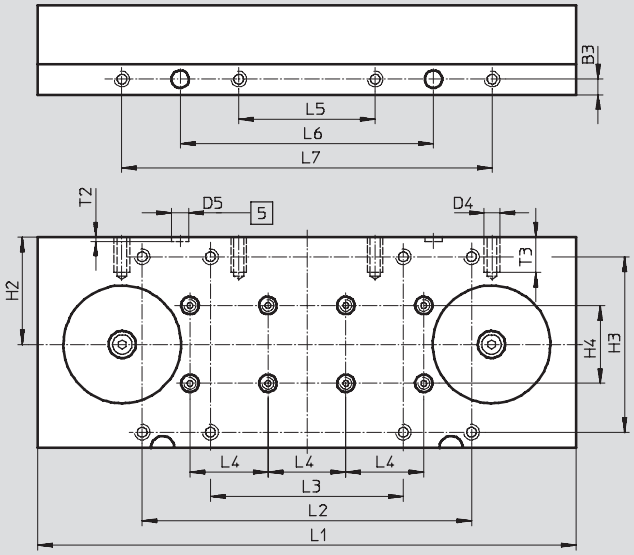
View A



∅ 63



View A



5 Hole for centring sleeve ZBH

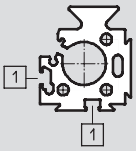
∅ [mm]	B3 ±0.05	D1	D2 ∅ H7	D3	D4	D5 ∅ H7	H2	H3	H4 ±0.03	H5 ±0.1	L1 ±0.1
50	7	M8	9	M6	M8	9	44	72±0.3	40	–	245
63	8	M8	9	M6	M8	9	55	90±0.3	40	–	276

∅ [mm]	L2 ±0.1	L3	L4 ±0.03	L5 ±0.1	L6 ±0.05	L7 ±0.1	T1	T2	T3	T4
50	151	111±0.2	40	80	130	180	13	2.1+0.2	13.5	13
63	169	99±0.2	40	70	130	190	16	2.1+0.2	18	14.5

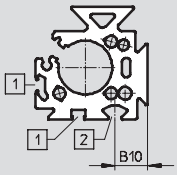
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

Profile barrel

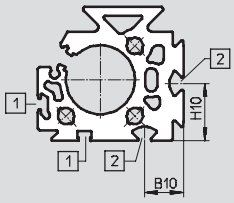
∅ 18



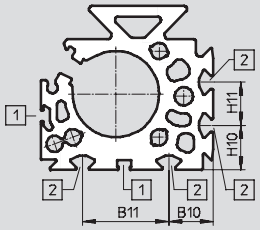
∅ 25



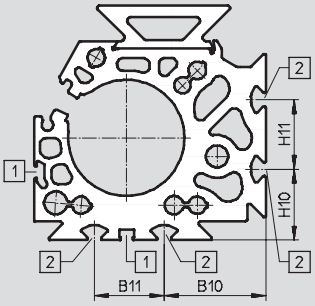
∅ 32



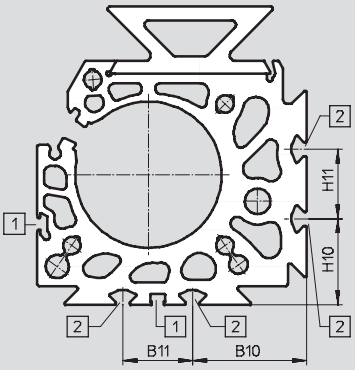
∅ 40



∅ 50



∅ 63



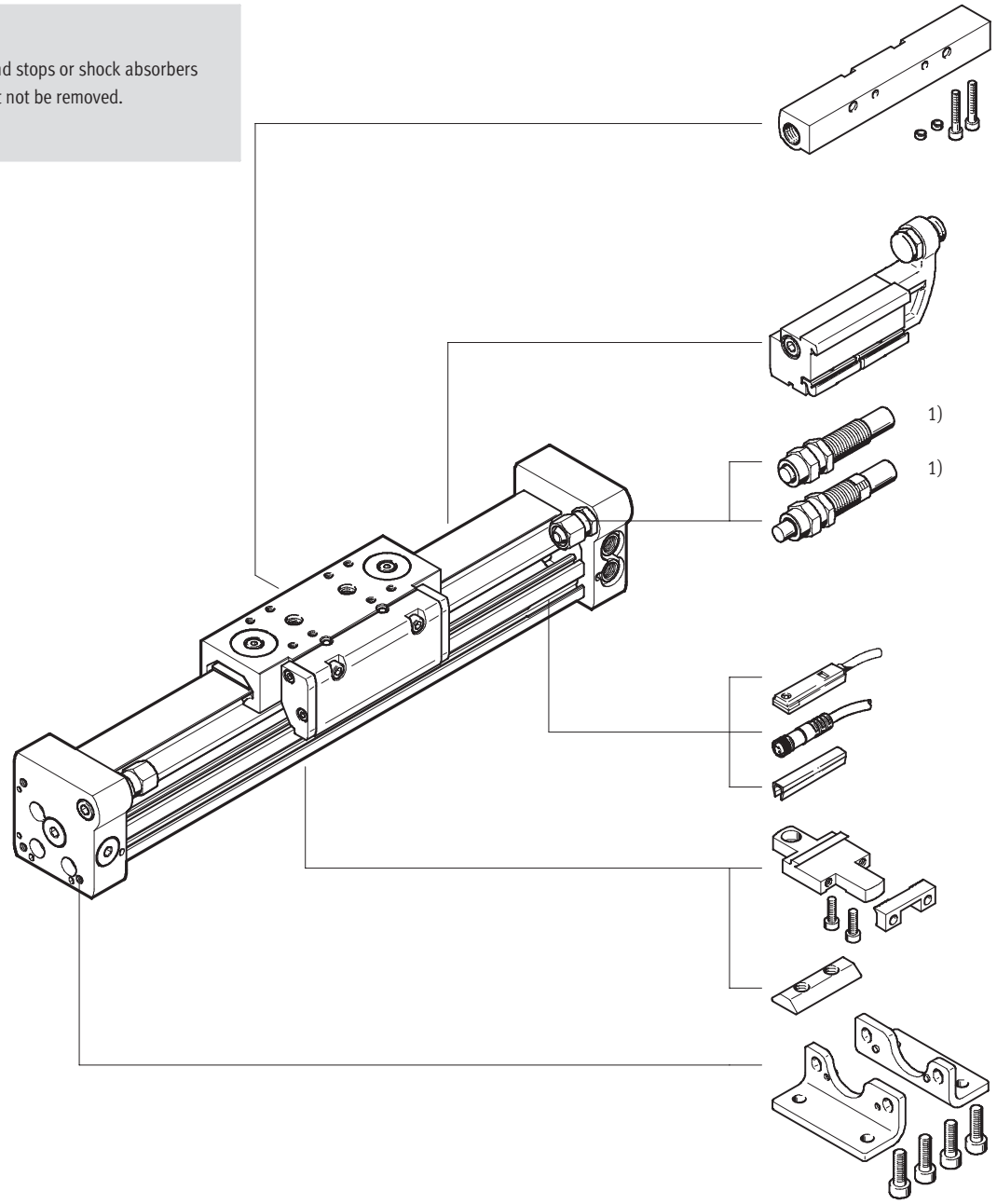
1 Sensor slot for proximity sensor
2 Mounting slot for slot nut

∅ [mm]	B10	B11	H10	H11
25	15.23	–	–	–
32	18	–	26.5	–
40	20.5	40	20.5	20
50	43.8	30	30.5	30
63	49	30	37	30

Order code
Mandatory data/options

Note

1) End stops or shock absorbers must not be removed.



YWZ1/YWZ2		
YWZ1/YWZ2		
YSR	1)	
YSRW	1)	
G/H/I/J		
V		
L		
M		
B		
F		

Linear drives DGC-GF, with plain-bearing guide

Ordering data – Modular products

FESTO

M Mandatory data									O Options			
Module No.	Function		Stroke		Cushioning				Accessories			
	Piston ∅		Guide		Position sensing				Accessories supplied loose		User manual	
532 446 532 447 532 448 532 449 532 450 532 451	DGC	18 25 32 40 50 63	1 … 8500	GF	PPV YSR YSRW	A				F, …M, …B, …G, …H, …I, …J, …V, …L, YWZ1, YWZ2	O	
Order example												
532 446	DGC	– 18	– 250	– GF	– PPV	– A			ZUB	– F2M2I2V	–	

Ordering table												
Size			18	25	32	40	50	63	Conditions	Code		Enter code
M	Module No.		532 446	532 447	532 448	532 449	532 450	532 451				
	Function		Linear drive							DGC		DGC
	Piston ∅	[mm]	18	25	32	40	50	63		-...		
	Stroke	[mm]	1 … 3000	1 … 8500			1 … 5000		1	-...		
	Guide		Plain-bearing guide							-GF		-GF
	Cushioning		Pneumatic cushioning, adjustable at both ends							-PPV		
			Shock absorber, self-adjusting							-YSR		
			Shock absorber, self-adjusting, progressive							-YSRW		
	Position sensing		For proximity sensor							-A		-A
O	Accessories		Supplied loose (can be retrofitted)							ZUB-		ZUB-
	Foot mounting		1							F		
	Profile mounting		1 … 9							…M		
	Slot nut for mounting slot		–	1 … 9						…B		
	Proximity sensor	Cable, 2.5 m	1 … 9							…G		
		M8 plug	1 … 9							…H		
	Proximity sensor, contactless, PNP	Cable, 2.5 m	1 … 9							…I		
		M8 plug	1 … 9							…J		
	Cable with socket	M8, 2.5 m	1 … 9							…V		
	Slot cover for sensor slot		1 … 9							…L		
	Mechanical end position limiter		Variable end position, at one end						1	YWZ1		
			Variable end position, at both ends						1	YWZ2		
	User manual		Express waiver – no operating instructions to be included (already available)							-O		

1 **YWZ1, YWZ2** Only with cushioning YSR or YSRW

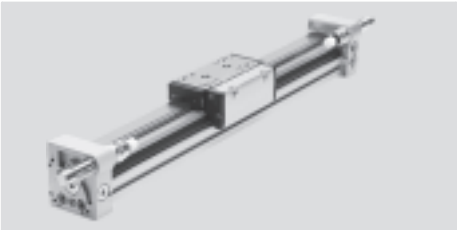
Transfer order code

	DGC	–	–	–	GF	–	–	ZUB	–	–

Ordering data – Wearing parts kits					
Piston ∅	Part No.	Type	Piston ∅	Part No.	Type
18	684 486	DGC-18	40	684 489	DGC-40
25	684 487	DGC-25	50	719 825	DGC-50
32	684 488	DGC-32	63	719 826	DGC-63

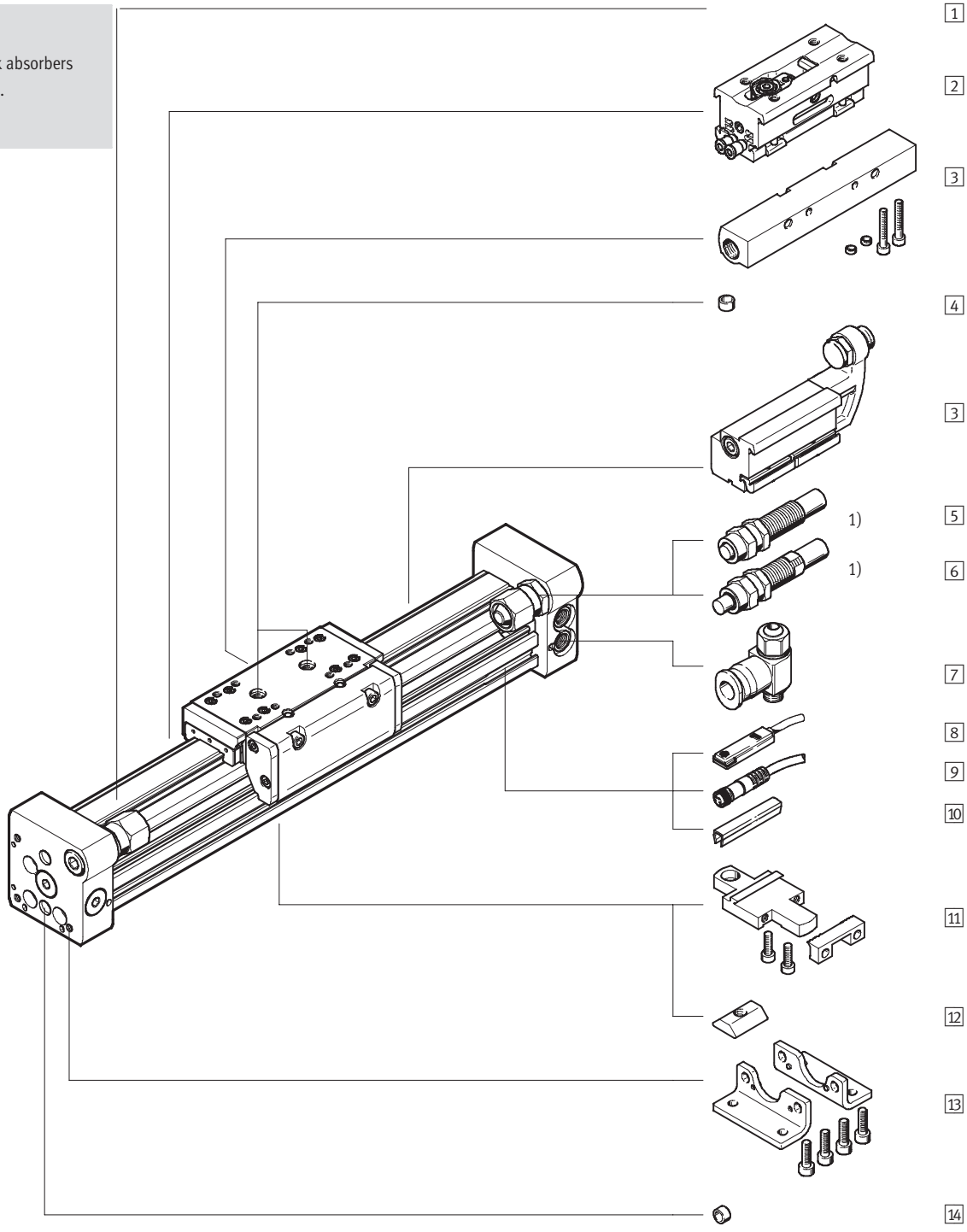
Linear drives DGC-KF, with recirculating ball bearing guide

Peripherals overview



Note

1) End stops or shock absorbers must not be removed.



Linear drives DGC-KF, with recirculating ball bearing guide

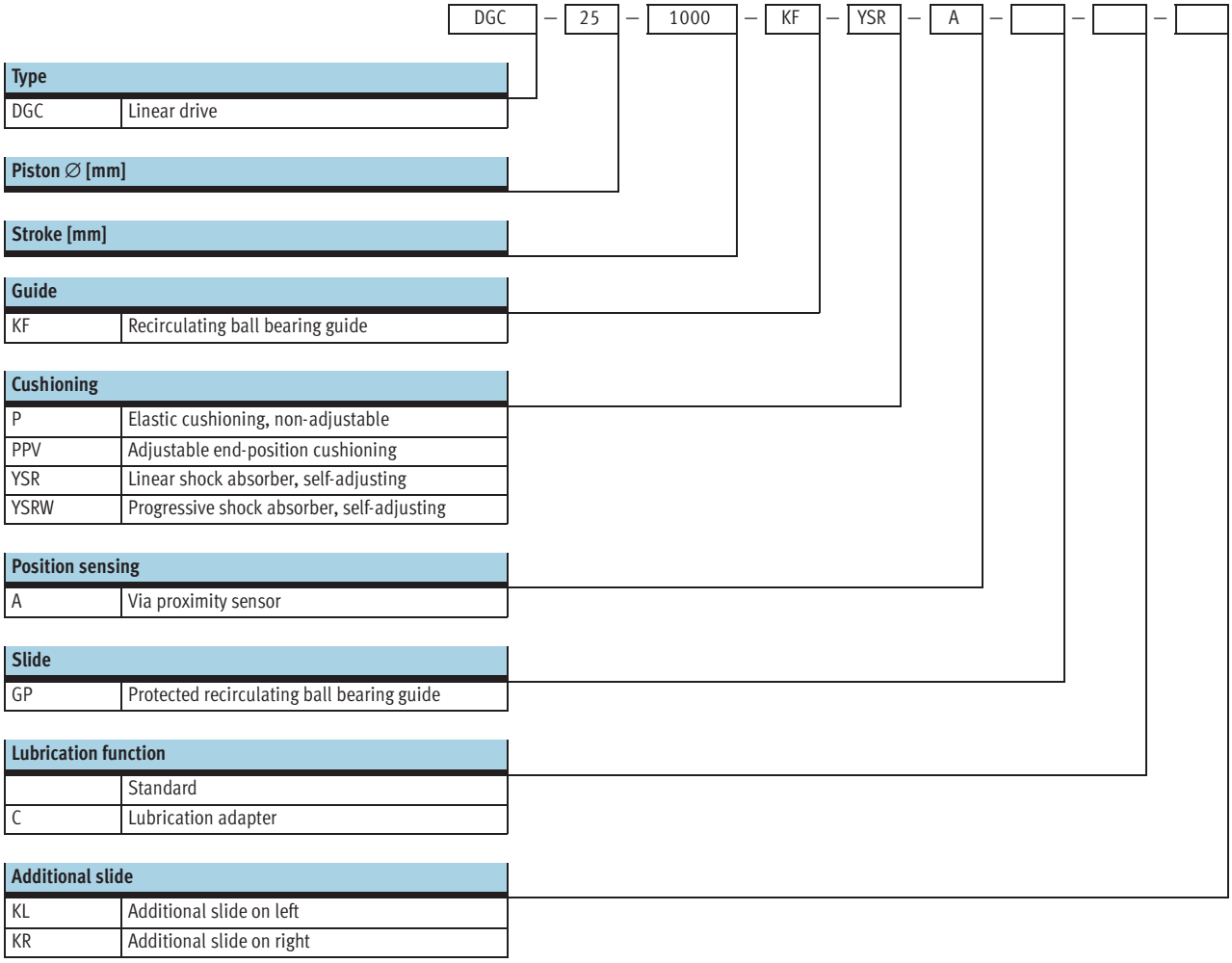
Peripherals overview

Variants and accessories				
	Type	For piston ∅	Brief description	→ Page/Internet
1	Linear drive DGC-KF	8 … 63	Linear drive without accessories, with recirculating ball bearing guide	46
2	Intermediate position module Z1/Z2/Z3	25, 32, 40	Permits up to three intermediate positions	76
3	Mechanical end position limiter YWZ	18 … 63	For variable end position adjustment, e.g. for format adjustments	74
4	Centring pin/sleeve[1)] ZBS/ZBH	8 … 63	For centring loads and attachments on the slide	78
–	Cushioning P	8, 12	Non-adjustable, flexible cushioning. Used only at low speeds	64
–	Cushioning PPV	18 … 63	Adjustable pneumatic end position cushioning. Used at medium speeds	64
5	Shock absorber YSR	8 … 63	Self-adjusting hydraulic shock absorber with spring return and linear cushioning characteristic	64
6	Shock absorber YSRW	8 … 63	Self-adjusting hydraulic shock absorber with spring return and progressive cushioning characteristic	64
7	One-way flow control valve GRLA	8 … 63	For regulating speed	78
8	Proximity sensor G/H/I/J	8 … 63	For sensing the slide position	79
9	Cable with socket V	8 … 63	For proximity sensor	79
10	Slot cover L	18 … 63	For protecting against ingress of dirt and securing proximity sensor cables	78
11	Profile mounting M	8 … 63	Simple and precise mounting option via dovetail connection	70
12	Slot nut B	25 … 63	For mounting attachments	78
13	Foot mounting F	8 … 63	For mounting on end cap	66
14	Centring pin/sleeve[1)] ZBS/ZBH	8 … 63	For centring the drive without foot mountings (user-specific)	78

1) Included in the scope of delivery of the drive

Linear drives DGC-KF, with recirculating ball bearing guide

Type codes



Type	
DGC	Linear drive

Piston ∅ [mm]	

Stroke [mm]	

Guide	
KF	Recirculating ball bearing guide

Cushioning	
P	Elastic cushioning, non-adjustable
PPV	Adjustable end-position cushioning
YSR	Linear shock absorber, self-adjusting
YSRW	Progressive shock absorber, self-adjusting

Position sensing	
A	Via proximity sensor

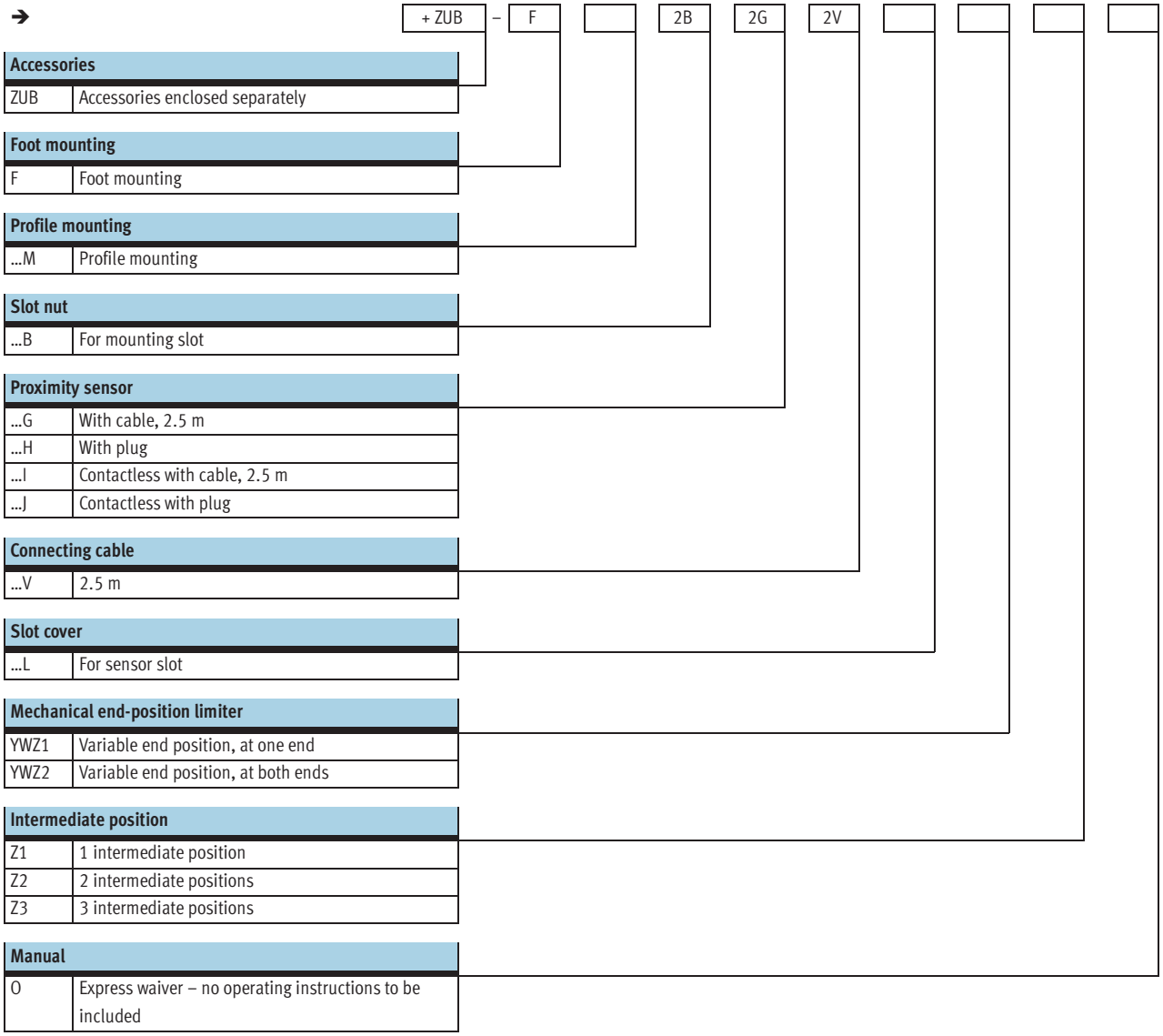
Slide	
GP	Protected recirculating ball bearing guide

Lubrication function	
	Standard
C	Lubrication adapter

Additional slide	
KL	Additional slide on left
KR	Additional slide on right

Linear drives DGC-KF, with recirculating ball bearing guide

Type codes



Accessories	
ZUB	Accessories enclosed separately

Foot mounting	
F	Foot mounting

Profile mounting	
...M	Profile mounting

Slot nut	
...B	For mounting slot

Proximity sensor	
...G	With cable, 2.5 m
...H	With plug
...I	Contactless with cable, 2.5 m
...J	Contactless with plug

Connecting cable	
...V	2.5 m

Slot cover	
...L	For sensor slot

Mechanical end-position limiter	
YWZ1	Variable end position, at one end
YWZ2	Variable end position, at both ends

Intermediate position	
Z1	1 intermediate position
Z2	2 intermediate positions
Z3	3 intermediate positions

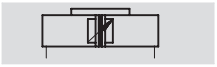
Manual	
O	Express waiver – no operating instructions to be included

Linear drives DGC-KF, with recirculating ball bearing guide

Technical data

FESTO

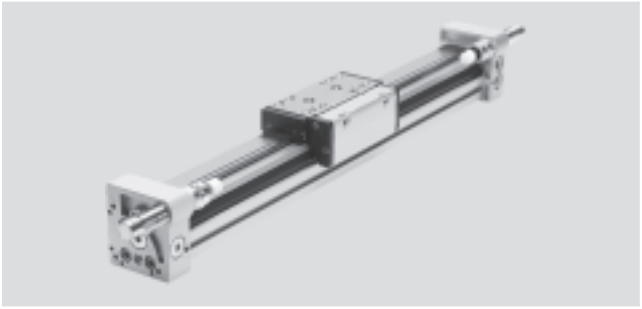
Function



- Ø - Diameter
  8 … 63 mm
- l - Stroke length
  1 … 8,500 mm

www.festo.com/en/Spare_parts_service

Wearing parts kits
➔ 64



General technical data									
Piston ∅		8	12	18	25	32	40	50	63
Stroke	[mm]	1 … 1,300	1 … 1,900	1 … 3,000	1 … 8,500			1 … 5,000	
Pneumatic connection		M5			G1⁄8		G1⁄4		G3⁄8
Mode of operation		Double-acting							
Design		Rodless drive							
Moment compensator principle		Slotted cylinder, mechanically coupled							
Guide		External recirculating ball bearing guide							
Mounting position		Any							
Cushioning ➔ 49	P	Non-adjustable at both ends		–					
	PPV	–		Adjustable at both ends					
	YSR…	Self-adjusting at both ends							
Cushioning length with PPV cushioning	[mm]	–		16.5	15.5	17.5	29.5	29.8	31.1
Position sensing		Via proximity sensor							
Type of mounting		Profile mounting							
		Foot mounting							
		Direct mounting							
Max. speed	[m/s]	1	1.2	3					
Repetition accuracy	[mm]	0.02 (with shock absorber YSR/YSRW)							

Note: This product conforms to ISO 1179-1 and to ISO 228-1

Operating and environmental conditions									
Piston ∅		8	12	18	25	32	40	50	63
Operating pressure	[bar]	2.5 … 8		2 … 8			1.5 … 8		
Operating medium		Filtered compressed air, lubricated or unlubricated							
Ambient temperature[1]	[°C]	–10 … +60							
Corrosion resistance class CRC[2]		1							
ATEX		Specified types ➔ www.festo.com							

1) Note operating range of proximity sensors
2) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

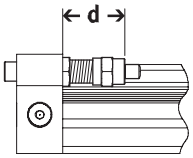
Forces [N]									
Piston ∅		8	12	18	25	32	40	50	63
Theoretical force at 6 bar		30	68	153	295	483	754	1,178	1,870
Impact energy in the end positions		➔ 49							

Linear drives DGC-KF, with recirculating ball bearing guide

Technical data

Weight [g]								
Piston ∅	8	12	18	25	32	40	50	63
Basic weight with 0 mm stroke	225	391	975	2,113	2,837	6,996	13,342	22,220
Additional weight per 10 mm stroke	11	16	31	49	74	117	153	236
Moving load	77	149	331	732	1,146	2,330	4,511	8,225

Adjustable end-position range d [mm]



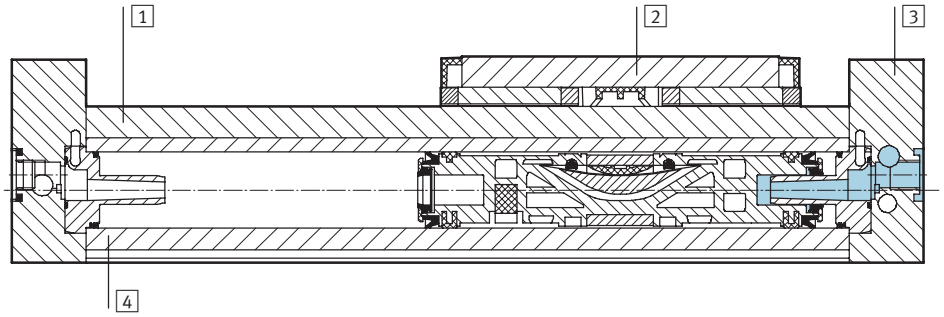
Note

The permissible kinetic energy decreases if the stroke is reduced with PPV adjustable cushioning at both ends.

Piston ∅	8	12	18	25	32	40	50	63
Cushioning P/PPV	11.3 ... 16.3	12.7 ... 17.7	13.8 ... 15.8	21.1 ... 25.1	25.2 ... 30.2	28.7 ... 33.7	28.7 ... 33.7	38.8 ... 43.8
Protected guide with cushioning P/PPV	–	–	16.9 ... 18.9	23.6 ... 27.6	25.2 ... 30.2	34.7 ... 39.7	–	–
Cushioning YSR/YSRW	12.8 ... 22.8	14 ... 24	14.5 ... 34.5	22.5 ... 47.5	27.3 ... 52.3	31 ... 56	31 ... 56	41 ... 76

Materials

Sectional view

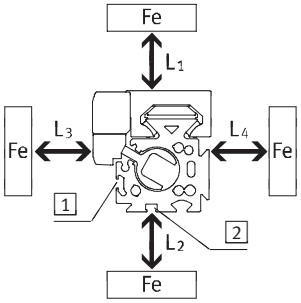


Linear drives		
1	Guide rail	High-alloy steel
2	Slide	High-alloy steel
3	End cap	Anodised aluminium
4	Cylinder barrel	Anodised aluminium
–	Piston seal	Polyurethane
–	Sealing band/cover band	Polyurethane
–	Note on materials	Free of copper, PTFE and silicone

Influence of ferritic materials on proximity sensors

Ferritic materials (steel parts or panels) directly next to the proximity sensors can cause sensing malfunctions. The following safety distances must be observed.

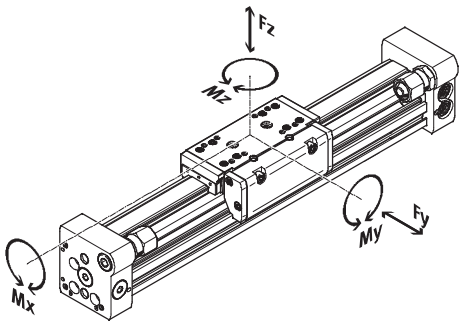
The distance depends on the position of the proximity sensor (see 1 and 2).



Piston ∅			8	12	18	25	32	40	50	63
Distance L1	1	[mm]	0	0	0	0	0	0	0	0
	2	[mm]	–	–	0	0	0	0	0	0
Distance L2	1	[mm]	20	10	10	10	0	0	0	0
	2	[mm]	–	–	25	25	25	25	25	25
Distance L3	1	[mm]	30	25	25	25	25	25	25	25
	2	[mm]	–	–	10	10	0	0	0	0
Distance L4	1	[mm]	0	0	0	0	0	0	0	0
	2	[mm]	–	–	0	0	0	0	0	0

Characteristic 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 cushioning 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:

$$\frac{Fy}{Fy_{max.}} + \frac{Fz}{Fz_{max.}} + \frac{Mx}{Mx_{max.}} + \frac{My}{My_{max.}} + \frac{Mz}{Mz_{max.}} \leq 1$$

Permissible forces and torques

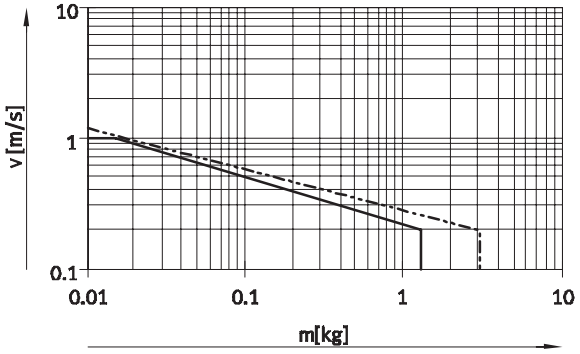
Piston ∅		8	12	18	25	32	40	50	63
$Fy_{max.}$	[N]	300	650	1,850	3,050	3,310	6,890	6,890	15,200
$Fz_{max.}$	[N]	300	650	1,850	3,050	3,310	6,890	6,890	15,200
$Mx_{max.}$	[Nm]	1.7	3.5	16	36	54	144	144	529
$My_{max.}$	[Nm]	4.5	10	51	97	150	380	634	1,157
$Mz_{max.}$	[Nm]	4.5	10	51	97	150	380	634	1,157

Note

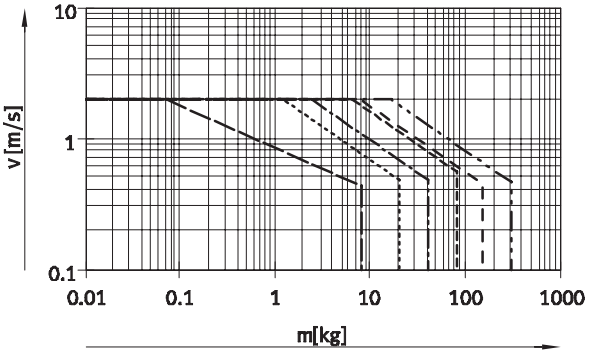
ProDrive
sizing software
➔ www.festo.com

Maximum permissible piston speed v as a function of effective load m

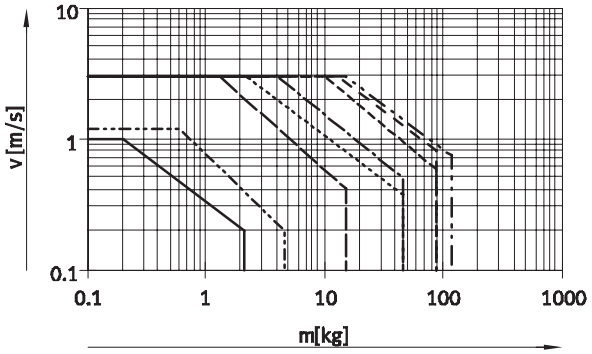
Piston ∅ 8/12 with P cushioning



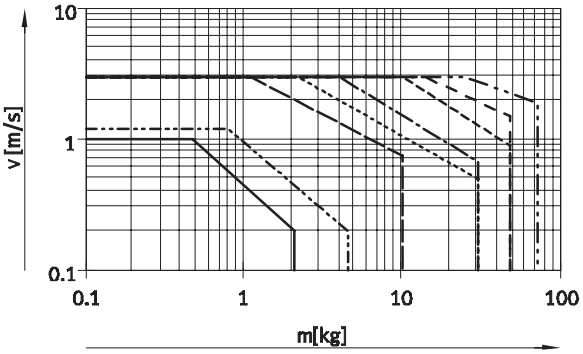
Piston ∅ 18 ... 63 with PPV cushioning



Piston ∅ 8 ... 63 with YSR cushioning



Piston ∅ 8 ... 63 with YSRW cushioning



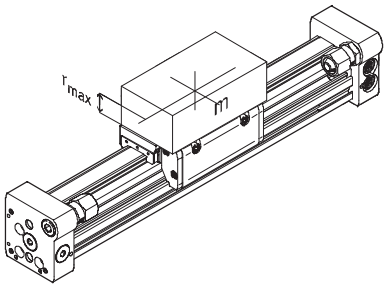
∅ 8 ∅ 12 ∅ 18 ∅ 25 ∅ 32 ∅ 40 ∅ 50 ∅ 63

Note

This data represents the maximum values that can be achieved. In practice, values fluctuate relative to the position of the effective load and mounting position.

Operating range of cushioning

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 cushioned using suitable equipment (shock absorbers, stops, etc.), preferably at the centre of gravity of the load.



Note

To avoid distortion in the slide, the bearing surfaces of the attachments must maintain a flatness of at least 0.01 mm.

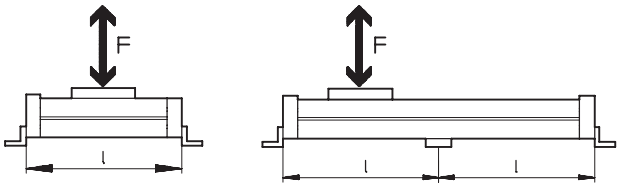
The specifications apply to a horizontal mounting position:

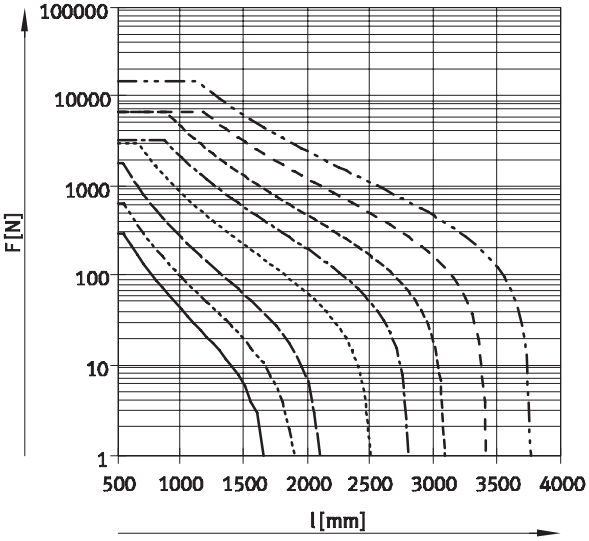
Piston ∅	8	12	18	25	32	40	50	63
Distance $r_{max.}$ [mm]	25	35	35	50	50	50	50	50

Number of profile mountings MUC as a function of force due to weight F and support span l

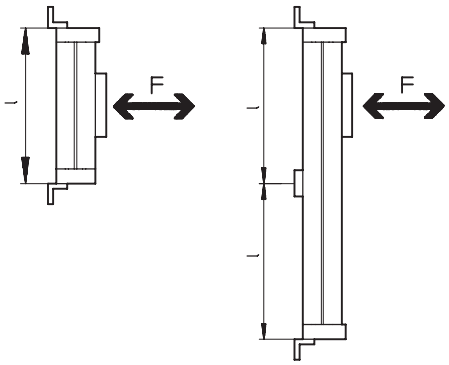
In order to limit deflection in the case of large strokes, the drive may need to be supported. The following graphs help to determine the maximum permissible support span as a function of mounting position, force due to weight and normal force.

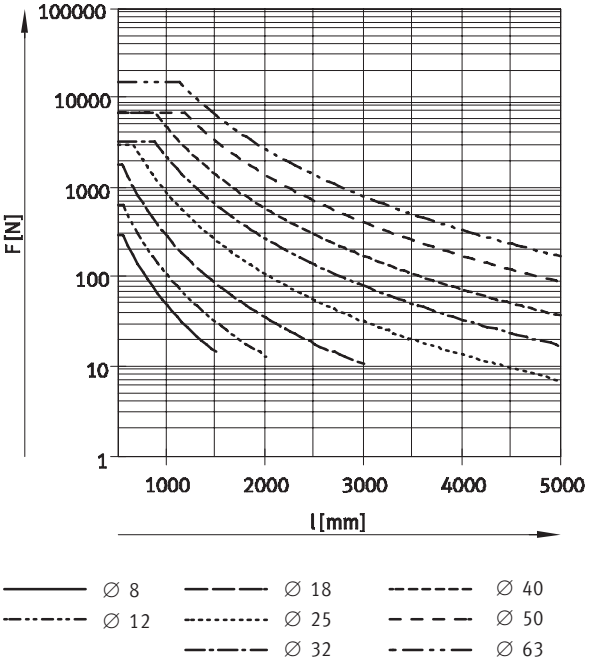
Horizontal mounting position





Vertical mounting position





Example:

The drive DGC-25-1500 is subjected to a force of 300 N in a horizontal mounting position.

The drive has an overall length of:
l = stroke length + L1 (see dimensions)
= 1,500 mm + 200 mm
= 1,700 mm

According to the graph, the max. support span for the drive DGC-25 with a force of 300 N is 1,300 mm.

In this example, profile mountings are required as the max. support span (1,300 mm) is smaller than the overall length of the drive (1,700 mm).

Linear drives DGC-KF, with recirculating ball bearing guide

Technical data

FESTO

Central lubrication system

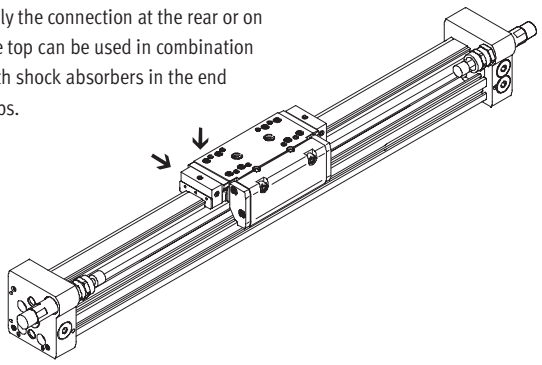
The lubrication adapter enables the guide of the linear drive DGC-KF to be permanently lubricated in applications in humid or wet ambient conditions using semi or fully automatic relubrication devices.

- For piston ∅ 25, 32, 40, 63
- The modules are suitable for oils and greases
- The dimensions of the linear drive DGC-KF are the same with and without central lubrication modules
- Both lubrication adapters must be connected
- There are three connection options on each side
- Can be used in combination with:
  - Standard slide GK
  - Additional slide KL, KR
- Cannot be used in combination with:
  - Protected recirculating ball bearing guide GP

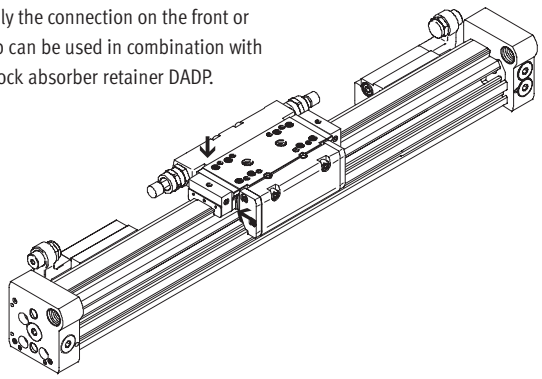
Slide dimensions
➔ 60
Order code C in the modular product system ➔ 65

Connection options

Only the connection at the rear or on the top can be used in combination with shock absorbers in the end caps.

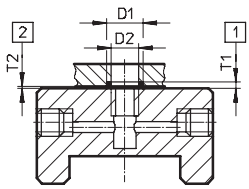


Only the connection on the front or top can be used in combination with shock absorber retainer DADP.



Connection option for customer design

The drawing opposite shows the connection option on the top lubrication interface using a customer design.



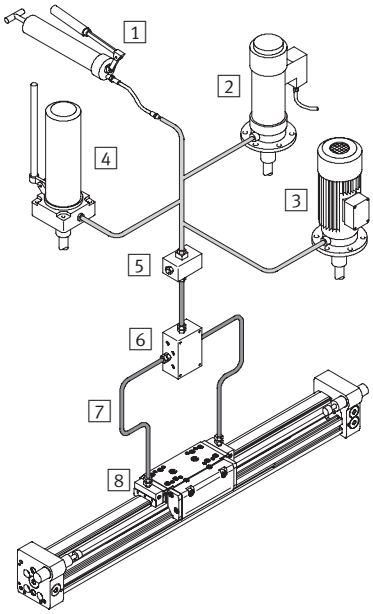
D1 $8^{+0.2}$ mm
D2 6 mm
T1 $0.6_{-0.05}$ mm
T2 $0.1^{+0.2}$ mm
O-ring ∅ 6x1 mm (DIN 3771)

1 Slot depth for O-ring
2 Required air gap

Additional dimensions ➔ 60

Structure of a central lubrication system

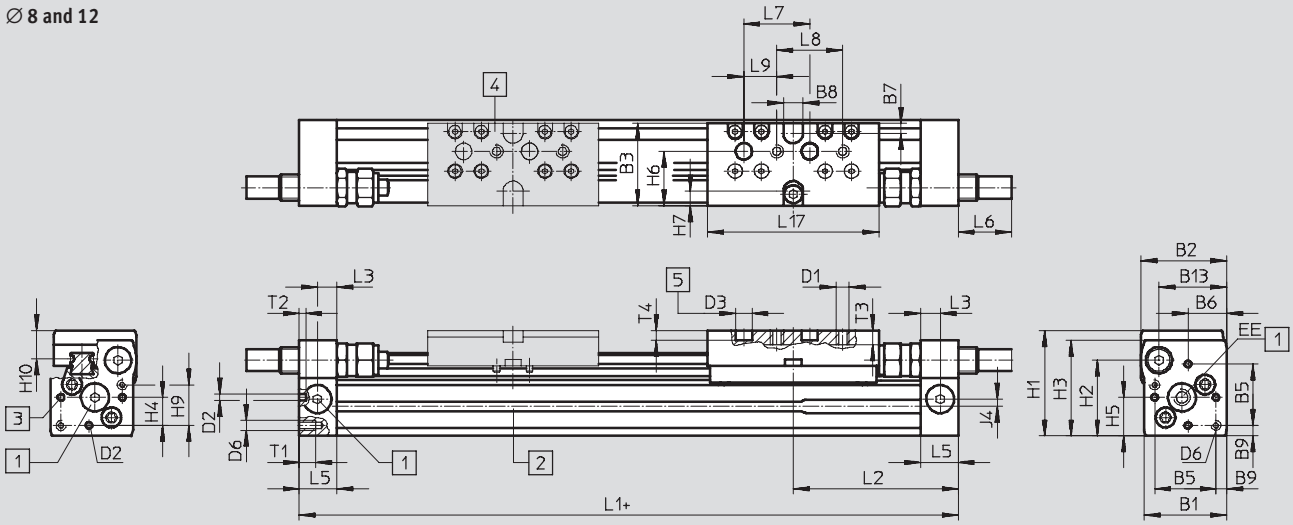
A central lubrication system requires various additional components. The illustration shows different options (using a hand pump, pneumatic container pump or electric container pump) required as a minimum for designing a central lubrication system. Festo does not sell these additional components, however they can be obtained from the following companies:
– Lincoln
– Bilomatik
– SKF (Vogel)
Festo recommends these companies because they can supply all the necessary components.



1 Hand pump
2 Pneumatic container pump
3 Electric container pump
4 Manually operated container pump
5 Nipple block
6 Distributor block
7 Tubing or piping
8 Fittings

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

∅ 8 and 12



\+ plus stroke length
1 Supply port options on 3 sides
2 Sensor slot for proximity sensor
3 Mounting hole for foot mounting or centring pin
4 Additional slide KL
5 Hole for centring pin ZBS

Linear drives DGC-KF, with recirculating ball bearing guide

Technical data

∅ [mm]	B1	B2	B3	B5	B6	B7	B8 ±0.05	B9 ±0.1	B13	D1	D2 ∅ H8	D3 ∅ H7	D6
8	25	26	25	18.6	11.7	3	6	3.2	20.5	M4	2	5	M3
12	30.2	31	31	20.6	13.5	3	8	4.8	25	M4	2	5	M4

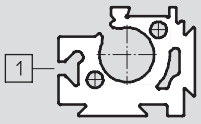
∅ [mm]	EE	H1	H2	H3	H4	H5	H6	H7	H9	H10	J4	L1	L2
8	M5	32	23	29	8.5	11.7	16.5	4.5	12.3	8.7	2.2	100	50.1
12	M5	37.5	28.5	34.5	8.7	13.5	20.5	5	14.7	9.8	3	125	62.1

∅ [mm]	L3	L5	L6			L7 ±0.03	L8 ±0.1	L9 ±0.1	L17	T1	T2	T3	T4 +0.2	Stroke tolerance
			P	YSR	YSRW									
8	6	11.5	0	16	16.2	20	20	10	52	5	2	4.3	3	0 … 1.7
12	8	16	0	11.3	12.3	20	20	10	65	6	2	5	3	

Profile barrel

∅ 8

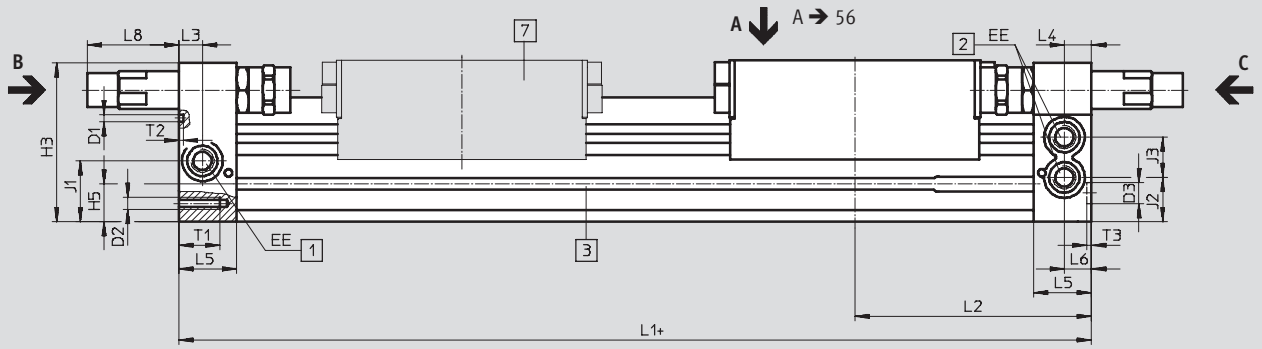
∅ 12



1 Sensor slot for proximity sensor

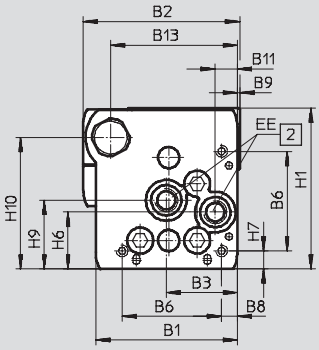
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

∅ 18 ... 40



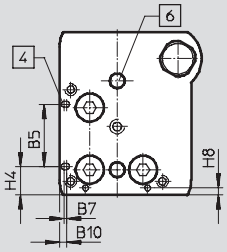
View C

∅ 18 ... 40

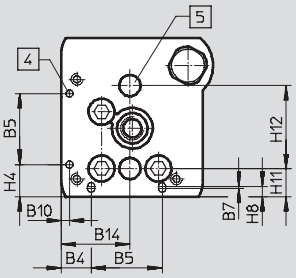


View B

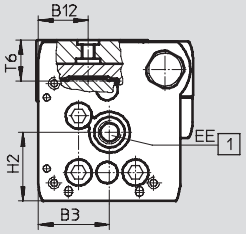
∅ 18



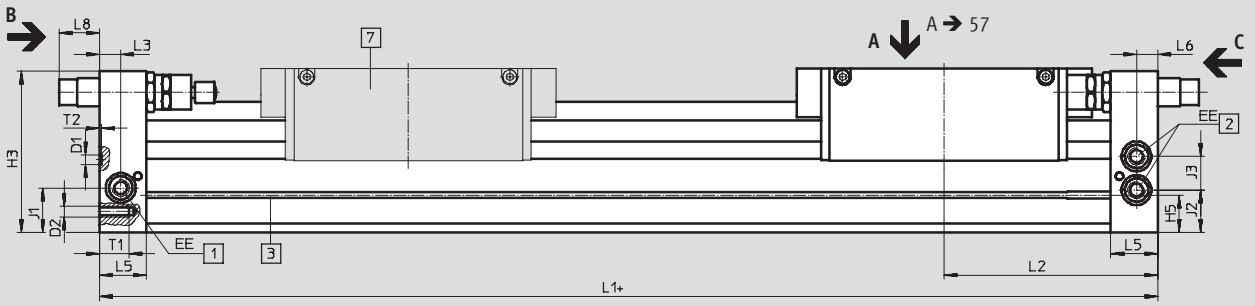
∅ 25 ... 40



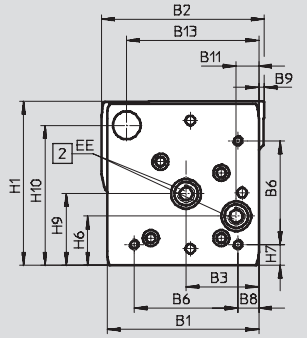
∅ 18 ... 40



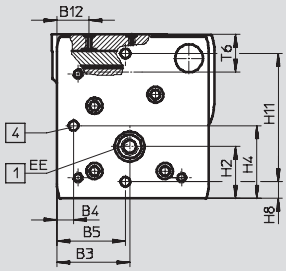
∅ 50/63



View C



View B



\+ plus stroke length
1 Supply port options on 2 sides
2 Supply port options on 2 sides, for supply port at one end only
3 Sensor slot for proximity sensor
4 Mounting hole for foot mounting HPC
5 Hole for centring sleeve ZBH
6 Hole for centring pin ZBS
7 Additional slide

Linear drives DGC-KF, with recirculating ball bearing guide

Technical data

∅ [mm]	B1	B2	B3	B4	B5 ±0.05	B6	B7	B8	B9	B10	B11	B12
18	44.5	49.9	19.5	8.8	21	31	0.8	3.8	1	2.4	5.5	15.5
25	59.8	66	30	12.65	30	42	1	6.65	1	3.5	9.3	21
32	73	79	38.5	5.7	63.1	57.5	–	8.5	1.5	14	14.9	18
40	91	98.5	45	17.2	55	65	–	12.2	2	8	16.5	24.8
50	113	126.5	60	8	52.8	81.6	–	12	–	–	21	24
63	142	149	68	15.5	68	97	–	19.5	5	–	21	30

∅ [mm]	B13	B14	D1 ∅	D2	D3 ∅ H7	EE	H1	H2	H3	H4 ±0.2	H5	H6
18	39	19.5	2±0.05	M4	5	M5	56.3	23.1	55	9.6	13.4	20
25	53	29	3±0.05	M5	9	G1/8	68	29	67	13.65	15.8	24
32	65	38.5	3±0.05	M6	9	G1/8	78.5	30	77	5.7	17	27.7
40	80.5	45	4±0.05	M6	9	G1/4	99.5	41.5	97.5	17.2	25	36.5
50	97	–	9H7	M8	–	G1/4	124.5	38.5	122.5	52.8	29.3	36
63	123.5	–	9H7	M10	–	G3/8	153.5	48.5	151	68	34.8	46

∅ [mm]	H7	H8	H9	H10	H11	H12 ±0.05	J1	J2	J3	L1	
										KF	KF-GP
18	4.6	2.4	25.2	46	8.5±0.15	30	20	16.5	11	150	157
25	7.65	4.5	29	55.5	12±0.15	35	26.1	18.6	17	200	205
32	8.5	14	35.2	63.8	11.45±0.15	50	30	22	18.5	250	250
40	12.2	8	44	81.5	15±0.15	60	35	26	26	300	312
50	12	8	53	104.5	100±0.05	–	30.5	30.5	28	350	–
63	19.5	15.5	67	131	120±0.05	–	41.5	39.5	31.5	400	–

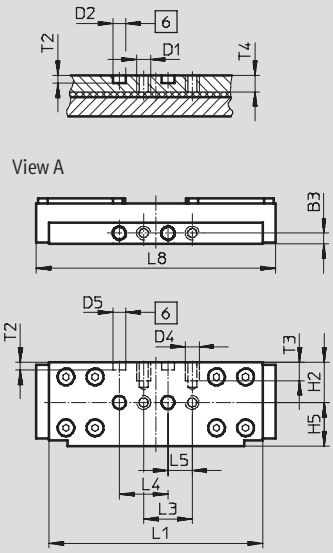
∅ [mm]	L2		L3	L4	L5	L6	L8			T1	T2	T3	T6	Stroke tolerance
	KF	KF-GP					PPV	YSR	YSRW					
18	74.5	78	5.7	5.8	15	5.5	0	29.9	32.4	9	2	$3.1^{+0.2}$	15	0 ... 2.5
25	100	102.5	10.5	10.6	24.5	10.6	0	35.6	38.6	17.5	2	$2.1^{+0.2}$	17.3	
32	124.8	124.8	14.5	14.5	30.5	14.5	0	19.5	28	15	2	$2.1^{+0.2}$	20	
40	150	156	14.6	14.6	33.5	14.6	0	38.5	43.5	20	3	$2.1^{+0.2}$	25.7	
50	175	–	17	–	41	17	0	31	36.3	24	$2.1^{+0.2}$	–	28.75	
63	200	–	20	–	44	20	0	38.3	48.3	27.5	$2.1^{+0.2}$	–	36.1	

Note: This product conforms to ISO 1179-1 and to ISO 228-1

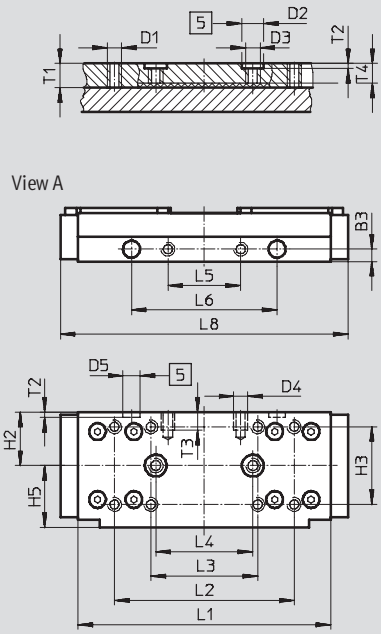
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

Slide

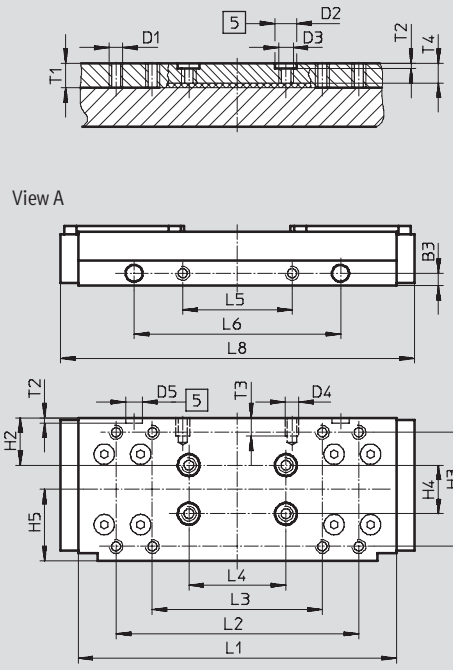
∅ 18



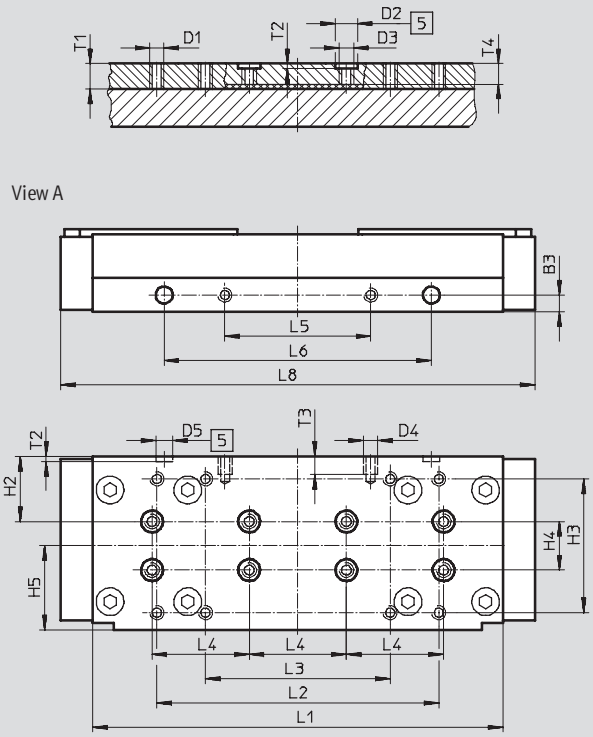
∅ 25



∅ 32



∅ 40

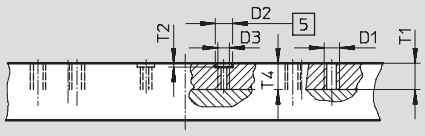


5 Hole for centring sleeve ZBH
6 Hole for centring pin ZBS

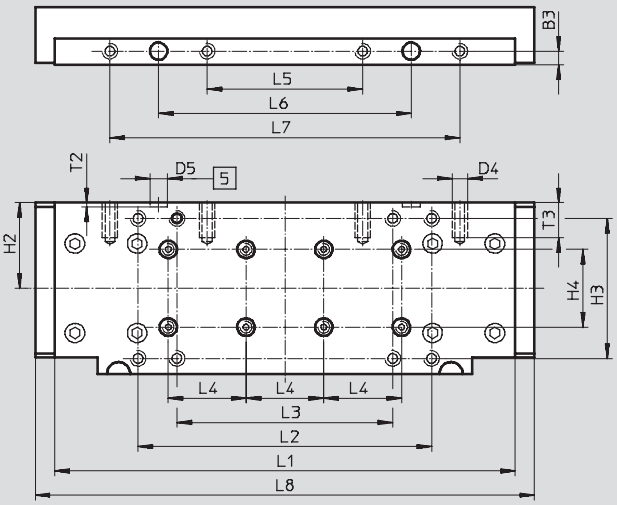
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

Slide

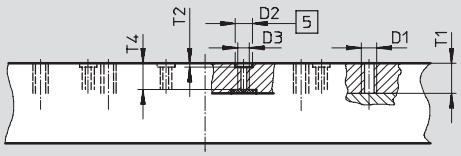
∅ 50



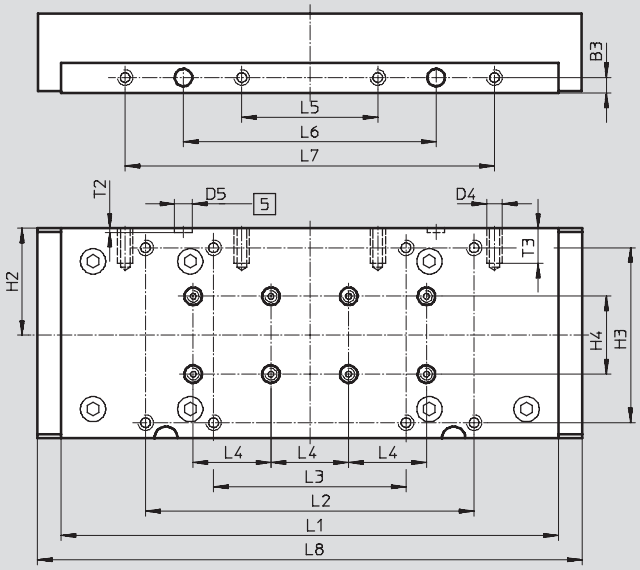
View A



∅ 63



View A



5 Hole for centring sleeve ZBH
6 Hole for centring pin ZBS

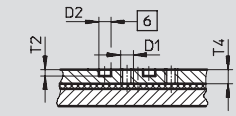
∅ [mm]	B3 ±0.05	D1	D2 ∅ H7	D3	D4	D5 ∅ H7	H2	H3	H4 ±0.03	H5 ±0.1	L1
18	4.5	M5	5	–	M5	5	16.5	–	–	18	88±0.1
25	5	M5	9	M6	M5	7	22	32±0.2	–	25.5	104±0.2
32	5	M5	9	M6	M5	7	19.5	47±0.2	20	29.5	131±0.2
40	7	M5	9	M6	M6	7	26.8	55±0.2	20	34.7	169±0.2
50	7	M8	9	M6	M8	9	44	72±0.3	40	–	237±0.1
63	8	M8	9	M6	M8	9	55	90±0.3	40	–	256±0.1

∅ [mm]	L2 ±0.2	L3	L4 ±0.03	L5 ±0.1	L6 ±0.05	L7 ±0.1	L8	T1	T2	T3	T4
18	–	20±0.1	20	10	–	–	99	–	3.1±0.1	7.5	6.7
25	74	44±0.2	40	30	60	–	118.5	10	2.1±0.2	7.5	8
32	100	70±0.2	40	45	85	–	145.7	10	2.1±0.2	7.5	8
40	116	76±0.2	40	60	110	–	195.4	10.5	2.1±0.2	7.5	8.5
50	151	111±0.2	40	80	130	180	256.8	13.5	2.1±0.2	18	13.5
63	169	99±0.2	40	70	130	190	280	15.5	2.1±0.2	18	13.6

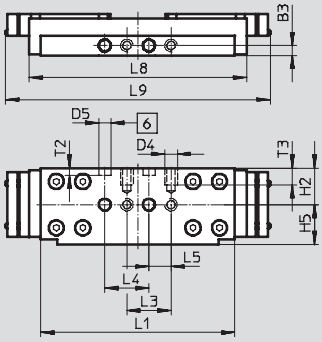
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

Slide, variant GP – Protected recirculating ball bearing guide

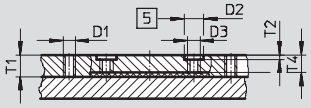
∅ 18



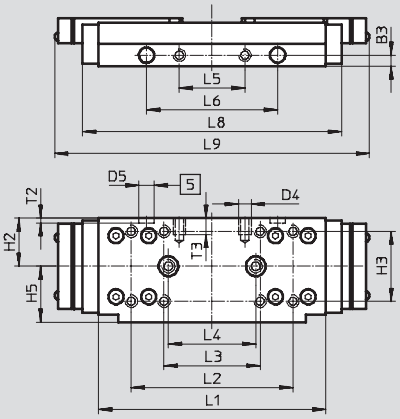
View A



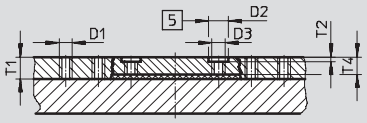
∅ 25



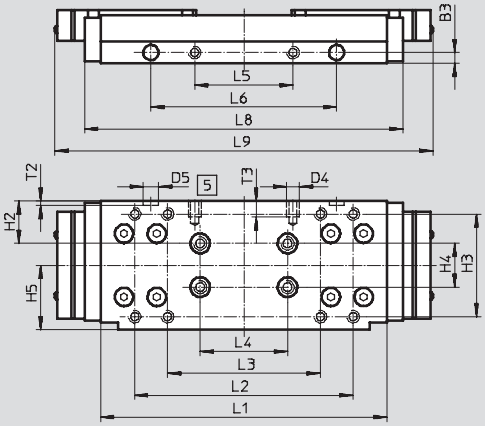
View A



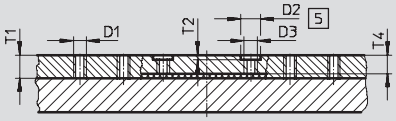
∅ 32



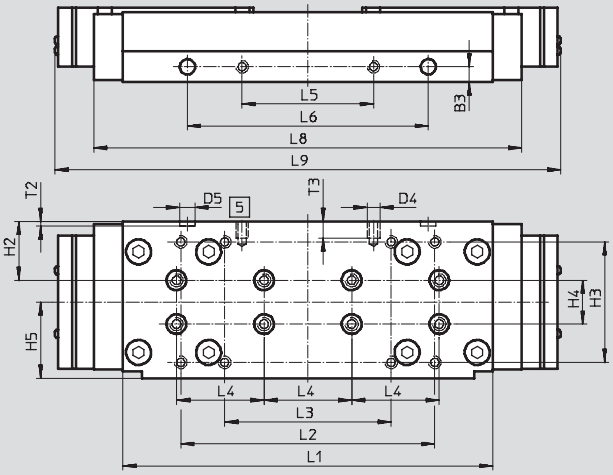
View A



∅ 40



View A



5 Hole for centring sleeve ZBH
6 Hole for centring pin ZBS

Linear drives DGC-KF, with recirculating ball bearing guide

Technical data

∅ [mm]	B3 ±0.05	D1	D2 ∅ H7	D3	D4	D5 ∅ H7	H2	H3
18	4.5	M5	5	–	M5	5	16.5	–
25	5	M5	9	M6	M5	7	22	32±0.2
32	5	M5	9	M6	M5	7	19.5	47±0.2
40	7	M5	9	M6	M6	7	26.8	55±0.2

∅ [mm]	H4 ±0.03	H5 ±0.1	L1	L2 ±0.2	L3	L4 ±0.03	L5 ±0.1	L6 ±0.05
18	–	18	88±0.1	–	20±0.1	20	10	–
25	–	25.5	104±0.2	74	44±0.2	40	30	60
32	20	29.5	131±0.2	100	70±0.2	40	45	85
40	20	34.7	169±0.2	116	76±0.2	40	60	110

∅ [mm]	L7 ±0.1	L8	L9	T1	T2	T3	T4
18	–	99	120	–	3.1±0.1	7.5	6.7
25	–	118.5	144	10	2.1±0.2	7.5	8
32	–	145.7	173	10	2.1±0.2	7.5	8
40	–	195.4	231	10.5	2.1±0.2	7.5	8.5

Linear drives DGC-KF, with recirculating ball bearing guide

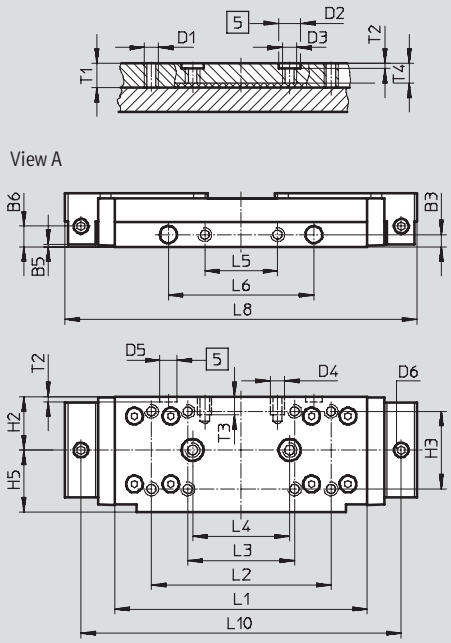
Technical data

FESTO

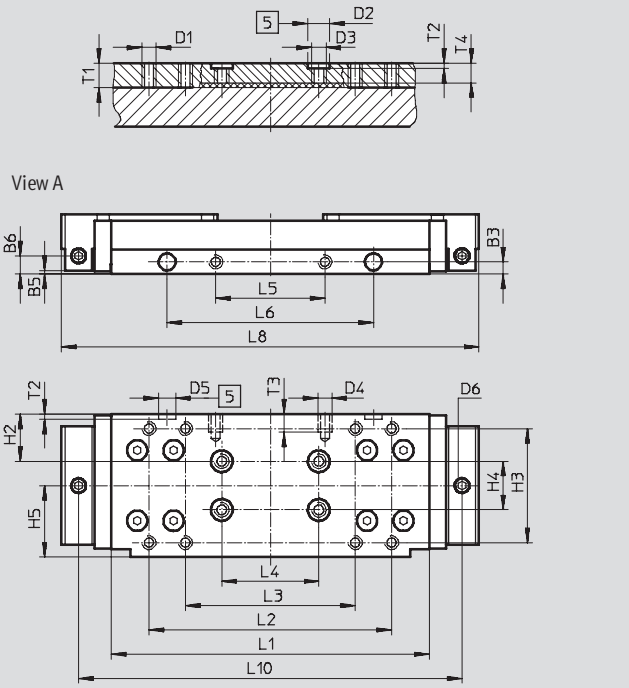
Dimensions Download CAD Data ➔ **www.festo.com/us/cad**

Slide, variant C – Lubrication adapter

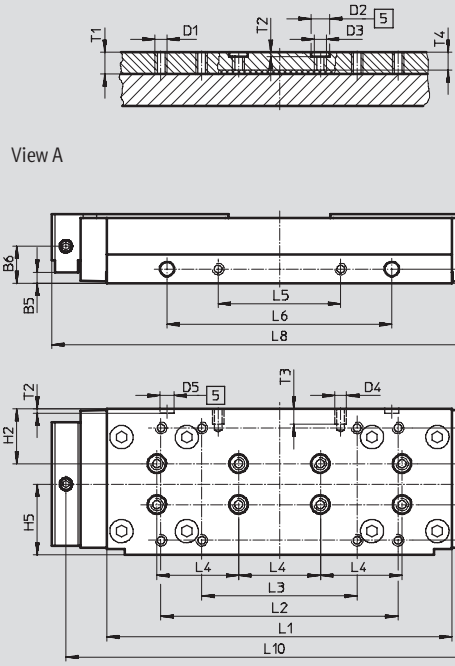
∅ 25



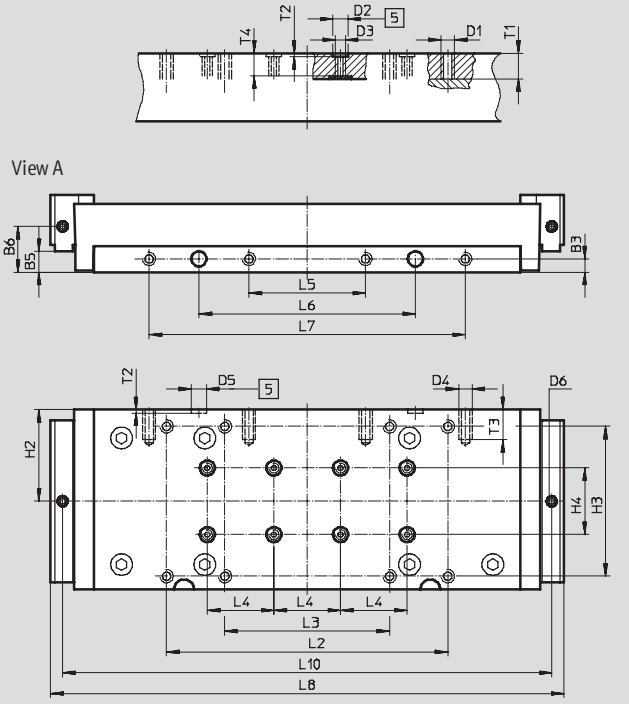
∅ 32



∅ 40



∅ 63



5 Hole for centring sleeve ZBH

Linear drives DGC-KF, with recirculating ball bearing guide

FESTO

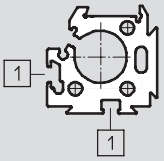
Technical data

∅ [mm]	B3 ±0.05	B5 ±0.05	B6	D1	D2 ∅ H7	D3	D4	D5 ∅ H7	D6	H2	H3	H4 ±0.03	H5 ±0.1
25	5	1	8.5	M5	9	M6	M5	7	M6x1	22	32±0.2	–	25.5
32	5	1.5	7.5	M5	9	M6	M5	7	M6x1	19.5	47±0.2	20	29.5
40	7	18.2	18.2	M5	9	M6	M6	7	M6x1	26.8	55±0.2	20	34.7
63	8	12.5	27.5	M8	9	M6	M8	9	M6x1	55	90±0.3	40	–

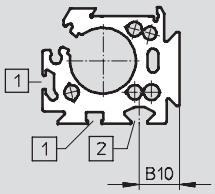
∅ [mm]	L1	L2 ±0.2	L3 ±0.2	L4 ±0.03	L5 ±0.1	L6 ±0.05	L7 ±0.1	L8	L10	T1	T2 ±0.2	T3	T4
25	104±0.2	74	44	40	30	60	–	145	132	10	2.1	7.5	8
32	131±0.2	100	70	40	45	85	–	172	158	10	2.1	7.5	8
40	169±0.2	116	76	40	60	110	–	223	209	10.5	2.1	7.5	8.5
63	256±0.1	169	99	40	70	130	190	308.4	293.8	15.5	2.1	18	13.6

Profile barrel

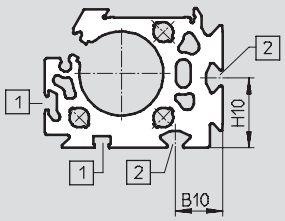
∅ 18



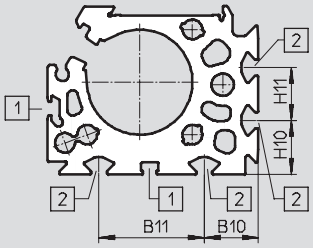
∅ 25



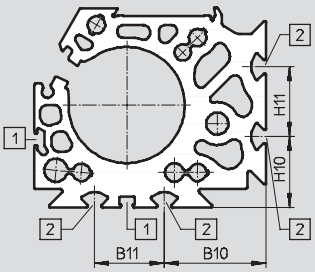
∅ 32



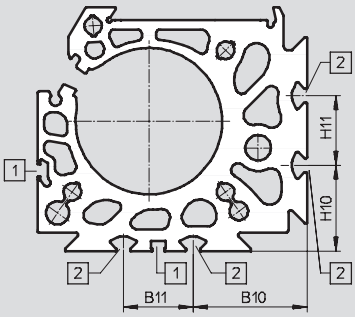
∅ 40



∅ 50



∅ 63



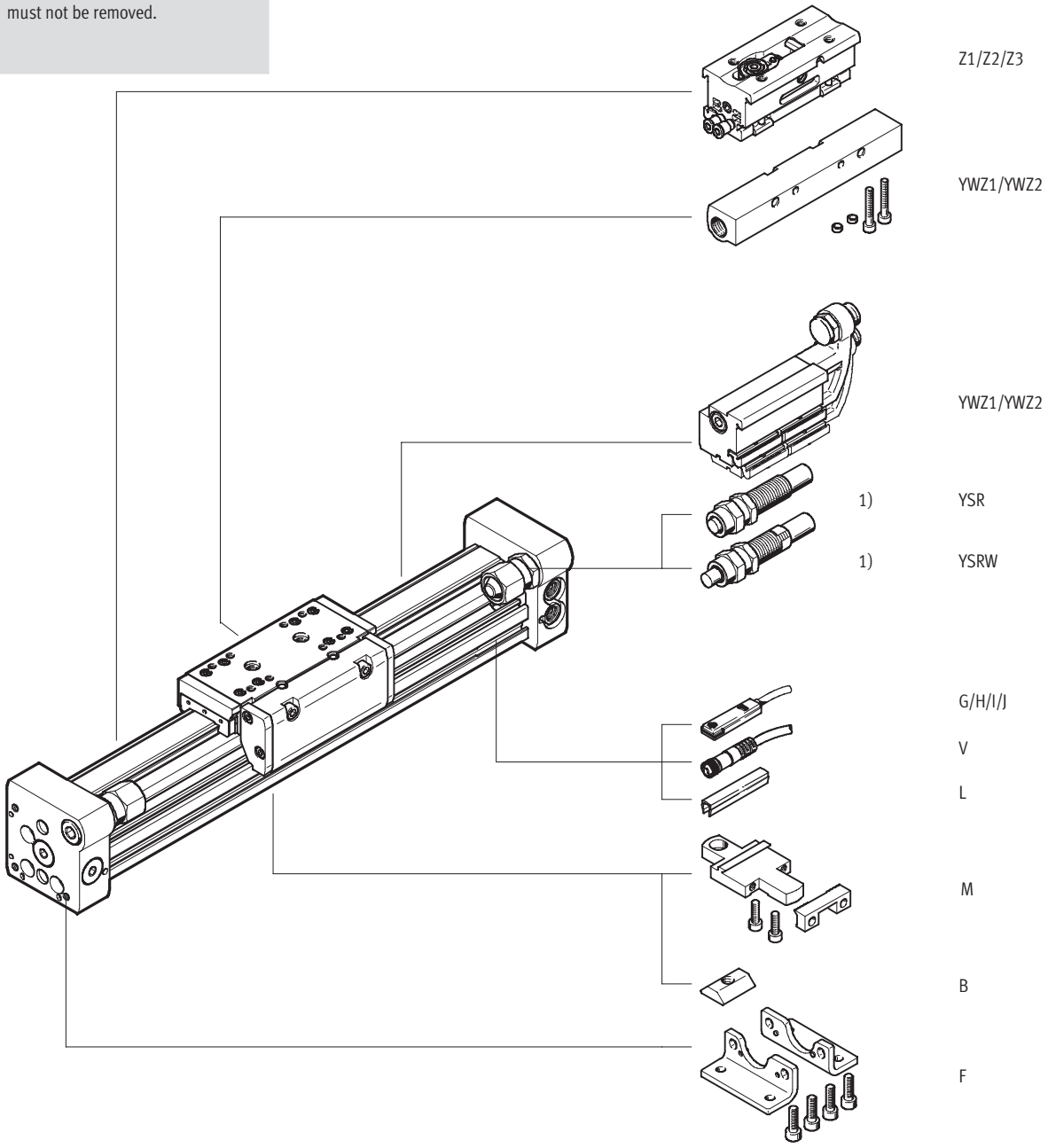
1 Sensor slot for proximity sensor
2 Mounting slot for slot nut

∅ [mm]	B10	B11	H10	H11
25	15.23	–	–	–
32	18	–	26.5	–
40	20.5	40	20.5	20
50	43.8	30	30.5	30
63	49	30	37	30

Order code
Mandatory data/options

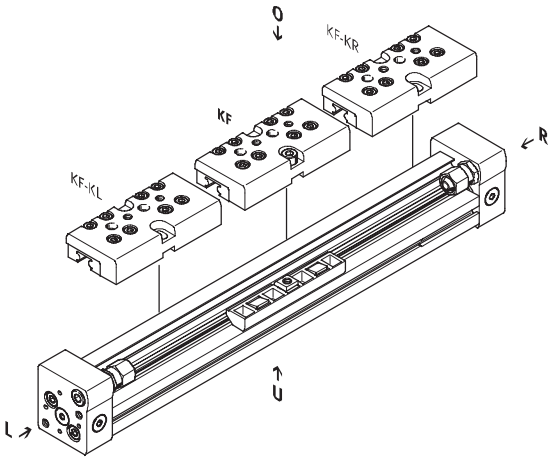
Note

1) End stops or shock absorbers must not be removed.

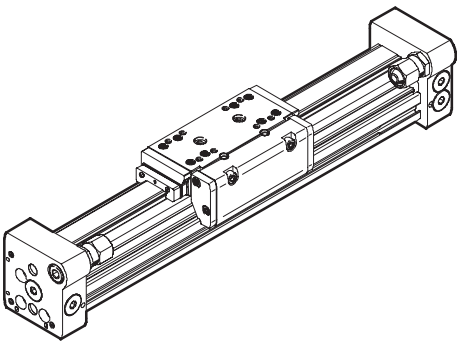


Order code

KL/KR – With additional slide



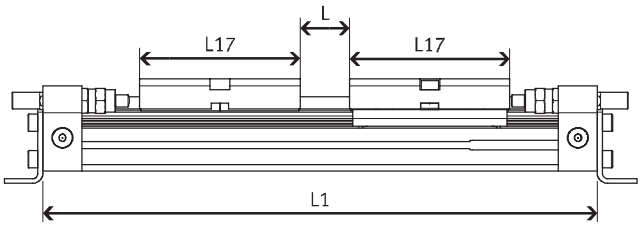
GP – With protected recirculating ball bearing guide



Effective stroke reduction when ordering an additional slide KL or KR

With a guide axis DGC with additional slide, the effective stroke is reduced by the length of the additional slide and the distance between both slides.

Given:
DGC-12-500-...
L = 20 mm
L17= 65 mm



∅ [mm]	8	12	18	25	32	40	50	63
L17	52	65	99	118.5	145.7	195.4	256.8	280

The effective stroke is reduced to
415 mm = 500 mm – 20 mm – 65 mm

Linear drives DGC-KF, with recirculating ball bearing guide

Ordering data – Modular products

FESTO

M Mandatory data →

Module No.	Function	Piston ∅	Stroke	Guide	Cushioning	Position sensing
530 906	DGC	8	1 … 8,500	KF	P	A
530 907		12			PPV	
532 446		18			YSR	
532 447		25			YSRW	
532 448		32				
532 449		40				
532 450		50				
532 451		63				
Ordering example						
530 907	**DGC**	**12**	**250**	**KF**	**YSRW**	**A**

Ordering table

Size		8	12	18	25	32	40	50	63	Conditions	Code		Enter code
M	Module No.	**530 906**	**530 907**	**532 446**	**532 447**	**532 448**	**532 449**	**532 450**	**532 451**				
	Function	Linear drive									**DGC**		DGC
	Piston ∅ [mm]	8	12	18	25	32	40	50	63		**-...**		
	Stroke [mm]	1 … 1,300	1 … 1,900	1 … 3,000	1 … 8,500			1 … 5,000			**-...**		
	Guide	Recirculating ball bearing guide									**-KF**		-KF
	Cushioning	Elastic cushioning rings/pads at both ends		–	–	–	–	–	–		**-P**		
		–	–	Pneumatic cushioning, adjustable at both ends							**-PPV**		
		Shock absorber, self-adjusting									**-YSR**		
		Shock absorber, self-adjusting, progressive									**-YSRW**		
↓	Position sensing	Via proximity sensor									**-A**		-A

Transfer order code

	DGC	–		–		–	**KF**	–		–	**A**	–

Linear drives DGC-KF, with recirculating ball bearing guide

Ordering data – Modular products

FESTO

➔ 0 Options

	Slide		Lubrication function		Additional slide on left		Additional slide on right		Accessories		Accessories enclosed separately		Intermediate position		Manual
	GP		C		KL		KR				F, ...M, ...B, ...G, ...H, ...I, ...J, ...V, ...L, YWZ1, YWZ2		Z1, Z2, Z3		O
–		–		–	KL	–	KR		ZUB	–	F2M	–		–	

Ordering table

Size		8	12	18	25	32	40	50	63	Conditions	Code		Enter code
0	Slide	–	–	Protected recirculating ball bearing guide				–	–	1	-GP		
	Lubrication function	Standard											
		–	–	–	Lubrication adapter			–	Lubrication adapter	5	-C		
	Additional slide on left	Additional slide, standard, on left								2	-KL		
	Additional slide on right	Additional slide, standard, on right								2	-KR		
	Accessories	Enclosed separately (can be retrofitted)									ZUB-		ZUB-
	Foot mounting	1									F		
	Profile mounting	1 ... 9									...M		
	Slot nut for mounting slot	–	–	–	1 ... 9						...B		
	Proximity sensor, Cable, 2.5 m	1 ... 9									...G		
	Proximity sensor, Plug M8	1 ... 9									...H		
	Proximity sensor, contactless, PNP, Cable, 2.5 m	1 ... 9									...I		
	Proximity sensor, contactless, PNP, Plug M8	1 ... 9									...J		
	Connecting cable M8, 2.5 m	1 ... 9									...V		
	Slot cover for sensor slot	–	–	1 ... 9							...L		
	Mechanical end-position limiter	–	–	Variable end position, at one end						3	YWZ1		
		–	–	Variable end position, at both ends						3	YWZ2		
	Intermediate position	–	–	–	1 intermediate position			–	–	4	-Z1		
		–	–	–	2 intermediate positions			–	–	4	-Z2		
		–	–	–	3 intermediate positions			–	–	4	-Z3		
	Manual	Express waiver – no operating instructions to be included (already available)									-O		

1 **GP** Not with cushioning YSR and YSRW
Not with additional slide on left KL or additional slide on right KR

2 **KL, KR** For a linear drive DGC with additional slide, the effective stroke is reduced by the length of the additional slide and the distance between both slides. Not with cushioning PPV

3 **YWZ1, YWZ2** Only with cushioning YSR or YSRW

4 **Z1, Z2, Z3** Only with cushioning YSR or YSRW and mechanical end-position limiter YWZ1 or YWZ2

5 **C** Not with slide GP

Transfer order code

–		–		–		ZUB	–		–		–	

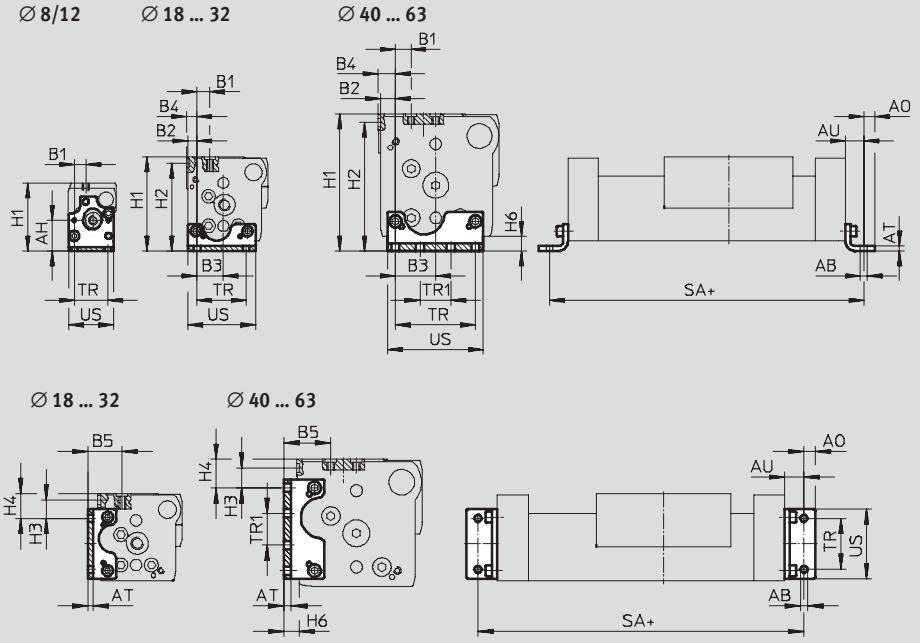
Ordering data – Wearing parts kits

Piston ∅	Part No.	Type
8	665 335	DGC-8-KF
12	665 336	DGC-12-KF
18	684 486	DGC-18
25	684 487	DGC-25

Piston ∅	Part No.	Type
32	684 488	DGC-32
40	684 489	DGC-40
50	719 825	DGC-50
63	719 826	DGC-63

Foot mounting HPC
(order code: F)

Material:
Galvanised steel



\+ = plus stroke length

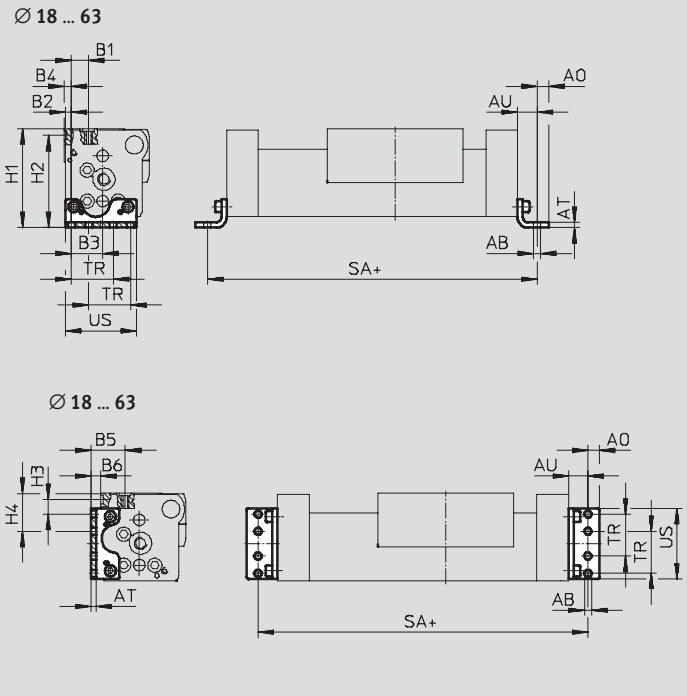
Dimensions and ordering data

For Ø [mm]	AB Ø	AH	AO	AT	AU	B1		B2	B3	B4		B5		H1	
						G	GF/KF			GF	KF	G	GF/KF	G	GF/KF
8	3.4	16.7	3	2	9	6	6	–	–	–	–	–	–	37	37
12	4.5	18.5	4.5	2	11.5	5.4	5.4	–	–	–	–	–	–	42.5	42.5
18	5.5	–	6.75	3	13.25	15	11.2	4.3	15.2	–	5.3	27	23.2	57.5	64
25	5.5	–	9	4	15	12.5	13.35	7.65	21.35	–	8.65	28.65	29.5	67	76.5
32	6.6	–	10	5	19	11.5	9	9	29.5	–	10.5	29.5	27	82	87.5
40	6.6	–	10	6	20	7.6	12.6	12.2	32.8	–	14.2	31.8	36.8	100	111.5
50	9	–	11	8	25	12.5	12.5	11.5	48.5	11.5	11.5	41	41	137	141.5
63	11	–	13.5	8	28	17.5	17.5	12.5	55.5	6.5	17.5	49	49	159	172.5

For Ø [mm]	H2 GF/KF	H3 GF/KF	H4 G	H4 GF/KF	H6	SA	TR ±0.1	TR1 ±0.1	US	Weight [g]	Part No.	Type
8	–	–	–	–	5	118	18	–	24.4	25	**526 385**	**HPC-8**
12	–	–	–	–	5	148	20	–	29.6	41	**526 388**	**HPC-12**
18	59.5	16	14	21.2	7.7	176.5	30	–	38.6	58	**533 667**	**HPC-18**
25	71.5	14.35	9.85	19.35	8.5	230	40	–	55	131	**533 668**	**HPC-25**
32	82.5	8	7.5	13	9	288	56.5	19.5	68	239	**533 669**	**HPC-32**
40	104.5	15.3	10.8	22.3	12	340	65	25	78	348	**533 670**	**HPC-40**
50	134.5	23.4	25.9	30.4	17	400	82.6	47.4	102	754	**545 236**	**HPC-50**
63	164.5	22	24	30	19	456	111	39	133	1,245	**545 237**	**HPC-63**

Foot mounting HPC-S
(when replacing linear drive DGPL
with linear drive DGC-GF/-KF)

Material:
Galvanised steel



\+ = plus stroke length

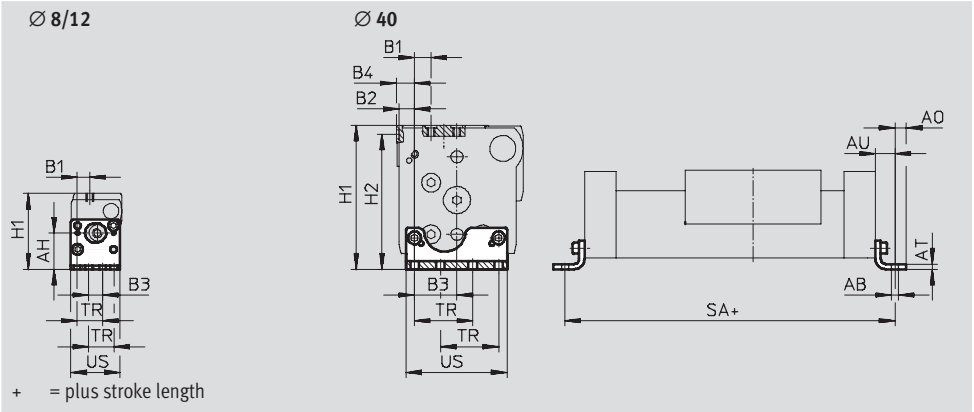
Dimensions and ordering data

For ∅ [mm]	AB ∅	AO	AT	AU	B1	B2	B3	B4	B5	B6
18	5.5	4.75	3	13.25	12	3.5	15.6	4.5	24	7.5
25	5.5	6	3	13	16.25	4.75	24.25	5.75	29.5	7.5
32	6.6	7	4	17	9	9	29.5	10.5	27	7.5
50	9	11	8	25	12.5	11.5	48.5	11.5	38	14
63	11	13.5	8	28	17.5	12.5	55.5	17.5	37	2

For ∅ [mm]	H1	H2	H3	H4	SA	TR ±0.1	US	Weight [g]	Part No.	Type
18	64	59.5	15.9	28	$176.5^{+0.9/-0.2}$	24	40	54	**535 600**	**HPC-18-S**
25	75.5	70.5	11.45	29.75	$226^{+0.9/-0.2}$	32.5	55	89	**535 601**	**HPC-25-S**
32	87.5	82.5	8	31.5	$284^{+0.9/-0.2}$	38	68	180	**538 413**	**HPC-32-S**
50	138.5	131.5	23.4	48	$400^{+1.7/-0.2}$	65	102	754	**545 238**	**HPC-50-S**
63	160.5	152.5	22	66	$456^{+1.7/-0.2}$	75	133	1,138	**545 239**	**HPC-63-S**

Foot mounting HPC-SO
(when replacing linear drive DGPL
with linear drive DGC-GF/-KF)

Material:
Galvanised steel



\+ = plus stroke length

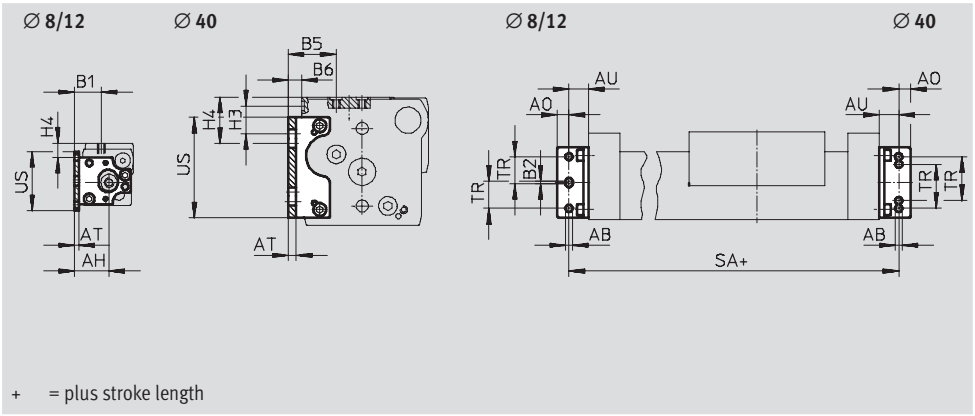
Dimensions and ordering data

For ∅ [mm]	AB ∅	AH	AO	AT	AU	B1	B2	B3
8	3.4	18.7	3	2	9	6.5	–	7
12	3.4	23.5	3	2	9	9.3	–	9.4
40	6.6	–	8.5	5	17.5	12.5	12.3	32.7

For ∅ [mm]	B4	H1	H2	SA	TR ±0.1	US	Weight [g]	Part No.	Type
8	–	39	–	118	13	25.4	25	**529 346**	**HPC-8-SO**
12	–	47.5	–	143	18.6	33.8	42	**529 348**	**HPC-12-SO**
40	14.3	104.5	97.5	335	45	78	264	**536 745**	**HPC-40-SO**

Foot mounting HPC-SH
(when replacing linear drive DGPL
with linear drive DGC-GF/-KF)

Material:
Galvanised steel



\+ = plus stroke length

Dimensions and ordering data

For ∅ [mm]	AB ∅	AH	AO	AT	AU	B1	B2	B5
8	3.4	17.8	3	2	9	13.8	1.5	–
12	3.4	21.1	3	2	9	16.5	1.4	–
40	6.6	–	8.5	5	17.5	–	–	36

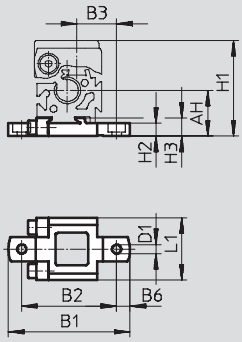
For ∅ [mm]	B6	H3	H4	SA	TR ±0.1	US	Weight [g]	Part No.	Type
8	–	–	7.25	118	13	30.5	25	**529 347**	**HPC-8-SH**
12	–	–	4.5	143	18.6	41.8	41	**529 349**	**HPC-12-SH**
40	9.2	21.6	36	335	45	78	275	**536 746**	**HPC-40-SH**

Profile mounting MUC
(order code: M)

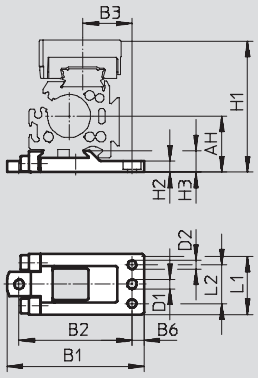
Material:
High-alloy steel

MUC-12

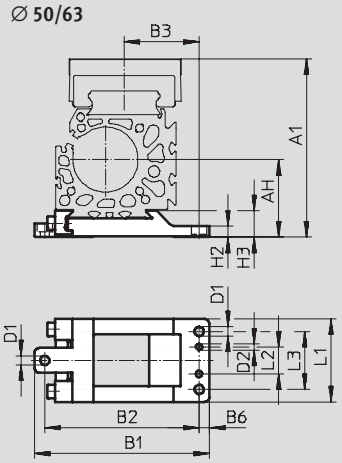
∅ 8/12



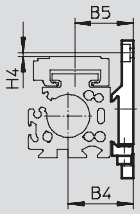
∅ 18 ... 40



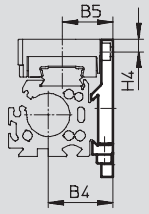
∅ 50/63



∅ 18 ... 40-G



∅ 18 ... 40-GF/KF
∅ 50/63-G



Position of the profile mounting along the profile barrel is freely selectable.

Dimensions and ordering data

For ∅ [mm]	AH	B1	B2	B3		B4
				G	GF/KF	
8	17.7	47	36.7	15.35	15.35	–
12	18.5	52.5	42.2	16.5	16.5	–
18	27.2	67.8±0.2	56±0.15	30.5	28.7	27.2
25	32.5	79.5±0.2	65.5±0.15	32.5	28.5	37.5
32	37.5	94±0.2	80±0.15	35	35	47.5
40	47	110.5±0.2	96±0.15	43	43	57
50	61	145±0.5	125±0.2	56	56	77
63	75	169±0.5	149±0.2	72.5	72.5	87

For ∅ [mm]	B5		B6	D1 ∅ H13	D2 ∅ H7	H1	
	G	GF/KF				G	GF/KF
8	–	–	5.1	3.5	–	37	37
12	–	–	5.1	3.5	–	42.5	42.5
18	25	23.2	5.7	5.5	5	57.5	64
25	33.5	29.5	7	5.5	5	67	76.5
32	37	37	7	5.5	5	82	87.5
40	46.8	46.8	7	6.5	6	100	111.5
50	61	61	7	9	6	137	141.5
63	69	69	10	9	6	159	172.5

Dimensions and ordering data

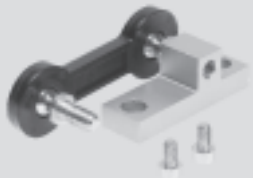
For ∅ [mm]	H2	H3	H4		L1
			G	GF/KF	
8	5	7	–	–	24
12	4.5	7	–	–	24
18	$5.7_{-0.2}$	$9.9_{\pm 0.1}$	0.1	6.4	$33_{\pm 0.1}$
25	$6.5_{-0.2}$	$12.5_{\pm 0.1}$	2.07	7.43	$35_{\pm 0.1}$
32	$6.5_{-0.2}$	$13_{\pm 0.1}$	1.5	4	$45_{\pm 0.1}$
40	$8.5_{-0.2}$	$16_{\pm 0.1}$	0.2	11.3	$60_{\pm 0.1}$
50	11	23.5	4.7	9.2	$80_{\pm 0.4}$
63	11	25.5	1.5	15	$80_{\pm 0.4}$

For ∅ [mm]	L2 ±0.05	L3 ±0.2	Weight [g]	Part No.	Type
8	–	–	28	**526 384**	**MUC-8**
12	–	–	32	**526 387**	**MUC-12**
18	20.5	–	78	**531 752**	**MUC-18**
25	22.5	–	113	**531 753**	**MUC-25**
32	30	–	174	**531 754**	**MUC-32**
40	44	–	346	**531 755**	**MUC-40**
50	26	56	874	**531 756**	**MUC-50**
63	26	56	1,080	**531 757**	**MUC-63**

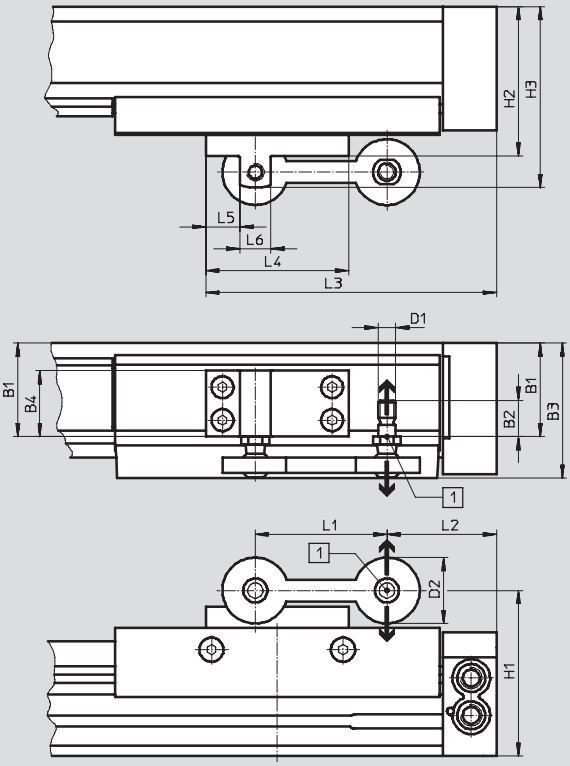
Driver FKC
(order code: FK)
for DGC-G

Materials:
Plate: Wrought aluminium alloy

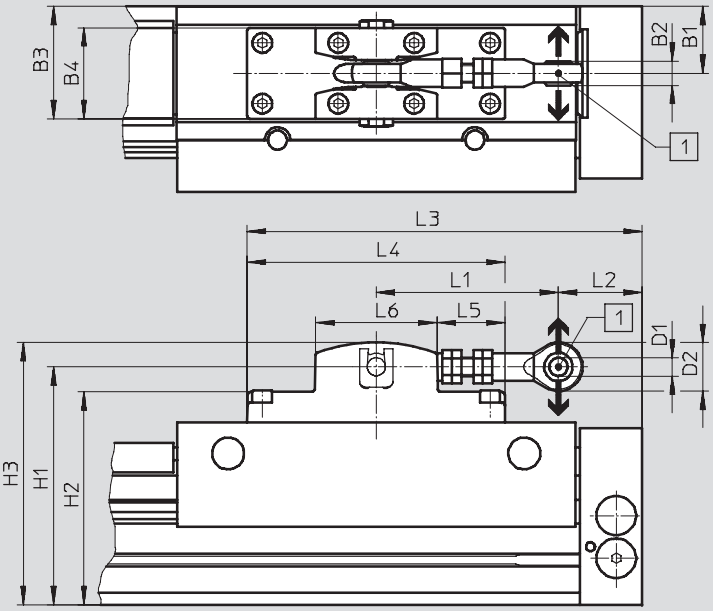
Joint: Polyamide
Ball pin: High-alloy steel



For ∅ 8 ... 40



For ∅ 50/63



Note

Compensation possible in direction of arrow.

1 Radial deflection:
with ∅ 8 ... 40: ± 2.5 mm
with ∅ 50/63: ±4 mm

Dimensions and ordering data

For ∅ [mm]	Max. offset between linear drive and external guide [mm]	Max. permissible load in direction of force [N]		Ambient temperature [°C]
8	±2.5	550	Backlash-free	–10 … +60
12		550	Backlash-free	
18		1,400	Backlash-free	
25		1,400	Backlash-free	
32		1,400	Backlash-free	
40		1,400	Backlash-free	
50	±4	5,000	Low-backlash	
63		5,000	Low-backlash	

For ∅ [mm]	B1	B2	B3	B4	D1	D2	H1	H2	H3	L1
8	17.5	10.2	30	16	M5	20	43.5	42	48	40
12	18.5	10.2	31	16	M5	20	49	47.5	53.5	40
18	29.3	16.5	47.8	20	M8	30	66.8	59.8	73.8	60
25	42.65	16.5	61.15	30	M8	30	75.5	68	82.5	60
32	43	16.5	61.5	30	M8	30	90	82.5	97	60
40	57.3	16.5	75.8	45	M8	30	105	97.5	113	60
50	44	16	74	60	12^{H7}	32	156.5	140	172.4	120 … 125
63	50	16	80	60	12^{H7}	32	176.5	161.5	192.4	120 … 125

For ∅ [mm]	L2	L3	L4	L5	L6	CRC[1)]	Weight [g]	Part No.	Type
8	5.1	62.6	35	13	9	1	29	**529 350**	**FKC-8/12**
12	17.1	74.6	35	13	9	1	29	**529 350**	**FKC-8/12**
18	24.5	107	65	15.5	14	1	97	**538 714**	**FKC-18**
25	50	132.5	65	15.5	14	1	119	**538 715**	**FKC-25**
32	77.5	162	75	17.5	14	1	122	**538 961**	**FKC-32**
40	103	187.5	75	17.5	14	1	180	**538 962**	**FKC-40**
50	50 … 55	260	170	45	80	1	1,200	**545 240**	**FKC-50/63**
63	75 … 80	260	170	45	80	1	1,200	**545 240**	**FKC-50/63**

1) Corrosion resistance class 1 to Festo standard 940 070
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers

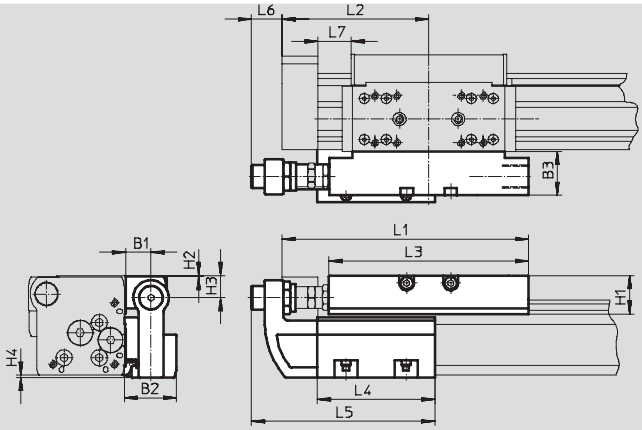
Shock absorber retainer DADP
Stop KYC
(order code: YWZ1 or YWZ2)
For DGC-GF, DGC-KF, DGC-FA

Materials: Stop
Housing: Anodised aluminium
Stop bracket: Stainless steel casting
Clamp: High-alloy steel
Free of copper and PTFE

Materials: Shock absorber retainer
Housing: Anodised aluminium
Free of copper and PTFE

Shock absorber retainer DADP

Stop KYC



Note

Shock absorber not included in scope of delivery.
Existing shock absorbers can be removed from the end caps of the linear unit and installed in the shock absorber retainer.

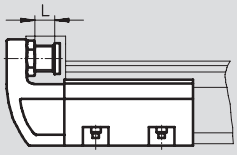
Dimensions

For ∅ [mm]		B1	B2	B3	H1	H2	H3	H4
18	GF	16	34.5	29	20.7	0.2	12.5	0.7
	KF							
25	GF	16.5	35	28	25.5	0.5	15	1.4
	KF			30				
32	GF	16.5	35	28	25.5	0.5	15	1.7
	KF			30				
40	GF	16	35.7	29	32	0.5	21.5	1.6
	KF			35	37			2
50	GF	25	50	41	40.5	0.5	24	0
	KF							
63	GF	25	50	40	51.5	1.5	33	0
	KF							

For ∅ [mm]		L1	L2	L3	L4	L5	L6	L7 min.
18	GF	128	74.5	107	80	118.5	23.5	14.5
	KF							
25	GF	168	100	136	80	125	20.5	22.5
	KF							
32	GF	206.8	124.8	164	120	165	14.5	42.8
	KF							27.3
40	GF	255	150	210	156	220.5	31	30.8
	KF							31
50	GF	301	175	252	170	238	27	31
	KF							
63	GF	328	200	256	200	268	24	41
	KF							

Technical data and ordering codes

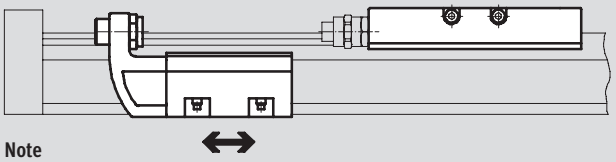
Precision adjustment



Note

The stop KYC can be used in both directions.

Installation example



Note

The stop KYC can be mounted at any position within the stroke.

For ∅ [mm]		Max. impact force [N]	Ambient temperature [°C]	CRC[1)]	Weight [g]	Part No.	Type
Shock absorber retainer							
18	GF	1,100	–10 … +80	2	140	**541 725**	**DADP-DGC-18-GF**
	KF				130	**541 729**	**DADP-DGC-18-KF**
25	GF	1,400			205	**541 726**	**DADP-DGC-25-GF**
	KF				180	**541 730**	**DADP-DGC-25-KF**
32	GF	1,700			225	**541 727**	**DADP-DGC-32-GF**
	KF				215	**541 731**	**DADP-DGC-32-KF**
40	GF	3,500			380	**541 728**	**DADP-DGC-40-GF**
	KF				460	**541 732**	**DADP-DGC-40-KF**
50	GF	3,500			890	**545 244**	**DADP-DGC-50**
	KF						
63	GF	4,300			1,080	**545 245**	**DADP-DGC-63**
	KF						

1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents

For ∅ [mm]	Precision adjustment L [mm]	Ambient temperature [°C]	CRC[1)]	Weight [g]	Part No.	Type
Stop						
18	10	–10 … +80	2	400	**541 691**	**KYC-18**
25	10			560	**541 692**	**KYC-25**
32	10			790	**541 693**	**KYC-32**
40	15			1,525	**541 694**	**KYC-40**
50	15			2,270	**545 242**	**KYC-50**
63	15			2,950	**545 243**	**KYC-63**

1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents

Linear drives DGC

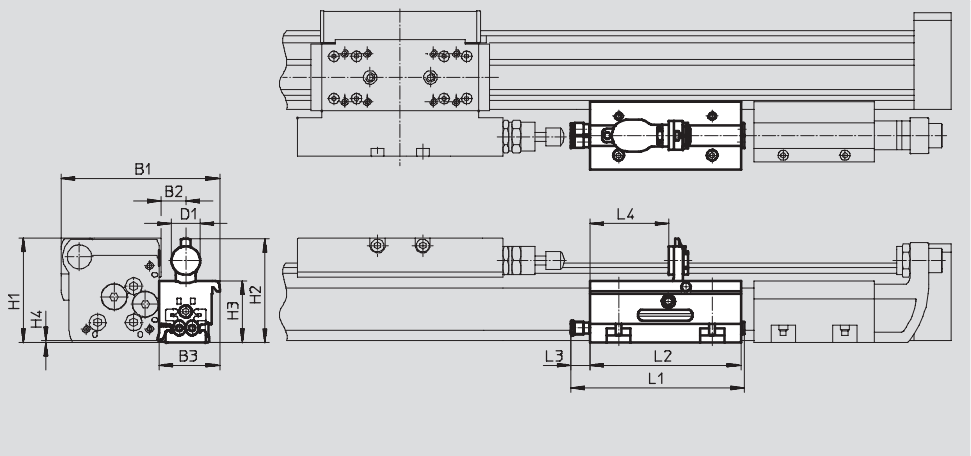
Accessories

FESTO

Intermediate position module DADM
(order code: Z1, Z2 or Z3)
For DGC-KF

Materials:
Housing: Anodised aluminium
Stop screw, nut:
Galvanised steel

Clamp, lever:
High-alloy steel
Free of copper and PTFE

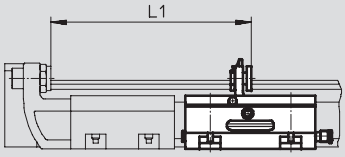


Dimensions

For ∅ [mm]	B1	B2	B3	D1	H1	H2	H3	H4	L1	L2	L3	L4
25	105	16.5	40	19	69.4	68.6	41	1.4	116	100	13.4	52.2
32	117.5	16.5	40	19	80.2	79.7	52	1.7	116	100	13.4	52.2
40	137.5	16	41	27	101.6	101.1	63	2.1	186	170	13.4	76.5

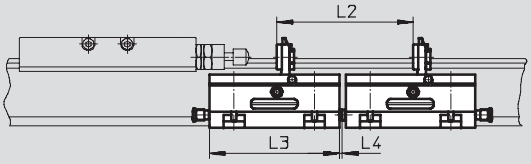
Minimum distance

between end stop and intermediate position



For ∅ [mm]	L1
25	145.3
32	185.3
40	271.5

between two intermediate positions



For ∅ [mm]	L2	L3	L4
25	105	100	2.5
32	105	100	2.5
40	175	170	2.5

Note

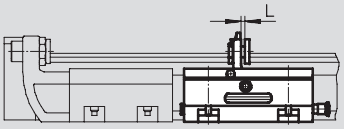
- Shock absorber not included in scope of delivery.
  Existing shock absorbers can be removed from the end caps of the linear drive and installed in the shock absorber retainer.
  Under no circumstances may the linear drive and the intermediate position module be operated without a shock absorber.
- A shock absorber retainer DADP and a stop KYC are additionally needed when using an intermediate position module.
- The projection (dimension H4) must be noted when using the drive in combination with the intermediate position module DADM. Mounting via foot mountings HP or profile mountings MUC is recommended in this case.
- The position of the stop lever can be detected using proximity sensors SME/SMT-10 ➔ 79.

Linear drives DGC

Accessories

FESTO

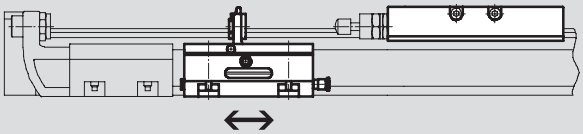
Precision adjustment L



Note

The intermediate position module DADM can be used in both directions.
A shock absorber retainer DADP and a stop KYC are additionally needed when using an intermediate position module.

Installation example



Note

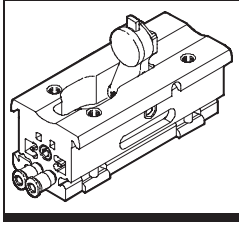
The intermediate position module DADM can be mounted at any position within the stroke.

Technical data

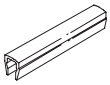
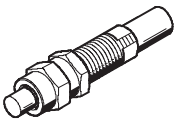
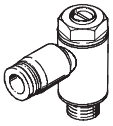
For ∅	[mm]	25	32	40
Pneumatic connection		QS-4		
Operating pressure	[bar]	2.5 ... 8		
Mounting position		Any		
Impact velocity	[m/s]	→ 49		
Swivel time	[ms]	≤100	≤100	≤300
Precision adjustment L	[mm]	2	2	4
Repetition accuracy	[mm]	0.02		
Position sensing		For proximity sensor SME/SMT-10		
Weight	[g]	430	530	970
Ambient temperature	[°C]	–10 ... +60		
Corrosion resistance class CRC[1)]		2		
Note on material		Free of copper and PTFE		
		Conforms to RoHS		–

1) Corrosion resistance class 2 to Festo standard 940 070
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Ordering codes

	For ∅ [mm]	Part No.	Type
	25	**541 700**	**DADM-DGC-25-A**
	32	**541 701**	**DADM-DGC-32-A**
	40	**541 702**	**DADM-DGC-40-A**

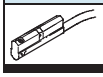
Ordering data

	For ∅	Remarks	Order code	Part No.	Type	PU[1]
Slot nut NST					Technical data ➔ Internet: hmbn	
	25 … 40	For mounting slot	B	**547 264**	**HMBN-5-1M5**	10
	50, 63			**186 566**	**HMBN-5-2M5**	
Centring pin/sleeve ZBS/ZBH					Technical data ➔ Internet: zbs, zbh	
	8 … 18	For slide	–	**150 928**	**ZBS-5**	10
	25 … 63			**150 927**	**ZBH-9**	
	8, 12	For end cap	–	**525 273**	**ZBS-2**	
	18			**150 928**	**ZBS-5**	
	25 … 63			**150 927**	**ZBH-9**	
Slot cover ABP-S					Technical data ➔ Internet: abp	
	18 … 63	For sensor slot each 0.5 m	L	**151 680**	**ABP-5-S**	2
Shock absorber YSRW					Technical data ➔ Internet: ysrw	
	8	For DGC basic version and recirculating ball bearing guide	YSRW	**540 344**	**YSRW-DGC-8**	1
	12			**540 345**	**YSRW-DGC-12**	
	18	For DGC with plain-bearing guide		**540 346**	**YSRW-DGC-18-GF**	
	25			**540 348**	**YSRW-DGC-25-GF**	
	32			**540 350**	**YSRW-DGC-32-GF**	
	40			**540 352**	**YSRW-DGC-40-GF**	
	50			**540 353**	**YSRW-DGC-40/50**	
	63			**543 069**	**YSRW-DGC-63**	
	18	For DGC with recirculating ball bearing guide		**540 347**	**YSRW-DGC-18-KF**	
	25			**540 349**	**YSRW-DGC-25-KF**	
	32			**540 351**	**YSRW-DGC-32-KF**	
	40			**540 353**	**YSRW-DGC-40/50**	
	50					
	63			**543 069**	**YSRW-DGC-63**	
One-way flow control valve GRLA					Technical data ➔ Internet: grla	
	8 … 18	Metal design	–	**193 137**	**GRLA-M5-QS-3-D**	1
				193 138	**GRLA-M5-QS-4-D**	
	25, 32			**193 142**	**GRLA-⅛-QS-3-D**	
				193 143	**GRLA-⅛-QS-4-D**	
				193 144	**GRLA-⅛-QS-6-D**	
				193 145	**GRLA-⅛-QS-8-D**	
	40, 50			**193 146**	**GRLA-¼-QS-6-D**	
				193 147	**GRLA-¼-QS-8-D**	
				193 148	**GRLA-¼-QS-10-D**	
	63			**193 149**	**GRLA-⅜-QS-6-D**	
				193 150	**GRLA-⅜-QS-8-D**	
				193 151	**GRLA-⅜-QS-10-D**	

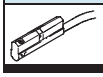
1) Packaging unit quantity

Proximity sensors for piston ∅ 8/12 and intermediate position module DADM

Ordering data – Proximity sensors for C-slot, magneto-resistive — Technical data ➔ Internet: smt

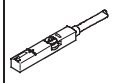
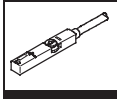
	Type of mounting	Switch output	Electrical connection, connection direction	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot lengthwise	PNP	Plug M8x1, 3-pin, in-line	0.3	**173 220**	**SMT-10-PS-SL-LED-24**
			Cable, 3-wire, in-line	2.5	**173 218**	**SMT-10-PS-KL-LED-24**

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 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**

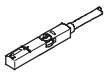
Proximity sensors for piston ∅ 18 … 63

Ordering data – Proximity sensors for T-slot, magneto-resistive — Technical data ➔ Internet: smt

	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with cylinder profile	PNP	Cable, 3-wire	2.5	**543 867**	**SMT-8M-PS-24V-K-2,5-OE**
			Plug M8x1, 3-pin	0.3	**543 866**	**SMT-8M-PS-24V-K-0,3-M8D**
			Plug M12x1, 3-pin	0.3	**543 869**	**SMT-8M-PS-24V-K-0,3-M12**
		NPN	Cable, 3-wire	2.5	**543 870**	**SMT-8M-NS-24V-K-2,5-OE**
			Plug M8x1, 3-pin	0.3	**543 871**	**SMT-8M-NS-24V-K-0,3-M8D**
	Insertable in the slot lengthwise, flush with the cylinder profile	PNP	Cable, 3-wire	2.5	**175 436**	**SMT-8-PS-K-LED-24-B**
			Plug M8x1, 3-pin	0.3	**175 484**	**SMT-8-PS-S-LED-24-B**
N/C contact						
	Insertable in the slot from above, flush with cylinder profile	PNP	Cable, 3-wire	7.5	**543 873**	**SMT-8M-PO-24V-K7,5-OE**

Proximity sensors for piston ∅ 18 ... 63

Ordering data – Proximity sensors for T-slot, magnetic reed — Technical data ➔ Internet: sme

	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with cylinder profile	Contacting	Cable, 3-wire	2.5	**543 862**	**SME-8M-DS-24V-K-2,5-OE**
				5.0	**543 863**	**SME-8M-DS-24V-K-5,0-OE**
			Cable, 3-wire	2.5	**543 872**	**SME-8M-ZS-24V-K-2,5-OE**
			Plug M8x1, 3-pin	0.3	**543 861**	**SME-8M-DS-24V-K-0,3-M8D**
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	2.5	**150 855**	**SME-8-K-LED-24**
			Plug M8x1, 3-pin	0.3	**150 857**	**SME-8-S-LED-24**
N/C contact						
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	7.5	**160 251**	**SME-8-O-K-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**
	Straight socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	**541 363**	**NEBU-M12G5-K-2.5-LE3**
			5	**541 364**	**NEBU-M12G5-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**
	Angled socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	**541 367**	**NEBU-M12W5-K-2.5-LE3**
			5	**541 370**	**NEBU-M12W5-K-5-LE3**

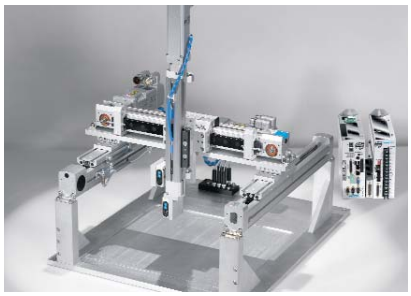
Product Range and Company Overview

A Complete Suite of Automation Services

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

Custom Automation Components
Complete custom engineered solutions

Custom Control Cabinets
Comprehensive engineering support and on-site services



Complete Systems
Shipment, stocking and storage services

The Broadest Range of Automation Components

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

Electromechanical
Electromechanical actuators, motors, controllers & drives

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

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

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

Quality Assurance, ISO 9001 and ISO 14001 Certifications

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

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

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

Festo North America

Festo Regional Contact Center

5300 Explorer Drive
Mississauga, Ontario L4W 5G4
Canada

USA Customers:

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

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

Canadian Customers:

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

USA Headquarters

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

USA Sales Offices

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

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

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

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

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

New York
395 Moreland Road
Hauppauge, NY 11788, USA

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

United States

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

Canada

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

Mexico

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

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

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

Festo Worldwide

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

www.festo.com