Passive guide axes DGC-FA, without drive

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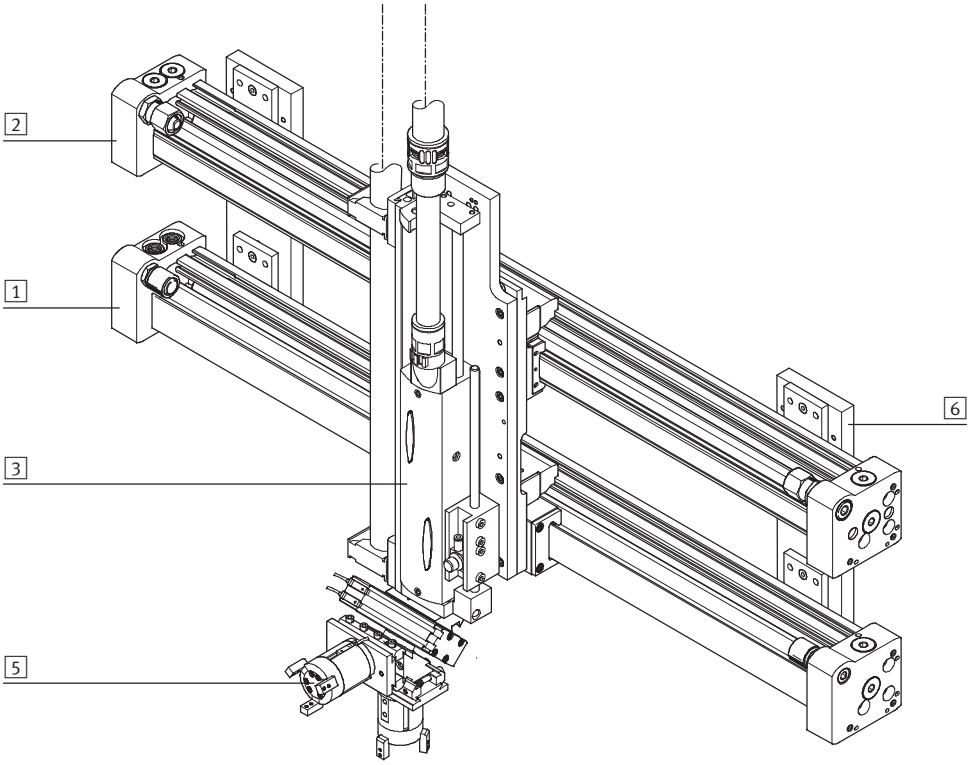
Passive guide axes DGC-FA, without drive

Key features

At a glance

- Driveless linear guide unit with guide and freely movable slide
- The passive guide axis/heavy-duty guide is designed to increase force and torque capacities in multi-axis applications
- Higher torsional resistance
- Reduced vibrations with dynamic loads
- Drive axis and passive guide axis/heavy-duty guide can be arranged adjacent to or above one another

System product for handling and assembly technology



System components and accessories

		Brief description	➔ Page/Internet
1	Axes	Wide range of combinations possible within handling and assembly technology	axis
2	Passive guide axes	For increasing force and torque capacity in multi-axis applications	guide axis
3	Drives	Wide range of combinations possible within handling and assembly technology	drive
5	Grippers	Wide range of variations possible within handling and assembly technology	gripper
6	Adapters	For drive/drive and drive/gripper combinations	adapter kit
–	Motors	Servo and stepper motors, with or without gearing	motor

Passive guide axes DGC-FA, without drive

Key features

Guide axes and the corresponding drives

Passive guide axis DGC-FA

- Can be combined with:
  - Linear drive DGC-KF
- For size 8 ... 63
- Load capacity to max. 6,890 N or 380 Nm

Passive guide axis EGC-FA

- Can be combined with:
  - Toothed belt axis EGC-TB
  - Spindle axis EGC-BS
- For size 70 ... 185
- Load capacity to max. 15,200 N or 1,820 Nm

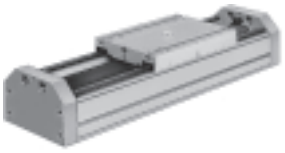
Passive guide axis FDG-ZR-RF

- Can be combined with:
  - Toothed belt axis DGE-ZR-RF
- For size 25 ... 63
- Load capacity to max. 1,500 N or 600 Nm

Passive guide axis FDG-P/-ZR/-SP

- Can be combined with:
  - Linear drive DGPL
  - Toothed belt axis DGE-ZR-KF
  - Spindle axis DGE-SP-KF
- For size 18 ... 63
- Load capacity to max. 14,050 N or 1,820 Nm

Heavy-duty guide HD



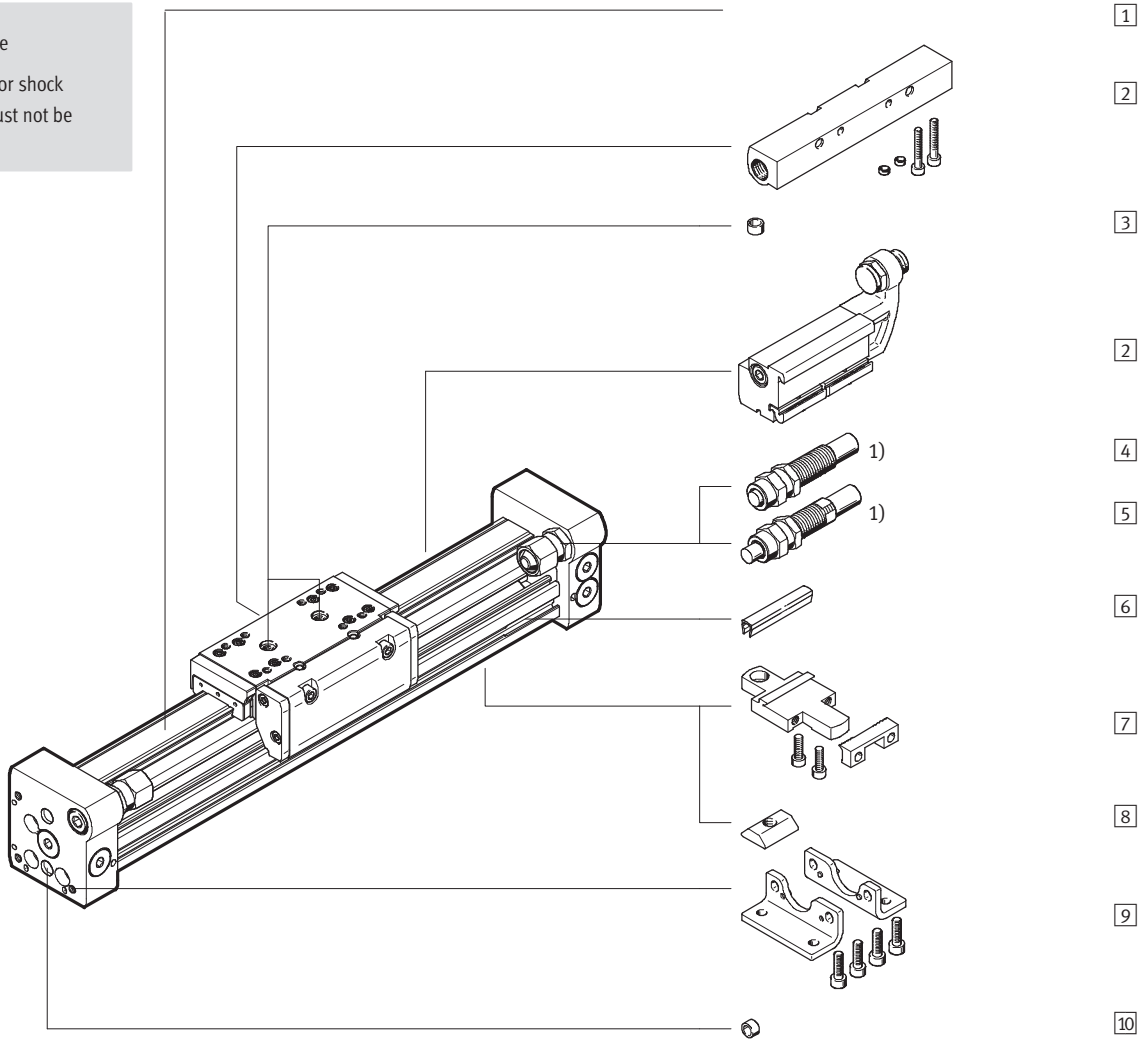
- Size HD8 ... HD40
- Stroke lengths of 10 ... 2,160 mm
- Load capacity to max. 5,600 N or 560 Nm

Passive guide axes DGC-FA, without drive

Peripherals overview

- Note

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



Passive guide axes DGC-FA, without drive

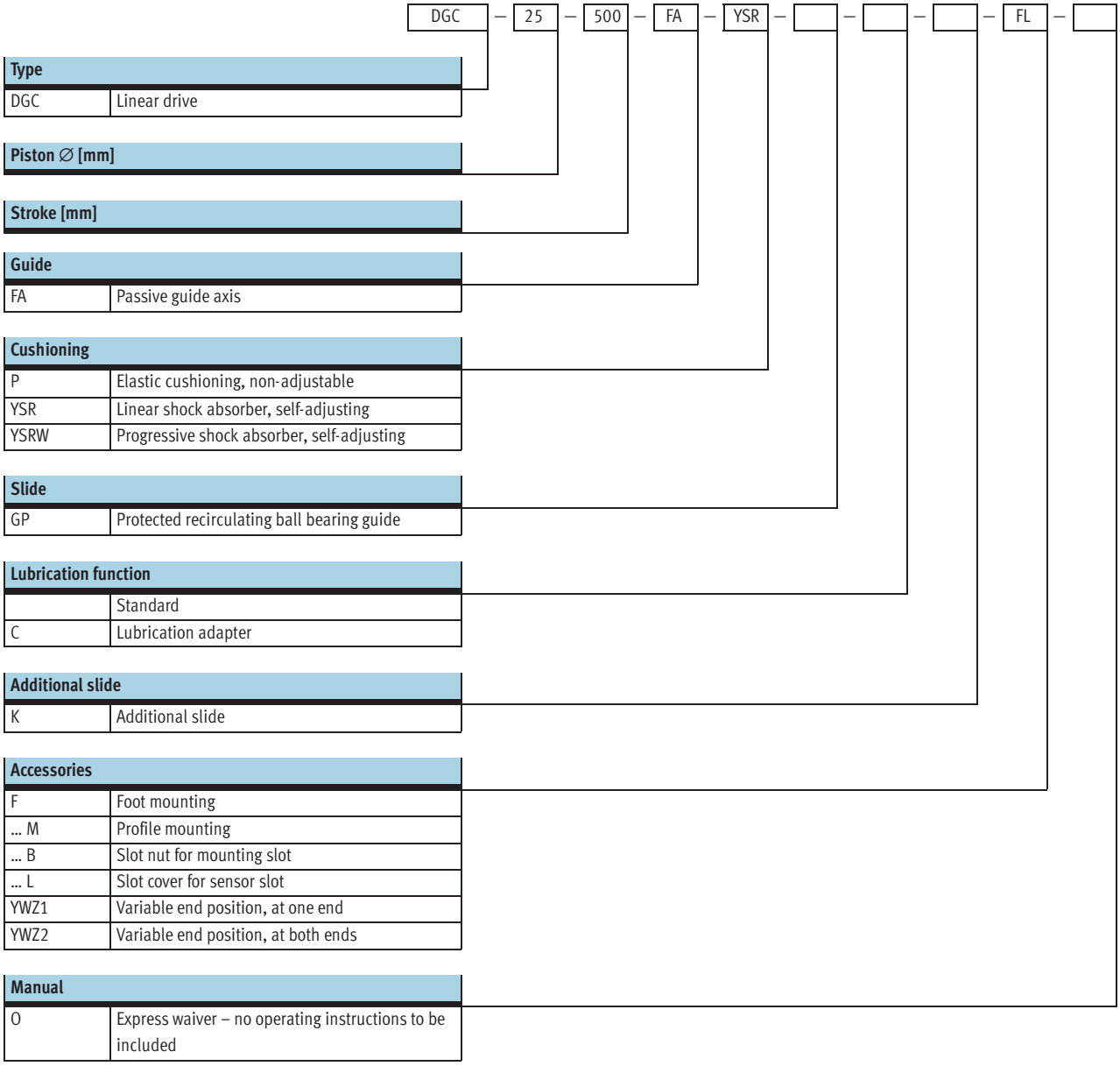
Peripherals overview

Variants and accessories			
	Type	**Brief description**	**➔ Page/Internet**
1	Passive guide axes DGC-FA	Passive guide axis without accessories	6
2	Mechanical end position limiter YWZ	For variable end position adjustment, e.g. for format adjustments	29
3	Centring pin/sleeve[1)] ZBS/ZBH	For centring loads and attachments on the slide	31
–	Cushioning P	Non-adjustable, flexible cushioning. Only used for low speeds	23
4	Shock absorber YSR	Self-adjusting hydraulic shock absorber with spring return and linear cushioning characteristic	23
5	Shock absorber YSRW	Self-adjusting hydraulic shock absorber with spring return and progressive cushioning characteristic	23
6	Slot cover L	For protecting against ingress of dirt and securing proximity sensor cables	31
7	Profile mounting M	Simple and precise mounting option via dovetail connection	28
8	Slot nut B	For mounting attachments	31
9	Foot mounting F	For mounting on end cap	24
10	Centring pin/sleeve[1)] ZBS/ZBH	For centring the drive DGC without foot mountings (user-specific)	31

1) Included in the scope of delivery for the axis

Passive guide axes DGC-FA, without drive

Type codes



Type	
DGC	Linear drive

Piston ∅ [mm]	

Stroke [mm]	

Guide	
FA	Passive guide axis

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

Slide	
GP	Protected recirculating ball bearing guide

Lubrication function	
	Standard
C	Lubrication adapter

Additional slide	
K	Additional slide

Accessories	
F	Foot mounting
... M	Profile mounting
... B	Slot nut for mounting slot
... L	Slot cover for sensor slot
YWZ1	Variable end position, at one end
YWZ2	Variable end position, at both ends

Manual	
O	Express waiver – no operating instructions to be included

Passive guide axes DGC-FA, without drive

Technical data

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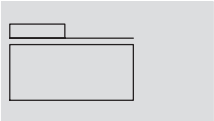
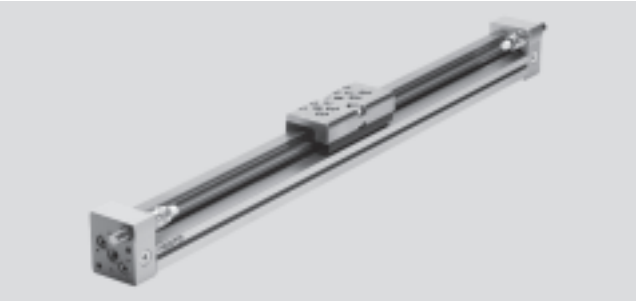
Function



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



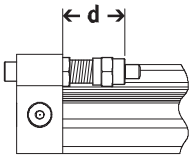
General technical data									
Piston ∅		8	12	18	25	32	40	50	63
Stroke	[mm]	1 ... 1,300	1 ... 1,900	1 ... 3,000	1 ... 8,500			1 ... 5,000	
Guide		External recirculating ball bearing guide							
Mounting position		Any							
Cushioning		Non-adjustable at both ends							
➔9		Self-adjusting at both ends							
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)							

Operating and environmental conditions		
Ambient temperature	[°C]	–10 ... +60
Corrosion resistance class CRC[1)]		1

1) 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.

Weight [g]								
Piston ∅	8	12	18	25	32	40	50	63
Basic weight per 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	47	117	153	236
Moving load	77	149	331	732	1,146	2,330	4,511	8,225

Adjustable end-position range d [mm]



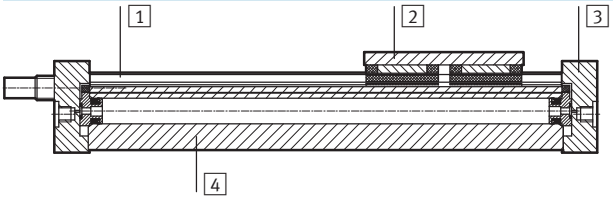
Piston ∅	8	12	18	25	32	40	50	63
Cushioning P	11.3 ... 16.3	12.7 ... 17.7	13.8 ... 15.8	21.1 ... 25.1	25.2 ... 30.2	28.7 ... 33.7	28.7 ... 33.7	38.8 ... 43.8
Protected guide with cushioning P	–	–	16.9 ... 18.9	23.6 ... 27.6	25.2 ... 30.2	34.7 ... 39.7	–	–
Cushioning YSR/YSRW	12.8 ... 22.8	14 ... 24	14.5 ... 34.5	22.5 ... 47.5	27.3 ...37.3	31 ... 56	31 ... 56	41 ... 76

Passive guide axes DGC-FA, without drive

Technical data

Materials

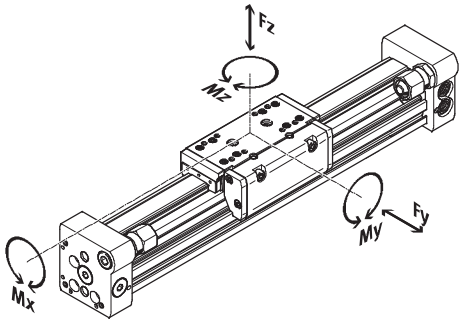
Sectional view



Guide axes		
1	Guide rail	High-alloy steel
2	Slide	High-alloy steel
3	End cap	Anodised aluminium
4	Cylinder barrel	Anodised aluminium
–	Sealing band	Polyurethane

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

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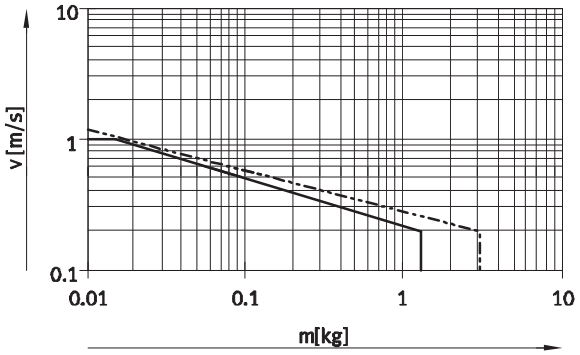
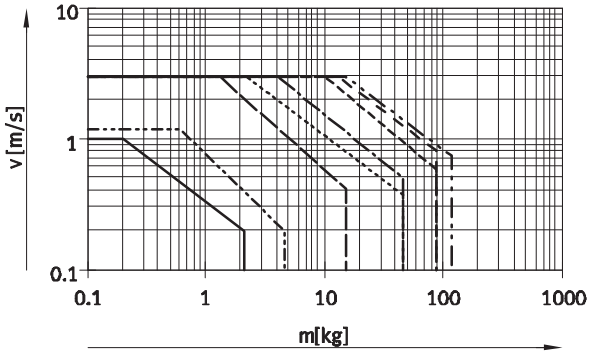
Technical data

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

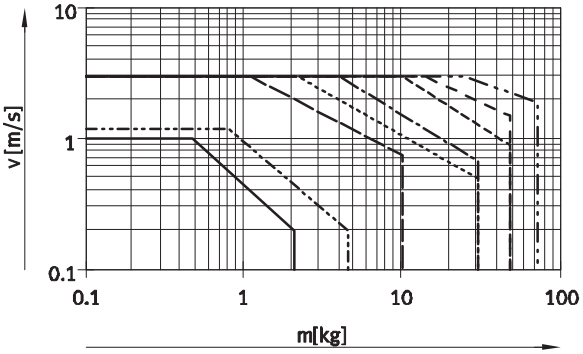
Piston ∅ 8/12 with P cushioning



Piston ∅ 8 ... 40 with YSR cushioning



Piston ∅ 8 ... 40 with YSRW cushioning



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

- Note

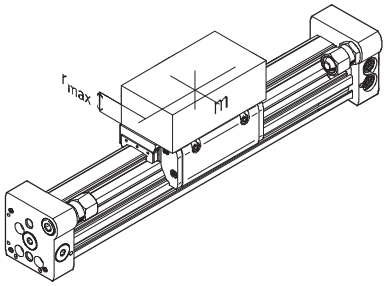
This data represents the maximum values that can be achieved. Values fluctuate in practice relative to the position of the effective load and mounting position.

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 0.01 mm.



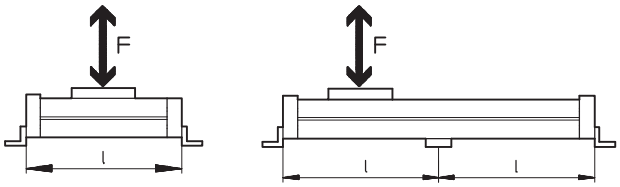
The specifications apply to a horizontal mounting position:

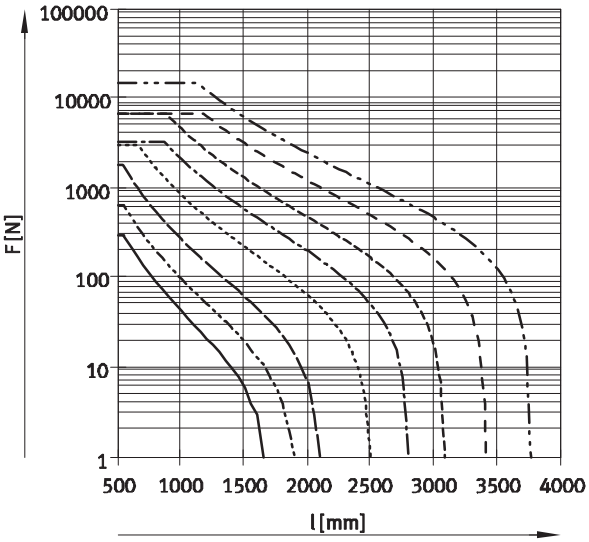
Piston ∅		8	12	18	25	32	40	50	63
Distance $r_{max.}$	[mm]	25	35	35	50	50	50	50	50

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

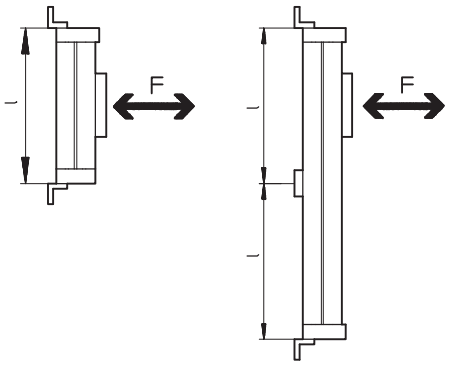
In order to limit deflection in the case of large strokes, the guide axis may need to be supported. The following graphs help to determine the maximum permissible support span as a function of mounting position, force due to weight and normal force.

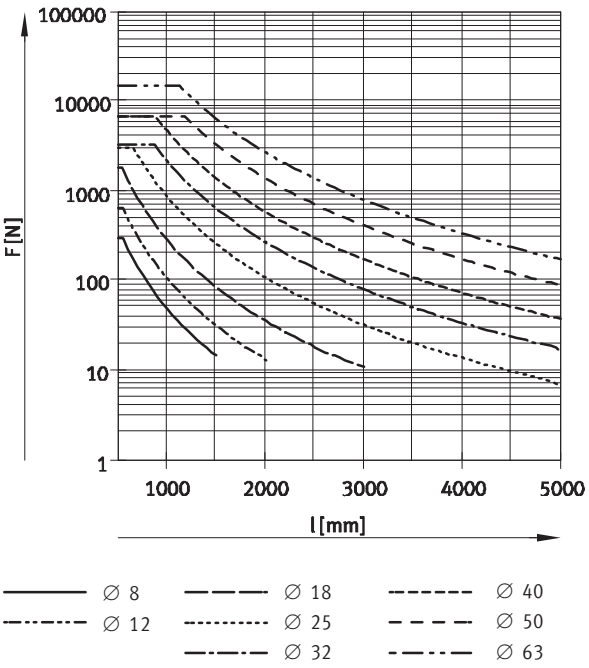
Horizontal mounting position





Vertical mounting position





Example:

The guide axis DGC-25-1500 is subjected to a force of 300 N in the horizontal assembly position.

The axis 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 is 1,300 mm for the axis DGC-25 with a force of 300 N.

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

Central lubrication system

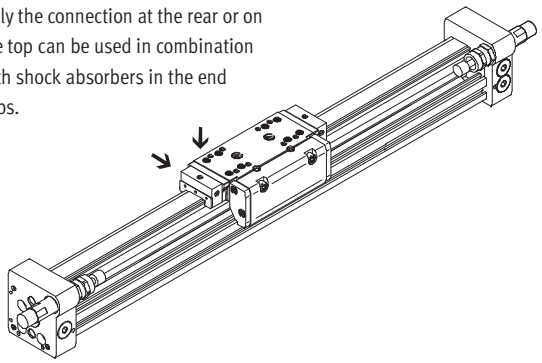
The lubrication adapter enables the guide of the passive guide axis DGC-FA to be permanently lubricated in applications in humid or wet ambient conditions using semi or fully automatic relubrication devices.

- For piston ∅ 25, 32, 40, 63
- The modules are suitable for oils and greases
- The dimensions of the passive guide axis DGC-FA 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:
  – Additional slide K
- Cannot be used in combination with:
  – Protected recirculating ball bearing guide GP

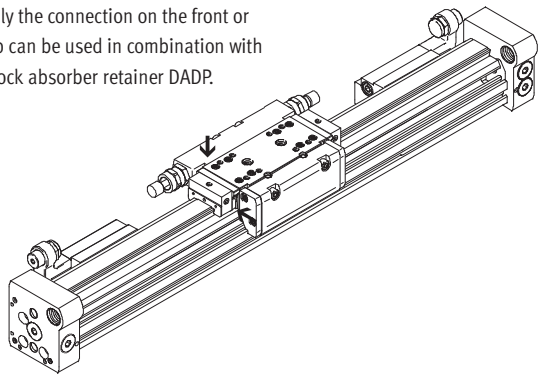
Slide dimensions
➔ 20
Order code C in the modular product system ➔ 23

Connection options

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

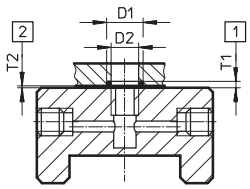


Only the connection on the front or top can be used in combination with shock absorber retainer DADP.



Connection option for customer design

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



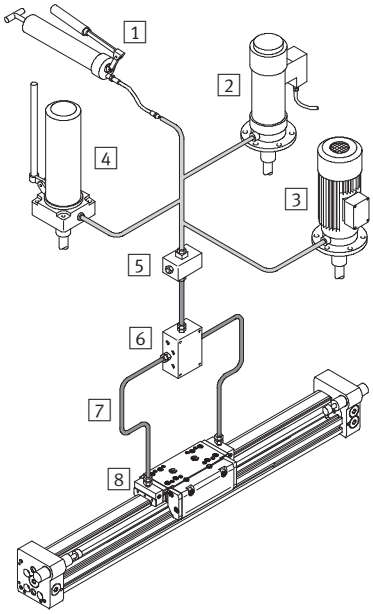
D1 $8^{+0.2}$ mm
D2 6 mm
T1 $0.6_{-0.05}$ mm
T2 $0.1^{+0.2}$ mm
O-ring ∅ 6x1 mm (DIN 3771)

1 Slot depth for O-ring
2 Required air gap

Additional dimensions ➔ 20

Structure of a central lubrication system

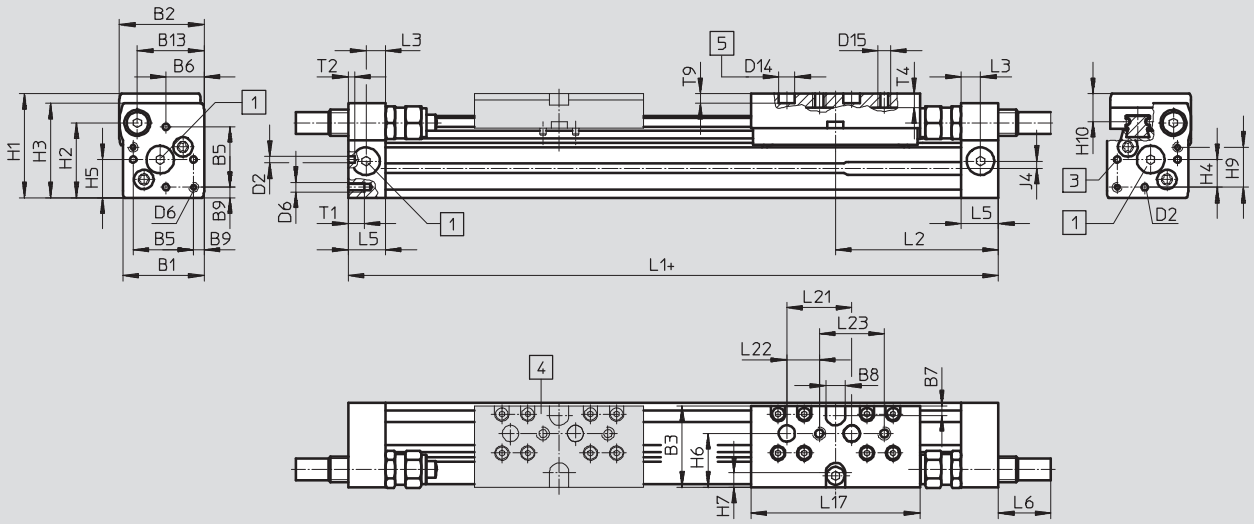
A central lubrication system requires various additional components. The illustration shows different options (using a hand pump, pneumatic container pump or electric container pump) required as a minimum for designing a central lubrication system. Festo does not sell these additional components, however 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**

∅ 8 and 12



\+ plus stroke length
1 The ports on the end caps are sealed with blanking plugs
3 Mounting hole for foot mounting or centring pin
4 Additional slide K
5 Hole for centring pin ZBS

Passive guide axes DGC-FA, without drive

Technical data

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

∅ [mm]	D6	D14 ∅ H7	D15	H1	H2	H3	H4	H5	H6	H7
8	M3	5	M4	32	23	29	8.5	11.7	16.5	4.5
12	M4	5	M4	37.5	28.5	34.5	8.7	13.5	20.5	5

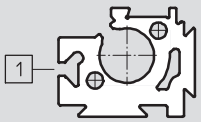
∅ [mm]	H9	H10	J4	L1	L2	L3	L5	L6		
								P	YSR	YSRW
8	12.3	8.7	2.2	100	50.1	6	11.5	0	16	16.2
12	14.7	9.8	3	125	62.1	8	16	0	11.3	12.3

∅ [mm]	L17	L21 ±0.03	L22 ±0.1	L23 ±0.1	T1	T2	T4	T9 ±0.2	Stroke tolerance
8	52	20	10	20	5	2	4.3	3	0 ... 1.7
12	65	20	10	20	6	2	5	3	

Profile barrel

∅ 8

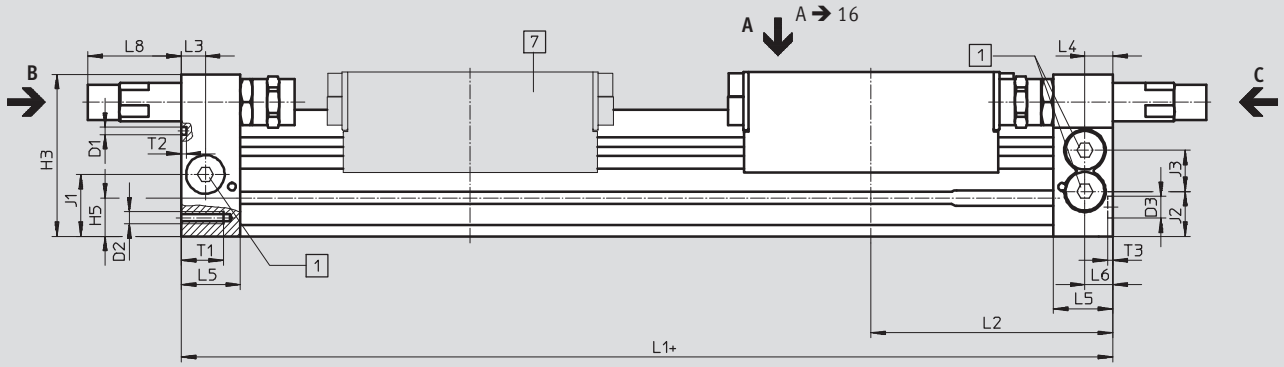
∅ 12



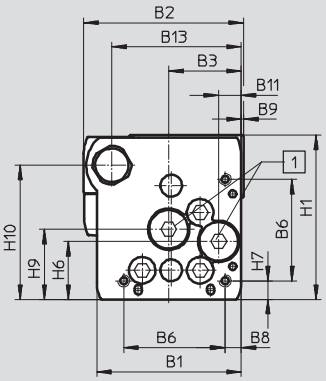
1 Sensor slot for proximity sensor

Dimensions Download CAD data ➔ **www.festo.com**

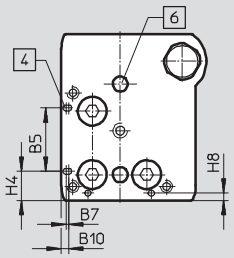
∅ 18 ... 40



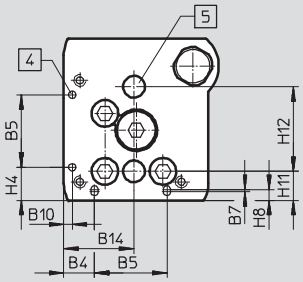
View C
∅ 18 ... 40



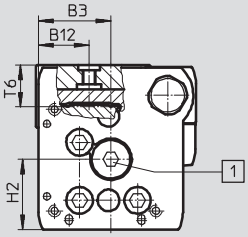
View B
∅ 18



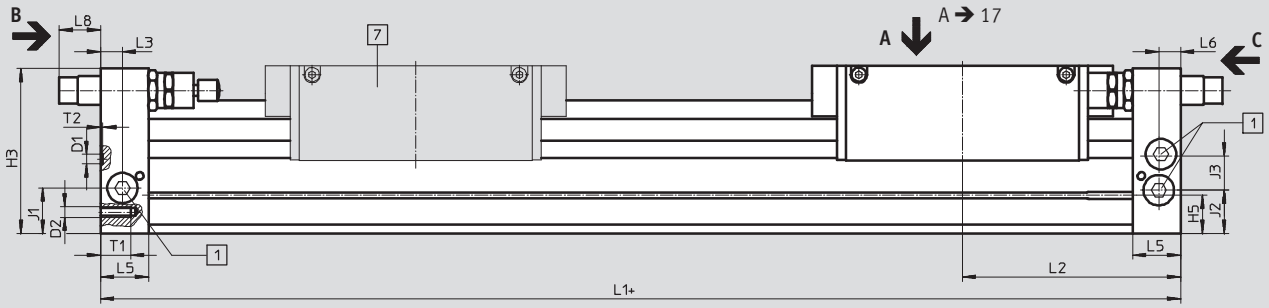
∅ 25 ... 40



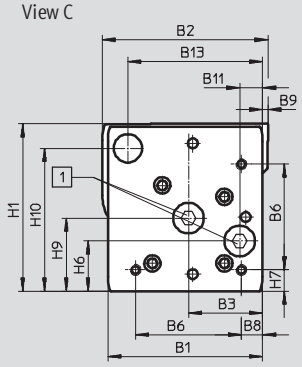
∅ 18 ... 40



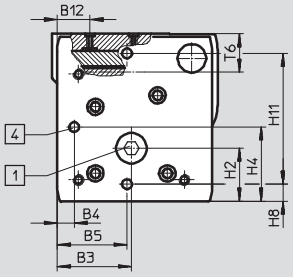
∅ 50/63



View C



View B



\+ plus stroke length
1 The ports on the end caps are sealed with blanking plugs
4 Mounting hole for foot mounting HPC
5 Hole for centring sleeve ZBH
6 Hole for centring pin ZBS
7 Additional slide

Passive guide axes DGC-FA, without drive

Technical data

∅ [mm]	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
18	44.5	49.9	19.5±0.05	8.8±0.1	21±0.05	31	0.8	3.8±0.1	1	2.4	5.5	15.5
25	59.8	66	30±0.05	12.65±0.1	30±0.05	42	1	6.65±0.1	1	3.5	9.3	21
32	73	79	38.5±0.05	5.7±0.1	63.1±0.05	57.5	–	8.5±0.1	1.5	14	14.9	18
40	91	98.5	45±0.05	17.2±0.1	55±0.05	65	–	12.2±0.1	2	8	16.5	24.8
50	113	126.5	60	8±0.2	52.8	81.6	–	12	0	–	21	24
63	142	149	68	15.5±0.2	68	97	–	19.5	5	–	21	30

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

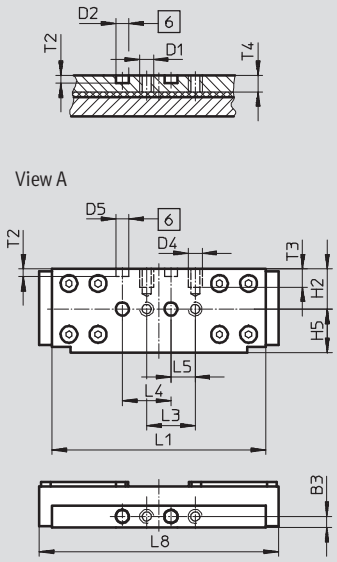
∅ [mm]	H7	H8	H9	H10	H11 ±0.15	H12 ±0.05	J1	J2	J3	L1	
										KF	KF-GP
18	4.6	2.4	25.2	46	8.5±0.15	30	20	16.5	11	150	157
25	7.65	4.5	29	55.5	12±0.15	35	26.1	18.6	17	200	205
32	8.5	14	35.2	63.8	11.45±0.15	50	30	22	18.5	250	250
40	12.2	8	44	81.5	15±0.15	60	35	26	26	300	312
50	12	8	53	104.5	100±0.05	–	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 +0.2	T6	Stroke tolerance
	KF	KF-GP					YSR	YSRW					
18	74.5	78	5.7	5.8	15	5.5	29.9	32.4	9	2	3.1	15	0 ... 2.5
25	100	102.5	10.5	10.6	24.5	10.6	35.6	38.6	17.5	2	2.1	17.3	
32	124.8	124.8	14.5	14.5	30.5	14.5	19.5	28	15	2	2.1	20	
40	150	156	14.6	14.6	33.5	14.6	38.5	43.5	20	3	2.1	25.7	
50	175	–	17	–	41	17	31	36.3	24	$2.1^{+0.2}$	–	28.75	
63	200	–	20	–	44	20	38.3	48.3	27.5	$2.1^{+0.2}$	–	36.1	

Dimensions Download CAD data ➔ **www.festo.com**

Slide

∅ 18



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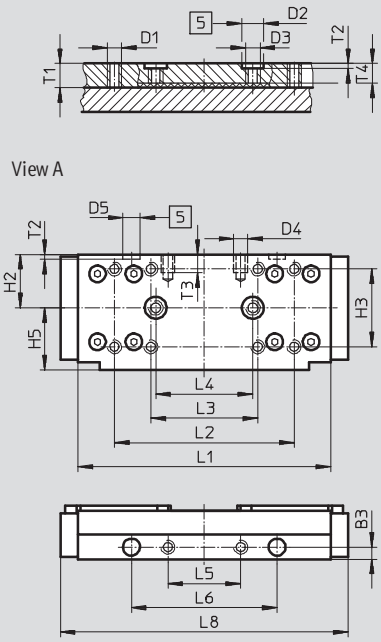
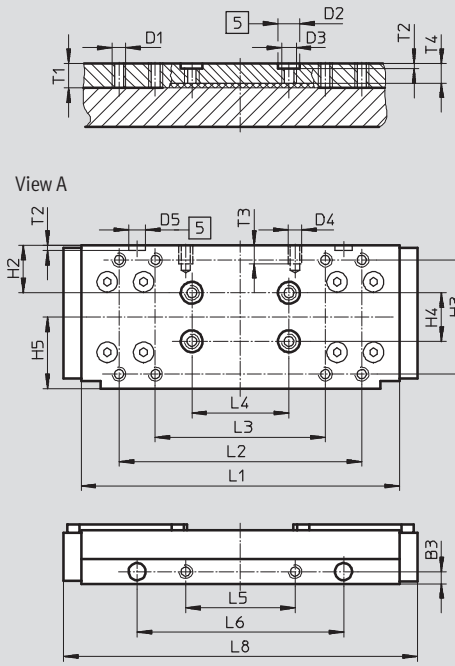


∅ 32



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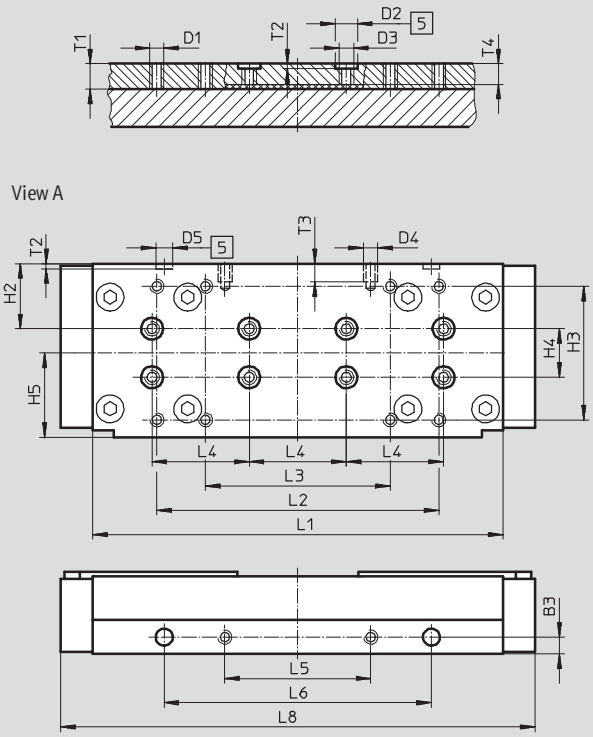
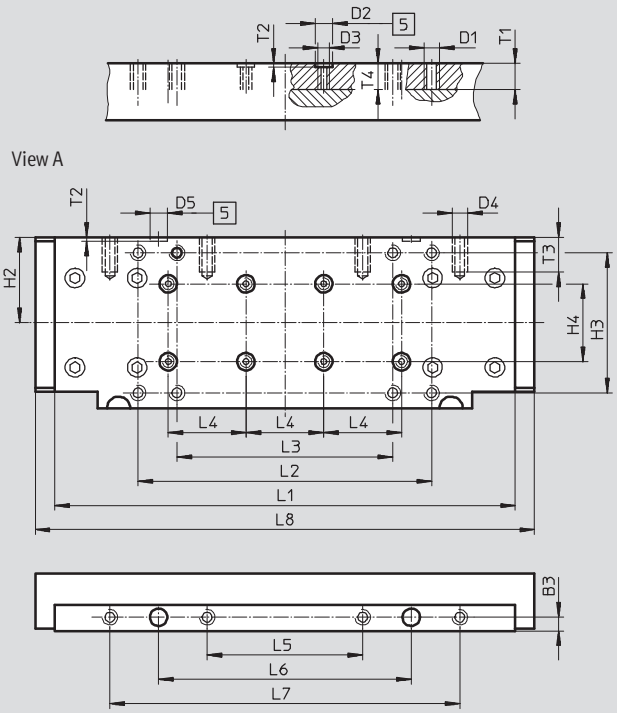


5 Hole for centring sleeve ZBH
6 Hole for centring pin ZBS

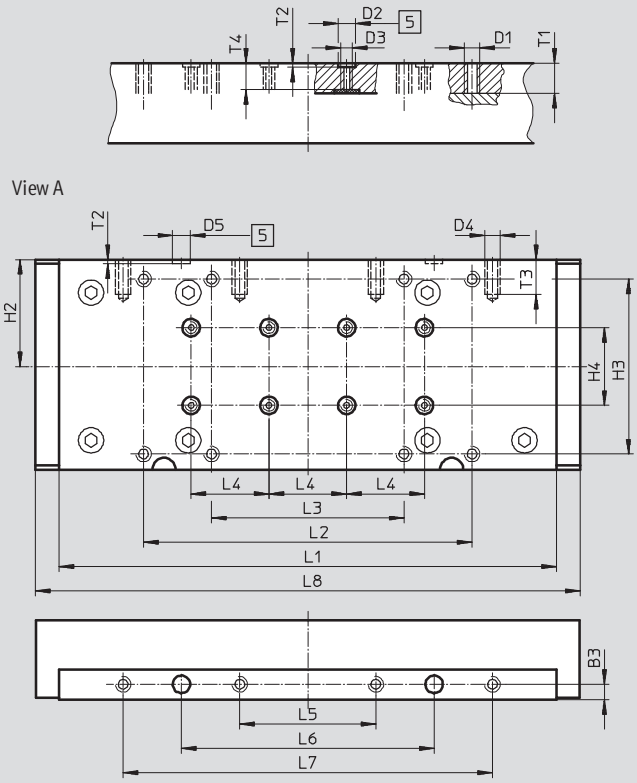
Dimensions Download CAD data ➔ **www.festo.com**

Slide

∅ 50



∅ 63



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

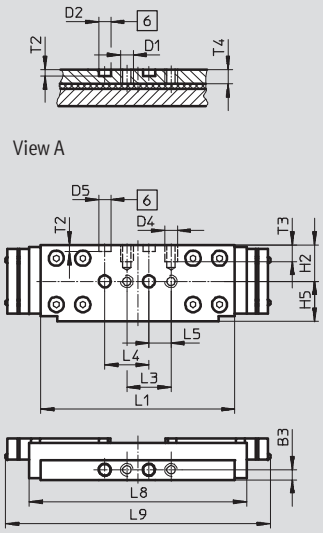
Passive guide axes DGC-FA, without drive

Technical data

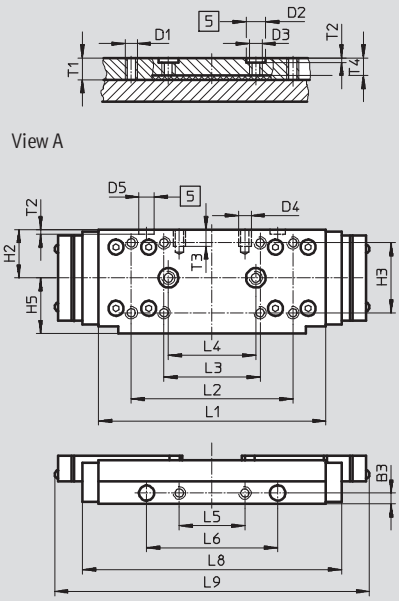
Dimensions Download CAD data ➔ **www.festo.com**

Slide, variant GP – Protected recirculating ball bearing guide

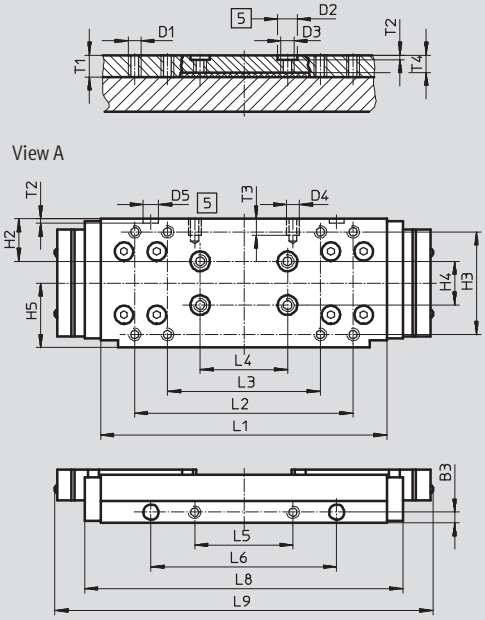
∅ 18



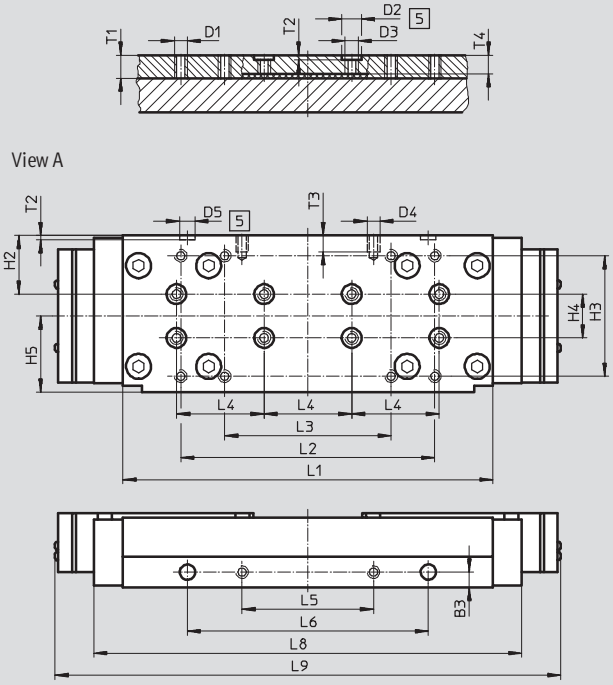
∅ 25



∅ 32



∅ 40



5 Hole for centring sleeve ZBH

6 Hole for centring pin ZBS

Passive guide axes DGC-FA, without drive

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
50	7	M8	9	M6	M8	9	44	72±0.3
63	8	M8	9	M6	M8	9	55	90±0.3

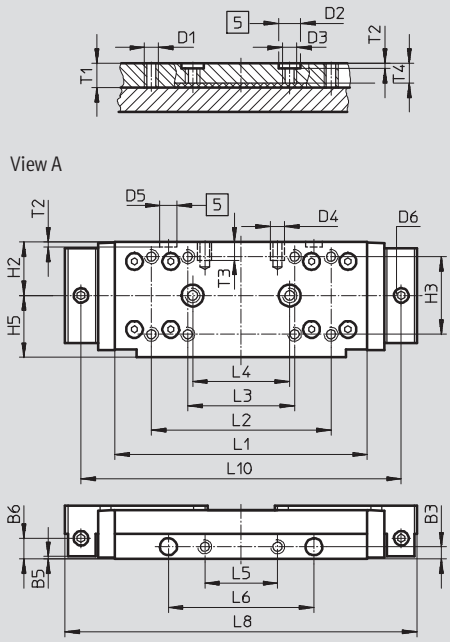
∅ [mm]	H4 ±0.03	H5 ±0.1	L1	L2 ±0.2	L3	L4 ±0.03	L5 ±0.1	L6 ±0.05
18	–	18	88±0.1	–	20±0.1	20	10	–
25	–	25.5	104±0.2	74	44±0.2	40	30	60
32	20	29.5	131±0.2	100	70±0.2	40	45	85
40	20	34.7	169±0.2	116	76±0.2	40	60	110
50	40	–	237±0.1	151	111±0.2	40	80	130
63	40	–	256±0.1	169	99±0.2	40	70	130

∅ [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
50	180	256.8	–	13.5	2.1±0.2	18	13.5
63	190	280	–	15.5	2.1±0.2	18	13.6

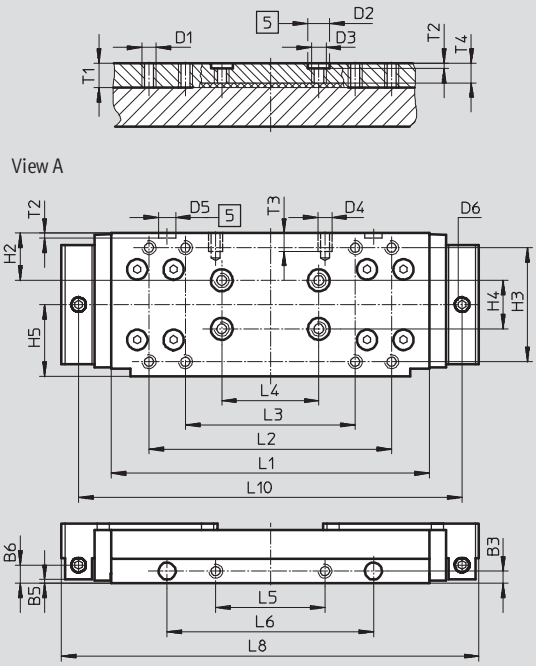
Dimensions Download CAD data ➔ **www.festo.com**

Slide, variant C – Lubrication adapter

∅ 25



∅ 32



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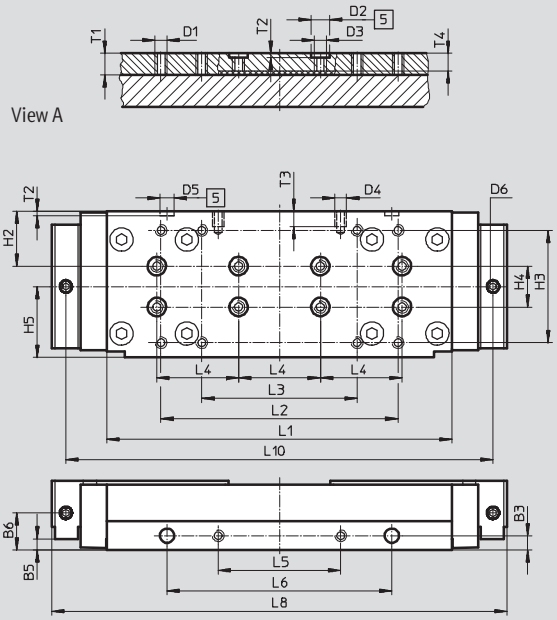
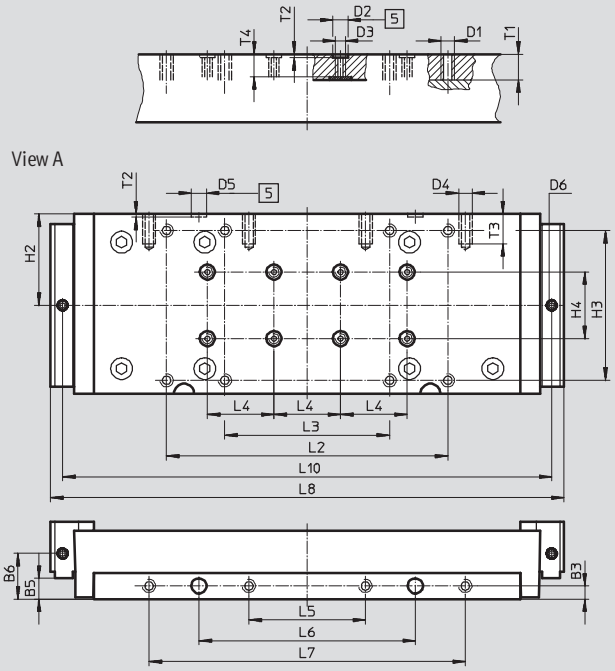


∅ 63



5 Hole for centring sleeve ZBH

Passive guide axes DGC-FA, without drive

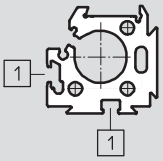
Technical data

∅ [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	–

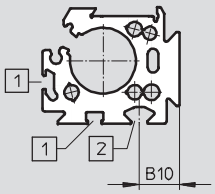
∅ [mm]	L1	L2 ±0.2	L3 ±0.2	L4 ±0.03	L5 ±0.1	L6 ±0.05	L7 ±0.1	L8	L10	T1	T2 ±0.2	T3	T4
25	104±0.2	74	44	40	30	60	–	145	132	10	2.1	7.5	8
32	131±0.2	100	70	40	45	85	–	172	158	10	2.1	7.5	8
40	169±0.2	116	76	40	60	110	–	223	209	10.5	2.1	7.5	8.5
63	256±0.1	169	99	40	70	130	190	308.4	293.8	15.5	2.1	18	13.6

Profile barrel

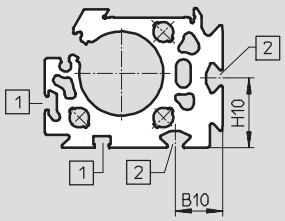
∅ 18



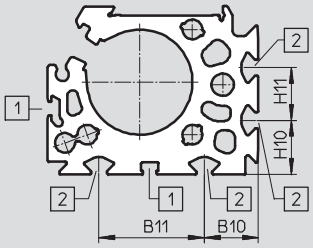
∅ 25



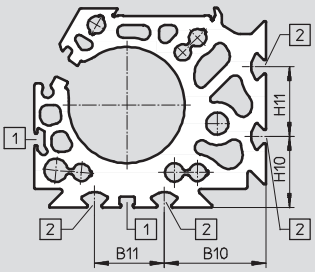
∅ 32



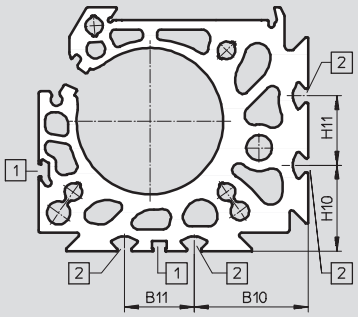
∅ 40



∅ 50



∅ 63

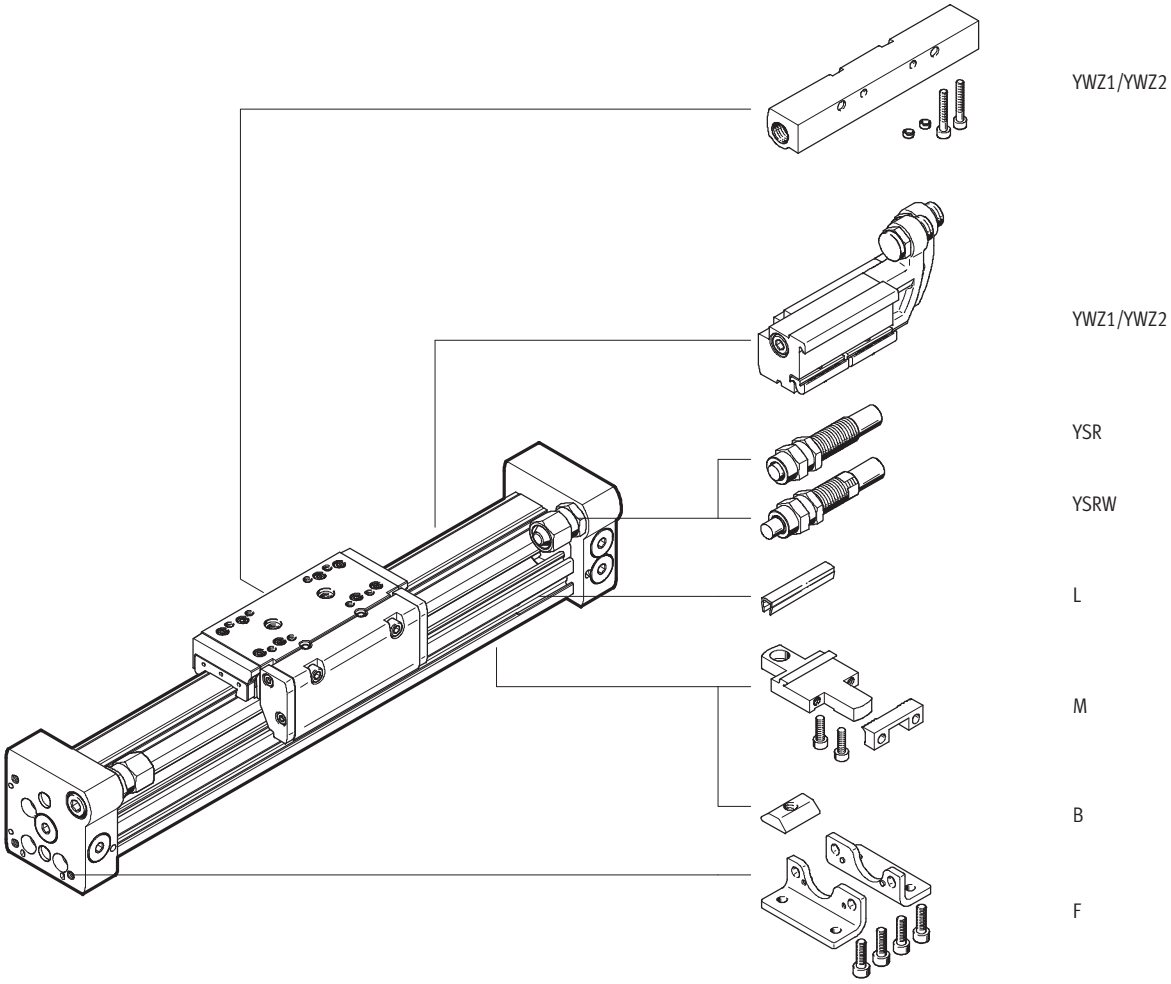


1 Sensor slot for proximity sensor
2 Mounting slot for slot nut

∅ [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

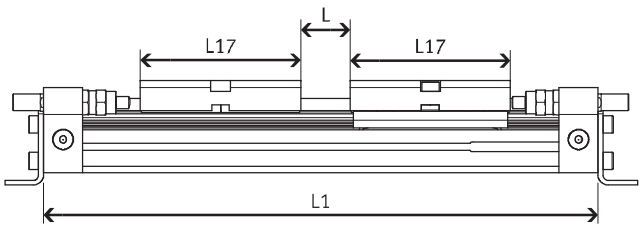
Mandatory data/options



Effective stroke reduction when ordering an additional slide K

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

Passive guide axes DGC-FA, without drive

Ordering data – Modular products

Ordering table

Size		8	12	18	25	32	40	50	63	Condi-tions	Code	Enter code
M	Module No.	**530906**	**530907**	**532446**	**532447**	**532448**	**532449**	**532450**	**532451**			
	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 ... 5,000					1	**-...**	
	Guide	Passive guide axis									**-FA**	-FA
	Cushioning	Elastic cushioning rings/pads at both ends									**-P**	
		Shock absorber, self-adjusting									**-YSR**	
		Shock absorber, self-adjusting, progressive									**-YSRW**	
O	Slide	–	–	Protected recirculating ball bearing guide				–	–	2	**-GP**	
	Lubrication function	Standard										
		–	–	–	Lubrication adapter			–	Lubrica-tion adapter	5	**-C**	
	Additional slide	1 ... 2								3	**-...K**	
	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**	
	Slot cover for sensor slot	–	–	1 ... 9							**...L**	
	Mechanical end-position limiter	–	–	Variable end position, at one end						4	**YWZ1**	
		–	–	Variable end position, at both ends						4	**YWZ2**	
	Manual	Express waiver – no operating instructions to be included (already available)									**-O**	

1 **Stroke** Size 25, 32, 40: strokes up to 8,500 mm on request

2 **GP** Not with cushioning YSR and YSRW
Not with additional slide K

3 **K** For 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
Not with cushioning P

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

5 **C** Not with slide GP

Transfer order code

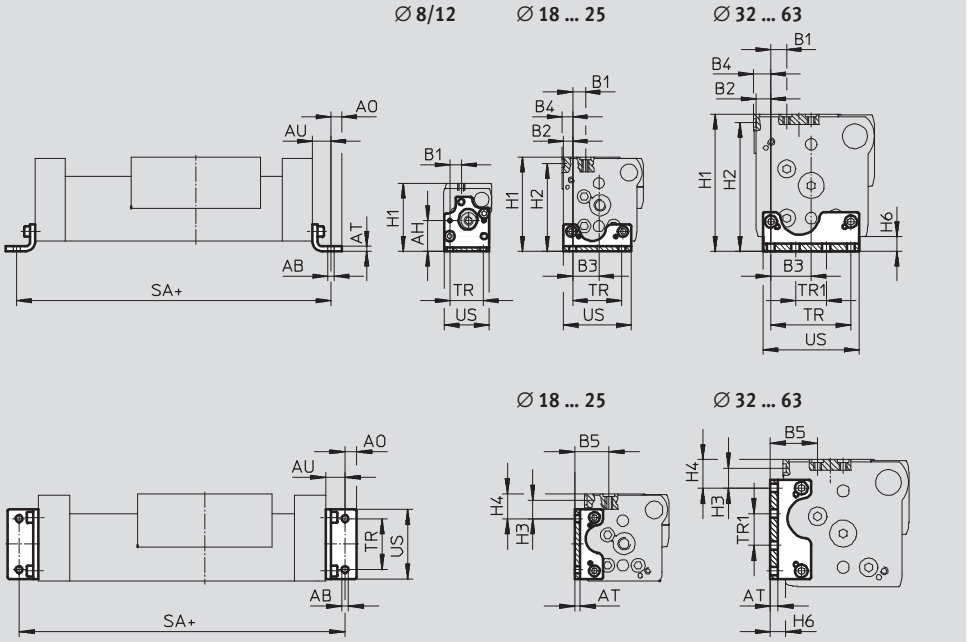
	DGC	–		–		–	FA	–		–		–		–	ZUB	–		–	

Passive guide axes DGC-FA, without drive

Accessories

Foot mounting HPC
(order code: F)

Material:
Galvanised steel



\+ = plus stroke length

Dimensions and ordering data

For ∅ [mm]	AB ∅	AH	AO	AT	AU	B1	B2	B3	B4	B5	B6	H1
8	3.4	16.7	3	2	9	6	–	–	–	–	–	37
12	4.5	18.5	4.5	2	11.5	5.4	–	–	–	–	–	42.5
18	5.5	–	6.75	3	13.25	11.2	4.3	15.2	5.3	23.2	6.7	64
25	5.5	–	9	4	15	13.35	7.65	21.35	8.65	29.5	7.5	76.5
32	6.6	–	10	5	19	11.5	9	29.5	10.5	27	7.5	87.5
40	6.6	–	10	6	20	12.6	12.2	32.8	14.2	36.8	10	111.5
50	9	–	11	8	25	12.5	11.5	48.5	11.5	41	17	141.5
63	11	–	13.5	8	28	17.5	12.5	55.5	17.5	49	14	172.5

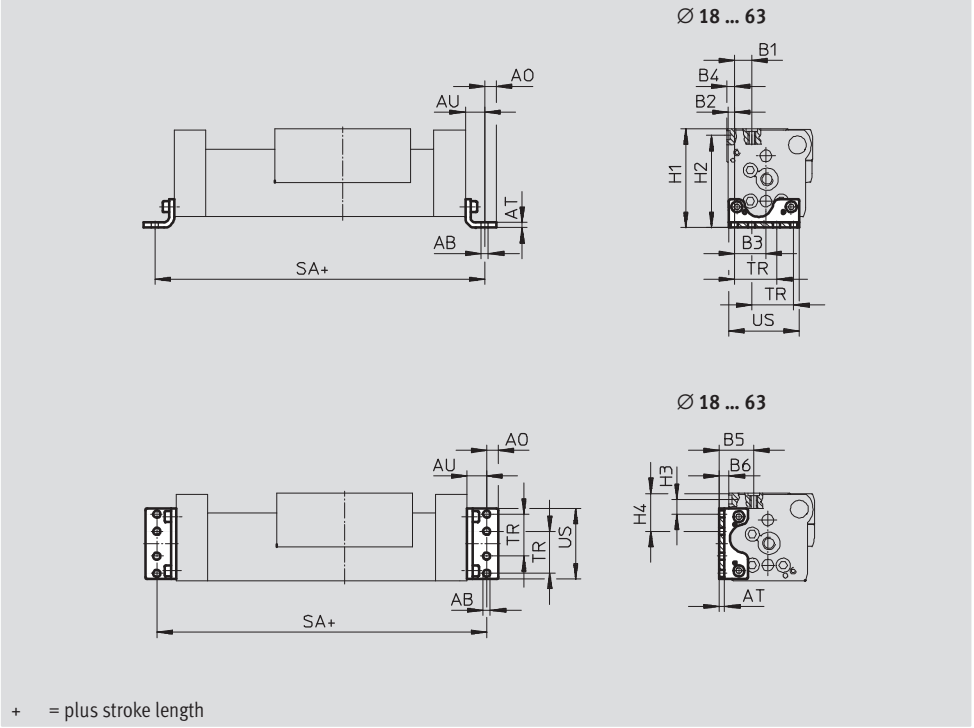
For ∅ [mm]	H2	H3	H4	SA	TR ±0.1	TR1 ±0.1	US	Weight [g]	Part No.	Type
8	–	–	–	118	18	–	24.4	26	**526385**	**HPC-8**
12	–	–	–	148	20	–	29.6	38	**526388**	**HPC-12**
18	59.5	16.7	21.5	176	30	–	38.6	58	**533667**	**HPC-18**
25	71.5	14.35	19.35	230	40	–	55	131	**533668**	**HPC-25**
32	82.5	8	13	288	56.5	19.5	68	239	**533669**	**HPC-32**
40	104.5	15.3	22.3	340	65	25	78	348	**533670**	**HPC-40**
50	134.5	23.4	30.4	400	82.6	47.4	102	754	**545236**	**HPC-50**
63	164.5	22	30	456	111	39	133	1,245	**545237**	**HPC-63**

Passive guide axes DGC-FA, without drive

Accessories

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 Ø [mm]	AB Ø	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 Ø [mm]	H1	H2	H3	H4	SA	TR ±0.1	US	Weight [g]	Part No.	Type
18	64	59.5	16.7	28	176.5$^{+0.9/-0.2}$	24	40	54.5	**535600**	**HPC-18-S**
25	75.5	70.5	11.45	29.75	226$^{+0.9/-0.2}$	32.5	55	89.5	**535601**	**HPC-25-S**
32	87.5	82.5	8	31.5	284$^{+0.9/-0.2}$	38	68	180	**538413**	**HPC-32-S**
50	138.5	131.5	23.4	48	400$^{+1.7/-0.2}$	65	102	754	**545238**	**HPC-50-S**
63	160.5	152.5	22	66	456$^{+1.7/-0.2}$	75	133	1,138	**545239**	**HPC-63-S**

Passive guide axes DGC-FA, without drive

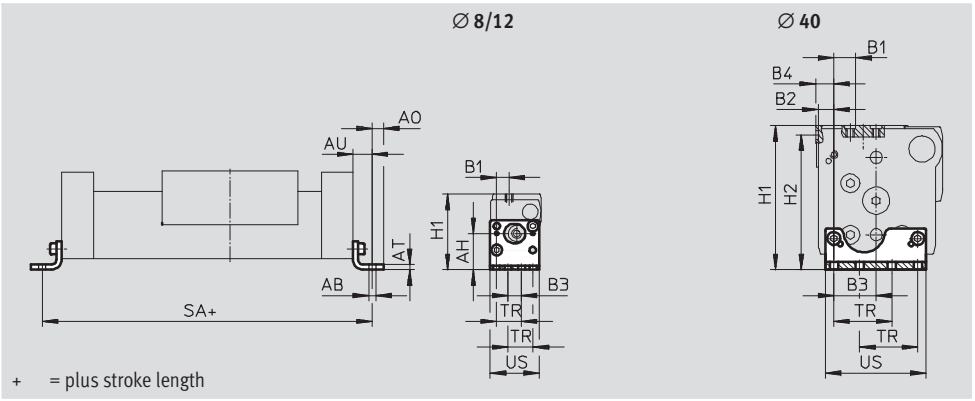
Accessories

FESTO

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

Material:
Galvanised steel

HPC-12-SO



\+ = 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	26	**529346**	**HPC-8-SO**
12	–	47.5	–	143	18.6	33.8	42	**529348**	**HPC-12-SO**
40	14.3	104.5	97.5	335	45	78	264	**536745**	**HPC-40-SO**

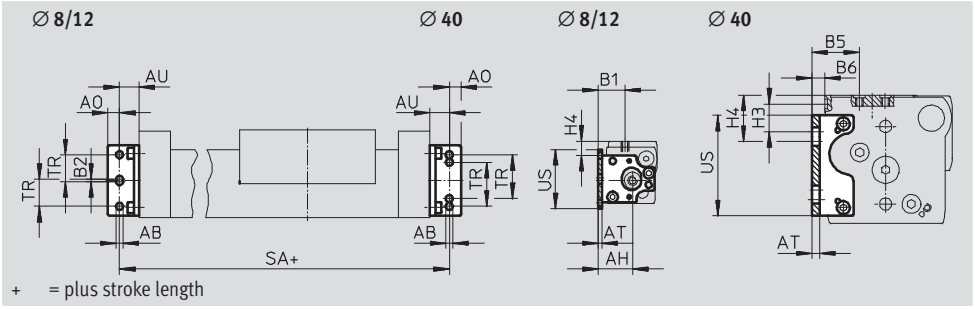
Passive guide axes DGC-FA, without drive

Accessories

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

Material:
Galvanised steel

HPC-12-SH



\+ = 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

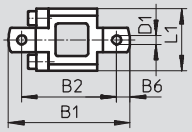
For ∅ [mm]	B6	H3	H4	SA	TR ±0.1	US	Weight [g]	Part No.	Type
8	–	–	7.25	118	13	30.5	25	**529347**	**HPC-8-SH**
12	–	–	4.5	143	18.6	41.8	41.5	**529349**	**HPC-12-SH**
40	9.2	21.6	36	335	45	78	275	**536746**	**HPC-40-SH**

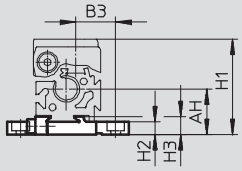
Profile mounting MUC
(order code: M)

Material:
High-alloy steel

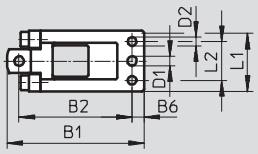
MUC-12

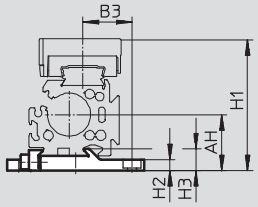
∅ 8/12



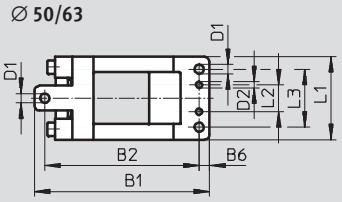


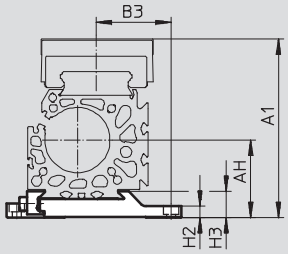
∅ 18 ... 40



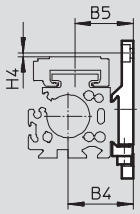


∅ 50/63

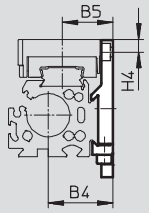




∅ 18 ... 40-G



∅ 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 ±0.2	B3	B4	B5	B6	D1 ∅	D2 ∅ H7
8	17.7	47	36.7	15.35	–	–	5.1	3.5	–
12	18.5	52.5	42.2	16.5	–	–	5.1	3.5	–
18	27.2	67.8	56	28.7	27.2	28.7	5.7	5.5	5
25	32.5	79.5	65.5	28.5	37.5	29.5	7	5.5	5
32	37.5	94	80	35	47.5	37	7	5.5	5
40	47	110.5	96	43	57	46.8	7	6.5	6
50	61	145	125	56	77	61	7	9	6
63	75	169	149	72.5	87	69	10	9	6

For ∅ [mm]	H1	H2	H3	H4	L1	L2	L3	Weight [g]	Part No.	Type
8	37	5	7	–	24	–	–	28	**526384**	**MUC-8**
12	42.5	4.5	7	–	24	–	–	32	**526387**	**MUC-12**
18	64	5.7	9.9	6.4	33	20.5	–	78	**531752**	**MUC-18**
25	76.5	6.5	12.5	7.43	35	22.5	–	113	**531753**	**MUC-25**
32	87.5	6.5	13	4	45	30	–	174	**531754**	**MUC-32**
40	111.5	8.5	16	11.3	60	44	–	346	**531755**	**MUC-40**
50	159	11	23.5	9.2	80	26	56	874	**531756**	**MUC-50**
63	172.5	11	23.5	15	80	26	56	1,080	**531757**	**MUC-63**

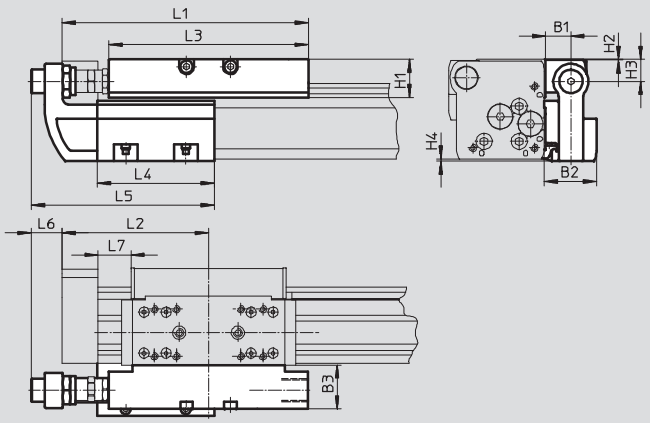
Shock absorber retainer DADP
Stop KYC
(order code: YWZ1 or YWZ2)

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.

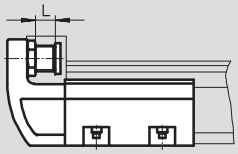
Dimensions

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

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

Technical data and ordering codes

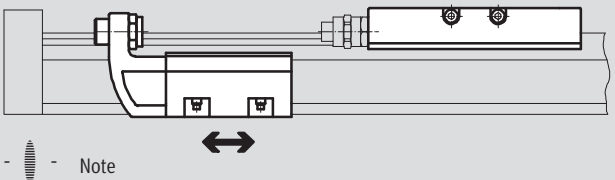
Precision adjustment



Note

The stop KYC can be used in both directions.

Installation example



Note

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

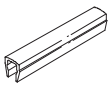
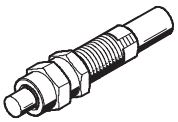
For ∅ [mm]	Precision adjustment L [mm]	Ambient temperature [°C]	CRC[1)]	Weight [g]	Part No.	Type
Shock absorber retainer						
18	10	–10 … +80	2	130	**541729**	**DADP-DGC-18-KF**
25	10			180	**541730**	**DADP-DGC-25-KF**
32	10			215	**541731**	**DADP-DGC-32-KF**
40	15			460	**541732**	**DADP-DGC-40-KF**
50	15			890	**545244**	**DADP-DGC-50**
63	15			1,080	**545245**	**DADP-DGC-63**
Stop						
18	10	–10 … +80	2	400	**541691**	**KYC-18**
25	10			560	**541692**	**KYC-25**
32	10			790	**541693**	**KYC-32**
40	15			1,525	**541694**	**KYC-40**
50	15			2,270	**545242**	**KYC-50**
63	15			2,950	**545243**	**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

Passive guide axes DGC-FA, without drive

Accessories

Ordering data

	For ∅	Remarks	Order code	Part No.	Type	PU[1]
Slot nut NST					Technical data ➔ Internet: hmbn	
	25 … 40	For mounting slot	B	**547264**	**HMBN-5-1M5**	10
	50, 63			**186566**	**HMBN-5-2M5**	
Centring pin/sleeve ZBS/ZBH					Technical data ➔ Internet: zbs, zbh	
	8 … 18	For slide	–	**150928**	**ZBS-5**	10
	25 … 63			**150927**	**ZBH-9**	
	8, 12	For end cap	–	**525273**	**ZBS-2**	
	18			**150928**	**ZBS-5**	
	25 … 63			**150927**	**ZBH-9**	
Slot cover ABP-S					Technical data ➔ Internet: abp	
	18 … 63	For sensor slot each 0.5 m	L	**151680**	**ABP-5-S**	2
Shock absorber					Technical data ➔ Internet: ysrw	
	18	For DGC-FA with recirculating ball bearing guide	YSRW	**540347**	**YSRW-DGC-18-KF**	1
	25			**540349**	**YSRW-DGC-25-KF**	
	32			**540351**	**YSRW-DGC-32-KF**	
	40, 50			**1232870**	**YSRW-DGC-40/50-B**	
	63			**543069**	**YSRW-DGC-63-GF/KF**	

1) Packaging unit quantity