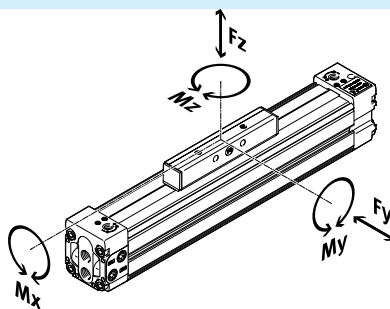





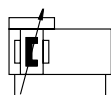
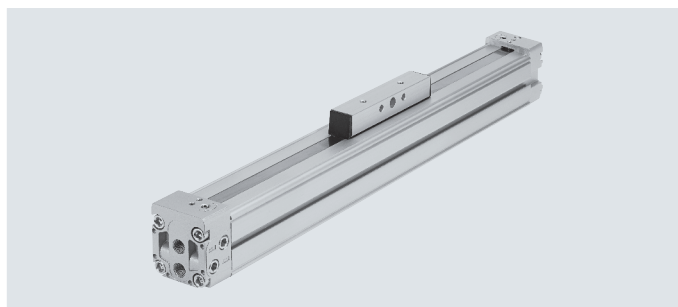
## Product range overview

### Product variants



	Piston diameter	Theoretical force at 6 bar	Guide characteristics					→ Page/ Internet
	[mm]	[N]	Fy [N]	Fz [N]	Mx [Nm]	My [Nm]	Mz [Nm]	
Compact design DGC-K								
	18	153	–	120	0.8	11	1	6
	25	295	–	330	1.2	20	3	
	32	483	–	480	1.9	40	5	
	40	754	–	800	3.8	60	8	
	50	1178	–	1200	6	120	15	
	63	1870	–	1600	5.7	150	24	
	80	3016	–	2500	30.6	400	100	
Basic design DGC-G								
	8	30	150	150	0.5	2	2	dgc
	12	68	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	1100	12	60	25	
	50	1178	480	1600	20	150	37	
	63	1870	650	2000	26	150	48	
Plain-bearing guide DGC-GF								
	18	153	440	540	3.4	20	8.5	dgc
	25	295	640	1300	8.5	40	20	
	32	483	900	1800	15	70	33	
	40	754	1380	2000	28	110	54	
	50	1178	1500	2870	54	270	103	
	63	1870	2300	4460	96	450	187	

# Data sheet


[www.festo.com](http://www.festo.com)


- Ø - Diameter  
18 ... 80 mm
- l - Stroke length  
1 ... 8500 mm

General technical data							
Piston diameter	18	25	32	40	50	63	80
Design	Pneumatic linear drive with slide						
Guide	Slotted cylinder barrel						
Mode of operation	Double-acting						
Stroke [mm]	1 ... 3000	1 ... 8500			1 ... 6000	1 ... 5000	1 ... 3000 <sup>1)</sup>
Pneumatic connection	M5	G1/8		G1/4		G3/8	G1/2
Cushioning [PPV]	Adjustable at both ends						
Cushioning length [mm]	16	18	20	30	30	30	83
Max. speed							
With adjust. pneum. cushioning PPV [m/s]	2						
With external cushioning [m/s]	3						
Position sensing	Via proximity sensor						
Type of mounting	Via accessories						
Mounting position	Any						

1) Additional strokes on request.

Operating and environmental conditions							
Piston diameter	18	25	32	40	50	63	80
Operating pressure [bar]	2 ... 8				1.5 ... 8		
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:-]						
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)						
Ambient temperature <sup>1)</sup> [°C]	−10 ... +60						
Food-safe <sup>2)</sup>	→ supplementary information on materials						
Corrosion resistance class CRC <sup>3)</sup>	1						

1) Note operating range of proximity sensors.

2) Additional information: [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

3) Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. Dry indoor application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

ATEX <sup>1)</sup>	
Explosion-proof ambient temperature	-10°C ≤ Ta ≤ +60°C
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
EX2 certification	
ATEX category for gas	II 3G
Type of ignition protection for gas	Ex h IIC T4 Gc X
ATEX category for dust	II 3D
Type of ignition protection for dust	Ex h IIIC T120°C Dc X
EX3 certification	
ATEX category for gas	II 2G
Type of ignition protection for gas	Ex h IIC T4 Gb X

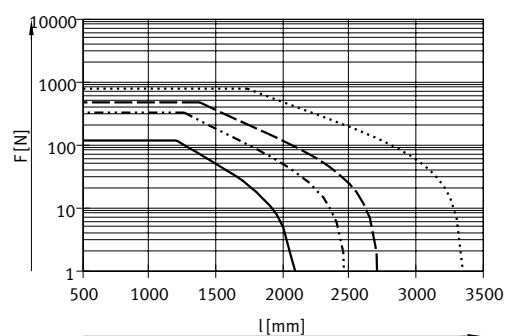
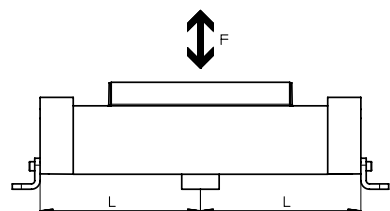
1) Note the ATEX certification of the accessories.

## Data sheet

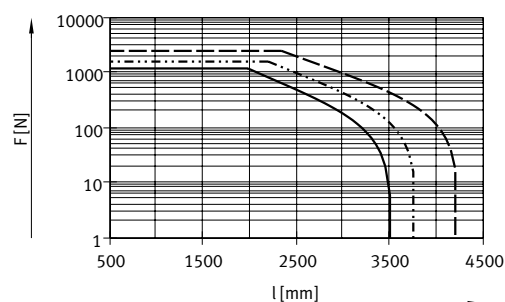
Number of central supports MUP as a function of weight force  $F$  and distance  $l$  between supports

The drive may need to be supported to limit the deflection in the case of large strokes. The following graphs are provided to determine the maximum permissible distance between supports as a function of the mounting position and the applied weight and normal forces.

Mounting position  
Horizontal

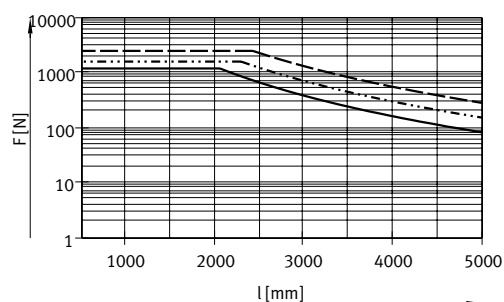
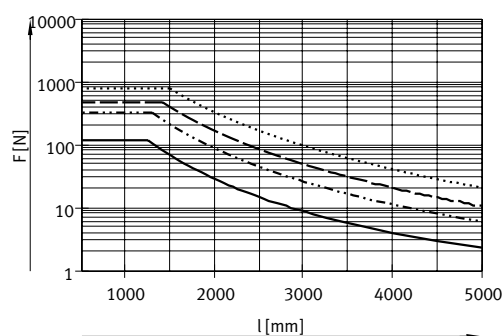
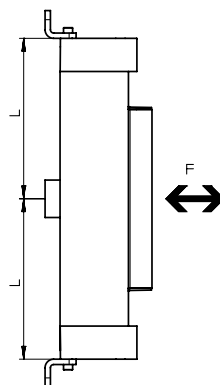


— DGC-K-18  
 ..... DGC-K-25  
 --- DGC-K-32  
 - · - · - DGC-K-40



— DGC-K-50  
 ..... DGC-K-63  
 --- DGC-K-80

Vertical



## Example:

The drive DGC-K-25-1500 is subjected to a force of 200 N in a horizontal mounting position.

The drive has an overall length of:  
 $l$  = stroke length + L1 (see dimensions)  
 = 1500 mm + 200 mm  
 = 1700 mm

According to the graph, the max. distance between supports for the drive DGC-K-25 with a force of 200 N is 1450 mm.

In this example, central supports are required as the max. distance between supports (1450 mm) is smaller than the overall length of the drive (1700 mm).