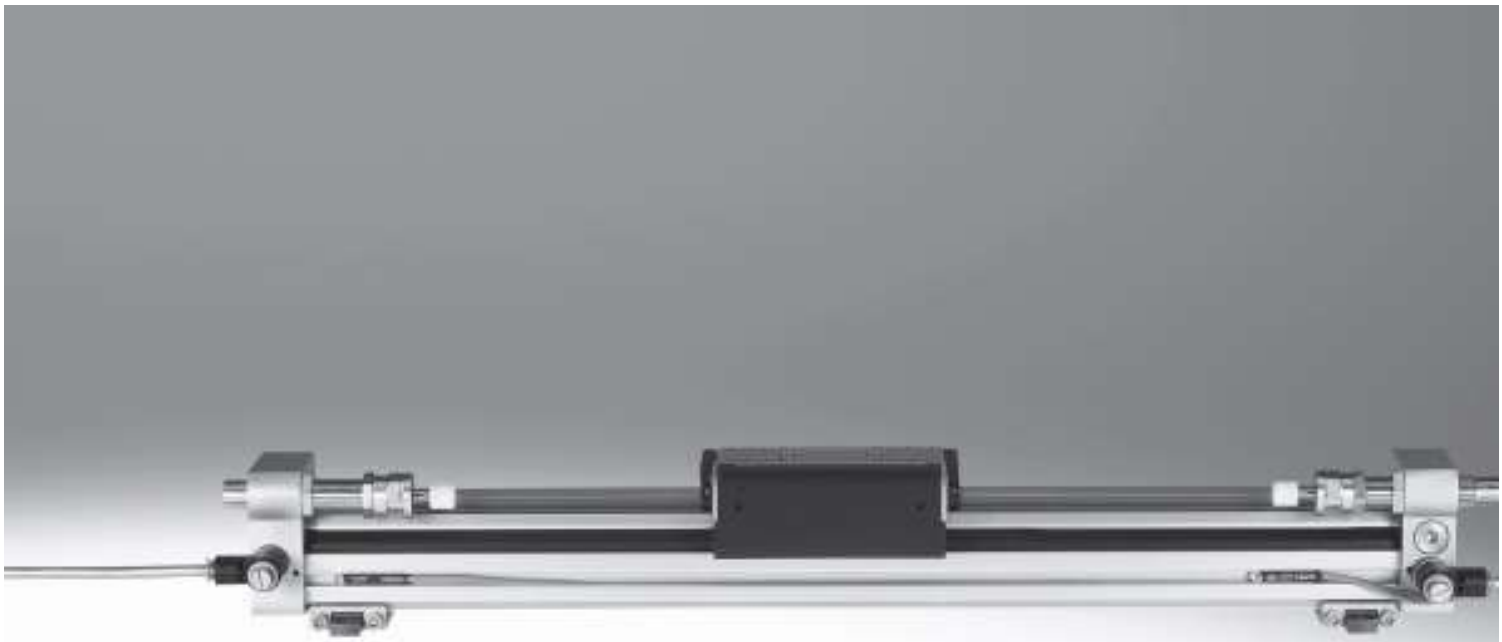
Linear drives DGC

FESTO

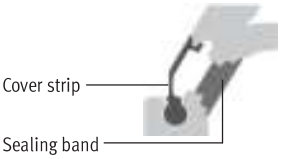


Linear drives DGC

Key features

General

- Compact – fitting length relative to stroke
- Loads and devices can be directly mounted on the slide
- Three types of cushioning available:
  - Flexible 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 without restrictions
- Virtually zero-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 with 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

Linear drives DGC

Key features

Versatile

1 Supply ports

- Optional on two faces (on the end face or from 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 end position adjustment, e.g. for format adjustments
- The end stop can be mounted at any position within the stroke
- For DGC-GF/DGC-KF/DGC-FA

6 Intermediate position Z1/Z2/Z3

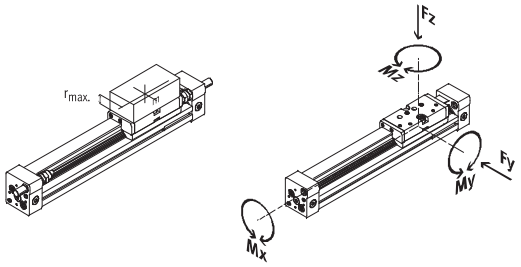
- Permits variable intermediate positions
- The intermediate position module can be mounted at any position within the stroke
- Precision repetition accuracy (0.02 mm) with highly dynamic response
- For DGC-KF

Driver FK

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

Example

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	40
	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	

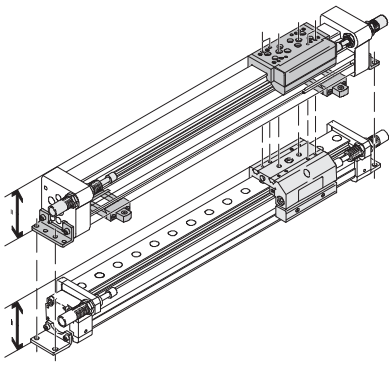
1) At v = 0.5 m/s with shock absorber YSR or YSRW

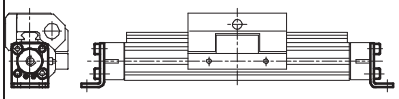
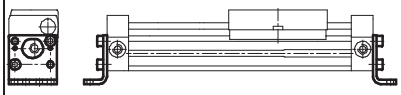
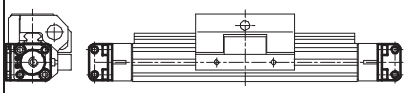
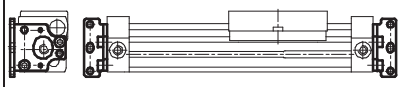
Linear drives DGC

Key features

Interchangeability with linear drive DGPL

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

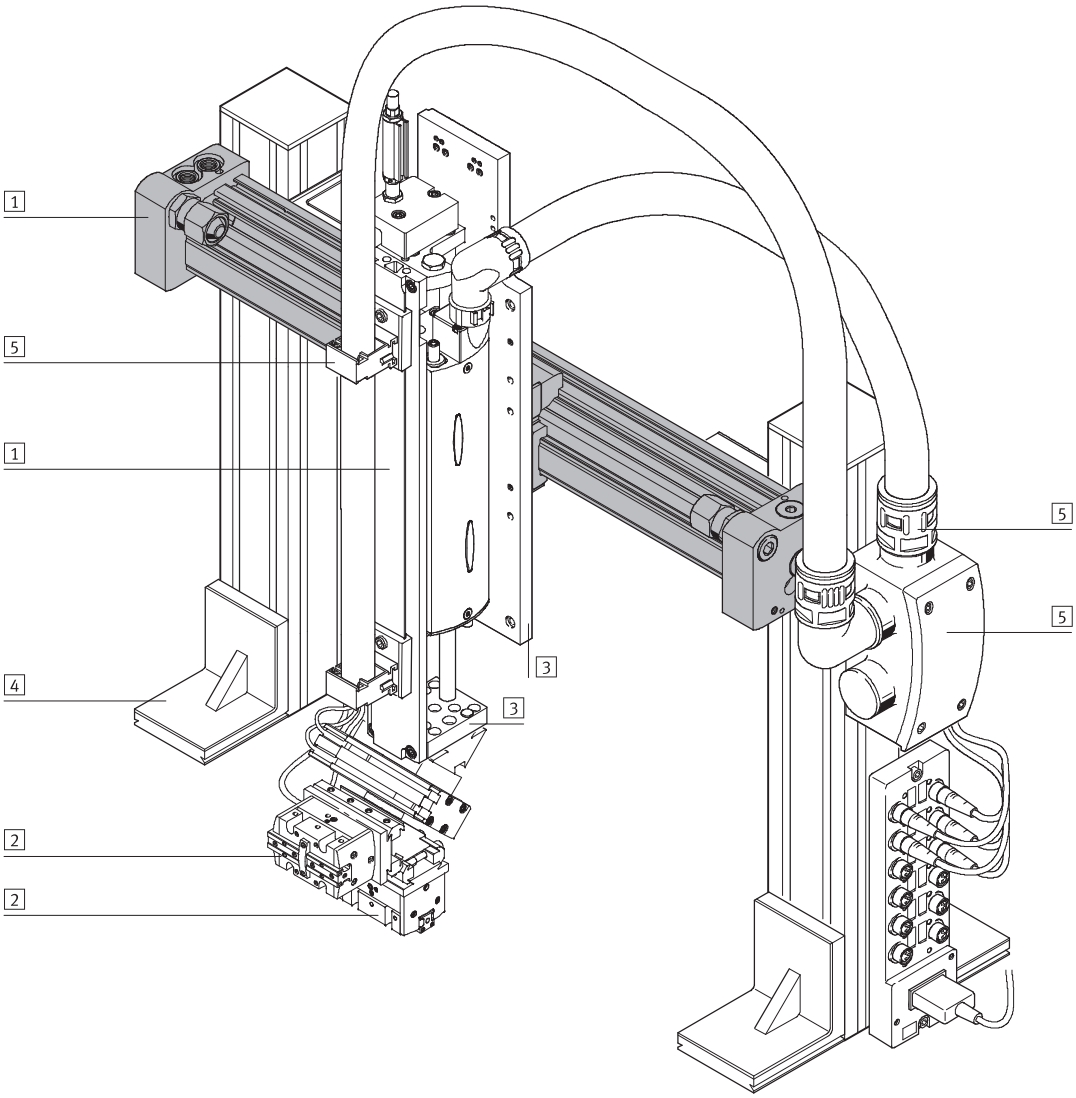


Slide position	Linear drive DGPL	Linear drive DGC-GF/-KF	Foot mounting required ➔ 60
Top			Type HPC-...-SO/ HPC-...-S
Rear			Type HPC-...-SH/ HPC-...-S

Alternatives

Electro-mechanical drives		Rodless cylinders, magnetically coupled
Toothed belt axes DGE-ZR	Spindle axes DGE-SP	Linear drives DGO
		
Advantages: Positioning drive for approaching several positions ➔ Internet: dge-zr	Positioning drive for approaching several positions ➔ Internet: dge-sp	Hermetically sealed drive ➔ Internet: dgo

System product for handling and assembly technology



Linear drives DGC

Key features

System elements and accessories			
		Brief description	➔ Page/Internet
1	Drive units	Wide range of combinations possible within handling and assembly technology	drive
2	Grippers	Diverse variation options in handling and assembly technology	gripper
3	Adapters	For drive/drive and drive/gripper combinations	adapter kit
4	Basic mounting components	Profiles and profile connectors as well as profile/drive connectors	basic component
5	Installation components	For achieving a clear-cut, safe layout for electrical cables and tubing	installation component
–	Axes	Wide range of combinations possible within handling and assembly technology	axes
–	Motors	Servo and stepper motors, with or without gear unit	motor