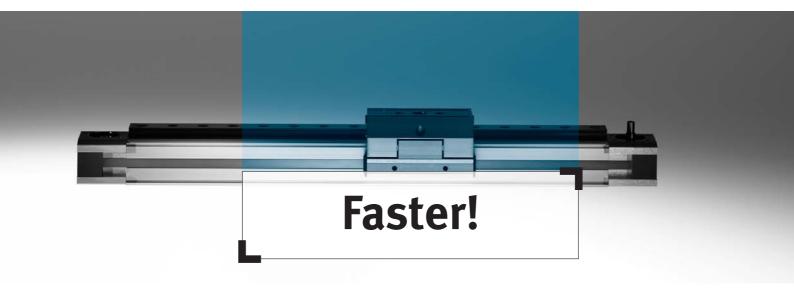
## **Electrical toothed belt axis DGE-ZR**





Extra compact, high precision, extremely sturdy and a superb team player: The DGE-ZR

# State of the art when it comes to electrical axes

The DGE Team. What they all have in common is unbeatable compact dimensions with high-loads capacity and high mechanical torques in addition to standardisation of all the drive technologies in the same design. The DGE-ZR demonstrates its outstanding qualities to the full when used in single-axis or multi-axis systems.

### **Exceptional guidance**

Sturdy, precision guidance with repeat accuracy of up to ±0.08 mm.

### Long service life

Not by virtue of the high quality toothed belt alone: a high precision unit thanks to the shape and position of the teeth, it has flexibility and high tensile strength and the guide's minimal friction and lubrication for life make it wear-free.

### Flexible team player

Thanks to the open interfaces with the modular handling system, e.g. for motor packages and matching accessories. Includes assembly options and a wide range of options for mounting on drive units. Ideal for Festo's package solutions for the handling sector.



144.1.**PSI** 

yer! Product Short Information

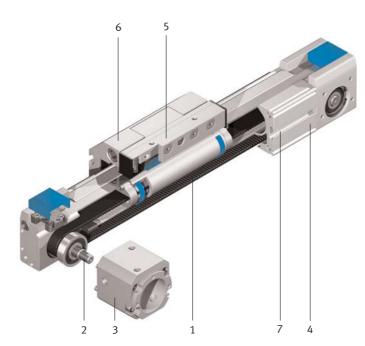


# Versions with toothed belt drive DGE-ZR

- Without guide (with driver)
- With recirculating ball bearing guide, available with extended slide as an option
- With heavy-duty guide
- In dust-proof version

#### Benefits at a glance

- Rigid precision guide
- Highly versatile thanks to the wide choice of mounting and assembly options
- Wide range of options for mounting on drive units
- Comprehensive assembly accessories for multi-axis combinations
- Optimally adapted motor controller combinations



- 1 Toothed belt
- 2 Drive shaft/trunnion
- **3** Coupling housing
- 4 Aluminium profile
- **5** Driver
- 6 Slide
- 7 Sensors can be integrated

### Note

Use the PtTool project engineering tool on the Festo CD-ROM. It supports project engineering and calculates the expected positioning time.

### Technical data

DGE-ZR with driver									
Toothed belt drive		Type DGE	Type DGEZR						
Size		8	12	18	25	40	63		
Nominal stroke	[mm]	1 650	1 1000	1 1000	1 3000	1 4000	1 4500		
Max. driving torque	[Nm]	0.08	0.18	0.5	2.6	9.7	42		
Max. feed force	[N]	15	30	60	260	610	1500		
Max. speed	[m/s]	1	1.5	2	5	5	5		
Repeat accuracy	[mm]	±0.08	±0.08			±0.1			
Max. applied load Fz	[N]	38	59	120	330	800	1600		
May lateral torque My	[Mm]	0.15	0.3	0.5	1	/1	Q		



Toothed belt drive		Type DGE	Type DGEZR-KF-GK/-GA							
Size		8	12	18	25	40	63			
Guide	recirculating ball bearing guide									
Nominal stroke	[mm]	1 650	1 1000	1 1000	1 3000	1 4000	1 4500			
Max. driving torque	[Nm]	0.08	0.18	0.5	2.6	9.7	42			
Max. feed force	[N]	15	30	60	260	610	1500			
Max. speed	[m/s]	1	1.5	2	3	3	3			
Repeat accuracy	[mm]	±0.08			±0.1					
Max. applied load Fz	[N]	255	565	830	3080	7300	14050			
Max. lateral torque Mx	[Nm]	1	3	7	45	170	580			



DGE-ZR with heavy duty guide								
Toothed belt drive	Type DGE	Type DGEZR-HD						
Size		18	25	40				
Nominal stroke	[mm]	1 1000	1 2000	1 2000				
Max. driving torque	[Nm]	0.5	2.6	9.7				
Max. feed force	[N]	60	260	610				
Max. speed	[m/s]	3	3	3				
Repeat accuracy	[mm]	±0.08	±0.1					
Max. applied load Fz	[N]	1820	5600	5600				
Max. lateral torque Mx	[Nm]	70	260	375				



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 $<sup>\</sup>mbox{\scriptsize \star}$  Representatively tested and certified with products ADVU, DGPL and DNC.