Electromechanical Linear Actuators DGE-ZR

Belt Driven





High Speed in a Compact, Protected Package

The DGE-ZR offers high speed performance up to 10 m/s in a compact, protected unit. By having the belt drive integrated within the body of the actuator, all DGE-ZR actuators offer reliable performance and predictable life. These units can be easily configured into multi-axis systems.

Quiet Operation

The optimized tooth geometry of the DGE-ZR provides minimal tooth spacing tolerance and improved repeatability, delivering low belt noise emission and long life.

Benefits at a Glance

- DGE linear actuators encapsulate their mechanical drives within the body of the actuator. This protects them from contamination and prevents premature failure.
- Wide range of options for third-party motor mounting kits
- Comprehensive range of mounting accessories for multi-axis combinations
- Can be used in any mounting position

Versatile

With three guide options available, the DGE-ZR satisfies a wide variety of motion control requirements. It features open interfaces with modular handling systems, such as for motor packages and accessories. Includes assembly options and a wide range of options for mounting on drive units. A key part of Festo package solutions for the handling sector.

DGE-ZR.PSI.US

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DGE-ZR Toothed Belt Actuator configuration

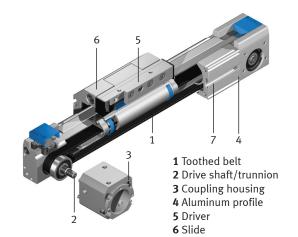
- Without guide. These actuators are ideal for moving light loads.
 Or, when combined with external linear guides, to move heavy loads, or to withstand high moment loads.
- With recirculating ball bearing guide, available with extended slide as an option. These actuators are used to carry a maximum load or moment in a compact space.
- Dustproof version. Guide and slide are fitted with a cover to

protect against the ingress of particles from above and the side.

 With heavy-duty guide. Used in applications where you need the lowest profile possible to withstand high moment loads.

Note

Use the Festo PtTool project engineering tool on CD-ROM and in the Download Software section at www.festo.com/us. It aids in project engineering and calculates the expected positioning time.



DGE-ZR (Electromechanical Actuator with Toothed Belt, without Guide)							
Size		8	12	18	25	40	63
Guide		– (Designed for use with external guide)					
Working stroke 1)	[mm]	1 650	1 1,000	1 1,000	1 3,000 2)	1 4,000 2)	1 4,500 2)
Max. input torque	[Nm]	0.08	0.18	0.5	2.6	9.7	42
Max. no-load running torque 3	[Nm]	0.05	0.08	0.2	0.5	1.0	4.5
Max. speed	[m/s]	1	1.5	2	5	5	5
Repeatability	[mm]	±0.08			±0.1		·

DGE-ZR-KF (Electromechanical Actuator with Toothed Belt and Recirculating Ball Bearing Guide)								
Size			8	12	18	25	40	63
Guide			Recirculating ball bearing guide					
Working	Standard Slide, GK	[mm]	1 650	1 1,000	1 1,000	1 3,000 2)	1 4,000 2)	1 4,500 2)
stroke 1)	Extended Slide, GV	[mm]	_	_	1 920	1 2,900	1 3,830	1 4,250
	Dustproof Version, GA	[mm]	-	_	_	1 1,800	1 1,800	_
Max. input	torque	[Nm]	0.08	0.18	0.5	2.6	9.7	42
Max. no-lo	ad running torque ³⁾	[Nm]	0.05	0.08	0.2	0.5	1.0	4.5
Max. speed	<u> </u>	[m/s]	1	1.5	2	3	3	3
Repeatability [mm]		±0.08			±0.1			

DGE-ZR-RF (Electromechanical Actuator with Toothed Belt and Internal Roller Guide)						
Size		25	40	63		
Guide		Internal roller guide				
Working stroke 1)	[mm]	1 3,000	1 5,000	1 5,000		
Max. input torque	[Nm]	3.7	12.1	55.3		
Max. no-load running torque 3	[Nm]	0.5	1.0	4.5		
Max. speed	[m/s]	10				
Repeatability	[mm]	±0.1				

DGE-ZR-HD (Electromechanical Actuator with Heavy-Duty Guide)							
Size		18-HD18	25-HD25	25-HD40	40-HD40		
Guide	Recirculating ball bearing guide						
Working stroke 1)	[mm]	1 1,000	1 2,000	1 2,000	1 2,000		
Max. input torque	[Nm]	0.5	2.6	2.6	9.7		
Max. no-load running torque 3	[Nm]	0.2	0.5	0.5	1.0		
Max. speed	[m/s]	3					
Repeatability	[mm]	±0.08	±0.1				

¹⁾ Total stroke = working stroke + 2x stroke reserve



7 Sensors can be integrated.

Festo Corporation

For ordering assistance, or to find your nearest Festo Distributor,

Call: 1.800.99.FESTO

Fax: 1.800.96.FESTO

Email: customer.service@us.festo.com

Visit: www.festo.com/us

For technical support,
Call: 1.866.GO.FESTO
Fax: 1.800.96.FESTO

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²⁾ Special lengths on request

³⁾ Measured at a speed of 0.2 m/s