FESTO

Belt driven linear actuator EGC-HD-125- -TB

Part number: 556823



Data sheet

Feature	Value
Drive pinion effective diameter	32.47 mm
Working stroke	50 mm3000 mm
Size	125
Toothed belt elongation	0.31 %
Toothed belt pitch	3 mm
Mounting position	Any
Guide	Recirculating ball bearing guide
Structural design	Electromechanical linear axis with toothed belt
Motor type	Stepper motor Servo motor
Measuring principle of linear potentiometer	Incremental
Max. acceleration	40 m/s²
Max. speed	3 m/s
Duty cycle	100%
LABS (PWIS) conformity	VDMA24364 zone III
Degree of protection	IP40
Ambient temperature	-10 °C60 °C
2nd moment of area ly	689000 mm⁴
2nd moment of area lz	4090000 mm⁴
Max. driving torque	7.2 Nm
Max. force Fy	3650 N
Max. force Fz	3650 N
Max. force Fy total axis	3650 N
Max. force Fz total axis	3650 N
Fy with theoretical service life of 100 km (from a guide perspective only)	13446 N
Fz with theoretical service life of 100 km (from a guide perspective only)	13446 N
Max. no-load resistance to shifting	67.8 N
Max. torque Mx	140 Nm
Max. torque My	275 Nm
Max. torque Mz	275 Nm
Max. moment Mx total axis	140 Nm

Feature	Value
Max. moment My total axis	275 Nm
Max. moment Mz total axis	275 Nm
Mx with theoretical service life of 100 km (from a guide perspective only)	515 Nm
My with theoretical service life of 100 km (from a guide perspective only)	1013 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	1013 Nm
Max. feed force Fx	450 N
No-load driving torque	1.1 Nm
Torsion moment of inertia It	627000 mm ⁴
Mass moment of inertia JH per meter of stroke	0.38 kgcm ²
Mass moment of inertia JL per kg of payload	2.635 kgcm²
Mass moment of inertia JO	4.639 kgcm²
Mass moment of inertia JW for additional slide	3.3 kgcm ²
Feed constant	102 mm/U
Reference service life	5000 km
Slide weight	1218 g
Additional slide weight	1026 g
Basic weight with 0 mm stroke	4720 g
Additional weight per 10 mm stroke	73 g
Profile material	Wrought aluminum alloy, anodized
Note on materials	RoHS-compliant
Drive cover material	Wrought aluminum alloy, anodized
Belt pulley material	High-alloy stainless steel
Slide material	Wrought aluminum alloy, anodized
Toothed belt clamping component material	Beryllium bronze
Toothed belt material	Polychloroprene with glass cord and nylon coating Polyurethane with steel cord and nylon cover