FESTO

Belt driven linear actuator EGC-HD-160- -TB

Part number: 556824



Data sheet

Feature	Value
Drive pinion effective diameter	39.79 mm
Working stroke	50 mm5000 mm
Size	160
Toothed belt elongation	0.23 %
Toothed belt pitch	5 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	50 m/s ²
Max. speed	5 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	129000000 mm ⁴
2nd moment of area Iz	989000000 mm⁴
Max. driving torque	20 Nm
Max. force Fy	5600 N
Max. force Fz	5600 N
Max. force Fy total axis	5600 N
Max. force Fz total axis	5600 N
Fy with theoretical service life of 100 km (from a guide perspective only)	20630 N
Fz with theoretical service life of 100 km (from a guide perspective only)	20630 N
Max. no-load resistance to shifting	105.5 N
Max. torque Mx	300 Nm
Max. torque My	500 Nm
Max. torque Mz	500 Nm
Max. moment Mx total axis	300 Nm

Feature	Value
Max. moment My total axis	500 Nm
Max. moment Mz total axis	500 Nm
Mx with theoretical service life of 100 km (from a guide perspective only)	1105 Nm
My with theoretical service life of 100 km (from a guide perspective only)	1842 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	1842 Nm
Max. feed force Fx	1000 N
No-load driving torque	2.1 Nm
Torsion moment of inertia It	104000000 mm⁴
Mass moment of inertia JH per meter of stroke	1.267 kgcm ²
Mass moment of inertia JL per kg of payload	3.96 kgcm ²
Mass moment of inertia JO	14.49 kgcm²
Mass moment of inertia JW for additional slide	11.734 kgcm²
Feed constant	125 mm/U
Reference service life	5000 km
Slide weight	2571 g
Additional slide weight	2022 g
Basic weight with 0 mm stroke	9050 g
Additional weight per 10 mm stroke	107 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