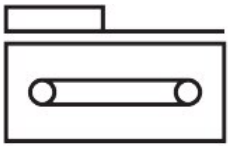
Belt driven linear actuator
EGC-70-500-TB-KF-0H-GK

Part number: 3012494





Data sheet

Feature	Value
Drive pinion effective diameter	24.83 mm
Working stroke	500 mm
Size	70
Stroke reserve	0 mm
Toothed belt pitch	3 mm
Mounting position	Any
Guide	Recirculating ball bearing
Structural design	Electromechanical linear axis With toothed belt
Motor type	Stepper motor Servo motor
Max. acceleration	50 m/s²
Max. speed	5 m/s
Repetition accuracy	±0.08 mm
Duty cycle	100%
LABS (PWIS) conformity	VDMA24364 Zone III
Degree of protection	IP40
Ambient temperature	-10 °C...60 °C
2nd moment of area Iy	395000 mm⁴
2nd moment of area Iz	577000 mm⁴
Max. force Fy	1850 N
Max. force Fz	1850 N
Max. force Fy total axis	1850 N
Max. force Fz total axis	1850 N
Fy with theoretical service life of 100 km (from a guide perspective only)	6842 N
Fz with theoretical service life of 100 km (from a guide perspective only)	6842 N
Max. no-load resistance to shifting	14.5 N
Max. torque Mx	16 Nm
Max. torque My	51 Nm
Max. torque Mz	51 Nm
Max. moment Mx total axis	16 Nm
Max. moment My total axis	51 Nm

Feature	Value
Max. moment Mz total axis	51 Nm
Mx with theoretical service life of 100 km (from a guide perspective only)	58.9 Nm
My with theoretical service life of 100 km (from a guide perspective only)	188 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	188 Nm
Max. feed force Fx	100 N
Torsion moment of inertia It	240000 mm^4
Mass moment of inertia JH per meter of stroke	0.11 $kgcm^2$
Mass moment of inertia JL per kg of payload	1.54 $kgcm^2$
Feed constant	78 mm/U
Reference service life	5000 km
Material of end caps	Wrought aluminum alloy Anodized
Profile material	Wrought aluminum alloy Anodized
Note on materials	RoHS compliant
Drive cover material	Wrought aluminum alloy Anodized
Slide carriage material	Steel
Guide rail material	Steel
Belt pulley material	high-alloy stainless steel
Slide material	Wrought aluminum alloy Anodized
Toothed belt clamping component material	Nickel-plated
Toothed belt material	Polychloroprene or nitrile rubber (NBR) with glass cord and nylon coating