

Toothed belt axis EGC-HD-160- -TB

Part number: 556824

FESTO



Data sheet

Feature	Value
Effective diameter of drive pinion	39.79 mm
Working stroke	50 mm...5000 mm
Size	160
Toothed-belt stretch	0.23 %
Toothed-belt pitch	5 mm
Mounting position	optional
Guide	Recirculating ball bearing guide
Design	Electromechanical linear axis With toothed belt
Type of motor	Stepper motor Servo motor
Functional principle of measuring system	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 °C...60 °C
2nd moment of area Iy	1290000 mm ⁴
2nd moment of area Iz	9890000 mm ⁴
Max. drive 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 at theoretical life value of 100 km (only guide consideration)	20630 N
Fz at theoretical life value of 100 km (only guide consideration)	20630 N
Max. idle running transfer resistance	105.5 N
Max. moment Mx	300 Nm
Max. moment My	500 Nm
Max. moment 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 at theoretical life value of 100 km (only guide consideration)	1105 Nm
My at theoretical life value of 100 km (only guide consideration)	1842 Nm
Mz at theoretical life value of 100 km (only guide consideration)	1842 Nm
Max. feed force Fx	1000 N
Frictional torque independent of load	2.1 Nm
Torsional mass moment of inertia It	1040000 mm ⁴
Mass moment of inertia JH per metre of stroke	1.267 kgcm ²
Mass moment of inertia JL per kg of working load	3.96 kgcm ²
Mass moment of inertia JO	14.49 kgcm ²
Mass moment of inertia JW for additional slide	11.734 kgcm ²
Feed constant	125 mm/U
Reference service life	5000 km
Weight of slide	2571 g
Weight of additional slide	2022 g
Basic weight for 0 mm stroke	9050 g
Additional weight per 10 mm stroke	107 g
Material profile	Anodised wrought aluminium alloy
Note on materials	RoHS-compliant
Material drive cover	Anodised wrought aluminium alloy
Material pulleys	High-alloy stainless steel
Material slide	Anodised wrought aluminium alloy
Material toothed belt clamping piece	Beryllium bronze
Material toothed belt	Polychloroprene with glass filament and nylon coating Polyurethane with steel cord and nylon cover