

Toothed belt axis EGC-50- -TB-KF

Part number: 556812

FESTO



Data sheet

Feature	Value
Effective diameter of drive pinion	18.46 mm
Working stroke	50 mm...1900 mm
Size	50
Toothed-belt pitch	2 mm
Mounting position	optional
Guide	Recirculating ball bearing guide
Design	Electromechanical linear axis With toothed belt
Type of motor	Stepper motor Servo motor
Max. acceleration	50 m/s ²
Max. speed	3 m/s
Repetition accuracy	±0.08 mm
Duty cycle	100%
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
Explosion protection certification outside the EU	EPL Db (GB) EPL Gb (GB)
Explosion protection	Zone 1 (ATEX) Zone 1 (UKEX) Zone 2 (ATEX) Zone 21 (UKEX)
ATEX category gas	II 2G
Explosion ignition protection type for gas	Ex h IIC T4 Gb
Explosion ambient temperature	-10 °C ≤ Ta ≤ +60 °C
LABS (PWIS) conformity	VDMA24364 zone III
Degree of protection	IP40
Ambient temperature	-10 °C...60 °C
2nd moment of area Iy	84000 mm ⁴
2nd moment of area Iz	114000 mm ⁴
Max. force Fy	650 N
Max. force Fz	650 N
Max. force Fy total axis	650 N

Feature	Value
Max. force Fz total axis	650 N
Fy at theoretical life value of 100 km (only guide consideration)	2395 N
Fz at theoretical life value of 100 km (only guide consideration)	2395 N
Max. idle running transfer resistance	8 N
Max. moment Mx	3.5 Nm
Max. moment My	10 Nm
Max. moment Mz	10 Nm
Max. moment Mx total axis	3.5 Nm
Max. moment My total axis	10 Nm
Max. moment Mz total axis	10 Nm
Mx at theoretical life value of 100 km (only guide consideration)	13 Nm
My at theoretical life value of 100 km (only guide consideration)	37 Nm
Mz at theoretical life value of 100 km (only guide consideration)	37 Nm
Max. feed force Fx	50 N
Torsional mass moment of inertia It	42500 mm ⁴
Mass moment of inertia JH per metre of stroke	0.026 kgcm ²
Mass moment of inertia JL per kg of working load	0.85 kgcm ²
Feed constant	58 mm/U
Reference service life	5000 km
Material end cap	Wrought aluminium alloy Anodised
Material profile	Wrought aluminium alloy Anodised
Note on materials	RoHS-compliant
Material drive cover	Wrought aluminium alloy Anodised
Material guide slide	Steel
Material guide rail	Steel
Material pulleys	High-alloy stainless steel
Material slide	Wrought aluminium alloy Anodised
Material toothed belt clamping piece	Nickel-plated
Material toothed belt	Polychloroprene oder Nitrilkautschuk (NBR) mit Glascord und Nylonüberzug