

# Toothed belt axis EGC-80-500-TB-KF-0H-GK

Part number: 3013354

FESTO



 [General operating condition](#)

## Data sheet

Feature	Value
Effective diameter of drive pinion	28.65 mm
Working stroke	500 mm
Size	80
Stroke reserve	0 mm
Toothed-belt pitch	3 mm
Mounting position	optional
Guide	Recirculating ball bearing guide
Design	Electromechanical linear axis With toothed belt
Type of motor	Stepper motor Servo motor
Symbol	00991212
Max. acceleration	50 m/s <sup>2</sup>
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	844000 mm <sup>4</sup>
2nd moment of area Iz	1160000 mm <sup>4</sup>
Max. force Fy	3050 N
Max. force Fz	3050 N
Max. force Fy total axis	3050 N
Max. force Fz total axis	3050 N
Fy at theoretical life value of 100 km (only guide consideration)	11236 N
Fz at theoretical life value of 100 km (only guide consideration)	11236 N
Max. idle running transfer resistance	28 N
Max. moment Mx	36 Nm
Max. moment My	97 Nm
Max. moment Mz	97 Nm
Max. moment Mx total axis	36 Nm
Max. moment My total axis	97 Nm
Max. moment Mz total axis	97 Nm
Mx at theoretical life value of 100 km (only guide consideration)	133 Nm
My at theoretical life value of 100 km (only guide consideration)	357 Nm

Feature	Value
Mz at theoretical life value of 100 km (only guide consideration)	357 Nm
Max. feed force Fx	350 N
Torsional mass moment of inertia It	551000 mm <sup>4</sup>
Mass moment of inertia JH per metre of stroke	0.19 kgcm <sup>2</sup>
Mass moment of inertia JL per kg of working load	2.05 kgcm <sup>2</sup>
Feed constant	90 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	Stainless steel casting
Material toothed belt	Polychloroprene or nitrile rubber (NBR) with glass cord and nylon coating