

# Ball screw axis

## EGC-80-500-BS-20P-KF-0H-ML-GK

Part number: 3013543

FESTO



## Data sheet

Feature	Value
Working stroke	500 mm
Size	80
Stroke reserve	0 mm
Screw diameter	15 mm
Spindle pitch	20 mm/U
Mounting position	Any
Guide	Recirculating ball bearing guide
Structural design	Electromechanical linear axis with ball screw
Motor type	Stepper motor Servo motor
Spindle type	Ball screw
Max. acceleration	15 m/s <sup>2</sup>
Max. speed	1 m/s
Repetition accuracy	±0.02 mm
Duty cycle	100%
LABS (PWIS) conformity	VDMA24364-B2-L
Degree of protection	IP40
Ambient temperature	-10 °C...60 °C
2nd moment of area Iy	981000 mm <sup>4</sup>
2nd moment of area Iz	1320000 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 with theoretical service life of 100 km (from a guide perspective only)	11236 N
Fz with theoretical service life of 100 km (from a guide perspective only)	11236 N
Max. torque Mx	36 Nm
Max. torque My	97 Nm
Max. torque Mz	97 Nm
Max. moment Mx total axis	36 Nm
Max. moment My total axis	97 Nm

Feature	Value
Max. moment Mz total axis	97 Nm
Mx with theoretical service life of 100 km (from a guide perspective only)	133 Nm
My with theoretical service life of 100 km (from a guide perspective only)	357 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	357 Nm
Max. radial force on actuator shaft	250 N
Max. feed force Fx	650 N
Torsion moment of inertia It	255000 mm <sup>4</sup>
Mass moment of inertia JH per meter of stroke	0.346 kgcm <sup>2</sup>
Feed constant	20 mm/U
Reference service life	5000 km
Material of end caps	Wrought aluminum alloy Anodized
Moment compensator material	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
Slide material	Wrought aluminum alloy Anodized
Spindle nut material	Steel
Spindle material	Steel