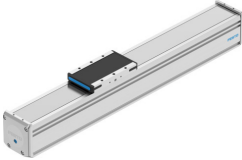


# Guide axis ELFD-KF-80- -

Part number: 8182488

FESTO



## Data sheet

Feature	Value
Working stroke	50 mm...8500 mm
Size	80
Stroke reserve	4.5 mm
Mounting position	Any
Guide	Recirculating ball bearing guide
Structural design	Guide
Max. acceleration	50 m/s <sup>2</sup>
Max. speed	3 m/s
Duty cycle	100%
Corrosion resistance class (CRC)	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Suitability for the production of Li-ion batteries	Product corresponds to Festo's internal product definition for use in battery production: Metals with more than 1% by mass of copper, zinc or nickel are excluded from use. The exceptions are nickel in steel, chemically nickel-plated surfaces, circuit boards, cables, electrical plug connectors and coils
Degree of protection	IP40
Ambient temperature	0 °C...60 °C
2nd moment of area Iy	1213000 mm <sup>4</sup>
2nd moment of area Iz	2052000 mm <sup>4</sup>
Max. force Fy	4200 N...8433 N
Max. force Fz	4200 N...8400 N
Max. torque Mx	106 Nm...200 Nm
Max. torque My	42 Nm...390 Nm
Max. torque Mz	42 Nm...390 Nm
Max. force Fy total axis	2291 N...4581 N
Max. force Fz total axis	3500 N...5600 N
Max. moment Mx total axis	106 Nm...190 Nm
Max. moment My total axis	42 Nm...356 Nm
Max. moment Mz total axis	42 Nm...294 Nm
Torsion moment of inertia It	405000 mm <sup>4</sup>
Displacement force	6 N

Feature	Value
Reference service life	5000 km
Fy with theoretical service life of 100 km (from a guide perspective only)	17576 N...35153 N
Fz with theoretical service life of 100 km (from a guide perspective only)	17576 N...35153 N
Mx with theoretical service life of 100 km (from a guide perspective only)	422 Nm...844 Nm
My with theoretical service life of 100 km (from a guide perspective only)	162 Nm...1356 Nm
Mz with theoretical service life of 100 km (from a guide perspective only)	162 Nm...1356 Nm
Moving mass	911 g...1615 g
Basic weight with 0 mm stroke	2345 g...3645 g
Additional weight per 10 mm stroke	76 g
Material of end caps	Aluminum gravity die-cast, painted
Profile material	Wrought aluminum alloy, anodized
Note on materials	RoHS-compliant
Cover strip material	High-alloy stainless steel
Cover material	Aluminum gravity die-cast, painted
Slide carriage material	Steel
Guide rail material	Steel
Slide material	Wrought aluminum alloy