Guide axis ELFD-KF-80- -

Part number: 8182488



Data sheet

| Feature | Value |
|--|---|
| Size | 80 |
| Stroke reserve | 4.5 mm |
| Mounting position | Any |
| Guide | Recirculating ball bearing guide |
| Structural design | Guide |
| Max. acceleration | 50 m/s ² |
| 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 | 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 | IP30 |
| Ambient temperature | 0 °C60 °C |
| 2nd moment of area ly | 1213000 mm ⁴ |
| 2nd moment of area Iz | 2052000 mm⁴ |
| Max. force Fy | 4200 N8433 N |
| Max. force Fz | 4200 N8400 N |
| Max. torque Mx | 106 Nm200 Nm |
| Max. torque My | 42 Nm390 Nm |
| Max. torque Mz | 42 Nm390 Nm |
| Max. force Fy total axis | 2291 N4581 N |
| Max. force Fz total axis | 3500 N5600 N |
| Max. moment Mx total axis | 106 Nm200 Nm |
| Max. moment My total axis | 42 Nm356 Nm |
| Max. moment Mz total axis | 42 Nm294 Nm |
| Torsion moment of inertia It | 405000 mm ⁴ |
| Displacement force | 6 N |
| Reference service life | 5000 km |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 17576 N35153 N |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 17576 N35153 N |

| Feature | Value |
|--|------------------------------------|
| Mx with theoretical service life of 100 km (from a guide perspective only) | 422 Nm844 Nm |
| My with theoretical service life of 100 km (from a guide perspective only) | 162 Nm1356 Nm |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 162 Nm1356 Nm |
| Moving mass | 911 g1615 g |
| Basic weight with 0 mm stroke | 2345 g3645 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 |