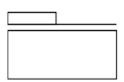
## Guide axis ELFC-KF-80-1000 Part number: 8062831





## **Data sheet**

| Feature  | Value  |
|--|--|
| Working stroke                                     | 1000 mm  |
| Size   | 80   |
| Mounting position                                  | optional   |
| Guide  | Recirculating ball bearing guide   |
| Design   | Guidance   |
| Position detection                                 | Via proximity switch<br>Via inductive sensors  |
| Max. acceleration                                  | 15 m/s <sup>2</sup>  |
| Max. speed   | 1.5 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 the internal product definition from Festo<br>for use in battery production:Metals with more than 1% by mass of<br>copper, zinc or nickel are excluded from use.The exceptions are nickel in<br>steel, chemically nickel-plated surfaces, printed circuit boards, cables,<br>electrical plug connectors and coils |
| Cleanroom class                                    | Class 7 according to ISO 14644-1   |
| Degree of protection                               | IP40   |
| Ambient temperature                                | 0 °C50 °C  |
| 2nd moment of area ly                              | 1370000 mm <sup>4</sup>  |
| 2nd moment of area Iz                              | 1660000 mm <sup>4</sup>  |
| Max. force Fy                                      | 5543 N   |
| Max. force Fz                                      | 5543 N   |
| Max. moment Mx                                     | 59.8 Nm  |
| Max. moment My                                     | 56.2 Nm  |
| Max. moment Mz                                     | 56.2 Nm  |
| Max. force Fy total axis                           | 900 N  |
| Max. force Fz total axis                           | 2700 N   |
| Max. moment Mx total axis                          | 59.8 Nm  |
| Max. moment My total axis                          | 56.2 Nm  |
| Max. moment Mz total axis                          | 56.2 Nm  |
| Torsional mass moment of inertia It                | 90500 mm⁴  |

| Feature   | Value                                 |
|---|---------------------------------------|
| Displacement force  | 15 N                                  |
| Reference service life  | 5000 km                               |
| Maintenance interval  | Life-time lubrication                 |
| Fy at theoretical life value of 100 km (only guide consideration) | 20400 N                               |
| Fz at theoretical life value of 100 km (only guide consideration) | 20400 N                               |
| Mx at theoretical life value of 100 km (only guide consideration) | 220 Nm                                |
| My at theoretical life value of 100 km (only guide consideration) | 207 Nm                                |
| Mz at theoretical life value of 100 km (only guide consideration) | 207 Nm                                |
| Moving mass   | 815 g                                 |
| Basic weight for 0 mm stroke                                      | 1905 g                                |
| Additional weight per 10 mm stroke                                | 73 g                                  |
| Dynamic deflection (moving load)                                  | 0.05% of the axis length, max. 0.5 mm |
| Static deflection (load in standstill)                            | 0.1% of the axis length               |
| Material end cap  | Painted die cast aluminium            |
| Material profile  | Anodised wrought aluminium alloy      |
| Note on materials   | RoHS-compliant                        |
| Material cover tape   | High-alloy stainless steel            |
| Material guide slide  | Steel                                 |
| Material guide rail   | Steel                                 |
| Material slide  | Die-cast aluminium                    |