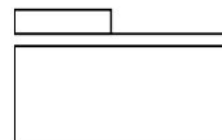


# Guide axis ELFC-KF-45-200

Part number: 8062803

FESTO



## Data sheet

| Feature                                                   | Value                                                              |
|-----------------------------------------------------------|--------------------------------------------------------------------|
| Working stroke                                            | 200 mm                                                             |
| Size                                                      | 45                                                                 |
| Mounting position                                         | Any                                                                |
| Guide                                                     | Recirculating ball bearing                                         |
| Structural design                                         | Guide                                                              |
| Position sensing                                          | Via proximity switch<br>For 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        | Suitable for battery production with reduced Cu/Zn/Ni values (F1a) |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 7 according to ISO 14644-1                                   |
| Degree of protection                                      | IP40                                                               |
| Ambient temperature                                       | 0 °C...50 °C                                                       |
| 2nd moment of area Iy                                     | 140000 mm <sup>4</sup>                                             |
| 2nd moment of area Iz                                     | 170000 mm <sup>4</sup>                                             |
| Max. force Fy                                             | 880 N                                                              |
| Max. force Fz                                             | 880 N                                                              |
| Max. torque Mx                                            | 5.5 Nm                                                             |
| Max. torque My                                            | 4.7 Nm                                                             |
| Max. torque Mz                                            | 4.7 Nm                                                             |
| Max. force Fy total axis                                  | 300 N                                                              |
| Max. force Fz total axis                                  | 600 N                                                              |
| Max. moment Mx total axis                                 | 5.5 Nm                                                             |
| Max. moment My total axis                                 | 4.7 Nm                                                             |
| Max. moment Mz total axis                                 | 4.7 Nm                                                             |
| Torsion moment of inertia It                              | 8500 mm <sup>4</sup>                                               |
| Displacement force                                        | 4.5 N                                                              |
| Reference service life                                    | 5000 km                                                            |
| Maintenance interval                                      | Lifetime lubrication                                               |

| Feature                                                                    | Value                                |
|----------------------------------------------------------------------------|--------------------------------------|
| Fy with theoretical service life of 100 km (from a guide perspective only) | 3240 N                               |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 3240 N                               |
| Mx with theoretical service life of 100 km (from a guide perspective only) | 20 Nm                                |
| My with theoretical service life of 100 km (from a guide perspective only) | 17 Nm                                |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 17 Nm                                |
| Moving mass                                                                | 144 g                                |
| Basic weight with 0 mm stroke                                              | 384 g                                |
| Additional weight per 10 mm stroke                                         | 23 g                                 |
| Dynamic deflection (load moved)                                            | 0.05% of axis length, maximum 0.5 mm |
| Static deflection (load at standstill)                                     | 0.1 % of axis length                 |
| Material of end caps                                                       | Die cast aluminum, painted           |
| Profile material                                                           | Wrought aluminum alloy, anodized     |
| Note on materials                                                          | RoHS compliant                       |
| Cover strip material                                                       | high-alloy stainless steel           |
| Slide carriage material                                                    | Steel                                |
| Guide rail material                                                        | Steel                                |
| Slide material                                                             | Die-cast aluminum                    |