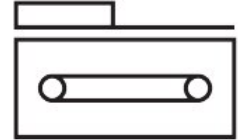
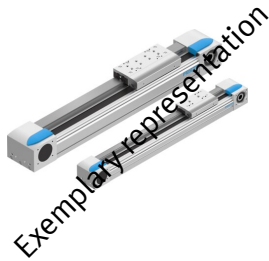


# Toothed belt axis EGC-120- -TB-KF

Part number: 556815

FESTO



 General operating condition

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature   | Value   |
|---|---|
| Effective diameter of drive pinion                | 39.79 mm  |
| Working stroke                                    | 50 mm ... 8500 mm   |
| Size  | 120   |
| Toothed-belt pitch                                | 5 mm  |
| Mounting position                                 | Any   |
| Guide   | Recirculating ball bearing guide                                  |
| Design  | Electromechanical linear axis<br>With toothed belt                |
| Type of motor                                     | Stepper motor<br>Servo motor                                      |
| Symbol  | 00991212  |
| Functional principle of measuring system          | Incremental   |
| Max. acceleration                                 | 50 m/s <sup>2</sup>   |
| Max. speed  | 5 m/s   |
| Repetition accuracy                               | ±0.08 mm  |
| Duty cycle  | 100%  |
| CE mark (see declaration of conformity)           | To EU Explosion Protection Directive (ATEX)                       |
| UKCA marking (see declaration of conformity)      | To UK EX instructions   |
| Explosion protection certification outside the EU | EPL Db (GB)<br>EPL Gb (GB)  |
| Explosion protection                              | Zone 1 (ATEX)<br>Zone 1 (UKEX)<br>Zone 2 (ATEX)<br>Zone 21 (UKEX) |
| ATEX category gas                                 | II 2G   |
| Explosion ignition protection type for gas        | Ex h IIC T4 Gb  |
| Explosion ambient temperature                     | -10°C ≤ Ta ≤ +60°C  |
| LABS (PWIS) conformity                            | VDMA24364 zone III  |
| Degree of protection                              | IP40  |
| Ambient temperature                               | -10 °C ... 60 °C  |
| 2nd moment of area Iy                             | 4620000 mm <sup>4</sup>   |
| 2nd moment of area Iz                             | 5650000 mm <sup>4</sup>   |
| Max. force Fy                                     | 6890 N  |
| Max. force Fz                                     | 6890 N  |
| Max. force Fy total axis                          | 6890 N  |
| Max. force Fz total axis                          | 6890 N  |

| Feature   | Value   |
|---|---|
| Fy at theoretical life value of 100 km (only guide consideration) | 25383 N   |
| Fz at theoretical life value of 100 km (only guide consideration) | 25383 N   |
| Max. idle running transfer resistance                             | 70 N  |
| Max. moment Mx  | 144 Nm  |
| Max. moment My  | 380 Nm ... 680 Nm   |
| Max. moment Mz  | 380 Nm ... 680 Nm   |
| Max. moment Mx total axis   | 144 Nm  |
| Max. moment My total axis   | 380 Nm ... 680 Nm   |
| Max. moment Mz total axis   | 380 Nm ... 680 Nm   |
| Mx at theoretical life value of 100 km (only guide consideration) | 531 Nm  |
| My at theoretical life value of 100 km (only guide consideration) | 1400 Nm ... 2505 Nm   |
| Mz at theoretical life value of 100 km (only guide consideration) | 1400 Nm ... 2505 Nm   |
| Max. feed force Fx  | 800 N   |
| Torsional mass moment of inertia It                               | 2680000 mm <sup>4</sup>   |
| Mass moment of inertia JH per metre of stroke                     | 0.93 kgcm <sup>2</sup>  |
| Mass moment of inertia JL per kg of working load                  | 3.96 kgcm <sup>2</sup>  |
| Feed constant   | 125 mm/U  |
| Reference service life  | 5000 km   |
| Pneumatic connection, clamping unit                               | M5  |
| Material end cap  | Anodised wrought aluminium alloy  |
| Material profile  | Anodised wrought aluminium alloy  |
| Note on materials   | RoHS compliant  |
| Material drive cover  | Anodised wrought aluminium alloy  |
| Material guide slide  | Steel   |
| Material guide rail   | Steel   |
| Material pulleys  | High-alloy stainless steel  |
| Material slide  | Anodised wrought aluminium alloy  |
| Material toothed belt clamping piece                              | Cast stainless steel  |
| Material toothed belt   | Polychloroprene with glass filament and nylon coating<br>Polyurethane with steel cord and nylon cover |