

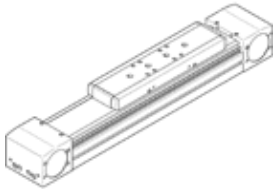
# toothed belt axis

## ELGA-TB-KF-80-600-0H

Part number: 8041860

FESTO

With recirculating ball bearing guide



### Data sheet

| Feature  | Value  |
|--|--|
| Effective diameter of drive pinion               | 39.79 mm   |
| Working stroke                                   | 600 mm   |
| Size   | 80   |
| Stroke reserve                                   | 0 mm   |
| Toothed-belt stretch                             | 0.168 %  |
| Toothed-belt pitch                               | 5 mm   |
| Assembly position                                | Any  |
| Guide  | Recirculating ball bearing guide                   |
| Design structure                                 | Electromechanical linear axis<br>With toothed belt |
| Motor type                                       | Stepper motor<br>Servomotor                        |
| Measuring method: displacement encoder           | Incremental  |
| Max. acceleration                                | 50 m/s <sup>2</sup>                                |
| Max. speed                                       | 5 m/s  |
| Repetition accuracy                              | ±0,08 mm   |
| Duty cycle                                       | 100 %  |
| Protection class                                 | IP40   |
| Ambient temperature                              | -10 ... 60 °C                                      |
| Area moment of inertia 2nd degree Iy             | 257.18E+03 mm <sup>4</sup>                         |
| Area moment of inertia 2nd degree Iz             | 913.66E+03 mm <sup>4</sup>                         |
| Max. drive torque                                | 15.92 Nm   |
| Max. force Fy                                    | 2,500 N  |
| Max. force Fz                                    | 3,050 N  |
| Max. idling displacement resistance              | 50.3 N   |
| Max. torque Mx                                   | 36 Nm  |
| Max. torque My                                   | 228 Nm   |
| Max. torque Mz                                   | 228 Nm   |
| Max. feed force Fx                               | 800 N  |
| No-load driving torque                           | 1 Nm   |
| Torsional mass moment of inertia It              | 159.25E+03 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>                             |
| Mass moment of inertia, JO                       | 9.82 kgcm <sup>2</sup>                             |
| Mass moment of inertia JW for additional slide   | 7.61 kgcm <sup>2</sup>                             |
| Feed constant                                    | 125 mm/U   |
| Lubrication interval, distance dependent         | 1,000 km   |
| Slide weight                                     | 1.9 kg   |
| Additional slide weight                          | 1.53 kg  |
| Additional weight per 10 mm stroke               | 0.051 kg   |
| Basic weight for 0 mm stroke                     | 4.7 kg   |
| Material of profile                              | Wrought Aluminium alloy<br>Anodised                |
| Materials note                                   | Contains PWIS substances                           |

| Feature                              | Value   |
|--------------------------------------|---|
|                                      | Conforms to RoHS                                  |
| Material cover tape                  | Stainless steel strip                             |
| Material drive cover                 | Wrought Aluminium alloy<br>Anodised               |
| Material guide slide                 | Stainless steel                                   |
| Material guide rail                  | Stainless steel                                   |
| Material pulleys                     | High alloy steel, non-corrosive                   |
| Material slide                       | Wrought Aluminium alloy<br>Anodised               |
| Material toothed belt clamping piece | Stainless steel casting                           |
| Material toothed belt                | polychloroprene with glass cord and nylon coating |