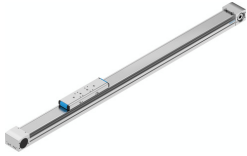


# Belt driven linear actuator ELGA-TB-KF-80-1000-0H

Part number: 8041862

FESTO



## Data sheet

| Feature  | Value   |
|--|---|
| Drive pinion effective diameter                | 39.79 mm  |
| Working stroke                                 | 1000 mm   |
| Size   | 80  |
| Stroke reserve                                 | 0 mm  |
| Toothed belt elongation                        | 0.168 %   |
| Toothed belt pitch                             | 5 mm  |
| Type code                                      | ELGA  |
| Mounting position                              | Any   |
| Guide  | Recirculating ball bearing guide                |
| Structural design                              | Electromechanical linear axis with toothed belt |
| Motor type                                     | Stepper motor<br>Servo motor                    |
| Measuring principle of linear potentiometer    | Incremental                                     |
| Max. acceleration                              | 50 m/s <sup>2</sup>                             |
| Max. speed                                     | 5 m/s   |
| Repetition accuracy                            | ±0.08 mm  |
| Duty cycle                                     | 100%  |
| Degree of protection                           | IP40  |
| Ambient temperature                            | -10 °C ... 60 °C                                |
| 2nd moment of area Iy                          | 257180 mm <sup>4</sup>                          |
| 2nd moment of area Iz                          | 913660 mm <sup>4</sup>                          |
| Max. driving torque                            | 15.92 Nm  |
| Max. force Fy                                  | 2500 N  |
| Max. force Fz                                  | 3050 N  |
| Max. no-load resistance to shifting            | 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  |
| Torsion moment of inertia It                   | 159250 mm <sup>4</sup>                          |
| Mass moment of inertia JH per meter of stroke  | 0.93 kgcm <sup>2</sup>                          |
| Mass moment of inertia JL per kg of payload    | 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>                          |

| <b>Feature</b>                           | <b>Value</b>   |
|--|--|
| Feed constant                            | 125 mm/U   |
| Lubrication interval, distance dependent | 1000 km  |
| Slide weight                             | 1900 g   |
| Additional slide weight                  | 1530 g   |
| Additional weight per 10 mm stroke       | 51 g   |
| Basic weight with 0 mm stroke            | 4700 g   |
| Profile material                         | Wrought aluminum alloy<br>Anodized                             |
| Note on materials                        | Contains paint-wetting impairment substances<br>RoHS-compliant |
| Cover strip material                     | Stainless steel strip  |
| Drive cover material                     | Wrought aluminum alloy<br>Anodized                             |
| Slide carriage material                  | Stainless steel  |
| Guide rail material                      | Stainless steel  |
| Belt pulley material                     | High-alloy stainless steel                                     |
| Slide material                           | Wrought aluminum alloy<br>Anodized                             |
| Toothed belt clamping component material | Cast stainless steel   |
| Toothed belt material                    | Polychloroprene with glass cord and nylon coating              |