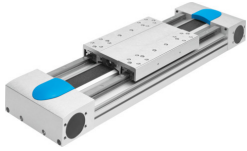


# Belt driven linear actuator EGC-HD-220- -TB

Part number: 556825

FESTO



## Data sheet

| Feature  | Value   |
|--|---|
| Drive pinion effective diameter  | 66.21 mm  |
| Working stroke   | 50 mm...4750 mm                                 |
| Size   | 220   |
| Toothed belt elongation  | 0.29 %  |
| Toothed belt pitch   | 8 mm  |
| 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   |
| Duty cycle   | 100%  |
| LABS (PWIS) conformity   | VDMA24364 zone III                              |
| Degree of protection   | IP40  |
| Ambient temperature  | -10 °C...60 °C                                  |
| 2nd moment of area Iy  | 5580000 mm <sup>4</sup>                         |
| 2nd moment of area Iz  | 35100000 mm <sup>4</sup>                        |
| Max. driving torque  | 59.58 Nm  |
| Max. force Fy  | 13000 N   |
| Max. force Fz  | 13000 N   |
| Max. force Fy total axis   | 13000 N   |
| Max. force Fz total axis   | 13000 N   |
| Fy with theoretical service life of 100 km (from a guide perspective only) | 47892 N   |
| Fz with theoretical service life of 100 km (from a guide perspective only) | 47892 N   |
| Max. no-load resistance to shifting  | 123.8 N   |
| Max. torque Mx   | 900 Nm  |
| Max. torque My   | 1450 Nm   |
| Max. torque Mz   | 1450 Nm   |
| Max. moment Mx total axis  | 900 Nm  |

| Feature  | Value   |
|--|---|
| Max. moment My total axis  | 1450 Nm   |
| Max. moment Mz total axis  | 1450 Nm   |
| Mx with theoretical service life of 100 km (from a guide perspective only) | 3315 Nm   |
| My with theoretical service life of 100 km (from a guide perspective only) | 5341 Nm   |
| Mz with theoretical service life of 100 km (from a guide perspective only) | 5341 Nm   |
| Max. feed force Fx   | 1800 N  |
| No-load driving torque   | 4.1 Nm  |
| Torsion moment of inertia It   | 5780000 mm <sup>4</sup>   |
| Mass moment of inertia JH per meter of stroke                              | 6.269 kgcm <sup>2</sup>   |
| Mass moment of inertia JL per kg of payload                                | 10.96 kgcm <sup>2</sup>   |
| Mass moment of inertia JO  | 108.99 kgcm <sup>2</sup>  |
| Mass moment of inertia JW for additional slide                             | 80.66 kgcm <sup>2</sup>   |
| Feed constant  | 208 mm/U  |
| Reference service life   | 5000 km   |
| Slide weight   | 6317 g  |
| Additional slide weight  | 5498 g  |
| Basic weight with 0 mm stroke  | 25510 g   |
| Additional weight per 10 mm stroke   | 210 g   |
| Profile material   | Wrought aluminum alloy, anodized  |
| Note on materials  | RoHS-compliant  |
| Drive cover material   | Wrought aluminum alloy, anodized  |
| Belt pulley material   | High-alloy stainless steel  |
| Slide material   | Wrought aluminum alloy, anodized  |
| Toothed belt clamping component material                                   | Beryllium bronze  |
| Toothed belt material  | Polychloroprene with glass cord and nylon coating<br>Polyurethane with steel cord and nylon cover |