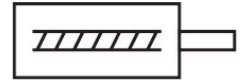


# Electric drive ESBF-BS-100-100-40P

Part number: 574122

FESTO



 General operating condition

## Data sheet

| Feature                                       | Value                                  |
|-----------------------------------------------|----------------------------------------|
| Working stroke                                | 100 mm                                 |
| Size                                          | 100                                    |
| Stroke                                        | 100 mm                                 |
| Piston rod thread                             | M20x1.5                                |
| Reversing backlash theoretical                | 40 µm                                  |
| Spindle diameter                              | 40 mm                                  |
| Spindle pitch                                 | 40 mm/U                                |
| Torsional backlash at piston rod +/-          | 0.5 deg                                |
| Based on standard                             | ISO 15552                              |
| Mounting position                             | optional                               |
| Piston-rod end                                | Male thread                            |
| Type of motor                                 | Servo motor                            |
| Position detection                            | Via proximity switch                   |
| Design                                        | Electric cylinder with ball screw      |
| Spindle type                                  | Ball screw                             |
| Symbol                                        | 00991941                               |
| Protection against torque/guide               | With plain-bearing guide               |
| Max. acceleration                             | 25 m/s <sup>2</sup>                    |
| Max. rotational speed                         | 2010 rpm                               |
| Max. speed                                    | 1.34 m/s                               |
| Repetition accuracy                           | ±0.01 mm                               |
| Duty cycle                                    | 100%                                   |
| Corrosion resistance class CRC                | 2 - Moderate corrosion stress          |
| LABS (PWIS) conformity                        | VDMA24364 zone III                     |
| Storage temperature                           | -20 °C ... 60 °C                       |
| Suitable for use with food                    | See supplementary material information |
| Relative air humidity                         | 0 - 95%                                |
| Degree of protection                          | IP40                                   |
| Ambient temperature                           | 0 °C ... 60 °C                         |
| Max. drive torque                             | 102.6 Nm                               |
| Max. radial force at drive shaft              | 1100 N                                 |
| Max. feed force Fx                            | 14500 N                                |
| Frictional torque independent of load         | 1 Nm                                   |
| Reference value effective load, horizontal    | 1400 kg                                |
| Reference value effective load, vertical      | 1400 kg                                |
| Mass moment of inertia JH per metre of stroke | 20.372 kgcm <sup>2</sup>               |

| Feature                                          | Value                                   |
|--------------------------------------------------|-----------------------------------------|
| Mass moment of inertia JL per kg of working load | 0.40528 kgcm <sup>2</sup>               |
| Mass moment of inertia JO                        | 6.1704 kgcm <sup>2</sup>                |
| Maintenance interval                             | Life-time lubrication                   |
| Moving mass for 0 mm stroke                      | 8786 g                                  |
| Additional moving mass per 10 mm stroke          | 132 g                                   |
| Basic weight for 0 mm stroke                     | 11123 g                                 |
| Additional weight per 10 mm stroke               | 193 g                                   |
| Type of mounting                                 | Via female thread<br>Or accessories     |
| Interface code, actuator                         | D100                                    |
| Note on materials                                | RoHS-compliant                          |
| Material cover                                   | Cast aluminium, coated                  |
| Material piston rod                              | High-alloy stainless steel              |
| Material screws                                  | Galvanised steel                        |
| Material spindle nut                             | Rolled steel                            |
| Material spindle                                 | Rolled steel                            |
| Material cylinder barrel                         | Smooth-anodised wrought aluminium alloy |