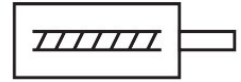


# Electric drive ESBF-BS-40-100-5P

Part number: 8022574

FESTO



 General operating condition

## Data sheet

| Feature                                    | Value                                  |
|--|--|
| Working stroke                             | 100 mm                                 |
| Size                                       | 40                                     |
| Stroke                                     | 100 mm                                 |
| Piston rod thread                          | M12x1.25                               |
| Reversing backlash theoretical             | 30 µm                                  |
| Spindle diameter                           | 16 mm                                  |
| Spindle pitch                              | 5 mm/U                                 |
| Torsional backlash at piston rod +/-       | 0.2 deg                                |
| Based on standard                          | ISO 15552                              |
| Mounting position                          | optional                               |
| Piston-rod end                             | Male thread                            |
| Type of motor                              | Stepper motor<br>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                          | 5 m/s <sup>2</sup>                     |
| Max. rotational speed                      | 4800 rpm                               |
| Max. speed                                 | 0.42 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                          | 3 Nm                                   |
| Max. radial force at drive shaft           | 130 N                                  |
| Max. feed force Fx                         | 3000 N                                 |
| Frictional torque independent of load      | 0.2 Nm                                 |
| Reference value effective load, horizontal | 300 kg                                 |
| Reference value effective load, vertical   | 300 kg                                 |

| Feature  | Value                                    |
|--|--|
| Mass moment of inertia JH per metre of stroke    | 0.4601 kgcm <sup>2</sup>                 |
| Mass moment of inertia JL per kg of working load | 0.0063 kgcm <sup>2</sup>                 |
| Mass moment of inertia JO                        | 0.0504 kgcm <sup>2</sup>                 |
| Maintenance interval                             | Life-time lubrication                    |
| Moving mass for 0 mm stroke                      | 467 g                                    |
| Additional moving mass per 10 mm stroke          | 26 g                                     |
| Basic weight for 0 mm stroke                     | 1237 g                                   |
| Additional weight per 10 mm stroke               | 47 g                                     |
| Type of mounting                                 | Via female thread<br>Or accessories      |
| Interface code, actuator                         | D40                                      |
| Note on materials                                | RoHS-compliant                           |
| Material cover                                   | Wrought aluminium alloy, smooth anodised |
| 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  |