

# Electric drive ESBF-BS-80-200-32P

Part number: 574112

FESTO



 General operating condition

## Data sheet

| Feature                                          | Value                                  |
|--------------------------------------------------|----------------------------------------|
| Size                                             | 80                                     |
| Stroke                                           | 200 mm                                 |
| Piston rod thread                                | M20x1.5                                |
| Reversing backlash theoretical                   | 40 µm                                  |
| Spindle diameter                                 | 32 mm                                  |
| Spindle pitch                                    | 32 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. speed                                       | 1.33 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                                | 56.6 Nm                                |
| Max. radial force at drive shaft                 | 1100 N                                 |
| Max. feed force Fx                               | 10001 N                                |
| Frictional torque independent of load            | 0.65 Nm                                |
| Reference value effective load, horizontal       | 1000 kg                                |
| Reference value effective load, vertical         | 1000 kg                                |
| Mass moment of inertia JH per metre of stroke    | 8.277 kgcm <sup>2</sup>                |
| Mass moment of inertia JL per kg of working load | 0.25938 kgcm <sup>2</sup>              |
| Mass moment of inertia JO                        | 2.1197 kgcm <sup>2</sup>               |

| Feature                                 | Value                                   |
|-----------------------------------------|-----------------------------------------|
| Moving mass for 0 mm stroke             | 5300 g                                  |
| Additional moving mass per 10 mm stroke | 103 g                                   |
| Basic weight for 0 mm stroke            | 7393 g                                  |
| Additional weight per 10 mm stroke      | 155 g                                   |
| Type of mounting                        | Via female thread<br>Or accessories     |
| Interface code, actuator                | D80                                     |
| 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 |