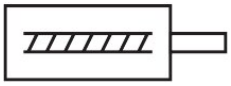
# Electric cylinder
# ESBF-BS-100-200-5P

Part number: 1347393





## Data sheet

| Feature | Value |
|---|---|
| Working stroke | 200 mm |
| Size | 100 |
| Stroke | 200 mm |
| Piston rod thread | M20x1.5 |
| Reversing backlash | 30 µm |
| Screw diameter | 40 mm |
| Spindle pitch | 5 mm/U |
| Max. angle of rotation of the piston rod +/- | 0.5 deg |
| Based on norm | ISO 15552 |
| Mounting position | Any |
| Piston rod end | External thread |
| Motor type | Servo motor |
| Position sensing | Via proximity switch |
| Structural design | Electric cylinder with ball screw |
| Spindle type | Ball screw |
| Protection against torsion/guide | With plain bearing-guide |
| Max. acceleration | 5 m/s² |
| Max. rotational speed | 2010 rpm |
| Max. speed | 0.17 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 |
| For use in the food industry | See supplementary material information |
| Relative air humidity | 0 - 95% |
| Degree of protection | IP40 |
| Ambient temperature | 0 °C...60 °C |
| Max. driving torque | 16.9 Nm |
| Max. radial force on actuator shaft | 1100 N |
| Max. feed force Fx | 17000 N |

| Feature | Value |
|---|---|
| No-load driving torque | 0.7 Nm |
| Guide value for payload, horizontal | 1700 kg |
| Guide value for payload, vertical | 1700 kg |
| Mass moment of inertia JH per meter of stroke | 18.978 kgcm² |
| Mass moment of inertia JL per kg of payload | 0.00633 kgcm² |
| Mass moment of inertia JO | 4.6963 kgcm² |
| Maintenance interval | Lifetime lubrication |
| Moving mass at 0 mm stroke | 8786 g |
| Additional moving mass per 10 mm stroke | 132 g |
| Basic weight with 0 mm stroke | 11123 g |
| Additional weight per 10 mm stroke | 193 g |
| Type of mounting | With internal thread<br>or accessories |
| Interface code, actuator | D100 |
| Note on materials | RoHS compliant |
| Cover material | Die-cast aluminum, coated |
| Piston rod material | high-alloy stainless steel |
| Material of screws | Galvanized steel |
| Ball screw nut material | Bearing steel |
| Spindle material | Bearing steel |
| Material of cylinder barrel | Wrought aluminum alloy, smooth-anodized |