

Electric cylinder ESBF-LS-40-300-3P

Part number: 8022587

FESTO



 General operating condition

Data sheet

| Feature | Value |
|--|---|
| Working stroke | 300 mm |
| Size | 40 |
| Stroke | 300 mm |
| Piston rod thread | M12x1.25 |
| Reversing backlash | 100 µm |
| Screw diameter | 16 mm |
| Spindle pitch | 3 mm/U |
| Max. angle of rotation of the piston rod +/- | 0.2 deg |
| Based on norm | ISO 15552 |
| Mounting position | Any |
| Piston rod end | External thread |
| Motor type | Stepper motor Servo motor |
| Position sensing | Via proximity switch |
| Structural design | Electric cylinder with lead screw spindle |
| Spindle type | Lead screw |
| Symbol | 00991941 |
| Protection against torsion/guide | With plain bearing-guide |
| Max. acceleration | 2.5 m/s ² |
| Max. rotational speed | 1000 rpm |
| Max. speed | 0.15 m/s |
| Repetition accuracy | ±0.05 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 ... 50 °C |
| Max. driving torque | 2.4 Nm |
| Max. radial force on actuator shaft | 130 N |
| Max. feed force Fx | 1000 N |
| No-load driving torque | 0.2 Nm |
| Guide value for payload, horizontal | 100 kg |
| Guide value for payload, vertical | 100 kg |

| Feature | Value |
|---|---|
| Mass moment of inertia JH per meter of stroke | 1.0187 kgcm ² |
| Mass moment of inertia JL per kg of payload | 0.0063 kgcm ² |
| Mass moment of inertia JO | 0.0449 kgcm ² |
| Moving mass at 0 mm stroke | 317 g |
| Additional moving mass per 10 mm stroke | 11 g |
| Basic weight with 0 mm stroke | 1079 g |
| Additional weight per 10 mm stroke | 48 g |
| Type of mounting | With internal thread or accessories |
| Interface code, actuator | D40 |
| Note on materials | RoHS compliant |
| Cover material | Wrought aluminum alloy, smooth-anodized |
| 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 |