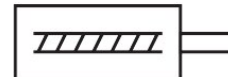


# Electric cylinder EPCC-BS-60-350-12P-A

Part number: 5428911

FESTO



## Data sheet

| Feature                                                   | Value                                                              |
|-----------------------------------------------------------|--------------------------------------------------------------------|
| Size                                                      | 60                                                                 |
| Stroke                                                    | 350 mm                                                             |
| Stroke reserve                                            | 0 mm                                                               |
| Piston rod thread                                         | M12x1.25                                                           |
| Reversing backlash theoretical                            | 100 µm                                                             |
| Spindle diameter                                          | 12 mm                                                              |
| Spindle pitch                                             | 12 mm/U                                                            |
| Torsional backlash at piston rod +/-                      | 1 deg                                                              |
| Mounting position                                         | optional                                                           |
| Piston-rod end                                            | Male thread                                                        |
| Type of motor                                             | Stepper motor<br>Servo motor                                       |
| Position detection                                        | Via proximity switch                                               |
| Design                                                    | Electric cylinder<br>With ball screw drive                         |
| Spindle type                                              | Ball screw drive                                                   |
| Protection against torque/guide                           | With plain-bearing guide                                           |
| Max. acceleration                                         | 15 m/s <sup>2</sup>                                                |
| Max. rotational speed                                     | 3000 rpm                                                           |
| Max. speed                                                | 0.6 m/s                                                            |
| Max. homing speed                                         | 0.01 m/s                                                           |
| Repetition accuracy                                       | ±0.02 mm                                                           |
| Duty cycle                                                | 100%                                                               |
| Corrosion resistance class CRC                            | 0 - No corrosion stress                                            |
| LABS (PWIS) conformity                                    | VDMA24364 zone III                                                 |
| Suitability for the production of Li-ion batteries        | Suitable for battery production with reduced Cu/Zn/Ni values (F1a) |
| Cleanroom suitability, measured according to ISO 14644-14 | Class 9 according to ISO 14644-1                                   |
| Storage temperature                                       | -20 °C...60 °C                                                     |
| Relative air humidity                                     | 0 - 95%<br>Non-condensing                                          |
| Degree of protection                                      | IP40                                                               |
| Ambient temperature                                       | 0 °C...60 °C                                                       |

| Feature                                          | Value                                      |
|--------------------------------------------------|--------------------------------------------|
| Impact energy in end positions                   | 0.024 J                                    |
| Max. drive torque                                | 2.4 Nm                                     |
| Max. moment Mx                                   | 0 Nm                                       |
| Max. moment My                                   | 6.4 Nm                                     |
| Max. moment Mz                                   | 6.4 Nm                                     |
| Max. radial force at drive shaft                 | 230 N                                      |
| Max. feed force Fx                               | 1000 N                                     |
| Frictional torque independent of load            | 0.325 Nm                                   |
| Reference value effective load, horizontal       | 120 kg                                     |
| Reference value effective load, vertical         | 60 kg                                      |
| Mass moment of inertia JH per metre of stroke    | 0.1519 kgcm <sup>2</sup>                   |
| Mass moment of inertia JL per kg of working load | 0.0365 kgcm <sup>2</sup>                   |
| Mass moment of inertia JO                        | 0.0779 kgcm <sup>2</sup>                   |
| Maintenance interval                             | Life-time lubrication                      |
| Moving mass for 0 mm stroke                      | 305 g                                      |
| Additional moving mass per 10 mm stroke          | 6.5 g                                      |
| Basic weight for 0 mm stroke                     | 1114 g                                     |
| Additional weight per 10 mm stroke               | 69 g                                       |
| Type of mounting                                 | Via female thread<br>With accessories      |
| Note on materials                                | RoHS-compliant                             |
| Material housing                                 | Wrought aluminium alloy<br>Smooth anodised |
| Material piston rod                              | High-alloy stainless steel                 |
| Material ball screw nut                          | Steel                                      |
| Material spindle                                 | Rolled steel                               |