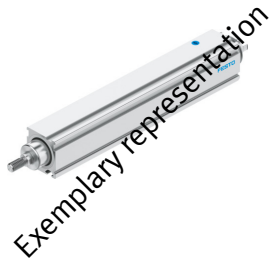


# Electric cylinder EPCC-BS-25-

Part number: 5428821

FESTO



 General operating condition

## Data sheet

Overall data sheet – Individual values depend upon your configuration.

| Feature                                            | Value                                                                                                                                                    |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size                                               | 25                                                                                                                                                       |
| Stroke                                             | 25 mm ... 200 mm                                                                                                                                         |
| Stroke reserve                                     | 0 mm                                                                                                                                                     |
| Piston rod thread                                  | M6                                                                                                                                                       |
| Reversing backlash theoretical                     | 100 µm                                                                                                                                                   |
| Spindle diameter                                   | 6 mm                                                                                                                                                     |
| Spindle pitch                                      | 2 mm/U ... 6 mm/U                                                                                                                                        |
| Torsional backlash at piston rod +/-               | 1 deg                                                                                                                                                    |
| Mounting position                                  | optional                                                                                                                                                 |
| Piston-rod end                                     | Male thread<br>Female 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                                                                                                                                         |
| Symbol                                             | 00991941                                                                                                                                                 |
| Protection against torque/guide                    | With plain-bearing guide                                                                                                                                 |
| Max. acceleration                                  | 5 m/s <sup>2</sup> ... 15 m/s <sup>2</sup>                                                                                                               |
| Max. rotational speed                              | 4000 rpm                                                                                                                                                 |
| Max. speed                                         | 0.067 m/s ... 0.4 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 according to the Festo internal definition of the degree of severity F1A with restrictions regarding the use of Cu/Zn/Ni |
| Cleanroom class                                    | 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                   | 0.0012 J                                              |
| Max. drive torque                                | 0.05 Nm ... 0.1 Nm                                    |
| Max. moment Mx                                   | 0 Nm                                                  |
| Max. moment My                                   | 0.6 Nm                                                |
| Max. moment Mz                                   | 0.6 Nm                                                |
| Max. radial force at drive shaft                 | 30 N                                                  |
| Max. feed force Fx                               | 75 N                                                  |
| Frictional torque independent of load            | 0.02 Nm ... 0.055 Nm                                  |
| Reference value effective load, horizontal       | 12 kg                                                 |
| Reference value effective load, vertical         | 6 kg                                                  |
| Mass moment of inertia JH per metre of stroke    | 0.0056 kgcm <sup>2</sup> ... 0.0095 kgcm <sup>2</sup> |
| Mass moment of inertia JL per kg of working load | 0.001 kgcm <sup>2</sup> ... 0.0091 kgcm <sup>2</sup>  |
| Mass moment of inertia JO                        | 9.0E-4 kgcm <sup>2</sup> ... 0.0014 kgcm <sup>2</sup> |
| Maintenance interval                             | Life-time lubrication                                 |
| Moving mass for 0 mm stroke                      | 53 g                                                  |
| Additional moving mass per 10 mm stroke          | 2.6 g                                                 |
| Basic weight for 0 mm stroke                     | 132 g                                                 |
| Additional weight per 10 mm stroke               | 13 g                                                  |
| Type of mounting                                 | With accessories                                      |
| Note on materials                                | RoHS-compliant                                        |
| Material housing                                 | Smooth anodised                                       |
| Material piston rod                              | High-alloy stainless steel                            |
| Material spindle nut                             | Steel                                                 |
| Material spindle                                 | Rolled steel                                          |