

# Electro-cylinder EPCC-BS-45-25-3P-A

Part number: 5428858

★ Core product range

FESTO



## Data sheet

| Feature  | Value                                |
|--|--------------------------------------|
| Size   | 45                                   |
| Stroke   | 25 mm                                |
| Stroke reserve                                   | 0 mm                                 |
| Piston rod thread                                | M10x1,25                             |
| Reversing backlash                               | 100 µm                               |
| Spindle diameter                                 | 10 mm                                |
| Spindle pitch                                    | 3 mm/U                               |
| Max. angular deflection of piston rod +/-        | 1 deg                                |
| Assembly position                                | Any                                  |
| Piston-rod end                                   | Male thread                          |
| Motor type                                       | Stepper motor<br>Servomotor          |
| Position detection                               | For proximity sensor                 |
| Design structure                                 | Electric cylinder<br>With ball screw |
| Spindle type                                     | Ball screw                           |
| Protection against torque/guide                  | with plain-bearing guide             |
| Max. acceleration                                | 5 m/s <sup>2</sup>                   |
| Max. speed                                       | 0.18 m/s                             |
| Repetition accuracy                              | ±0,02 mm                             |
| Duty cycle                                       | 100 %                                |
| Corrosion resistance classification CRC          | 0 - No corrosion stress              |
| PWIS conformity                                  | VDMA24364 zone III                   |
| RSBP classification to CD-0033                   | F1a                                  |
| Cleanroom class                                  | ISO class 9                          |
| Storage temperature                              | -20 ... 60 °C                        |
| Relative air humidity                            | 0 - 95 %<br>non-condensing           |
| Protection class                                 | IP40                                 |
| Ambient temperature                              | 0 ... 60 °C                          |
| Impact energy in end positions                   | 0.012 J                              |
| Max. torque Mx                                   | 0 Nm                                 |
| Max. torque My                                   | 2.9 Nm                               |
| Max. torque Mz                                   | 2.9 Nm                               |
| Max. radial force at drive shaft                 | 180 N                                |
| Max. feed force Fx                               | 450 N                                |
| Reference value for working load, horizontal     | 60 kg                                |
| Reference value for working load, vertical       | 30 kg                                |
| Mass moment of inertia JH per meter of stroke    | 0.0503 kgcm <sup>2</sup>             |
| Mass moment of inertia JL per kg of working load | 0.0023 kgcm <sup>2</sup>             |
| Mass moment of inertia, JO                       | 0.0109 kgcm <sup>2</sup>             |
| Moving mass with 0 mm stroke                     | 179 g                                |
| Additional mass factor per 10 mm of stroke       | 4.9 g                                |
| Basic weight for 0 mm stroke                     | 555 g                                |
| Additional weight per 10 mm stroke               | 41 g                                 |
| Mounting type                                    | with internal (female) thread        |

| Feature              | Value                                     |
|----------------------|---|
|                      | with accessories                          |
| Materials note       | Conforms to RoHS                          |
| Material housing     | Wrought Aluminum alloy<br>Smooth anodized |
| Material piston rod  | High alloy steel, non-corrosive           |
| Material spindle nut | Steel                                     |
| Material spindle     | Roller bearing steel                      |