

# Electro-cylinder DNCE-63-800-BS-"10"P-Q

Part number: 543142

FESTO

with ball screw actuator and non-rotating piston rod.



## Data sheet

| Feature  | Value   |
|--|---|
| Working stroke                                   | 800 mm  |
| Size   | 63  |
| Stroke   | 800 mm  |
| Stroke reserve                                   | 0 mm  |
| Piston rod thread                                | M16x1,5   |
| Reversing backlash                               | 0.05 mm   |
| Spindle diameter                                 | 20 mm   |
| Spindle pitch                                    | 10 mm/U   |
| Max. angular deflection of piston rod +/-        | 0.2 deg   |
| Based on the standard                            | ISO 15552 (previously also VDMA 24652, ISO 6431, NF E49 003.1, UNI 10290) |
| Assembly position                                | Any   |
| Motor type                                       | Stepper motor<br>Servomotor   |
| Position detection                               | For proximity sensor  |
| Design structure                                 | Electro-cylinder with ball screw  |
| Spindle type                                     | Ball screw actuator   |
| Variants   | Non-rotating piston rod   |
| Protection against torque/guide                  | with plain-bearing guide  |
| Max. acceleration                                | 6 m/s <sup>2</sup>  |
| Max. speed                                       | 0.5 m/s   |
| Repetition accuracy                              | +/-0,02 mm  |
| Duty cycle                                       | 100%  |
| Corrosion resistance classification CRC          | 0   |
| Storage temperature                              | -25 ... 60 °C   |
| Relative air humidity                            | 0 - 95 %  |
| Protection class                                 | IP40  |
| Ambient temperature                              | 0 ... 50 °C   |
| Impact energy in end positions                   | 0.0004 J  |
| Permanent drive torque                           | 4.1 Nm  |
| Permanent feed force                             | 2,000 N   |
| Max. drive torque                                | 4.9 Nm  |
| Max. torque for protection against rotation      | 1.5 Nm  |
| Max. torque Mx                                   | 1.5 Nm  |
| Max. radial force at drive shaft                 | 300 N   |
| Max. static axial force Fx                       | 3,700 N   |
| Max. feed force Fx                               | 2,500 N   |
| No-load driving torque                           | 0.2 Nm  |
| Reference value for working load, horizontal     | 240 kg  |
| Reference value for working load, vertical       | 120 kg  |
| Mass moment of inertia JH per meter of stroke    | 0.909 kgcm <sup>2</sup>   |
| Mass moment of inertia JL per kg of working load | 0.0253 kgcm <sup>2</sup>  |
| Mass moment of inertia, JO                       | 0.7626 kgcm <sup>2</sup>  |
| Moving mass with 0 mm stroke                     | 810 g   |

| Feature                                    | Value   |
|--|---|
| Additional weight per 10 mm stroke         | 81.2 g  |
| Basic weight for 0 mm stroke               | 3,010 g   |
| Additional mass factor per 10 mm of stroke | 12.8 g  |
| Mounting type                              | with internal (female) thread<br>with accessories |
| Materials note                             | Contains PWIS substances<br>Conforms to RoHS      |
| Materials information for cover            | Aluminum casting<br>Painted                       |
| Materials information for seals            | NBR   |
| Materials information, housing             | Wrought Aluminum alloy<br>Smooth anodized         |
| Materials information for piston rod       | High alloy steel, non-corrosive                   |
| Material information, spindle nut          | Roller bearing steel                              |
| Material information, spindle              | Roller bearing steel                              |
| Materials information for cylinder barrel  | Wrought Aluminum alloy<br>Smooth anodized         |