

# Rotary drive ERMO-16-ST-E

Part number: 3008526

FESTO



 General operating condition

## Data sheet

| Feature                                            | Value                                                       |
|----------------------------------------------------|-------------------------------------------------------------|
| Size                                               | 16                                                          |
| Design                                             | Electromechanical rotary drive<br>With integrated gear unit |
| Mounting position                                  | optional                                                    |
| Type of mounting                                   | Via female thread                                           |
| Rotation angle                                     | Infinite                                                    |
| Gear unit ratio                                    | 9:1                                                         |
| Nominal torque                                     | 0.8 Nm                                                      |
| Nominal rotary speed                               | 100 rpm                                                     |
| Max. speed at 90°                                  | 200 rpm                                                     |
| Impact energy in end positions                     | 7.0E-5 J                                                    |
| Torsional backlash                                 | 0.2 deg                                                     |
| Repetition accuracy                                | ±0.05 °                                                     |
| Max. axial force                                   | 290 N                                                       |
| Max. radial force                                  | 300 N                                                       |
| Permissible mass moment of inertia                 | 0.0013 kgm <sup>2</sup>                                     |
| Product weight                                     | 900 g                                                       |
| Stepper angle for complete step                    | 1.8 deg                                                     |
| Stepping angle tolerance                           | ±5%                                                         |
| Mass moment of inertia JO                          | 0.0383 kgcm <sup>2</sup>                                    |
| Duty cycle                                         | 100%                                                        |
| Nominal operating voltage DC                       | 24 V                                                        |
| Operating voltage DC for brake                     | 24 V                                                        |
| Power consumption, brake                           | 8 W                                                         |
| Brake holding torque                               | 1 Nm                                                        |
| Mass moment of inertia of brake                    | 0.0069 kgcm <sup>2</sup>                                    |
| Nominal motor current                              | 1.4 A                                                       |
| Insulation protection class                        | B                                                           |
| Type of motor                                      | Stepper motor                                               |
| Rotor position sensor                              | Incremental encoder                                         |
| Rotor position encoder interface                   | RS422 TTL AB channels + zero index                          |
| Rotor position sensor, encoder measuring principle | Optical                                                     |
| Electrical connector system                        | Plug                                                        |
| Approval                                           | RCM trademark                                               |
| CE mark (see declaration of conformity)            | To EU EMC Directive<br>In accordance with EU RoHS Directive |

| Feature                                    | Value                                                 |
|--------------------------------------------|-------------------------------------------------------|
| CE marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions |
| Bending radius, fixed cable                | ≥60 mm                                                |
| Interface code, basis                      | E8-45                                                 |
| Degree of protection                       | IP40                                                  |
| Storage temperature                        | -20 °C ... 60 °C                                      |
| Ambient temperature                        | 0 °C ... 50 °C                                        |
| Relative air humidity                      | 0 - 85%<br>Non-condensing                             |
| LABS (PWIS) conformity                     | VDMA24364 zone III                                    |
| Note on materials                          | RoHS-compliant                                        |
| Material flange                            | Wrought aluminium alloy<br>Anodised                   |
| Material housing                           | Wrought aluminium alloy<br>Anodised                   |