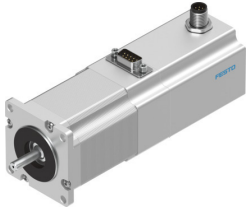


# Stepper motor EMMS-ST-57-M-SEB-G2

Part number: 1370481

**FESTO**



## Data sheet

| Feature                                      | Value                                                 |
|----------------------------------------------|-------------------------------------------------------|
| Ambient temperature                          | -10 °C...50 °C                                        |
| Storage temperature                          | -20 °C...70 °C                                        |
| Relative air humidity                        | 0 - 85%                                               |
| Conforms to standard                         | IEC 60034                                             |
| Insulation protection class                  | B                                                     |
| Temperature class as per EN 60034-1          | B                                                     |
| Rating class as per EN 60034-1               | S1                                                    |
| Degree of protection                         | IP54                                                  |
| Electrical connector system                  | Plug                                                  |
| Note on materials                            | RoHS-compliant                                        |
| Corrosion resistance class CRC               | 1 - Low corrosion stress                              |
| LABS (PWIS) conformity                       | VDMA24364-B2-L                                        |
| Approval                                     | RCM trademark<br>c UL us - Recognized (OL)            |
| CE mark (see declaration of conformity)      | To EU EMC Directive                                   |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions |
| Nominal operating voltage DC                 | 48 V                                                  |
| Motor holding torque                         | 1.4 Nm                                                |
| Max. rotational speed                        | 1940 rpm                                              |
| Stepper angle for complete step              | 1.8 deg                                               |
| Stepping angle tolerance                     | ±5%                                                   |
| Nominal motor current                        | 5 A                                                   |
| Voltage constant, phase                      | 25.5 mVmin                                            |
| Phase winding resistance                     | 0.25 Ohm                                              |
| Phase winding inductance                     | 0.95 mH                                               |
| Mass moment of inertia of rotor              | 0.48 kgcm <sup>2</sup>                                |
| Total mass moment of inertia of output       | 0.5 kgcm <sup>2</sup>                                 |
| Product weight                               | 1380 g                                                |
| Permissible axial shaft load                 | 10 N                                                  |
| Permissible radial shaft load                | 52 N                                                  |
| Rotor position sensor                        | Incremental encoder                                   |

| Feature                                            | Value                              |
|----------------------------------------------------|------------------------------------|
| Rotor position encoder interface                   | RS422 TTL AB channels + zero index |
| Rotor position sensor, encoder measuring principle | Optical                            |
| Brake holding torque                               | 1 Nm                               |
| Operating voltage DC for brake                     | 24 V                               |
| Power consumption, brake                           | 10 W                               |
| Mass moment of inertia of brake                    | 0.02 kgcm <sup>2</sup>             |