

# Servomotor EMMS-AS-70-M-HS-RSB-S1

Part number: 1550990

FESTO

Without gear unit.



## Data sheet

| Feature  | Value  |
|--|--|
| Ambient temperature                              | -10 ... 40 °C  |
| Storage temperature                              | -20 ... 60 °C  |
| Relative air humidity                            | 0 - 90 %   |
| Conforms to standard                             | IEC 60034  |
| Insulation protection class                      | F  |
| Rating class according to EN 60034-1             | S1   |
| Temperature monitoring                           | PTC resistor   |
| Protection class                                 | IP65   |
| Electrical connector system                      | Plug   |
| Materials note                                   | Conforms to RoHS   |
| Corrosion resistance classification CRC          | 2 - Moderate corrosion stress  |
| Authorization                                    | RCM Mark<br>c UL us - Recognized (OL)                                  |
| CE symbol (see declaration of conformity)        | according to EU-EMV guideline<br>according to EU low voltage guideline |
| Nominal operating voltage DC                     | 565 V  |
| Nominal voltage DC                               | 565 V  |
| Type of winding switch                           | Star inside  |
| Number of pole pairs                             | 4  |
| Standstill torque                                | 2.53 Nm  |
| Nominal torque                                   | 2.26 Nm  |
| Peak torque                                      | 8.55 Nm  |
| Nominal rotary speed                             | 4,400 1/min  |
| Max. speed                                       | 4,960 1/min  |
| Nominal motor power                              | 1,044 W  |
| Nominal motor current                            | 1.7 A  |
| Peak current                                     | 7.4 A  |
| Motor constant                                   | 1.333 Nm/A   |
| Voltage constant, phase-to-phase                 | 80.49 mVmin  |
| Phase-phase winding resistance                   | 16.294 Ohm   |
| Phase-phase winding inductance                   | 30.834 mH  |
| Overall mass moment of inertia at power take-off | 0.68 kgcm <sup>2</sup>   |
| Product weight                                   | 2,900 g  |
| Permissible axial shaft load                     | 75 N   |
| Permissible radial shaft load                    | 200 N  |
| Rotor position sensor                            | Absolute single turn encoder   |
| Rotary position encoder interface                | EnDat 22   |
| Rotary position encoder measuring principle      | Inductive  |
| Rotary position encoder resolution               | 18 Bit   |
| Brake holding torque                             | 2 Nm   |
| Operating voltage DC for brake                   | 24 V   |
| Power consumption, brake                         | 11 W   |
| Mass moment of inertia of brake                  | 0.07 kgcm <sup>2</sup>   |
| Switching cycles, holding brake                  | 10 million idle actuations (without friction work)                     |
| MTTF, subcomponent                               | 76 years, rotary position encoder<br>1769 years, holding brake         |
| MTTFd, subcomponent                              | 152 years, rotary position encoder                                     |