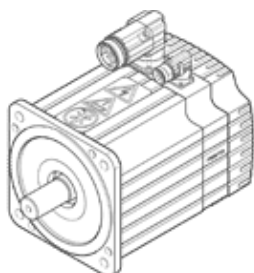


# servo motor EMMS-AS-190-SK-HS-ARB

Part number: 1584920

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                                 | IP54                                                            |
| Shaft design Featherkey                          | DIN 6885<br>A 10 x 8 x 40                                       |
| Electrical connector system                      | Plug                                                            |
| Materials note                                   | Conforms to RoHS                                                |
| Corrosion resistance classification CRC          | 2 - Moderate corrosion stress                                   |
| Authorisation                                    | RCM Mark<br>c UL us - Recognized (OL)                           |
| CE mark (see declaration of conformity)          | to EU directive for EMC<br>to EU directive low-voltage devices  |
| Nominal operating voltage DC                     | 565 V                                                           |
| Nominal voltage DC                               | 565 V                                                           |
| Type of winding switch                           | Star inside                                                     |
| Number of pole pairs                             | 6                                                               |
| Standstill torque                                | 26.2 Nm                                                         |
| Nominal torque                                   | 17.47 Nm                                                        |
| Peak torque                                      | 80 Nm                                                           |
| Nominal rotary speed                             | 3,000 1/min                                                     |
| Max. speed                                       | 5,300 1/min                                                     |
| Nominal motor power                              | 5,490 W                                                         |
| Nominal motor current                            | 14.43 A                                                         |
| Peak current                                     | 77.2 A                                                          |
| Motor constant                                   | 1.211 Nm/A                                                      |
| Voltage constant, phase-to-phase                 | 75.4 mVmin                                                      |
| Phase-phase winding resistance                   | 0.283 Ohm                                                       |
| Phase-phase winding inductance                   | 3.07 mH                                                         |
| Overall mass moment of inertia at power take-off | 55.7 kgcm <sup>2</sup>                                          |
| Product weight                                   | 22,200 g                                                        |
| Permissible axial shaft load                     | 250 N                                                           |
| Permissible radial shaft load                    | 940 N                                                           |
| Rotor position sensor                            | Resolver                                                        |
| Rotary position encoder interface                | SIN/COS analogue signal                                         |
| Rotary position encoder measuring principle      | Inductive                                                       |
| Brake holding torque                             | 30 Nm                                                           |
| Operating voltage DC for brake                   | 24 V                                                            |
| Power consumption, brake                         | 17 W                                                            |
| Mass moment of inertia of brake                  | 3.6 kgcm <sup>2</sup>                                           |
| Switching cycles, holding brake                  | 5 million idle actuations (without work of friction!)           |
| MTTF, subcomponent                               | 114 years, rotary position encoder<br>4469 years, holding brake |
| MTTFd, subcomponent                              | 228 years, rotary position encoder                              |