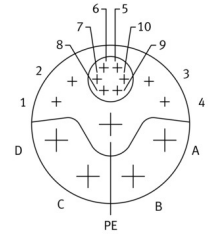
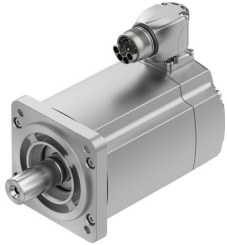


Servo motor EMMT-AS-80-S-LS-RS

Part number: 5255425

FESTO



Data sheet

| Feature | Value |
|---|--|
| Electrical connection 1, connection technology | M23x1 |
| Electrical connection 1, connection type | Hybrid plug |
| Detent torque | < 1.0% of peak torque |
| Electrical connection for input 1, connection pattern | 00995913 |
| Concentricity, coaxiality, axial runout according to DIN SPEC 42955 | N |
| Rotor position sensor for manufacturer designation | ECI 1118 |
| Mounting position | Any |
| Shock resistance | Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27 |
| Information on max. installation height | with 1,000 m and longer only with derating of -1.0% per 100 m |
| Note on degree of protection | IP40 for motor shaft without rotary shaft seal IP65 for motor shaft with rotary shaft seal IP67 for motor housing, incl. connection technology |
| Contamination level | 2 |
| Note on ambient temperature | Up to 80 °C with derating of -1.5% per degree Celsius |
| Vibration resistance | Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6 |
| Measuring flange | 250 x 250 x 15 mm, steel |
| Motor type as per EN 60034-7 | IM B5 IM V1 IM V3 |
| Balancing quality | G 2.5 |
| Certificate issuing authority | UL E342973 |
| Electrical connection 1, number of pins/wires | 15 |
| Max. winding temperature | 155 °C |
| Max. installation height | 4000 m |
| Rotor position encoder for DC operating voltage | 5 V |
| Max. mechanical speed | 14000 1/min |
| Number of pole pairs | 5 |
| Storage lifetime, under nominal conditions | 20000 h |
| Electric time constant | 4.9 ms |
| Cross inductivity Lq (phase) | 12.2 mH |
| Winding longitudinal inductivity Ld (phase) | 10.2 mH |
| Rotor position encoder for DC operating voltage range | 3.6 V ... 14 V |
| Standstill torque constant | 0.57 Nm/A |
| Rotor position encoder for absolutely detectable revolutions | 1 |

| Feature | Value |
|---|--|
| Rotor position encoder system accuracy angle measurement | -120 arcsec ... 120 arcsec |
| Thermal resistance | 0.95 K/W |
| Rotor position encoder for positional values per revolution | 262144 |
| Thermal time constant | 42 min |
| Type code | EMMT-AS |
| Rotor position sensor | Absolute encoder, single-turn |
| Rotor position sensor interface | EnDat® 2.2 |
| Rotor position sensor measuring principle | Inductive |
| Temperature monitoring | Digital motor temperature transmission via EnDat® 2.2 |
| Max. rotational speed | 6700 1/min |
| Nominal rotary speed | 3000 1/min |
| Continuous stall current | 3.1 A |
| Motor constants | 0.48 Nm/A |
| Nominal operating voltage DC | 325 V |
| Motor nominal power | 408 W |
| Motor nominal current | 2.7 A |
| Rotor position sensor resolution | 18 bit |
| Phase-phase winding resistance | 4.93 Ohm |
| Winding inductance phase-phase | 16.3 mH |
| Type of winding switch | Star inside |
| Peak current | 8.4 A |
| Voltage constant, phase-to-phase | 34.3 mVmin |
| Rating class according to EN 60034-1 | S1 |
| CE marking (see declaration of conformity) | As per EU EMC directive As per EU low voltage directive As per EU RoHS directive |
| Corrosion resistance class (CRC) | 0 - No corrosion stress |
| Storage temperature | -20 °C ... 70 °C |
| Relative air humidity | 0 - 90 % |
| Degree of protection | IP40 |
| Ambient temperature | -15 °C ... 40 °C |
| Thermal class according to EN 60034-1 | F |
| Certification | RCM compliance mark c UL us - Recognized (OL) |
| Total output inertia moment | 1.33 kgcm ² |
| Nominal torque | 1.3 Nm |
| Peak torque | 2.8 Nm |
| Stall torque | 1.46 Nm |
| Permissible axial shaft load | 120 N |
| Permissible radial shaft load | 620 N |
| MTTF, subcomponent | 190 years, rotor position sensor |
| MTTFd, subcomponent | 380 years, rotor position sensor |
| Product weight | 2020 g |
| Interface code, motor out | 80P |
| Note on materials | Contains paint-wetting impairment substances RoHS-compliant |
| Conforms to standard | IEC 60034 |