

Servo motor EMME-AS-80-S-HS-AMB

Part number: 2093139

FESTO



Data sheet

Feature	Value
Type code	EMME-AS
Ambient temperature	-10 °C ... 40 °C
Storage temperature	-20 °C ... 70 °C
Relative air humidity	0 - 90 %
Conforms to standard	IEC 60034
Insulation protection class	F
Rating class according to EN 60034-1	S1
Degree of protection	IP21
Electrical connection technology	Plug
Note on materials	RoHS-compliant
Corrosion resistance class (CRC)	0 - No corrosion stress
LABS conformity	VDMA24364 zone III
Certification	RCM compliance mark c UL us - Recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive As per EU low voltage directive
Nominal operating voltage DC	565 V
DC nominal voltage	565 V
Type of winding switch	Star inside
Number of pole pairs	3
Stall torque	2.8 Nm
Nominal torque	2.3 Nm
Peak torque	11.2 Nm
Nominal rotary speed	3000 1/min
Max. rotational speed	4192 1/min
Motor nominal power	720 W
Continuous stall current	1.8 A
Motor nominal current	1.6 A
Peak current	7.2 A
Motor constants	1.438 Nm/A
Voltage constant, phase-to-phase	95.3 mVmin
Phase-phase winding resistance	14.2 Ohm
Winding inductance phase-phase	30 mH
Total output inertia moment	1.68 kgcm ²
Product weight	3700 g
Permissible axial shaft load	70 N

Feature	Value
Permissible radial shaft load	350 N
Rotor position sensor	Absolute encoder, multi-turn
Rotor position sensor interface	HIPERFACE®
Rotor position sensor measuring principle	Capacitive
Rotor position encoder, sinusoidal/cosinusoidal periods per revolution	16
Typical rotor position sensor resolution	12 bit
Rotor position encoder, typical angular accuracy	20 arcmin
Brake holding torque	4,5 Nm
Brake DC operating voltage	24 V
Brake power consumption	12 W
Brake mass moment of inertia	0.222 kgcm ²
Switching cycles, holding brake	5 million idle actuations (without friction work!)
MTTF, subcomponent	797 years, holding brake
MTTFd, subcomponent	271 years, rotor position sensor
Energy efficiency	ENEFF (CN) / Class 2