## **Servo motor** EMME-AS-80-M-LS-AMB Part number: 2093171

**FESTO** 



General operating condition

## **Data sheet**

Feature	Value
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 (PWIS) 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 As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions To UK instructions for electrical equipment
Nominal operating voltage DC	360 V
DC nominal voltage	360 V
Type of winding switch	Star inside
Number of pole pairs	3
Stall torque	3.5 Nm
Nominal torque	3.2 Nm
Peak torque	14 Nm
Nominal rotary speed	3000 rpm
Max. rotational speed	4627 rpm
Motor nominal power	1000 W
Continuous stall current	3.9 A
Motor nominal current	3.7 A
Peak current	15.6 A
Motor constants	0.865 Nm/A
Voltage constant, phase-to-phase	55 mVmin
Phase-phase winding resistance	2.8 Ohm
Winding inductance phase-phase	7.43 mH
Total output inertia moment	2.2 kgcm <sup>2</sup>

Feature	Value
Product weight	4350 g
Permissible axial shaft load	72 N
Permissible radial shaft load	360 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 kgcm²
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