

Servo motor EMME-AS-100-M-HS-AMB

Part number: 2103502

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 as per EN 60034-1	S1
Degree of protection	IP21
Electrical connector system	Plug
Note on materials	RoHS-compliant
Corrosion resistance class CRC	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Approval	RCM trademark c UL us - Recognized (OL)
CE mark (see declaration of conformity)	To EU EMC Directive To EU Low Voltage Directive In accordance with EU RoHS Directive
CE marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions To UK regulations for electrical equipment
Nominal operating voltage DC	565 V
Nominal voltage DC	565 V
Type of winding switch	Star inside
Number of pole pairs	3
Standstill torque	7.5 Nm
Nominal torque	6.4 Nm
Peak torque	30 Nm
Nominal rotary speed	3000 rpm
Max. rotational speed	3941 rpm
Nominal power rating of motor	2000 W
Continuous stall current	4.6 A
Nominal motor current	4.1 A
Peak current	18.4 A
Motor constant	1.561 Nm/A
Voltage constant, phase-to-phase	101.4 mVmin
Phase-phase winding resistance	3.2 Ohm
Phase-phase winding inductance	12 mH
Total mass moment of inertia of output	7.2 kgcm ²

Feature	Value
Product weight	8550 g
Permissible axial shaft load	136 N
Permissible radial shaft load	680 N
Rotor position sensor	Absolute multi-turn encoder
Rotor position encoder interface	HIPERFACE®
Rotor position sensor, encoder measuring principle	Capacitive
Rotor pos. enc., sin/cosin p/r	16
Rotor pos. encoder, typ. res.	12 bit
Rot. pos. enc., typ. ang. acc.	20 arcmin
Brake holding torque	9 Nm
Operating voltage DC for brake	24 V
Power consumption, brake	18 W
Mass moment of inertia of brake	0.654 kgcm ²
Switching cycles holding brake	5 million idle actuations (without friction work!)
Mean time to failure (MTTF), subcomponent	1037 years, holding brake
Mean time to dangerous failure (MTTFd), subcomponent	271 years, rotor position sensor
Energy efficiency	ENEFF (CN) / Class 2