

# Servo motor EMME-AS-100-M-HS-AMXB

Part number: 4267601

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	565 V
DC nominal voltage	565 V
Type of winding switch	Star inside
Number of pole pairs	3
Stall torque	7.5 Nm
Nominal torque	6.4 Nm
Peak torque	30 Nm
Nominal rotary speed	3000 rpm
Max. rotational speed	3941 rpm
Motor nominal power	2000 W
Continuous stall current	4.6 A
Motor nominal current	4.1 A
Peak current	18.4 A
Motor constants	1.561 Nm/A
Voltage constant, phase-to-phase	101.4 mV/min
Phase-phase winding resistance	3.2 Ohm
Winding inductance phase-phase	12 mH
Total output inertia moment	7.2 kgcm <sup>2</sup>

Feature	Value
Product weight	8550 g
Permissible axial shaft load	136 N
Permissible radial shaft load	680 N
Rotor position sensor	Safety encoder, absolute multi-turn
Rotor position sensor interface	HIPERFACE®
Rotor position sensor measuring principle	Optical
Rotor position encoder, sinusoidal/cosinusoidal periods per revolution	128
Typical rotor position sensor resolution	15 bit
Rotor position encoder, typical angular accuracy	20 arcmin
Brake holding torque	9 Nm
Brake DC operating voltage	24 V
Brake power consumption	18 W
Brake mass moment of inertia	0.654 kgcm <sup>2</sup>
Switching cycles, holding brake	5 million idle actuations (without friction work!)
Safety Integrity Level (SIL), subcomponent	SIL 2, rotor position sensor SILCL 2, rotor position sensor
Performance Level (PL), subcomponent	Category 3, performance level d, rotor position encoder
PFHd, subcomponent	1.3 x 10E-8, rotor position sensor
Duration of use Tm, subcomponent	20 years, rotor position sensor
MTTF, subcomponent	1037 years, holding brake
MTTFd, subcomponent	874 years, rotor position sensor
Energy efficiency	ENEFF (CN) / Class 2