

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

Part number: 4267603

FESTO



## Data sheet

Feature	Value
Number of pole pairs	3
Type code	EMME-AS
Rotor position sensor	Safety encoder, absolute multi-turn
Rotor position sensor interface	HIPERFACE®
Rotor position sensor measuring principle	Optical
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
Max. rotational speed	3941 1/min
Nominal rotary speed	3000 1/min
Brake DC operating voltage	24 V
Continuous stall current	4.6 A
Insulation protection class	F
Brake power consumption	18 W
Motor constants	1.561 Nm/A
Nominal operating voltage DC	565 V
Motor nominal power	2000 W
DC nominal voltage	565 V
Motor nominal current	4.1 A
Typical rotor position sensor resolution	15 bit
Rotor position encoder, typical angular accuracy	20 arcmin
Rotor position encoder, sinusoidal/cosinusoidal periods per revolution	128
Phase-phase winding resistance	3.2 Ohm
Winding inductance phase-phase	12 mH
Type of winding switch	Star inside
Peak current	18.4 A
Voltage constant, phase-to-phase	101.4 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
Corrosion resistance class (CRC)	0 - No corrosion stress
Storage temperature	-20 °C ... 70 °C
Relative air humidity	0 - 90 %
Degree of protection	IP21

Feature	Value
Ambient temperature	-10 °C ... 40 °C
Certification	RCM compliance mark c UL us - Recognized (OL)
Total output inertia moment	7.2 kgcm <sup>2</sup>
Brake holding torque	9 Nm
Brake mass moment of inertia	0.654 kgcm <sup>2</sup>
Nominal torque	6.4 Nm
Peak torque	30 Nm
Stall torque	7.5 Nm
Permissible axial shaft load	136 N
Permissible radial shaft load	680 N
MTTF, subcomponent	1037 years, holding brake
MTTFd, subcomponent	874 years, rotor position sensor
Switching cycles, holding brake	5 million idle actuations (without friction work!)
Product weight	8550 g
Electrical connection technology	Plug
Note on materials	Contains paint-wetting impairment substances RoHS-compliant
Conforms to standard	IEC 60034
Featherkey shaft design	DIN 6885 A 6 x 6 x 32