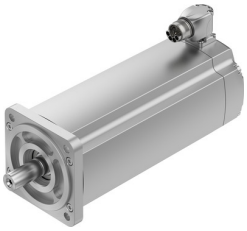
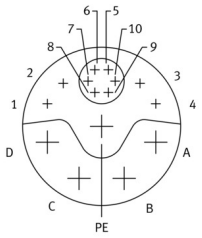
Servo motor
EMMT-AS-100-M-HS-RSB

Part number: 5255532





Data sheet

Feature	Value
Electrical connection 1, connection technology	M23x1
Electrical connection 1, connection type	Hybrid plug
Electrical connection for input 1, connection pattern	00995913
Concentricity, coaxiality, axial runout according to DIN SPEC 42955	N
Detent torque	‹ 1.0% of peak torque
Mounting position	Any
Rotor position sensor for manufacturer designation	ECI 1319
Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
Information on max. installation height	with 1,000 m and longer only with derating of -1.0% per 100 m
Contamination level	2
Note on degree of protection	IP40 for motor shaft without rotary shaft seal IP65 for motor shaft with rotary shaft seal IP67 for motor housing, incl. connection technology
Note on ambient temperature	Up to 80 °C with derating of -1.5% per degree Celsius
Vibration resistance	Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6
Measuring flange	300 x 300 x 20 mm, steel
Balancing quality	G 2.5
Motor type as per EN 60034-7	IM B5 IM V1 IM V3
Certificate issuing authority	UL E342973
Electrical connection 1, number of pins/wires	15
Max. winding temperature	155 °C
Brake airflow	0.54 A
Max. brake no-load speed	10000 1/min
Max. installation height	4000 m
Rotor position encoder for DC operating voltage	5 V
Brake coil inductivity	900 mH
Brake current consumption	0.75 A
Brake coil resistance	32 Ohm
Max. mechanical speed	13000 1/min
Brake stopping current	0.54 A
Number of pole pairs	5
Storage lifetime, under nominal conditions	20000 h

Feature	Value
Brake closing time	≤20 ms
Max. brake friction work	12000 J
Brake separation time	≤80 ms
Electric time constant	16.6 ms
DC brake response delay	≤4 ms
Cross inductivity Lq (phase)	15.3 mH
Winding longitudinal inductivity Ld (phase)	10.2 mH
Rotor position encoder for DC operating voltage range	3.6 V ... 14 V
Standstill torque constant	1.66 Nm/A
Rotor position encoder for absolutely detectable revolutions	1
Rotor position encoder system accuracy angle measurement	-65 arcsec ... 65 arcsec
Thermal resistance	0.5 K/W
Rotor position encoder for positional values per revolution	524288
Thermal time constant	73 min
Type code	EMMT-AS
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor interface	EnDat® 22
Rotor position sensor measuring principle	Inductive
Temperature monitoring	Digital motor temperature transmission via EnDat® 2.2
Max. rotational speed	3980 1/min
Nominal rotary speed	2700 1/min
Brake DC operating voltage	24 V
Continuous stall current	5.9 A
Brake power consumption	18 W
Motor constants	1.46 Nm/A
Nominal operating voltage DC	565 V
Motor nominal power	1770 W
Motor nominal current	4.3 A
Rotor position sensor resolution	19 bit
Phase-phase winding resistance	1.84 Ohm
Winding inductance phase-phase	20.4 mH
Type of winding switch	Star inside
Peak current	22.1 A
Voltage constant, phase-to-phase	100 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 As per EU RoHS directive
Corrosion resistance class (CRC)	0 - No corrosion stress
Storage temperature	-20 °C ... 70 °C
Relative air humidity	0 - 90 %
Degree of protection	IP40
Ambient temperature	-15 °C ... 40 °C
Thermal class according to EN 60034-1	F
Certification	RCM compliance mark c UL us - Recognized (OL)
Total output inertia moment	5.34 kgcm²
Brake holding torque	11 Nm
Brake mass moment of inertia	0.74 kgcm²
Nominal torque	6.3 Nm
Peak torque	22.4 Nm
Stall torque	8.6 Nm
Permissible axial shaft load	200 N
Permissible radial shaft load	1110 N

Feature	Value
MTTF, subcomponent	190 years, rotor position sensor
MTTFd, subcomponent	380 years, rotor position sensor
Switching cycles, holding brake	10 million idle actuations (without friction work!)
Product weight	8200 g
Interface code, motor out	100A
Note on materials	Contains paint-wetting impairment substances RoHS-compliant
Conforms to standard	IEC 60034