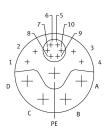
## Servo motor EMMT-AS-80-M-HS-RMY Part number: 8160648





**FESTO** 

## **Data sheet**

Feature	Value	
Ambient temperature	-15 °C40 °C	
Note on ambient temperature	Up to 80°C with derating of -1.5% per degree Celsius	
Max. installation height	4000 m	
Note on max. installation height	As of 1,000 m: only with derating of -1.0% per 100 m	
Storage temperature	-20 °C70 °C	
Relative air humidity	0 - 90%	
Conforms to standard	IEC 60034	
Temperature class as per EN 60034-1	F	
Max. winding temperature	155 ℃	
Rating class as per EN 60034-1	S1	
Temperature monitoring	Digital motor temperature transmission via EnDat® 2.2	
Motor type to EN 60034-7	IM B5 IM V1 IM V3	
Mounting position	optional	
Degree of protection	IP40	
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 including connection components	
Concentricity, coaxiality, axial runout to DIN SPEC 42955	N	
Balance quality	G 2.5	
Detent torque	<1,0% vom Spitzendrehmoment	
Bearing lifetime under nominal conditions	20000 h	
Interface code, motor out	80P	
Electrical connection 1, connection type	Hybrid plug	
Electrical connection 1, connector system	M23x1	
Electrical connection 1, number of connections/cores	15	
Pollution degree	2	
Note on materials	RoHS-compliant	
Corrosion resistance class CRC	0 - No corrosion stress	

/ibration resistance       Transpo 60068-         Shock resistance       Shock t         Approval       RCM tra Germar c UL us         CE mark (see declaration of conformity)       To EU E To EU L In accord         CE marking (see declaration of conformity)       To UK in To UK in To UK in To UK in To UK rest	st with severity level 2 to FN 942017-5 and EN 60068-2-27 lemark Technical Control Board (TÜV) Recognized (OL) IC Directive w Voltage Directive lance with EU ROHS Directive structions for EMC HS instructions gulations for electrical equipment /INS 464.00/24 973 de n n
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Phase-phase winding inductance31.8 mWinding longitudinal inductivity Ld (phase)19.4 m	
Winding longitudinal inductivity Ld (phase)         19.4 m	
Electric time constant 6.4 ms	
Thermal time constant 45 min	
Thermal resistance 0.78 K/	V
	• 0 x 15 mm, steel
Fotal mass moment of inertia of output 1.035 k	
Product weight 2640 g	
Permissible axial shaft load 120 N	
Permissible radial shaft load 620 N	
	multi-turn safety encoder
rotor position sensor, manufacturer designation EQI 112	-
rotor position sensor, absolute detectable revolutions 4096	
Rotor position encoder interface EnDate	22
Rotor position sensor, encoder measuring principle Inductiv	
rotor position sensor, DC operating voltage 5 V	
rotor position sensor, DC operating voltage range 3.6 V	
rotor position sensor, position values per revolution 524288	4 V
Rotor position transducer resolution 19 bit	4 V
	4 V
Safety device Safety	4 V sec120 arcsec

Feature	Value
Maximum SIL	Safety integrity level 3 See user documentation
Safety sub-functions up to SIL2	Reliable recording and transmission of single-turn position data
Safety sub-functions up to SIL3	Reliable recording and transmission of single-turn position data, only with additional software function in the servo drive
Maximum PL and category	Performance Level e, Category 3 See user documentation
Safety sub-function up to PL d, Cat. 3	Reliable recording and transmission of single-turn position data
Safety sub-function up to PL e, Cat. 3	Reliable recording and transmission of single-turn position data, only with additional software function in the servo drive
PFHd, subcomponent	15 x 10E-9, encoder
Duration of use Tm, subcomponent	20 years, rotor position sensor
Energy efficiency	ENEFF (CN) / Class 2