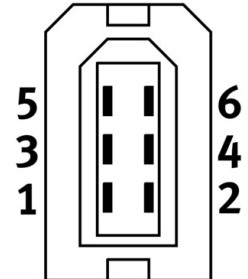


# Servo motor EMMB-AS-80-07-K-S30SB

Part number: 8097190

FESTO



## Data sheet

Feature	Value
Electrical connection 1, connection technology	Connection diagram RE
Electrical connection 1, connection type	Plug
Electrical connection for input 1, connection pattern	00995792
Concentricity, coaxiality, axial runout according to DIN SPEC 42955	N
Rotor position sensor for manufacturer designation	SAR-ML50AJC00
Mounting position	Any
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
Note on degree of protection	IP40 for motor shaft without rotary shaft seal IP54 for motor shaft with rotary shaft seal IP65 for motor housing without connection technology
Contamination level	2
Note on ambient temperature	Up to 60 °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	255 x 255 x 8 mm, aluminum
Motor type as per EN 60034-7	IM B5 IM V1 IM V3
Balancing quality	G 2.5
Certificate issuing authority	UL E342973
Electrical connection 1, number of pins/wires	6
Max. winding temperature	155 °C
Max. installation height	4000 m
Rotor position encoder for DC operating voltage	5 V
Max. mechanical speed	10000 1/min
Number of pole pairs	3
Storage lifetime, under nominal conditions	20000 h
Electric time constant	5 ms
Rotor position encoder for DC operating voltage range	4.75 V ... 5.25 V
Rotor position encoder for absolutely detectable revolutions	1
Rotor position encoder system accuracy angle measurement	-120 arcsec ... 120 arcsec
Rotor position encoder for positional values per revolution	1048576
Type code	EMMB-AS

Feature	Value
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor interface	Nikon A-format
Rotor position sensor measuring principle	Optical
Temperature monitoring	Digital motor temperature transmission via Nikon A format
Max. rotational speed	5000 1/min
Nominal rotary speed	3000 1/min
Brake DC operating voltage	24 V
Continuous stall current	4.2 A
Brake power consumption	11.5 W
Motor constants	0.662 Nm/A
Nominal operating voltage DC	300 V
Motor nominal power	750 W
DC nominal voltage	300 V
Motor nominal current	3.8 A
Rotor position sensor resolution	20 bit
Phase-phase winding resistance	2.1 Ohm
Winding inductance phase-phase	10.5 mH
Type of winding switch	Star inside
Peak current	11.4 A
Voltage constant, phase-to-phase	40 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 ... 55 °C
Relative air humidity	0 - 90 %
Degree of protection	IP65
Ambient temperature	-15 °C ... 40 °C
Thermal class according to EN 60034-1	F
Certification	c UL us - Recognized (OL)
Total output inertia moment	0.978 kgcm <sup>2</sup>
Brake holding torque	3.2 Nm
Nominal torque	2.39 Nm
Peak torque	7.17 Nm
Stall torque	2.63 Nm
Permissible axial shaft load	167.5 N
Permissible radial shaft load	335 N
Product weight	3400 g
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 22