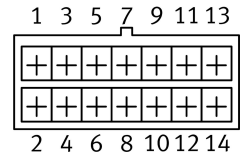
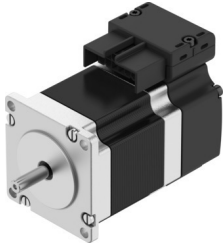


Stepper motor EMMB-ST-57-M-S

Part number: 8156137

FESTO



Data sheet

Feature	Value
Ambient temperature	-15 °C...40 °C
Note on ambient temperature	up to 80°C with derating -2%/°C
Max. installation height	4000 m
Information on max. installation height	with 1,000 m and longer only with derating of -1.0% per 100 m
Storage temperature	-20 °C...70 °C
Relative air humidity	0 - 90 % Non-condensing
Conforms to standard	IEC 60034
Thermal class according to EN 60034-1	B
Max. winding temperature	130 °C
Rating class according to EN 60034-1	S1
Motor type as per EN 60034-7	IM B5 IM V1 IM V3
Mounting position	Any
Degree of protection	IP20
Note on degree of protection	IP40 for motor shaft without rotary shaft seal
Interface code, motor out	57A
Electrical connection 1, connection type	Hybrid plug
Electrical connection 1, connection technology	Plug pattern L10
Electrical connection 1, number of pins/wires	14
Note on materials	RoHS-compliant
Corrosion resistance class (CRC)	0 - No corrosion stress
LABS (PWIS) conformity	VDMA24364 zone III
Vibration resistance	Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
Certification	RCM compliance mark
CE marking (see declaration of conformity)	As per EU EMC directive As per EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Nominal operating voltage DC	48 V

Feature	Value
Number of pole pairs	50
Motor holding torque	1050 Nm
Peak torque	1100 Nm
Max. rotational speed	2600 rpm
Max. mechanical speed	8000 rpm
Step angle with full step	1.8 deg
Step angle tolerance	±5%
Continuous stall current	6100 A
Motor nominal current	5100 A
Peak current	8 A
Motor constants	152 Nm/A
Voltage constant, phase	13100 mVmin
Phase winding resistance	170 Ohm
Winding inductance phase	500 mH
Winding longitudinal inductivity Ld (phase)	700 mH
Cross inductivity Lq (phase)	500 mH
Electric time constant	2900 ms
Thermal time constant	28 min
Thermal resistance	1600 K/W
Measuring flange	200 x 200 x 15 mm, steel
Total output inertia moment	0.3 kgcm ²
Product weight	810 g
Permissible axial shaft load	15 N
Permissible radial shaft load	75 N