

# Stepper motor EMMS-ST-42-S-SE-G2

Part number: 1370471

FESTO



## Data sheet

Feature	Value
Type code	EMMS-ST
Ambient temperature	-10 °C ... 50 °C
Storage temperature	-20 °C ... 70 °C
Relative air humidity	0 - 85 %
Conforms to standard	IEC 60034
Insulation protection class	B
Thermal class according to EN 60034-1	B
Rating class according to EN 60034-1	S1
Degree of protection	IP54
Electrical connection technology	Plug
Note on materials	RoHS-compliant
Corrosion resistance class (CRC)	1 - Low corrosion stress
LABS conformity	VDMA24364-B2-L
Certification	RCM compliance mark c UL us - Recognized (OL)
CE marking (see declaration of conformity)	As per EU EMC directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Nominal operating voltage DC	48 V
Motor holding torque	0.5 Nm
Max. rotational speed	1740 1/min
Step angle with full step	1.8 deg
Step angle tolerance	±5%
Motor nominal current	1.8 A
Voltage constant, phase	23 mVmin
Phase winding resistance	1.75 Ohm
Winding inductance phase	3.3 mH
Rotor mass moment of inertia	0.082 kgcm <sup>2</sup>
Total output inertia moment	0.082 kgcm <sup>2</sup>
Product weight	450 g
Permissible axial shaft load	7 N
Permissible radial shaft load	20 N
Rotor position sensor	Incremental encoder
Rotor position sensor interface	RS422 TTL A/B channels + zero index
Rotor position sensor measuring principle	Optical
Brake holding torque	0.4 Nm