

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

Part number: 1370471

FESTO



 General operating condition

## Data sheet

Feature	Value
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
Temperature class as per EN 60034-1	B
Rating class as per EN 60034-1	S1
Degree of protection	IP54
Electrical connector system	Plug
Note on materials	RoHS-compliant
Corrosion resistance class CRC	1 - Low corrosion stress
LABS (PWIS) conformity	VDMA24364-B2-L
Approval	RCM trademark c UL us - Recognized (OL)
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS 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 rpm
Stepper angle for complete step	1.8 deg
Stepping angle tolerance	±5%
Nominal motor current	1.8 A
Voltage constant, phase	23 mVmin
Phase winding resistance	1.75 Ohm
Phase winding inductance	3.3 mH
Mass moment of inertia of rotor	0.082 kgcm <sup>2</sup>
Total mass moment of inertia of output	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 encoder interface	RS422 TTL AB channels + zero index
Rotor position sensor, encoder measuring principle	Optical
Brake holding torque	0.4 Nm