PRODUCT DATASHEET

ES-MT-C09-S044-V002

Cylindrical Series

Cylindrical Series | ES-VC-CY03 Cylindrical Voice Coil Motor Series

Product Overview

Cylindrical Series with continuous Force 11 N, peak Force 31 N and force Constant 9 ±1 N/A.

Key Specifications

PARAMETER	VALUE	UNIT
Continuous Force	11	N
Peak Force	31	N
Force Constant	9 ±1	N/A
Continuous Current	1.25 (coil at 100 °C)	A
Impedance	7.87 ±10% (20 °C)	Ω
Insulation Class	Class B	
Insulation Resistance	100 (500 VDC)	MΩ
Body Mass	102	g
Coil Assembly Mass	33	g

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Continuous Force	11	N
Peak Force	31	N
Force Constant	9 ±1	N/A
ELECTRICAL		
Continuous Current	1.25 (coil at 100 °C)	A
Impedance	7.87 ±10% (20 °C)	Ω
Insulation Class	Class B	
Insulation Resistance	100 (500 VDC)	MΩ
Linear Back-EMF Constant	9	V/m/s
Closed-Circuit Line-to-Line Inductance	1.7 ±20%	mH
Motor Midpoint Resistance	7.75 ±10%	Ω
THERMAL		
Maximum Continuous Power	10	W
Maximum Magnet Temperature	<100	°C

Technical Specifications

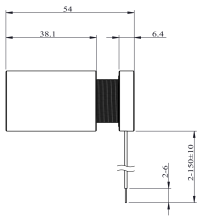
PARAMETER	SPECIFICATION	UNIT
MECHANICAL		
Body Mass	102	g
Stroke	9.5 ±0.5	mm
Coil Clearance	0.38	mm
Coil Assembly Mass	33	g
ENVIRONMENTAL		
Operating Relative Humidity	10-95 (non-condensing)	% RH
Operating Temperature	5-40	°C
Storage Temperature	-20-60	°C
Storage Relative Humidity	10-95 (non-condensing)	% RH
Operating Atmospheric Pressure	62-106	kPa
Storage Atmospheric Pressure	50-106	kPa
COMPLIANCE		
Standards Compliance	RoHS compliant (2002/95/EC; 2011/65/E)	

Dimensional & Integration Overview

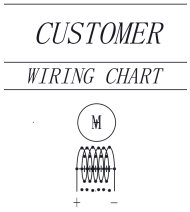
Mechanical Overview

PARAMETER	VALUE	UNIT
Body Mass	102	g
Stroke	9.5 ±0.5	mm
Coil Clearance	0.38	mm
Coil Assembly Mass	33	g

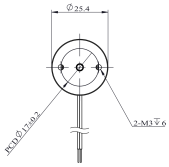
Dimensional Drawings



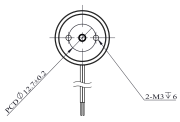
Mechanical View 1



Power Connector Pinout

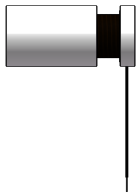


Mechanical View 3



Mechanical View 4

Mechanical View 5


Mechanical View 6

View Product Online Request Engineering Data Request a Quote

01 Specifications are subject to change without notice. Verify the current product configuration before final design release.

02 2D drawings, CAD files and integration documentation are controlled documents and are supplied separately on request.