

PRODUCT DATASHEET

ES-ST-08H2028-050-4AL

Hybrid Stepper Motors

Hybrid Stepper Motors | 20 mm Hybrid Stepper Motor Series - ES-ST-HY02

Product Overview

Hybrid Stepper Motors with holding Torque 0.012 Nm, continuous Rated Current 0.5 A and step Angle 1.8 °.

Key Specifications

PARAMETER	VALUE	UNIT
Holding Torque	0.012	Nm
Continuous Rated Current	0.5	A
Step Angle	1.8	°
Body Length	28	mm
Weight	0.06	kg
Temperature Rise	80	°C
Number of Phases	2	
Phase Resistance	6 ±10%	Ω
Insulation Class	B	

Technical Specifications

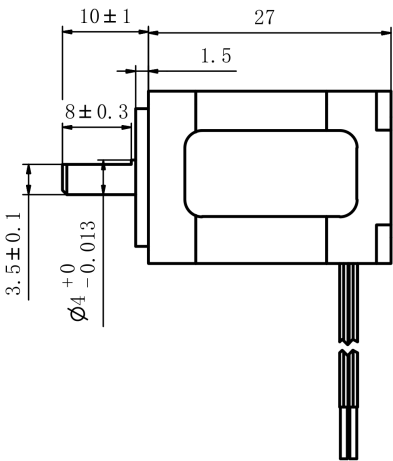
PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Holding Torque	0.012	Nm	
ELECTRICAL			
Continuous Rated Current	0.5	A	
Step Angle	1.8	°	
Temperature Rise	80	°C	
Number of Phases	2		
Phase Resistance	6 ±10%	Ω	Measurement: 20 °C
Phase Inductance	1.5 ±20%	mH	Measurement: 1V, 1kHz
Insulation Class	B		
Insulation Resistance	100 (500 VDC)	MΩ	
MECHANICAL			
Body Length	28	mm	
Weight	0.06	kg	

Dimensional & Integration Overview

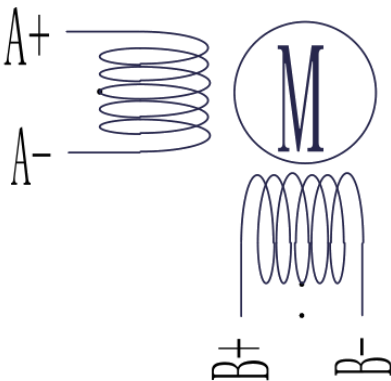
Mechanical Overview

PARAMETER	VALUE	UNIT
Body Length	28	mm
Weight	0.06	kg

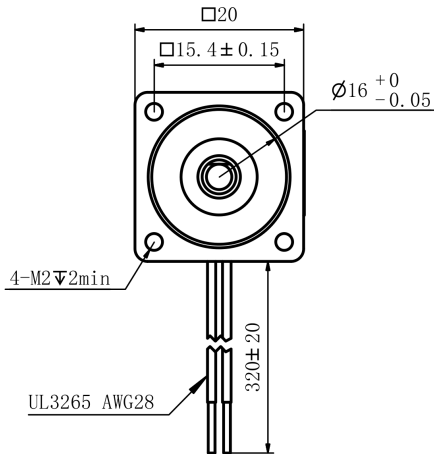
Dimensional Drawings



Mechanical View 1



Power Connector Pinout



Mechanical View 3

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	horizontal step length	10 ± 1 mm
	main body length	27 mm
	small step thickness	1.5 mm
	mounting section width	8 ± 0.3 mm
	mounting section height	3.5 ± 0.1 mm
	shaft diameter	diameter 4 mm, +0 / -0.013 mm
Mechanical View 3	Mounting flange square outer size	Square 20
	Mounting hole center spacing square size	Square 15.4 ± 0.15
	Central shaft/boss diameter tolerance	Diameter 16, upper deviation +0, lower deviation -0.05
	Mounting threaded hole specification and minimum depth	4 × M2 holes, depth/minimum depth 2 min

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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.