

PRODUCT DATASHEET

ES-ST-11H2045-100-4BL

Hybrid Stepper Motors

Hybrid Stepper Motors | 28 mm Hybrid Stepper Motor Series - ES-ST-HY03

Product Overview

Hybrid Stepper Motors with holding Torque 0.1 Nm, continuous Rated Current 1 A and step Angle 1.8 °.

Key Specifications

PARAMETER	VALUE	UNIT
Holding Torque	0.1	Nm
Continuous Rated Current	1	A
Step Angle	1.8	°
Body Length	45	mm
Weight	0.2	kg
Temperature Rise	80	°C
Number of Phases	2	
Phase Resistance	4.1 ±10%	Ω
Insulation Class	B	

Technical Specifications

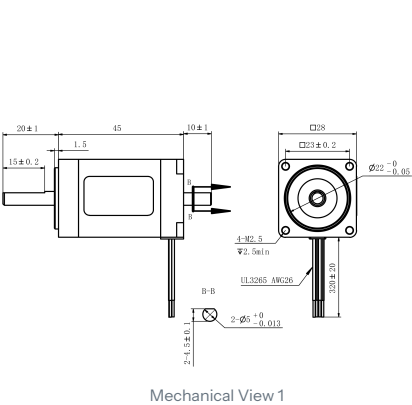
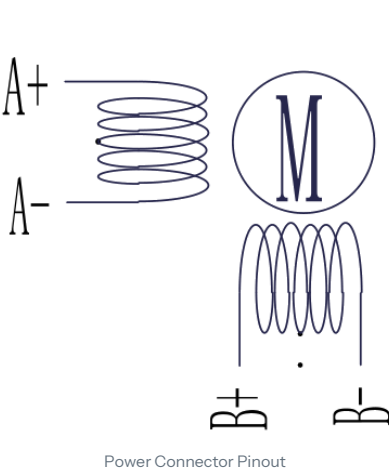
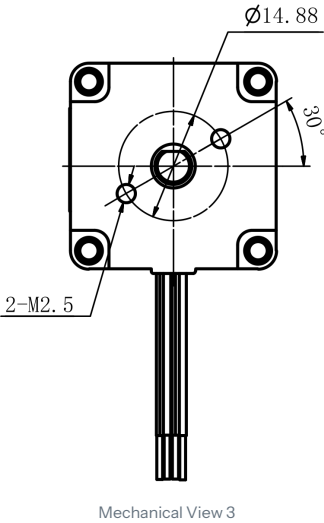
PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Holding Torque	0.1	Nm	
ELECTRICAL			
Continuous Rated Current	1	A	
Step Angle	1.8	°	
Temperature Rise	80	°C	
Number of Phases	2		
Phase Resistance	4.1 ±10%	Ω	Measurement: 20 °C
Phase Inductance	4 ±20%	mH	Measurement: 1V, 1kHz
Insulation Class	B		
Insulation Resistance	100 (500 VDC)	MΩ	
MECHANICAL			
Body Length	45	mm	
Weight	0.2	kg	

Dimensional & Integration Overview

Mechanical Overview

PARAMETER	VALUE	UNIT
Body Length	45	mm
Weight	0.2	kg

Dimensional Drawings



2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Motor body axial length	45
	Flange square outside size	Square 28
	Front shaft extension length	20 ±1
	Shaft shoulder or step length	1.5
	Mounting hole center square pitch	Square 23 ±0.2
	Shaft end effective length	15 ±0.2
	Center pilot diameter	Diameter 22 +0/-0.05
	Section or view marker B	B
	Mounting threaded hole quantity and size	4 × M2.5 threaded holes
	Minimum thread depth	Minimum depth 2.5
	Section view B-B label	Section B-B
	Cross hole quantity and diameter	2 holes, diameter 5 +0/-0.013
Mechanical View 3	Central shaft diameter	Diameter 14.88
	Mounting hole angular spacing	30 degrees
	Threaded mounting holes quantity and size	2 × M2.5 threaded holes

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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.