

PRODUCT DATASHEET

ES-ST-24H2085-500-4BL

Hybrid Stepper Motors

Hybrid Stepper Motors | 60 mm Hybrid Stepper Motor Series - ES-ST-HY07

Product Overview

Hybrid Stepper Motors with holding Torque 3 Nm, continuous Rated Current 5 A and step Angle 1.8 °.

Key Specifications

PARAMETER	VALUE	UNIT
Holding Torque	3	Nm
Continuous Rated Current	5	A
Step Angle	1.8	°
Body Length	85	mm
Weight	1.3	kg
Temperature Rise	80	°C
Number of Phases	2	
Phase Resistance	0.42 ±10%	Ω
Insulation Class	B	

Technical Specifications

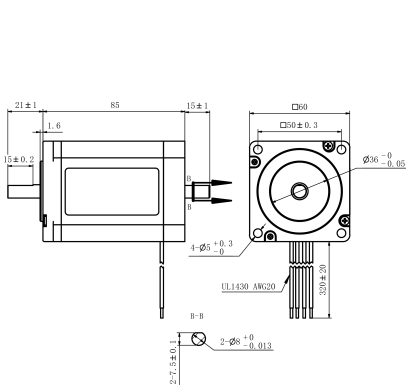
PARAMETER	SPECIFICATION	UNIT	NOTES
PERFORMANCE			
Holding Torque	3	Nm	
ELECTRICAL			
Continuous Rated Current	5	A	
Step Angle	1.8	°	
Temperature Rise	80	°C	
Number of Phases	2		
Phase Resistance	0.42 ±10%	Ω	Measurement: 20 °C
Phase Inductance	1.8 ±20%	mH	Measurement: 1V, 1kHz
Insulation Class	B		
Insulation Resistance	100 (500 VDC)	MΩ	
MECHANICAL			
Body Length	85	mm	
Weight	1.3	kg	

Dimensional & Integration Overview

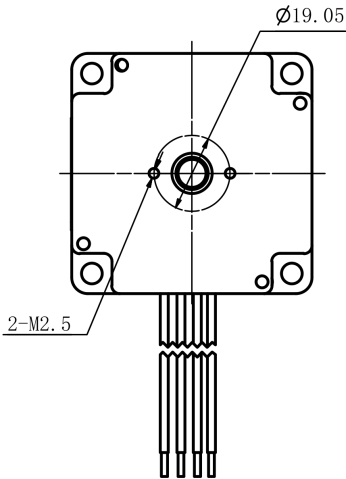
Mechanical Overview

PARAMETER	VALUE	UNIT
Body Length	85	mm
Weight	1.3	kg

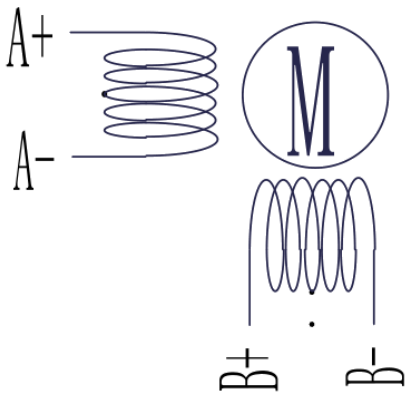
Dimensional Drawings



Mechanical View 1



Mechanical View 2



Mechanical View 3

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Motor width	21±1 mm
	Motor body length	85 mm
	Output shaft protrusion length	15±1 mm
	Mounting flange outer dimension	60×60 mm square
	Mounting flange inner dimension	50±0.3 mm square
	Flange step depth	1.6 mm
	Output shaft diameter and tolerance	Ø36 -0/-0.05 mm
	Side boss length	15±0.2 mm
	Datum reference B	Datum B
	Mounting hole diameter and tolerance	4 holes, Ø5 +0.3/0 mm
	Section view label	Section B-B
	Shaft keyway hole diameter and tolerance	2 holes, Ø8 +0/-0.013 mm
	Keyway position dimension	2-7.5±0.1 mm
Mechanical View 2	Shaft diameter	Ø19.05
	Datum identifier	Datum C
	Mounting hole specification	2×M2.5

2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 3	Motor identifier	M
	Identifier B	B
	Identifier H	H

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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.