

PRODUCT DATASHEET

ES-DC-SL06-M002

Slotted Series

Slotted Series | ES-DC-SL06 57 mm Slotted Brushless DC Motor Series

Product Overview

Slotted Series with rated Torque 0.22 N·m, rated Speed 3000 rpm and continuous Rated Output Power 69.1 W.

Key Specifications

PARAMETER	VALUE	UNIT
Rated Torque	0.22	N·m
Rated Speed	3000	rpm
Continuous Rated Output Power	69.1	W
Rated Voltage	24	V
Continuous Rated Current	4.1	A
Instantaneous Maximum Current	12.3	A
Body Length	63	mm
Dielectric strength	500VAC/1KHz/1mA/1s	
Duty Cycle	S1	

Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Rated Torque	0.22	Nm
Rated Speed	3000	rpm
Continuous Rated Output Power	69.1	W
No-Load Rotational Speed	4000	rpm
Motor efficiency	80	%
ELECTRICAL		
Rated Voltage	24	V
Continuous Rated Current	4.1	A
Instantaneous Maximum Current	12.3	A
Dielectric strength	500VAC/1KHz/1mA/1s	
Insulation Resistance	100 MOhm 20C	
Duty Cycle	S1	
Rotational Back-EMF Constant	5.66	V/krpm
No-load Current	0.5	A

Technical Specifications

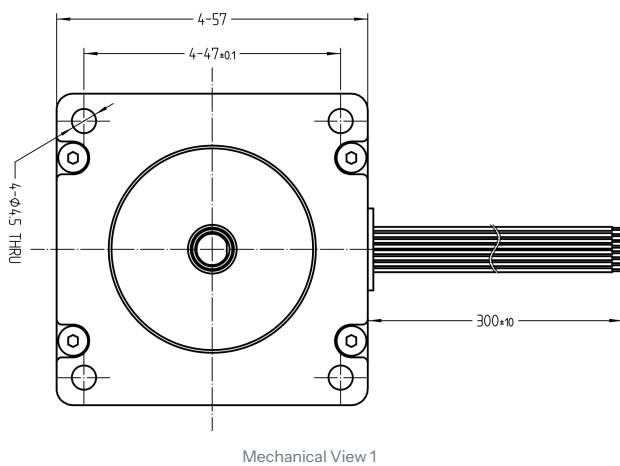
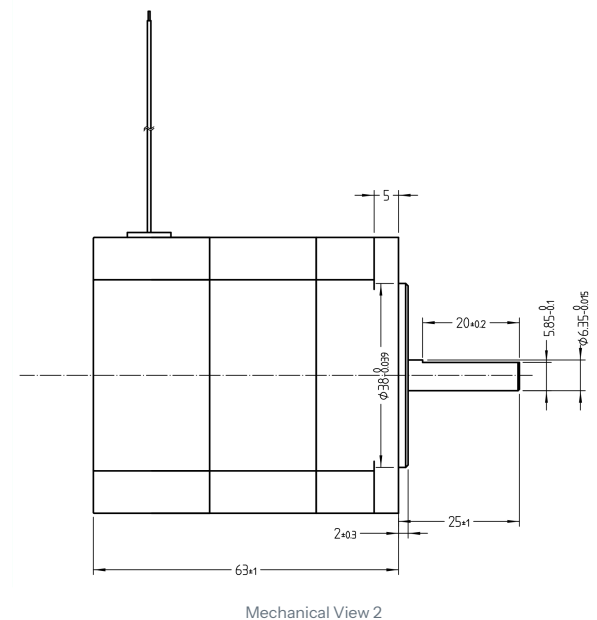
PARAMETER	SPECIFICATION	UNIT
ELECTRICAL		
Line resistance	0.473	Ω
Line inductance	0.357	mH
THERMAL		
Housing-to-Ambient Thermal Resistance	0.27	K/W
Maximum Winding Temperature	77.4	$^{\circ}\text{C}$
MECHANICAL		
Body Length	63	mm
Housing Type	No housing	
Frame size	57	mm
Housing shape	Square	
Commutation angle	120	$^{\circ}$
Motor Weight	0.65	g
ENVIRONMENTAL		
Noise	≤ 50	dB
Ambient temperature	29	$^{\circ}\text{C}$

Dimensional & Integration Overview

Mechanical Overview

PARAMETER	VALUE	UNIT
Body Length	63	mm
Housing Type	No housing	
Frame size	57	mm
Housing shape	Square	
Commutation angle	120	°
Motor Weight	0.65	g

Dimensional Drawings



2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Mounting hole spacing - overall width	57 mm (4-hole pattern width)
	Mounting hole spacing - center-to-center distance	47±0.1 mm (4-hole pattern, center distance)
	Mounting through-hole diameter	4 × Φ 4.5 mm through holes
	Motor shaft extension length	300±10 mm
Mechanical View 2	Shaft extension height	5
	Shaft extension length	20±0.2
	Shaft shoulder length	5.85-0.1
	Output shaft diameter	Φ 6.35-0.015
	Flange diameter	Φ 38 0/-0.039
	End protrusion length	25±1
	Bottom protrusion height	2±0.3
	Motor overall length	63±1

[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.