

PRODUCT DATASHEET

ES-FM-H01-OD060-TOP7NM-001

Frameless Torque Motor

Hollow Shaft Frameless Torque Motors | ES-FM-H01-OD060 Hollow-Shaft 60 mm Frameless Torque Motor Series

Product Overview

Frameless Torque Motor with rated Speed $3600 \pm 10\%$ / 3600 rpm, continuous Rated Output Power 264 W and lead Wire Length 100 mm, no connector.

Typical Applications

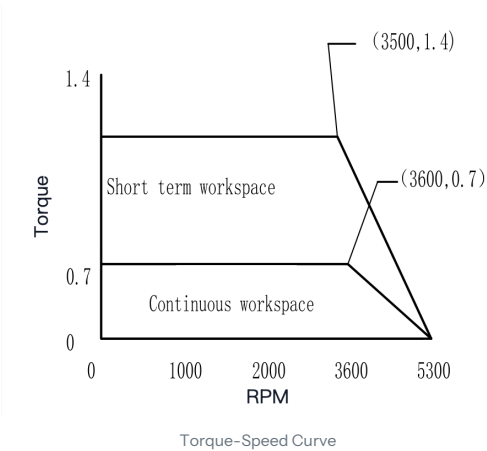
Robot joints | Direct-drive rotary axes | Integrated actuator modules

Configuration Context

Temperature sensor: NTC

Key Specifications

PARAMETER	VALUE	UNIT
Rated Speed	$3600 \pm 10\%$ / 3600	rpm
Continuous Rated Output Power	264	W
Lead Wire Length	100 mm, no connector	
Line-to-Line Inductance	$0.3 \pm 20\%$ / 0.3	mH
Line-to-Line Resistance	$0.3 \pm 10\%$ / 0.3	Ω
Maximum Rotational Speed	$5300 \pm 10\%$	rpm
Maximum Speed	5300	rpm
Motor Outer Diameter	60	mm
Motor Version	Version P	



Technical Specifications

PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Rated Speed	$3600 \pm 10\%$ / 3600	rpm
Continuous Rated Output Power	264	W
Rated Power	264	W
Maximum Rotational Speed	$5300 \pm 10\%$	rpm
ELECTRICAL		
Line-to-Line Inductance	$0.3 \pm 20\%$ / 0.3	mH
Line-to-Line Resistance	$0.3 \pm 10\%$ / 0.3	Ω
Operating Supply Voltage	48	V DC
Rated Current	8.35	A

Technical Specifications

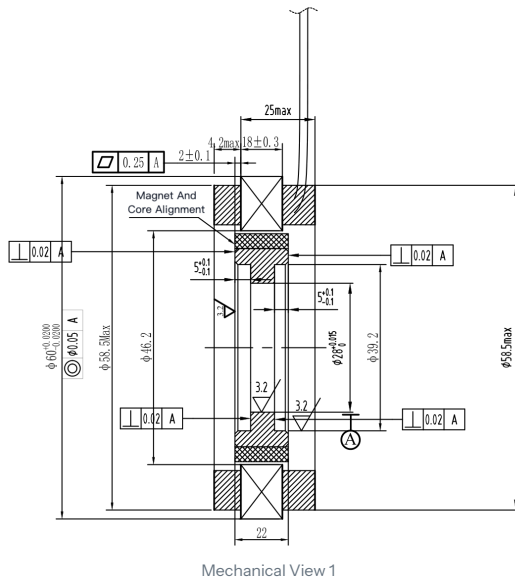
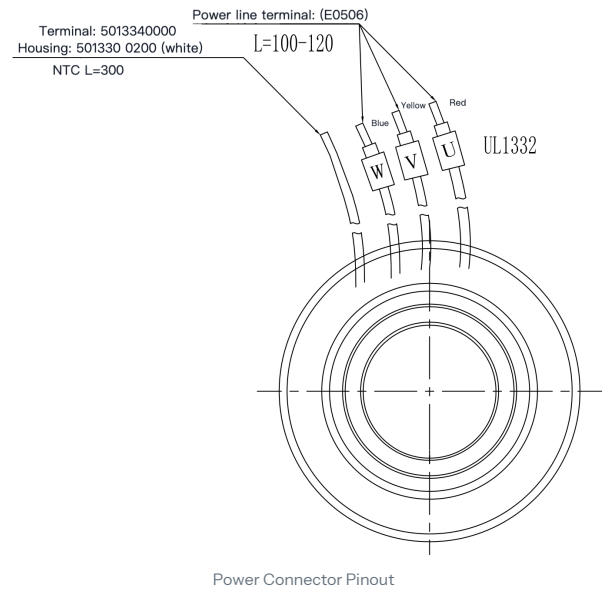
PARAMETER	SPECIFICATION	UNIT
THERMAL		
Temperature Sensor	NTC	
MECHANICAL		
Motor Outer Diameter	60	mm
Rotor Diameter	28	mm
Stator Core Height	18	mm
INTEGRATION		
Lead Wire Length	100 mm, no connector	
CONFIGURATION		
Motor Version	Version P	
ADDITIONAL SPECIFICATIONS		
Maximum Speed	5300	rpm

Dimensional & Integration Overview

Mechanical Overview

PARAMETER	VALUE	UNIT
Motor Outer Diameter	60	mm
Rotor Diameter	28	mm
Stator Core Height	18	mm
Lead Wire Length	100 mm, no connector	

Dimensional Drawings



2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Top maximum projection width	25 max
	Upper local width	18 ±0.3
	Upper step offset	2 ±0.1
	Upper geometric tolerance relative to datum A	Geometric tolerance 0.25 relative to datum A
	Magnet and core alignment note	Magnet and core alignment
	Left-side perpendicularity tolerance to datum A	Perpendicularity 0.02 to datum A
	Upper right perpendicularity tolerance to datum A	
	Local slot width	5 +0.1/-0.1
	Outer diameter	Diameter 60 +0.0200/-0.0200
	Datum A related geometric tolerance	Diameter tolerance zone 0.05 relative to datum A
	Left inner or step diameter	Diameter 46.2
	Maximum outer diameter	Diameter 58.5 max
	Shaft bore or journal diameter	Diameter 28 +0.015/0
	Right step diameter	Diameter 39.2
	Surface roughness	Ra 3.2
	Bottom width	22

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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.