

PRODUCT DATASHEET

ES-FM-H01-OD115-T3P5NM-001

Frameless Torque Motor

Hollow Shaft Frameless Torque Motors | ES-FM-H01-OD115 Hollow-Shaft 115 mm Frameless Torque Motor Series

Product Overview

Frameless Torque Motor with rated Speed 3200 rpm, continuous Rated Output Power 1173 W and lead Wire Length 100 mm, no connector.

Typical Applications

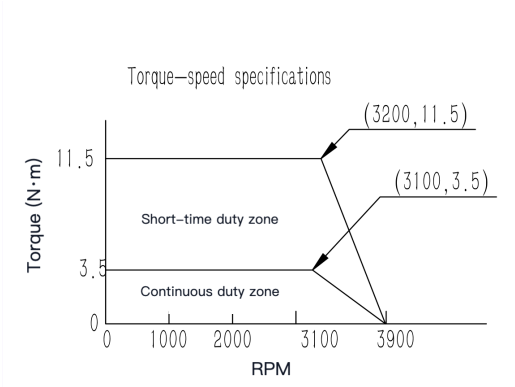
Robot joints | Direct-drive rotary axes | Integrated actuator modules

Configuration Context

Temperature sensor: NTC

Key Specifications

PARAMETER	VALUE	UNIT
Rated Speed	3200	rpm
Continuous Rated Output Power	1173	W
Lead Wire Length	100 mm, no connector	
Line-to-Line Inductance	0.074 ± 20% / 0.074	mH
Line-to-Line Resistance	0.022 ± 10% / 0.022	Ω
Maximum Rotational Speed	3900	rpm
Motor Outer Diameter	115	mm
Motor Version	Version P	
Operating Supply Voltage	48	V DC



Torque-Speed Curve

Technical Specifications

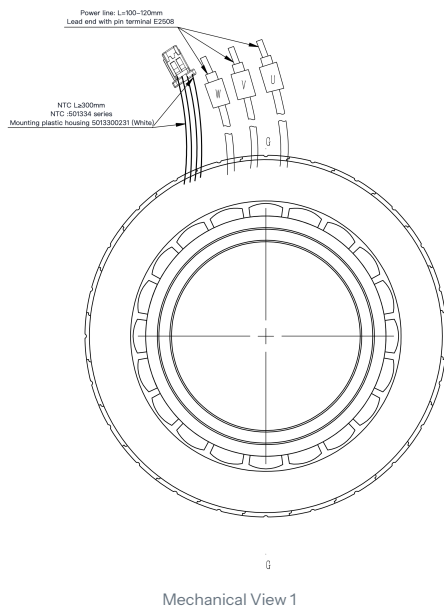
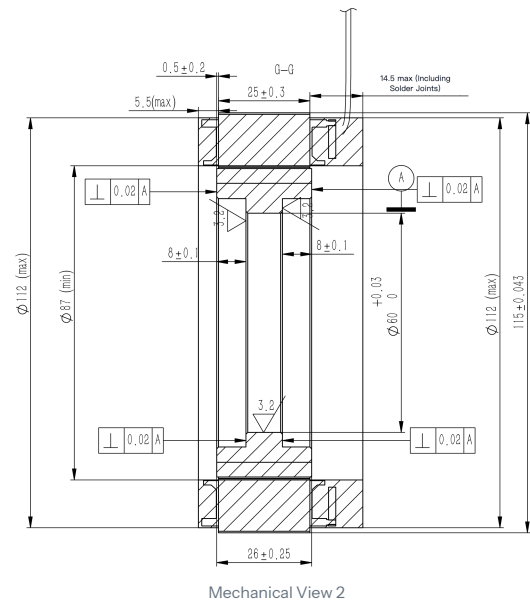
PARAMETER	SPECIFICATION	UNIT
PERFORMANCE		
Rated Speed	3200	rpm
Continuous Rated Output Power	1173	W
Maximum Rotational Speed	3900	rpm
ELECTRICAL		
Line-to-Line Inductance	$0.074 \pm 20\%$ / 0.074	mH
Line-to-Line Resistance	$0.022 \pm 10\%$ / 0.022	Ω
Operating Supply Voltage	48	V DC
Rated Current	30	A
THERMAL		
Temperature Sensor	NTC	
MECHANICAL		
Motor Outer Diameter	115	mm
Rotor Diameter	60	mm
Stator Core Height	25	mm
INTEGRATION		
Lead Wire Length	100 mm, no connector	
CONFIGURATION		
Motor Version	Version P	

Dimensional & Integration Overview

Mechanical Overview

PARAMETER	VALUE	UNIT
Motor Outer Diameter	115	mm
Rotor Diameter	60	mm
Stator Core Height	25	mm
Lead Wire Length	100 mm, no connector	

Dimensional Drawings



2D Drawing Dimensions & Callouts

VIEW	FIELD	VALUE
Mechanical View 1	Mounting housing part number	5013300231 (White)
	Wire identifier	G
Mechanical View 2	Upper mounting step width	25 $\pm$ 0.3
	Maximum edge clearance	5.5 max
	Upper right face perpendicularity to datum A	Perpendicularity 0.02 to datum A
	Upper left face perpendicularity to datum A	
	Left internal slot width	8 $\pm$ 0.1
	Left maximum outer diameter	Diameter 112 max
	Right maximum outer diameter	
	Central bore diameter tolerance	Diameter 60 +0.03/0
	Datum A	
	Surface roughness value	Surface roughness Ra 3.2
	Lower left face perpendicularity to datum A	Perpendicularity 0.02 to datum A
	Lower right face perpendicularity to datum A	
	Bottom interface width	26 $\pm$ 0.25
	Overall outside diameter tolerance	Diameter 115 $\pm$ 0.043
	Minimum inner diameter	Diameter 87 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.