

D	6	MECHANICAL PARAMETERS	
		FRAME SIZE	- F
		OVERALL LENGTH	in [mm] 3.69 [93.7]
		NOMINAL OD	in [mm] 1.50 [38.1]
C		MASS	lbm [kg] 1.10 [0.5]
		OPERATIONAL PARAMETERS	
		NOMINAL OPERATIONAL VOLTAGE	V _{bc} 28
		MAXIMUM ALLOWABLE CURRENT LIMIT	A _{bc} 4.5
B		NO LOAD SPEED	RPM 625
		STALL TORQUE	lbf-in [N · m] 13.7 [1.5]
		TORQUE LIMIT (10,000 CYCLE FATIGUE LIFE)	lbf-in [N · m] 13.7 [1.5]
		TORQUE LIMIT (1,000,000 CYCLE FATIGUE LIFE)	lbf-in [N · m] 4.7 [0.5]
A		OPERATIONAL TEMPERATURE RANGE	°C -55 TO 90
		SURVIVAL TEMPERATURE RANGE	°C -65 TO 150
		MOTOR WINDING PARAMETERS	
		NUMBER OF PHASES	- 3
		NUMBER OF POLE PAIRS	- 2
		WINDING CONFIGURATION	- REDUNDANT WYE WOUND
		ROTOR INERTIA	oz-in-s ² x10 ⁻³ [g · cm ²] 0.317 [22.4]
		BACK-EMF CONSTANT	V _{PEAK} /rad/s 0.038
		TORQUE CONSTANT	lbf-in/A _{PEAK} [N · m/A _{PEAK}] 0.34 [0.038]
		MOTOR CONSTANT	lbf-in/√W [N · m/√W] 0.23 [0.026]
		RESISTANCE (LINE-LINE)	Ω 1.6 - 2.7
		INDUCTANCE (LINE-LINE)	mH 0.5 - 0.8
		COMMUTATION SENSOR PARAMETERS	
		SENSOR TYPE	- BI-POLAR LATCHING HALL EFFECT SENSOR
		REDUNDANCY	- DUAL REDUNDANT
		SUPPLY VOLTAGE	V _{bc} 4.5 - 24
		GEARBOX PARAMETERS	
		GEARBOX TYPE	- PLANETARY
		GEAR REDUCTION	- 10.7:1 (32:3)
		NUMBER OF STAGES	- 1
		TYPICAL BACKLASH	DEG 1.25

NOTES;

1. PERFORMANCE AND TEMPERATURE OPERATIONAL ENVELOPES ARE DEPENDENT ON DUTY CYCLE, THERMAL BOUNDARY CONDITIONS, MOTOR POWER LOSSES AND DERATING REQUIREMENTS OF THE APPLICATION. CONTACT HONEYBEE ROBOTICS FOR EVALUATION UNDER SPECIFIC CONDITIONS.
2. STEP FILE ATTACHED TO PDF.

