

MECHANICAL PARAMETERS		
FRAME SIZE	-	C
OVERALL LENGTH	in [mm]	3.15 [80.1]
NOMINAL OD	in [mm]	1.00 [25.4]
MASS	lbm [kg]	0.45 [0.2]
OPERATIONAL PARAMETERS		
DRIVE TYPE	-	2 PHASE - BIPOLAR
PHASES	#	2
NUMBER OF POLE PAIRS	-	3
FULL STEP SIZE	DEG [RAD]	0.83 [0.014]
NO LOAD RESPONSE RATE FULL STEP MODE	PULSES/S	299
	DEG/S [RAD/S]	250 [4.36]
TORQUE AT LOW PULSE RATE	lbf-in [N·m]	2.38 [0.27]
POWERED HOLDING TORQUE	lbf-in [N·m]	4.75 [0.71]
UNPOWERED HOLDING	lbf-in [N·m]	1.2 [0.135]
OPERATING TEMPERATURE RANGE	°C	-60 TO 100
SURVIVAL TEMPERATURE RANGE	°C	-80 TO 200
MOTOR WINDING PARAMETERS		
ROTOR INERTIA	oz-in-s ² x10 ⁻³ [g·cm ²]	0.038 [2.71]
PHASE RESISTANCE	Ω	207-253
PHASE INDUCTANCE	mH	30
GEARBOX PARAMETERS		
GEARBOX TYPE	-	PLANETARY
REDUNDANCY	-	REDUNDANT
GEAR REDUCTION	-	36:1
NUMBER OF STAGES	-	2
TYPICAL BACKLASH	DEG	1.25

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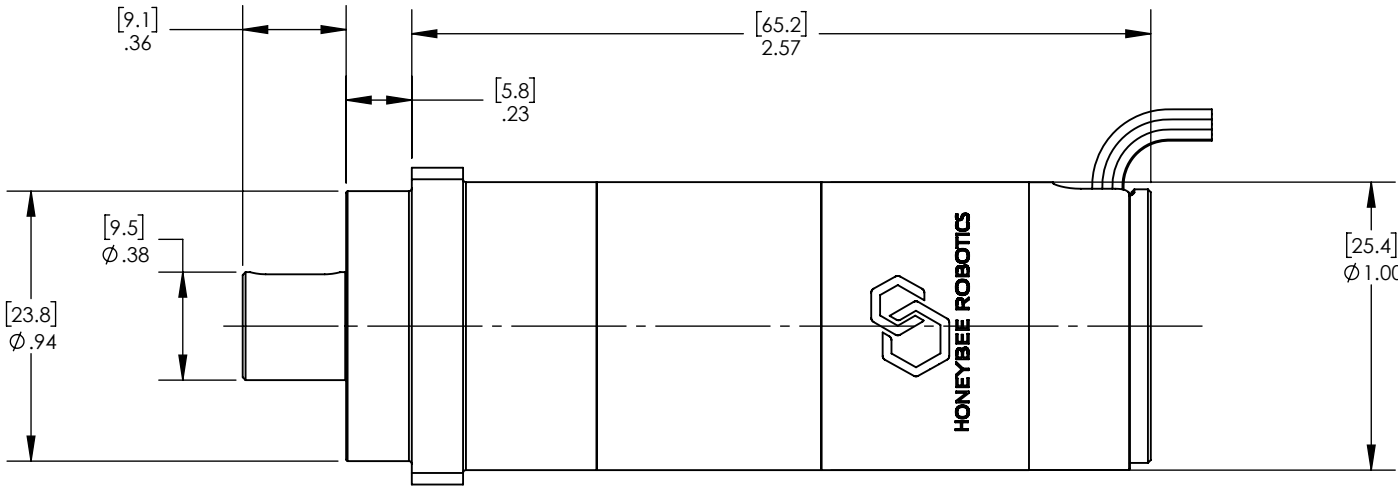
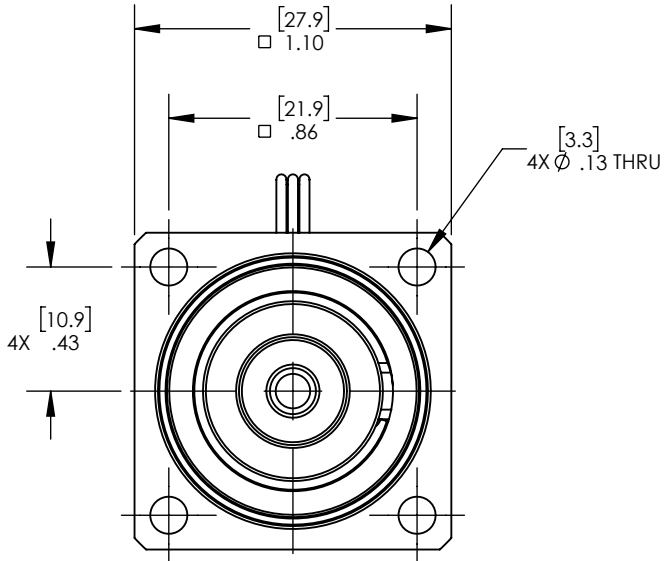
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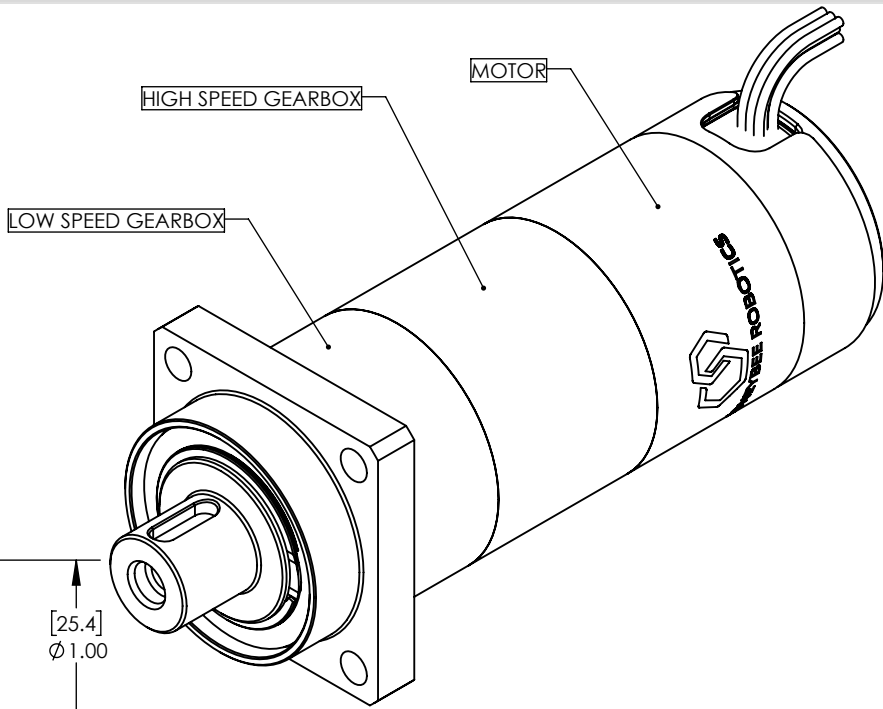
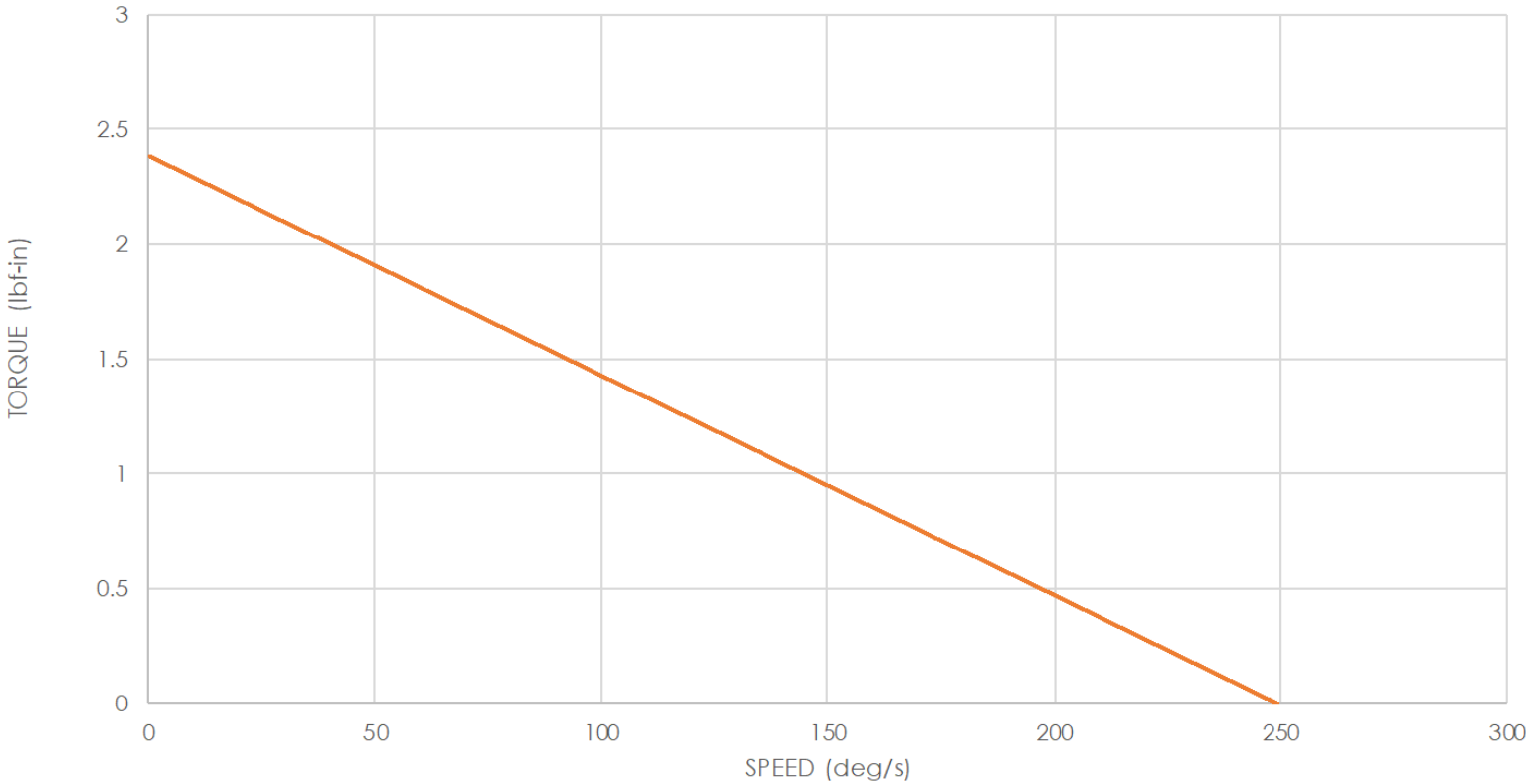
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NOTES:

1. ASSUMING 1:1 INERTIA FACTOR (REFLECTED DRIVEN INERTIA/ROTOR INERTIA). CONTACT HBR FOR INERTIA FACTORED RESPONSE RATE.
2. 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.
3. STEP FILE ATTACHED TO PDF.



PERFORMANCE ENVELOPE AT 28V WITH 1:1 INERTIA FACTOR (AMBIENT)



UNLESS OTHERWISE NOTED: DIMENSIONS ARE IN INCHES (CRITICAL DIMENSION) (ALL FEATURE CONTROL FRAME) INTERPRET DRAWING PER ASME Y14.5-2018 LINEAR TOLERANCES: .X ±.05 .XX ±.01 .XXX ±.005 XXXX CRITICAL ANGULAR TOLERANCES: ±0.5 DEGREES		SURFACE ROUGHNESS 63/ MICROINCHES OR BETTER	
 HONEYBEE ROBOTICS		PROJECT TITLE STANDARD PRODUCT DATA SHEETS	
PART NUMBER 560-101-0051		REVISION B	
PART DESCRIPTION C-SIZE STEPPER, 2-PHASE REDUNDANT, 36:1			
CAGE CODE 8DSS5		SHEET SIZE B	SHEET 1 OF 1

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