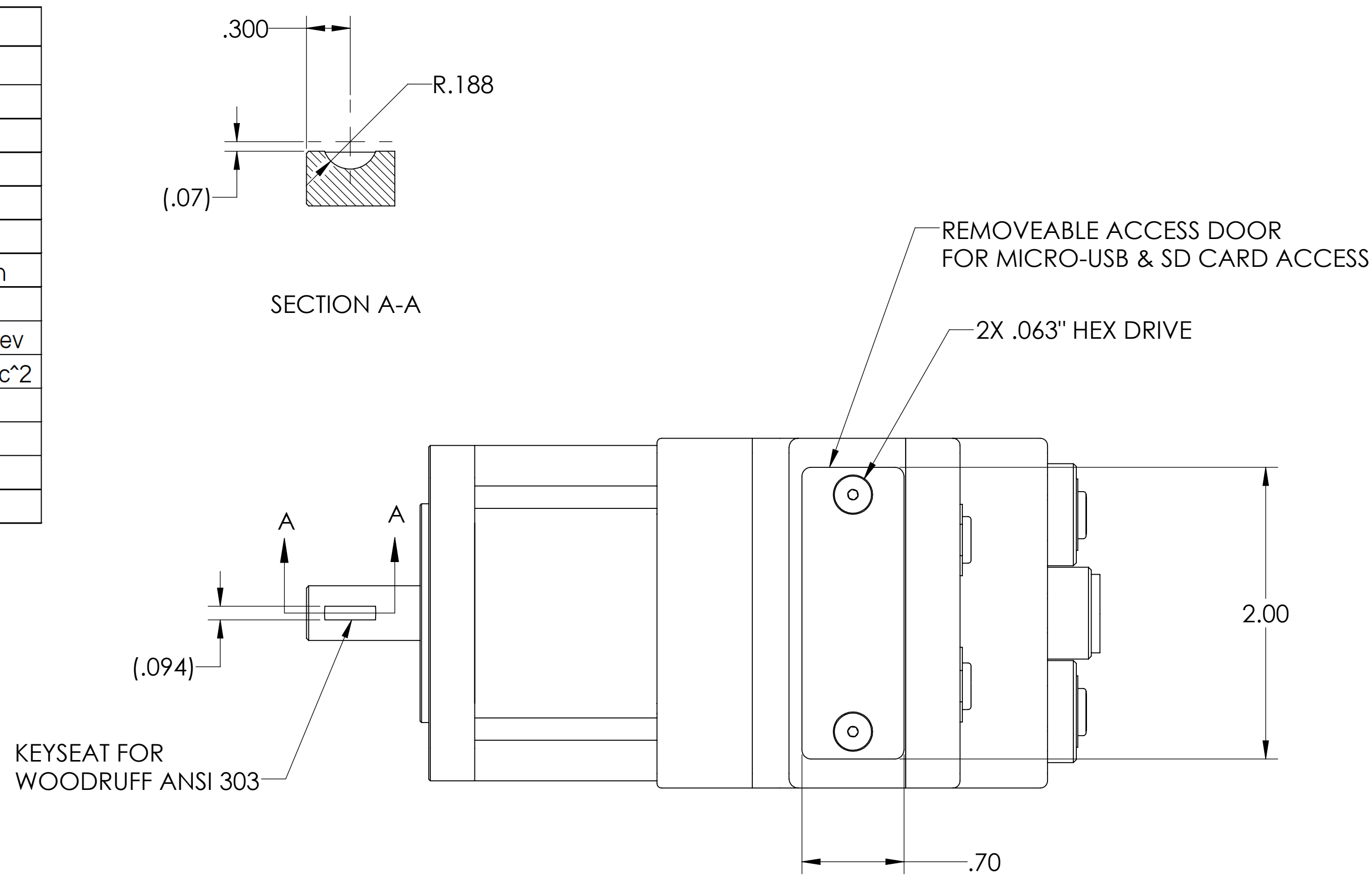


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REVISION INFORMATION			
REV.	ECN	DESCRIPTION	DATE
A	SC001705	PRODUCTION RELEASE	07/15/2019

Motor Performance at 25°C		
Performance	Value	Units
Continuous Torque @48V	113	oz-in
Peak Torque	133	oz-in
Nominal Continuous Power	210	Watts
Nominal Peak Power	255	Watts
No Load Speed	3900	RPM
Voltage Constant	9.08	V/krpm
Winding Resistance	0.743	Ohms
Encoder Resolution	4000	counts/rev
Rotor Inertia	1.03	oz-in-sec <sup>2</sup>
Weight	2.20	lb
Shaft Diameter	0.375	in
Shaft, Radial Load	15	lb
Shaft, Axial Thrust Load	3	lb

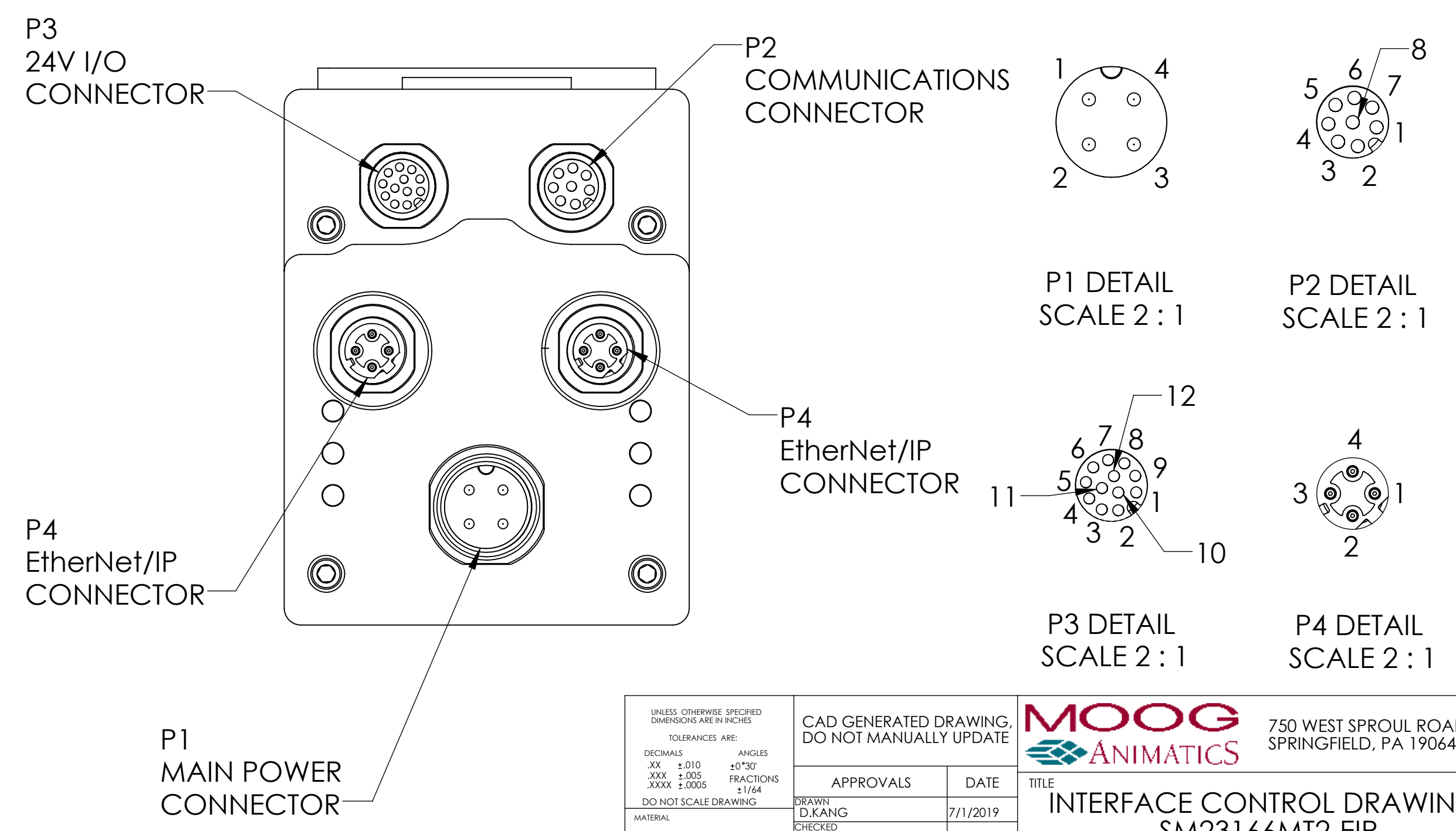
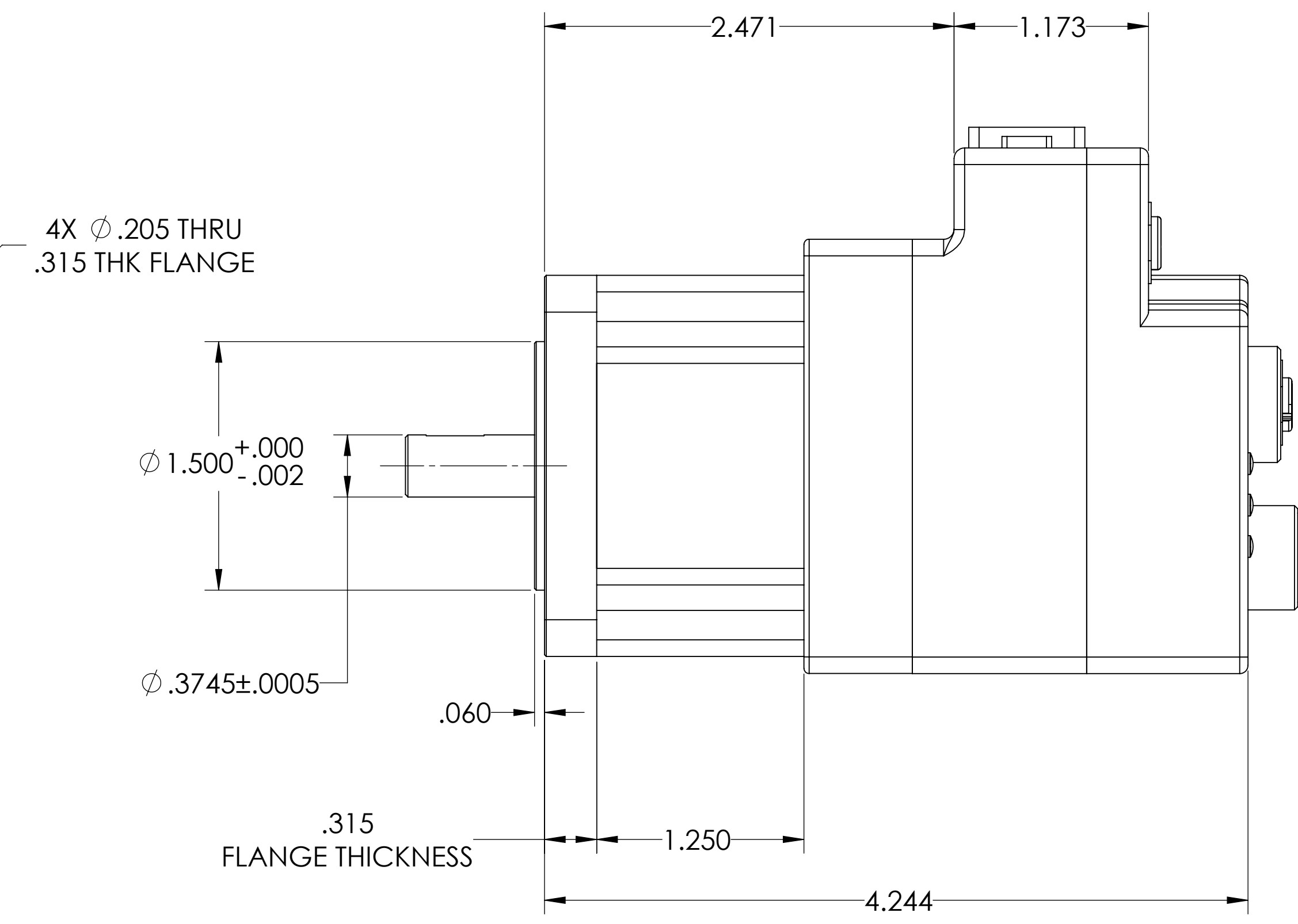
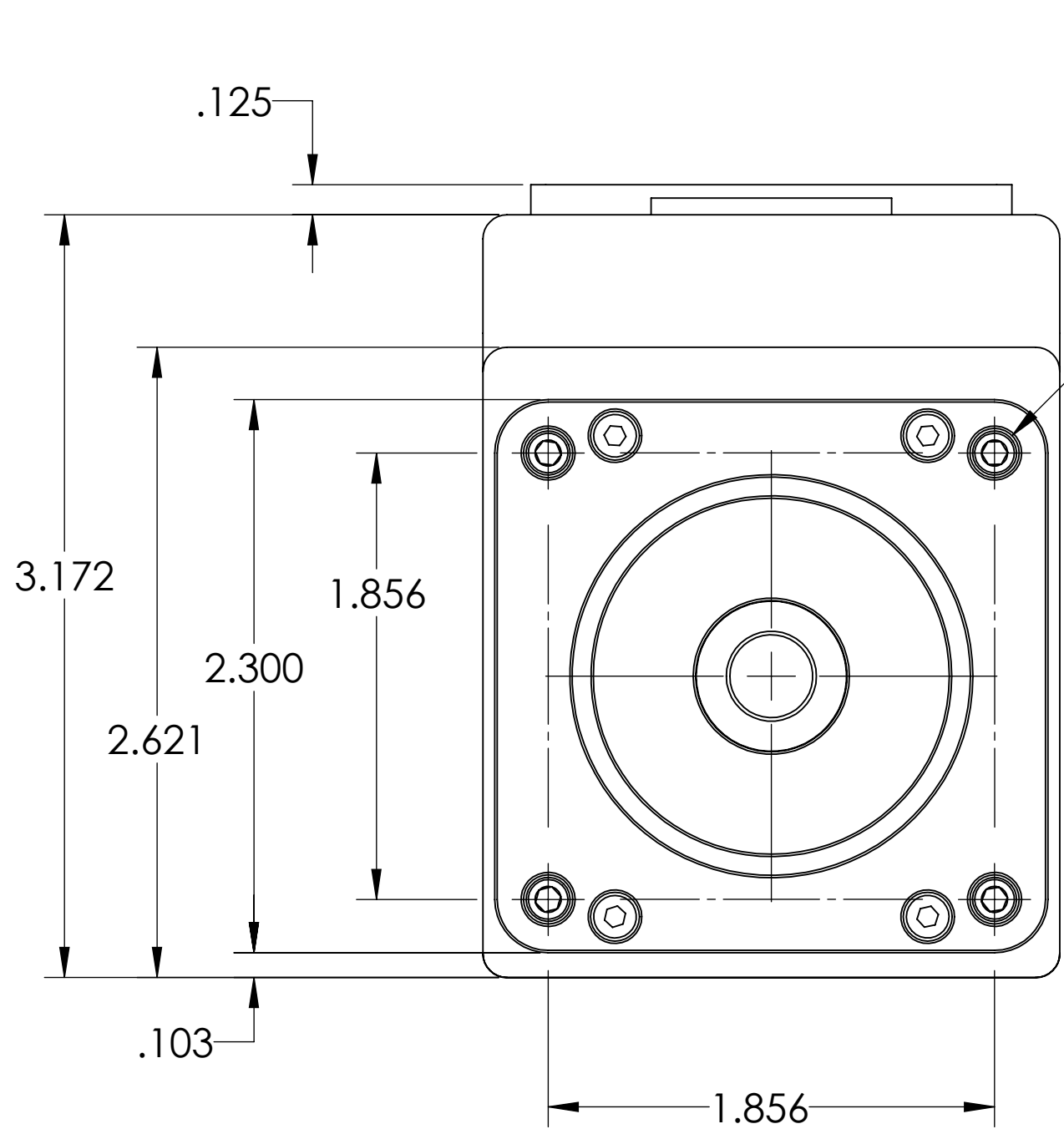


P1 Main Power Connector			
Pin	Description	Specifications	Notes
1	Control Power In	+24V (±20%), 32V Max.	Also Supplies I/O
2	Chassis		
3	Control, Com, I/O and Amplifier Ground	Common Ground	Nonisolated
4	Amplifier Power In	+24V Min., 48V Max.	Powers Amplifier Only

P2 Communications Connector			
Pin	Description	Specifications	Notes
1	Control, Com, I/O and Amp Ground	Common Ground	Nonisolated
2	RS-485 B, Com ch. 0	115.2 Kbaud Max.	
3	RS-485 A, Com ch. 0	115.2 Kbaud Max.	
4	Encoder A+ Input/Output	125 KHz Individual Line Frequency	Configurable as Encoder Output
5	Encoder B- Input/Output	125 KHz Individual Line Frequency	Configurable as Encoder Output
6	Encoder A- Input/Output	125 KHz Individual Line Frequency	Configurable as Encoder Output
7	+5V Out	50 mA Max.	
8	Encoder B+ Input/Output	125 KHz Individual Line Frequency	Configurable as Encoder Output

P3 24V I/O Connector			
Pin	Description	Specifications	Notes
1	IN0 GP, Discrete or Analog Input	Inp Impedance > 10 kohm	For Inputs:
2	IN1 GP, Discrete or Analog Input	Inp Impedance > 10 kohm	7 Configurable Inputs
3	IN2 Pos Limit or GP	Inp Impedance > 10 kohm	Low Lvl Thld: 3.6V Max.
4	IN3 Neg Limit or GP	Inp Impedance > 10 kohm	High Lvl Thld: 5.0V Min.
5	IN/OUT4 GP or Ext. Enc. Index Capture	Inp Impedance > 10 kohm	Inp Hysteresis: 1.0V Min.
6	IN/OUT5 GP or Int. Enc. Index Capture	Inp Impedance > 10 kohm	Analog Input Scale: 10V FS
7	IN6 GP, G Cmd	Inp Impedance > 10 kohm	
8	IN7 Drive Enable	Inp Impedance > 10 kohm	
9	OUT8 Brake or GP	250 mAmps Max.	For Outputs: Do Not Exceed
10	OUT9 NOT FAULT	250 mAmps Max.	500 mAmps Combined
11	+24 VDC Out (Supplied from P1, Pin 1)	125V Min., 23V Max. Load 2 Amps Max.	
12	Ground Common	Common Ground	Nonisolated

P4 EtherNet/IP Connectors			
Pin	Description	Specifications	Notes
1	+TX		
2	+RX		
3	-TX		
4	-RX		



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE				750 WEST SPROUL ROAD SPRINGFIELD, PA 19064	
DECIMALS	ANGLES	APPROVALS	DATE	TITLE			
XXX ±.010	+0°30'	DRAWN	7/1/2019	INTERFACE CONTROL DRAWING, SM23166MT2-EIP			
XXXX ±.005	FRACTIONS	DWG. NO.		CAGE CODE			
DO NOT SCALE DRAWING	1/164	1K426		MFG ENGR			
		SCALE	3:2	REV.			
				A			

Item ID: SM23166MT2-EIP Revision: A Name: SMART MOTOR, SM23, MT2, EIP  
Released Date: 23-Jul-2019 10:52