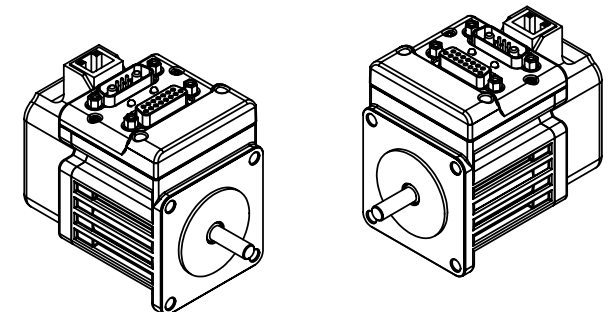
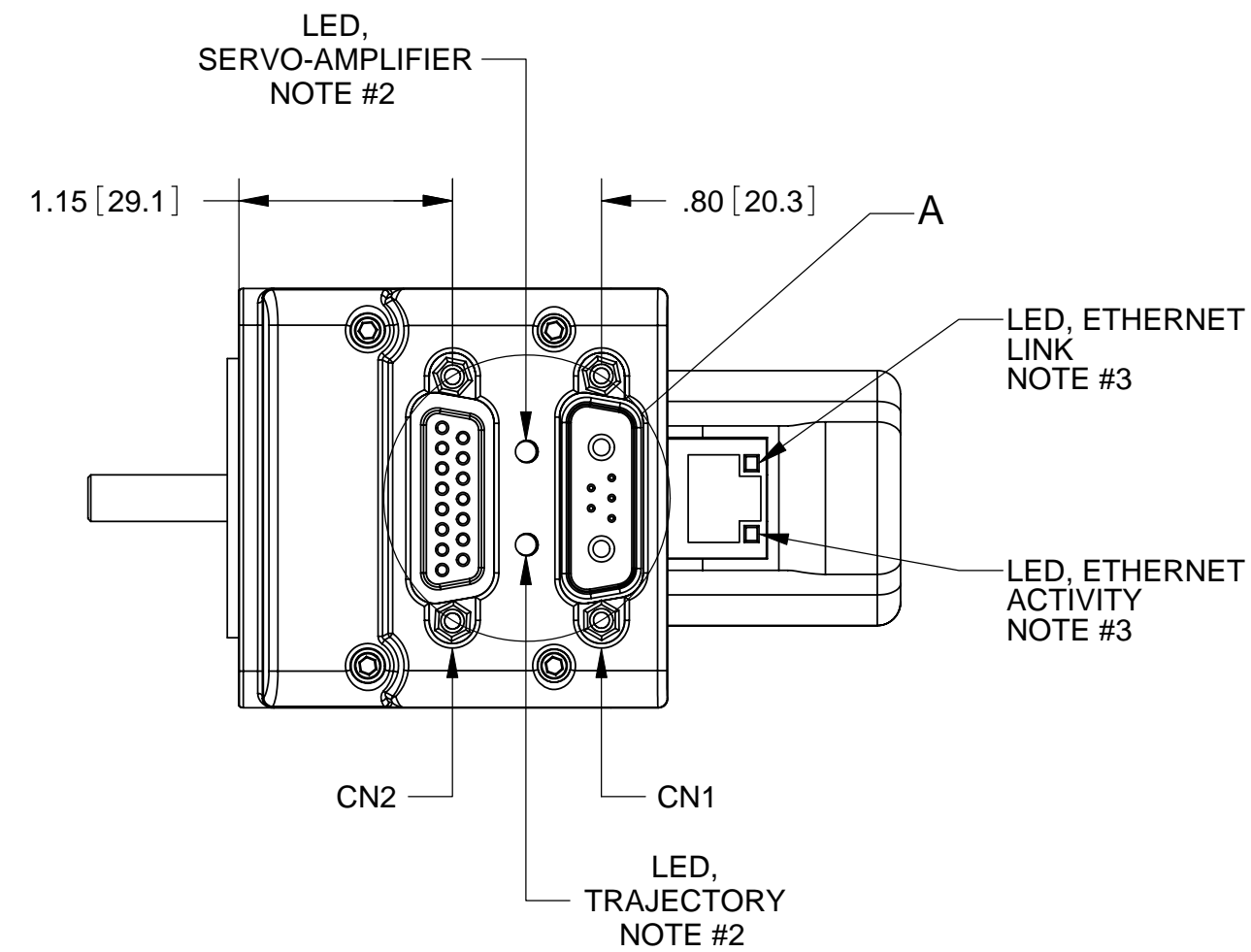


REV.	DESCRIPTION	ZONE	ECO	DATE	APPROVED
1	DRAWING RELEASE			04/30/2009	M. TRAN

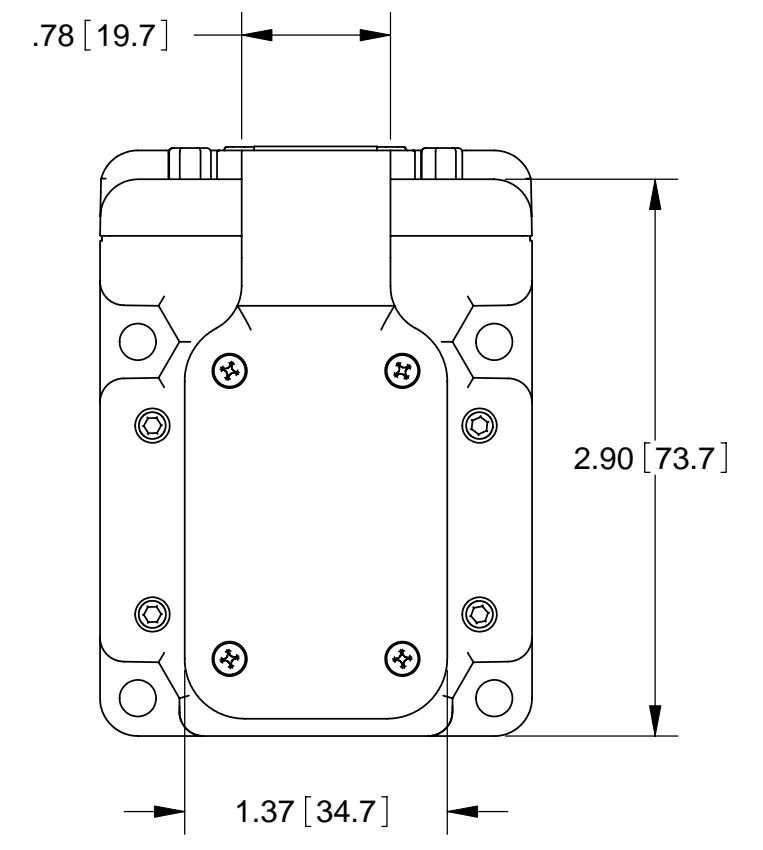
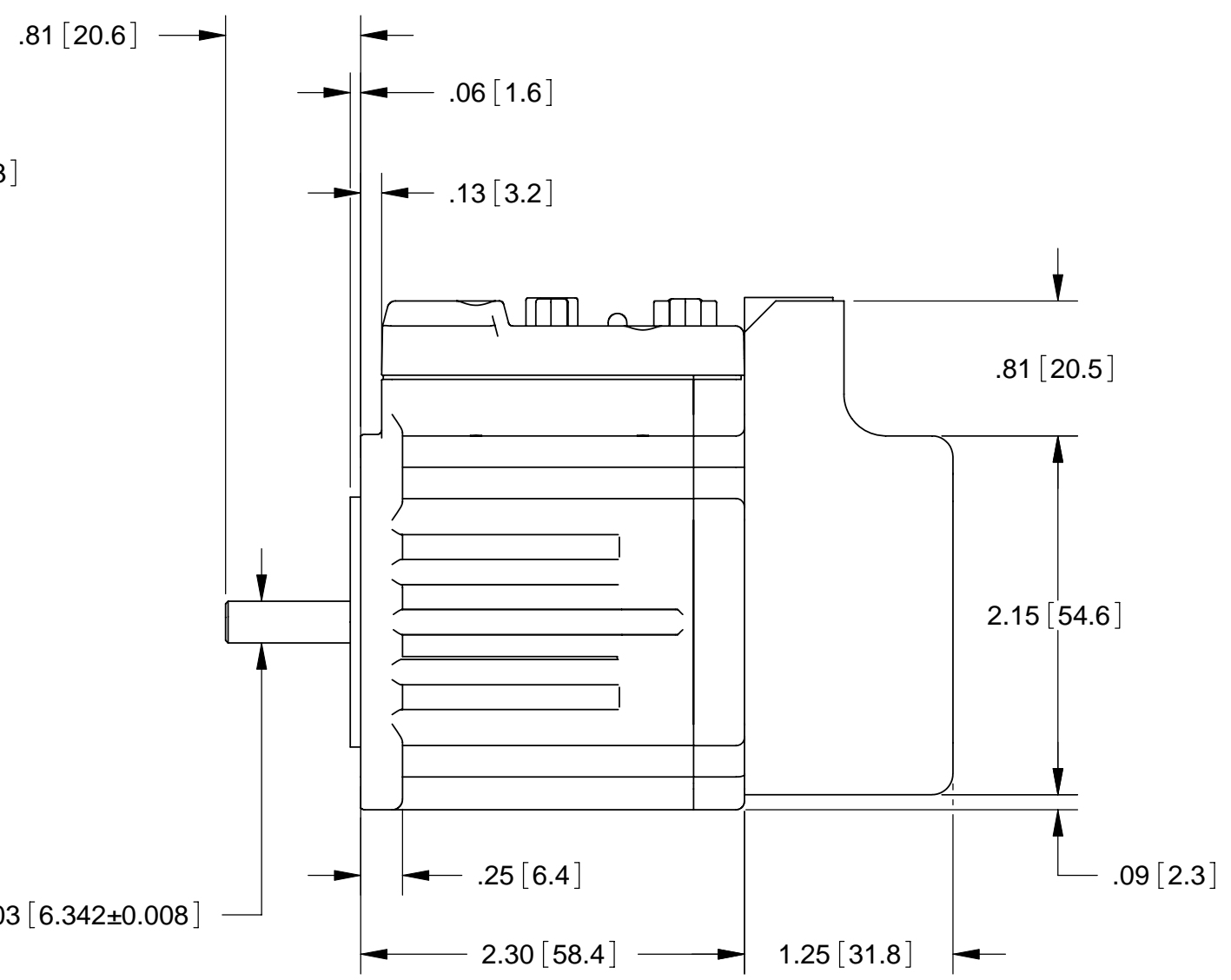
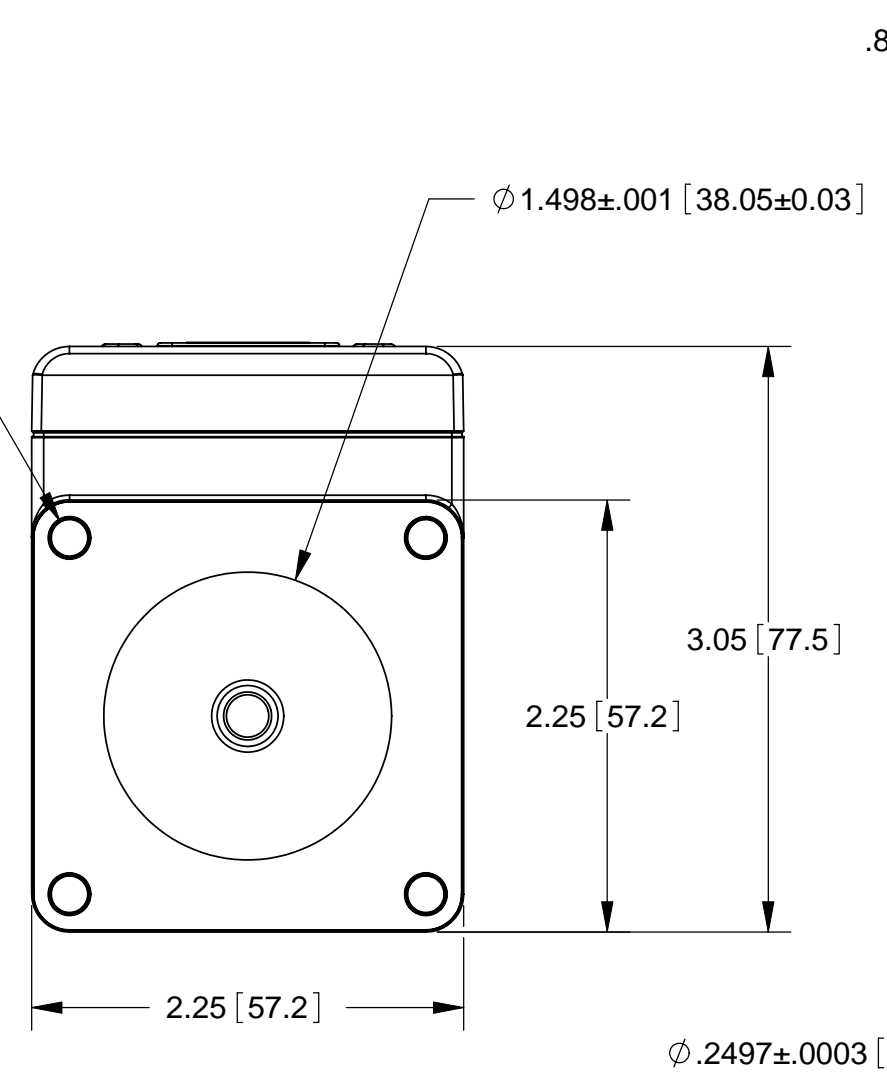
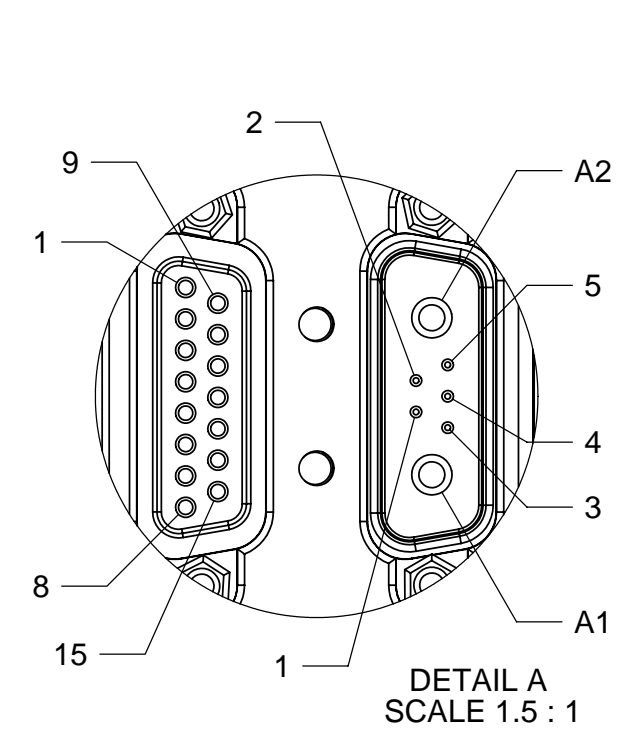
NOTES:

- DRAWING APPLIES TO THE FOLLOWING SMARTMOTOR WITH PART NUMBERS:  

SM2315D-BRKETH	SM2315D-DEBRKETH	SM2315DT-BRKETH	SM2315DT-DEBRKETH
SM2316D-BRKETHPLS2	SM2316D-DEBRKETHPLS2	SM2316DT-BRKETHPLS2	SM2316DT-DEBRKETHPLS2
SM23165D-BRKETH	SM23165D-DEBRKETH	SM23165DT-BRKETH	SM23165DT-DEBRKETH
- LED, SERVO-AMPLIFIER:
  - FOR SM2315D AND SM2316D
    - CLEAR = CONTROLLER POWER NOT AVAILABLE
    - RED = DRIVE (AMPLIFIER) IS OFF
    - GREEN = DRIVE (AMPLIFIER) IS ON
  - FOR SM23165D
    - CLEAR = CONTROLLER POWER NOT AVAILABLE
    - RED = FAULT
    - FLASH GREEN = DRIVE (AMPLIFIER) IS OFF
    - GREEN = DRIVE (AMPLIFIER) IS ON
- LED, TRAJECTORY
  - CLEAR = NOT IN CONTROLLED TRAJECTORY (DEFAULT STATE)
  - GREEN = IN CONTROLLED TRAJECTORY (CLOSE LOOP MOTION)
- ETHERNET LED STATES:
  - LED, LINK:
    - OFF = NO LINK
    - AMBER = 10 Mbps
    - GREEN = 100 Mbps
  - LED, ACTIVITY:
    - OFF = NO ACTIVITY
    - AMBER = HALF-DUPLEX
    - GREEN = FULL-DUPLEX
- FOR -DE OPTION, DRIVE POWER AND CONTROLLER POWER ARE ON SEPARATE PINS. MUST PROVIDE POWER TO CONTROLLER AND DRIVE POWER TO OPERATE SEE TABLE CN2 BELOW FOR PIN ASSIGNMENT.
- DIMENSIONS IN [ ] ARE mm.
- RECOMMENDED BOLTING SCREW SIZE TO BE 10-32 OR M5x0.8.



Ø.20 [5.0] THRU ON Ø2.625 [66.68] B.C. EQUALLY SPACED



CN2 : 15PIN D-SUB FEMALE CONNECTOR					
PIN #	NAME	FUNCTIONS			
		Default Function	Secondary Function	Digital I/O	Analog Input (10bit Res)
1	I/O A	External Encoder A Input	Step Input	5V TTL	0 to 5V
2	I/O B	External Encoder B Input	Direction Input	5V TTL	0 to 5V
3	I/O C	Positive Limit Input		5V TTL	0 to 5V
4	I/O D	Negative Limit Input		5V TTL	0 to 5V
5	I/O E	AniLink Data +-		5V TTL +-	0 to 5V +-
6	I/O F	AniLink Clock +-		5V TTL +-	0 to 5V +-
7	I/O G	G-Synchronization	RS485-ISO Adaptor Flow Control	5V TTL	0 to 5V
8	ENC A OUT	Encoder A Output			
9	ENC B OUT	Encoder B Output			
10	RS232 Tx	RS232 Transmit			
11	RS232 Rx	RS232 Receive			
12	+5Vdc OUT	+5Vdc Output			
13	GND	Signal GND			
14	POWER GND	POWER GND	For -DE Option, Pin 15 is Control power (20V to 48V) and Pin 14 is PWR GND. *PIN 15 is not connected to A1.		
15	POWER	POWER			

CN1 : 7PIN COMBO D-Sub Male Connector				
PIN #	NAME	FUNCTIONS	Ties to CN2, PIN #	
1	I/O G	G-Synchronization	7	
2	+5V dc OUT	+5Vdc Output	12	
3	RS232 Tx	RS232 Transmit	10	
4	RS232 Rx	RS232 Received	11	
5	GND	Signal GND	13	
A1	DRIVE PWR	Drive Power (20 - 48Vdc)	15^	
A2	POWER GND	POWER GND	14	

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MATERIAL <b>ALUMINUM HOUSING</b>	FINISH <b>BLACK ANODIZED HOUSING</b>	DRAWN <b>M. TRAN</b>	DATE <b>4/30/2009</b>
		ENGR <b>M. TRAN</b>	DATE <b>4/30/2009</b>

**INCH** THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE INCHES AND TOLERANCES ARE:  
 DECIMALS: .XXX ± .005  
 ANGLES: .XX ± 0.25°  
 .XX ± .01 .X ± 0.5°

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M - 1994.  
 ALL DIMENSIONS, TOLERANCES AND ROUGHNESS APPLY AFTER FINISHING, WHEN APPLICABLE.  
 NO BURRS ALLOWED, BREAK SHARP EDGES .01 MAX.

**Animatics Corporation**

TITLE: **SM2315D, SM2316D, AND SM23165D SERIES WITH ETHERNET AND BRAKE OPTION**

SIZE: **C** DWG NO: **SM2315D SM2316D SM23165D BRKETH**

DO NOT SCALE DRAWING SCALE: **1:1** SHEET: **1 OF 1**