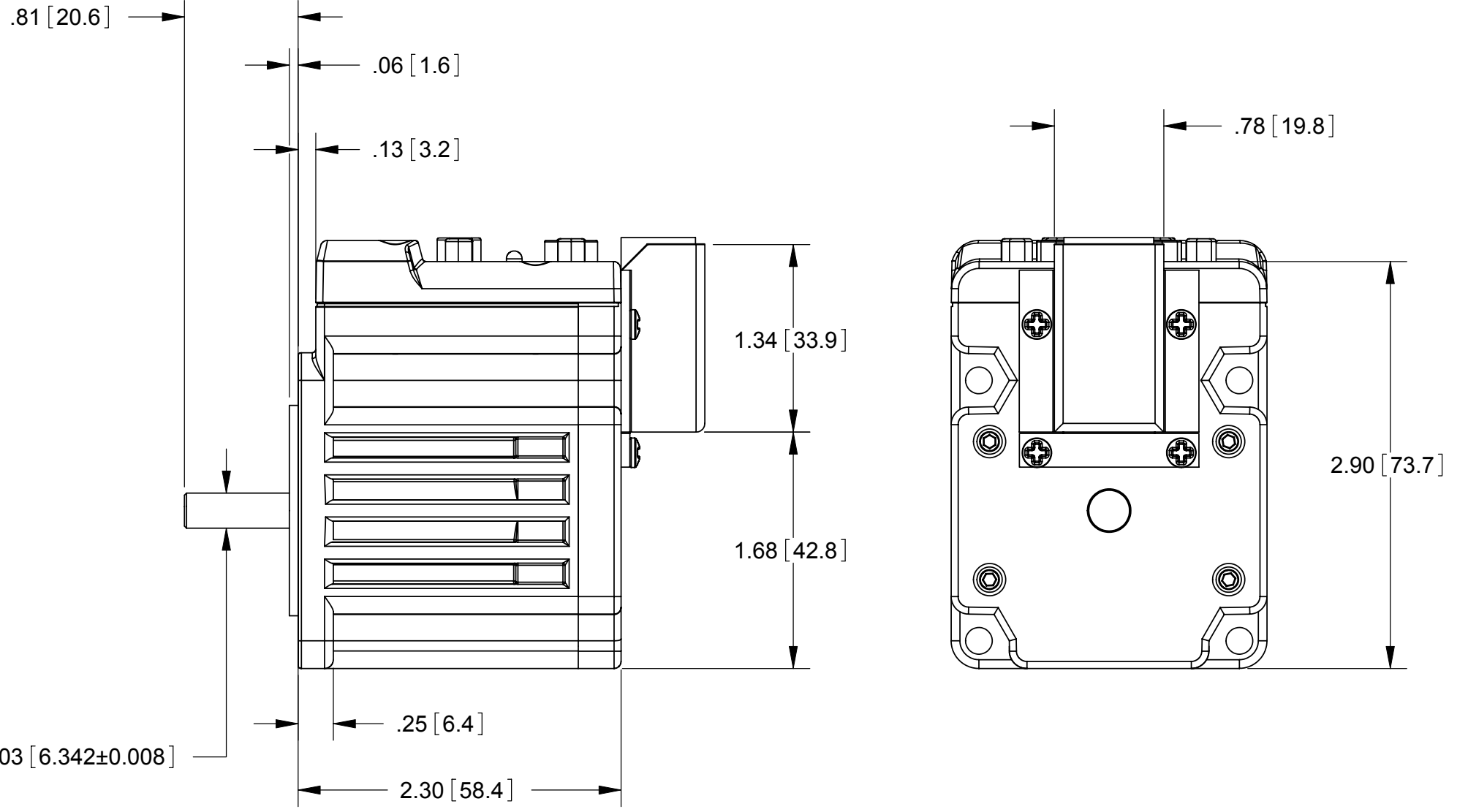
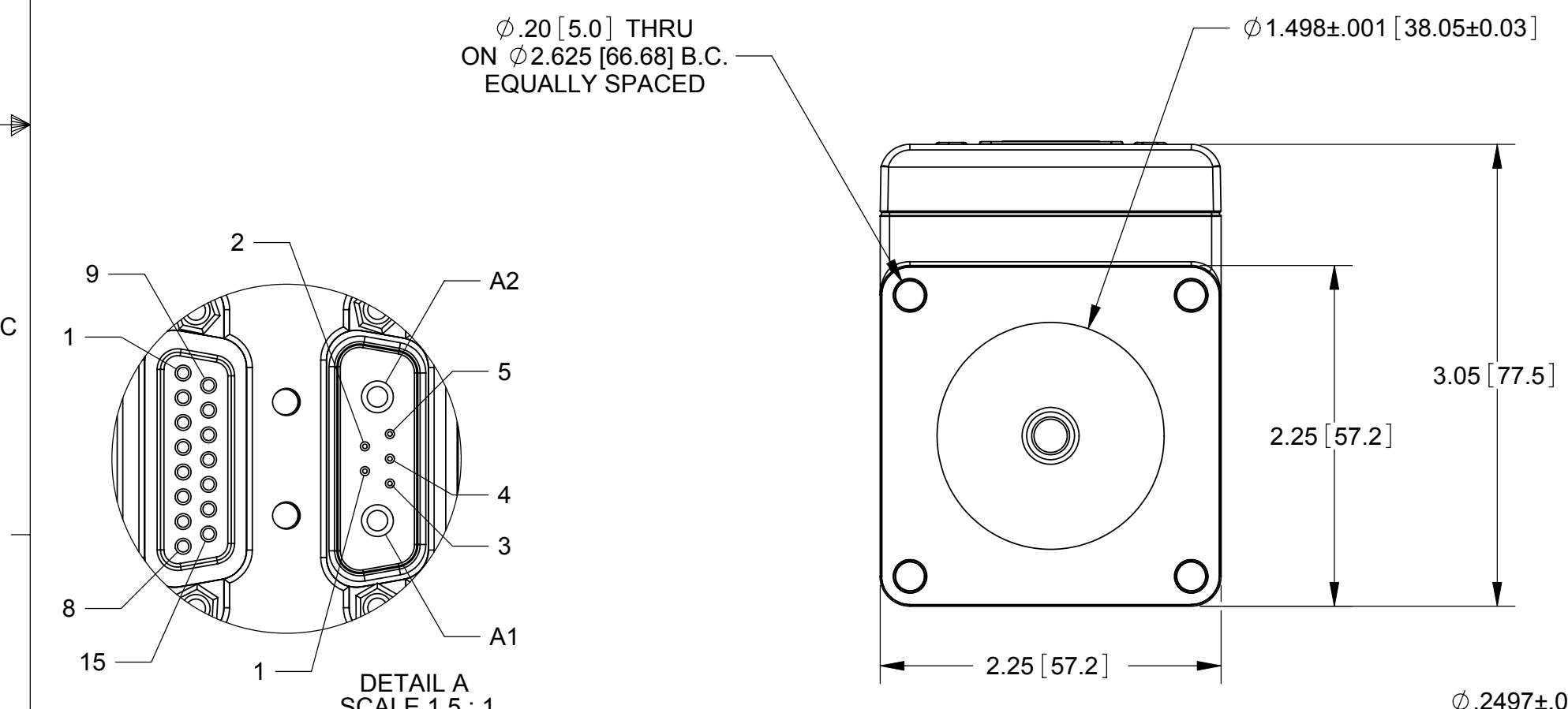
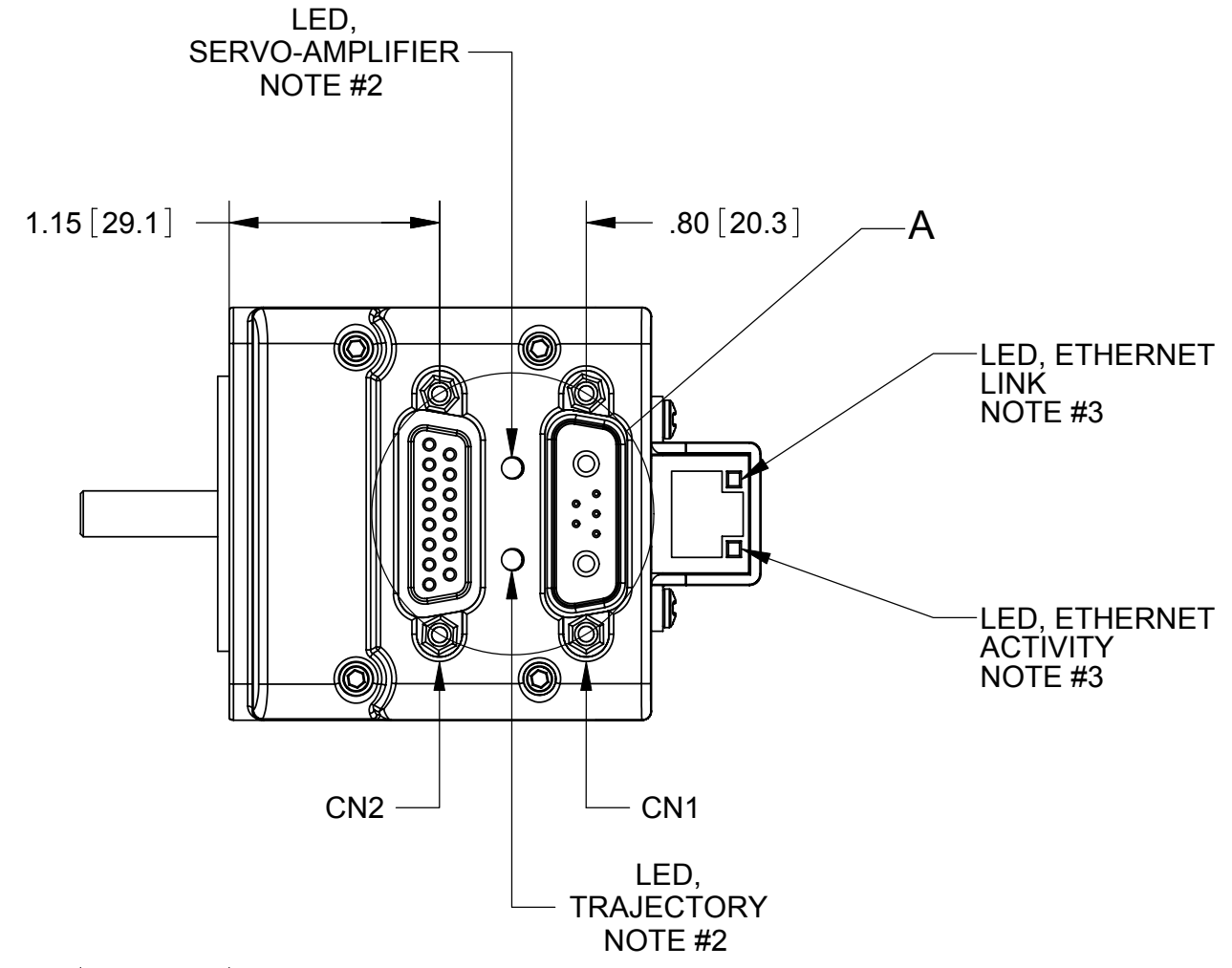
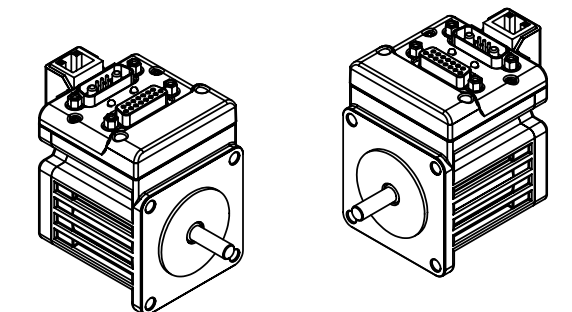


REV.	DESCRIPTION	ZONE	ECO	DATE	APPROVED
1	DRAWING RELEASE			04/29/2009	M. TRAN

- NOTES:
- DRAWING APPLIES TO THE FOLLOWING SMARTMOTOR WITH PART NUMBERS:
SM2315D-ETH SM2315D-ETHDE SM2315DT-ETH SM2315DT-ETHDE
SM2316D-ETHPLS2 SM2316D-ETHDEPLS2 SM2316DT-ETHPLS2 SM2316DT-ETHDEPLS2
SM23165D-ETH SM23165D-ETHDE SM23165DT-ETH SM23165DT-ETHDE
 - 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 SEPARATED PINS. MUST PROVIDE POWER TO CONTROLLER AND DRIVE POWER TO OPERATE. SETT TABLE CN2 BELOW FOR PIN ASSIGNMENT.
 - DIMENSIONS IN [] ARE mm.
 - RECOMMENDED BOLTING SCREW SIZE TO BE 10-32 OR M5x0.8.



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 Adapter 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			
15	POWER	POWER			

* NOT AVAILABLE ON SM2315D
* NOT AVAILABLE ON SM2316D
- NOT AVAILABLE ON SM23165D

For -DE Option, Pin 15 is Control power (20V to 48V) and Pin 14 is PWR GND. *PIN 15 is not connected to A1.

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: ALUMINUM HOUSING FINISH: BLACK ANODIZED HOUSING

DRAWN: M. TRAN DATE: 4/29/2009
ENGR: M. TRAN DATE: 4/29/2009

INCH 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 OPTION

SIZE: C DWG NO: SM2315D SM2316D SM23165D ETHERNET

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