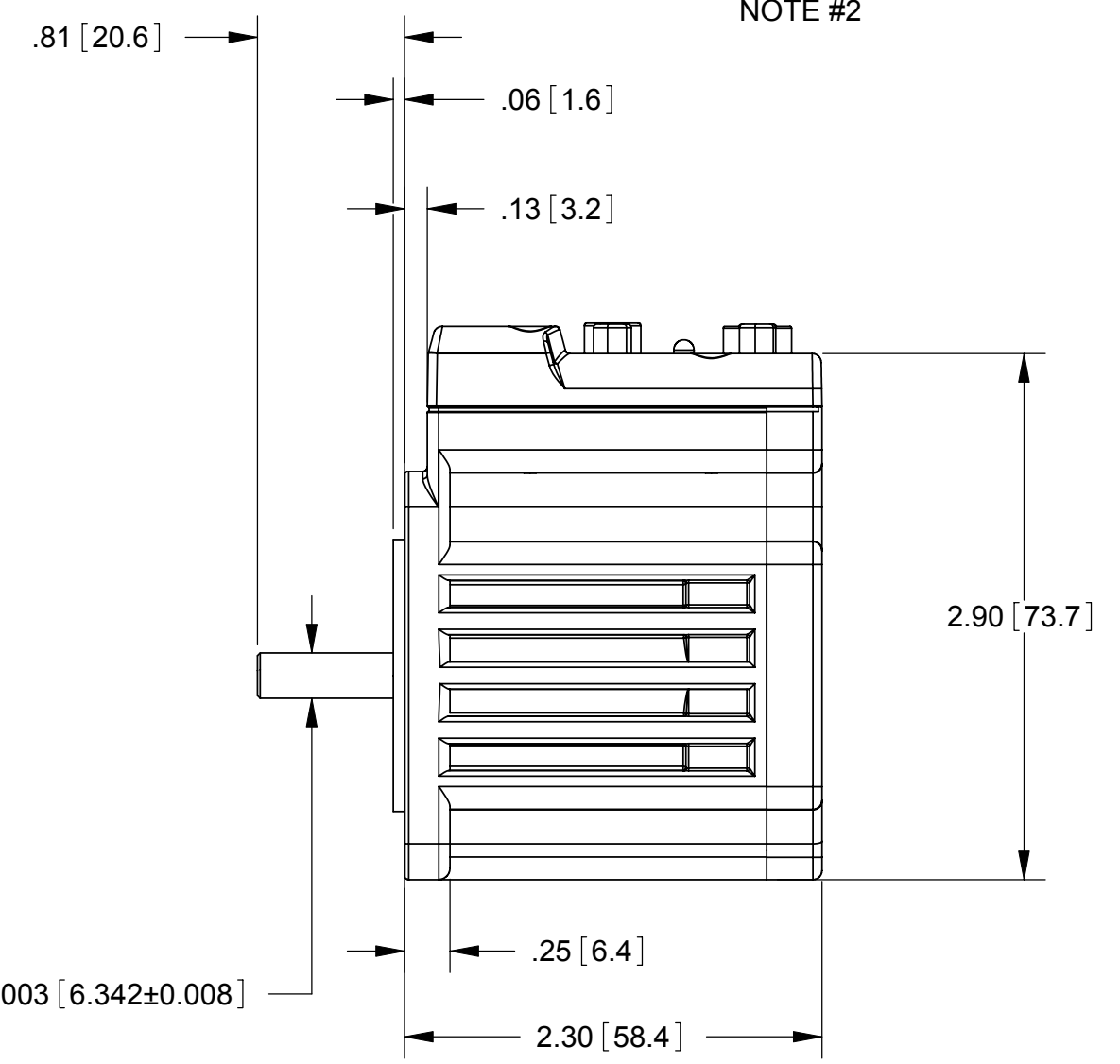
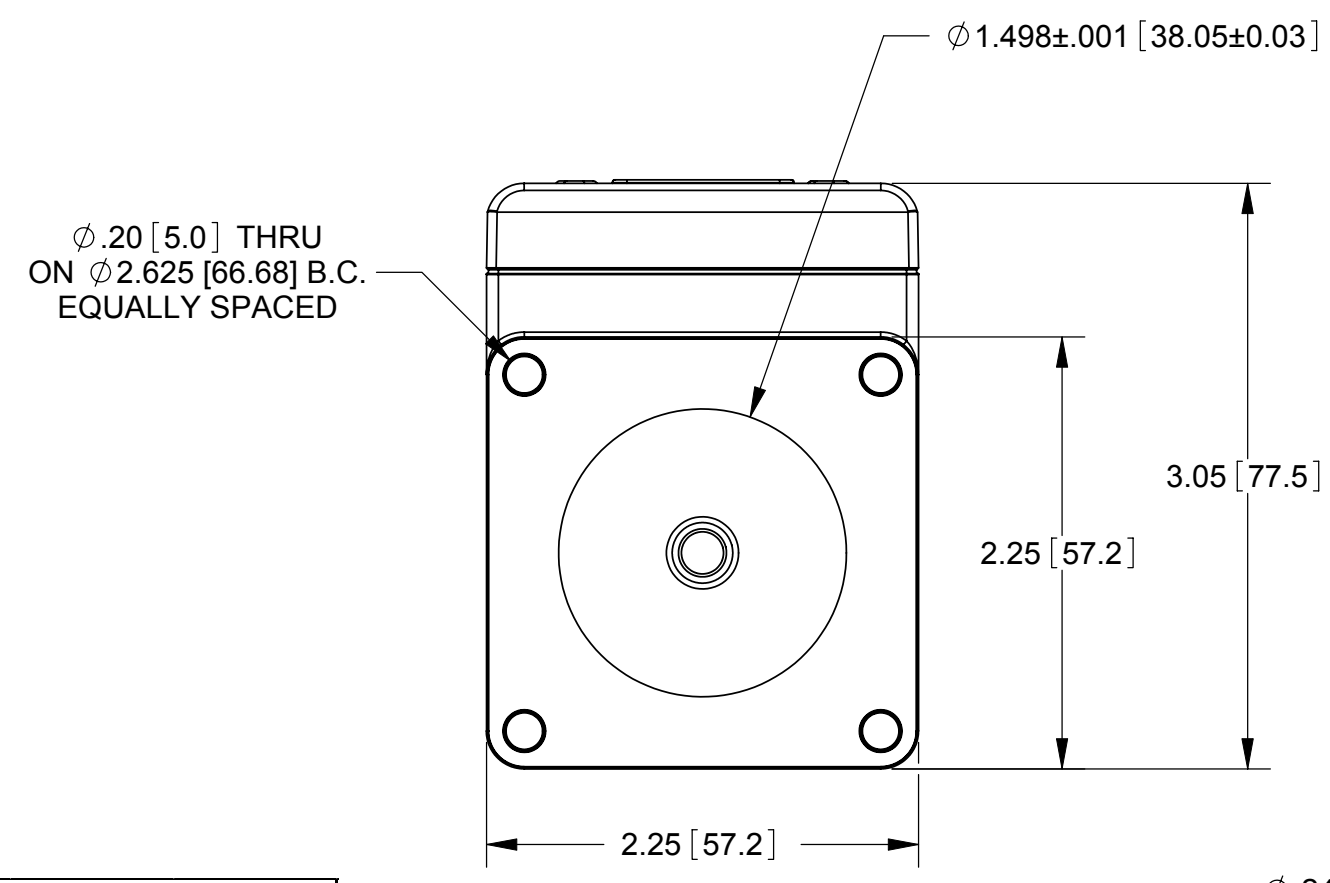
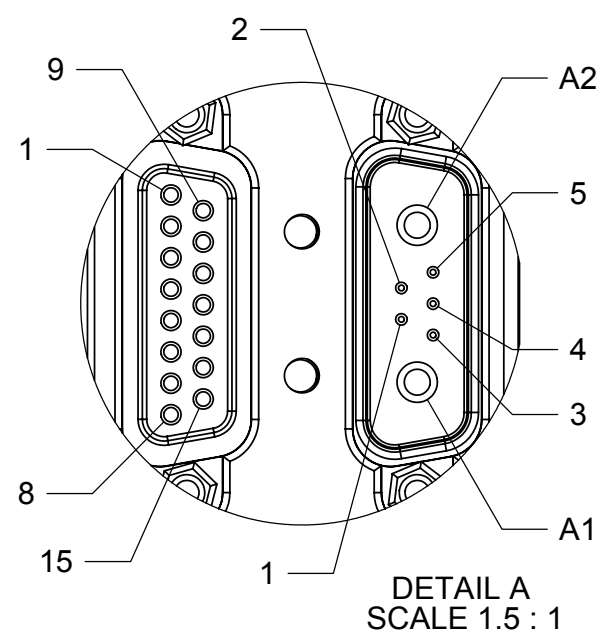
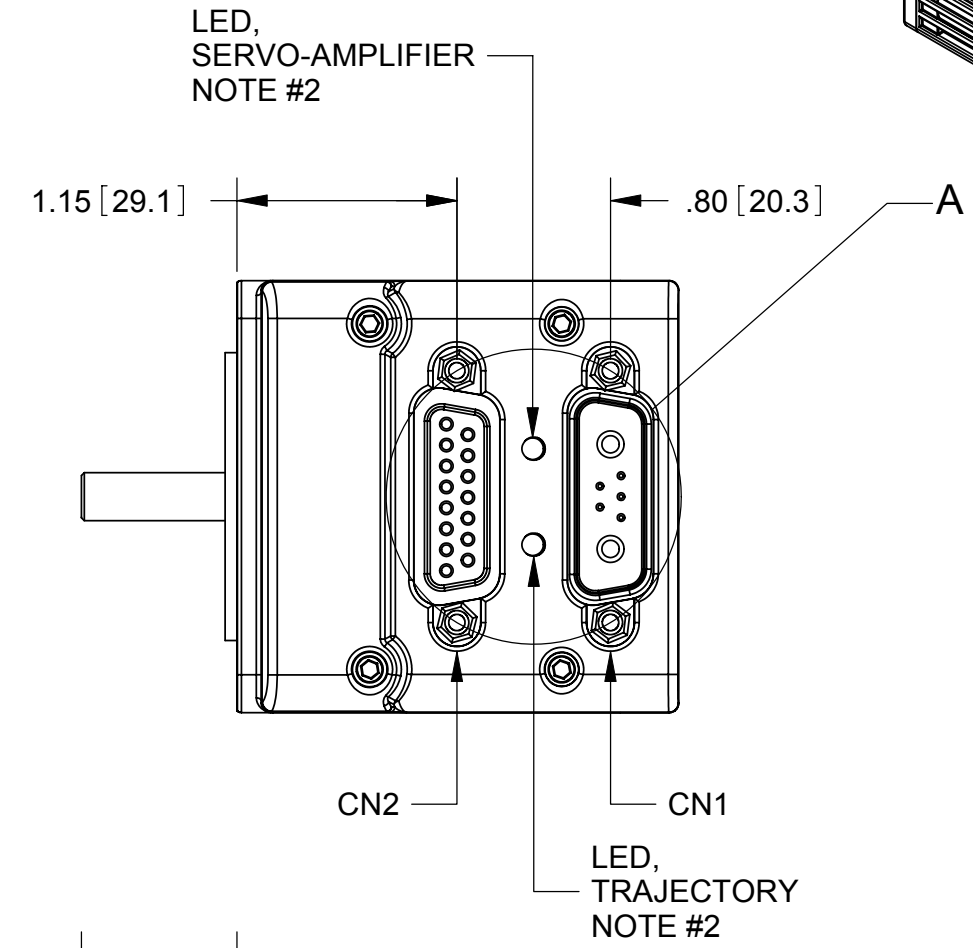
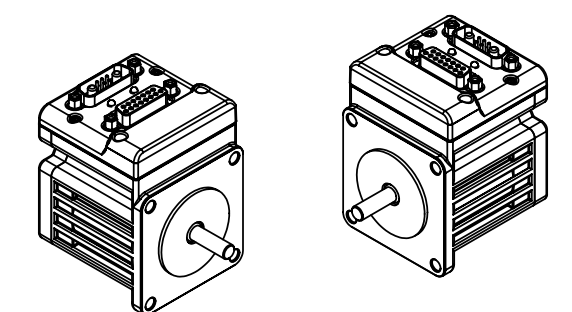


REV.	DESCRIPTION	ZONE	ECO	DATE	APPROVED
1	DRAWING RELEASE			04/29/2009	M. TRAN

- NOTES:
- DRAWING APPLIES TO THE FOLLOWING SMARTMOTOR WITH PART NUMBERS:  

SM2315D	SM2315D-DE	SM2315DT	SM2315DT-DE
SM2316D-PLS2	SM2316D-DEPLS2	SM2316DT-PLS2	SM2316DT-DEPLS2
SM23165D	SM23165D-DE	SM23165DT	SM23165DT-DE
  - 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)
  - 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.



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 -	RS485 A (+) *	5V TTL	0 to 5V
6	I/O F	AniLink Clock -	RS485 B (-) *	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			
15	POWER	POWER			

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

For -DE Option, Pin 15 is Controller 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	

**CONFIDENTIAL.** THE INFORMATION CONTAINED HEREIN IS THE PROPRIETY PROPERTY OF ANIMATICS CORPORATION AND IS PROTECTED AS A TRADE SECRET. IT IS SUBMITTED FOR USE BY RECIPIENT ONLY FOR A BUSINESS PURPOSE AUTHORIZED BY ANIMATICS CORPORATION. ANY OTHER USE IS PROHIBITED. RECIPIENT AGREES TO KEEP SUCH INFORMATION CONFIDENTIAL.

MATERIAL <b>ALUMINUM HOUSING</b>	FINISH <b>BLACK ANODIZED HOUSING</b>	DRAWN M. TRAN	DATE 4/23/2009
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE INCHES AND TOLERANCES ARE: DECIMALS: .XXX ± .005 .XX ± .01		ENGR M. TRAN	DATE 4/23/2009

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**

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

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