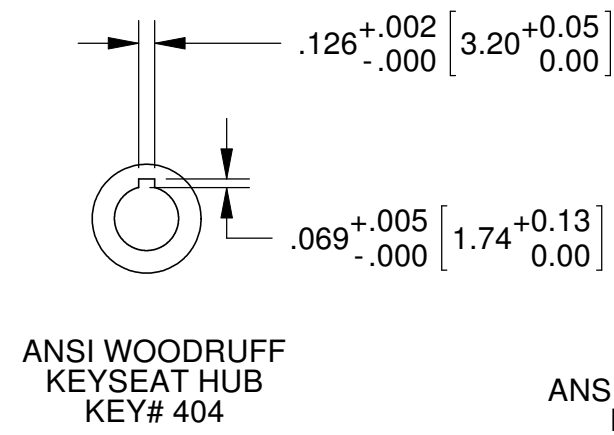
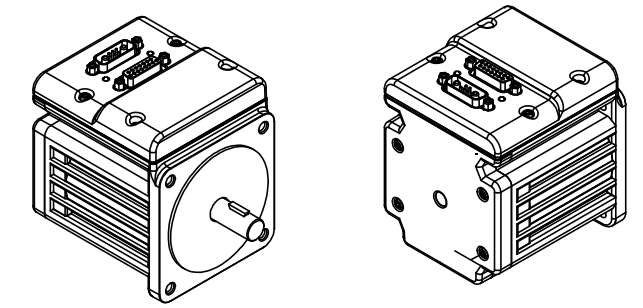
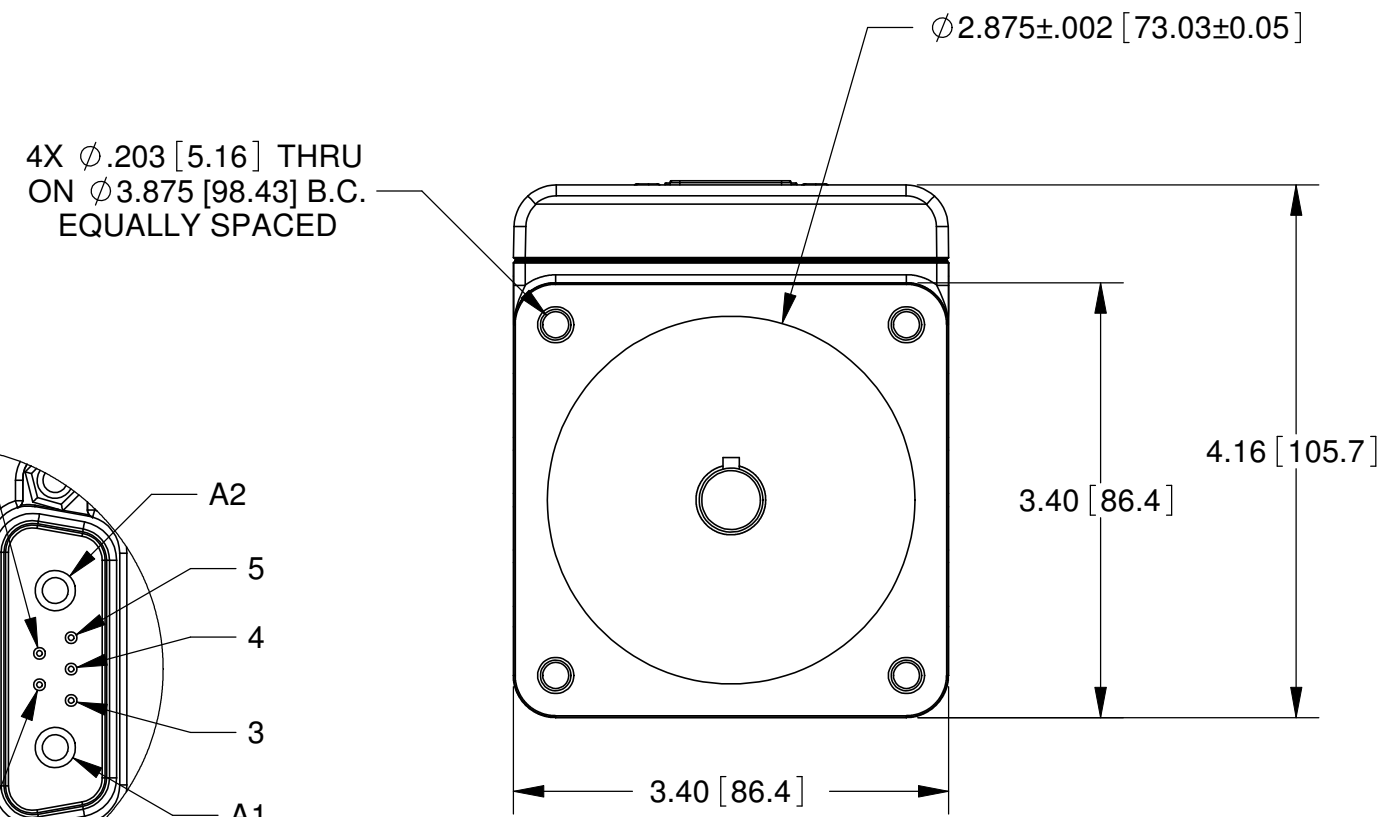
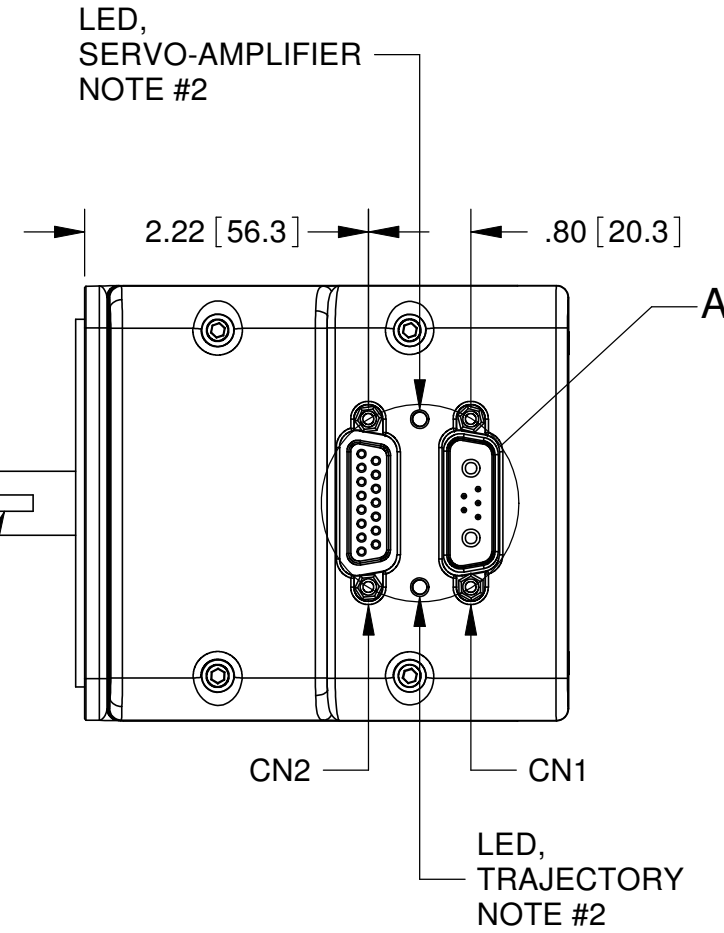


- NOTES:
- DRAWING APPLIES TO THE FOLLOWING SMARTMOTOR WITH PART NUMBERS:
 SM34165DT SM34165DT-DE
 SM34165DT-SH SM34165DT-DESH
 - LED, SERVO-AMPLIFIER:
 - CLEAR = CONTROLLER POWER NOT AVAILABLE
 - RED = FAULT
 - FLASH GREEN = DRIVE (AMPLIFIER) IS OFF
 - GREEN = DRIVE (AMPLIFIER) IS ON
 - LED, TRAJECTORY
 - 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 M5, SOCKET CAP.

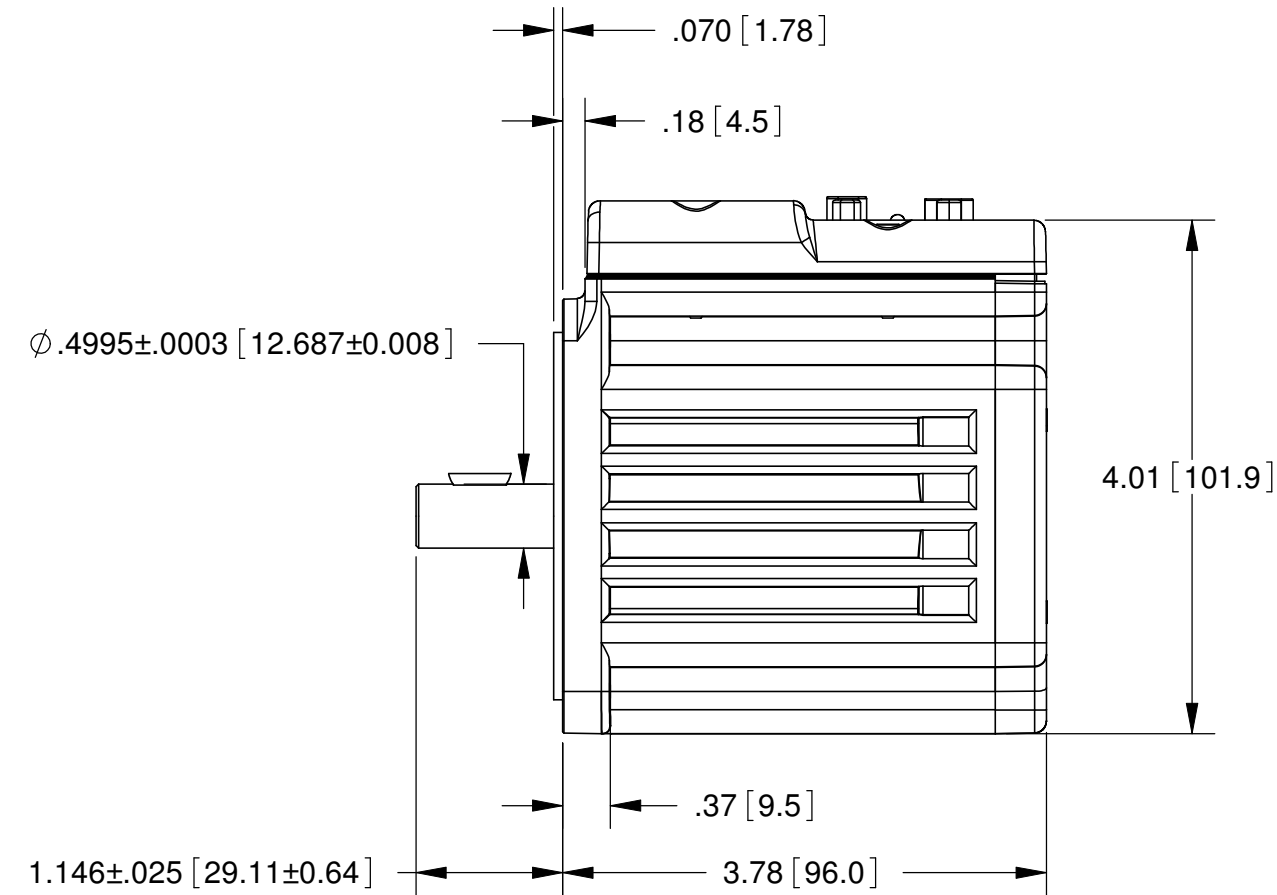
| REV. | DESCRIPTION | ZONE | ECO | DATE | APPROVED |
|------|---------------------|------|-----|------------|----------|
| A | PRELIMINARY RELEASE | | | 10/12/2010 | M. TRAN |



ANSI WOODRUFF
KEY# 404



DETAIL A
SCALE 1.5 : 1



CN2 : 15PIN D-SUB FEMALE CONNECTOR

| PIN # | NAME | FUNCTIONS | | | |
|-------|-----------|--------------------------|---|-------------|--------------|
| | | Default Function | Secondary Function | Digital I/O | Analog Input |
| 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 | | RS485 A (+) | 5V TTL | 0 to 5V |
| 6 | I/O F | | RS485 B (-) | 5V TTL | 0 to 5V |
| 7 | I/O G | G-Synchronization | RS485-ISO Adopter Data | 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 Supply Out | | | |
| 13 | GND | Signal GND | | | |
| 14 | POWER GND | POWER GND | For -DE Option, Pin 15 is Contorl 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 | Dirve Power (20 - 48Vdc) | 15^ |
| A2 | POWER GND | POWER GND | 14 |

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| | | | |
|------------------------------|---------------------------------|------------------|--------------------|
| MATERIAL ALUMINUM HOUSING | FINISH BLACK ANODIZE HOUSING | DRAWN M. TRAN | DATE 10/12/2010 |
| THIRD ANGLE PROJECTION | | ENGR | DATE |

INCH UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE INCHES AND TOLERANCES ARE:
 DECIMALS: .XXX ± .010 .XX ± .04
 ANGLES: .XX ± 0.25° .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: **SM34165DT SERIES**

SIZE: **C** DWG NO: **SM34165DT**

DO NOT SCALE DRAWING SCALE: 2:3 SHEET: 1 OF 1