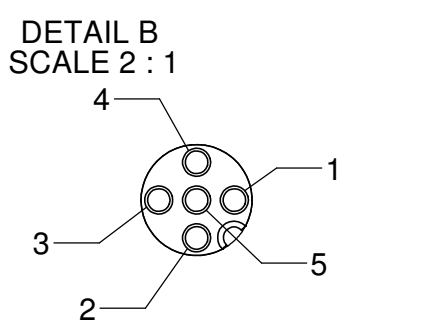
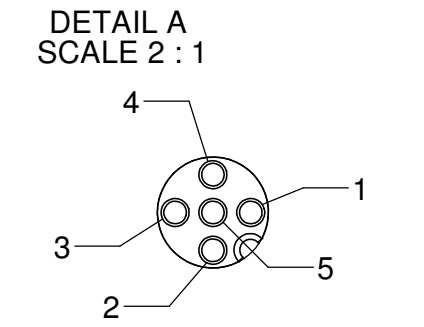
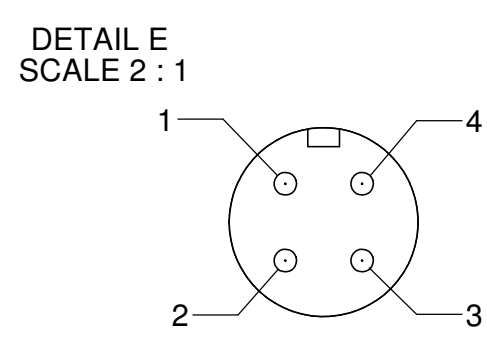
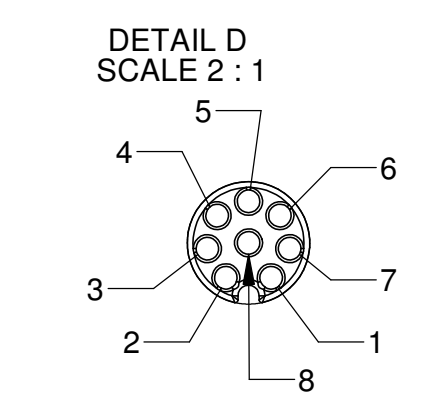
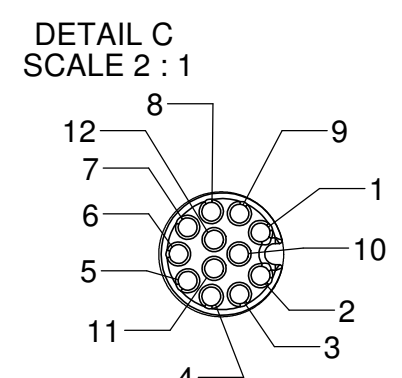
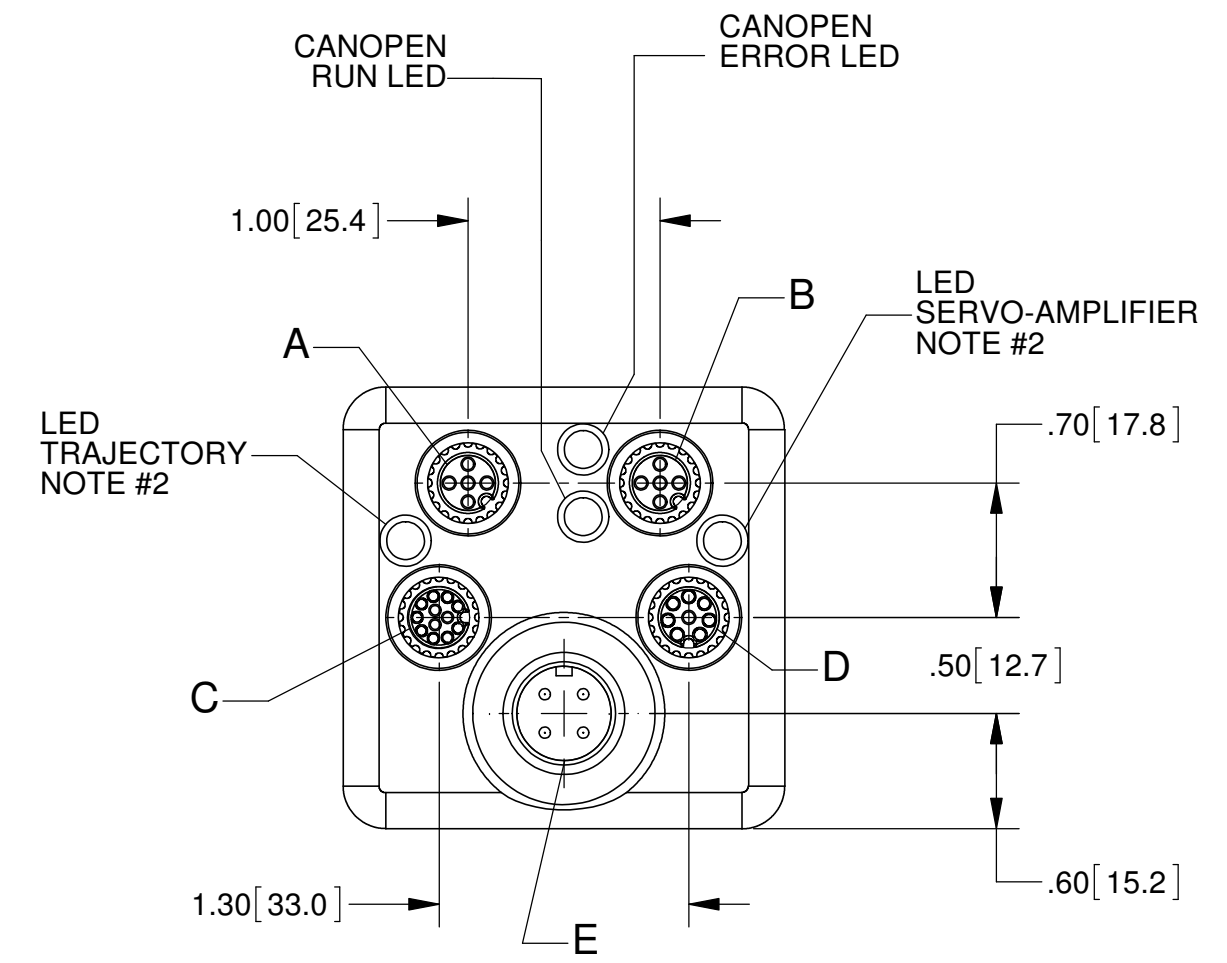
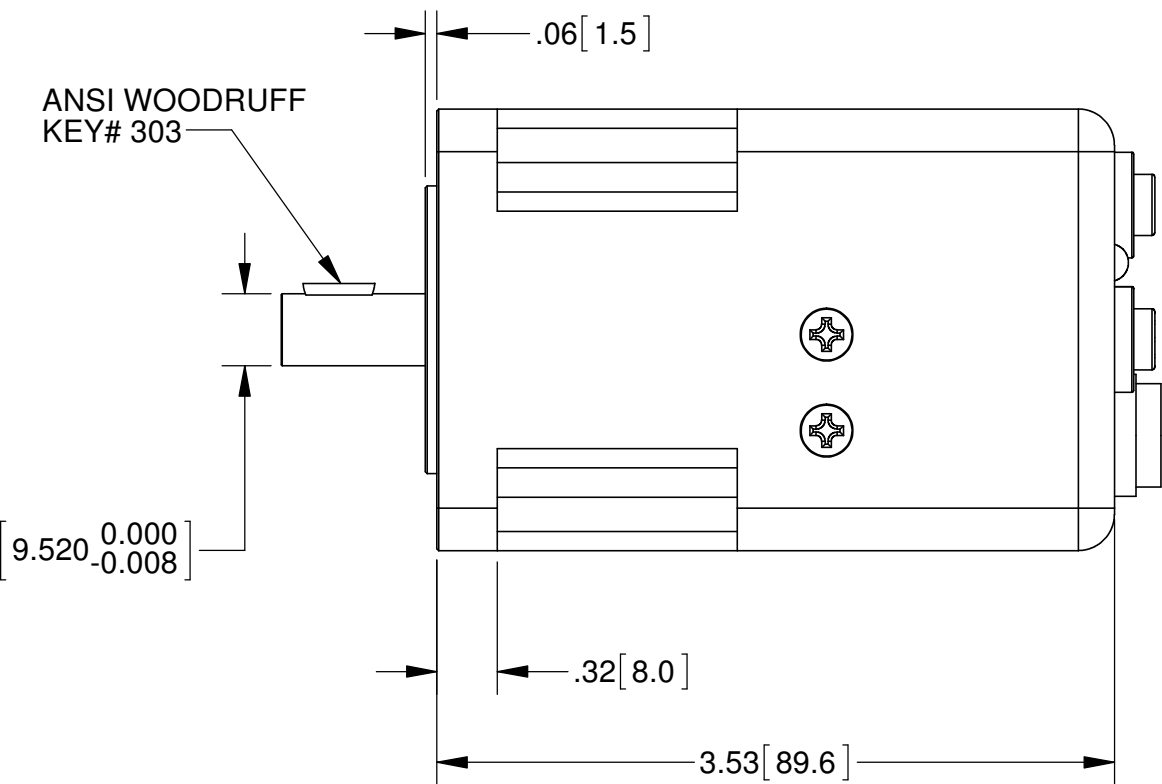
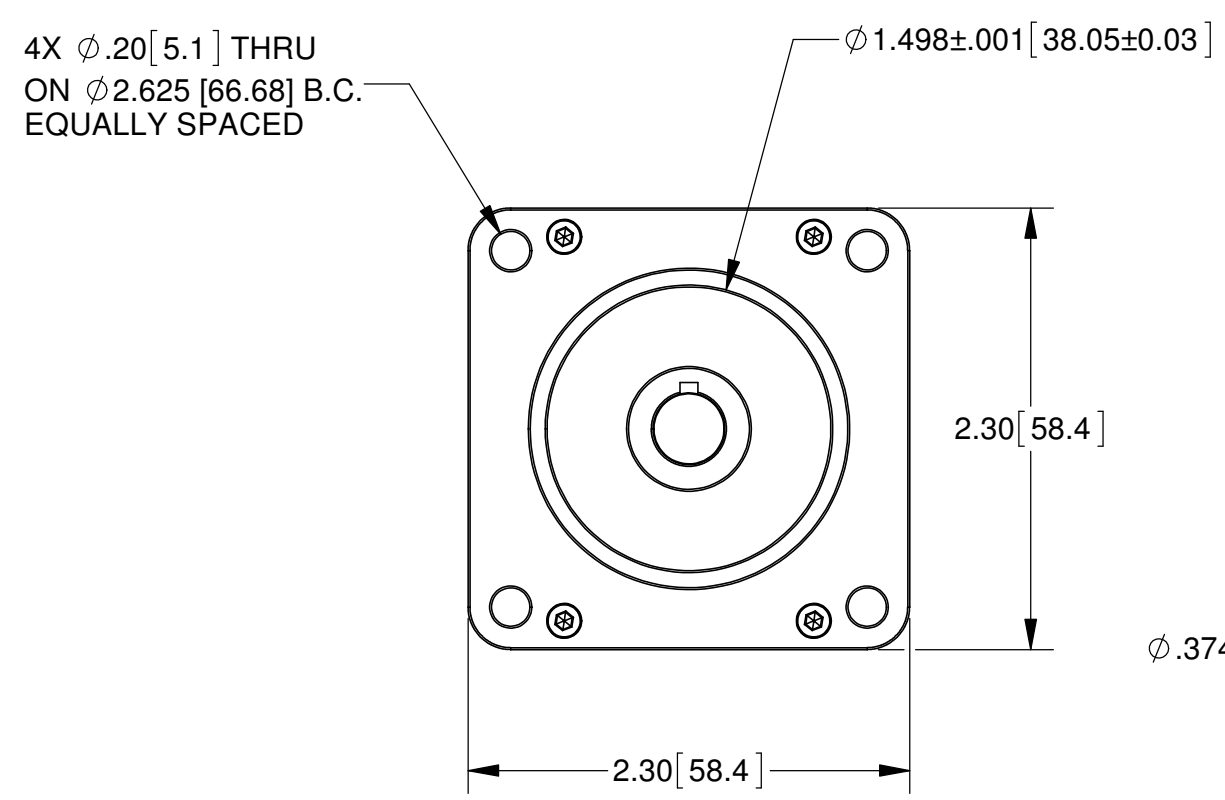
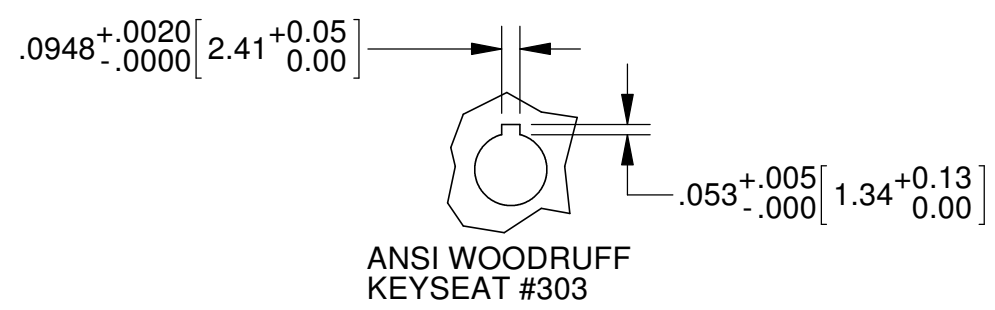
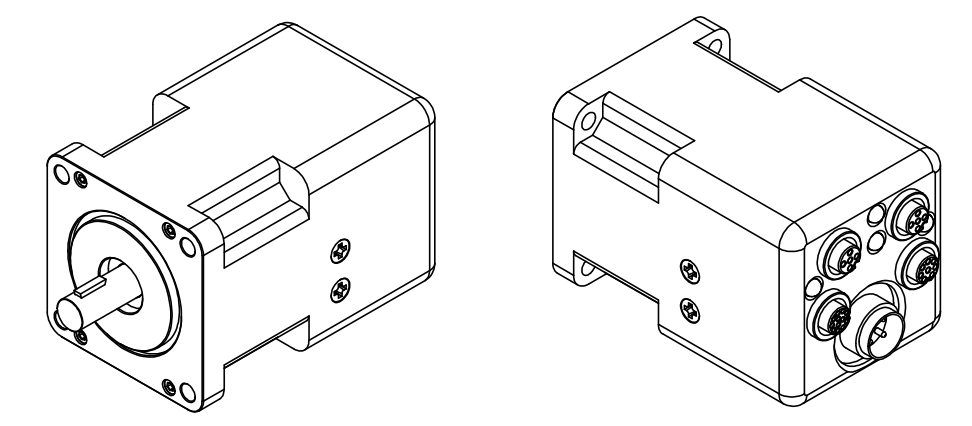


REV.	DESCRIPTION	ZONE	ECO	DATE	APPROVED
A	PRELIMINARY RELEASE			06/01/2011	M. TRAN

- NOTES:
- DRAWING APPLIES TO THE FOLLOWING SMARTMOTOR WITH PART NUMBERS:
SM23165M SM23165MT
 - 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)
 - CANopen ERROR LED (RED)
 - CLEAR = NO ERROR
 - SINGLE FLASH = WARNING, COMMUNICATION ERROR COUNT LIMIT REACHED
 - DOUBLE FLASH = GUARD OR HEART BEAT ERROR
 - CANopen RUN LED (GREEN)
 - SINGLE FLASH = DEVICE IS IN STOPPED STATE
 - BLINKING = PREOPERATIONAL STATE
 - SOLID = OPERATIONAL STATE
 - MUST SUPPLY 24V FOR CONTROL POWER ON PIN 1 OF POWER INPUT CONNECTOR P1.
 - IOs 0 TO 7 AND 10 CAN SOURCE UP TO 150mA MAX WHEN USED AS OUTPUT.
 - IOs 8 AND 9 CAN SOURCE UP TO 300mA MAX WHEN USED AS OUTPUT.
 - DIMENSIONS IN [] ARE mm.
 - RECOMMENDED BOLTING SCREW SIZE TO BE 10-32 OR M5x0.8.



P3 24V I/Os
M12x1 12-Pin, Female

PIN	Description
1	IO-0
2	IO-1
3	IO-4
4	IO-5
5	IO-6
6	IO-7
7	IO-8 OR BRK LNE
8	IO-9
9	NOT FAULT OUT
10	DRV ENABLE IN
11	24V out
12	GND -Common

P2 COMMUNICATION
M12x1 8-Pin, Female

PIN	Description
1	GND -Common
2	RS485B CHO
3	RS485A CHO
4	ENC A+ (IN/OUT)
5	ENC B- (IN/OUT)
6	ENC A- (IN/OUT)
7	5Vdc out
8	ENC B+ (IN/OUT)

P1 CANOPEN
M16x0.75 4pin, Male

PIN	Description
1	CNTRL PWR 24Vdc max
2	CHASSIS GND/EARTH
3	GND -Common
4	AMPLIFIER PWR 48Vdc max

P4 LIMITS
M12x1 5-Pin, Female

PIN	Description
1	24V out
2	IO-3 OR -Limit
3	GND -Common
4	IO-2 OR +Limit
5	IO-10 OR SYN

P5 CANOPEN/DeviceNet
M12x1 5-Pin, Female

PIN	Description
1	NC
2	V+ (Monitor)
3	V-
4	CAN -H
5	CAN -L

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: ALUMINUM HOUSING
FINISH: BLACK ANODIZED HOUSING

DRAWN: M. TRAN
ENGR

DATE: 6/1/2011

DATE:

INCH
THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE INCHES AND TOLERANCES ARE:
DECIMALS: .XXX ± .005
.XX ± .01
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: SM23165M and SM23165MT with CanOpen Option

SIZE: C
DWG NO: SM 23165 M&MT -C

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