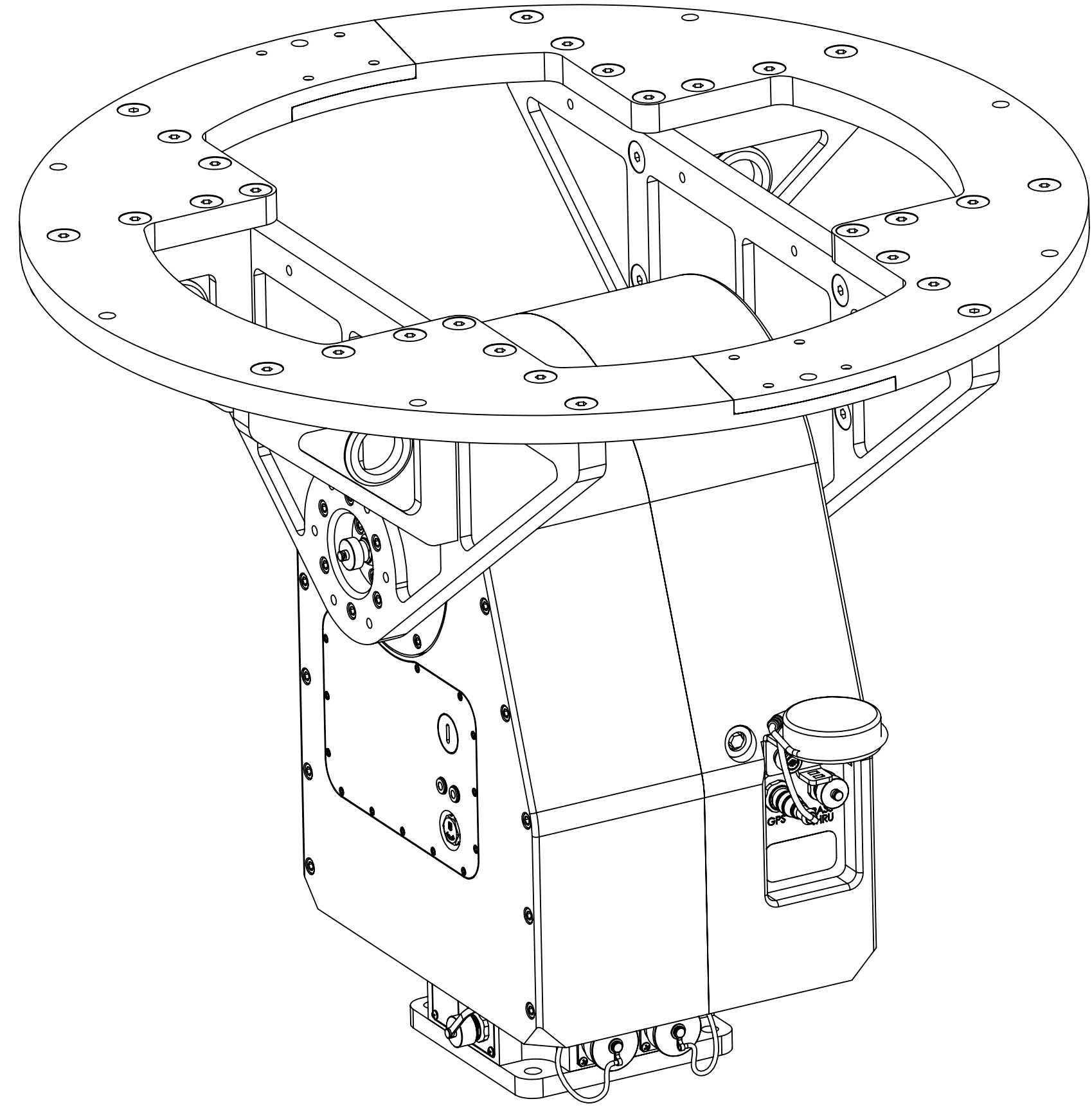


REV	DESCRIPTION	DATE	APPROVED
C	CN600926	2021-03-22	CLC


NOTES: UNLESS OTHERWISE SPECIFIED

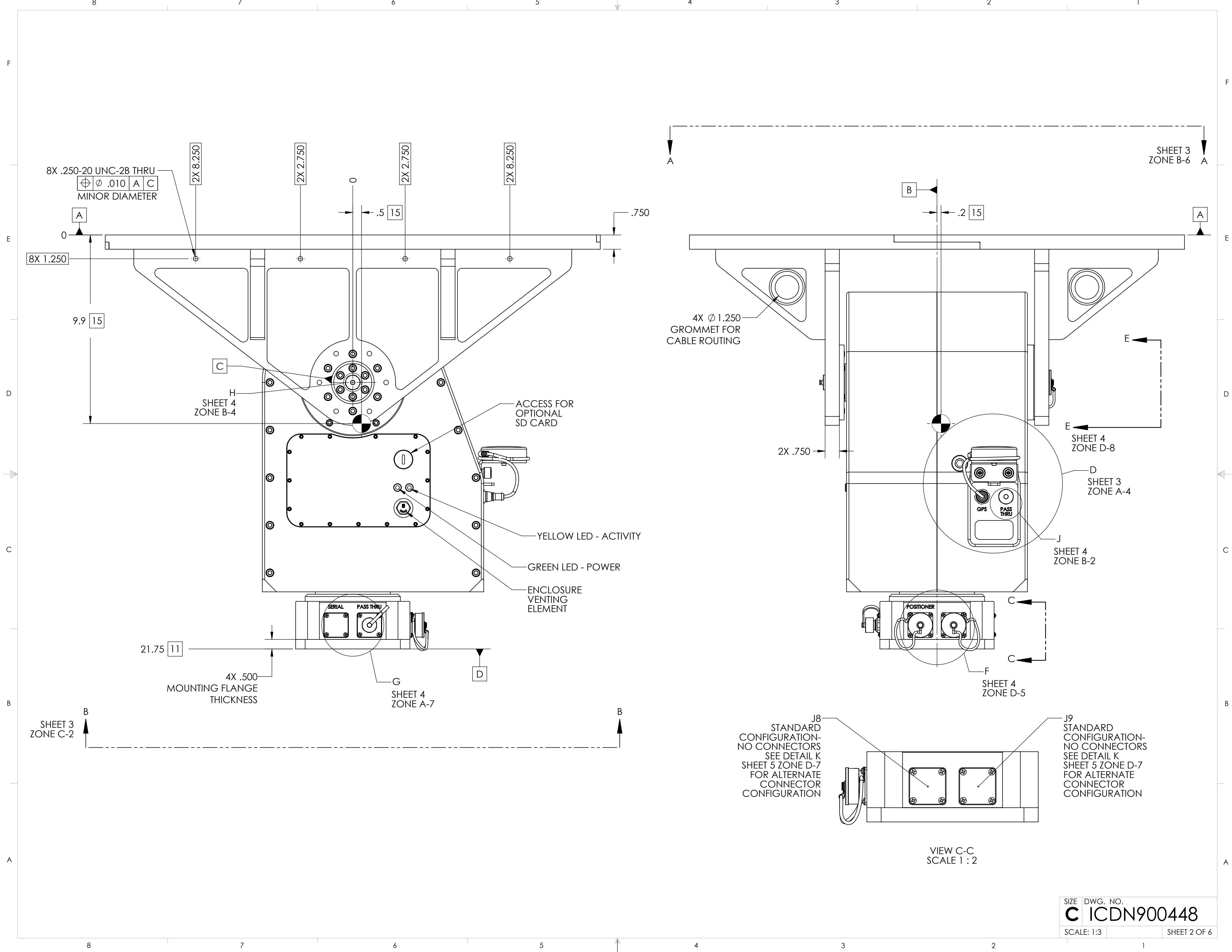
1. LINKALIGN-360FER-50 CONFIGURABLE OPTIONS PER TABLE I
2. USE INTERFACE CONTROL DRAWING IN CONJUNCTION WITH DATASHEET N500140
3. USE TABLE II FOR AVAILABLE LINKALIGN-360FER-50 ACCESSORY OPTIONS
4. POSITIONER POWERED BY POWER OVER ETHERNET 50-57 VDC, 4 PAIR, PoH (INDOOR RATED 54 VDC POWER SUPPLY INCLUDED WITH POSITIONER. NOT SHOWN IN DRAWING). OPTIONAL DC POWER INPUT MAY BE USED AS ALTERNATE CUSTOM CONFIGURATION, 20-60 V. STANDBY POWER DRAWS LESS THAN 16 W. MAXIMUM POWER DRAW, 95 W
5. HARD COAT ANODIZE ALUMINUM CONSTRUCTION WITH STAINLESS STEEL HARDWARE
6. 400° (+/-200°) AZIMUTH TRAVEL WITH UPT TO 0.5°/SEC DRIVE RATE (MAX LOAD)
7. 110° (+110°/0°) ELEVATION TRAVEL WITH UP TO 0.5°/SEC DRIVE RATE (MAX LOAD)
8. -19° TO 140°F (-28° TO 60°C) OPERATIONAL TEMPERATURE RANGE. MINIMUM OPERATIONAL TEMPERATURE SPECIFIED AT NO LOAD. -40 TO 158°F (-40 TO 70°C) NON-OPERATIONAL TEMPERATURE RANGE
9. 0.1° FEEDBACK RESOLUTION
10. AZIMUTH AND ELEVATION BACKLASH LESS THAN 0.05°
11. 21.75" (55.2 cm) HIGH X 26.0" (66.0 cm) WIDE X 26.0" (66.0 cm) DEEP. DIMENSIONS APPLY WHEN POSITIONER IS AT 0° AZIMUTH AND 0° ELEVATION ANGLES
12. WEIGHT APPROXIMATELY 112 LBS (50.8 kg) OR 228 LBS (103.4 kg) WITH COUNTERWEIGHT KIT (ACC-N900416-1)
13. PAYLOAD NOT TO EXCEED 500 LBS OR 100 FT-LBS OF NET TORQUE ABOUT THE ELEVATION AXIS. OPTIONAL COUNTERWEIGHT KIT, ACC-N900416-1, MAY BE USED TO ACCOMPLISH NET TORQUE REQUIREMENTS. TO CALCULATE TORQUE, TAKE THE DISTANCE FROM THE PAYLOAD CENTER OF GRAVITY TO DATUM -C- IN FEET AND MULTIPLY BY THE PAYLOAD WEIGHT. MAXIMUM OPERATING TORQUE MAY BE REDUCED AT TEMPERATURES BELOW -13°F (-25°C) AND/OR WITH PERIPHERAL DEVICES
14. TABLE TOP MOUNTING HOLES
15. CENTER OF GRAVITY 0.2" (0.5 cm) IN THE X-DIRECTION, 9.9" (25.2 cm) IN THE Y-DIRECTION AND 0.5" (1.3 cm) IN THE Z-DIRECTION (WITHOUT COUNTERWEIGHT KIT)
16. SIGNAL PASS THRU CONNECTORS USE 39" (100 cm) LONG, 24 AWG WIRE ABLE TO CARRY 60 VAC / 75 VDC, 2A



BUILDING A PART NUMBER		STANDARD OPTIONS
LA-360FER	- 50 -	- 100
		<<EXAMPLE
		SHIELDED ETHERNET CABLE STANDARD LENGTHS
		050 = 50 ft
		100 = 100 ft
		150 = 150 ft
		200 = 200 ft
		250 = 250 ft
		300 = 300 ft
		XXX = Custom length in feet
		XXXC = Add "C" to end of cable length for unterminated mating connector
		CUSTOM CONFIGURATION
		= Standard options - leave blank
		MOTOR DRIVES AND PAYLOAD
		50 = Az/EI Travel @ 0.5°/s, EI Torque 100 ft-lbs, 500 lb payload. Typically paired with 4-8 ft antenna
		MODEL
		LA-360FER = LinkAlign-360FER (+/-200° azimuth, +110/0 elevation)

ACCESSORY DESCRIPTION	ACCESSORY PART NUMBER	ACCESSORY ICD
COUNTERWEIGHT KIT, FER-50	ACC-N900416-1	ICDN900416
QUADPOD, FER-50	ACC-N900577-XX-2	ICDN900577

SYMBOL KEY <input type="checkbox"/> NOTE <input type="checkbox"/> PL ITEMS PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF NEXTMOVE TECHNOLOGIES. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF NEXTMOVE TECHNOLOGIES IS PROHIBITED. NEXTMOVE TECHNOLOGIES, LLC MILFORD, NH 03055 www.nextmove.tech.com	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: ANGLE ± 5 DEGREES TWO PLACE DECIMAL ±.030 THREE PLACE DECIMAL ±.010 INTERPRET DIM AND TOL PER ASME Y14.5M - 1994 THIRD ANGLE PROJECTION  DO NOT SCALE DRAWING	DRAWN C. CHEYNE 2017-03-13 CHECKED S. CHEYNE 2017-03-13 ME APPR. S. CHEYNE 2017-03-15 EE APPR.	NEXTMOVE TECHNOLOGIES TITLE: LINK-ALIGN-360FER-50 INTERFACE CONTROL DRAWING	
		PART NO. SEE TABLE I	SIZE DWG. NO. C ICDN900448	REV C
		SCALE: 1:3	SHEET 1 OF 6	



8X .250-20 UNC-2B THRU
 ϕ .010 A C
 MINOR DIAMETER

2X 8.250

2X 2.750

2X 2.750

2X 8.250

.5 15

.750

0

8X 1.250

9.9 15

H
 SHEET 4
 ZONE B-4

ACCESS FOR
 OPTIONAL
 SD CARD

YELLOW LED - ACTIVITY

GREEN LED - POWER

ENCLOSURE
 VENTING
 ELEMENT

21.75 11

4X .500
 MOUNTING FLANGE
 THICKNESS

G
 SHEET 4
 ZONE A-7

SHEET 3
 ZONE C-2

SHEET 3
 ZONE B-6

4X ϕ 1.250
 GROMMET FOR
 CABLE ROUTING

SHEET 4
 ZONE D-8

D
 SHEET 3
 ZONE A-4

SHEET 4
 ZONE B-2

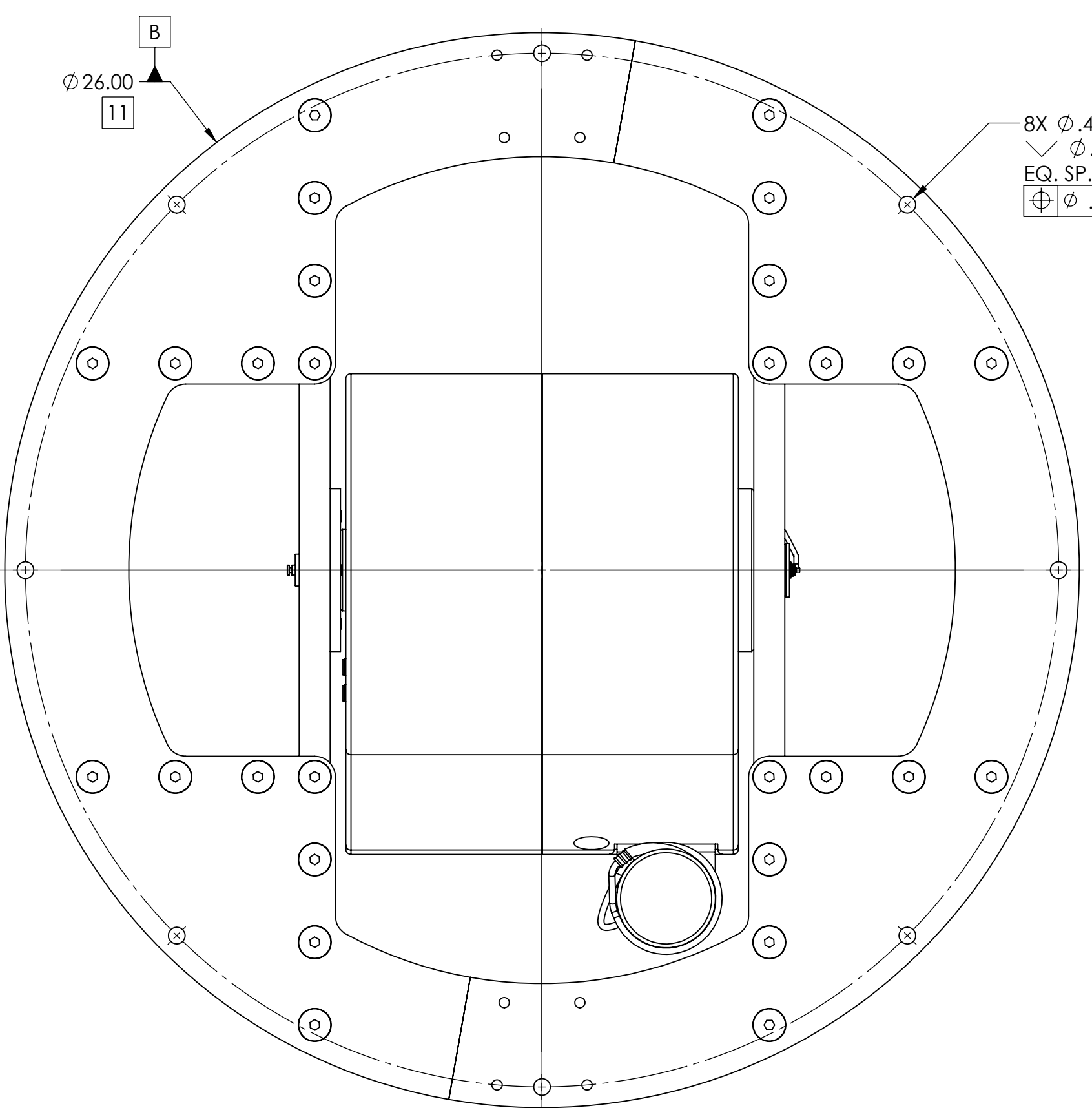
POSITIONER

F
 SHEET 4
 ZONE D-5

J8
 STANDARD
 CONFIGURATION-
 NO CONNECTORS
 SEE DETAIL K
 SHEET 5 ZONE D-7
 FOR ALTERNATE
 CONNECTOR
 CONFIGURATION

J9
 STANDARD
 CONFIGURATION-
 NO CONNECTORS
 SEE DETAIL K
 SHEET 5 ZONE D-7
 FOR ALTERNATE
 CONNECTOR
 CONFIGURATION

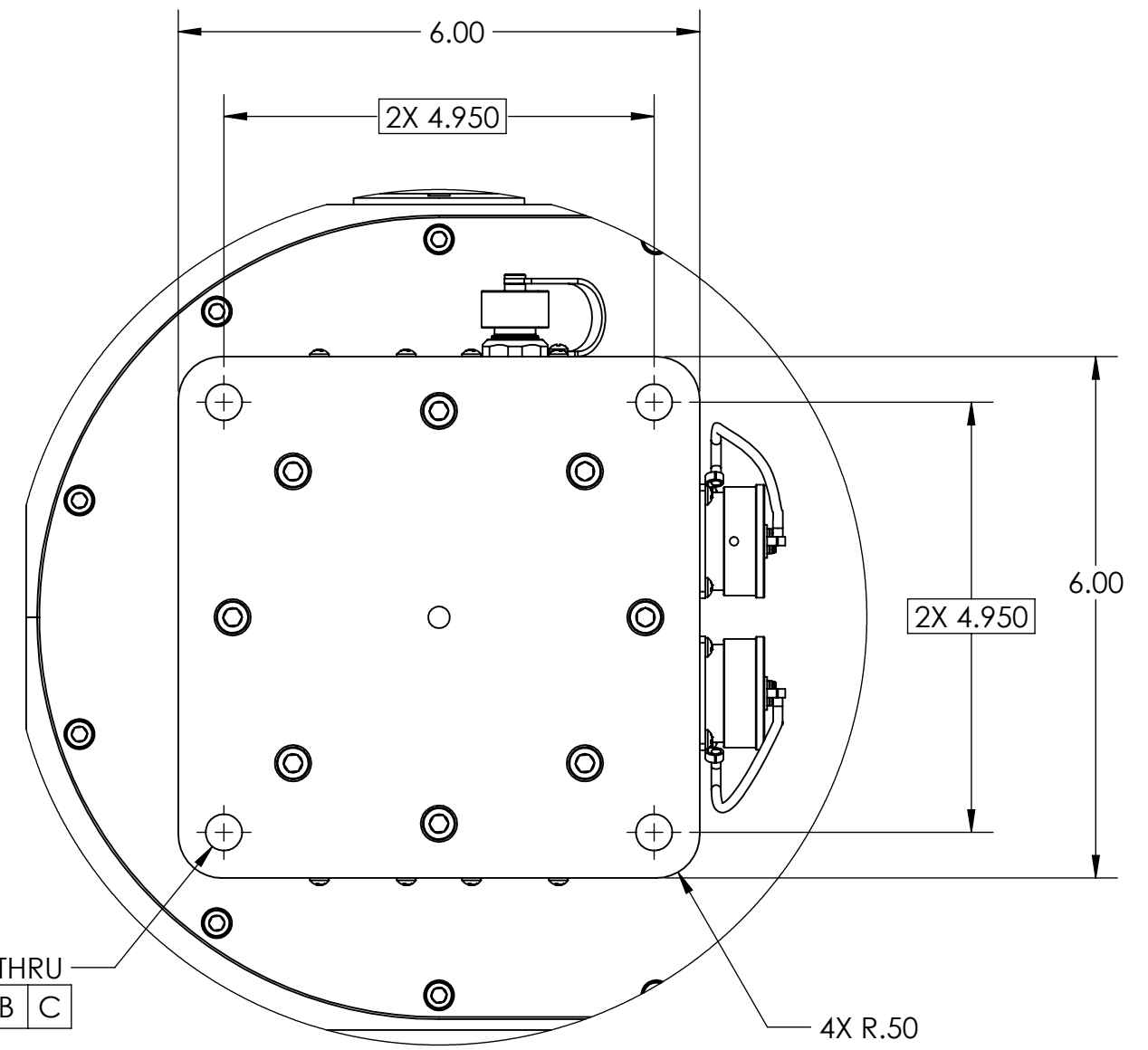
VIEW C-C
 SCALE 1:2



Ø 26.00
11

8X Ø.405±.005 THRU
Ø.800 X 82° FAR SIDE
EQ. SP. ON Ø25.000 B.C.
Ø.010 A B

VIEW A-A
SHEET 2
ZONE F-1

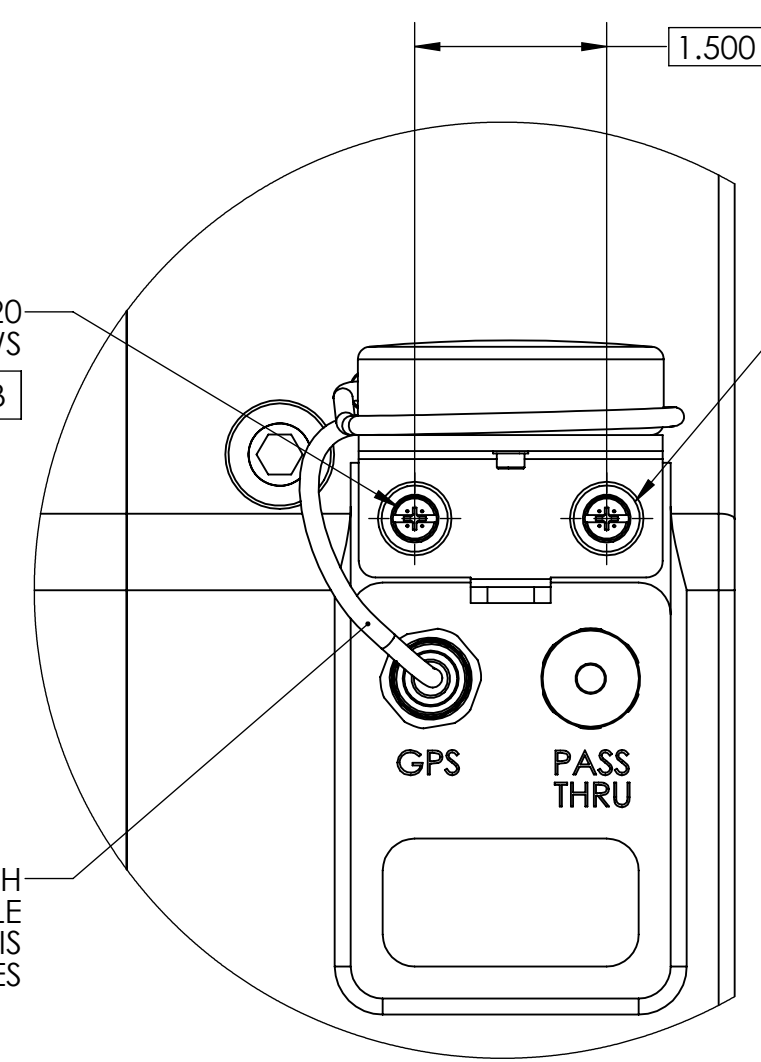


4X Ø.420±.005 THRU
Ø.010 D B C

4X R.50

VIEW B-B
SHEET 2
ZONE A-8
SCALE 1 : 2
TABLE TOP MOUNTING HOLES

14

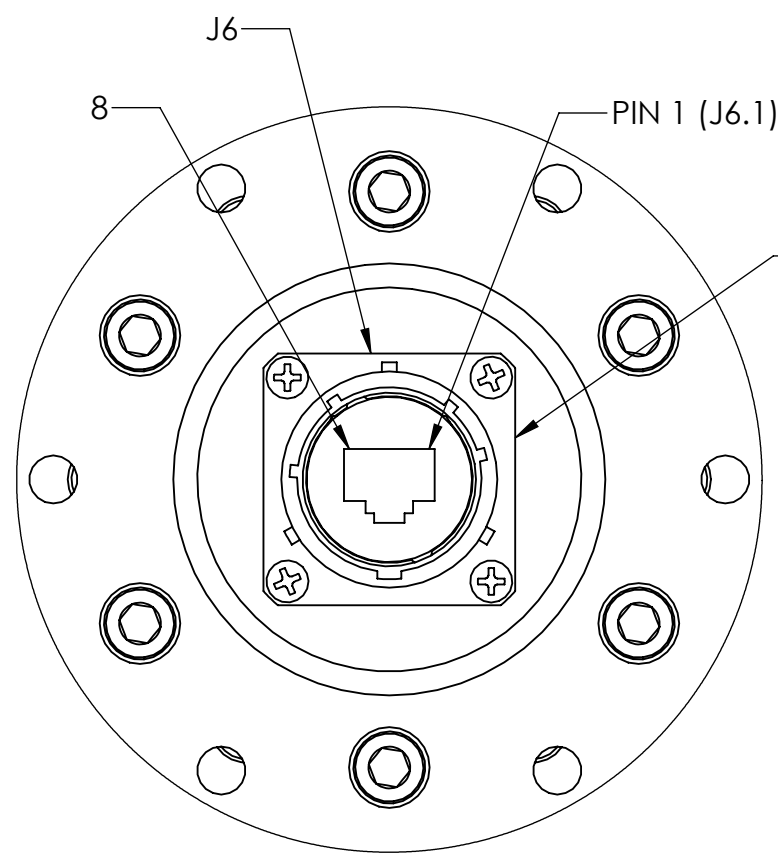


2X .250-20
CAPTIVE THUMB SCREWS
Ø.010 A B

REMOVABLE GPS
BRACKET

GPS CABLE LENGTH
NOT TO SCALE
ACTUAL LENGTH IS
72 INCHES

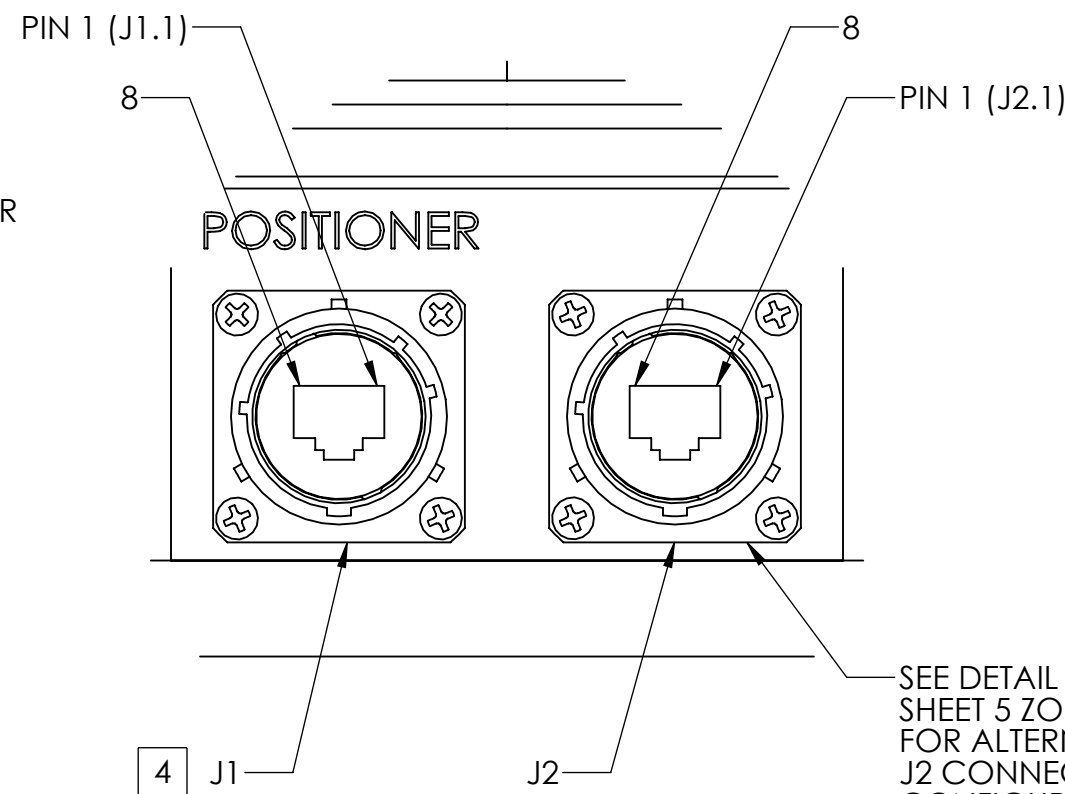
DETAIL D
SCALE 2 : 3
SHEET 2
ZONE C-1



J6 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH AMPHENOL P/N - RJF6B

VIEW E-E
SHEET 2
ZONE D-1
SCALE 1 : 1

SHOWN WITHOUT PROTECTIVE COVER
SEE TABLE V FOR J6 PASS THRU CONNECTOR PINOUT DETAILS



J1 & J2 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH AMPHENOL P/N - RJF68

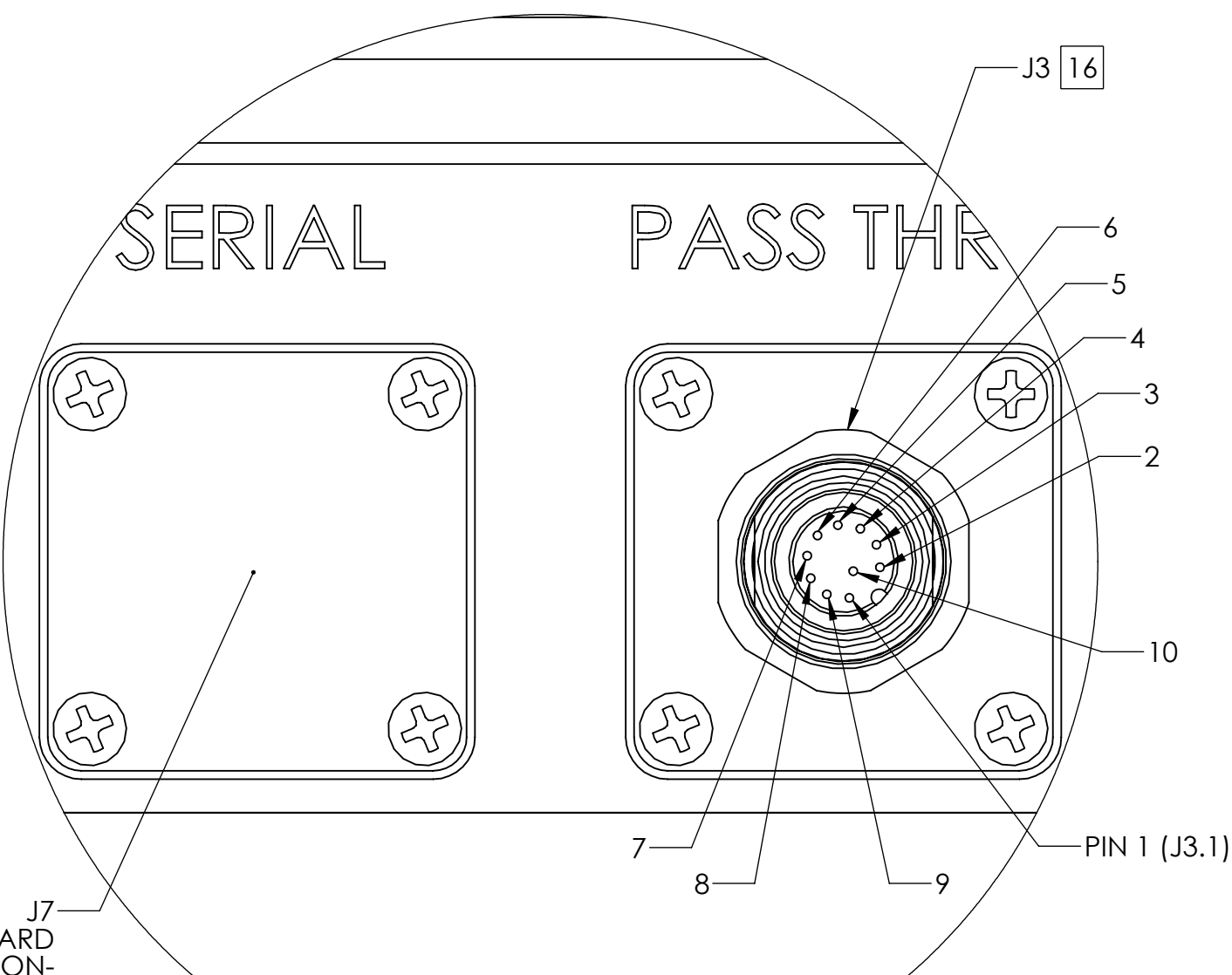
DETAIL F
SHEET 2
ZONE B-2
SCALE 1 : 1

SHOWN WITHOUT PROTECTIVE COVERS
SEE TABLE III FOR J1 PoE CONNECTOR PINOUT DETAILS
SEE TABLE V FOR J2 PASS THRU CONNECTOR PINOUT DETAILS

TABLE III (PoE CONNECTOR)	
CONNECTOR DESIGNATION	FUNCTION
J1.1	DATA PAIR 1
J1.2	DATA PAIR 1
J1.3	DATA PAIR 2
J1.4	+50-57 VDC PoE POWER INPUT
J1.5	+50-57 VDC PoE POWER INPUT
J1.6	DATA PAIR 2
J1.7	DC RETURN FOR PoE INPUT
J1.8	DC RETURN FOR PoE INPUT

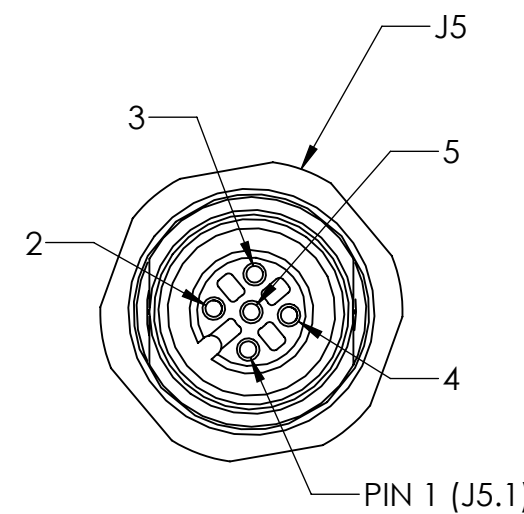
TABLE IV (AUX/POLARIZATION CONNECTOR)	
CONNECTOR DESIGNATION	FUNCTION
J5.1	GND
J5.2	+/-12 VDC MOTOR
J5.3	+/-12 VDC MOTOR
J5.4	POT WIPER
J5.5	+3.3V

TABLE V (PASS THRU CONNECTORS)	
FROM	TO
J2.1	J6.1
J2.8	J6.8
J3.1	J4.1
J3.10	J4.10



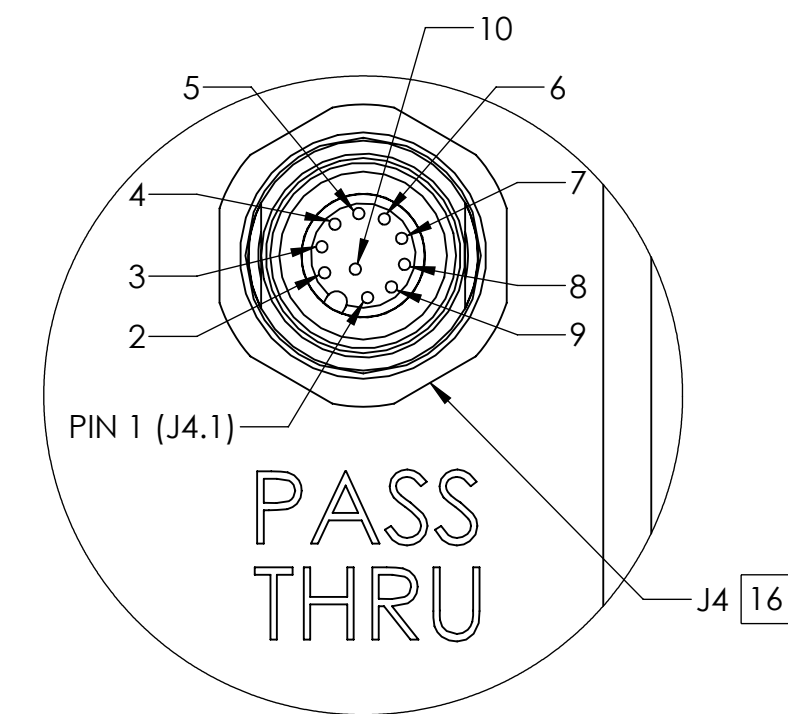
J3 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH TURCK P/N - RK 10-T-* (* LENGTH IN METERS)

DETAIL G
SHEET 2
ZONE B-6
SCALE 2 : 1
SHOWN WITHOUT PROTECTIVE COVER
SEE TABLE V FOR
J3 PASS THRU CONNECTOR
PINOUT DETAILS



J5 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH TURCK P/N - RS 4.5T-* (* LENGTH IN METERS)

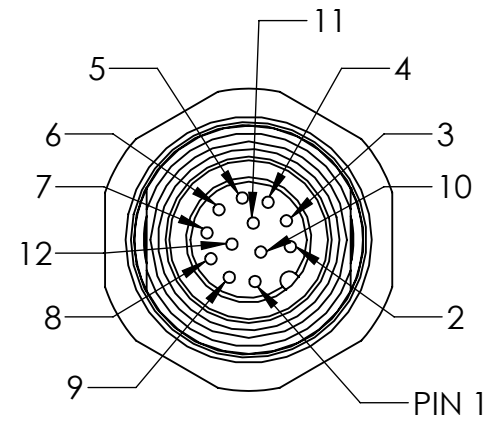
DETAIL H
SHEET 2
ZONE D-7
SCALE 2 : 1
SHOWN WITHOUT PROTECTIVE COVER
SEE TABLE IV FOR J5 AUX/POLARIZATION CONNECTOR PINOUT DETAILS



J4 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH TURCK P/N - RS 10-T-* (* LENGTH IN METERS)

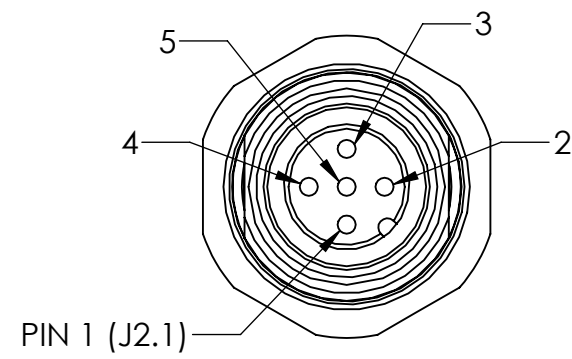
DETAIL J
SHEET 2
ZONE C-2
SCALE 2 : 1
SHOWN WITHOUT PROTECTIVE COVER
SEE TABLE V FOR J7 PASS THRU CONNECTOR PINOUT DETAILS

ALTERNATE CONNECTOR CONFIGURATIONS



J8 & J9 CONNECTORS SHOWN FROM MATING SIDE
MATES WITH TURCK P/N - RK 12-T-* (* LENGTH IN METERS)

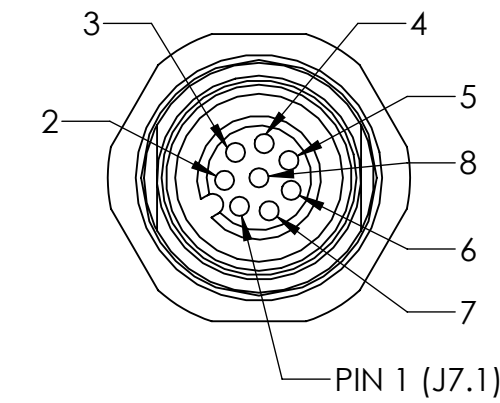
DETAIL K
SHEET 2
ZONE B-1 & B-3
SCALE 2 : 1
SHOWN WITHOUT PROTECTIVE COVER
SEE TABLE VI FOR
J8 & J9 EXT I/O CONNECTOR
PINOUT DETAILS



J2 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH TURCK P/N - RK 4.5-T-* (* LENGTH IN METERS)

DETAIL L
SHEET 4
ZONE F-4
SCALE 2 : 1
SHOWN WITHOUT PROTECTIVE COVER
SEE TABLE VII FOR
J2 DC POWER CONNECTOR
PINOUT DETAILS

4



J7 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH TURCK P/N - RS 8-T-* (* LENGTH IN METERS)

DETAIL M
SHEET 4
ZONE B-8
SCALE 2 : 1
SHOWN WITHOUT PROTECTIVE COVER
SEE TABLE VIII FOR
J7 SERIAL CONNECTOR
PINOUT DETAILS

TABLE VI (EXT I/O)

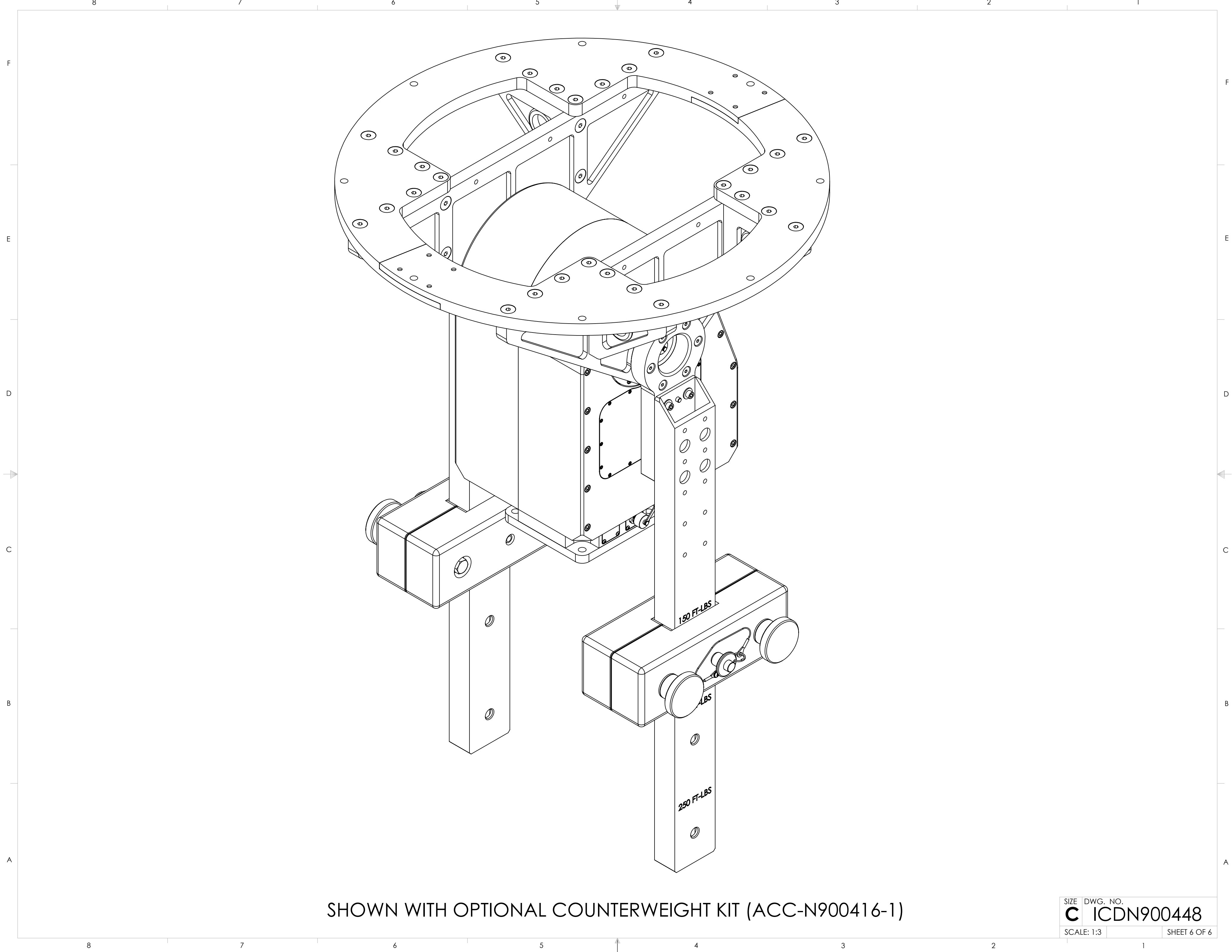
CONNECTOR DESIGNATION	FUNCTION
J8.1	ADC_1+
J8.2	GND
J8.2	IN2, IN_GPIO_1_27
J8.4	IN1, IN_GPIO_1_16
J8.5	COM
J8.6	IN3, IN_GPIO_1_24
J8.7	OUT1, OUT_GPIO_1_15
J8.8	OUT4, OUT_GPIO_1_22
J8.9	ADC_1-
J8.10	OUT3, OUT_GPIO_1_21
J8.11	IN4, IN_GPIO_1_14
J8.12	OUT2, OUT_GPIO_1_17
J9.1	ADC_2+
J9.2	GND
J9.3	IN6, IN_GPIO_0_6
J9.4	IN5, IN_GPIO_3_16
J9.5	COM
J9.6	IN7, IN_GPIO_1_26
J9.7	OUT5, OUT_GPIO_0_13
J9.8	OUT8, OUT_GPIO_1_28
J9.9	ADC_2-
J9.10	OUT7, OUT_GPIO_1_25
J9.11	IN 8, IN_GPIO_2_0
J9.12	OUT6, OUT_GPIO_3_21

TABLE VII (DC POWER CONNECTOR)

CONNECTOR DESIGNATION	FUNCTION
J2.1	N/C
J2.2	N/C
J2.3	+20-60 VDC POWER INPUT
J2.4	N/C
J2.5	GND

TABLE VIII (SERIAL CONNECTOR)

CONNECTOR DESIGNATION	FUNCTION
J7.1	5V
J7.2	GND
J7.3	12V
J7.4	GND
J7.5	RS232, UART4 Tx
J7.6	RS232, UART4 Rx
J7.7	RS232, UART5 Tx
J7.8	RS232, UART5 Rx



SHOWN WITH OPTIONAL COUNTERWEIGHT KIT (ACC-N900416-1)

SIZE	DWG. NO.
C	ICDN900448
SCALE: 1:3	SHEET 6 OF 6