REV	DESCRIPTION	DATE	APPROVED
G	CN600564	2018-08-02	CLC

NOTES: UNLESS OTHERWISE SPECIFIED

1. QPAR LINKALIGN-360FER-10 CONFIGURABLE OPTIONS PER TABLE I. PART NUMBER QLA-360FER-10-100 SHOWN THROUGHOUT THIS DRAWING. PoE CABLE SHOWN NOT TO SCALE
2. USE INTERFACE CONTROL DRAWING IN CONJUNCTION WITH DATASHEET N500119
3. 48 - 56VDC POWER SUPPLY INCLUDED WITH POSITIONER. NOT SHOWN IN DRAWING
4. HARD COAT ANODIZE ALUMINUM CONSTRUCTION WITH STAINLESS STEEL HARDWARE
5. 400° (+/-200°) AZIMUTH TRAVEL WITH 4.5°/SEC DRIVE RATE (NO LOAD)
6. 140° (+120°/-20°) ELEVATION TRAVEL WITH 4.5°/SEC DRIVE RATE (NO LOAD)
7. -22° TO 140°F (-30° TO 60°C) OPERATIONAL TEMPERATURE RANGE. -40 TO 158°F (-40 TO 70°C) NON-OPERATIONAL TEMPERATURE RANGE
8. 0.1° FEEDBACK RESOLUTION IN ALL AXES
9. AZIMUTH AND ELEVATION BACKLASH LESS THAN 0.25°
10. 13.08" (33.2 cm) HIGH X 8.59" (21.8 cm) WIDE X 12.38" (31.4 cm) DEEP. DIMENSIONS APPLY WHEN POSITIONER IS AT 0° AZIMUTH AND 0° ELEVATION ANGLES
11. WEIGHT APPROXIMATELY 21.0 LBS (9.5 kg) NOT INCLUDING PoE CABLE
12. PAYLOAD SHALL NOT EXCEED 45 LBS OR 20 FT-LBS OF TORQUE ABOUT THE ELEVATION AXIS. TO CALCULATE TORQUE, TAKE THE DISTANCE FROM THE PAYLOAD CENTER OF GRAVITY TO DATUM -H- IN FEET AND MULTIPLY BY THE PAYLOAD WEIGHT. SEVERAL ANTENNA BRACKET OPTIONS AVAILABLE THAT INTERFACE DIRECTLY WITH FEATURES SHOWN. GO TO www.qparusa.com TO LEARN MORE
13. RADIO OR AUXILIARY MOUNTING HOLES (BOTH SIDES). 30 LBS MAX. IF MOUNTED TO THE ELEVATION BRACKET, TOTAL PAYLOAD (INCLUDING ANTENNA) MUST NOT EXCEED 20 FT-LBS
14. CENTER OF GRAVITY 0.2" (0.51 cm) IN THE X-DIRECTION, 6.5" (16.5 cm) IN THE Y-DIRECTION AND 0.5" (1.3 cm) IN THE Z-DIRECTION. X & Z MEASURED FROM THE CENTER OF THE 2.00" DIAMETER MOUNTING POLE
15. FOR PERMANENT INSTALLATIONS, IT IS RECOMMENDED THAT THE (2) INDICATED 5/16-18 THREADED KNOBS BE REPLACED WITH (2) 5/16-18 X 1.000" LONG STAINLESS STEEL HEX HEAD FASTENERS. HARDWARE PROVIDED WITH UNIT. TORQUE TO 132 IN-LBS
16. POSITIONER IS AT AZIMUTH PEDESTAL 0° WHEN INDICATED FASTENER IS AT POSITION SHOWN WITH CLAMPING KNOBS IN THE BACK AS SHOWN
17. POSITIONER CLAMPS TO STANDARD 2" OUTSIDE DIAMETER MAST (NOT INCLUDED). OPTIONAL MIDMOUNT KIT AVAILABLE TO ADAPT TO MAST DIAMETERS UP TO 6". GO TO www.qparusa.com TO LEARN MORE
18. 5/16" QUICK RELEASE PIN TO SECURE POSITIONER TO MAST AND PREVENT ROTATION

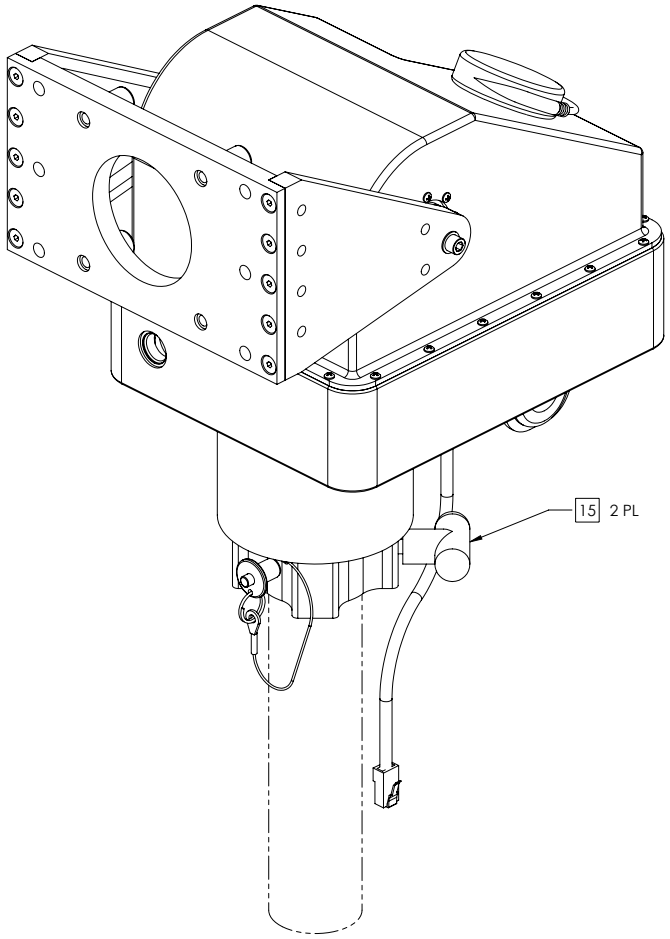


TABLE I

BUILDING A PART NUMBER ***STANDARD OPTIONS***

LA-360FER - 10 - ____ - 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
- 10 = Az 20 ft-lbs @ 4.5°/s, El 20 ft-lbs @ 4.5°/s, 45 lb payload. Typically paired with 1-2 ft antenna

MODEL
- LA-360FER = LinkAlign-360FER (+/-200° azimuth, +120/-20° elevation)

SYMBOL KEY
NOTE PL ITEMS

QPAR ANTENNAS USA, LLC
San Diego, CA 92020
www.qparusa.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	S. CHEYNE	2015-03-24
CHECKED	C. CHEYNE	2018-08-02
ME APPR.	S. CHEYNE	2015-03-24
EE APPR.		

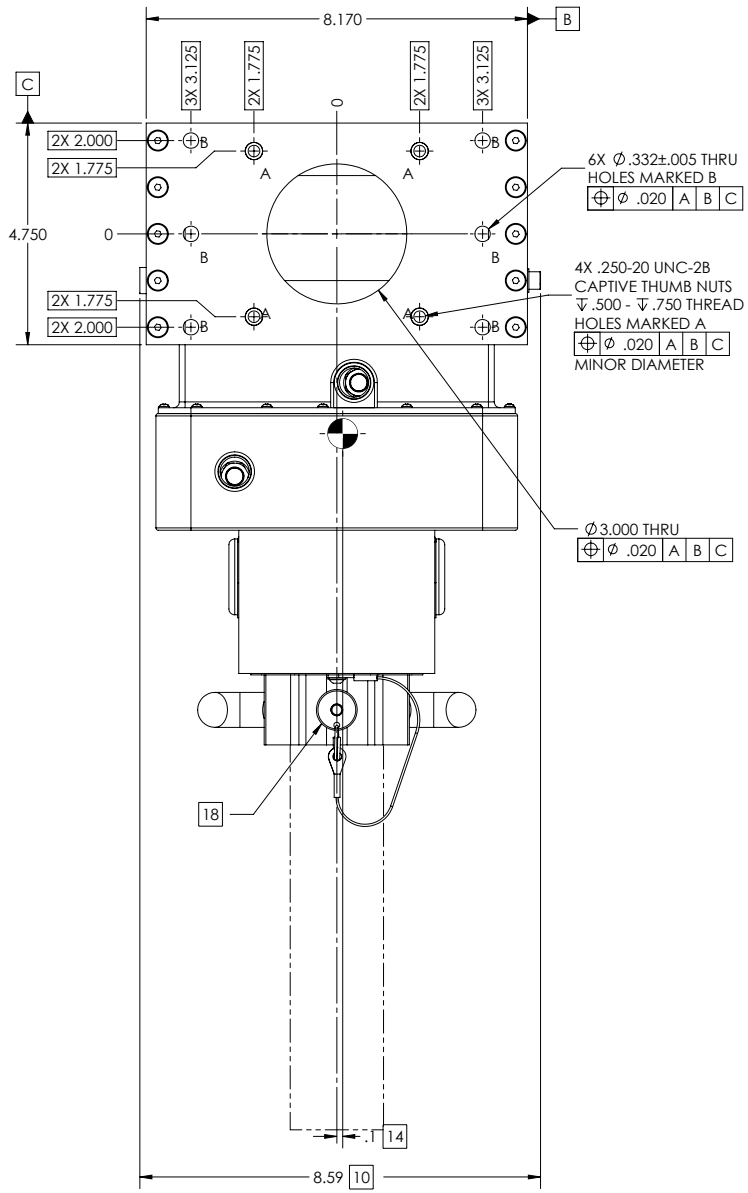
PART NO. SEE TABLE I

QPAR ANTENNAS USA, LLC

TITLE: Q-PAR LINKALIGN-360FER-10 INTERFACE CONTROL DRAWING

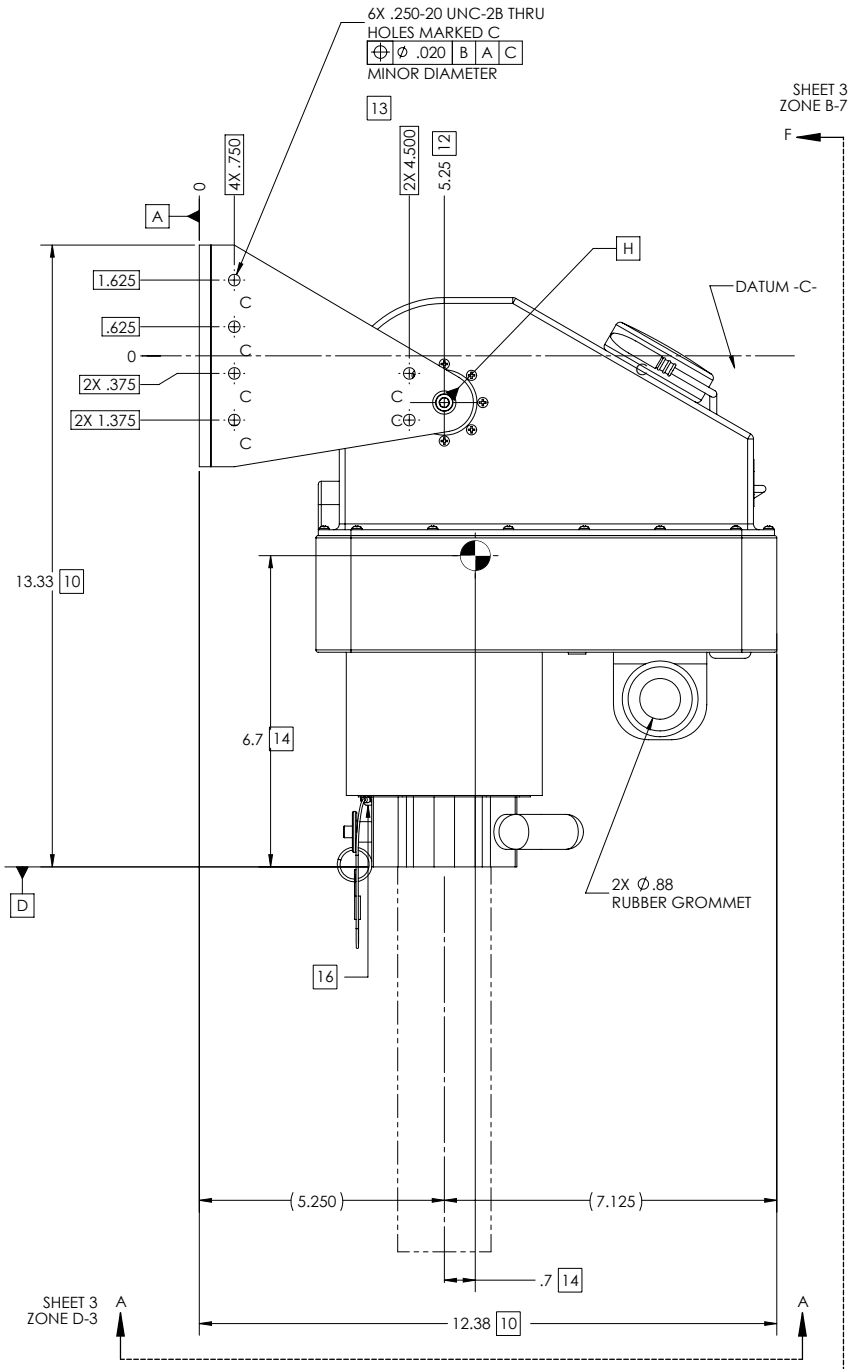
SIZE C | DWG. NO. ICDN900316 | REV G

SCALE: 1:2 | SHEET 1 OF 4



ANTENNA MOUNTING FEATURES

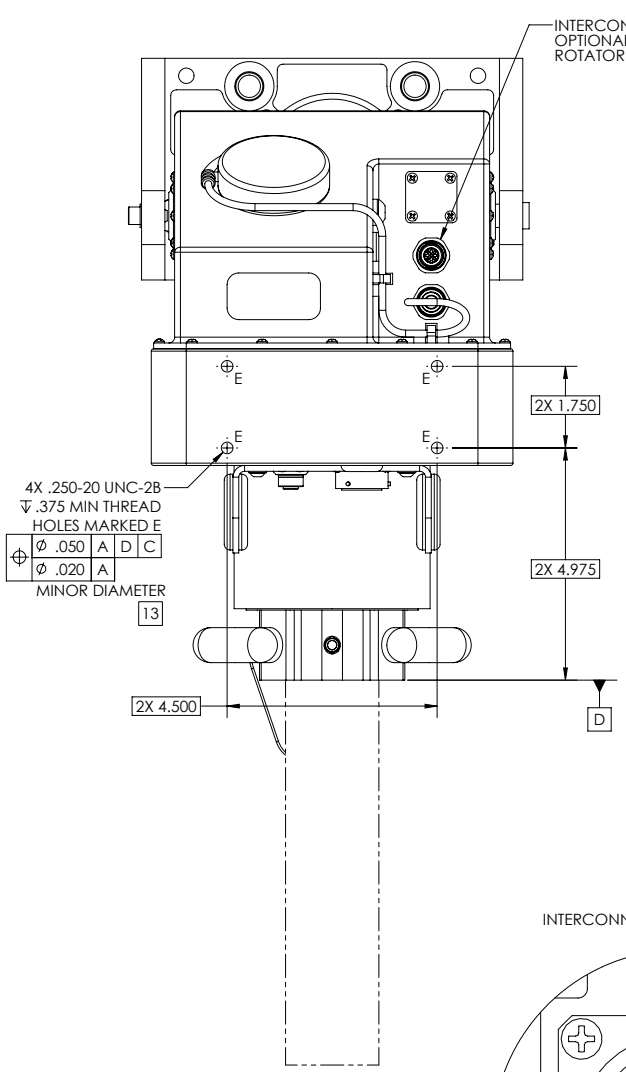
12



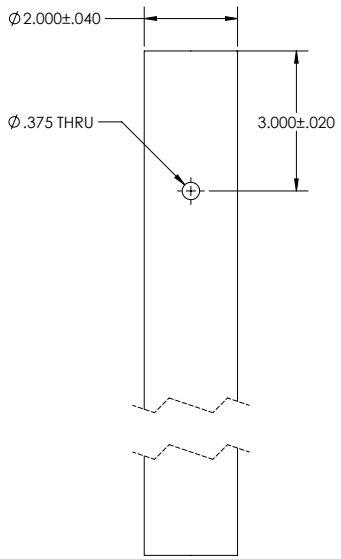
RADIO OR AUXILIARY EQUIPMENT MOUNTING FEATURES

13

SIZE	DWG. NO.
C	ICDN900316
SCALE: 1:2	SHEET 2 OF 4

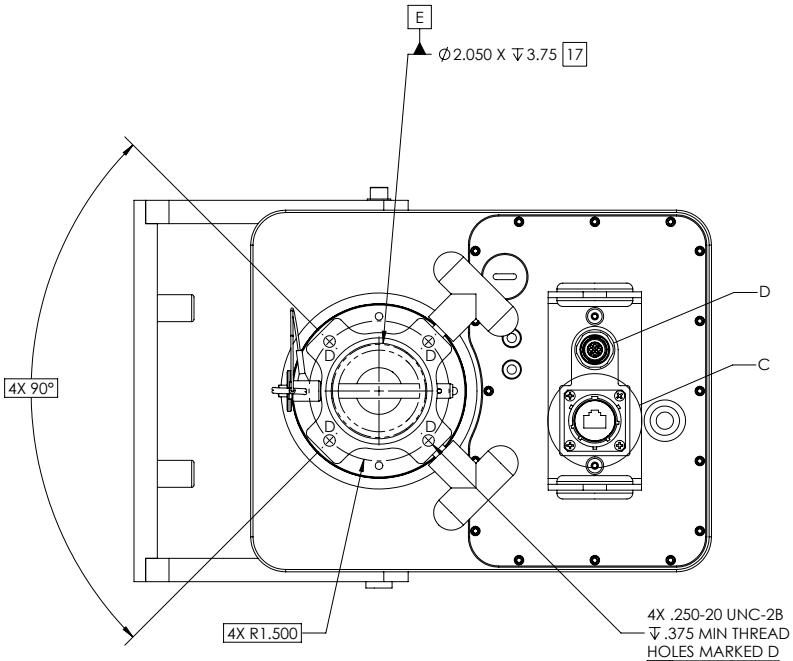


SECTION B-B
SHEET 2
ZONE F-1



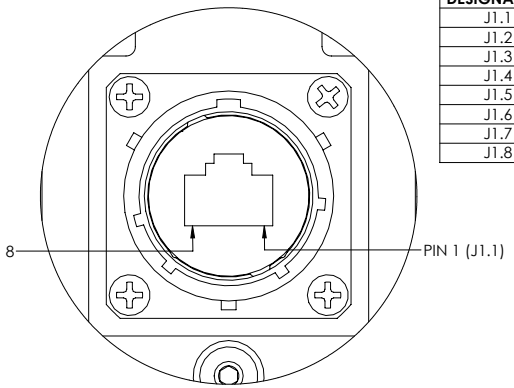
SUGGESTED POSITIONER
MAST DIMENSIONS

17



SECTION A-A
SHEET 2
ZONE A-3

INTERCONNECT FOR POSITIONER PoE

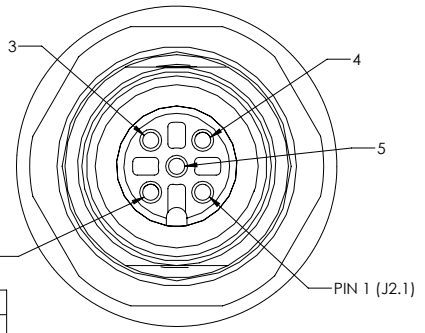


J1 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH AMPHENOL P/N - RJF6B

DETAIL C
SCALE 2 : 1
SEE TABLE II FOR PINOUT DETAILS

TABLE II (PoE CONNECTOR)	
CONNECTOR DESIGNATION	**FUNCTION**
J1.1	DATA PAIR 1
J1.2	DATA PAIR 1
J1.3	DATA PAIR 2
J1.4	+48-56VDC PoE POWER INPUT
J1.5	+48-56VDC PoE POWER INPUT
J1.6	DATA PAIR 2
J1.7	DC RETURN FOR PoE INPUT
J1.8	DC RETURN FOR PoE INPUT

INTERCONNECT FOR SERIAL INTERFACE

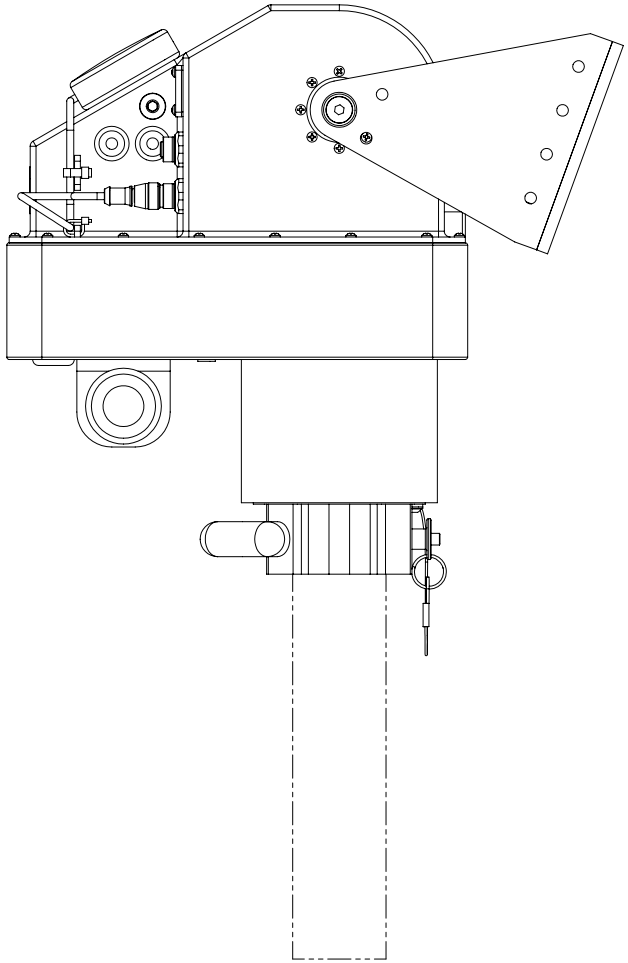


J2 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH TURCK P/N 8151-0/PG9

DETAIL D
SCALE 4 : 1
SEE TABLE III FOR PINOUT DETAILS

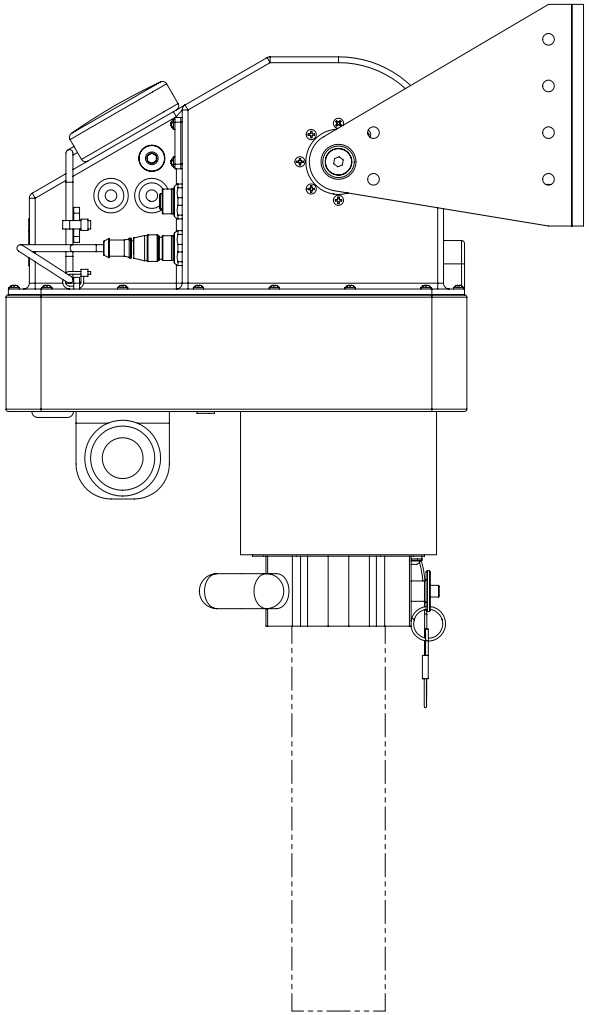
TABLE III (SERIAL CONNECTOR)	
CONNECTOR DESIGNATION	**FUNCTION**
J2.1	DC RETURN FOR QPARUSA JOYSTICK
J2.2	NOT USED
J2.3	(B) TxD-/RxD- DATA LINE
J2.4	(A) TxD+/RxD+ DATA LINE
J2.5	DC POWER FOR QPARUSA JOYSTICK

SIZE	DWG. NO.
C	ICDN900316
SCALE: 1:2	SHEET 3 OF 4

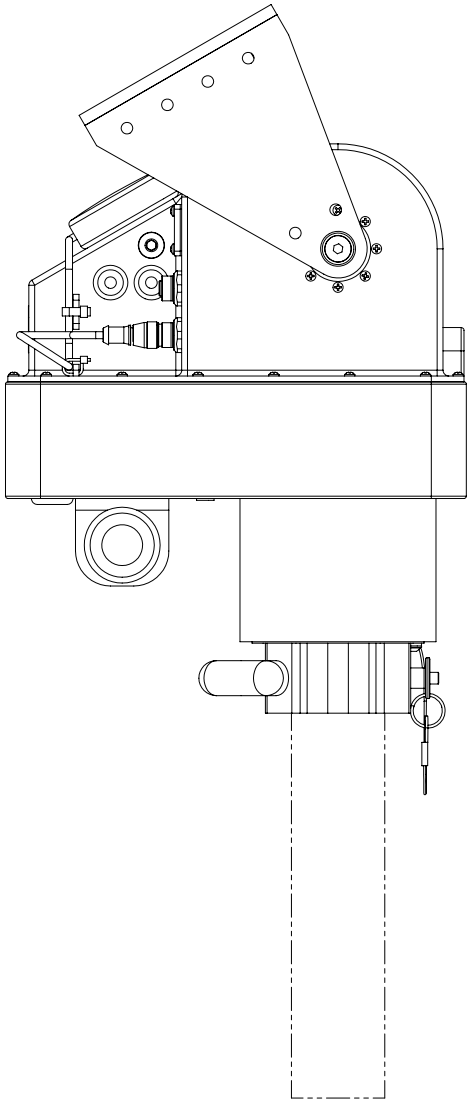


SHOWN AT -20° ELEVATION LIMIT

6



SHOWN AT 0° ELEVATION



SHOWN AT 120° ELEVATION LIMIT

6

SIZE	DWG. NO.
C	ICDN900316
SCALE: 1:2	SHEET 4 OF 4