

QLA-360AZR-10

AUTO ACQUISITION ANTENNA POSITIONER FOR MICROWAVE LINE OF SIGHT



The QLA-360AZR-10 is a Power Over Ethernet (PoE) antenna positioner designed from the ground up to automatically point and peak directional antennas for microwave line of sight communications.

The built in GPS and digital compass with full featured web based user interface provides rapid and accurate antenna pointing. The user interface includes a stored locations database that allows easy recall of known target locations followed by a final auto peak using radio signal strength.

The QLA-360AZR-10 is specifically designed to interface with the U.S. and NATO forces Band III, Band III+, and Band 4 line of sight radio systems. The positioner can accommodate payloads up to 60 lbs (27.2 kg), and offers 360° of azimuth range. Download the Interface Control Drawing (ICD) for more details.

Optional tri-pods, table top mount, radio adapter brackets, antenna adapter brackets, polarization rotators, joysticks, and transit cases are also available.

TECHNICAL SPECIFICATIONS – QLA-360AZR-10

Power	Power Over Ethernet (POE) 48VDC-56VDC Supply Included
Material / Finish	Aluminum with stainless steel hardware / Hard coat anodize
Positioner Travel	
Azimuth	400° (+/-200°)
Positioner Drive Rate	
Azimuth	Variable, up to 4.5°/sec no load
Temperature	
Operational	-22 to 140°F (-30 to 60°C)
Survival	-40 to 158°F (-40 to 70°C)
Feedback Resolution	0.1°
Backlash	less than 0.25°
Torque	
Operational	20 ft-lbs (27.1 Nm)
Survival	50 ft-lbs (67.8 Nm)
Payload	60 lbs (27.2 kg)
Dimensions	Height: 14.85" (37.7 cm), Width: 7.75" (19.7 cm), Depth: 10.00" (25.4 cm)
Weight	13.5 lbs (6.1 kg)
Mounting Interface	Clamps standard to a 2" dia mast (5 cm). Optional table top mount available
Antenna Mount Options	1.555" (39.5cm) pole mount with anti rotation pin (See ICD for details)
Communication Interface	
User Interfaces	Web based hosted internal to unit, Pelco D
Ethernet	10/100 Ethernet
Serial	RS-485

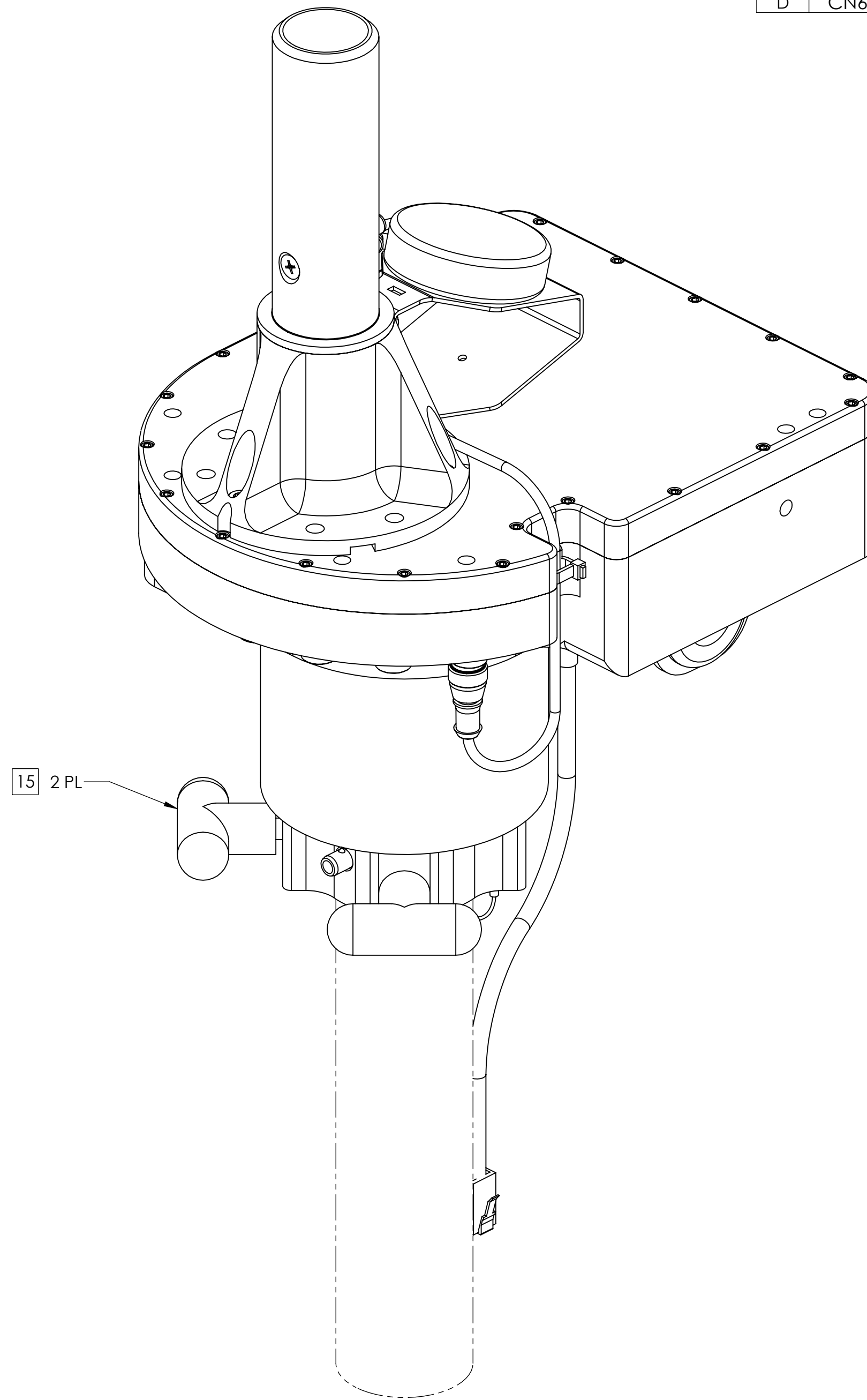
REV I

Specifications subject to change without notice

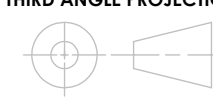
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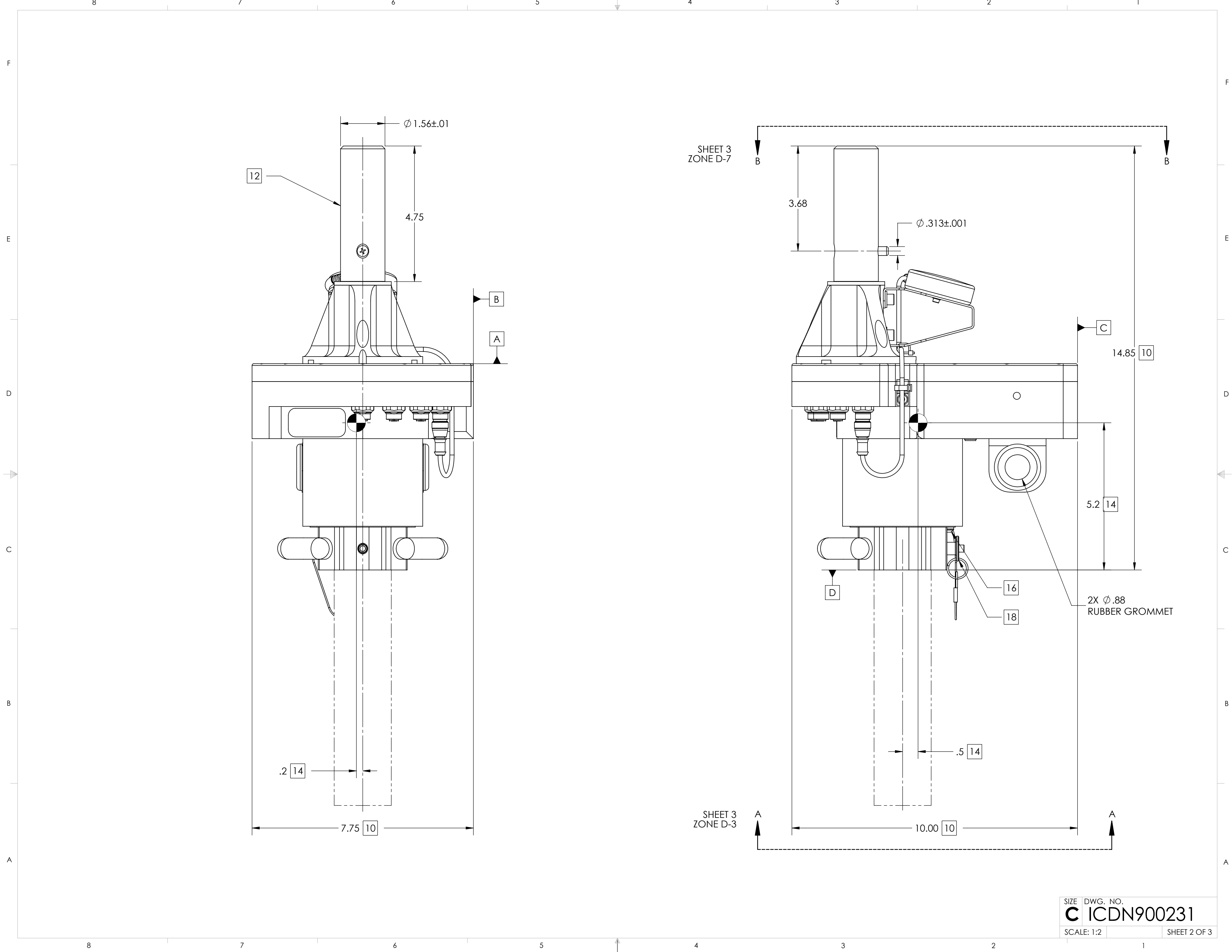
NOTES: UNLESS OTHERWISE SPECIFIED

1. QLA-360AZR-10 CONFIGURABLE OPTIONS PER TABLE I. PART NUMBER LA-360AZR-10-100 SHOWN THROUGHOUT THIS DRAWING. PoE CABLE SHOWN NOT TO SCALE
2. USE INTERFACE CONTROL DRAWING IN CONJUNCTION WITH DATASHEET N500110
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. NOT USED
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
9. AZIMUTH BACKLASH LESS THAN 0.25°
- 10 14.85" (37.1 cm) HIGH X 7.75" (19.7 cm) WIDE X 10.00" (25.4 cm) DEEP
11. WEIGHT APPROXIMATELY 13.5 LBS NOT INCLUDING PoE CABLE
- 12 PAYLOAD SHALL NOT EXCEED 60 LBS ON INDICATED MAST
- 13 RADIO OR AUXILIARY EQUIPMENT MOUNTING FEATURES. 20 LBS MAX
- 14 CENTER OF GRAVITY 0.2" (0.5 cm) IN THE X-DIRECTION, 5.2" (13.2 cm) IN THE Y-DIRECTION AND 0.6" (1.5 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 FRONT 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



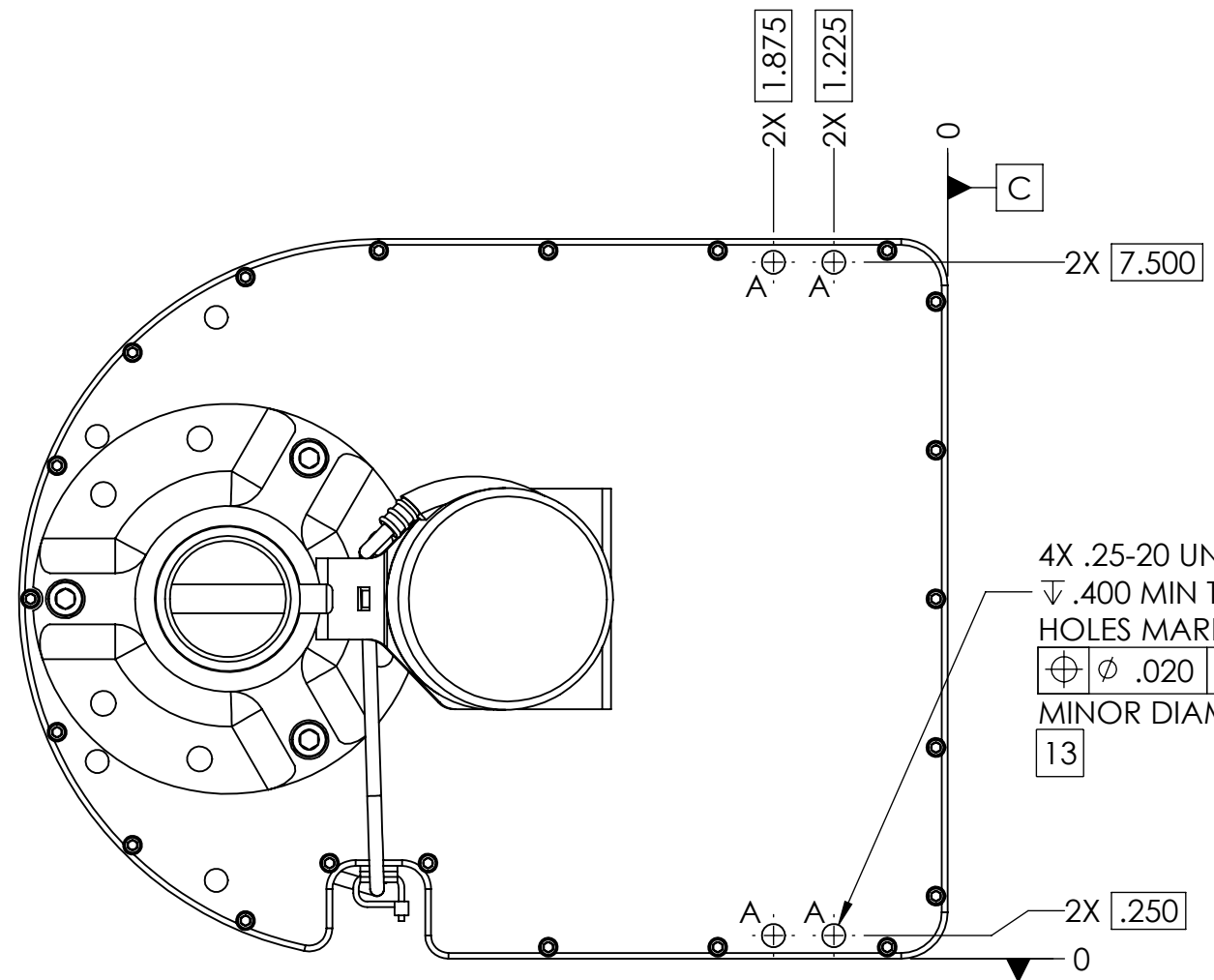
BUILDING A PART NUMBER		STANDARD OPTIONS
LA-360AZR	- 10 - 100	<<EXAMPLE
SHIELDED ETHERNET CABLE STANDARD LENGTHS		
050 = 50 ft		
100 = 100 ft		
150 = 150 ft		
200 = 200 ft		
250 = 250 ft		
300 = 300 ft		
XXX = Custom length in feet		
XXXC = Add "C" to end of cable length for unterminated mating connector		
CUSTOM CONFIGURATION		
= Standard options - leave blank		
MOTOR DRIVES AND PAYLOAD		
10 = Az 20 ft-lbs @ 4.5°/s, 60 lb payload		
MODEL		
LA-360AZR = LinkAlign-360AZR (+/- 200° azimuth)		

SYMBOL KEY □ NOTE ○ PL ITEMS PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF QPARUSA. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF QPARUSA IS PROHIBITED. QPAR ANTENNAS USA, LLC LAS VEGAS, NV 89121 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 2015-06-08 CHECKED C. CHEYNE 2018-07-30 ME APPR. S. CHEYNE 2015-06-08 EE APPR.	QPAR Antennas USA, LLC TITLE: QLA-360AZR-10 INTERFACE CONTROL DRAWING
		PART NO. SEE TABLE I	SIZE DWG. NO. REV C ICDN900231 D

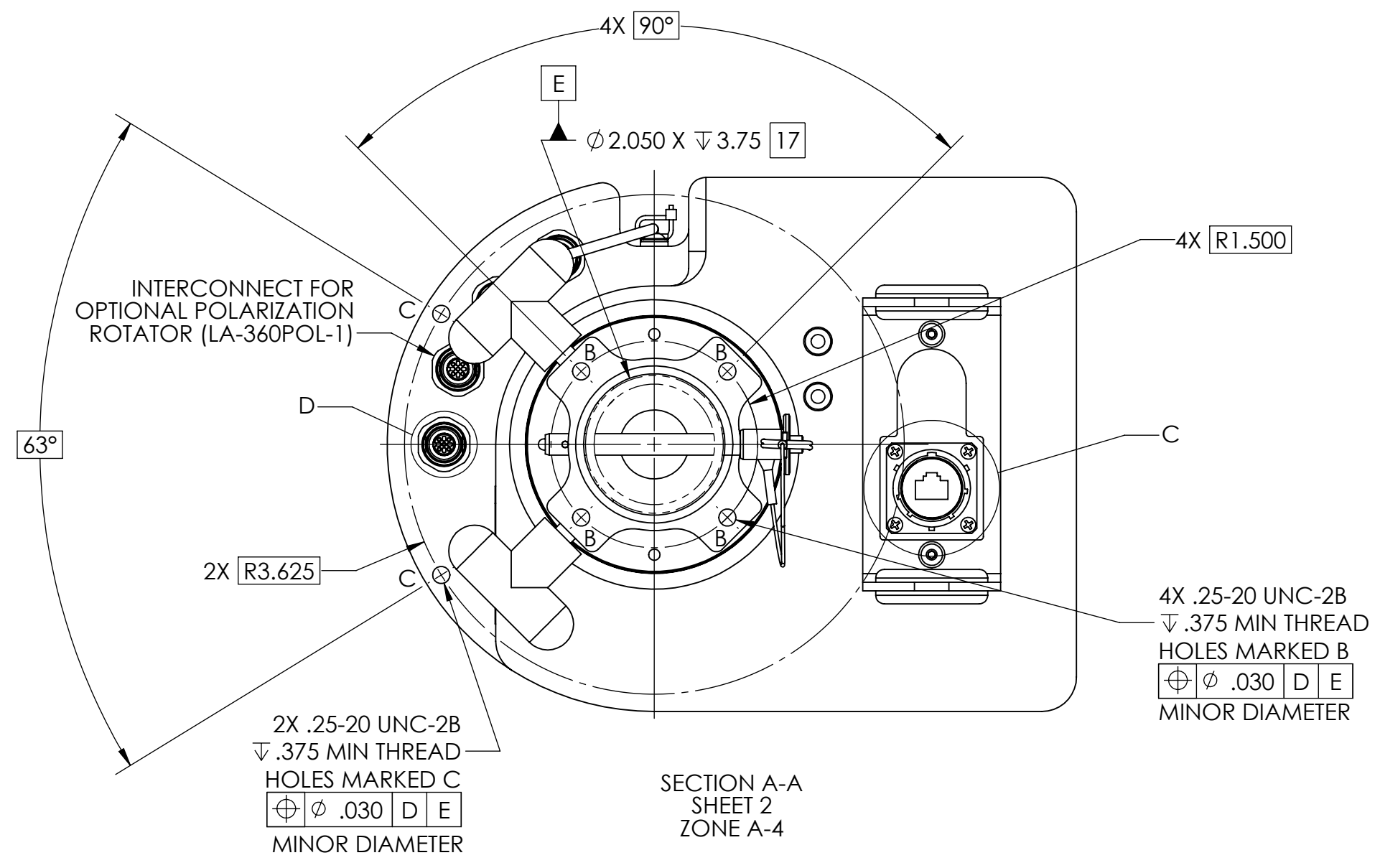


SHEET 3
ZONE D-7

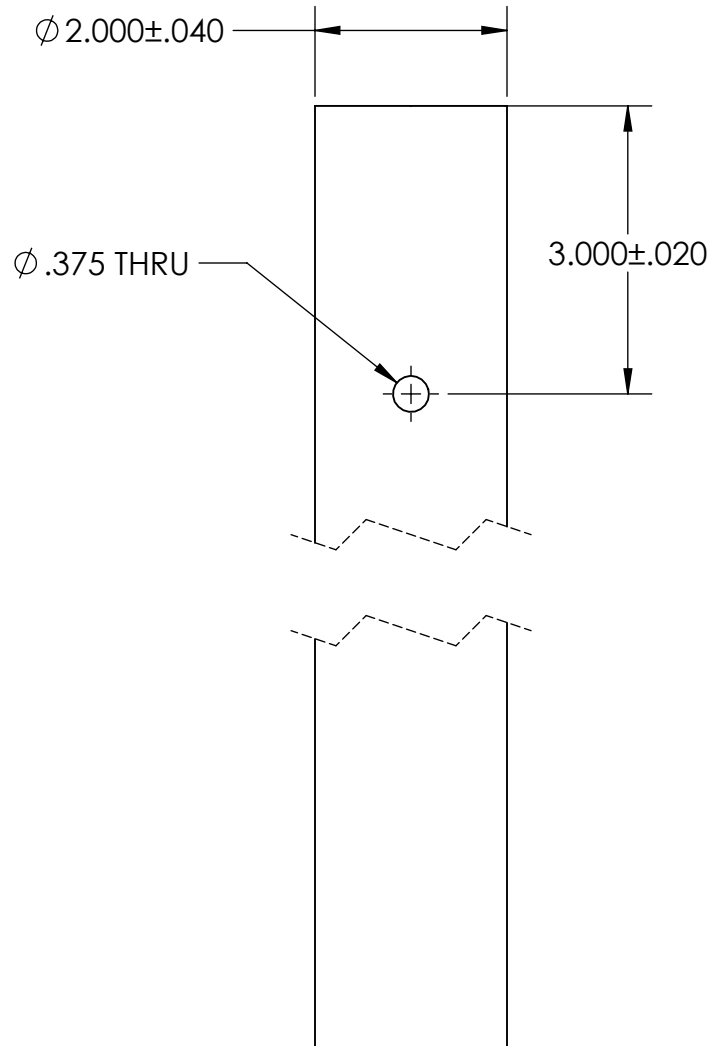
SHEET 3
ZONE D-3



SECTION B-B
SHEET 2
ZONE F-4



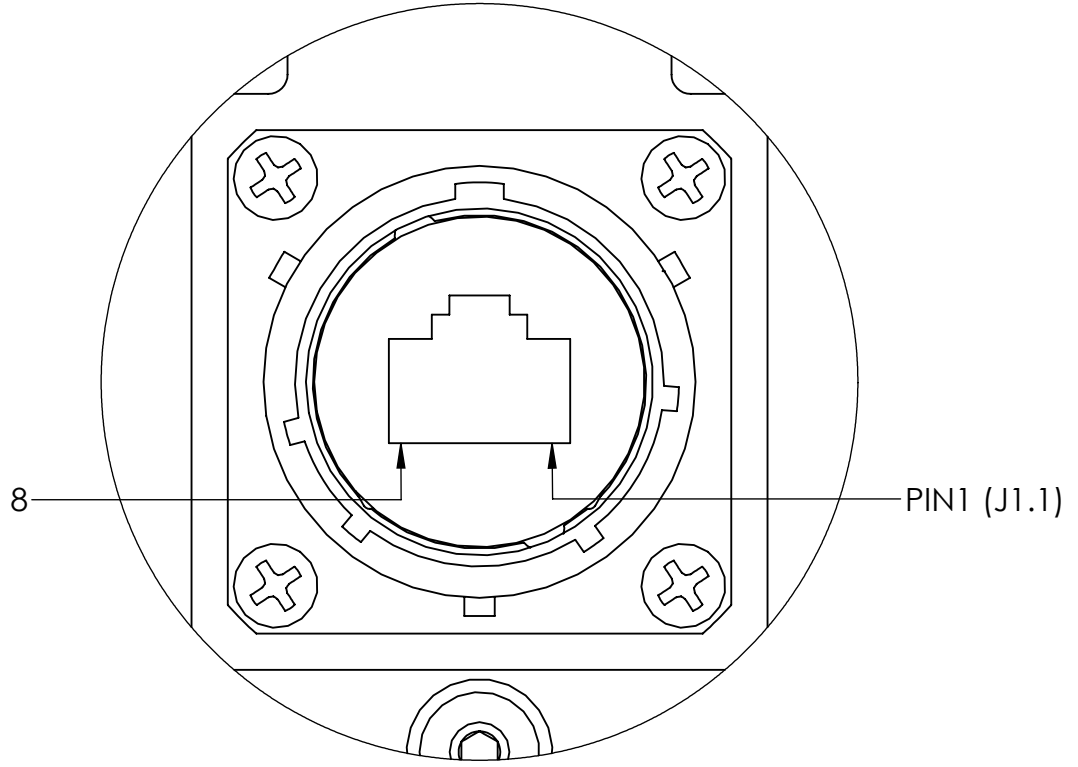
SECTION A-A
SHEET 2
ZONE A-4



SUGGESTED POSITIONER
MAST DIMENSIONS

17

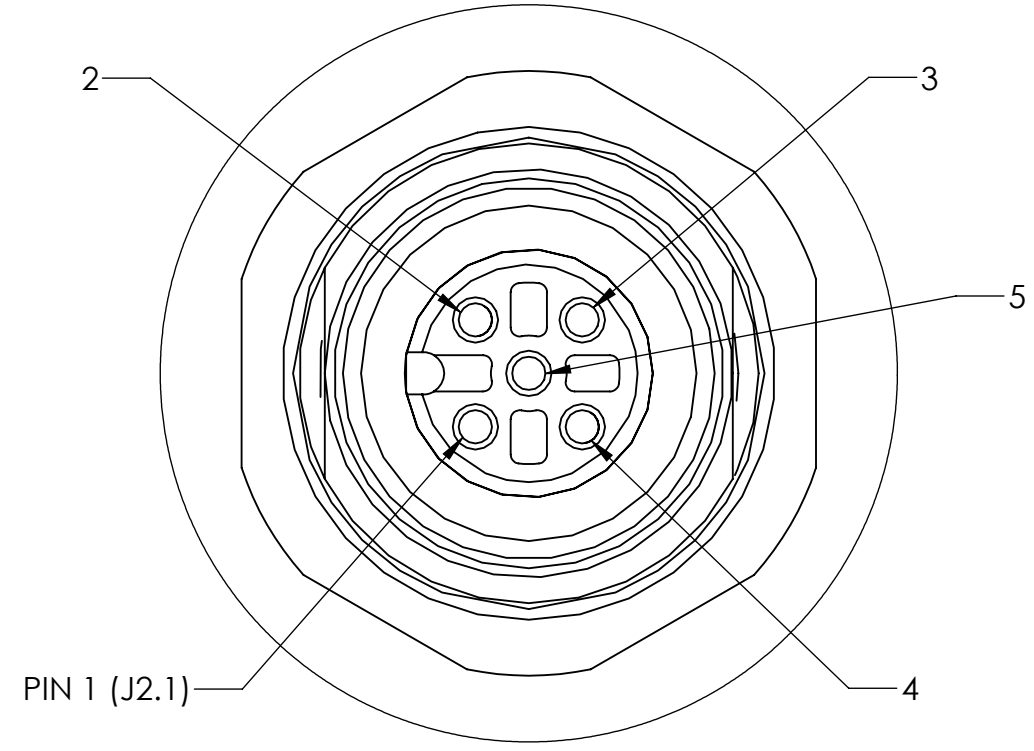
INTERCONNECT FOR POSITIONER PoE



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

DETAIL C
SCALE 2 : 1

INTERCONNECT FOR SERIAL INTERFACE



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

DETAIL D
SCALE 4 : 1

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

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