

8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364. 9. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO

EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4 10. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL, AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS. 11. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS, PLUGS OR RECYCLED MATERIAL). NO REPAIRS SHALL BE MADE UNLESS

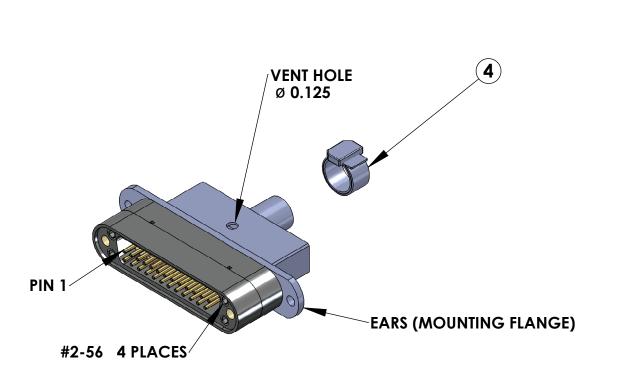
SURFACE FINISH TO BE AS-PROCESSED FROM MILL/SUPPLIER, FREE FROM SCRATCHES OR GOUGES.

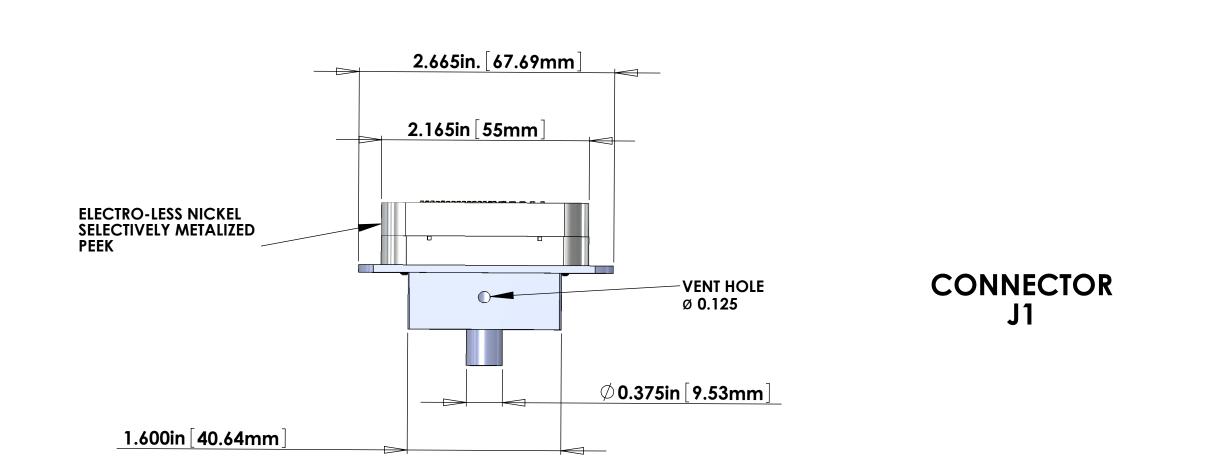
APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY.

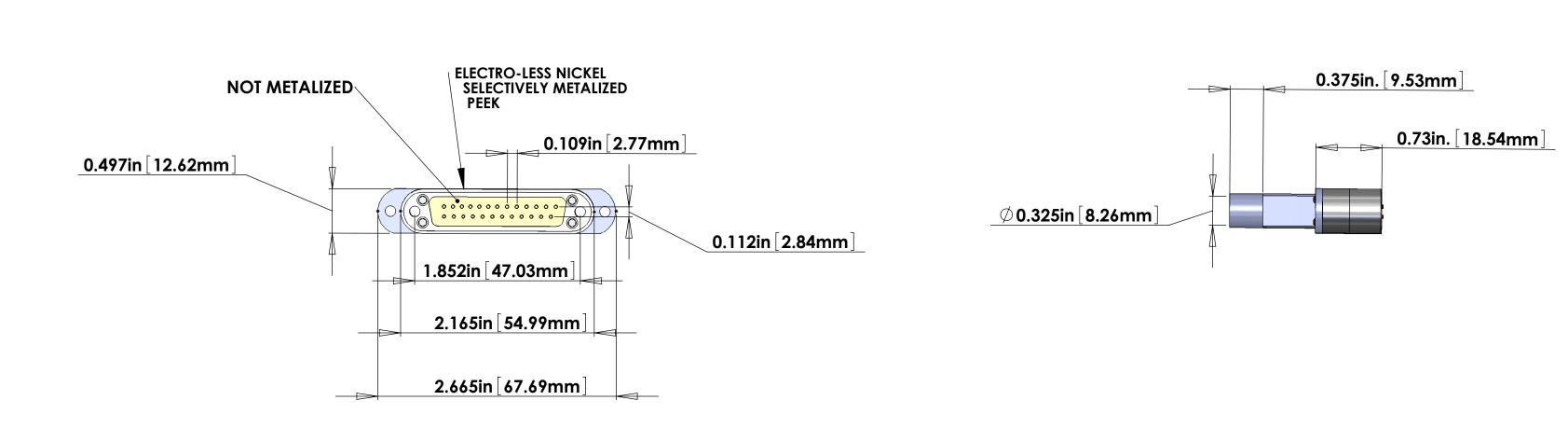
13. PART WILL BE PORCELAIN COATED PER LIGO SPECIFICATION E1000083 AFTER FABRICATION. THE INDICATED HOLES WILL BE MASKED PRIOR TO PORCELAIN COATING TO APPROXIMATELY 2.5-3X HOLE DIAMETER CENTERED ON BOTH SIDES OF THE HOLE.

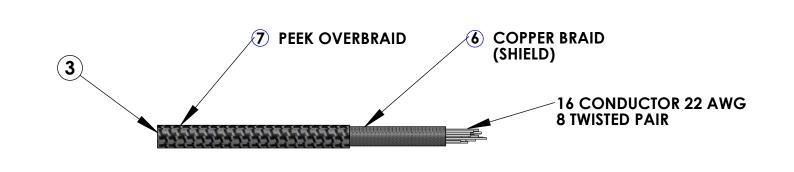
14. DIMENSIONS APPLY BEFORE PORCELAIN COATING UNLESS SPECIFIED.

15. BEND RADIUS: UNLESS OTHERWISE NOTED, THE BEND RADIUS SHOULD BE THE MINIMUM REQUIRED TO FORM WITHOUT CRACKING OR REQUIRING ADDITIONAL WORK WHEN FORMING. IN PARTICULAR IF SHEET METAL IS TO BE PORCELAIN COATED, THE BEND RADIUS SHALL BE A MINIMUM OF .12" OUTSIDE RADIUS OF BEND UNLESS OTHERWISE NOTED.







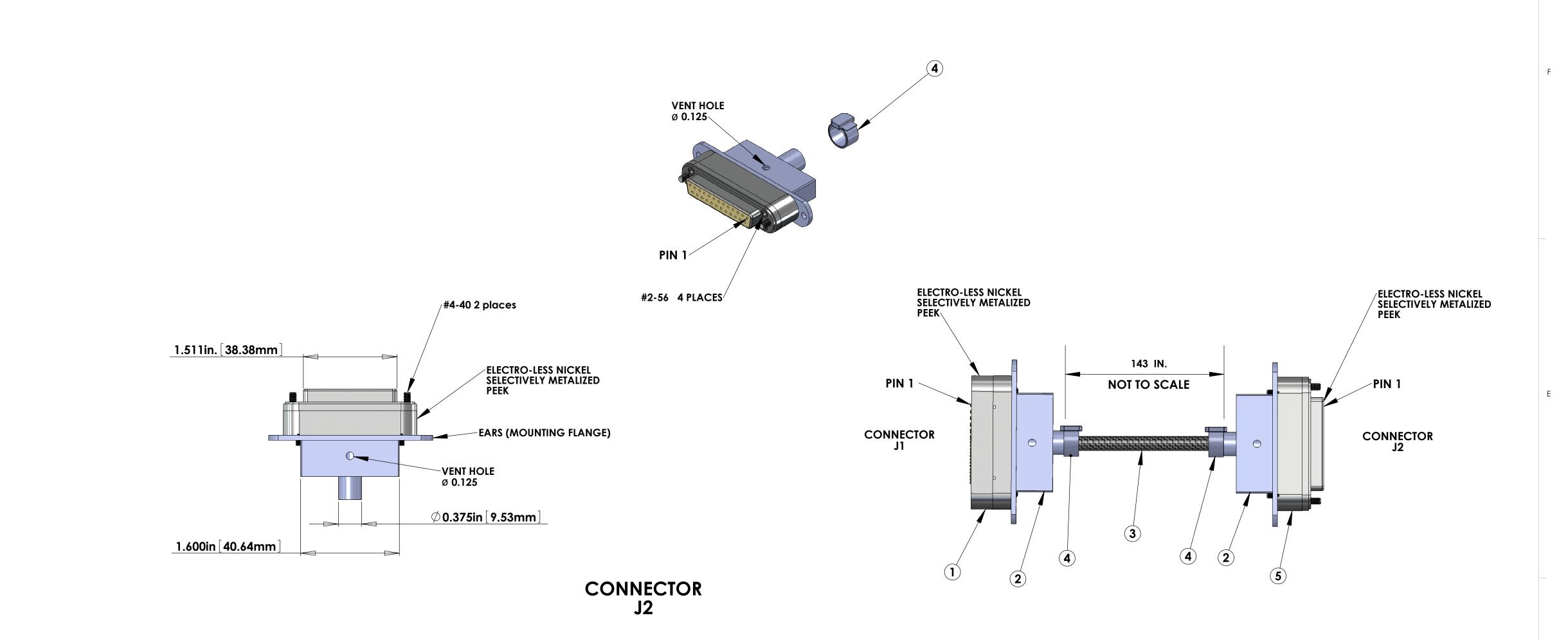


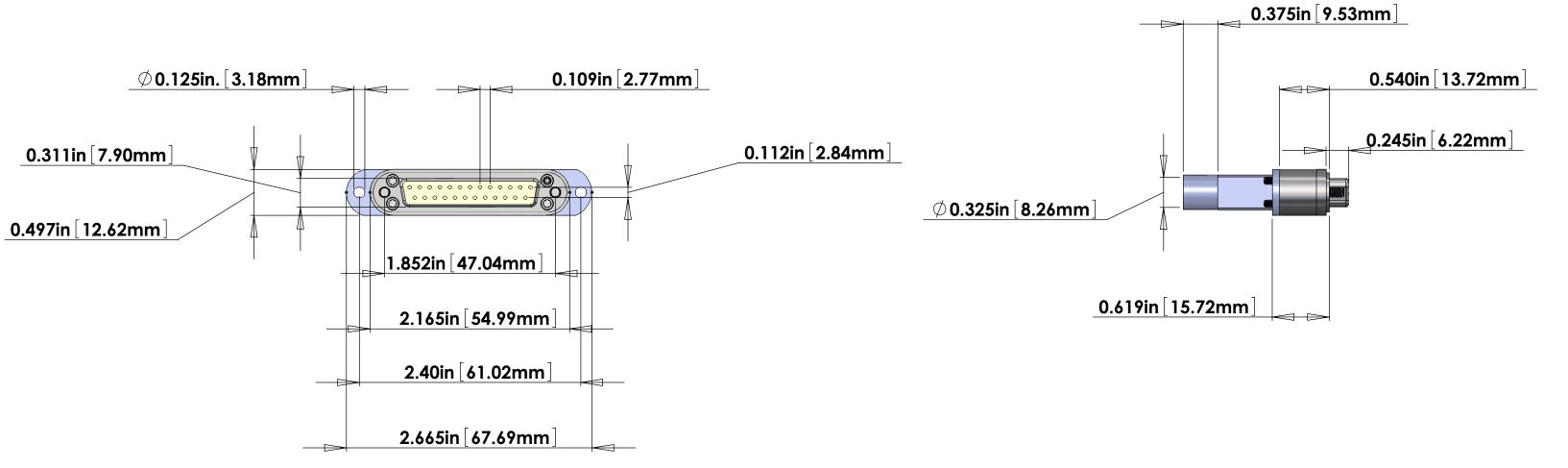
ITEM NO.	PART NUMBER	ART NUMBER DESCRIPTION			
1	CUSTOM DB25 FEMALE	DB25 FEMALE CONNECTOR (J1) FOR UHV (PEEK)	1		
2	CUSTOM BACKSHELL	DB25 CONNECTOR BACKSHELL (WITH EARS) (LARGE PORT) FOR UHV (STAINLESS)	2		
3	COONER WIRE # CZ2205 + 6 + 7 16 COND. 22Ga. (8 TWISTED PAIR) CABLE WITH COPPER BRAID (SHIELD) AND PEEK OVERBRAID		1	143in *	
4	GLENAIR 600-052	GLENAIR 600-052 STANDARD BRAID CLAMP (BAND - IT)	2		
5	CUSTOM DB25 FEMALE	DB25 FEMALE CONNECTOR (J2) FOR UHV (METALIZED PEEK)	1		
6	CONTINENTAL PART #24x3x40BC COPPER BRAID - CONTINENTAL CORDAGE PART #24x3x40BC		1	143in *	
7	#6759	PEEK BRAID - PART #6759 MANUFACTURED WITH ZEUS 0.016" BLACK PEEK DRAWN MONOFILAMENT	1	143in *	

\* NOTE: USE WHATEVER LENGTH IS NECESSARY FOR THE INTERNAL WIRING OF THE CONNECTORS AND STRIP LENGTH TO ACHIEVE THE CORRECT OVERALL LENGTHS.

## NOTES: ( UNLESS OTHERWISE SPECIFIED )

- 1. MATERIAL: a. J1 CONNECTOR SHELL PEEK VICTREX 450GL30
  - b. J2 CONNECTOR SHELL SELECTIVELY METALIZED OVER PEEK VICTREX 450GL30. c. BACKSHELLS - STAINLESS STEEL WITH VENT HOLE. d. CONTACTS - BERYLLIUM COPPER ALLOY C17300
  - 0.000050 MIN. GOLD OVER NICKEL
  - e. HARDWARE: CORROSION RESISTANCE STEEL, PASSIVATED f. PEEK BRAID PEEK VICTREX GRADE TDS-450CA30 CARBON LOADED SUPPLIED BY LIGO
- 2. CABLE 16 COND. 22 AWG, (150 STRD 44 AWG) WITH 0.005" PFA INSULATION (COONER WIRE #CZ2205) 8 TWISTED PAIRS ( 4 TO 5 TWISTS PER INCH )
  - OVERALL 40AWG COPPER BRAID 50% COVERAGE SUPPLIED BY LIGO
  - OVERALL PEEK BRAID MIN. 50% COVERAGE OVERALL CABLE O.D. WILL BE 0.240 IN.
- 3. CONNECTORS WILL BE SUPPLIED WITH HARDWARE (LENGTH OF SCREWS AS SHOWN ARE APPROXIMATE SCREWS SHOULD BE THE PROPER LENGTH FOR PROPER MATING)





**GLENAIR** 

CLAMPING BANDS (BAND-IT)

	V25C-143 CABLE ASSEMBLY CIRCUIT SUMMARY V-DB25 M/S1-143-DB25 F/S1								
	CABLE NAME	COND WIRE ID	TWISTED PAIR	LENGTH	FROM	то			
	V25A-143	16 COND. CABLE	(8 TOTAL)	143 in.	Conn. J1	Conn. J2			
		SHIELD		143 in	PIN 1, SHELL	PIN 1, SHELL			
		W13	TD 1	143 in	PIN 13	PIN 13			
-		W25	TP-1	143 in	PIN 25	PIN 25			
		W12	TD O	143 in	PIN 12	PIN 12			
		W24	TP-2	143 in	PIN 24	PIN 24			
		W11	TD 2	143 in	PIN 11	PIN 11			
		W23	TP-3	143 in	PIN 23	PIN 23			
		W10	TD 4	143 in	PIN 10	PIN 10			
		W22	TP-4	143 in	PIN 22	PIN 22			
		W9	TP-5	143 in	PIN 9	PIN 9			
		W21	11-5	143 in	PIN 21	PIN 21			
		W8	TP-6	143 in	PIN 8	PIN 8			
		W20	117-0	143 in	PIN 20	PIN 20			
		W7	TP-7	143 in	PIN 7	PIN 7			
		W19	IF-/	143 in	PIN 19	PIN 19			
		W6	TP-8	143 in	PIN 6	PIN 6			
		W18	117-0	143 in	PIN 18	PIN 18			

SEE REFERENCE DCC# LIGO-D1100670

\* The length shown in this list is the length of the cable between the two connectors. Add additional length as necessary for the internal wiring of the connectors and strip length.

		COMOTOR CABLE NDED TRANSMON TABLE
	V-DB25 M/S1-1	43-DB25 F/S1
	STANDARD USE F	OR THIS CABLE
SUBSYSTEM	AIR/VAC	STANDARD USE
SEI	IN-VAC	PICOMOTORS TOP TO TABLE

DRAWING TREE #

DATE

DCN#

	NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIE	D)		ノリリリ	CALIFORNIA INICTITUTE OF TECHNICIOCY	PART NAME	•	CIICTO	ACADIE	CDECIEIC A	A TION	
DIMENSIONS ARE IN	1. INTERPRET DRAWING PER ASME Y14 2. REMOVE ALL SHARP EDGES, .0050 EDGES APPROXIMATLEY R.02 FOR SHE	15. FOR MACHINED PARTS	. ROUND ALL	LIGO	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY			CUSTOM CABLE SPECIFICATION V25C-143				
OLERANCES:	3. DO NOT SCALE FROM DRAWING.			SYSTEM	SUB-SYSTEM	DESIGNER	R.ABBOTT	MAY/4/2011	SIZE DWG. I	NO.		REV.
XX ± XXX ±	4. ALL MACHINING FLUIDS MUST BE FU AND FREE OF SULFUR, SILICONE, AND		TER SOLUBLE		ISC	DRAFTER	E.BROWN	MAY/4/2011	F	D100	0921	V
	MATERIAL	FIN	ISH	NEXT ASSY		CHECKER			-		0/21	<b>V</b> 4
ANGULAR±°	Material <not spe<="" td=""><td>cified&gt;</td><td>μinch</td><td>1</td><td></td><td>APPROVAL</td><td></td><td></td><td>SCALE: 1:1</td><td>PROJECTION:</td><td><math>\oplus</math></td><td>SHEET 1 OF 1</td></not>	cified>	μinch	1		APPROVAL			SCALE: 1:1	PROJECTION:	$\oplus$	SHEET 1 OF 1

PIN 14,2,15,3,16,4,17,5 N/C (NOT CONNECTED)