REVISION ON NOTÉD SURFACE FOLLOWED ON THE NEXT LINE BY A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE .07" HIGH **EXAMPLE:** 

7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH,

ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

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

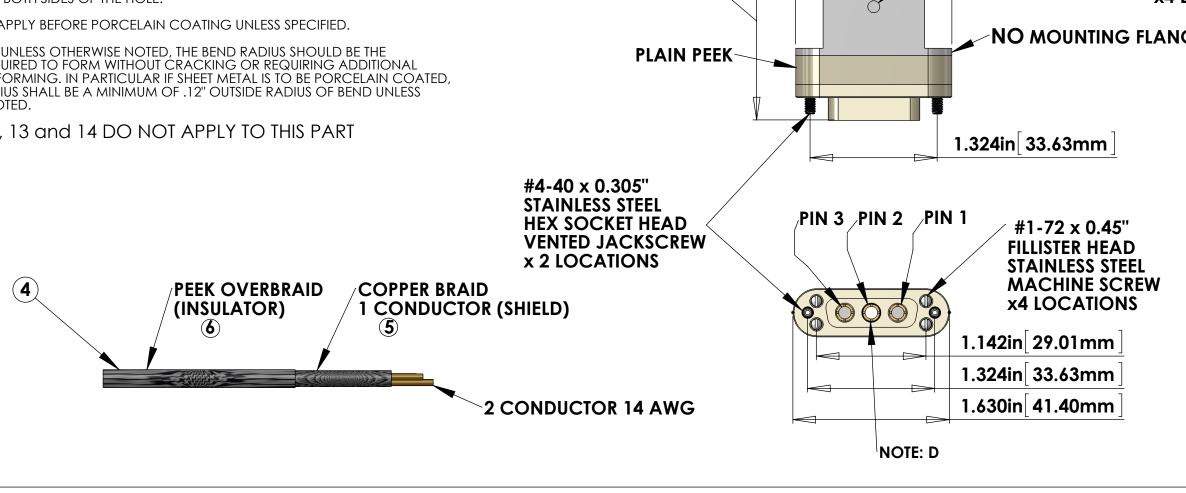
12. SURFACE FINISH TO BE AS-PROCESSED FROM MILL/SUPPLIER, FREE FROM

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

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

NOTES 9, 10, 13 and 14 DO NOT APPLY TO THIS PART



	BILL OF MATERIALS							
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	LENGTH				
1	CUSTOM DB3 FEMALE	DB3 FEMALE CONNECTOR (J1) FOR UHV (PEEK)	1					
<b>2</b>	TICOR # TS0148-15C003BS1-188	DB3 CONNECTOR BACK SHELL (NO EARS) FOR UHV (STAINLESS)	1					
3	94B8812	CRIMP PINS (J2, J3) HARTING # 09 15 000 6126 NEWARK # 94B8812	2					
4	C1	2 COND. (2 WIRES + SHIELD) CABLE WITH 5 COPPER BRAID (SHIELD) AND 6 PEEK OVERBRAID	1	25in.				
<b>(5</b> )	CONTINENTAL PART #24x3x40BC	COPPER BRAID - CONTINENTAL CORDAGE PART #24x3x40BC	1	25in.				
<b>6</b>	#6759	PEEK BRAID - PART #6759 MANUFACTURED WITH ZEUS 0.016" BLACK PEEK DRAWN MONOFILAMENT	1	25in.				
7	SPACER	3/16" SPACER 1/4" LENGTH 0.115" i.d.	1					
8	GLENAIR # 600-052 or BAND-IT # A10086	GLENAIR # 600-052 STANDARD BRAID CLAMP or BAND-IT PART # A10086 (0.240" WIDE) ("BAG OF 100" # A10089)	2					

\* NOTE: THE OVERALL LENGTH IS MEASURED FROM PIN TIP (3 PIN) TO PIN TIP (CRIMP PINS) OF THE CABLE. THE OTHER MEASUREMENT IS SPACER TO PIN TIPS (CRIMP PINS). 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)

A. MATERIAL: a. CONNECTOR SHELL - PEEK VICTREX 450GL30.

b. BACKSHELL - STAINLESS STEEL WITH VENT HOLE. c. CONTACTS - BERYLLIUM COPPER ALLOY C17300 0.000050 MIN. GOLD OVER NICKEL. d. HARDWARE: STAINLESS STEEL, PASSIVATED.

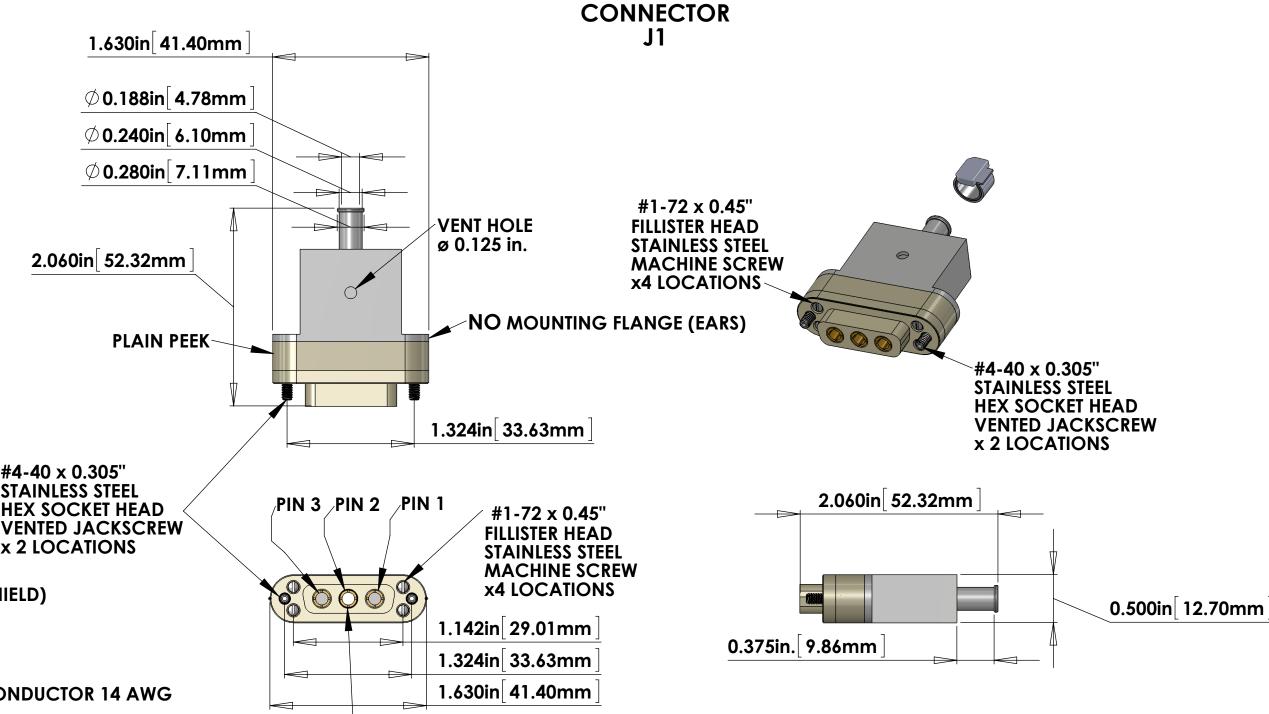
e. PEEK BRAID - PEEK VICTREX GRADE TDS-450CA30 CARBON LOADED - SUPPLIED BY LIGO.

B. CABLE 2 COND. 14 AWG, (STRANDED) WITH 2 LAYERS OF KAPTON TAPE. OVERALL 40AWG COPPER BRAID 50% COVERAGE - SUPPLIED BY LIGO. OVERALL PEEK BRAID MIN. 50% COVERAGE. OVERALL CABLE O.D. WILL BE 0.240 IN.

C. CONNECTORS WILL BE SUPPLIED WITH HARDWARE. SCREWS SHOULD BE THE PROPER LENGTH FOR MATING.

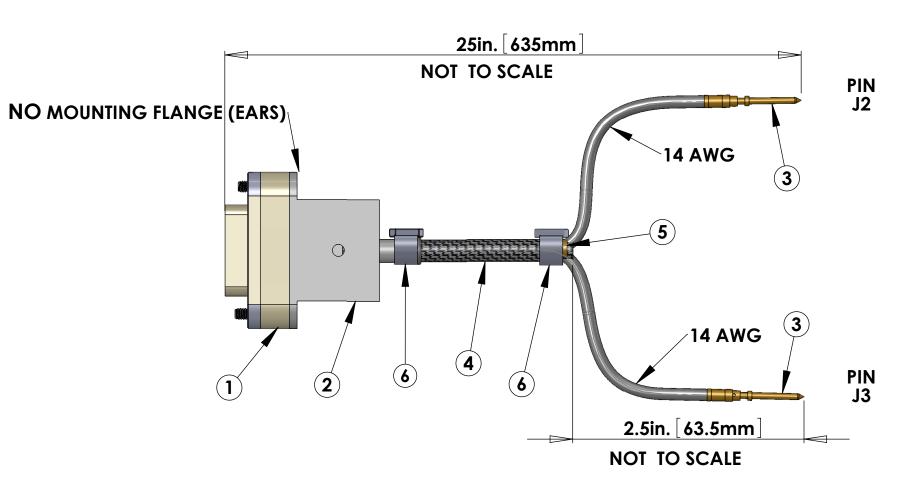
D. THE DIFFERENCE IN COLOR OF THE CENTER PIN IS CAUSED BY THE LINE-UP OF THE PORT HOLE OF THE BACKSHELL OF THE MODEL WITH THE PIN AND DOES NOT INDICATE ANY DIFFERENCE BETWEEN PINS.

DATE DCN# DRAWING TREE #



3/16" x 1/4" SPACER CHAMFER INSIDE BOTH SIDES **BREAK ALL EDGES** 0.250in 6.35mm 0.1875in 4.76mm  $\emptyset$  0.115in 2.92mm





## CONNECTOR J2 and J3



CRIMP PIN NEWARK P/N 94B8812 **CRIMP PIN HARTING # TB09150006126** HARTING CRIMPER # 79K0525 STRIPPING LENGTH FOR WIRE 0.236" (6mm)

		4B8812 M/	^	
WIRE NAME	WIRE SIZE	LENGTH *	FROM	то
SHIELD	COPPER BRAID		J1 PIN 1	END OF CABLE
W1	14 AWG	25in.	J1 PIN 2	J2
W2	14AWG	25in.	J1 PIN 3	J3
	NAME SHIELD W1	NAME SIZE  SHIELD COPPER BRAID  W1 14 AWG	NAME SIZE *  SHIELD COPPER BRAID  W1 14 AWG 25in.	NAME SIZE * FROM  SHIELD COPPER BRAID J1 PIN 1  W1 14 AWG 25in. J1 PIN 2

DARD USE FOR TH	HIS CABLE
AIR/VAC	STANDARD USE
IN-VAC	ISI ACTUATOR
-	

DIMENSIONS ARE IN	1. INTERPRET DRAWING PER ASME Y1 2. REMOVE ALL SHARP EDGES, .005 ALL EDGES APPROXIMATLEY R.02 FO	4.5-1994. D15. FOR MACHINED PARTS. ROUND	LIGO	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAM		CABI	LE SPE	CIFICATION V	/3A-25
TOLERANCES:	3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE F	ILLY SYNTHETIC FILLY WATER	SYSTEM	SUB-SYSTEM	DESIGNER	B. ABBOTT	MAY/01/2012	SIZE DWG. N	10.	REV.
.XX ± .XXX ±	SOLUBLE AND FREE OF SULFUR, SILICO			SEI	DRAFTER	E. BROWN	MAY/01/2012		1000218	V5
	MATERIAL	FINISH	NEXT ASSY		CHECKER				1000210	<b>V</b> ~
ANGULAR±°	Material <not spe<="" td=""><td>cified&gt;   μir</td><td>nch</td><td></td><td>APPROVAL</td><td></td><td></td><td>SCALE: 1:1</td><td>PROJECTION:</td><td>SHEET 1 OF 1</td></not>	cified>   μir	nch		APPROVAL			SCALE: 1:1	PROJECTION:	SHEET 1 OF 1