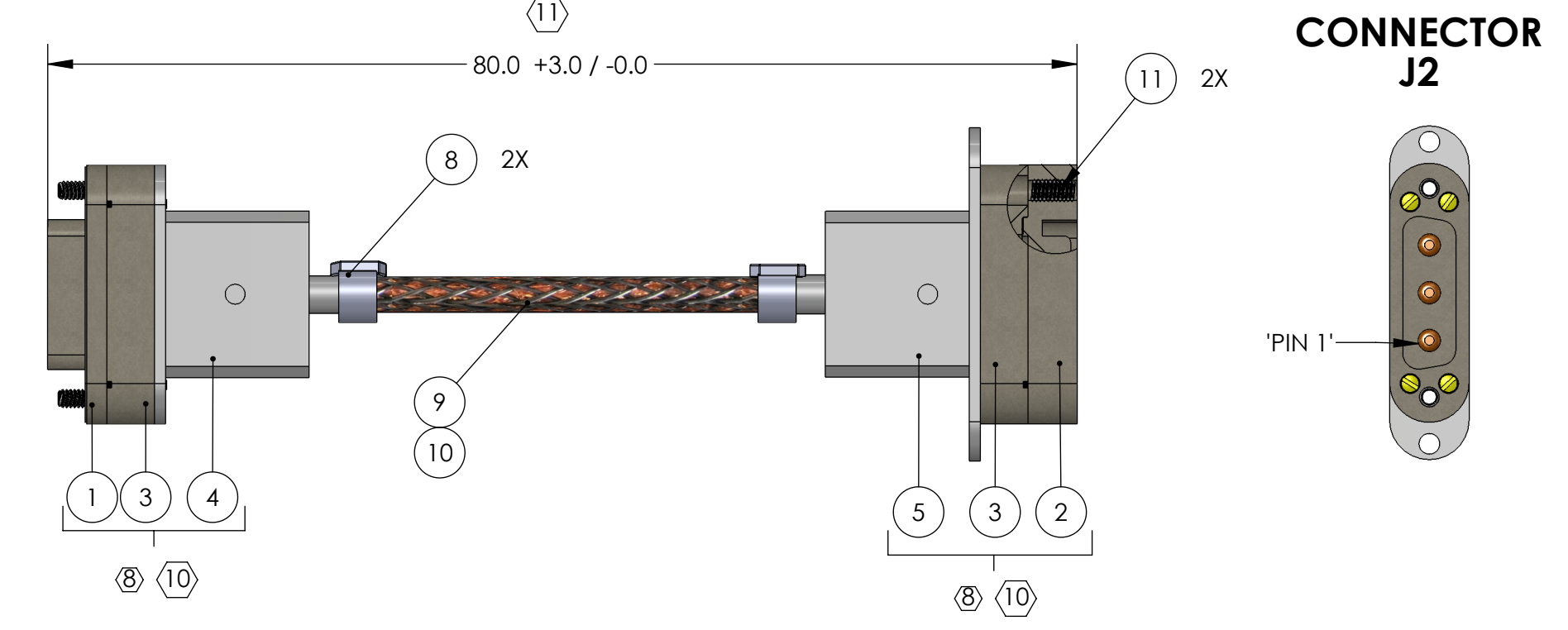
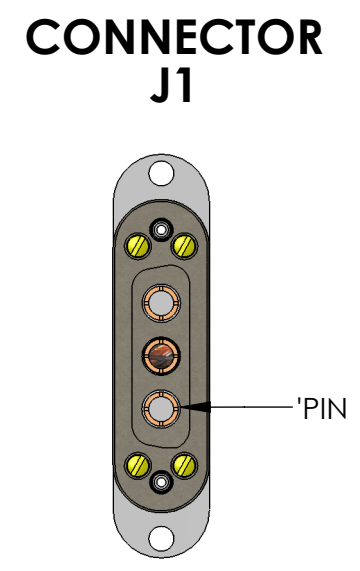
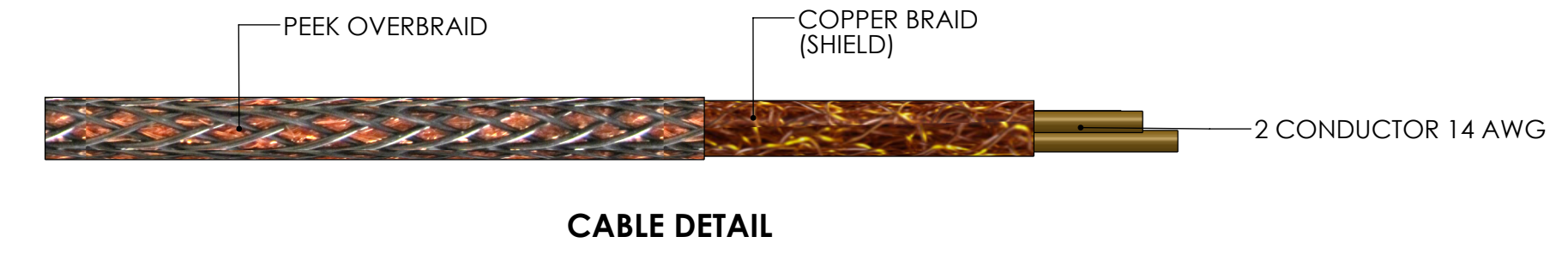


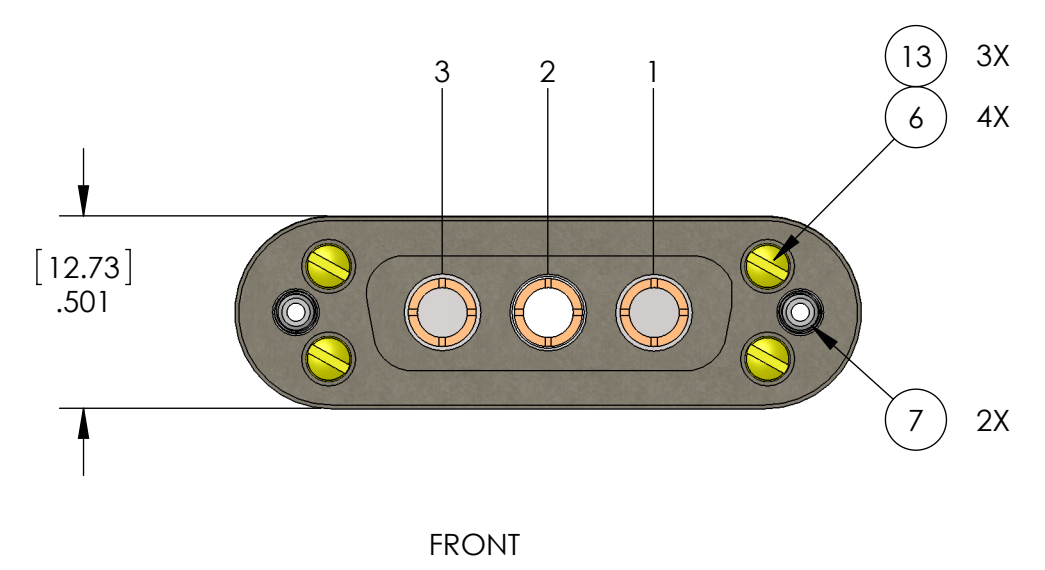
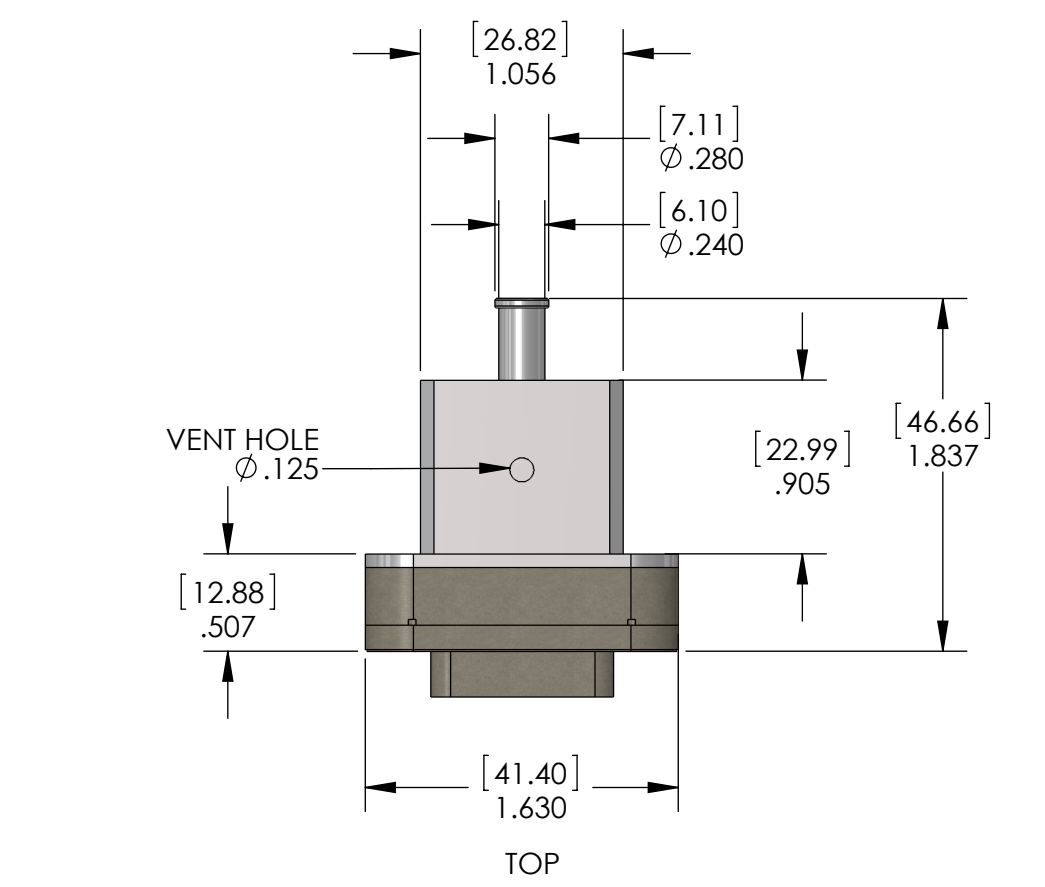
5. CABLE IDENTIFICATION: IDENTIFY PER STATEMENT OF WORK.
6. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4
7. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL. AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS.
- ⑧ MATERIAL:
- a. J1 CONNECTOR SHELL - PEEK VICTREX 450GL30.
 - b. J2 CONNECTOR SHELL - PEEK VICTREX 450GL30.
 - c. BACKSHELL - STAINLESS STEEL WITH VENT HOLE.
 - d. CONTACTS - BERYLLIUM COPPER ALLOY C17300, 0.000050 MIN. GOLD OVER NICKEL.
 - e. HARDWARE - STAINLESS STEEL, PASSIVATED.
 - f. PEEK BRAID - PEEK VICTREX GRADE TDS-450CA30 CARBON LOADED.
- ⑨ CABLE: 2 COND. 14 AWG (STRANDED), WITH 2 LAYERS OF KAPTON TAPE OVERALL 40AWG COPPER BRAID 50% COVERAGE. OVERALL PEEK BRAID MIN. 50% COVERAGE. OVERALL CABLE O.D. WILL BE APPROX. 0.240 IN.
- ⑩ CONNECTORS WILL BE SUPPLIED WITH HARDWARE. LENGTH OF SCREWS SHOULD BE THE PROPER LENGTH FOR MATING.
- ⑪ INDICATED LENGTH IS FROM PIN TIP TO PIN TIP. USE APPROPRIATE LENGTH TO COMPENSATE FOR THE INTERNAL WIRING OF THE CONNECTORS AND STRIP LENGTH.
- ⑫ INDICATED DIMENSIONS SHOWN FOR REFERENCE ONLY.

REV.	DATE	DCN #	DRAWING TREE #
v1	17 OCT 2011	-	-
v4	19 JUL 2012	E1200711-v1	-
-	-	-	-

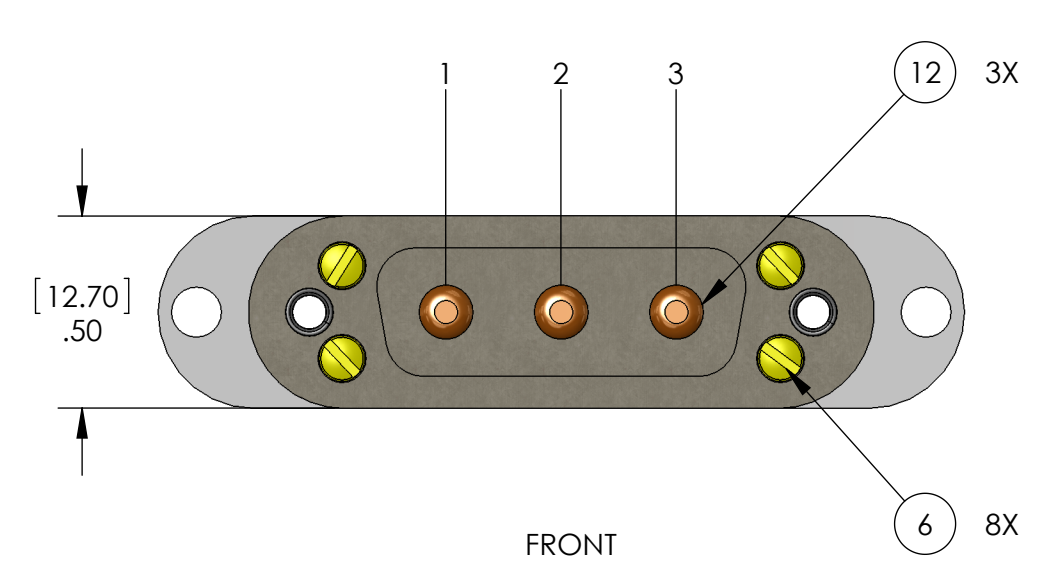
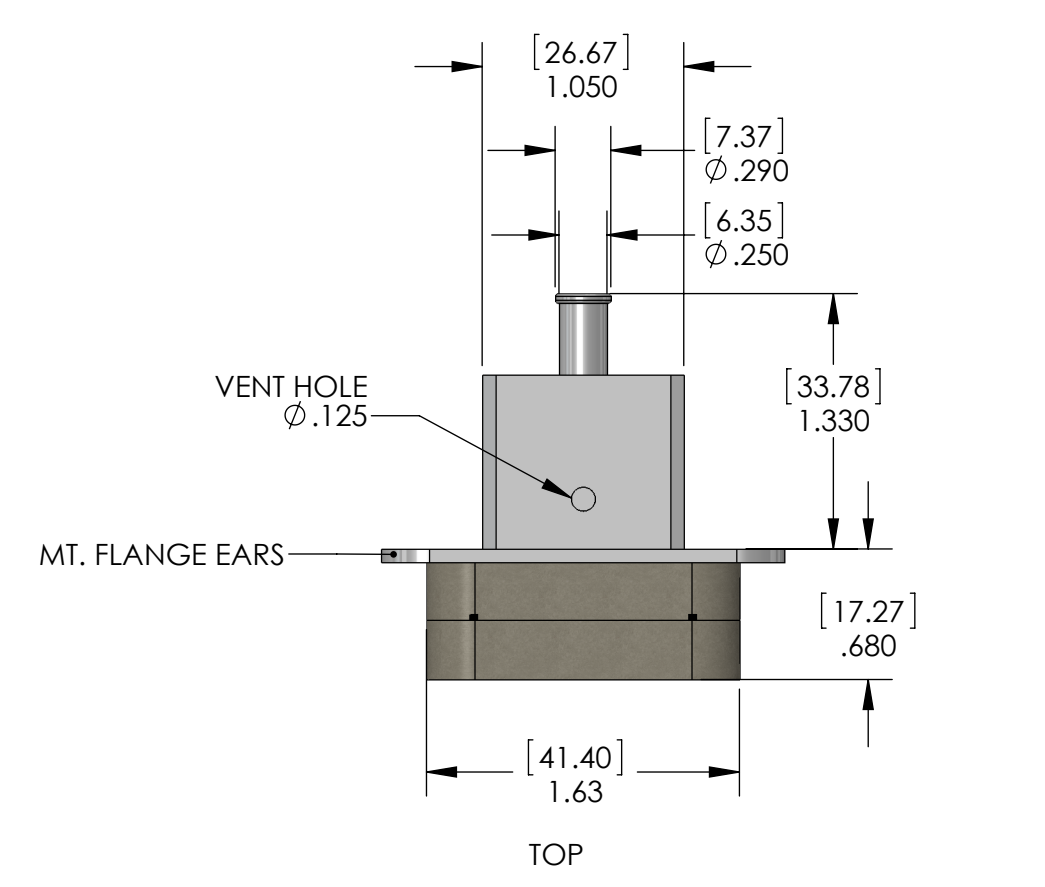


V-DB3 F/S1 -80-DB3 M/S1		
STANDARD USE FOR THIS CABLE		
SUBSYSTEM	AIR/VAC	STANDARD USE
SEI	IN-VAC	FROM FLANGE TO TABLE

CONNECTOR 'J1' ⑧ ⑩ ⑫



CONNECTOR 'J2' ⑧ ⑩ ⑫



V3B-80 CABLE ASSEMBLY CIRCUIT SUMMARY			
V-DB3 F/S1-80-DB3 M/S1			
FROM 'J1'		TO 'J2'	
PIN	WIRE NAME	PIN	REMARKS
1	SHIELD	1	COPPER BRAID
2	WIRE 1	2	-
3	WIRE 2	3	-

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
14		WIRE, 14 AWG		SEE NOTE 9
13	038-5001-0812 TICOR OR EQ.	SIZE 08 SOCKET CONTACT, 12 CRIMP BARREL		SEE NOTE 8
12	037-5001-0812 TICOR OR EQ.	SIZE 08 PIN CONTACT, 12 CRIMP BARREL		SEE NOTE 8
11	1185-04EN-336	HELICOIL, 4-40 X .336 LG., NITRONIC60	NITRONIC 60	2
10	6759	PEEK OVERBRAID, 50% COVERAGE MIN.	ZEUS, .016 BLK PEEK DRAWN MONOFILAMENT	A/R
9	24X3X40BC CONTINENTAL CORDAGE	1/8 DIA. COPPER BRAID	COPPER	A/R
8	600-052 GLENNAIR OR EQ.	BRAID CLAMPING BAND, .24 WIDE	SSTL	2
7	013-2702-0000 TICOR OR EQ.	SCREW, SHC, 4-40 X .305 LG., VENTED	SEE NOTE 8	2
6	013-2701-0001 TICOR OR EQ.	SCREW, FILLISTER HEAD, 1-72 X .450 LG., SLOTTED		8
5		UHV DB3 CONNECTOR BACKSHELL W/ EARS		1
4	040-2724-1501 TICOR OR EQ.	UHV CONNECTOR BACKSHELL		1
3	034-1002-1503 TICOR OR EQ.	UHV CONTACT RETAINER, SUBD9, SHIELDED		2
2	034-1006-15503 TICOR OR EQ.	UHV CONNECTOR INTERFACE, SUBD9, SHIELDED (MALE)		1
1	034-1001-1503 TICOR OR EQ.	UHV CONNECTOR INTERFACE, SUBD9, SHIELDED (FEMALE)		1

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

- INTERPRET DRAWING PER ASME Y14.5-1994.
- REMOVE ALL SHARP EDGES, .005-.015. FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

DIMENSIONS ARE IN INCHES

TOLERANCES:
 .XX ± .10
 .XXX ± .005

ANGULAR ± .5°

MATERIAL: N/A FINISH: N/A μinch

SYSTEM: ADVANCED LIGO SUB-SYSTEM: SEI NEXT ASSY: N/A

CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PART NAME: CUSTOM CABLE SPECIFICATION, V3B-80

DESIGNER: R.ABBOT 21 DEP 2011 SIZE: D DWG. NO.: D1100148 REV.: v4

DRAFTER: E.BROWN 17 OCT 2011

CHECKER: SEE DCC SEE DCC

APPROVAL: SEE DCC SEE DCC SCALE: NTS PROJECTION: SHEET 1 OF 1

D1100148 ALIGO, SEI, CUSTOM CABLE SPECIFICATION V3B-80, PART PDM REV: X-001, DRAWING PDM REV: X-002

SEE LIGO D0901301, BSC ISI SYSTEM SCHEMATIC FOR REFERENCE.