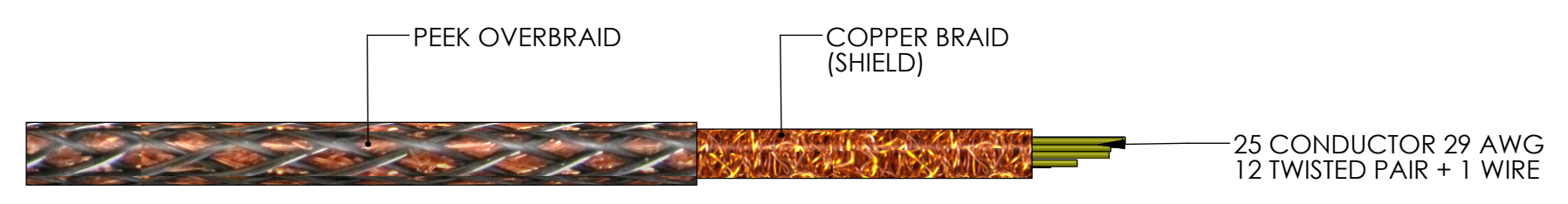
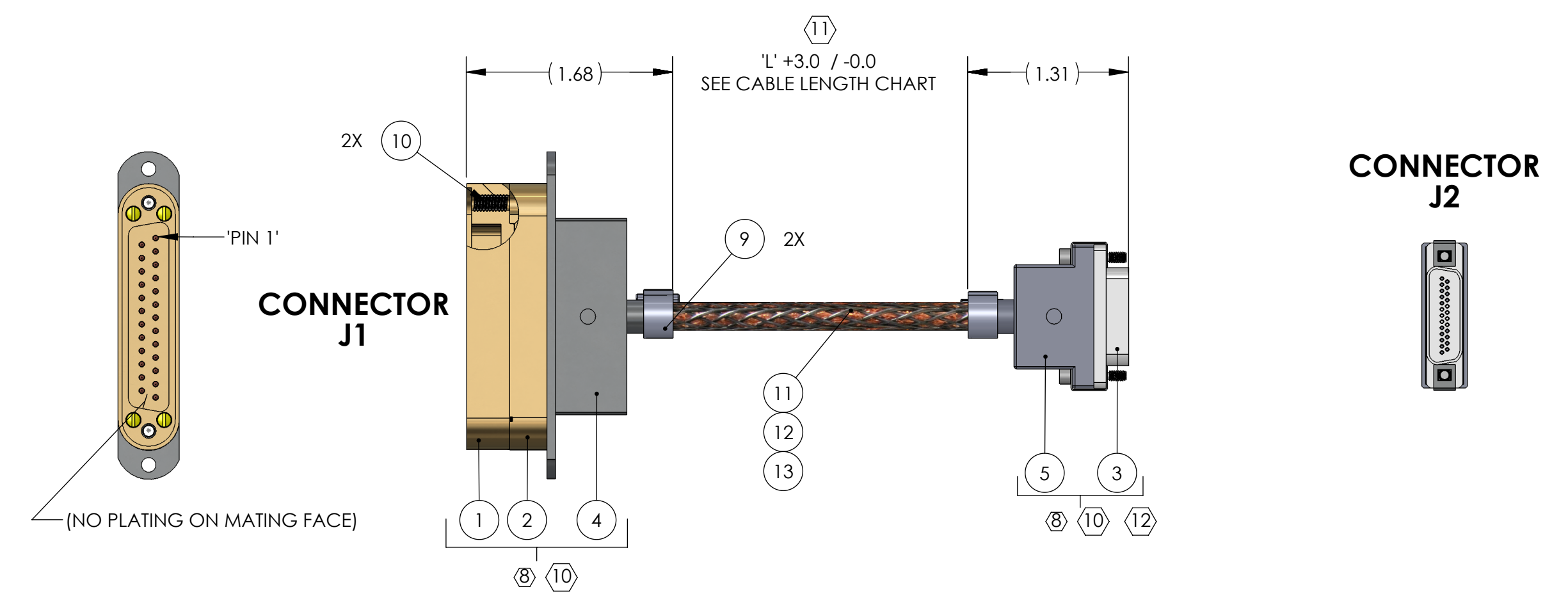


5. CABLE IDENTIFICATION: IDENTIFY PER STATEMENT OF WORK.
6. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4
7. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL. AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS.
- 8 MATERIAL:
- a. J1 CONNECTOR SHELL - GOLD OVER ELECTRO-LESS NICKEL SELECTIVELY METALIZED PEEK VICTREX 450GL30.
 - b. J2 CONNECTOR SHELL - SSTL OVER LCP (LIQUID CRYSTAL POLYMER), MIL-M-24519.
 - 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: 25 COND. 29 AWG, (51/46), WITH PFA INSULATION (COONER WIRE #CZ1104) 12 TWISTED PAIRS (APPROX. 2 TWISTS PER INCH) + 1 WIRE 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 CONNECTOR END TO CONNECTOR END. USE APPROPRIATE LENGTH TO COMPENSATE FOR THE INTERNAL WIRING OF THE CONNECTORS AND STRIP LENGTH.
- 12 ADEQUATE POTTING COMPOUND REQUIRED FOR 'J2' CONNECTOR. SEE SOW FOR ACCEPTABLE MATERIALS.
- 13 INDICATED DIMENSIONS SHOWN FOR REFERENCE ONLY.
- 14 PART NO. SHOWN CORRESPONDS TO UNPLATED PARTS. MATERIALS/FINISH AS SPECIFIED ON NOTE 8, SHALL TAKE PRECEDENCE AT ALL TIMES.



V-DB25 M/S1 -TBD-μDB25 F/S1		
STANDARD USE FOR THIS CABLE		
SUBSYSTEM	AIR/VAC	STANDARD USE
SUS	IN-VAC	QUAD SUSPENSION UIM

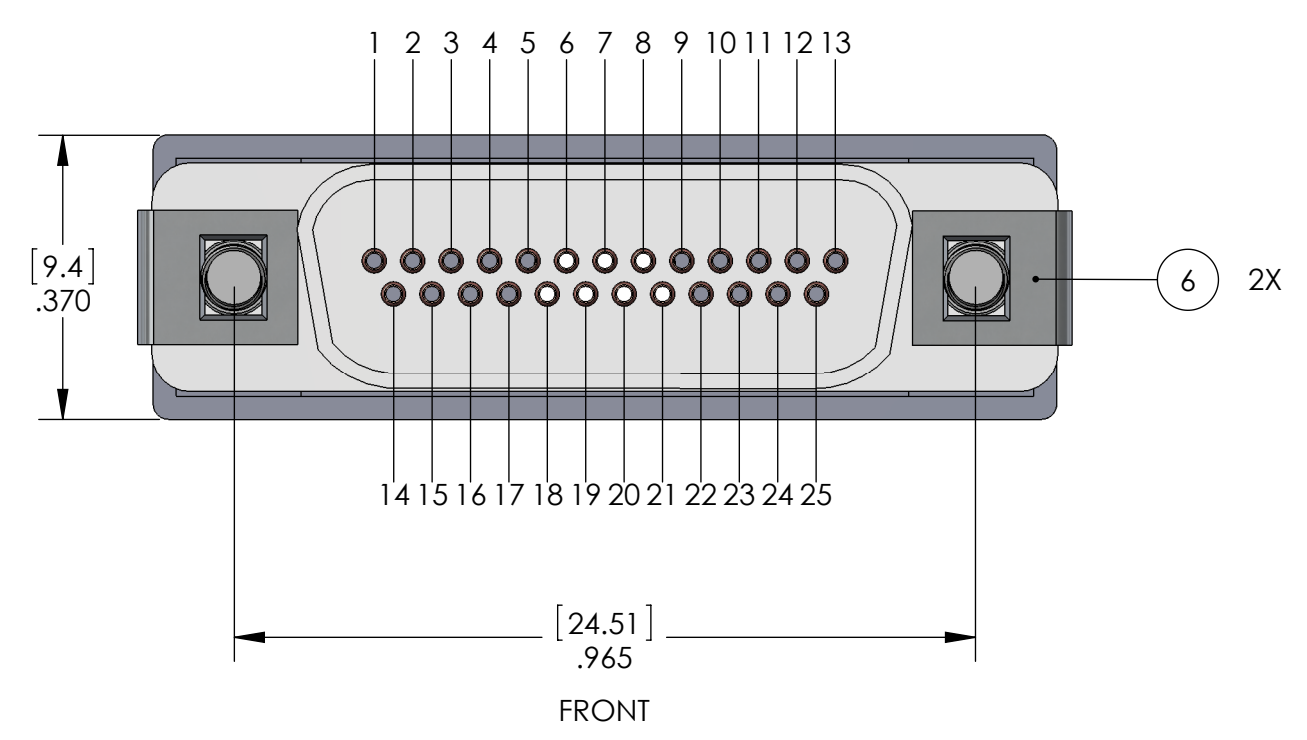
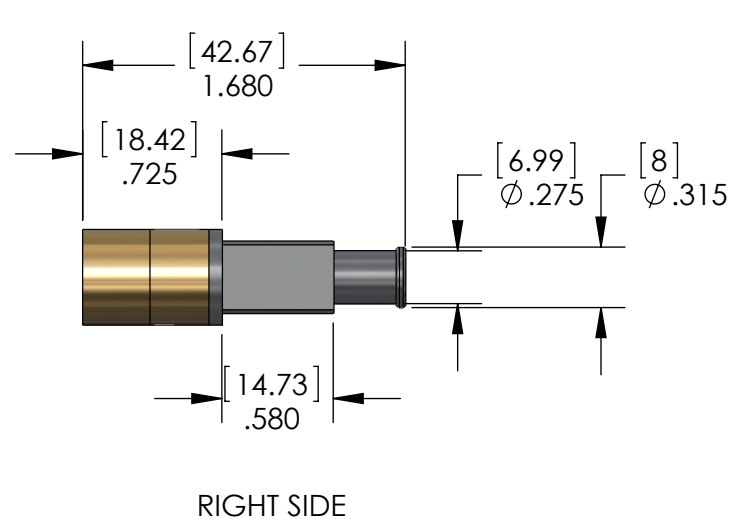
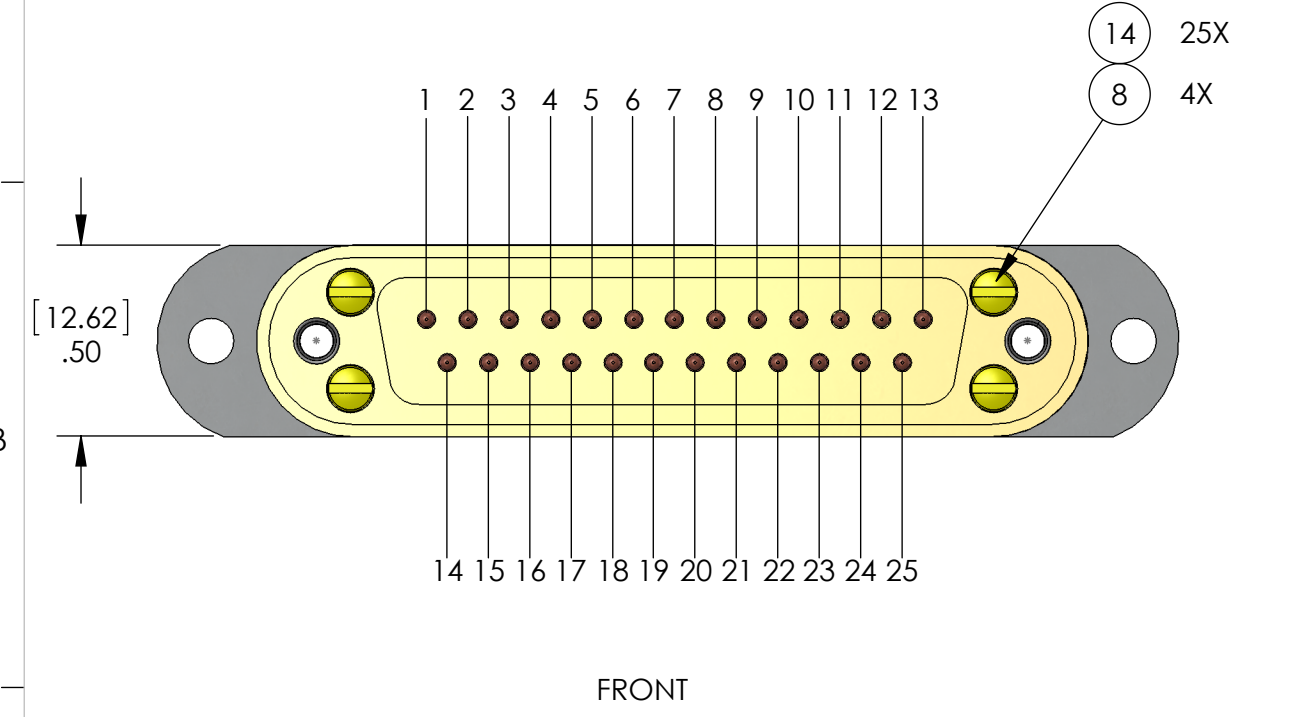
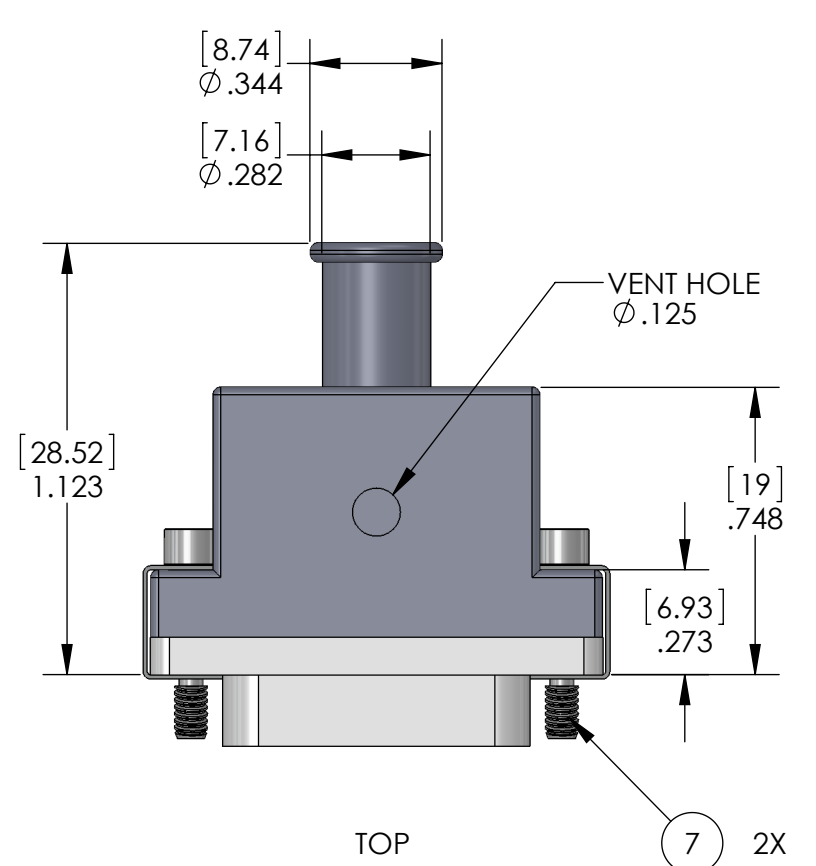
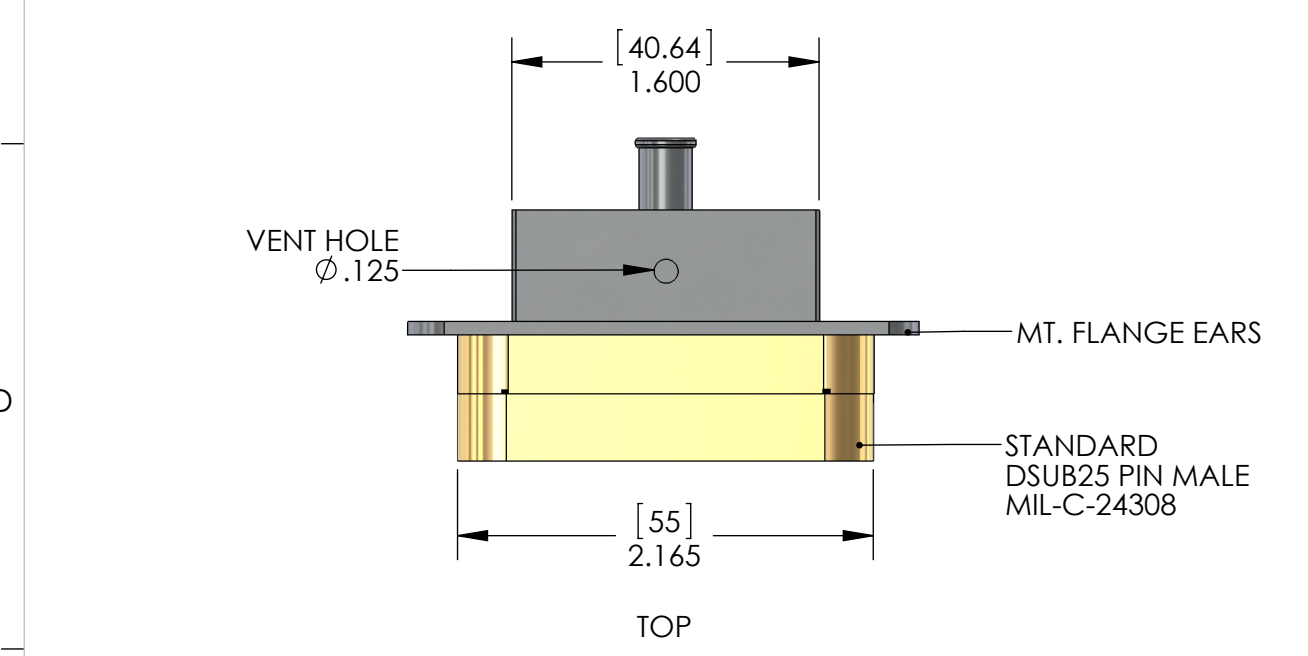
STANDARD CABLE LENGTH CHART		
IDENTIFYING NO.	DESIGNATOR	'L' (INCHES)
D1002522-80	V25G-80	80
D1002522-110	V25G-110	110
D1002522-121	V25G-121	121
D1002522-156	V25G-156	156
D1002522-TBD	V25G-TBD	LENGTH TO BE DETERMINED AT TIME OF ORDER



V25G-TBD CABLE ASSEMBLY CIRCUIT SUMMARY				
FROM 'J1'		TO 'J2'		
PIN	WIRE NAME	TWISTED PAIR	PIN	
1, SHIELD & SHELL	SHIELD (COPPER BRAID)		PIN 1, SHIELD & SHELL	
1, SHIELD & SHELL	WIRE 1	SINGLE WIRE	1, SHIELD & SHELL	
2	WIRE 2	TP-1	2	
14	WIRE 14		14	
3	WIRE 3		3	
15	WIRE 15	TP-2	15	
4	WIRE 4		4	
16	WIRE 16	TP-3	16	
5	WIRE 5		5	
17	WIRE 17	TP-4	17	
6	WIRE 6		6	
18	WIRE 18	TP-5	18	
7	WIRE 7		7	
19	WIRE 19	TP-6	19	
8	WIRE 8		8	
20	WIRE 20	TP-7	20	
9	WIRE 9		9	
21	WIRE 21	TP-8	21	
10	WIRE 10		10	
22	WIRE 22	TP-9	22	
11	WIRE 11		11	
23	WIRE 23	TP-10	23	
12	WIRE 12		12	
24	WIRE 24	TP-11	24	
13	WIRE 13		13	
25	WIRE 25	TP-12	25	

CONNECTOR 'J1' 8 10 13

CONNECTOR 'J2' 8 10 12 14



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	TOTAL	
14	037-5001-2022 TICOR OR EQ.	SIZE 20 PIN CONTACT, 22D CRIMP BARREL	SEE NOTE 8	25	
13	6759	PEEK OVERBRAID, 50% COVERAGE MIN.	ZEUS, .016 BLK PEEK DRAWN MONOFILAMENT	A/R	
12	24X3X40BC CONTINENTAL CORDAGE	1/8 DIA. COPPER BRAID	COPPER	A/R	
11	CZ1104 COONER WIRE	WIRE, 29 AWG (51/46), .023 DIA	SEE NOTE 9	A/R	
10	1185-04EN-336	HELICOIL, 4-40 X .336 LG., NITRONIC60	NITRONIC 60	2	
9	600-052 GLENAIR OR EQ.	BRAID CLAMPING BAND, .24 WIDE	ST. STEEL, PASSIVATED	2	
8	013-2701-0001 TICOR OR EQ.	SCREW, FILLISTER HEAD, 1-72 X .450 LG., SLOTTED	SEE NOTE 8	4	
7	013-200-0019 TICOR OR EQ.	SCREW, SHC, 2-56 X .45 LG.		2	
6		RETAINING C-CLIP		2	
5		BACKSHELL, MICRO DSUB25 W/ SINGLE PORT		1	
4		UHV DSUB25 CONNECTOR BACKSHELL, W/ EARS		1	
3		CONNECTOR INTERFACE, MICRO DSUB25		1	
2	034-1002-2520 TICOR OR EQ.	CONTACT RETAINER, DSUB25, UHV, SHIELDED		1	
1	034-1006-2520 TICOR OR EQ.	CONNECTOR INTERFACE, DSUB25, UHV, SHIELDED (MALE)		1	
PARTS LIST					

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°

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
ADVANCED LIGO		CUSTOM CABLE SPECIFICATION, V25G-TBD	
DESIGNER	J. HEFFNER	DATE	28 SEP 2010
DRAFTER	E. BROWN	DATE	11 FEB 2011
CHECKER	SEE DCC	SCALE	D
APPROVAL	SEE DCC	PROJECTION	1

SEE LIGO D1001725, SUS CONTROLS WIRING SCHEMATIC FOR REFERENCE.

D1002522 ALIGO, SUS, CUSTOM CABLE SPECIFICATION V25G-TBD, PART PDM REV: X-000, DRAWING PDM REV: X-001