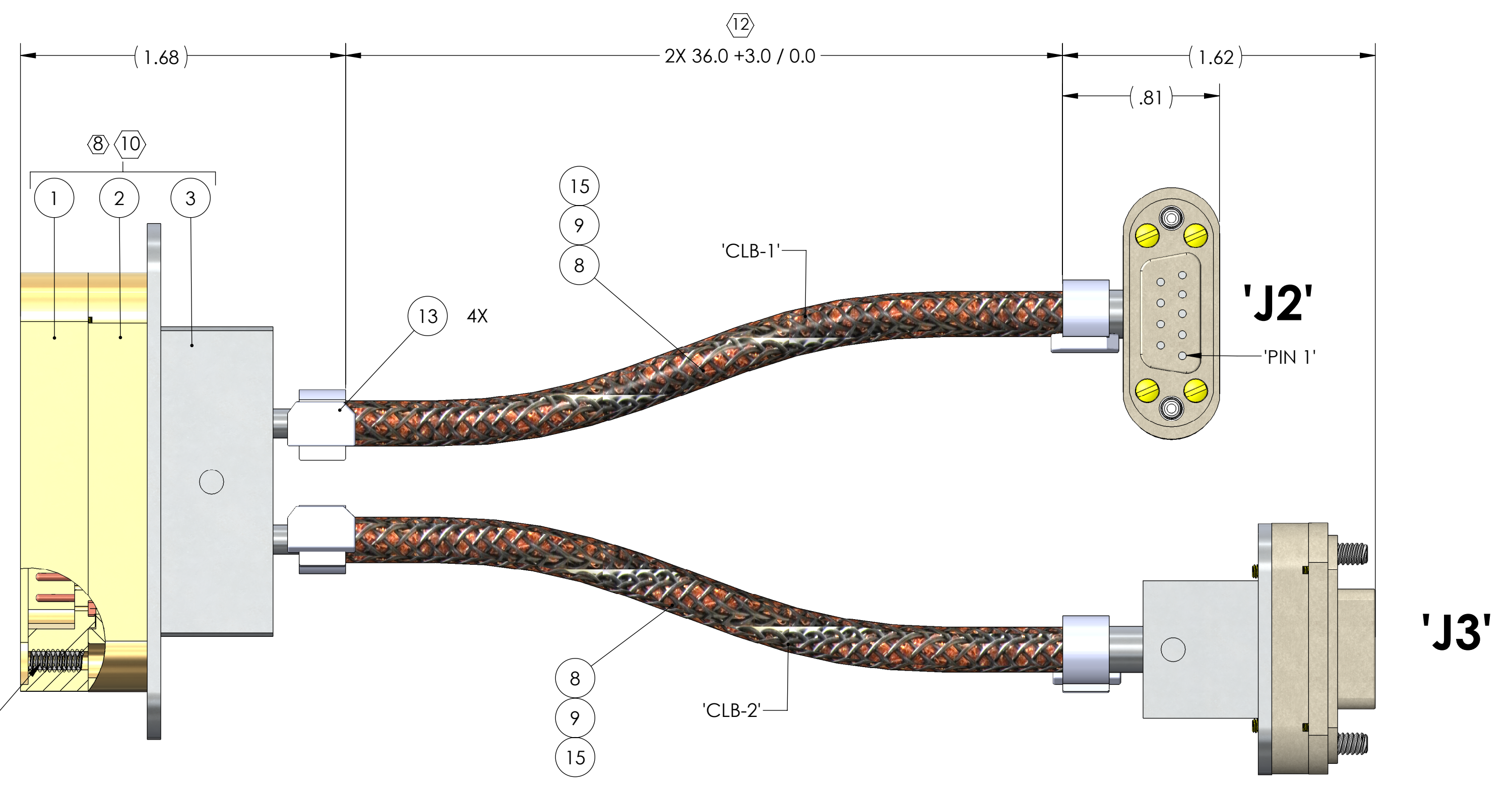
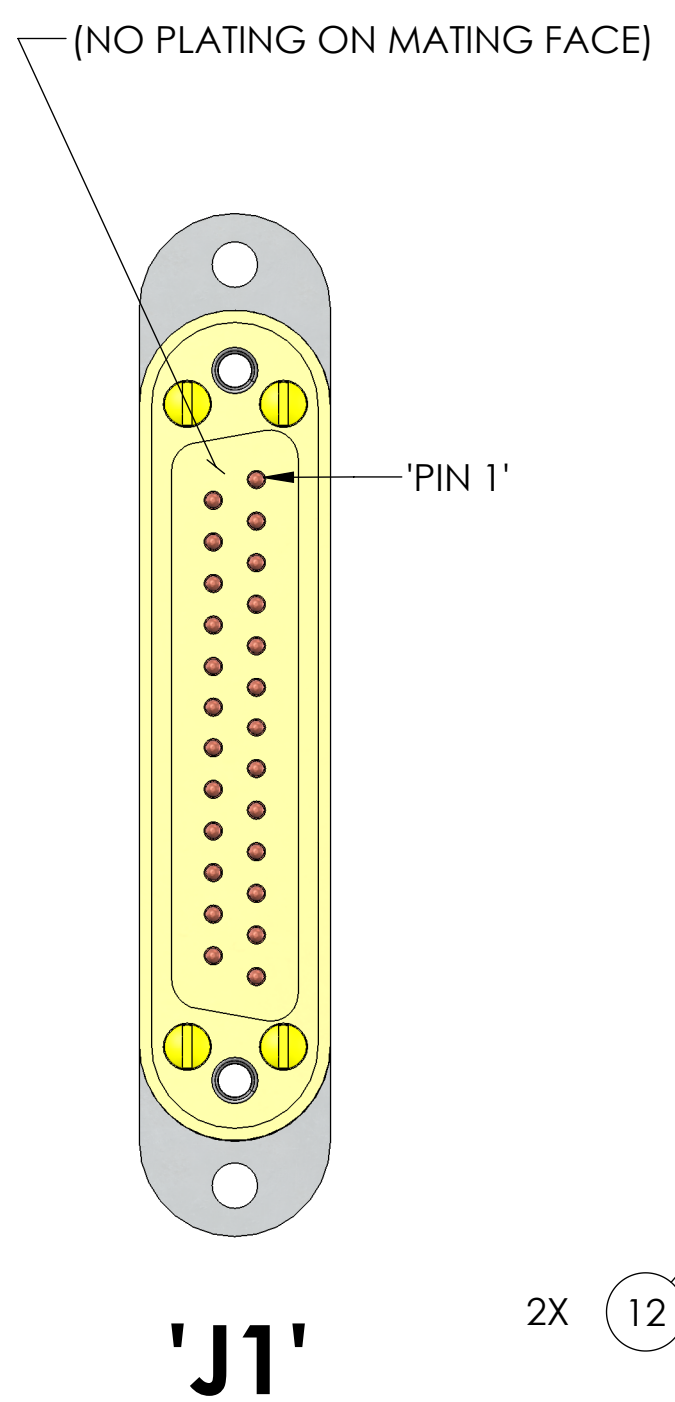


- NOTES CONTINUED:
- CABLE IDENTIFICATION: IDENTIFY PER STATEMENT OF WORK.
 - ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4
 - ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL AFTER DELIVERY OF FINISHED PARTS. USE NITRONIC 60 THREADED INSERTS.
- MATERIAL:
- J1 CONNECTOR SHELL - GOLD OVER ELECTRO-LESS NICKEL SELECTIVELY METALIZED PEEK VICTREX 450GL30.
 - J2 CONNECTOR SHELL - PEEK VICTREX 450GL30.
 - J3 CONNECTOR SHELL - PEEK VICTREX 450GL30.
 - BACKSHELL - STAINLESS STEEL WITH VENT HOLE.
 - CONTACTS - BERYLLIUM COPPER ALLOY C17300, 0.000050 MIN. GOLD OVER NICKEL.
 - HARDWARE - STAINLESS STEEL, PASSIVATED.
 - PEEK BRAID - PEEK VICTREX GRADE TDS-450CA30 CARBON LOADED.
- CABLE: 9 COND. 29 AWG. (51/46) WITH 2 LAYERS OF KAPTON TAPE. 4 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.
 - CONNECTORS WILL BE SUPPLIED WITH HARDWARE. LENGTH OF SCREWS SHOULD BE THE PROPER LENGTH FOR MATING.
 - INDICATED LENGTH IS FROM CONNECTOR END TO CONNECTOR END. USE APPROPRIATE LENGTH TO COMPENSATE FOR THE INTERNAL WIRING OF THE CONNECTORS AND STRIP LENGTH.
 - INDICATED DIMENSIONS SHOWN FOR REFERENCE ONLY.
 - FILL UNUSED CONTACT POSITIONS WITH UNCRIMPED CONTACTS.
 - PART NO. SHOWN CORRESPONDS TO UNPLATED PARTS. MATERIALS/FINISH AS SPECIFIED ON NOTE 8. SHALL TAKE PRECEDENCE AT ALL TIMES.

PARTS LIST				
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ
1	034-1006-2520 TICOR OR EQ.	CONNECTOR INTERFACE, DSUB25, UHV, SHIELDED (MALE)		1
2	034-1002-2520 TICOR OR EQ.	CONTACT RETAINER, DSUB25, UHV, SHIELDED		1
3		CONNECTOR BACKSHELL, DSUB25, UHV, 2 PORT		1
4	034-1001-0920 TICOR OR EQ.	CONNECTOR INTERFACE, SIZE 9 D SUB, UHV, SHIELDED	SEE NOTE 8	2
5	034-1002-0920 TICOR OR EQ.	CONTACT RETAINER, SIZE 9 D SUB, UHV, SHIELDED		2
6		UHV CONNECTOR BACKSHELL, DB9, W/ SINGLE PORT		1
7		UHV CONNECTOR BACKSHELL, DB9, RIGHT ANGLE SINGLE PORT		1
8	6759	PEEK OVERBRAID, 50% COVERAGE MIN.	ZEUS, .016 BLK PEEK DRAWN MONOFILAMENT	A/R
9	24X3X408C CONTINENTAL CORDAGE	1/8 DIA. COPPER BRAID	COPPER	A/R
10	013-2701-0001 TICOR OR EQ.	SCREW, FILLISTER HEAD, 1-72 X .450 LG., SLOTTED	SEE NOTE 8	4
11	91794A068 McMASTER-CARR OR EQ.	SCREW, FILLISTER HEAD, 1-72 X .38 LG., SLOTTED	SEE NOTE 8	8
12	1185-04EN-336	HELICOIL, 4-40 X .336 LG., NITRONIC60	NITRONIC 60	2
13	600-052 GLENAIR OR EQ.	BRAID CLAMPING BAND, .24 WIDE	ST. STEEL, PASSIVATED	4
14	013-2702-0000 TICOR OR EQ.	SCREW, SHC, 4-40 X .305 LG., VENTED	SEE NOTE 8	4
15	C21104 COONER WIRE	WIRE, 29 AWG (51/46), .023 DIA.	SEE NOTE 9	4
16	037-5001-2022 TICOR OR EQ.	SIZE 20 PIN CONTACT, 22D CRIMP BARREL	SEE NOTE 8	25

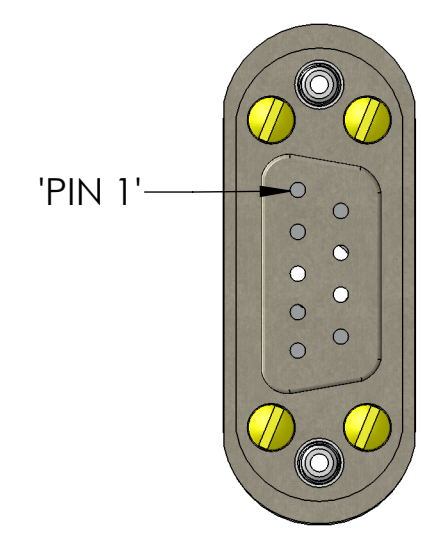
REV.	DATE	DCN #	DRAWING TREE #
v1	01 FEB 2010	-	-
v10	13 JUL 2012	E1200711-v1	-
-	-	-	-

V25M CABLE ASSEMBLY CIRCUIT SUMMARY					
FROM			TO		
'J1'			'J2'		
PIN	WIRE NAME	TWISTED PAIR	PIN	WIRE NAME	SIGNAL
1,9,SHELL	SHIELD (BRAID)		5, SHELL	SHIELD (BRAID)	SHIELD
1,9,SHELL	(CABLE 1) WIRE 1		5, SHELL	(CABLE 1) WIRE 1	SHIELD
2	(CABLE 1) WIRE 2		4	(CABLE 1) WIRE 2	POWER -
14	(CABLE 1) WIRE 14	TP-1	9	(CABLE 1) WIRE 14	POWER - RTN
3	(CABLE 1) WIRE 3		3	(CABLE 1) WIRE 3	POWER +
15	(CABLE 1) WIRE 15	TP-2	8	(CABLE 1) WIRE 15	POWER + RTN
4	(CABLE 1) WIRE 4		2	(CABLE 1) WIRE 4	LOCK +
16	(CABLE 1) WIRE 16	TP-3	7	(CABLE 1) WIRE 16	LOCK -
5	(CABLE 1) WIRE 5		1	(CABLE 1) WIRE 5	SIG +
17	(CABLE 1) WIRE 17	TP-4	6	(CABLE 1) WIRE 17	SIG -
			'J3'		
PIN	WIRE NAME	SIGNAL	PIN	WIRE NAME	SIGNAL
1,9,SHELL	SHIELD (BRAID)		5, SHELL	SHIELD (BRAID)	SHIELD
1,9,SHELL	(CABLE 2) WIRE 9		5, SHELL	(CABLE 2) WIRE 9	SHIELD
10	(CABLE 2) WIRE 10	TP-5	4	(CABLE 2) WIRE 10	POWER -
22	(CABLE 2) WIRE 22		9	(CABLE 2) WIRE 22	POWER - RTN
11	(CABLE 2) WIRE 11		3	(CABLE 2) WIRE 11	POWER +
23	(CABLE 2) WIRE 23	TP-6	8	(CABLE 2) WIRE 23	POWER + RTN
12	(CABLE 2) WIRE 12		2	(CABLE 2) WIRE 12	LOCK +
24	(CABLE 2) WIRE 24	TP-7	7	(CABLE 2) WIRE 24	LOCK -
13	(CABLE 2) WIRE 13		1	(CABLE 2) WIRE 13	SIG +
25	(CABLE 2) WIRE 25	TP-8	6	(CABLE 2) WIRE 25	SIG -

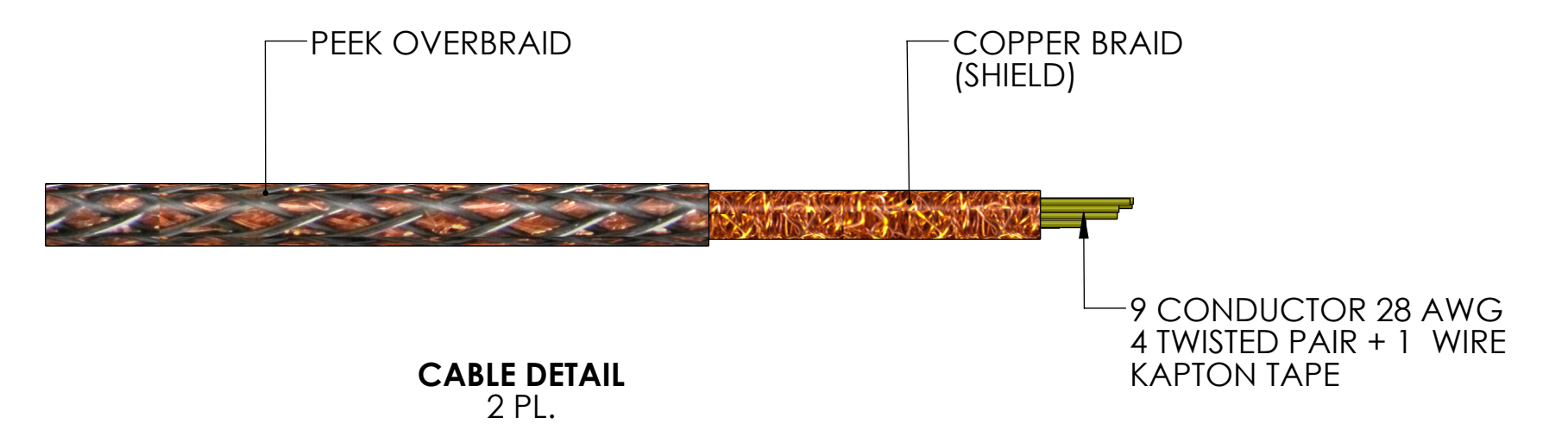


TEST LIST	
FROM	TO
'J1'	'J2'
J1 - 1,9,SHELL	J2 - 5, SHELL
J1 - 1,9,SHELL	J2 - 5, SHELL
J1-2	J2-4
J1-3	J2-3
J1-4	J2-2
J1-5	J2-1
J1-14	J2-9
J1-15	J2-8
J1-16	J2-7
J1-17	J2-6

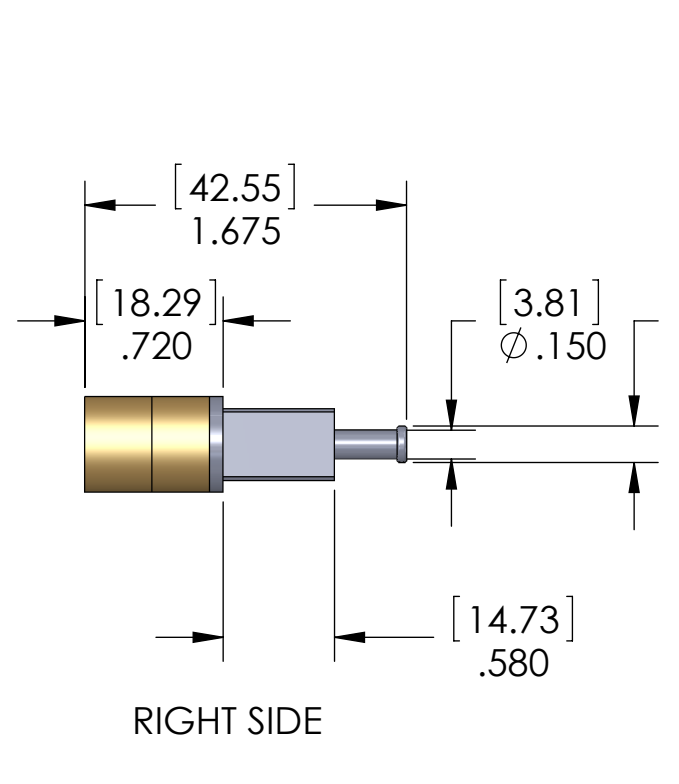
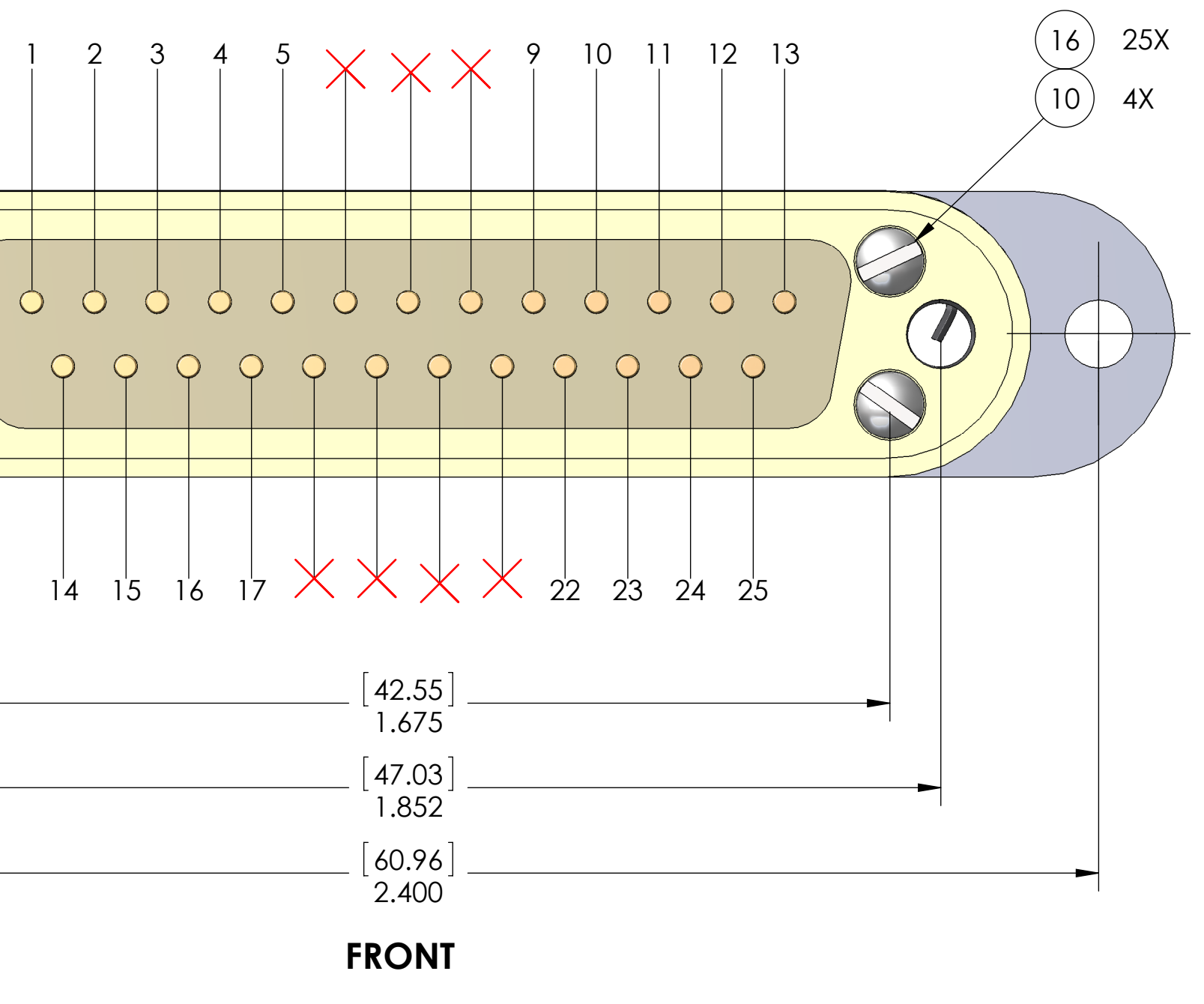
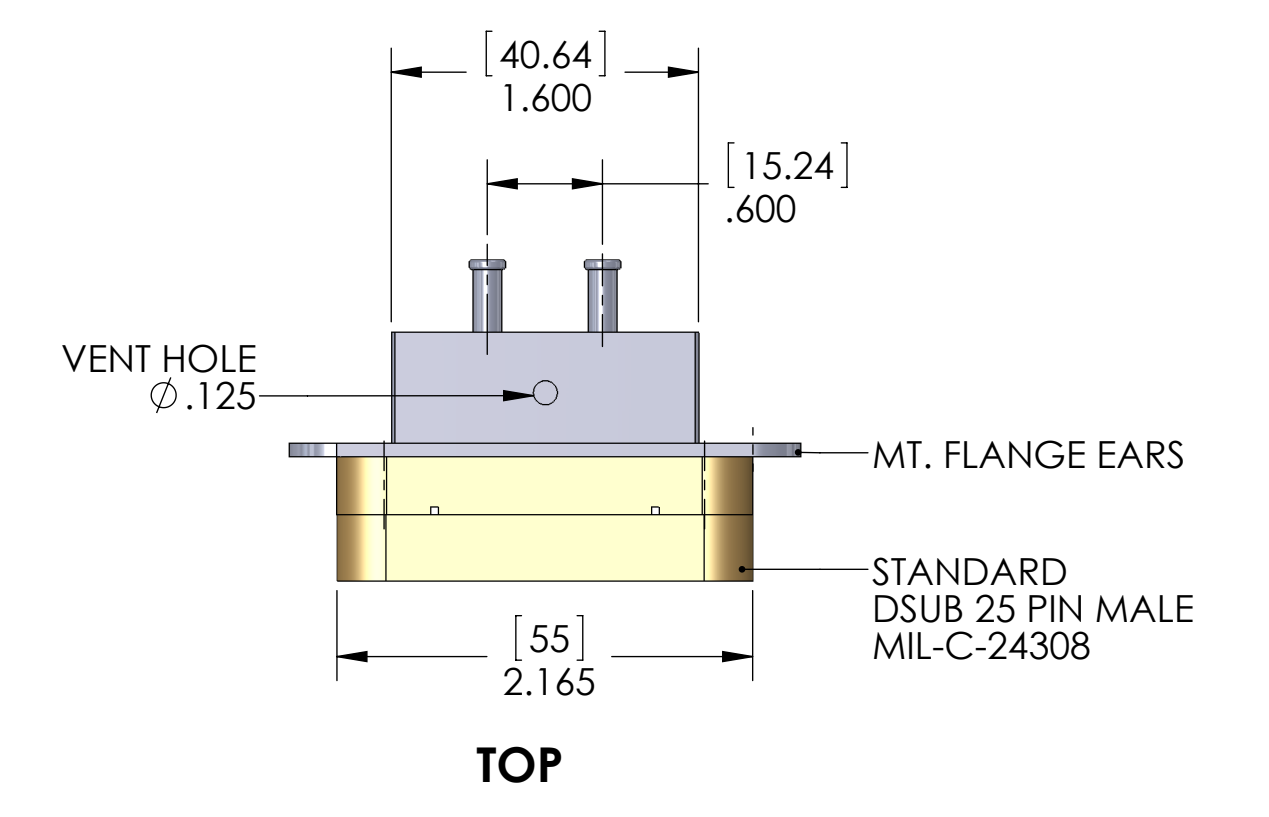
TEST LIST	
FROM	TO
'J1'	'J3'
J1 - 1,9,SHELL	J3 - 5, SHELL
J1 - 1,9,SHELL	J3 - 5, SHELL
J1-10	J3-4
J1-11	J3-3
J1-12	J3-2
J1-13	J3-1
J1-22	J3-9
J1-23	J3-8
J1-24	J3-7
J1-25	J3-6



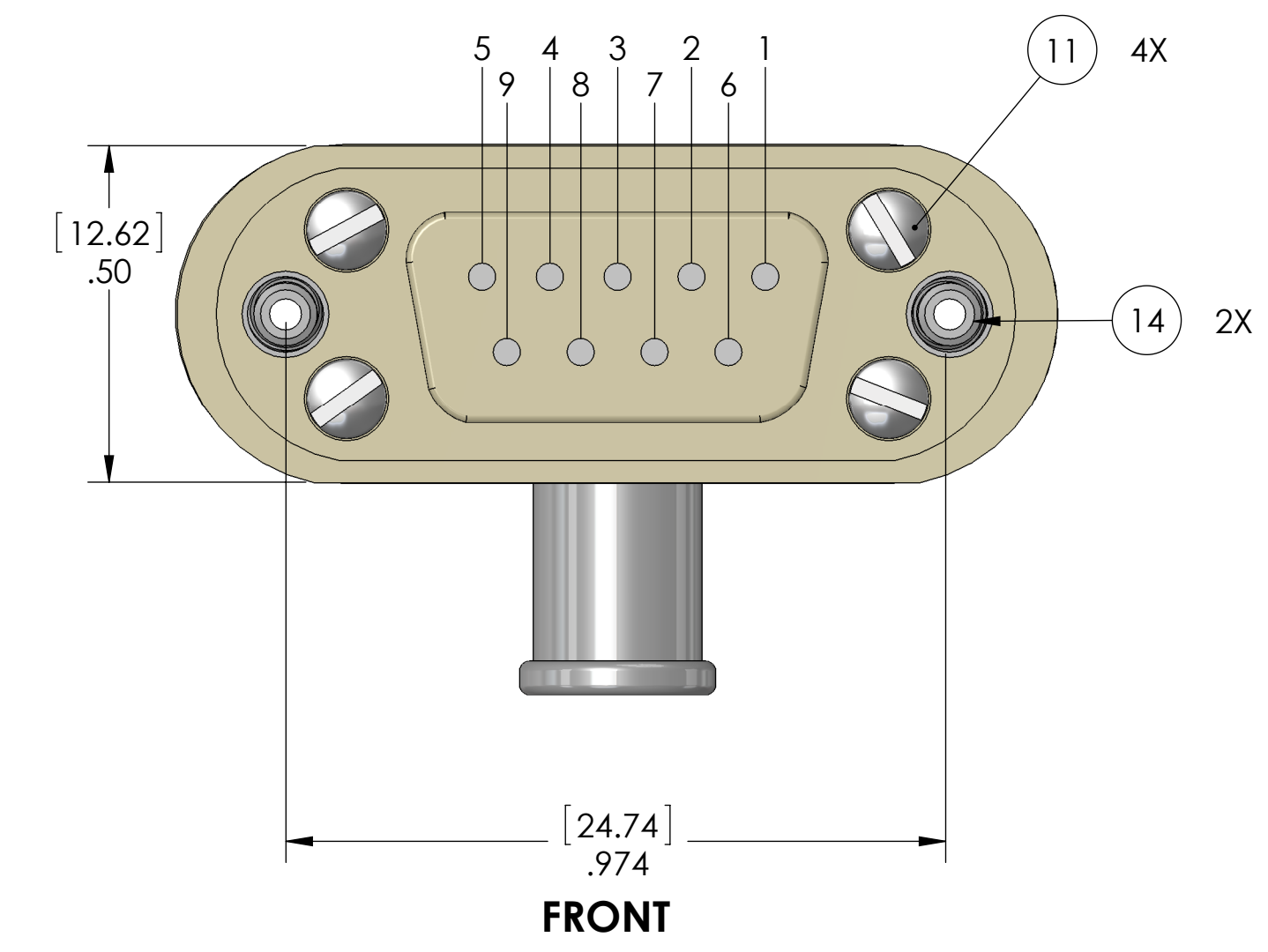
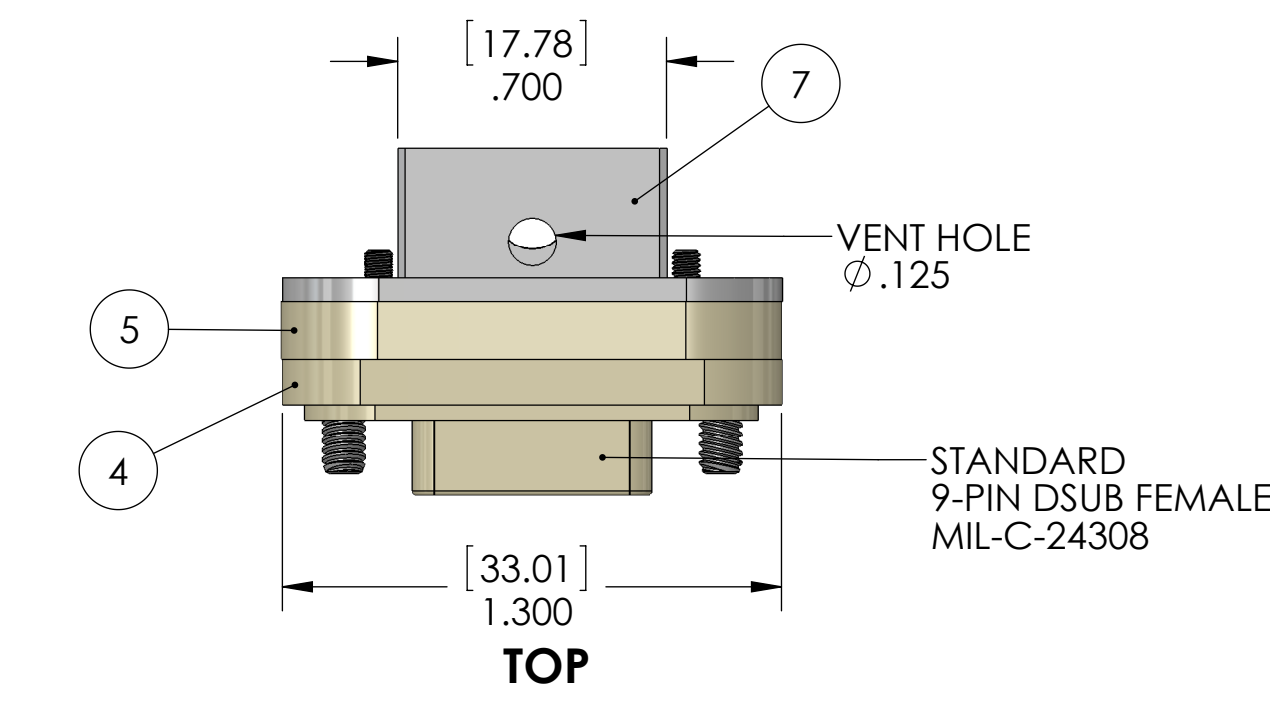
SEI GS-13 AND L-4C SEISMOMETER CABLE		
FROM CONNECTOR MOUNT TO SEISMOMETER		
V-DB25 M/S1,9-36-DB9 F/S5,DB9 F/S5 RA		
STANDARD USE FOR THIS CABLE		
SUBSYSTEM	AIR/VAC	STANDARD USE
SEI	IN-VAC	GS-13,L-4C



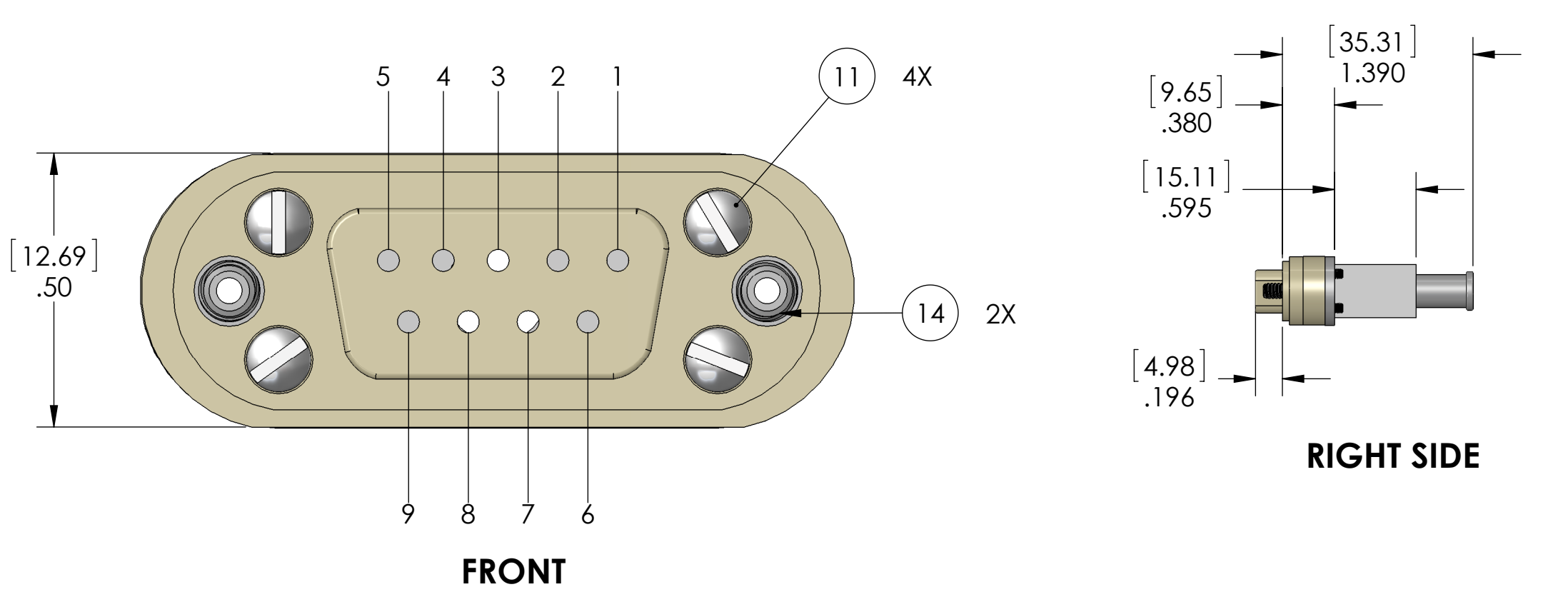
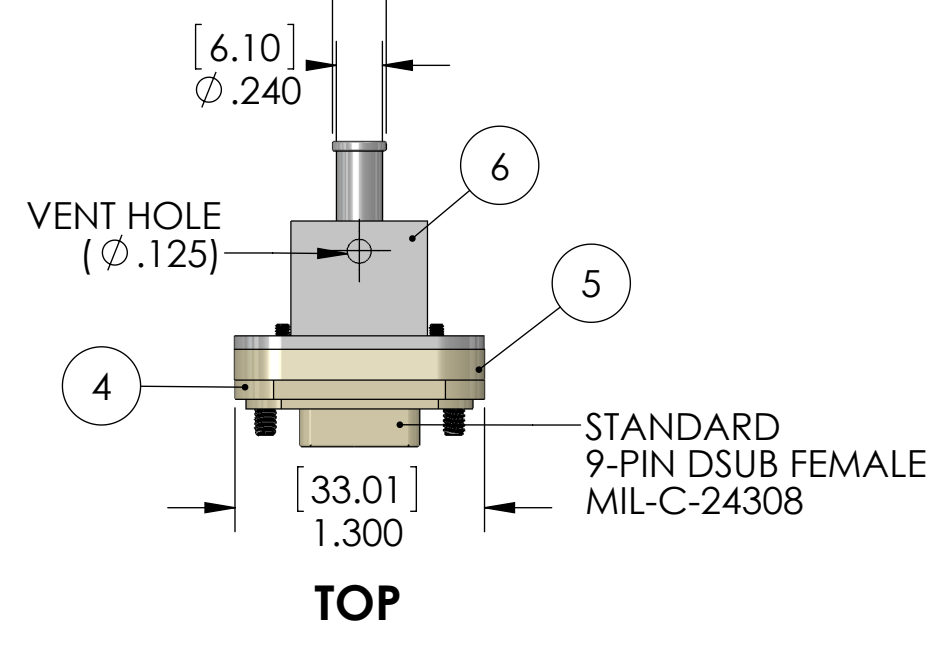
CONNECTOR J1 ⑧ ⑩ ⑫ ⑬



CONNECTOR J2 ⑧ ⑩ ⑫ ⑭



CONNECTOR J3 ⑧ ⑩ ⑪ ⑬



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 ± .01
 .XXX ± .005
 ANGULAR ± 0.5°

MATERIAL: N/A

FINISH: N/A μinch

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

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 ANGULAR ± 0.5°

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FINISH: N/A μinch

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TOLERANCES:
 .XX ± .01
 .XXX ± .005
 ANGULAR ± 0.5°

MATERIAL: N/A

FINISH: N/A μinch

CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO SUB-SYSTEM: SEI

PART NAME: CUSTOM CABLE SPECIFICATION V25M-36

DESIGNER: BARBOT DATE: 01 FEB 2010 SIZE: DWG. NO. E

DRAFTER: EBARROW DATE: FEB 01 2010

CHECKER: SEE DCC

APPROVAL: SEE DCC

SCALE: NTS

PROJECTION:

D1000227

REV. v10

SHEET 1 OF 1