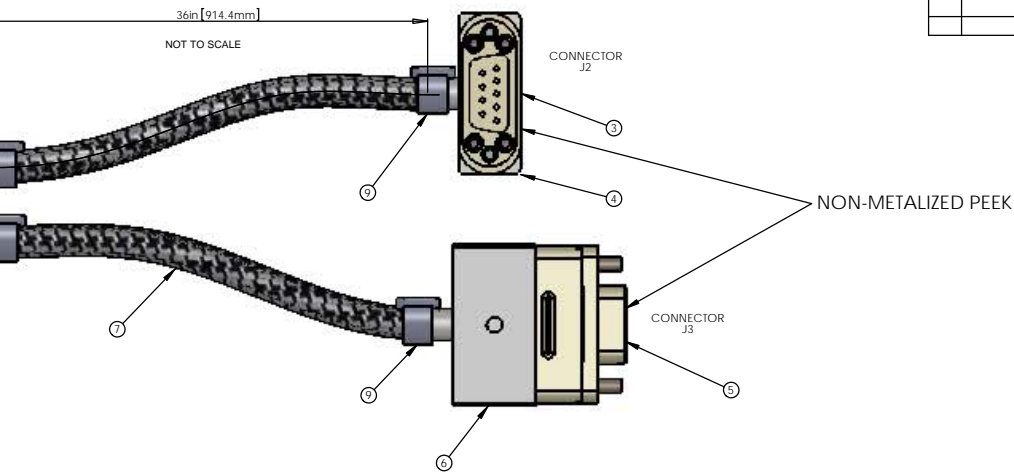
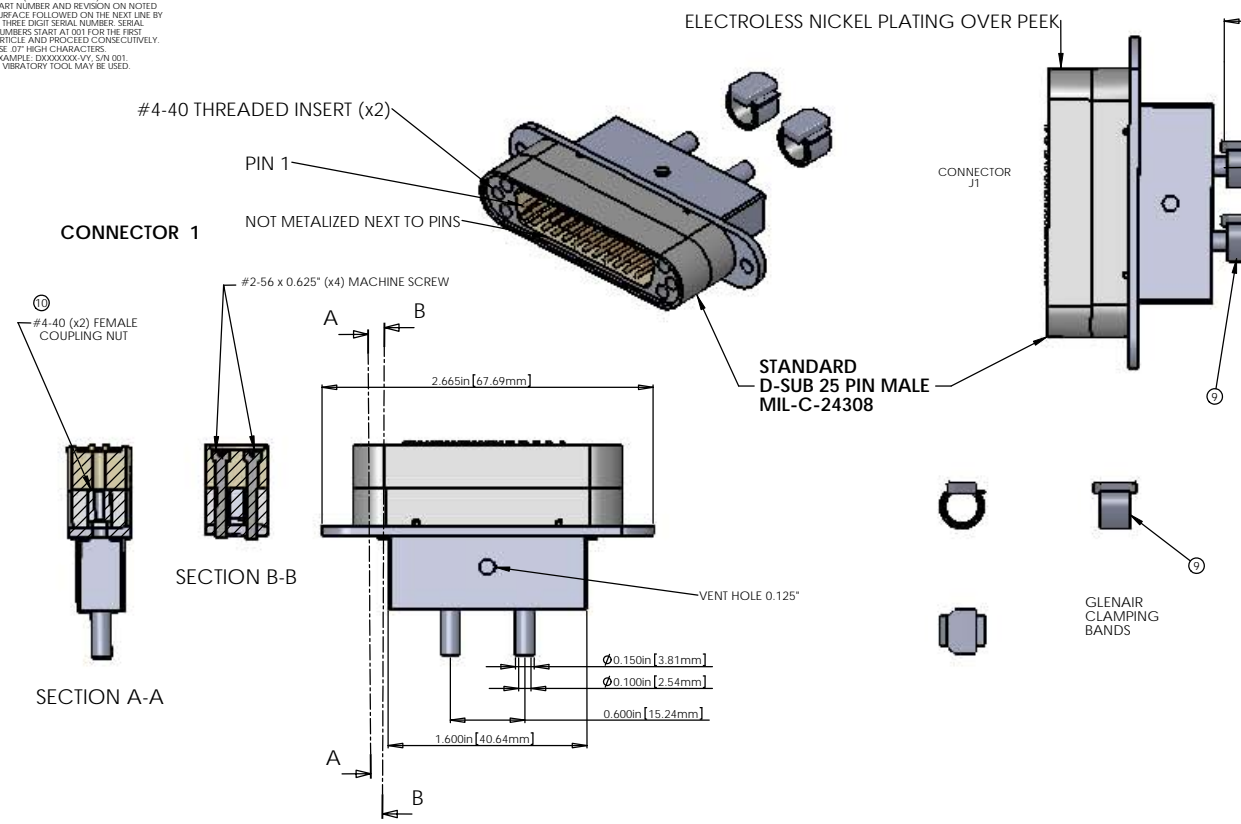


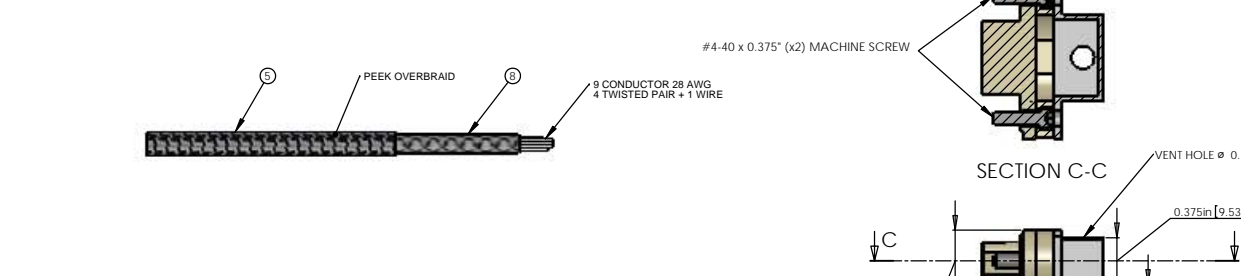
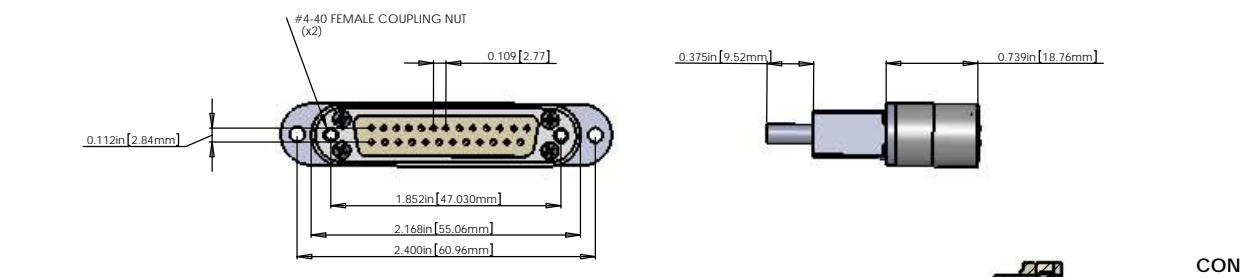
REV.	DATE	DCN #	DRAWING TREE #

NOTES CONTINUED:  
 ○ SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER AND REVISION ON NOTED 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 OF HIGH CHARACTERS. EXAMPLE: D1000227-V2.001. A VIBRATORY TOOL MAY BE USED.



**V25M CABLE ASSEMBLY CIRCUIT SUMMARY**  
 V-DB25 M/1, 9s-36-DB9 F/5s, DB9 F/5s RA

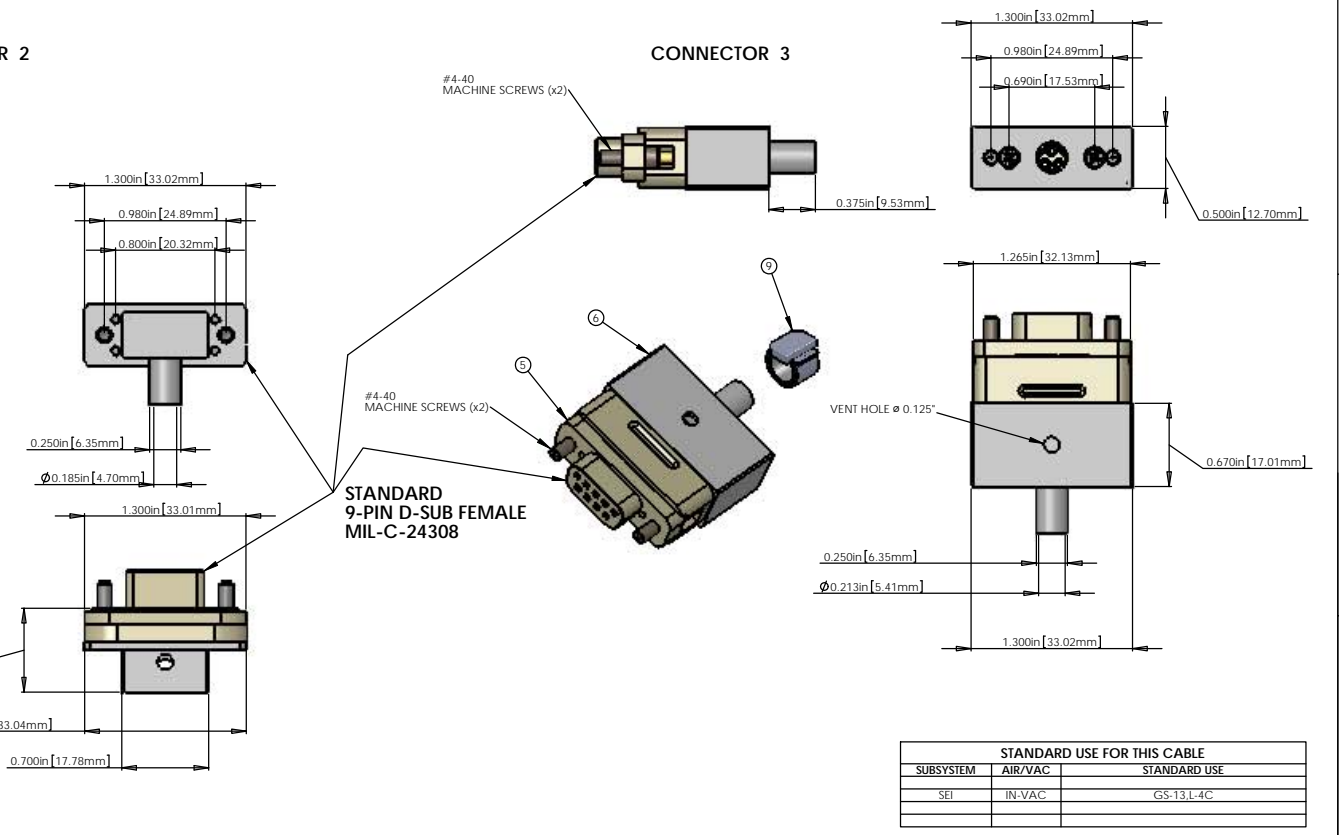
FROM					TO		
CONNECTOR J1 - 25 PIN SUBMINI_D MALE CONNECTOR (PEEK)					CONNECTOR J2 - 9 PIN SUBMINI_D RIGHT ANGLE FEMALE CONNECTOR (PEEK)		
PIN	WIRE NAME	COLOR	LENGTH	TWISTED PAIR	PIN	WIRE NAME	SIGNAL
1, 9 SHELL	SHIELD (BRAID)		36in		5, SHELL	SHIELD (BRAID)	SHIELD
1, 9 SHELL	(CABLE 1) WIRE 1	White	36in		5, SHELL	(CABLE 1) WIRE 1	SHIELD
2	(CABLE 1) WIRE 2	White	36in	TP-1	4	(CABLE 1) WIRE 2	POWER
14	(CABLE 1) WIRE 14	White	36in	TP-1	9	(CABLE 1) WIRE 14	POWER - RTN
3	(CABLE 1) WIRE 3	White	36in	TP-2	3	(CABLE 1) WIRE 3	POWER +
15	(CABLE 1) WIRE 15	White	36in	TP-2	8	(CABLE 1) WIRE 15	POWER + RTN
4	(CABLE 1) WIRE 4	White	36in	TP-3	2	(CABLE 1) WIRE 4	LOCK +
16	(CABLE 1) WIRE 16	White	36in	TP-3	7	(CABLE 1) WIRE 16	LOCK -
5	(CABLE 1) WIRE 5	White	36in	TP-4	1	(CABLE 1) WIRE 5	SIG +
17	(CABLE 1) WIRE 17	White	36in	TP-4	6	(CABLE 1) WIRE 17	SIG -
CONNECTOR J3 - 9 PIN SUBMINI_D FEMALE CONNECTOR (PEEK)							
PIN	WIRE NAME	COLOR	LENGTH	TWISTED PAIR	PIN	WIRE NAME	SIGNAL
1, 9 SHELL	SHIELD (BRAID)		36in		5, SHELL	SHIELD (BRAID)	SHIELD
1, 9 SHELL	(CABLE 2) WIRE 9	White	36in		5, SHELL	(CABLE 2) WIRE 9	SHIELD
10	(CABLE 2) WIRE 10	White	36in	TP-5	4	(CABLE 2) WIRE 10	POWER
22	(CABLE 2) WIRE 22	White	36in	TP-5	9	(CABLE 2) WIRE 22	POWER - RTN
11	(CABLE 2) WIRE 11	White	36in	TP-6	3	(CABLE 2) WIRE 11	POWER +
23	(CABLE 2) WIRE 23	White	36in	TP-6	8	(CABLE 2) WIRE 23	POWER + RTN
12	(CABLE 2) WIRE 12	White	36in	TP-7	2	(CABLE 2) WIRE 12	LOCK +
24	(CABLE 2) WIRE 24	White	36in	TP-7	7	(CABLE 2) WIRE 24	LOCK -
13	(CABLE 2) WIRE 13	White	36in	TP-8	1	(CABLE 2) WIRE 13	SIG +
25	(CABLE 2) WIRE 25	White	36in	TP-8	6	(CABLE 2) WIRE 25	SIG -



**BILL OF MATERIALS**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	LENGTH
1	CUSTOM DB25 MALE	DB25 MALE CONNECTOR (J1) FOR UHV (METALIZED PEEK)	1	
2	CUSTOM DB25 BACKSHELL	DB25 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	1	
3	CUSTOM DB9 RIGHT ANGLE FEMALE	DB9 RIGHT ANGLE FEMALE CONNECTOR (J2) FOR UHV (PEEK)	1	
4	CUSTOM DB9 BACKSHELL	DB9 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	1	
5	CUSTOM DB9 FEMALE	DB9 FEMALE CONNECTOR (J3) FOR UHV (PEEK)	1	
6	CUSTOM DB9 BACKSHELL	DB9 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	1	
7	C1	9 COND. (4 TW PAIR + 1 WIRE + SHIELD) CABLE WITH COPPER BRAID (SHIELD) AND PEEK OVERBRAID	2	36"
8	COPPER BRAID	CONTINENTAL CORDAGE PART # 24x3x40BC	2	36"
9	GLENNAIR 600-052	GLENNAIR 600-052 STANDARD BRAID CLAMP	4	

- NOTES: ( UNLESS OTHERWISE SPECIFIED )
- MATERIAL:
    - a. CONNECTOR SHELL - PEEK OR METALIZED PEEK - VICTREX 450GL30
    - b. BACKSHELL - STAINLESS STEEL WITH VENT HOLE
    - c. CONTACTS - BERYLLIUM COPPER ALLOW C17300
    - d. HARDWARE: CORROSION RESISTANCE STEEL, PASSIVATED
    - e. PEEK BRAID - PEEK CARBON FIBRE LOADED
  - CABLE 9 COND. 28 AWG. (40 STRD 44 AWG) WITH 2 LAYERS OF KAPTON TAPE (SUPPLIED BY LIGO) 4 TWISTED PAIRS (4 TO 5 TWISTS PER INCH) + 1 WIRE OVERALL 40AWG COPPER BRAID 50% COVERAGE (SUPPLIED BY LIGO) OVERALL PEEK BRAID MIN. 50% COVERAGE (SUPPLIED BY LIGO) OVERALL CABLE O.D. WILL BE APPROX. 0.240 IN.
  - CONNECTORS WILL BE SUPPLIED WITH HARDWARE. (LENGTH OF SCREWS AS SHOWN ARE APPROXIMATE SCREWS SHOULD BE THE PROPER LENGTH FOR PROPER MATING)



**STANDARD USE FOR THIS CABLE**

SUBSYSTEM	AIR/VAC	STANDARD USE
SEI	IN-VAC	GS-13.1-4C

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)  
 1. INTERPRET DRAWING PER ASME Y14.5-1994.  
 2. REMOVE ALL SHARP EDGES: R0.02 MIN.  
 3. DO NOT SCALE FROM DRAWING.  
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

DIMENSIONS ARE IN: .0005" ±, .001" ±, .005" ±, .010" ±, .050" ±, .100" ±, .500" ±, 1.000" ±, 1.500" ±, 2.000" ±, 3.000" ±, 4.000" ±, 5.000" ±, 10.000" ±, 15.000" ±, 20.000" ±, 30.000" ±, 40.000" ±, 50.000" ±, 60.000" ±, 70.000" ±, 80.000" ±, 90.000" ±, 100.000" ±, 150.000" ±, 200.000" ±, 300.000" ±, 400.000" ±, 500.000" ±, 600.000" ±, 700.000" ±, 800.000" ±, 900.000" ±, 1000.000" ±, 1500.000" ±, 2000.000" ±, 3000.000" ±, 4000.000" ±, 5000.000" ±, 6000.000" ±, 7000.000" ±, 8000.000" ±, 9000.000" ±, 10000.000" ±

ANGULAR: ±

MATERIAL: Material <not specified> FINISH: μin/ft

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)  
 1. INTERPRET DRAWING PER ASME Y14.5-1994.  
 2. REMOVE ALL SHARP EDGES: R0.02 MIN.  
 3. DO NOT SCALE FROM DRAWING.  
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DIMENSIONS ARE IN: .0005" ±, .001" ±, .005" ±, .010" ±, .050" ±, .100" ±, .500" ±, 1.000" ±, 1.500" ±, 2.000" ±, 3.000" ±, 4.000" ±, 5.000" ±, 10.000" ±, 15.000" ±, 20.000" ±, 30.000" ±, 40.000" ±, 50.000" ±, 60.000" ±, 70.000" ±, 80.000" ±, 90.000" ±, 100.000" ±, 150.000" ±, 200.000" ±, 300.000" ±, 400.000" ±, 500.000" ±, 600.000" ±, 700.000" ±, 800.000" ±, 900.000" ±, 1000.000" ±

ANGULAR: ±

MATERIAL: Material <not specified> FINISH: μin/ft

CALIFORNIA INSTITUTE OF TECHNOLOGY  
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PART NAME: CUSTOM CABLE SPECIFICATION V25M

DESIGNER	DATE	SIZE	DWG. NO.	REV.
0.000001	09/10/2010	E	D1000227-	v2

SCALE: 2:1 PROJECTION: SHEET 1 OF 1