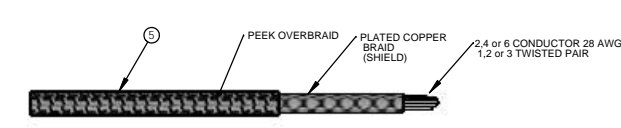
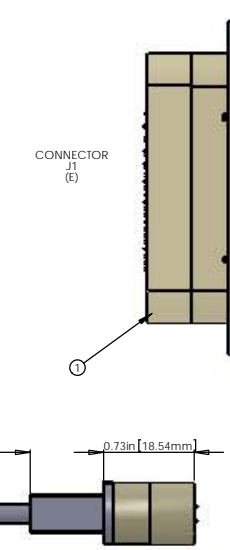
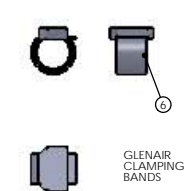
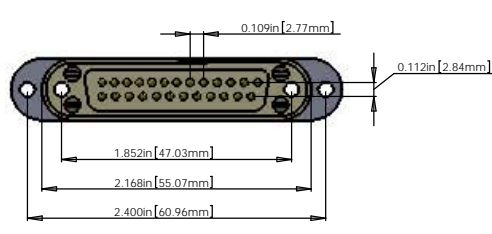
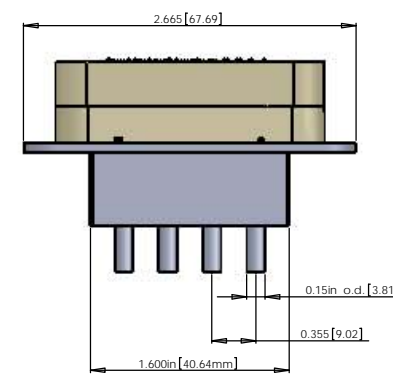
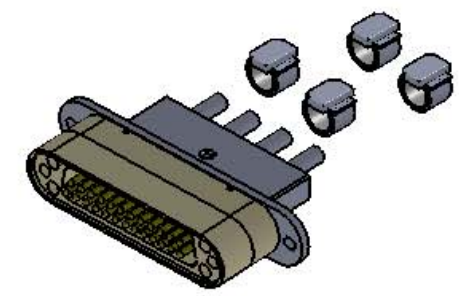


REV.	DATE	DCN #	DRAWING TREE #

NOTES CONTINUED:
 ① 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 07 HIGH CHARACTERS. EXAMPLE: D1000000V1, SW1001. A VIBRATORY TOOL MAY BE USED.

V25X CABLE ASSEMBLY CIRCUIT SUMMARY					
FROM					
CONNECTOR J1 - 25 PIN MALE SUBMINI_D CONNECTOR (PEEK)					
PIN	WIRE NAME	COLOR	LENGTH	TWISTED PAIR	
E1	(CABLE 1) SHIELD	White	53 in.	(CABLE 1) SHIELD	
E14	(CABLE 1) WIRE 14	White	53 in.	SINGLE WIRE	
E2	(CABLE 1) WIRE 2	White	53 in.	TP-1A	
E15	(CABLE 1) WIRE 15	White	53 in.	TP-2A	
E3	(CABLE 1) WIRE 3	White	53 in.	TP-2A	
E16	(CABLE 1) WIRE 16	White	53 in.	TP-3A	
E4	(CABLE 1) WIRE 4	White	53 in.	TP-3A	
E1	(CABLE 2) SHIELD			(CABLE 2) SHIELD	
E17	(CABLE 2) WIRE 17	White	53 in.	TP-1B	
E5	(CABLE 2) WIRE 5	White	53 in.	TP-1B	
E18	(CABLE 2) WIRE 18	White	53 in.	TP-2B	
E6	(CABLE 2) WIRE 6	White	53 in.	TP-2B	
E19	(CABLE 2) WIRE 19	White	53 in.	TP-3B	
E7	(CABLE 2) WIRE 7	White	53 in.	TP-3B	
E1	(CABLE 3) SHIELD			(CABLE 3) SHIELD	
E20	(CABLE 3) WIRE 20	White	53 in.	TP-1C	
E8	(CABLE 3) WIRE 8	White	53 in.	TP-1C	
E21	(CABLE 3) WIRE 21	White	53 in.	TP-2C	
E9	(CABLE 3) WIRE 9	White	53 in.	TP-2C	
E22	(CABLE 3) WIRE 22	White	53 in.	TP-3C	
E10	(CABLE 3) WIRE 10	White	53 in.	TP-3C	
E1	(CABLE 4) SHIELD			(CABLE 4) SHIELD	
E23	(CABLE 4) WIRE 23	White	53 in.	TP-1D	
E11	(CABLE 4) WIRE 11	White	53 in.	TP-1D	
E24	(CABLE 4) WIRE 24	White	53 in.	TP-2D	
E12	(CABLE 4) WIRE 12	White	53 in.	TP-2D	
E25	(CABLE 4) WIRE 25	White	53 in.	TP-3D	
E13	(CABLE 4) WIRE 13	White	53 in.	TP-3D	



BILL OF MATERIALS				
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	LENGTH
1	CUSTOM DB25 MALE	DB25 MALE CONNECTOR (J1) FOR UHV (PEEK)	1	
2		DB25 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	1	
3	TICOR #TS094	DB9 (DE9) FEMALE CONNECTOR (J2, J3, J4, J5) FOR UHV (PEEK)	4	
4	WITH FLYING LEADS	DB9 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	4	
5	C1	9 COND. (1, 2 or 3 TW PAIR + SHIELD) CABLE (ADD COPPER BRAID (SHIELD) AND PEEK OVERBRAID)	4	53in.*
6	GLENAIR 600-052	GLENAIR 600-052 STANDARD BRAID CLAMP	4	

* NOTE: THE OVERALL LENGTH IS MEASURED FROM PIN TIP (25 PIN) TO PIN TIP (9 PIN) OF THE CABLE. Use whatever length is necessary for the internal wiring of the connectors and strip length to achieve the correct overall length.

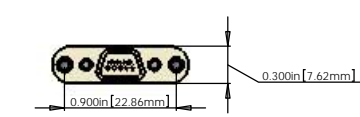
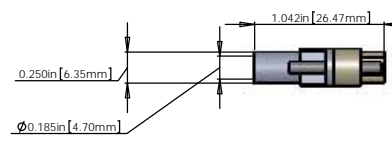
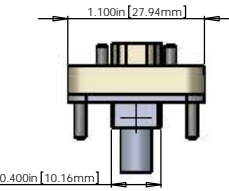
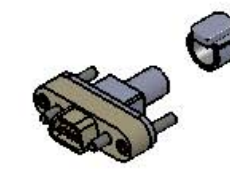
- NOTES: (UNLESS OTHERWISE SPECIFIED)
- MATERIAL: a. CONNECTOR SHELL - PEEK.
 b. BACKSHELL - STAINLESS STEEL WITH VENT HOLE.
 c. CONTACTS - BERYLLIUM COPPER ALLOW C17300 0.00050 MIN. GOLD OVER NICKEL.
 d. HARDWARE: CORROSION RESISTANCE STEEL, PASSIVATED.
 e. PEEK BRAID - PEEK CARBON FIBRE LOADED.
 - CABLE 2, 4 or 6 COND. 28 AWG (40 STRD 44 AWG) WITH 2 LAYERS OF KAPTON TAPE 1, 2 or 3 TWISTED PAIRS (4 TO 5 TWISTS PER INCH) OVERALL 40AWG SILVER PLATED COPPER BRAID 90% COVERAGE OVERALL PEEK BRAID MIN. 50% COVERAGE OVERALL CABLE O.D. WILL BE APPROX. 0.240 IN.

V25X CABLE ASSEMBLY CIRCUIT SUMMARY		
TO		
CONNECTOR J2 - 9 PIN FEMALE MICRO_D CONNECTOR (PEEK)		
PIN	WIRE NAME	SIGNAL
N/C	(CABLE 1) SHIELD	SHIELD
A5	(CABLE 1) WIRE 1	SHIELD
A1	(CABLE 1) WIRE 14	MO FACE 1
A6	(CABLE 1) WIRE 2	MO FACE 1
A2	(CABLE 1) WIRE 15	MO RIGHT
A7	(CABLE 1) WIRE 3	MO RIGHT
A4	(CABLE 1) WIRE 16	RO FACE 3
A9	(CABLE 1) WIRE 4	RO FACE 3

V25X CABLE ASSEMBLY CIRCUIT SUMMARY		
TO		
CONNECTOR J3 - 9 PIN FEMALE MICRO_D CONNECTOR (PEEK)		
PIN	WIRE NAME	SIGNAL
N/C	(CABLE 2) SHIELD	SHIELD
B5	(CABLE 2) WIRE 1	SHIELD
B1	(CABLE 2) WIRE 17	MO FACE 2
B6	(CABLE 2) WIRE 5	MO FACE 2
B2	(CABLE 2) WIRE 18	MO SIDE
B7	(CABLE 2) WIRE 6	MO SIDE
B4	(CABLE 2) WIRE 19	RO LEFT
B9	(CABLE 2) WIRE 7	RO LEFT

V25X CABLE ASSEMBLY CIRCUIT SUMMARY		
TO		
CONNECTOR J4 - 9 PIN FEMALE MICRO_D CONNECTOR (PEEK)		
PIN	WIRE NAME	SIGNAL
N/C	(CABLE 3) SHIELD	SHIELD
C5	(CABLE 3) WIRE 1	SHIELD
C1	(CABLE 3) WIRE 20	MO FACE
C6	(CABLE 3) WIRE 8	MO FACE
C2	(CABLE 3) WIRE 21	RO FACE 1
C7	(CABLE 3) WIRE 9	RO FACE 1
C4	(CABLE 3) WIRE 22	RO RIGHT
C9	(CABLE 3) WIRE 10	RO RIGHT

V25X CABLE ASSEMBLY CIRCUIT SUMMARY		
TO		
CONNECTOR J5 - 9 PIN FEMALE MICRO_D CONNECTOR (PEEK)		
PIN	WIRE NAME	SIGNAL
N/C	(CABLE 4) SHIELD	SHIELD
D5	(CABLE 4) WIRE 1	SHIELD
D1	(CABLE 4) WIRE 23	MO LEFT
D6	(CABLE 4) WIRE 11	MO LEFT
D2	(CABLE 4) WIRE 24	RO FACE 2
D7	(CABLE 4) WIRE 12	RO FACE 2
D4	(CABLE 4) WIRE 25	RO SIDE
D9	(CABLE 4) WIRE 13	RO SIDE



STANDARD USE FOR THIS CABLE	
SUBSYSTEM	STANDARD USE
SUS	QUAD SUSPENSIONS TOP

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		CALIFORNIA INSTITUTE OF TECHNOLOGY		PART NAME	
1. INTERPRET DRAWING PER ASME Y14.5-1994.		LIGO MASSACHUSETTS INSTITUTE OF TECHNOLOGY		CUSTOM CABLE SPECIFICATION V25X	
2. REMOVE ALL SHARP EDGES: R.02 MIN.		SYSTEM		DESIGNER	
3. DO NOT SCALE FROM DRAWING.		SUB-SYSTEM		SUS	
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		DRAWN		DATE	
TOLERANCES:		CHECKER		SITE	
XXX ±		APPROVAL		DWS: NO	
XXX ±		MATERIAL		E	
ANGULAR ±		FINISH		D1000234-v1	
		NEXT ASSY		REV.	
		Material <not specified>		SCALE: 2:1	
		μinch		PROJECTION:	
				SHEET 1 OF 1	

DRAWN BY: LIGON V25X PART FROM REV: DRAWING FOR REV: