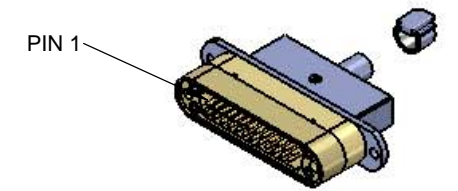


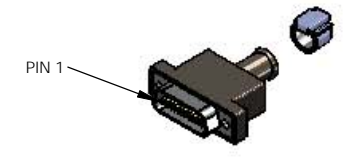
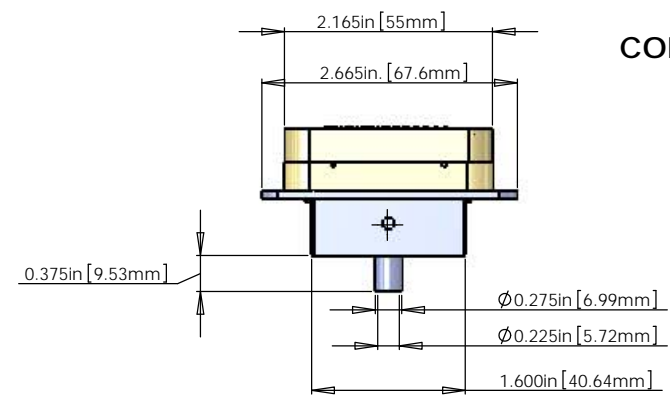
NOTES CONTINUED:  
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER AND REVISION ON NOTED SURFACE FOLLOWED ON THE NEXT LINE BY A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE .07" HIGH CHARACTERS. EXAMPLE: DXXXXX-VY, S/N 001. VIBRATORY TOOL MAY BE USED.

6. APPROXIMATE WEIGHT = X.XXX LB.  
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.  
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.  
 9. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4  
 10. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL. AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS.

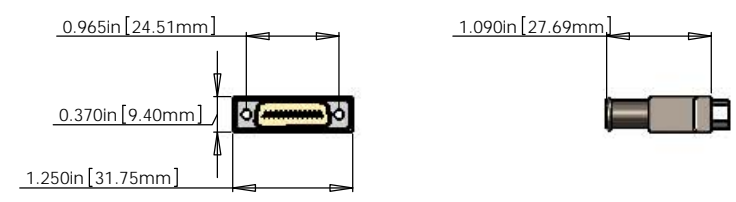
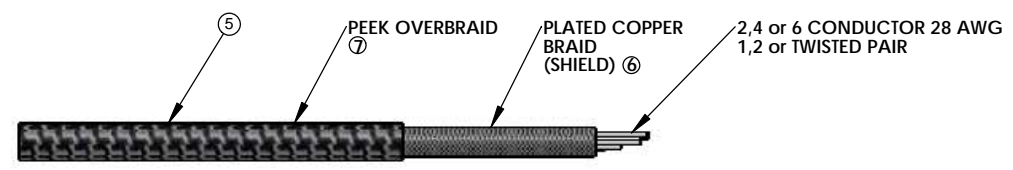
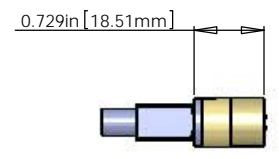
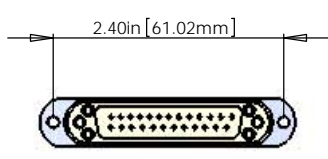
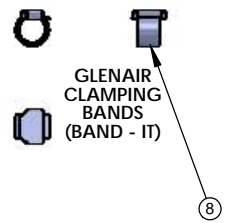
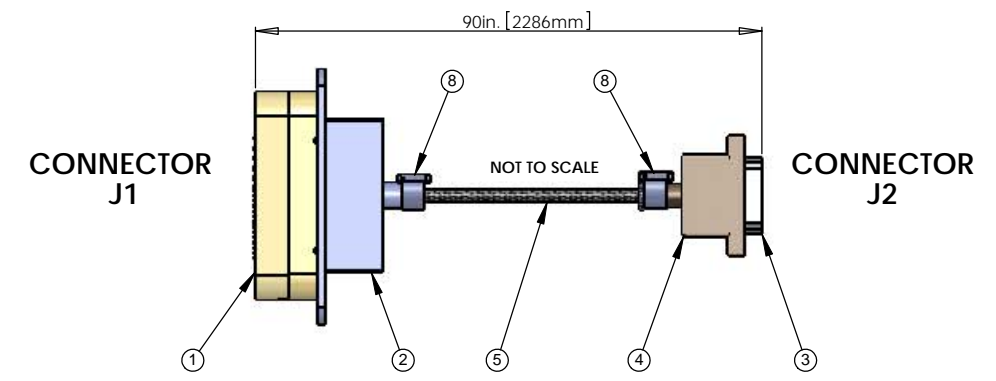
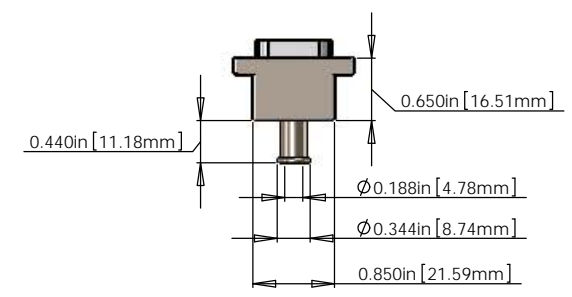
REV.	DATE	DCN #	DRAWING TREE #



CONNECTOR J1



CONNECTOR J2



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	LENGTH
1	TICOR PART # TS0086-1	DB25 MALE CONNECTOR (J1) FOR UHV (PEEK)	1	
2	TICOR PART # TS-0143-1	DB25 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	1	
3	TICOR PART # TS-0143-1	MicroD25 FEMALE CONNECTOR (J2) FOR UHV	1	
4	BACKSHELL (included in PART # TS-0143-1)	MicroD25 CONNECTOR BACKSHELL FOR UHV	1	
5	C1	25 COND. (12 TW PAIR + 1 WIRE + SHIELD) CABLE WITH COPPER BRAID (SHIELD) (6) AND PEEK OVERBRAID (7)	1	90in *
6	CONTINENTAL PART #24x4x40BC	COPPER BRAID - CONTINENTAL CORDAGE PART #24x4x40BC	1	
7	PART #6759	PEEK BRAID - PART #6759 MANUFACTURED WITH ZEUS 0.016" BLACK PEEK DRAWN MONOFILAMENT	1	
8	GLENAIR 600-052	GLENAIR 600-052 STANDARD BRAID CLAMP (BAND - IT)	2	

\* NOTE: THE OVERALL LENGTH IS MEASURED FROM PIN TIP (25 PIN D-SUB) TO PIN TIP (25 PIN μD) 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:
  - CONNECTOR SHELL - PEEK - VICTREX 450GL30.
  - BACKSHELL - STAINLESS STEEL WITH VENT HOLE.
  - CONTACTS - BERYLLIUM COPPER ALLOY C17300 0.000050 MIN. GOLD OVER NICKEL
  - HARDWARE: CORROSION RESISTANCE STEEL, PASSIVATED
  - PEEK BRAID - PEEK CARBON LOADED
- CABLE 25 COND. 28 AWG, ( 40 STRD 44 AWG ) WITH 2 LAYERS OF KAPTON TAPE 12 TWISTED PAIRS ( 4 TO 5 TWISTS PER INCH ) + 1 WIRE OVERALL 40AWG SILVER PLATED COPPER BRAID 90% COVERAGE OVERALL PEEK BRAID MIN. 50% COVERAGE OVERALL CABLE O.D. WILL BE 0.240 IN.

**V25G-90 CABLE ASSEMBLY CIRCUIT SUMMARY**  
 V-DB25 M/S1-90-μD25 F/S1

CABLE NAME	COND.- WIRE ID	TWISTED PAIR	LENGTH *	FROM	TO
V25G-90	25 COND. CABLE	(12 TOTAL)	90 in.	Conn. J1	Conn. J2
C1	SHIELD (COPPER BRAID)	SINGLE WIRE	90 in.	PIN 1, SHIELD & SHELL	PIN 1, SHIELD & SHELL
				PIN 1, SHIELD & SHELL	PIN 1, SHIELD & SHELL
				PIN 2	PIN 2
				PIN 14	PIN 14
				PIN 3	PIN 3
				PIN 15	PIN 15
				PIN 4	PIN 4
				PIN 16	PIN 16
				PIN 5	PIN 5
				PIN 17	PIN 17
				PIN 6	PIN 6
				PIN 18	PIN 18
PIN 7	PIN 7				
PIN 19	PIN 19				
PIN 8	PIN 8				
PIN 20	PIN 20				
PIN 9	PIN 9				
PIN 21	PIN 21				
PIN 10	PIN 10				
PIN 22	PIN 22				
PIN 11	PIN 11				
PIN 23	PIN 23				
PIN 12	PIN 12				
PIN 24	PIN 24				
PIN 13	PIN 13				
PIN 25	PIN 25				

\* The length shown in this list is the overall length of the cable from connector end to connector end. Change length as necessary to compensate for the internal wiring of the connectors and strip length.

V-DB25 M/S1-90-μD25 F/S1		
STANDARD USE FOR THIS CABLE		
SUBSYSTEM	AIR/VAC	STANDARD USE
SUS	IN-VAC	QUAD SUSPENSION UIM

DIMENSIONS ARE IN		TOLERANCES: XX ± XXX ±		ANGULAR ± °		NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED) 1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.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.		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME <b>CUSTOM CABLE SPECIFICATION V25G-90 V-DB25 M/S1-90-μD25 F/S1</b>	
MATERIAL		FINISH		NEXT ASSY		SYSTEM SUB-SYSTEM <b>SUS</b>		DESIGNER J.HEEFNER SEPT/28/2010		SIZE DWG. NO. <b>D</b> <b>LIGO-D1002521-</b>	
APPROVAL		CHECKER		APPROVAL		DRAFTER E.BROWN SEPT/28/2010		REV. <b>v1</b>		SCALE: NONE PROJECTION:	