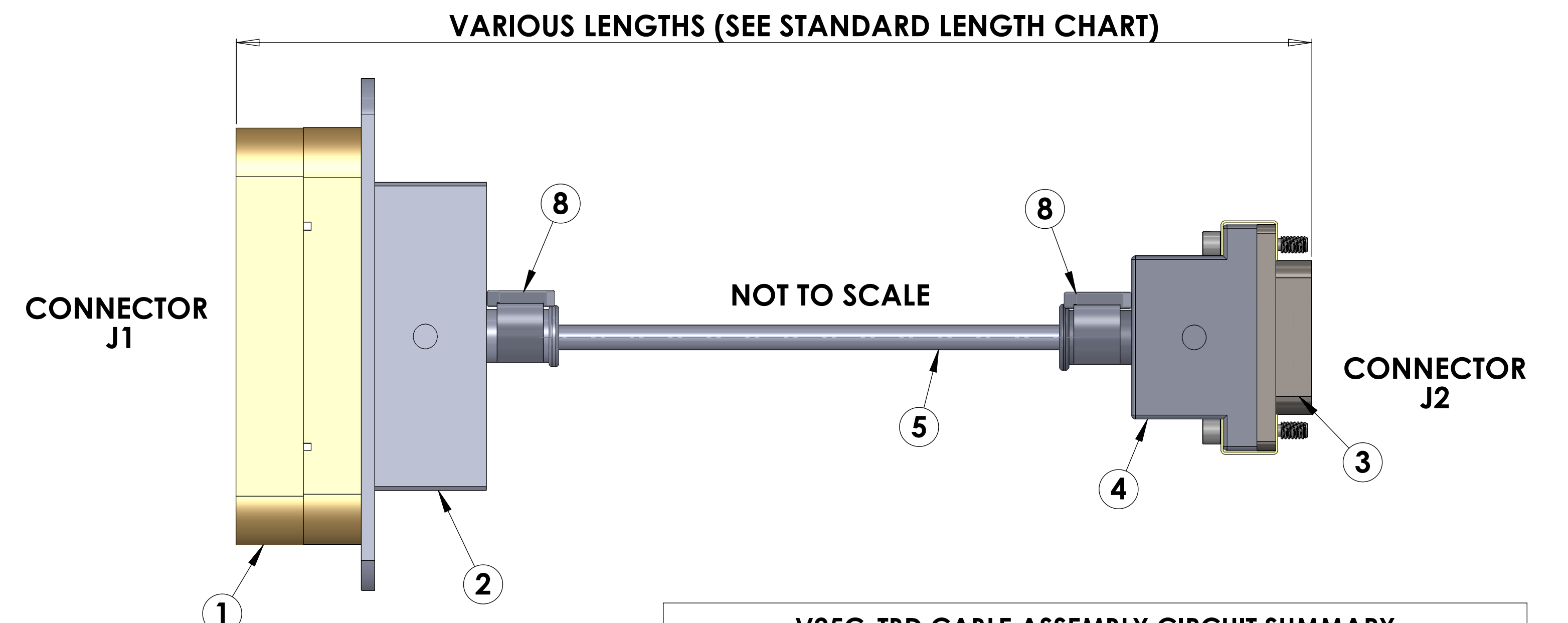


NOTES CONTINUED:  
 3. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER AND REVISION ON NOTED SURFACE FOLLOWED ON THE NEXT LINE BY A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE 07" HIGH CHARACTERS. EXAMPLE: DXXXXXXVY, S/N 001. VIBRATORY TOOL MAY BE USED. A  
 6. APPROXIMATE WEIGHT = X.XXXX LB.  
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED. REFER TO LIGO-E0900364  
 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  
 NOTES 13 and 14 DO NOT APPLY TO THIS PART

10. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL AFTER DELIVERY OF FINISHED PARTS. USE NITRONIC 60 THREADED INSERTS.  
 11. ALL MATERIAL IS TO BE VIRGIN MATERIAL (I.E. NO WELD REPAIRS, PLUGS OR RECYCLED MATERIAL). NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. REFER TO LIGO-E0900364.  
 12. SURFACE FINISH TO BE AS PROCESSED FROM MILL/SUPPLIER, FREE FROM SCRATCHES OR GOUGES.  
 13. PART WILL BE PORCELAIN COATED PER LIGO SPECIFICATION E1000083 AFTER FABRICATION; THE INDICATED HOLES WILL BE MASKED PRIOR TO PORCELAIN COATING TO APPROXIMATELY 2.5-3X HOLE DIAMETER CENTERED ON BOTH SIDES OF THE HOLE.  
 14. DIMENSIONS APPLY BEFORE PORCELAIN COATING UNLESS SPECIFIED.  
 15. BEND RADIUS: UNLESS OTHERWISE NOTED, THE BEND RADIUS SHOULD BE THE MINIMUM REQUIRED TO FORM WITHOUT CRACKING OR REQUIRING ADDITIONAL WORK WHEN FORMING. IN PARTICULAR IF SHEET METAL IS TO BE PORCELAIN COATED, THE BEND RADIUS SHALL BE A MINIMUM OF .12" OUTSIDE RADIUS OF BEND UNLESS OTHERWISE NOTED.

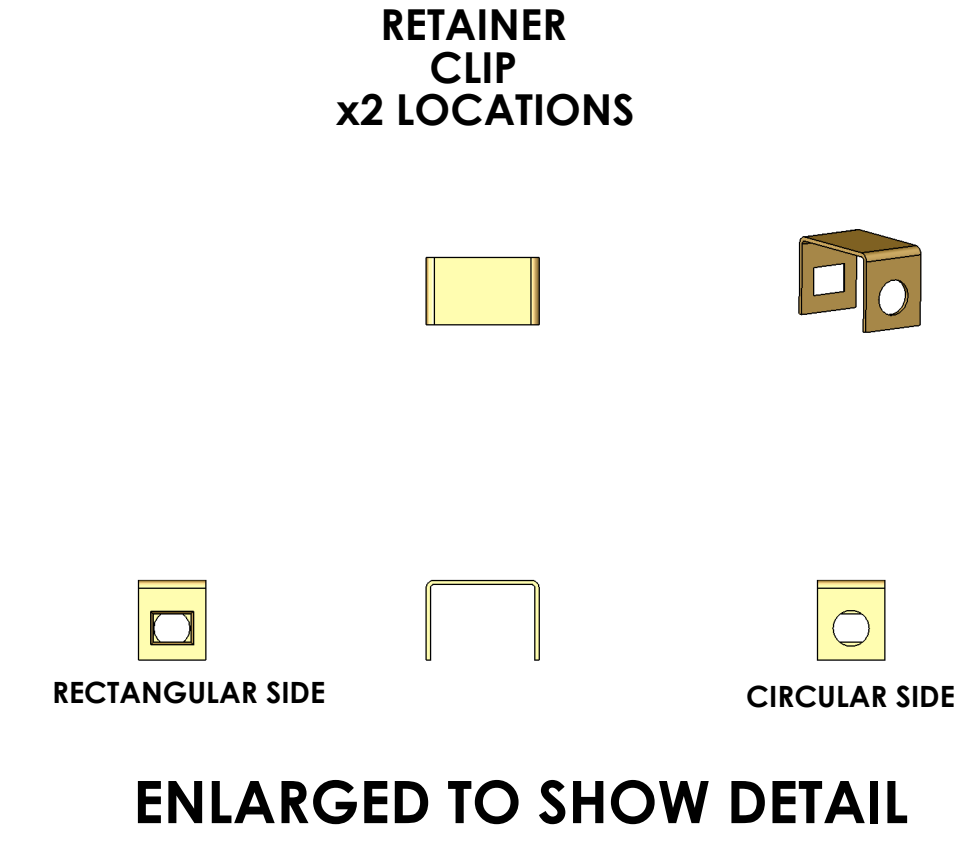
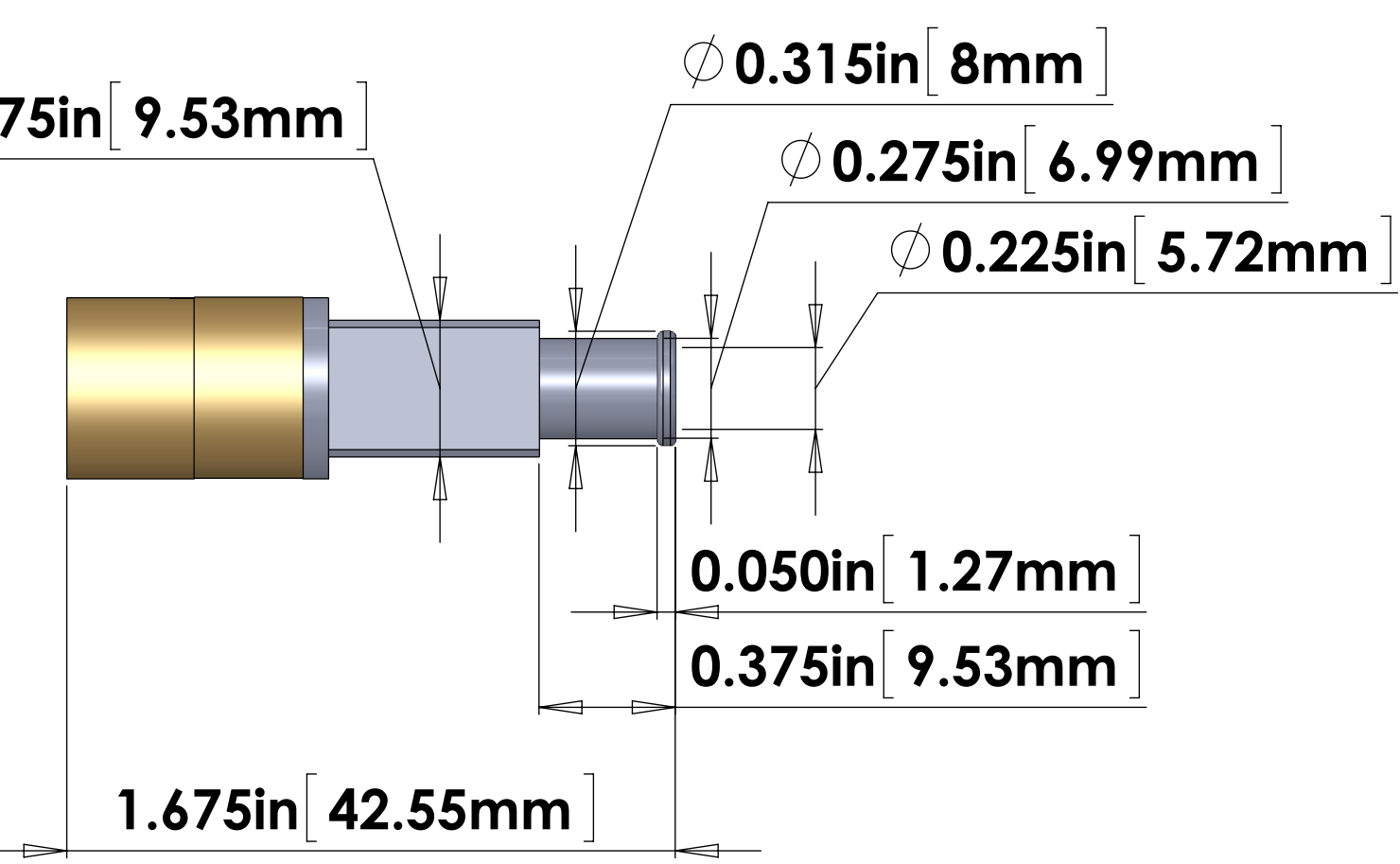
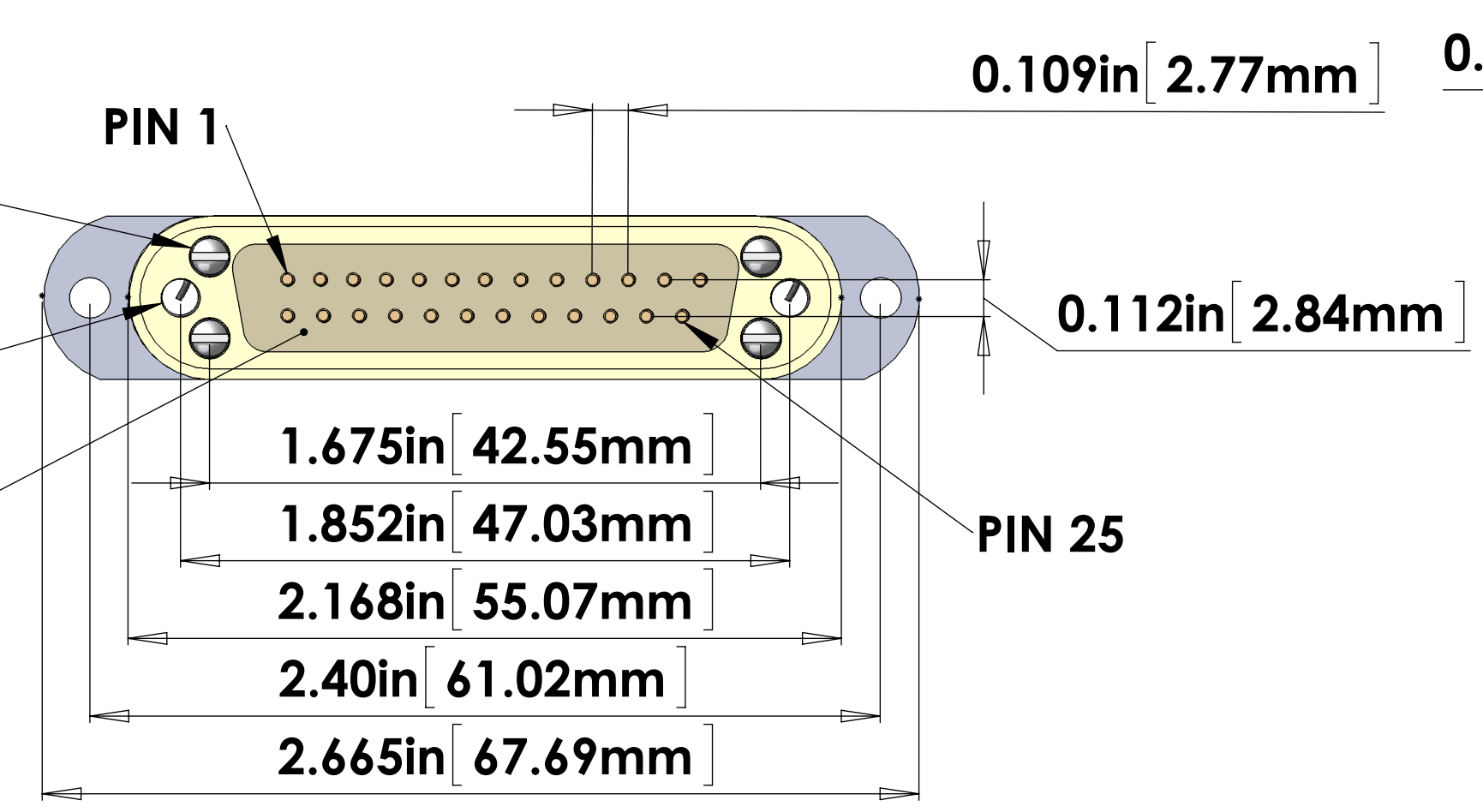
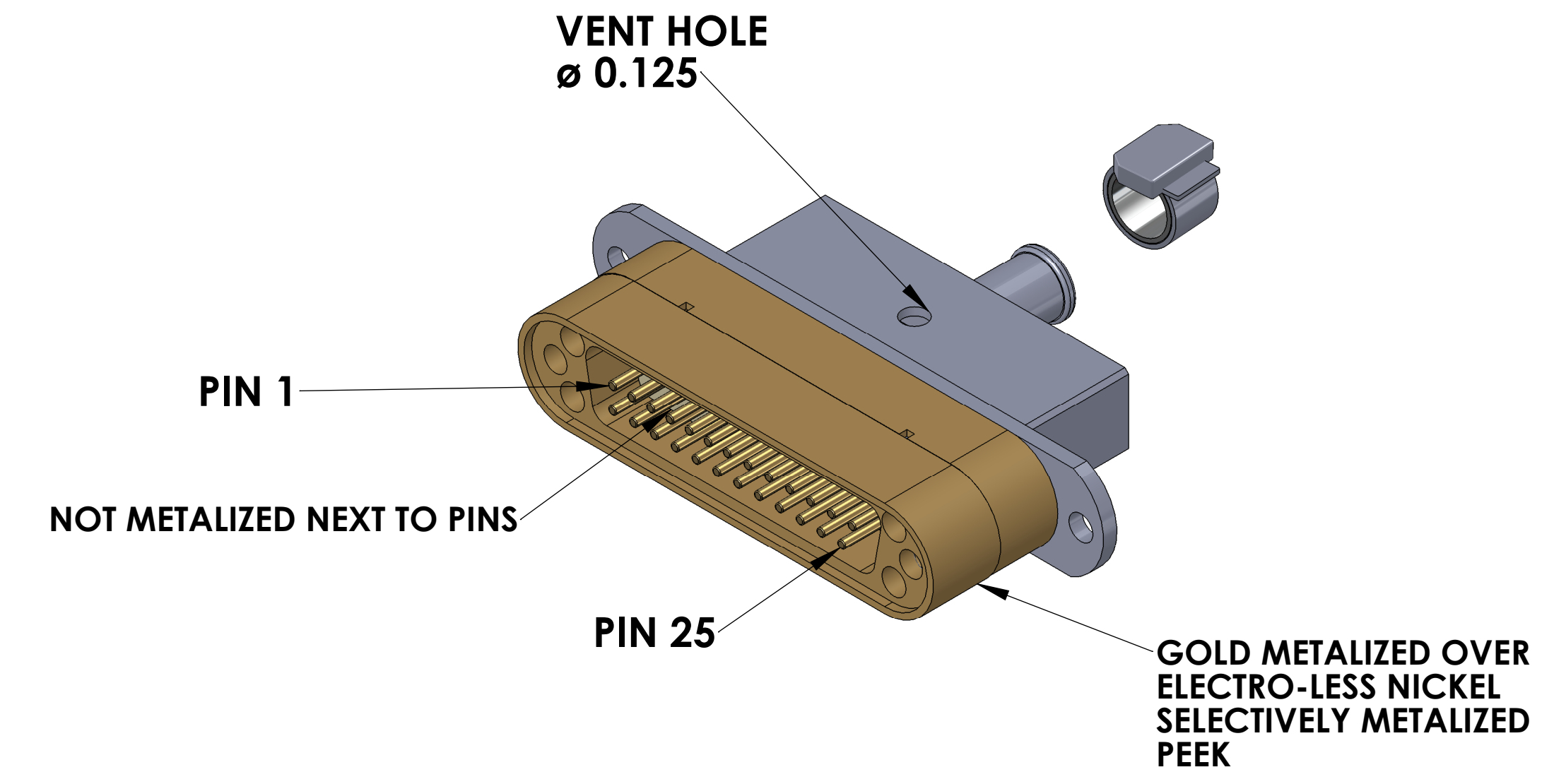
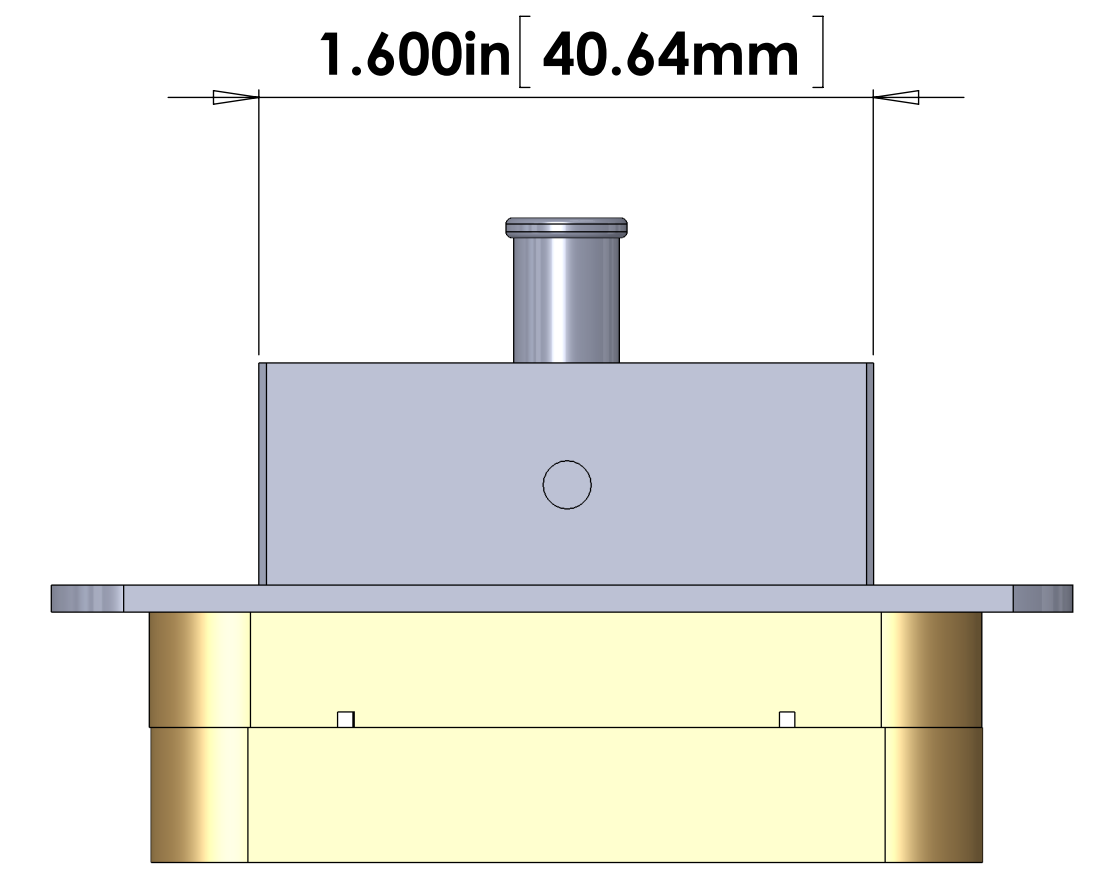
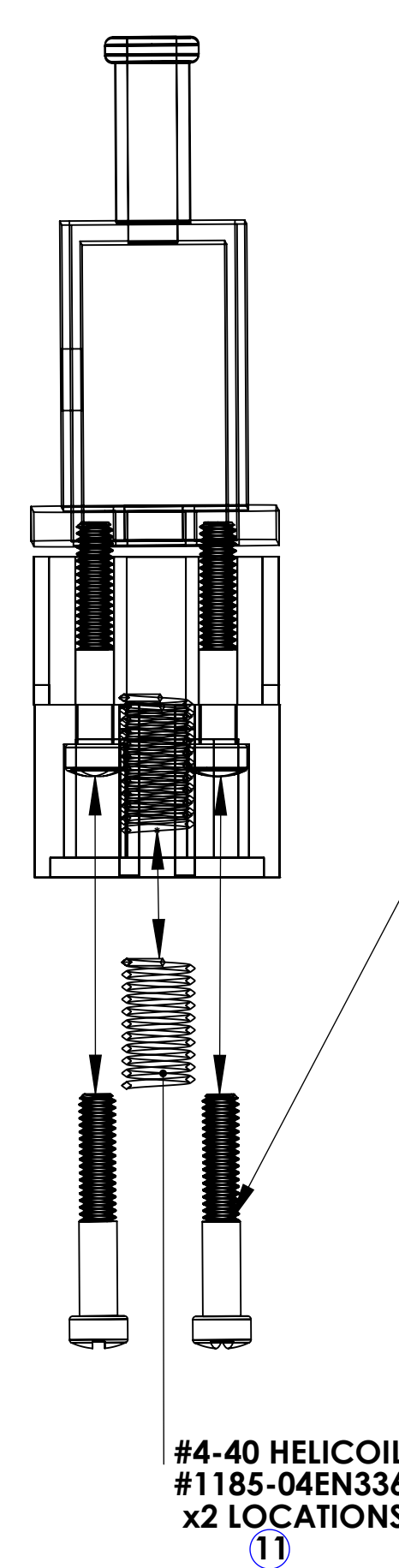
STANDARD CABLE LENGTH CHART		
DESIGNATOR	INCHES	FEET and INCHES
V25G-90	90	7 ft. 2 in.
V25G-110	110	9 ft. 2 in.
V25G-121	121	10 ft. 1 in.
V25G-156	156	13 ft.
V25G-TBD	TBD - ADDITIONAL CUSTOM LENGTHS	LENGTH TO BE DETERMINED AT TIME OF ORDER



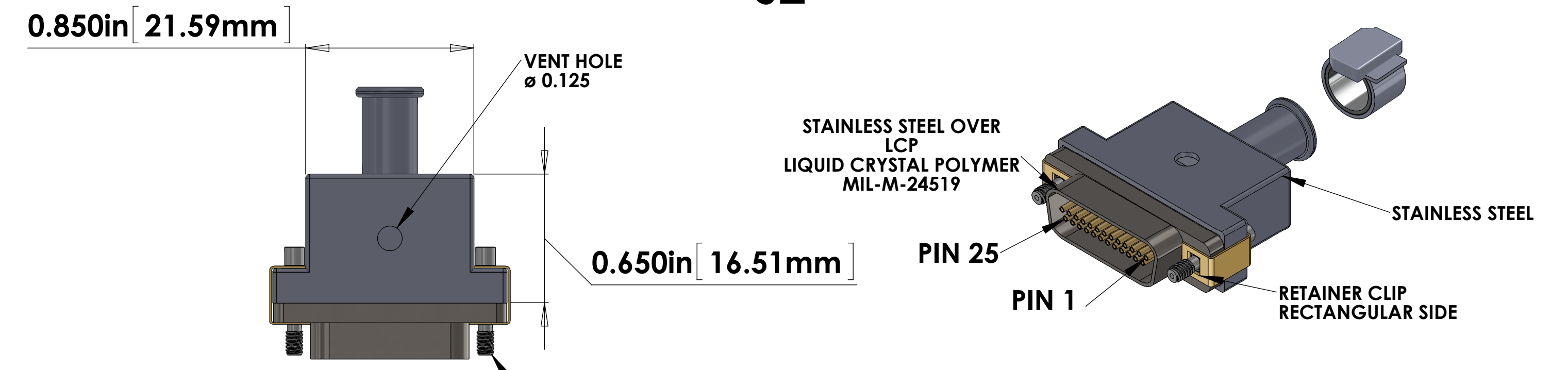
V25G-TBD CABLE ASSEMBLY CIRCUIT SUMMARY V-DB25 M/S1-TBD-μD25 F/S1					
CABLE NAME	COND. - WIRE ID	TWISTED PAIR	LENGTH **	FROM	TO
V25G-TBD	25 COND. CABLE	(12 TOTAL)	TBD in. *	CONN. J1	CONN. J2
C1	W1 W2 W3 W4 W5 W6 W7 W8 W9 W10 W11 W12 W13 W14 W15 W16 W17 W18 W19 W20 W21 W22 W23 W24 W25	SHIELD (COPPER BRAID)	TBD in. *	PIN 1, SHIELD & SHELL	PIN 1, SHIELD & SHELL
		SINGLE WIRE	TBD in. *	PIN 1, SHIELD & SHELL	PIN 1, SHIELD & SHELL
		TP-1	TBD in. *	PIN 2	PIN 2
		TP-2	TBD in. *	PIN 3	PIN 3
		TP-3	TBD in. *	PIN 4	PIN 4
		TP-4	TBD in. *	PIN 5	PIN 5
		TP-5	TBD in. *	PIN 6	PIN 6
		TP-6	TBD in. *	PIN 7	PIN 7
		TP-7	TBD in. *	PIN 8	PIN 8
		TP-8	TBD in. *	PIN 9	PIN 9
		TP-9	TBD in. *	PIN 10	PIN 10
		TP-10	TBD in. *	PIN 11	PIN 11
TP-11	TBD in. *	PIN 12	PIN 12		
TP-12	TBD in. *	PIN 13	PIN 13		
TP-13	TBD in. *	PIN 14	PIN 14		
TP-14	TBD in. *	PIN 15	PIN 15		
TP-15	TBD in. *	PIN 16	PIN 16		
TP-16	TBD in. *	PIN 17	PIN 17		
TP-17	TBD in. *	PIN 18	PIN 18		
TP-18	TBD in. *	PIN 19	PIN 19		
TP-19	TBD in. *	PIN 20	PIN 20		
TP-20	TBD in. *	PIN 21	PIN 21		
TP-21	TBD in. *	PIN 22	PIN 22		
TP-22	TBD in. *	PIN 23	PIN 23		
TP-23	TBD in. *	PIN 24	PIN 24		
TP-24	TBD in. *	PIN 25	PIN 25		
TP-25	TBD in. *	PIN 26	PIN 26		

TBD in. \* = LENGTH TO BE DETERMINED AT TIME OF ORDER - see STANDARD CABLE LENGTH CHART  
 \*\* THE LENGTH SHOWN IN THIS LIST IS THE OVERALL LENGTH OF THE CABLE FROM THE CONNECTOR END TO THE OTHER CONNECTOR END. CHANGE LENGTH AS NECESSARY TO COMPENSATE FOR THE INTERNAL WIRING OF THE CONNECTOR AND STRIP LENGTH.

ENLARGED TO SHOW DETAIL



CONNECTOR J2



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	LENGTH *
1	TICOR PART # TS0149-25CG20B51-225F OR EQUIVALENT **	CUSTOM DB25 MALE CONNECTOR (J1) FOR UHV (GOLD METALIZED PEEK)	1	
2	TICOR PART # TS-0143-1 BACKSHELL (Included in PART # TS-0143-1) OR EQUIVALENT	DB25 CONNECTOR BACKSHELL FOR UHV (STAINLESS STEEL) WITH ø0.225" i.d. PORT	1	
3	TICOR PART # TS-0143-1 BACKSHELL (Included in PART # TS-0143-1) OR EQUIVALENT	MicroD25 FEMALE CONNECTOR (J2) FOR UHV (PEEK)	1	
4	C1	MicroD25 CONNECTOR BACKSHELL FOR UHV (STAINLESS STEEL) WITH ø0.188" i.d. PORT	1	
5		25 COND. (12 TW PAIR + 1 WIRE + SHIELD) CABLE WITH 6 COPPER BRAID (SHIELD) AND 7 PEEK OVERBRAID	1	TBD in. *
6	CONTINENTAL PART #24x4x40BC	COPPER BRAID - CONTINENTAL CORDAGE PART #24x4x40BC	1	TBD in. *
7	PART #6759	PEEK BRAID - PART #6759 MANUFACTURED WITH ZEUS 0.016" BLACK PEEK DRAWN MONOFILAMENT	1	TBD in. *
8	GLENAIR # 600-052 or BAND-IT # A10086	GLENAIR # 600-052 STANDARD BRAID CLAMP or BAND-IT PART # A10086 (0.240" WIDE) ("BAG OF 100" # A10089)	2	
9	HELICOIL #1185-04EN336	#4-40 Nitronic 60® HELICOIL 0.336" LENGTH	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.  
 \*\* NOTE: SEE THE "TICOR CONNECTOR PART NUMBER BUILDER" DCC#D1000219 FOR DETAILS ON THIS PART NUMBER.

ELECTRICAL NOTES: ( UNLESS OTHERWISE SPECIFIED )

- A. MATERIAL: a. CONNECTOR SHELL - PEEK OR GOLD OVER ELECTRO-LESS NICKEL SELECTIVELY METALIZED PEEK VICTREX 450GL30.  
 b. BACKSHELL - STAINLESS STEEL WITH VENT HOLE.  
 c. CONTACTS - BERYLLIUM COPPER ALLOY C17300, 0.00050 MIN. GOLD OVER NICKEL.  
 d. HARDWARE: STAINLESS STEEL, PASSIVATED.  
 e. PEEK BRAID - PEEK VICTREX GRADE TDS-450CA30 CARBON LOADED.
- B. CABLE 25 COND. 28 AWG. ( 65 STRD 46 AWG ) WITH PFA INSULATION COONER WIRE #CZ1105. 12 TWISTED PAIRS ( 4 TO 5 TWISTS PER INCH ) + 1 WIRE. OVERALL 40AWG COPPER BRAID 90% COVERAGE. OVERALL PEEK BRAID MIN. 50% COVERAGE. OVERALL CABLE O.D. WILL BE ~ 0.240 IN.
- C. CONNECTORS WILL BE SUPPLIED WITH HARDWARE. SCREWS SHOULD BE THE PROPER LENGTH FOR MATING.



DIMENSIONS ARE IN		NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
TOLERANCES:	.XX ±	1. INTERPRET DRAWING PER ASME Y14.5-1994	2. REMOVE ALL SHARP EDGES, .005-.015, FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS.	CUSTOM CABLE SPECIFICATION V25G-TBD		DESIGNER	J. HEEFNER
ANGULAR ± °	.XXX ±	3. DO NOT SCALE FROM DRAWING	4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.	STANDARD USE FOR THIS CABLE		DRAFTER	E. BROWN
				SUBSYSTEM		CHECKER	
				SUS		APPROVAL	
				NEXT ASSY		SCALE: 1:1	
						DWG. NO. D1002522	
						REV. v6	
						SHEET 1 OF 1	