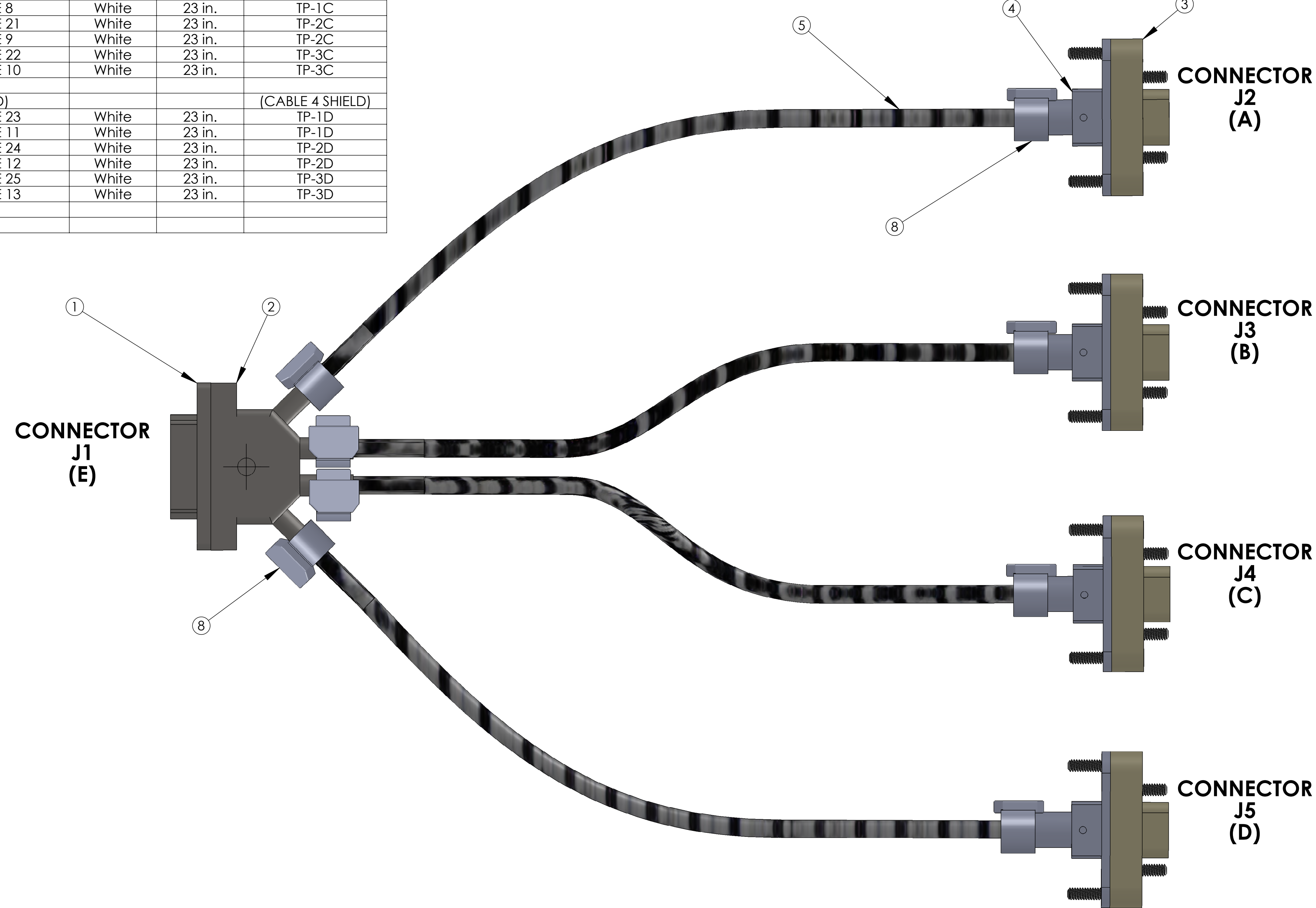
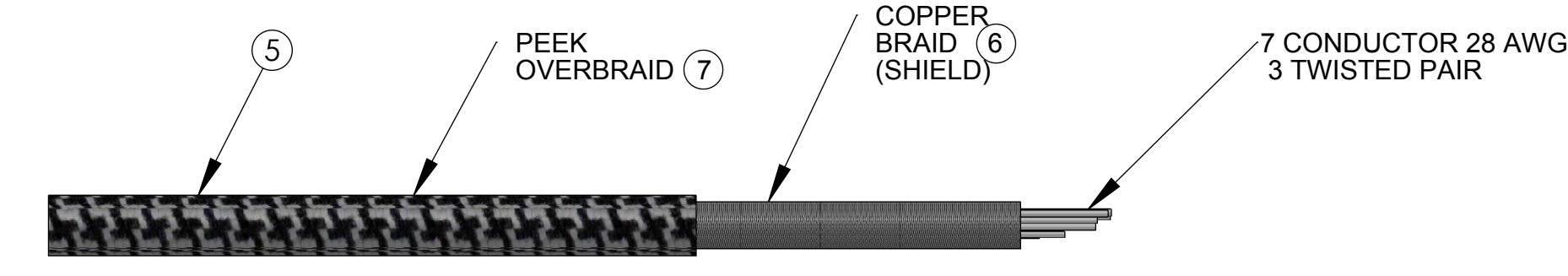
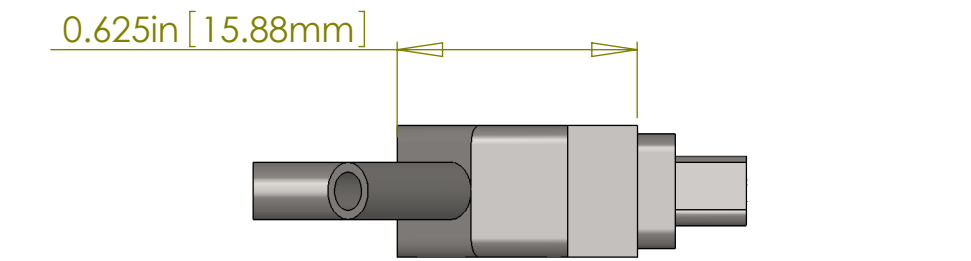
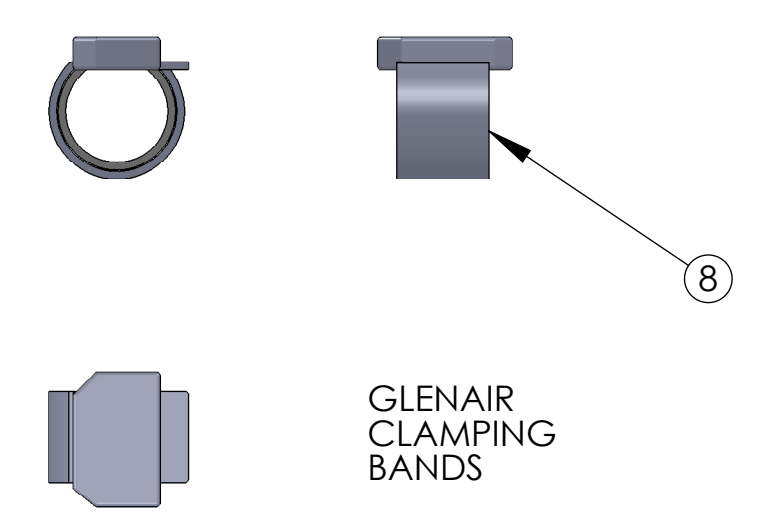
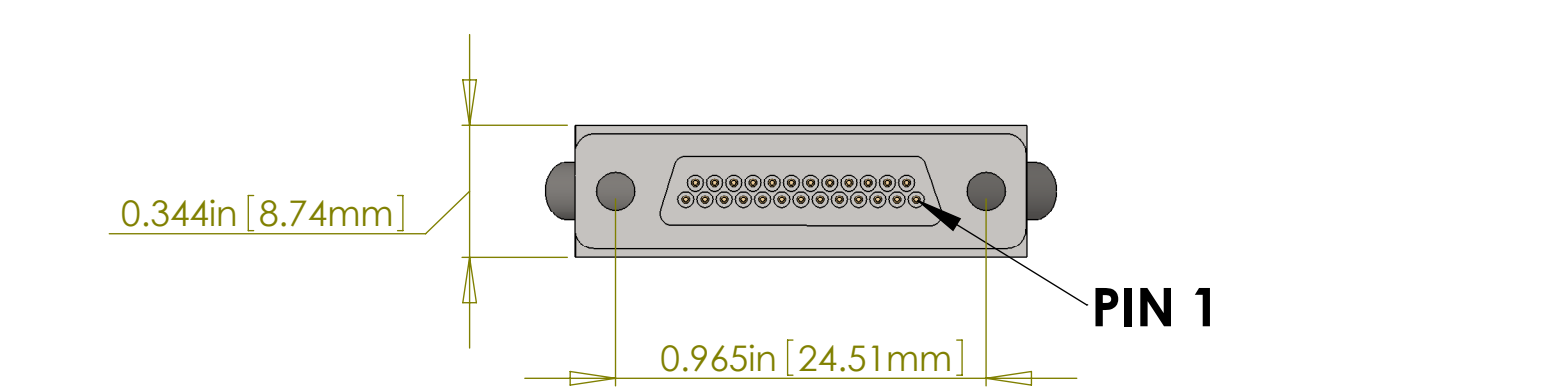
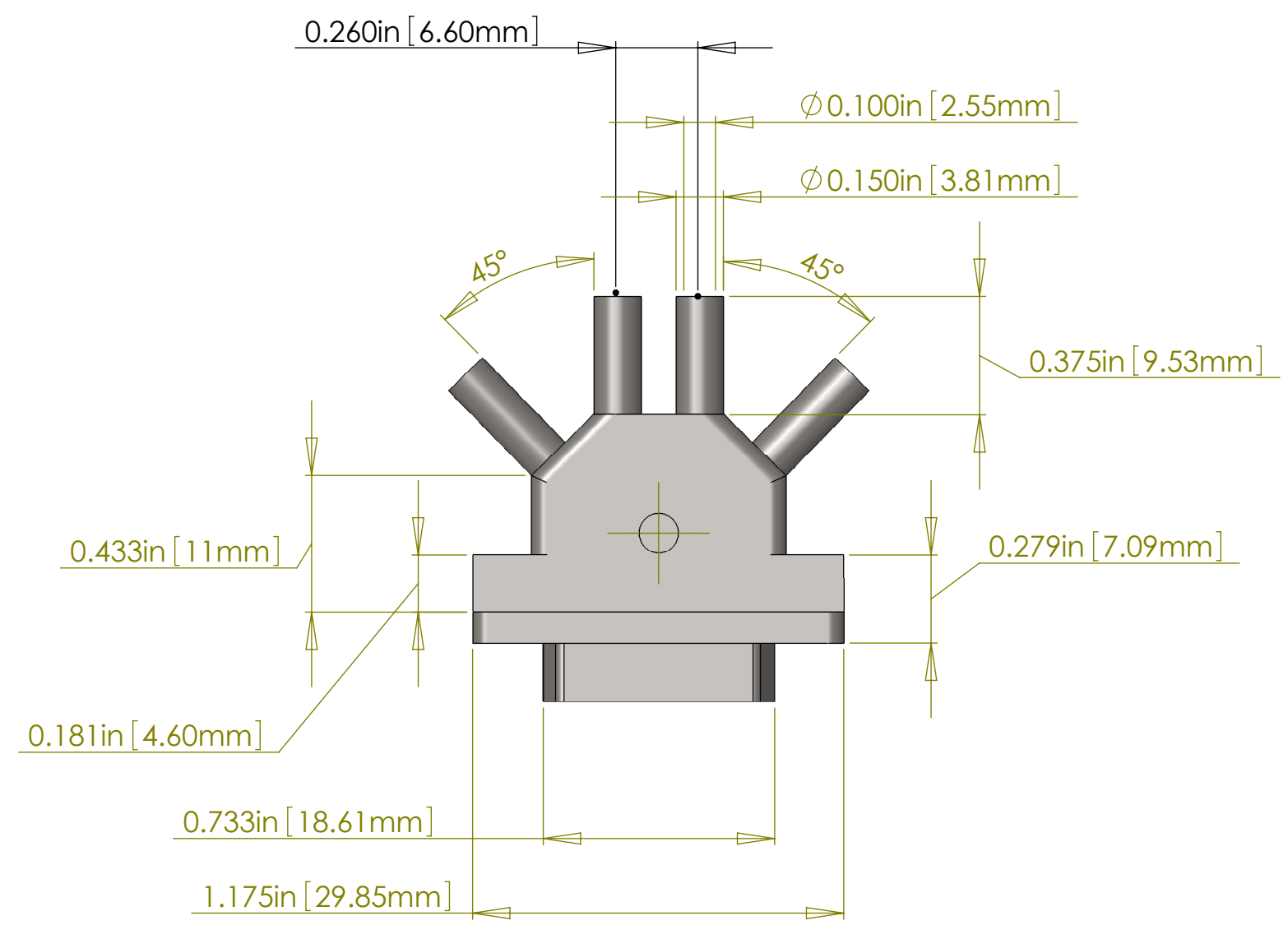
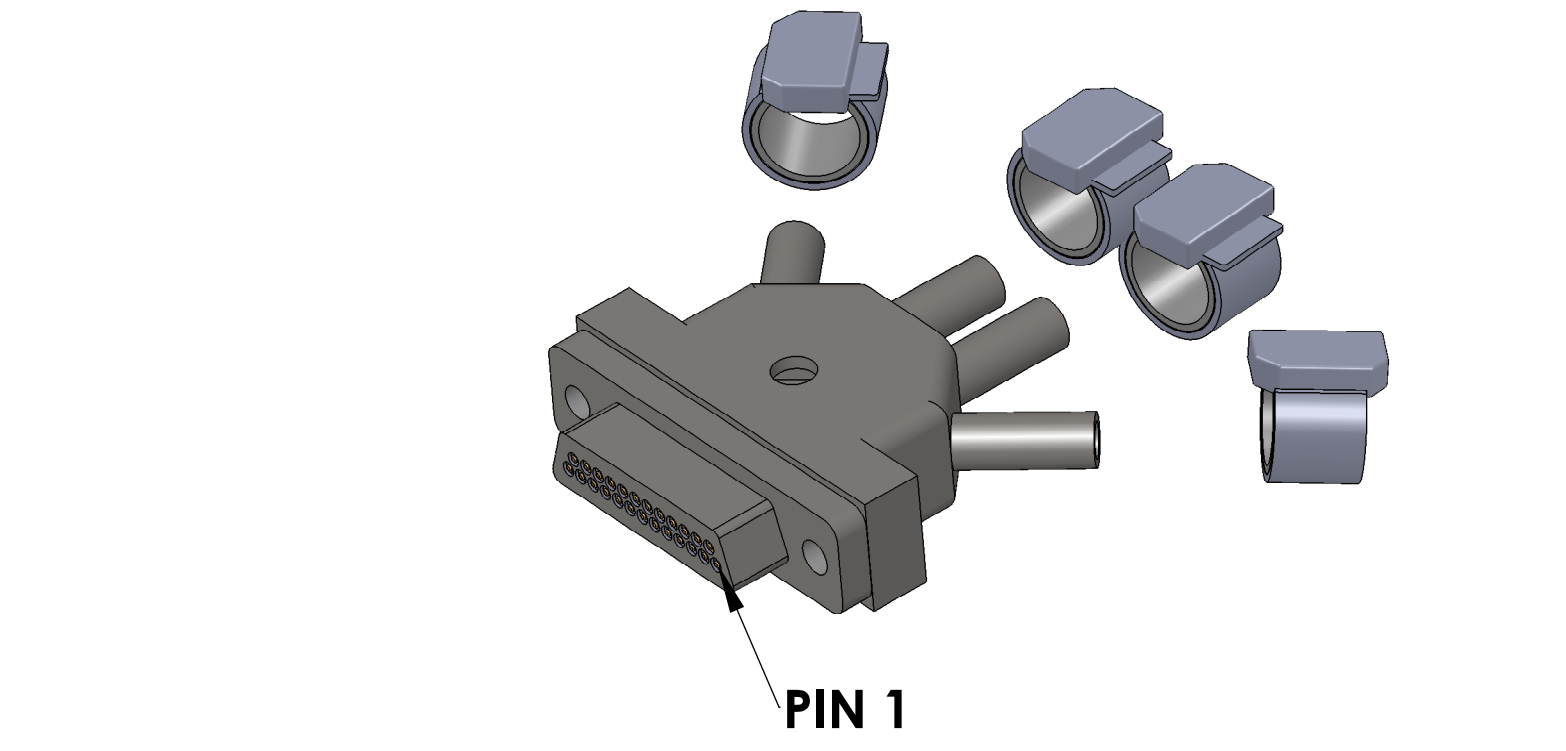


NOTES CONTINUED:  
 ③ SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER AND REVISION ON NOTED SURFACE FOLLOWED ON THE NEXT LINE BY A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE 27 HIGH CHARACTERS. EXAMPLE: DXXXXXX-VY, S/N 001. A VIBRATORY TOOL MAY BE USED.

### V25AM-23-A CABLE ASSEMBLY CIRCUIT SUMMARY

#### V<sub>μ</sub>D25 M/1S-23-4\_μD9 F/5S:A

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



#### V25AM-23-A CABLE ASSEMBLY CIRCUIT SUMMARY

TO		
CONNECTOR J2 - 9 PIN FEMALE MICRO_D CONNECTOR (PEEK)		
PIN	WIRE NAME	SIGNAL
A5	(CONNECTOR SHELL)	SHIELD
A5	(CABLE 1) SHIELD	SHIELD
A5	(CABLE 1) WIRE 1	SHIELD
A1	(CABLE 1) WIRE 14	PD1-K
A6	(CABLE 1) WIRE 2	PD1-A
A2	(CABLE 1) WIRE 15	LED1-A
A7	(CABLE 1) WIRE 3	LED1-K
A4	(CABLE 1) WIRE 16	COIL1-FN
A9	(CABLE 1) WIRE 4	COIL1-ST

#### V25AM-23-A CABLE ASSEMBLY CIRCUIT SUMMARY

TO		
CONNECTOR J3 - 9 PIN FEMALE MICRO_D CONNECTOR (PEEK)		
PIN	WIRE NAME	SIGNAL
B5	(CONNECTOR SHELL)	SHIELD
B5	(CABLE 2) SHIELD	SHIELD
B5	(CABLE 2) WIRE 1	SHIELD
B1	(CABLE 2) WIRE 17	PD2-K
B6	(CABLE 2) WIRE 5	PD2-A
B2	(CABLE 2) WIRE 18	LED2-A
B7	(CABLE 2) WIRE 6	LED2-K
B4	(CABLE 2) WIRE 19	COIL2-FN
B9	(CABLE 2) WIRE 7	COIL2-ST

#### V25AM-23-A CABLE ASSEMBLY CIRCUIT SUMMARY

TO		
CONNECTOR J4 - 9 PIN FEMALE MICRO_D CONNECTOR (PEEK)		
PIN	WIRE NAME	SIGNAL
C5	(CONNECTOR SHELL)	SHIELD
C5	(CABLE 3) SHIELD	SHIELD
C5	(CABLE 3) WIRE 1	SHIELD
C1	(CABLE 3) WIRE 20	PD3-K
C6	(CABLE 3) WIRE 8	PD3-A
C2	(CABLE 3) WIRE 21	LED3-A
C7	(CABLE 3) WIRE 9	LED3-K
C4	(CABLE 3) WIRE 22	COIL3-FN
C9	(CABLE 3) WIRE 10	COIL3-ST

#### V25AM-23-A CABLE ASSEMBLY CIRCUIT SUMMARY

TO		
CONNECTOR J5 - 9 PIN FEMALE MICRO_D CONNECTOR (PEEK)		
PIN	WIRE NAME	SIGNAL
D5	(CONNECTOR SHELL)	SHIELD
D5	(CABLE 4) SHIELD	SHIELD
D5	(CABLE 4) WIRE 1	SHIELD
D1	(CABLE 4) WIRE 23	PD4-K
D6	(CABLE 4) WIRE 11	PD4-A
D2	(CABLE 4) WIRE 24	LED4-A
D7	(CABLE 4) WIRE 12	LED2-K
D4	(CABLE 4) WIRE 25	COIL4-FN
D9	(CABLE 4) WIRE 13	COIL4-ST

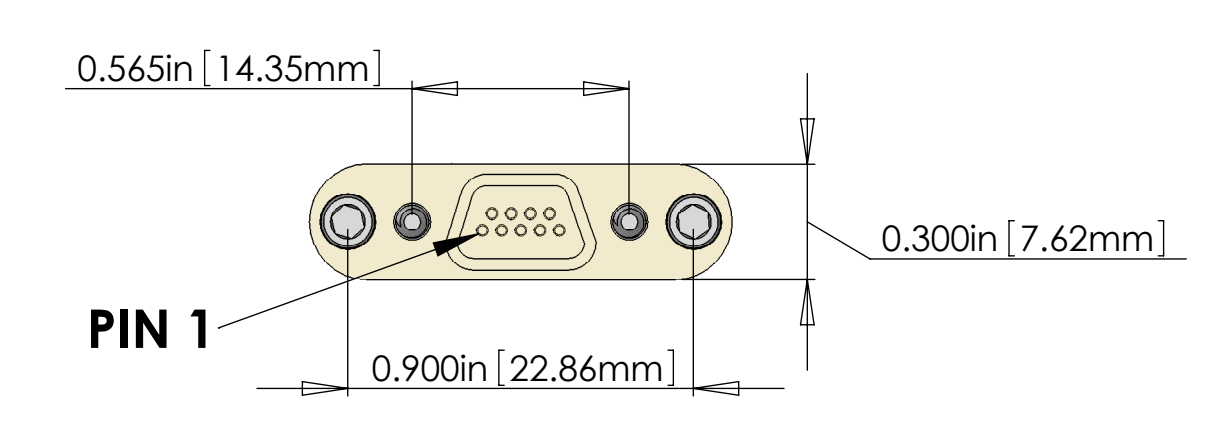
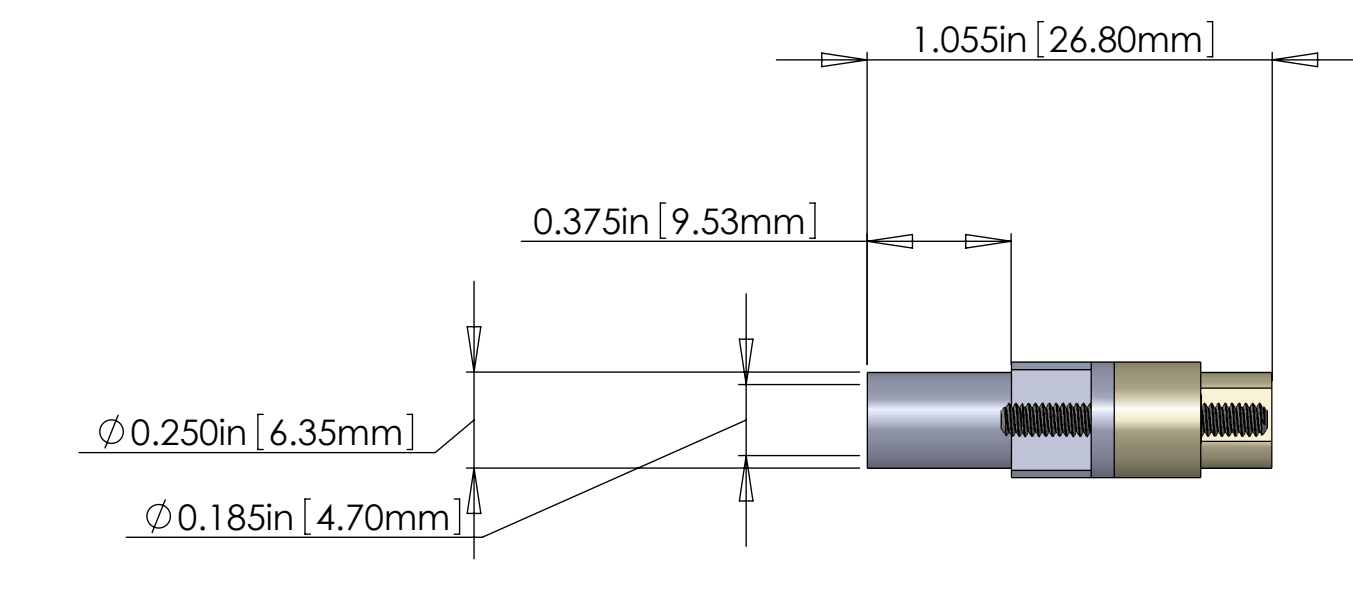
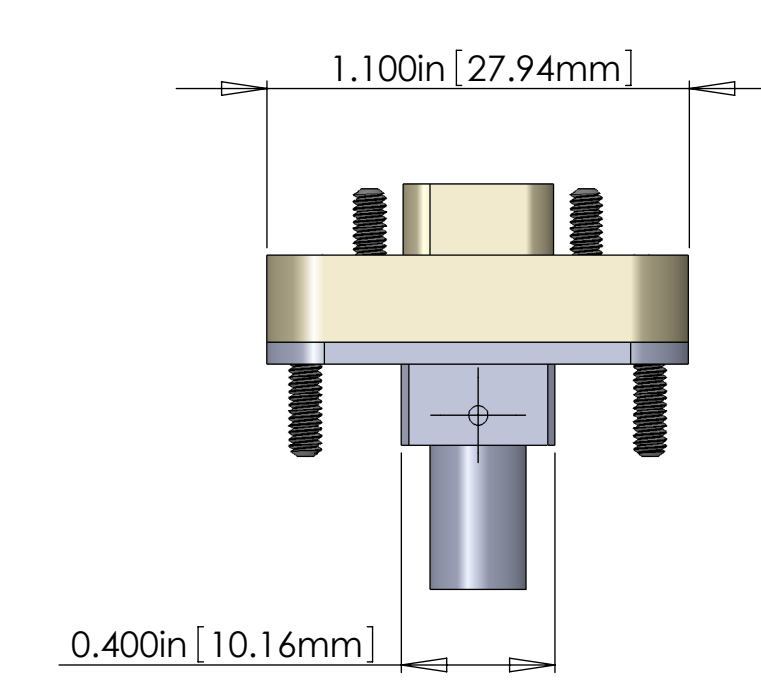
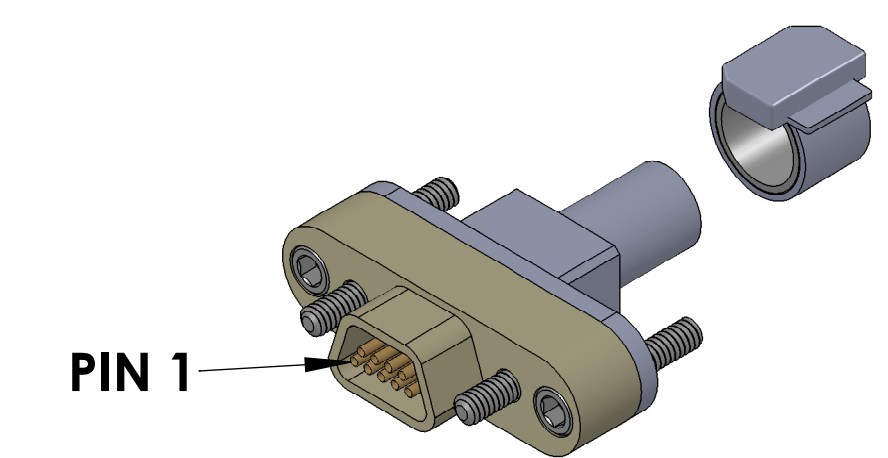
#### BILL OF MATERIALS

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	LENGTH
①	GLENAIR #DCDM25P-S-MC225-240	MicroD25 MALE CONNECTOR (J1) FOR UHV	1	
②	TICOR # 040-1243-0025	MicroD25 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	1	
③	TICOR # TS0094 WITH 60in. FLYING LEADS WITH BACKSHELL	MicroD9 FEMALE CONNECTOR (J2, J3, J4, J5) FOR UHV (PEEK)	4	
④		MicroD9 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	4	
⑤	C1	7 COND. (3 TWISTED PAIR) CABLE (ADD COPPER BRAID (SHIELD) ⑥ . AND PEEK OVERBRAID) 7 .	4	23in.*
⑥	COPPER BRAID	CONTINENTAL CORDAGE PART #24x3x40BC	4	23in.*
⑦	PEEK BRAID	PART #6759 MANUFACTURED WITH ZEUS 0.016" BLACK PEEK DRAWN MONOFILAMENT	4	23in.*
⑧	GLENAIR 600-052	GLENAIR 600-052 STANDARD BRAID CLAMP	8	

\* 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:
  - CONNECTOR SHELL - PEEK OR METALIZED 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 VICTREX GRADE TD5-450CA30 CARBON LOADED - SUPPLIED BY LIGO
- CABLE 7 COND. 28 AWG, ( 40 STRD 44 AWG ) WITH 2 LAYERS OF KAPTON TAPE (SUPPLIED BY LIGO) 3 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)



V <sub>μ</sub> D25 M/1S-23-4_μD9 F/5S:A	
STANDARD USE FOR THIS CABLE	
SUBSYSTEM	STANDARD USE
SUS	QUAD SUSPENSIONS UIM

DIMENSIONS ARE IN		NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME <b>CUSTOM CABLE SPECIFICATION V25AM-23-A</b>	
TOLERANCES: .XX ± .XXX ±		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.		LIGO		DESIGNER: J. JHEPPER SEP/21/2011	
ANGULAR ± °		MATERIAL: Material <not specified>		FINISH: μinch		DRAFTER: E. BROWN SEP/21/2011	
				NEXT ASSY: D100		CHECKER: APPROVAL:	
						SIZE DWG. NO. E	
						SCALE: 2:1	
						PROJECTION: SHEET 1 OF 1	
						REV. <b>D1000562- v3</b>	