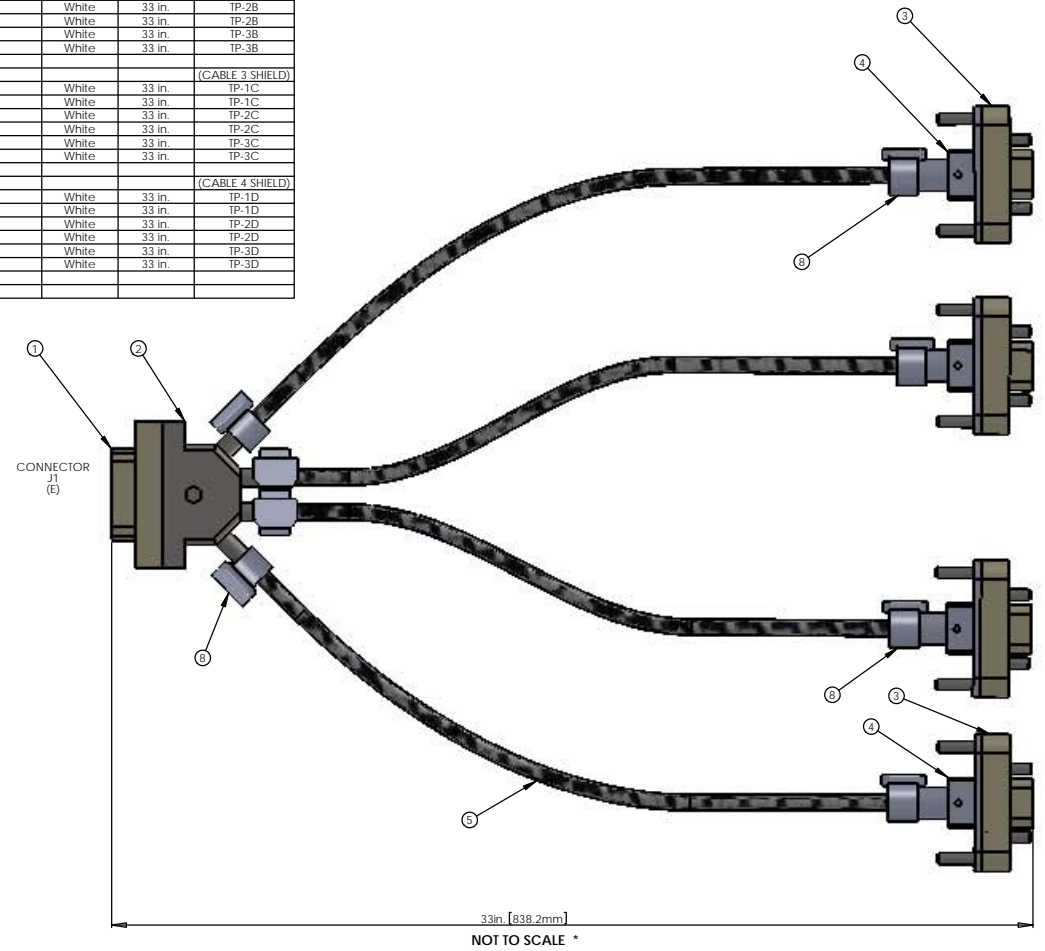
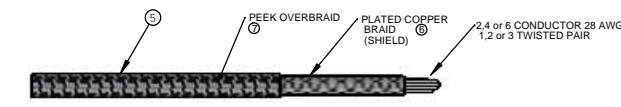
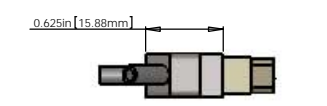
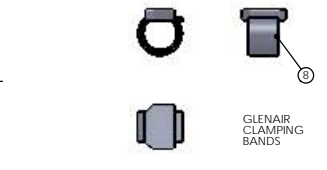
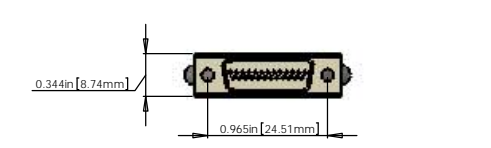
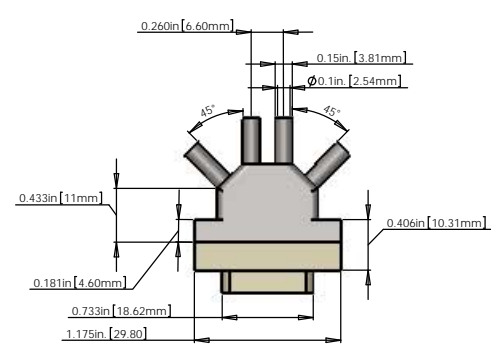
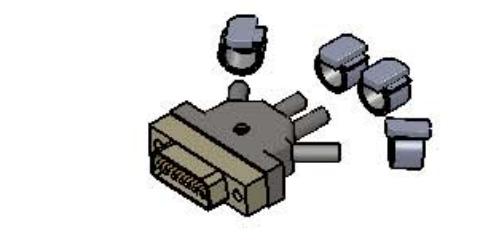


| REV. | DATE | DCN # | DRAWING TREE # |
|------|------|-------|----------------|
| | | | |
| | | | |

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP TWO INCS 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: DXXXXXXVY, SIV001. A VIBRATORY TOOL MAY BE USED.

V25AM-33-A CABLE ASSEMBLY CIRCUIT SUMMARY
 VμD25 M/1S-33-4_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) SHIELD | | | (CABLE 1) SHIELD |
| E1 | (CABLE 1) WIRE 1 | White | 33 in. | SINGLE WIRE |
| E14 | (CABLE 1) WIRE 14 | White | 33 in. | TP-1A |
| E2 | (CABLE 1) WIRE 2 | White | 33 in. | TP-1A |
| E15 | (CABLE 1) WIRE 15 | White | 33 in. | TP-2A |
| E3 | (CABLE 1) WIRE 3 | White | 33 in. | TP-2A |
| E16 | (CABLE 1) WIRE 16 | White | 33 in. | TP-3A |
| E4 | (CABLE 1) WIRE 4 | White | 33 in. | TP-3A |
| E1 | (CABLE 2) SHIELD | | | (CABLE 2) SHIELD |
| E17 | (CABLE 2) WIRE 17 | White | 33 in. | TP-1B |
| E5 | (CABLE 2) WIRE 5 | White | 33 in. | TP-1B |
| E18 | (CABLE 2) WIRE 18 | White | 33 in. | TP-2B |
| E6 | (CABLE 2) WIRE 6 | White | 33 in. | TP-2B |
| E19 | (CABLE 2) WIRE 19 | White | 33 in. | TP-3B |
| E7 | (CABLE 2) WIRE 7 | White | 33 in. | TP-3B |
| E1 | (CABLE 3) SHIELD | | | (CABLE 3) SHIELD |
| E20 | (CABLE 3) WIRE 20 | White | 33 in. | TP-1C |
| E8 | (CABLE 3) WIRE 8 | White | 33 in. | TP-1C |
| E21 | (CABLE 3) WIRE 21 | White | 33 in. | TP-2C |
| E9 | (CABLE 3) WIRE 9 | White | 33 in. | TP-2C |
| E22 | (CABLE 3) WIRE 22 | White | 33 in. | TP-3C |
| E10 | (CABLE 3) WIRE 10 | White | 33 in. | TP-3C |
| E1 | (CABLE 4) SHIELD | | | (CABLE 4) SHIELD |
| E23 | (CABLE 4) WIRE 23 | White | 33 in. | TP-1D |
| E11 | (CABLE 4) WIRE 11 | White | 33 in. | TP-1D |
| E24 | (CABLE 4) WIRE 24 | White | 33 in. | TP-2D |
| E12 | (CABLE 4) WIRE 12 | White | 33 in. | TP-2D |
| E25 | (CABLE 4) WIRE 25 | White | 33 in. | TP-3D |
| E13 | (CABLE 4) WIRE 13 | White | 33 in. | TP-3D |



V25AM-33-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-33-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-33-A CABLE ASSEMBLY CIRCUIT SUMMARY

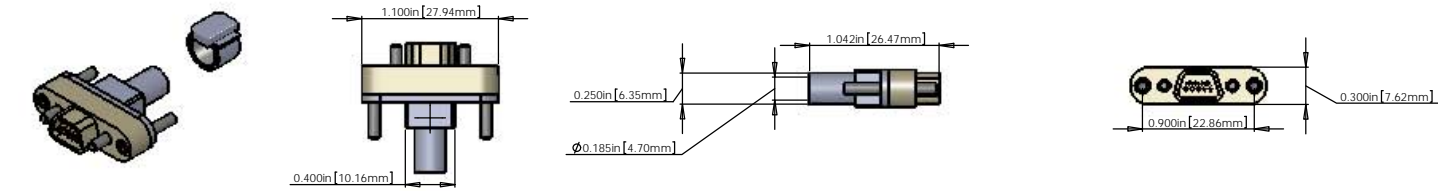
| TO | | |
|--|-------------------|----------|
| CONNECTOR J4 - 9 PIN FEMALE MICRO_D CONNECTOR (PEEK) | | |
| PIN | WIRE NAME | SIGNAL |
| C5 | (CONNECTOR SHELL) | SHIELD |
| C5 | (CABLE 3) SHIELD | SHIELD |
| C5 | (CABLE 3) WIRE 1 | SHIELD |
| C1 | (CABLE 3) WIRE 20 | PD3-K |
| C6 | (CABLE 3) WIRE 8 | 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-33-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 | LED4-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 | 33in.* |
| 6 | COPPER BRAID | CONTINENTAL CORDAGE PART # 24x3x40BC | 4 | 33in.* |
| 7 | PEEK BRAID | PART #6759 MANUFACTURED WITH ZEUS 0.016" BLACK PEEK DRAWN MONOFILAMENT | 4 | 33in.* |
| 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: 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 7 COND. 28 AWG. (40 STRD 44 AWG) WITH 2 LAYERS OF KAPTON TAPE 3 TWISTED PAIRS (4 TO 5 TWISTS PER INCH) OVERALL 40AWG COPPER BRAID 90% COVERAGE OVERALL PEEK BRAID MIN. 50% COVERAGE OVERALL CABLE O.D. WILL BE APPROX. 0.240 IN.

| STANDARD USE FOR THIS CABLE | |
|-----------------------------|-----------------------|
| SUBSYSTEM | STANDARD USE |
| SUS | QUAD SUSPENSIONS PUMP |

NOTES AND TOLERANCES: UNLESS OTHERWISE SPECIFIED

- INTERPRET DRAWING PER ASME Y14.5-1994.
- REMOVE ALL SHARP EDGES: R.02 MIN.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

DIMENSIONS ARE IN: TOLERANCES: .XX ± .XXX ± ANGULAR: °

MATERIAL: FINISH: NEXT ASSY: APPROVAL:

SCALE: 2:1 PROJECTION: SHEET 1 OF 1

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PART NAME: CUSTOM CABLE SPECIFICATION V25AM-33-A

DESIGNER: E880288 DATE: 08/17/2016

DRAWER: E880288

CHECKER: APPROVAL:

SCALE: 2:1 PROJECTION: SHEET 1 OF 1

DWG. NO: D1000564-v2