



V25A-40 CABLE ASSEMBLY CIRCUIT SUMMARY
V-DB25 F/1-40-DB25 F/S

| CABLE NAME | COND.- WIRE ID | TWISTED PAIR | LENGTH * | FROM | TO |
|------------|----------------|--------------|----------|----------|----------|
| V25A-40 | 25 COND. CABLE | (12 TOTAL) | 40 in. | Conn. J1 | Conn. J2 |
| | W1 | SHIELD | 40 in | PIN 1 | PIN 1 |
| | W2 | TP-1 | 40 in | PIN 2 | PIN 2 |
| | W14 | | 40 in | PIN 14 | PIN 14 |
| | W3 | TP-2 | 40 in | PIN 3 | PIN 3 |
| | W15 | | 40 in | PIN 15 | PIN 15 |
| | W4 | TP-3 | 40 in | PIN 4 | PIN 4 |
| | W16 | | 40 in | PIN 16 | PIN 16 |
| | W5 | TP-4 | 40 in | PIN 5 | PIN 5 |
| | W17 | | 40 in | PIN 17 | PIN 17 |
| | W6 | TP-5 | 40 in | PIN 6 | PIN 6 |
| | W18 | | 40 in | PIN 18 | PIN 18 |
| | W7 | TP-6 | 40 in | PIN 7 | PIN 7 |
| | W19 | | 40 in | PIN 19 | PIN 19 |
| | W8 | TP-7 | 40 in | PIN 8 | PIN 8 |
| | W20 | | 40 in | PIN 20 | PIN 20 |
| | W9 | TP-8 | 40 in | PIN 9 | PIN 9 |
| | W21 | | 40 in | PIN 21 | PIN 21 |
| | W10 | TP-9 | 40 in | PIN 10 | PIN 10 |
| | W22 | | 40 in | PIN 22 | PIN 22 |
| | W11 | TP-10 | 40 in | PIN 11 | PIN 11 |
| | W23 | | 40 in | PIN 23 | PIN 23 |
| | W12 | TP-11 | 40 in | PIN 12 | PIN 12 |
| | W24 | | 40 in | PIN 24 | PIN 24 |
| | W13 | TP-12 | 40 in | PIN 13 | PIN 13 |
| | W25 | | 40 in | PIN 25 | PIN 25 |

* The length shown in this list is the length of the cable between the two connectors. Add additional length as necessary for the internal wiring of the connectors and strip length.

| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. | LENGTH |
|----------|--------------------|---|------|----------|
| ① | CUSTOM DB25 FEMALE | DB25 FEMALE CONNECTOR (J1,J2) FOR UHV (PEEK) | 2 | |
| ② | CUSTOM BACKSHELL | DB25 CONNECTOR BACKSHELL FOR UHV (STAINLESS) | 2 | |
| ③ | C1 | 25 COND. (12 TW PAIR + 1 WIRE + SHIELD) CABLE WITH COPPER BRAID (SHIELD) AND PEEK OVERBRAID | 1 | 40in + |
| ④ | GLENAIR 600-052 | GLENAIR 600-052 STANDARD BRAID CLAMP (BAND - IT) | 2 | |
| ⑤ | | #4-40 UNC ALLEN HEAD MACHINE SCREW | 2 | 0.375 in |
| ⑥ | | #2-56 ALLEN HEAD MAXHINE SCREW | 4 | 0.5 in |

NOTES: (UNLESS OTHERWISE SPECIFIED)

- MATERIAL:**
 - CONNECTOR SHELL - PEEK.
 - BACKSHELL - STAINLESS STEEL WITH VENT HOLE.
 - CONTACTS - BERYLLIUM COPPER ALLOW C17300 0.000050 MIN. GOLD OVER NICKEL
 - HARDWARE: CORROSION RESISTANCE STEEL, PASSIVATED
 - PEEK BRAID - PEEK CARBON FIBRE 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.

| STANDARD USE FOR THIS CABLE | | |
|-----------------------------|---------|-------------------------------------|
| SUBSYSTEM | AIR/VAC | STANDARD USE |
| SEI | IN-VAC | GS-13,L-4C |
| ISC | IN-VAC | OSEMS,LSC RFPD, IN VAC BEAM BLOCKER |

| | | | | | | | |
|------------|--|-------------|--|--------------|---------|--------|----------------------|
| DWG. NO. | | DESCRIPTION | | NEXT ASSY | USED ON | FINISH | DO NOT SCALE DRAWING |
| SCALE: 1:1 | | WEIGHT | | SHEET 1 OF 1 | | REV | |

California Institute of Technology
 Massachusetts Institute of Technology
LIGO-D1000220-v2
CUSTOM CABLE
SPECIFICATION
V25A-40
 SUBSYSTEM:
 SEI, ISC