



### V25A-100 CABLE ASSEMBLY CIRCUIT SUMMARY V-DB25 F/1-100-DB25 F/S

CABLE NAME	COND.-WIRE ID	TWISTED PAIR	LENGTH *	FROM	TO
V25A-100	25 COND. CABLE	(12 TOTAL)	100 in.	Conn. J1	Conn. J2
	W1	SHIELD	100 in	PIN 1	PIN 1
	W2	TP-1	100 in	PIN 2	PIN 2
	W14		100 in	PIN 14	PIN 14
	W3	TP-2	100 in	PIN 3	PIN 3
	W15		100 in	PIN 15	PIN 15
	W4	TP-3	100 in	PIN 4	PIN 4
	W16		100 in	PIN 16	PIN 16
	W5	TP-4	100 in	PIN 5	PIN 5
	W17		100 in	PIN 17	PIN 17
	W6	TP-5	100 in	PIN 6	PIN 6
	W18		100 in	PIN 18	PIN 18
	W7	TP-6	100 in	PIN 7	PIN 7
	W19		100 in	PIN 19	PIN 19
	W8	TP-7	100 in	PIN 8	PIN 8
	W20		100 in	PIN 20	PIN 20
	W9	TP-8	100 in	PIN 9	PIN 9
	W21		100 in	PIN 21	PIN 21
	W10	TP-9	100 in	PIN 10	PIN 10
	W22		100 in	PIN 22	PIN 22
	W11	TP-10	100 in	PIN 11	PIN 11
	W23		100 in	PIN 23	PIN 23
	W12	TP-11	100 in	PIN 12	PIN 12
	W24		100 in	PIN 24	PIN 24
	W13	TP-12	100 in	PIN 13	PIN 13
	W25		100 in	PIN 25	PIN 25

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	100in +
④	GLENAIR 600-052	GLENAIR 600-052 STANDARD BRAID CLAMP (BAND-IT)	2	

\* NOTE: USE WHATEVER LENGTH IS NECESSARY FOR THE INTERNAL WIRING OF THE CONNECTORS AND STRIP LENGTH TO ACHIEVE THE CORRECT OVERALL LENGTHS.

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 VICTREX GRADE TDS-450CA30 CARBON LOADED - SUPPLIED BY LIGO
- 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 COPPER BRAID 50% COVERAGE - SUPPLIED BY LIGO OVERALL PEEK BRAID MIN. 50% COVERAGE OVERALL CABLE O.D. WILL BE 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)

\* 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.

V-DB25 F/1-100-DB25 F/S	
STANDARD USE FOR THIS CABLE	
SUBSYSTEM	STANDARD USE
SEI	GS-13,L-4C

UNLESS OTHERWISE SPECIFIED		DRAWN: E. BROWN MAY/5/10		NAME: [ ] DATE: [ ]	
DIMENSIONS ARE IN INCHES		CHECKED: B. ABBOTT MAY/5/10		LIGO California Institute of Technology Massachusetts Institute of Technology	
TOLERANCES: FRACTIONAL		ENG APPR: [ ]		<b>CUSTOM CABLE SPECIFICATION</b> <b>V25A-100</b>	
ANGULAR: MACH ± BEND ±		MFG APPR: [ ]			
THREE PLACE DECIMAL		S.A. [ ]			
MATERIAL: --		COMMENTS: (SUBSYSTEM) SEI		SIZE: C DWG. NO. LIGO-D1000221- v3 SCALE: 1:1 WEIGHT: [ ] SHEET 1 OF 1	
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NEXT ASSY	USED ON
	REFERENCE DRAWINGS		APPLICATION		DO NOT SCALE DRAWING