



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

CABLE NAME	COND. - WIRE ID	TWISTED PAIR	LENGTH *	FROM	TO
C1	25 COND. CABLE	(12 TOTAL)	100in	Conn. J1	Conn. J2
	SHIELD COPPER BRAID		100 in	PIN 1	SHELL
	w1		100 in	PIN 1, SHIELD	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

\* 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 BACK SHELL FOR UHV (STAINLESS)	2	
③	C1	25 COND. (12 TW PAIR + 1 WIRE + SHIELD) CABLE WITH COPPER BRAID (SHIELD) AND PEEK OVERBRAID	1	100in + (2540mm)
④	GLENAIR 600-052	GLENAIR 600-052 STANDARD BRAID CLAMP	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 VICTREX GRADE TDS-450G.
    - 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 VICTREX GRADE TDS-450CA30 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.

UNLESS OTHERWISE SPECIFIED		NAME	DATE	LIGO California Institute of Technology Massachusetts Institute of Technology			
DIMENSIONS ARE IN INCHES		E. Brown	FEB/01/10				
TOLERANCES		DRAWN		LIGO-D1000221-v1 CUSTOM CABLE SPECIFICATION V25A-100			
FRACTIONAL		CHECKED					
ANGULAR: MACH ± BEND ±		ENG APPR					
TWO PLACE DECIMAL		MFG APPR					
THREE PLACE DECIMAL		S.A.		SCALE: 1:1 WEIGHT SHEET 1 OF 1			
MATERIAL --		COMMENTS					
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NEXT ASSY	USED ON	FINISH --	
REFERENCE DRAWINGS			APPLICATION		DO NOT SCALE DRAWING		