REV.	DATE	DCN #	DRAWING TREE #
v1	03 MAY 2011	-	-
v7	16 JUL 2012	E1200711-v1	-
-	-	-	-

5. CABLE IDENTIFICATION: IDENTIFY PER STATEMENT OF WORK.

⑥ MATERIAL:
a. J1 CONNECTOR SHELL - PEEK VICTREX 450GL30.
b. J2 CONNECTOR SHELL - GOLD OVER ELECTRO-LESS NICKEL SELECTIVELY METALIZED PEEK VICTREX 450GL30.
c. BACKSHELL - STAINLESS STEEL WITH VENT HOLE.
d. CONTACTS - BERYLLIUM COPPER ALLOY C17300, 0.000050 MIN. GOLD OVER NICKEL.
e. HARDWARE: STAINLESS STEEL, PASSIVATED.
f. PEEK BRAID - PEEK VICTREX GRADE TDS-450CA30 CARBON LOADED.

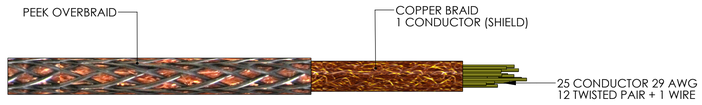
⑦ CABLE: 25 COND. 29 AWG, (51/46), WITH 2 LAYERS OF KAPTON TAPE (COONER WIRE #CZ1104)
12 TWISTED PAIRS (APPROX. 2 TWISTS PER INCH) + 1 WIRE
OVERALL 40AWG COPPER BRAID 50% COVERAGE.
OVERALL PEEK BRAID MIN. 50% COVERAGE.
OVERALL CABLE O.D. WILL BE APPROX. 0.240 IN.

⑧ CONNECTORS WILL BE SUPPLIED WITH HARDWARE.
LENGTH OF SCREWS SHOULD BE THE PROPER LENGTH FOR MATING.

⑨ INDICATED LENGTH IS FROM CONNECTOR END TO CONNECTOR END. USE APPROPRIATE LENGTH TO COMPENSATE FOR THE INTERNAL WIRING OF THE CONNECTORS AND STRIP LENGTH.

⑩ INDICATED DIMENSIONS SHOWN FOR REFERENCE ONLY.

⑪ PART NO. SHOWN CORRESPONDS TO UNPLATED PARTS. MATERIALS/FINISH AS SPECIFIED ON NOTE 6, SHALL TAKE PRECEDENCE AT ALL TIMES.



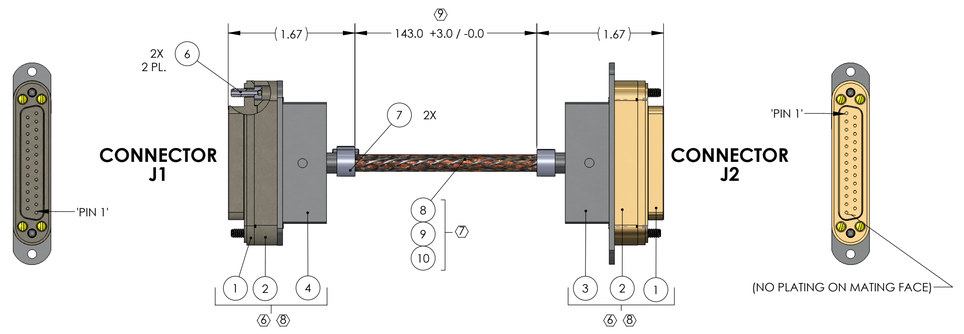
CABLE DETAIL

ISC TRANSMON QPD CABLE VACUUM FLANGE TO SEISMIC

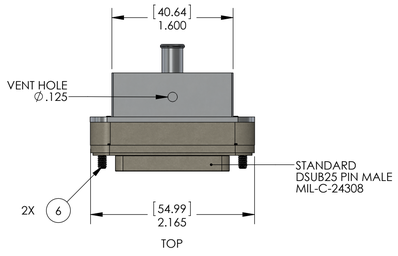
V-DB25 F/S1-216-DB25 F/S1

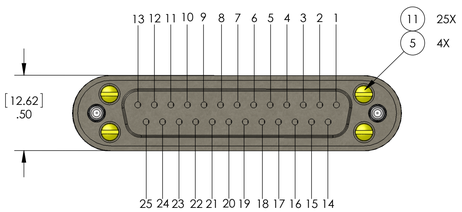
STANDARD USE FOR THIS CABLE

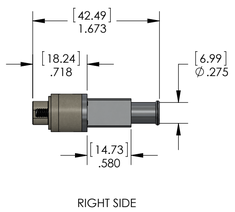
SUBSYSTEM	AIR/VAC	STANDARD USE
ISC (TMS)	IN-VAC	FLANGE TO TOP CABLE QPD FOR TRANSMON



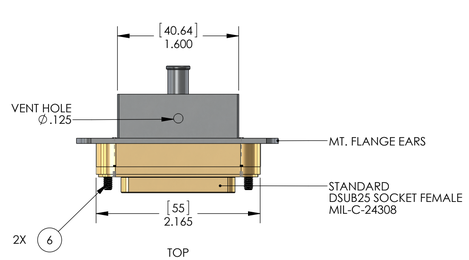
CONNECTOR 'J1' ⑥ ⑧ ⑩

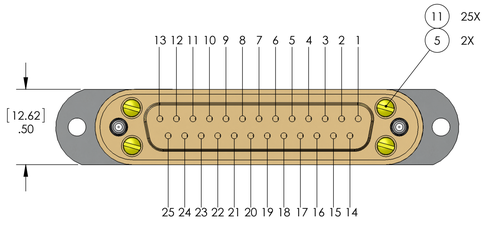


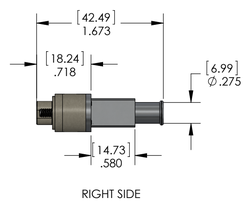




CONNECTOR 'J2' ⑥ ⑧ ⑩







V25A-216 CABLE ASSEMBLY CIRCUIT SUMMARY V-DB25 F/S1-216-DB25 F/S1

FROM 'J1'		TO 'J2'	
PIN	WIRE NAME	TWISTED PAIR	PIN
1, SHELL	WIRE 1		1, SHELL
2	WIRE 2	TP-1	2
14	WIRE 14		14
3	WIRE 3	TP-2	3
15	WIRE 15		15
4	WIRE 4	TP-3	4
16	WIRE 16		16
5	WIRE 5	TP-4	5
17	WIRE 17		17
6	WIRE 6	TP-5	6
18	WIRE 18		18
7	WIRE 7	TP-6	7
19	WIRE 19		19
8	WIRE 8	TP-7	8
20	WIRE 20		20
9	WIRE 9	TP-8	9
21	WIRE 21		21
10	WIRE 10	TP-9	10
22	WIRE 22		22
11	WIRE 11	TP-10	11
23	WIRE 23		23
12	WIRE 12	TP-11	12
24	WIRE 24		24
13	WIRE 13	TP-12	13
25	WIRE 25		25

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	TOTAL
11	038-5001-2022 TICOR OR EQ.	SIZE 20 SOCKET CONTAC, 22D CRIMP BARREL	SEE NOTE 6	50
10	6759	PEEK OVERBRAID, 50% COVERAGE MIN.	ZEUS, .016 BLK PEEK DRAWN MONOFILAMENT	A/R
9	24X3X40BC CONTINENTAL CORDAGE	1/8 DIA. COPPER BRAID	COPPER	A/R
8	CZ1104 COONER WIRE	WIRE, 29 AWG (51/46), .023 DIA.	SEE NOTE 7	A/R
7	600-052 GLENAIR OR EQ.	BRAID CLAMPING BAND, .24 WIDE	ST. STEEL, PASSIVATED	2
6	013-2702-0000 TICOR OR EQ.	SCREW, SHC, 4-40 X .305 LG., VENTED	SEE NOTE 6	4
5	013-2701-0001 TICOR OR EQ.	SCREW, FILLISTER HEAD, 1-72 X .450 LG., SLOTTED		8
4		UHV DSUB25 CONNECTOR BACKSHELL, W/O EARS		1
3		UHV DSUB25 CONNECTOR BACKSHELL, W/ EARS		1
2	034-1002-2520 TICOR OR EQ.	CONTACT RETAINER, DSUB25, UHV, SHIELDED	SEE NOTE 6	2
1	034-1001-2520 TICOR OR EQ.	DSUB25 CONNECTOR INTERFACE, UHV, SHIELDED (FEMALE)	SEE NOTE 6	2

⑪

PARTS LIST

SEE LIGO D1100670, ISC ELECTRONICS WIRING SCHEMATIC FOR REFERENCE.

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES

TOLERANCES:
.XX ± .10
.XXX ± .005

ANGULAR ± .5°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, .005-.015. FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL: N/A

FINISH: N/A µinch

LIGO — CALIFORNIA INSTITUTE OF TECHNOLOGY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO

SUB-SYSTEM: ISC

NEXT ASSY: N/A

PART NAME: CUSTOM CABLE SPECIFICATION, V25A-216

DESIGNER	R.ABBOT	25 APR 2011	SIZE: D	DWG. NO.: D1000924 REV.: v7
DRAFTER	E.BROWN	25 APR 2011		
CHECKER	SEE DCC	SEE DCC		
APPROVAL	SEE DCC	SEE DCC	SCALE: 1:1	PROJECTION: SHEET 1 OF 1