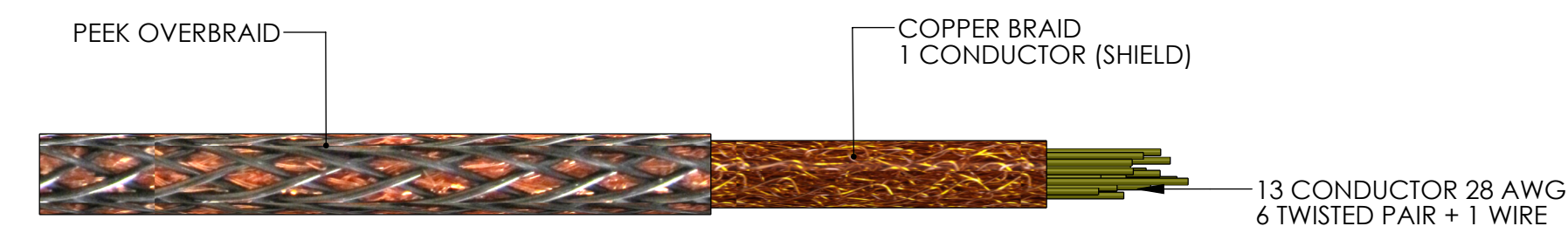


5. CABLE IDENTIFICATION: IDENTIFY PER STATEMENT OF WORK.
6. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4
7. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL, AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS.
8. MATERIAL:
 a. J1 CONNECTOR SHELL - GOLD OVER ELECTRO-LESS NICKEL SELECTIVELY METALIZED 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.
9. CABLE 13 COND. 29 AWG, (51/46), WITH PFA INSULATION (COONER WIRE #CZ1104) 6 TWISTED PAIRS (APPROX. 2 TWISTS PER INCH) + 1 WIRE. OVERALL 40AWG COPPER BRAID 90% COVERAGE. OVERALL PEEK BRAID MIN. 50% COVERAGE. OVERALL CABLE O.D. WILL BE APPROX. 0.240 IN.
10. CONNECTORS WILL BE SUPPLIED WITH HARDWARE. LENGTH OF SCREWS SHOULD BE THE PROPER LENGTH FOR MATING.
11. INDICATED LENGTH IS FROM CONNECTOR END TO CONNECTOR END. USE APPROPRIATE LENGTH TO COMPENSATE FOR THE INTERNAL WIRING OF THE CONNECTORS AND STRIP LENGTH.
12. INDICATED DIMENSIONS SHOWN FOR REFERENCE ONLY.
13. FILL UNUSED CONTACT POSITIONS WITH UNCRIMPED CONTACTS.
14. PART NO. SHOWN CORRESPONDS TO UNPLATED PARTS. MATERIALS/FINISH AS SPECIFIED ON NOTE 8, SHALL TAKE PRECEDENCE AT ALL TIMES.

REV.	DATE	DCN #	DRAWING TREE #
v1	04 MAY 2011	-	-
v9	16 JUL 2012	E1200711-v1	-
-	-	-	-

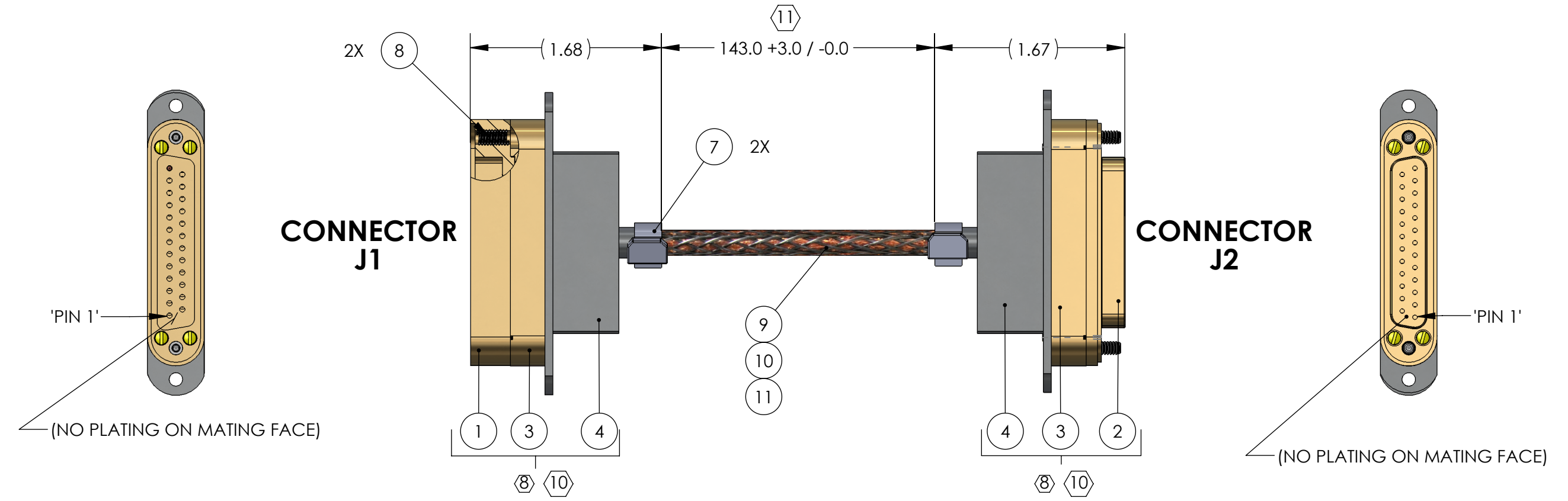


**ISC TRANSMON QPD CABLE
SEISMIC TABLE TO SUSPENDED TRANSMON TABLE**

V-DB25 M/S1-143-DB25 F/S1

STANDARD USE FOR THIS CABLE

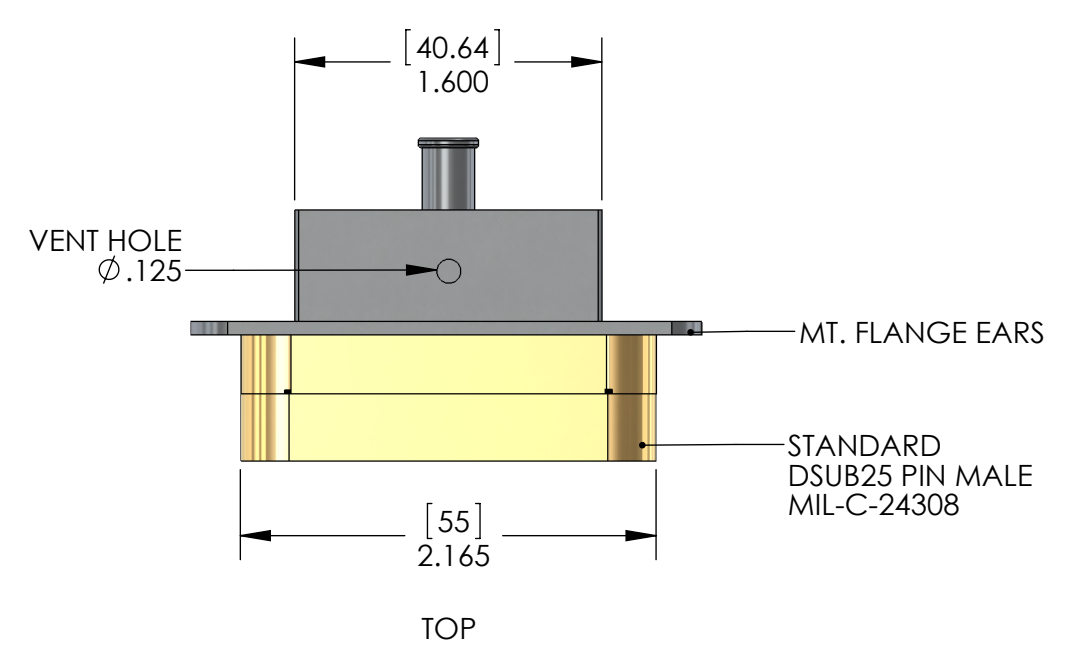
SUBSYSTEM	AIR/VAC	STANDARD USE
ISC (TMS)	IN-VAC	TRANSMON TABLE TO SEISMIC TABLE QPD FOR TRANSMON



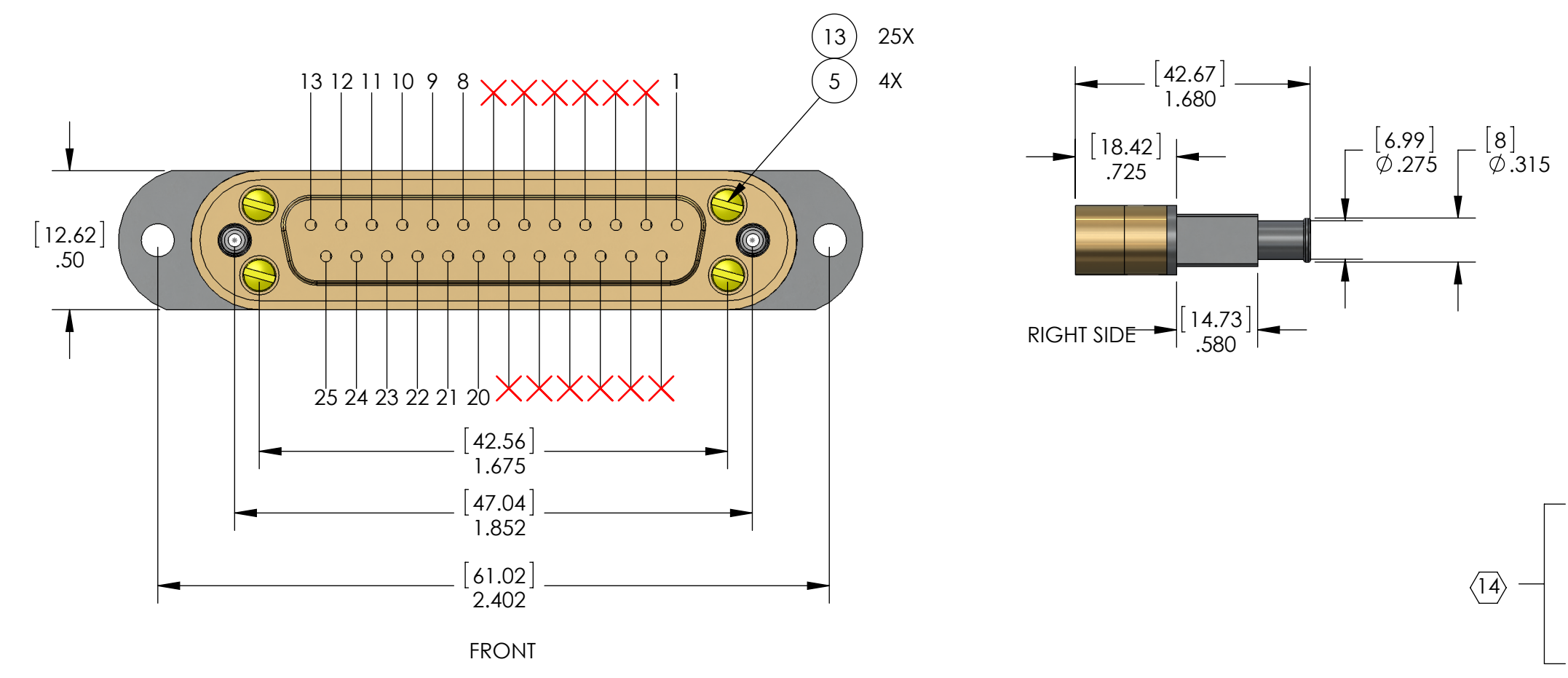
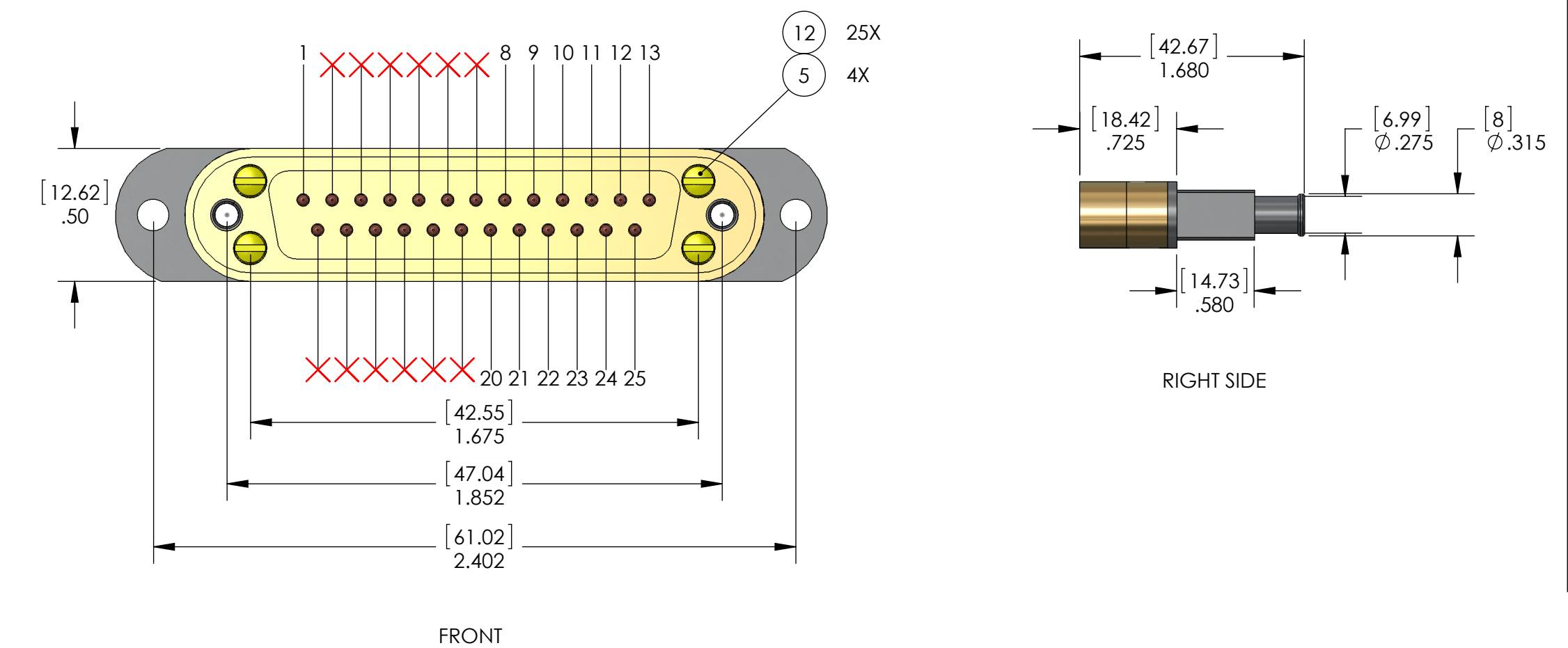
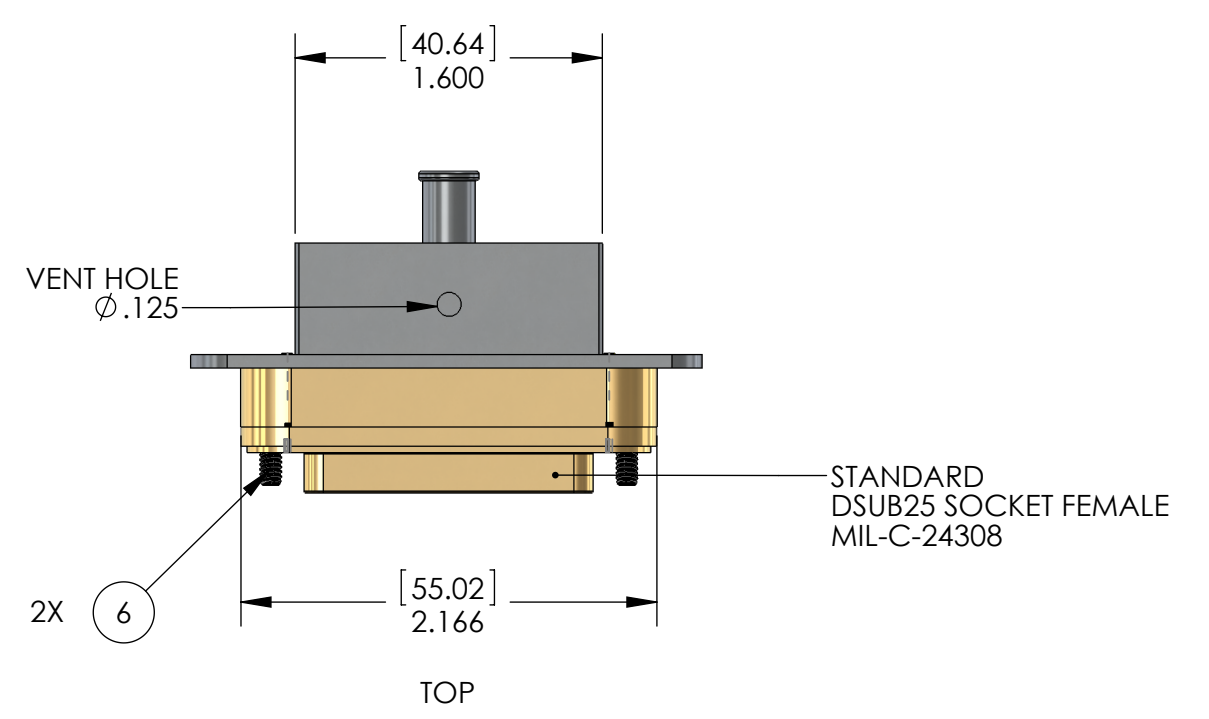
**V25J-143 CABLE ASSEMBLY CIRCUIT SUMMARY
V-DB25 M/S1-143-DB25 F/S1**

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

CONNECTOR 'J1' (12) (13)



CONNECTOR 'J2' (12) (13)



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	TOTAL
13	038-5001-2022 TICOR OR EQ.	SIZE 20 SOCKET CONTACT, 22D CRIMP BARREL	SEE NOTE 8	25
12	037-5001-2022 TICOR OR EQ.	SIZE 20 PIN CONTACT, 22D CRIMP BARREL	SEE NOTE 8	25
11	6759	PEEK OVERBRAID, 50% COVERAGE MIN.	ZEUS, .014 BLK PEEK DRAWN MONOFILAMENT	A/R
10	24X3X40BC CONTINENTAL CORDAGE	1/8 DIA. COPPER BRAID	COPPER	A/R
9	CZ1104 COONER WIRE	WIRE, 29 AWG (51/46), .023 DIA	SEE NOTE 9	A/R
8	1185-04EN-336	HELICOIL, 4-40 X .336 LG., NITRONIC60	NITRONIC 60	2
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		2
5	013-2701-0001 TICOR OR EQ.	SCREW, FILLISTER HEAD, 1-72 X .450 LG., SLOTTED		8
4		UHV DSUB25 CONNECTOR BACKSHELL, W/ EARS	SEE NOTE 8	2
3	034-1002-2520 TICOR OR EQ.	CONTACT RETAINER, DSUB25, UHV, SHIELDED		2
2	034-1001-2520 TICOR OR EQ.	DSUB25 CONNECTOR INTERFACE, UHV, SHIELDED (FEMALE)		1
1	034-1006-2520 TICOR OR EQ.	CONNECTOR INTERFACE, DSUB25, UHV, SHIELDED (MALE)		1

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

- INTERPRET DRAWING PER ASME Y14.5-1994.
- REMOVE ALL SHARP EDGES, .005-.015, FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS.
- 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 INCHES
 TOLERANCES:
 .XX ± .10
 .XXX ± .005
 ANGULAR ± .5°

MATERIAL		FINISH		NEXT ASSY	
N/A		N/A μinch		N/A	

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY

ADVANCED LIGO SUB-SYSTEM **ISC (TMS)**

PART NAME: CUSTOM CABLE SPECIFICATION, V25J-143

DESIGNER	R.ABBOT	DATE	04 MAY 2011	SIZE	DWG. NO.	REV.
DRAFTER	E.BROWN	DATE	04 MAY 2011	D	D1000568	v9
CHECKER	SEE DCC	DATE	SEE DCC	SCALE:	1:1	
APPROVAL	SEE DCC	DATE	SEE DCC	PROJECTION:		SHEET 1 OF 1