

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: 17 COND, 22 AWG, (150/44), WITH PFA INSULATION (COONER WIRE #CZ2205) 8 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.

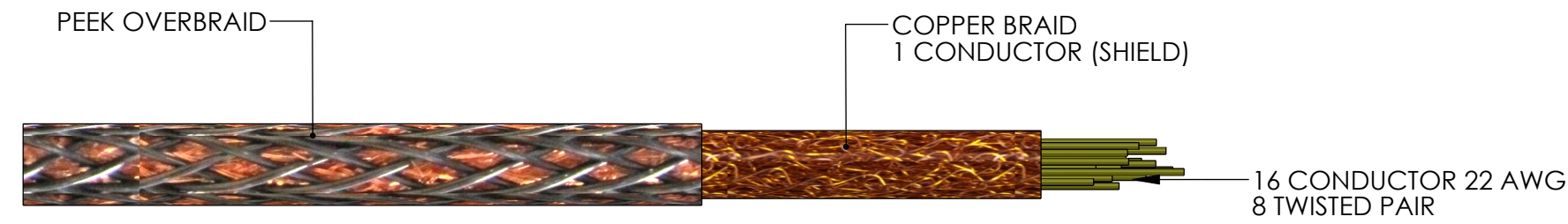
- ⑧ CONNECTORS WILL BE SUPPLIED WITH HARDWARE. LENGTH OF SCREWS SHOULD BE THE PROPER LENGTH FOR MATING.

- 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 FILL UNUSED CONTACT POSITIONS WITH UNCRIMPED CONTACTS.

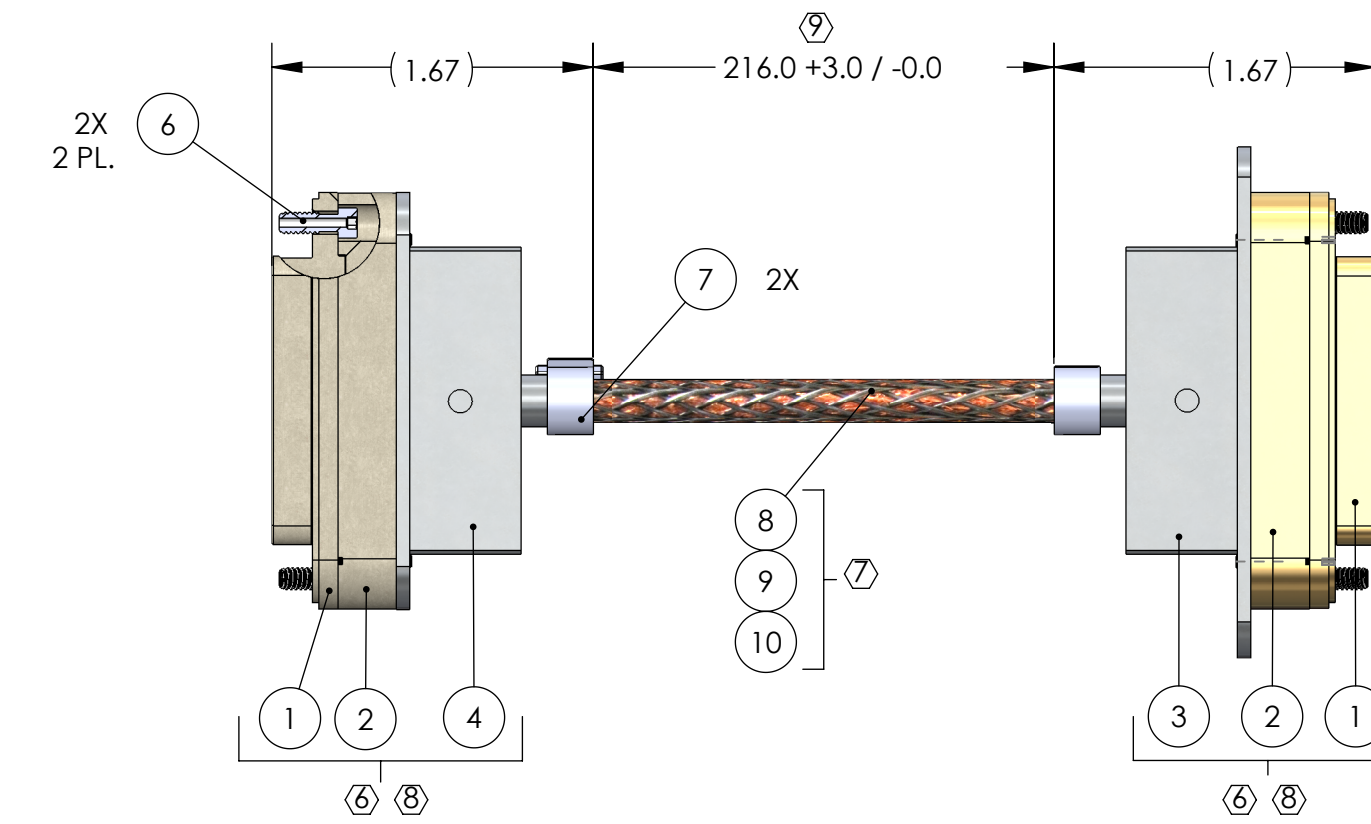
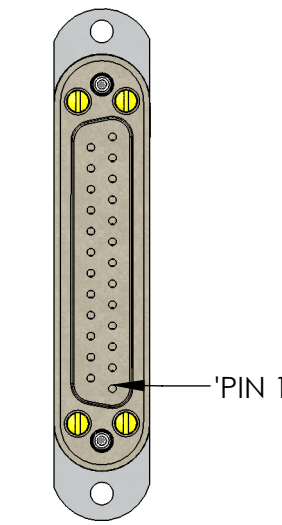
- ⑫ PART NO. SHOWN CORRESPONDS TO UNPLATED PARTS. MATERIALS/FINISH AS SPECIFIED ON NOTE 6, SHALL TAKE PRECEDENCE AT ALL TIMES.



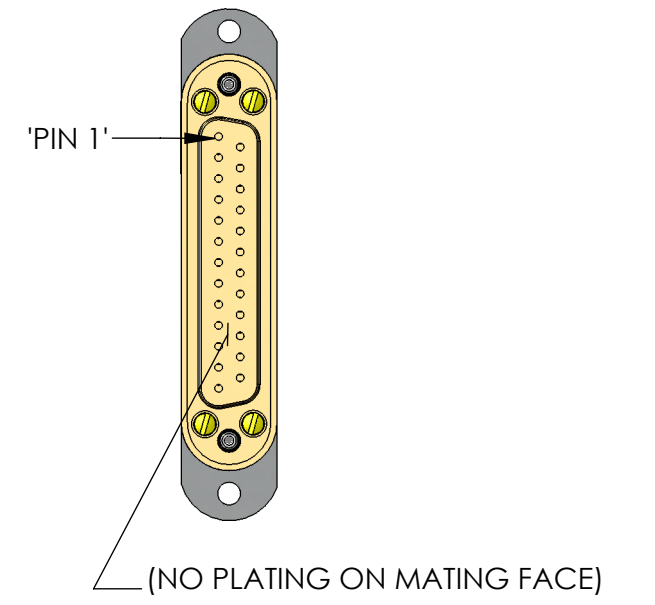
CABLE DETAIL

ISC TRANSMON PICOMOTOR CABLE V-DB25HD F/S1-108-DB25HD F/S1		
STANDARD USE FOR THIS CABLE		
SUBSYSTEM	AIR/VAC	STANDARD USE
ISC	IN-VAC	PICOMOTOR FLANGE TO TOP
ISC (TMS)		BEAM DIVERTERS

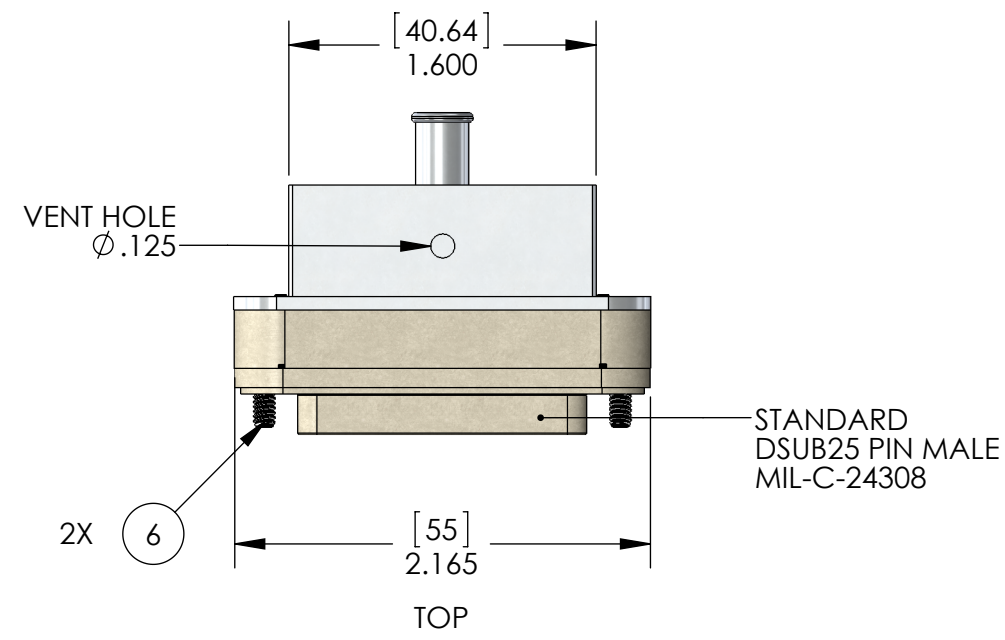
CONNECTOR J1



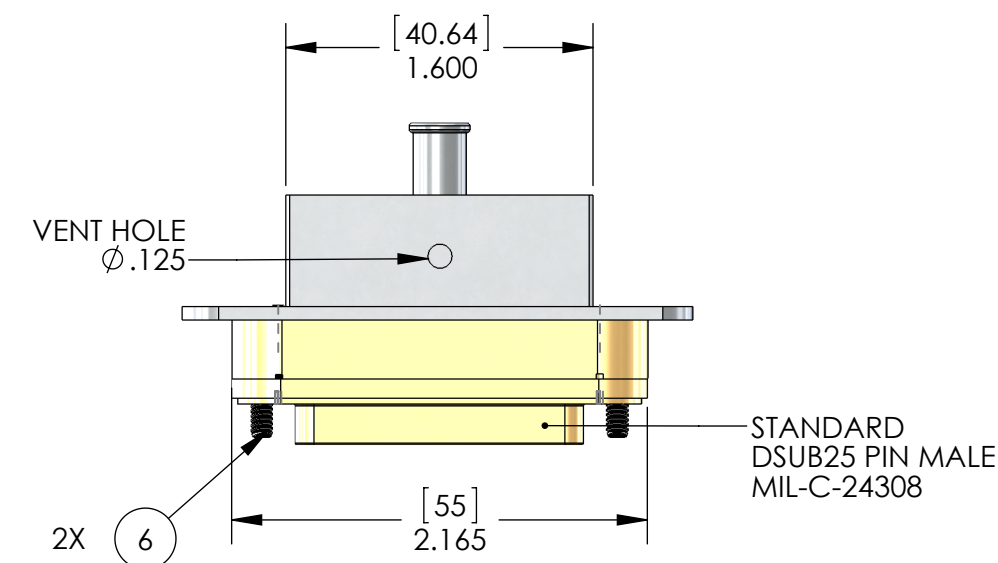
CONNECTOR J2



CONNECTOR 'J1' ⑥ ⑧ ⑩ ⑪

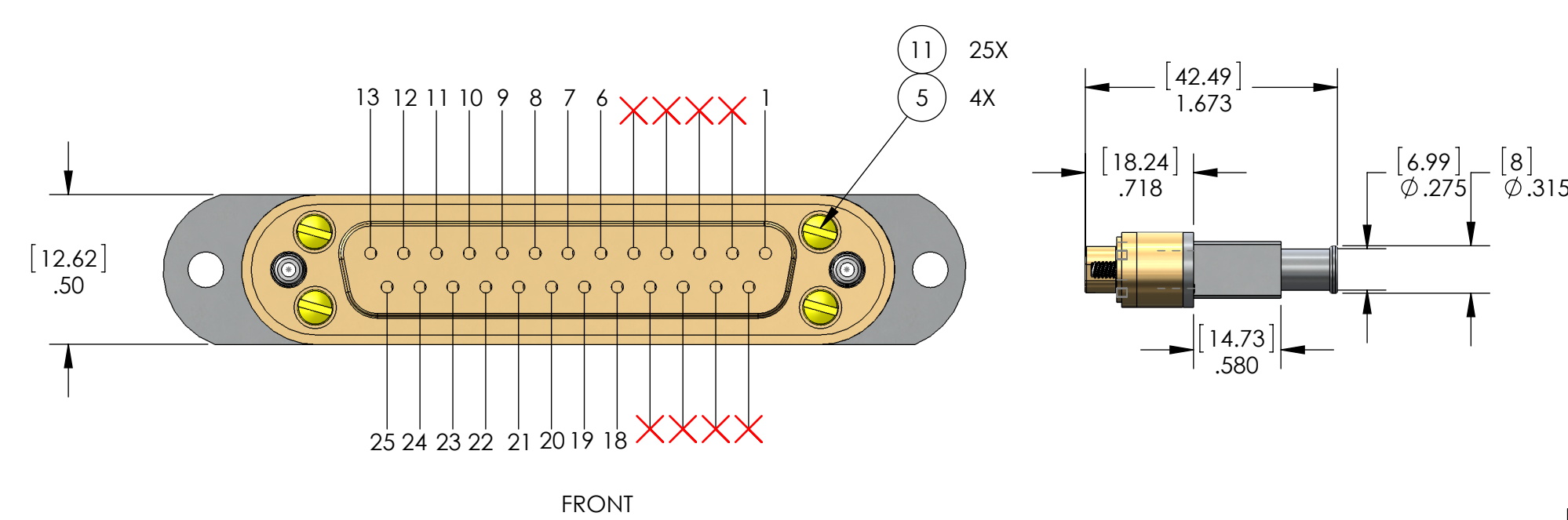
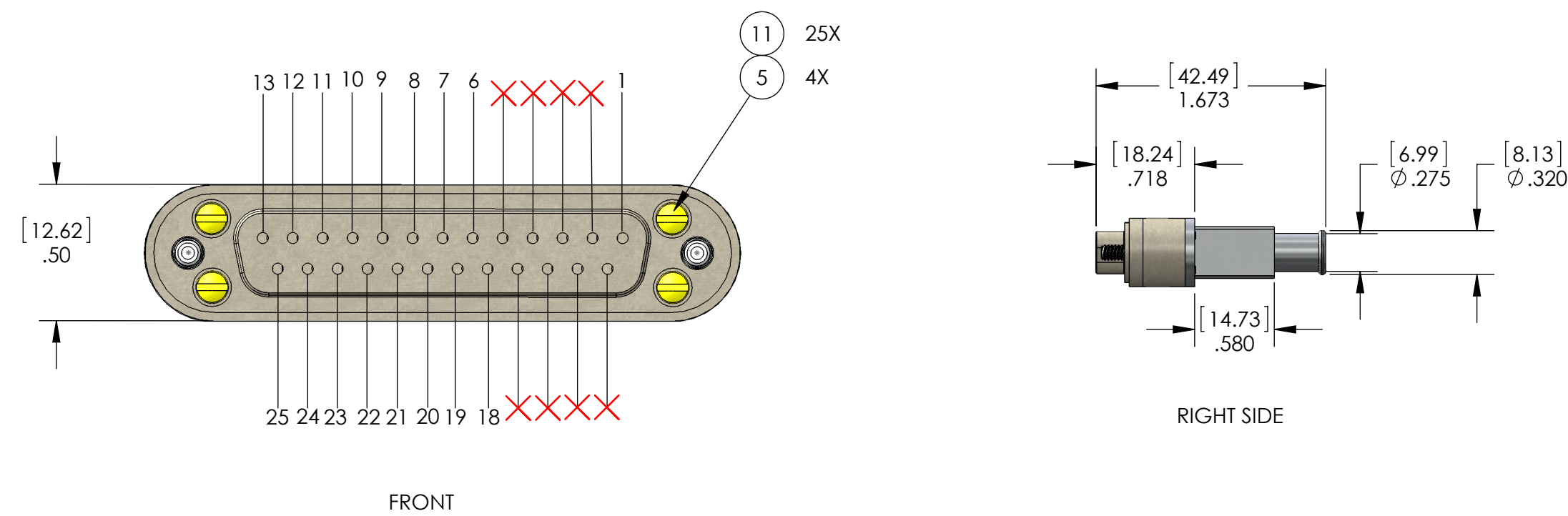


CONNECTOR 'J2' ⑥ ⑧ ⑩ ⑪



V25B-216 CABLE ASSEMBLY CIRCUIT SUMMARY
V-DB25HD F/S1-216-DB25HD F/S1

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



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	TOTAL
11	038-5001-2022 TICOR OR EQ.	SIZE 20 SOCKET CONTACT, 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	CZ2205 COONER WIRE	WIRE, 22 AWG (150/44)	SEE NOTE 7	A/R
7	600-052 GLENNAIR 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		2
1	034-1001-2520 TICOR OR EQ.	DSUB25 CONNECTOR INTERFACE, UHV, SHIELDED (FEMALE)		2

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES	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.
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

PART NAME: CUSTOM CABLE SPECIFICATION, V25B-216

DESIGNER	R.ABBOT	DATE	04 MAY 2011	SIZE	DWG. NO.	REV.
DRAFTER	E.BROWN	DATE	04 MAY 2011		D	D1000223
CHECKER	SEE DCC	DATE	SEE DCC			v7
APPROVAL	SEE DCC	DATE	SEE DCC	SCALE:	NTS	PROJECTION:

SEE LIGO D1100670, ISC ELECTRONICS WIRING SCHEMATIC FOR REFERENCE.

D1000223 LIGO, ITC, CUSTOM CABLE SPECIFICATION V25B-216, PART PDM REV. X-000, DRAWING PDM REV. X-002