

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.

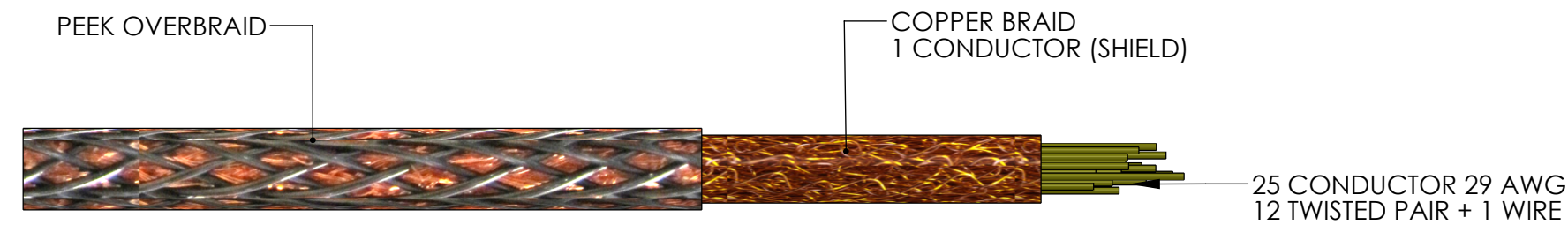
- ⑦ CABLE: 25 COND, 29 AWG, (51/46), WITH 2 LAYERS OF KAPTON TAPE (COONER WIRE #CZ1104) 12 TWISTED PAIRS (APPROX. 2 TWISTS PER INCH) + 1 WIRE OVERALL 40AWG COPPER BRAID 50% COVERAGE. OVERALL PEEK BRAID MIN. 50% COVERAGE. OVERALL CABLE O.D. WILL BE APPROX. 0.240 IN.

- 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.

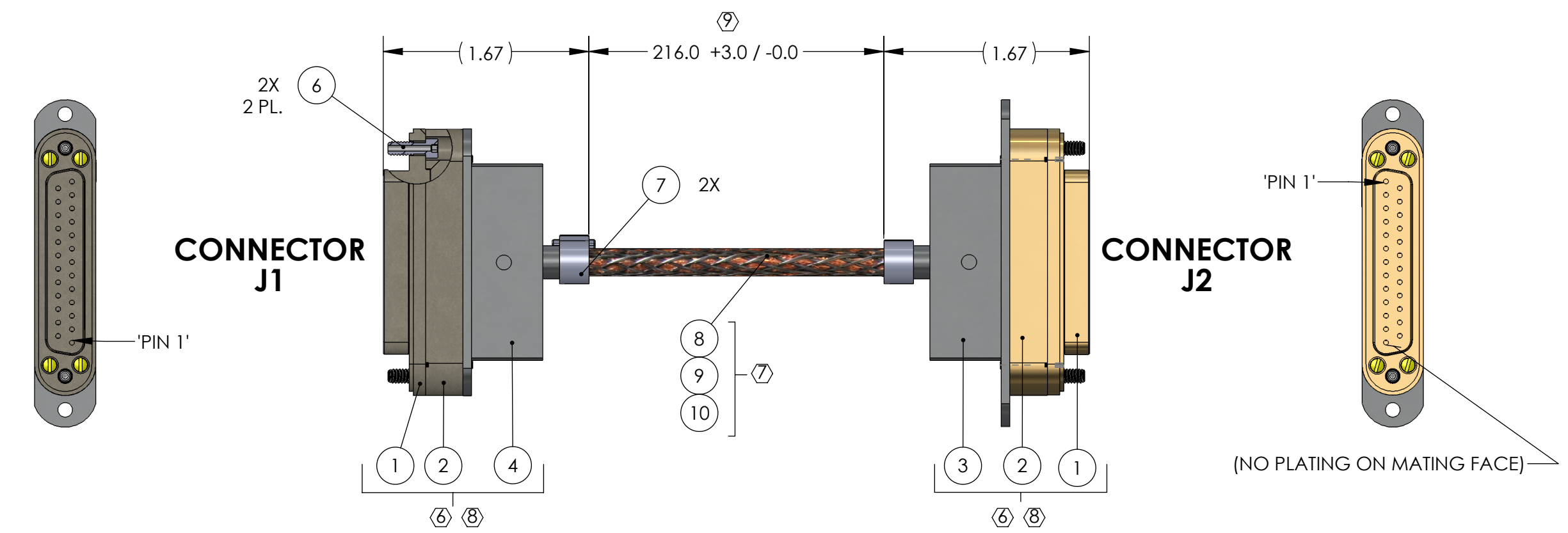
- ⑩ INDICATED DIMENSIONS SHOWN FOR REFERENCE ONLY.

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

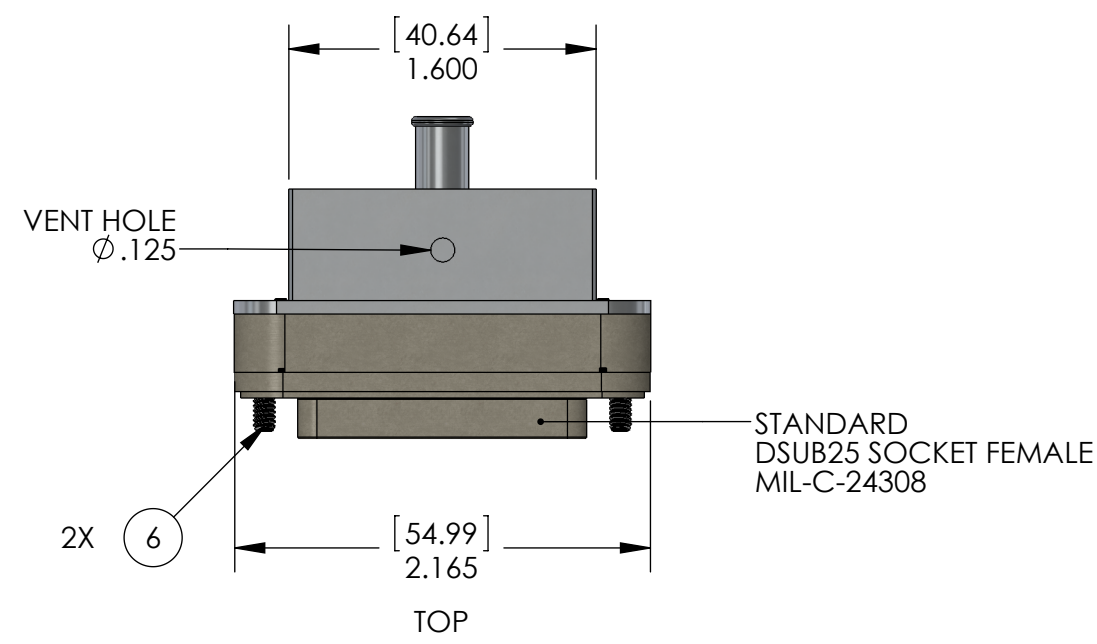


CABLE DETAIL

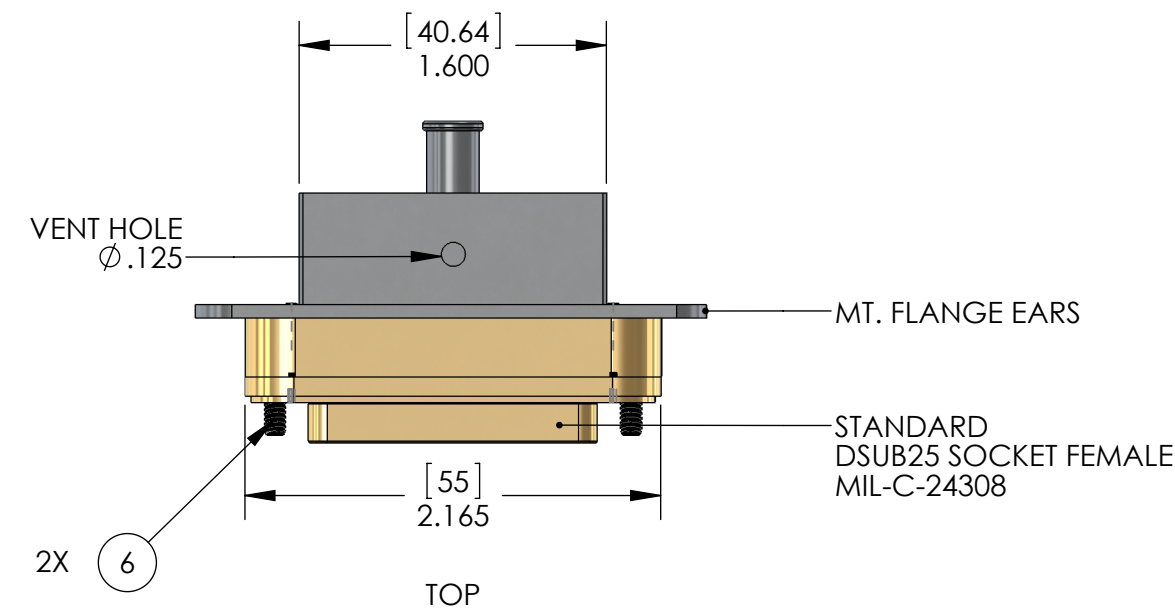
ISC TRANSMON QPD CABLE V-DB25 F/S1-216-DB25 F/S1 STANDARD USE FOR THIS CABLE		
SUBSYSTEM	AIR/VAC	STANDARD USE
ISC (TMS)	IN-VAC	FLANGE TO TOP CABLE QPD FOR TRANSMON



CONNECTOR 'J1' ⑥ ⑧ ⑩

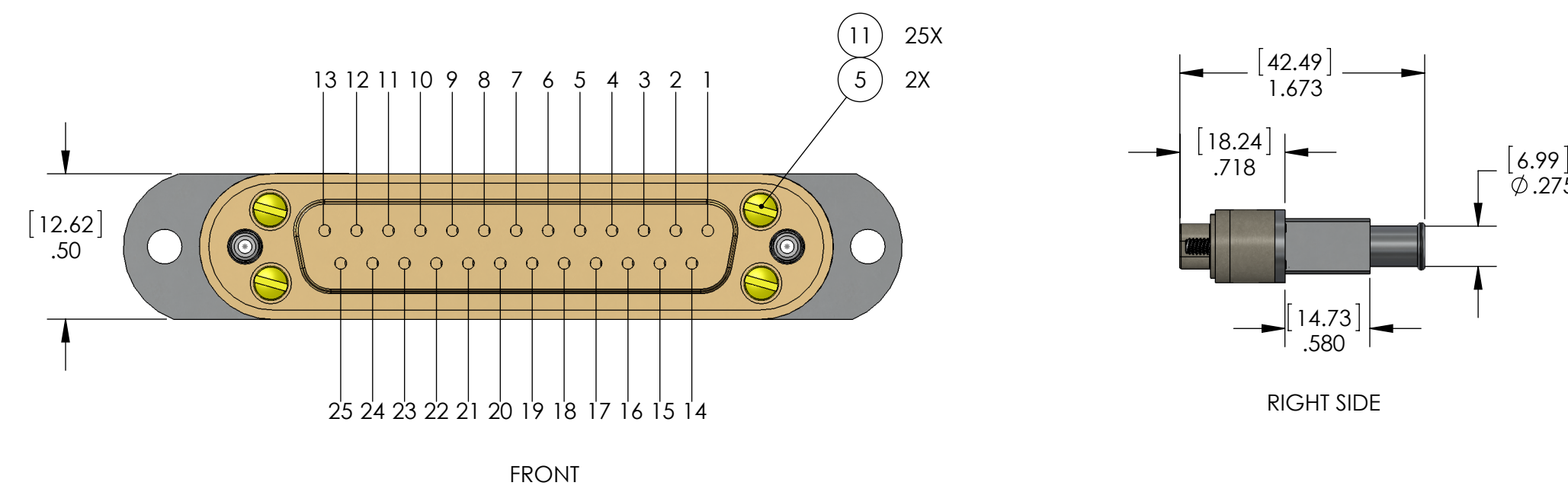
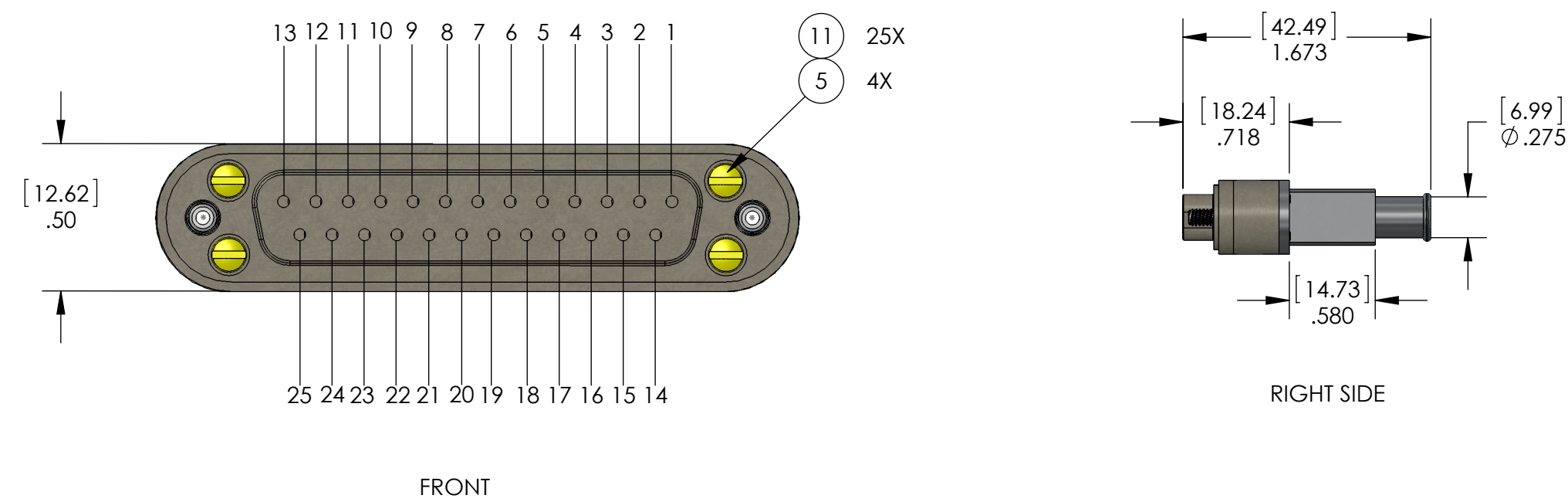


CONNECTOR 'J2' ⑥ ⑧ ⑩



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		2
14	WIRE 14	TP-1	14
3	WIRE 3		3
15	WIRE 15	TP-2	15
4	WIRE 4		4
16	WIRE 16	TP-3	16
5	WIRE 5		5
17	WIRE 17	TP-4	17
6	WIRE 6	TP-5	6
18	WIRE 18	TP-6	18
7	WIRE 7		7
19	WIRE 19	TP-7	19
8	WIRE 8		8
20	WIRE 20	TP-8	20
9	WIRE 9		9
21	WIRE 21	TP-9	21
10	WIRE 10		10
22	WIRE 22	TP-10	22
11	WIRE 11		11
23	WIRE 23	TP-11	23
12	WIRE 12		12
24	WIRE 24	TP-12	24
13	WIRE 13		13
25	WIRE 25		25



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	CZ1104 COONER WIRE	WIRE, 29 AWG (51/46), .023 DIA.	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	SEE NOTE 6	2	
1	034-1001-2520 TICOR OR EQ.	DSUB25 CONNECTOR INTERFACE, UHV, SHIELDED (FEMALE)	SEE NOTE 6	2	
ITEM NO.		PART NUMBER	DESCRIPTION	MATERIAL	TOTAL

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	N/A	FINISH	N/A μinch
NEXT ASSY	N/A	DESIGNER	R.ABBOT 25 APR 2011
SYSTEM	ADVANCED LIGO	SUB-SYSTEM	ISC
CHECKER	SEE DCC	DRAPTER	E.BROWN 25 APR 2011
APPROVAL	SEE DCC	CHECKER	SEE DCC

CALIFORNIA INSTITUTE OF TECHNOLOGY  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PART NAME: CUSTOM CABLE SPECIFICATION, V25A-216

SCALE: 1:1  
PROJECTION:

DWG. NO. D1000924  
REV. v8  
SHEET 1 OF 1

D1000924 LIGO, ITC, CUSTOM CABLE SPECIFICATION V25A-216, PART FDM REV. X-001, DRAWING FDM REV. X-002