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 - GLENAIR PART NO. 600-052
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: 6 COND. 22 AWG, (150/44), WITH .005 PFA INSULATION (COONER WIRE #CZ2205)
3 TWISTED PAIRS (APPROX. 2 TWISTS PER INCH)
OVERALL 40AWG COPPER BRAID 50% 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	11 FEB 2011	-	-
v7	16 JUL 2012	E1200711-v1	-
v8	14 AUG 2012	E1200757-x0	-

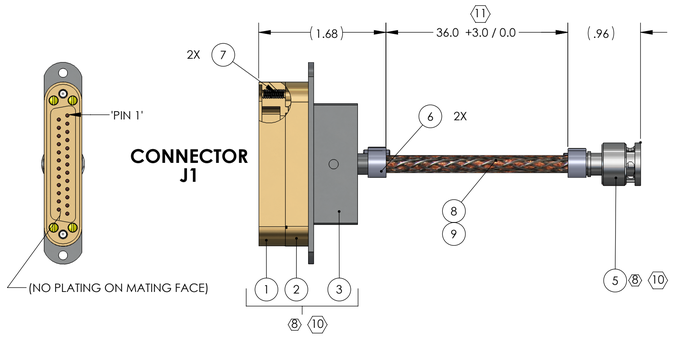
CABLE DETAIL

ISC TRANSMON BEAM DIVERTER CABLE SUSPENDED TRANSMON TABLE TO BEAM DIVERTER

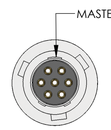
V25AB-36 - V-DB25HD M/S1-36-MM7PINHD F/X

STANDARD USE FOR THIS CABLE

SUBSYSTEM	AIR/VAC	STANDARD USE
ISC	IN-VAC	TRANSMON BEAM DIVERTER

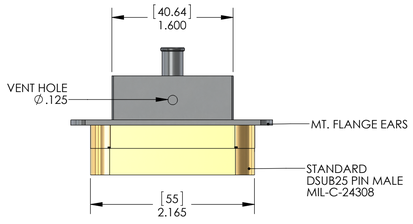


CONNECTOR J2

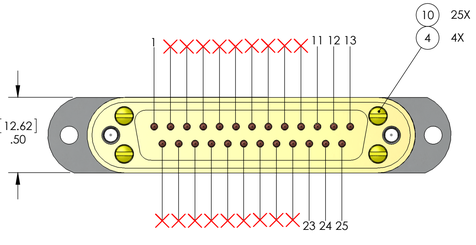


ROTATED 90 DEGREES CW
(MATES WITH GLENAIR 803-003-07M6-7PN-598A)

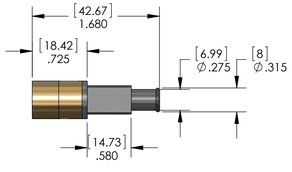
CONNECTOR 'J1' ⑧ ⑩ ⑫ ⑬



TOP

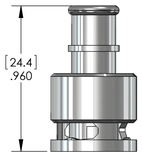


FRONT



RIGHT SIDE

CONNECTOR 'J2' ⑧ ⑩ ⑬



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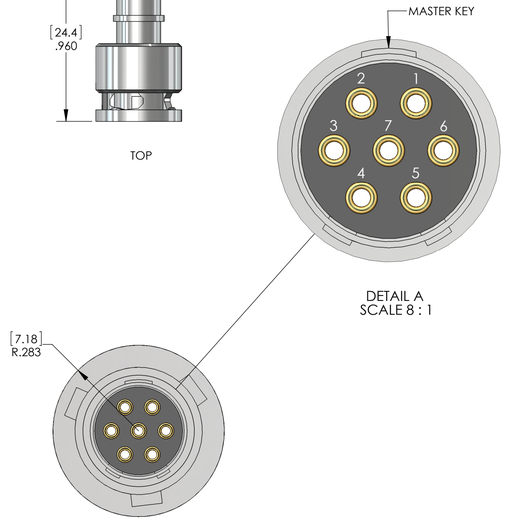

DETAIL A
SCALE 8 : 1

FRONT

V25AB-36 CABLE ASSEMBLY CIRCUIT SUMMARY

FROM 'J1'		TO 'J2'		
PIN	WIRE NAME	TWISTED PAIR	PIN	SIGNAL
1	(SHIELD)		N/C	-
13	WIRE 13	TP-1	1	(+)COIL
25	WIRE 25		2	(-)COIL
12	WIRE 12	TP-2	3	(+)LEFT SENSOR
24	WIRE 24		4	(-)LEFT SENSOR
11	WIRE 11	TP-3	5	(+)RIGHT SENSOR
23	WIRE 23		6	(-)RIGHTSENSOR
N/C	-	-	7	N/C

TEST LIST

FROM 'J1'	TO 'J2'
PIN	PIN
N/C	SHELL
SHELL	N/C
13	1
25	2
12	3
24	4
11	5
23	6
N/C	7

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	TOTAL
10	037-5001-2022 TICOR OR EQ.	SIZE 20 PIN CONTACT, 22D CRIMP BARREL	SEE NOTE 8	25
9	6759	PEEK OVERBRAID, 50% COVERAGE MIN.	ZEUS, .016 BLK PEEK DRAWN MONOFILAMENT	A/R
8	CZ2205 COONER WIRE	WIRE, 22 AWG (150/54)	SEE NOTE 9	A/R
7	1185-04EN-336	HELICOIL, 4-40 X .336 LG., NITRONIC60	NITRONIC 60	2
6	600-052 GLENAIR OR EQ.	BRAID CLAMPING BAND, .24 WIDE	ST. STEEL, PASSIVATED	2
5	803-001-06M6-7SN-598A GLENAIR	CONNECTOR, 7 PIN MIGHY MOUSE SOCKET		1
4	013-2701-0001 TICOR OR EQ.	SCREW, FILLISTER HEAD, 1-72 X .450 LG., SLOTTED	SEE NOTE 8	4
3		UHV DSUB25 CONNECTOR BACKSHELL, W/ EARS		1
2	034-1002-2520 TICOR OR EQ.	CONTACT RETAINER, DSUB25, UHV, SHIELDED		1
1	034-1006-2520 TICOR OR EQ.	CONNECTOR INTERFACE, DSUB25, UHV, SHIELDED (MALE)		1

⑭ 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 APPROXIMATLEY 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
NEXT ASSY: N/A

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO
SUB-SYSTEM: ISC

PART NAME: CUSTOM CABLE SPECIFICATION, V25AB-36

DESIGNER	B.ABBOT	11 FEB 2011	SIZE: D
DRAFTER	E.BROWN	11 FEB 2011	DWG. NO.: D1000237
CHECKER	SEE DCC	SEE DCC	REV.: v8
APPROVAL	SEE DCC	SEE DCC	SCALE: NTS

PROJECTION: SHEET 1 OF 1

D1000237 ALIGO_ISC_CUSTOM CABLE SPECIFICATION V25AB-36, PART PDM REV=X-001, DRAWING PDM REV=X-009