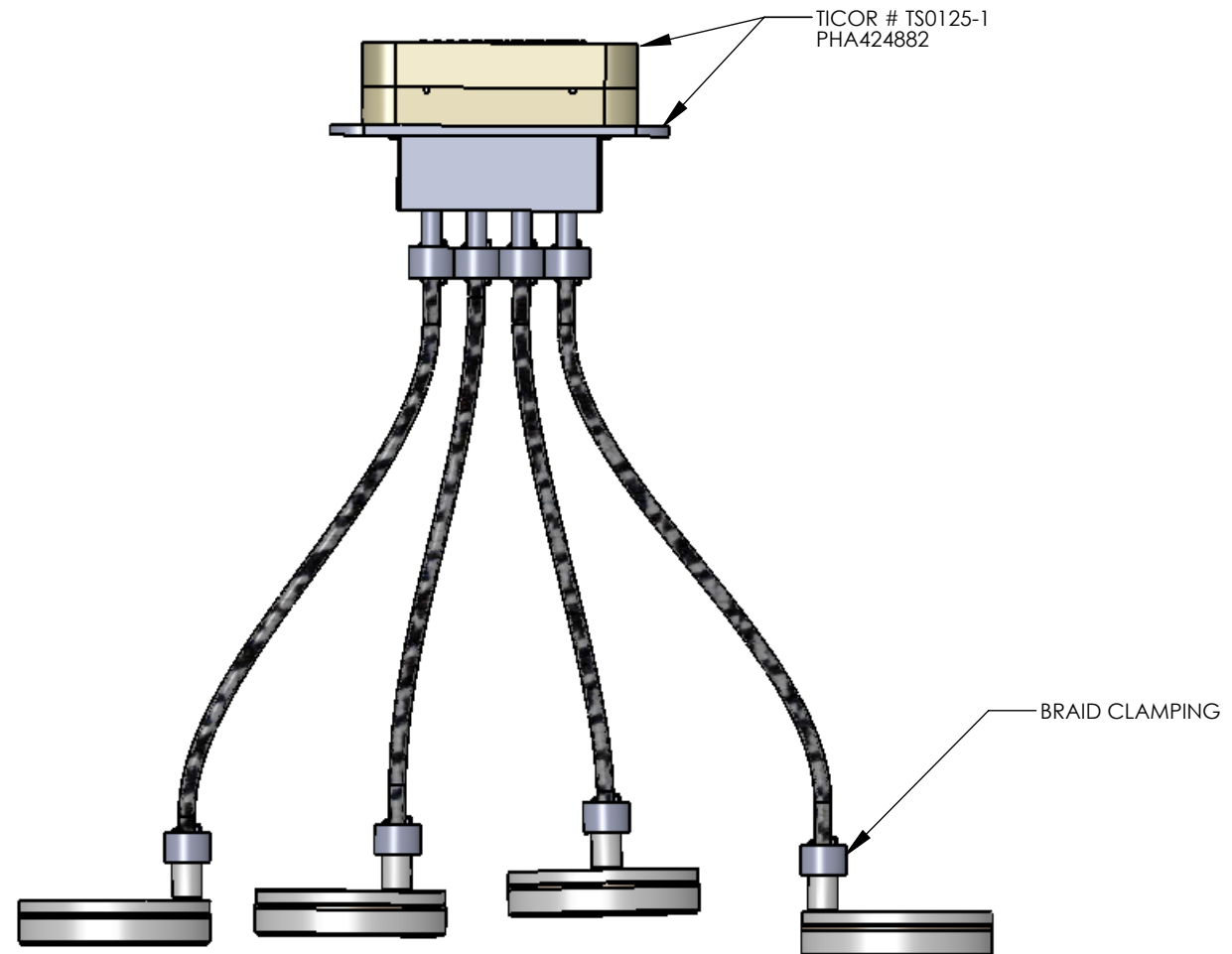


8 7 6 5 4 3 2 1

NOTES: ( UNLESS OTHERWISE SPECIFIED )

1. MATERIAL:
  - a. CONNECTOR SHELL - PEEK VICTREX GRADE TDS-450G.
  - b. BACKSHELL - STAINLESS STEEL WITH VENT HOLE.
  - c. CONTACTS - BERYLLIUM COPPER ALLOY C17300  
0.000050 MIN. GOLD OVER NICKEL
  - d. HARDWARE: CORROSION RESISTANCE STEEL, PASSIVATED
  - e. PEEK BRAID - PEEK VICTREX GRADE TDS-450CA30 CARBON LOADED
2. CABLE 4 COND. 22 AWG, WITH PFA INSULATION COONER WIRE #CZ2205  
OVERALL PEEK BRAID MIN. 50% COVERAGE OVERALL CABLE O.D. WILL BE APPROX. 0.200 IN.
- ③ INSERT WIRES (ITEM 4) IN PD BACK PEEK (ITEM 7) AND LABEL

REV.	DATE	DCN #	DRAWING TREE #
v1	06 MAR 2011	E1100335	
v2	25 MAY 2011	E1100335	
v3	24 Aug. 2011	E1100335	



D1003111\_AdlIGO\_AOS\_SLC Photodetector Cable Lower Assy, PART PDM REV: X-142, DRAWING PDM REV: X-029

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 .XX ± .06  
 .XXX ± .010  
 ANGULAR ± 1.0°

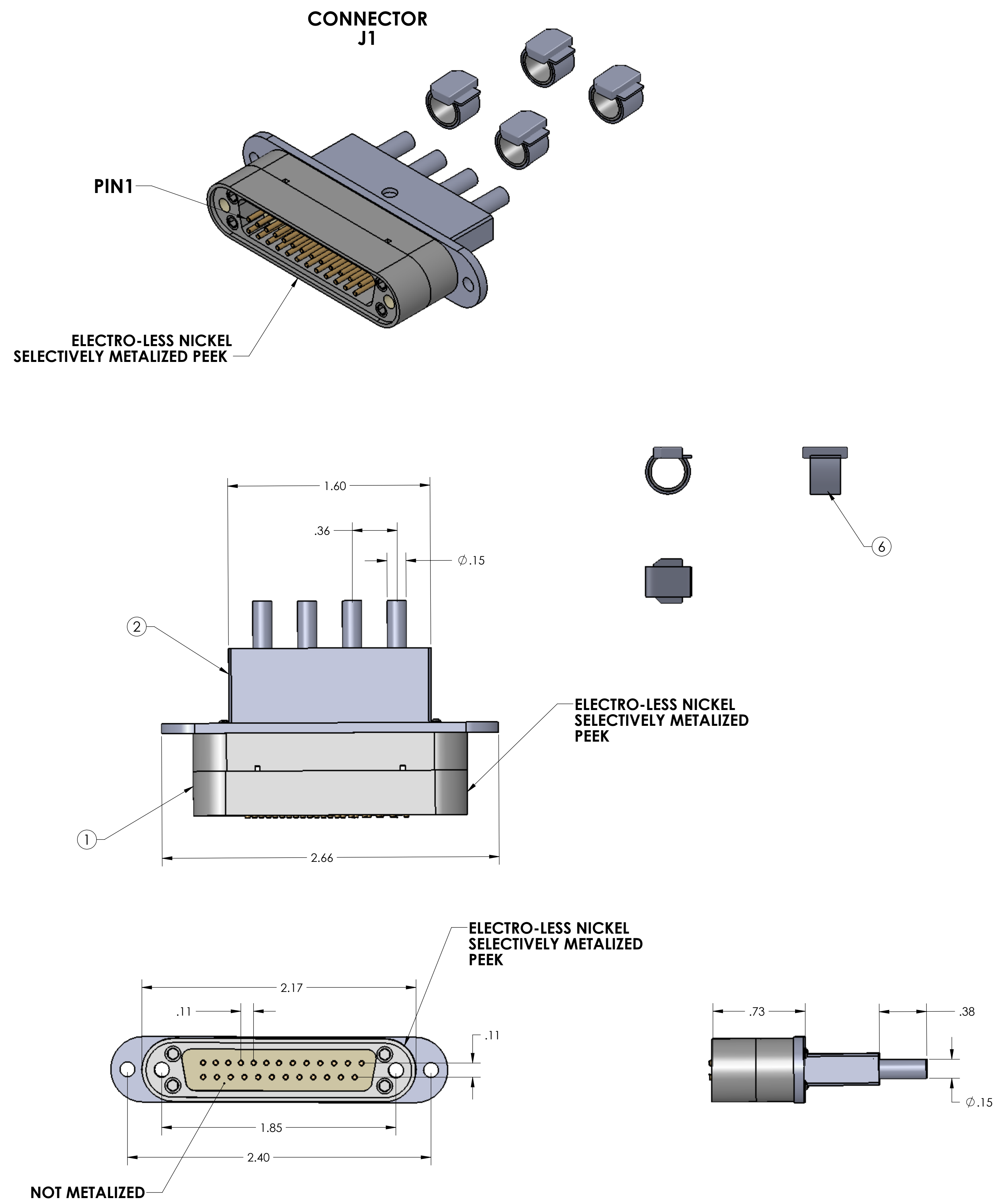
MATERIAL	N/A	FINISH	N/A μinch
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 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM	ADVANCED LIGO	SUB-SYSTEM	AOS
NEXT ASSY	D1000977		

PART NAME				SLC PHOTODETECTOR CABLE LOWER ASSY			
DESIGNER	N.Nguyen	02 Dec 2010	SIZE	DWG. NO.	REV.		
DRAFTER	N.Nguyen	04 Dec 2010	<b>B</b>	<b>D1003111</b>	<b>v3</b>		
CHECKER	M. Smith	10 DEC 2010	SCALE: 1:4	PROJECTION:	SHEET 1 OF 2		
APPROVAL							

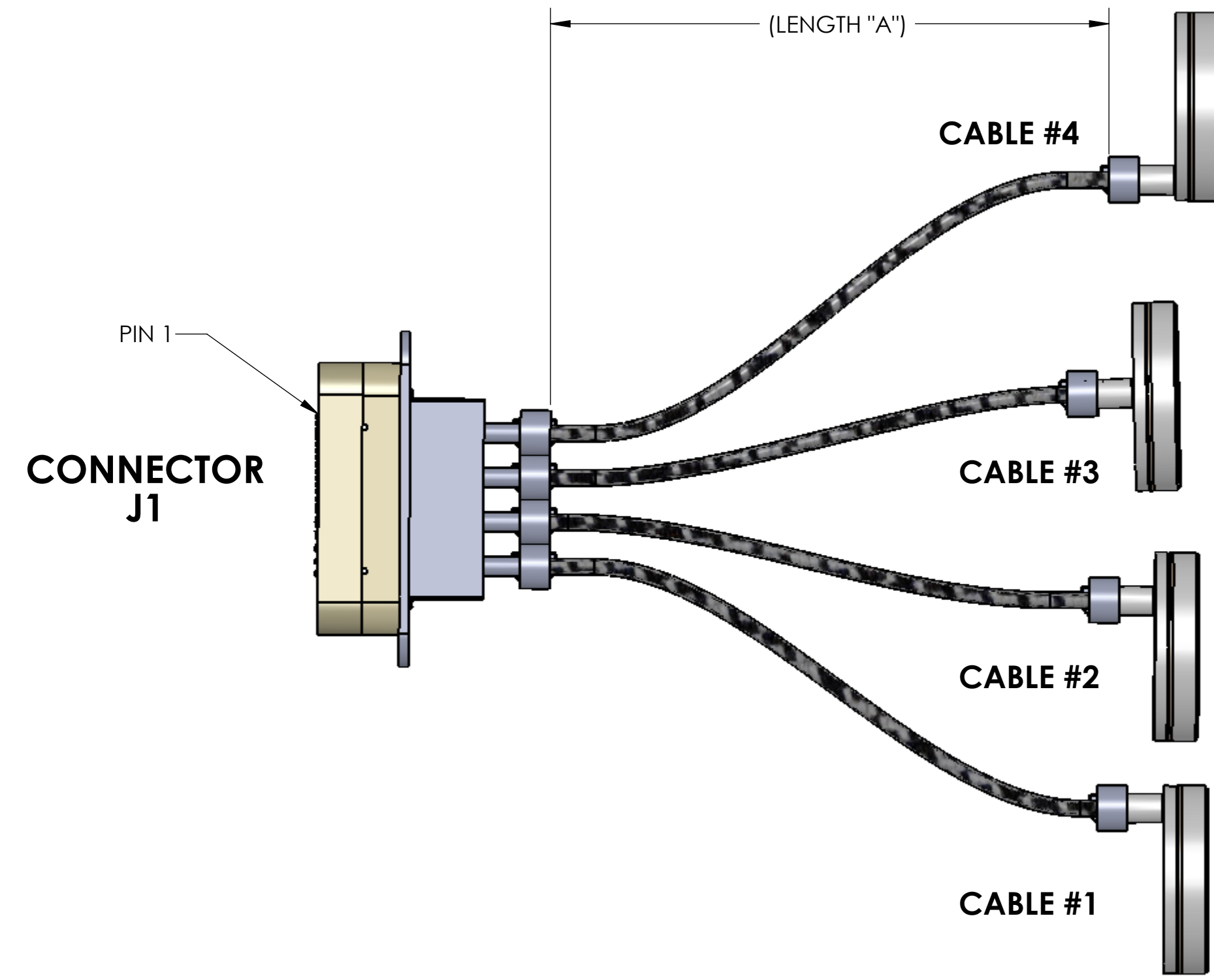
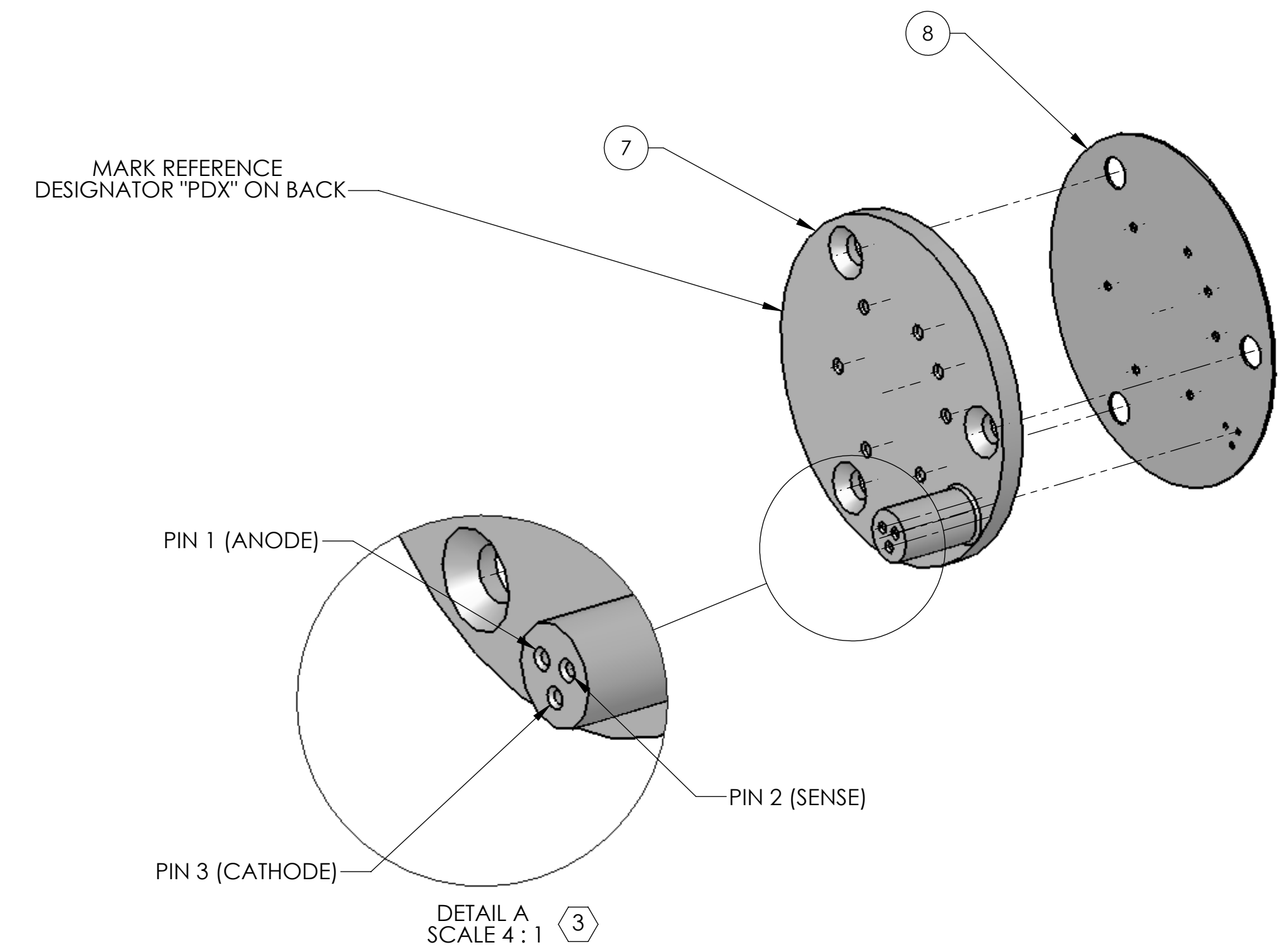
8 7 6 5 4 3 2 1



**V25AC-36 CABLE ASSEMBLY CIRCUIT SUMMARY**  
V-DB25 M/S1-36-4\_MM4PIN F/X

FROM			
CONNECTOR J1 - 25 PIN SUBMINI_D CONNECTOR (PEEK)			
PIN	WIRE NAME	LENGTH "A"	TWISTED PAIR
1, SHELL	SHIELD		
4	CABLE 4 WIRE 4	69"	TP-1
16	CABLE 4 WIRE 16	69"	TP-1
3	CABLE 4 WIRE 3	69"	TP-2
15	NO CONNECT		
7	CABLE 3 WIRE 7	69"	TP-3
19	CABLE 3 WIRE 19	69"	TP-3
6	CABLE 3 WIRE 6	69"	TP-4
18	NO CONNECT		
10	CABLE 2 WIRE 10	58"	TP-5
22	CABLE 2 WIRE 22	58"	TP-5
9	CABLE 2 WIRE 9	58"	TP-6
21	NO CONNECT		
13	CABLE 1 WIRE 13	50"	TP-7
25	CABLE 1 WIRE 25	50"	TP-7
12	CABLE 1 WIRE 12	50"	TP-8
24	NO CONNECT		

OPEN 14,17,20,23,2,5,8,11 N/C (NOT CONNECTED)



PHOTODETECTOR PD4

PHOTODETECTOR PD3

PHOTODETECTOR PD2

PHOTODETECTOR PD1

**V25AC-36 CABLE #4 ASSEMBLY CIRCUIT SUMMARY**

TO		
PHOTODETECTOR PD4		
PIN	WIRE NAME	SIGNAL
SHELL	(SHIELD)	
1	(CABLE 4) WIRE 4	ANODE
2	(CABLE 4) WIRE 16	SENSE
3	(CABLE 4) WIRE 3	CATHODE

**V25AC-36 CABLE #3 ASSEMBLY CIRCUIT SUMMARY**

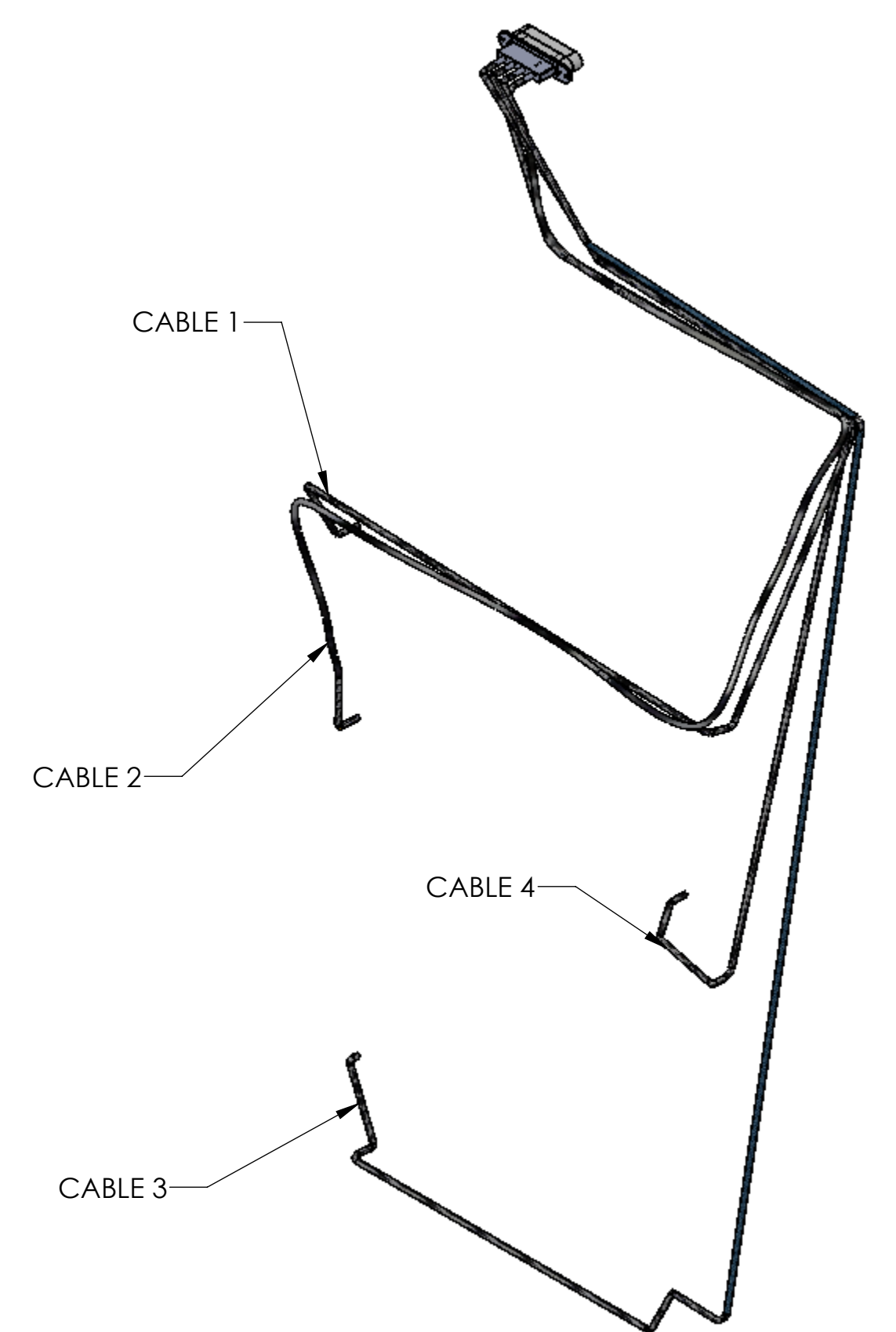
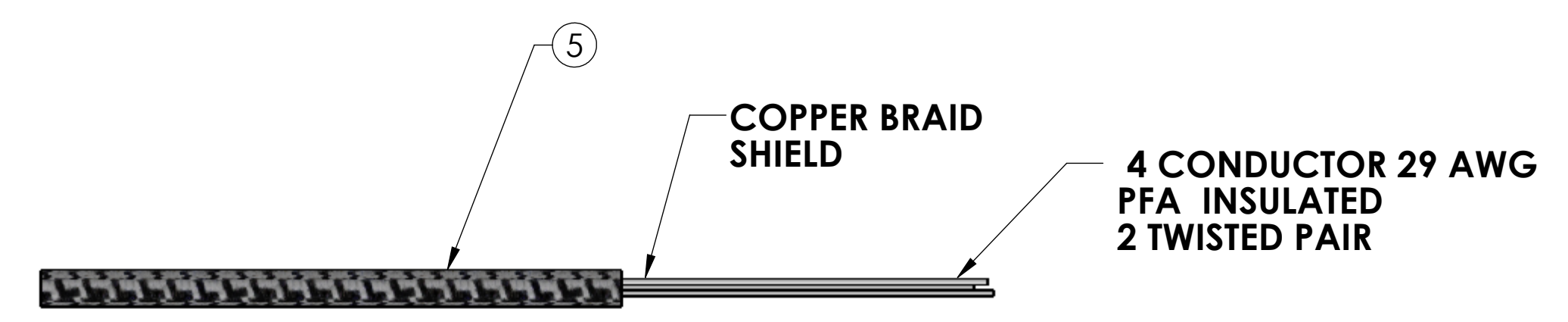
TO		
PHOTODETECTOR PD3		
PIN	WIRE NAME	SIGNAL
SHELL	(SHIELD)	
1	(CABLE 3) WIRE 7	ANODE
2	(CABLE 3) WIRE 19	SENSE
3	(CABLE 3) WIRE 6	CATHODE

**V25AC-36 CABLE #2 ASSEMBLY CIRCUIT SUMMARY**

TO		
PHOTODETECTOR PD2		
PIN	WIRE NAME	SIGNAL
SHELL	(SHIELD)	
1	(CABLE 2) WIRE 10	ANODE
2	(CABLE 2) WIRE 22	SENSE
3	(CABLE 2) WIRE 9	CATHODE

**V25AC-36 CABLE #1 ASSEMBLY CIRCUIT SUMMARY**

TO		
PHOTODETECTOR PD1		
PIN	WIRE NAME	SIGNAL
SHELL	(SHIELD)	
1	(CABLE 4) WIRE 13	ANODE
2	(CABLE 4) WIRE 25	SENSE
3	(CABLE 4) WIRE 12	CATHODE



ISO VIEW FOR REF ONLY

**BILL OF MATERIALS**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	LENGTH "A"
1	TICOR # TS0125-3	DB25 MALE CONNECTOR (J1) FOR UHV (PEEK)	1	
2	D1003013	DB25 CONNECTOR BACKSHELL FOR UHV (STAINLESS)	1	
3	D1003013	SLC ACB PHOTODETECTOR ASSY	4	
4	COONER WIRE # CZ1104 29GA PFA INSULATED BIOMEDICAL WIRE	4 COND. CABLE 29GA PFA INSULATED (WITH PEEK OVERBRAID) 5 NO SHIELD. - PARTS SUPPLIED BY LIGO	4	
5	PART # 6759	PEEK BRAID - PART #6759 MANUFACTURED WITH ZEUS 0.016" BLACK PEEK DRAWN MONOFILAMENT - SUPPLIED BY LIGO	4	
6	GLENAIR 600-052	GLENAIR 600-052 STANDARD BRAID CLAMP	8	
7	D1003014	PD BACK PEEK	1	
8	D1003239	ARM CAVITY BAFFLE ALS PD PCB	1	

\* NOTE: THE OVERALL LENGTH IS MEASURED FROM PIN TIP (25 PIN) TO PIN TIP (4 PIN) OF THE CABLE. Use whatever length is necessary for the internal wiring of the connectors and strip length to achieve the correct overall length.

**V25AC - V-DB25 M/S1-36-4\_MM4PIN F/S**

STANDARD USE FOR THIS CABLE		
SUBSYSTEM	AIR/VAC	STANDARD USE
ISC	IN-VAC	ACB (4) PHOTODIODE INTERFACE CABLE