

NOTES:

DESIGNED & DIMENSIONED IN MILLIMETERS

RCH-XXX-XXXX

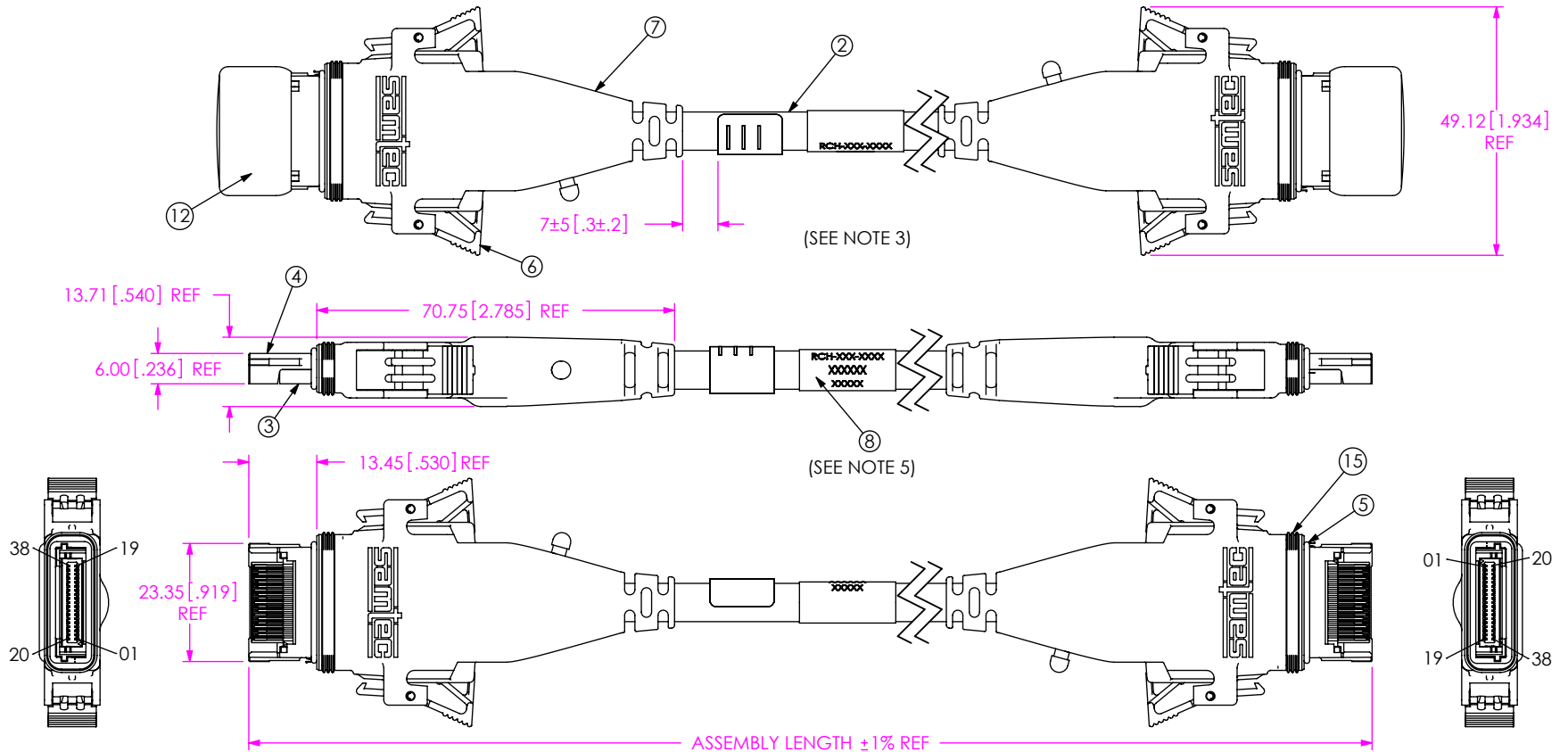
1. REPRESENTS A CRITICAL DIMENSION.
2. ALL ASSEMBLIES TO BE 100% ELECTRICALLY TESTED FOR SHORTS AND OPENS.
3. ALL ASSEMBLIES TO BE HI-POT TESTED AT 300V.  
AFTER FINAL ELECTRICAL TEST, LABEL EACH ASSEMBLY WITH 1 LABEL-ET.
4. ENSURE VCOV-EPLSP-XXX-ORG IS APPLIED AND PACKAGE IN CLEAR POLY-BAGS.
5. HDRL-11 IS TO BE CENTERED ON CABLE AS SHOWN OR 1 FOR EVERY METER OF CABLE FOR ASSEMBLIES OVER 1 METER.  
HDRL-11 IS TO CONTAIN: PART NUMBER, SHOP ORDER & DATE CODE.
6. THIS ASSEMBLY USES 32 AWG 100 OHM TWINAX.
7. MEASURE O-RING IN THE CENTER OF THE PART.

No. OF POSITIONS  
-019 = 19 POSITION (SEE TABLE 3) PIN 1 TO 1

ASSEMBLY LENGTH  
(IN MILLIMETERS)  
-0500 TO -9999  
(-1000, -2000, AND -3000,  
ARE STOCKED LENGTHS)  
(SEE NOTE 6)

DO NOT  
SCALE FROM  
THIS PRINT

FIG 1  
RCH-019-XXXX SHOWN  
(SOME COMPONENTS NOT SHOWN IN ALL VIEWS FOR CLARITY)



LENGTH	"A"
500-1999	1
2000-2999	2
3000-3999	3
4000-4999	4
5000-5999	5
6000-6999	6
7000-7999	7
8000-8999	8
9000-9999	9

ITEM NO.	PART NUMBER	DESCRIPTION	QUANTITY	MATERIAL
1	SUB-EPHSI-019-D-EM	SUB ASSEMBLY	2	SEE TITLE BLOCK
2	SUB-FSIO-32100-01-XXXX	BUNDLED 9 TWIN AX AND 5 POWER	1	SEE TITLE BLOCK
3	EPHSI-019-02-RCH	BOTTOM HOUSING EPHSI CONNECTOR	2	ZINC ALLOY
4	EPHSI-019-01-RCH	TOP HOUSING EPHSI CONNECTOR	2	ZINC ALLOY
5	OR-129-01	EMI GASKET FOR RCH	2	SILVER/ALUMINUM
6	LTC-28	PESS PLASTIC LATCH	4	PA66 RG001, BLACK
7	MD-NY-L-ZY-70G13-BK	OVERMOLD	0.047 lbs	NYLON, ZYTEL, 70G13, BLACK
8	HDRL-11	LABEL	"A"	SELF LAMINATING VINYL
9	CUT-0.250	COPPER FOIL TAPE	4	COPPER FOIL, CONDUCTIVE ADHESIVE
10	LABEL-ET	PRINTED LABEL	1	VINYL
11	RVT-02.3-09.5-002	EPLSP RIVET	4	ALUM. SEMI-TUBULAR PLAIN FINISH
12	VCOV-EPLSP-019-ORG	PROTECTIVE COVER	2	VINYL
13	VCOV-EPLSP-019-ORG-PR	PROTECTIVE COVER	2	VINYL
14	SUB-SRP-065-015-01-00.48	SOLDER PREFORM	4	SAC 305
15	OR-121-01	O-RING	2	NBR+SILICONE OIL
16	EPHSI-SR-01	EPHSI STRAIN RELIEF	2	RUBBER
17	MD-NY-L-MA-OM646-BK	PREMOLD	0.0022 lbs	NYLON, LOW PRESSURE, BLACK
18	CCS-137285-01-PP	KAPTON TAPE	2	KAPTON

F:\DWG\MISC\MKTG\RCH-XXX-XXXX-MKT.SLDDRW

UNLESS OTHERWISE SPECIFIED,  
DIMENSIONS ARE IN MILLIMETERS.

TOLERANCES ARE:

DECIMALS ANGLES  
X.X: ±0.3 2°  
X.XX: ±0.13  
X.XXX: ±0.051

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MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 2:1  
INSULATOR: HIGH TEMP NYLON  
TERMINALS: CU ALLOY  
MAX FLASH ALLOWED: .05[.002]  
MAX GATE VESTIGE: .10[.004]

CABLE MATERIAL: JACKET: PVC  
INSULATOR: DIELECTRIC  
CONDUCTORS: COPPER  
BRAID: TINNED COPPER  
FOIL: ALUMINUM/POLYESTER

THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

**samtec**

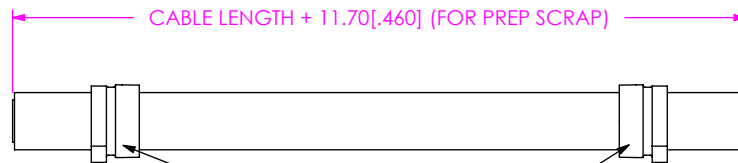
520 PARK EAST BLVD, NEW ALBANY, IN 47150  
PHONE: 812-944-6733 FAX: 812-948-5047  
e-Mail: info@SAMTEC.com code: 55322

DESCRIPTION:  
SEALED EPLSP CABLE ASSEMBLY

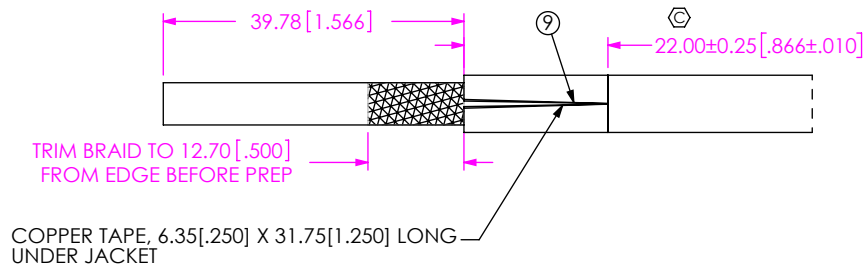
DWG. NO.  
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BY: D. SCHMELZ 07/15/2010 SHEET 1 OF 8



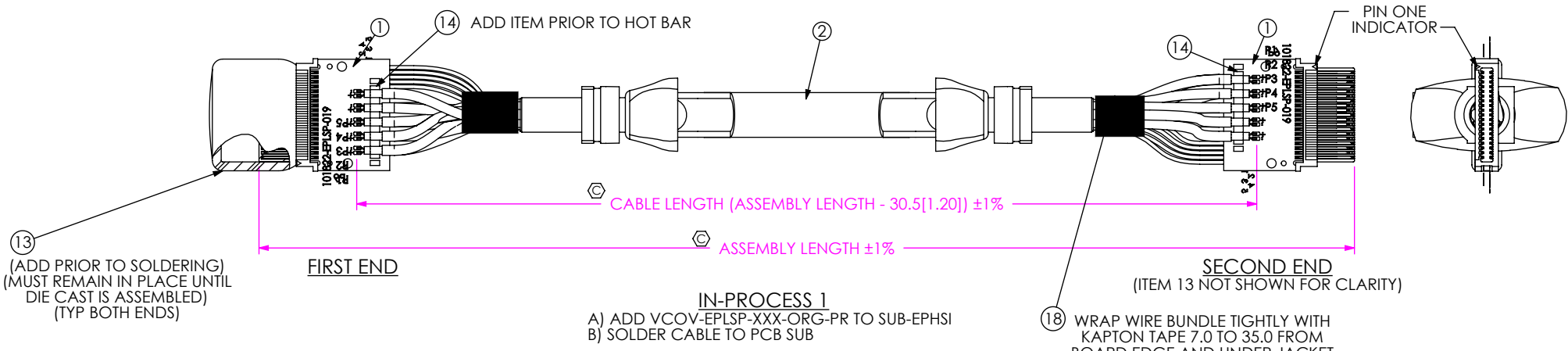


CUT CABLE TO LENGTH  
 SLIDE EPHSI-SR-01 ONTO CABLE BEFORE STRIPPING INSULATION



TRIM BRAID TO 12.70 [.500] FROM EDGE BEFORE PREP  
 COPPER TAPE, 6.35[.250] X 31.75[1.250] LONG UNDER JACKET

WRAP BRAID WITH COPPER TAPE BEFORE FOLDING BACK (TYP BOTH ENDS)



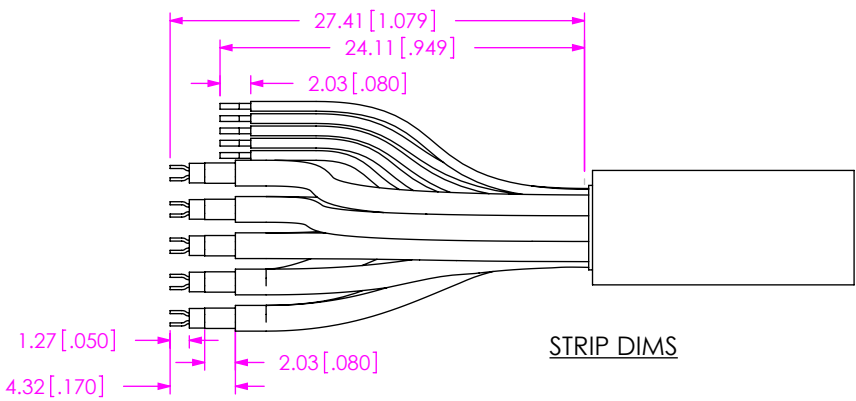
13 (ADD PRIOR TO SOLDERING) (MUST REMAIN IN PLACE UNTIL DIE CAST IS ASSEMBLED) (TYP BOTH ENDS)

FIRST END

IN-PROCESS 1  
 A) ADD VCOV-EPLSP-XXX-ORG-PR TO SUB-EPHSI  
 B) SOLDER CABLE TO PCB SUB

SECOND END (ITEM 13 NOT SHOWN FOR CLARITY)

18 WRAP WIRE BUNDLE TIGHTLY WITH KAPTON TAPE 7.0 TO 35.0 FROM BOARD EDGE AND UNDER JACKET OVERLAPPING THE TAPE SLIGHTLY AS YOU GO. (BOTH ENDS)



STRIP DIMS

SCALE: 2:1

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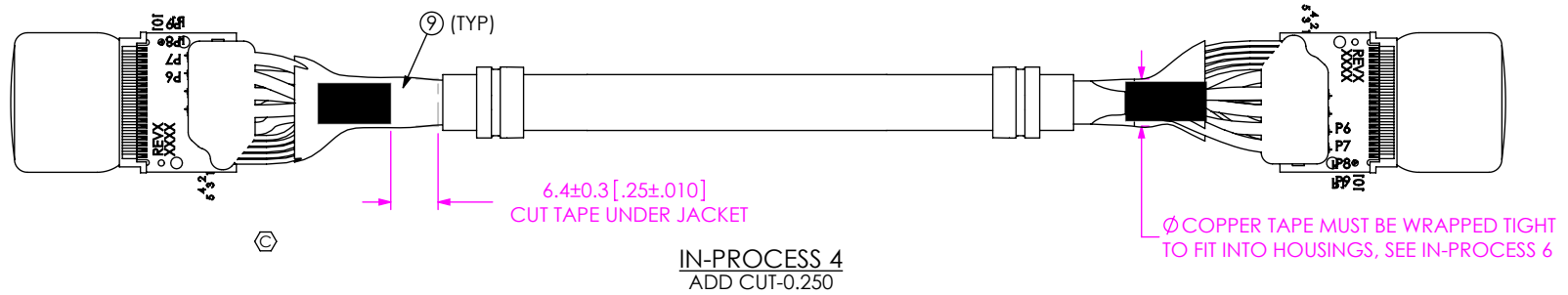
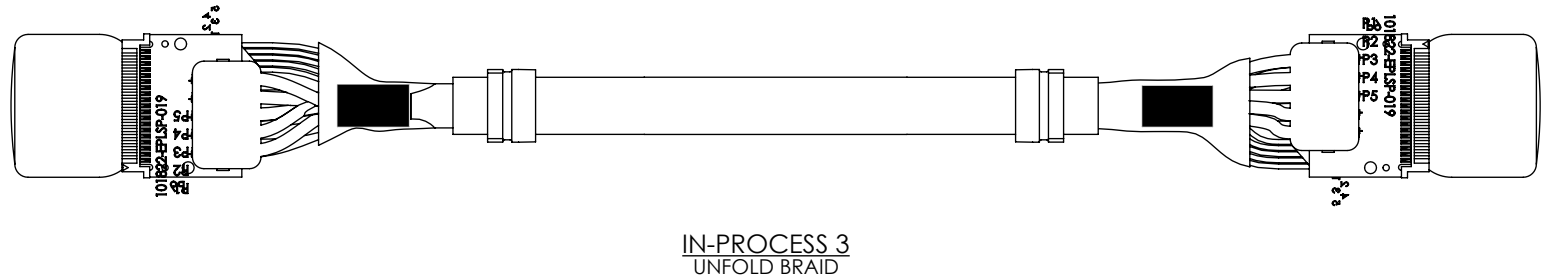
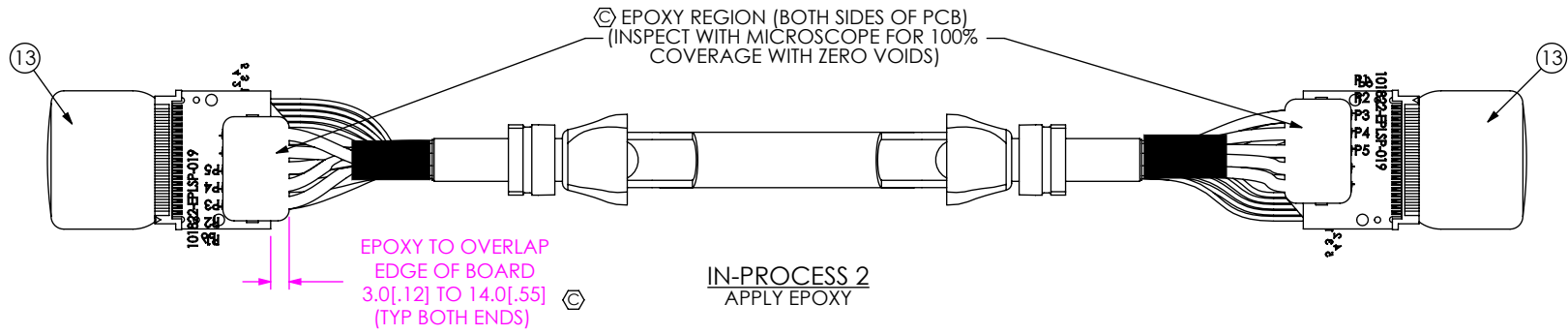
DO NOT SCALE DRAWING

DESCRIPTION:  
 SEALED EPLSP CABLE ASSEMBLY

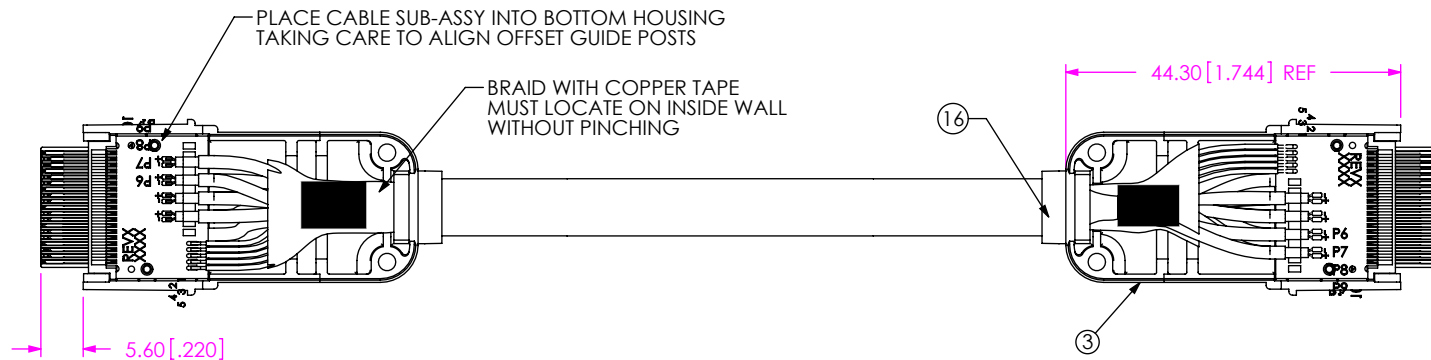
SHEET SCALE: 1:1

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 RCH-XXX-XXXX

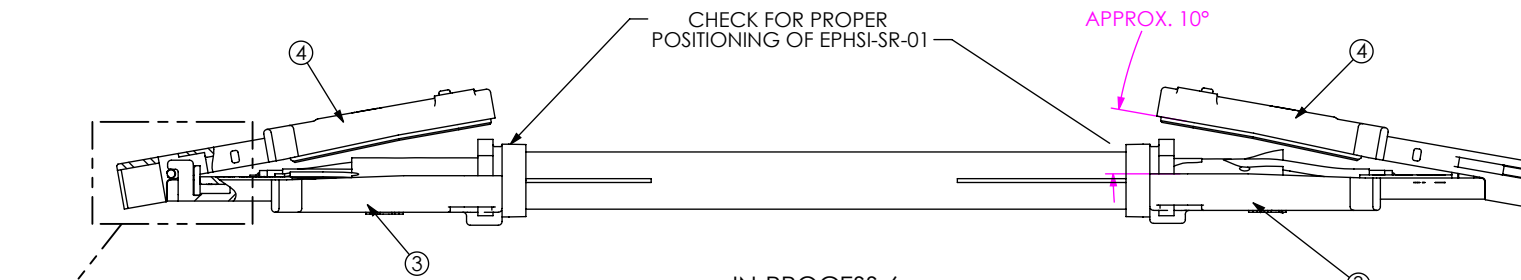
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	<p>DO NOT SCALE DRAWING</p>	<p>DESCRIPTION:  <b>SEALED EPLSP CABLE ASSEMBLY</b></p>
	<p>SHEET SCALE: 1:1</p>	<p>DWG. NO.  <b>RCH-XXX-XXXX</b></p> <p>BY: D. SCHMELZ 07/15/2010 SHEET 4 OF 8</p>

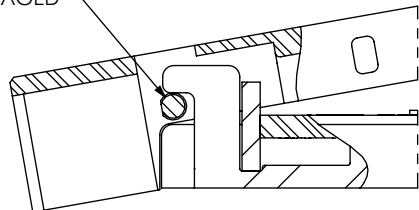


IN-PROCESS 5  
 ADD EPHSI-019-02-RCH  
 LOCATE STRAIN RELIEF IN HOUSING  
 (REMOVE ITEM 13 FOR HOUSING ASSEMBLY)



IN-PROCESS 6  
 ADD EPHSI-019-01-RCH  
 (REMOVE ITEM 13 FOR HOUSING ASSEMBLY)

WHILE POSITIONING THE TOP COVER (EPHSI-019-01-RCH)  
 INSURE THAT LATCH AND PIN  
 ARE ENGAGED



DETAIL 'A'  
 SCALE 3 : 1

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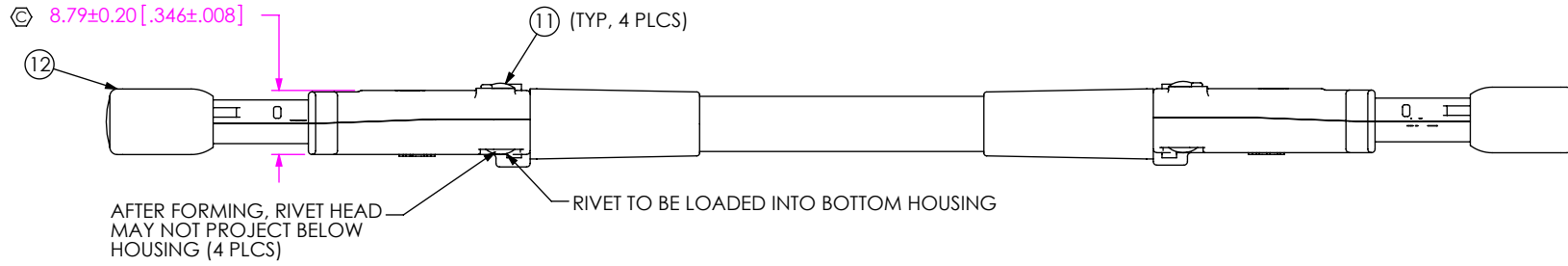
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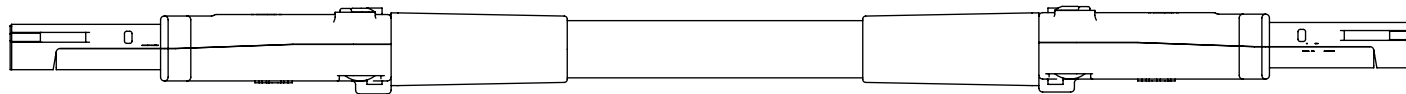
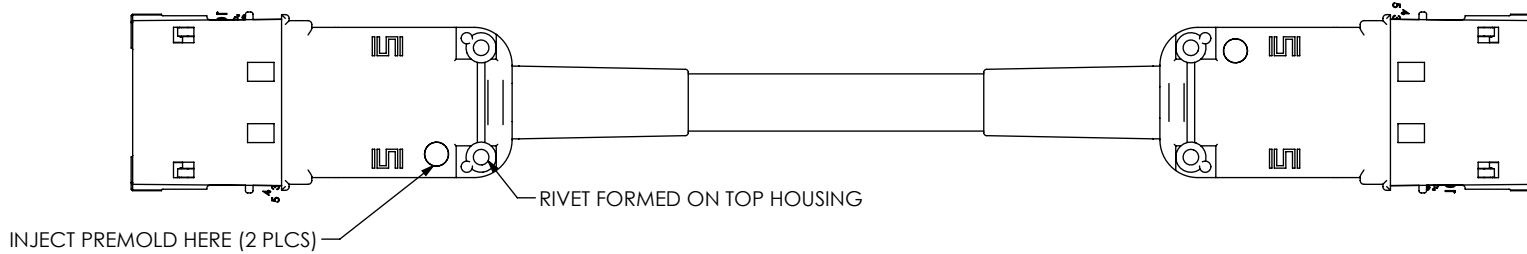
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SHEET SCALE: 1:1


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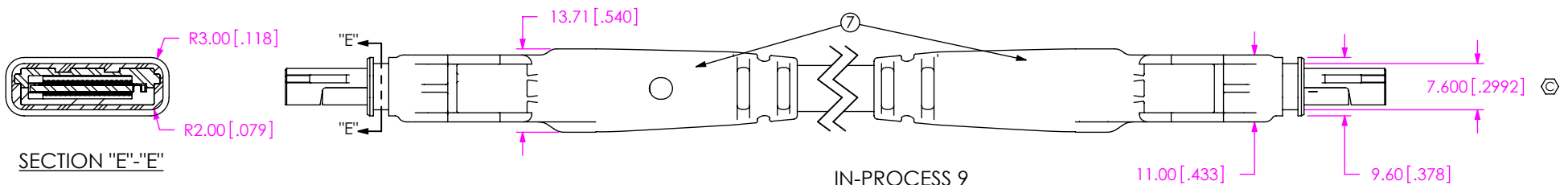
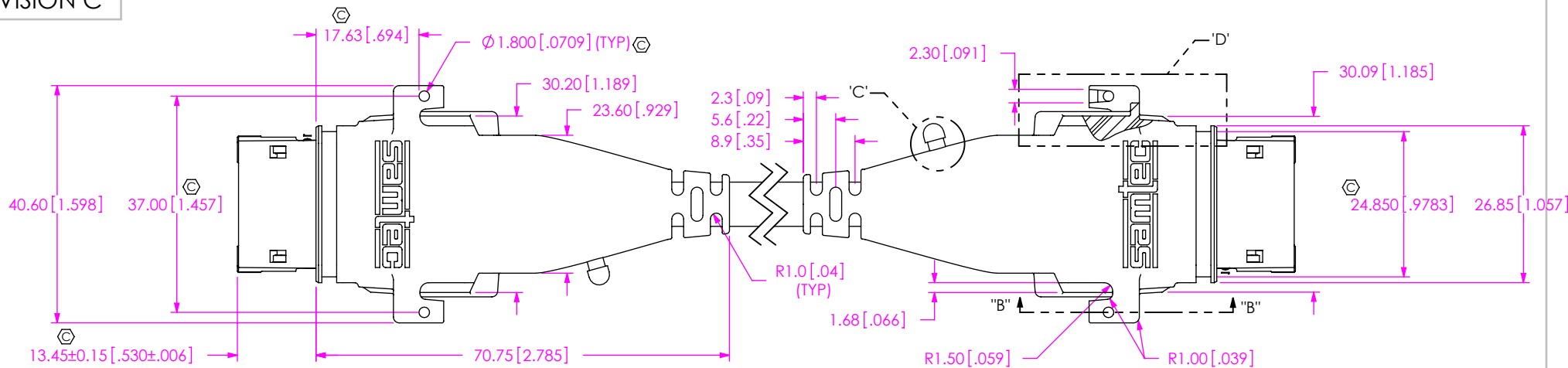


IN-PROCESS 7  
 A) ADD RVT-02.3-09.5-002  
 B) ADD ITEM 12, VCOV-EPLSP-ORG

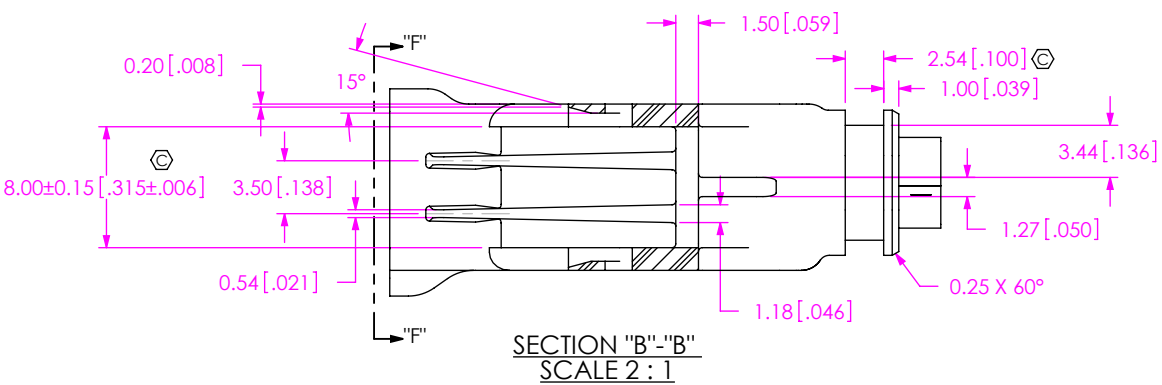
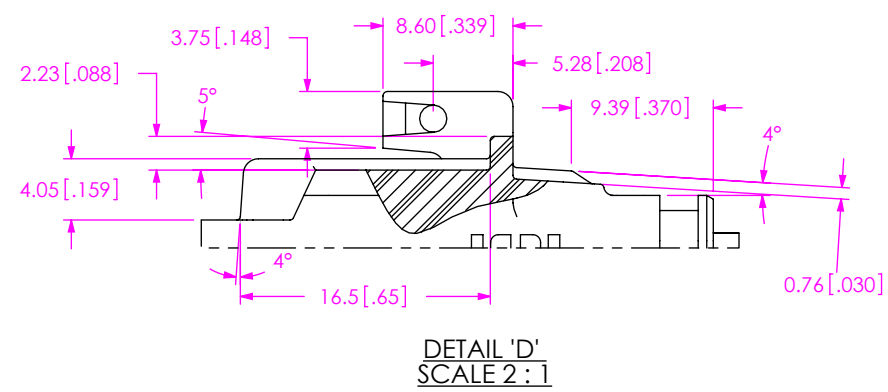
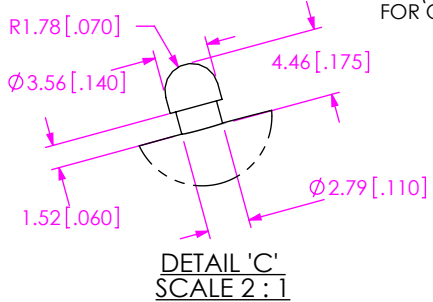
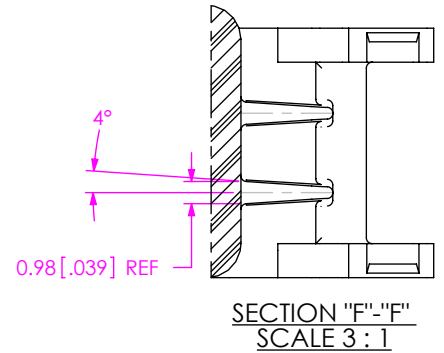


IN-PROCESS 8  
 PREMOLD  
 (REMOVE ITEM 12, VCOV-EPLSP-ORG, FOR MOLDING PROCESS THEN REPLACE)

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	<p>DO NOT SCALE DRAWING</p>	<p>DESCRIPTION:                  SEALED EPLSP CABLE ASSEMBLY</p>
	<p>SHEET SCALE: 1:1</p>	<p>DWG. NO.                  RCH-XXX-XXXX</p> <p>BY: D. SCHMELZ 07/15/2010 SHEET 6 OF 8</p>



IN-PROCESS 9  
OVERMOLD  
(REMOVE ITEM 12, VCOV-EPLSP-ORG,  
FOR OVERMOLDING PROCESS THEN REPLACE)



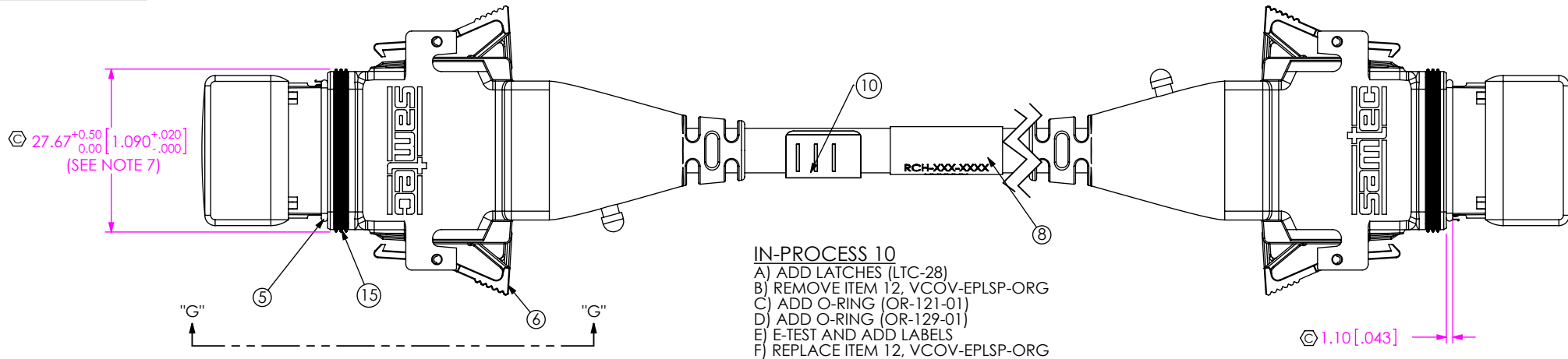
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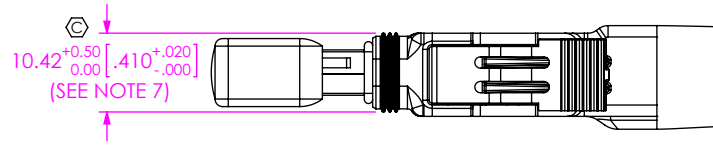
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SHEET SCALE: 1:1

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RCH-XXX-XXXX  
BY: D. SCHMELZ 07/15/2010 SHEET 7 OF 8



- IN-PROCESS 10  
 A) ADD LATCHES (LTC-28)  
 B) REMOVE ITEM 12, VCOV-EPLSP-ORG  
 C) ADD O-RING (OR-121-01)  
 D) ADD O-RING (OR-129-01)  
 E) E-TEST AND ADD LABELS  
 F) REPLACE ITEM 12, VCOV-EPLSP-ORG



SECTION "G"- "G"

TABLE 3 (PIN OUT)

END 1	SIGNAL	END 2		END 1	SIGNAL	END 2	
1	GND	1		20	GND	20	
2	SIGNAL	2	PAIR	21	SIGNAL	21	PAIR
3	SIGNAL	3	PAIR	22	SIGNAL	22	PAIR
4	GND	4		23	GND	23	
5	SIGNAL	5	PAIR	24	SIGNAL	24	PAIR
6	SIGNAL	6	PAIR	25	SIGNAL	25	PAIR
7	GND	7		26	GND	26	
8	SIGNAL	8	PAIR	27	SIGNAL	27	PAIR
9	SIGNAL	9	PAIR	28	SIGNAL	28	PAIR
10	GND	10		29	GND	29	
11	SIGNAL	11	PAIR	30	SIGNAL	30	PAIR
12	SIGNAL	12	PAIR	31	SIGNAL	31	PAIR
13	GND	13		32	GND	32	
14	SIGNAL	14	PAIR	33	SIGNAL	33	P
15	SIGNAL	15	PAIR	34	SIGNAL	34	P
16	GND	16		35	GND	35	
17	SIGNAL	17	P	36	SIGNAL	36	P
18	SIGNAL	18	P	37	N/C	37	
19	GND	19		38	GND	38	

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 SEALED EPLSP CABLE ASSEMBLY

DWG. NO.  
**RCH-XXX-XXXX**

SHEET SCALE: 1:1

BY: D. SCHMELZ 07/15/2010 SHEET 8 OF 8