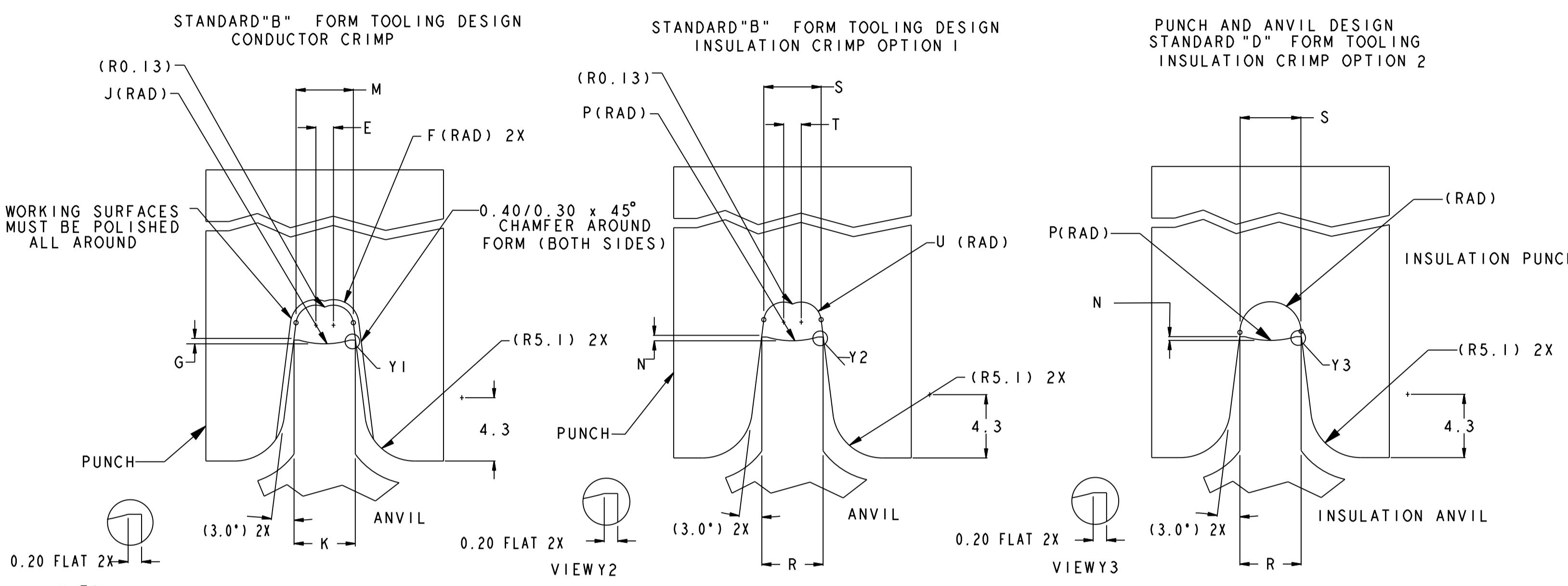
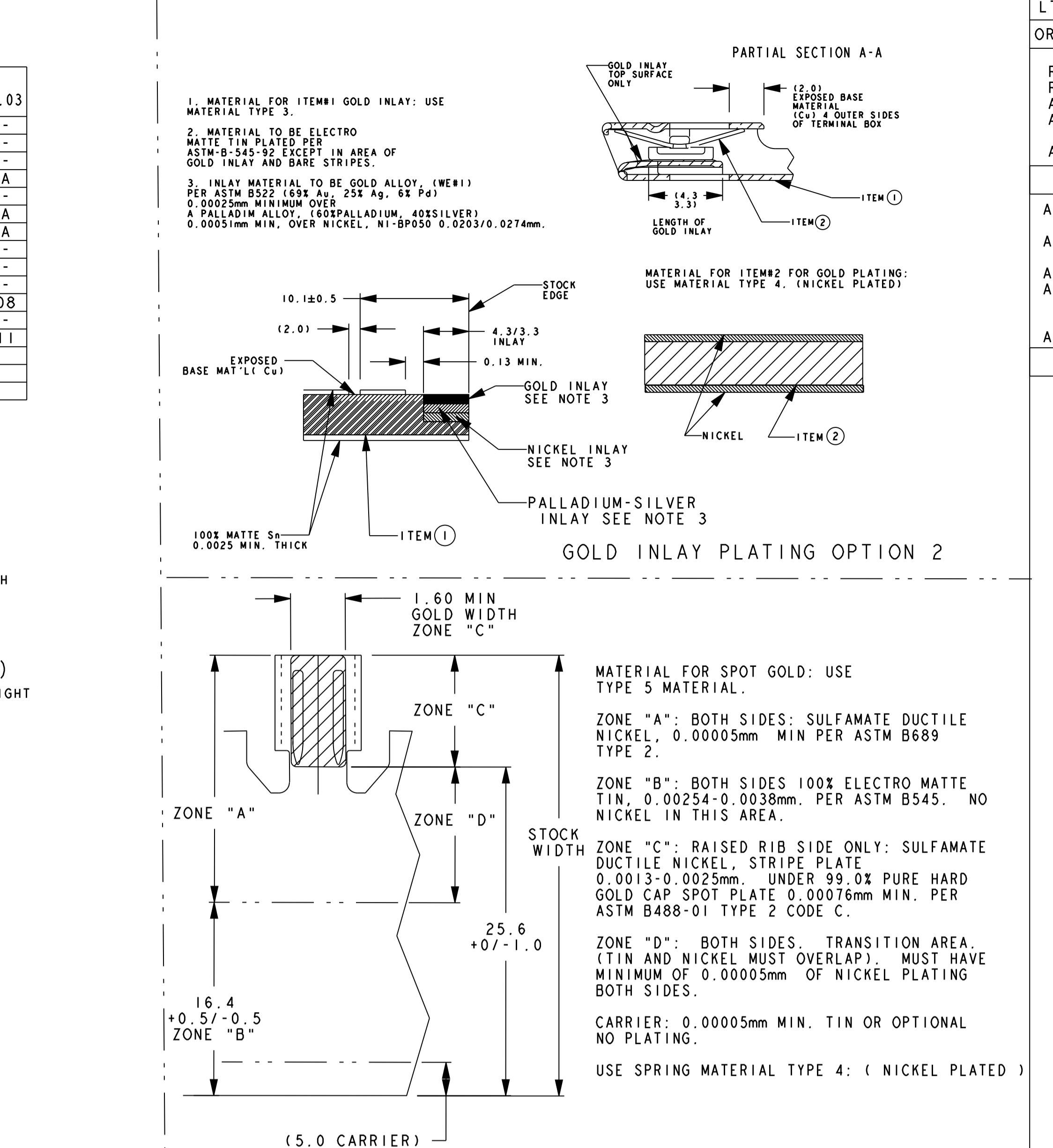
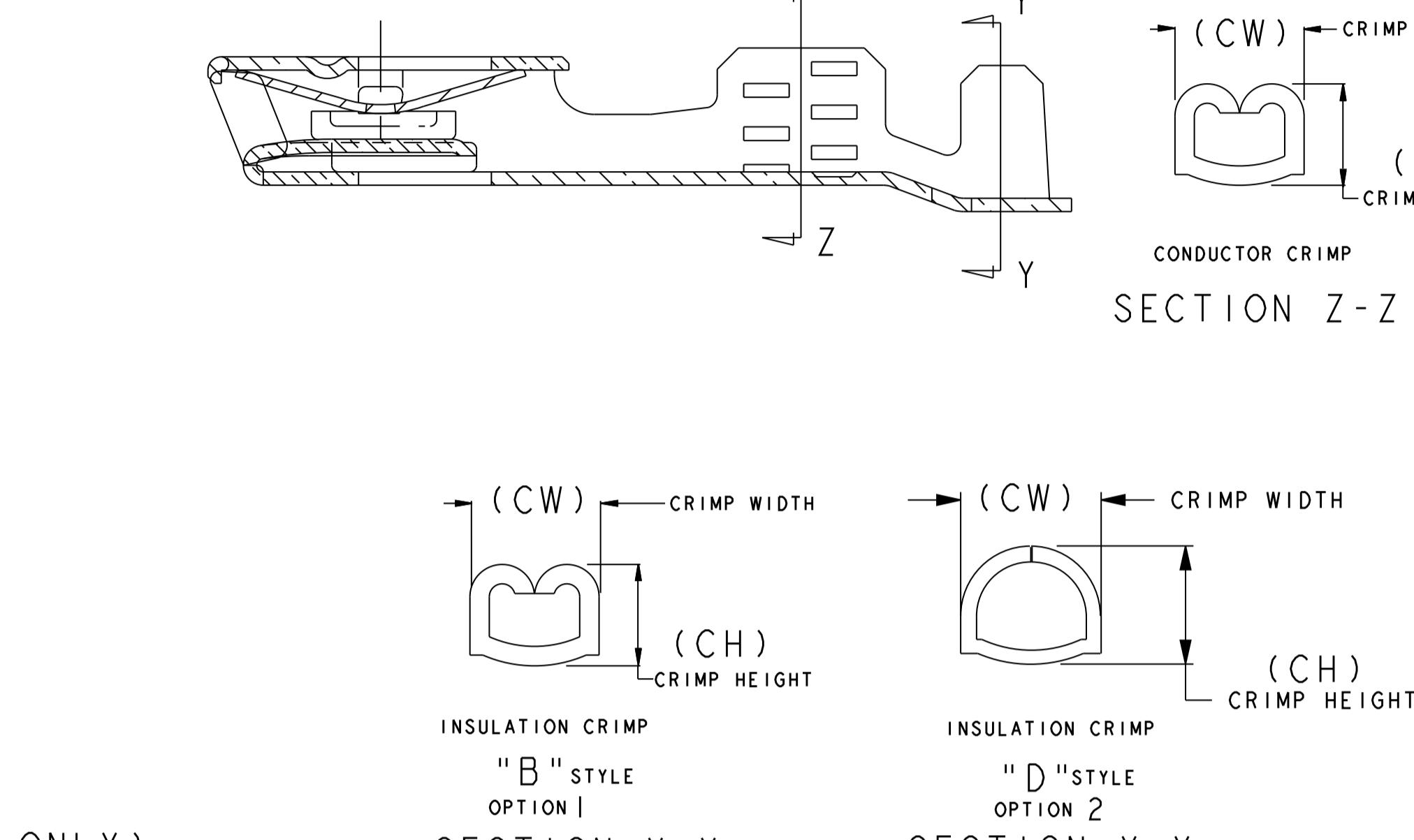


CABLE #	WIRE	WIRE	WIRE	CONDUCTOR	CONDUCTOR	CONDUCTOR	CONDUCTOR	INSULATION	INSULATION	INSULATION	INS
SEAL (CS)	SIZE	SPEC	SIZE	CRIMP	HEIGHT	CRIMP	HEIGHT	CRIMP	HEIGHT	CRIMP	FORM
UNSEAL	AWG	AWG	METRIC	AWG	(SECT Z-Z)	AWG	(SECT Z-Z)	AWG	(SECT Z-Z)	AWG	TYPE
US	22			0.35	1.10	1.10	1.85	1.75	1.65	2.60	
CS	18	0.75/1.00		1.30/1.40	1.20	1.25	2.05	3.85	2.00	3.30	1
US	20	0.50		1.30/1.40	1.20	1.25	2.05	2.20	2.15/2.30	2.60	3
US	16	0.75/1.00		1.30/1.40	1.20	1.25	2.05	2.20	2.00	3.30	3
CS	14	2.00/2.50		1.70	1.80/1.90	1.50	1.40	4.40	4.10*4/4.35*	4.10	1
CS	16	1.50		1.70	1.80/1.90	1.50	1.40	4.25	4.05*4/4.15*	4.10	3
US	14	2.00/2.50		1.70	1.80/1.90	1.50	1.40	2.70	3.00*3/3.10	3.20	1
US	16	1.50		1.70	1.80/1.90	1.50	1.40	2.60	2.55*2/2.65	3.20	1
US	21(18-20)	2(18-20)		VARIABLE	VARIABLE	3.05	VARIABLE	4.30	VARIABLE	4.30	OPTION 1
CS	12	3.00		1.95	1.95	3.45	4.80	4.40	4.30	3	OPTION 2
US	12	3.00		N/A	N/A	3.45	3.40	3.30	4.15	1	OPTION 2
CS	10	5.00/6.00		N/A	N/A	3.45	N/A	N/A	N/A	3	OPTION 1
CS	12	4.00		N/A	N/A	3.45	4.20	4.30	4.20	1	OPTION 1
US	12	5.00/6.00		4.00	2.05	3.45	4.20	4.30	4.20	1	OPTION 1
ES-B MILL 23-A	ES-AUST 1A348-AA										

\*NOT VERIFIED TO USCAR-21



CRIMP TOOL INFORMATION (REF. ONLY)



SPOT GOLD PLATING OPTION 3

NOT AVAILABLE AT THIS TIME

NOTES:

- 1) CONFORMS TO ALL APPLICABLE SECTIONS OF:  
SAE/USCAR-21 REV. 3 EXCEPT TERMINAL BEND RESISTANCE  
SECTION 5.2, 5.3  
SAE/USCAR-12 REV 2  
SAE/USCAR-21  
FORD SDA VER 11

2) MATERIALS

MATERIAL TYPE 1: C14530 CU TO ASTM B-152  
THICKNESS 0.305 ± 0.008  
TENSILE STRENGTH 372-442 MPa  
MINIMUM ELONGATION: 15% IN 5mm  
PLATING: 100% HOT TIN DIP, 0.0005-0.0025mm.

MATERIAL TYPE 2: C17410 BE CU TO ASTM B-768  
THICKNESS 0.203 ± 0.008  
TENSILE STRENGTH 758-897 MPa  
YIELD STRENGTH 655-862 MPa  
MINIMUM ELONGATION: 7% IN 5mm  
PLATING: 100% HOT TIN DIP : 0.0005-0.0025mm.

MATERIAL TYPE 3: C14520 CU TO ASTM B-152  
THICKNESS 0.305 ± 0.008  
TENSILE STRENGTH 324-394 MPa  
MINIMUM ELONGATION: 2.0% IN 5mm  
PLATING: SEE SPECIAL PLATING SECTION FOR INLAY GOLD.

MATERIAL TYPE 4: C17410 BE CU TO ASTM B-768  
THICKNESS 0.203 ± 0.008  
TENSILE STRENGTH 758-897 MPa  
YIELD STRENGTH 655-862 MPa  
MINIMUM ELONGATION: 7% IN 5mm  
PLATING: SULFAMATE DUCTILE NICKEL 0.0013-0.0025mm.  
TO ASTM B689 TYPE 2.

MATERIAL TYPE 5: C14530 CU TO ASTM B-152  
THICKNESS 0.305 ± 0.008  
TENSILE STRENGTH 372-442 MPa  
MINIMUM ELONGATION: 2.0% IN 5mm  
PLATING: SEE SPECIAL PLATING SECTION FOR SPOT GOLD.

3) THE APEX 2.80mm TERMINAL IS SYMMETRICAL  
ABOUT CENTERLINE AND CAN BE INSERTED 180°

4) DIMENSIONAL TOLERANCE:  
1 PLACE ±0.25  
2 PLACE ±0.10  
ANGULAR ±3°

5) DRAWING CONFORMS TO AVP - ( T401/T406)-001

6) SEE USCAR DRAWING EWCAP-001 FOR DIRECT CONNECT MATING  
BLADE INFORMATION

7) ANNUAL QUALITY REQUIREMENTS:  
FCI SPECIFICATION #A04-001; INSTEAD OF ANNUAL LAYOUT &  
ANNUAL PV REQUIREMENTS, Q5-3000 SECTION 4.1  
IT IS PERMISSIBLE TO PERFORM CONTINUOUS CONFORMANCE PER

8) VENDOR, TOOL, GRIP & WEEK CODES MUST BE PRESENT & LEGIBLE

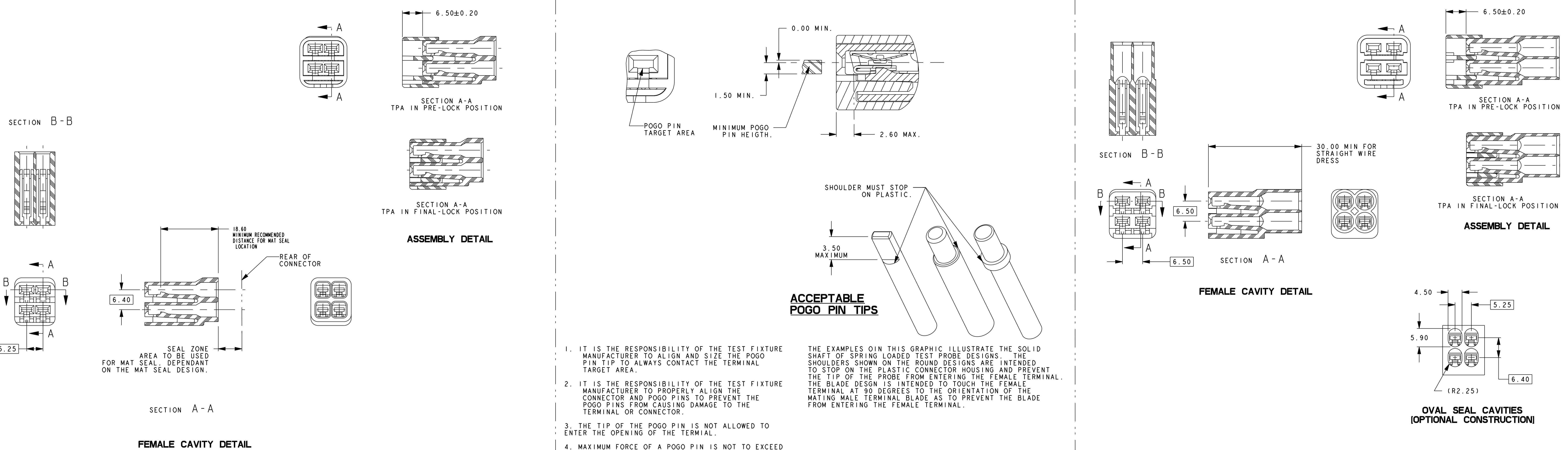
9) "SC" DESIGNATES SPC DIMENSION (2)  
(K1) 10 "K" INDICATES IN PROCESS INSPECTION FOR DIMENSIONS OR  
SPECIFICATIONS (3)

II) CAVITY SPECIFICATIONS, SEE SHEET # 2

REVISIONS			
ORIGINATOR	CHECKER	ENG APP	MATL APP
REVISED AND REDRAWN AFTER INTERNAL REVISION AD			
AC2 ADDED METRIC EQUIVALENT WIRE CODES			
AC2 REMOVED CRIMP INFORMATION AND VIEWS			
AELE-E-11786306-131			
B CUE RJC			
AD1 REVISED SHEET TWO, ADDED POGO PIN INFORMATION, NOTES, VIEWS.			
AD2 REVISED UN-SEALED VIEWS, ADDED 18.60 DIM.			
AD3 UPDATED SHEET 1 TO SDS STANDARDS.			
AD4 RELEASED P/N BUST-14474-HAA, JAA, KAA LA, MA, NAA			
AELE-E-11786306-159			
B CUE RJC			

FORD PART NO.	FCI PART NO.	METRIC WIRE	AWG	STAMP	PLATING	CABLE/UN SEALED CS/US	GREASED	A/+/-0.30	B/+/-0.30	(C1)	C2/+/-0.30	(D1)	D2/+/-0.30	L/+/-0.10	V/+0.5	W/+0.3	±0.30	GRIP STAMP
XF2T-14474-CA	54002231	0.35	22	22	TIN	US	NO	2.6	3.2	0.76	1.7	1.40	2.10	0.00	19.0	7.5	22	
BUST-14474-HAA	F067210	0.35	22	22	TIN	US	YES 2											
9U5T-14474-KA	54001879	0.50,0.75	18,20	18	GOLD INLAY	CS	NO											
AUST-14474-CAA	F703600	0.50,0.75	18,20	18	TIN	CS	YES 2	3.0	5.1	1.00	1.9	3.00	3.70	0.60	19.5	8.0	18	
XL3T-14474-DA	54001840	0.50,0.75	18,20	18	GOLD	CS	NO											
AUST-14474-ZA	F703500	0.50,0.75	18,20	18	GOLD	CS	NO											
AUST-14474-XA	F903500	0.50,0.75	18,20	18	GOLD	US	NO											
BUST-14474-GA	54001876	0.50,0.75	18,20	18	GOLD INLAY	US	NO											
FVB-B-14474-BA	54001839	0.50,0.75	18,20	18	TIN	US	NO	3.0	3.8	1.00	1.9	1.75	2.70	0.00	19.0	7.5	18	
BUST-14474-JAA	F167210	0.50,0.75	18,20	18	TIN	US	YES 2											
YF1T-14474-KAA	F013500	0.50,0.75	18,20	18	TIN	US	NO											
BUST-14474-KAA	F267210	0.35/1.00	18/20	18	TIN	US	YES 2	4.60	6.6	1.50	3.7	2.55	6.00	0.60	19.0	7.5	13	
9U5T-14474-JA	54001448	1.50/2.50	14,16	14	GOLD INLAY	CS	NO											
4L3T-14474-AA	54001439	1.50/2.50	14,16	14	TIN													

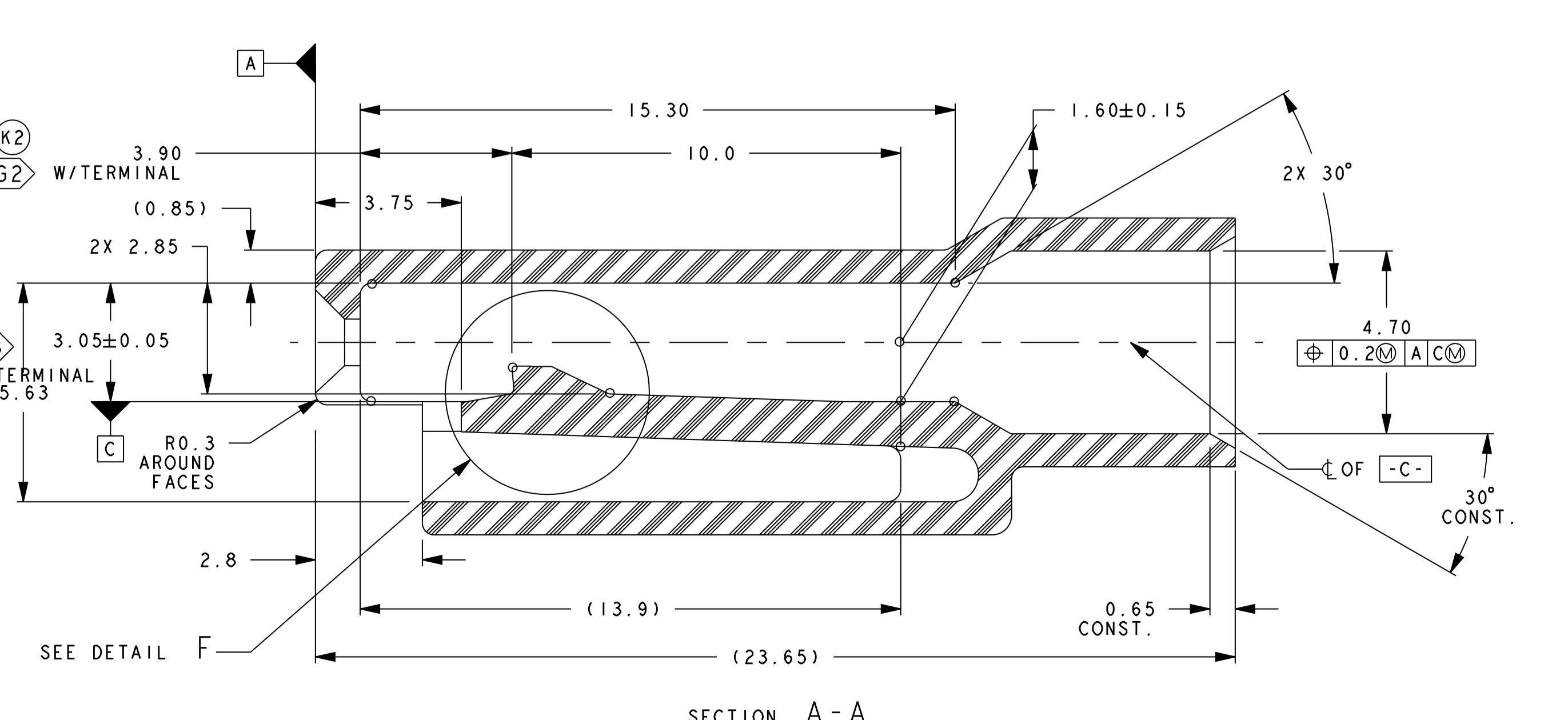
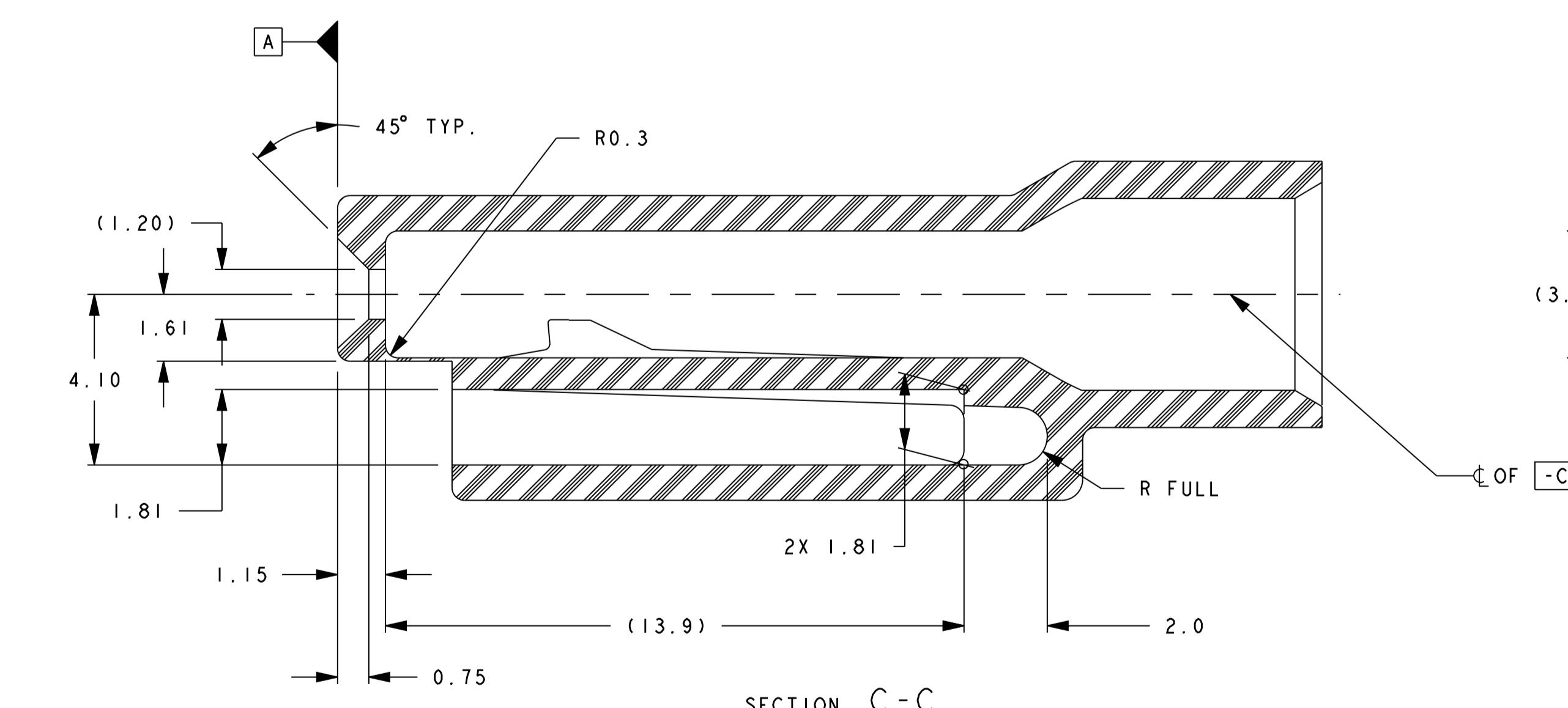
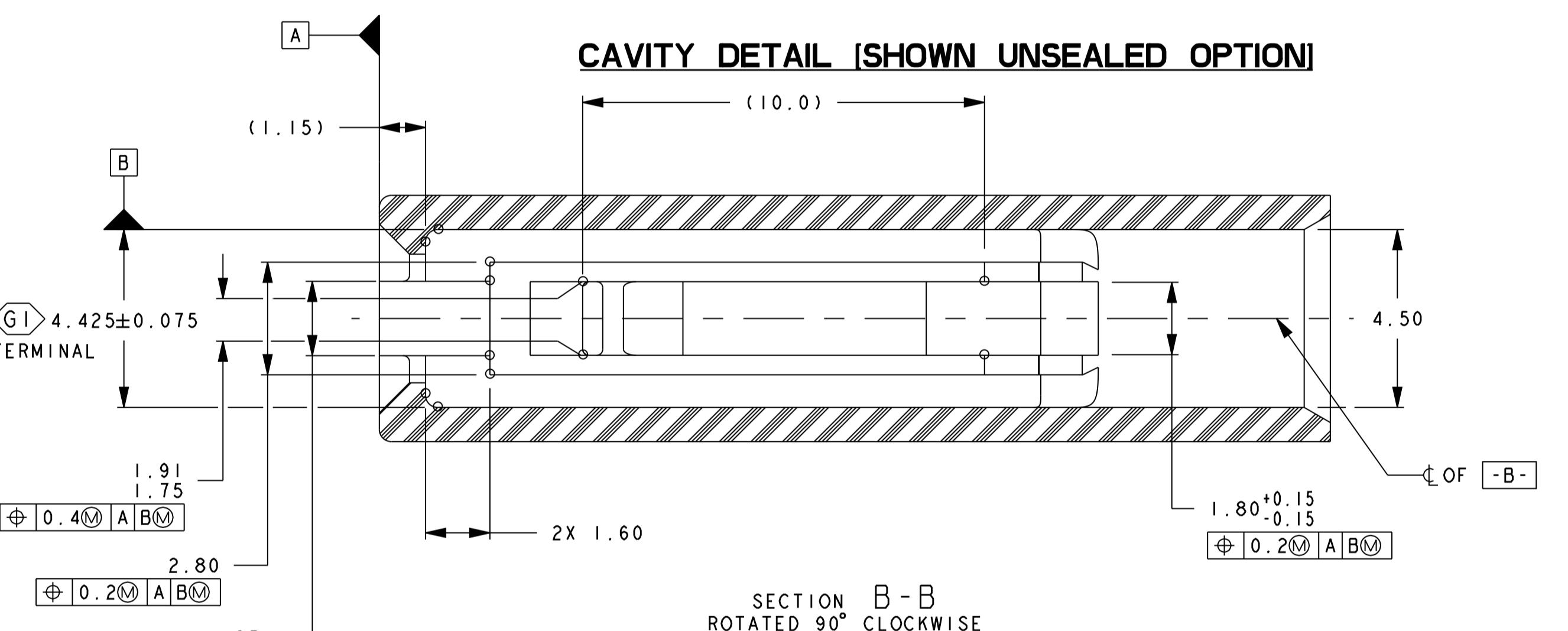
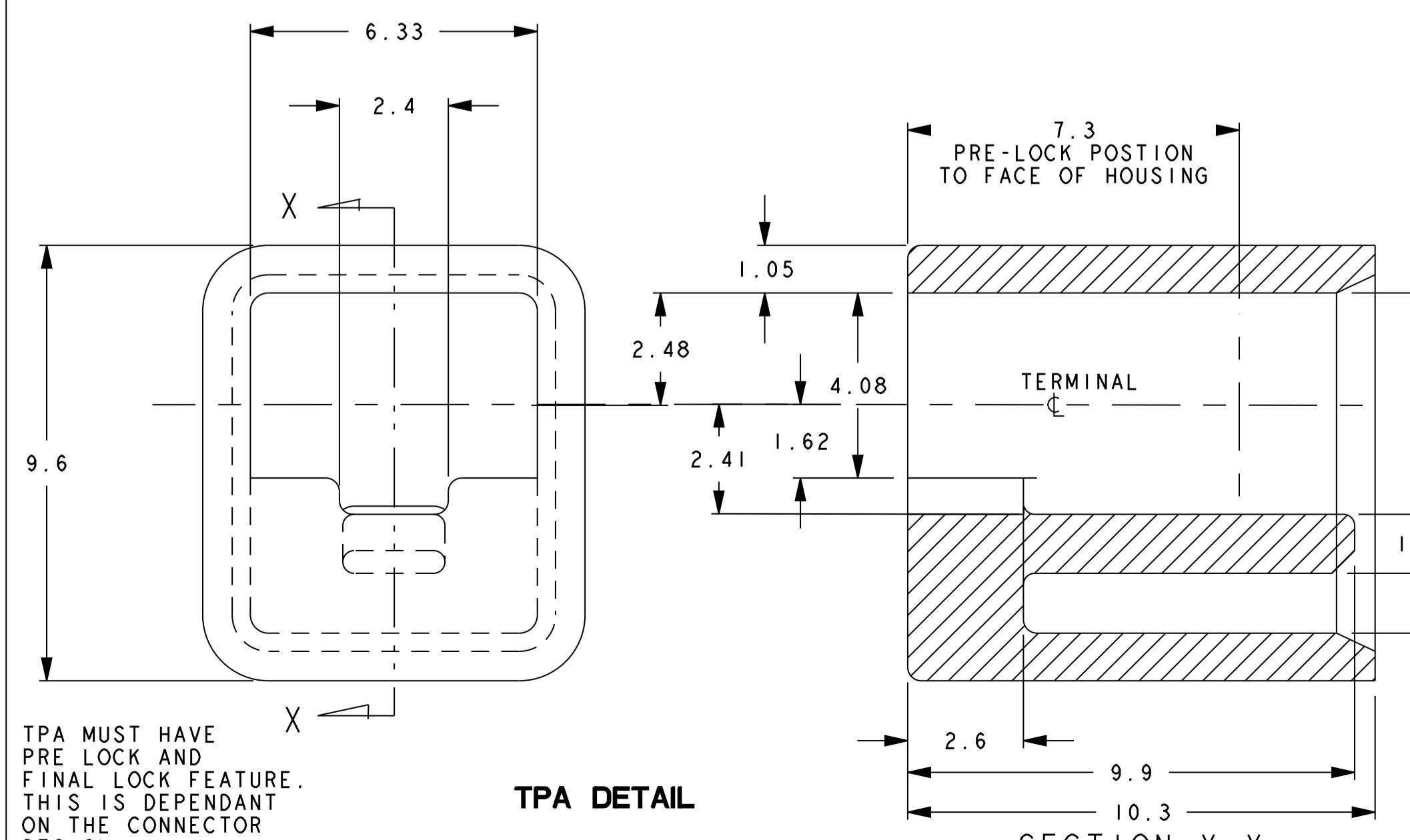
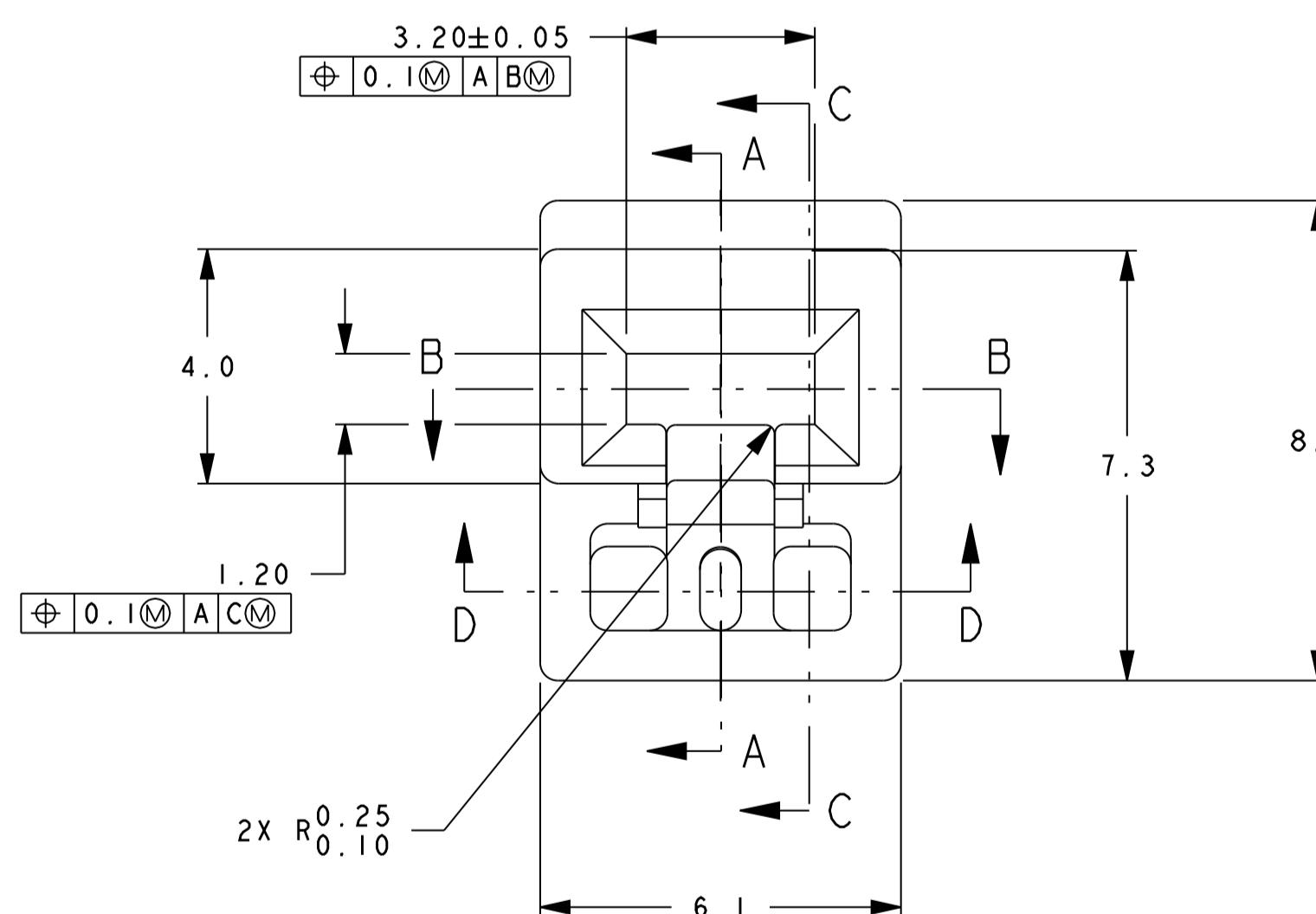
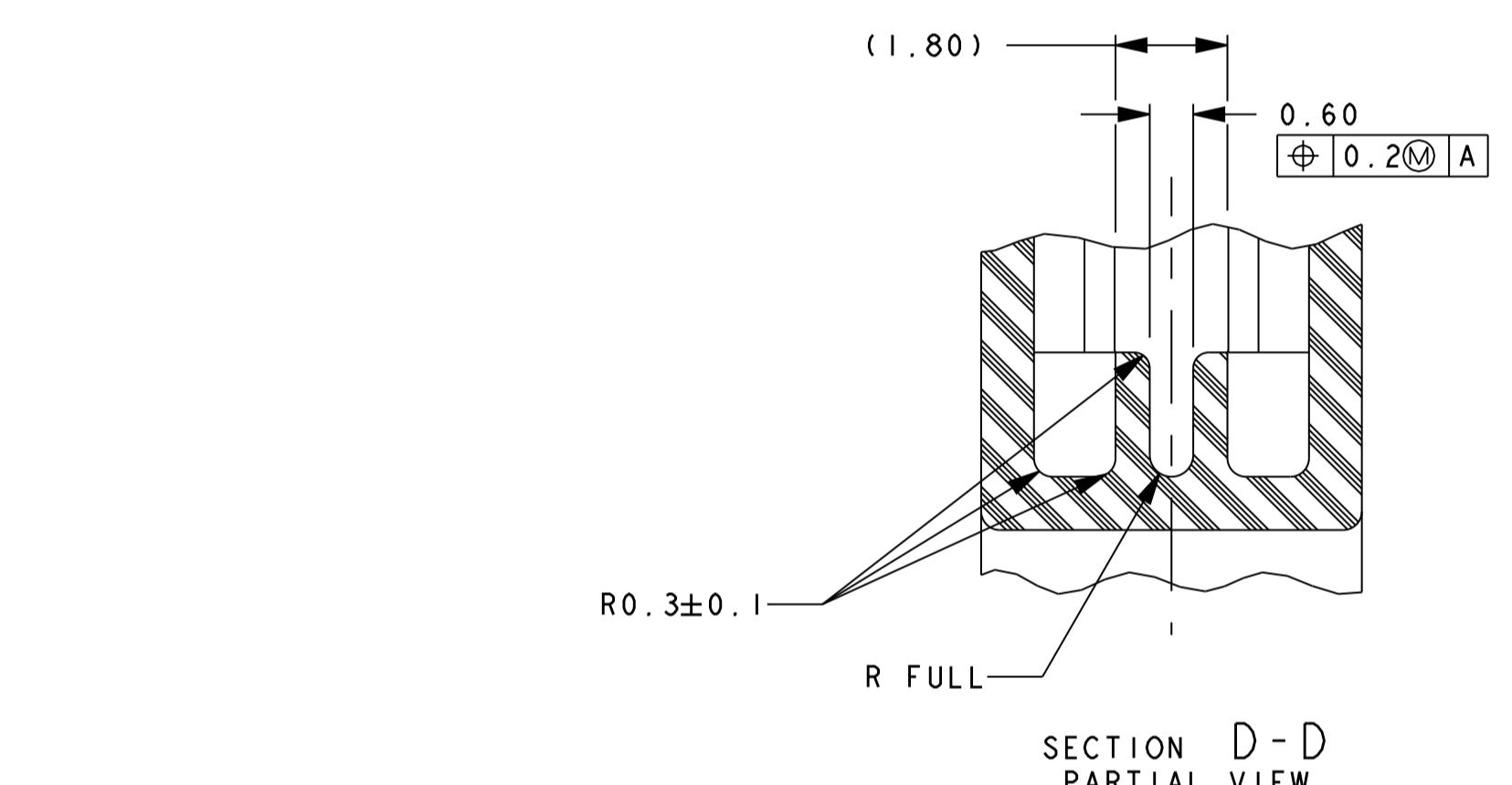
LTRS		REVISIONS	
ORIGINATOR	CHECKER	ENG APP	MATL APP
SEE SHEET 1 DATE: 2010928 AELE-E-11786306-131	B CUE	RJC	
SEE SHEET 1 DATE: 20110718 AELE-E-11786306-159	B CUE	RJC	



LTRS		REVISIONS	
ORIGINATOR	CHECKER	ENG APP	MATL APP
SEE SHEET 1 DATE: 2010928 AELE-E-11786306-131	B CUE	RJC	
SEE SHEET 1 DATE: 20110718 AELE-E-11786306-159	B CUE	RJC	

FEMALE CAVITY DETAIL

## UN-SEALED OPTION



## POGO PIN DESIGN CRITERIA

## 1. IT IS THE RESPONSIBILITY OF THE TEST FIXTURE MANUFACTURER TO ALIGN AND SIZE THE POGO PIN TIP TO ALWAYS CONTACT THE TERMINAL TARGET AREA.

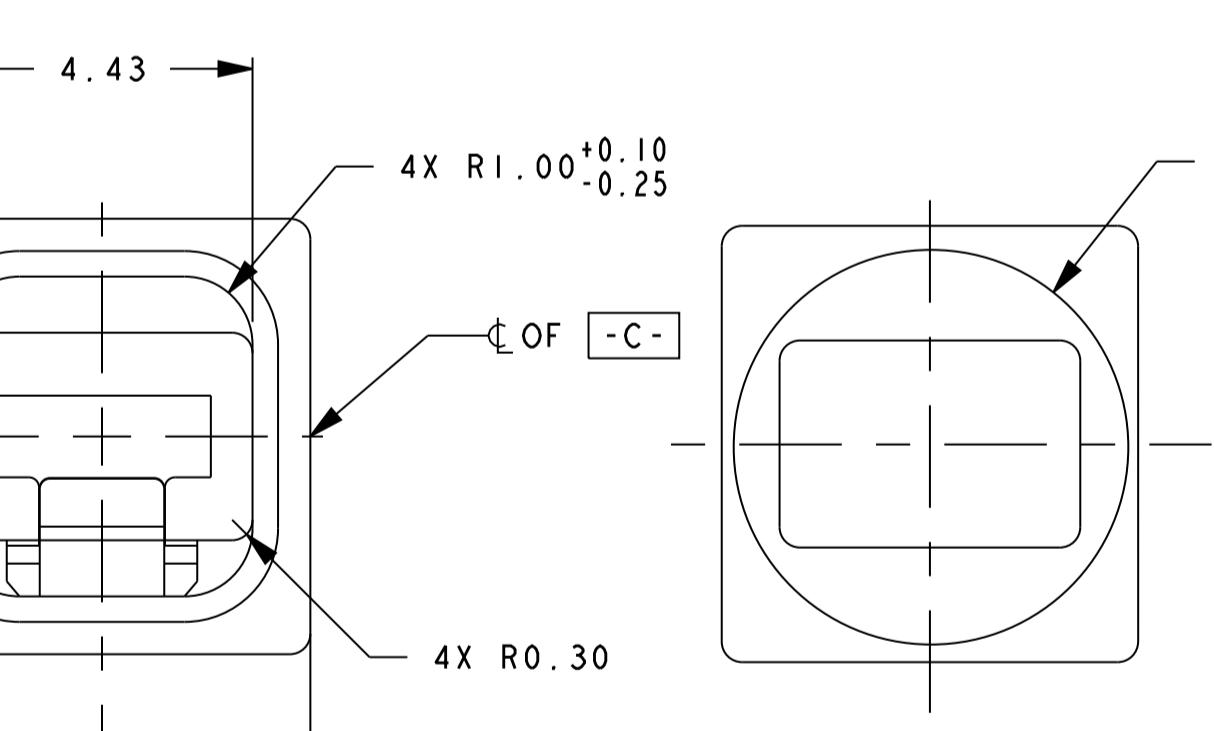
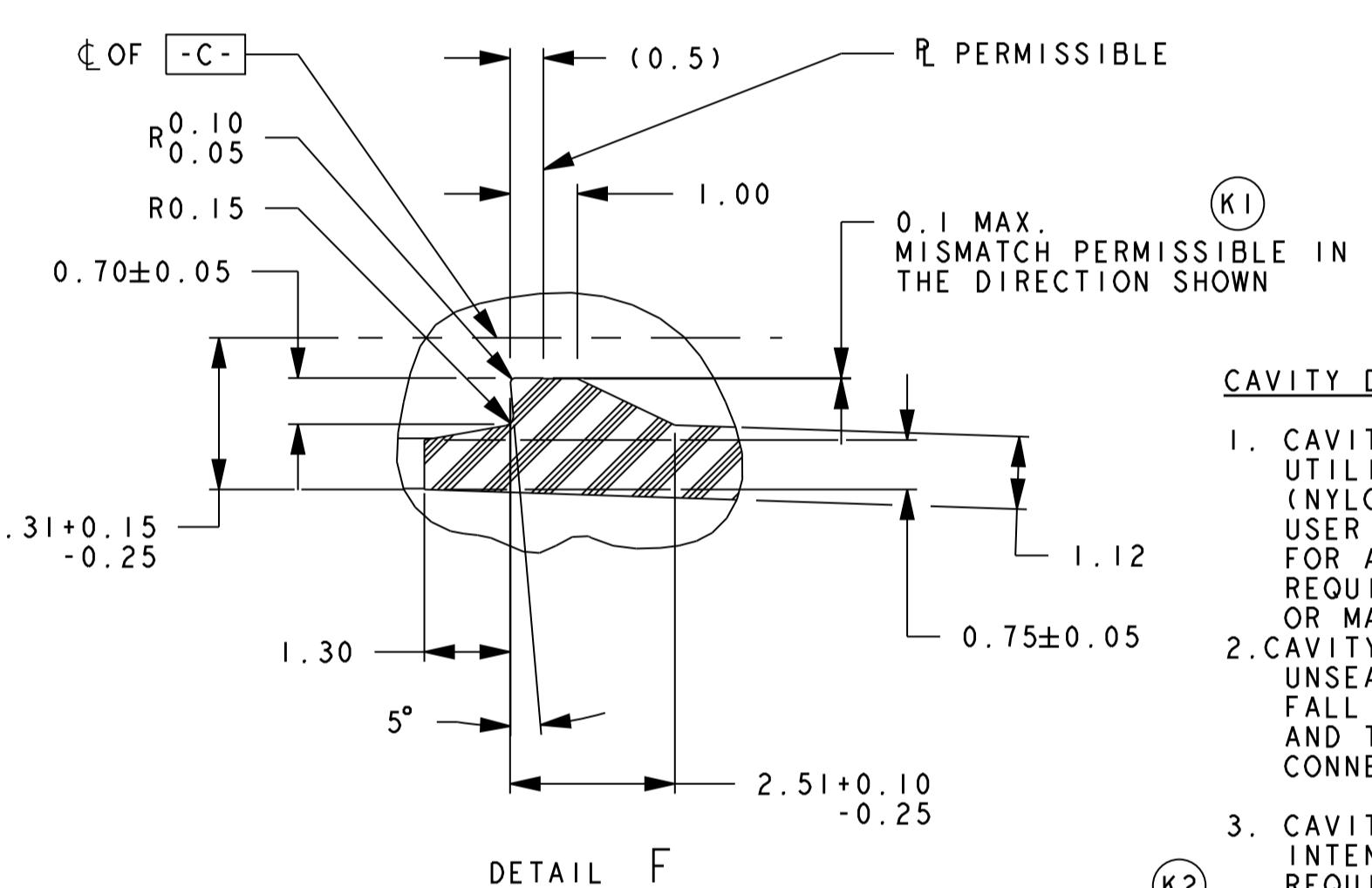
2. IT IS THE RESPONSIBILITY OF THE TEST FIXTURE MANUFACTURER TO PROPERLY ALIGN THE CAVITY DESIGNERS TO PREVENT THE POGO PINS FROM CAUSING DAMAGE TO THE TERMINAL OR CONNECTOR.

## 3. THE TIP OF THE POGO PIN IS NOT ALLOWED TO ENTER THE OPENING OF THE TERMINAL.

## 4. MAXIMUM FORCE OF A POGO PIN IS NOT TO EXCEED 3.0 NEWTONS WHEN CONTACTING ANY PORTION OF THE CONNECTOR SYSTEM.

THE EXAMPLES IN THIS GRAPHIC ILLUSTRATE THE SOLID SHAFT OR SPRING LOADED TEST PROBE DESIGNS. THE SHOULDERS ON THE PROBE DESIGN ARE INTENDED TO STOP ON THE PLASTIC CONNECTOR HOUSING AND PREVENT THE TIP OF THE PROBE FROM ENTERING THE FEMALE TERMINAL. THE BLADE DESIGN IS INTENDED TO TOUCH THE FEMALE TERMINAL AT 90 DEGREES TO THE ORIENTATION OF THE MATING MALE TERMINAL BLADE AS TO PREVENT THE BLADE FROM ENTERING THE FEMALE TERMINAL.

## CABLE SEAL OPTIONS



## NOTES:

I. BY USING ANY INFORMATION CONTAINED IN THIS DRAWING (FCI AUTOMOTIVE), THE USER AGREES TO THE FOLLOWING:

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E. ANY PROPOSED TERMINAL /CONNECTOR COMBINATION MUST BE TESTED AND VALIDATED FOR FUNCTION PROPER TO IMPLEMENTATION IN A HARNESS DESIGN. THE OEM SHALL DEFINE RESPONSIBILITY FOR TERMINAL/CONNECTOR VALIDATION.

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J. ANY USE OF THE INFORMATION SHOWN ON THE DRAWING REQUIRES THE PRIOR WRITTEN CONSENT OF FCI AUTOMOTIVE OR FORD MOTOR COMPANY.

REFERENCE	FCI - AUTOMOTIVE (7362)
FOR INFORMATION CONTACT:	FCI - AUTOMOTIVE (7362)
PART MUST COMPLY WITH MATERIAL SPECIFICATION WSS-M99P9999-A1	TO HELP SAFEGUARD HEALTH, SAFETY AND THE ENVIRONMENT.
DRAFTED IN ACCORDANCE WITH FAO	3RD ANGLE PROJ
ENGINEERING DRAFTING STANDARD	DIMENSIONS IN
CURRENT AT INITIAL RELEASE	MM
CAD TYPE	CAD LOC. CAD FILE
X-PROE	N/A
OPER. NO.	UNIT
DRAWING	F8VB-14474-AA
DESIGN	DETAIL
VB	TL
CHECKED	Safety
SSS	OF 2
SCALE	6:1
DATE	20070707
PLANT	Division
DRW SIZE	A4

