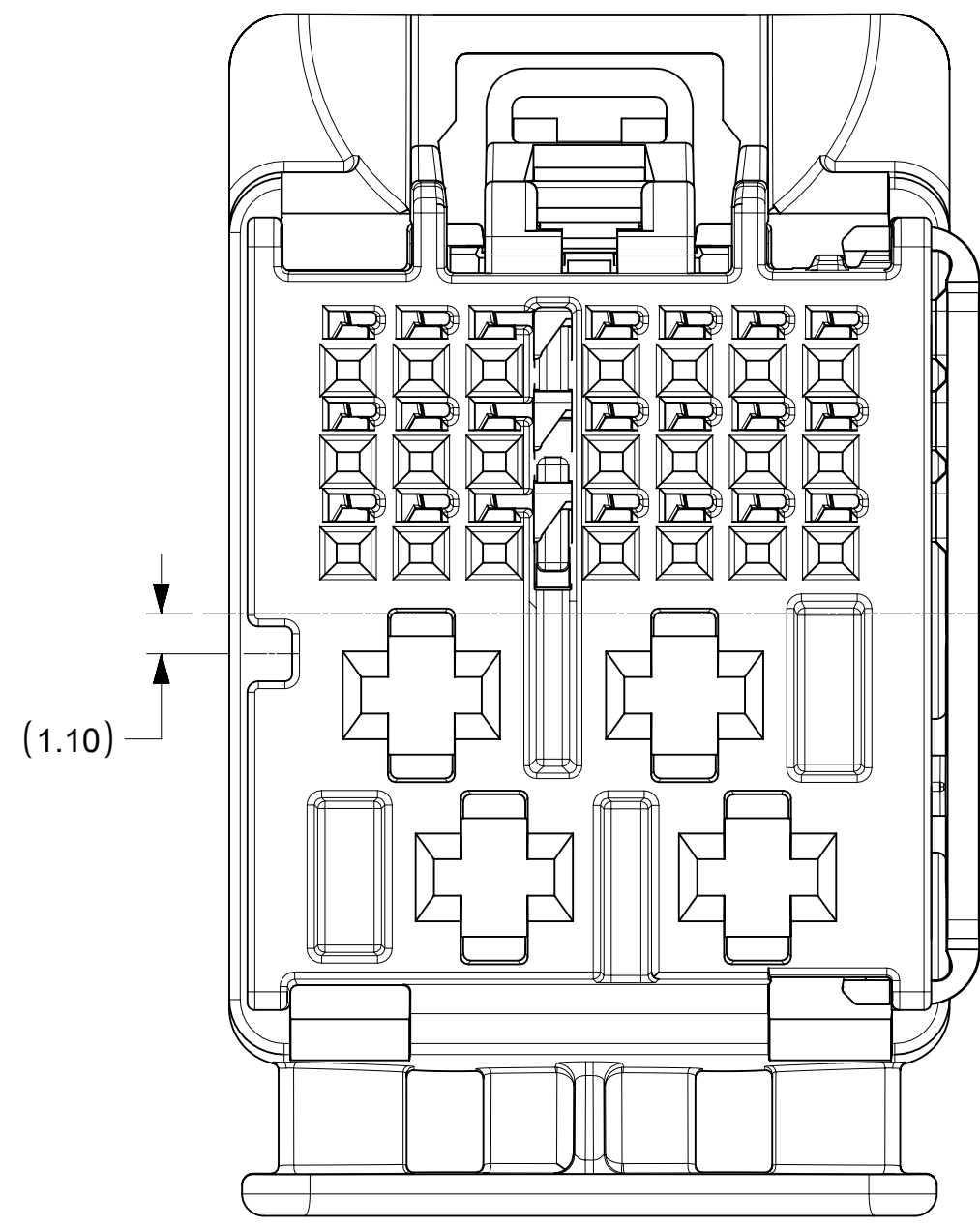
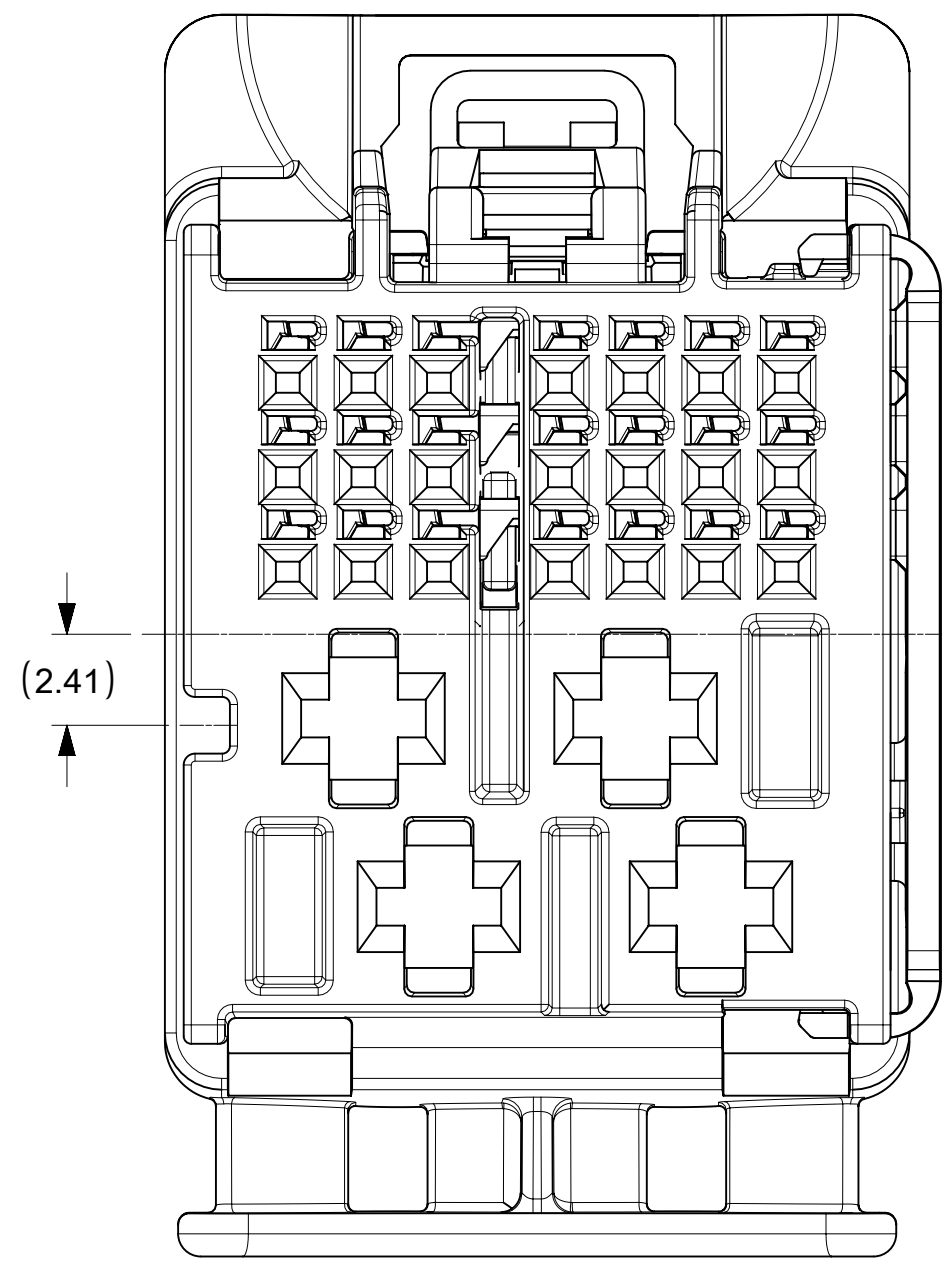


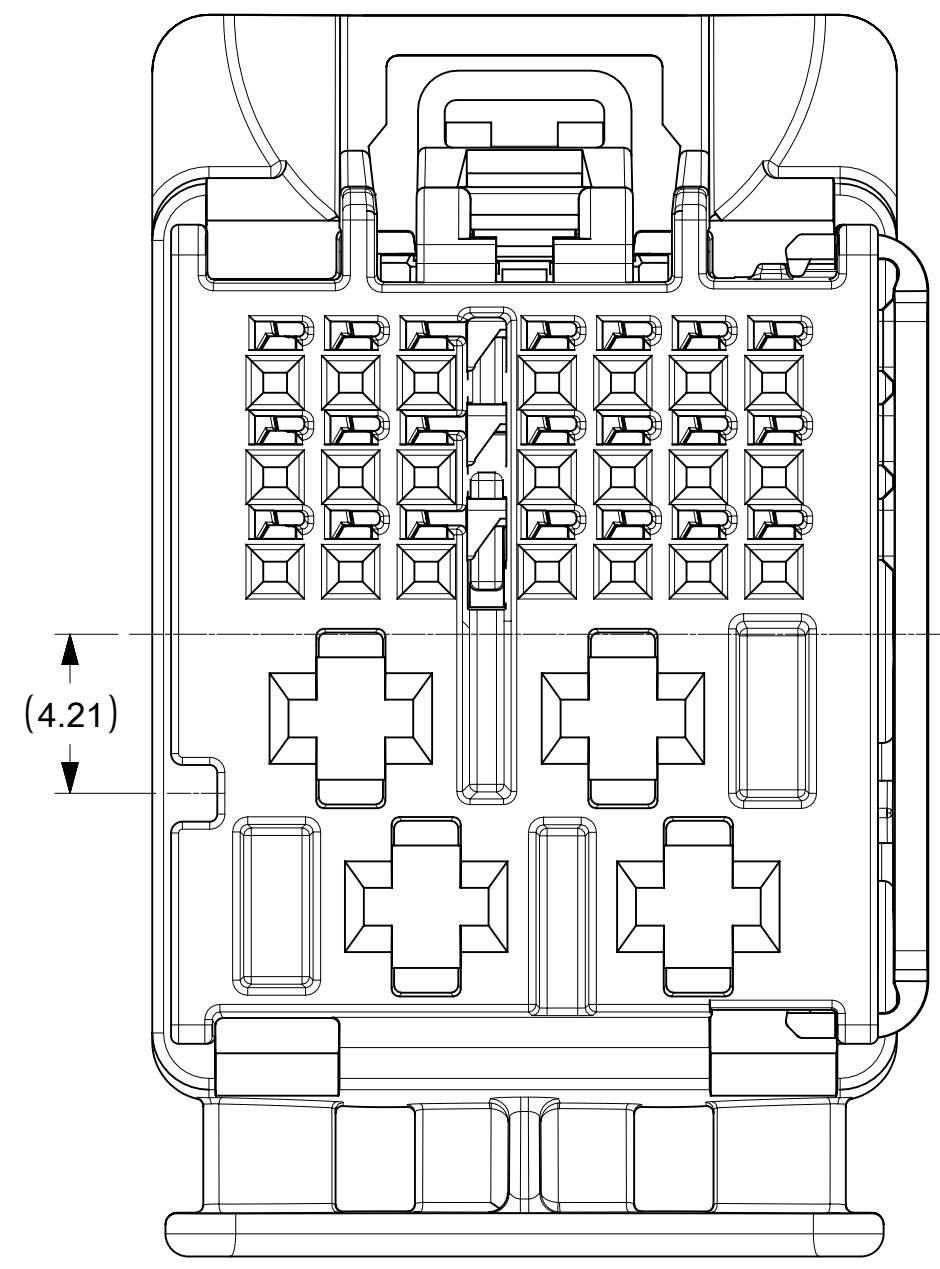
25 WAY CONNECTOR ASSEMBLY  
KEY 1 & KEY 5



25 WAY CONNECTOR ASSEMBLY  
KEY 2 & KEY 6



25 WAY CONNECTOR ASSEMBLY  
KEY 3 & KEY 7



25 WAY CONNECTOR ASSEMBLY  
KEY 4 & KEY 8

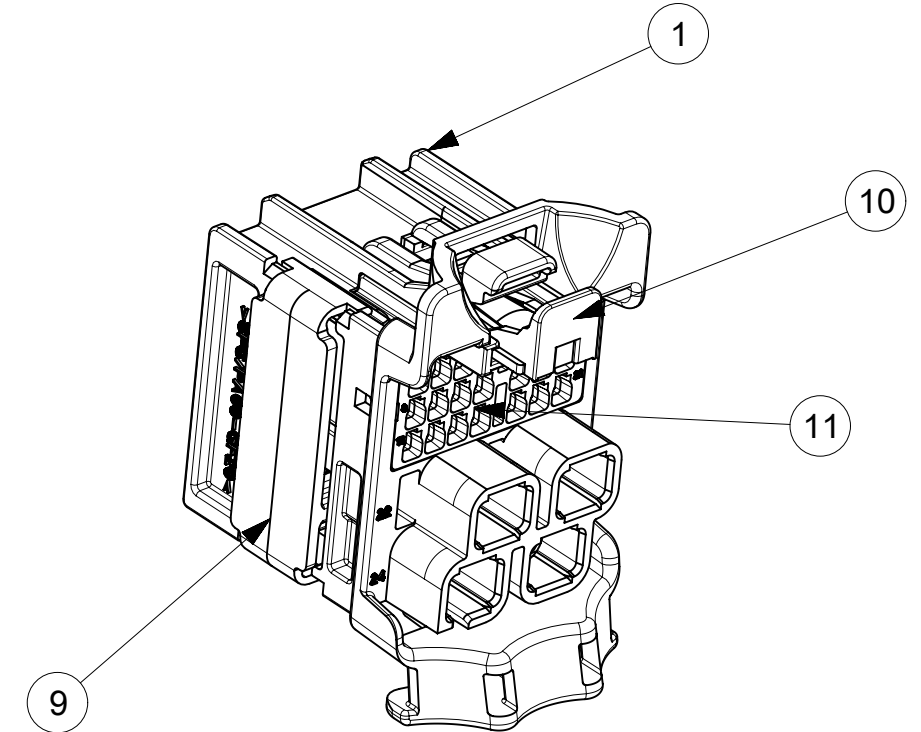
NOTES: VALID UNLESS OTHERWISE SPECIFIED

1. GENERAL:
  - a. APPLICATION SPECIFICATION SEE: AS-160014-001
  - b. PRODUCT SPECIFICATION SEE: PS-160014-001
  - c. PACKAGING SPECIFICATION PER MOLEX DRAWING: PK-31302-266
  - d. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: ES-40000-5016
  - e. DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS (COMPANY ID#13255)
2. DESIGN - MATERIALS:
  - a. SEE BOM TABLE
3. DESIGN - GEOMETRY:
  - a. ALL GRAPHIC DATA IS BASIC (NO TOLERANCE) AND MUST BE TAKEN FROM THE DATA FILE AT ITS LATEST REVISION.
  - b. PRODUCT DESIGN MODEL NUMBER(S): SEE BOM TABLE
  - c. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5-2009
  - d. EDGES AND UNDIMENSIONED DETAILS PER ISO13715
  - e. CORNERS SHOWN AS SHARP TO BE R 0.2 MAX.
  - f. MARKED TEXT TO INCLUDE RECYCLING CODE, CAVITY ID, VENDOR IDENTIFICATION AND CUSTOMER MATERIAL NUMBER.
    1. LASER ETCHED DATE CODE
      - 1ST THROUGH 2ND DIGIT = CALENDAR YEAR
      - 3RD THROUGH 5TH DIGIT = "DAY #" OF YEAR
      - 6TH THROUGH 7TH DIGIT = HOUR OF DAY
      - 8TH THROUGH 9TH DIGIT = MINUTE OF HOUR
      - 10TH THROUGH 11TH DIGIT = SECOND OF MINUTE
4. DESIGN - MANUFACTURING:
  - a. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B)

PART NUMBER	PLATING	SUPPLIER	WIRE GAGE (mm2)	TERMINAL FAMILY	WIRE SPECIFICATION
200096-3101	TIN PLATING	MOLEX	0.35	TAK FAMILY (0.5 mm)	VW 60306 OR GMW 15626 (SEE APPLICATION SPECIFICATION FOR MORE DETAILS)
200096-3201	TIN PLATING	MOLEX	0.13	TAK FAMILY (0.5 mm)	
2272196-2	TIN PLATING	TE	0.35	Generation 50 Locking Lance (0.5mm)	SAE/ J1128 THIN WALL INSULATION
2272196-1	TIN PLATING	TE	0.13	Generation 50 Locking Lance (0.5mm)	
1-968851-1	TIN PLATING	TE	1.0 - 2.5	AMP MCP 2.8	GMW 15626 INSULATION TYPE FLR (REGULAR THIN WALL)
1-968849-1	TIN PLATING	TE	0.5 - 1.0	AMP MCP 2.8	
15457849	TIN PLATING	DELPHI	1.5 - 2.5	CTS 2.8mm	
15457848	TIN PLATING	DELPHI	0.5 - 1.0	CTS 2.8mm	

ITEM	DESCRIPTION	COLOR	RECYCLING CODE	WEIGHT (GRAMS)	RIB OPTION	NO OF ITEMS REQUIRED															
1	OUTER SHROUD - KEY 1	LIGHT GREEN B	SPS/PA66-GF20	4.1	A	1															
2	OUTER SHROUD - KEY 2	STONE GRAY	SPS/PA66-GF20	4.1	A		1														
3	OUTER SHROUD - KEY 3	BLACK	SPS/PA66-GF20	4.1	A			1													
4	OUTER SHROUD - KEY 4	DARK GRAY	SPS/PA66-GF20	4.1	A				1												
5	OUTER SHROUD - KEY 5	DK PURPLE A	SPS/PA66-GF20	4.1	B					1											
6	OUTER SHROUD - KEY 6	TBD	SPS/PA66-GF20	4.1	B						1										
7	OUTER SHROUD - KEY 7	TBD	SPS/PA66-GF20	4.1	B							1									
8	OUTER SHROUD - KEY 8	LT GRAY	SPS/PA66-GF20	4.1	B								1								
9	ISL	NATURAL	SPS-GF30	0.37	N/A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	CPA	NATURAL	PA66-GF50	0.08	N/A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	INNER HOUSING	STONE GRAY	SPS/PA66-GF20	1.04	N/A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	INNER HOUSING	STONE GRAY	SPS/PA66-GF20	1.04	N/A							1	1	1	1	1	1	1	1	1	1

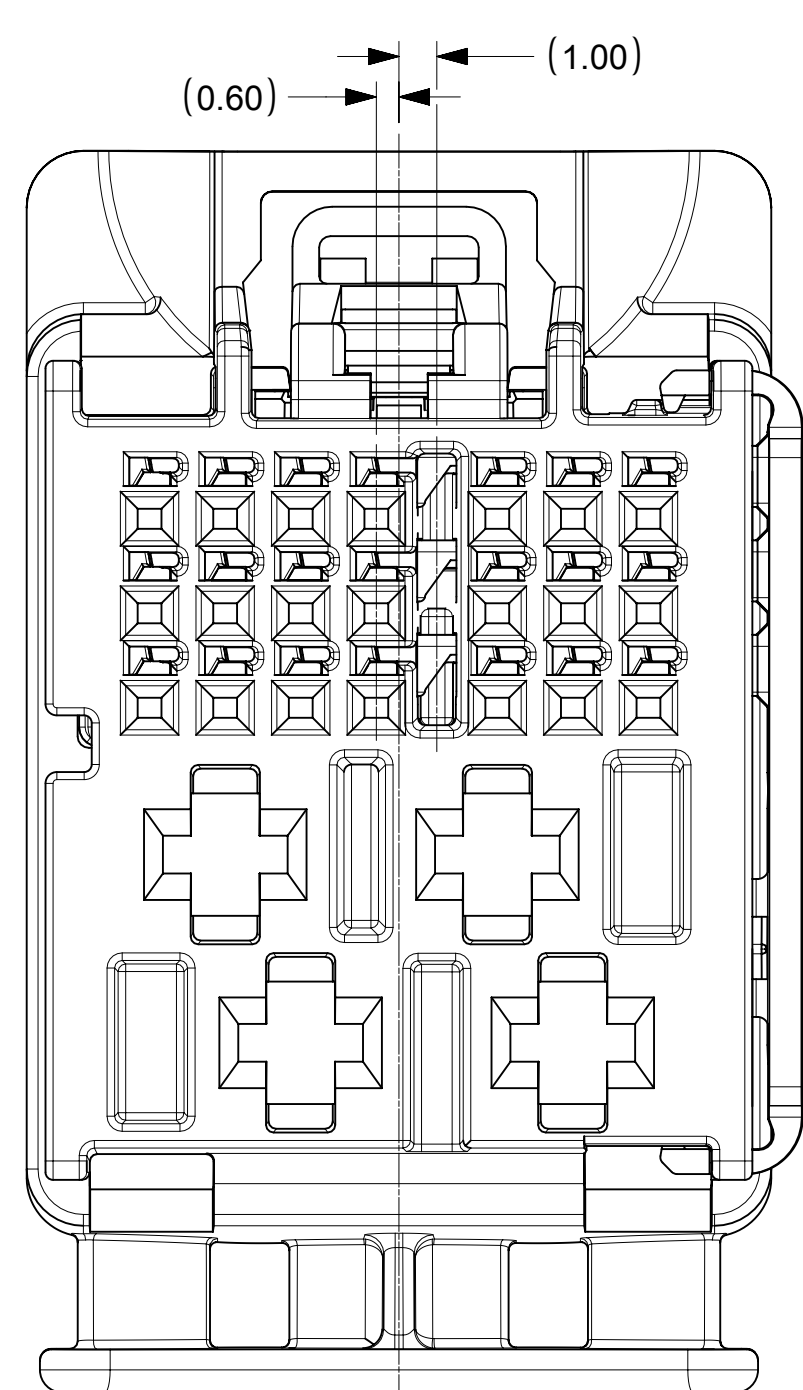
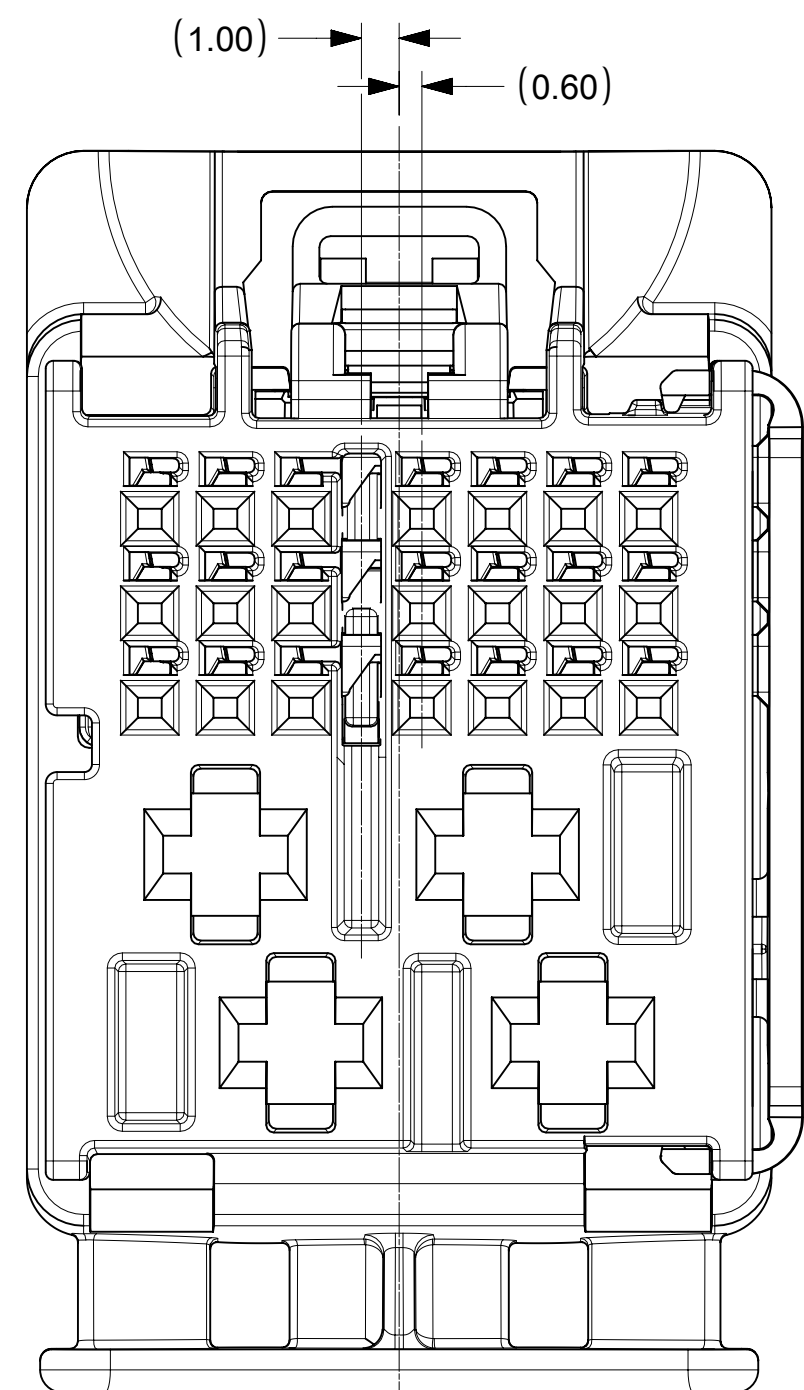
MOLEX ASSEMBLY PART NO.'S	
1600270011	KEY 1
1600270012	KEY 2
1600270013	KEY 3
1600270014	KEY 4
1600270015	KEY 5
1600270016	KEY 6
1600270017	KEY 7
1600270018	KEY 8



SCALE 2:1

RIB OPTION A

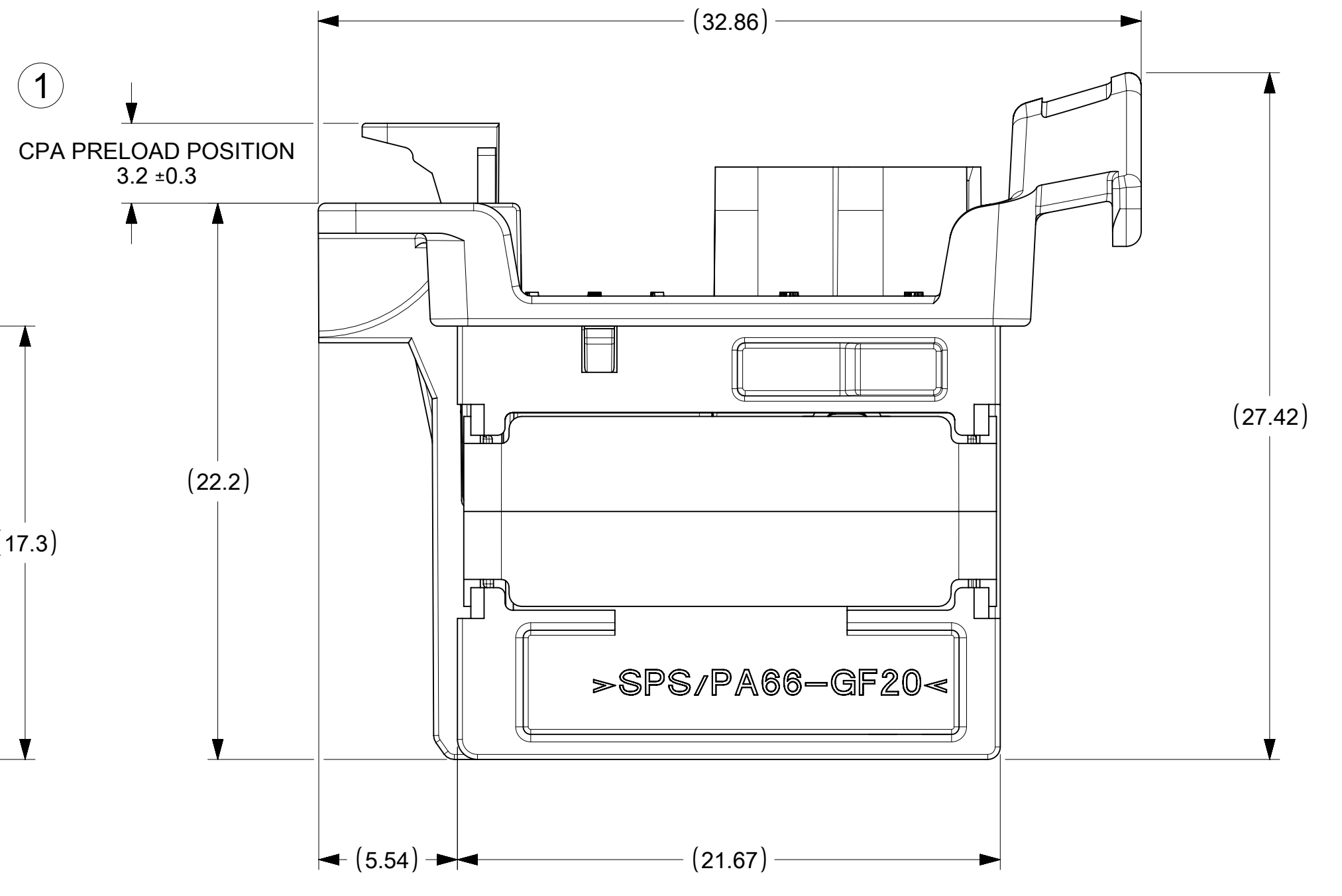
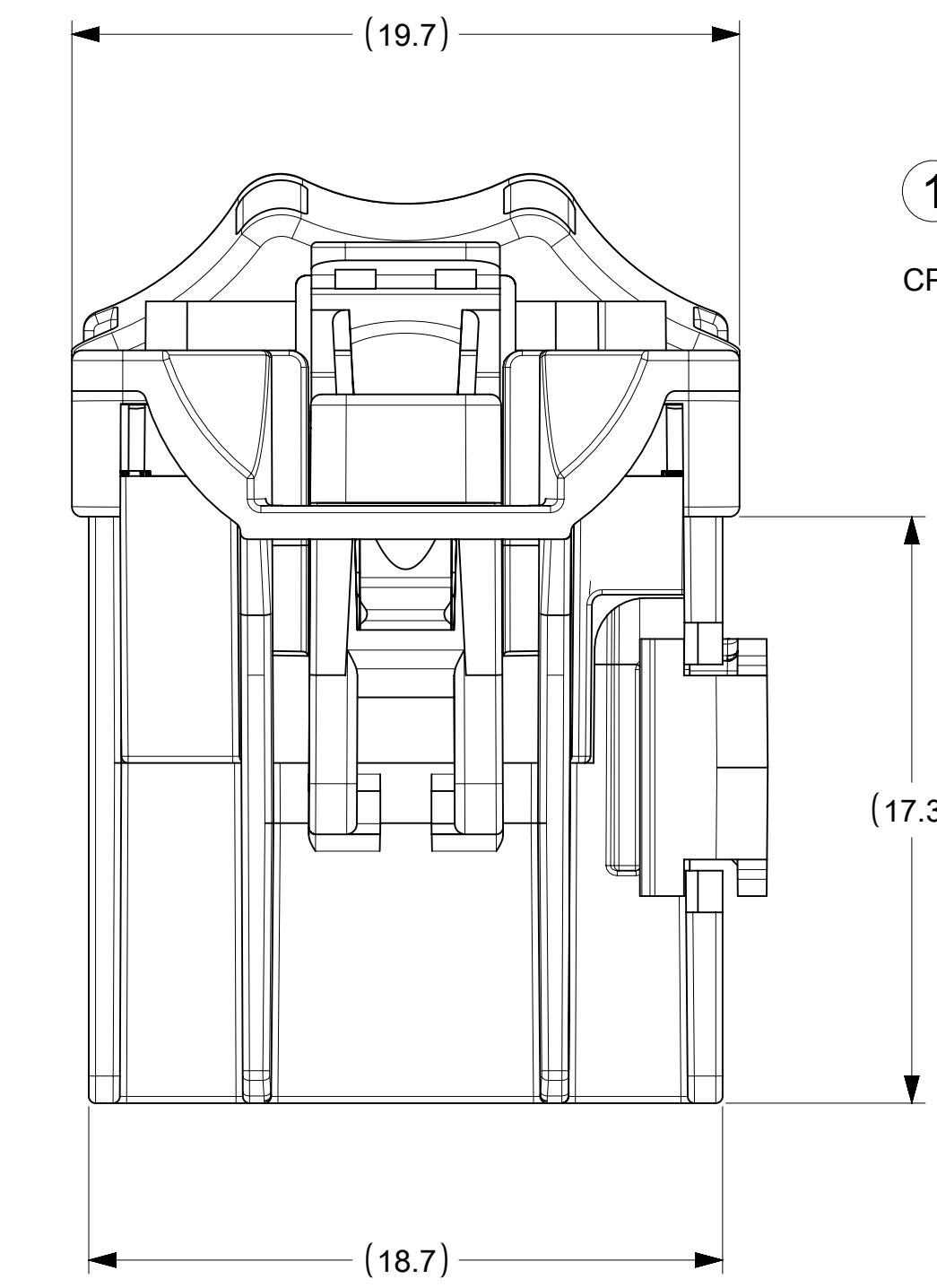
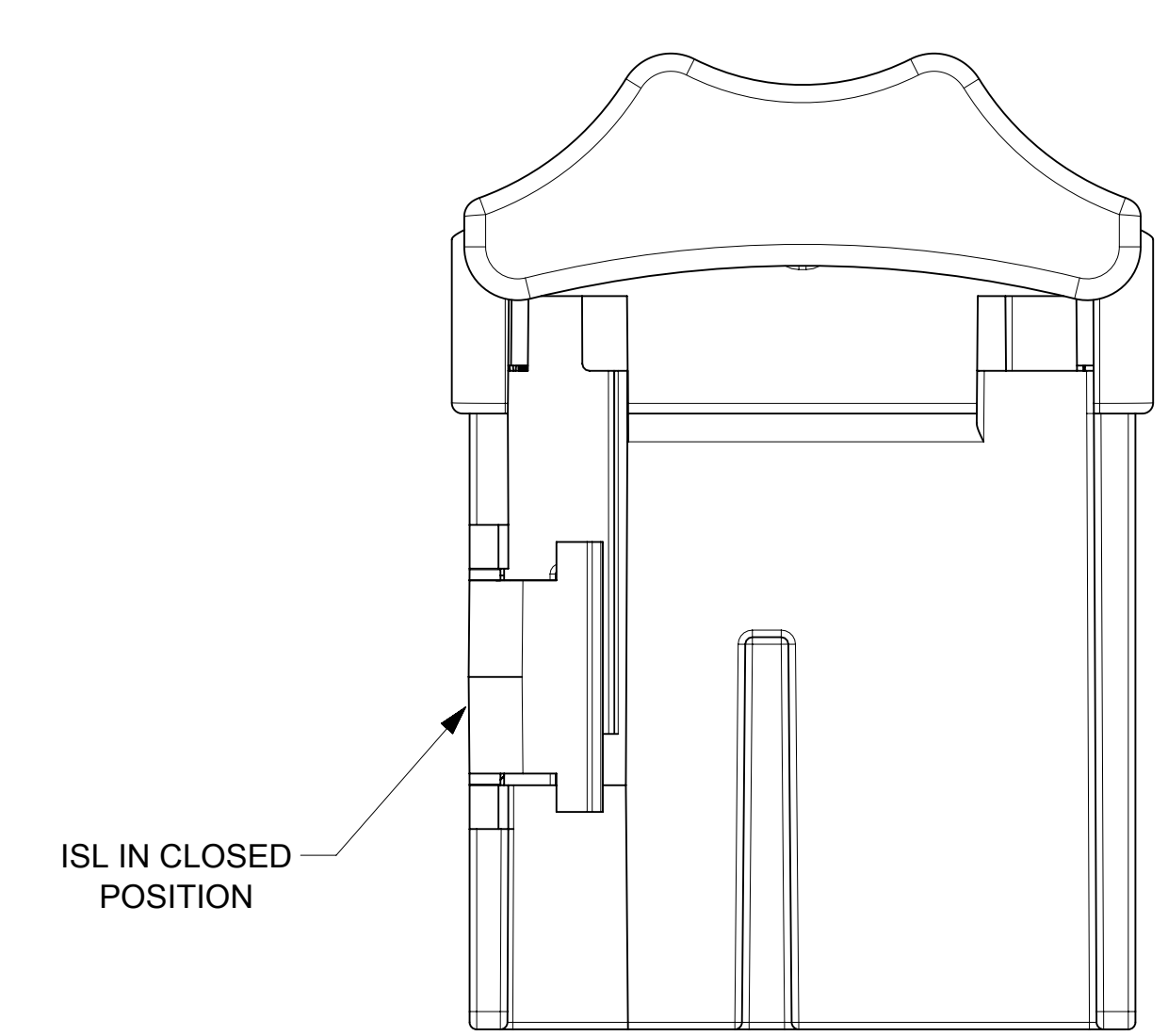
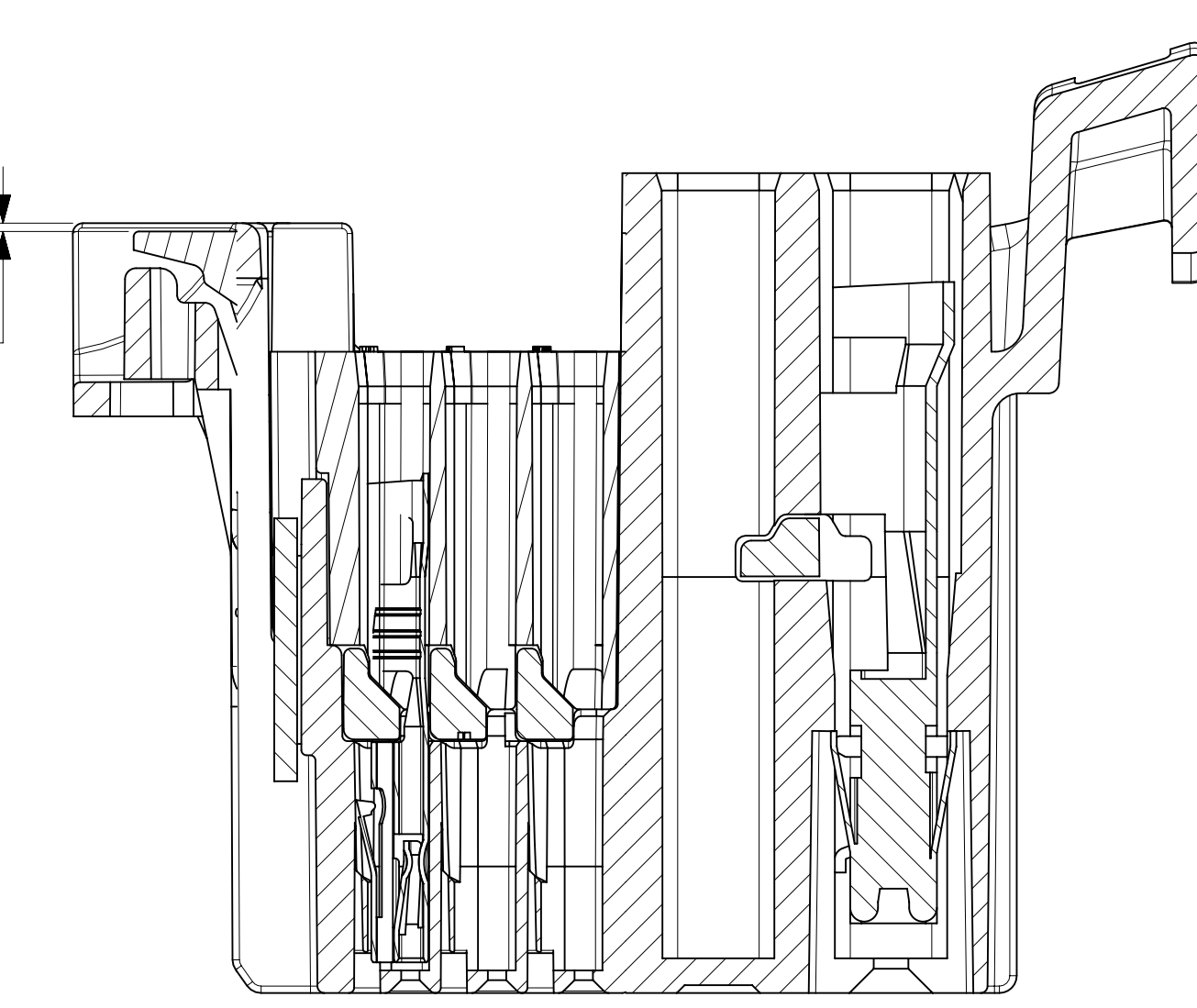
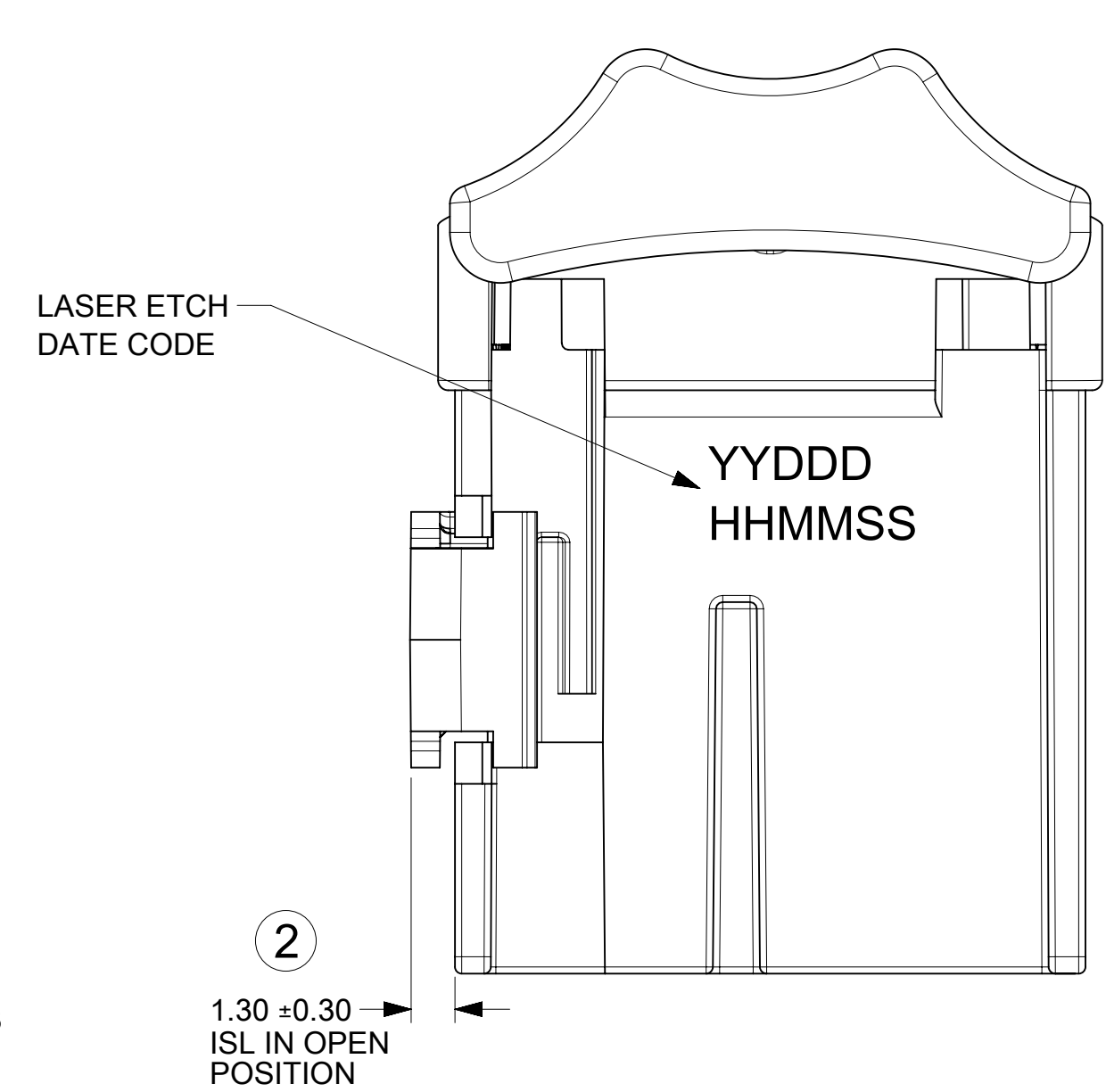
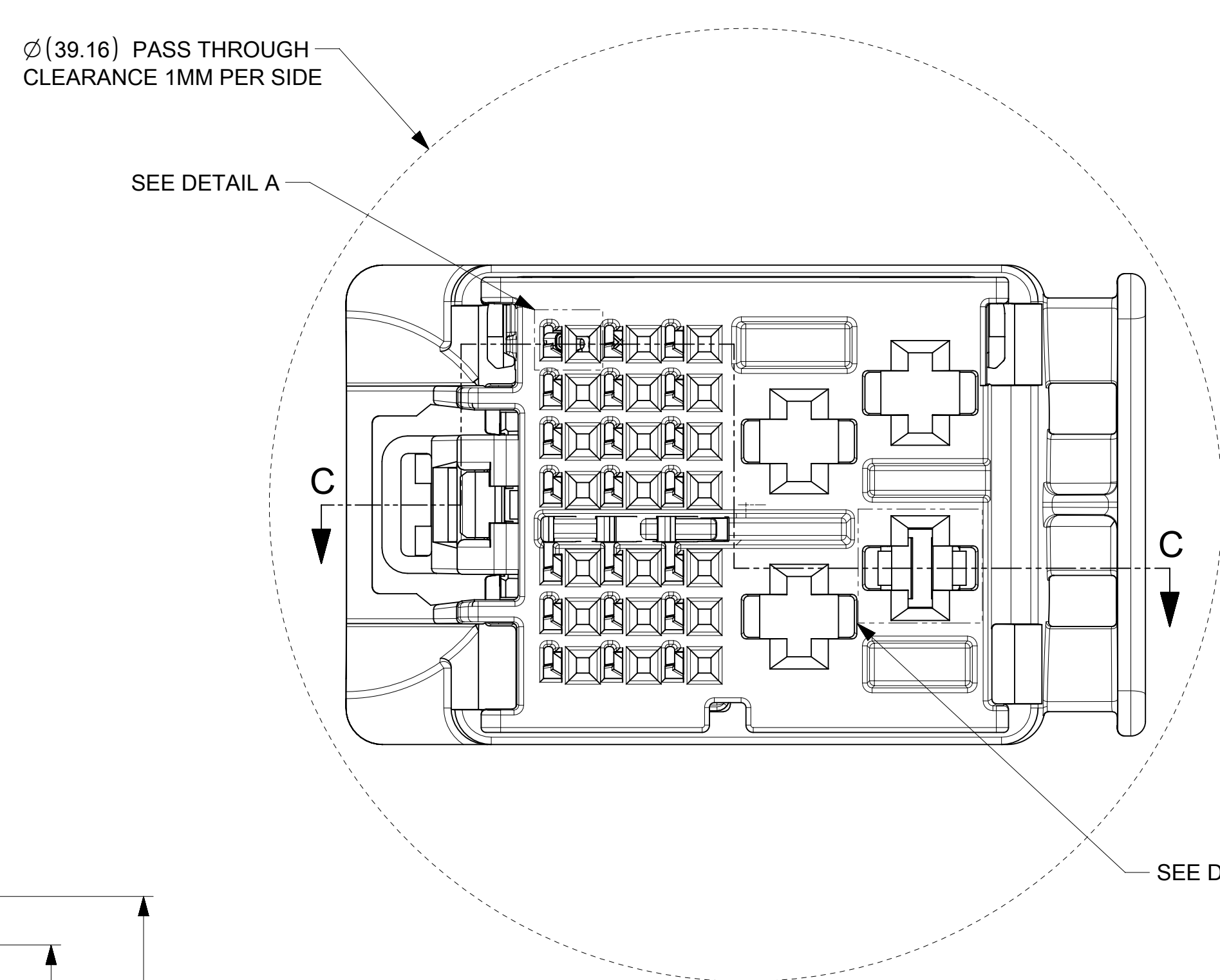
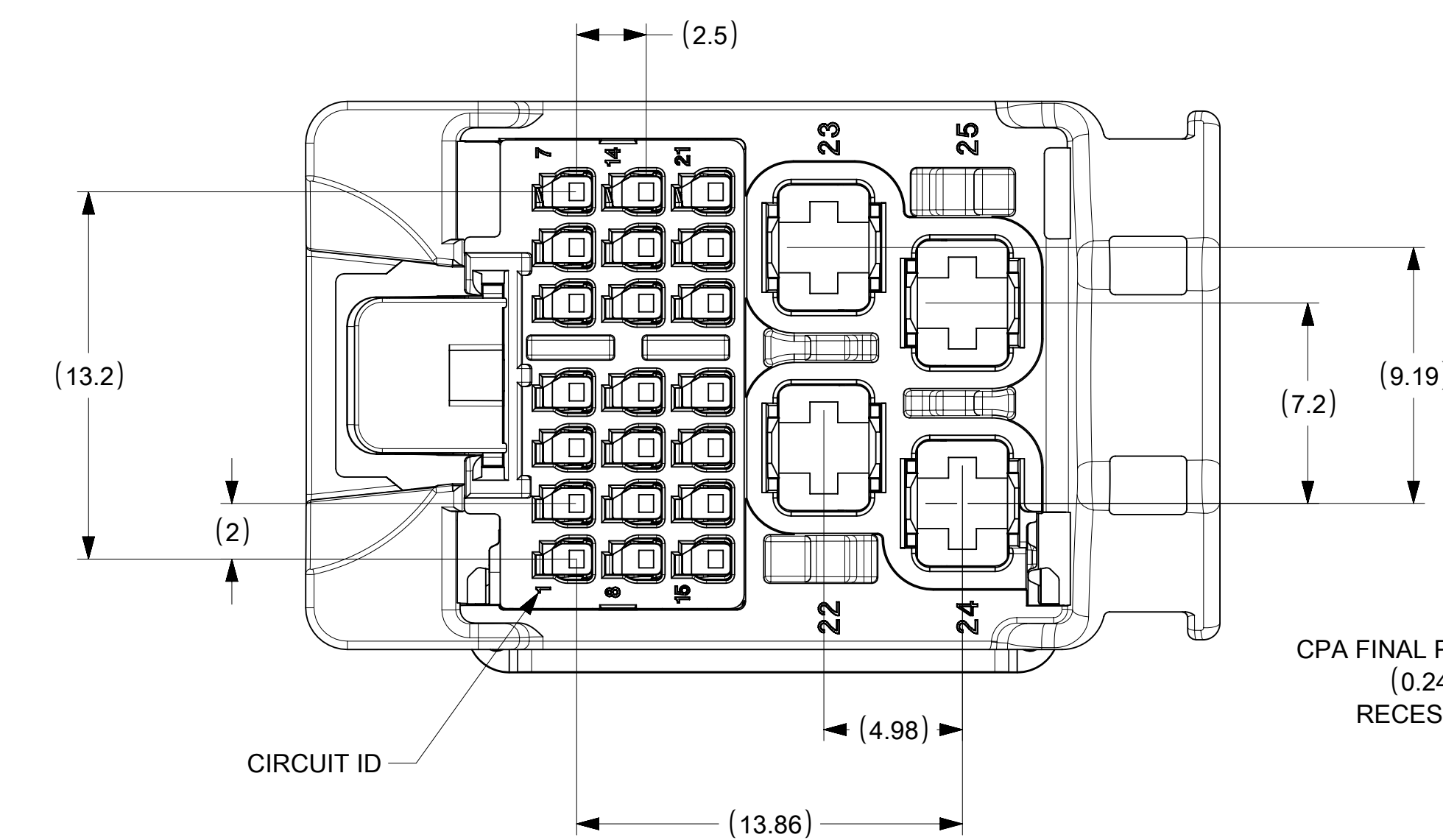
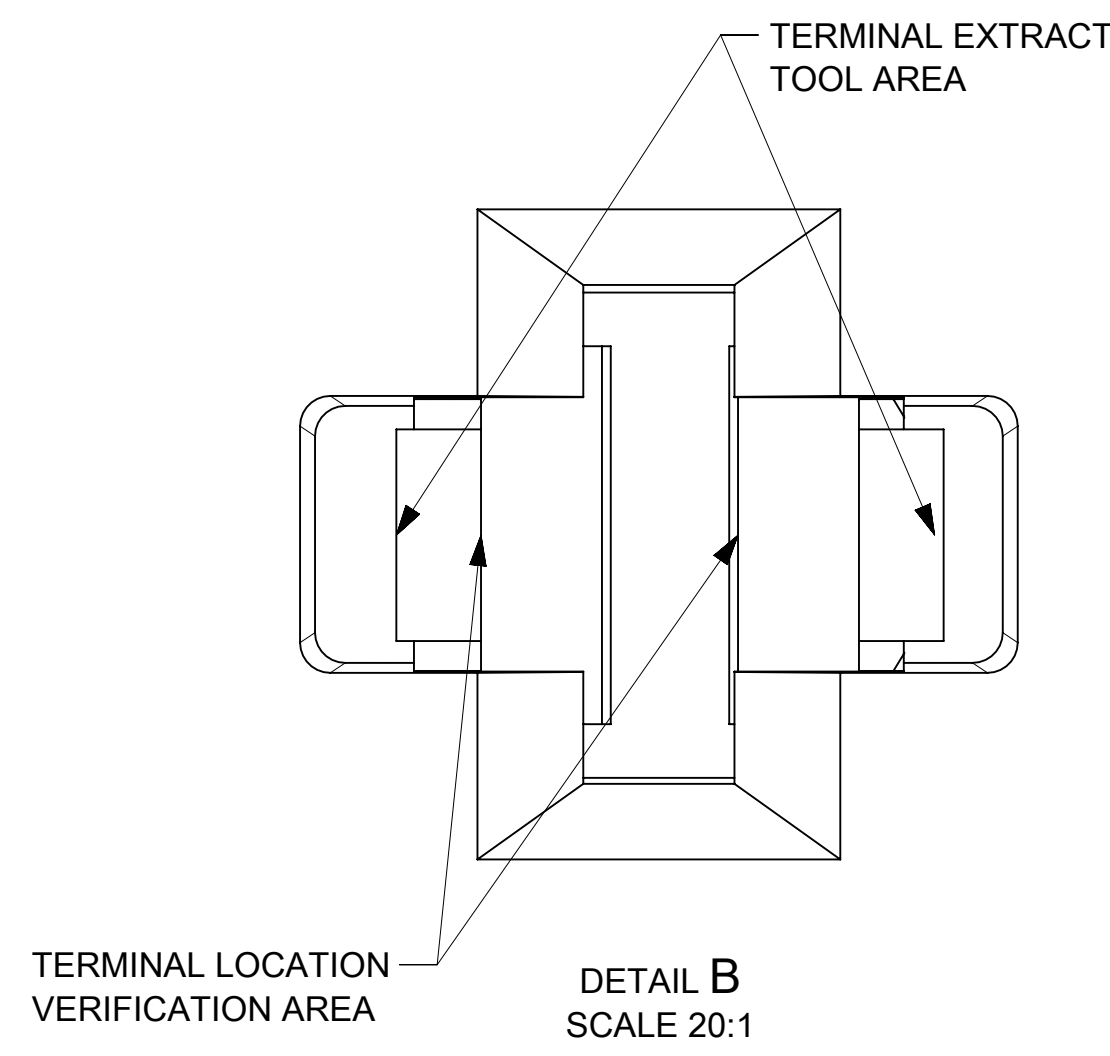
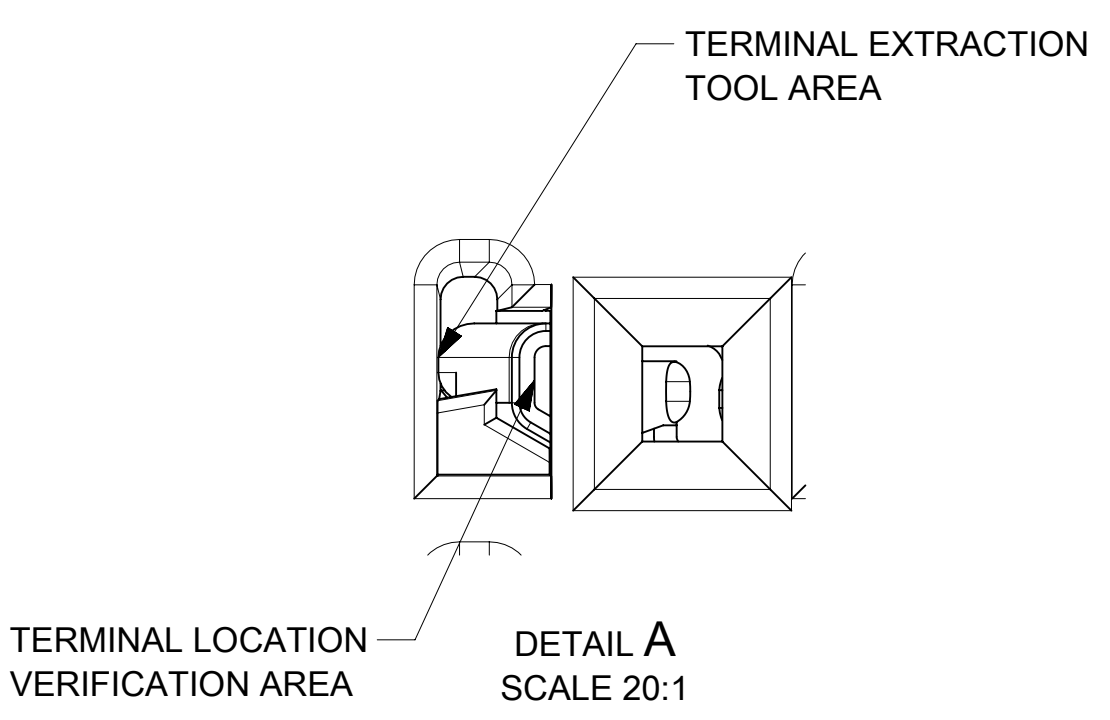
RIB OPTION B



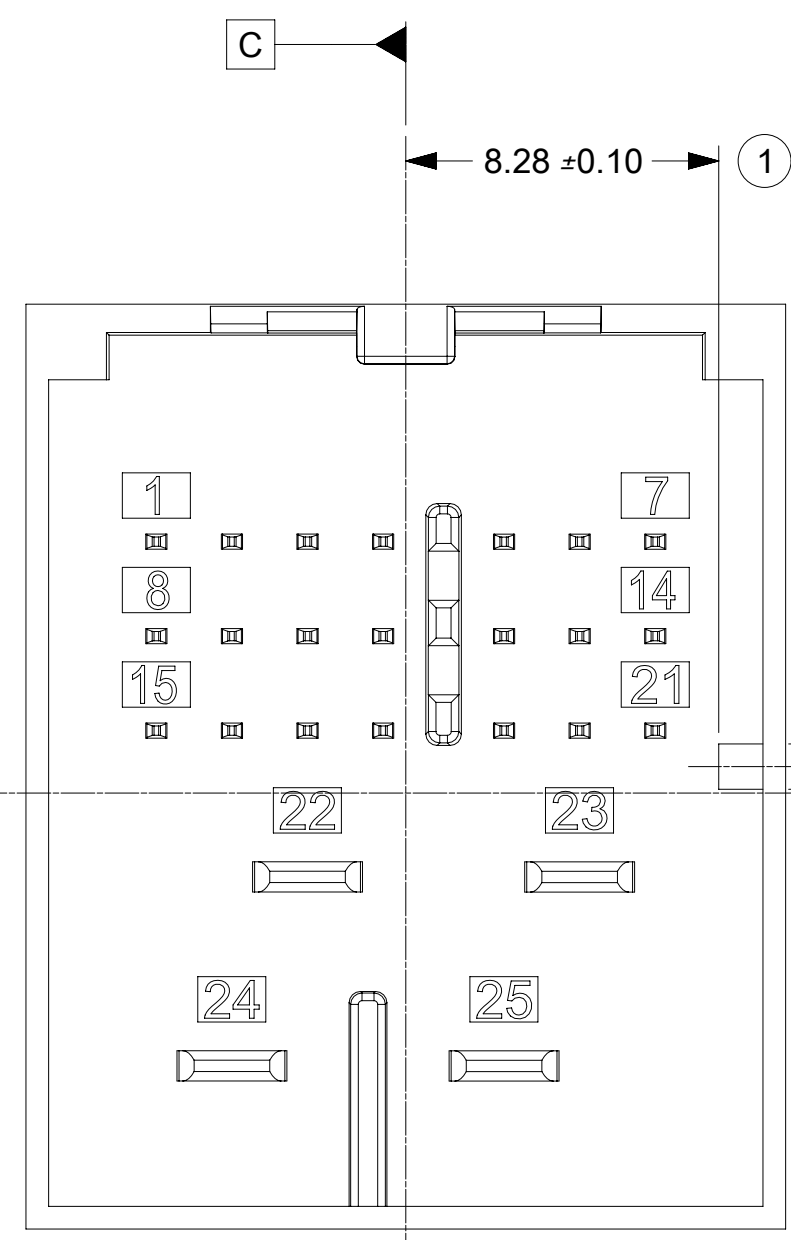
INSPECTION BALLOON NUMBER LOG	
PER DRAWING REVISION :	A3
LAST BALLOON NUMBER :	2
ADDED BALLOON NUMBER :	NONE
DELETED BALLOON NUMBER :	NONE

A4	UPDATED TAK50 TERMINAL PINS 21-July-2021 YPENG47 ECN 648438
REVISION	DESCRIPTION

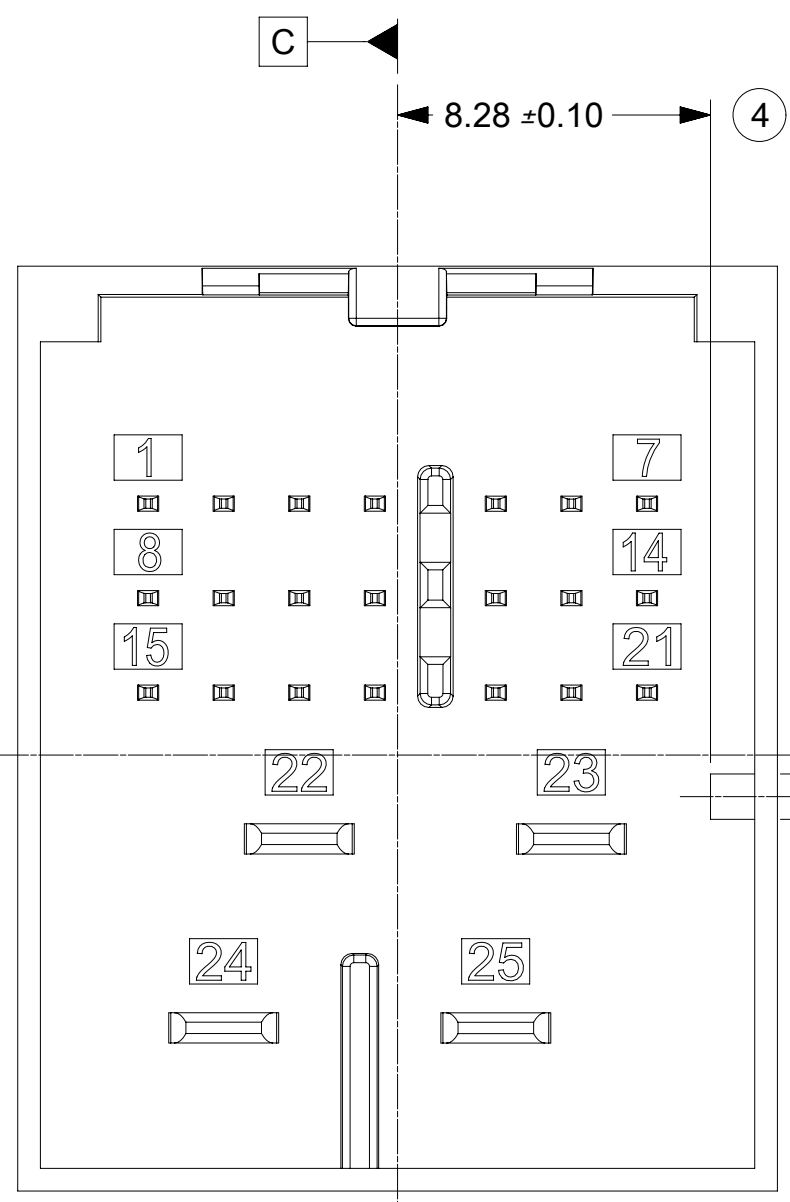
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SCALE		CURRENT REV DESC: UPDATED TAK50	
	DIMENSION UNITS: mm GENERAL TOLERANCES (UNLESS SPECIFIED): ANGULAR TOL: ± 3.0° 4 PLACES: ± 3 PLACES: ± 2 PLACES: ± 0.3 1 PLACE: ± 0.3 0 PLACES: ± 0.3	5:1	TERMINAL PINS		
EC NO: 648438 DRWN: YPENG47 2021/07/21 CHK'D: RCARLSON 2021/07/29 APPR: JCONDON 2021/08/02		INITIAL REVISION: DRWN: RCARLSON 2019/02/18 APPR: JCONDON 2019/02/25		25WAY STAK50H HYBRID ASSEMBLY CONNECTOR ASSEMBLY	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: 1600270011 DOC TYPE: PSD DOC PART: 000 REVISION: A3
MATERIAL NUMBER: SEE CHART CUSTOMER: GENERAL MARKET SHEET NUMBER: 1 OF 2		D-SIZE 160027			



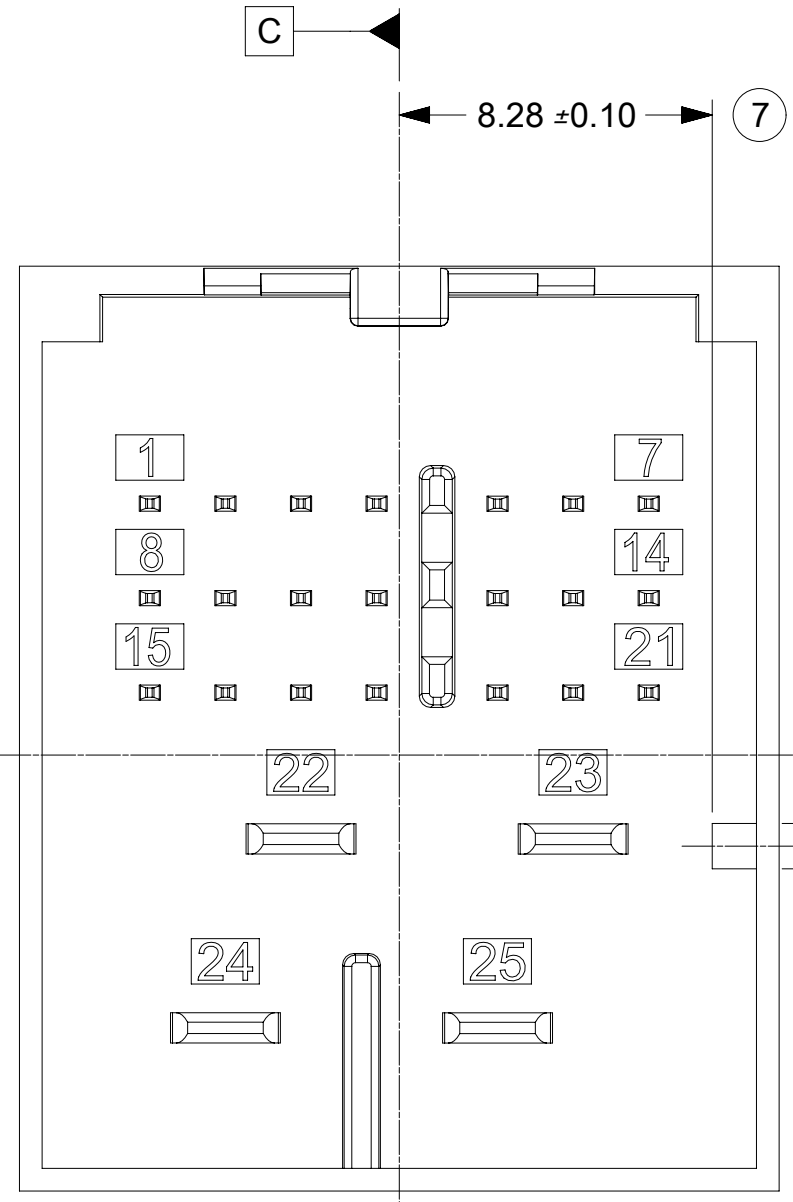
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DIMENSION UNITS	SCALE
▽ = 0	mm	5:1
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
▽ = 0	ANGULAR TOL	± 3.0°
▽ = 0	4 PLACES	±
▽ = 0	3 PLACES	±
▽ = 0	2 PLACES	± 0.3
▽ = 0	1 PLACE	± 0.3
▽ = 0	0 PLACES	± 0.3
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
▽ = 0	THIRD ANGLE PROJECTION	
CURRENT REV DESC: UPDATED TAK50 TERMINAL PNS		
EC NO: 648438		
DRWN: YPENG47		2021/07/21
CHK'D: RCARLSON		2021/07/29
APPR: JCONDON		2021/08/02
INITIAL REVISION:		
DRWN: RCARLSON		2019/02/18
APPR: JCONDON		2019/02/25
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		
DRAWING		SERIES
D-SIZE		160027
DOCUMENT NUMBER		DOC TYPE   DOC PART   REVISION
1600270011		PSD   000   A3
MATERIAL NUMBER		CUSTOMER
SEE SHEET 1		GENERAL MARKET
SHEET NUMBER		
		2 OF 2



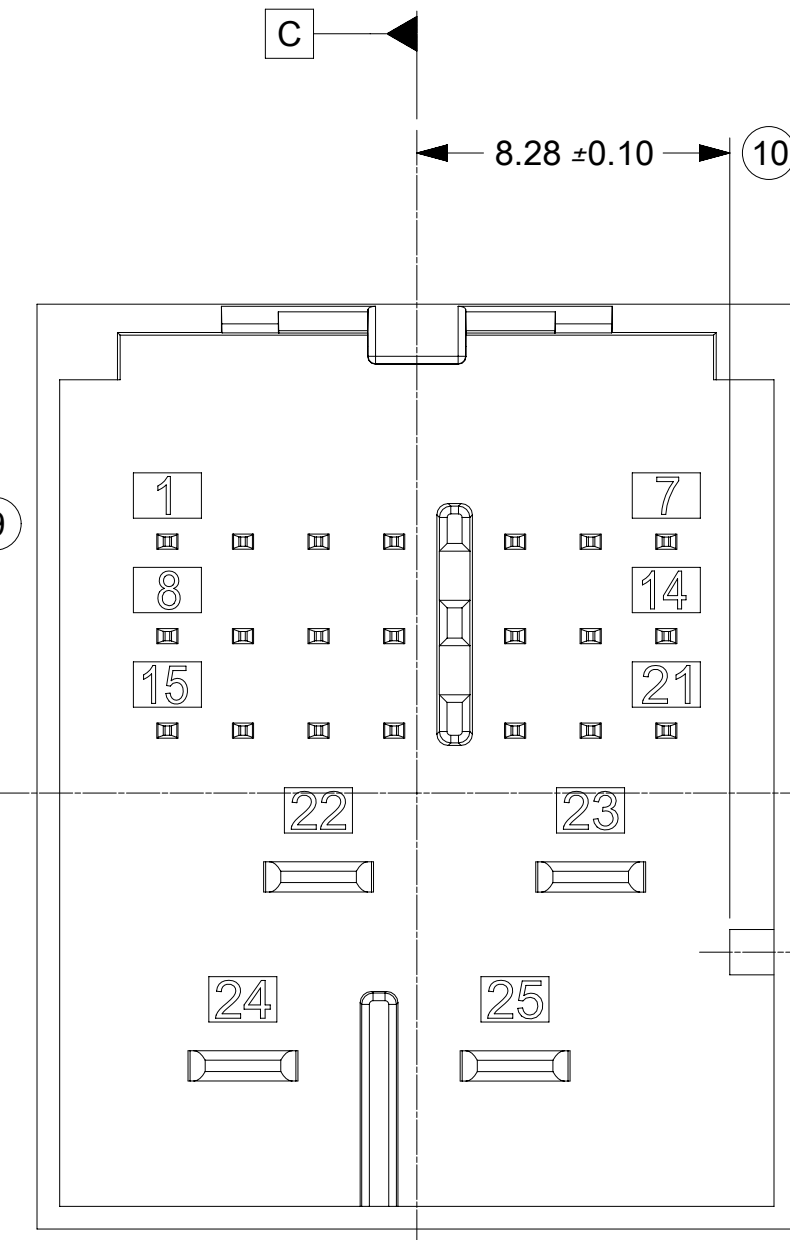
INTERFACE KEY 1 & KEY 5



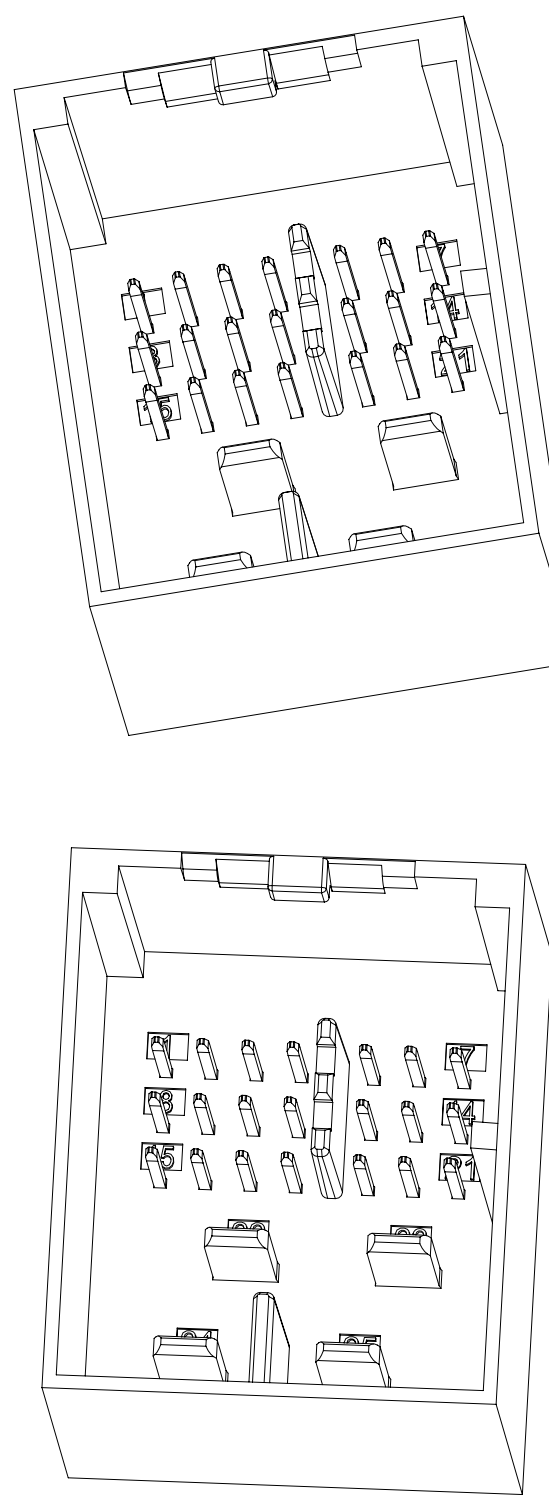
INTERFACE KEY 2 & KEY 6



INTERFACE KEY 3 & KEY 7



INTERFACE KEY 4 & KEY 8



INTERFACE OPTIONS		
KEY	RIB OPTION	MATING CONNECTOR COLOR
1	OPTION A	LIGHT GREEN B
2	OPTION A	STONE GRAY
3	OPTION A	BLACK
4	OPTION A	DARK GRAY
5	OPTION B	DARK PURPLE A
6	OPTION B	TBD
7	OPTION B	TBD
8	OPTION B	LIGHT GRAY

NOTES: VALID UNLESS OTHERWISE SPECIFIED

1. DESIGN - MATERIALS:

- a. RESIN MATERIAL : PBT+GF30 OR SPS+GF30 OR EQUIVALENT
- b. PIN/BLADE MATERIAL : ACCORDING TO USCAR DRAWING EWCAP-001 NOTE B2
- c. PLATING: ACCORDING TO USCAR DRAWING EWCAP-001 TIN REFLOW WITH UNDERPLATE
- d. PIN TIPS ACCORDING TO USCAR DRAWING EWCAP-001 (050-T001 & 280-T001)
- e. DEVIATION TO EWCAP-001 ACCEPTABLE IF PERFORMANCE (ELECTRICAL/MECHANICAL) IS SHOWN TO BE EQUAL OR BETTER AS REQUIRED BY VALIDATION TESTING.
- Ⓢ 1. DEVIATION TO TIN PLATING THICKNESS AS NECESSARY TO MEET MATING FORCE AND ALL VALIDATION REQUIREMENTS

2. DRAWING - GEOMETRY:

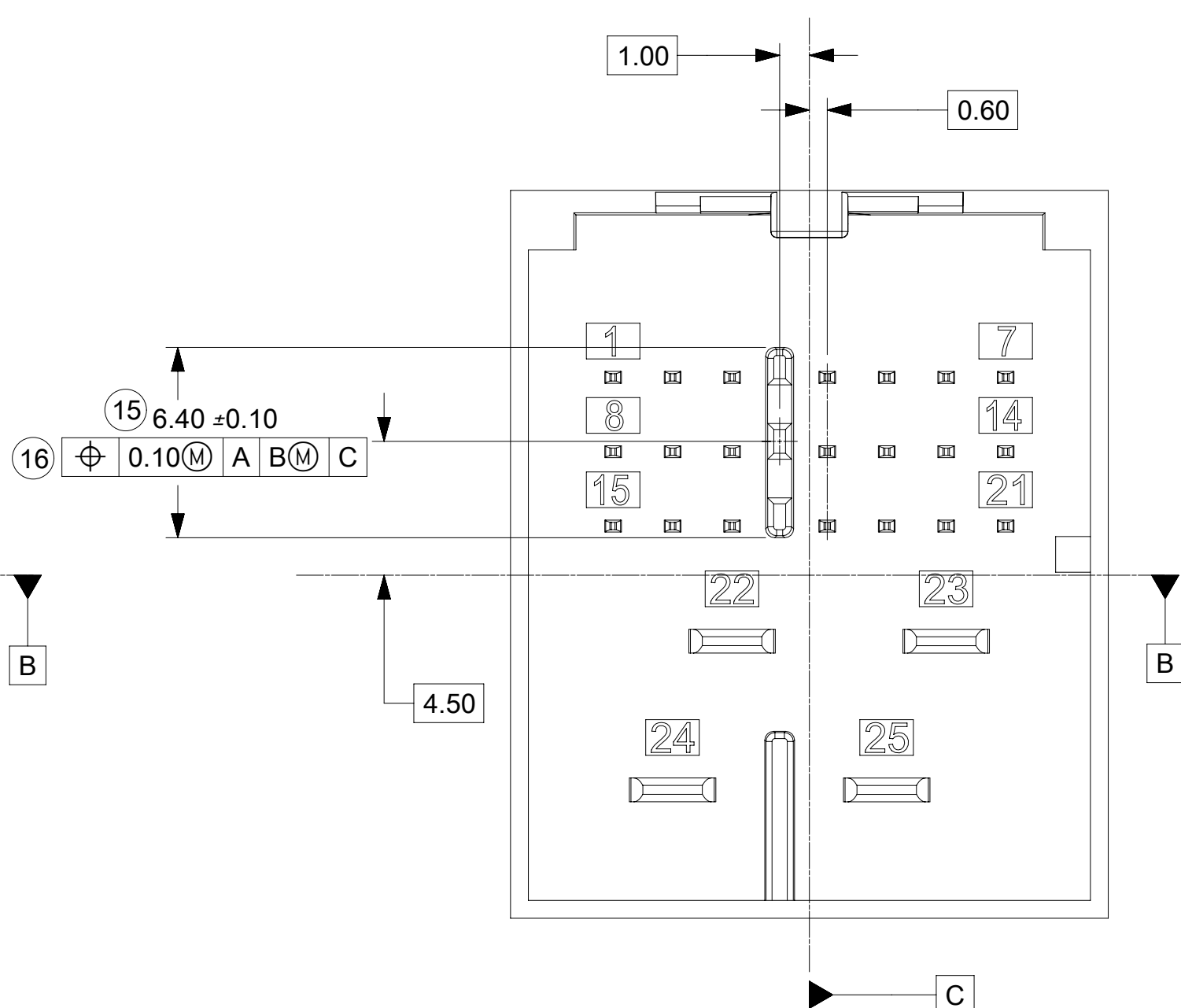
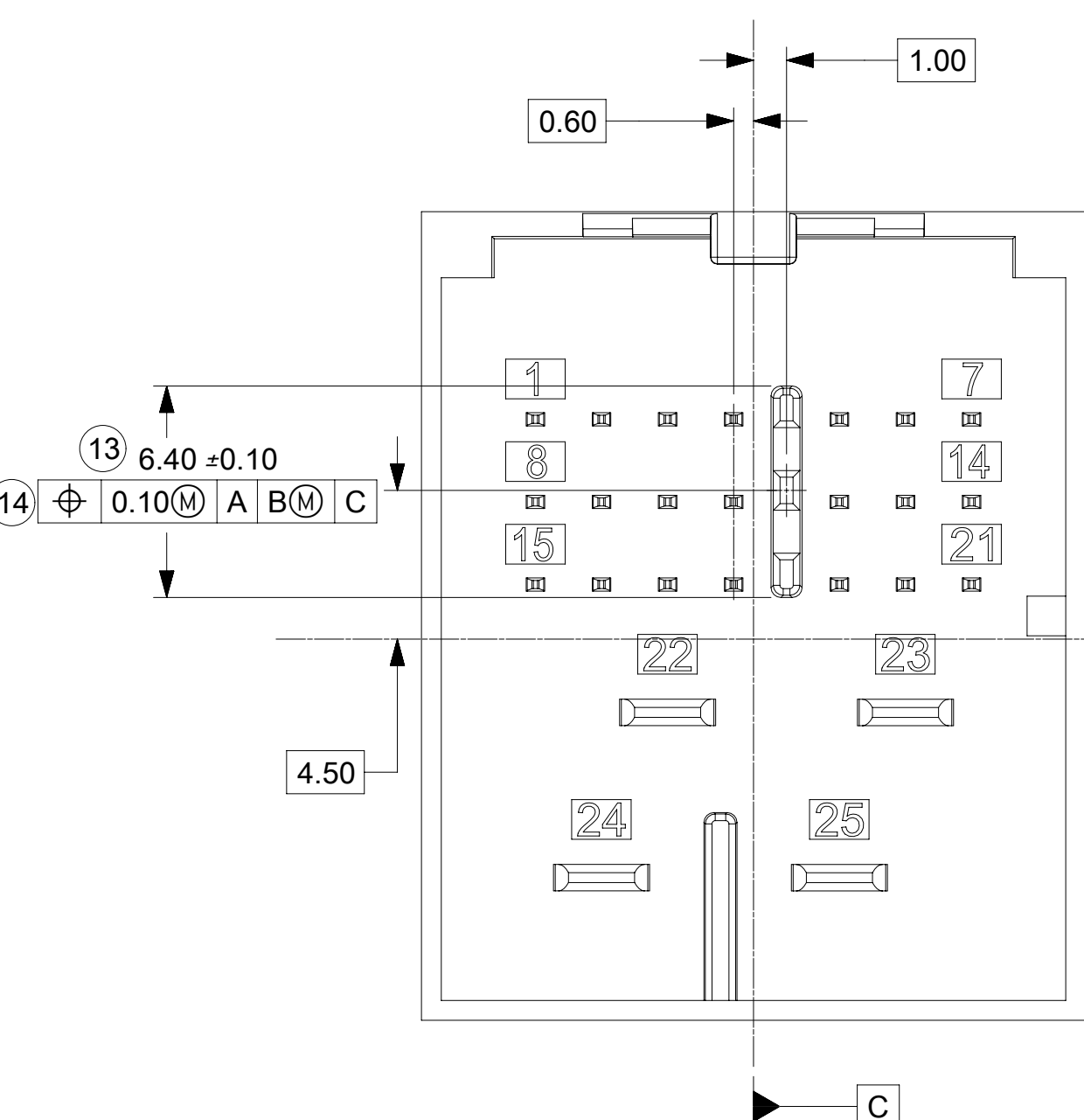
- a. ALL GRAPHIC DATA IS BASIC (NO TOLERANCE) AND MUST BE TAKEN FROM THE DATA FILE AT ITS LATEST REVISION.
- b. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M-2009.
- c. GENERAL TOLERANCES:  
 LINEAR : PER DIN 16901 LINEAR CODE B FOR PRECISION ENGINEERING  
 ANGULAR : ±3°
- d. EDGES AND UNDIMENSIONED DETAILS PER ISO13715
- e. CORNERS SHOW AS SHARP TO BE R 0.2 MAX.
- f. LETTERS SHALL BE 0.2 MAX RAISED IN 0.25 MAX RECESSED PAD.  
 THIS INCLUDES RECYCLING CODE, CAVITY ID, VENDOR IDENTIFICATION, AND CUSTOMER MATERIAL NUMBER.

3. DESIGN - MANUFACTURING:

- a. DRAFT TO BE WITHIN TOLERANCE.

RIB OPTION A

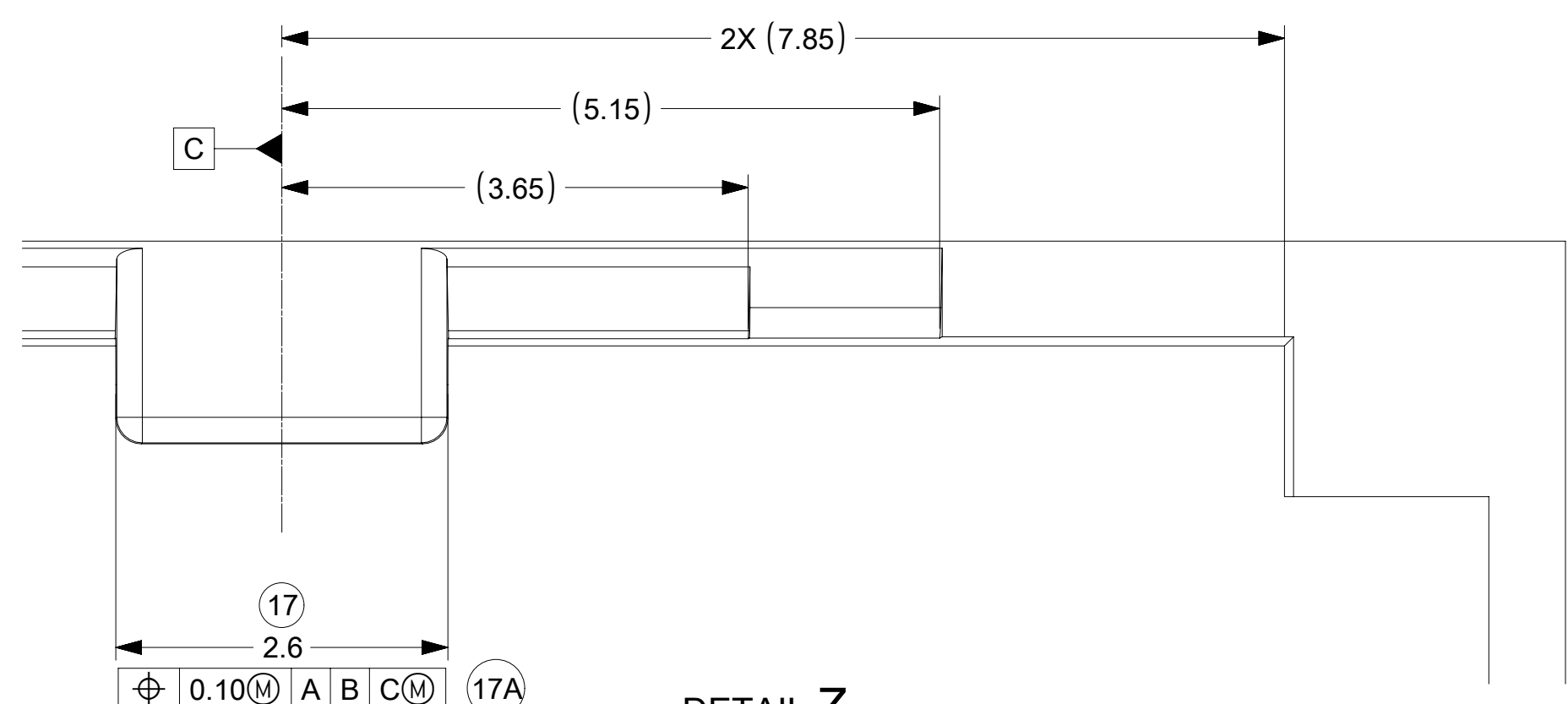
RIB OPTION B



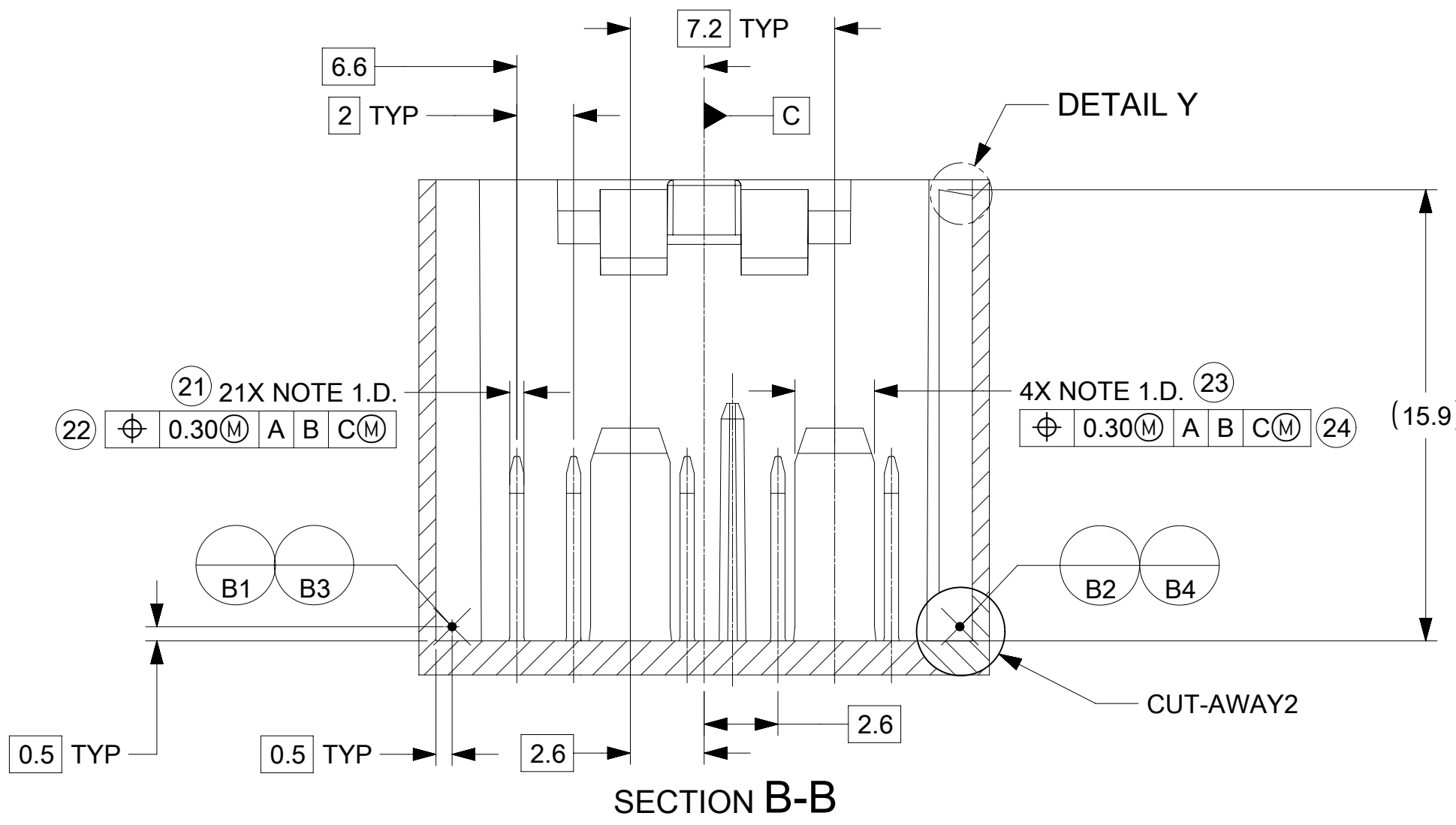
INSPECTION BALLOON NUMBER LOG	
PER DRAWING REVISION:	C1
LAST BALLOON NUMBER:	63
ADDED BALLOON NUMBER:	NONE
DELETED BALLOON NUMBER:	NONE

FUNCTIONAL SYMBOLS FA = 0 FE = 0 FP = 0	DIMENSION UNITS mm	SCALE 5:1	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
			CURRENT REV DESC: UPDATED BASIC DIMENSIONS IN SECTION B-B ON SHEET 2		
DIVISIONAL SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 649575		
	ANGULAR TOL ± °		DRWN: YPENG47 2020/11/19		
SEE NOTES	4 PLACES ±	CHK'D: JRUTTER 2020/11/23		PRODUCT CUSTOMER DRAWING	
	3 PLACES ±	APPR: MVANSLAMBROU 2020/11/25		DOCUMENT NUMBER	
	2 PLACES ±	INITIAL REVISION:		DOC TYPE DOC PART REVISION	
	1 PLACE ±	DRWN: SPEMMARAJU 2015/11/03		SD-160027-002 PSD 000 C1	
0 PLACES ±		APPR: KDEKOSKI 2016/03/24		SHEET NUMBER	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER CUSTOMER SHEET NUMBER
			D-SIZE	160027	GENERAL MARKET 1 OF 3

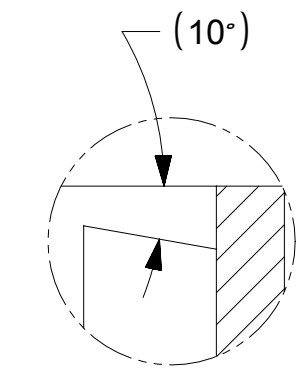
C1	UPDATED BASIC DIMENSIONS IN SECTION B-B ON SHEET 2 ECN: 649575 11/19/2020 YPENG47
C	ADDED 2.8MM BLADE LENGTH VARIANT FOR MATE FORCE REQUIREMENT ADDED NOTE 1.E.1 CHANGE RECORD: 626144 JPATE 10/22/2019
B1	ADDED BALLOONS JCONDON 08/02/2018
B	REMOVED 0.2MM FROM CONNECTOR LOCK TAB FEATURE
A2	ADDED CIRCUIT IDs
A1	ADDED NOTE 1e, MKOWALSKY 7/7/2017
8	GEOMETRY UPDATED , SPEMMARAJU 02/18/2016
7	UAU2016-1146 SAP # 10681629 JCONDON 03/25/2015



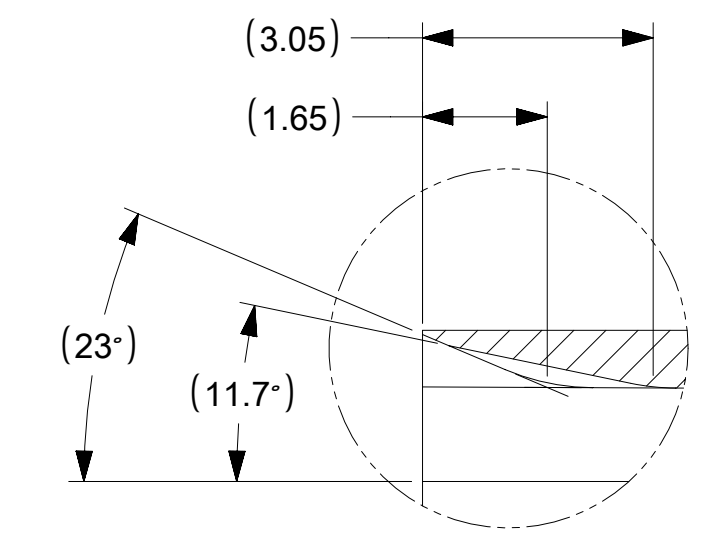
DETAIL Z  
SCALE 20:1



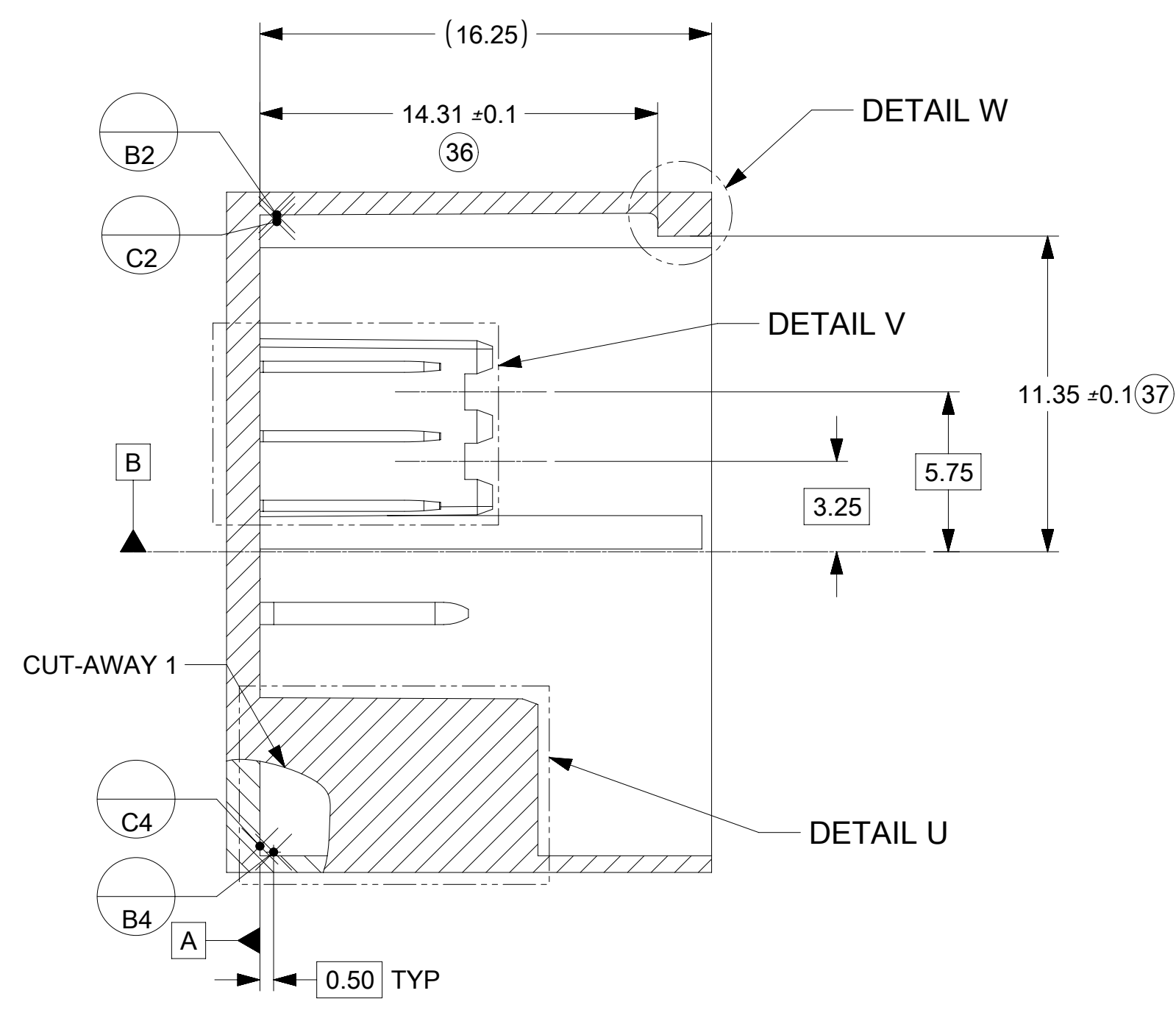
SECTION B-B



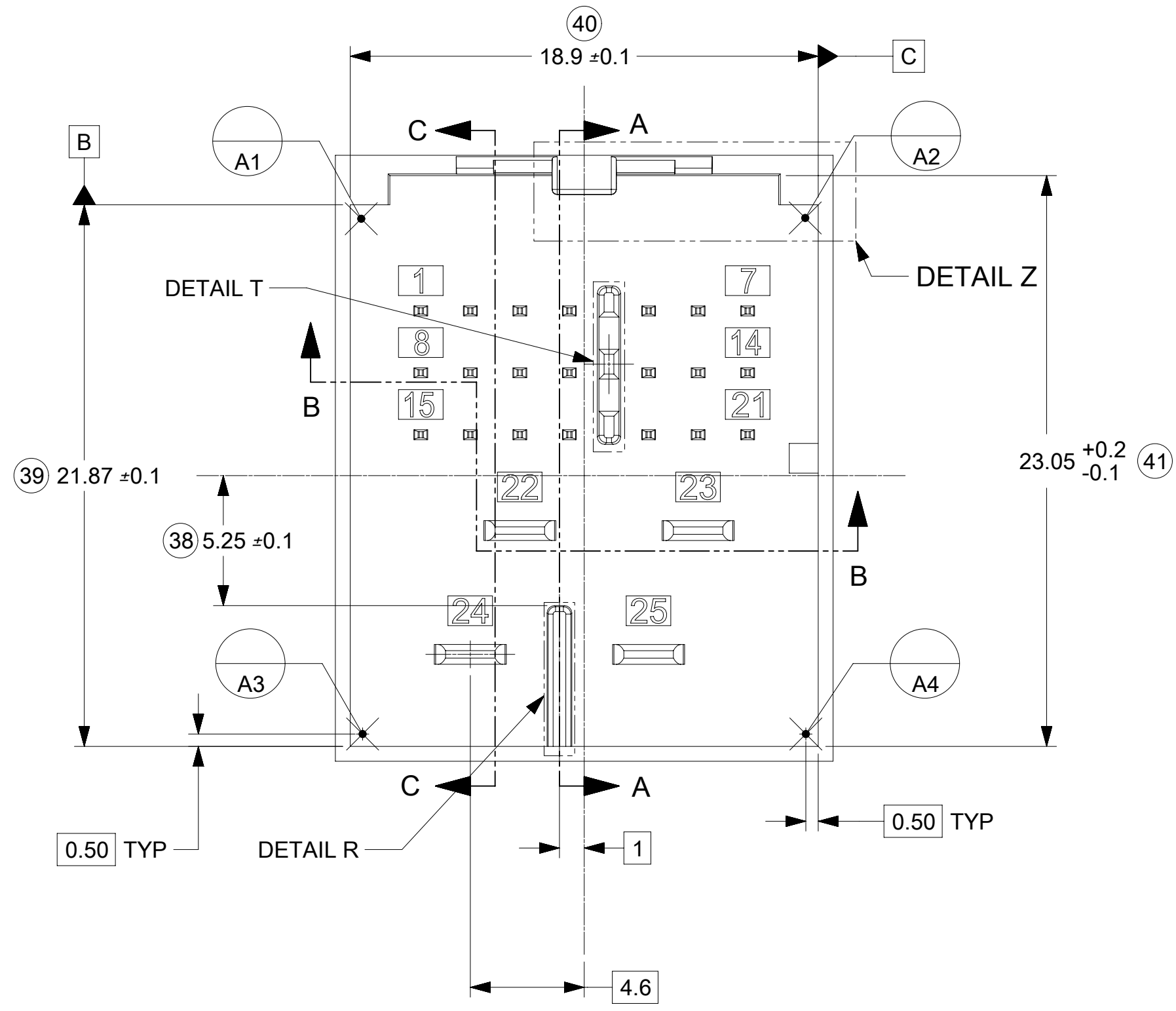
DETAIL Y  
SCALE 15:1



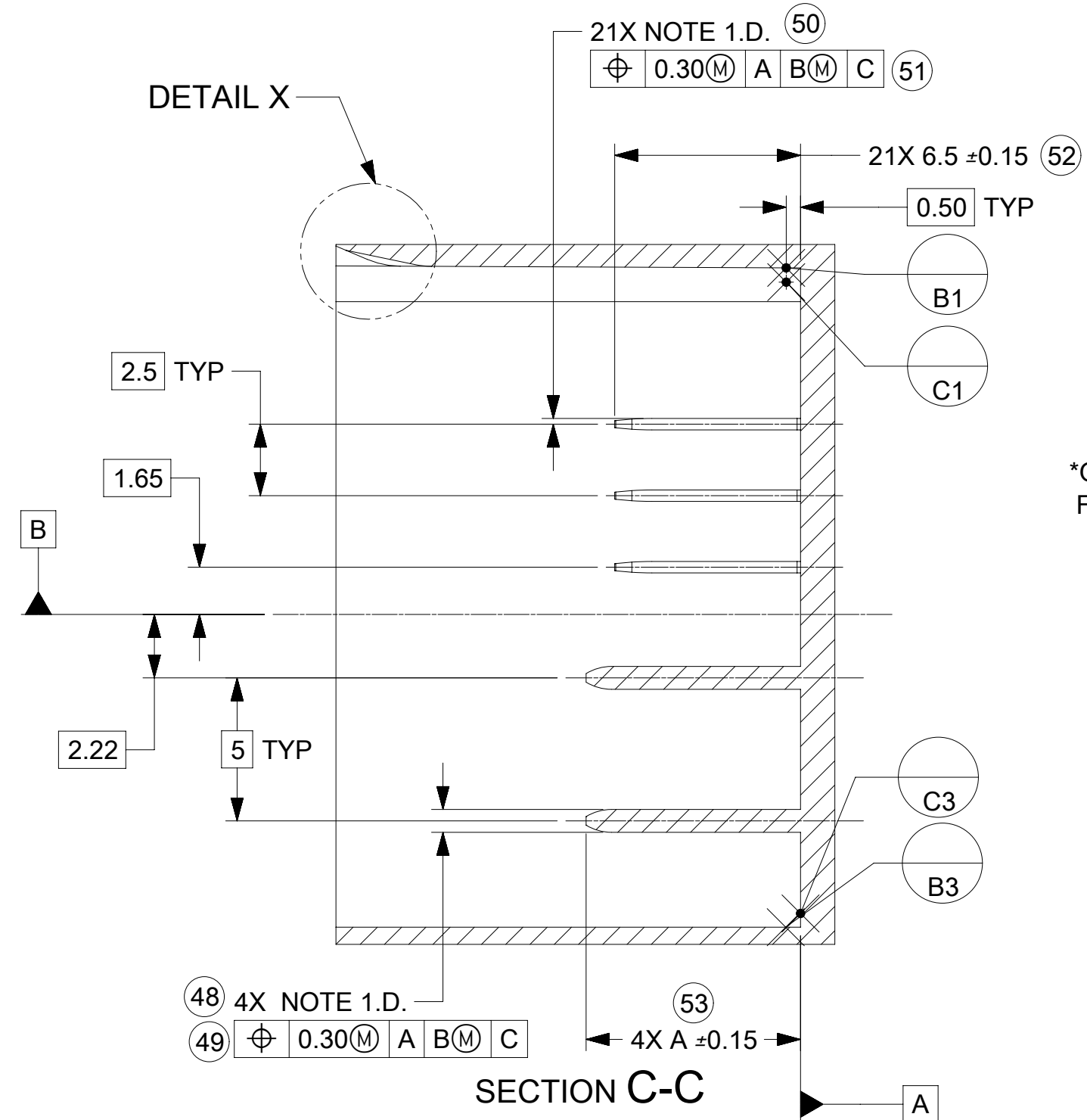
DETAIL X  
SCALE 10:1



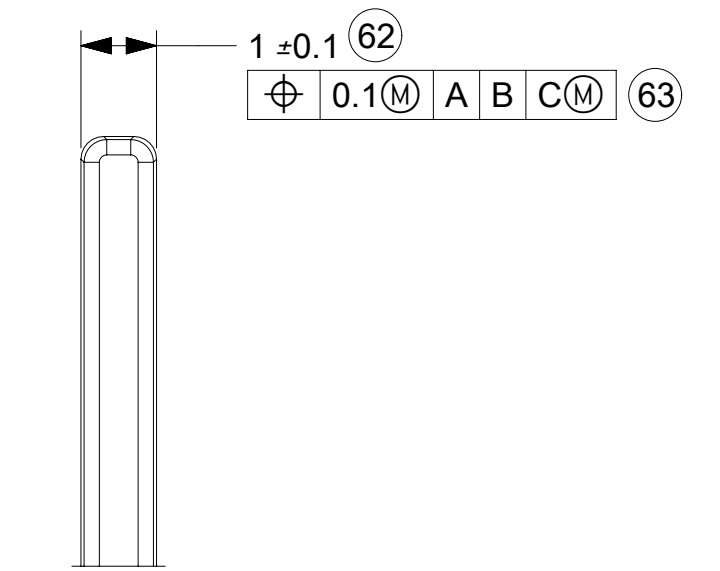
SECTION A-A



SECTION C-C



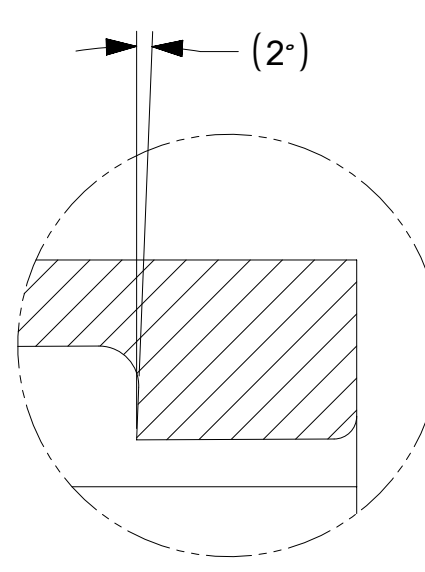
DETAIL T  
SCALE 10:1



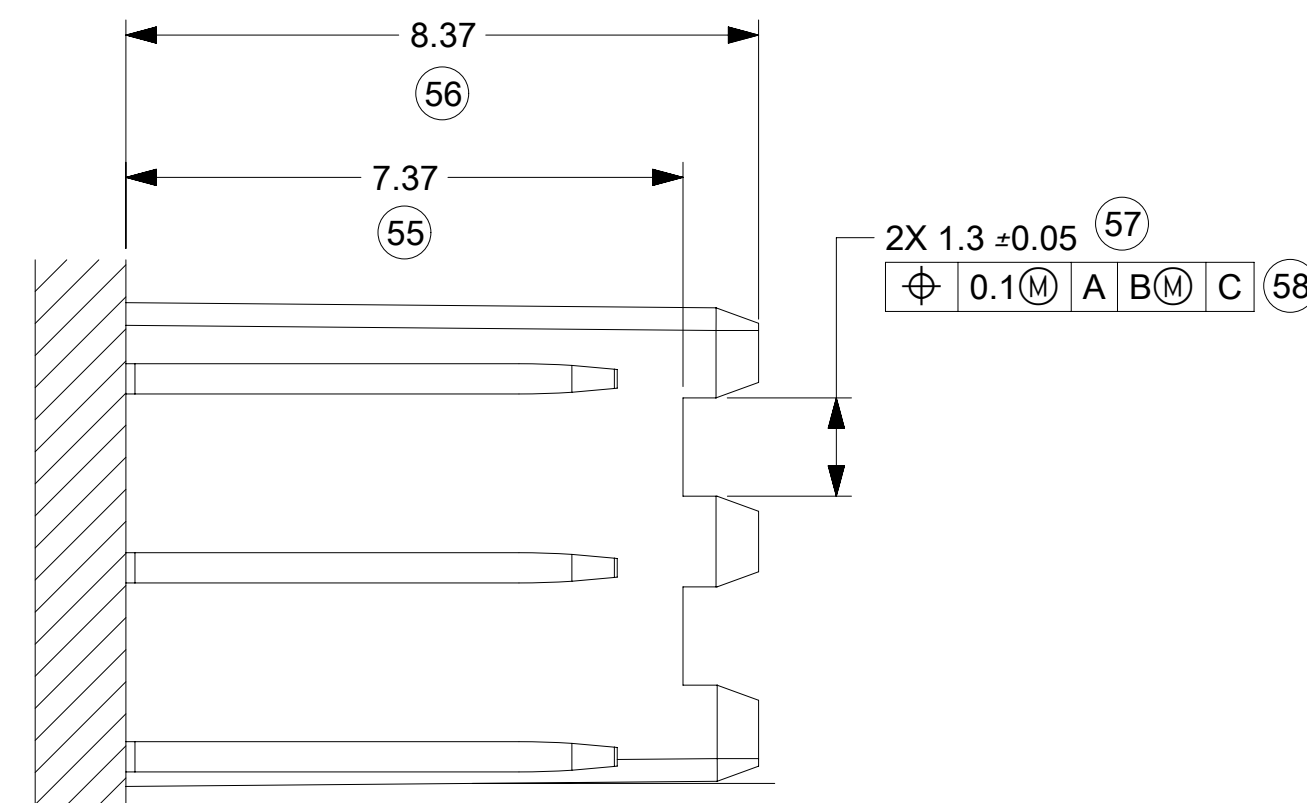
DETAIL R  
SCALE 10:1

CONSTRUCTION	DIM. A (mm)	STATUS
OPTION A	7.5	REVISION B
OPTION B	6.5	REVISION C

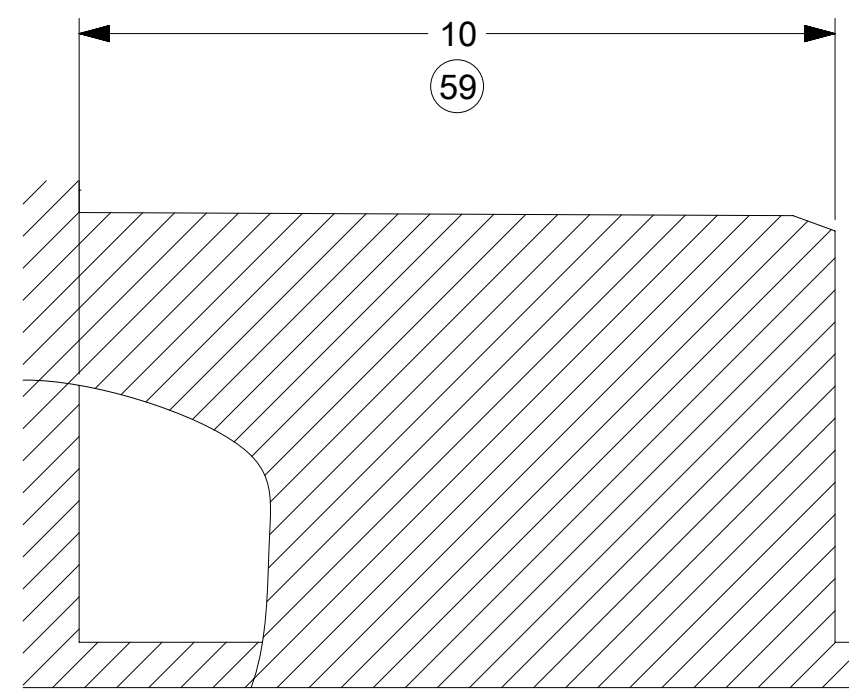
\*OPTION B IS THE PREFERRED CONSTRUCTION FOR ALL NEW HEADERS



DETAIL W  
SCALE 15:1



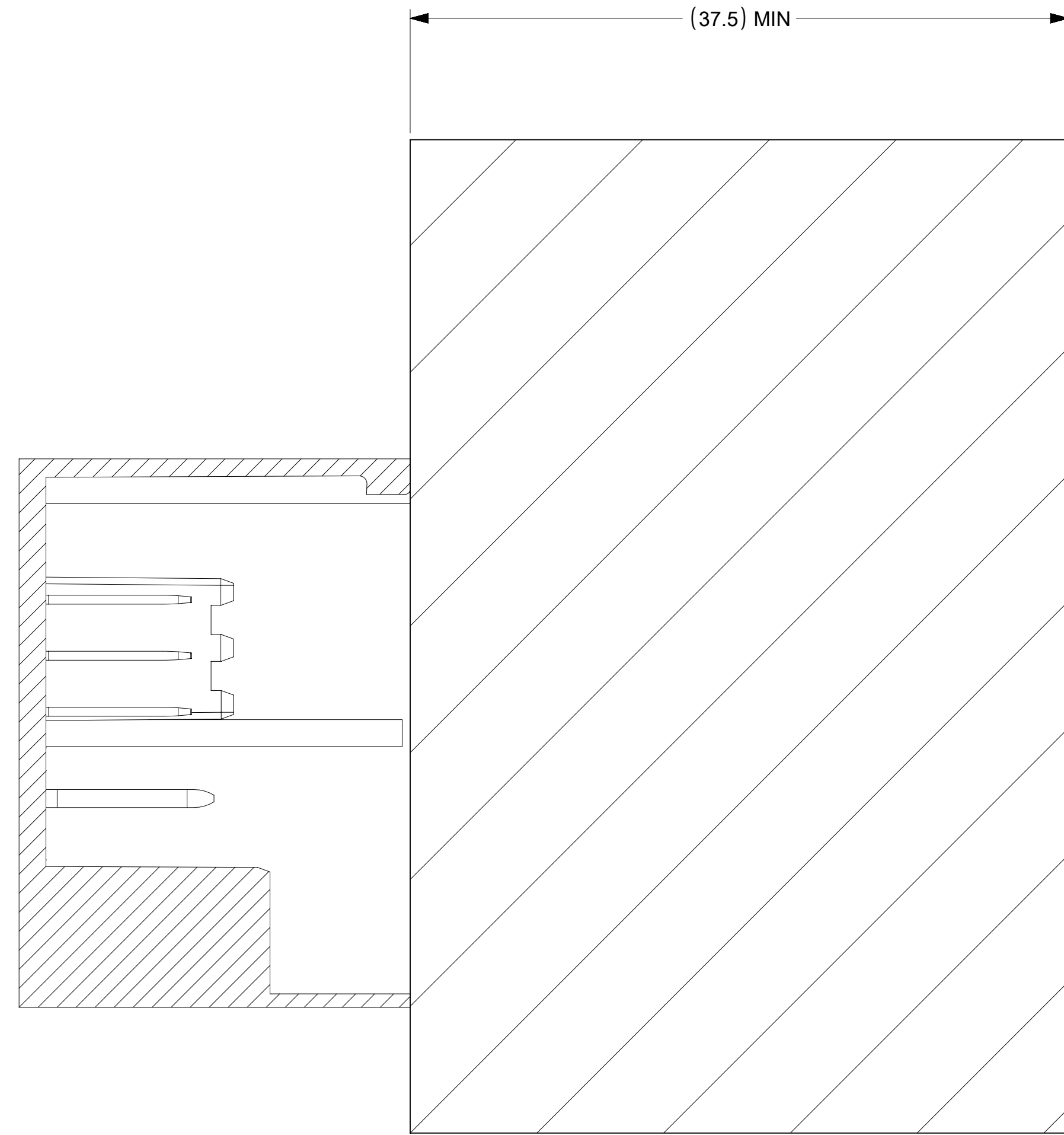
DETAIL V  
SCALE 10:1



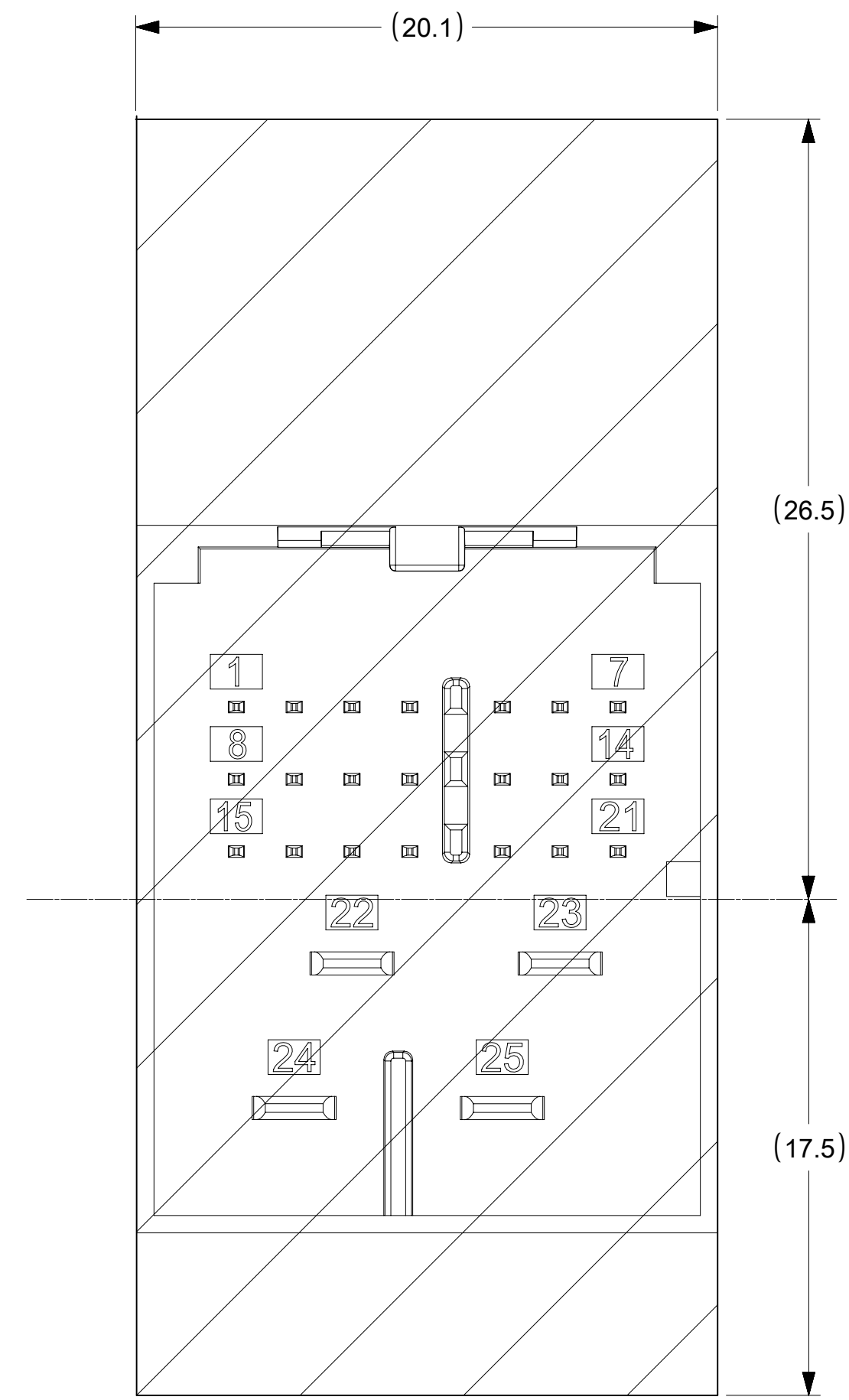
DETAIL U  
SCALE 10:1

FUNCTIONAL SYMBOLS FA = 0 FC = 0 FP = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SCALE 5:1	CURRENT REV DESC: UPDATED BASIC DIMENSIONS IN SECTION B-B ON SHEET 2											
	DIMENSION UNITS mm	GENERAL TOLERANCES (UNLESS SPECIFIED)	ANGULAR TOL ± °				EC NO: 649575	DRWN: YPENG47	2020/11/19					
DIVISIONAL SYMBOLS	4 PLACES ±	3 PLACES ±	2 PLACES ±	1 PLACE ±	0 PLACES ±	INITIAL REVISION: DRWN: SPEMMARAJU APPR: KDEKOSKI	2020/11/23	2020/11/25	2015/11/03	2016/03/24	SD-160027-002	PSD	000	C1
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION	DRAWING D-SIZE	SERIES 160027	MATERIAL NUMBER	CUSTOMER GENERAL MARKET	SHEET NUMBER 2 OF 3					

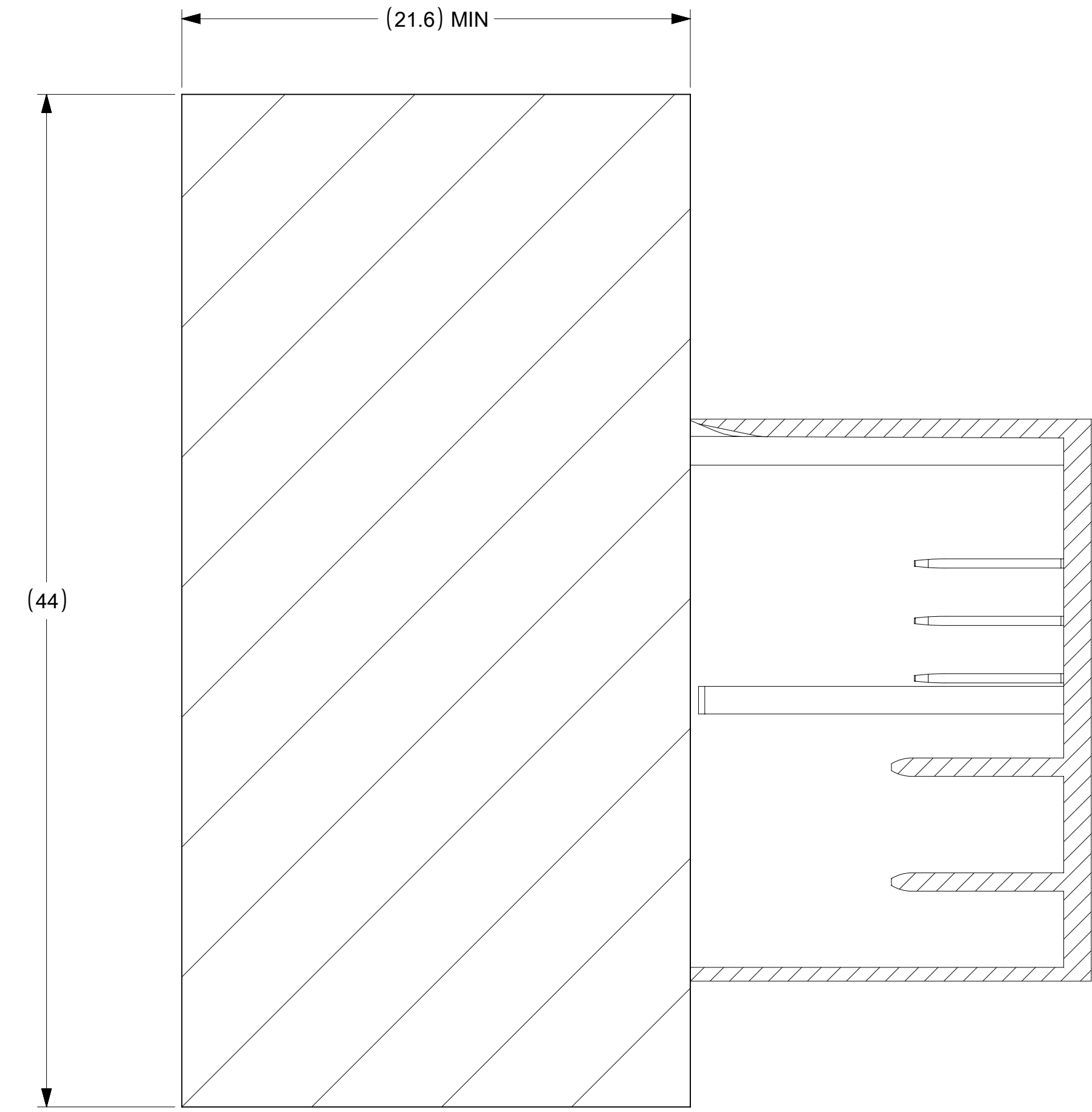
PACKAGE SPACE  
FOR UNMATED  
CONNECTOR



PACKAGE SPACE  
FOR CONNECTOR



PACKAGE SPACE FOR  
MATED CONNECTOR  
WITH COVER



<b>FUNCTIONAL SYMBOLS</b> $F_A = 0$ $F_C = 0$ $F_P = 0$ <b>DIVISIONAL SYMBOLS</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: UPDATED BASIC DIMENSIONS IN SECTION B-B ON SHEET 2			
	DIMENSION UNITS <b>mm</b>	SCALE <b>1:1</b>	GENERAL TOLERANCES (UNLESS SPECIFIED)			
	ANGULAR TOL $\pm$ °		4 PLACES $\pm$		INITIAL REVISION: DRWN: SPEMMARAJU 2015/11/03 APPR: KDEKOSKI 2016/03/24	
	3 PLACES $\pm$		2 PLACES $\pm$		DOCUMENT NUMBER <b>SD-160027-002</b>	
2 PLACES $\pm$		1 PLACE $\pm$		DOC TYPE <b>PSD</b>		
0 PLACES $\pm$		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DOC PART <b>000</b>		
THIRD ANGLE PROJECTION 		DRAWING <b>D-SIZE</b>		REVISION <b>C1</b>		
SERIES <b>160027</b>		MATERIAL NUMBER CUSTOMER <b>GENERAL MARKET</b>		SHEET NUMBER <b>3 OF 3</b>		