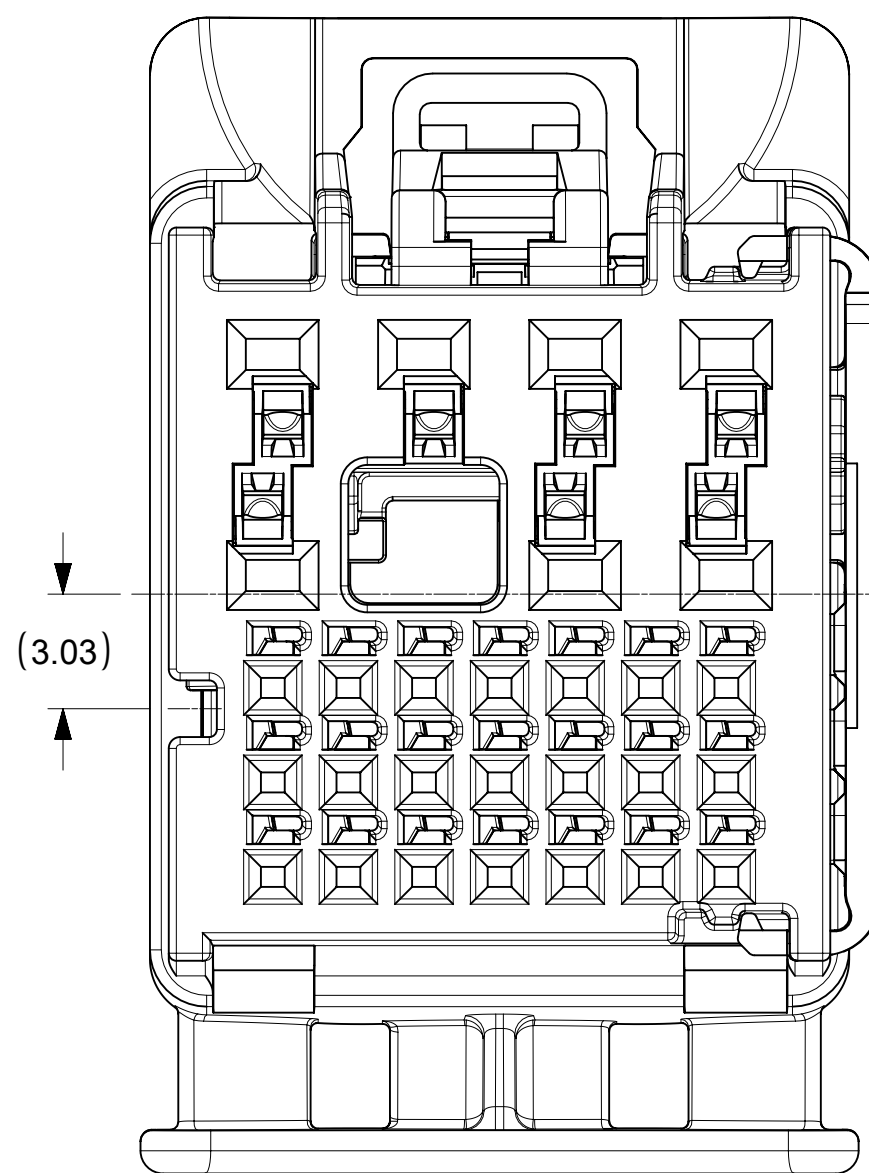
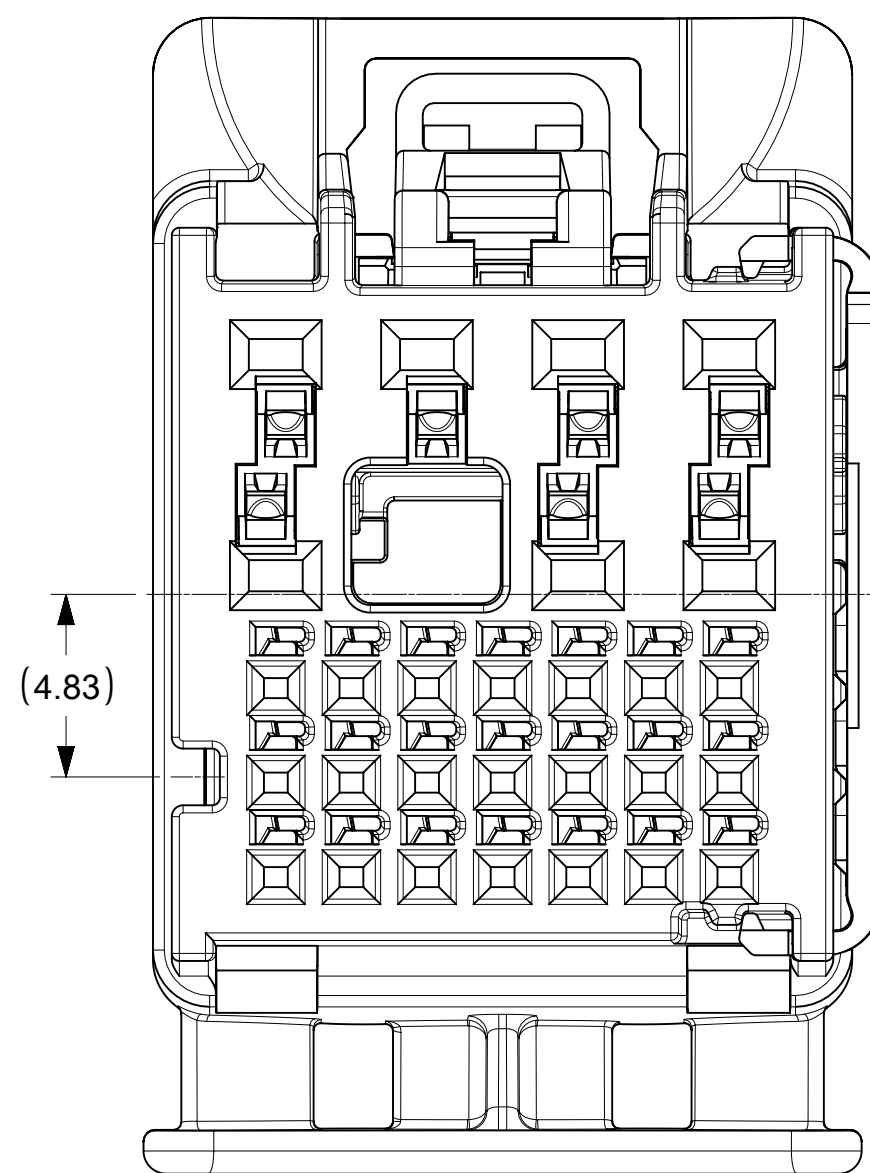


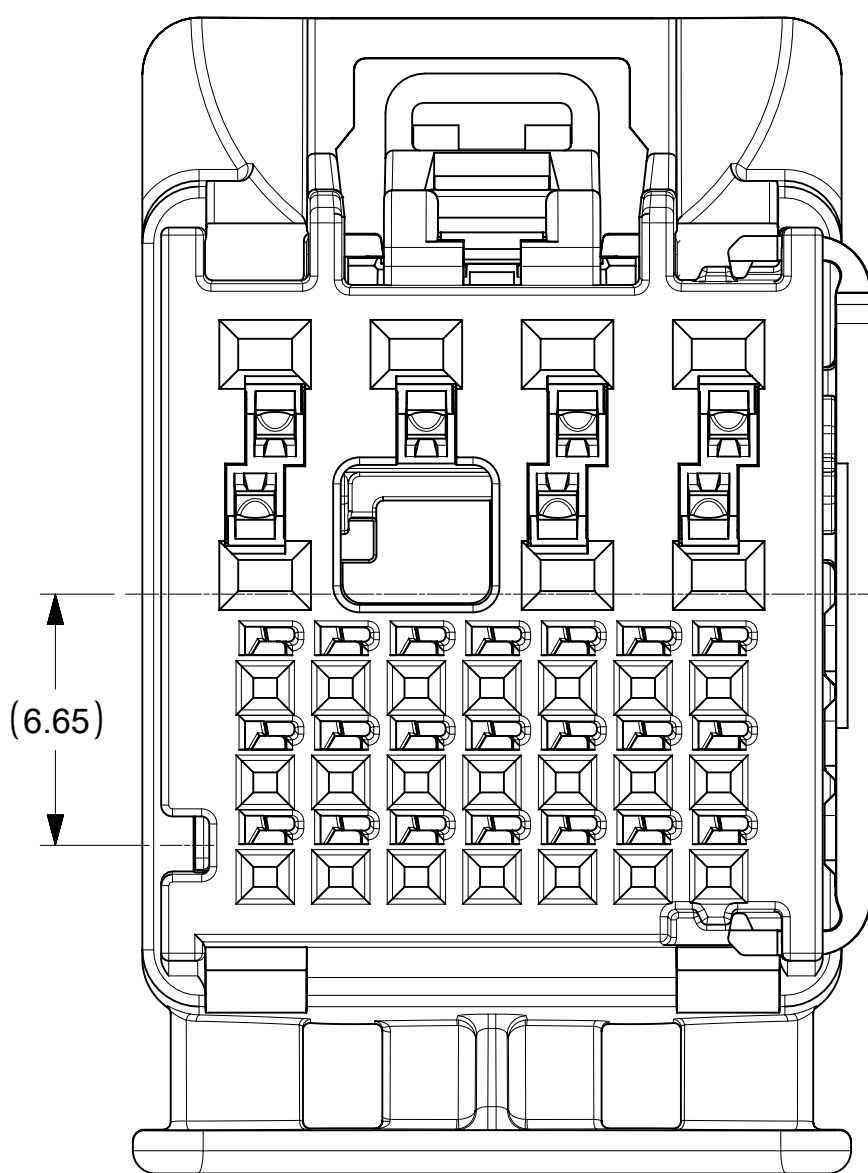
28 WAY CONNECTOR ASSY
KEY 1
P/N 1600140011



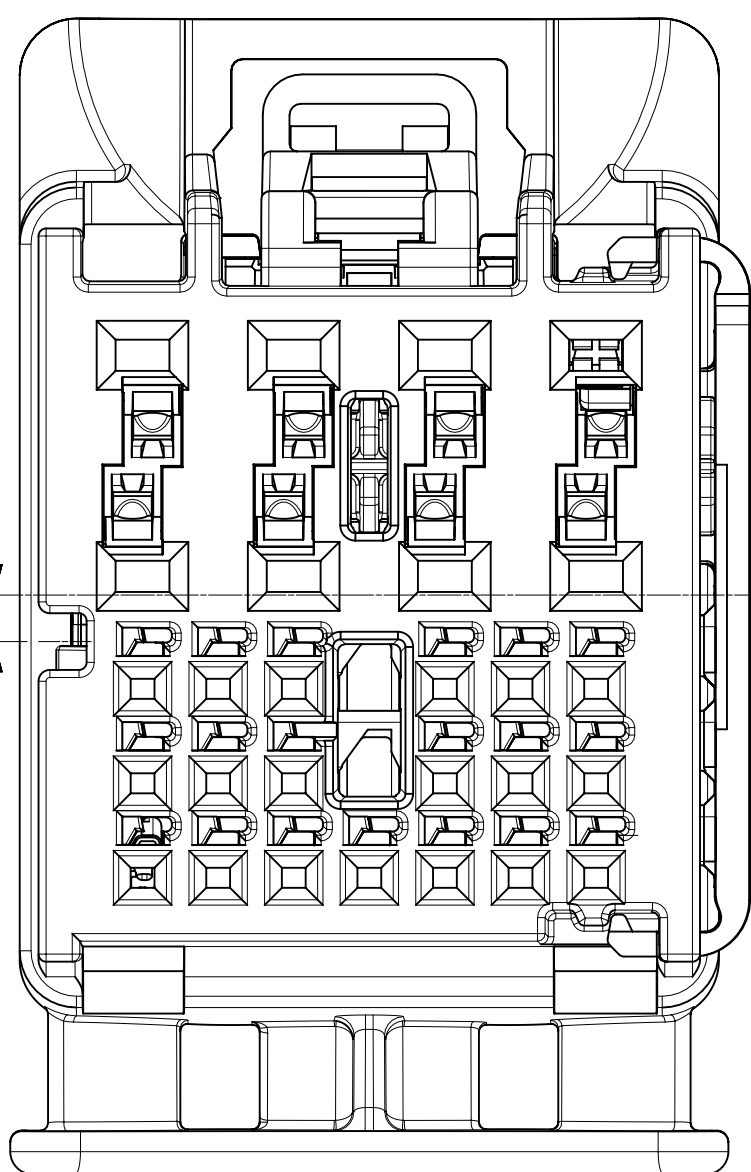
28 WAY CONNECTOR ASSY
KEY 2
P/N 1600140012



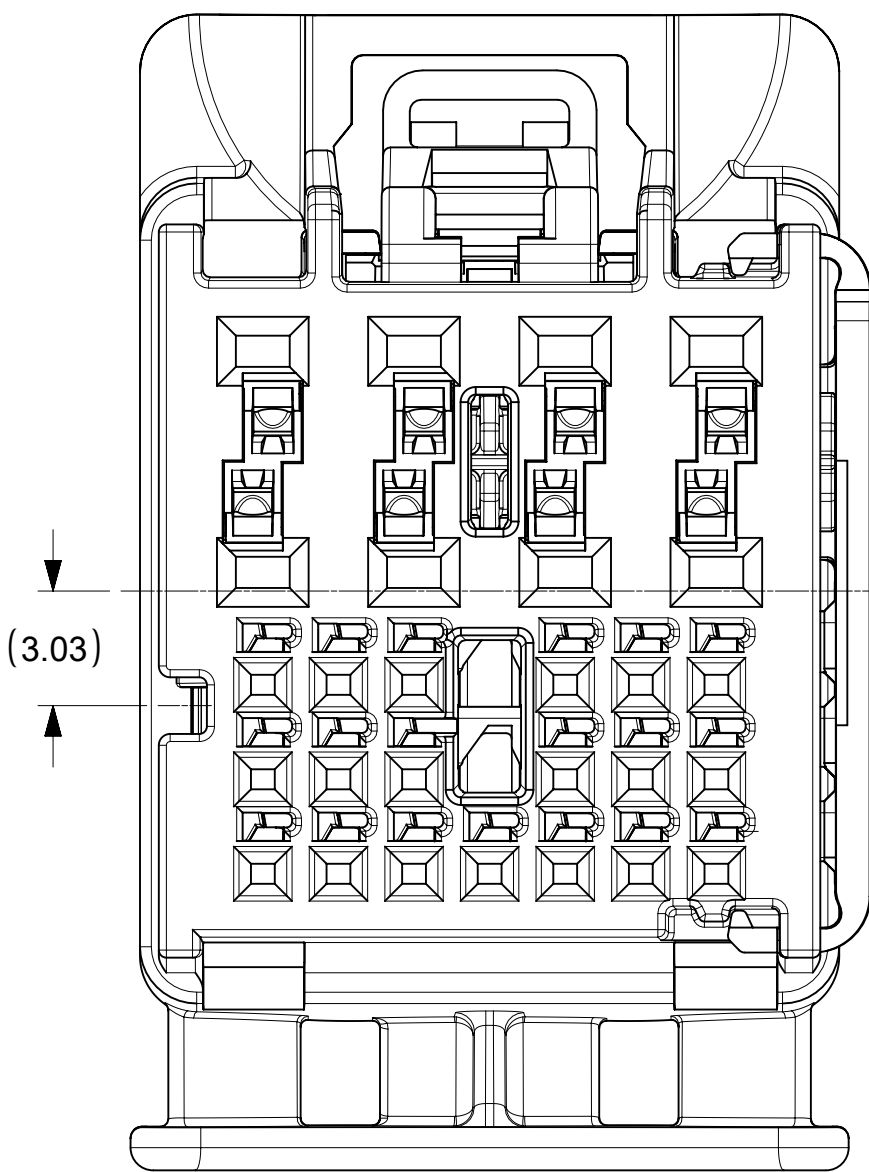
28 WAY CONNECTOR ASSY
KEY 3
P/N 1600140013



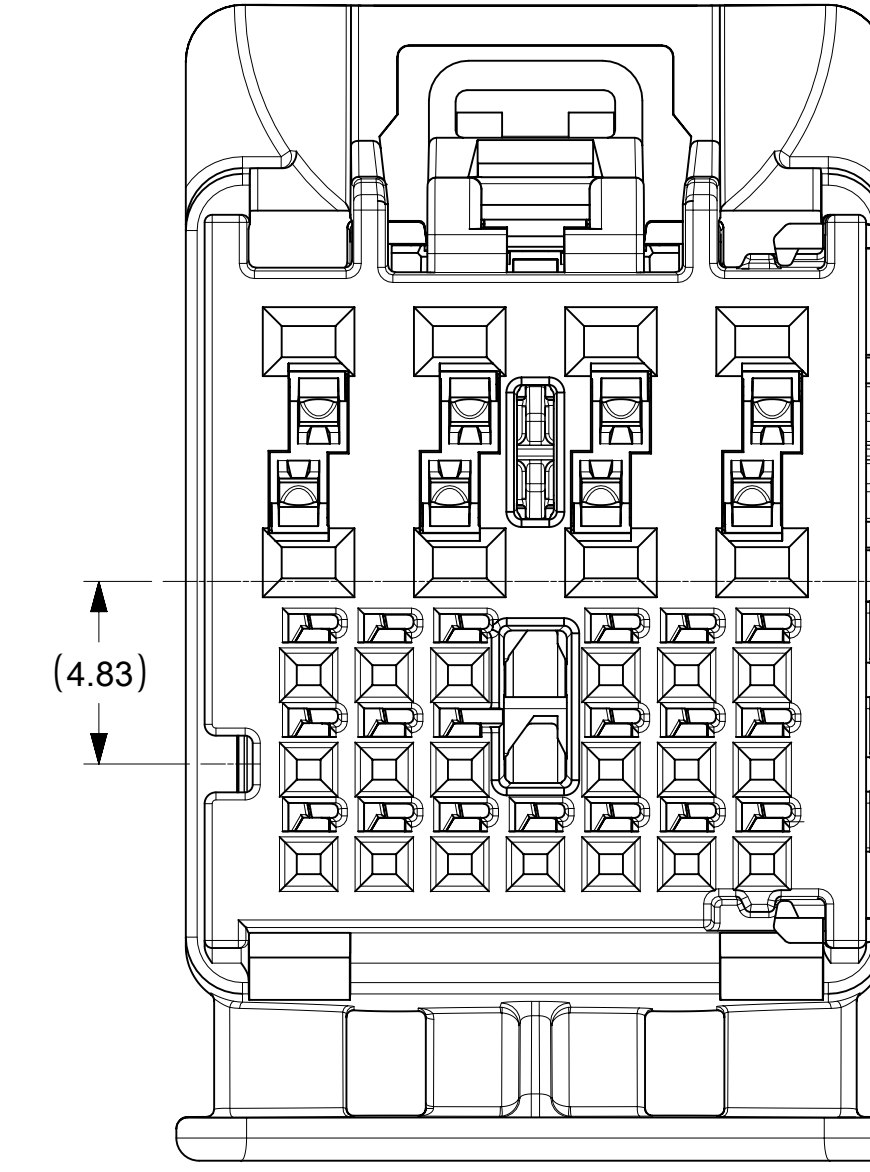
28 WAY CONNECTOR ASSY
KEY 4
P/N 1600140014



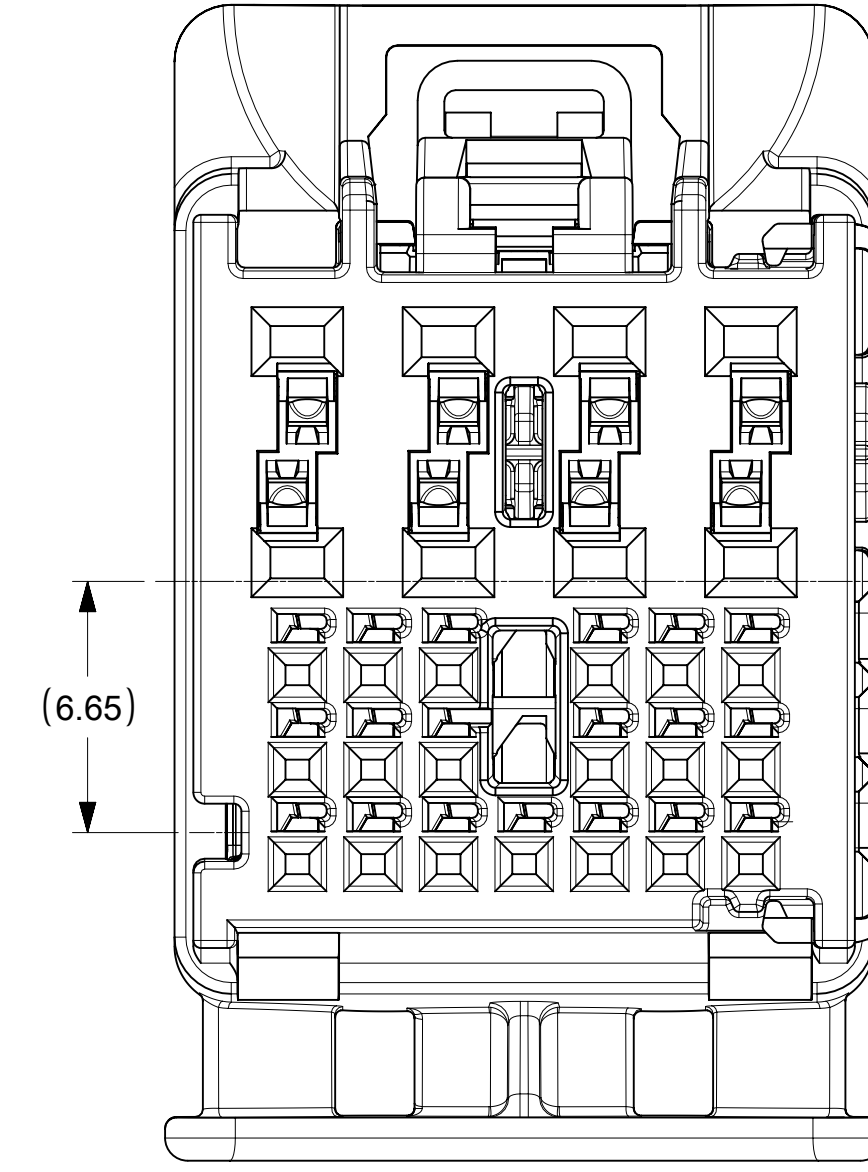
27 WAY CONNECTOR ASSY
KEY 1
P/N 1600290011



27 WAY CONNECTOR ASSY
KEY 2
P/N 1600290012



27 WAY CONNECTOR ASSY
KEY 3
P/N 1600290013



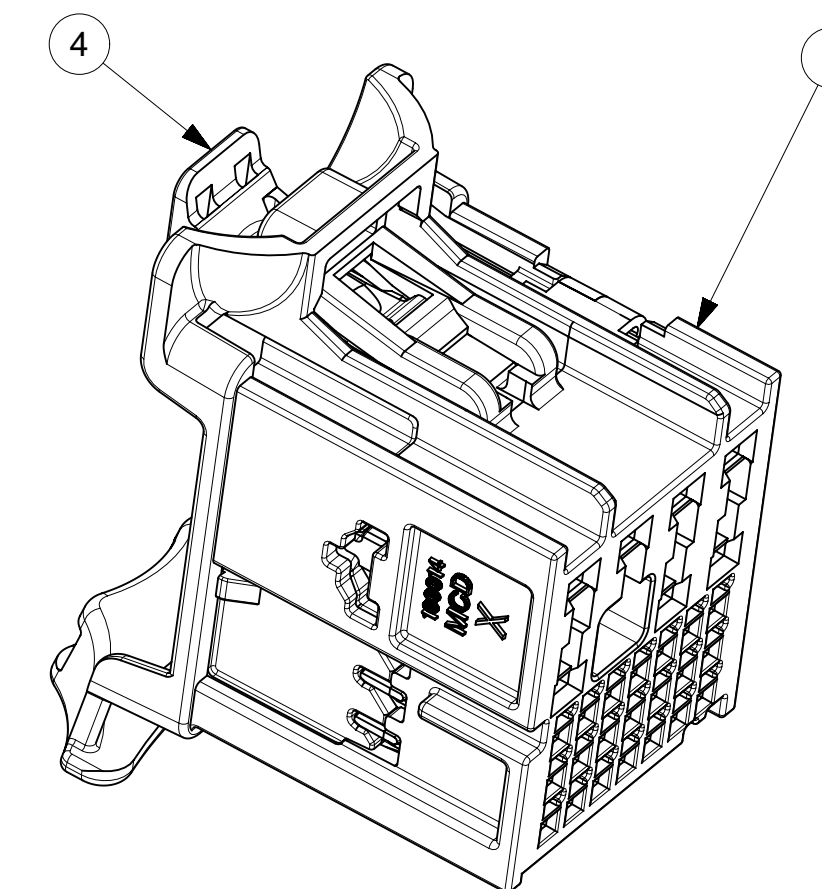
27 WAY CONNECTOR ASSY
KEY 4
P/N 1600290014

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)	
35072403	TIN PLATING	DELPHI	0.35 - 0.5	TAXI TERM OCS 1.2	
35072404	TIN PLATING	DELPHI	0.75 - 0.8		
35072405	TIN PLATING	DELPHI	0.8 - 1.0		
35072406	TIN PLATING	DELPHI	1.25 - 1.5		GMW 15626 INSULATION TYPE FLR (REGULAR THIN WALL)
SMSA-A031T-M1.2	TIN PLATING	JST	0.5 - 0.75	MSA 1.2mm TERMINAL	
SMSA-A041T-M1.2	TIN PLATING	JST	1.0 - 1.5	MSA 1.2mm TERMINAL	

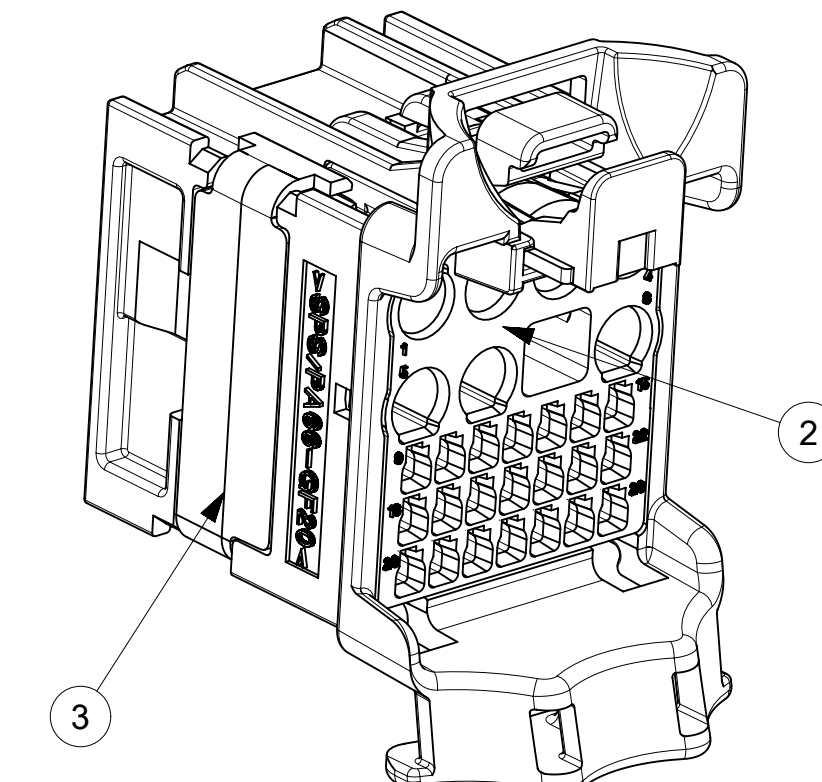
NOTES: VALID UNLESS OTHERWISE SPECIFIED

27WAY/28WAY ARE DEPOPULATED VARIANTS OF THE 29WAY

- GENERAL:
 - APPLICATION SPECIFICATION SEE: AS-160014-001
 - PRODUCT SPECIFICATION SEE: PS-160014-001
 - PACKAGING SPECIFICATION PER MOLEX DRAWING: PK-31302-266
 - PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: ES-40000-5016
 - DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS (COMPANY ID#13255)
- DESIGN - MATERIALS:
 - SEE BOM TABLE
- DESIGN - GEOMETRY:
 - ALL GRAPHIC DATA IS BASIC (NO TOLERANCE) AND MUST BE TAKEN FROM THE DATA FILE AT ITS LATEST REVISION.
 - PRODUCT DESIGN MODEL NUMBER(S): SEE BOM TABLE
 - GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5-2009
 - EDGES AND UNDIMENSIONED DETAILS PER ISO13715
 - CORNERS SHOWN AS SHARP TO BE R 0.2 MAX.
 - MARKED TEXT TO INCLUDE RECYCLING CODE, CAVITY ID, VENDOR IDENTIFICATION, AND CUSTOMER MATERIAL NUMBER.
 - 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
- DESIGN - MANUFACTURING:
 - VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B)



SCALE 3:1



SCALE 3:1

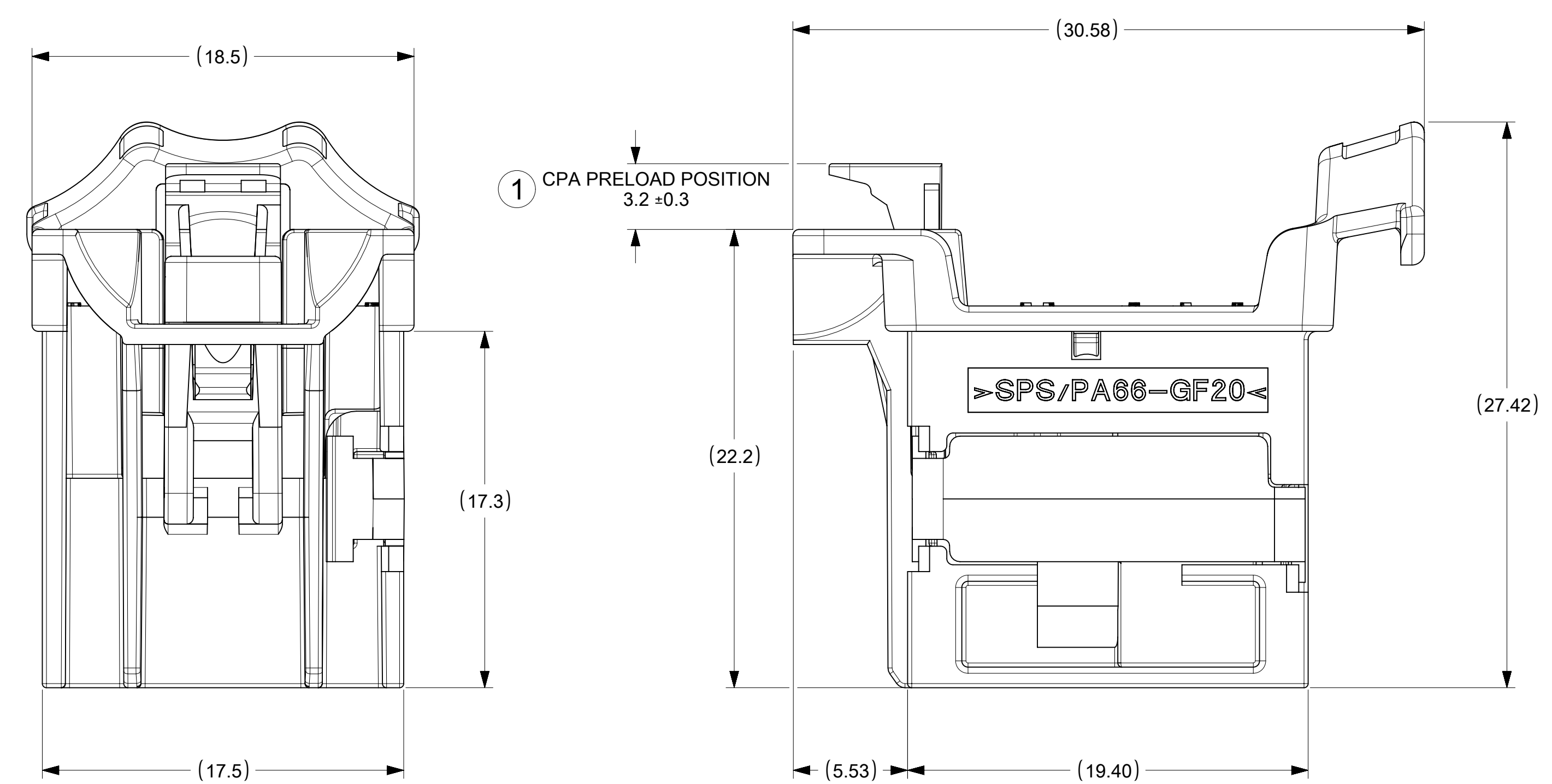
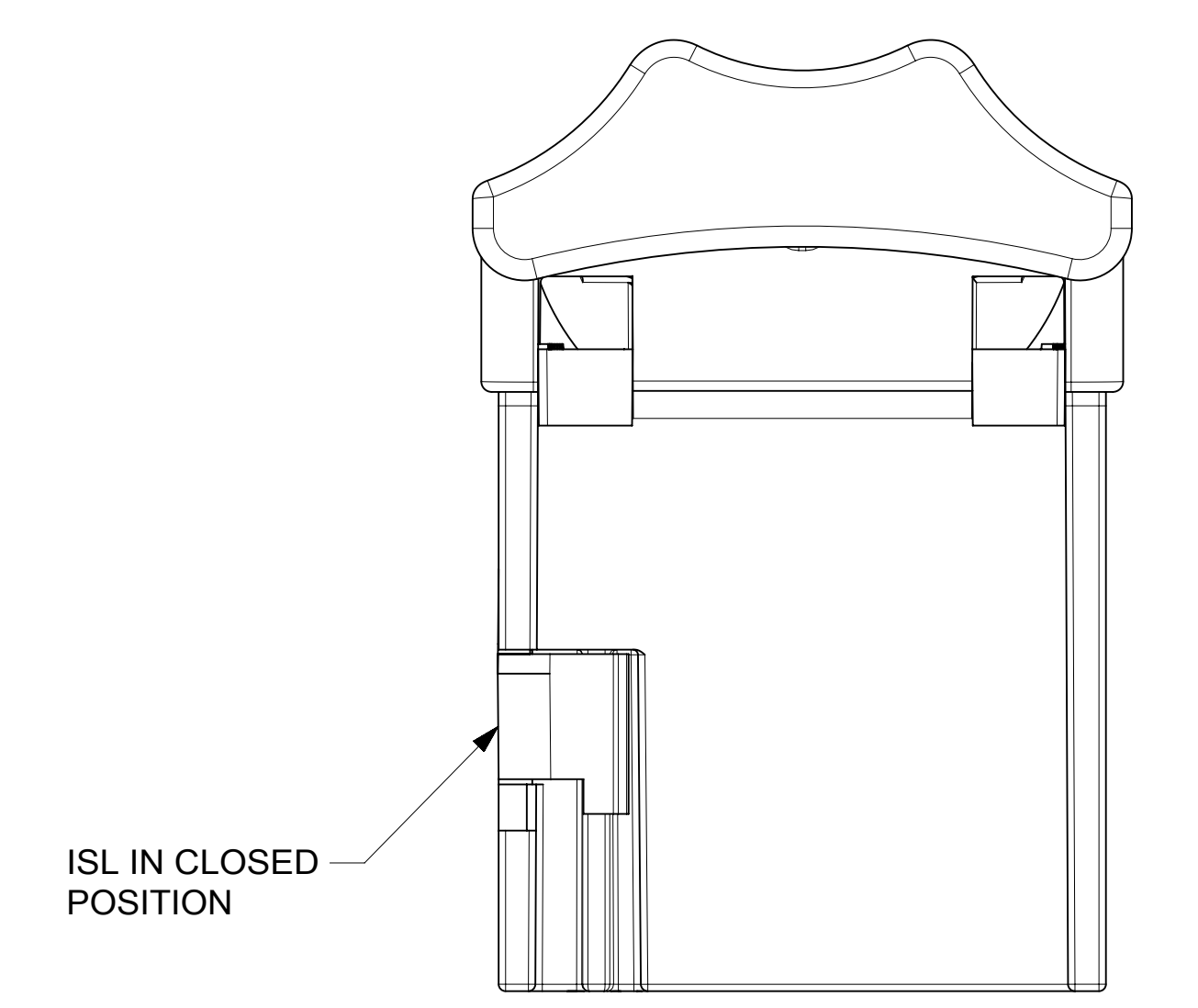
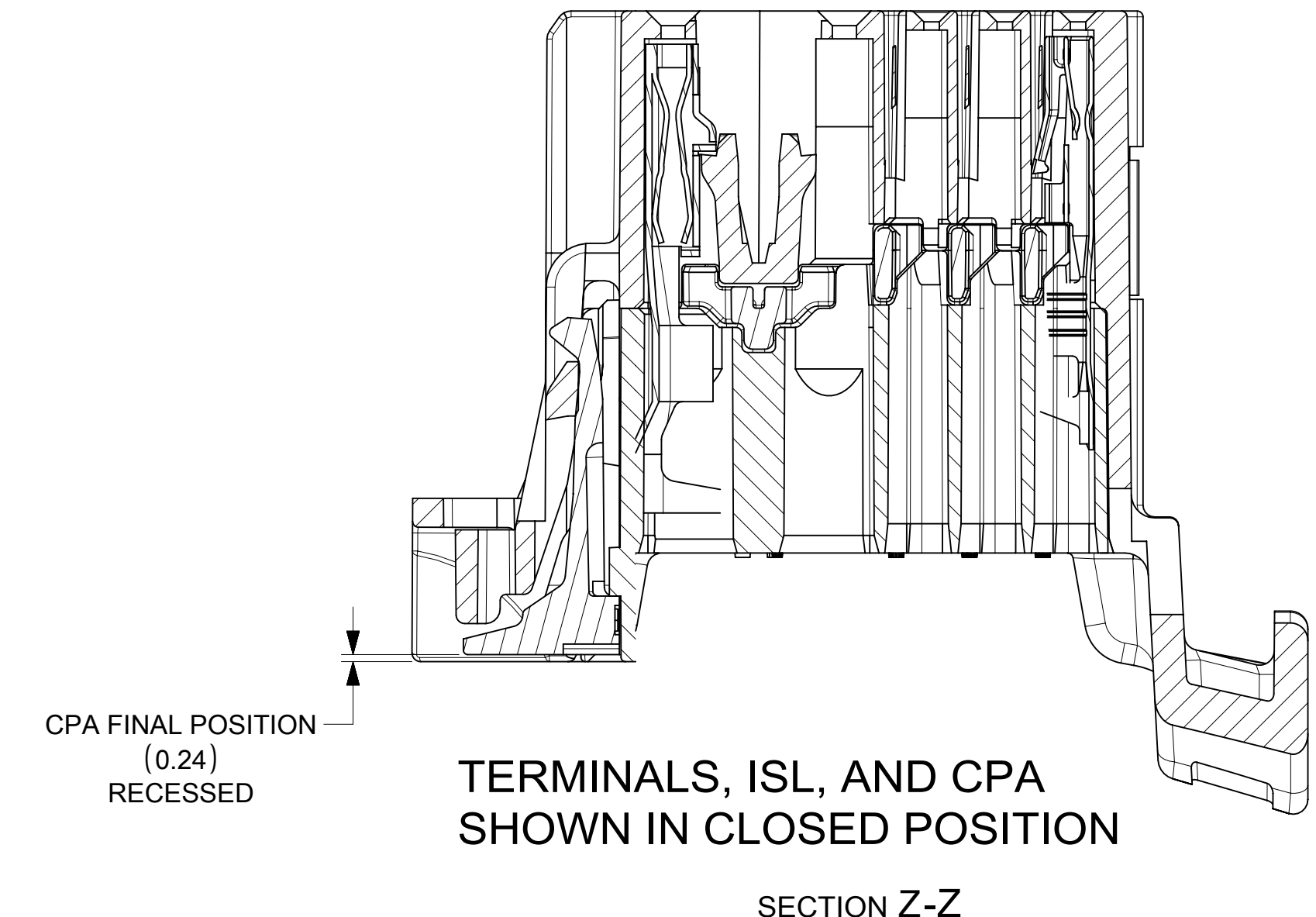
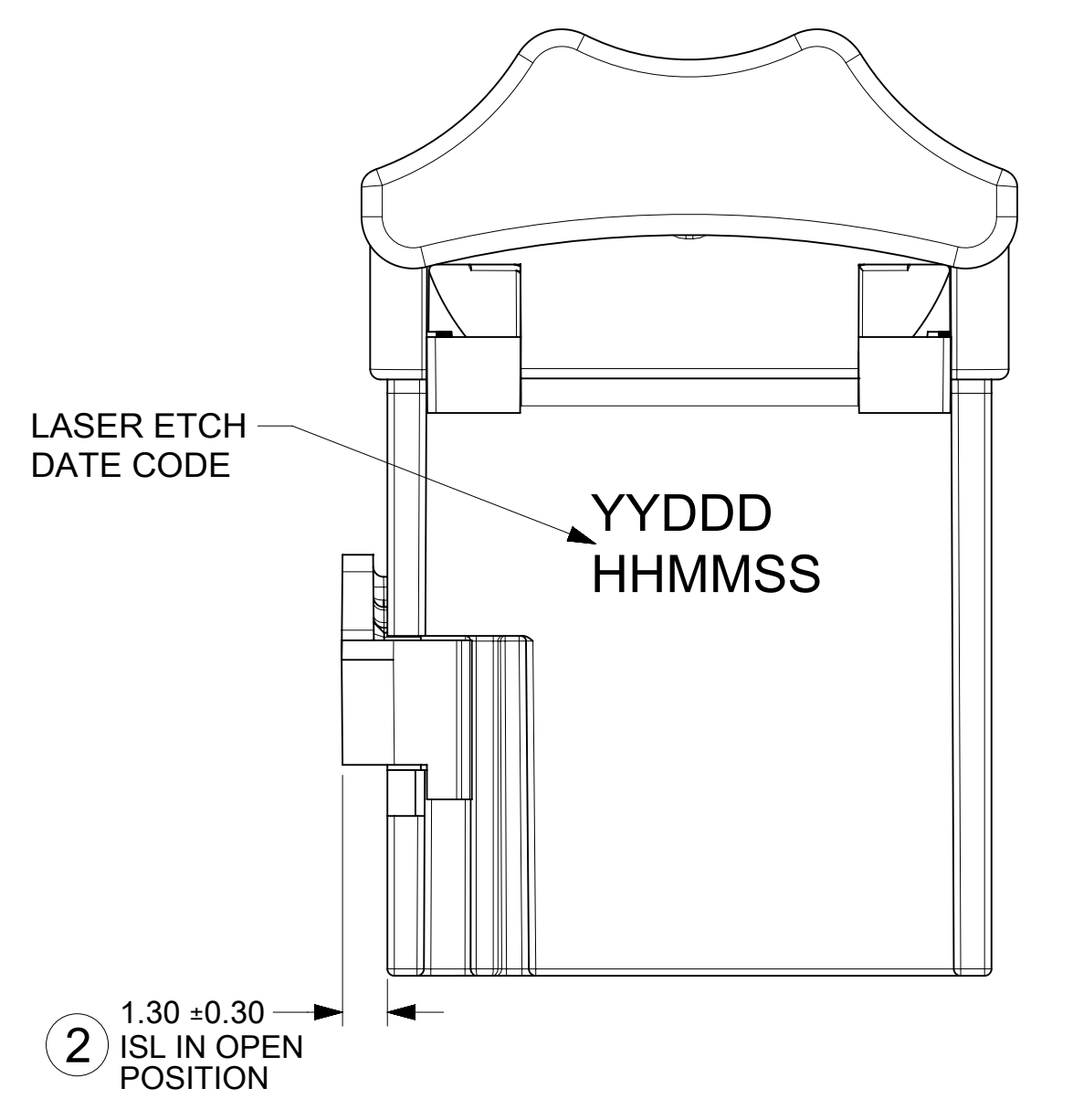
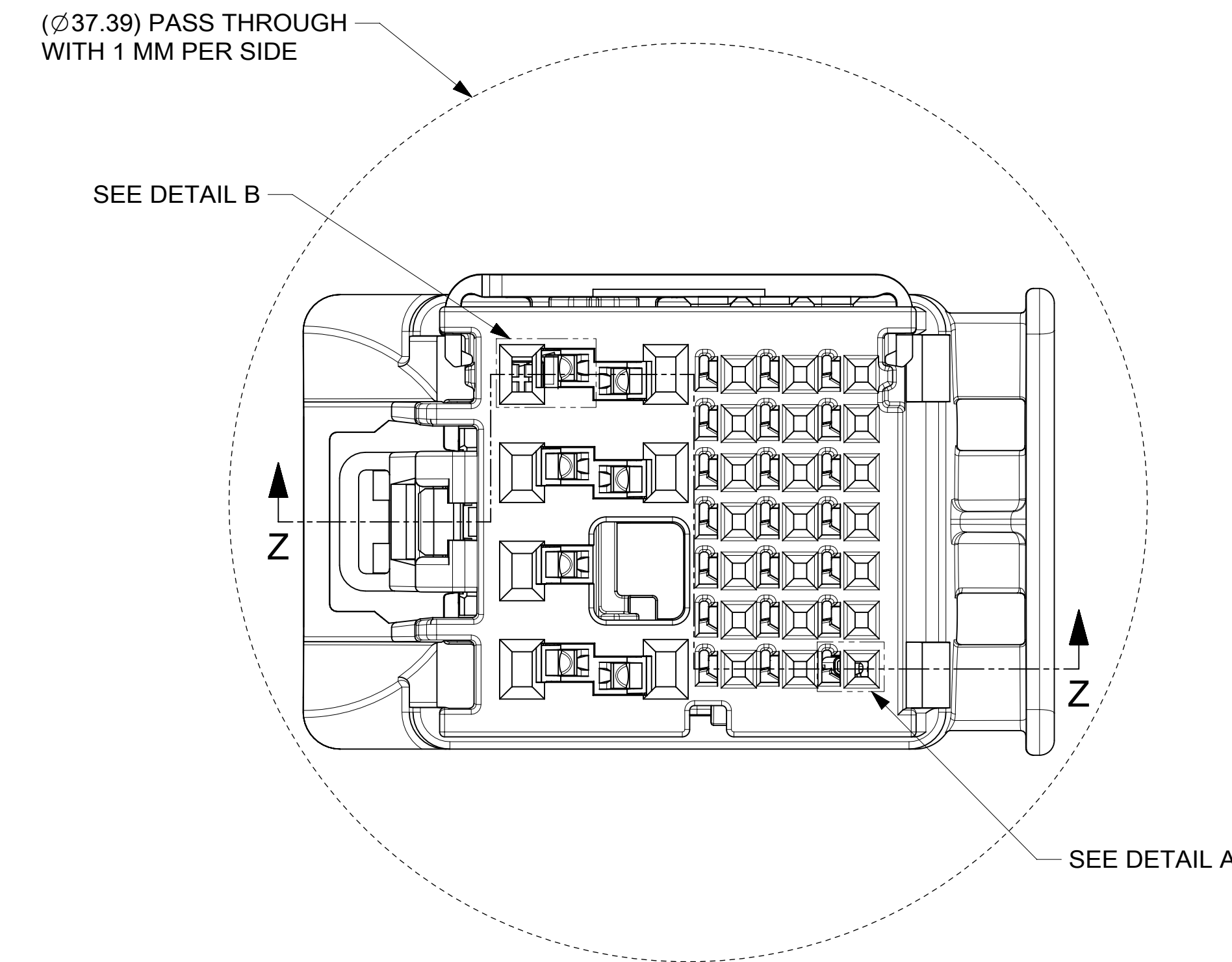
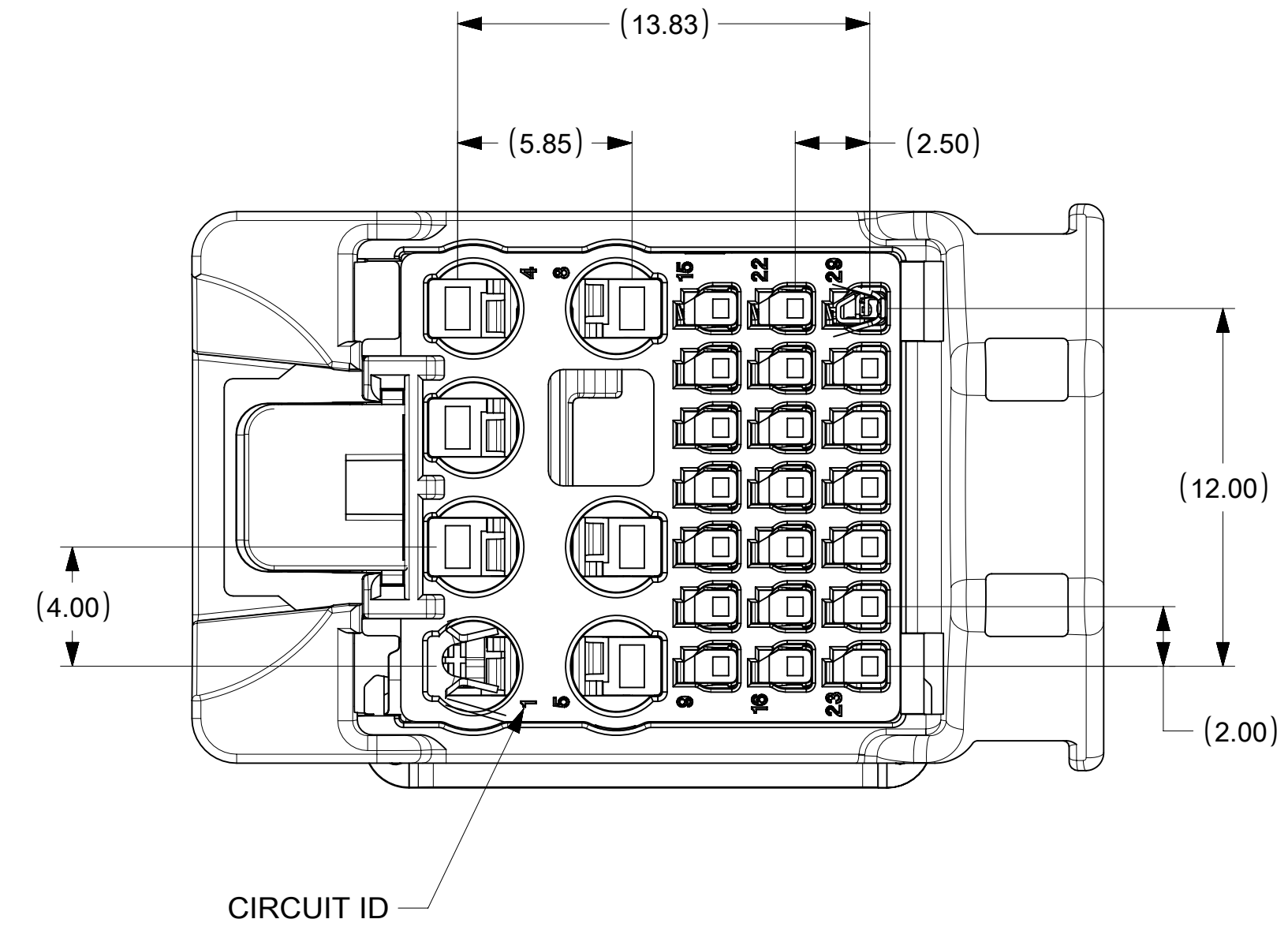
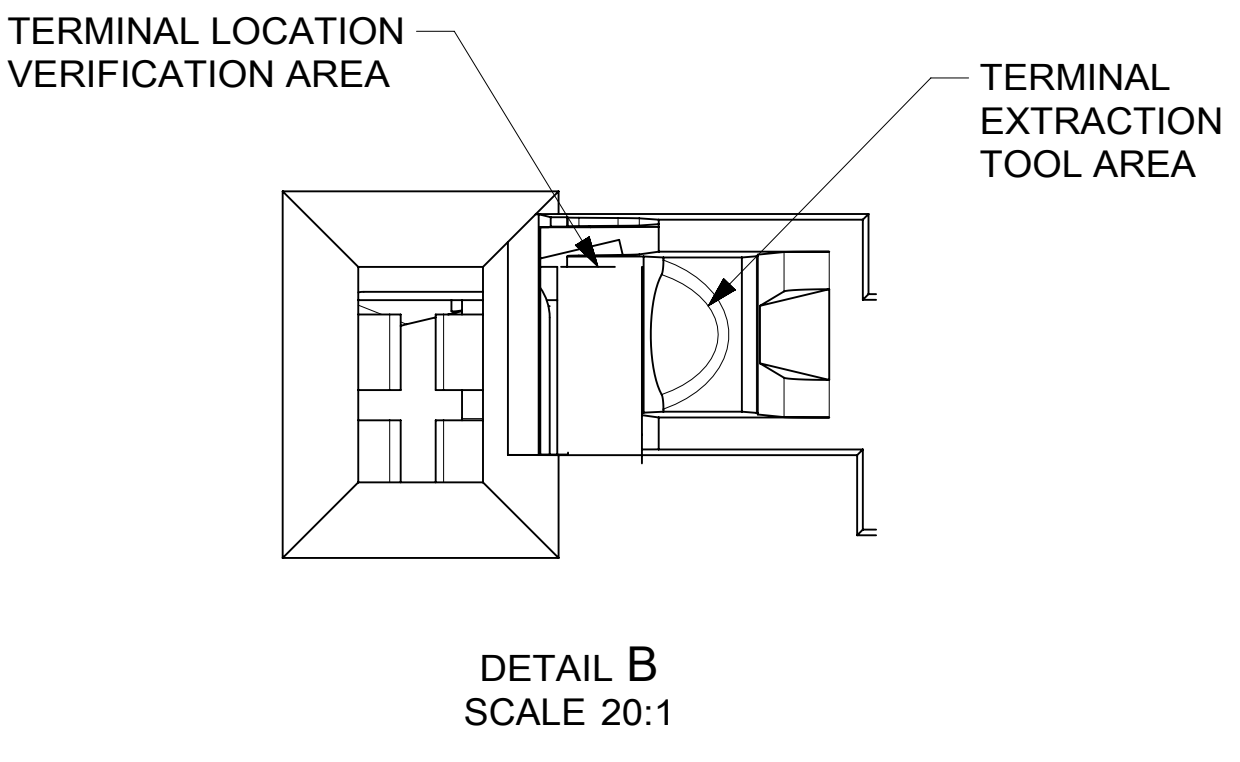
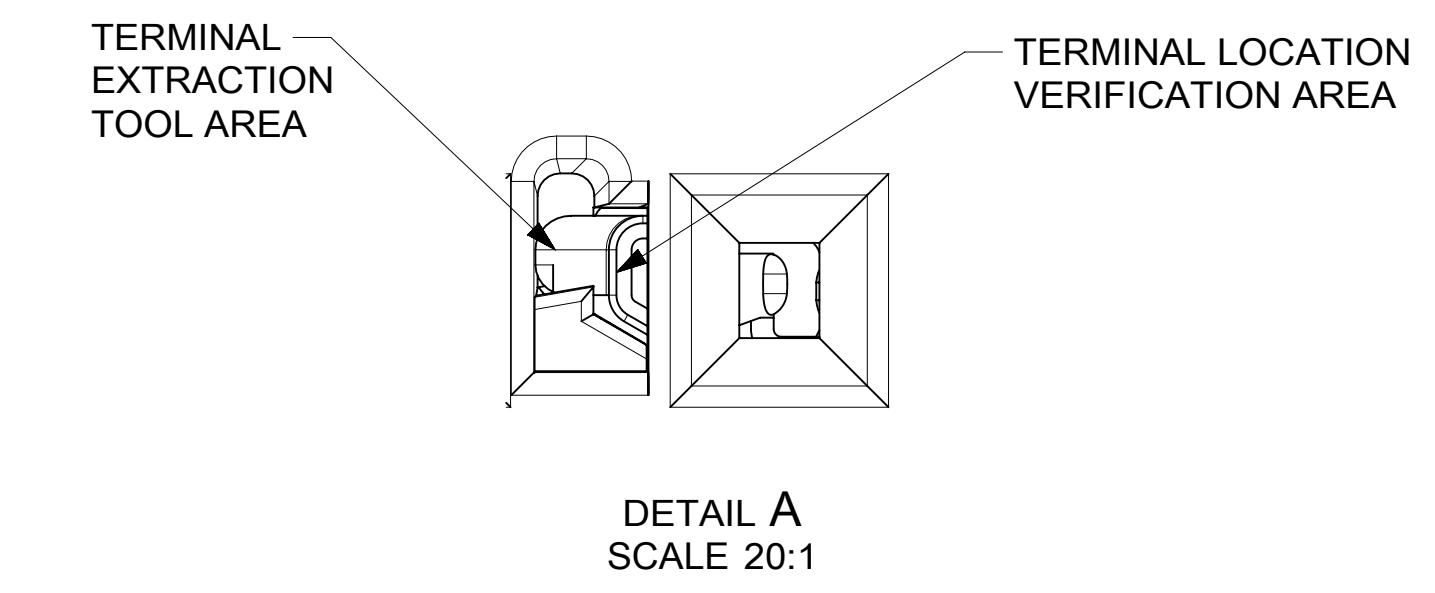
INSPECTION BALLOON NUMBER LOG
PER DRAWING REVISION : A6
LAST BALLOON NUMBER: 2
ADDED BALLOON NUMBER: NONE
DELETED BALLOON NUMBER: NONE

A6	UPDATED TAK50 TERMINAL PNS 21-July-2021 YPENG47 ECN 648438
A5	UPDATED DELPHI 1.2 TERMINAL PNS 10-Apr-2020 YPENG47 ECN 635661
A4	UPDATED ISL TO PRE-LOCK(SHIPMENT) STATUS 31-Mar-2020 YPENG47 ECN 635045
REVISION	DESCRIPTION

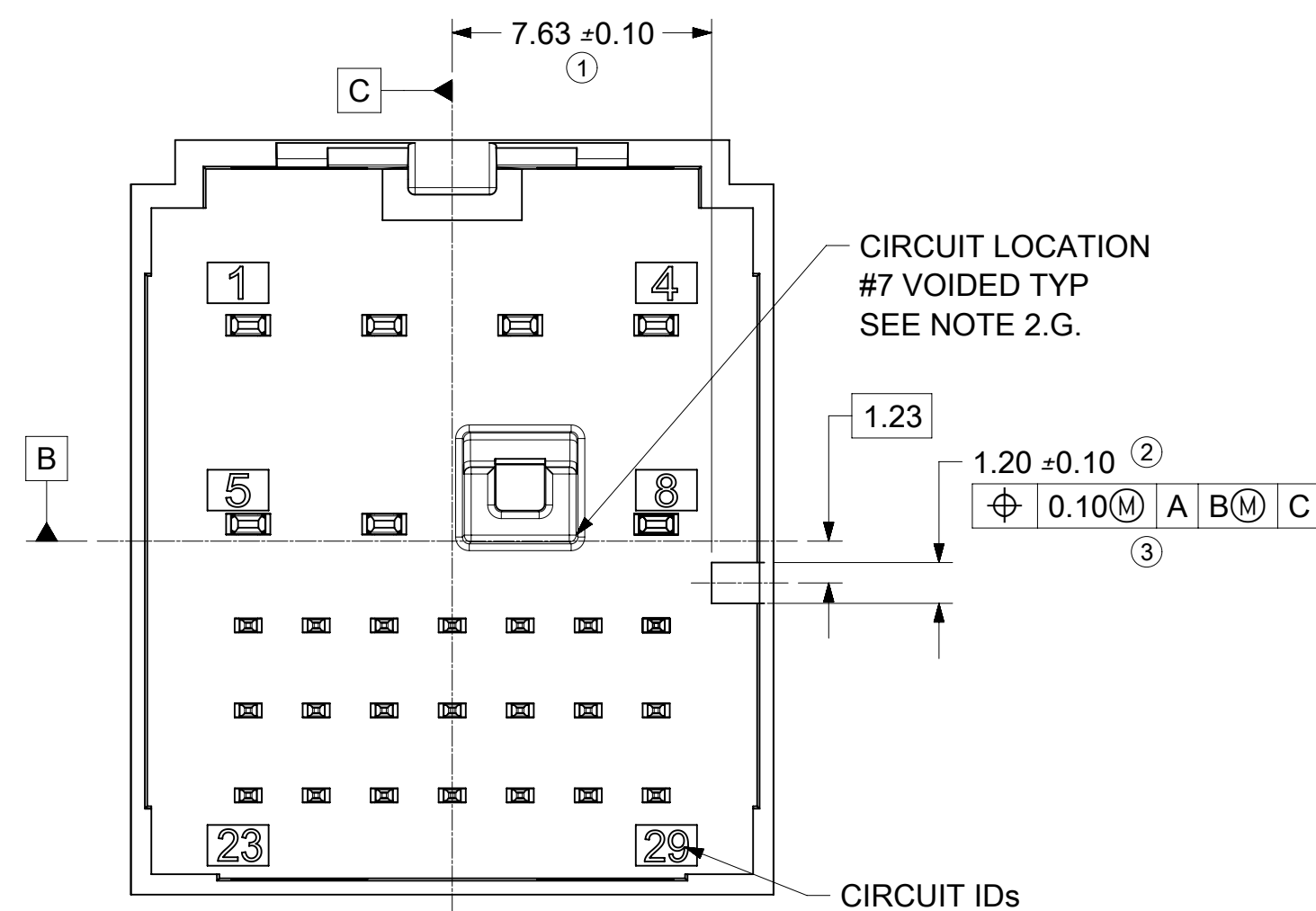
MOLEX ASSEMBLY PART NO.'S	CIRCUIT COUNT	KEY	OUTER SHROUD COLOR	COMPONENTS						
				ITEM 1				ITEM 2	ITEM 3	ITEM 4
				OUTER SHROUD KEY 1	OUTER SHROUD KEY 2	OUTER SHROUD KEY 3	OUTER SHROUD KEY 4	INNER HOUSING	ISL	CPA
1600140011	28	1	DARK GRAY	SPS/PA66-GF20 1600140511	SPS/PA66-GF20 1600140512	SPS/PA66-GF20 1600140513	SPS/PA66-GF20 1600140514	SPS/PA66-GF20 1600140701	SPS-GF30 1600140601	PA66-GF50 1600140703
1600140012	28	2	LT GREEN A	1	1			STONE GRAY 1	1	1
1600140013	28	3	LT GRAY			1		STONE GRAY 1	1	1
1600140014	28	4	BLACK				1	STONE GRAY 1	1	1
1600290011	27	1	BLACK	1600290511	1600290512	1600290513	1600290514	1600290701	1600290601	1600140703
1600290012	27	2	LT GREEN B	1	1			DARK GRAY 1	1	1
1600290013	27	3	LT BLUE B			1		DARK GRAY 1	1	1
1600290014	27	4	PURPLE C				1	DARK GRAY 1	1	1

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	DIMENSION UNITS	SCALE	CURRENT REV DESC: UPDATED TAK50 TERMINAL PNS
		mm	5:1	
DIVISIONAL SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	ANGULAR TOL	± 3.0°	EC NO: 648438 DRWN: YPENG47 CHK'D: RCARLSON APPR: JCONDON
		4 PLACES	±	
DIVISIONAL SYMBOLS	ANGULAR TOL	3 PLACES	±	2021/07/21 2021/07/29 2021/08/02
		2 PLACES	± 0.3	
DIVISIONAL SYMBOLS	ANGULAR TOL	1 PLACE	± 0.3	2019/02/14 2019/02/25
		0 PLACES	± 0.3	
DIVISIONAL SYMBOLS	ANGULAR TOL	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING SERIES D-SIZE 160014
DOCUMENT STATUS	P1	RELEASE DATE	2021/08/02 13:46:01	<p>28 WAY STAK50H HYBRID ASSEMBLY CONNECTOR ASSEMBLY</p> <p>PRODUCT CUSTOMER DRAWING</p>
DOCUMENT NUMBER		1600140011	DOC TYPE	PSD
DOC PART		000	REVISION	A6
MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
		GENERAL MARKET		1 OF 2

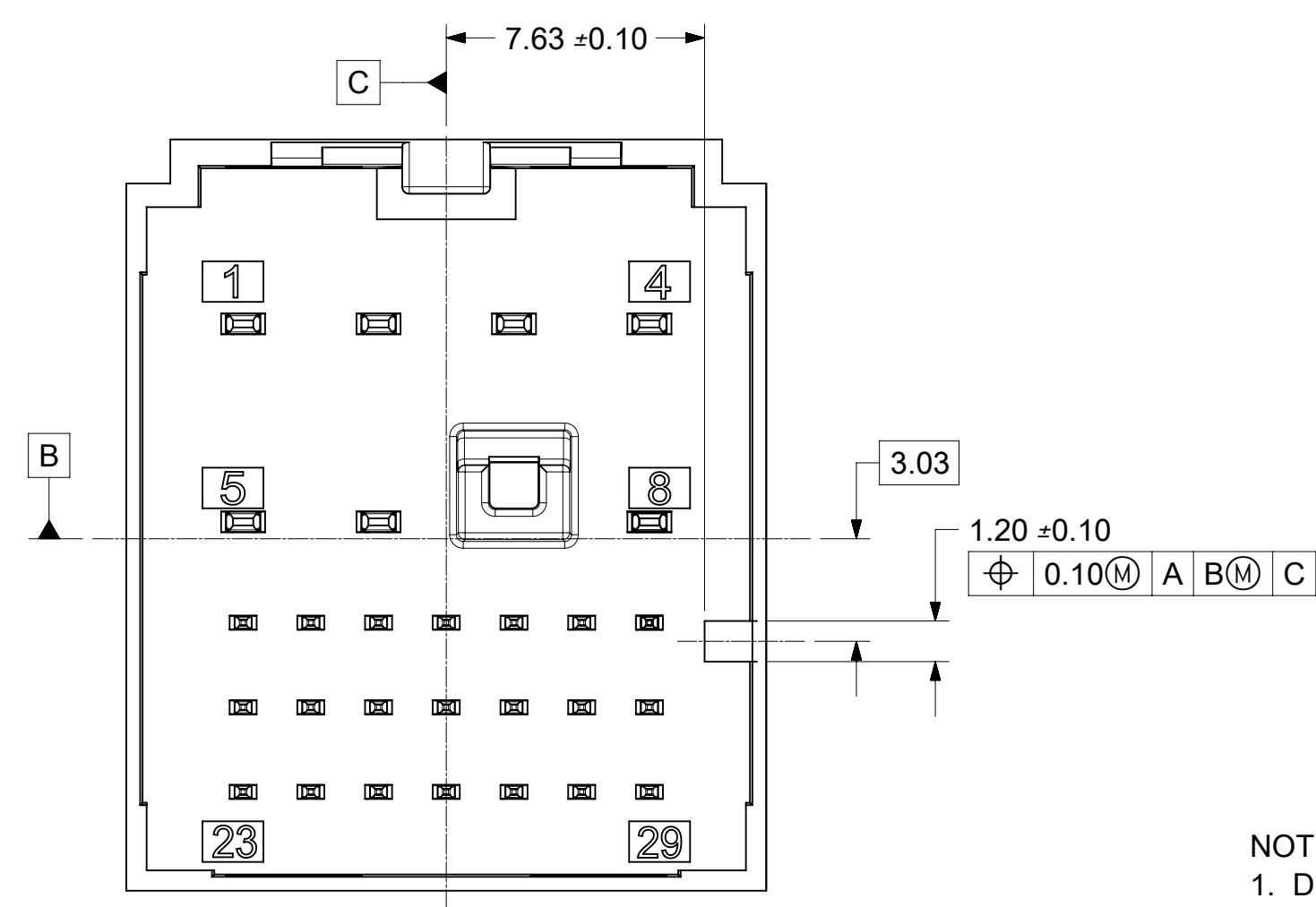
NOTE: 28 WAY CONNECTOR VARIANT SHOWN.
DIMENSIONS APPLY TO ALL CONNECTOR VARIANTS OF 29 WAY



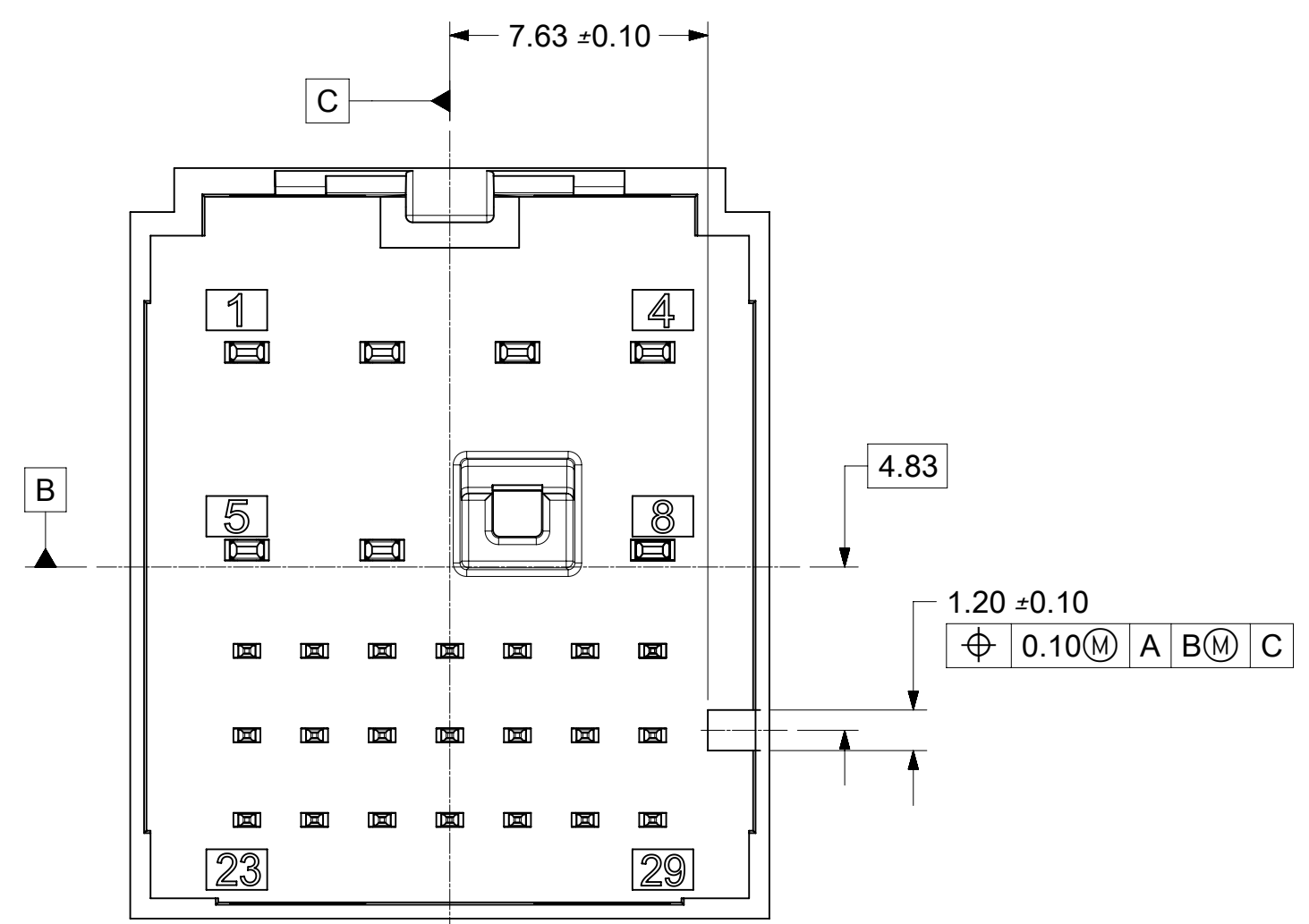
FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	DIMENSION UNITS	SCALE	CURRENT REV DESC: UPDATED TAK50 TERMINAL PMS
$F_A = 0$	mm	5:1	
$F_E = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		
$F_P = 0$	ANGULAR TOL $\pm 3.0^\circ$		
DIVISIONAL SYMBOLS	4 PLACES	\pm	EC NO: 648438
	3 PLACES	\pm	DRWN: YPENG47 2021/07/21
	2 PLACES	± 0.3	CHK'D: RCARLSON 2021/07/29
	1 PLACE	± 0.3	APPR: JCONDON 2021/08/02
	0 PLACES	± 0.3	INITIAL REVISION:
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRWING
			SERIES
			D-SIZE 160014
DOCUMENT STATUS		DOCUMENT NUMBER	CUSTOMER
P1	1600140011	GENERAL MARKET	
RELEASE DATE	DOC TYPE	DOC PART	REVISION
2021/08/02 13:46:01	PSD	000	A6
SHEET NUMBER		2 OF 2	



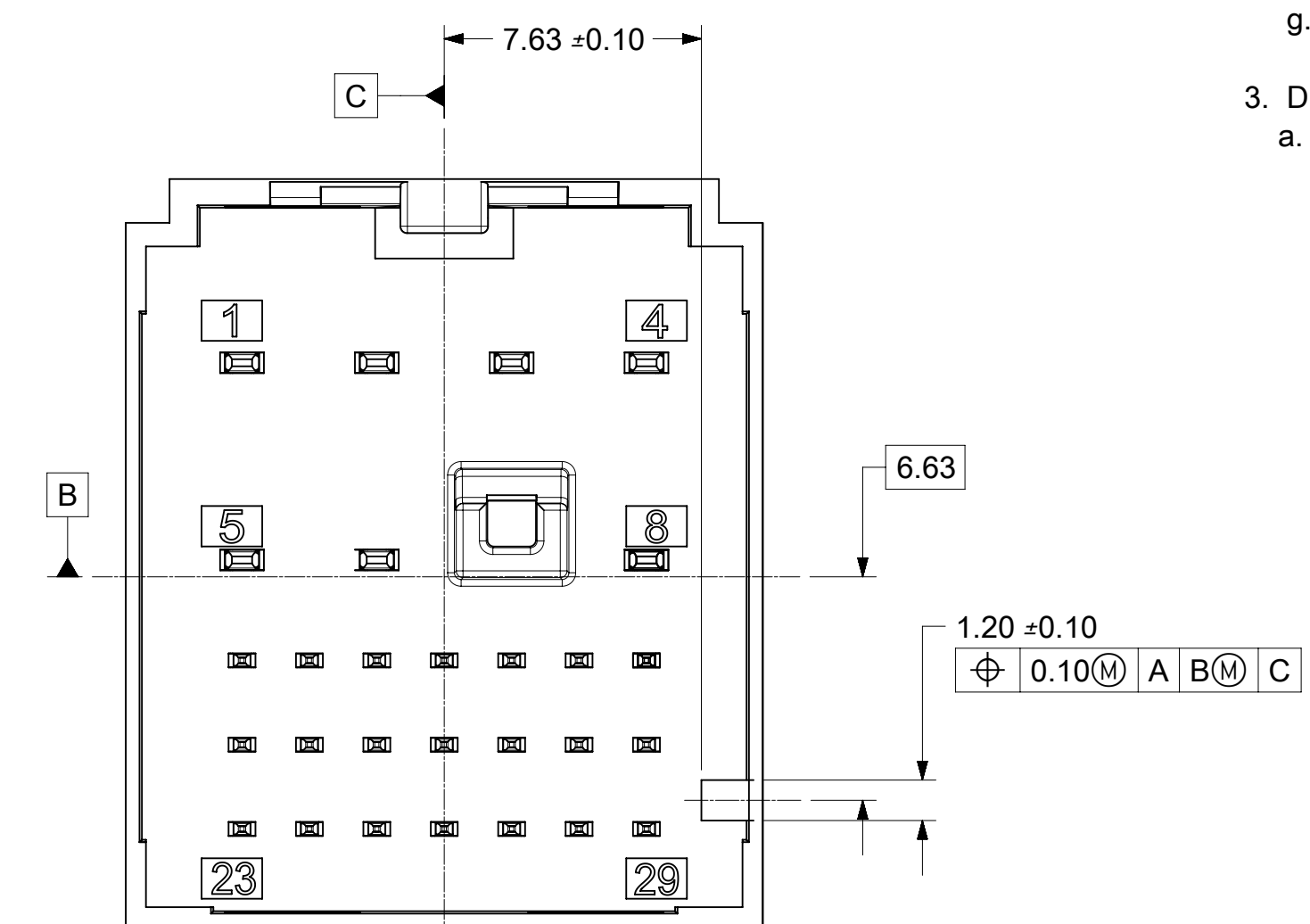
INTERFACE KEY #1
MATING CONNECTOR COLOR; DARK GRAY



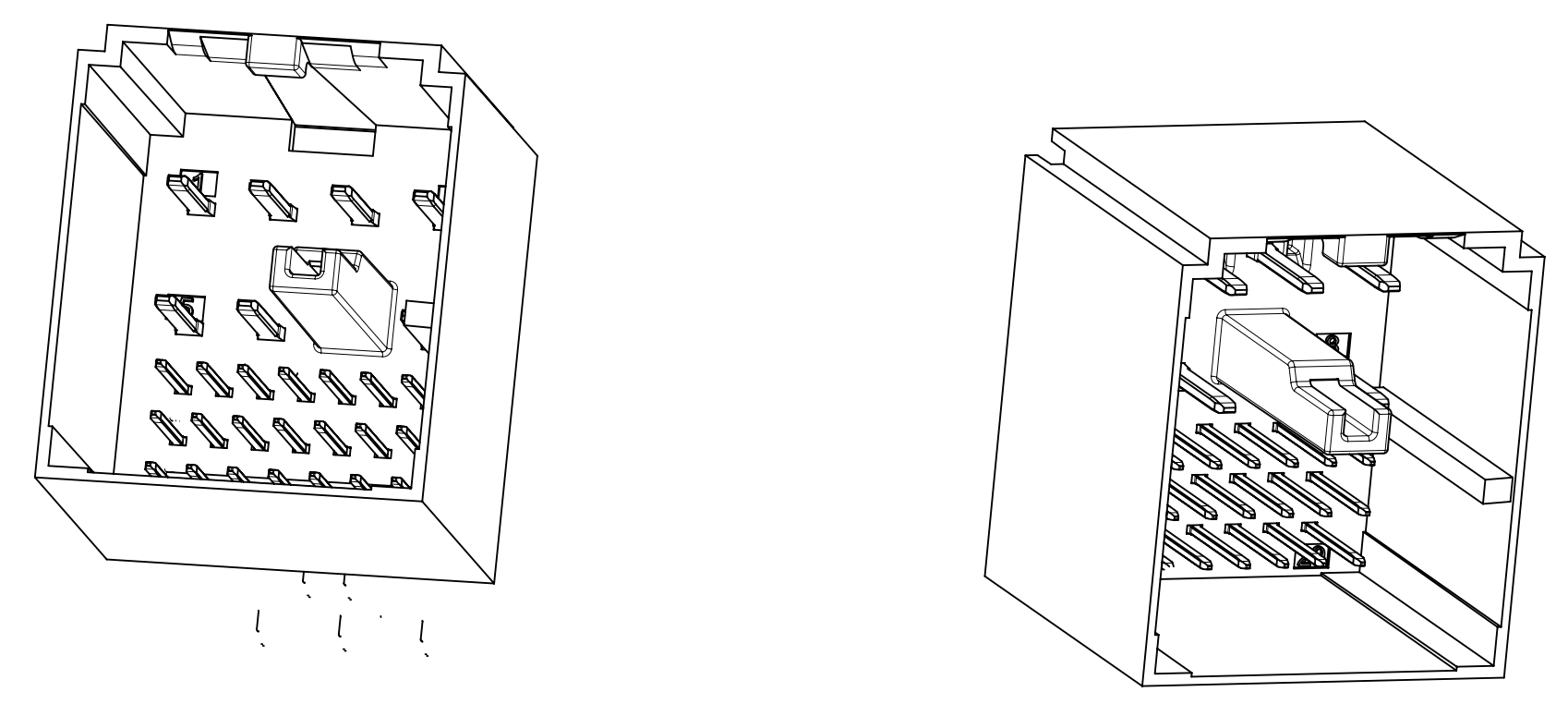
INTERFACE KEY #2
MATING CONNECTOR COLOR; LT GREEN A



INTERFACE KEY #3
MATING CONNECTOR COLOR; LIGHT GRAY



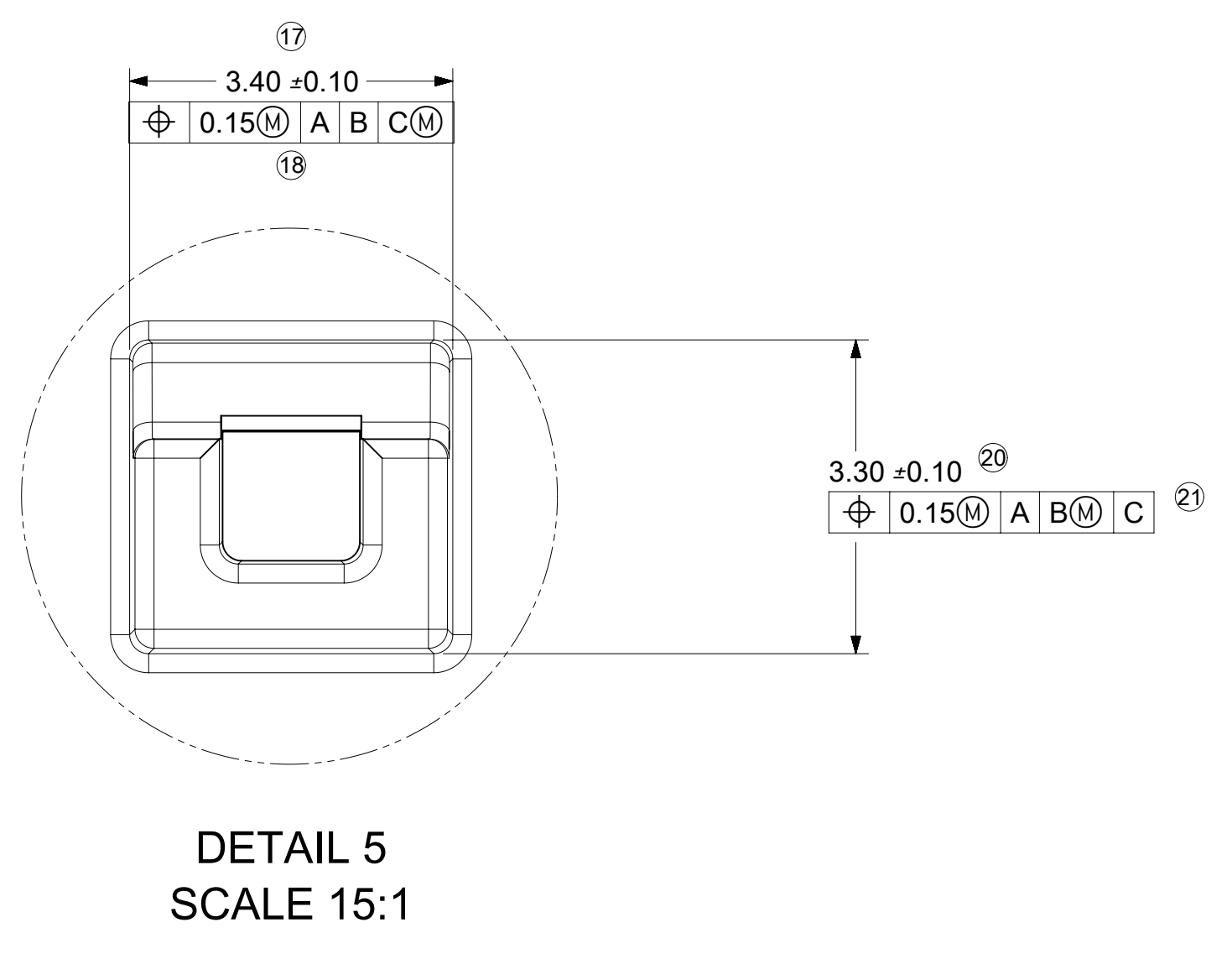
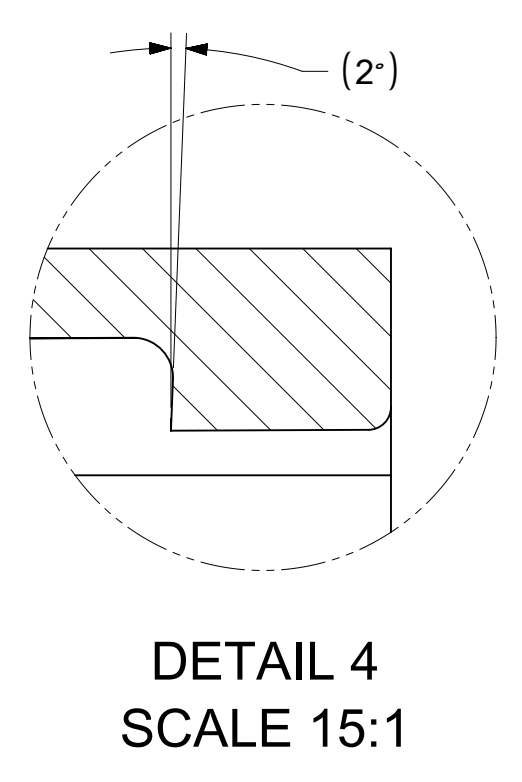
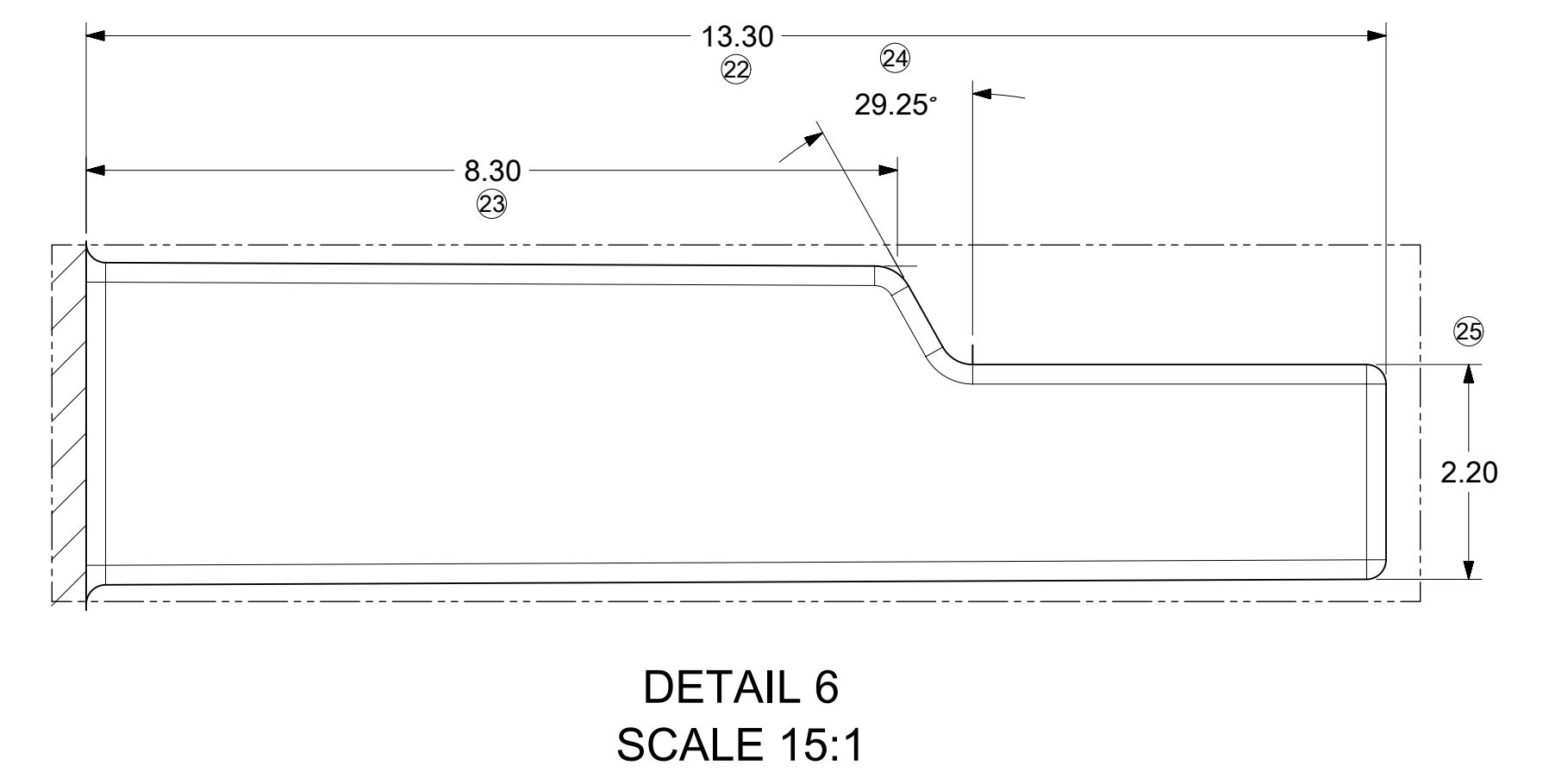
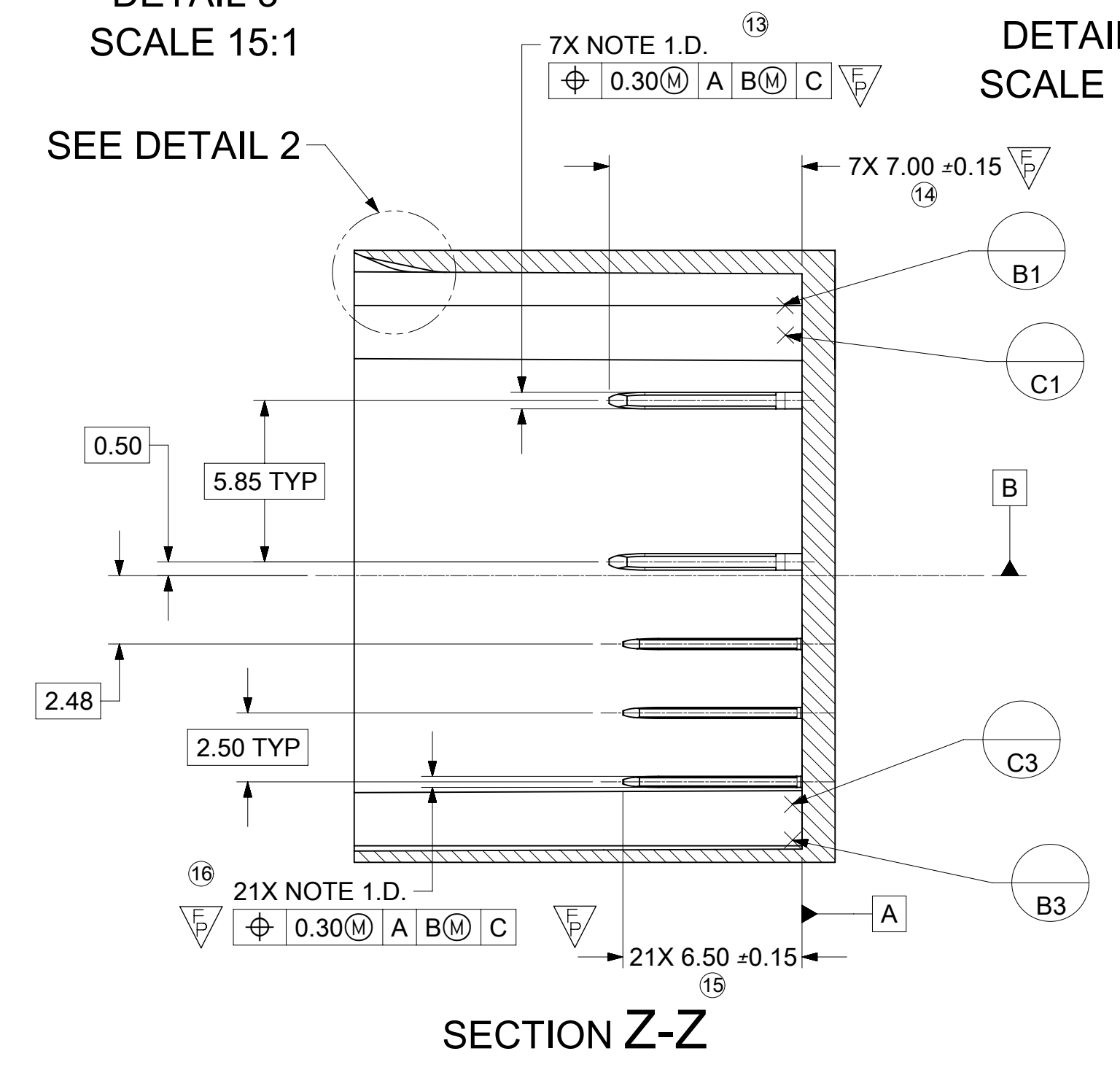
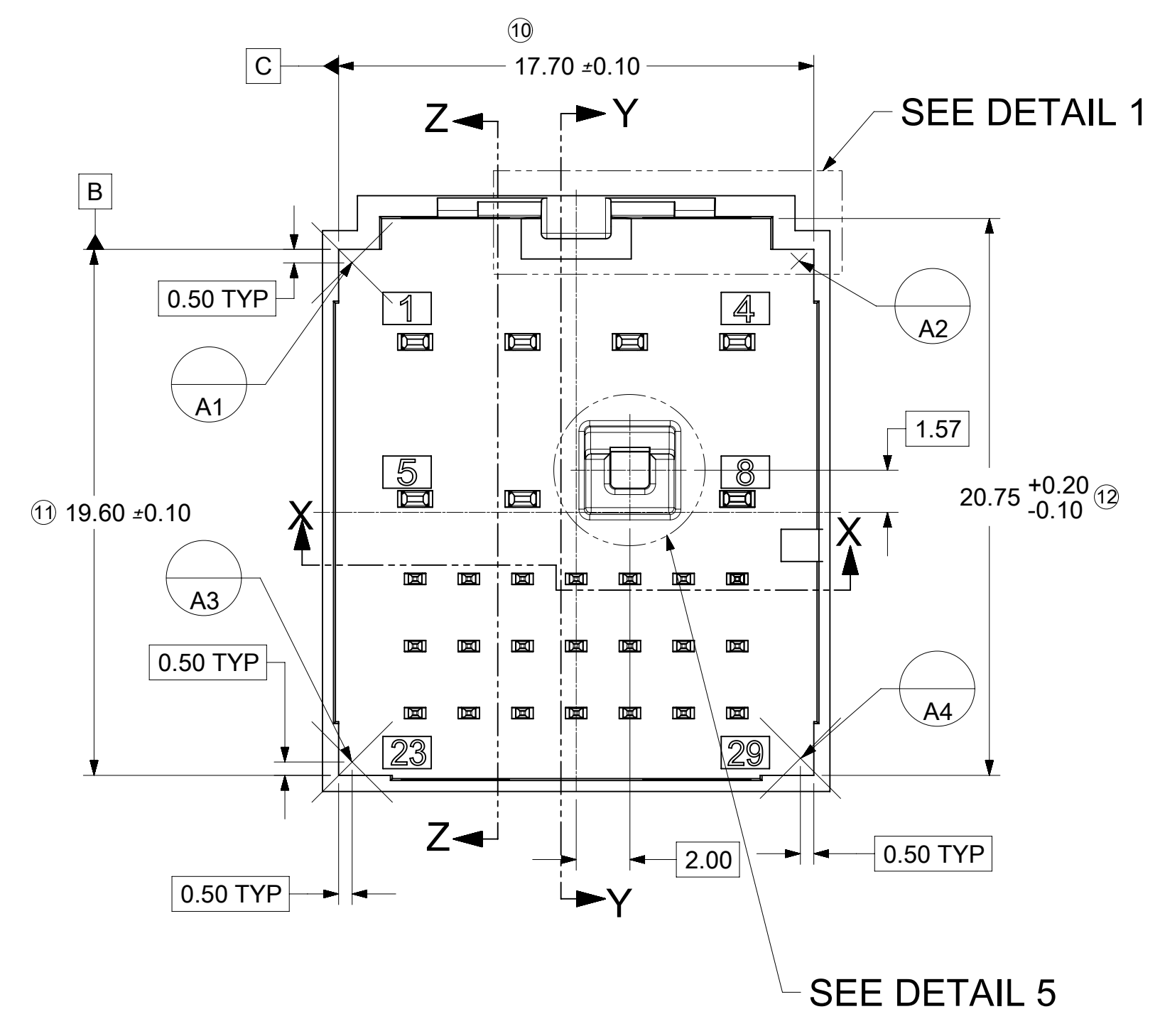
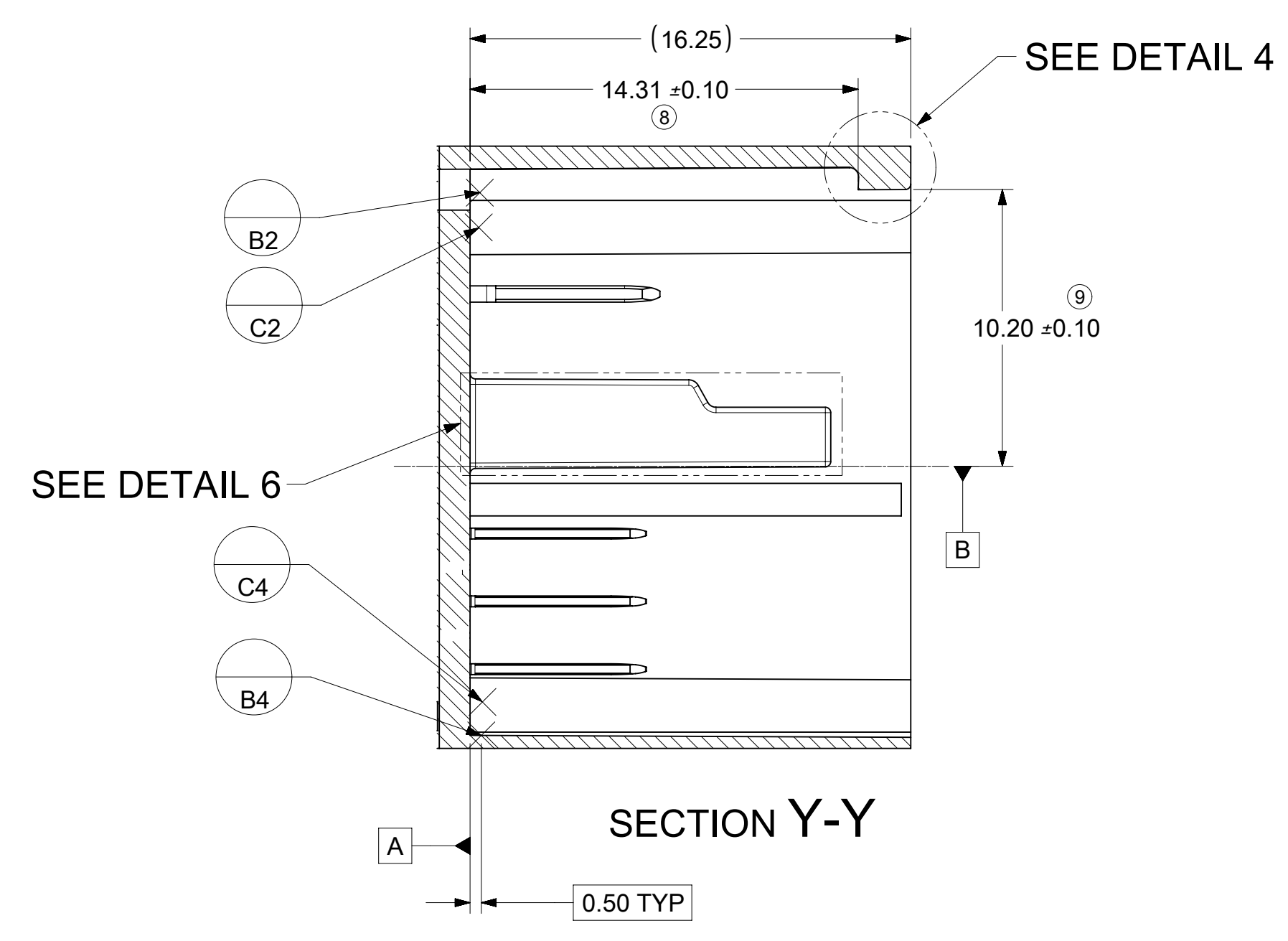
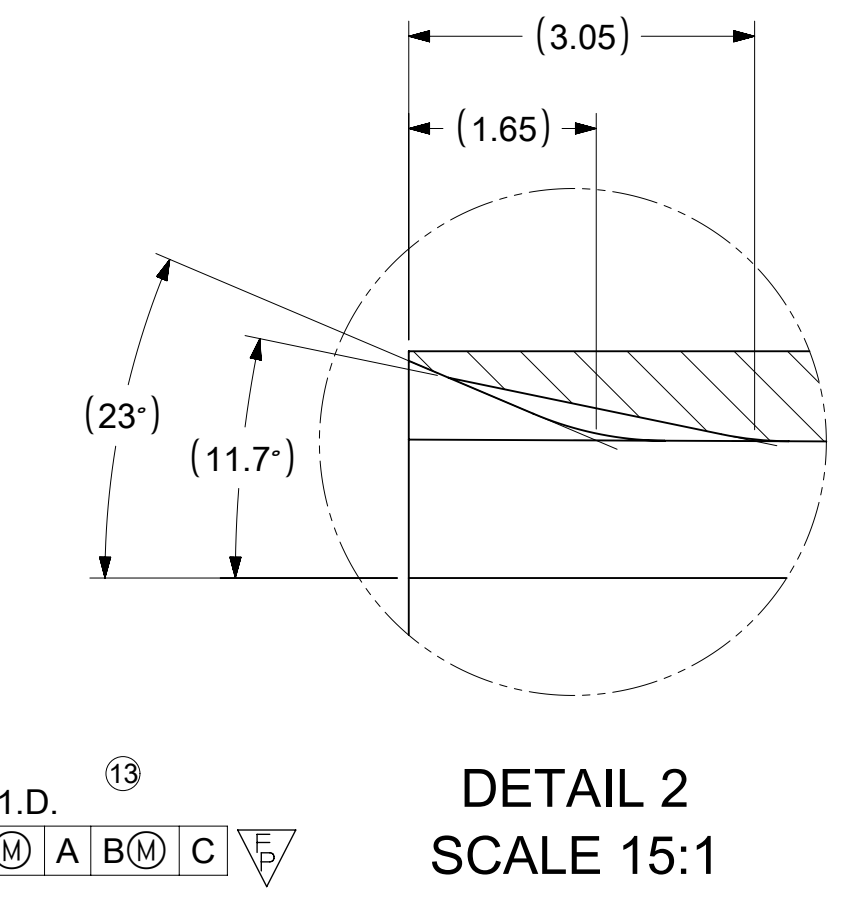
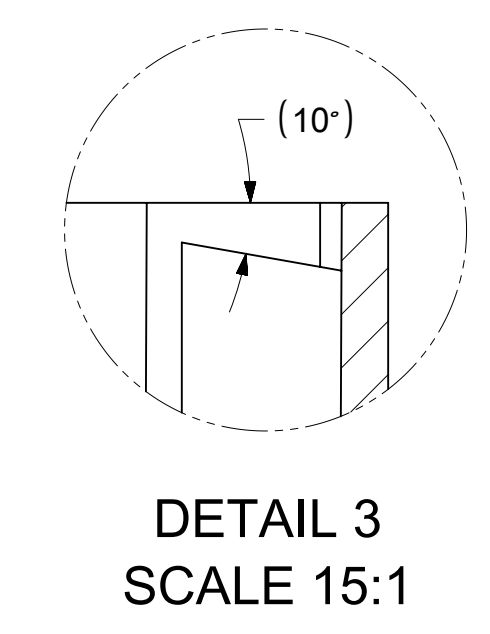
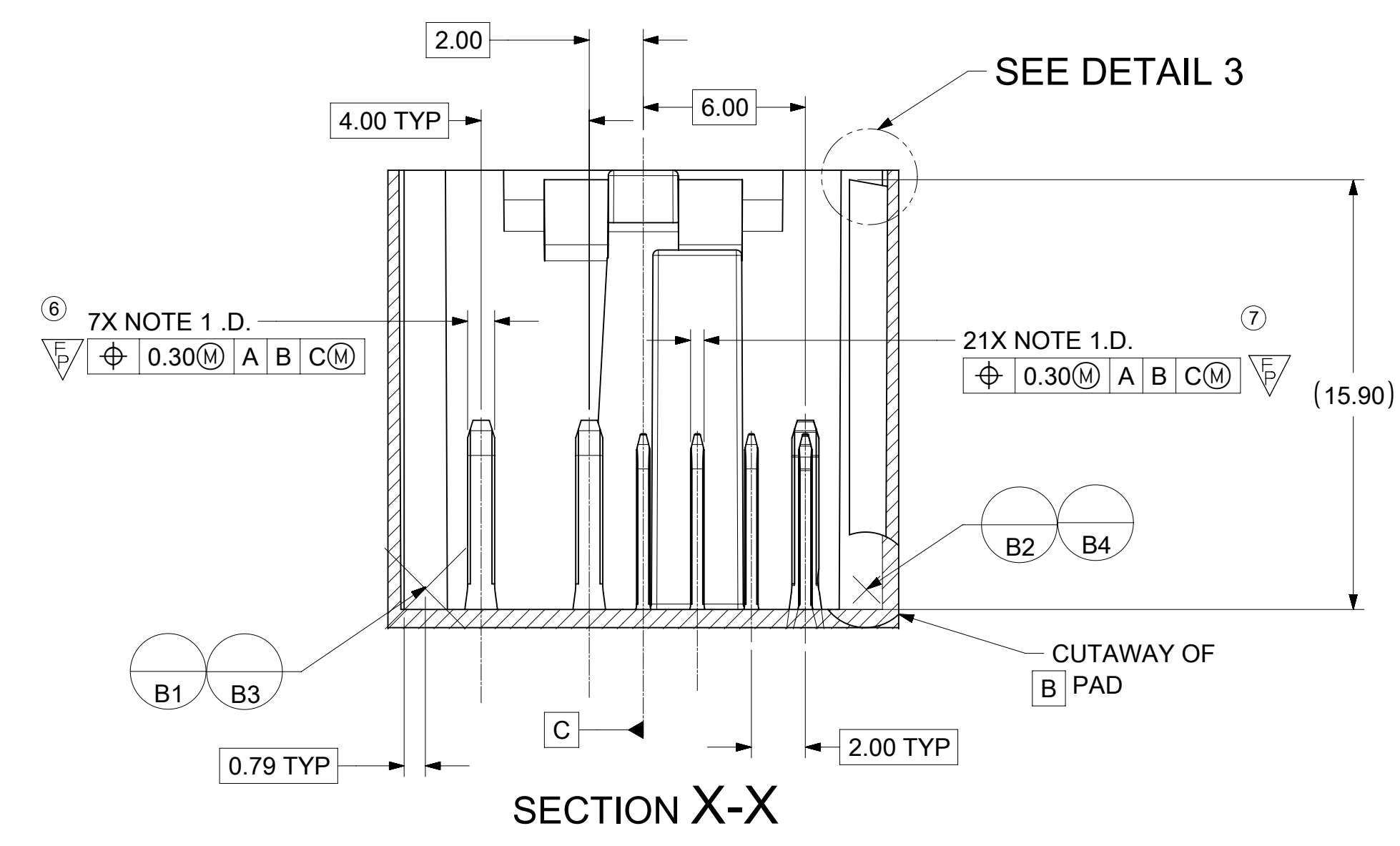
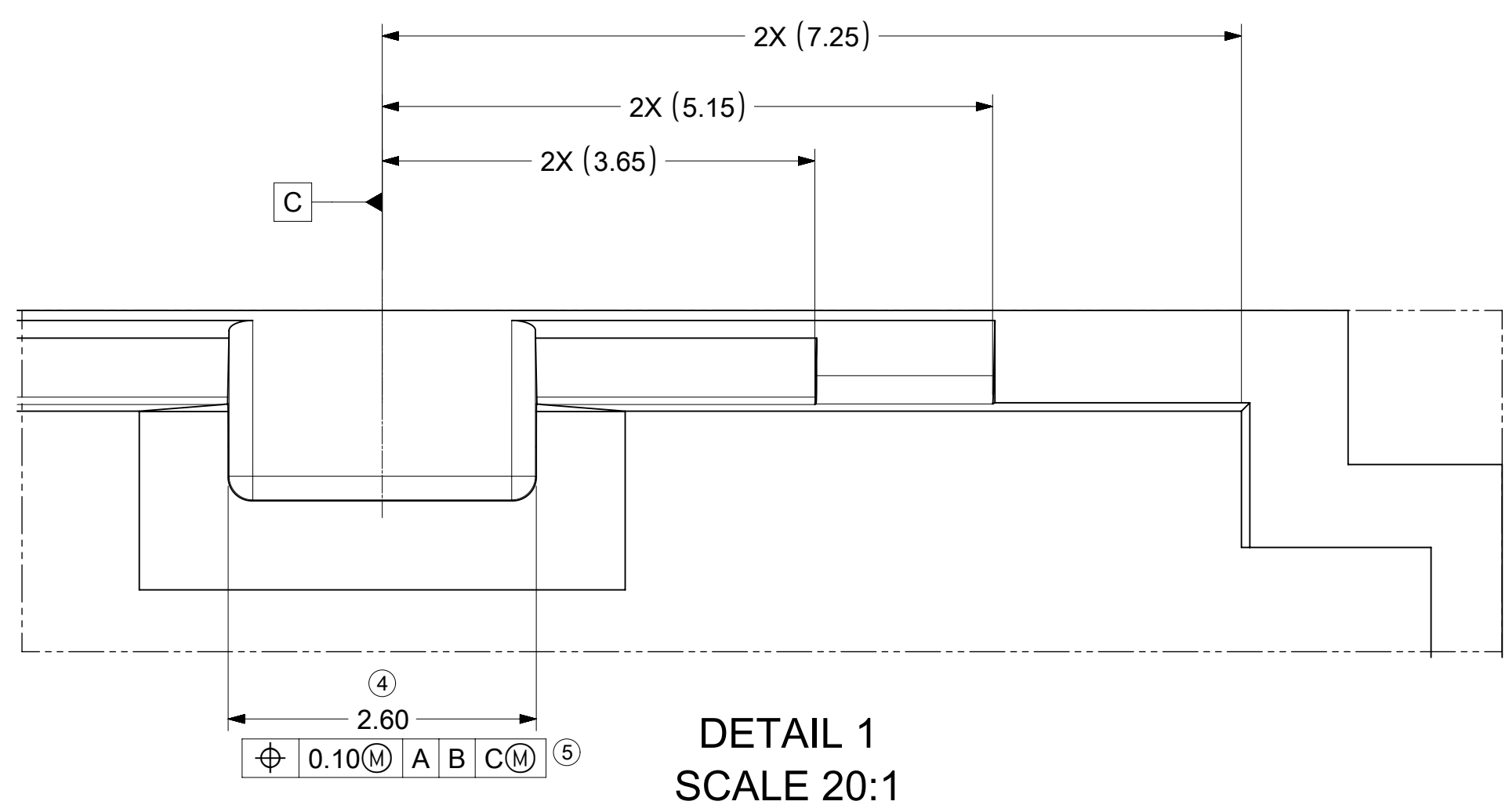
INTERFACE KEY #4
MATING CONNECTOR COLOR; BLACK



- NOTES: VALID UNLESS OTHERWISE SPECIFIED
- DESIGN - MATERIALS:
 - RESIN MATERIAL: PBT+GF30 OR SPS+GF30 OR EQUIVALENT
 - PIN/BLADE MATERIAL: ACCORDING TO USCAR DRAWING EWCAP-001 NOTE B2.
 - PLATING: ACCORDING TO USCAR DRAWING EWCAP-001 TIN REFLOW WITH UNDERPLATE.
 - PIN GEOMETRY ACCORDING TO USCAR DRAWING EWCAP-001 (120-T002 & 050-T001)
 - DEVIATION TO EWCAP-001 ACCEPTABLE IF PERFORMANCE (ELECTRICAL/MECHANICAL) IS SHOWN TO BE EQUAL OR BETTER AS REQUIRED BY VALIDATION TESTING.
 - DESIGN - GEOMETRY:
 - ALL GRAPHIC DATA IS BASIC (NO TOLERANCE) AND MUST BE TAKEN FROM THE DATA FILE AT ITS LATEST REVISION.
 - PRODUCT DESIGN MODEL NUMBER(S): SEE BOM TABLE
 - GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M-2009
 - GENERAL TOLERANCES:
 - LINEAR: PER DIN 16901 LINEAR CODE B FOR PRECISION ENGINEERING
 - ANGULAR: ± 3°
 - EDGES AND UNDIMENSIONED DETAILS PER ISO13715
 - CORNERS SHOWN AS SHARP TO BE R 0.2 MAX.
 - CIRCUIT LOCATION #7 VOIDED FOR 28WAY INTERFACE
 - DESIGN - MANUFACTURING:
 - DRAFT TO BE WITHIN TOLERANCE.

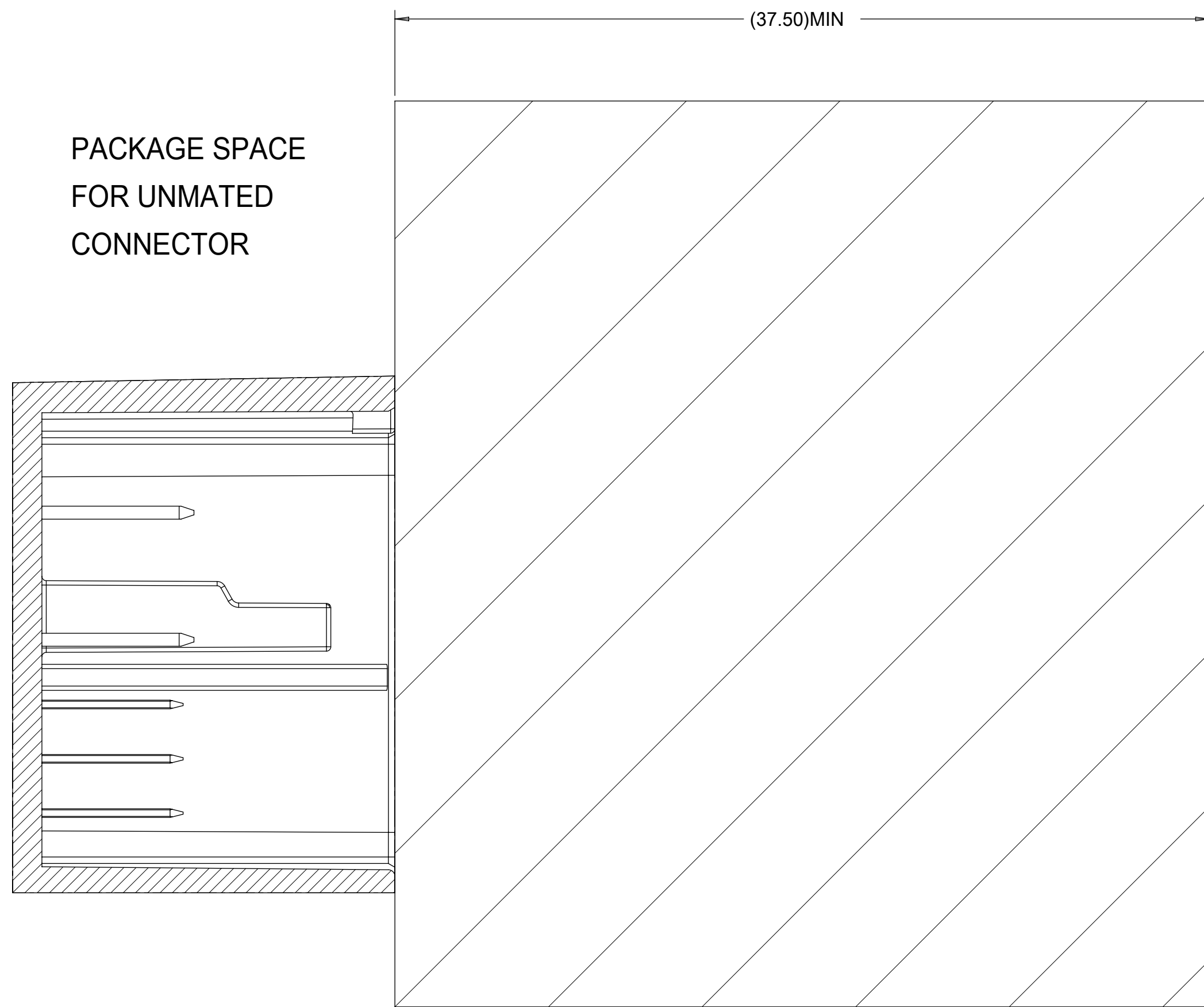
B1	ADDED BALLOONS JCONDON 07/31/2018
B	REMOVED 0.2MM FROM CONNECTOR LOCK TAB FEATURE
A3	NOTE 1.E. ADDED JCONDON 11/13/2017
A2	NX-REMASTERING SAP # 10867412
A1	UAU2016-1133 SAP # 10762453 JCONDON 02/02/2016
A	UAU2015-1973 SAP # 10701371 JCONDON 06/30/2015
6	UAU2015-1446 SAP # 10681629 JCONDON 03/25/2015
5	UAU2015-1212 SAP # 10674908 JCONDON 02/06/2015
4	UAU2015-0634 SAP # 10661788 JCONDON 10/22/2014
3	UAU2014-1679 SAP # XXXXXXXX BSCUDDER 04/28/2014
2	UAU2014-1221 SAP # XXXXXXXX MYOUNG01 01/21/2014
1	UAU2014-0715 SAP # XXXXXXXX MYOUNG01 11/14/2013
REV	DESCRIPTION

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: ADD DIMENSION BALLOONS		molex
	DIMENSION UNITS	SCALE			
▽ = 0	mm	5:1			28WAY STAK50H INTERFACE DRAWING
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)				
▽ = 0	ANGULAR TOL ± °				PRODUCT CUSTOMER DRAWING
▽ = 0	4 PLACES ±				
▽ = 0	3 PLACES ±				DOCUMENT NUMBER SD-160014-002
▽ = 0	2 PLACES ±				
▽ = 0	1 PLACE ±				DOC TYPE PSD
▽ = 0	0 PLACES ±				
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	DOC PART 001
▽ = 0			⊕	D-SIZE	
			SERIES	160014	REVISION B1
			MATERIAL NUMBER	CUSTOMER	
			GENERAL MARKET		SHEET NUMBER 1 OF 3

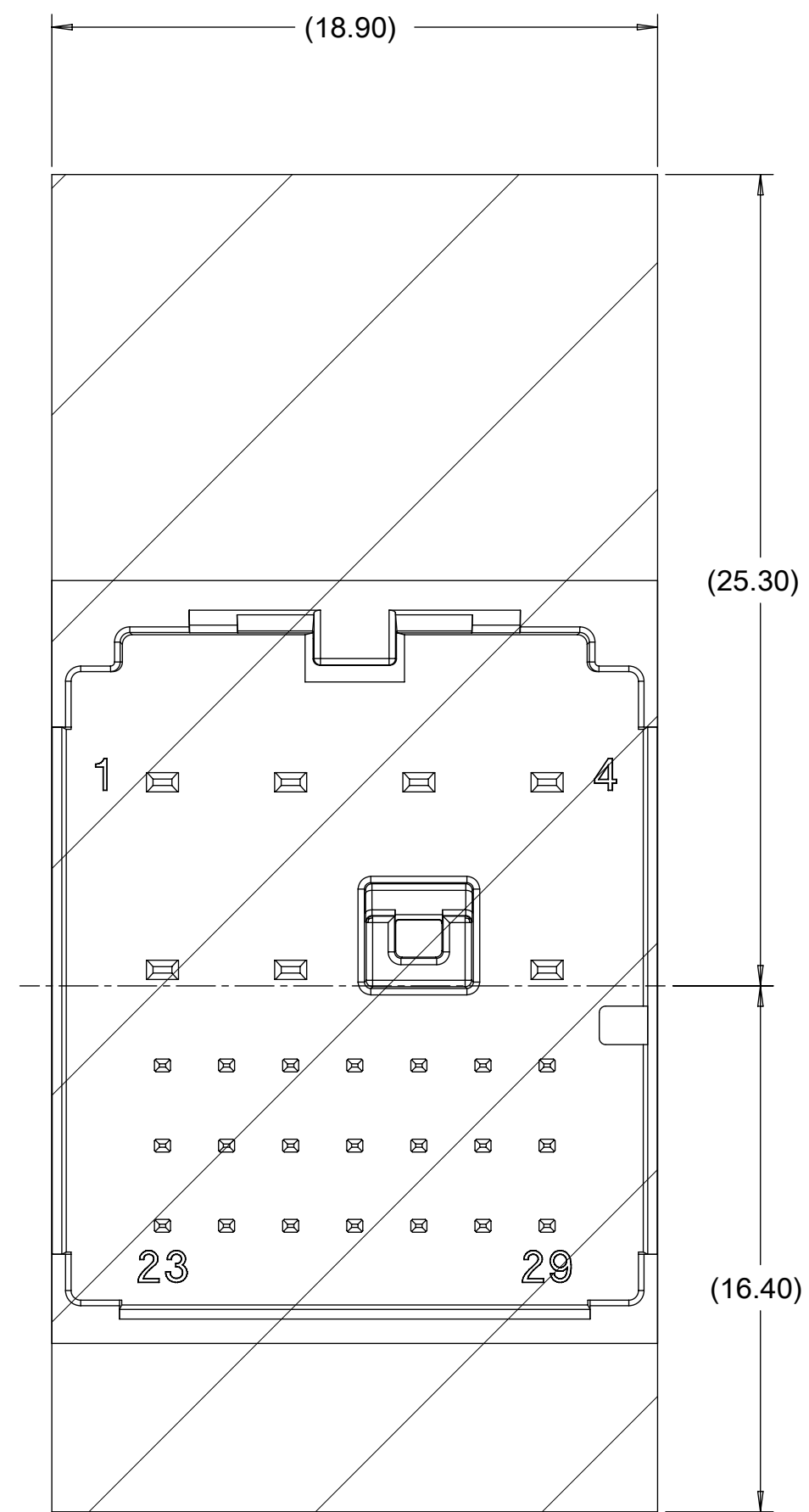


SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	DIMENSION UNITS	SCALE	CURRENT REV DESC: ADD DIMENSION BALLOONS
▽ = 0	mm	5:1	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		
▽ = 0	ANGULAR TOL ± °		
▽ = 0	4 PLACES	±	
▽ = 0	3 PLACES	±	
▽ = 0	2 PLACES	±	
▽ = 0	1 PLACES	±	
▽ = 0	0 PLACES	±	
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		
▽ = 0	THIRD ANGLE PROJECTION	DRAWING	SERIES
		D-SIZE	160014
EC NO: 602204		DRWN: JCONDON	2018/07/31
CHK'D: JCONDON		APPR: MVANSLAMBROU	2018/08/03
INITIAL REVISION:		DRWN: MYOUNG01	2013/11/14
		APPR: KDEKOSKI	2014/01/02
DOCUMENT NUMBER		DOC TYPE	DOC PART
SD-160014-002		PSD	001
REVISION		B1	
MATERIAL NUMBER		CUSTOMER	SHEET NUMBER
		GENERAL MARKET	2 OF 3

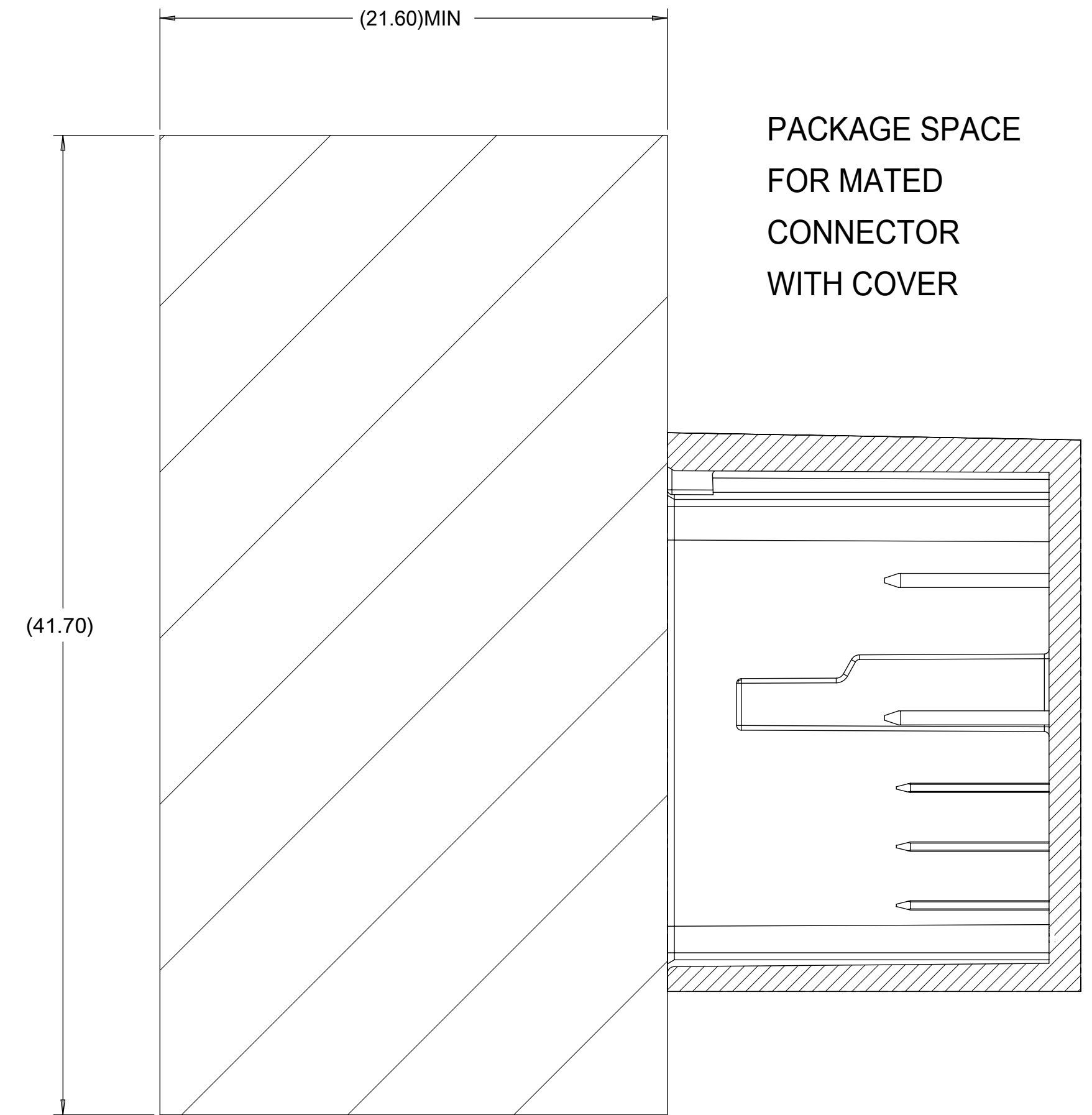
PACKAGE SPACE
FOR UNMATED
CONNECTOR



PACKAGE SPACE
FOR CONNECTOR



PACKAGE SPACE
FOR MATED
CONNECTOR
WITH COVER



SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	DIMENSION UNITS	SCALE	CURRENT REV DESC: ADD DIMENSION BALLOONS
▽ = 0	mm	5:1	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		
▽ = 0	ANGULAR TOL ± °		
▽ = 0	4 PLACES		EC NO: 602204
▽ = 0	3 PLACES		DRWN: JCONDON 2018/07/31
▽ = 0	2 PLACES		CHK'D: JCONDON 2018/08/03
▽ = 0	1 PLACE		APPR: MVANSLAMBROU 2018/08/03
□ = 0	0 PLACES		INITIAL REVISION:
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: MYOUNG01 2013/11/14
▽ = 0	THIRD ANGLE PROJECTION		APPR: KDEKOSKI 2014/01/02
	DRAWING		SERIES
	D-SIZE		160014
DOCUMENT STATUS		RELEASE DATE	DOCUMENT NUMBER
P1	2018/08/03 19:41:28	SD-160014-002	DOC TYPE
		PSD	DOC PART
		001	REVISION
		B1	
MATERIAL NUMBER		CUSTOMER	SHEET NUMBER
		GENERAL MARKET	3 OF 3