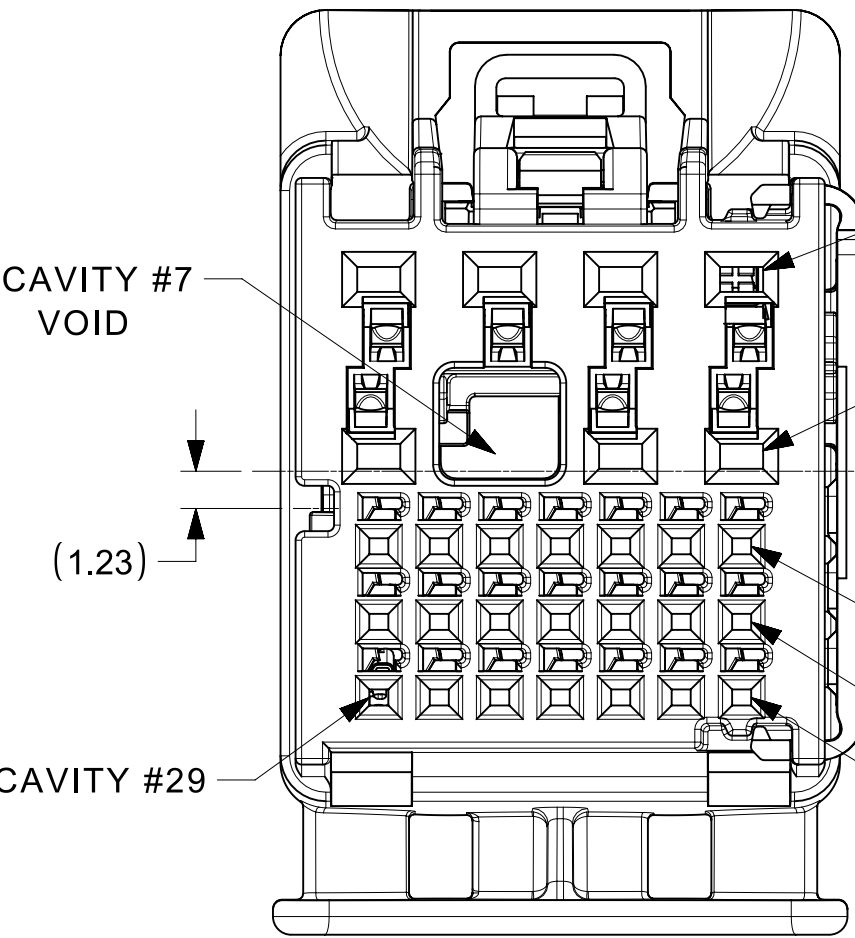
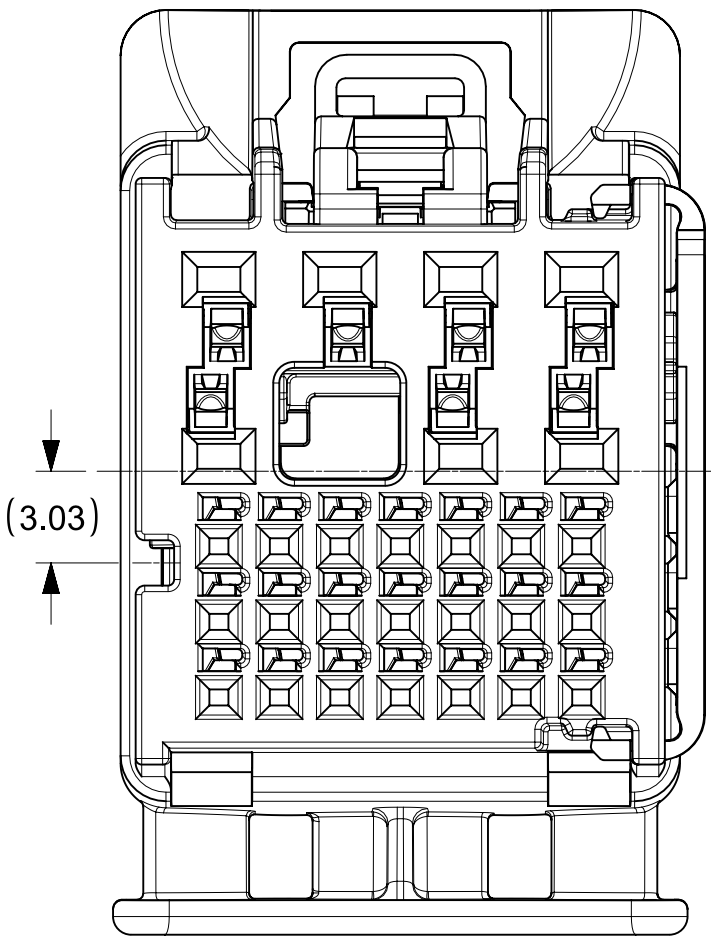
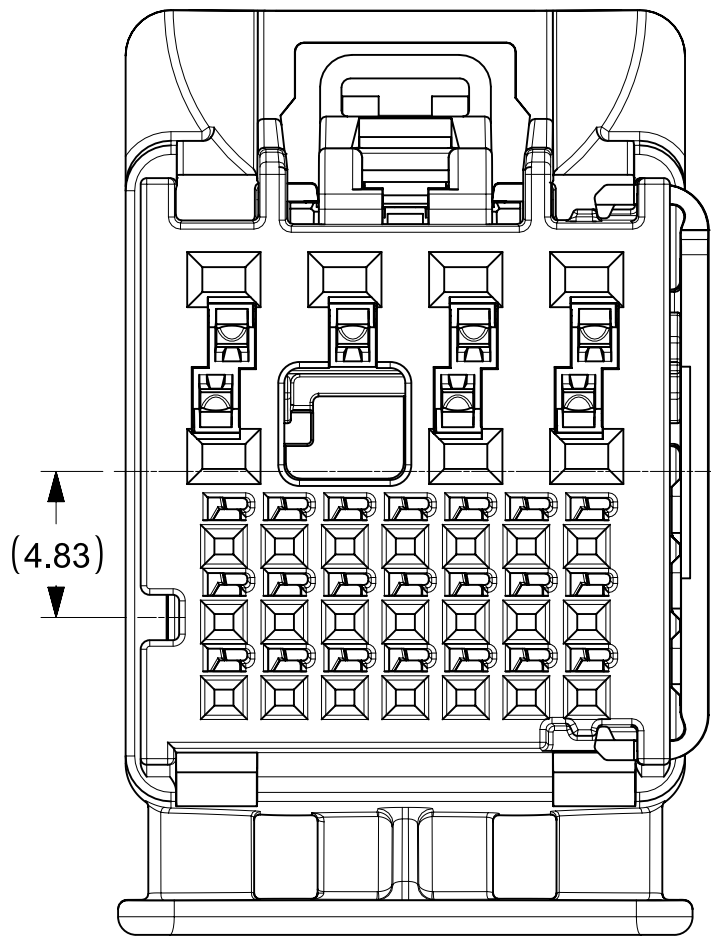




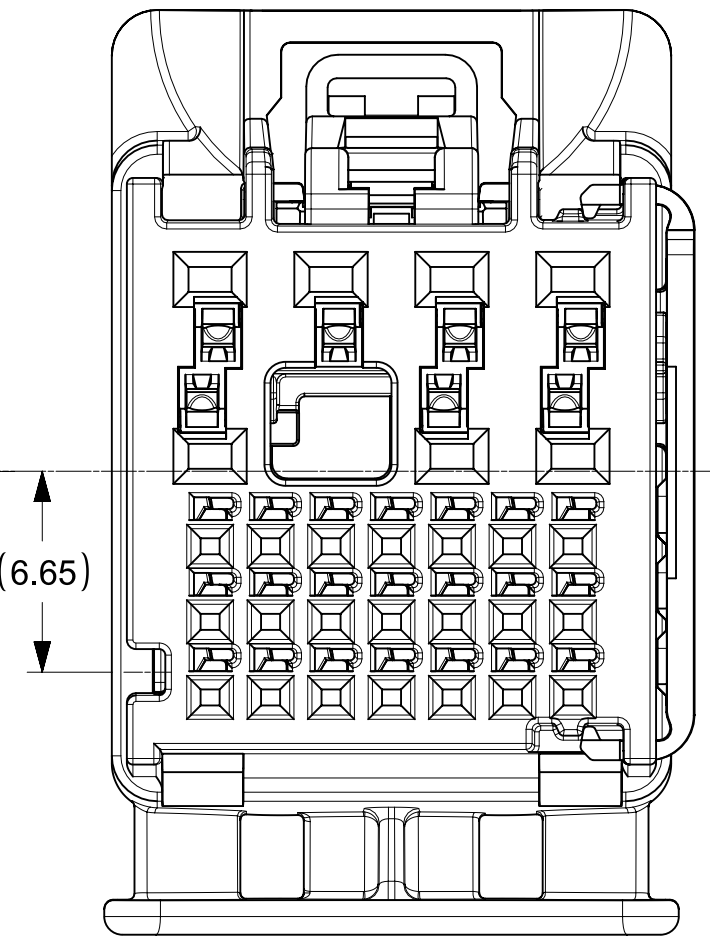
28 WAY CONNECTOR ASSY
(CAVITY #7 VOID)
KEY 1
P/N 1600140011



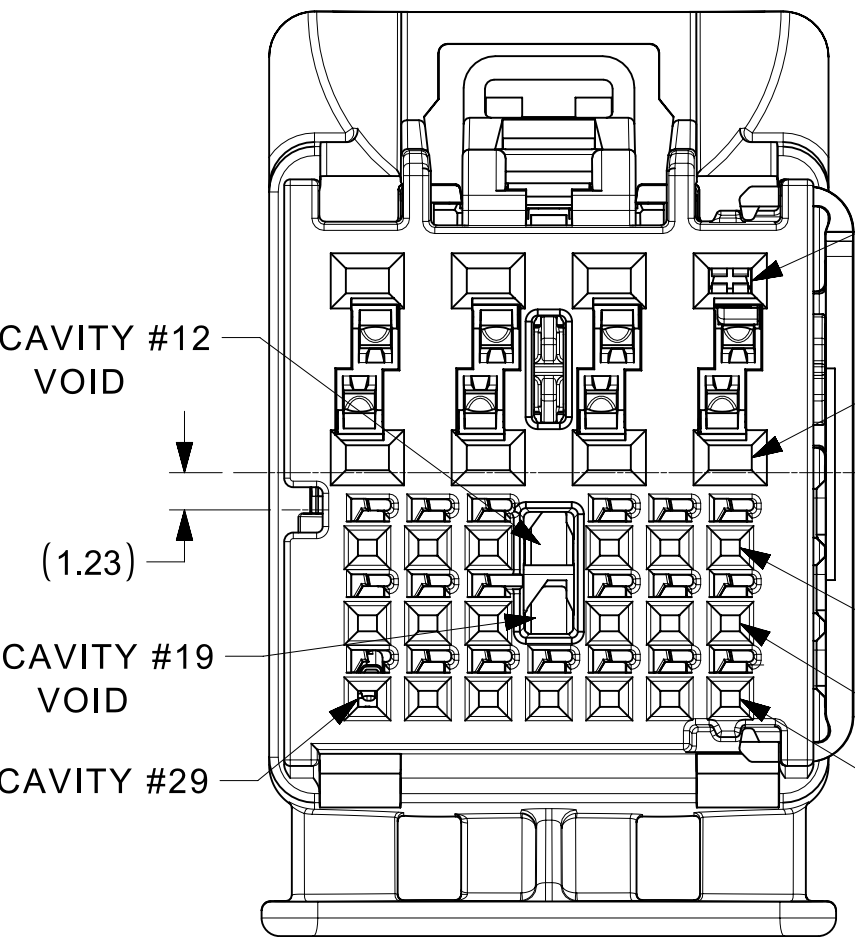
28 WAY CONNECTOR ASSY
(CAVITY #7 VOID)
KEY 2
P/N 1600140012



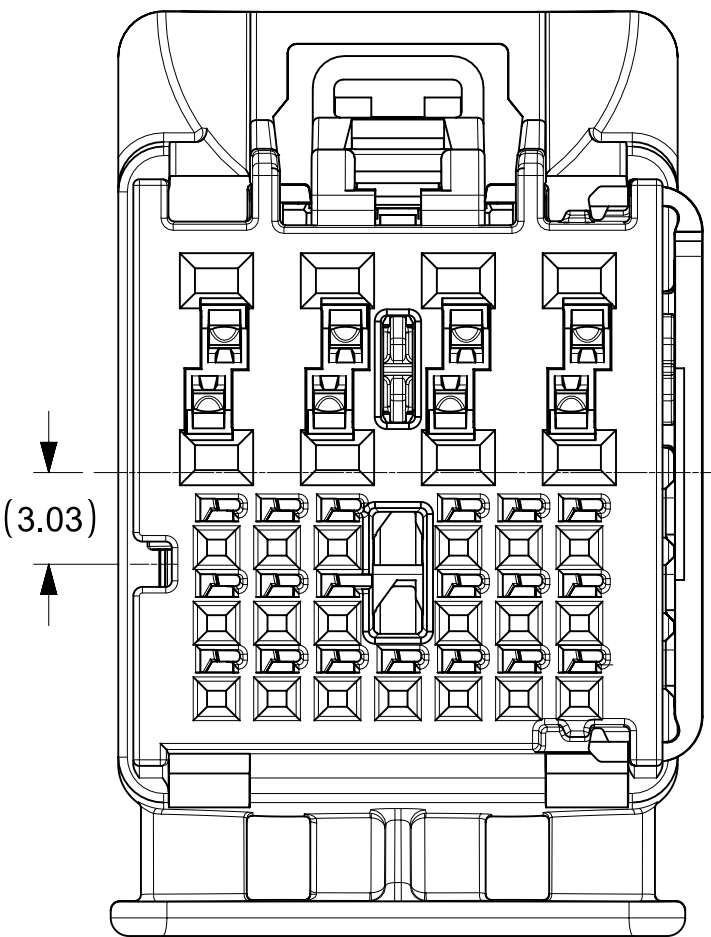
28 WAY CONNECTOR ASSY
(CAVITY #7 VOID)
KEY 3
P/N 1600140013



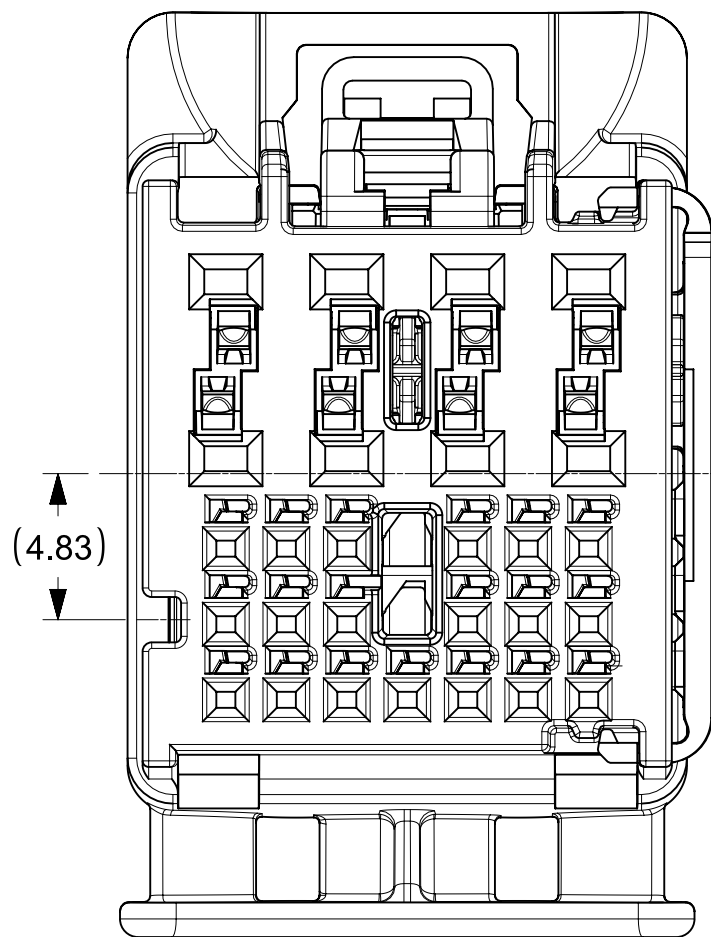
28 WAY CONNECTOR ASSY
(CAVITY #7 VOID)
KEY 4
P/N 1600140014



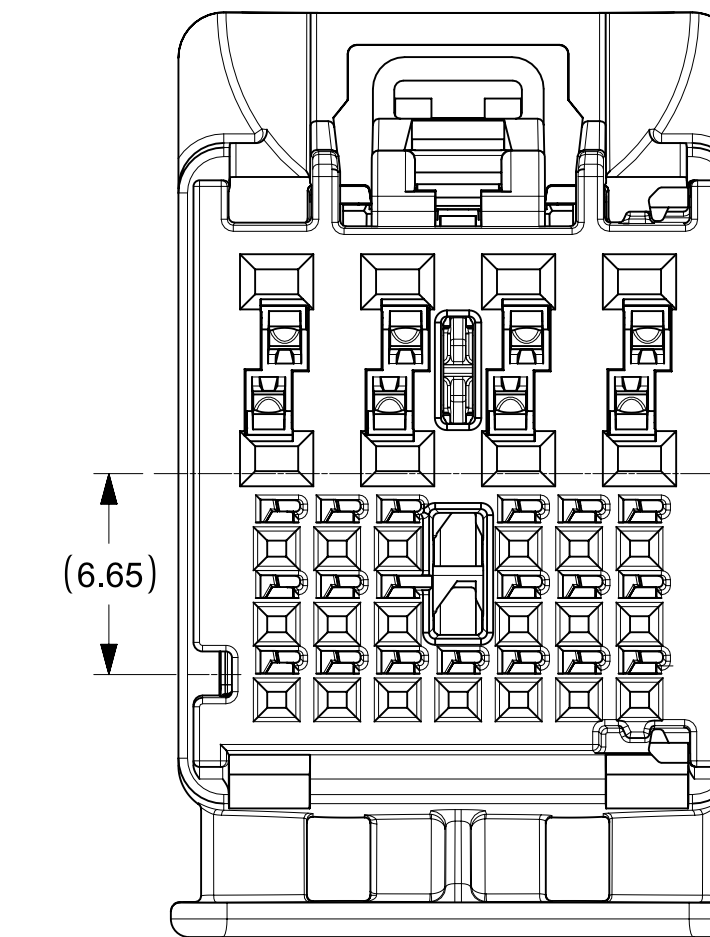
27 WAY CONNECTOR ASSY
(CAVITIES #12 & #19 VOID)
KEY 1
P/N 1600290011



27 WAY CONNECTOR ASSY
(CAVITIES #12 & #19 VOID)
KEY 2
P/N 1600290012



27 WAY CONNECTOR ASSY
(CAVITIES #12 & #19 VOID)
KEY 3
P/N 1600290013



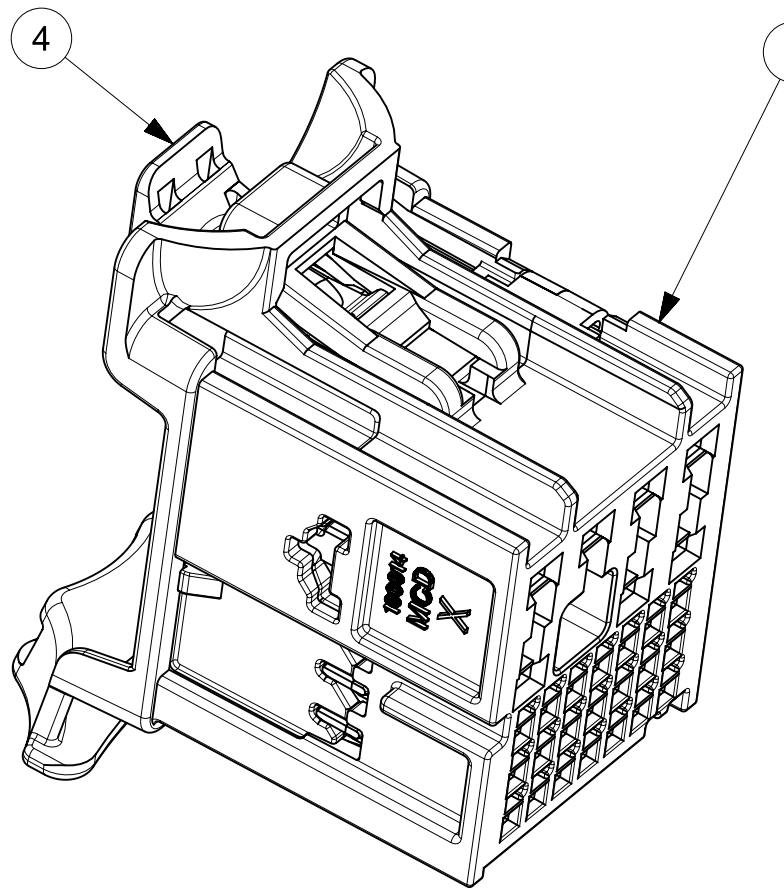
27 WAY CONNECTOR ASSY
(CAVITIES #12 & #19 VOID)
KEY 4
P/N 1600290014

PART NUMBER	STATUS	PLATING	SUPPLIER	WIRE GAGE (mm2)	TERMINAL FAMILY	WIRE SPECIFICATION
200096-3101	ACTIVE	TIN PLATING	MOLEX	0.35	TAK FAMILY (0.5 mm)	VW 60306 or GMW 15626 (SEE APPLICATION SPECIFICATION FOR MORE DETAILS)
200096-3201	ACTIVE	TIN PLATING	MOLEX	0.13	TAK FAMILY (0.5 mm)	
2272196-2	ACTIVE	TIN PLATING	TE	0.35	Generation 50 Locking Lance (0.5mm)	SAE/ J1128 THIN WALL INSULATION GMW 15626 INSULATION TYPE FLR (REGULAR THIN WALL)
2272196-1	ACTIVE	TIN PLATING	TE	0.13	Generation 50 Locking Lance (0.5mm)	
35072403	ACTIVE	TIN PLATING	DELPHI	0.35 - 0.5	TAXI TERM OCS 1.2	
35072404	ACTIVE	TIN PLATING	DELPHI	0.75 - 0.8		
35072405	ACTIVE	TIN PLATING	DELPHI	0.8 - 1.0		
35072406	OBSOLETE	TIN PLATING	DELPHI	1.25 - 1.5		
35457252	ACTIVE	TIN PLATING	DELPHI	1.25 - 1.5		
SMSA-A031T-M1.2	ACTIVE	TIN PLATING	JST	0.5 - 0.75	MSA 1.2mm TERMINAL	
SMSA-A041T-M1.2	ACTIVE	TIN PLATING	JST	1.0 - 1.5	MSA 1.2mm TERMINAL	

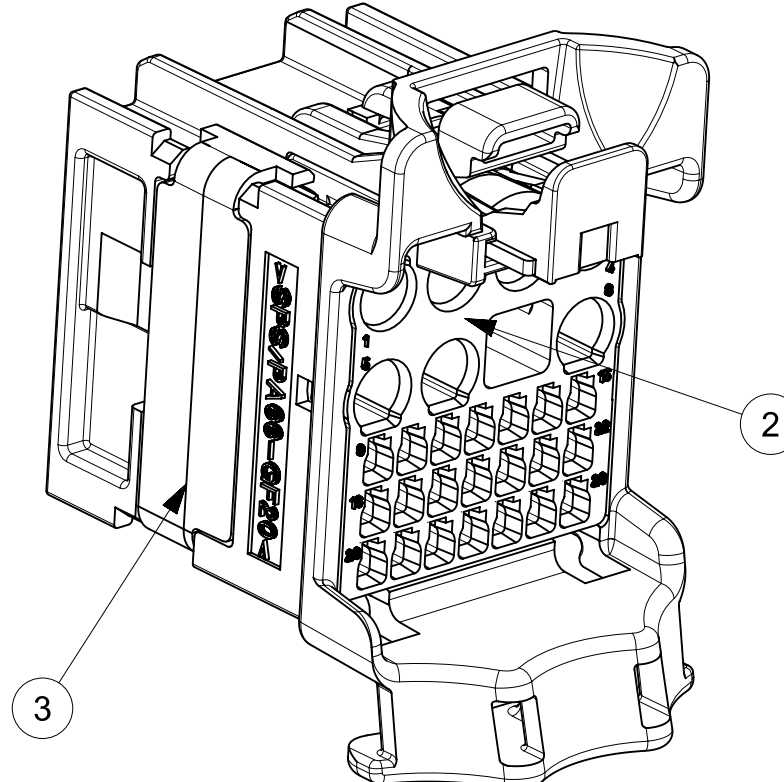
NOTES: VALID UNLESS OTHERWISE SPECIFIED

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

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
2. LASER ETCHED ASSEMBLY LINE
- "_X" DENOTES CAPACITY ASSEMBLY LINE SUCH AS "_2" OR MORE IN FUTURE
4. DESIGN - MANUFACTURING:
- a. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B)



SCALE 3:1



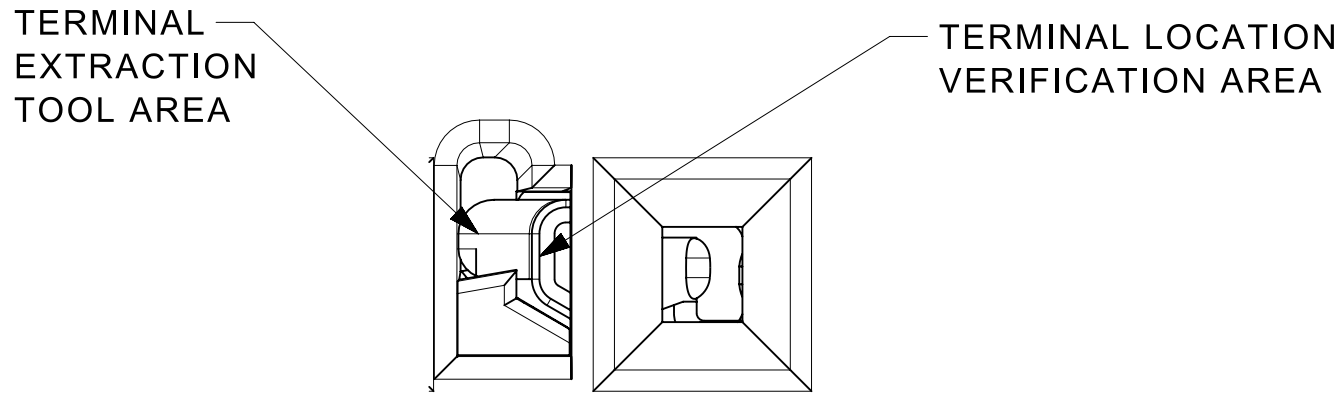
SCALE 3:1

INSPECTION BALLOON NUMBER LOG	A6	REVISION
PER DRAWING REVISION: A9		
LAST BALLOON NUMBER: 2		
ADDED BALLOON NUMBER: NONE		
DELETED BALLOON NUMBER: NONE		

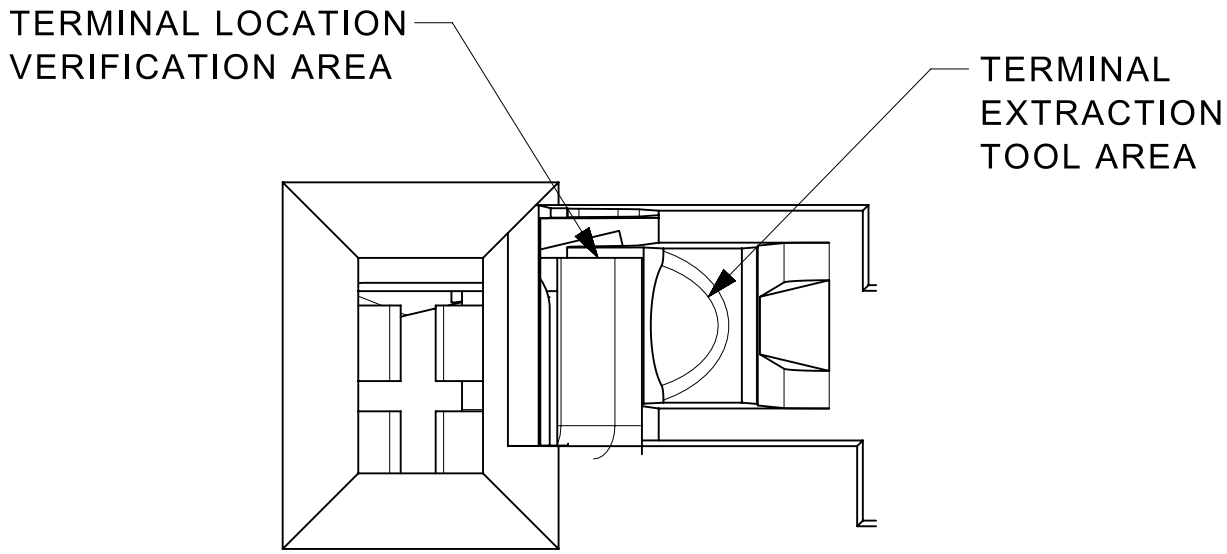
MOLEX ASSEMBLY PART NO.'S	CIRCUIT COUNT	KEY	OUTER SHROUD COLOR	COMPONENTS							
				ITEM 1				ITEM 2	ITEM 3	ITEM 4	
				OUTER SHROUD KEY 1	OUTER SHROUD KEY 2	OUTER SHROUD KEY 3	OUTER SHROUD KEY 4	INNER HOUSING	ISL	CPA	
				SPS/PA66-GF20 1600140511	SPS/PA66-GF20 1600140512	SPS/PA66-GF20 1600140513	SPS/PA66-GF20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

FUNCTIONAL SYMBOLS F A = 0 F C = 0 F P = 0 DIVISIONAL 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: SEE REVISION SHEET				molex 27/28 WAY STAK50H HYBRID ASSEMBLY CONNECTOR ASSEMBLY						
	mm		4:1												
	GENERAL TOLERANCES (UNLESS SPECIFIED)				STATUS: Production DRWN: Skyla Tang CHK'D: Yann Chen APPR: Ringo Hu				2024-08-01 2024-08-02 2024-08-06						
	ANGULAR TOL ± 3°														
	4 PLACES		±												
	3 PLACES		±												
	2 PLACES		± 0.300												
	1 PLACE		± 0.30												
	0 PLACES		± 0.30												
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
				D-SIZE		160014				GENERAL MARKET		1 OF 2			

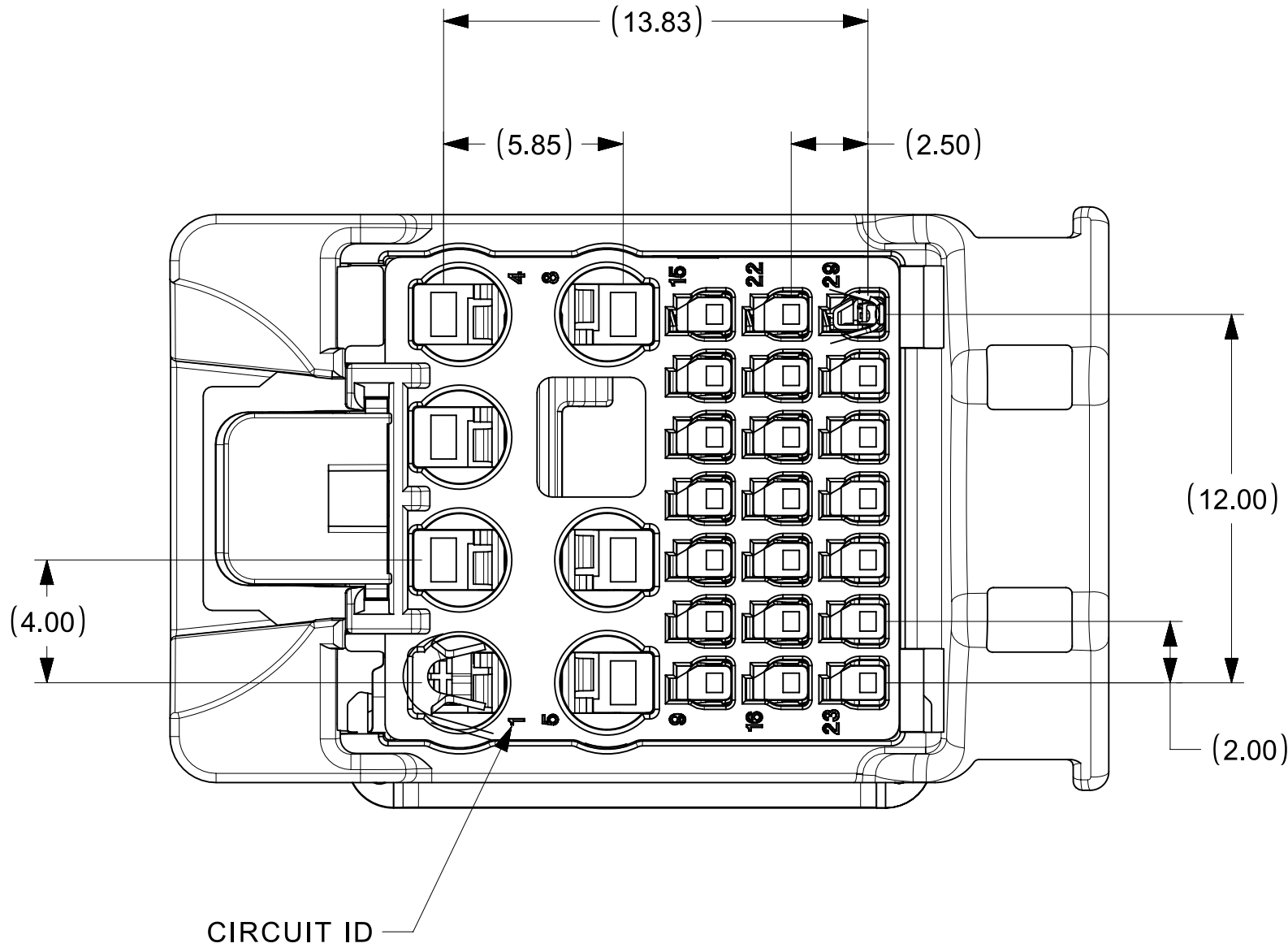
NOTE: 28 WAY CONNECTOR VARIANT SHOWN.
DIMENSIONS APPLY TO ALL CONNECTOR VARIANTS OF 29 WAY



DETAIL A
SCALE 20:1

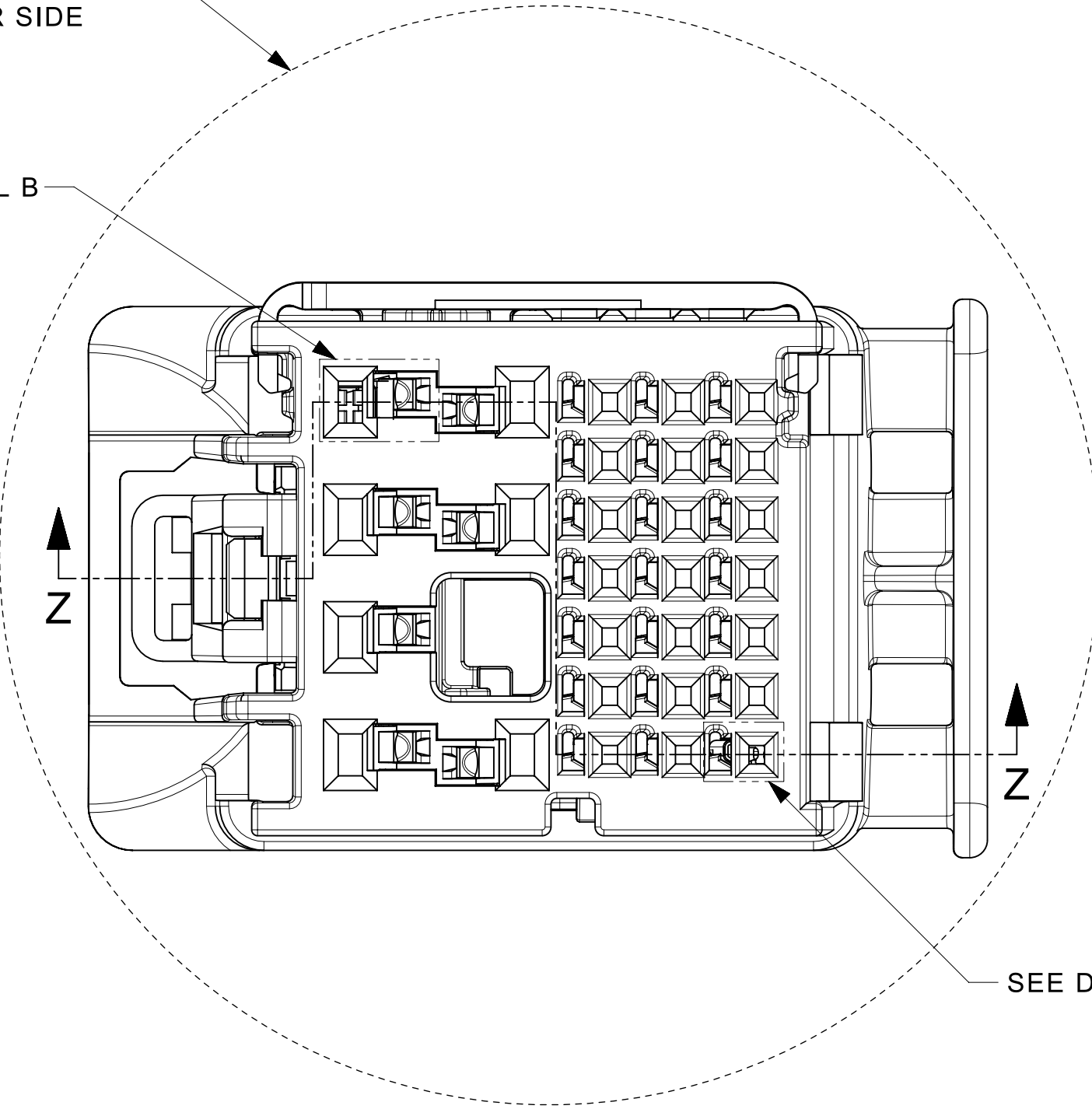


DETAIL B
SCALE 20:1



(Ø37.39) PASS THROUGH
WITH 1 MM PER SIDE

SEE DETAIL B

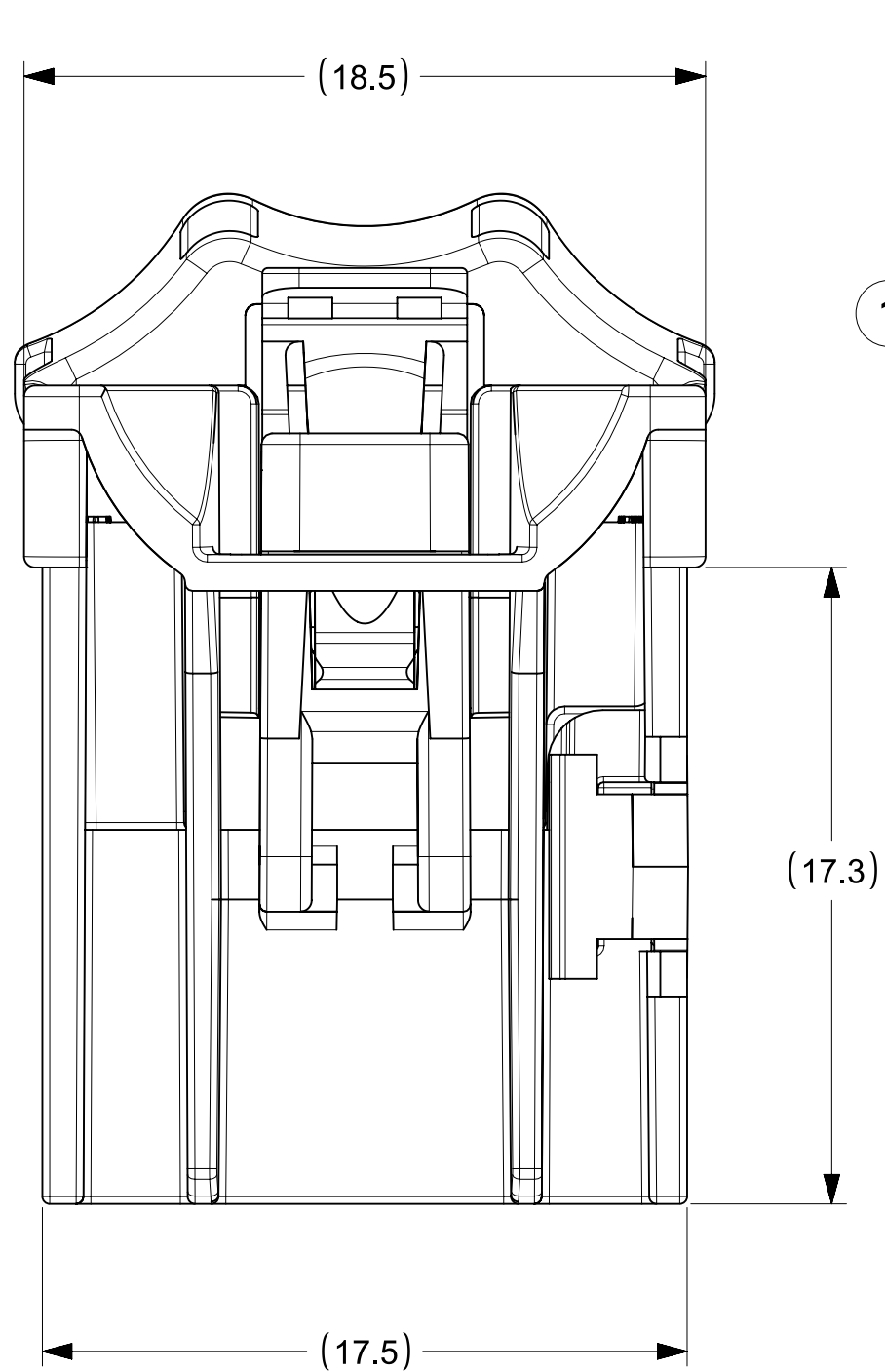


SEE DETAIL A

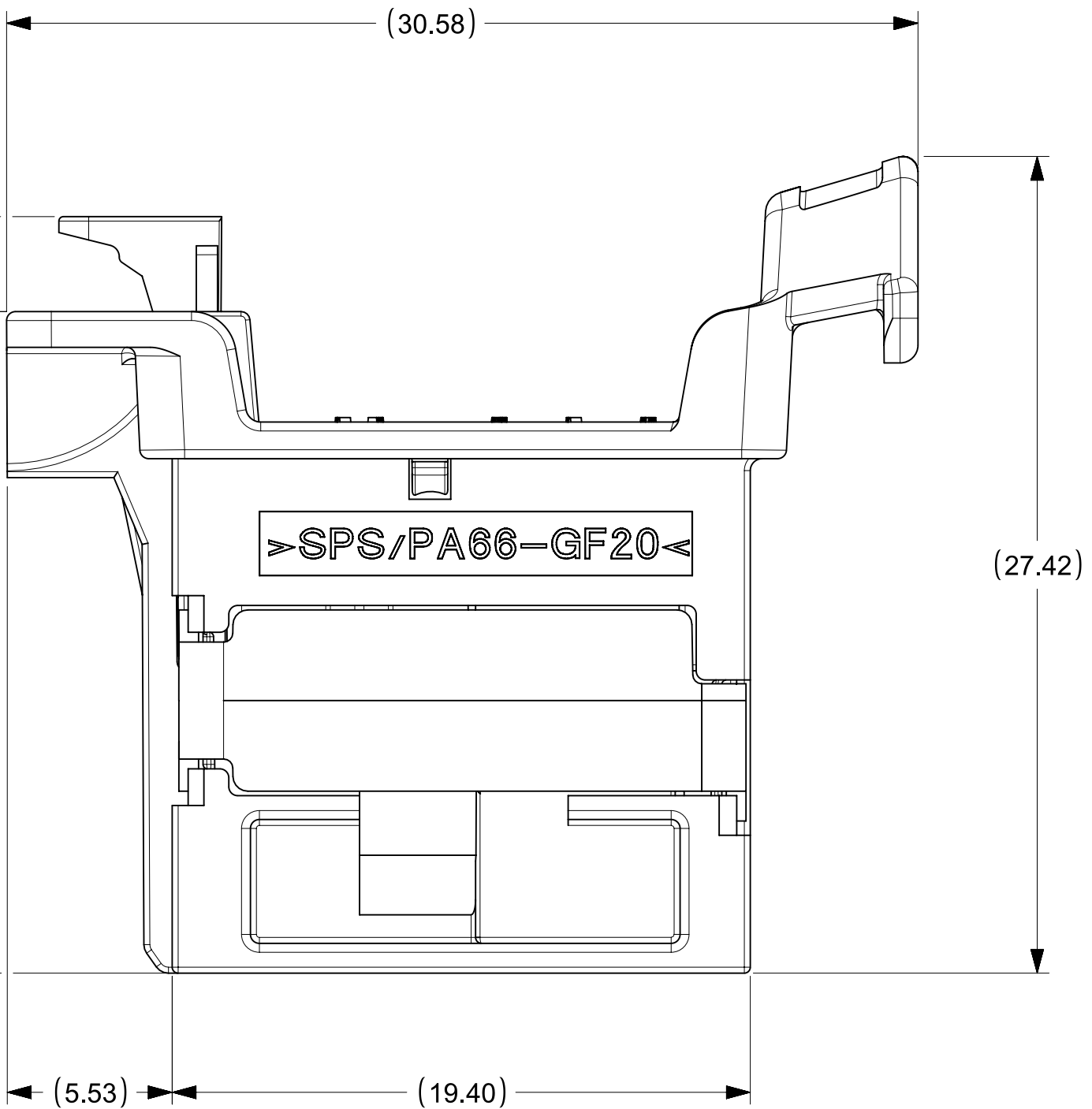
LASER ETCH
DATE CODE AND
ASSEMBLY LINE

YYDDD
HHMMSS_X

2 1.30 ±0.30
ISL IN OPEN
POSITION



1 CPA PRELOAD POSITION
3.2 ±0.3

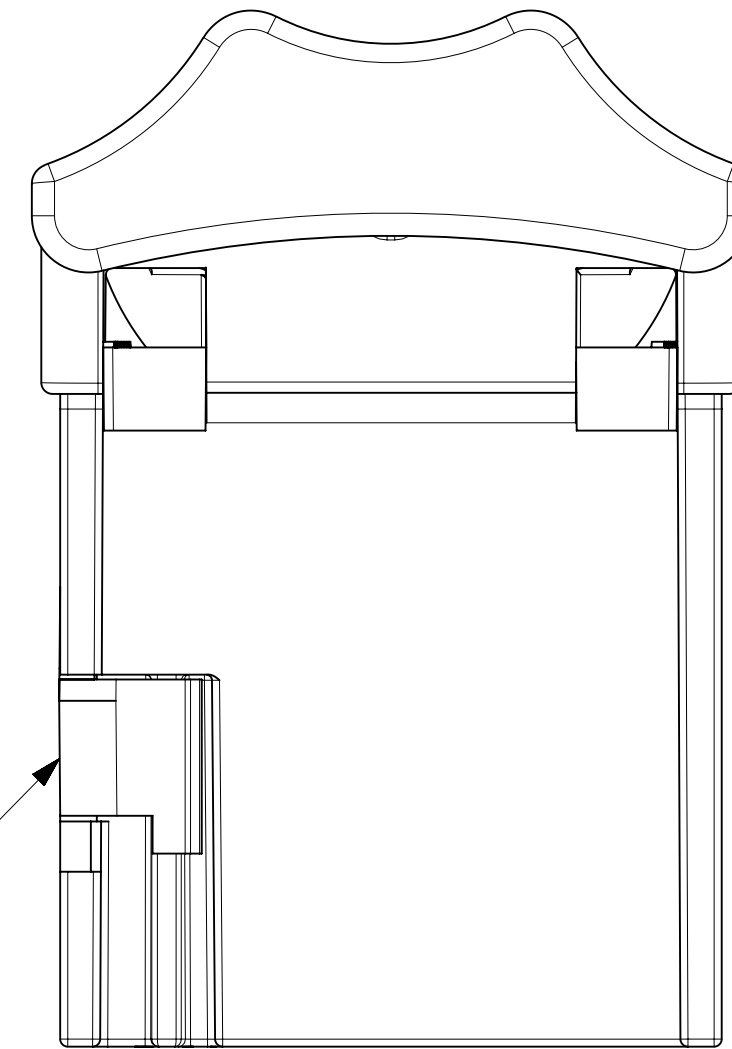


CPA FINAL POSITION
(0.24)
RECESSED

TERMINALS, ISL, AND CPA
SHOWN IN CLOSED POSITION

SECTION Z-Z

ISL IN CLOSED
POSITION



FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: SEE REVISION SHEET			
	DIMENSION UNITS	SCALE				
$\frac{F_A}{A} = 0$	mm	5:1				
$\frac{F_C}{C} = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)					
$\frac{F_P}{P} = 0$	ANGULAR TOL	± 3°				
DIVISIONAL SYMBOLS	4 PLACES	±				
	3 PLACES	±				
	2 PLACES	± 0.300				
	1 PLACE	± 0.30				
	0 PLACES	± 0.30				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES		
			D-SIZE	160014		
			STATUS: Production	2024-08-01		
			DRWN: Skyla Tang	2024-08-02		
			CHK'D: Yann Chen	2024-08-06		
			APPR: Ringo Hu			
			DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
			1600140011	PSD	000	B
			MATERIAL NUMBER	CUSTOMER	SHEET NUMBER	
				GENERAL MARKET	2 OF 2	

molex

27/28 WAY STAK50H HYBRID ASSEMBLY
CONNECTOR ASSEMBLY

PRODUCT CUSTOMER DRAWING

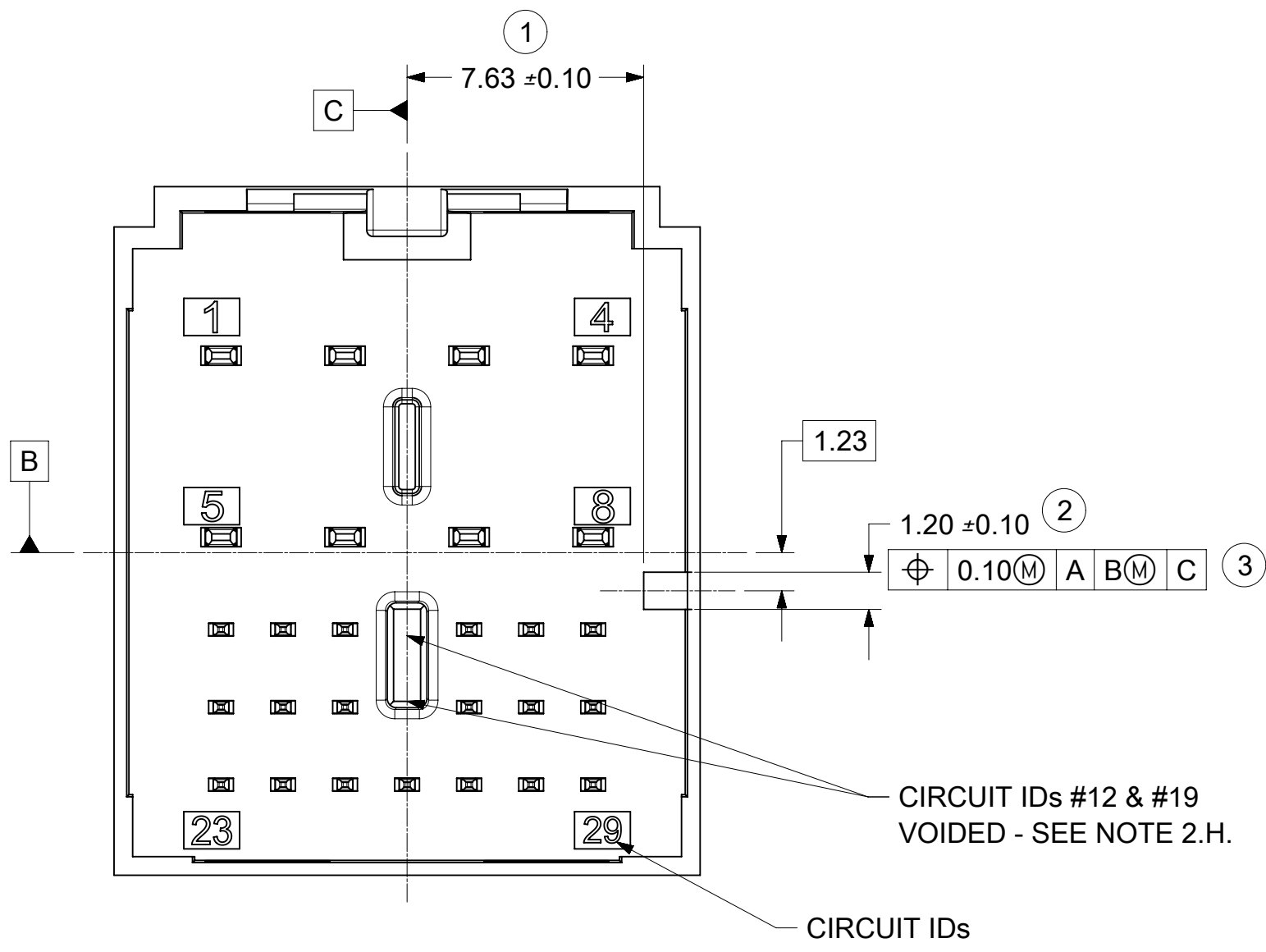
DOCUMENT NUMBER DOC TYPE DOC PART REVISION

1600140011

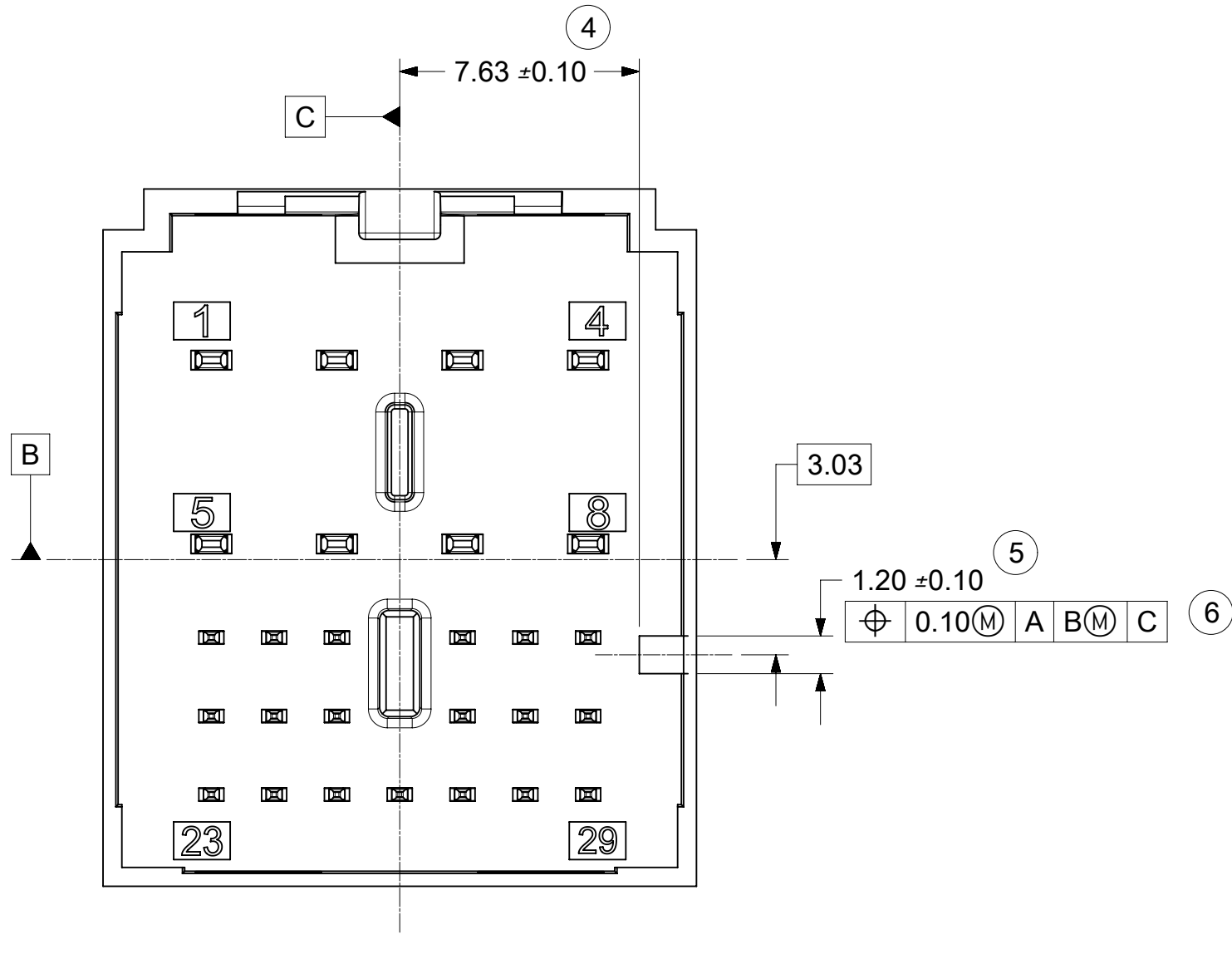
PSD 000 B

MATERIAL NUMBER CUSTOMER SHEET NUMBER

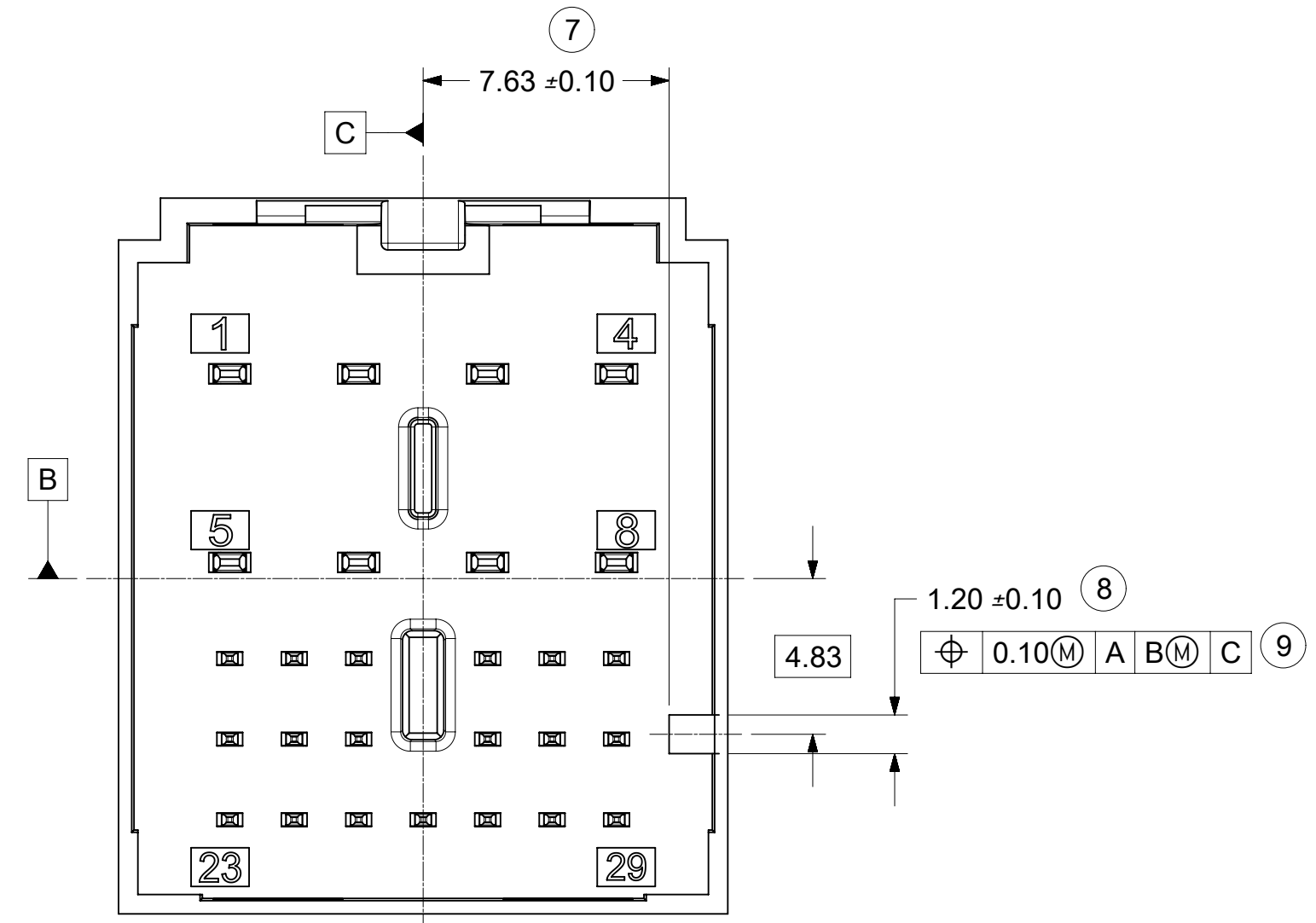
GENERAL MARKET 2 OF 2



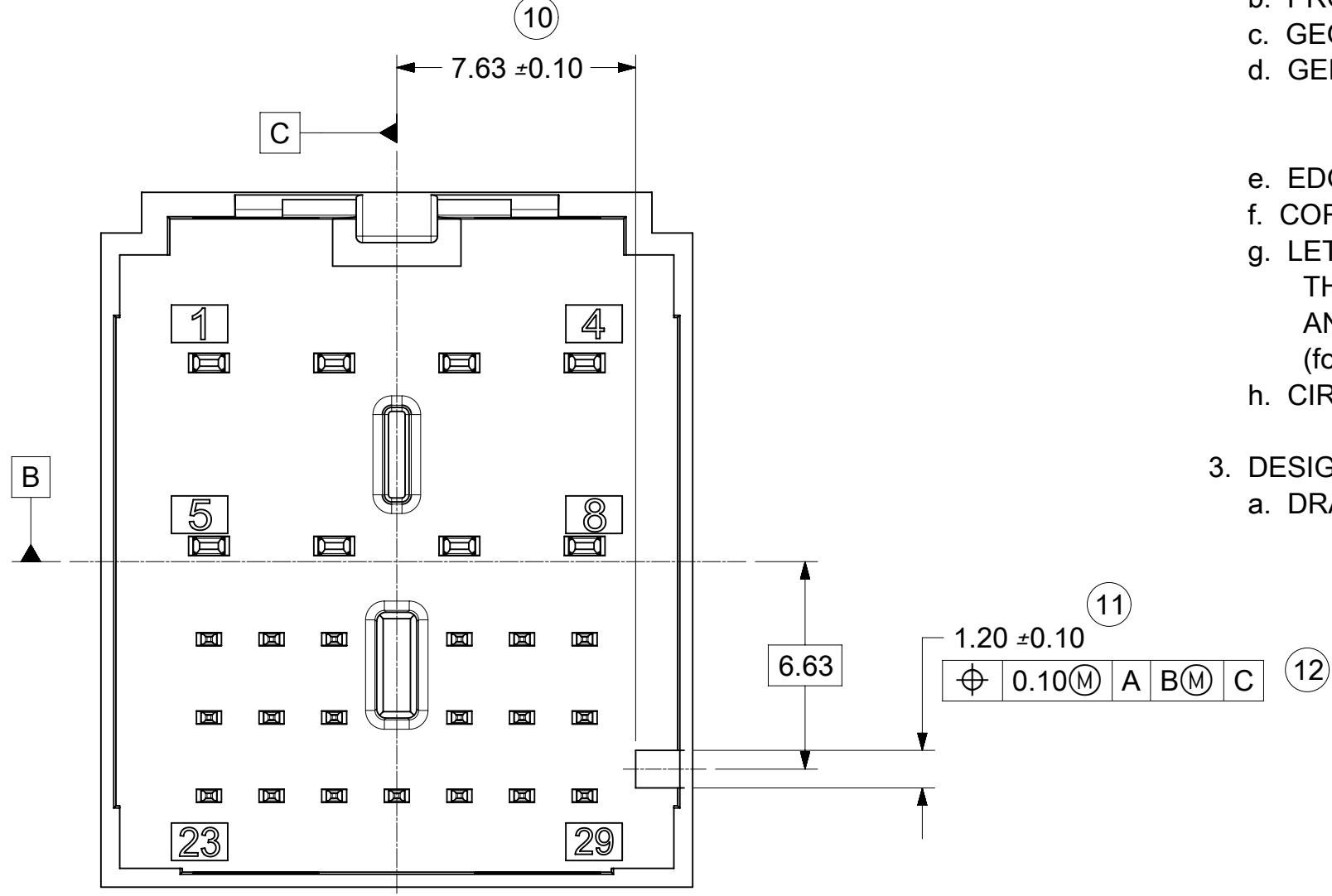
INTERFACE KEY #1
MATING CONNECTOR COLOR: BLACK



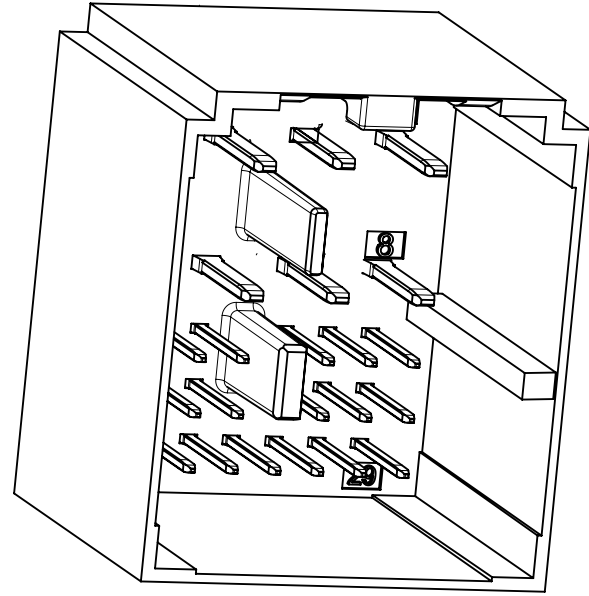
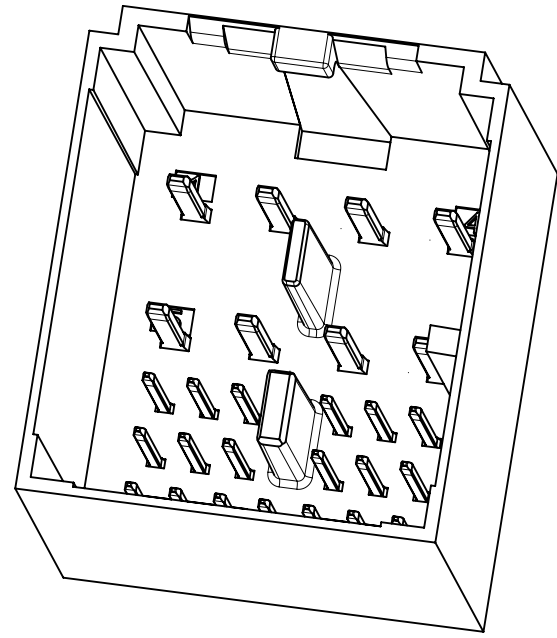
INTERFACE KEY #2
MATING CONNECTOR COLOR: LT GREEN B



INTERFACE KEY #3
MATING CONNECTOR COLOR: LT BLUE B

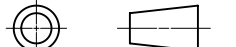


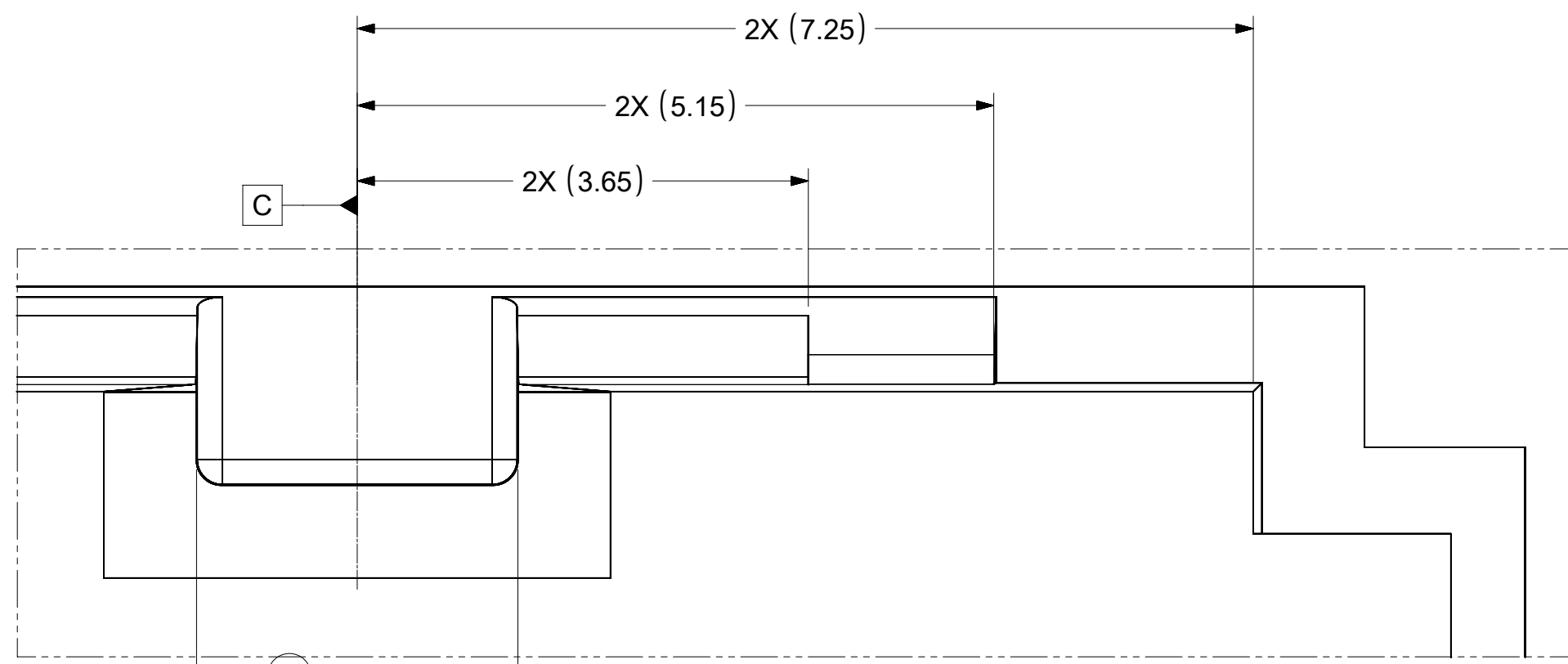
INTERFACE KEY #4
MATING CONNECTOR COLOR: PURPLE C



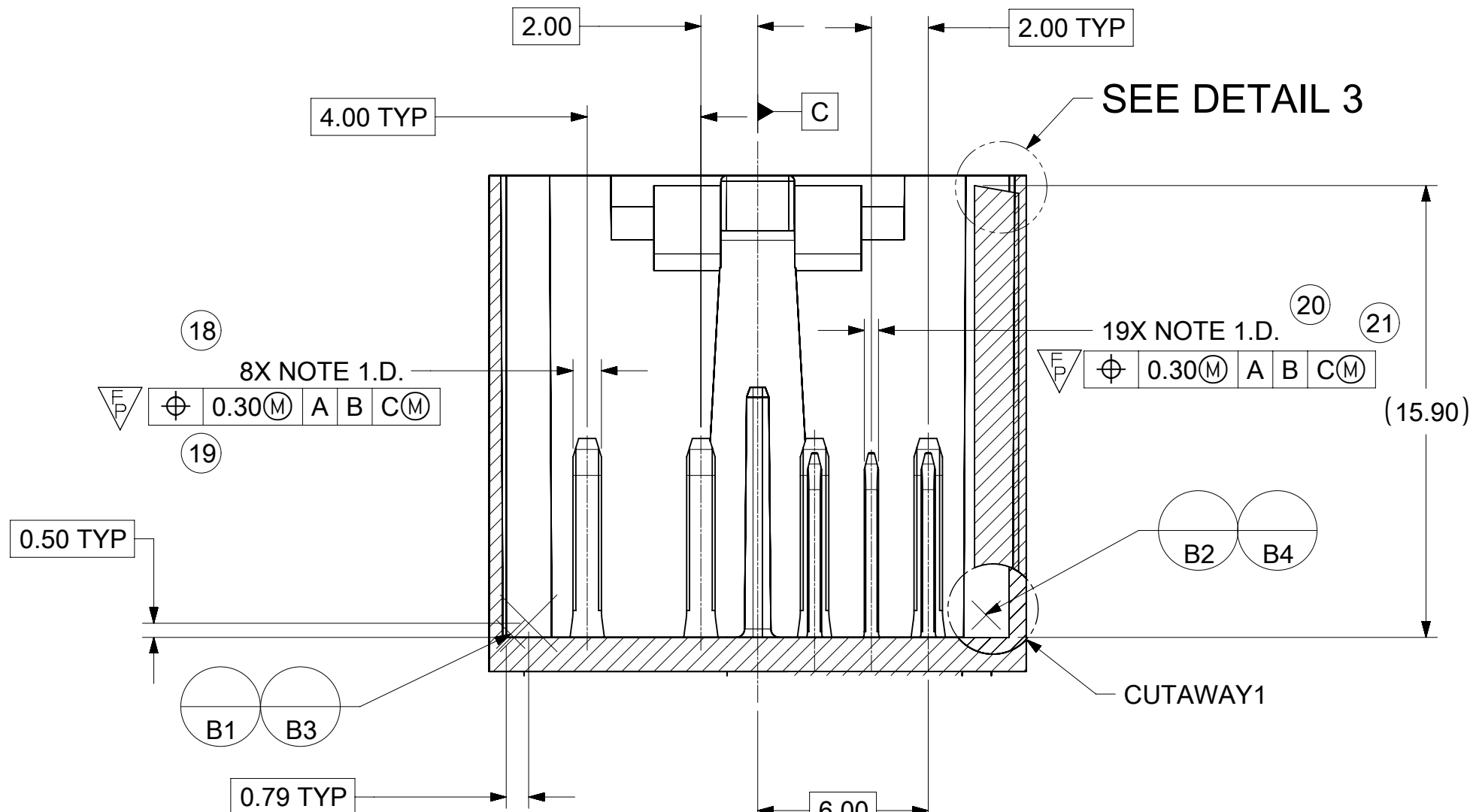
- NOTES: VALID UNLESS OTHERWISE SPECIFIED
- DESIGN - MATERIALS:
 - RESIN MATERIAL: PBT+GF30 OR SPS+GF30 OR EQUIVALENT
 - PIN/BLADE MATERIAL: ACCORDING TO USCAR DRAWING EWCAP-001 NOTE B2.
 - PLATING: ACCORDING TO USCAR DRAWING EWCAP-001 TIN REFLOW WITH UNDERPLATE.
 - PIN TIPS ACCORDING TO USCAR DRAWING EWCAP-001 (120-T002 AND 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.
 - LETTERING SHALL BE 0.15 MAX RAISED IN 0.25 MAX RECESS PAD.
THIS INCLUDES RECYCLING CODE, CAVITY ID, VENDOR IDENTIFICATION, AND CUSTOMER MATERIAL NUMBER.
(for small parts: LETTERING SHALL BE 0.10 MAX RAISED IN 0.15 MAX RECESS PAD)
 - CIRCUIT LOCATIONS 12 AND 19 VOIDED FOR 27WAY INTERFACE
 - DESIGN - MANUFACTURING:
 - DRAFT TO BE WITHIN TOLERANCE.

B1	ADDED BALLOONS JCONDON 08/02/2018
B	REMOVED 0.2MM FROM CONNECTOR LOCK TAB FEATURE
A1	NOTE 1.E. ADDED JCONDON 11/13/2017
A	NX-REMASTERING SAP # 10867412
9	UAU2016-1182 SAP # 10762453 JCONDON 02/08/2016
8	UAU2016-0542 SAP # 10728331 JCONDON 10/20/2015
7	UAU2015-1446 SAP # 10681629 JCONDON 03/25/2015
6	UAU2015-1212 SAP # 10674908 JCONDON 02/06/2015
5	UAU2015-1036 SAP # 10670355 JCONDON 01/07/2015
4	UAU2015-0634 SAP # 10661788 JCONDON 10/22/2014
3	UAU2014-1679 SAP # XXXXXXXX JCONDON 03/17/2014
2	UAU2014-1221 SAP # XXXXXXXX MYOUNG01 01/31/2014
1	UAU2014-0715 SAP # XXXXXXXX DAHALL 11/20/2013
REV	DESCRIPTION

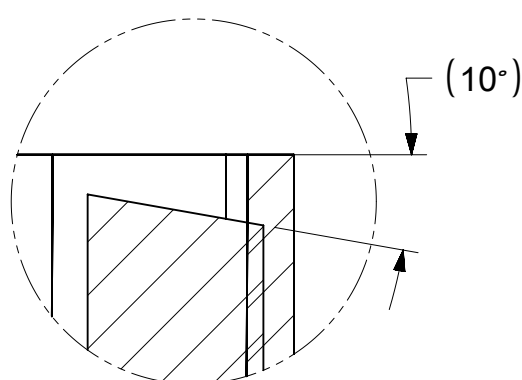
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										
DIMENSION UNITS		SCALE		CURRENT REV DESC: ADDED DIMENSION BALLOONS				molex			
 = 0	mm	5:1									
 = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)			EC NO: 602204 DRWN: JCONDON 2018/08/02 CHK'D: JCONDON 2018/08/03 APPR: MVANSLAMBROU 2018/08/03				27WAY STAK50H INTERFACE DRAWING			
 = 0											
 = 0	ANGULAR TOL ± °			2013/11/20 2014/01/02				PRODUCT CUSTOMER DRAWING			
 = 0	4 PLACES ±										
 = 0	3 PLACES			INITIAL REVISION:				DOCUMENT NUMBER SD-160029-002			
 = 0	2 PLACES ±										
 = 0	1 PLACE ±			DOC PART 001							
 = 0	0 PLACES ±							REVISION B1			
 = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NUMBER CUSTOMER GENERAL MARKET							
= 0	THIRD ANGLE PROJECTION 							SHEET NUMBER 1 OF 3			
	DRAWING D-SIZE			SERIES 160029							



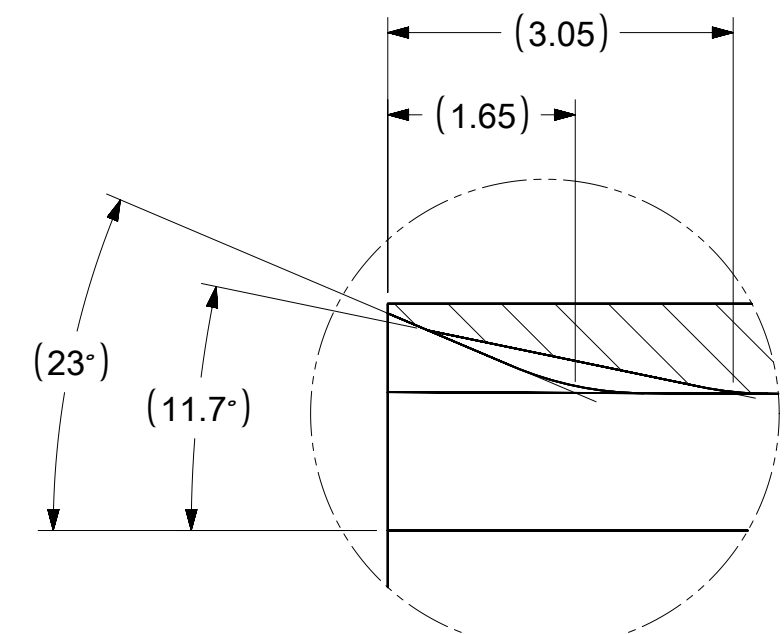
DETAIL 1
SCALE 20:1



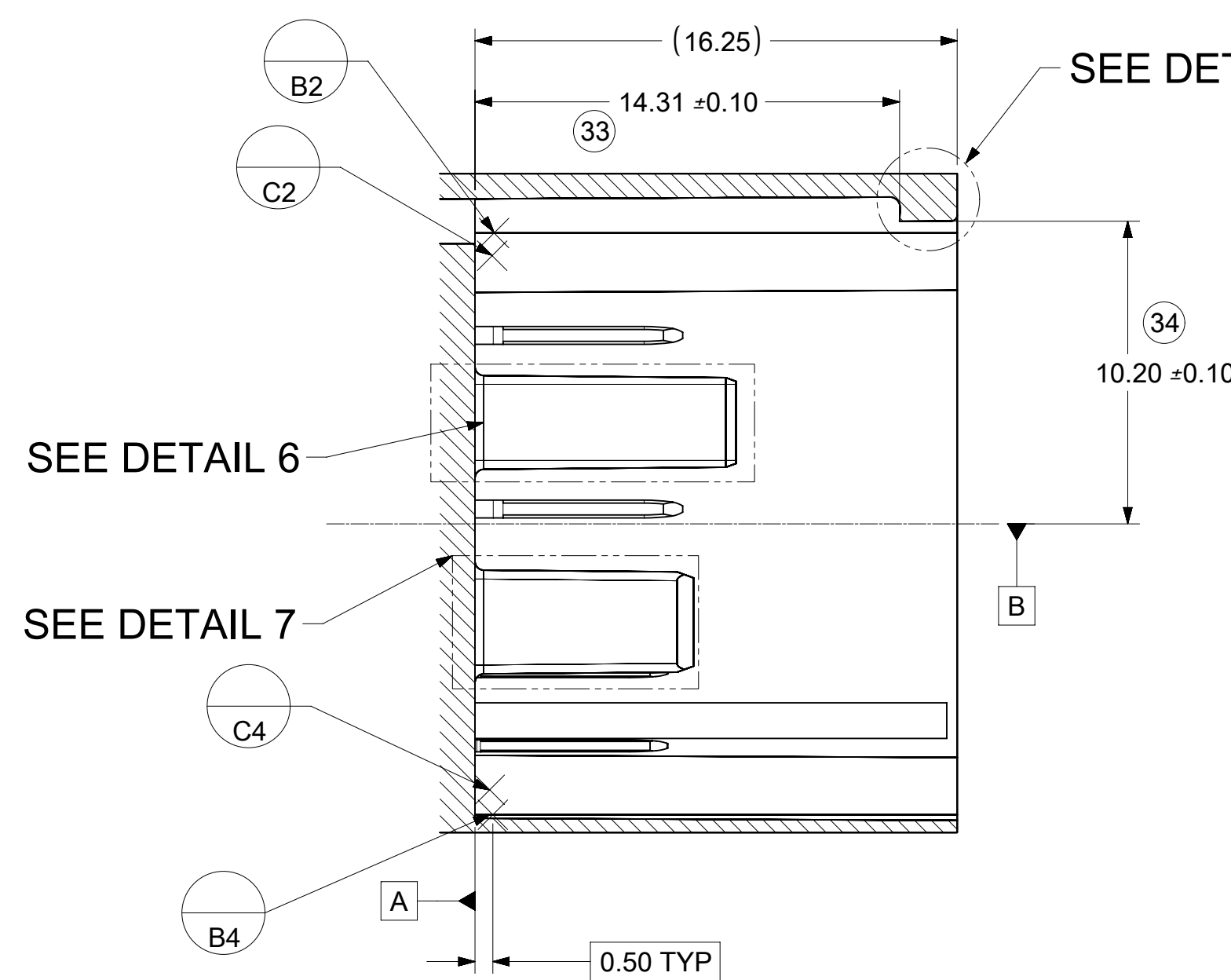
SECTION X-X



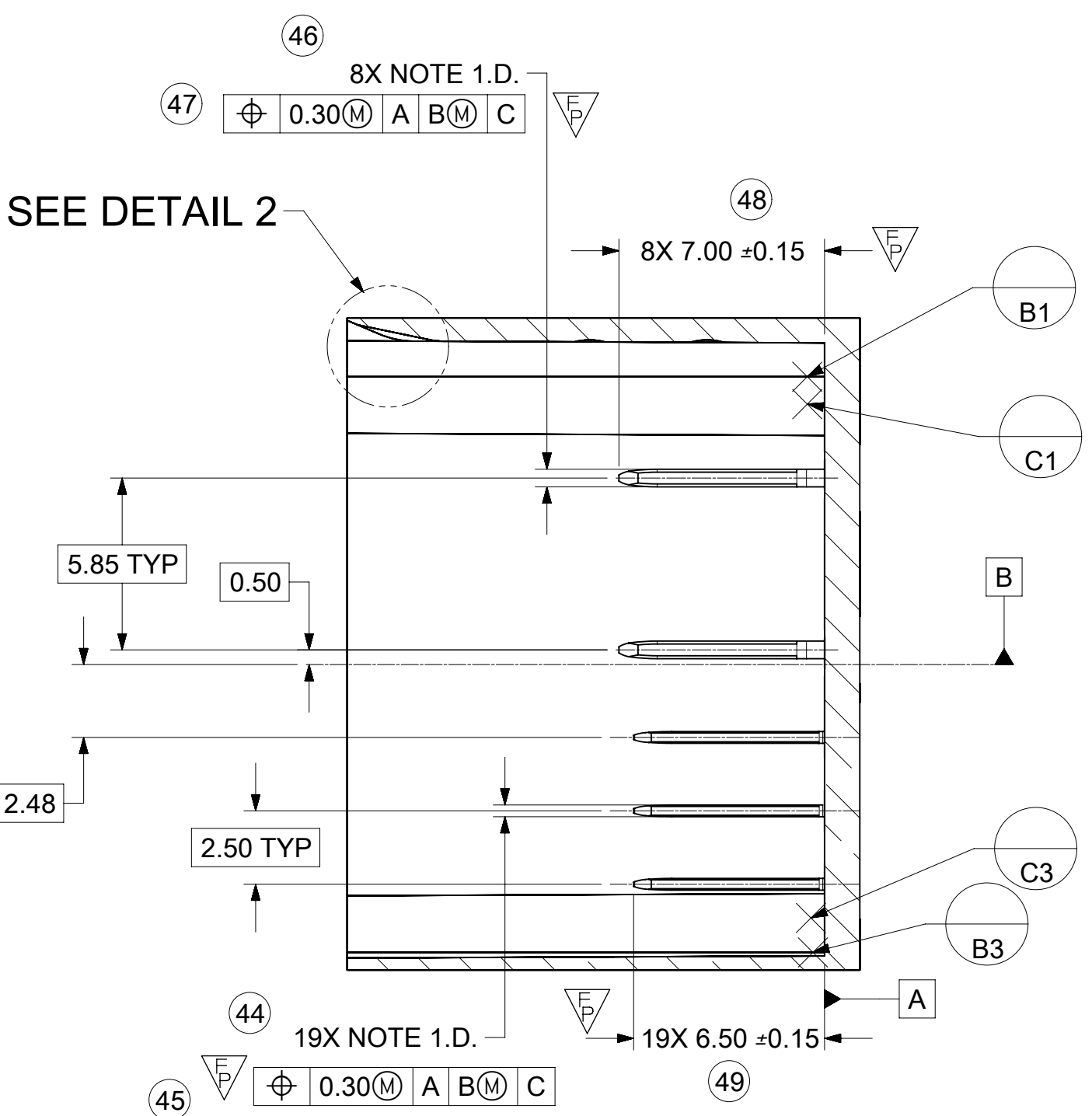
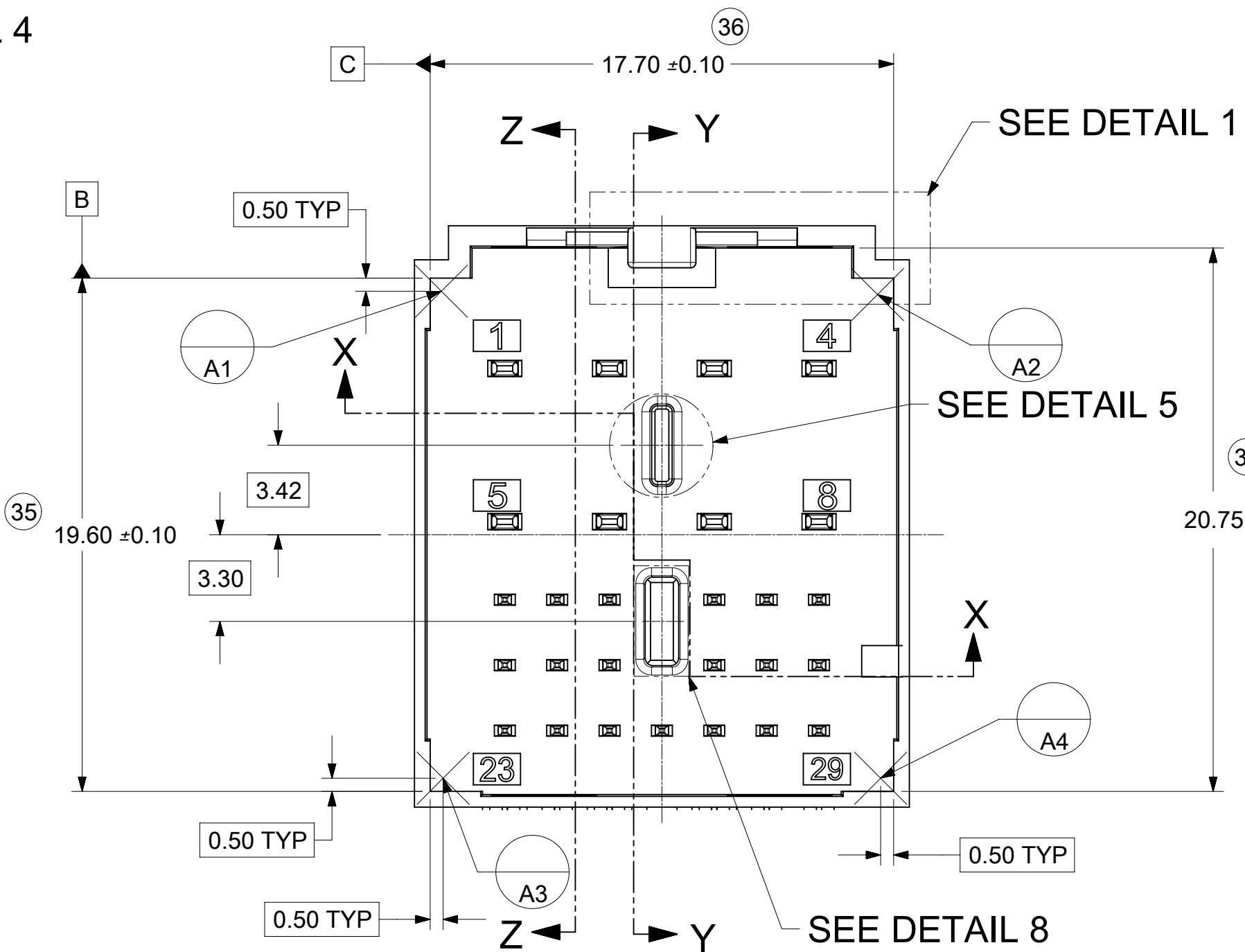
DETAIL 3
SCALE 15:1



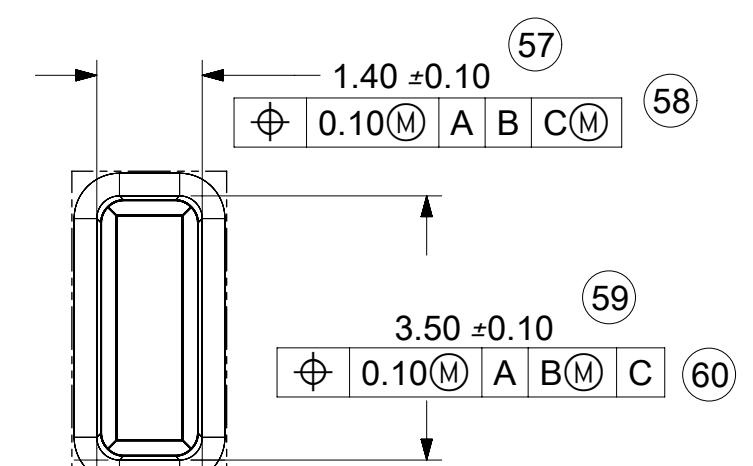
DETAIL 2
SCALE 15:1



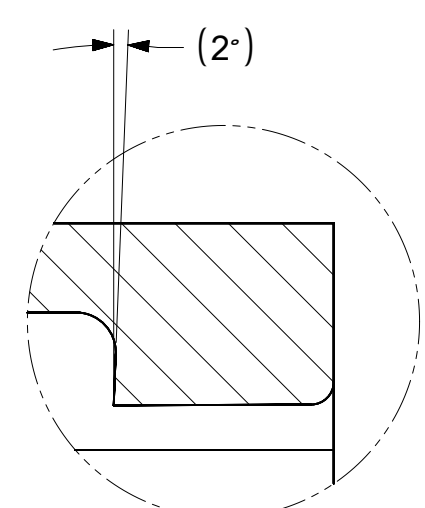
SECTION Y-Y



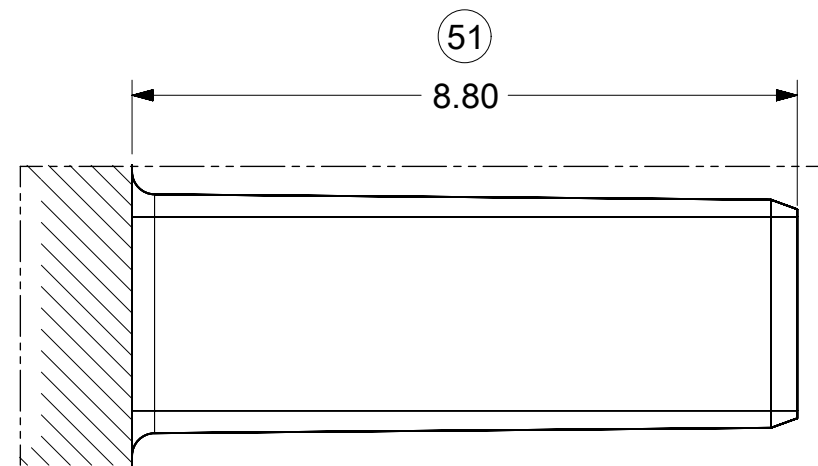
SECTION Z-Z



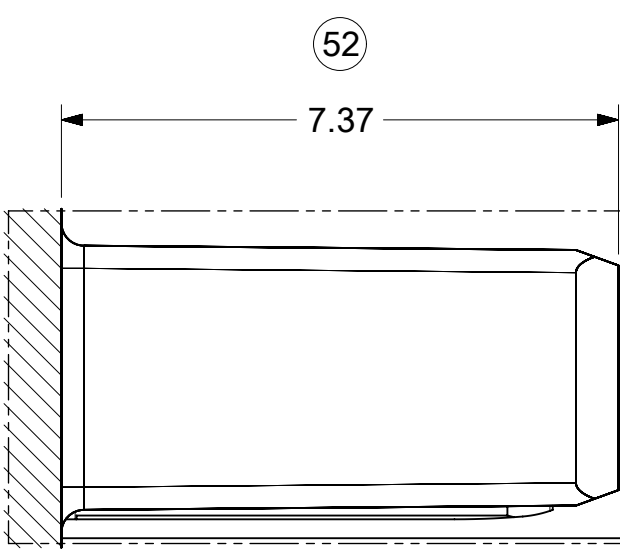
DETAIL 8
SCALE 10:1



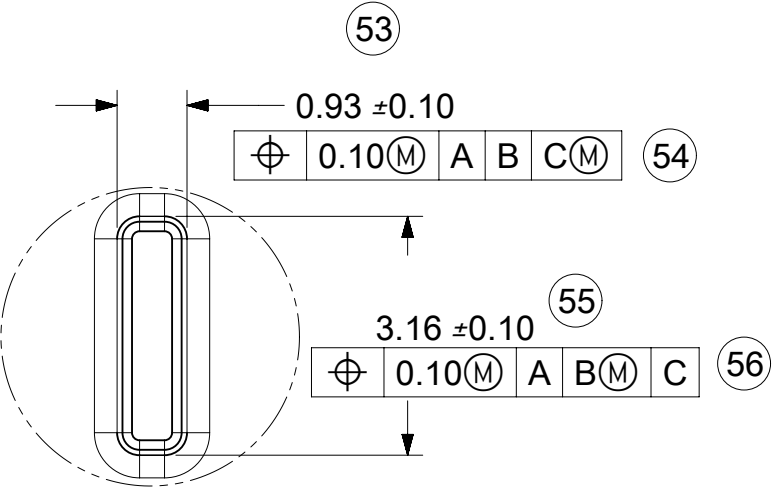
DETAIL 4
SCALE 15:1



DETAIL 6
SCALE 10:1



DETAIL 7
SCALE 10:1



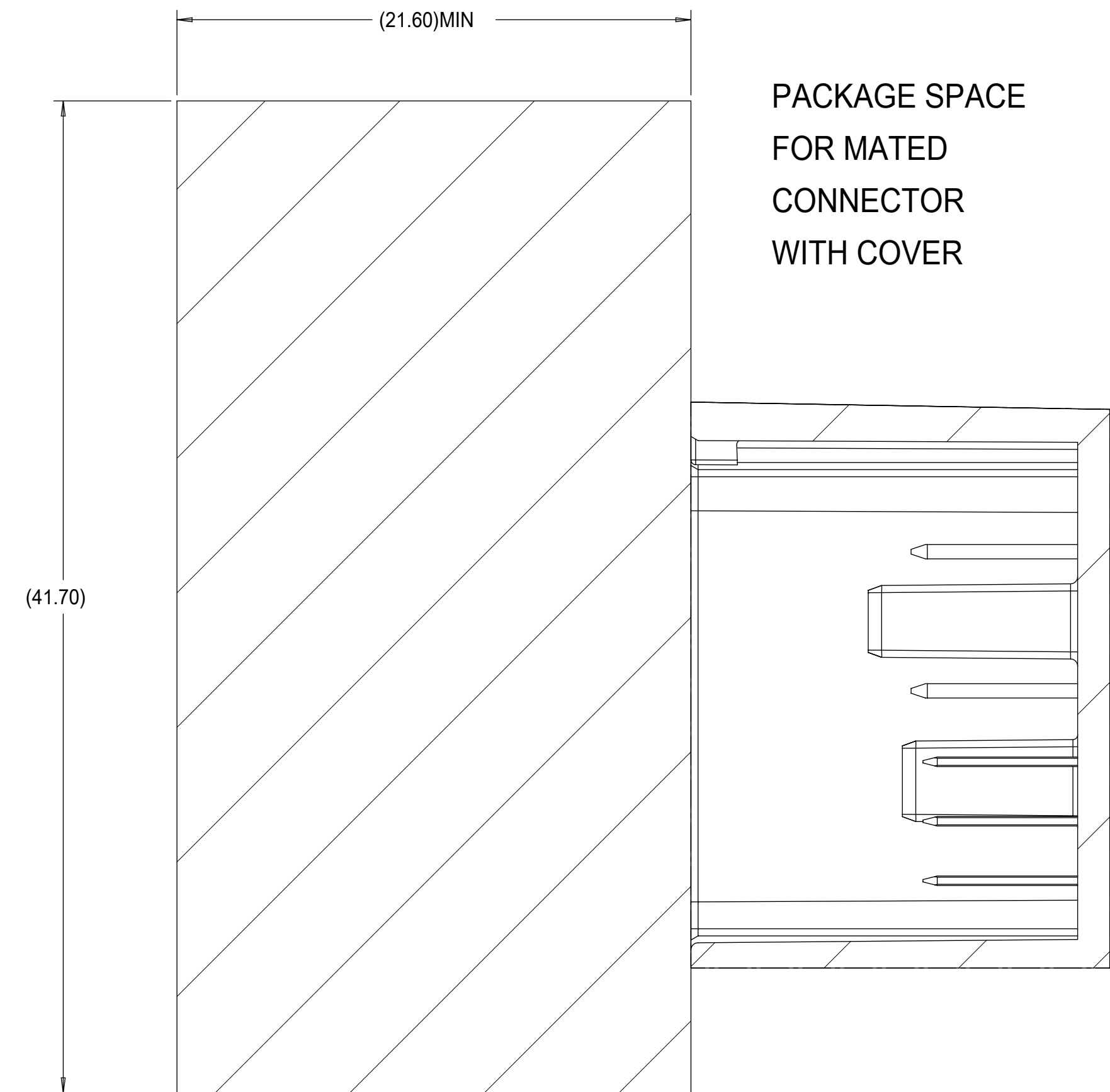
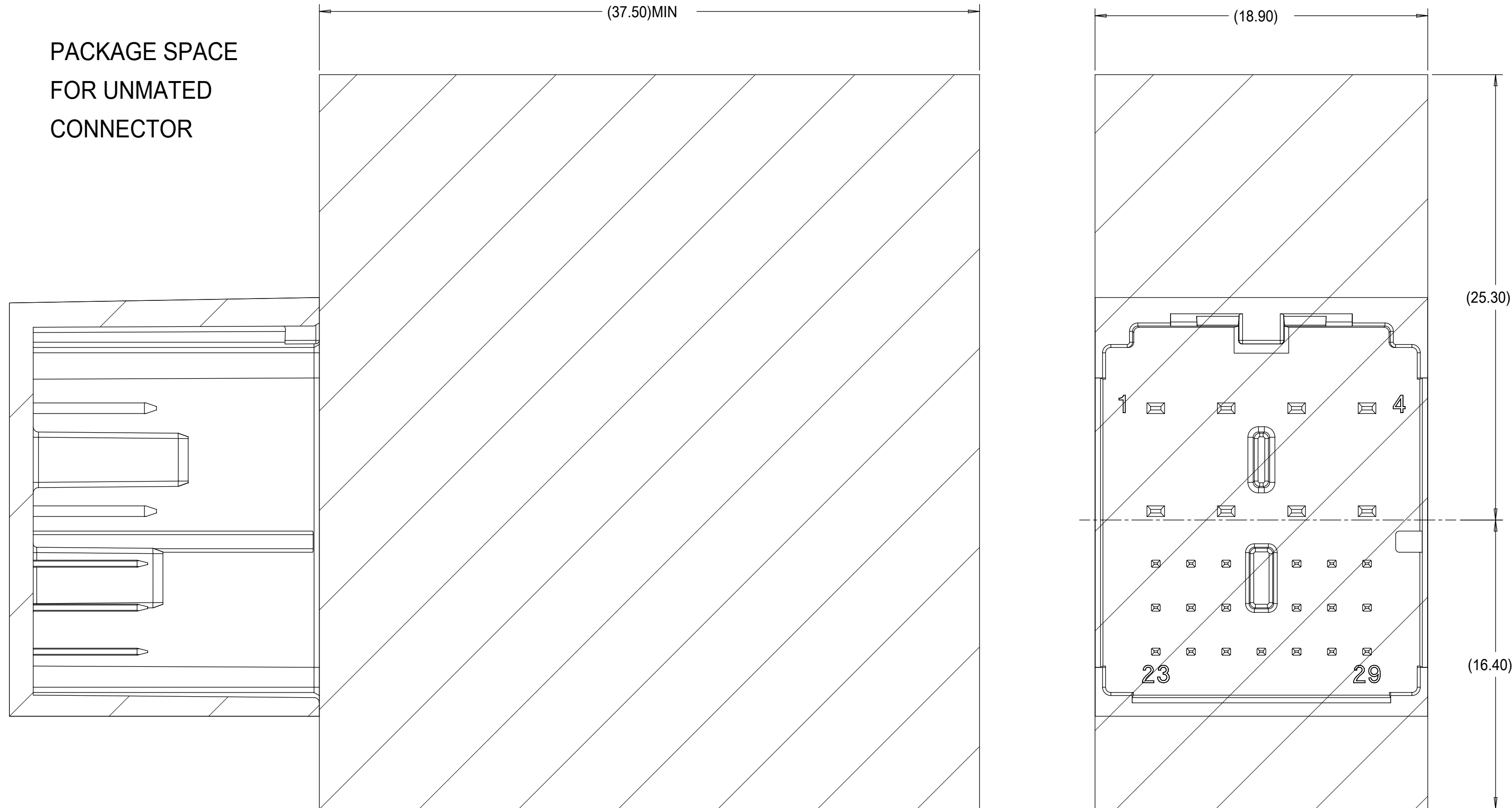
DETAIL 5
SCALE 10:1

SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: ADDED DIMENSION BALLOONS		molex	
	= 0	DIMENSION UNITS	mm	SCALE	5:1	27WAY STAK50H INTERFACE DRAWING	
	= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 602204		PRODUCT CUSTOMER DRAWING	
	= 6	ANGULAR TOL ± °		DRWN: JCONDON 2018/08/02		DOCUMENT NUMBER	DOC TYPE DOC PART REVISION
	= 0	4 PLACES ±		CHK'D: JCONDON 2018/08/03		SD-160029-002	
	= 0	3 PLACES ±		APPR: MVANSLAMBROU 2018/08/03		PSD	001 B1
	= 0	2 PLACES ±		INITIAL REVISION:		MATERIAL NUMBER CUSTOMER SHEET NUMBER	
	= 0	1 PLACE ±		DRWN: DAHALL 2013/11/20		GENERAL MARKET	
	= 0	0 PLACES ±		APPR: KDEKOSKI 2014/01/02		2 OF 3	
	= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	
	= 0				D-SIZE	160029	

PACKAGE SPACE FOR CONNECTOR

PACKAGE SPACE FOR UNMATED 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: ADDED DIMENSION BALLOONS				molex									
mm		5:1															
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 602204 DRWN: JCONDON 2018/08/02 CHK'D: JCONDON 2018/08/03 APPR: MVANSLAMBROU 2018/08/03				27WAY STAK50H INTERFACE DRAWING											
ANGULAR TOL ± °																	
4 PLACES ±		INITIAL REVISION: DRWN: DAHALL 2013/11/20 APPR: KDEKOSKI 2014/01/02				DOCUMENT NUMBER SD-160029-002		DOC TYPE PSD		DOC PART 001		REVISION B1					
3 PLACES ±																	
2 PLACES ±		PRODUCT CUSTOMER DRAWING															
1 PLACES ±																	
0 PLACES ±		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING D-SIZE		SERIES 160029		MATERIAL NUMBER		CUSTOMER GENERAL MARKET		SHEET NUMBER 3 OF 3	

DOCUMENT STATUS	P1	RELEASE DATE	2018/08/03	19:41:35
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