

STANDARD NOTICE

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- NOTES: UNLESS OTHERWISE SPECIFIED**
- ALL DIMENSIONS SHOWN IN MILLIMETERS.
 - DIMENSIONING AND TOLERANCING PER ASME Y14.5M-2009
 - 0.25 RADII ON ALL CORNERS SHOWN SHARP.
 - UNSPECIFIED RADII: 0.25 EXCEPT AS NOTED.
 - STANDARD COLORS FOR POLARIZATION (SEE CHART). DEVIATION REQUIRES APPROVAL OF AUTHORIZED PERSON.
 - REFER TO "SAE/USCAR 12 CONNECTOR GUIDELINES" FOR ADDITIONAL REQUIREMENTS.
 - EXCEPT WHERE NOTED, DRAFT ON OUTSIDE SURFACES IS PERMISSIBLE WITHIN TOLERANCE.
 - SYMBOL INDICATES DRAFT DIRECTION.
 - FOR TERMINAL MATERIAL, DIMENSIONAL, AND COATING REQUIREMENTS AND ANY BLADE TERMINAL DESIGN INFORMATION NOT SHOWN ON THIS DRAWING SEE EWCAP DRW. NO. EWCAP-001
 - A FULL SHROUD ON THE MATING CONNECTOR IS REQUIRED TO INSURE THAT THE CONNECTOR-HEADER POLARIZATION FEATURES (OPTIONS A THRU D) WILL FUNCTION. THE FULL SHROUD ALSO PREVENTS SCOOP DAMAGE TO THE HEADER PINS. REFER TO "SAE/USCAR-12 CONNECTOR DESIGN GUIDE LINES" FOR ADDITIONAL INFORMATION.
 - REFER TO USCAR/EWCAP PART LIST AS FOUND ON WEBSITE <http://www.uscarteams.org>
 - THIS IS A 100% CAD GENERATED PART. THE CAD MATHEMATICAL DATA IS THE MASTER FOR THIS PART. FOR DIMENSIONAL OR ANY INFORMATION NOT SHOWN ON THIS DRAWING, ANALYZE THE CAD MODEL.

REV	DATE	BY	CHK	DESCRIPTION	
132	D5			UPDATED CALL OUT FOR THE REVISION OF GD&T FROM ASME Y14.5-1994 TO Y14.5-2009	
132	D4			UPDATED THE STANDARD NOTICE TO THE LATEST TEMPLATE	
132	D3			ADDED PLANE 2	
132	D2			ADDED PLANE 1	
132	D1	04-24-17	MV	ADDED CALL OUT "CENTER PLANES ESTABLISHED BY DATUM B"	
095	C22			CHANGED ISO VIEW SCALE TO 4:1, WAS 1:1	
095	C21			ADDED PARTING LINE NOTE TO DETAIL A, REMOVED NOTE BACK ANGLE OPTIONAL FROM 5°	
095	C20			CORRECTED CHRYSLER GROUP LLC NOMENCLATURE ADDED LEGAL NOTE AND EWCAP TO TITLE BLOCK	
095	C19			MOVED NOTE TO SECTION B-B	
095	C18			UPDATED NOTES	
095	C17			ADDED 0.25° MAX DRAFT ANGLE ALL AROUND	
095	C16			ADDED 5.50	
095	C15			ADDED AT TANGENT NOTE	
095	C14			REMOVED DATUM D	
095	C13			ADDED BASIC DIMENSIONS FOR PROFILE CONTROL	
095	C12			ADDED 0.20 A B	
095	C11			DIMENSION TO DATUM A	
095	C10			SEALING SURFACE DIMENSIONS MOVED TO SECTION C-C	
095	C9			ADDED SECTION C-C	
095	C8			REMOVED 15.20 AND 2.50 FROM SECTION A-A	
095	C7			ADDED DRAFT ANGLE DIRECTION	
095	C6			REMOVED 0.80 ±0.10/-0.20 ALL AROUND	
095	C5			REPLACED WALL THICKNESS CONTROL WITH PROFILE OF A SURFACE	
095	C4			ADDED R(6.47)	
095	C3			ADDED 0.70±0.15 ALL AROUND	
095	C2			UPDATED CONNECTOR COLORS	
095	C1			SURFACE 'D' RELOCATED TO 3.50 WAS AT 8.20	
B3				REMOVED EWCAP FROM THE TITLE BLOCK	
B2				REMOVED LEGAL NOTICE	
B1	03-26-12	KC	MV	ANGEL 40° WAS 60° -4 PLACES (A4-D4)	
A	10-31-02	MV	DG	RELEASED	
CHANGE SERIAL NUMBER	LET	REVISION RECORD	DATE	DWN	CHK

EWCAP P/N	OPTION	MATING CONNECTOR COLOR
150-S-004-2-D02	D	BLACK
150-S-004-2-C02	C	DK GRAY
150-S-004-2-B02	B	LT GRAY
150-S-004-2-A02	A	BLACK

TOLERANCES (UNLESS OTHERWISE SPECIFIED):
 DIMENSIONS ARE IN MILLIMETERS
 ANGLES ±3°
 X ±0.2 XX ±0.10

THIRD ANGLE PROJECTION

EWCAP

SCALE: 4 - 1 DRAWN BY: K. CUNNINGHAM CHECKED BY: M. VANSLAMBOUCK DATE: 03-26-12

TITLE: DIRECT CONNECT INTERFACE
4 WAY (2 X 2) 1.5MM SEALED MALE

SHEET: DRAWING NUMBER: 150-S-004-2-Z02 SIZE: E DO NOT SCALE DRAWING COMPUTER AIDED DRAWING REVISION LEVEL: D

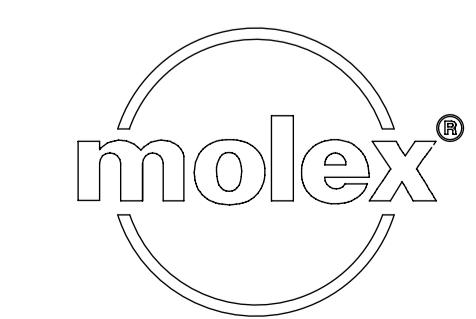


TABLE OF CONTENTS	
SHEET NO.	SHEET DESCRIPTION
1	NOTES AND BOM
2	CONFIGURATIONS
3-4	KEY CONFIGURATIONS
5	RECEPTACLE CONNECTOR ASSEMBLY
6	BACKSHELL NOTES
7	BACKSHELL
8	BACKSHELL CONFIGURATIONS
9	2X10 CONNECTOR INTERFACE DEFINITION

NOTES: VALID UNLESS OTHERWISE SPECIFIED

1. GENERAL:

- a. APPLICATION SPECIFICATION SEE: AS-33472-100
 - CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, CONNECTOR ASSEMBLY, PACKAGING INFORMATION, CONNECTOR MATING, SERVICE INSTRUCTIONS, ELECTRICAL CONTINUITY CHECKING, CRIMPING, AND TROUBLESHOOTING.
 - DESIGNED TO MATE WITH DEVICE OR CONNECTOR AS SPECIFIED IN THE MATING INTERFACE/CONNECTOR DRAWINGS CHART.
 - *DENOTES DRAWINGS THAT CAN BE ACCESSED AT <http://ewcap.uscarteams.org/>.
 - ASSEMBLY SHIPPED WITH PLR IN PRE-LOCK POSITION (SEE PLR PRE-LOCK VIEW SHEET 5).
- b. PRODUCT SPECIFICATION SEE:
 - STANDARD CONFIGURATION (STD): PS-33472-000
 - TRANSMISSION CONFIGURATION (TRNS):
 - CONTAINS SILICONE: TS-160038-0001
 - SILICONE FREE: TBD
 - UL V0 CONFIGURATION (UL V0): TBD
 - CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, RATINGS (CURRENT, TEMPERATURE, SEALING, AND FLAMMABILITY), TERMINALS, WIRE DIAMETER RANGE, PRODUCT VALIDATION, AND PRODUCT DEVIATIONS.
- c. PACKAGING SPECIFICATION PER MOLEX DRAWING: SEE PACKAGING CHART
- d. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: QEHS-699000-301
- e. DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS (COMPANY ID#13255)

2. DESIGN - MATERIALS:

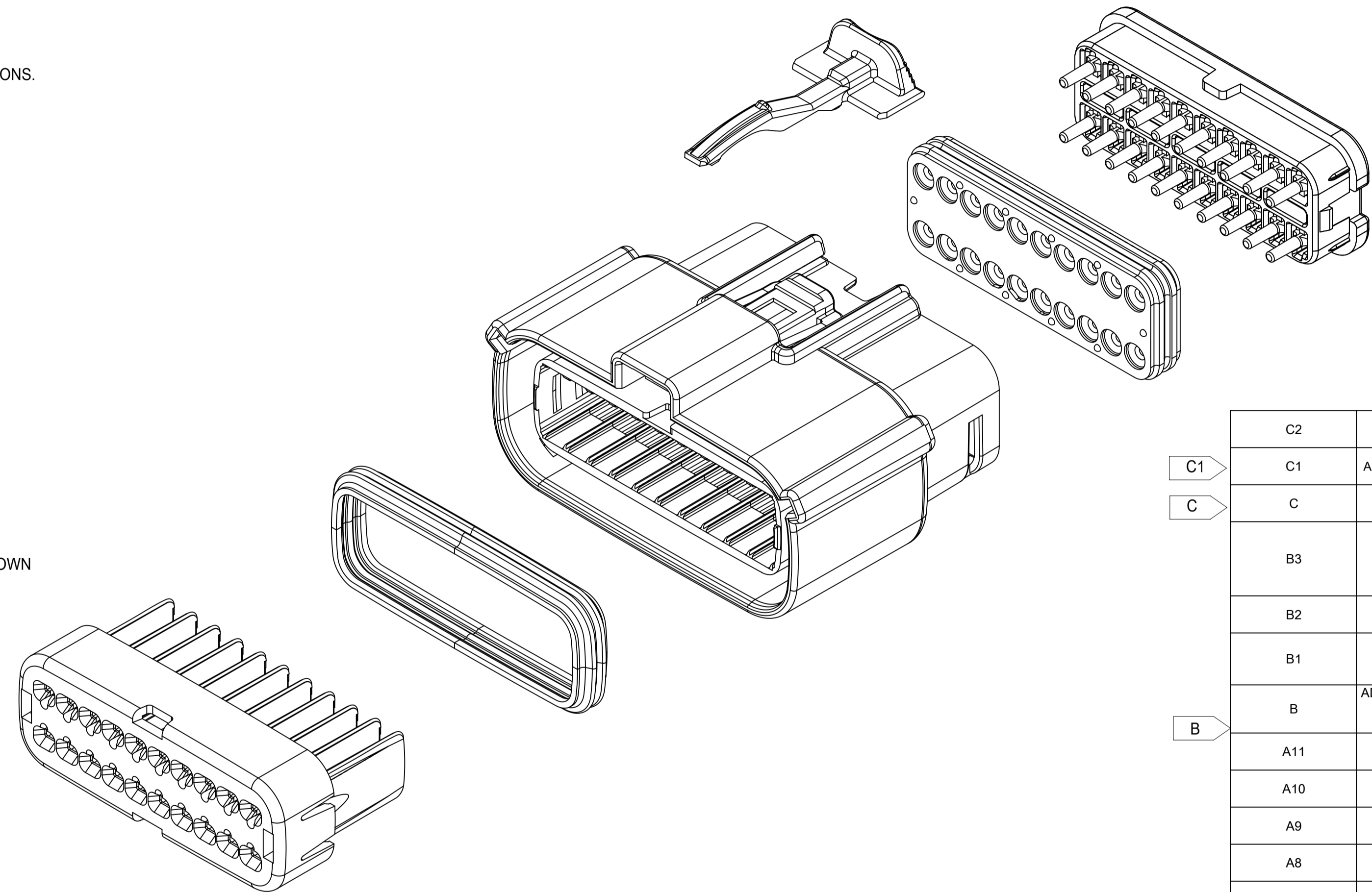
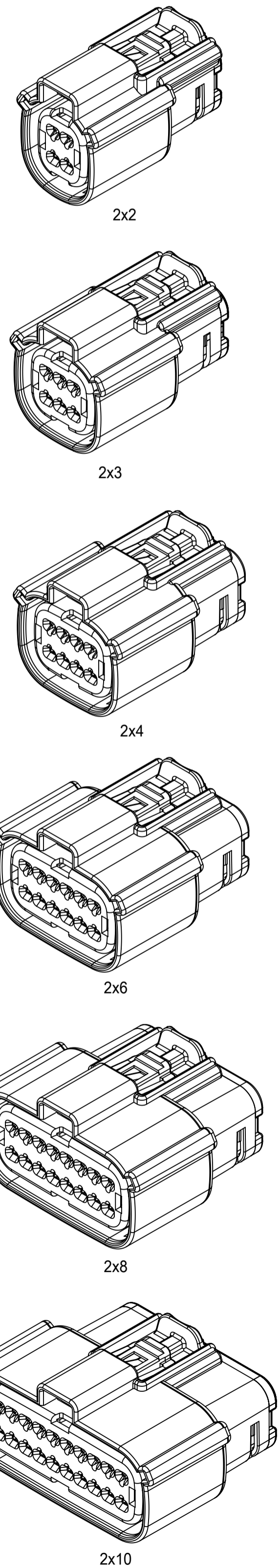
- a. FOR BILL OF MATERIALS SEE:
 - STANDARD CONFIGURATION SD-33472-0002
 - TRANSMISSION CONGRURATION
 - CONTAINS SILICONE: SD-160038-0002
 - SILICONE FREE: SD-160092-0002
 - UL V0 CONFIGURATION SD-160074-0002
- b. TRANSMISSION CONNECTOR COMPONENTS MUST MEET THE MATERIAL REQUIREMENTS SPECIFIED IN TS-160038-0001 & TBD

3. DESIGN - GEOMETRY:

- a. THE 3-D CAD DATA IS BASIC (WITHOUT TOLERANCE) AND MASTER FOR THIS PART WITH THE EXCEPTION OF UNDERLINED DIMENSIONS. DIMENSIONAL INFORMATION NOT SHOWN ON THIS DRAWING IS DEFINED BY THE DATA FILE AT ITS LATEST REVISION.
- b. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M-2009
- c. EDGES AND UNDIMENSIONED DETAILS PER ISO13715
- d. CORNERS SHOWN AS SHARP TO BE R 0.2 MAX.
- e. 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.
- f. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B).
- g. LASER MARKING:
 1. PART NUMBER
 2. DAY OF THE YEAR
 3. SHIFT
 4. YEAR
- FOR ADDITIONAL INFORMATION SEE SECTION 5 UNDER PROCEDURES IN ES-34735-008.
- h. 2X2 CLIP-SLOT DESIGN IS BASED ON USCAR/EWCAP 7mm CLIP SLOT EWCAP - 005 - 7
- 2X3 THRU 2X10 CLIP-SLOT DESIGN IS BASED ON USCAR/EWCAP 11mm CLIP SLOT EWCAP - 005 - 11

DESCRIPTION	DRAWING NO.
2X2	PK-31300-635
2X3	PK-31300-903
2X4	PK-31300-903
2X6	PK-31300-903
2X8	PK-31300-903
2X10	PK-31300-903

MATING INTERFACE/CONNECTOR DRAWINGS		
DESCRIPTION	INTERFACE DEFINITION	MOLEX INLINE
STANDARD 2X2	*150-S-004-2-Z02	SD-33482-0001
UL V0 2X2	*150-S-004-2-Z02	SD-33482-0001
STANDARD 2X3	*150-S-006-2-Z02	SD-33482-0001
TRANSMISSION 2X3	*150-S-006-2-Z02	N/A
STANDARD 2X4	*150-S-008-2-Z02	SD-33482-0001
UL V0 2X4	*150-S-008-2-Z02	SD-33482-0001
STANDARD 2X6	*150-S-012-2-Z01	SD-33482-0001
UL V0 2X6	*150-S-012-2-Z01	SD-33482-0001
STANDARD 2X8	*150-S-016-2-Z01	SD-33482-0001
STANDARD 2X10	SD-33472-0001	SD-33482-0001
UL V0 2X10	SD-33472-0001	SD-33482-0001



C2	ADDED MOLEX BACKSHELL DETAILS
C1	ADDED 2X6-TRNS.-WITH/WITHOUT CLIPSLOT *
C	ADDED 2X10-STD.-WITH CLIPSLOT *
B3	ADD ROW FOR 2X6 V0 ON SHEET 5DIM3# UPDATE TO 25.0 MAX FOR V0DIM11# UPDATE TO 33.85 MAX FOR V0
B2	ADD 2X6 UL V0 CONFIGURATIONS
B1	UPDATE 2X6 W/O CLIPSLOT DIM G ON TABLE OF SHEET 5
B	ADDED 2X2 - STD- WITH CLIPSLOT, 2X8 - STD- WITH CLIPSLOT AND NOTE h
A11	MINOR GEOMETRY CHANGE FOR UL V0
A10	UPDATED 2X4 DRAWING NUMBER
A9	UPDATED 2X10 PART NUMBERS
A8	UPDATED 2X3 DRAWING NUMBER
A7	UPDATED 2X10 INTERFACE
A6	ADDED TRANSMISSION REFERENCES
A5	ADD 2X10 INTERFACE SHEETS
A4	ADD UL V0 CONFIGURATIONS
A3	ADDED 2X3 STD AND TRANSMISSION
A2	UPDATED 2X8 BLD DRAWINGS
A1	FIXED TYPO IN NOTE 1a, UPDATED 2X6 MOLEX INLINE BLADE DRAWING
A	INITIAL RELEASE
REV	REV DESCRIPTION

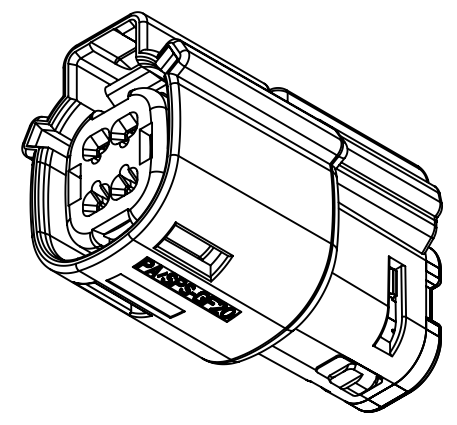
INSPECTION NUMBER LOG	
LAST NUMBER:	11
ADDED:	11
REMOVED:	

SYMBOLS THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION DIMENSION UNITS: mm SCALE: 1:1 GENERAL TOLERANCES (UNLESS SPECIFIED): ANGULAR TOL: ± 1.0° 4 PLACES: ± 3 PLACES: ± 2 PLACES: ± 0.1 1 PLACE: ± 0.2 0 PLACES: ± DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CURRENT REV DESC: EC NO: 171650 DRWN: DDEB 2018/01/19 CHK'D: MVANSLAMBROU 2018/02/16 APPR: MVANSLAMBROU 2018/02/16 INITIAL REVISION: DRWN: APROFFITT 2014/05/14 APPR: VKOSHY 2014/06/27	<p>MX150 RCPT DUAL ROW SEALED ASSEMBLY MAT SEAL</p> <p>PRODUCT CUSTOMER DRAWING</p>
	DOCUMENT NUMBER: SD-33472-0001 DOC TYPE: PSD DOC PART: 001 REVISION: C2	
MATERIAL NUMBER: A1-SIZE 33472 CUSTOMER: GENERAL MARKET SHEET NUMBER: 1 OF 11		

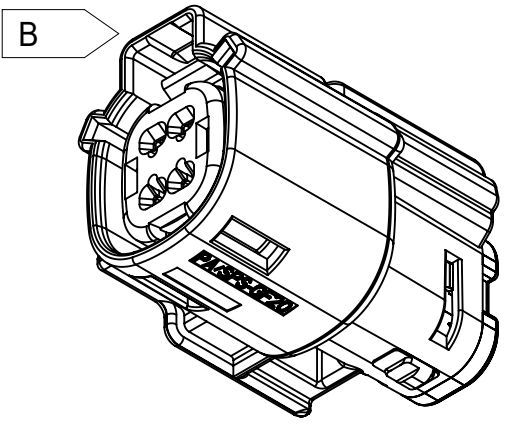
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P1			

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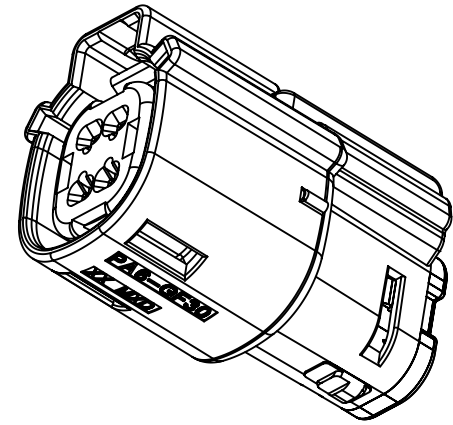
CONFIGURATIONS



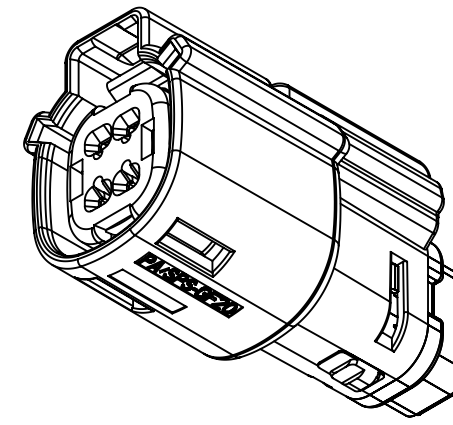
2X2 - STD.
2X2 - TRNS. - SILICONE FREE †



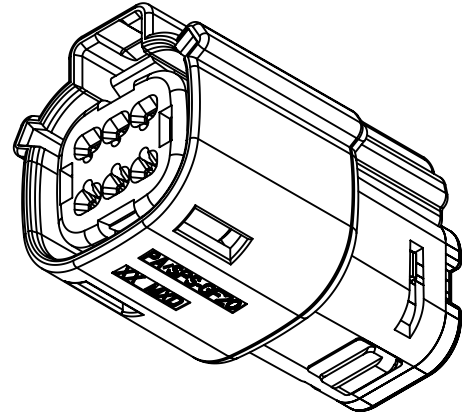
2X2 - STD. - WITH CLIPSLOT *



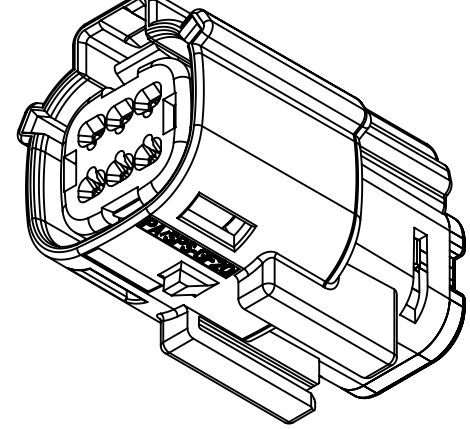
† 2X2 - UL V0



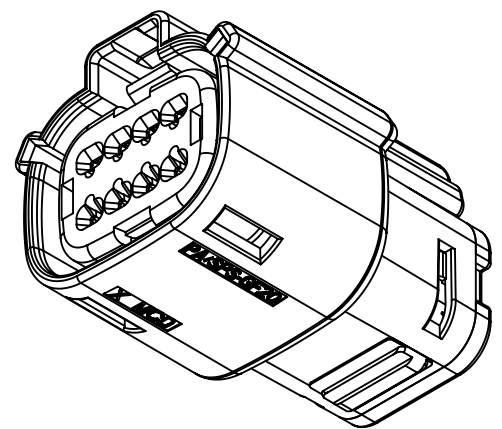
2X2 - STD. - LENGTHENED



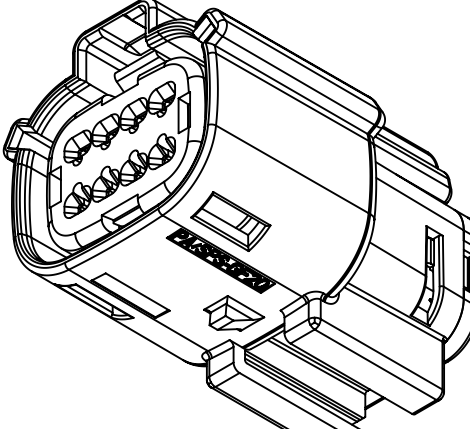
2X3 - STD.
2X3 - TRNS. - CONTAINS SILICONE †



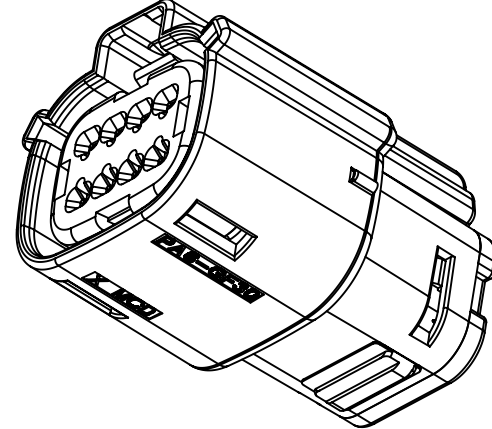
2X3 - STD. - WITH CLIPSLOT *



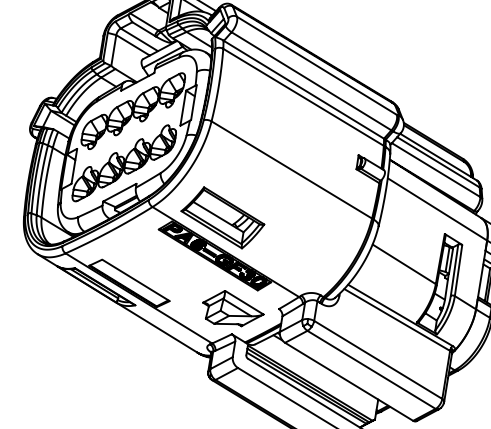
2X4 - STD.



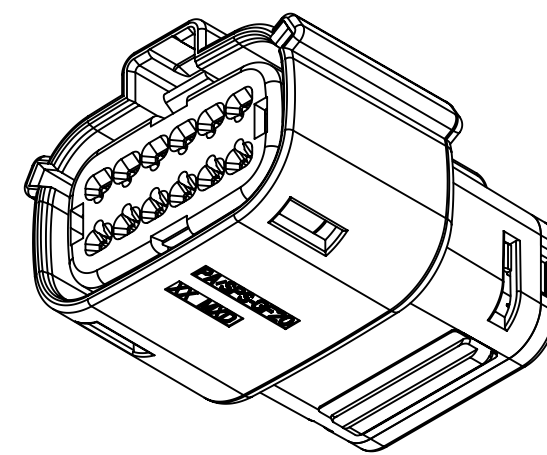
2X4 - STD. - WITH CLIPSLOT *



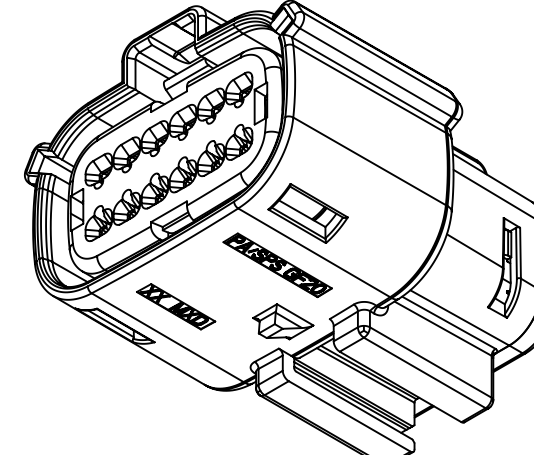
† 2X4 - UL V0



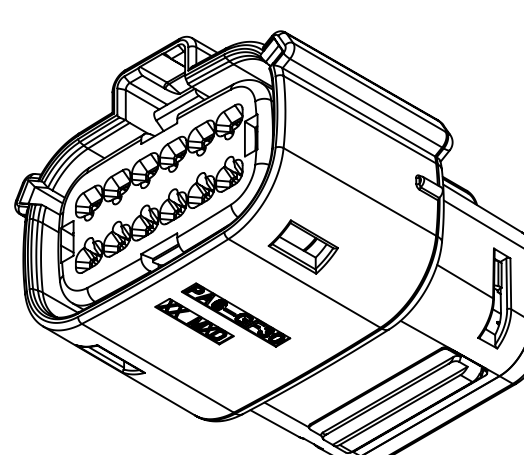
† 2X4 - UL V0-WITH CLIPSLOT*



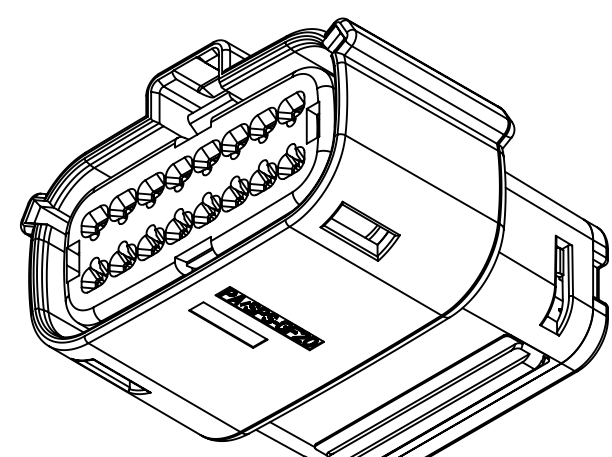
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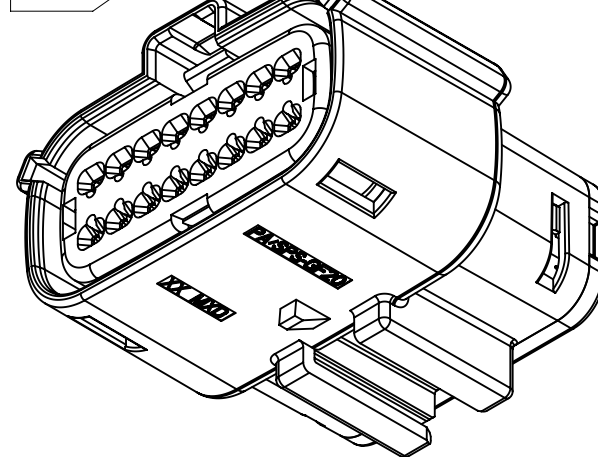
2X6 - STD. - WITH CLIPSLOT *



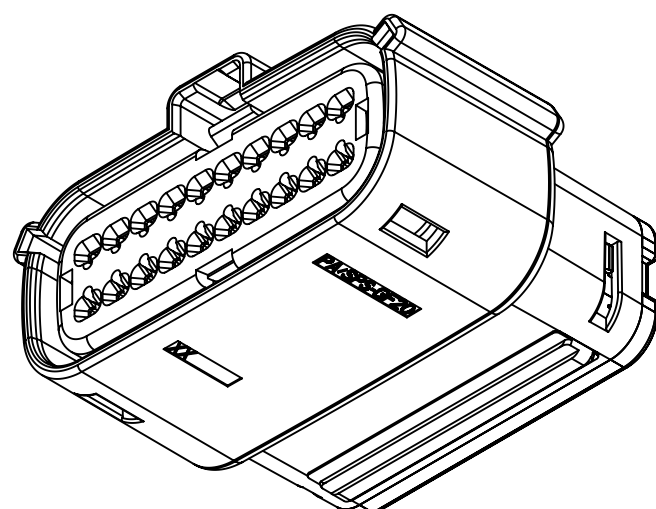
† 2X6 - UL V0



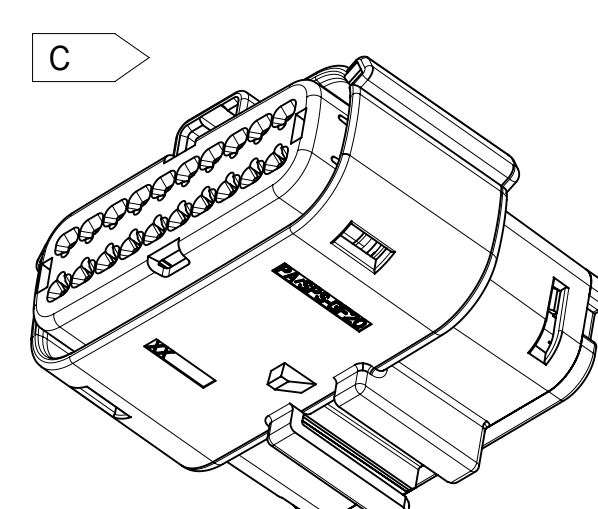
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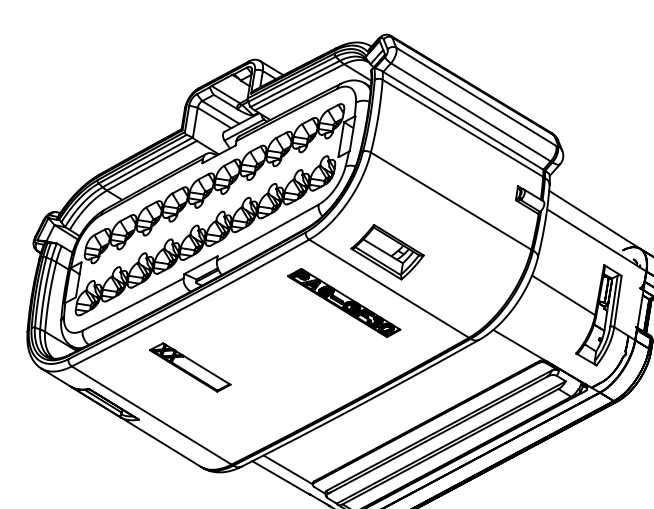
2X8 - STD. - WITH CLIPSLOT *



2X10 - STD.



2X10 - STD. - WITH CLIPSLOT *



† 2X10 - UL V0

* WITH CLIPSLOT CONFIGURATION DOES NOT MEET THE USCAR PACKAGING FRAME REQUIREMENTS
† MINOR GEOMETRY DIFFERENCE THAN STANDARD CONFIGURATION
SEE NOTES 1a & 2a-b FOR MORE INFORMATION

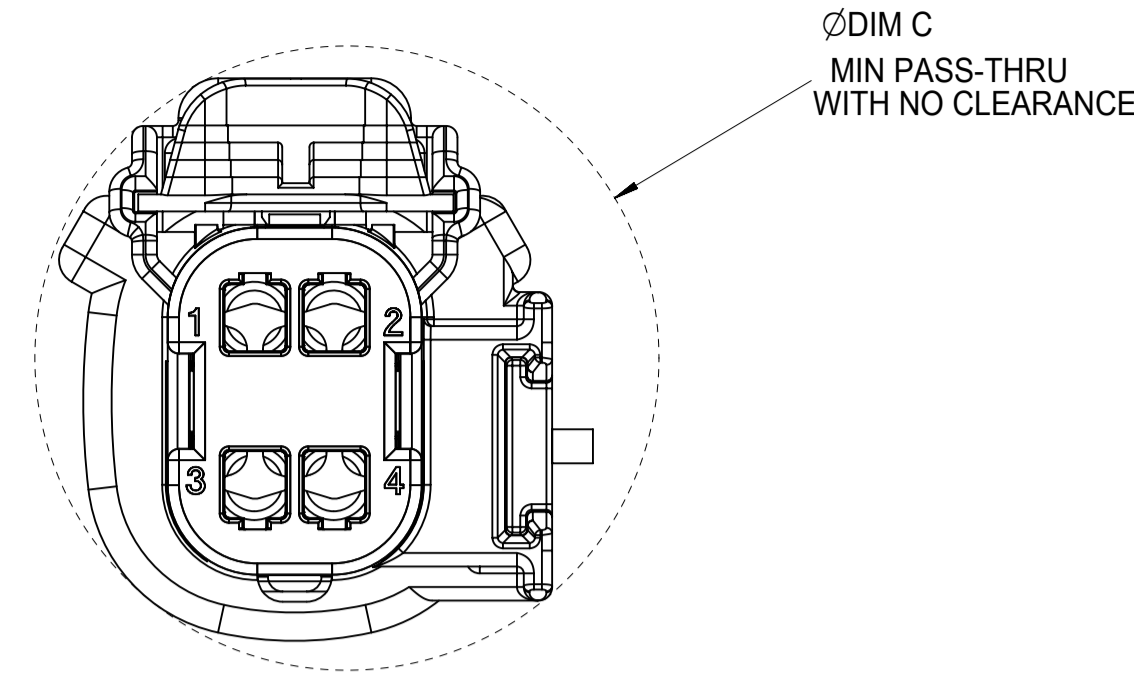
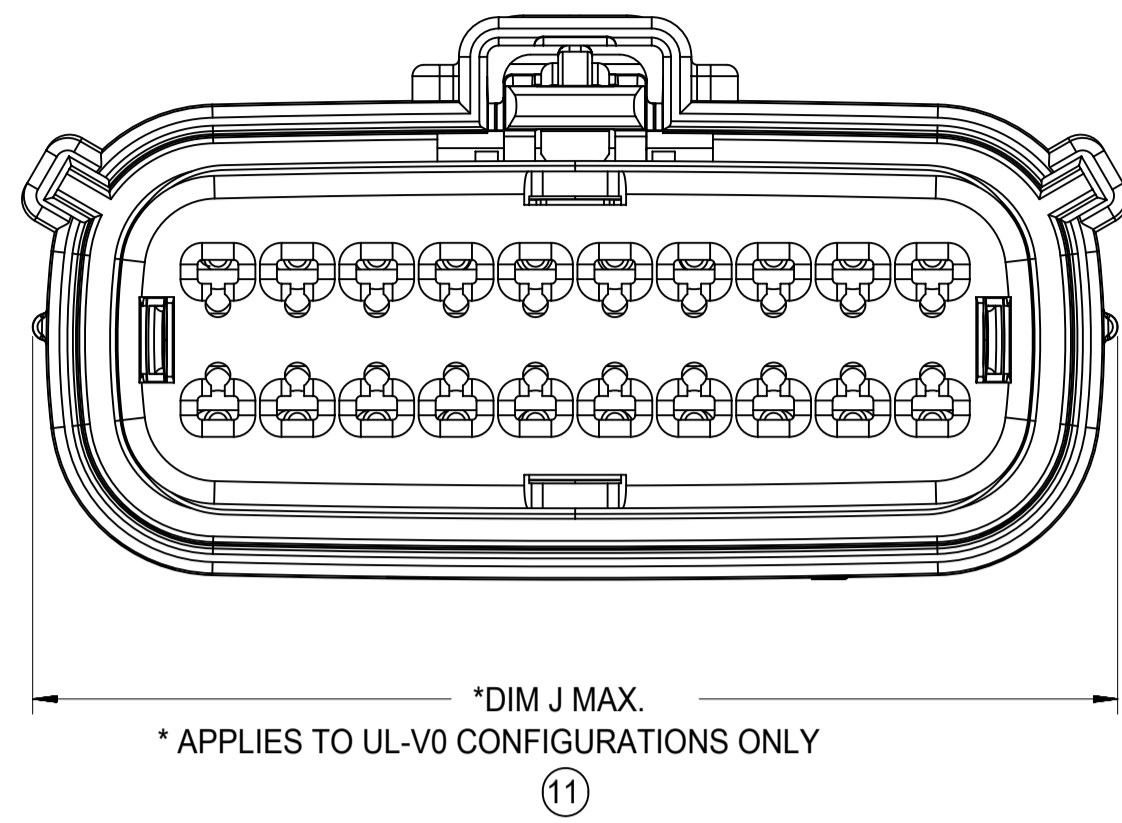
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SHEET DESCRIPTION

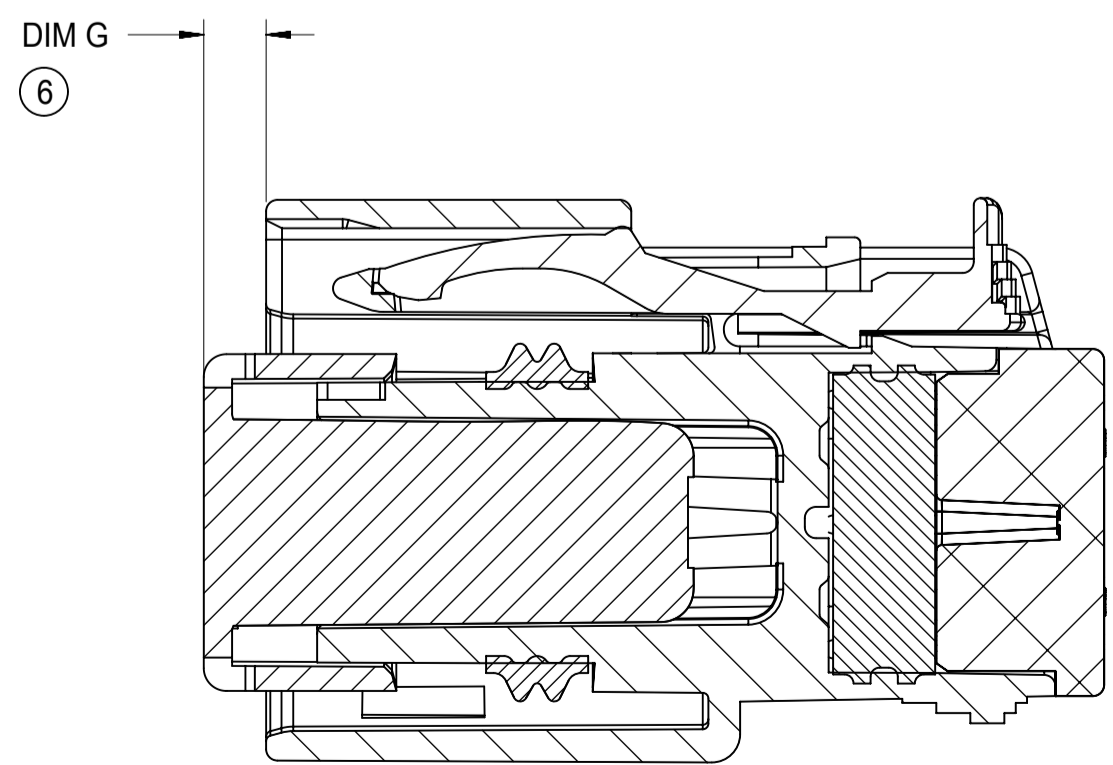
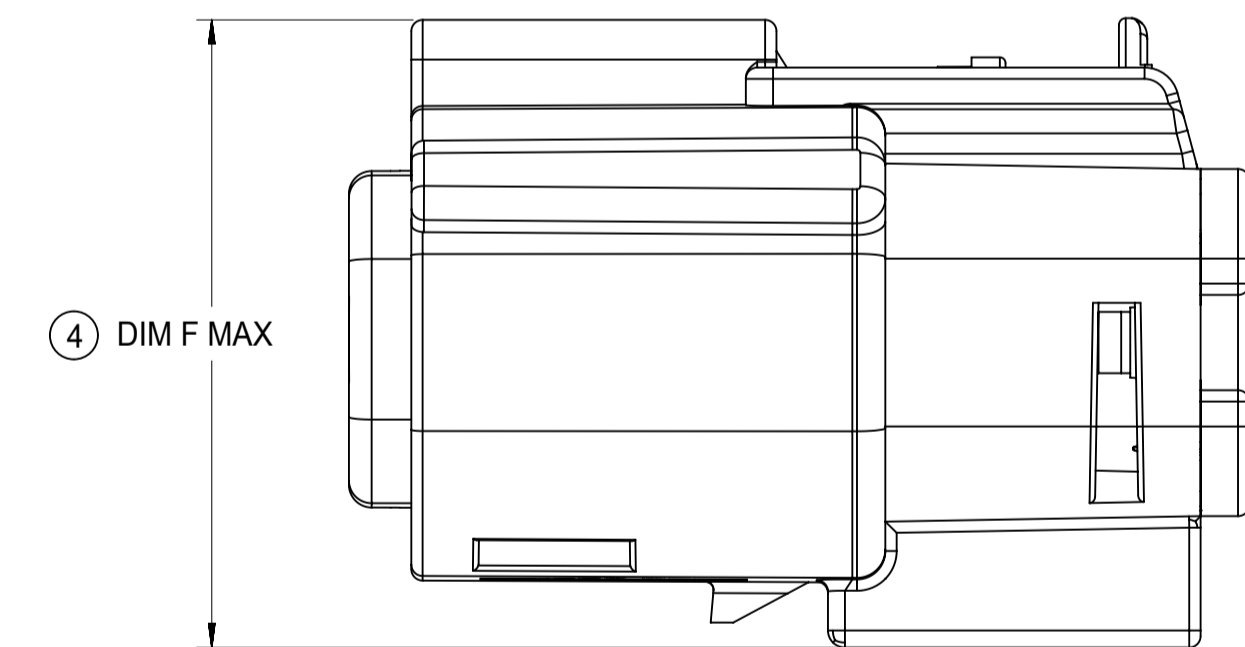
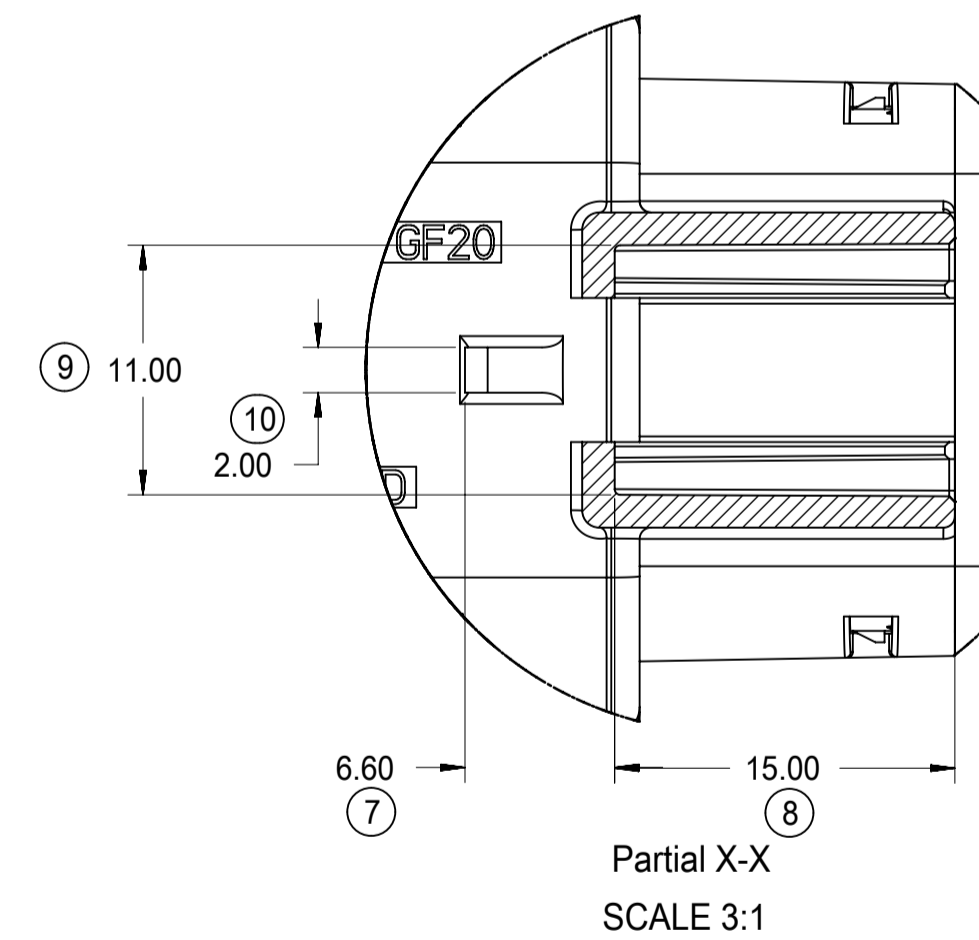
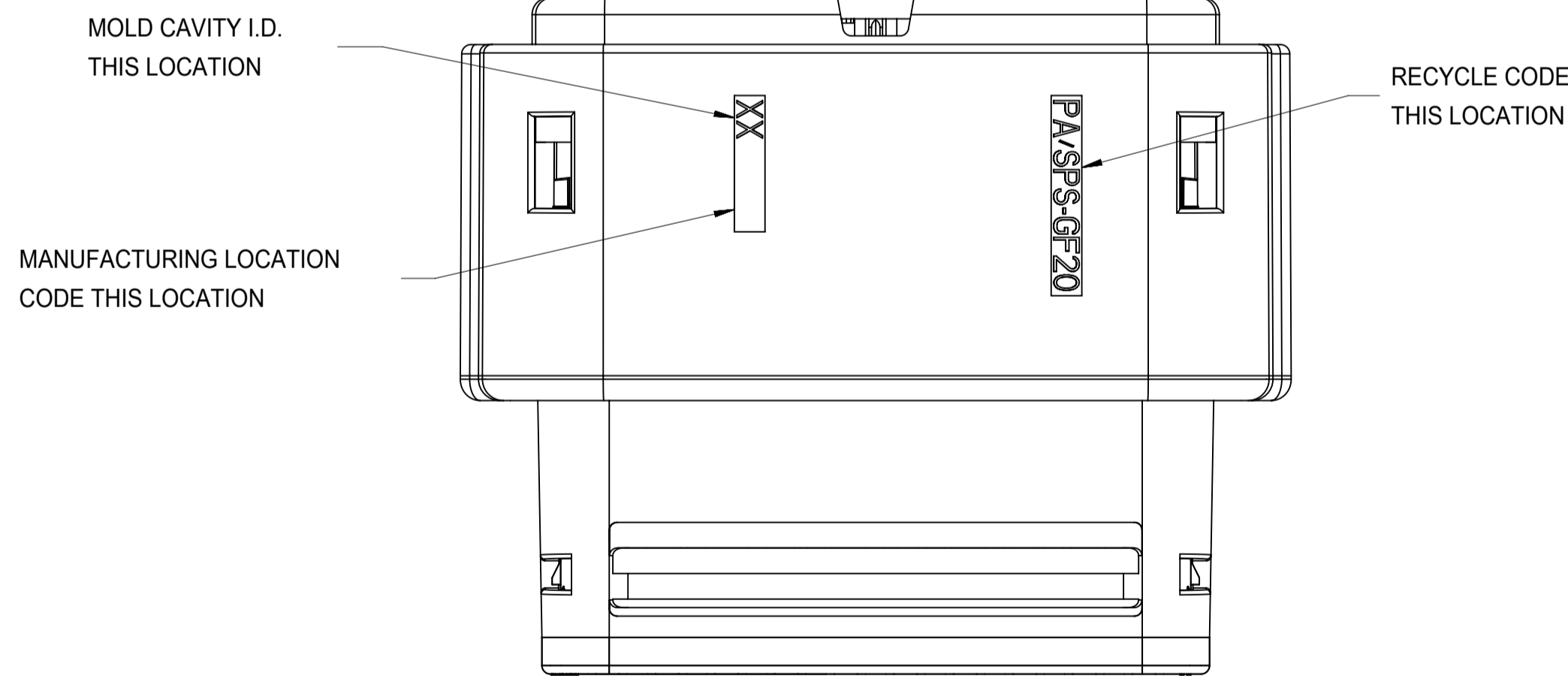
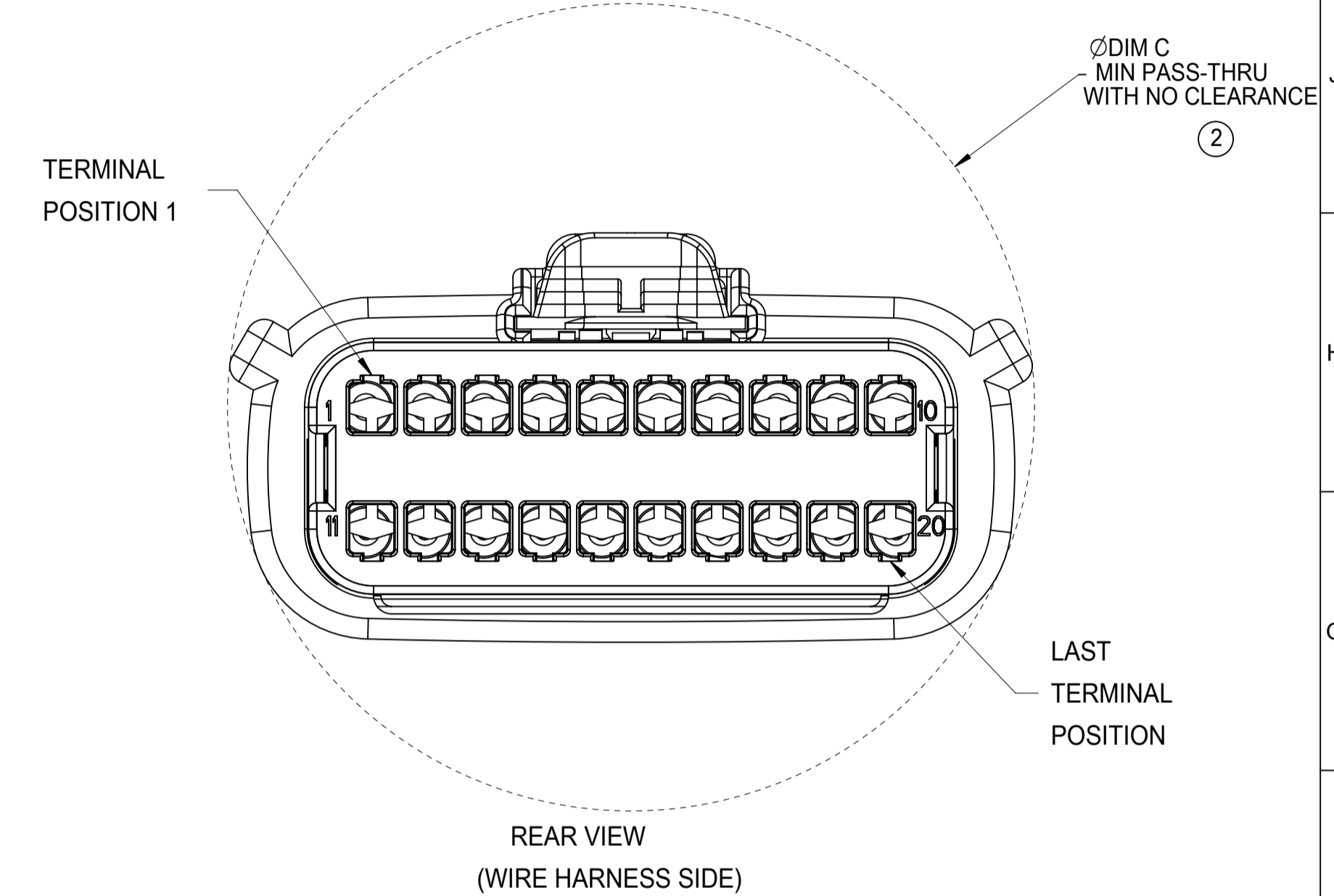
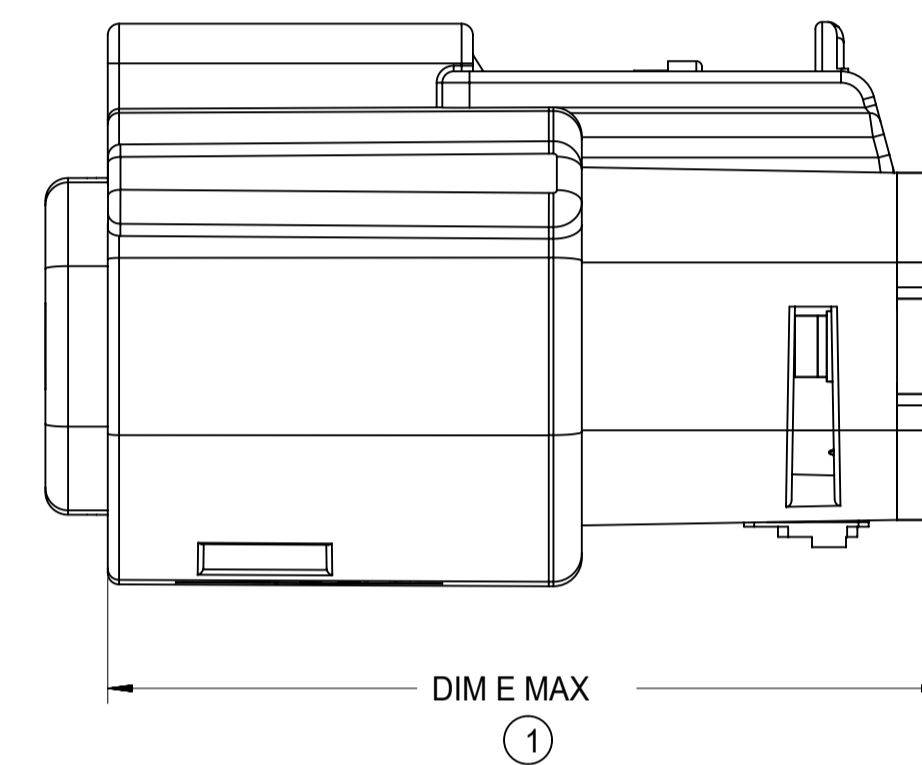
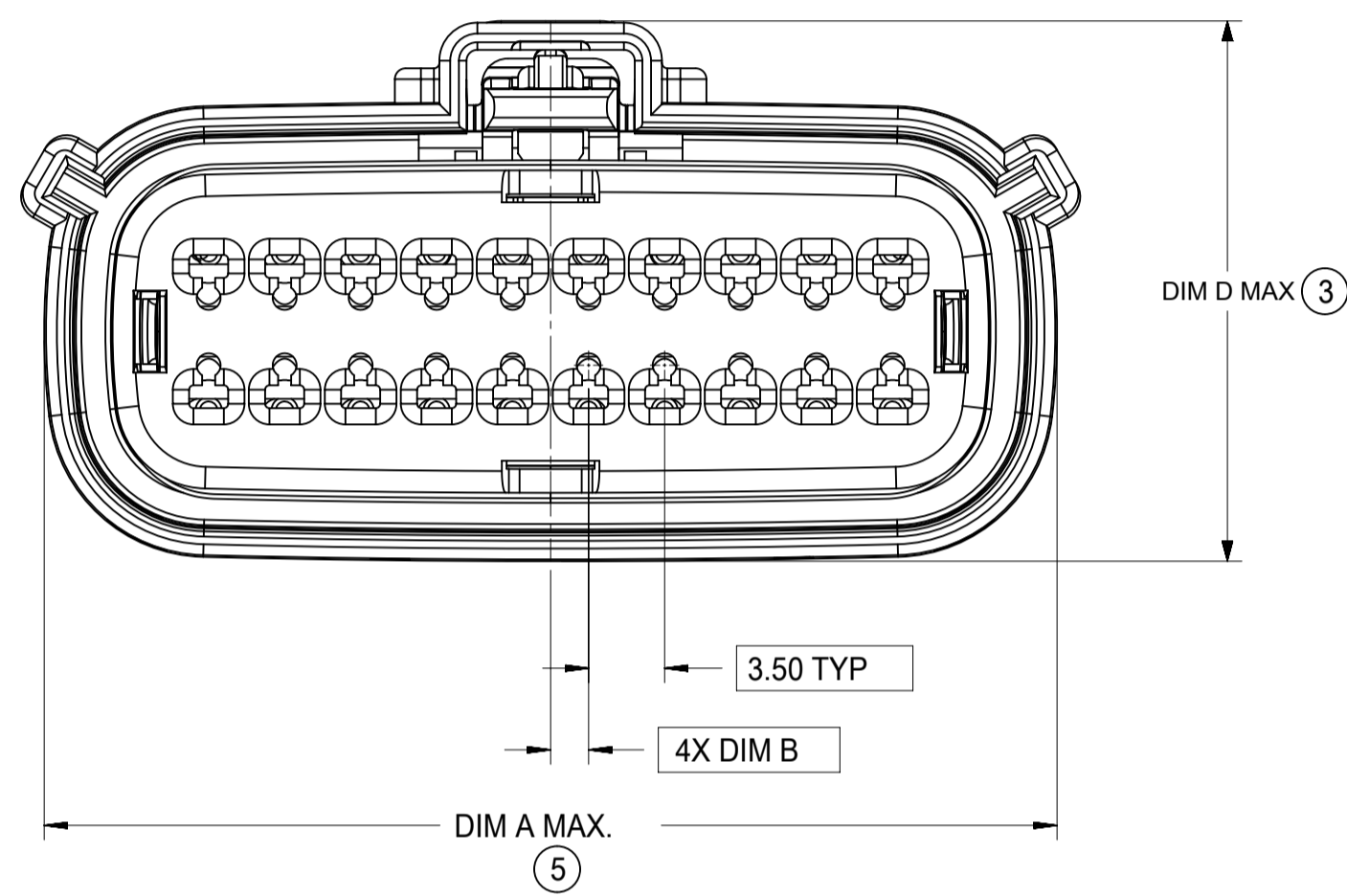
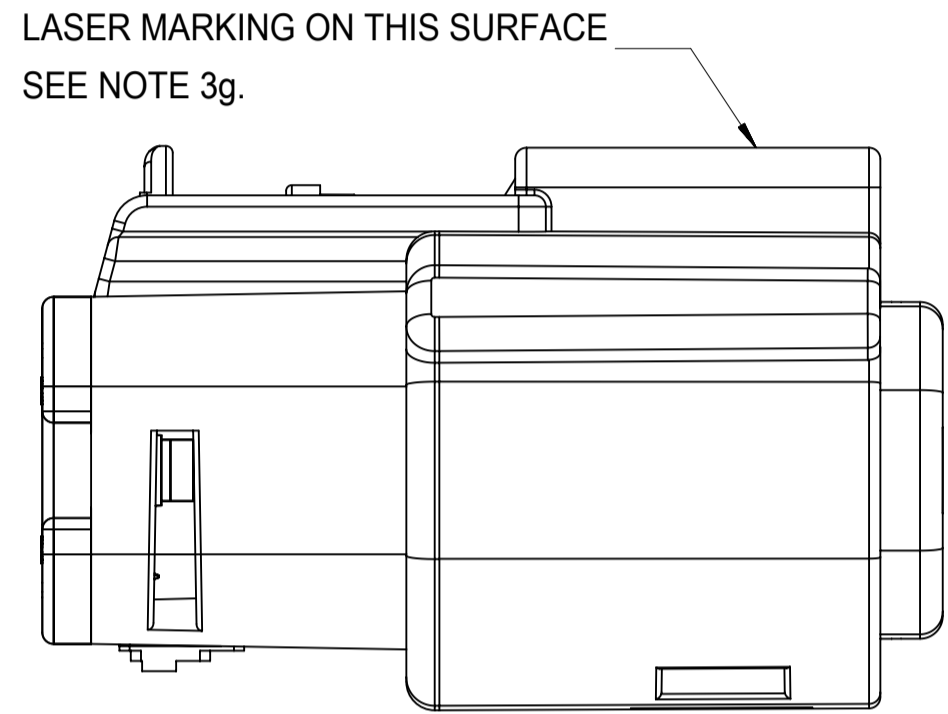
RECEPTACLE CONNECTOR ASSEMBLY

CHARTED DIMENSIONS

DESCRIPTION	DIMENSIONS						
	A	B	C	D	E	F	J
2X2 W/O CLIPSLOT	18.58	1.75	25.45	24.81	37.65	N/A	2.75±0.50
2X2 W/ CLIPSLOT	18.58	1.75	27.65	24.81	37.65	N/A	2.75±0.50
2X2 LENGTHENED	18.58	1.75	25.45	24.81	42.25	N/A	2.75±0.50
2X3 W/ CLIPSLOT	22.25	3.5	30.50	N/A	37.65	27.96	4.0±0.4
2X3 W/O CLIPSLOT	22.25	3.5	26.24	24.90	37.65	N/A	4.0±0.4
2X4 W/ CLIPSLOT	25.75	1.75	31.50	N/A	37.65	28.00	2.75±0.50
2X4 W/O CLIPSLOT	25.75	1.75	29.19	24.81	37.65	N/A	2.75±0.50
2X6 W/ CLIPSLOT	32.75	1.75	35.58	N/A	37.65	27.76	2.75±0.50
2X6 W/O CLIPSLOT	32.75	1.75	35.58	24.90	37.65	N/A	2.75±0.50
2X6 W/O CLIPSLOT V0	32.75	1.75	35.58	25.0	37.65	N/A	2.75±0.50
2X8 W/O CLIPSLOT	39.80	1.75	42.25	24.90	37.65	N/A	4.0±0.4
2X8 W/ CLIPSLOT	39.80	1.75	42.25	N/A	37.65	27.80	4.0±0.4
2X10 W/O CLIPSLOT	46.75	1.75	49.95	24.90	37.65	N/A	2.75±0.50
2X10 W/ CLIPSLOT	46.75	1.75	49.95	N/A	37.65	27.80	2.75±0.50

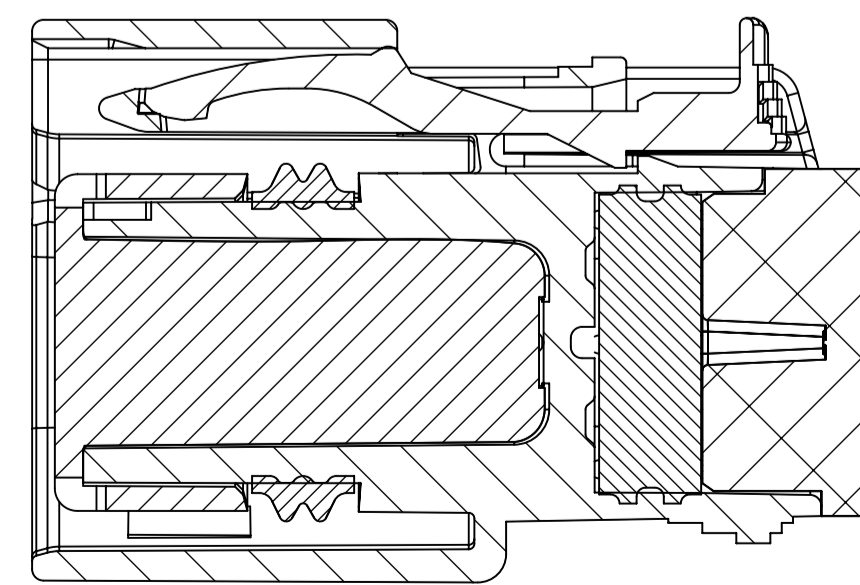


B APPLIES TO 2X2 - STD. - WITH CLIPSLOT ONLY



PRIMARY LOCK REINFORCEMENT (PLR) SHOWN
IN PRE-STAGED POSITION

SECTION Y-Y



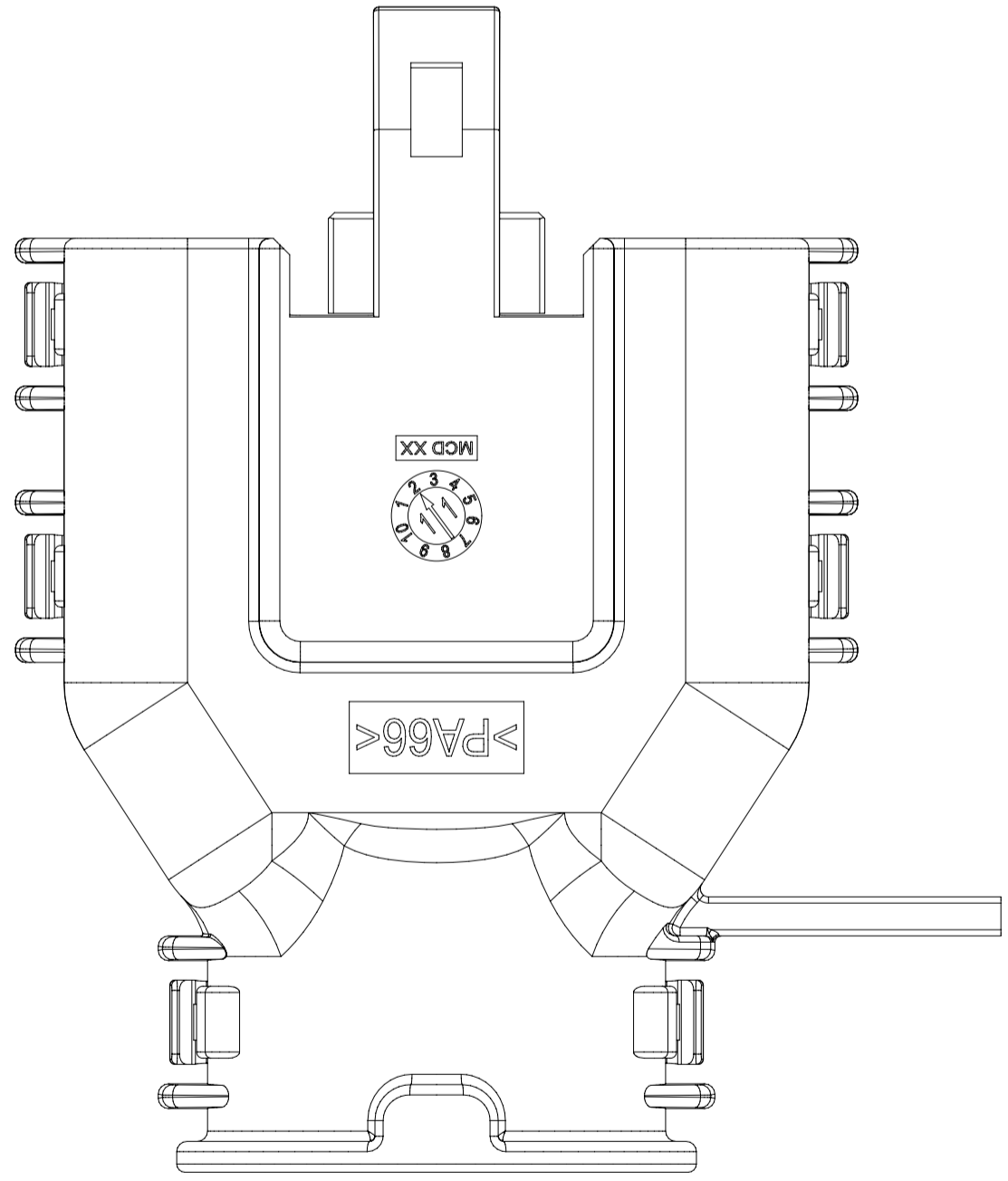
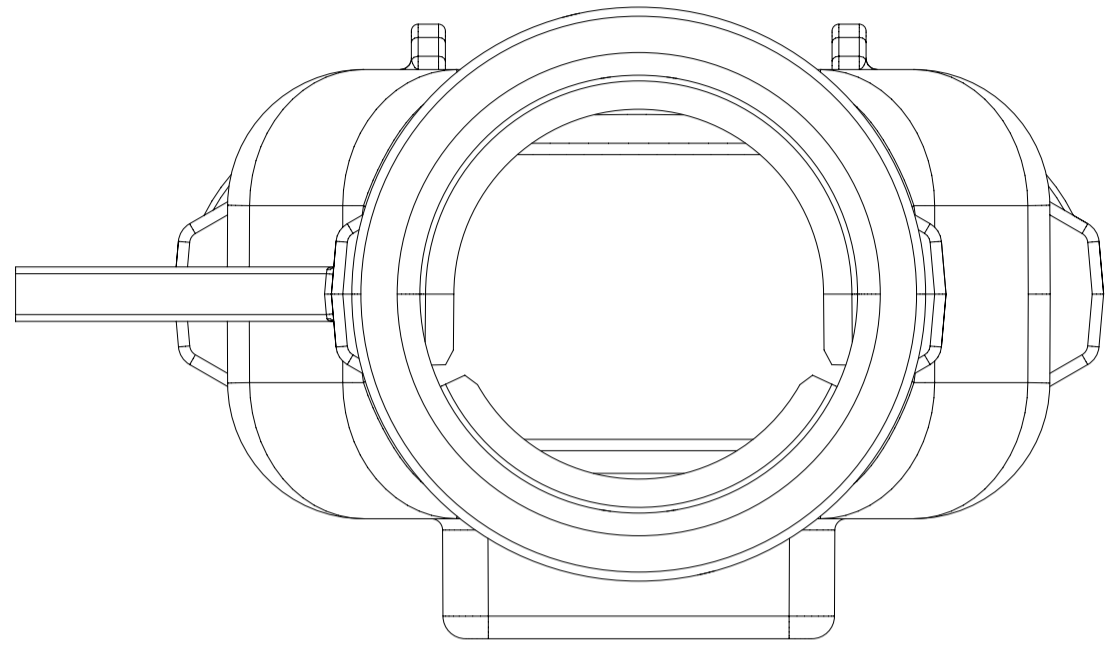
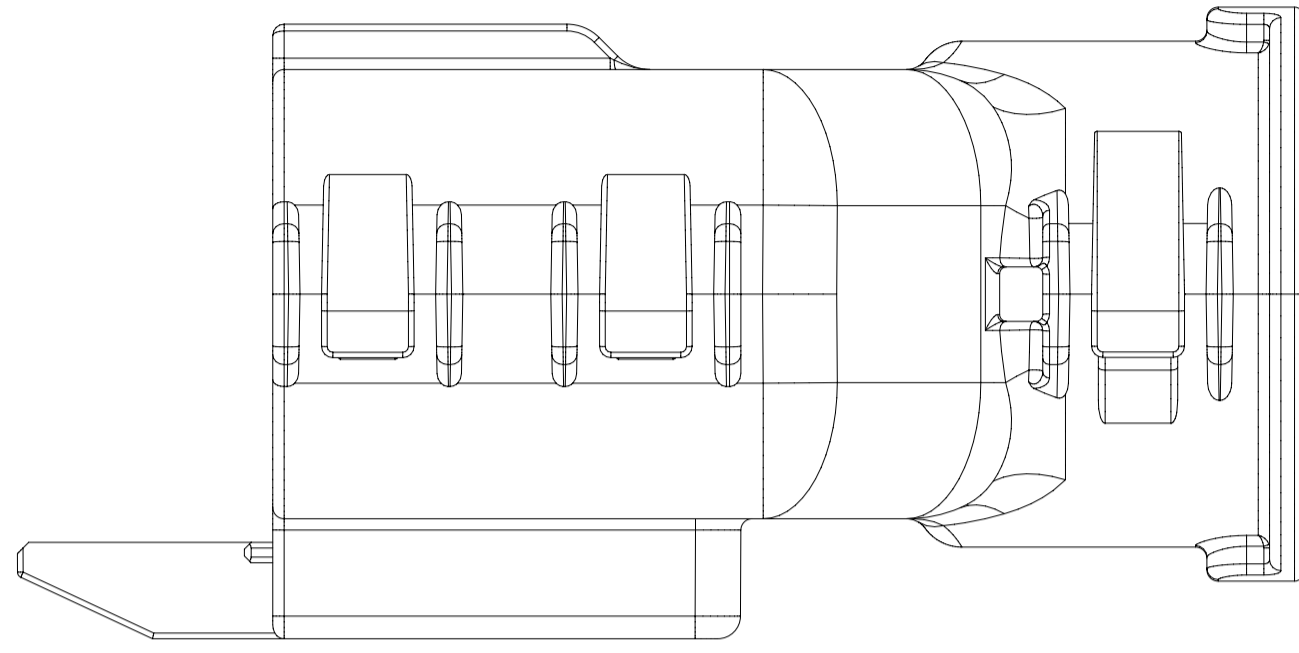
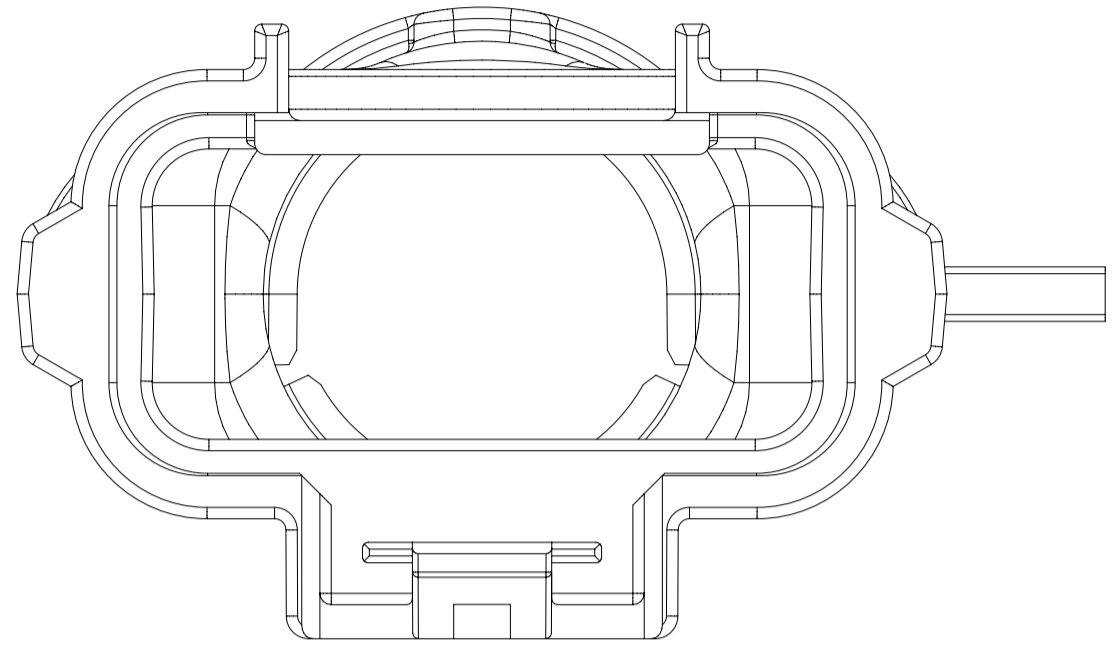
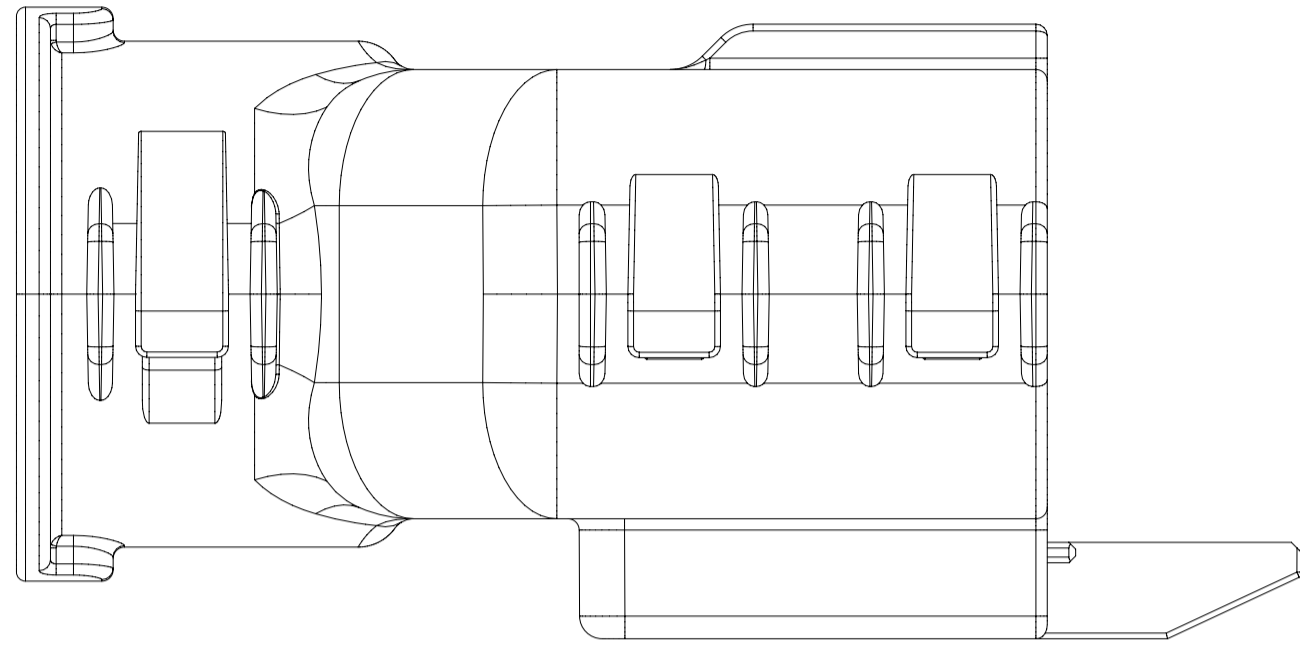
PRIMARY LOCK REINFORCEMENT (PLR) SHOWN
IN FINAL-LOCK POSITION

SECTION Z-Z

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:		
	DIMENSION UNITS	SCALE			
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▽ = 0	3 PLACES ±		CHK'D: MVANSLAMBROU 2018/02/16		DOCUMENT NUMBER SD-33472-0001
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▽ = 0	THIRD ANGLE PROJECTION	DRAWING	SERIES	SHEET NUMBER	
		A1-SIZE	33472	5 OF 11	

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SHEET DESCRIPTION
MOLEX BACKSHELL



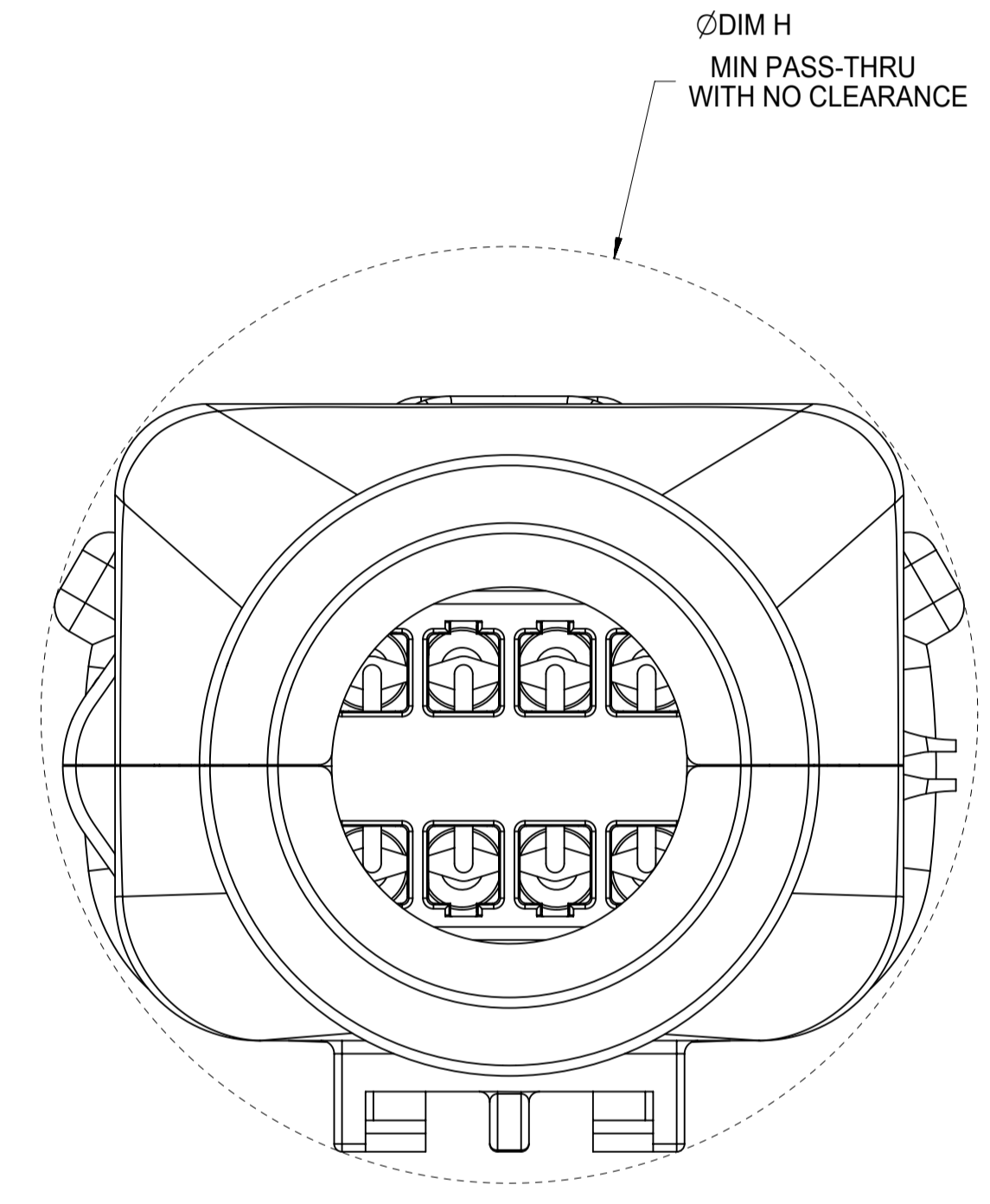
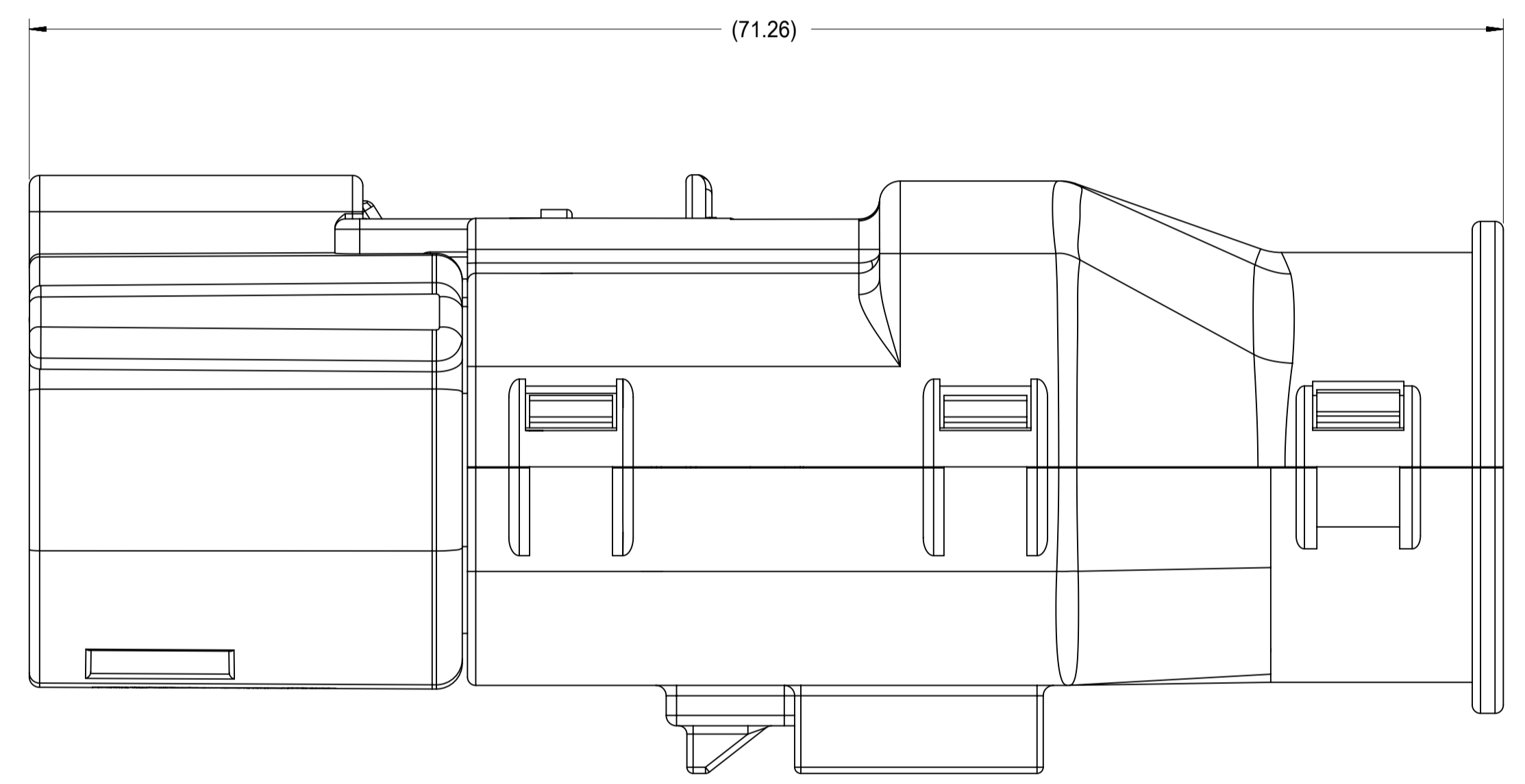
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	0 PLACES ±		DRAWING		8 OF 11		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SERIES		A1-SIZE 33472			

DOCUMENT STATUS	P1	RELEASE DATE	2018/02/16 22:02:25
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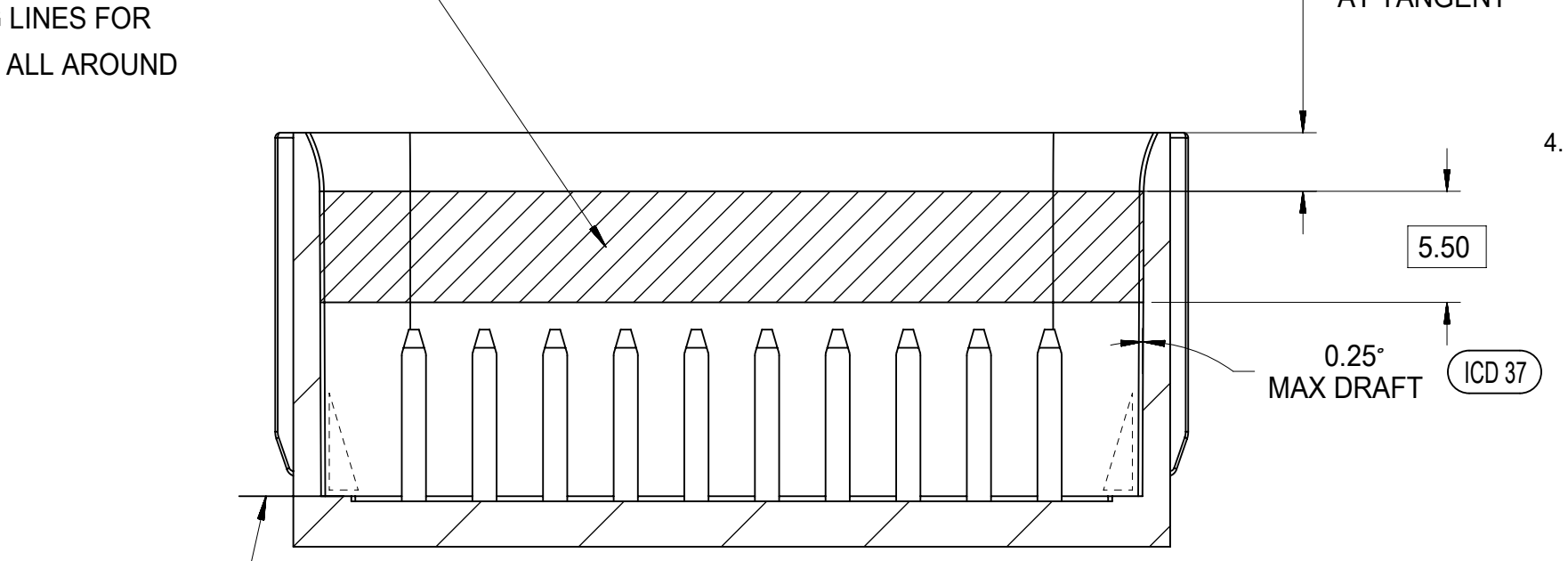
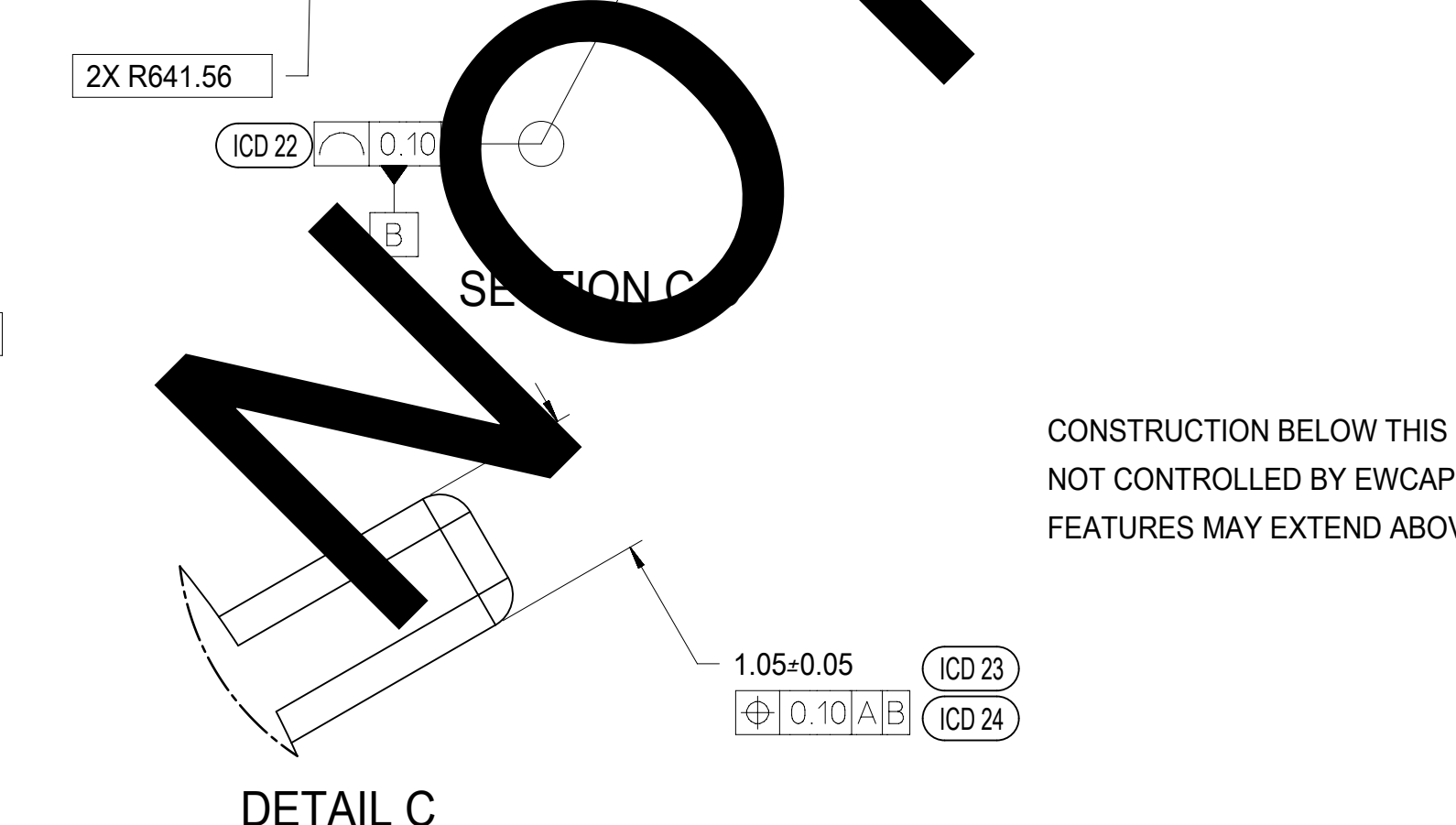
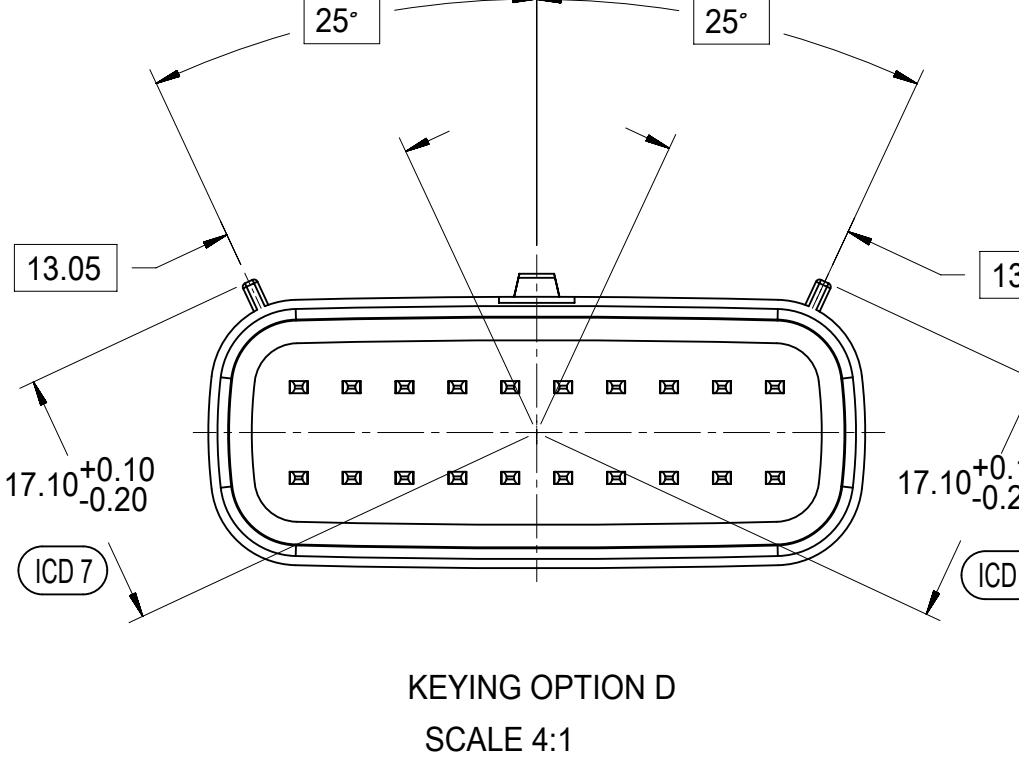
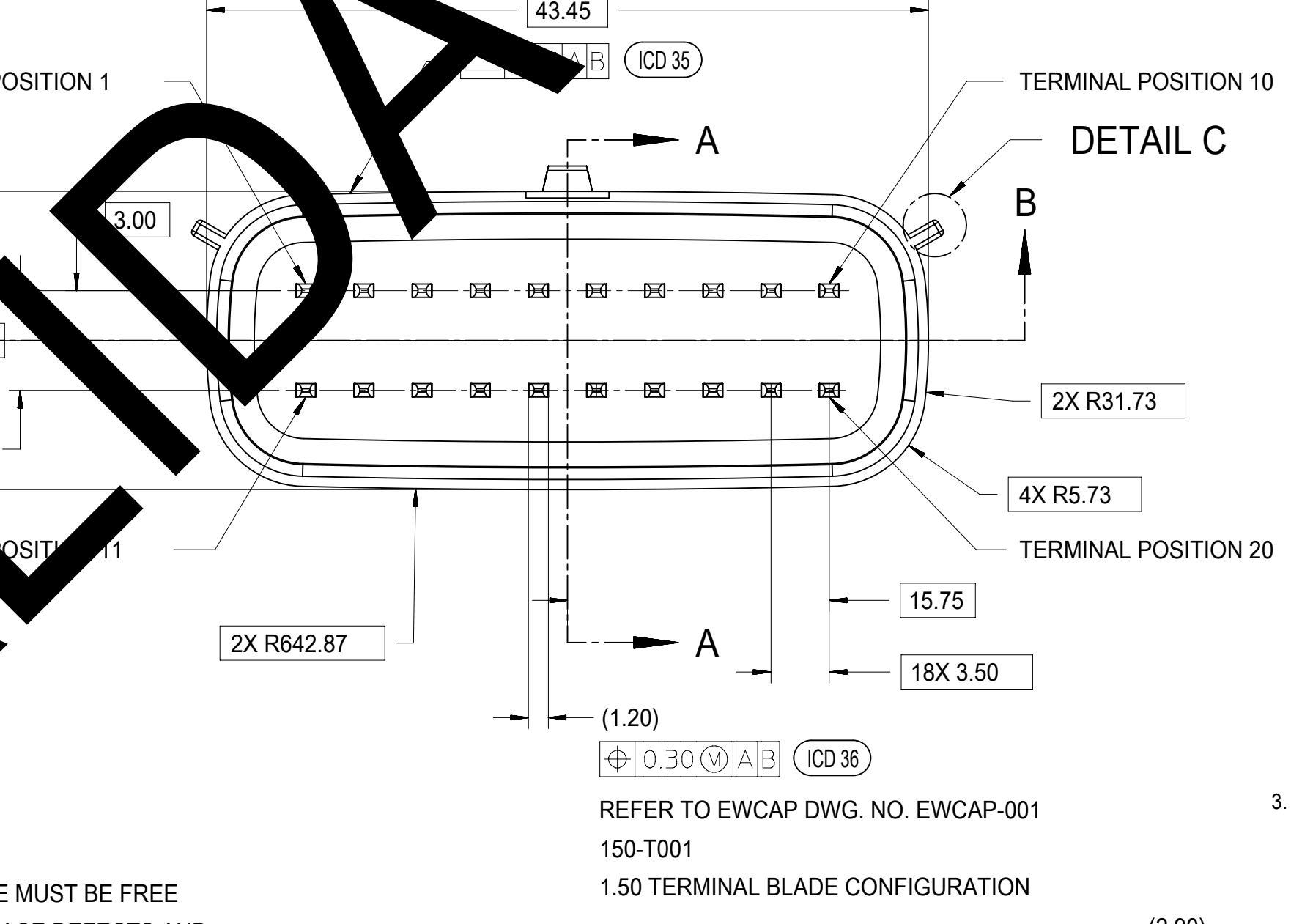
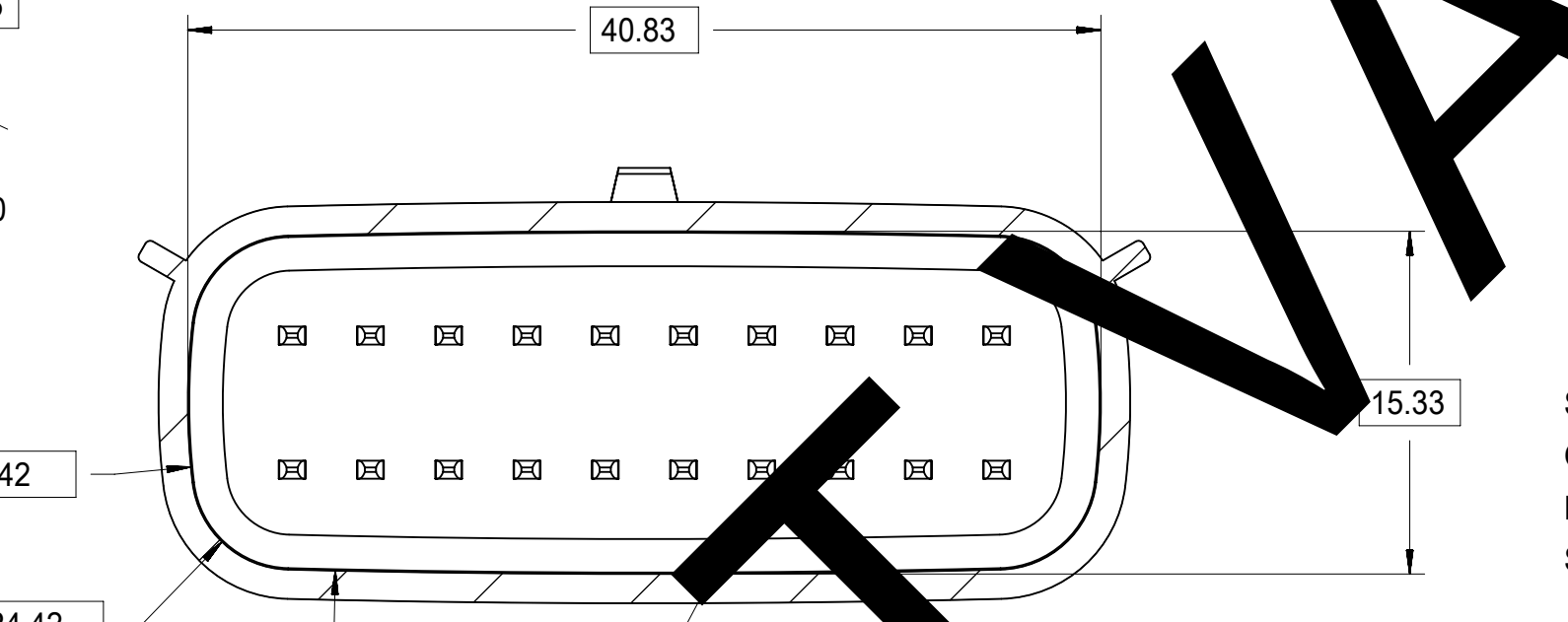
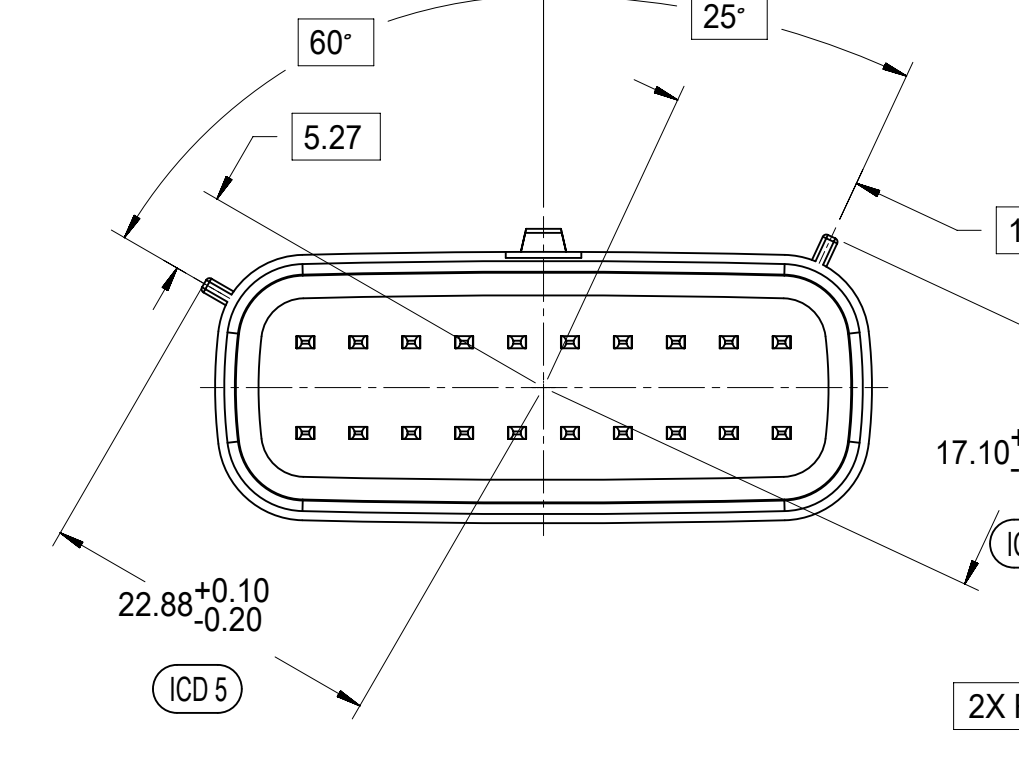
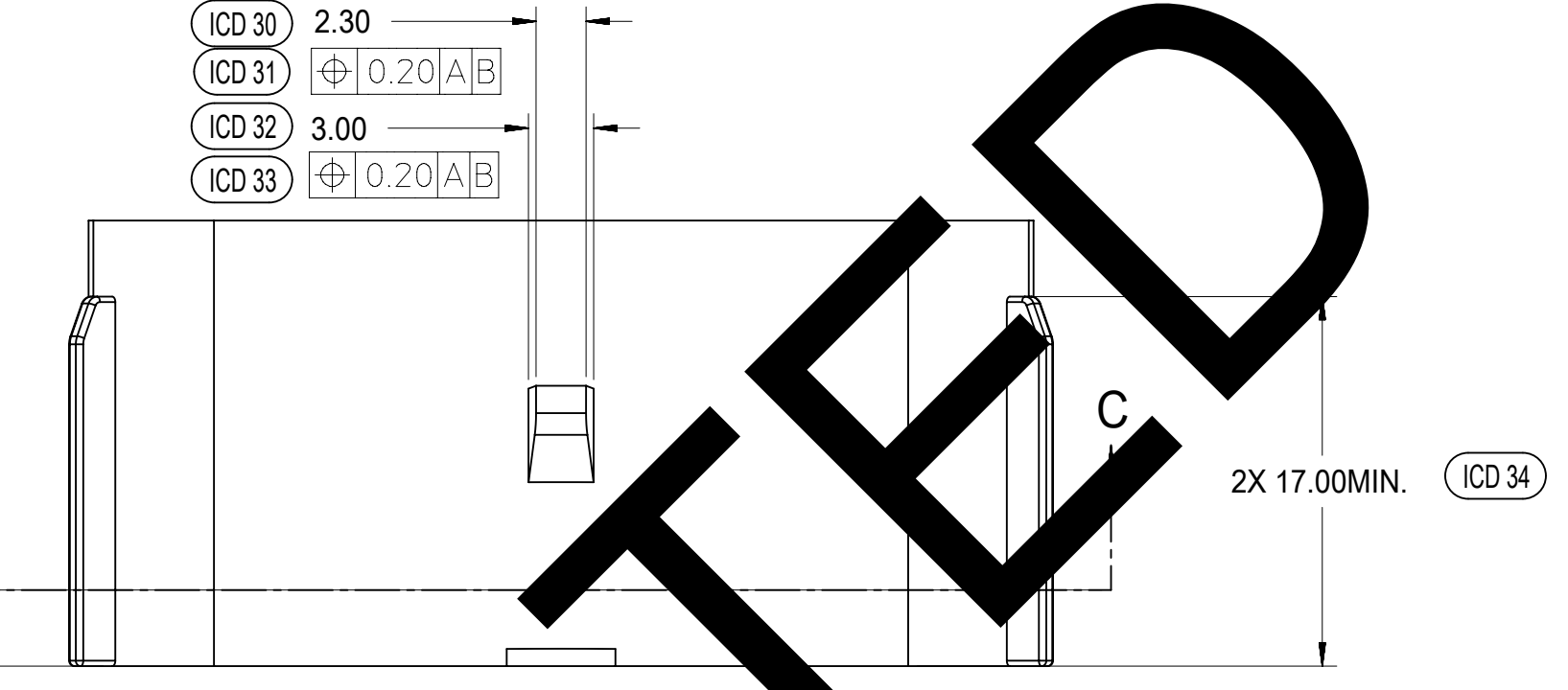
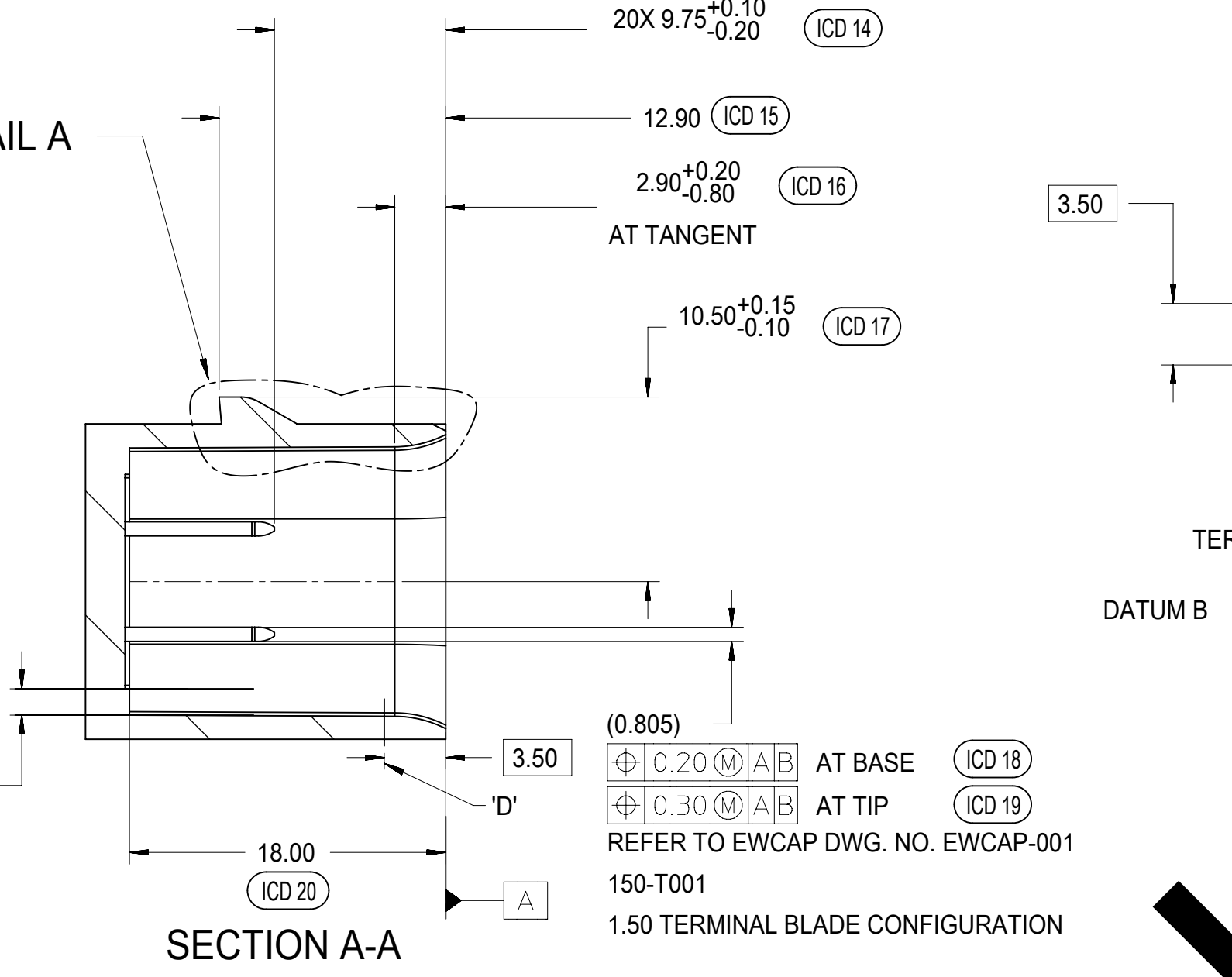
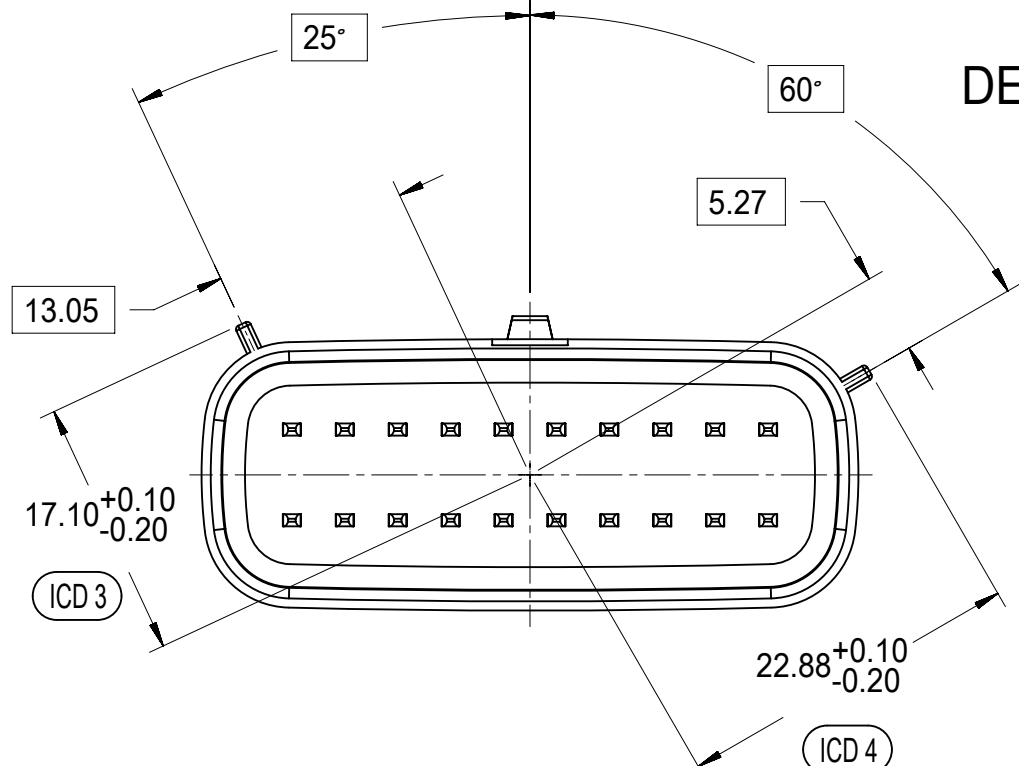
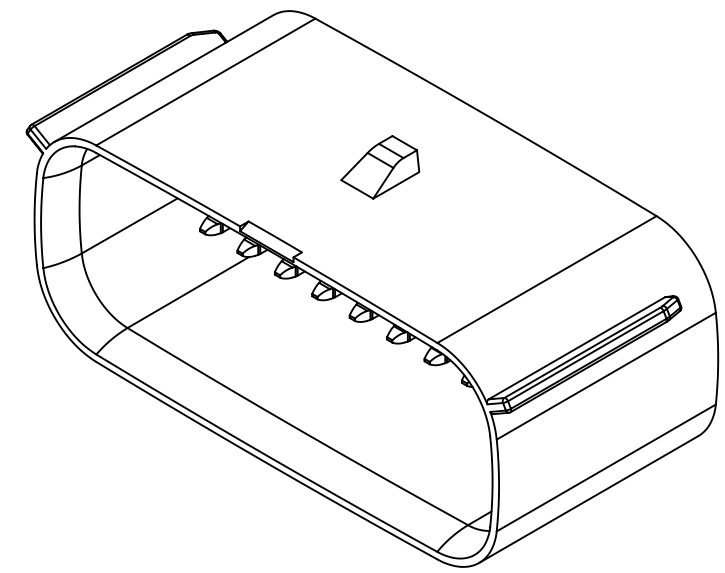
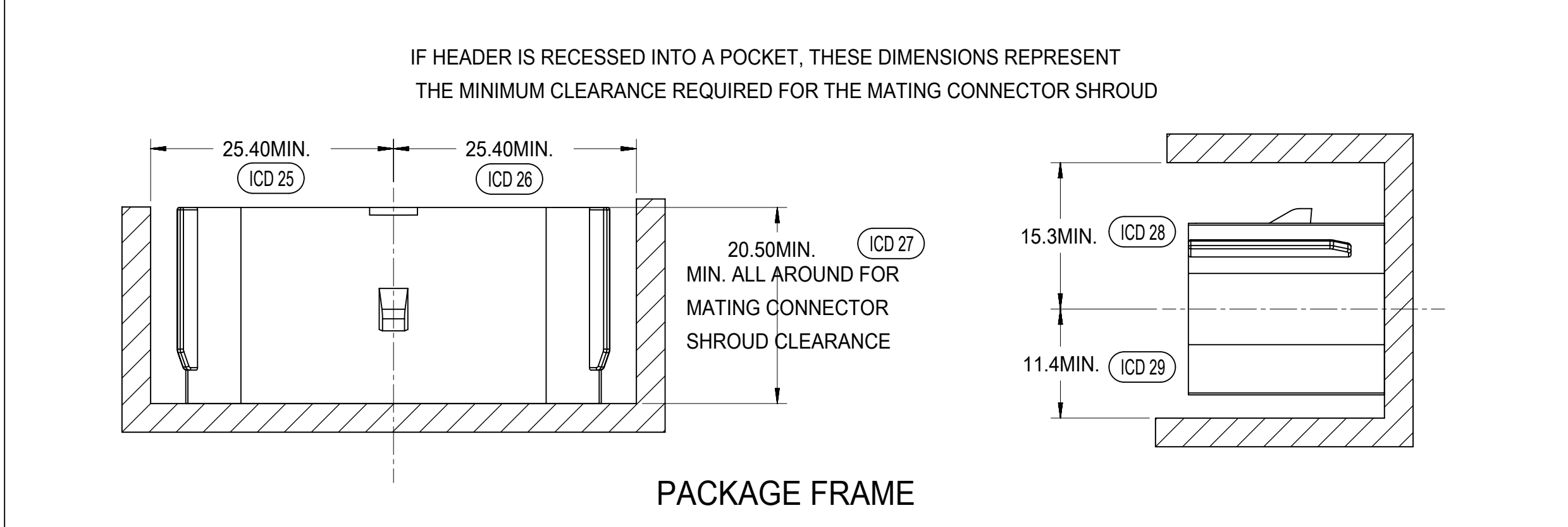
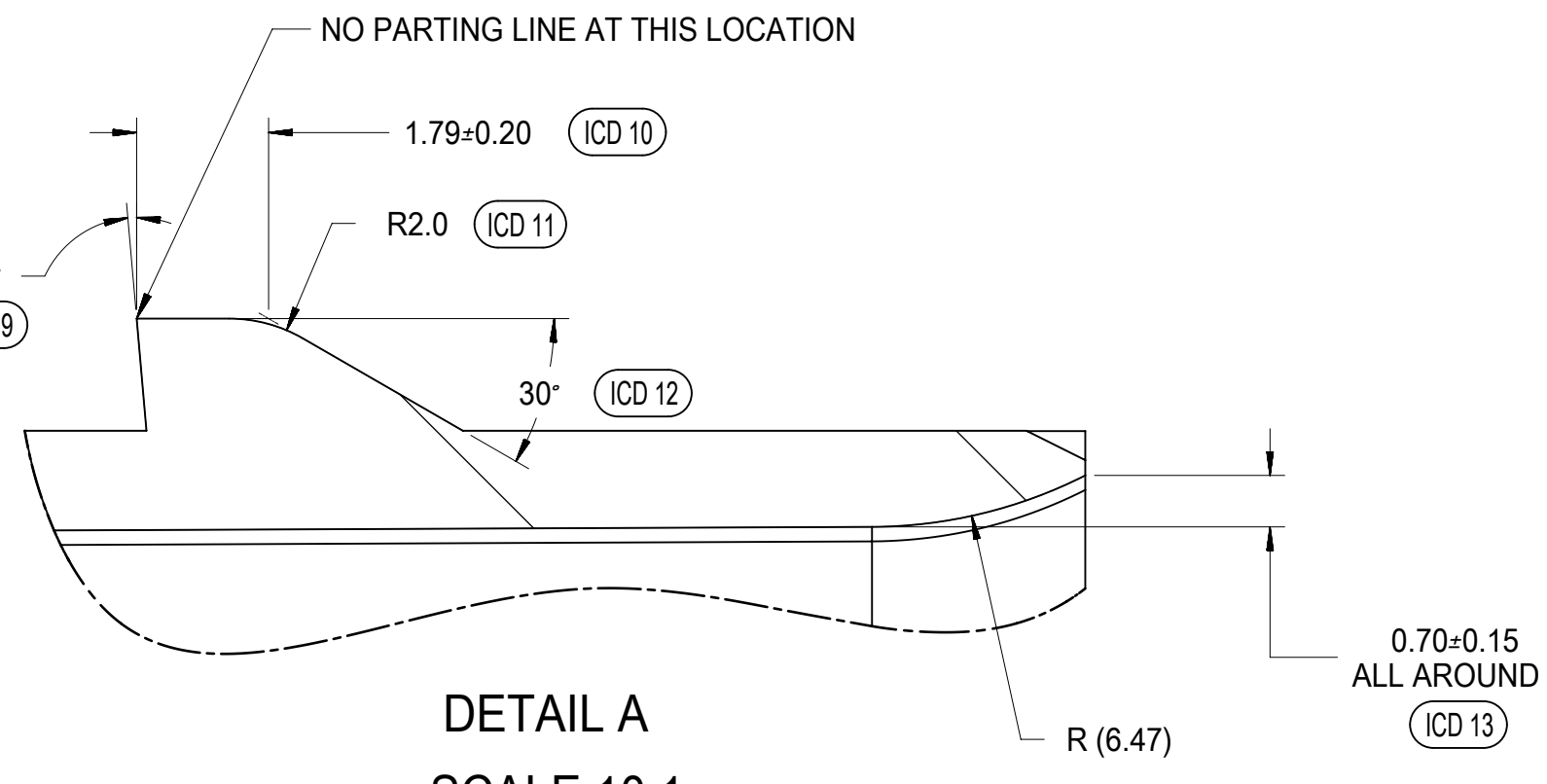
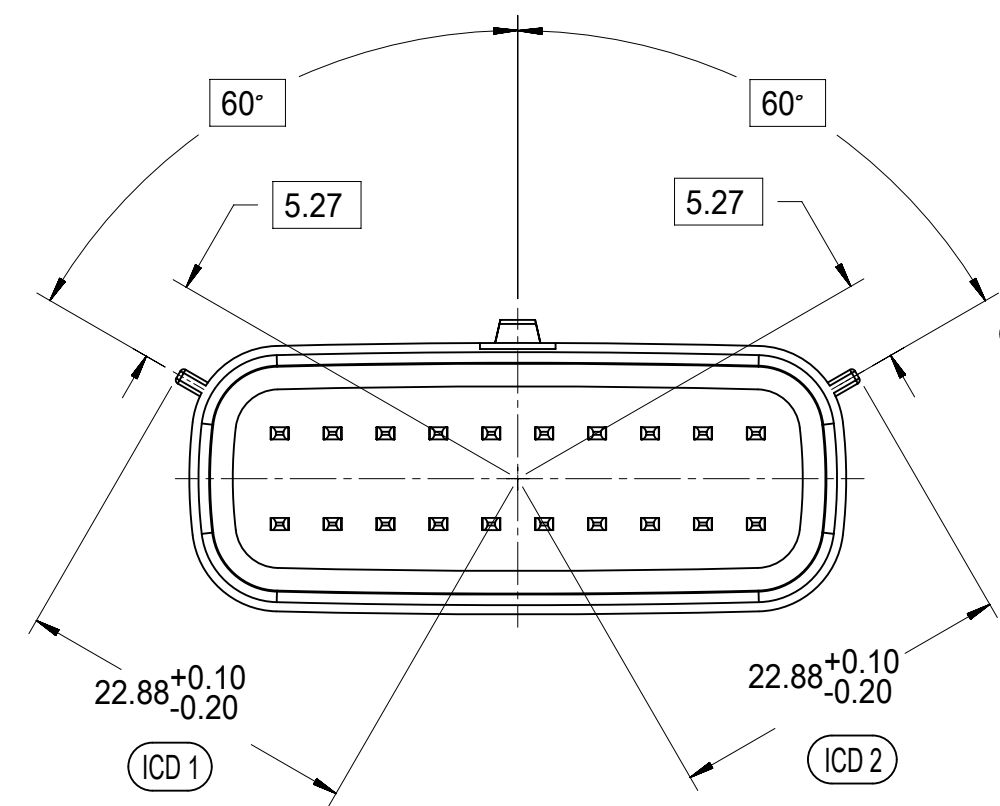
SHEET DESCRIPTION			
SCHLEMMER BACKSHELL CONFIGURATIONS			

CHARTED DIMENSIONS	
DESCRIPTION	DIMENSIONS
	H
2X3 W/ CLIPSLOT	N/A
2X3 W/O CLIPSLOT	28.50
2X4 W/ CLIPSLOT	N/A
2X4 W/O CLIPSLOT	30.75
2X6 W/ CLIPSLOT	N/A
2X6 W/O CLIPSLOT	35.83



RECEPTACLE SEALED ASSEMBLY WITH RECEPTACLE BACKSHELL

QUALITY SYMBOLS FA = 0 FE = 0 FE = 0 ▼ = 0 C = 0 ☒ = 0 ■ = 0 ∇ = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
	EC NO: 171650	DRWN: DDEB	CHKD: MYANSLAMBROU	APPR: MYANSLAMBROU	2018/01/19	2018/02/16	2018/02/16	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION UNITS	SCALE		
					ANGULAR TOL ± 1.0 °		mm	4:1	APROFFITT 2014/05/14			
					4 PLACES ±		APPROFIT		2014/05/14		MX150 RCPT DUAL ROW SEALED ASSEMBLY MAT SEAL PRODUCT CUSTOMER DRAWING	
					3 PLACES ±		CHK'D BY		2014/06/16			
					2 PLACES ± 0.1		KBORUSZEWSKI		2014/06/16			
					1 PLACE ± 0.2		VKOSHY		2014/06/27			
					0 PLACES ±		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE		THIRD ANGLE PROJECTION	
					A1				SERIES		MATERIAL NUMBER	CUSTOMER
					C2		33472		GENERAL MARKET			
				DOCUMENT NUMBER		SD-33472-0001		DOC TYPE		PSD		
				DOC PART		001		SHEET NUMBER		9 OF 11		



MATING INTERFACE NOTES: VALID UNLESS OTHERWISE SPECIFIED

- GENERAL:
 - DESIGNED TO MATE WITH MOLEX CONNECTOR 33472-2XXX & 160008-0XXX & 160074-0XXX. A FULL SHROUD ON THE MATING CONNECTOR IS REQUIRED TO INSURE THAT THE CONNECTOR-HEADER POLARIZATION FEATURES (OPTIONS A THRU D) WILL FUNCTION. THE FULL SHROUD ALSO PREVENTS SCOOP DAMAGE TO THE HEADER PINS. REFER TO 'SAE/USCAR-12 CONNECTOR DESIGN GUIDE LINES' FOR ADDITIONAL INFORMATION.
 - PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: ES-40000-5016
 - FLAMMABILITY REQUIREMENT: PER ISO3795 OR GM3191
 - BURN RATE 100mm/MIN MAXIMUM
 - MATERIAL MUST BE SELF EXTINGUISHING
- MATERIALS:
 - MATERIAL: SPS/NYLON GF20, REGRIND 20% MAX BY WEIGHT
 - STANDARD COLORS FOR POLARIZATION (SEE KEYING OPTIONS TABLE). DEVIATION REQUIRES APPROVAL OF AUTHORIZED PERSON
 - FOR BLADE BASE MATERIAL, PLATING AND PROCESS LUBRICANT:
 - TIN: - BASE MATERIAL: COPPER ALLOY, CONDUCTIVITY >=60% IACS AT 20°C; TENSILE STRENGTH >= 410 N/mm² P - BARRIER MATERIAL: NICKEL DEPOSIT FROM NICKEL SULFAMATE PLATING SOLUTION W/O ANY ADDITIVES THICKNESS: 1.25 - 2.25 MICROMETERS - TOP LAYER: 100% ELECTRO-DEPOSITED TIN, MATTE FINISH THICKNESS: 2.5 - 4.0 MICROMETERS
 - SILVER: - BARRIER MATERIAL: ELECTRO-DEPOSITED DUCTILE SULPHAMATE NICKEL THICKNESS: 1.25 - 2.25 MICROMETERS - TOP LAYER: ELECTRO-DEPOSITED SEMI-BRIGHT PURE SILVER (0.5% MAX IMPURITIES) OVER NICKEL ANTI-TARNISH TREATMENT EVERBRIGHT WS THICKNESS: 1.9 - 3.3 MICROMETERS
 - BLADES MUST CONFORM TO ES-40000-5007, EXCEPT FOR SPECULAR REFLECTIVITY - SECTION 6.0
 - ANY PROCESS LUBRICANT REMAINING ON THE TERMINAL MUST NOT VARNISH OR DEGRADE IT'S ELECTRICAL PERFORMANCE UP TO A MAXIMUM CLASS AMBIENT TEMPERATURE PER SAE USCAR-2 FOR 1008 HOURS, PROCESS LUBRICANTS SHOULD BE APPROVED BY THE RESPONSIBLE ENGINEER.
 - INFORMATION FOR BLADE DESIGN WAS DEVELOPED FROM EWCAP DWG: EWCAP-001
- GEOMETRY:
 - THIS IS A 100% CAD GENERATED PART. THE CAD MATHEMATICAL DATA IS THE MASTER FOR THIS PART. FOR DIMENSIONAL OR ANY INFORMATION NOT SHOWN ON THIS DRAWING, ANALYZE THE CAD MODEL.
 - GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M - 1994
 - GENERAL TOLERANCES: SEE TITLE BLOCK
 - EDGES AND UNDIMENSIONED DETAILS PER ISO13715
- MANUFACTURING:
 - DRAFT TO BE WITHIN TOLERANCE. PLUS DRAFT - INDICATES A DIMENSION REPRESENTS THE SMALLEST SIZE OF A FEATURE. DRAFT WILL ADD MATERIAL. MINUS DRAFT - INDICATES A DIMENSION REPRESENTS THE LARGEST SIZE OF A FEATURE. DRAFT WILL REMOVE MATERIAL.
 - ALLOWABLE FLASH MAX 0.20 HIGH BY MAX 0.13 THICK.
 - ALLOWABLE SPLIT/PARTING LINE MISMATCH 0.2 MAX.
 - VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B)
 - NO EXTERNAL MOLD RELEASE AGENT ALLOWED DURING MANUFACTURING
 - NO PARTING LINES, NO DRAFT, MISMATCHES OR EJECTOR MARKS PERMISSIBLE WITHIN SEALING SURFACE. SEALING SURFACE TOOLING TO BE PROCESSED TO SURFACE FINISH OF NITRA #700 PAPER MINIMUM.

NOT VALIDATED

SYMBOLS	DIMENSION UNITS	SCALE
▽ = 0	mm	1:1
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
▽ = 0	ANGULAR TOL ± 1.0°	
▽ = 0	4 PLACES ±	
▽ = 0	3 PLACES ±	
▽ = 0	2 PLACES ±	0.1
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▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

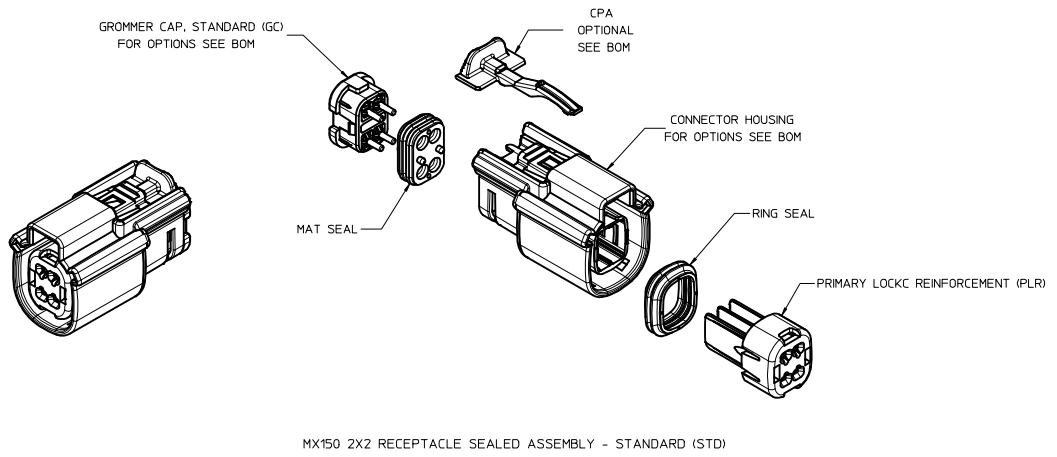
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CHK'D: MVANSLAMBROU	2018/02/16
APPR: MVANSLAMBROU	2018/02/16
INITIAL REVISION:	
DRWN: APROFFITT	2014/05/14
APPR: VKOSHY	2014/06/27
THIRD ANGLE PROJECTION	DRAWING
	A1-SIZE
SERIES	33472

molex			
MX150 RCPT DUAL ROW SEALED ASSEMBLY MAT SEAL			
PRODUCT CUSTOMER DRAWING			
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-33472-0001	PSD	001	C2
MATERIAL NUMBER	CUSTOMER	SHEET NUMBER	
	GENERAL MARKET	11 OF 11	

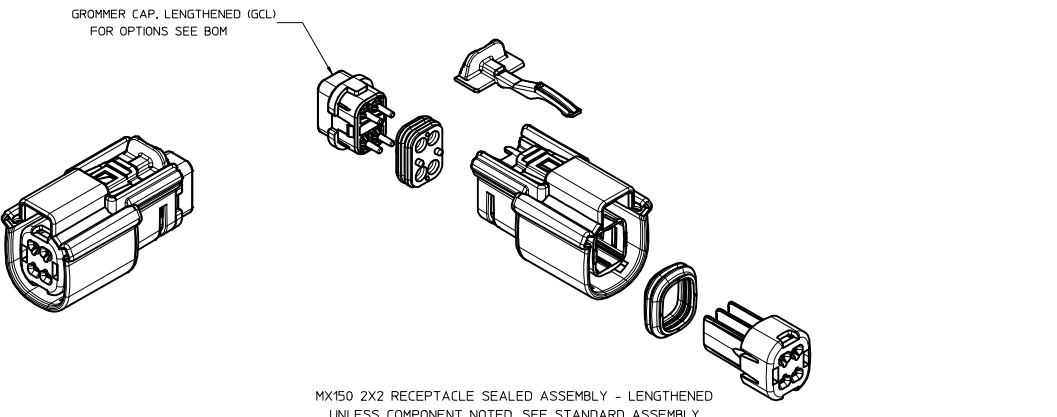
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150-S-020-2-B02	B	LT GRAY		
150-S-020-2-A02	A	BLACK		
PIN	OPTION	MATING CONNECTOR COLOR		

DETAIL C SCALE 20:1
APPLIES 2X
SEE KEYING OPTION VIEWS FOR POSITIONS

TABLE OF CONTENTS	
SHEET NO.	SHEET DESCRIPTION
1	NOTES
2	KEY CONFIGURATIONS
3	RECEPTACLE SEALED ASSEMBLY
4	BOM



MX150 2X2 RECEPTACLE SEALED ASSEMBLY - STANDARD (STD)



MX150 2X2 RECEPTACLE SEALED ASSEMBLY - LENGTHENED
UNLESS COMPONENT NOTED, SEE STANDARD ASSEMBLY

NOTES: VALID UNLESS OTHERWISE SPECIFIED

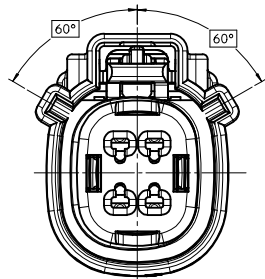
1. GENERAL:
- a. APPLICATION SPECIFICATION SEE: AS-33472-100
 - CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, CONNECTOR ASSEMBLY, PACKAGING INFORMATION, CONNECTOR MATING, SERVICE INSTRUCTIONS, ELECTRICAL CONTINUITY CHECKING, CRIMPING, AND TROUBLESHOOTING.
 - DESIGNED TO MATE WITH DEVICE CONNECTION AS SPECIFIED IN DRAWING EWCAP 150-S-004-2-202, AVAILABLE AT <http://ewcap.uscorteam.org/>
 - DESIGNED TO MATE WITH BLADE SEALED ASSEMBLY AS SPECIFIED IN DRAWING SD-33482-041
 - FOR 15mm RECEPTACLE TERMINALS TO BE USED WITH THIS ASSEMBLY. SEE MOLEX DRAWING SD-33012-002.
 - SYSTEM TO BE USED WITH WIRE WITHIN DIAMETER RANGE OF 1.4 mm TO 2.69 mm.
 - ASSEMBLY SHIPPED WITH PLR AND CPA IN PRE-LOCK POSITION (SEE SECTION 2-2, PRE-LOCK).
 - IN THE EVENT THAT THE PLR IS FOUND IN THE SEATED (FINAL LOCK) POSITION, REFER TO MOLEX SPECIFICATION PS-34646-001, AVAILABLE AT www.molex.com <http://www.molex.com>
 - ASSEMBLY CONFORMS TO SAE/USCAR-2 REV.4 WITH THE FOLLOWING EXCEPTIONS: ENGAGEMENT FORCE TO MOVE CPA FROM PRE-LOCK TO FINAL LOCK POSITION WHEN UNMATED: 40N MIN. DISENGAGEMENT FORCE TO MOVE CPA FROM FINAL LOCK TO PRE-LOCK POSITION: 3N MIN. 40N MAX. TERMINAL INSERTION FORCE FOR WIRE DIAMETER ABOVE 2.5mm NOT EXCEEDING 2.69mm SHALL NOT EXCEED 40 NEWTONS. PLR INSERTION FROM PRE-LOCK TO FINAL LOCK WITH TERMINALS SHALL NOT EXCEED 90N. PLR REMOVAL FROM FINAL LOCK TO PRE-LOCK POSITION SHALL NOT EXCEED 90N.
 - b. PRODUCT SPECIFICATION SEE: PS-33472-000
 - CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, RATINGS (CURRENT, TEMPERATURE, SEALING, AND FLAMMABILITY), AND PRODUCT VALIDATION.
 - c. PACKAGING SPECIFICATION PER MOLEX DRAWING: PK-31300-635.
 - 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 MDS (COMPANY ID#13255)
2. DESIGN - MATERIALS:
- a. HOUSING, GROMMET CAP, PLR: SPS/NYLON BLEND, 20% GLASS FILLED
 - b. RING SEAL, MAT SEAL: INHERENTLY LUBRICATED SILICONE
 - c. CPA: PBT, 20% GLASS FILLED
3. DESIGN - GEOMETRY:
- a. THIS IS A 100% CAD GENERATED PART. THE CAD MATHEMATICAL DATA IS THE MASTER FOR THIS PART. FOR DIMENSIONAL OR ANY INFORMATION NOT SHOWN ON THIS DRAWING, ANALYZE THE CAD MODEL.
 - b. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M - 1994
 - c. EDGES AND UNDIMENSIONED DETAILS PER ISO13715
 - d. CORNERS SHOWN AS SHARP TO BE R 0.2 MAX
 - e. 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.
 - f. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B)
 - g. LASER MARKING: TBD

INSPECTION NUMBER LOG
LAST NUMBER USED:
ADDED:
REMOVED:

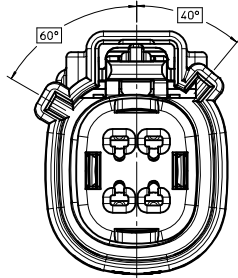
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T6	UPDATE 33472-4405 THRU 33472-4412 CAP
T5	ADD NEW P/N 33472-0455 33472-0456
T4	UPDATE THE BOM TO THE LATEST TEMPLATE
T3	ADD NEW P/N 33472-0454
T2	ADD NEW P/N 33472-0453
T1	UPDATED NOTES
T	REDRAWN

ENTER DESCRIPTION EC NO: UAU2016-0465 DRAWN BY: MVANSLAMBROU CHKD BY: CHYKOKBORUSZENSK APPR: VIOSHY	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	TITLE MX150 2X2 RECEPTACLE SEALED ASSEMBLY MAT SEAL
		mm	INCH	MM ONLY	DATE				
DESCRIPTION	▽=0	4 PLACES ±.005	±.005	MM ONLY	05-03-06				
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	▽=0	2 PLACES ±.010	±.010		06-22-06				
	▽=0	1 PLACE ±.03	±.03		06-22-06				
	▽=0	0 PLACE ±	±						
		ANGULAR ± 3 °							
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							
		SIZE D		SEE BOM					
		MATERIAL NO.		SEE BOM					
		DOCUMENT NO.		SD-33472-041					
		SHEET NO.		1 OF 5					

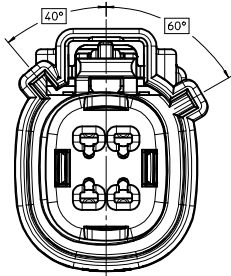
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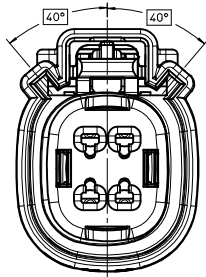
KEY A



KEY B



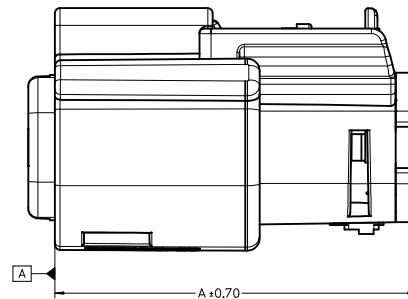
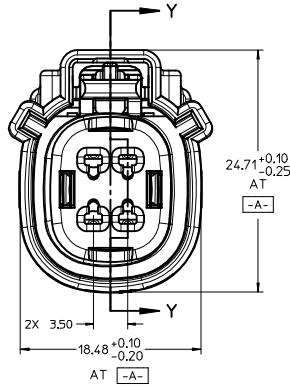
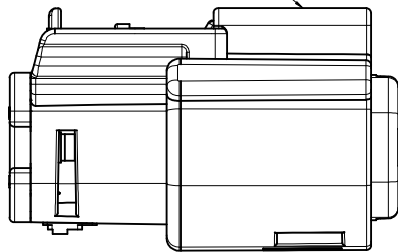
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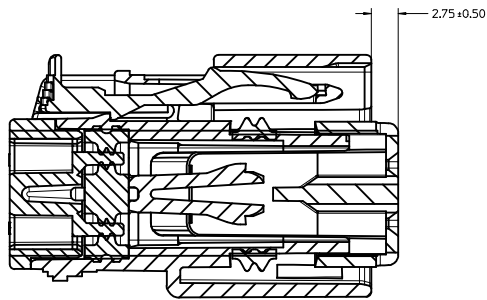
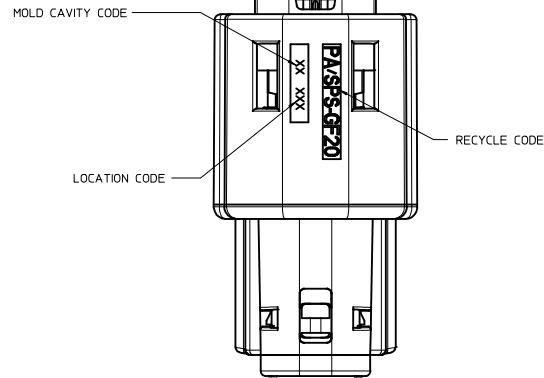
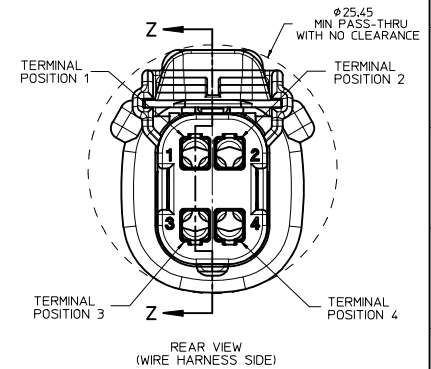
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				DRAWN BY MYANSLAMBROU	DATE 05-03-06	TITLE MX150 2X2 RECEPTACLE SEALED ASSEMBLY MAT SEAL		
				CHECKED BY DGRIFITHS	DATE 06-22-06	MATERIAL NO. SEE BOM		
				APPROVED BY SMARCEAU	DATE 06-22-06	DOCUMENT NO. SD-33472-041	SHEET NO. 2 OF 5	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± 3 °		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

LASER MARKING ON THIS SURFACE
SEE NOTE 3g.

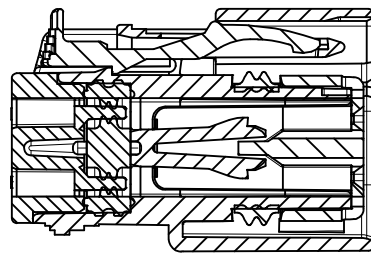


RECEPTACLE SEALED ASSEMBLY



PRIMARY LOCK REINFORCER (PLR) SHOWN
IN PRE-STAGED POSITION

SECTION Z-Z



PRIMARY LOCK REINFORCER (PLR) SHOWN
IN FINAL-LOCK POSITION

SECTION Y-Y

CHARTED DIMENSIONS		
PART NUMBERS	CONFIGURATION	A
33472-0401 THRU 33472-0452	MX150 2X2 RECEPTACLE CONN - STANDARD	36.95
33472-4401 THRU 33472-4412	MX150 2X2 RECEPTACLE CONN - LENGTHENED	4155

ENTER DESCRIPTION IEC NO. UAU2016-0465 DRAWN BY: CHYKORUSZENSKI 2015/10/06 CHECKED BY: APPR:VKOSHY 2015/10/07 REV: U	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± 0.10 ± --- 2 PLACES ± 0.3 ± --- 1 PLACE ± --- 0 PLACE ± ---	DIMENSION STYLE MM ONLY DRAWN BY: MYANSLAMBROU 05-03-06 CHECKED BY: DGRIFLITHS 06-22-06 APPROVED BY: SMARCEAU 06-22-06	SCALE 4:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE MX150 2X2 RECEPTACLE SEALED ASSEMBLY MAT SEAL molex	MATERIAL NO. SEE BOM	DOCUMENT NO. SD-33472-041	SHEET NO. 3 OF 5
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							
	SIZE D							

