

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

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: 1 OF 1

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

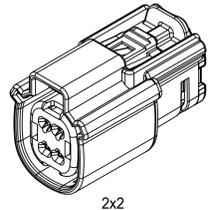
1. GENERAL:
- a. APPLICATION SPECIFICATION SEE: AS-33472-100
- CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, CONNECTOR ASSEMBLY, PACKAGING INFORMATION, CONNECTOR MATING, SERVICE INSTRUCTIONS, ELECTRICAL CONTINUITY CHECKING, CRIMPING, AND TROUBLESHOOTING.
 - DESIGNED TO MATE WITH DEVICE OR CONNECTOR 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 CONGRUATION
 - 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

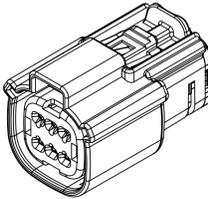
3. DESIGN - GEOMETRY:
- a. THE 3-D CAD DATA IS BASIC (WITHOUT TOLERANCE) AND MASTER FOR THIS PART WITH THE EXCEPTION OF UNDERLINED DIMENSIONS. DIMENSIONAL INFORMATION NOT SHOWN ON THIS DRAWING IS DEFINED BY THE DATA FILE AT ITS LATEST REVISION.
- b. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M-2009
- 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:
- PART NUMBER
 - DAY OF THE YEAR
 - SHIFT
 - 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

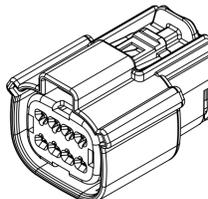
MATING INTERFACE/CONNECTOR DRAWINGS		
DESCRIPTION	INTERFACE DEFINITION	MOLEX INLINE
STANDARD 2X2	*150-S-004-2-Z02	SD-33482-0001
UL V0 2X2	*150-S-004-2-Z02	SD-33482-0001
STANDARD 2X3	*150-S-006-2-Z02	SD-33482-0001
TRANSMISSION 2X3	*150-S-006-2-Z02	N/A
STANDARD 2X4	*150-S-008-2-Z02	SD-33482-0001
UL V0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



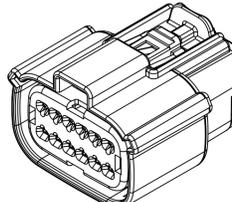
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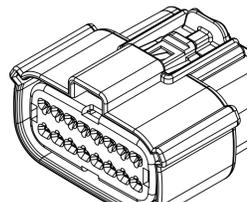
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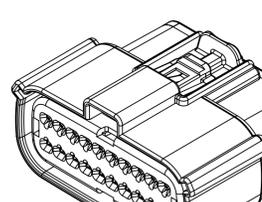
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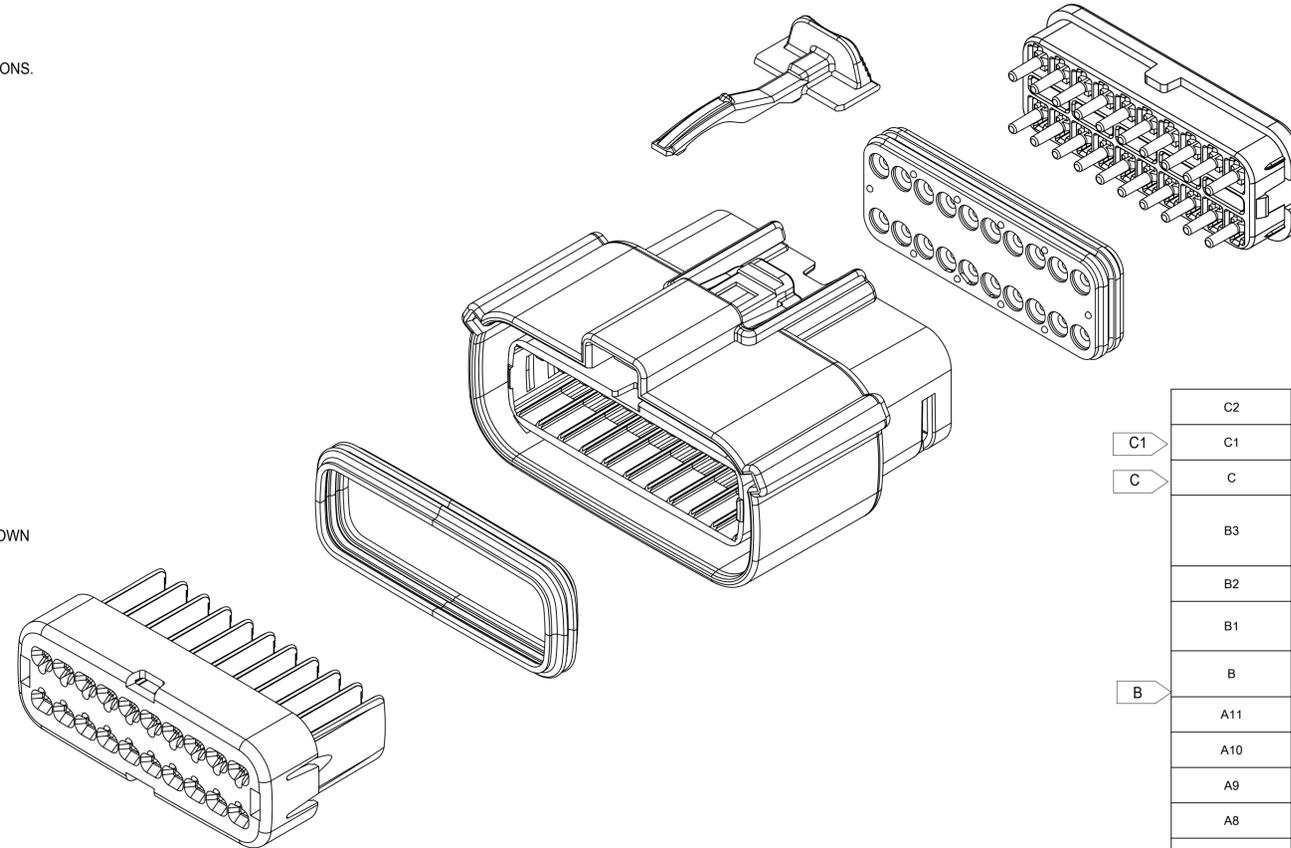
2x6



2x8



2x10



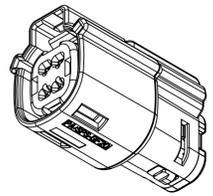
C2	ADDED MOLEX BACKSHELL DETAILS
C1	ADDED 2X6-TRNS.-WITH/WITHOUT CLIPSLOT *
C	ADDED 2X10-STD.-WITH CLIPSLOT *
B3	ADD ROW FOR 2X6 V0 ON SHEET 5DIM3# UPDATE TO 25.0 MAX FOR V0DIM11# UPDATE TO 33.85 MAX FOR V0
B2	ADD 2X6 UL V0 CONFIGURATIONS
B1	UPDATE 2X6 W/O CLIPSLOT DIM G ON TABLE OF SHEET 5
B	ADDED 2X2 - 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:	

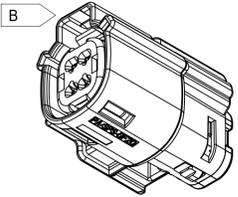
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▽ = 0	mm	SCALE	1:1	EC NO: 171650		MX150 RCPT DUAL ROW SEALED ASSEMBLY MAT SEAL PRODUCT CUSTOMER DRAWING	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DRWN: DDEB 2018/01/19		CHK'D: MVANSLAMBROU 2018/02/16			
▽ = 0	ANGULAR TOL ± 1.0°	APPR: MVANSLAMBROU 2018/02/16		INITIAL REVISION:			
▽ = 0	4 PLACES ±	DRWN: APROFFITT 2014/05/14		APPR: VKOSHY 2014/06/27			
▽ = 0	3 PLACES ±	DRWN: APROFFITT 2014/05/14		APPR: VKOSHY 2014/06/27		DOCUMENT NUMBER: SD-33472-0001	
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▽ = 0			A1-SIZE	33472	GENERAL MARKET		SHEET NUMBER
						1 OF 11	

SHEET DESCRIPTION

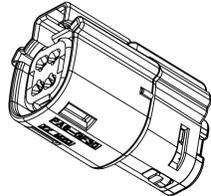
CONFIGURATIONS



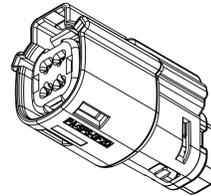
2X2 - STD.
2X2 - TRNS. - SILICONE FREE †



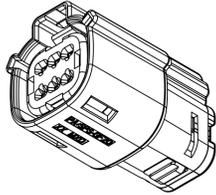
2X2 - STD. - WITH CLIPSLOT *



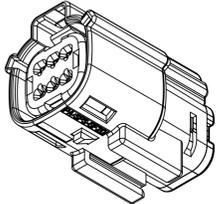
† 2X2 - UL V0



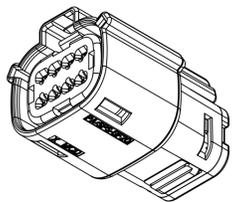
2X2 - STD. - LENGTHENED



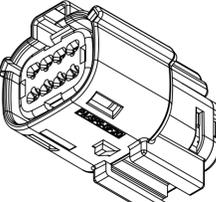
2X3 - STD.
2X3 - TRNS. - CONTAINS SILICONE †



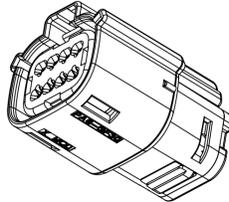
2X3 - STD. - WITH CLIPSLOT *



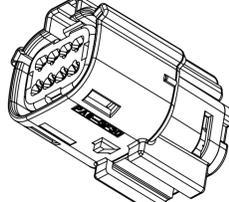
2X4 - STD.



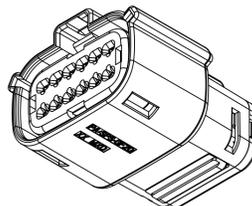
2X4 - STD. - WITH CLIPSLOT *



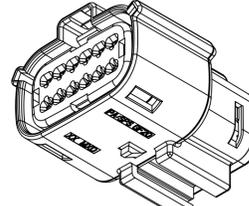
† 2X4 - UL V0



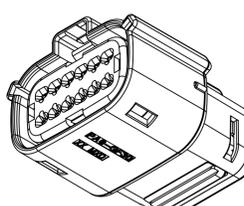
† 2X4 - UL V0-WITH CLIPSLOT*



2X6 - STD.

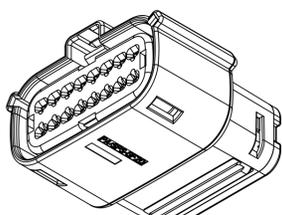


2X6 - STD. - WITH CLIPSLOT *

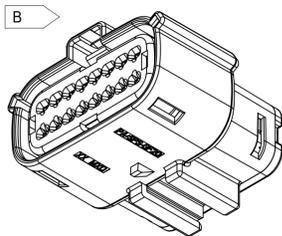


† 2X6 - UL V0

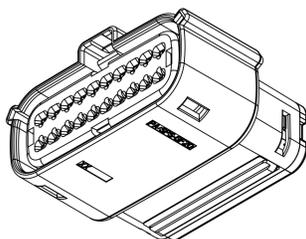
† 2X6 - TRNS. - WITH CLIPSLOT *



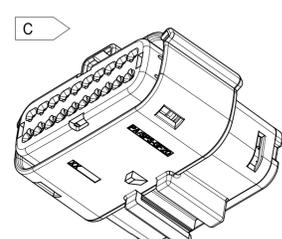
2X8 - STD.



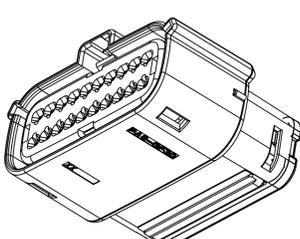
2X8 - STD. - WITH CLIPSLOT *



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

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

molex

MX150 RCPT
DUAL ROW SEALED ASSEMBLY MAT SEAL

PRODUCT CUSTOMER DRAWING

SD-33472-0001

PSD 001 C2

GENERAL MARKET 2 OF 11

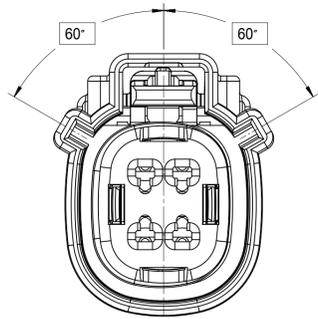
SHEET DESCRIPTION

KEY CONFIGURATIONS

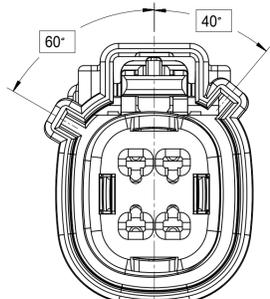
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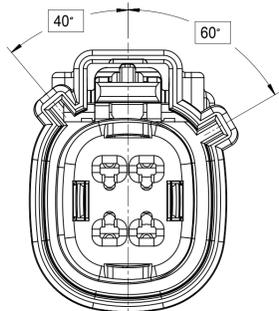
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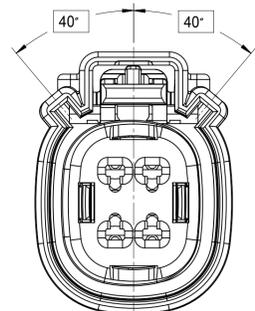
KEY A



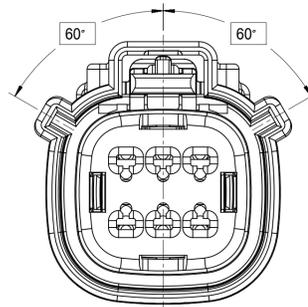
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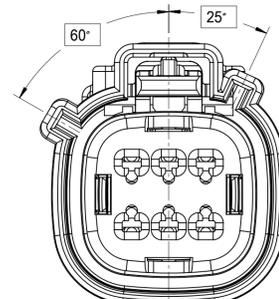
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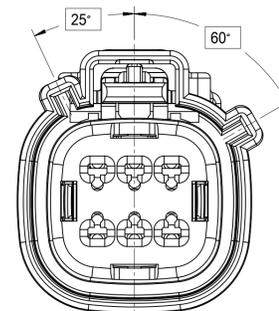
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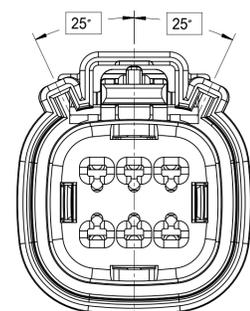
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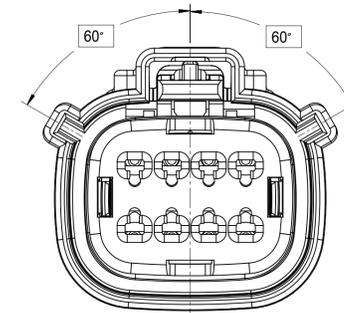
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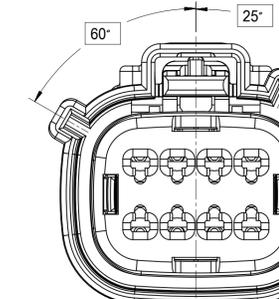
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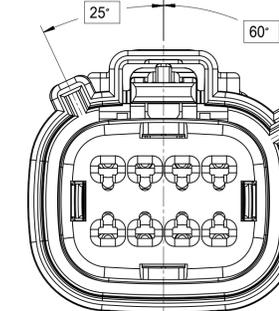
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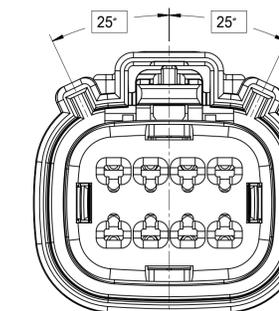
KEY A



KEY B



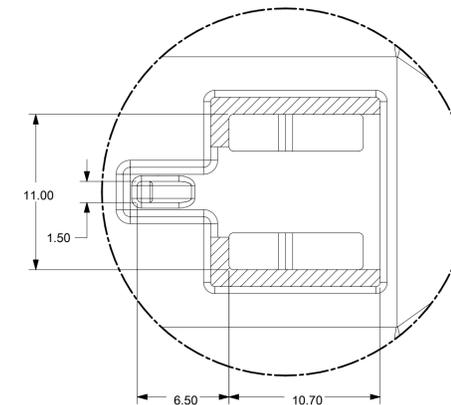
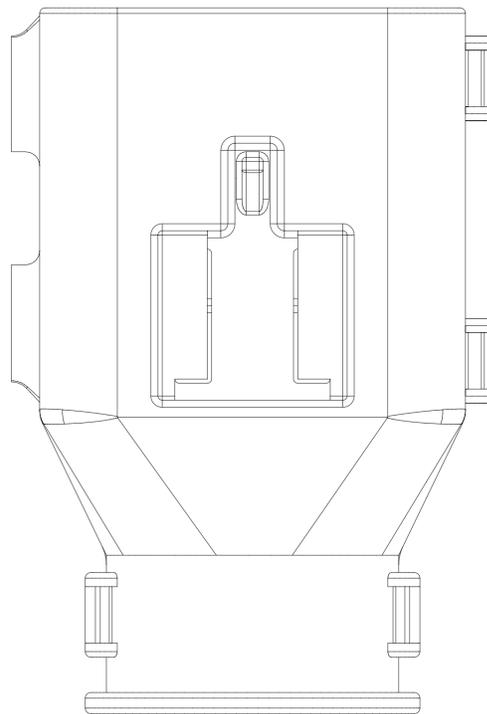
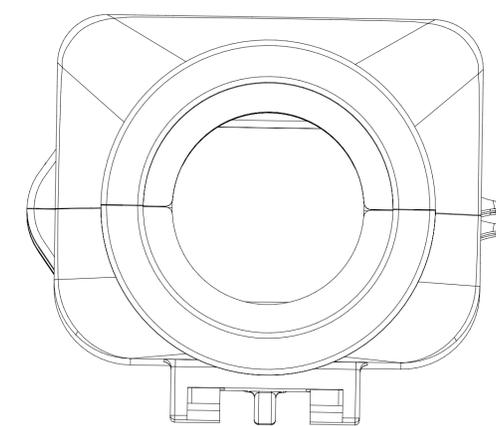
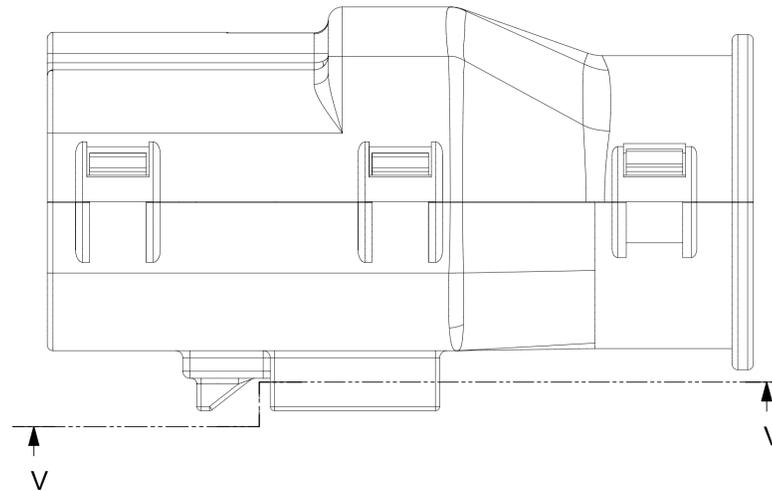
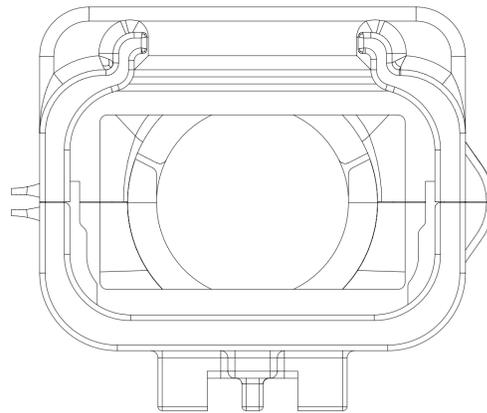
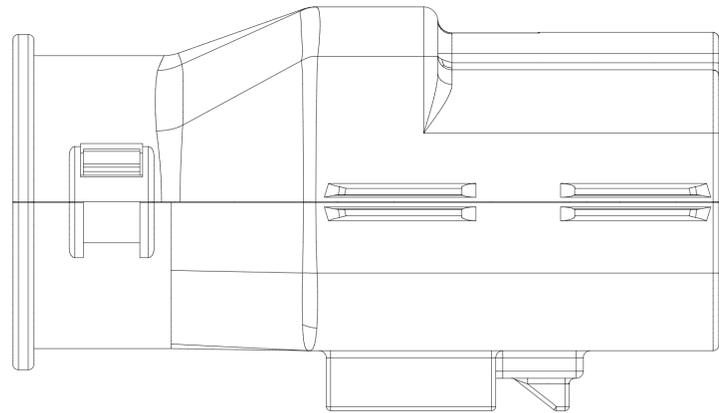
KEY C



KEY D

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	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	INITIAL REVISION: DRWN: APROFFITT 2014/05/14 APPR: VKOSHY 2014/06/27	PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: SD-33472-0001 DOC TYPE: PSD DOC PART: 001 REVISION: C2		
	THIRD ANGLE PROJECTION 	DRAWING: A1-SIZE SERIES: 33472	MATERIAL NUMBER CUSTOMER: GENERAL MARKET	SHEET NUMBER 3 OF 11	

SHEET DESCRIPTION
SCHLEMMER BACKSHELL

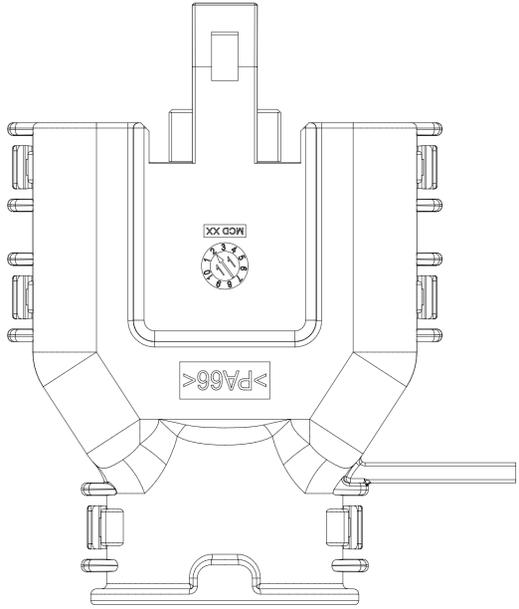
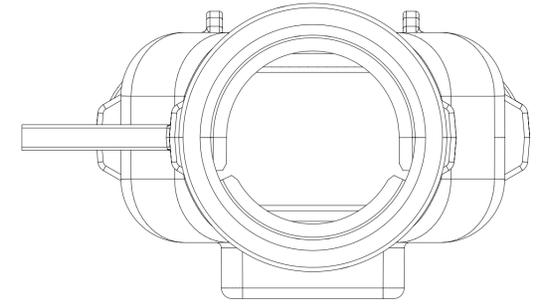
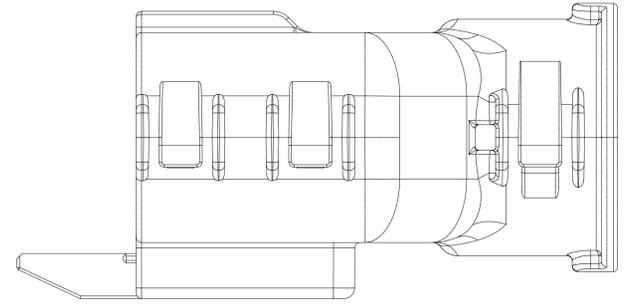
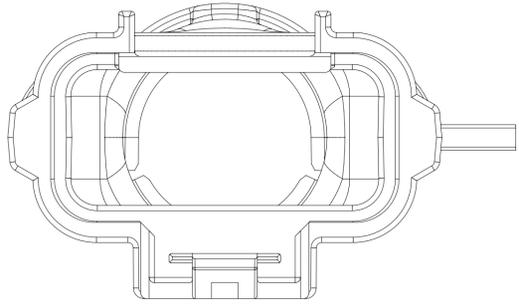
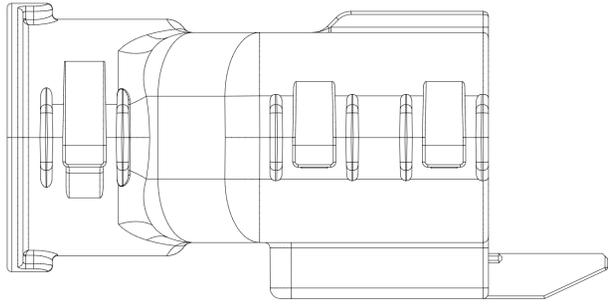


Partial V-V
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	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0°	INITIAL REVISION: DRWN: APROFFITT 2014/05/14 APPR: VKOSHY 2014/06/27	PRODUCT CUSTOMER DRAWING		
	4 PLACES ± 3 PLACES ± 2 PLACES ± 0.1 1 PLACE ± 0.2 0 PLACES ±	THIRD ANGLE PROJECTION 	DRAWING: A1-SIZE SERIES: 33472	DOCUMENT NUMBER: SD-33472-0001 DOC TYPE: PSD DOC PART: 001 REVISION: C2	MATERIAL NUMBER CUSTOMER: GENERAL MARKET SHEET NUMBER: 7 OF 11
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION 	DRAWING: A1-SIZE SERIES: 33472	DOCUMENT NUMBER: SD-33472-0001 DOC TYPE: PSD DOC PART: 001 REVISION: C2	MATERIAL NUMBER CUSTOMER: GENERAL MARKET SHEET NUMBER: 7 OF 11

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SHEET DESCRIPTION
MOLEX BACKSHELL



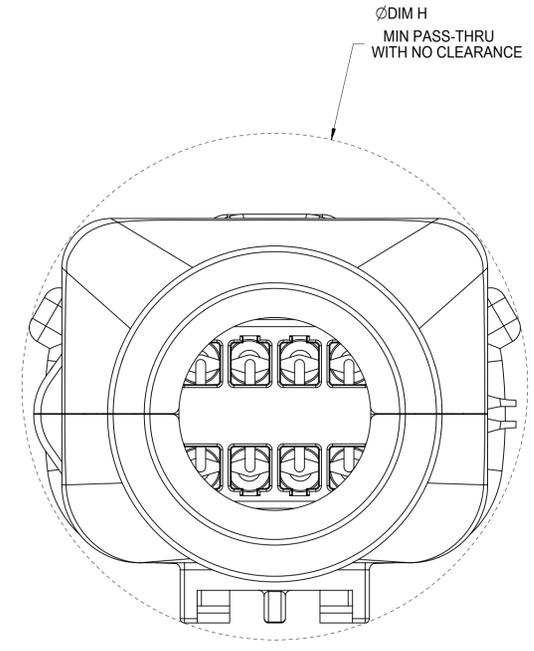
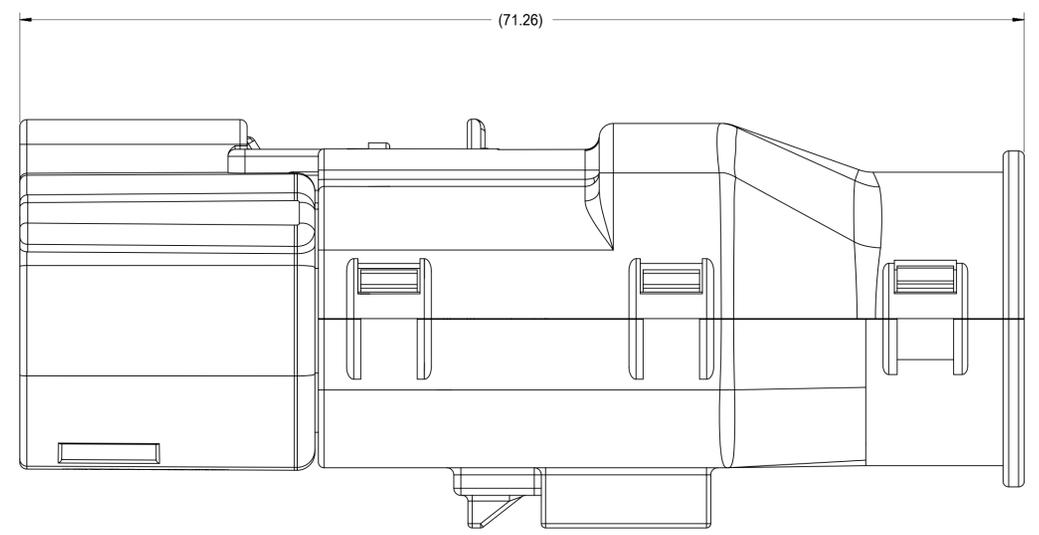
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	DIMENSION UNITS mm	SCALE 3:1	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0°				PRODUCT CUSTOMER DRAWING			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING A1-SIZE	SERIES 33472	DOCUMENT NUMBER SD-33472-0001	DOC TYPE PSD	DOC PART 001	REVISION C2
	MATERIAL NUMBER CUSTOMER GENERAL MARKET		SHEET NUMBER 8 OF 11							

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

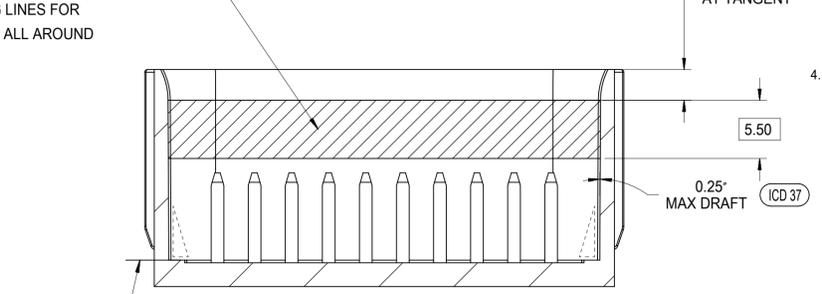
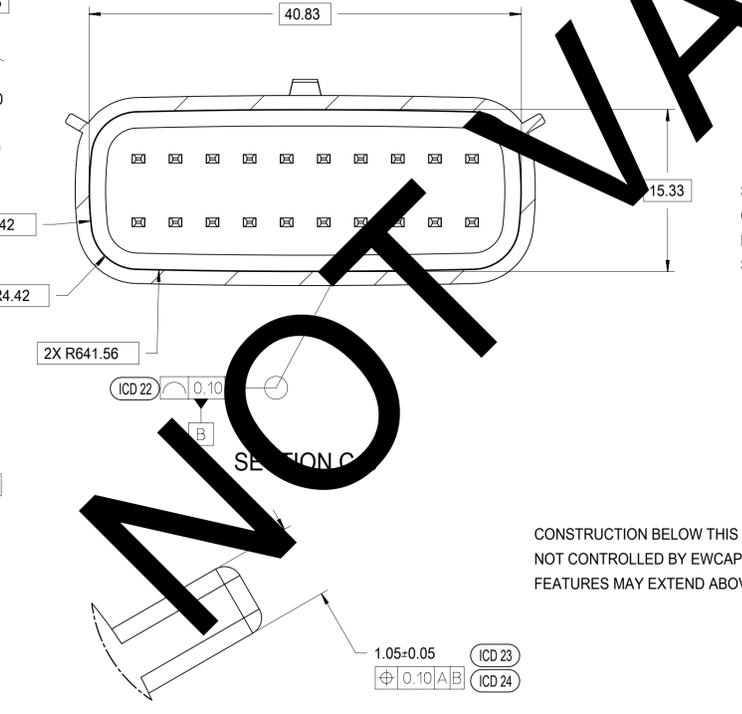
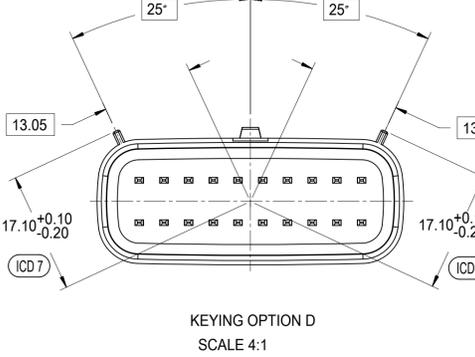
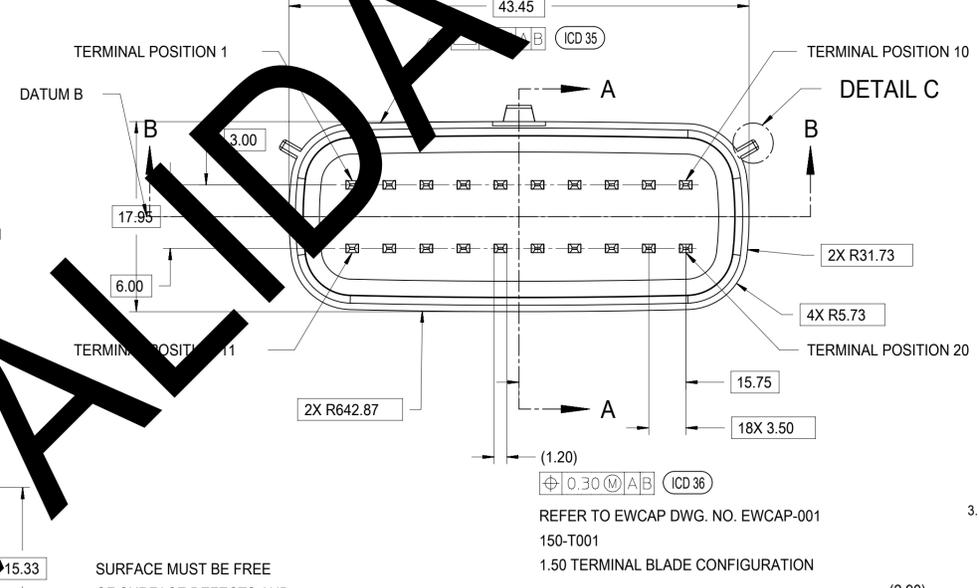
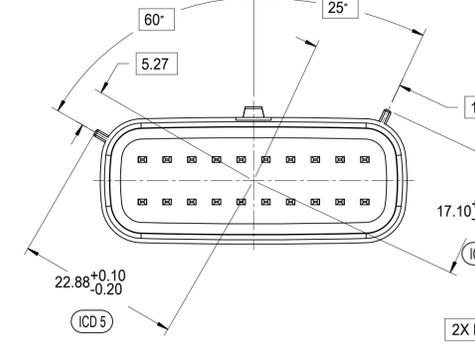
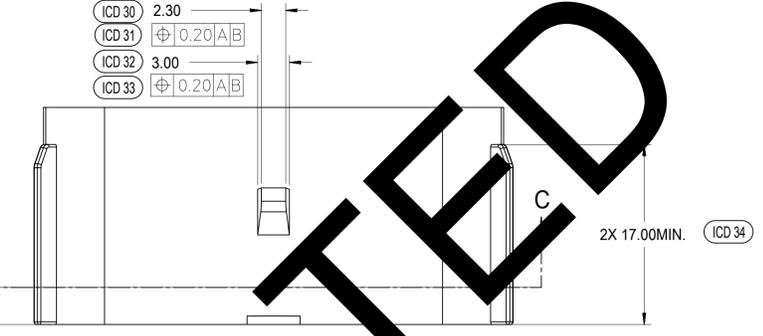
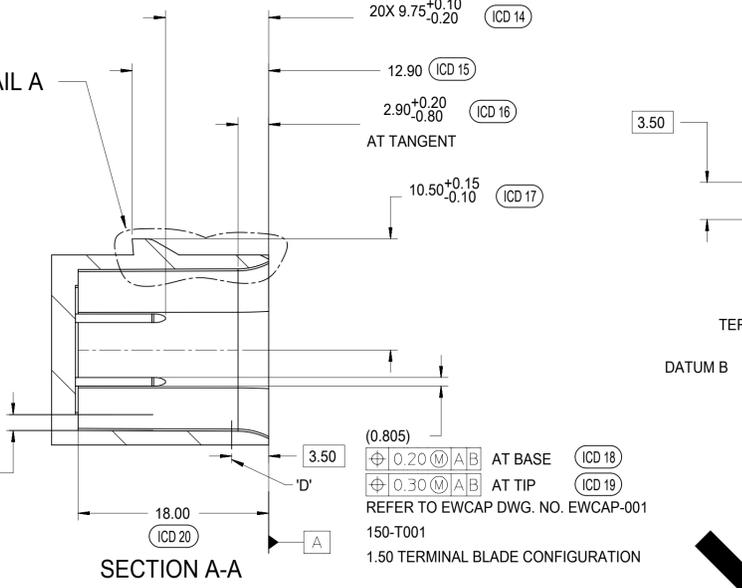
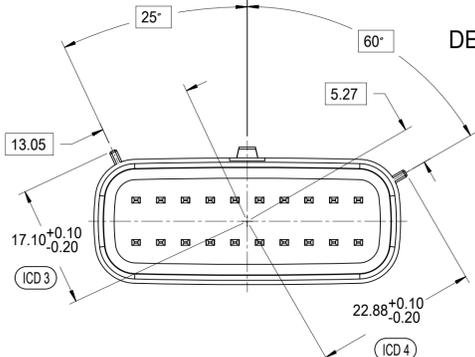
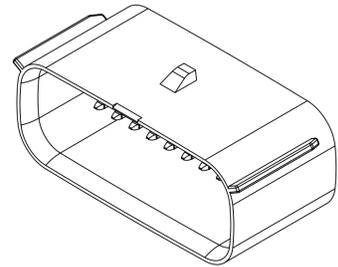
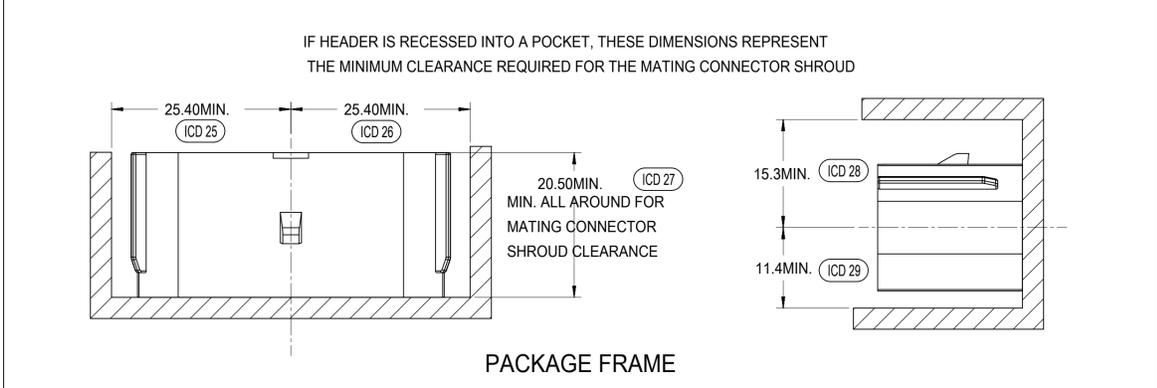
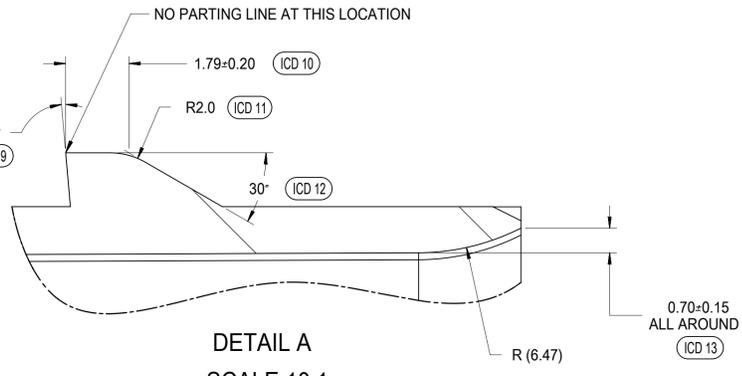
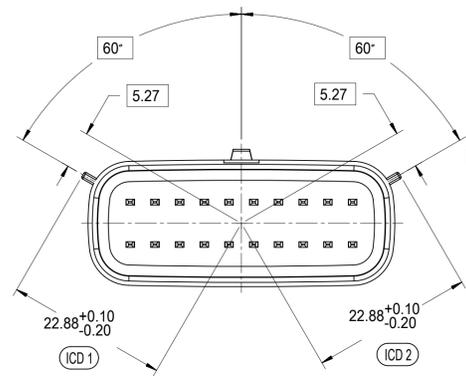
CHARTED DIMENSIONS	
DESCRIPTION	DIMENSIONS
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2X3 W/ CLIPSLOT	N/A
2X3 W/O CLIPSLOT	28.50
2X4 W/ CLIPSLOT	N/A
2X4 W/O CLIPSLOT	30.75
2X6 W/ CLIPSLOT	N/A
2X6 W/O CLIPSLOT	35.83



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									
	2018/01/19	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE					
	2018/02/16	ANGULAR TOL ± 1.0 °		mm	4:1					
	2018/02/16	4 PLACES ±	APROFFITT	DATE	MX150 RCPT DUAL ROW SEALED ASSEMBLY MAT SEAL					
		3 PLACES ±	CHK'D BY	DATE						
		2 PLACES ± 0.1	KBORUSZEWSKI	2014/06/16	PRODUCT CUSTOMER DRAWING					
		1 PLACE ± 0.2	VKOSHY	2014/06/27						
		0 PLACES ±	APPR BY	DATE	SERIES	MATERIAL NUMBER	CUSTOMER			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWING SIZE	THIRD ANGLE PROJECTION	33472		GENERAL MARKET			
			A1		DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER		
				SD-33472-0001	PSD	001	9 OF 11			

RELEASE STATUS	P1	RELEASE DATE	2018/02/16	22:02:25
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- 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

150-S-020-2-D02	D	STONE GRAY
150-S-020-2-C02	C	DK GRAY
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

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
▽ = 0	1 PLACE ±	0.2
▽ = 0	0 PLACES ±	
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

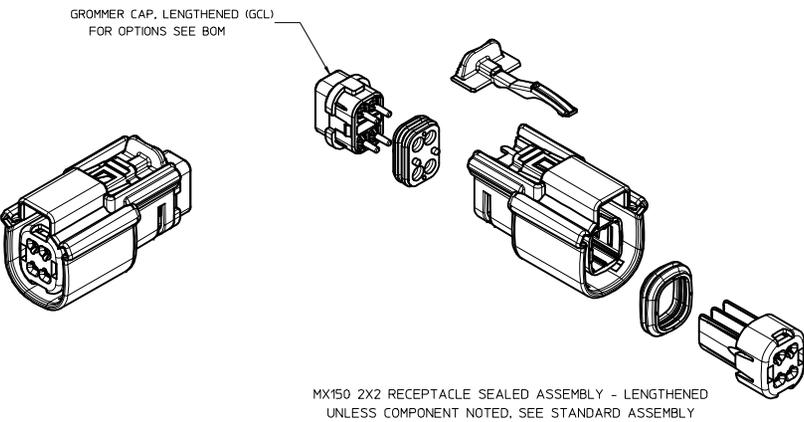
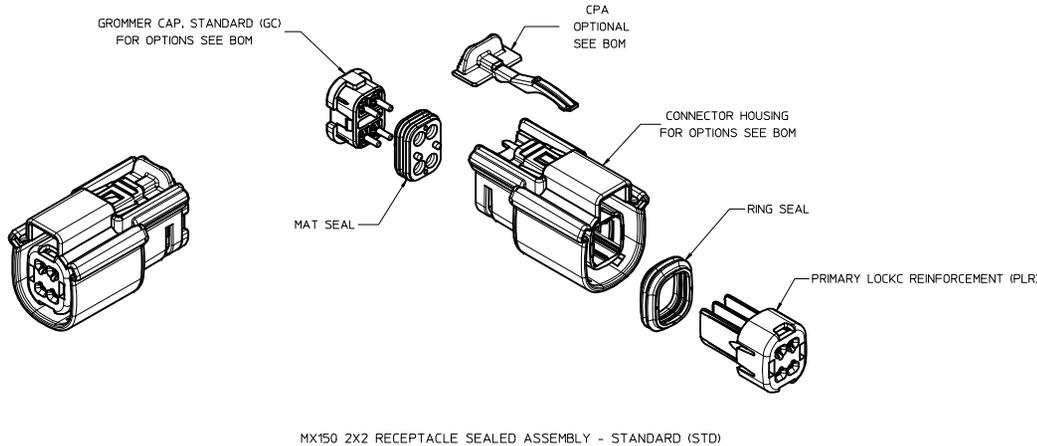
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CHK'D: MVANSLAMBROU	2018/02/16
APPR: MVANSLAMBROU	2018/02/16
INITIAL REVISION:	
DRWN: APROFFITT	2014/05/14
APPR: VKOSHY	2014/06/27

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	

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

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 IMDS (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

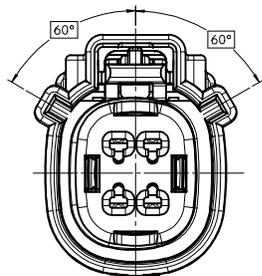


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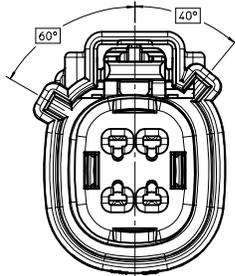
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T7	FIX TYPO ON RING SEAL COLOR
T6	UPDATE 33472-4405 THRU 33472-4412 CAP
T5	ADD NEW P/N 33472-0455 33472-0456
T4	UPDATE THE BOM TO THE LATEST TEMPLATE
T3	ADD NEW P/N 33472-0454
T2	ADD NEW P/N 33472-0453
T1	UPDATED NOTES
T	REDRAWN

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		mm	INCH	MM ONLY	DATE	2:1	METRIC	☉	
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		3 PLACES	±.008	±.008	CHECKED BY	DATE			
		2 PLACES	±.010	±.010	DGRIFFIETHS	06-22-06			
		1 PLACE	±.03	±.03	APPROVED BY	DATE			
		0 PLACE	±	±	SMARCEAU	06-22-06			
		ANGULAR ± 3 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE BOM		SD-33472-041		1 OF 5	
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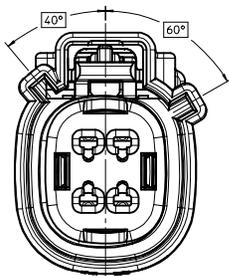
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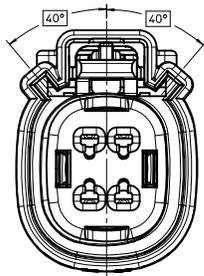
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KEY B



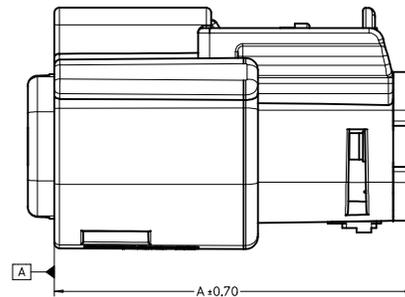
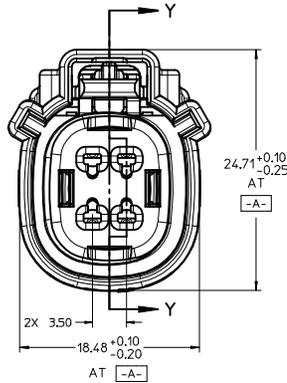
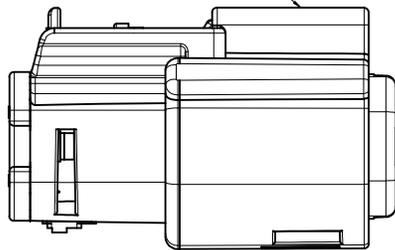
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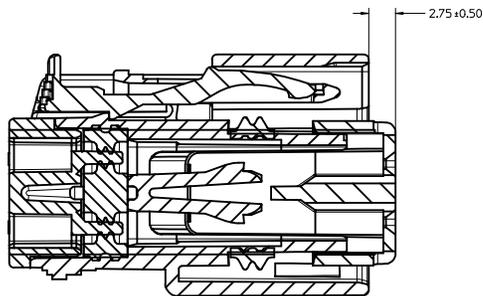
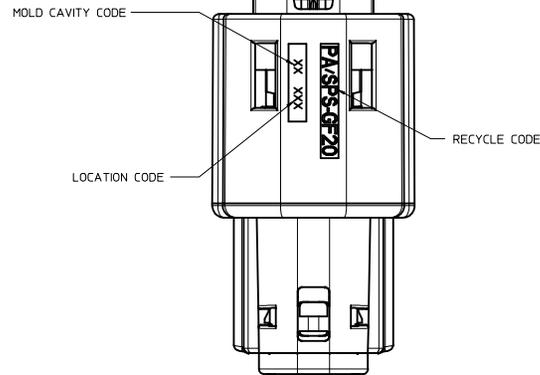
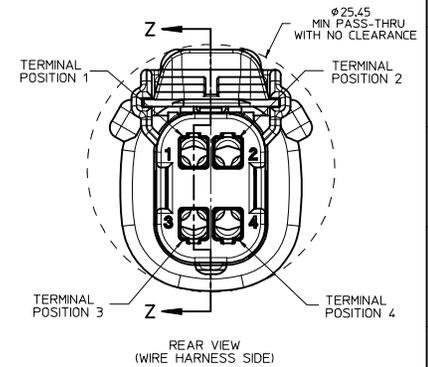
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ENTER DESCRIPTION IEC NO: UAU2016-0465 DRAWN: PROFFITT 2015/10/06 CHKD: BORUSZENSKI 2015/10/06 APPR: IKOSHY 2015/10/07	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM ONLY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

LASER MARKING ON THIS SURFACE
SEE NOTE 3g.

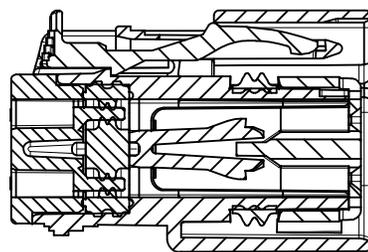


RECEPTACLE SEALED ASSEMBLY



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

