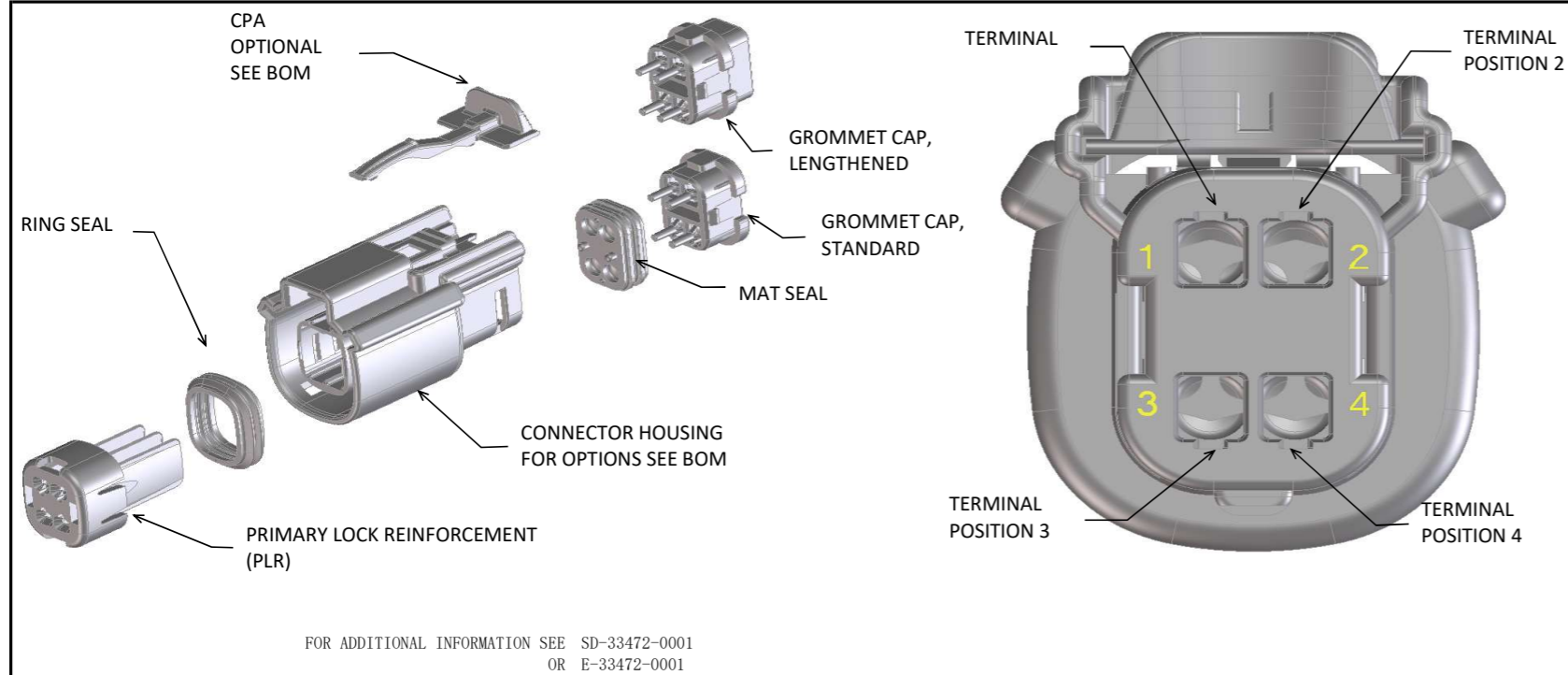


**MX150 UL VO RECEPTACLE 2X2 SEALED ASSEMBLY MAT SEAL  
BOM AND PIN OUT SHEET**

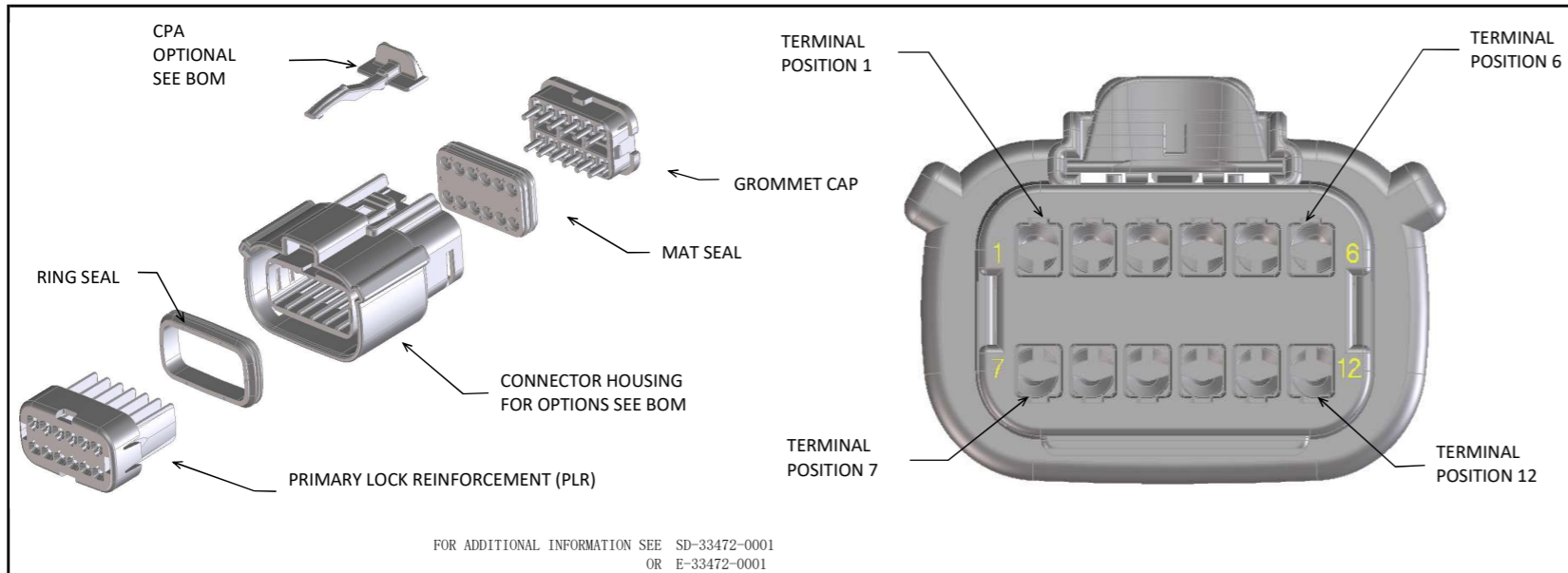


| ABBREVIATION | DESCRIPTION                      | COLOR      | MATERIAL                       |
|--------------|----------------------------------|------------|--------------------------------|
| A-BLK-UL     | HOUSING, KEYING OPTION A (UL VO) | BLACK      | PA6 GF30 VO                    |
| B-LG-UL      | HOUSING, KEYING OPTION B (UL VO) | LIGHT GRAY | PA6 GF30 VO                    |
| C-DG-UL      | HOUSING, KEYING OPTION C (UL VO) | DARK GRAY  | PA6 GF30 VO                    |
| D-SG-UL      | HOUSING, KEYING OPTION D (UL VO) | STONE GRAY | PA6 GF30 VO                    |
|              |                                  |            |                                |
| GCP          | GROMMET CAP (STANDARD PLUGGED)   | BLACK      | SPS/NYLON GF20                 |
| GCO          | GROMMET CAP (STANDARD OPEN)      | BLACK      | SPS/NYLON GF20                 |
| GCLP         | GROMMET CAP (LENGTHENED PLUGGED) | BLACK      | SPS/NYLON GF20                 |
| GCO          | GROMMET CAP (LENGTHENED OPEN)    | BLACK      | SPS/NYLON GF20                 |
| PLR-UL       | PLR (UL VO)                      | ASH GRAY   | PA6 GF30 VO                    |
| CPA          | CPA                              | RED        | PBT GF20                       |
| M            | MAT SEAL                         | RUST RED   | INHERENTLY LUBRICATED SILICONE |
| R            | RING SEAL                        | GREEN      | INHERENTLY LUBRICATED SILICONE |

| ASSEMBLY DESCRIPTION             | ASSEMBLY PART NUMBER | COMPONENT   |             |        |     |          |           |   | BLOCKED TERMINALS  |   |   |  |  |  |  |  |  |  | STATUS | COMMENTS | OPTIONAL ATTACHMENTS SOLD SEPERATELY |                        |  |  |
|----------------------------------|----------------------|---|-------------|--------|-----|----------|-----------|---|--|---|---|--|--|--|--|--|--|--|--------|----------|--------------------------------------|------------------------|--|--|
|                                  |                      | THE PRESENCE OF AN ABBREVIATION INDICATES THE PRESENCE OF THAT COMPONENT. |             |        |     |          |           |   | CAVITY WITH A NUMBER INDICATES BLOCKED TERMINAL POSITION<br>CAVITY WITHOUT A NUMBER INDICATES OPEN TERMINAL POSITION |   |   |  |  |  |  |  |  |  |        |          | BACKSHELL WITH RIBS                  | BACKSHELL WITHOUT RIBS |  |  |
|                                  |                      | HOUSING KEY/COLOR   | GROMMET CAP | PLR    | CPA | MAT SEAL | RING SEAL | 1 | 2  | 3 | 4 |  |  |  |  |  |  |  |        |          |                                      |                        |  |  |
| UL VO KEY A, BLACK, W/O CPA      | 160074-2001          | A-BLK-UL  | GCO         | PLR-UL |     | M        | R         |   |  |   |   |  |  |  |  |  |  |  |        |          |                                      | SALEABLE               |  |  |
| UL VO KEY B, LIGHT GRAY, W/O CPA | 160074-2002          | B-LG-UL   | GCO         | PLR-UL |     | M        | R         |   |  |   |   |  |  |  |  |  |  |  |        |          |                                      | SALEABLE               |  |  |
| UL VO KEY C, DARK GRAY, W/O CPA  | 160074-2003          | C-DG-UL   | GCO         | PLR-UL |     | M        | R         |   |  |   |   |  |  |  |  |  |  |  |        |          |                                      | SALEABLE               |  |  |
| UL VO KEY D, STONE GRAY, W/O CPA | 160074-2004          | D-SG-UL   | GCO         | PLR-UL |     | M        | R         |   |  |   |   |  |  |  |  |  |  |  |        |          |                                      | SALEABLE               |  |  |
| UL VO KEY A, BLACK, W/CPA        | 160074-2006          | A-BLK-UL  | GCO         | PLR-UL | CPA | M        | R         |   |  |   |   |  |  |  |  |  |  |  |        |          |                                      | SALEABLE               |  |  |
| UL VO KEY B, LIGHT GRAY, W/CPA   | 160074-2007          | B-LG-UL   | GCO         | PLR-UL | CPA | M        | R         |   |  |   |   |  |  |  |  |  |  |  |        |          |                                      | SALEABLE               |  |  |
| UL VO KEY C, DARK GRAY, W/CPA    | 160074-2008          | C-DG-UL   | GCO         | PLR-UL | CPA | M        | R         |   |  |   |   |  |  |  |  |  |  |  |        |          |                                      | SALEABLE               |  |  |
| UL VO KEY D, STONE GRAY, W/CPA   | 160074-2009          | D-SG-UL   | GCO         | PLR-UL | CPA | M        | R         |   |  |   |   |  |  |  |  |  |  |  |        |          |                                      | SALEABLE               |  |  |



**MX150 UL VO RECEPTACLE 2X6 SEALED ASSEMBLY MAT SEAL  
BOM AND PIN OUT SHEET**



| ABBREVIATION | DESCRIPTION                      | COLOR      | MATERIAL                       |
|--------------|----------------------------------|------------|--------------------------------|
| A-BLK-UL     | HOUSING, KEYING OPTION A (UL VO) | BLACK      | PA6 GF30 VO                    |
| B-LG-UL      | HOUSING, KEYING OPTION B (UL VO) | LIGHT GRAY | PA6 GF30 VO                    |
| C-DG-UL      | HOUSING, KEYING OPTION C (UL VO) | DARK GRAY  | PA6 GF30 VO                    |
| D-SG-UL      | HOUSING, KEYING OPTION D (UL VO) | STONE GRAY | PA6 GF30 VO                    |
| D-BLK-UL     | HOUSING, KEYING OPTION D (UL VO) | BLACK      | PA6 GF30 VO                    |
| GC           | GROMMET CAP (PLUGGED)            | BLACK      | SPS/NYLON GF20                 |
| PLR-UL       | PLR (UL VO)                      | ASH GRAY   | PA6 GF30 VO                    |
| CPA          | CPA                              | RED        | PBT GF20                       |
| M            | MAT SEAL                         | LIGHT BLUE | INHERENTLY LUBRICATED SILICONE |
| R            | RING SEAL                        | GREEN      | INHERENTLY LUBRICATED SILICONE |

FOR ADDITIONAL INFORMATION SEE SD-33472-0001  
OR E-33472-0001

| ASSEMBLY DESCRIPTION             | ASSEMBLY PART NUMBER | COMPONENT   |             |        |     |          |           |   | BLOCKED TERMINALS  |   |   |   |   |   |   |   |    |    |    |  | STATUS | COMMENTS | OPTIONAL ATTACHMENTS SOLD SEPERATELY |                        |            |            |
|----------------------------------|----------------------|---|-------------|--------|-----|----------|-----------|---|--|---|---|---|---|---|---|---|----|----|----|--|--------|----------|--------------------------------------|------------------------|------------|------------|
|                                  |                      | THE PRESENCE OF AN ABBREVIATION INDICATES THE PRESENCE OF THAT COMPONENT. |             |        |     |          |           |   | CAVITY WITH A NUMBER INDICATES BLOCKED TERMINAL POSITION<br>CAVITY WITHOUT A NUMBER INDICATES OPEN TERMINAL POSITION |   |   |   |   |   |   |   |    |    |    |  |        |          | BACKSHELL WITH RIBS                  | BACKSHELL WITHOUT RIBS |            |            |
|                                  |                      | HOUSING KEY/COLOR   | GROMMET CAP | PLR    | CPA | MAT SEAL | RING SEAL | 1 | 2  | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |        |          |                                      |                        |            |            |
| UL VO KEY A, BLACK, W/O CPA      | 160074-6001          | A-BLK-UL  | GC          | PLR-UL |     | M        | R         |   |  |   |   |   |   |   |   |   |    |    |    |  |        |          | SALEABLE                             |                        | 34951-1210 | 34951-1220 |
| UL VO KEY B, LIGHT GRAY, W/O CPA | 160074-6002          | B-LG-UL   | GC          | PLR-UL |     | M        | R         |   |  |   |   |   |   |   |   |   |    |    |    |  |        |          | SALEABLE                             |                        | 34951-1210 | 34951-1220 |
| UL VO KEY C, DARK GRAY, W/O CPA  | 160074-6003          | C-DG-UL   | GC          | PLR-UL |     | M        | R         |   |  |   |   |   |   |   |   |   |    |    |    |  |        |          | SALEABLE                             |                        | 34951-1210 | 34951-1220 |
| UL VO KEY D, STONE GRAY, W/O CPA | 160074-6004          | D-SG-UL   | GC          | PLR-UL |     | M        | R         |   |  |   |   |   |   |   |   |   |    |    |    |  |        |          | SALEABLE                             |                        | 34951-1210 | 34951-1220 |
| UL VO KEY A, BLACK, W/CPA        | 160074-6006          | A-BLK-UL  | GC          | PLR-UL | CPA | M        | R         |   |  |   |   |   |   |   |   |   |    |    |    |  |        |          | SALEABLE                             |                        | 34951-1210 | 34951-1220 |
| UL VO KEY B, LIGHT GRAY, W/CPA   | 160074-6007          | B-LG-UL   | GC          | PLR-UL | CPA | M        | R         |   |  |   |   |   |   |   |   |   |    |    |    |  |        |          | SALEABLE                             |                        | 34951-1210 | 34951-1220 |
| UL VO KEY C, DARK GRAY, W/CPA    | 160074-6008          | C-DG-UL   | GC          | PLR-UL | CPA | M        | R         |   |  |   |   |   |   |   |   |   |    |    |    |  |        |          | SALEABLE                             |                        | 34951-1210 | 34951-1220 |
| UL VO KEY D, STONE GRAY, W/CPA   | 160074-6009          | D-SG-UL   | GC          | PLR-UL | CPA | M        | R         |   |  |   |   |   |   |   |   |   |    |    |    |  |        |          | SALEABLE                             |                        | 34951-1210 | 34951-1220 |
| UL VO KEY D, BLACK, W/CPA        | 160074-6010          | D-BLK-UL  | GC          | PLR-UL | CPA | M        | R         |   |  |   |   |   |   |   |   |   |    |    |    |  |        |          | SALEABLE                             |                        | 34951-1210 | 34951-1220 |







| 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

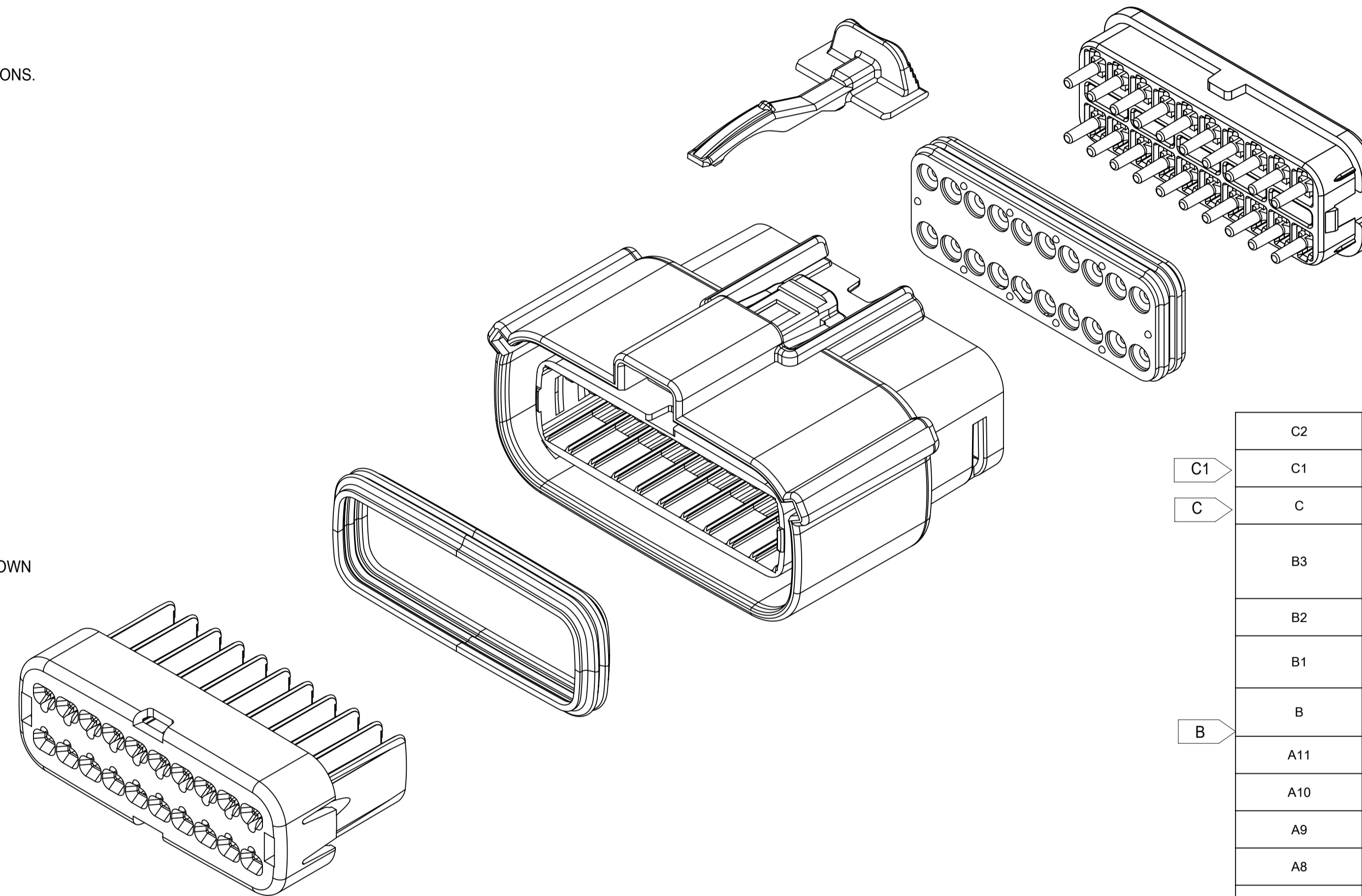
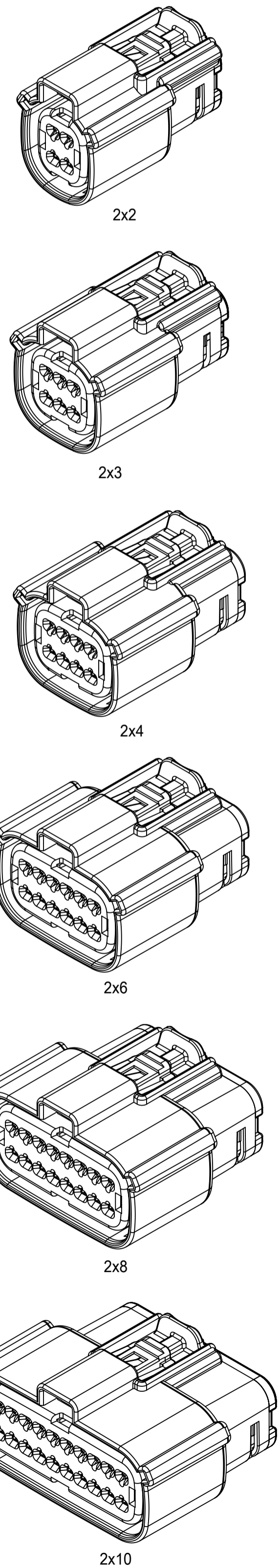
1. GENERAL:
- a. APPLICATION SPECIFICATION SEE: AS-33472-100
- CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, CONNECTOR ASSEMBLY, PACKAGING INFORMATION, CONNECTOR MATING, SERVICE INSTRUCTIONS, ELECTRICAL CONTINUITY CHECKING, CRIMPING, AND TROUBLESHOOTING.
  - DESIGNED TO MATE WITH DEVICE OR CONNECTOR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



|     |   |
|-----|---|
| 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#<br>UPDATE TO 25.0 MAX FOR V0DIM11#<br>UPDATE TO 33.85 MAX FOR V0 |
| B2  | ADD 2X6 UL V0 CONFIGURATIONS  |
| B1  | UPDATE 2X6 W/O CLIPSLOT DIM G ON<br>TABLE OF SHEET 5  |
| B   | ADDED 2X2 - STD- WITH CLIPSLOT,<br>2X8 - STD- WITH CLIPSLOT<br>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<br>MOLEX INLINE BLADE DRAWING                                    |
| A   | INITIAL RELEASE   |
| REV | REV DESCRIPTION   |

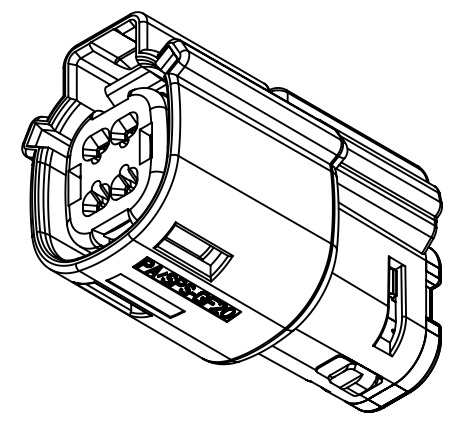
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|-----------------------|----|
| LAST NUMBER:          | 11 |
| ADDED:                | 11 |
| REMOVED:              |    |

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

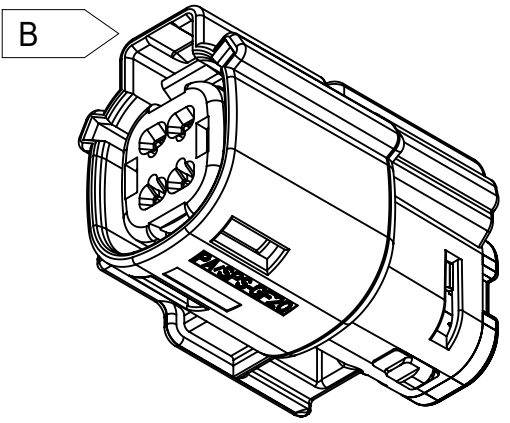
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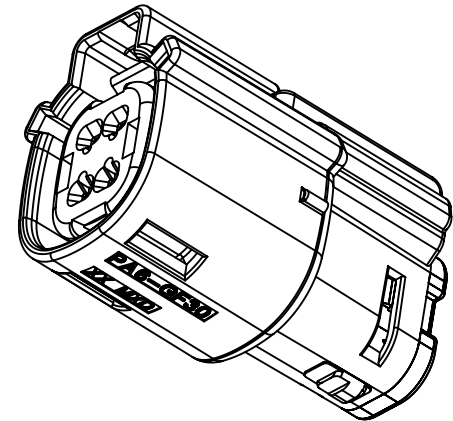
## CONFIGURATIONS



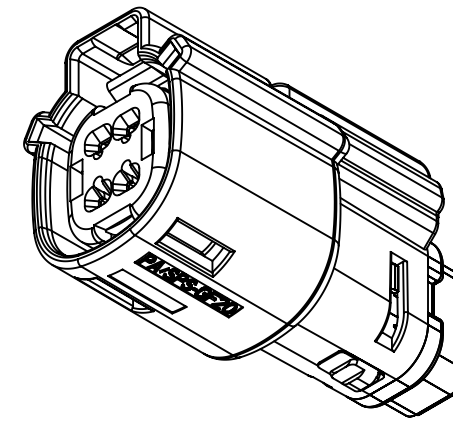
2X2 - STD.  
2X2 - TRNS. - SILICONE FREE †



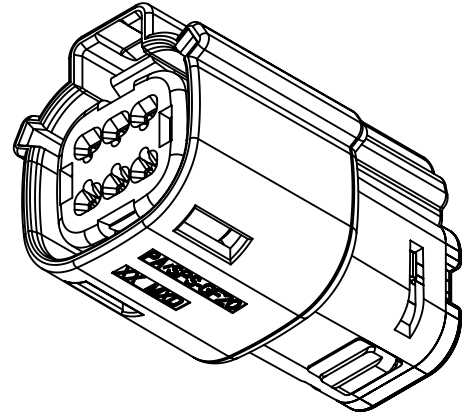
2X2 - STD. - WITH CLIPSLOT \*



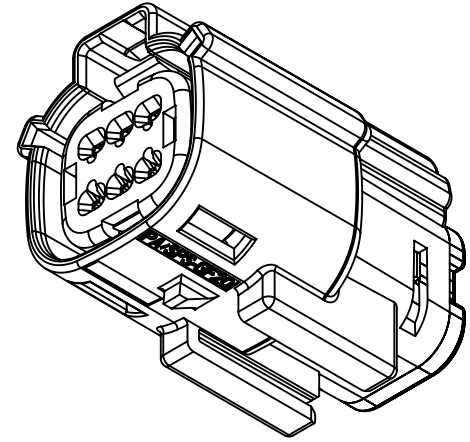
† 2X2 - UL V0



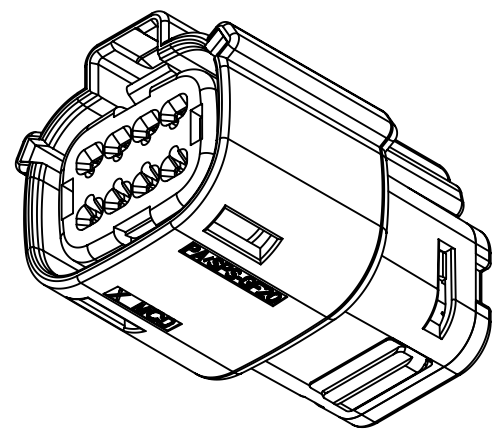
2X2 - STD. - LENGTHENED



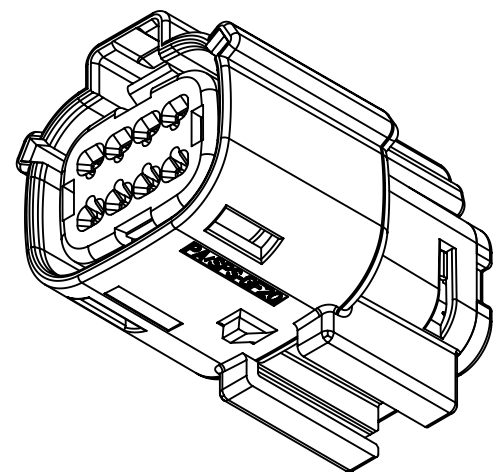
2X3 - STD.  
2X3 - TRNS. - CONTAINS SILICONE †



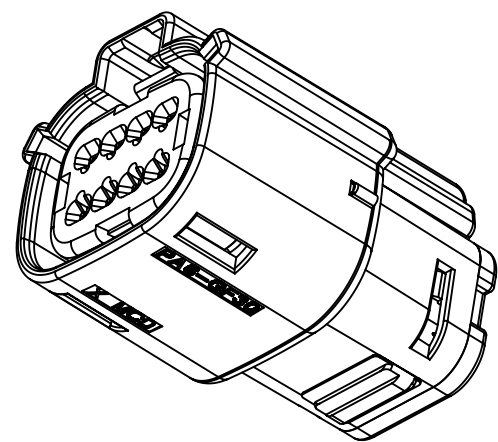
2X3 - STD. - WITH CLIPSLOT \*



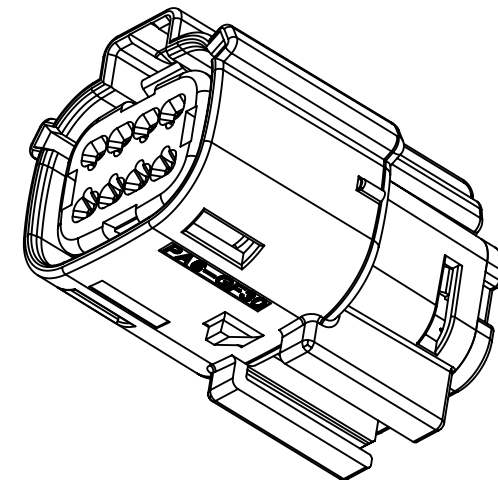
2X4 - STD.



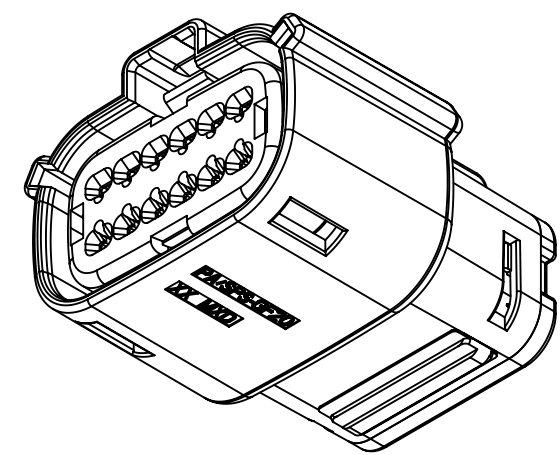
2X4 - STD. - WITH CLIPSLOT \*



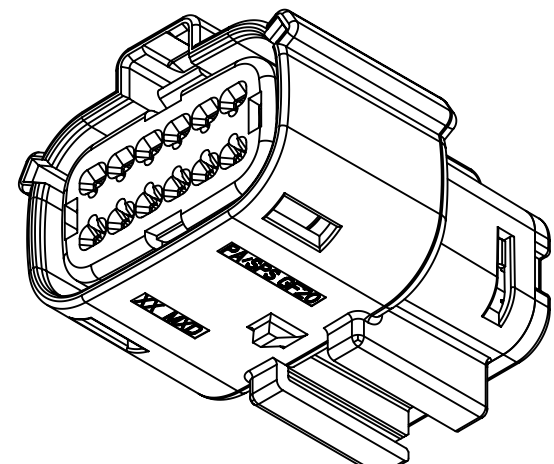
† 2X4 - UL V0



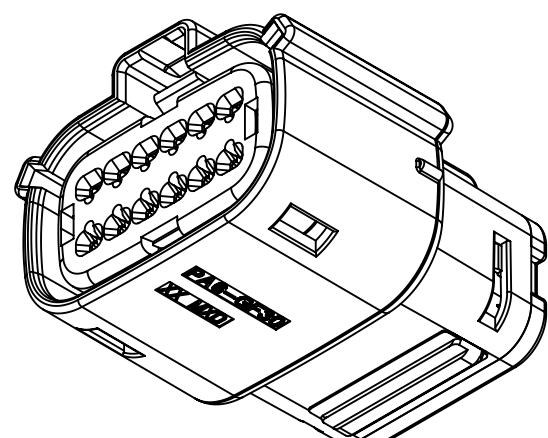
† 2X4 - UL V0-WITH CLIPSLOT\*



2X6 - STD.



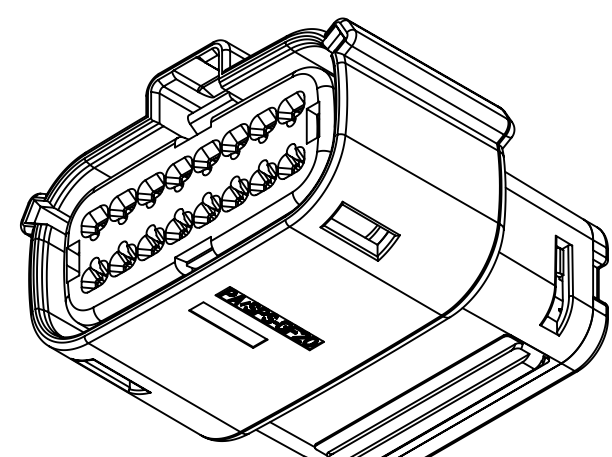
2X6 - STD. - WITH CLIPSLOT \*



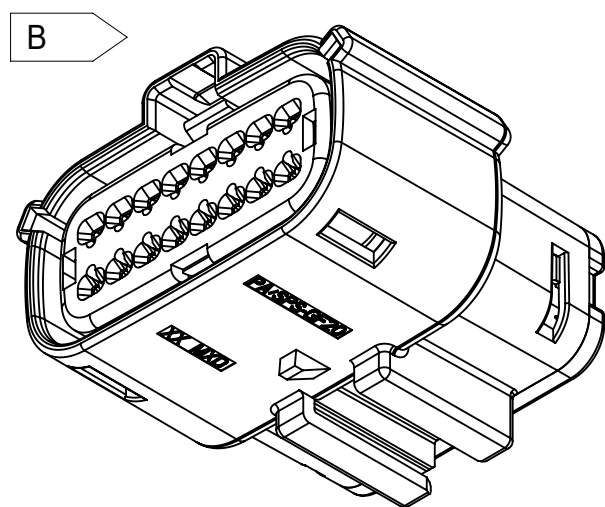
† 2X6 - UL V0

C1 † 2X6 - TRNS.

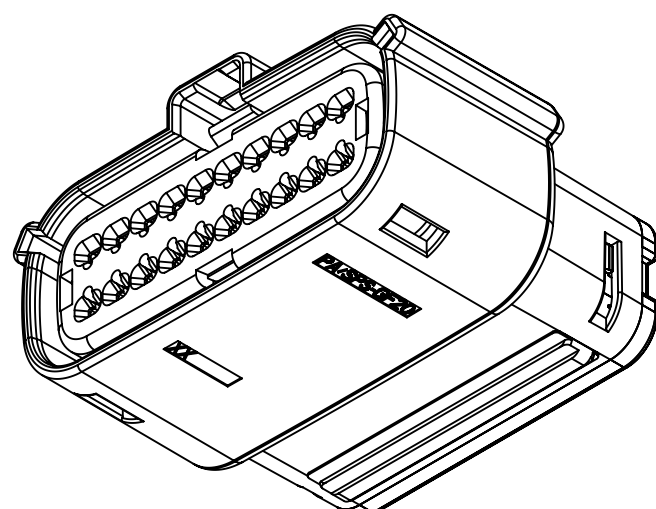
C1 † 2X6 - TRNS. - WITH CLIPSLOT \*



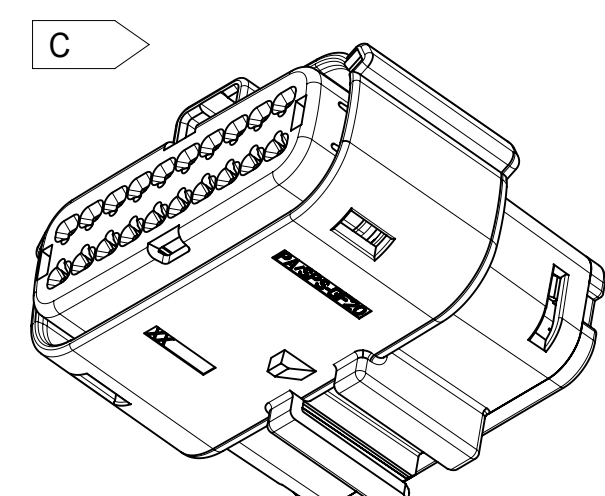
2X8 - STD.



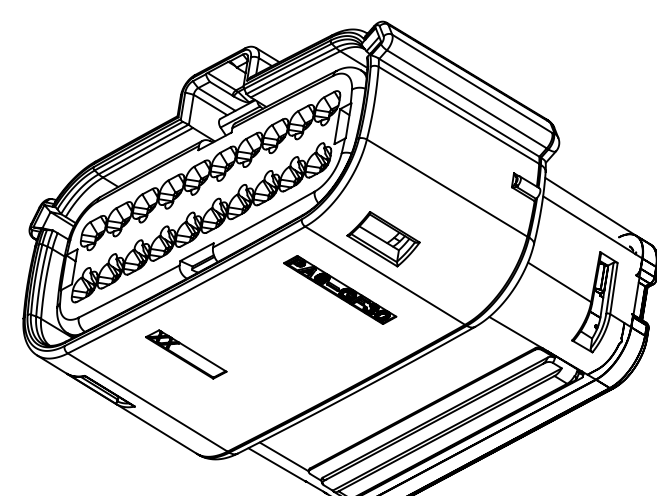
2X8 - STD. - WITH CLIPSLOT \*



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:              |  |
|---------|---|---------|--------------------------------|--|
|         | DIMENSION UNITS   | SCALE   |                                |  |
|         | mm  | 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  |         |                                |  |
|         | THIRD ANGLE PROJECTION  | DRAWING |                                |  |
|         | A1-SIZE   | SERIES  |                                |  |
|         | 33472   |         |                                |  |
|         |   |         | 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        |  |
|         |   |         | DOCUMENT NUMBER                |  |
|         |   |         | SD-33472-0001                  |  |
|         |   |         | DOC TYPE   DOC PART   REVISION |  |
|         |   |         | PSD   001   C2                 |  |
|         |   |         | PRODUCT CUSTOMER DRAWING       |  |
|         |   |         | MATERIAL NUMBER                |  |
|         |   |         | CUSTOMER                       |  |
|         |   |         | GENERAL MARKET                 |  |
|         |   |         | SHEET NUMBER                   |  |
|         |   |         | 2 OF 11                        |  |

# molex

MX150 RCPT  
DUAL ROW SEALED ASSEMBLY MAT SEAL

PRODUCT CUSTOMER DRAWING

SD-33472-0001

PSD 001 C2

GENERAL MARKET 2 OF 11



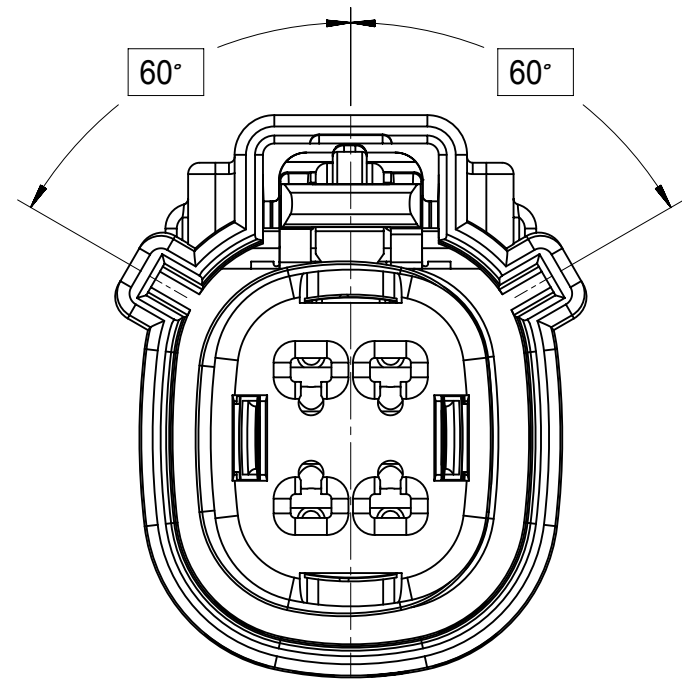
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KEY CONFIGURATIONS

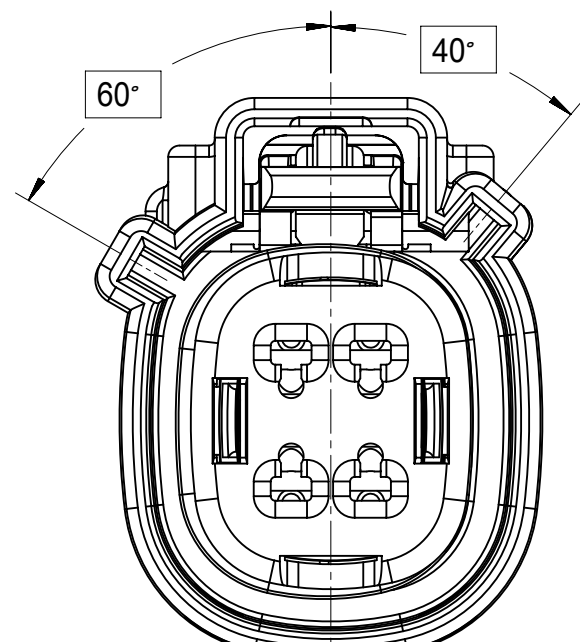
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2X3

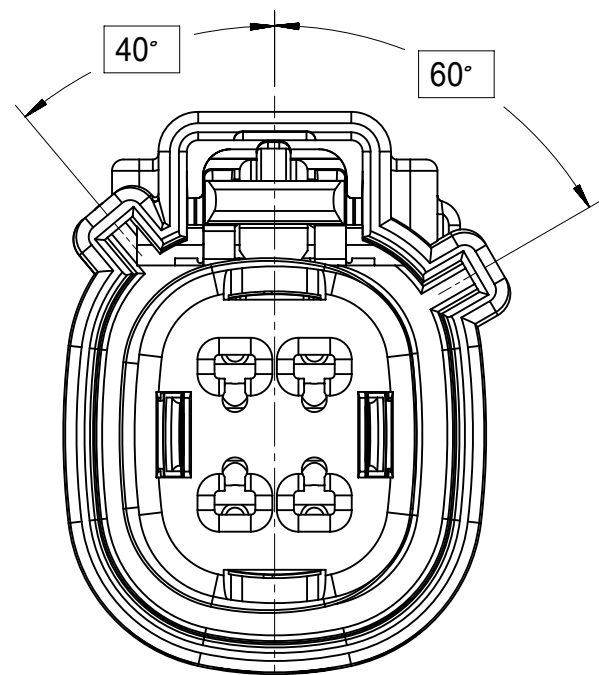
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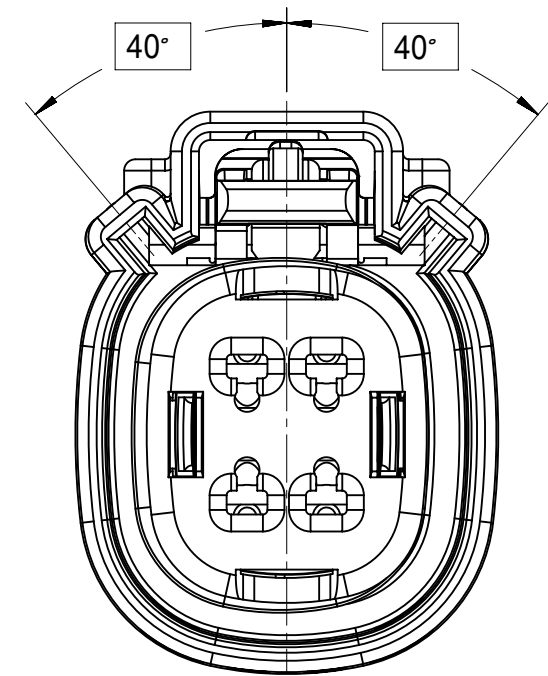
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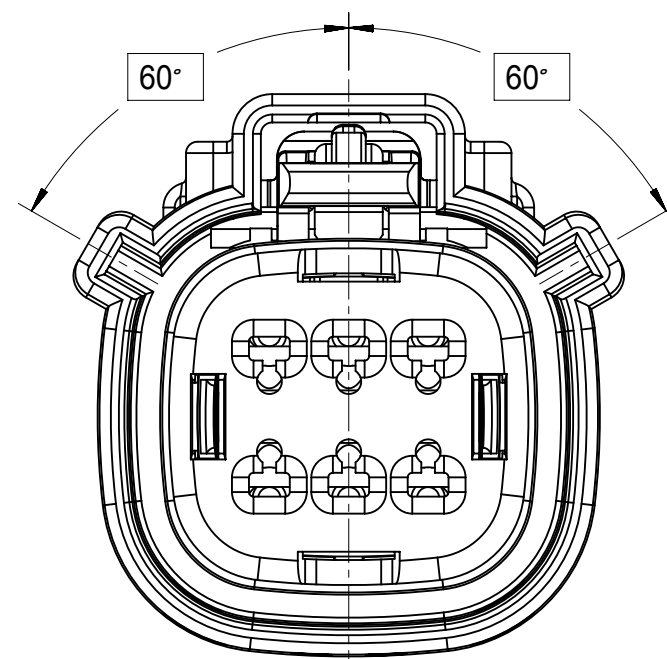
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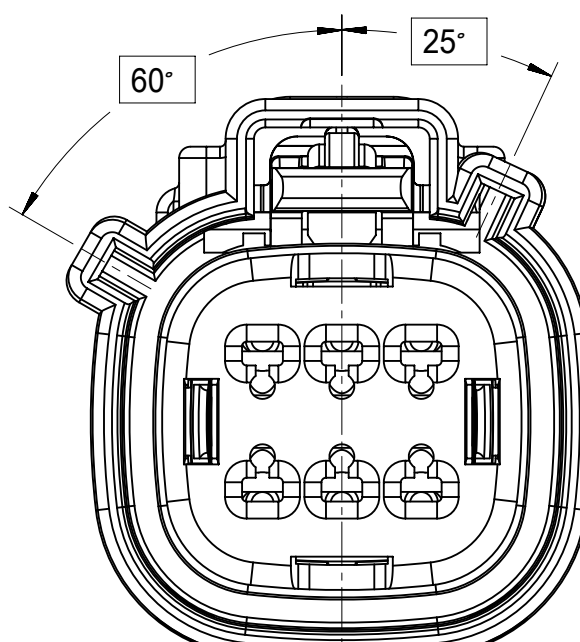
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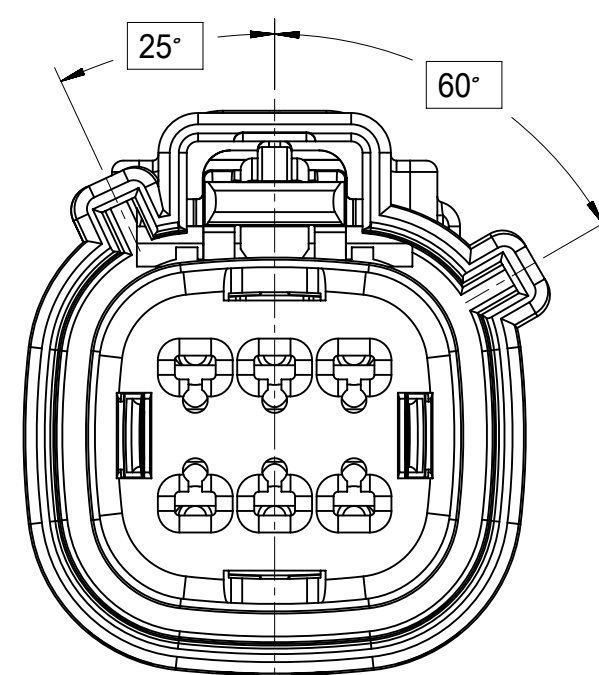
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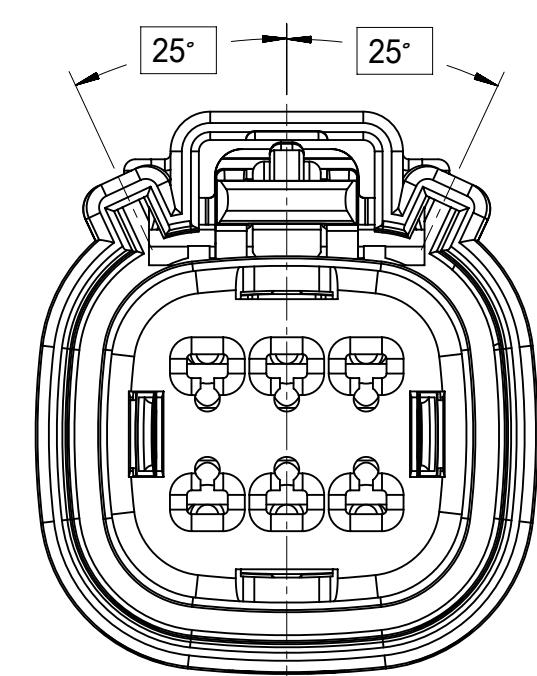
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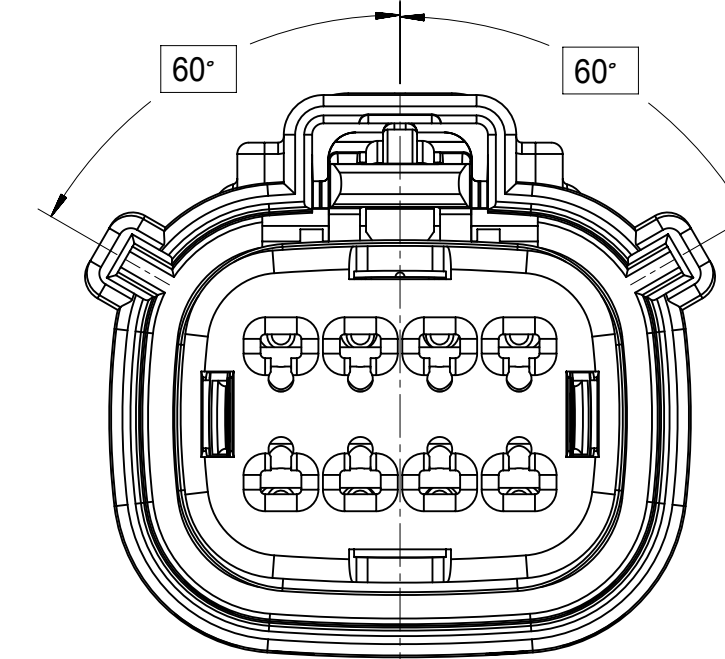
KEY B



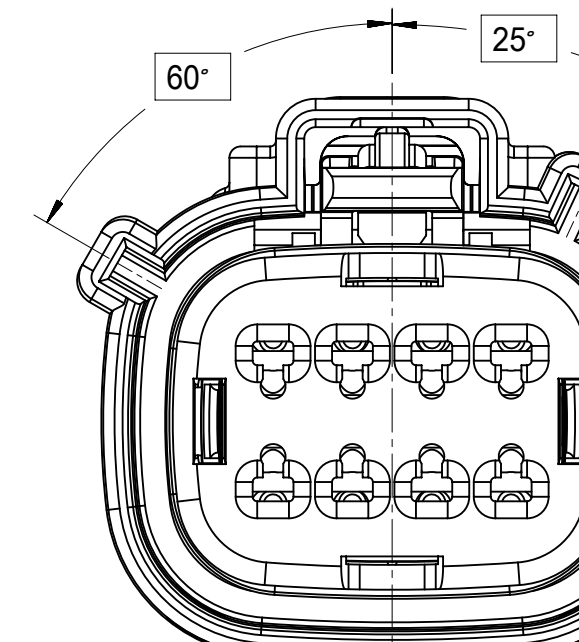
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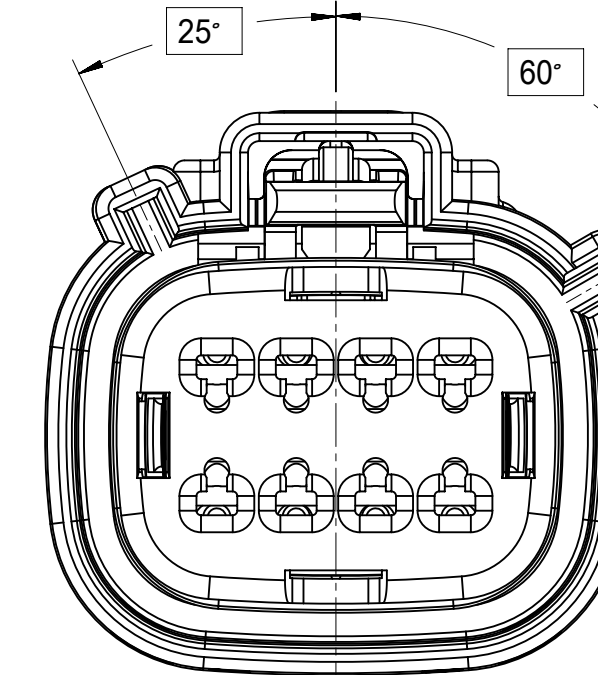
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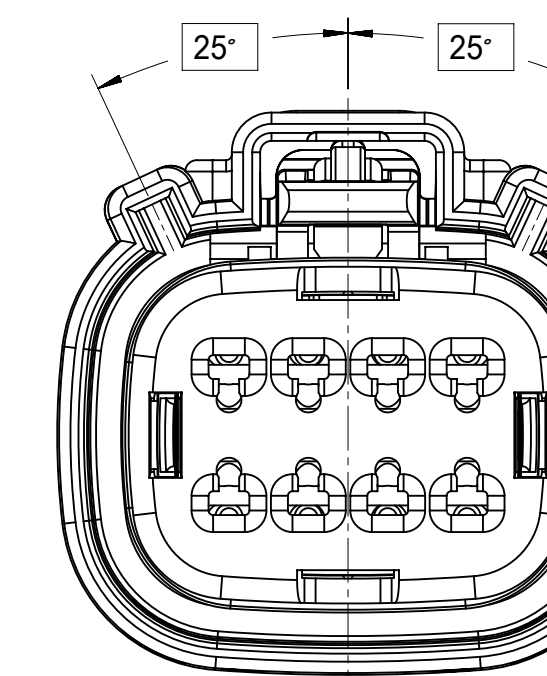
KEY A



KEY B



KEY C



KEY D

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



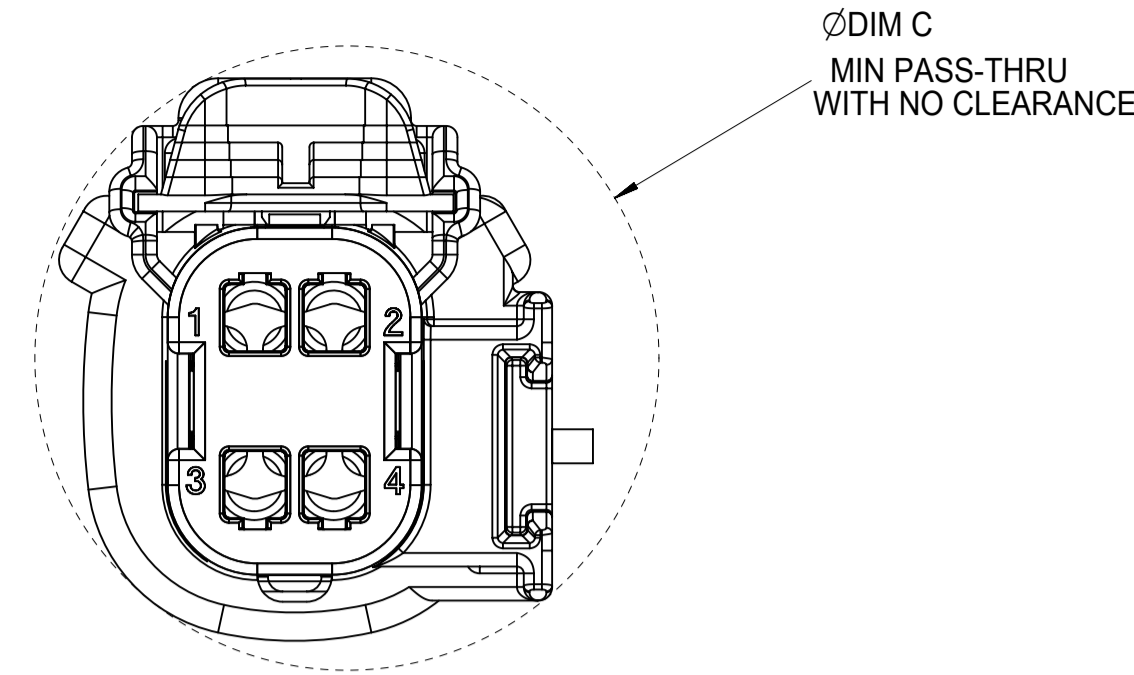
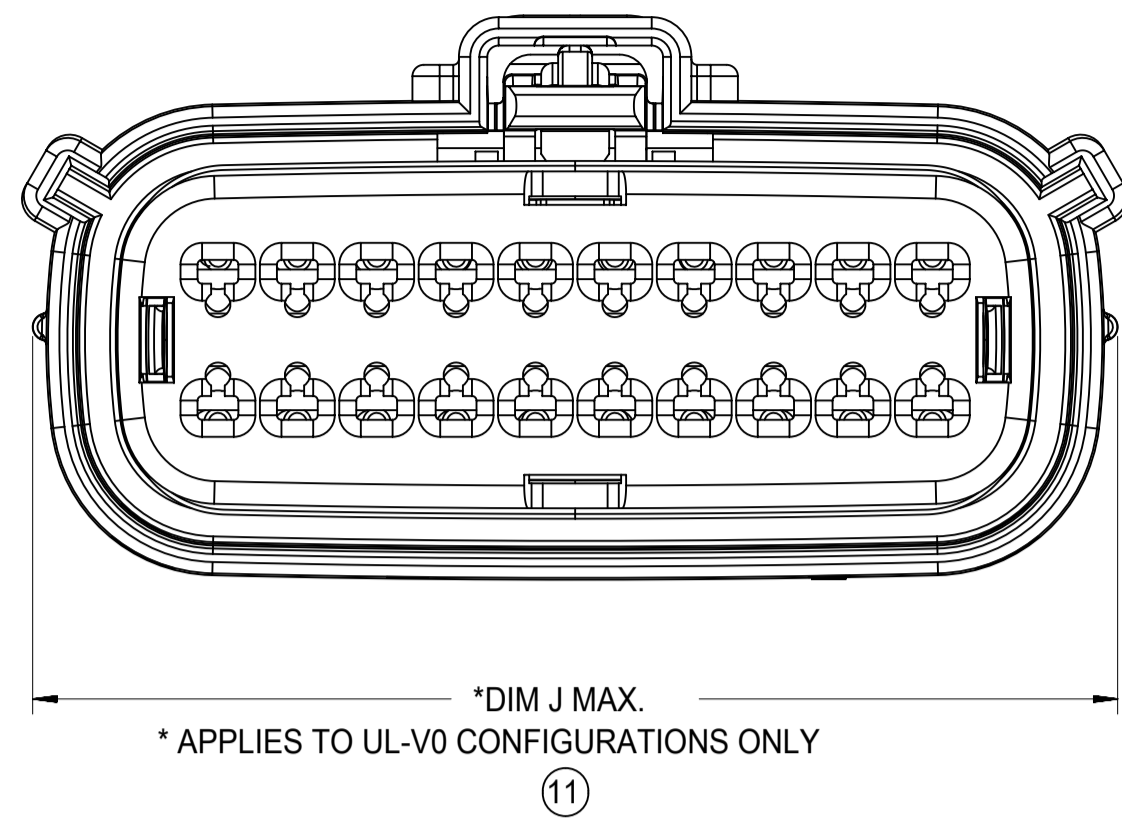


# SHEET DESCRIPTION

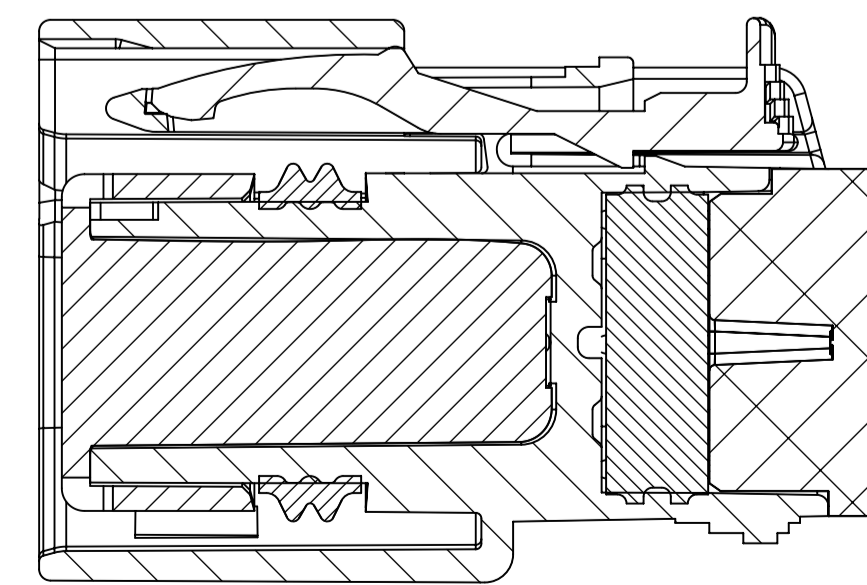
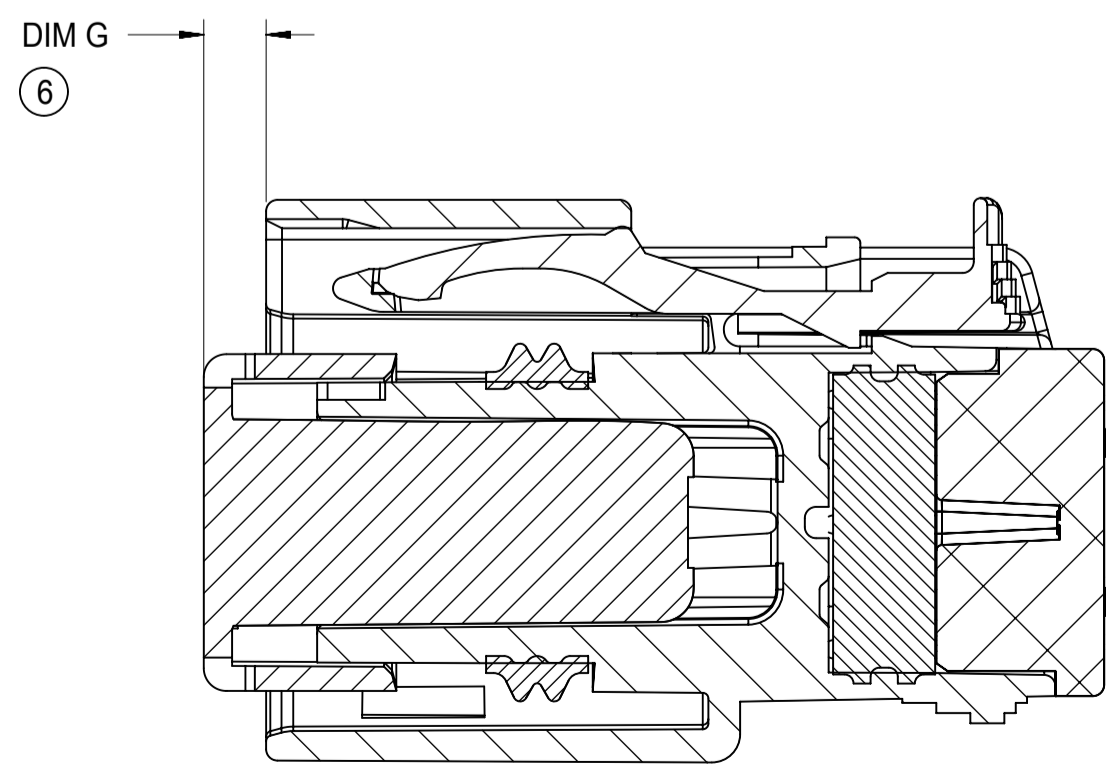
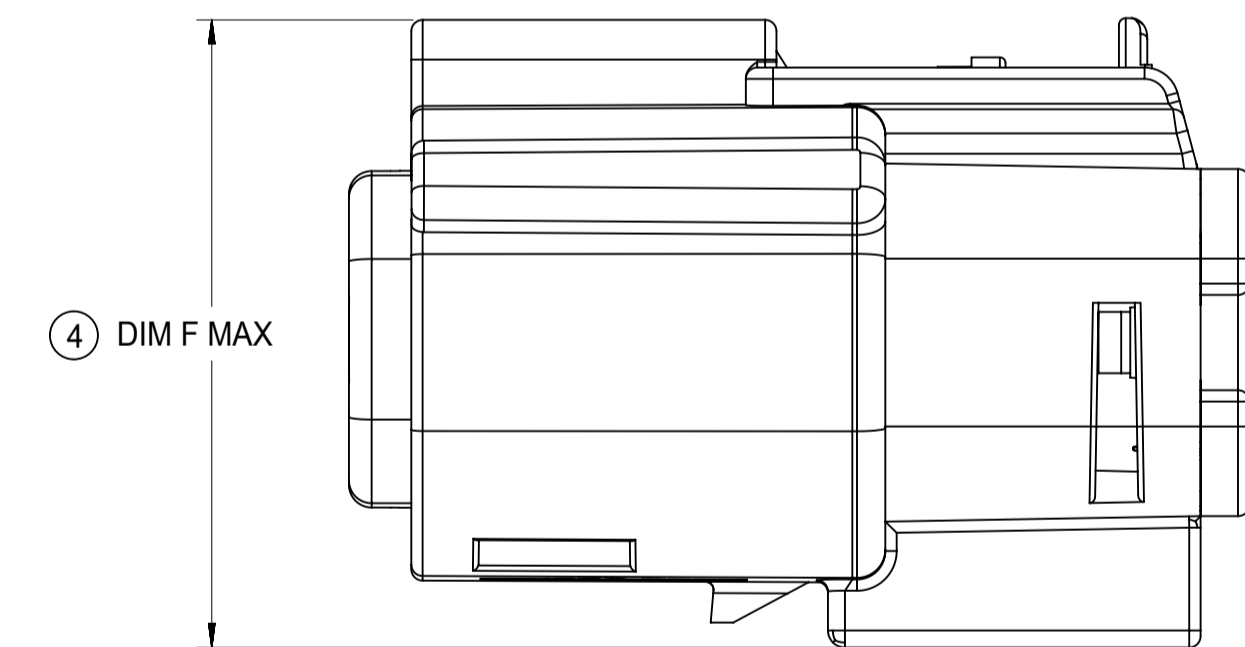
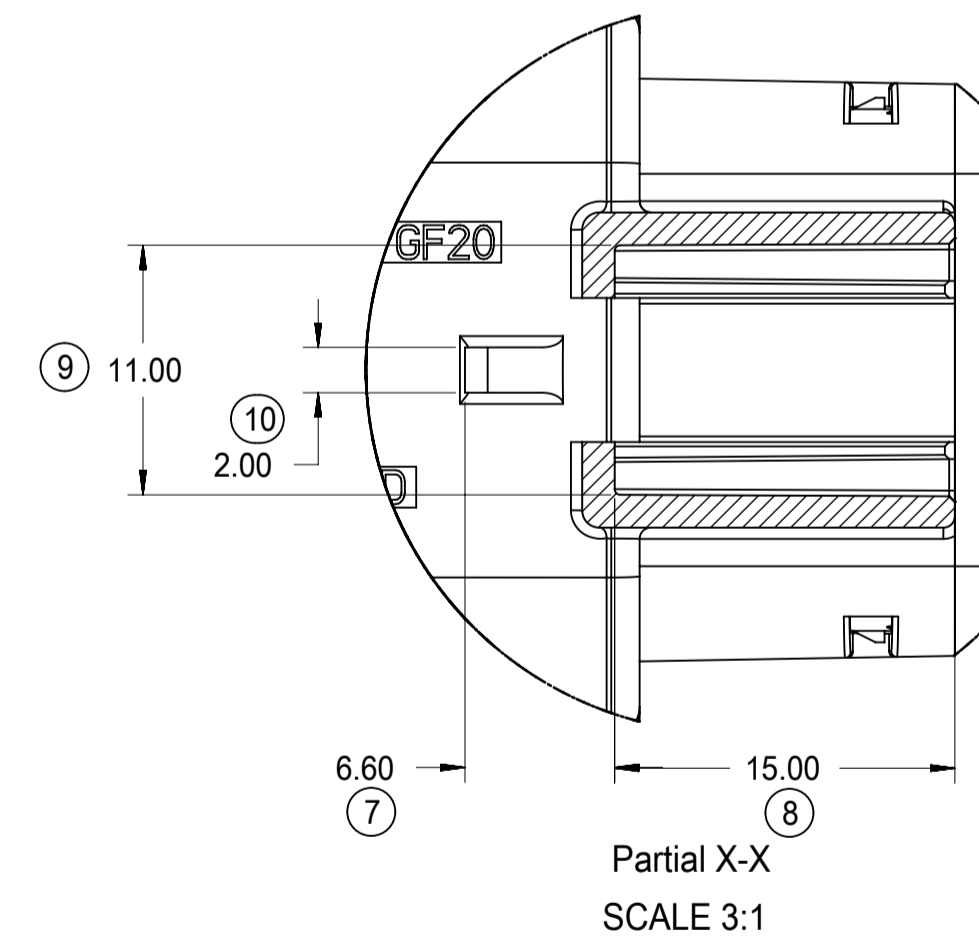
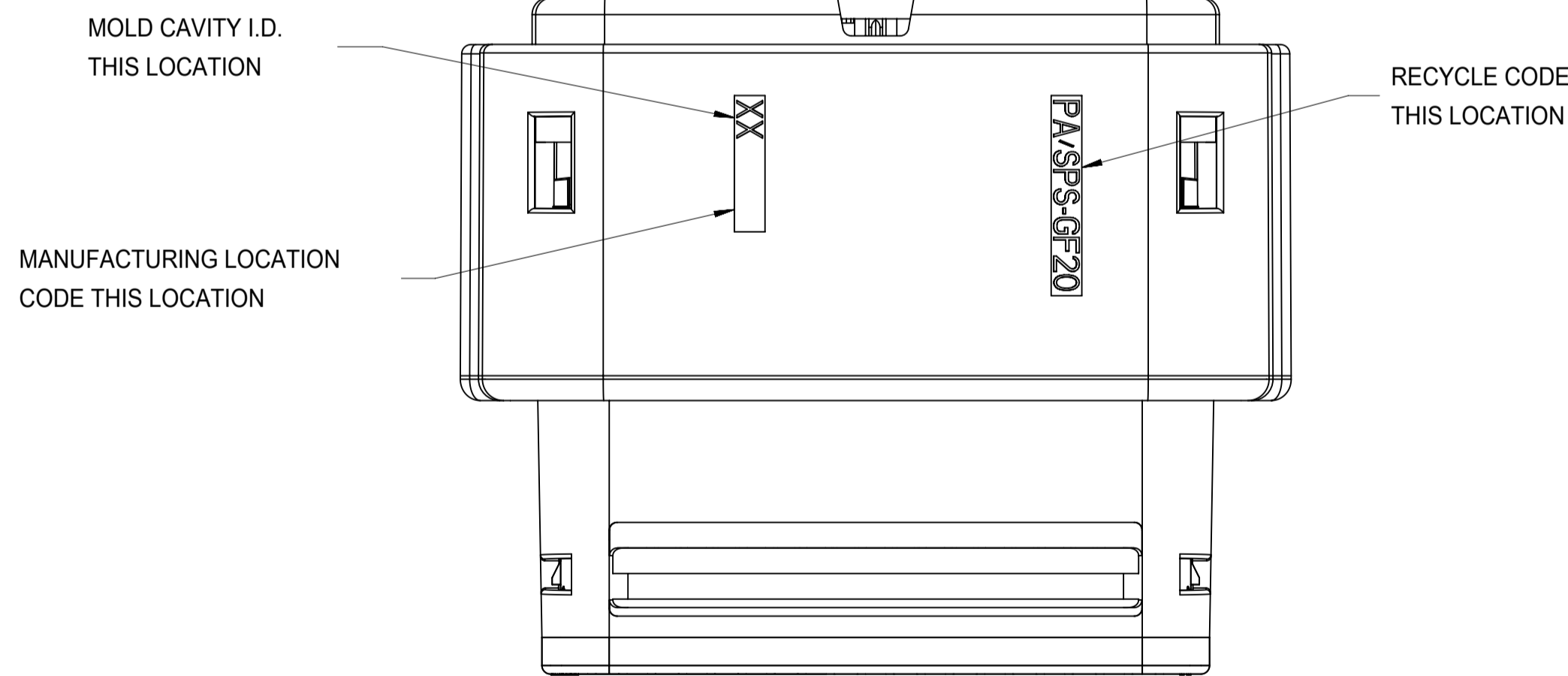
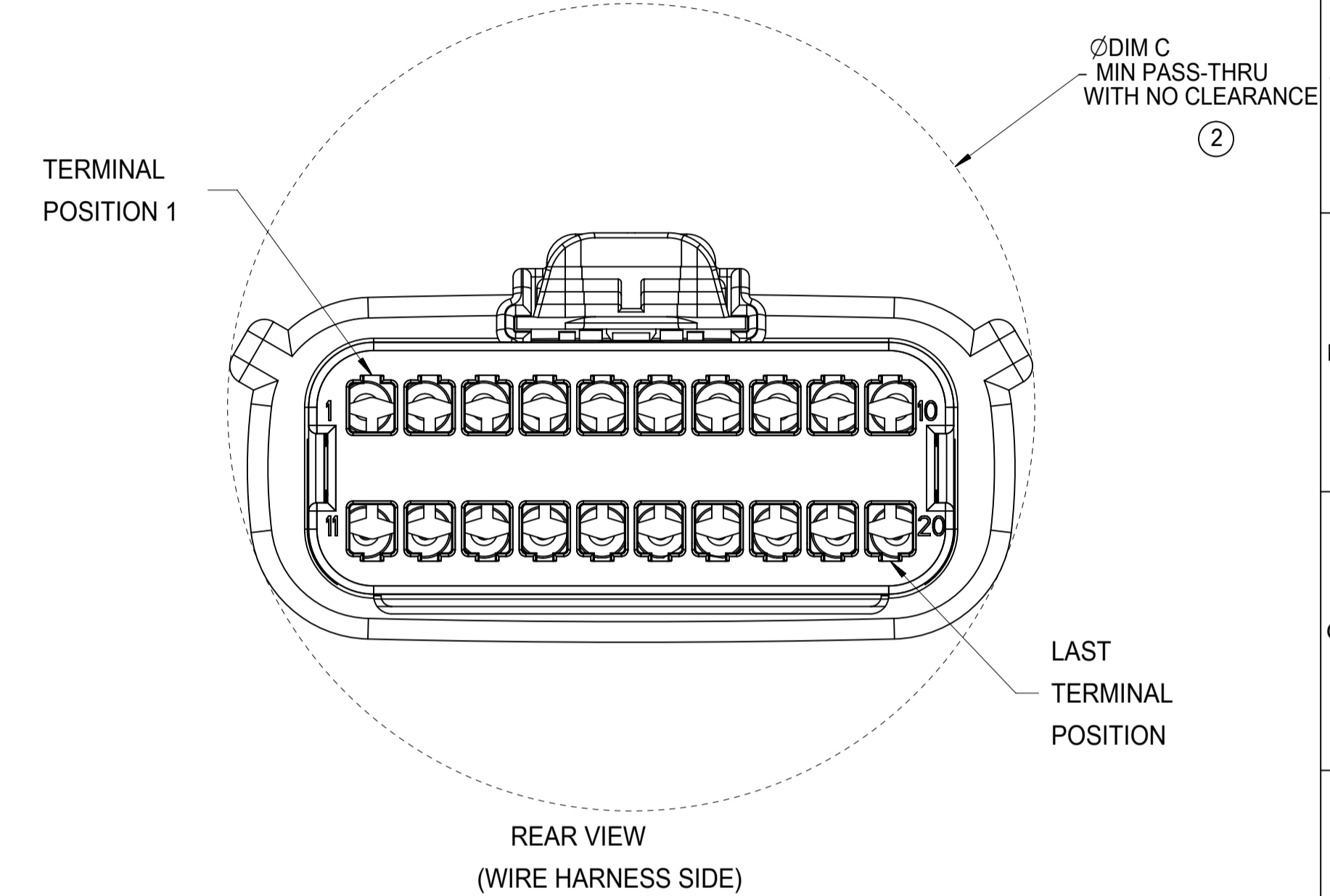
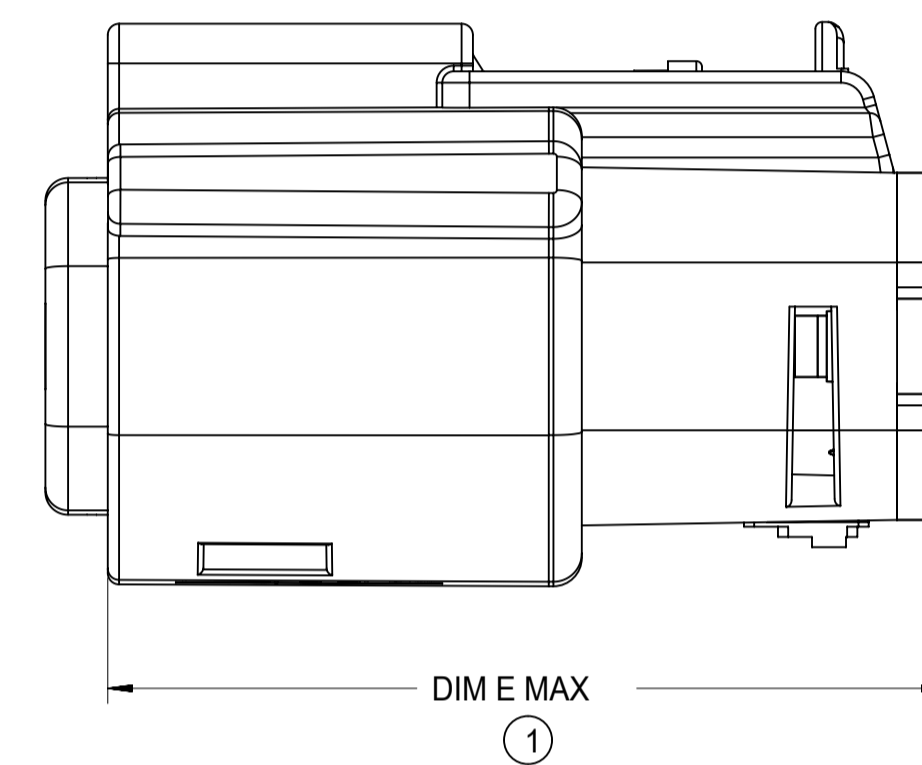
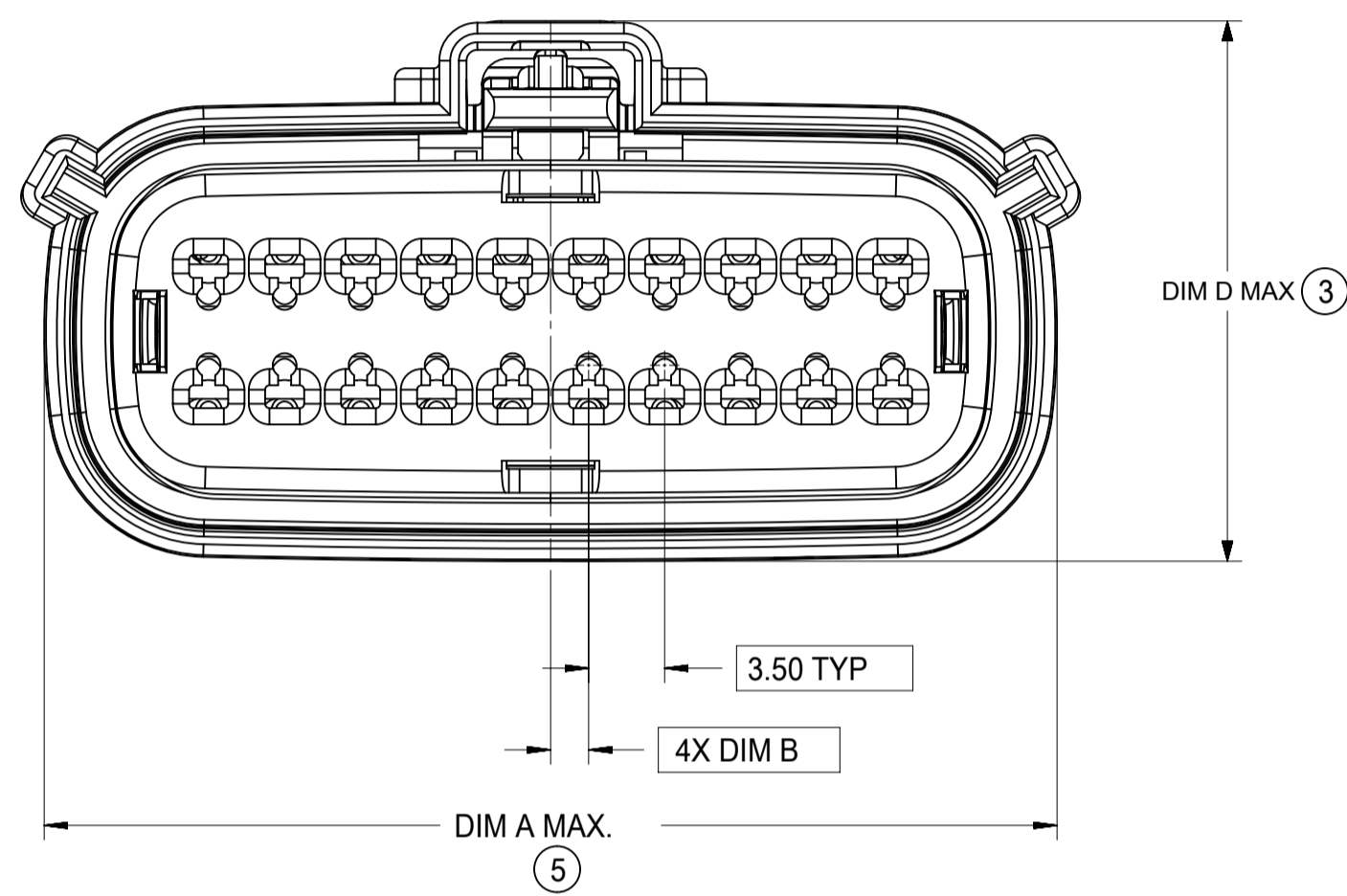
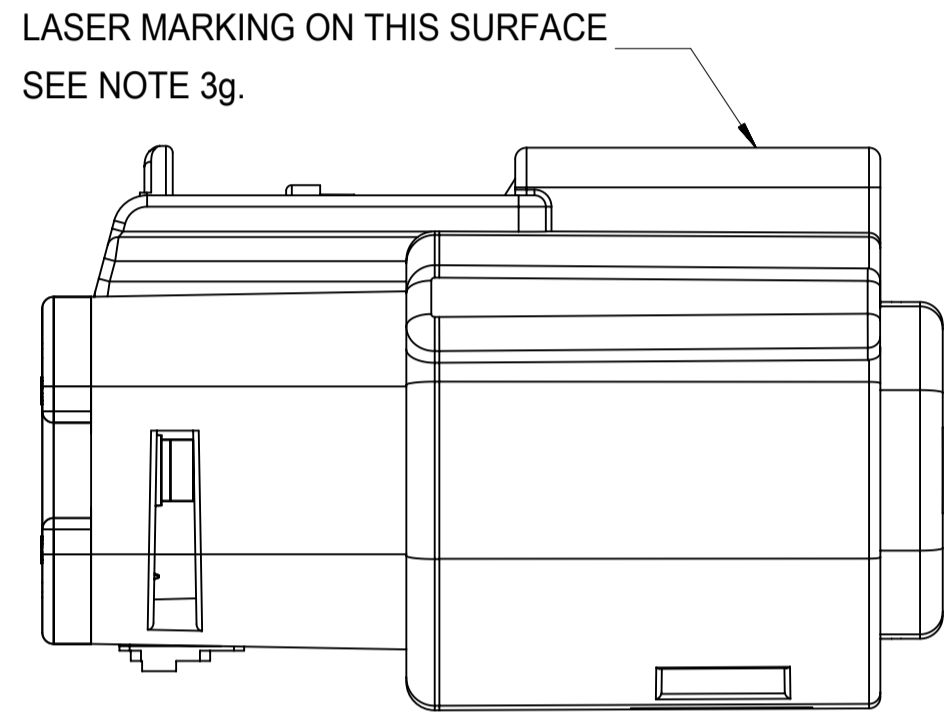
RECEPTACLE CONNECTOR ASSEMBLY

# 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



SECTION Y-Y

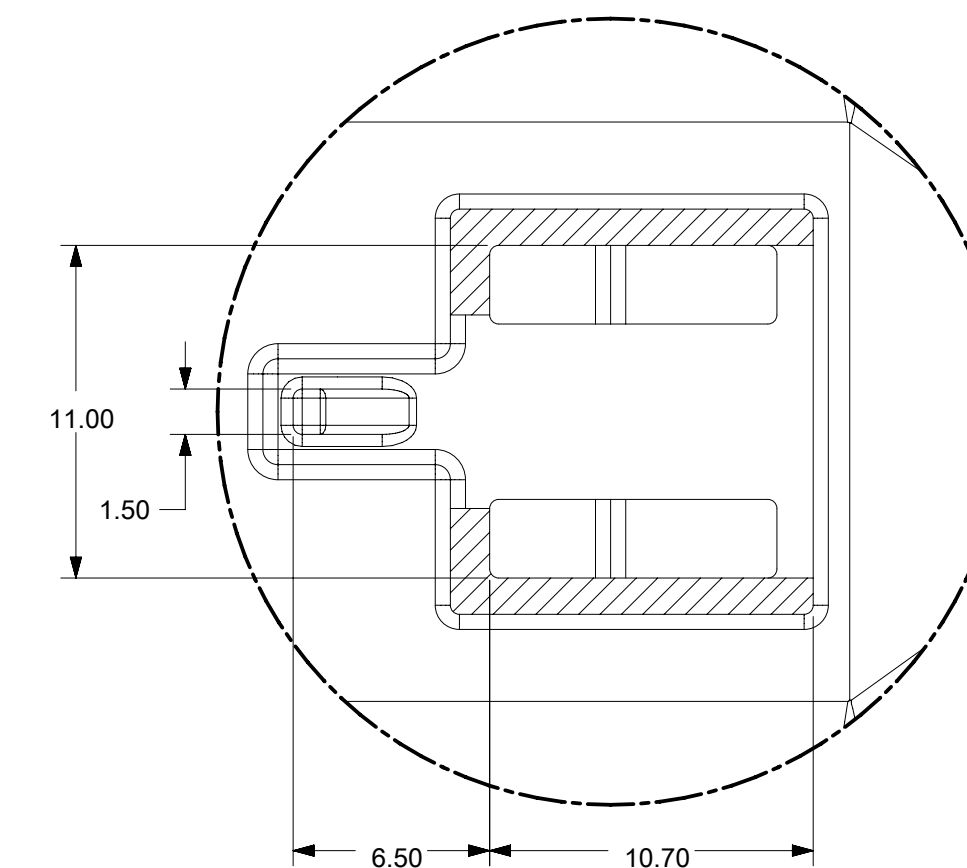
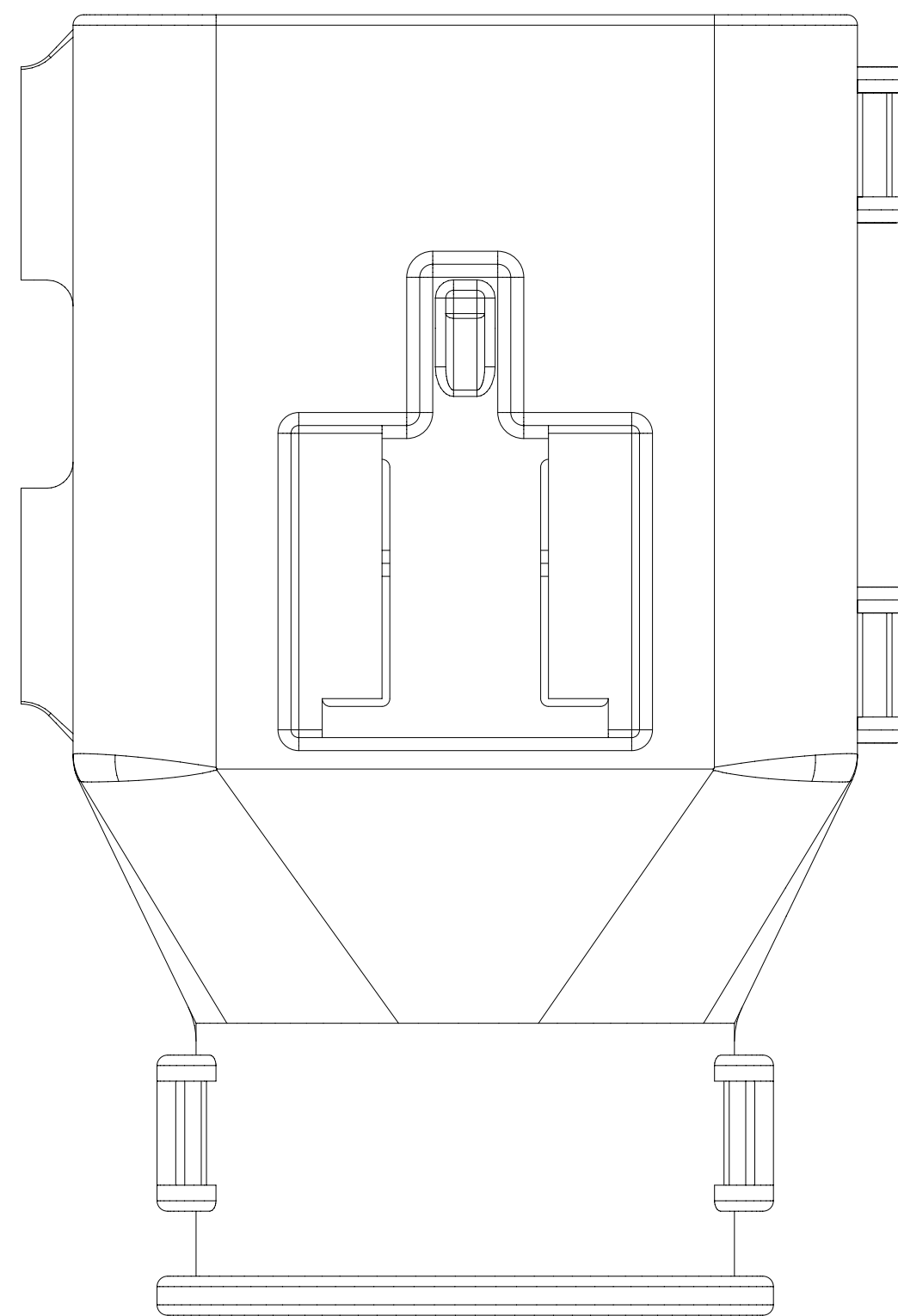
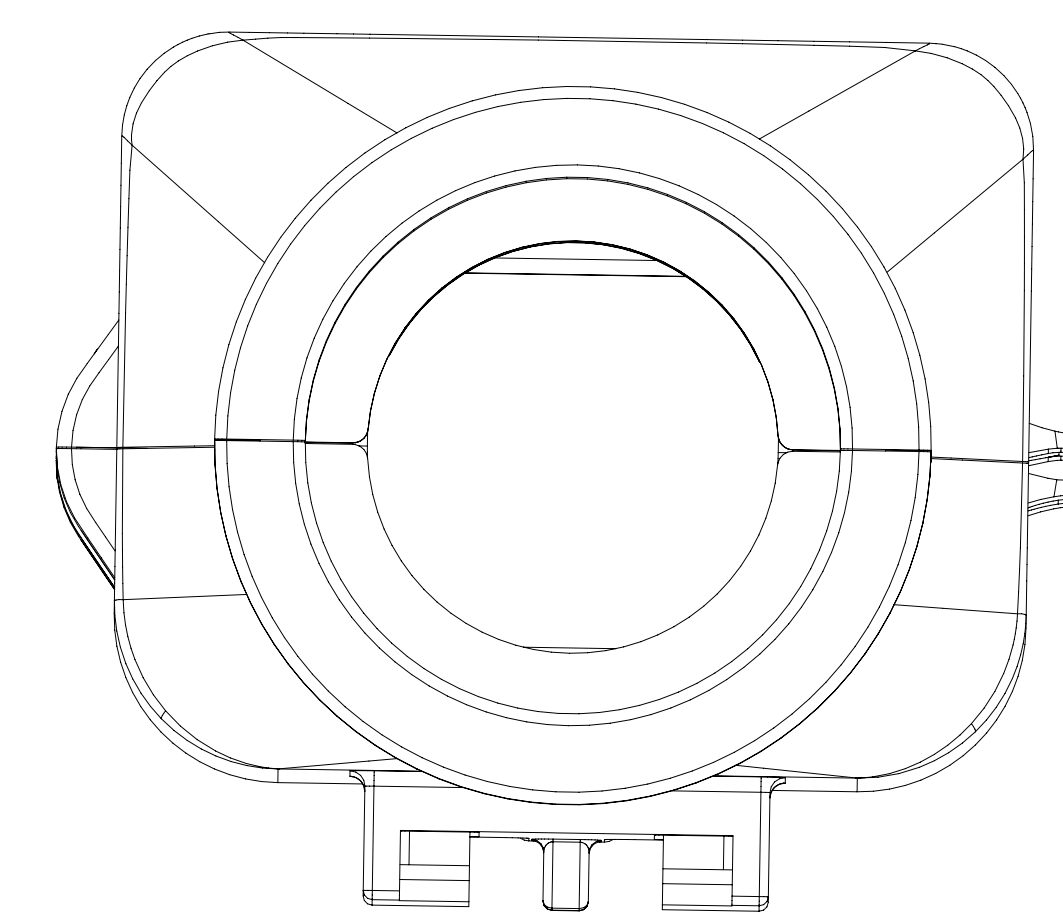
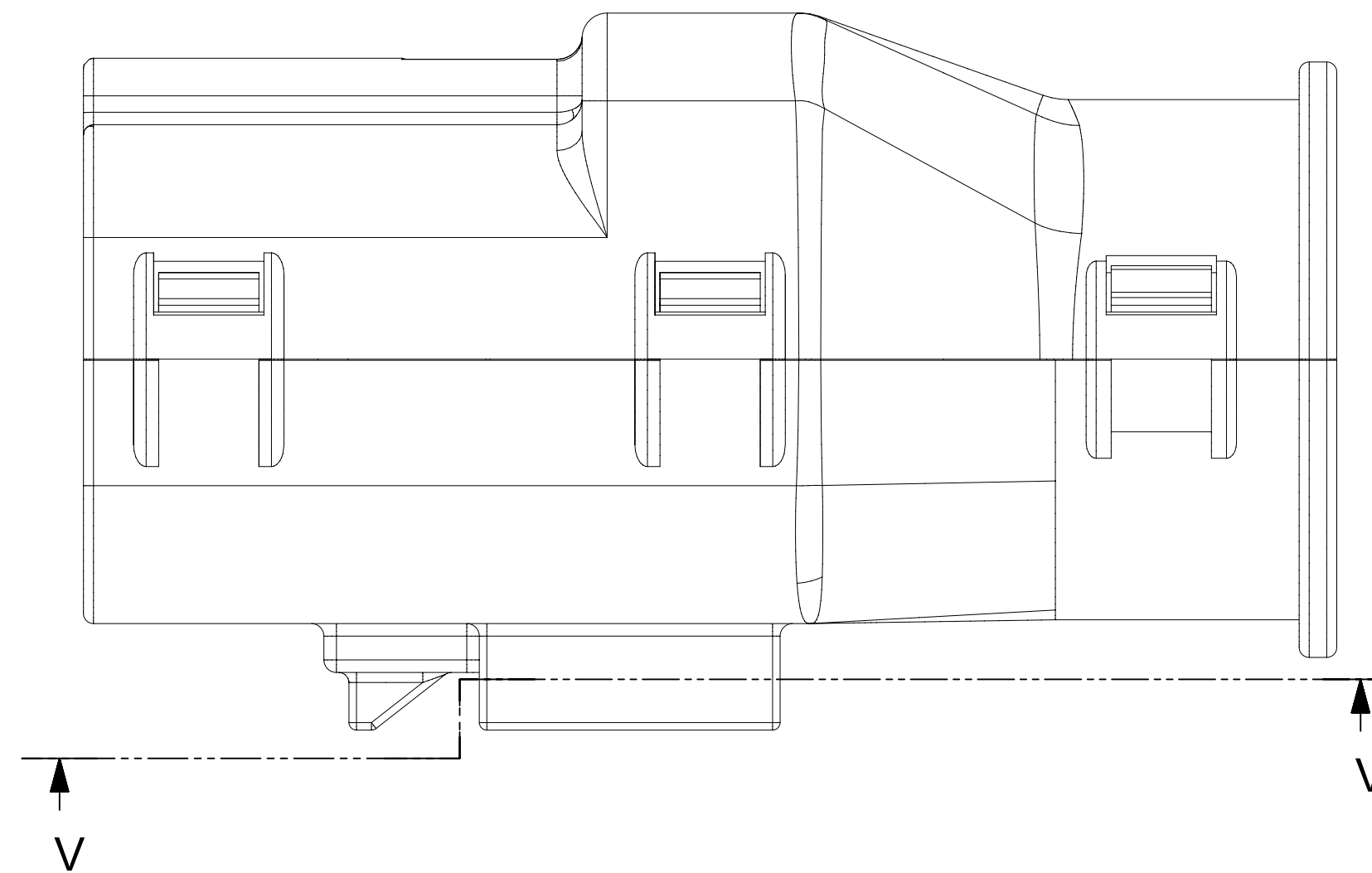
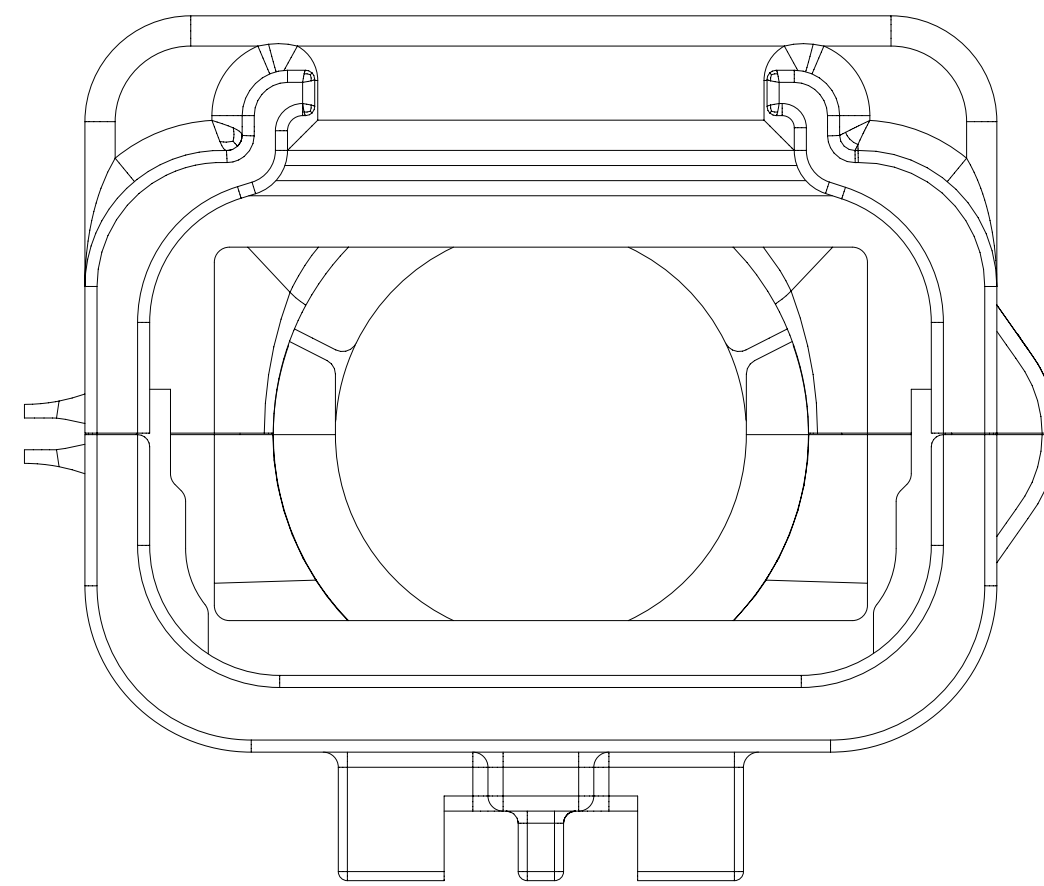
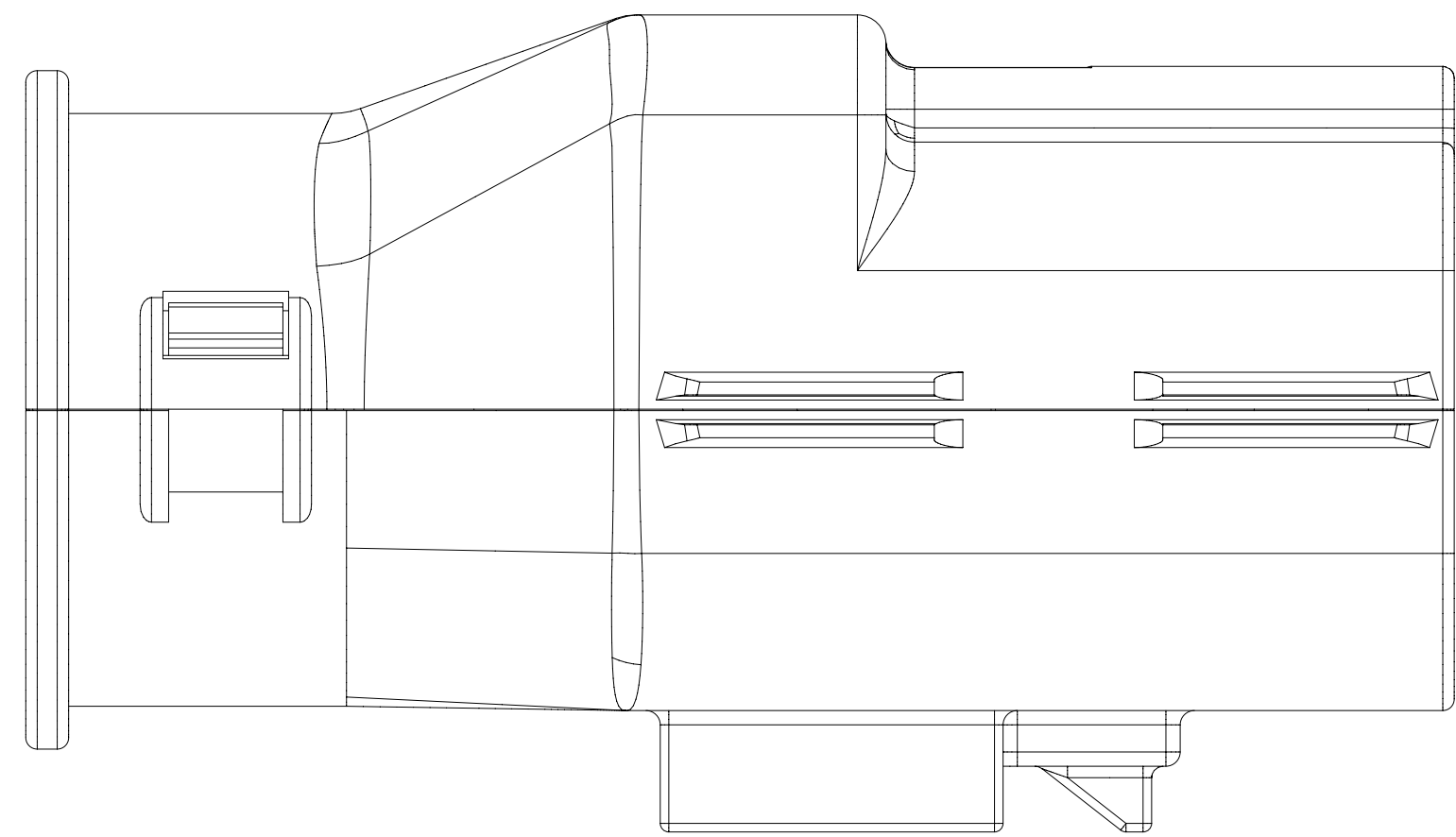
SECTION Z-Z

|         |   |       |                                |                |   |
|---------|---|-------|--------------------------------|----------------|---|
| 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 |                                |                |   |
| ▽ = 0   | mm  | 1:1   | EC NO: 171650                  |                | MX150 RCPT<br>DUAL ROW SEALED ASSEMBLY MAT SEAL |
| ▽ = 0   | GENERAL TOLERANCES (UNLESS SPECIFIED)   |       | DRWN: DDEB 2018/01/19          |                |   |
| ▽ = 0   | ANGULAR TOL ± 1.0°  |       | CHK'D: MVANSLAMBROU 2018/02/16 |                |   |
| ▽ = 0   | 4 PLACES ±  |       | APPR: MVANSLAMBROU 2018/02/16  |                |   |
| ▽ = 0   | 3 PLACES ±  |       | INITIAL REVISION:              |                |   |
| ▽ = 0   | 2 PLACES ± 0.1  |       | DRWN: APROFFITT 2014/05/14     |                |   |
| ▽ = 0   | 1 PLACE ± 0.2   |       | APPR: VKOSHY 2014/06/27        |                |   |
| ▽ = 0   | 0 PLACES ±  |       | THIRD ANGLE PROJECTION         |                |   |
| ▽ = 0   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |       | DRAWING                        | SERIES         | DOCUMENT NUMBER                                 |
| ▽ = 0   |   |       | A1-SIZE                        | 33472          | SD-33472-0001                                   |
|         |   |       | MATERIAL NUMBER                | CUSTOMER       | DOC TYPE   DOC PART   REVISION                  |
|         |   |       |                                | GENERAL MARKET | PSD 001 C2                                      |
|         |   |       |                                |                | SHEET NUMBER                                    |
|         |   |       |                                |                | 5 OF 11   |





**SHEET DESCRIPTION**  
SCHLEMMER BACKSHELL



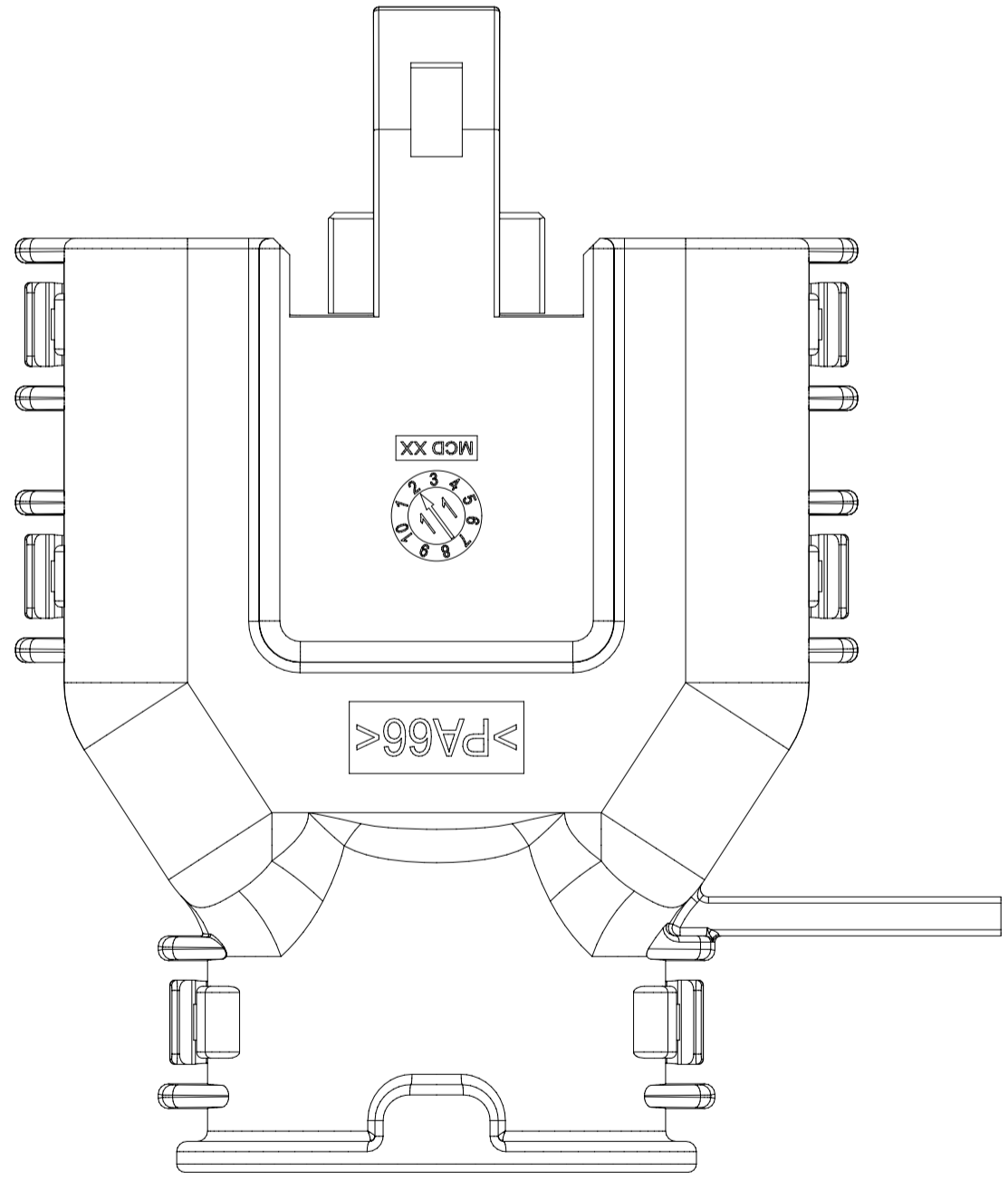
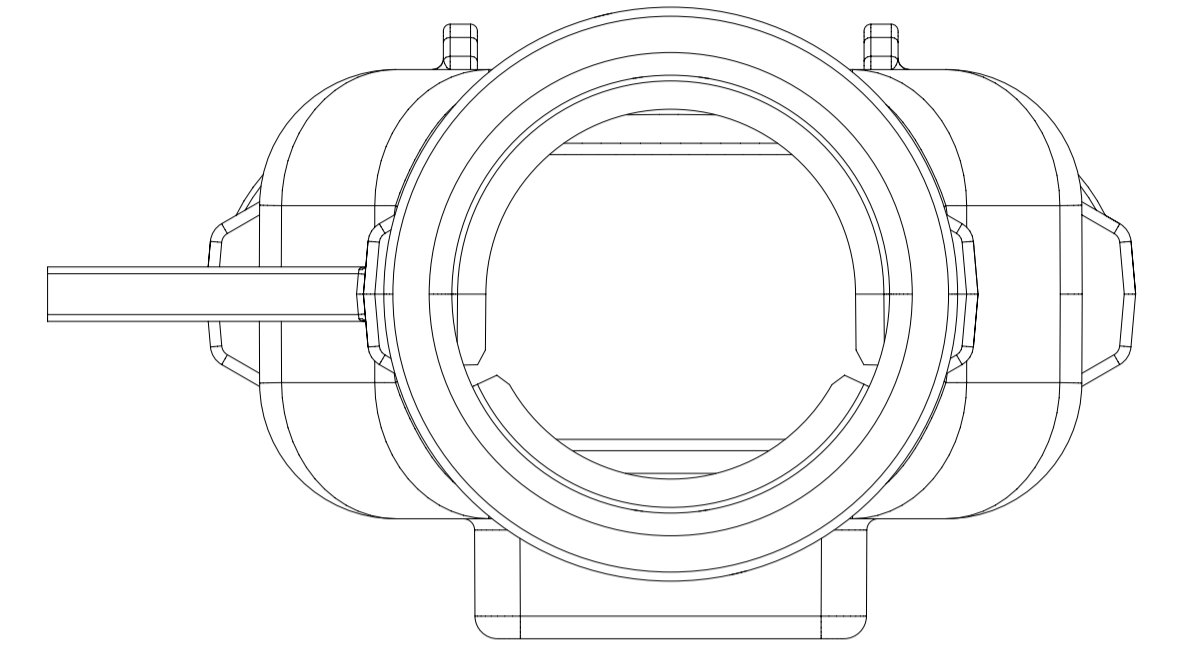
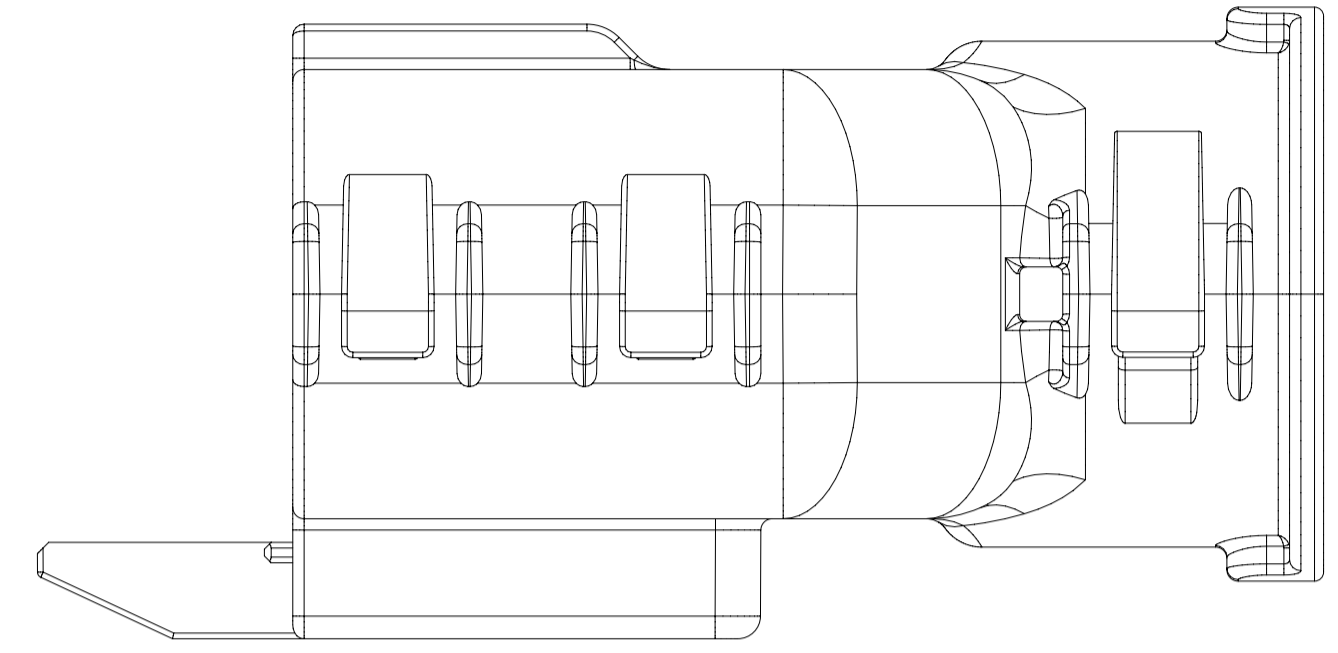
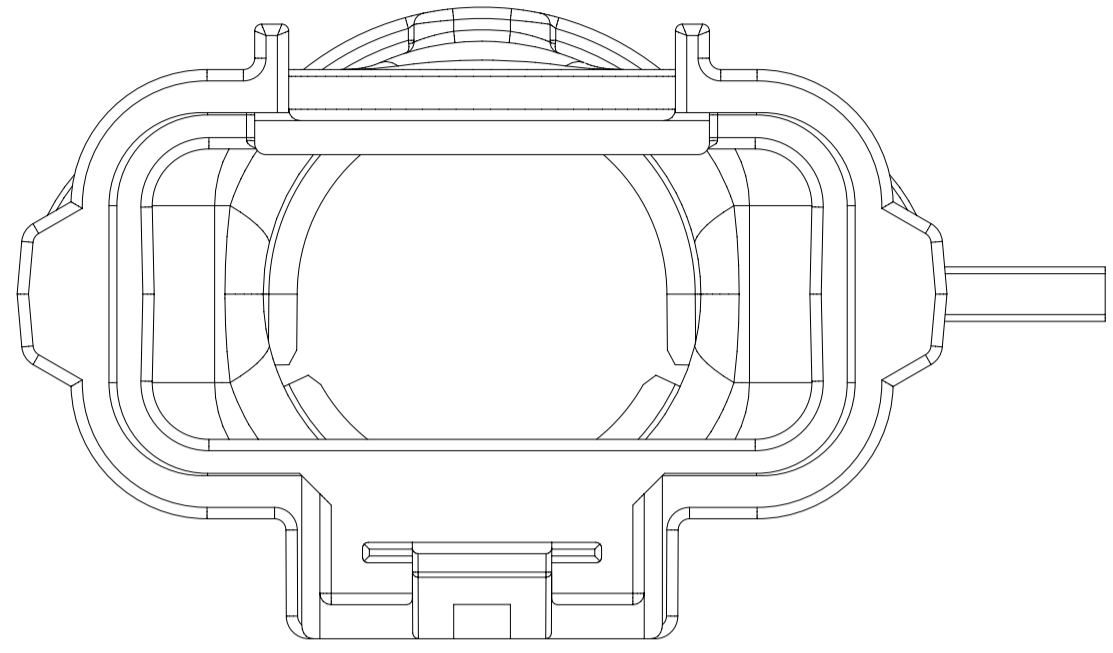
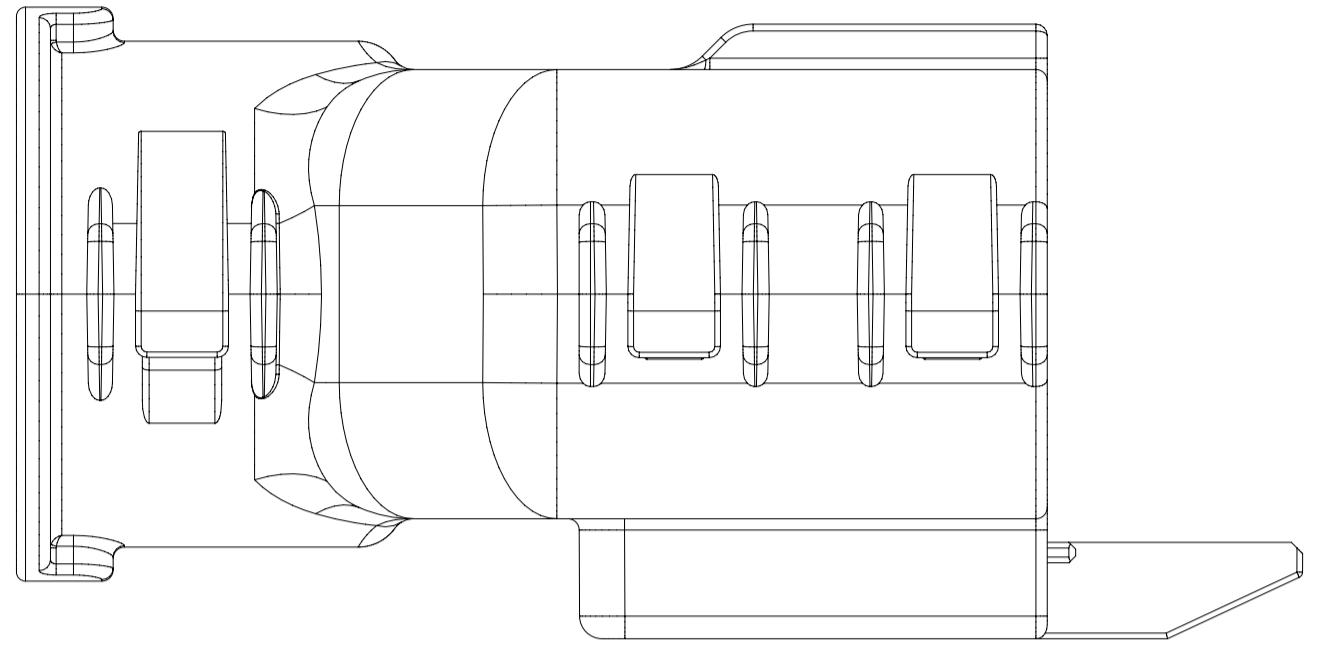
Partial V-V  
SCALE 4:1

|  |  |  |  |   |  |
|--|--|--|--|---|--|
| <b>SYMBOLS</b><br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION<br>DIMENSION UNITS: <b>mm</b><br>SCALE: <b>4:1</b> | CURRENT REV DESC:<br>EC NO: 171650<br>DRWN: DDEB 2018/01/19<br>CHK'D: MVANSLAMBROU 2018/02/16<br>APPR: MVANSLAMBROU 2018/02/16 | <br>MX150 RCPT<br>DUAL ROW SEALED ASSEMBLY MAT SEAL  |   |  |
|  | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>ANGULAR TOL ± 1.0°  | INITIAL REVISION:<br>DRWN: APROFFITT 2014/05/14<br>APPR: VKOSHY 2014/06/27   | PRODUCT CUSTOMER DRAWING   |   |  |
|  | 4 PLACES ±<br>3 PLACES ±<br>2 PLACES ± 0.1<br>1 PLACE ± 0.2<br>0 PLACES ±  | MATERIAL NUMBER: <b>SD-33472-0001</b><br>SERIES: <b>33472</b>  | DOCUMENT NUMBER: <b>SD-33472-0001</b><br>DOC TYPE: <b>PSD</b><br>DOC PART: <b>001</b><br>REVISION: <b>C2</b> | CUSTOMER: <b>GENERAL MARKET</b><br>SHEET NUMBER: <b>7 OF 11</b> |  |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   | THIRD ANGLE PROJECTION<br>   | DRAWING: <b>A1-SIZE</b><br>SERIES: <b>33472</b>  |   |  |



18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

**SHEET DESCRIPTION**  
MOLEX BACKSHELL



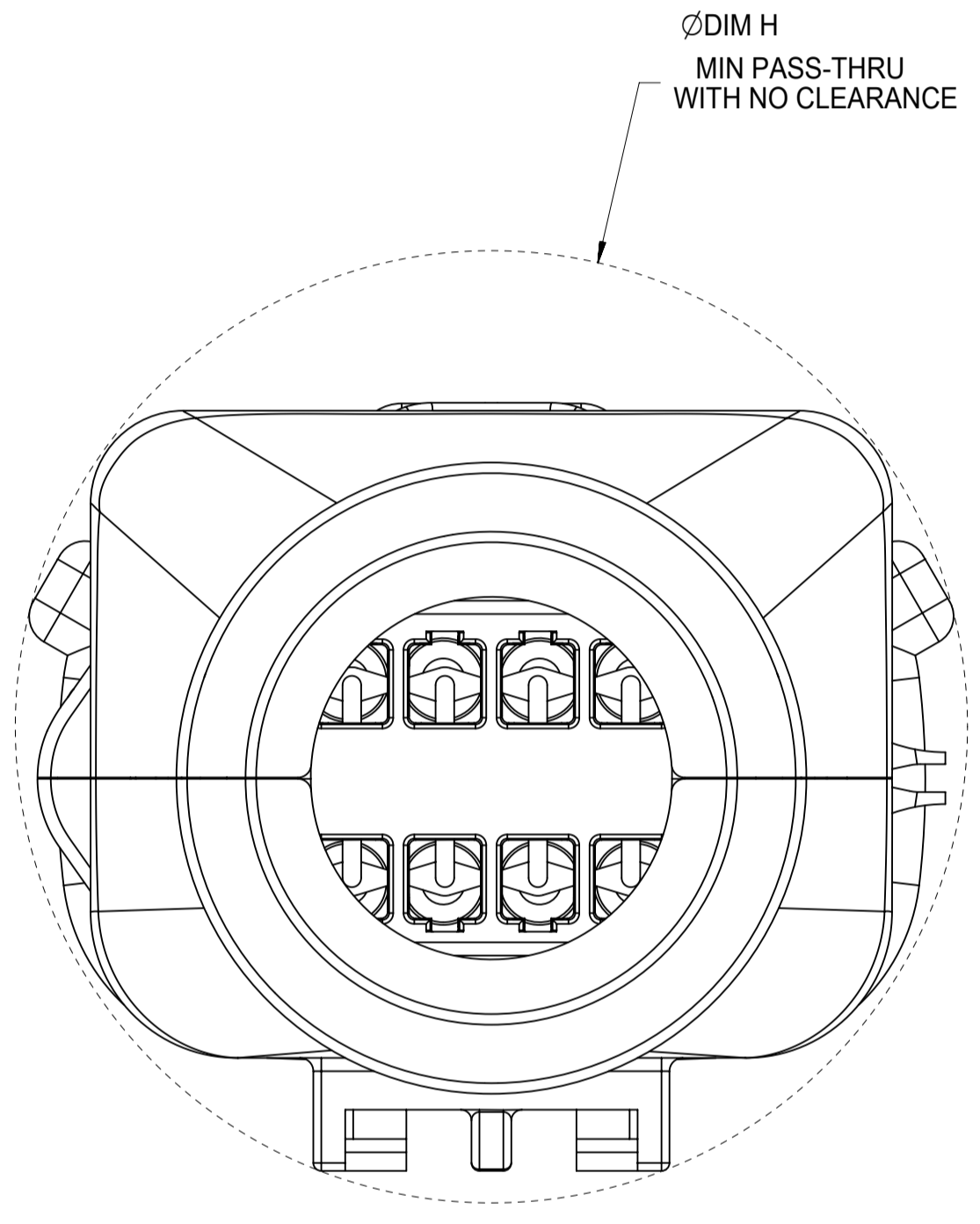
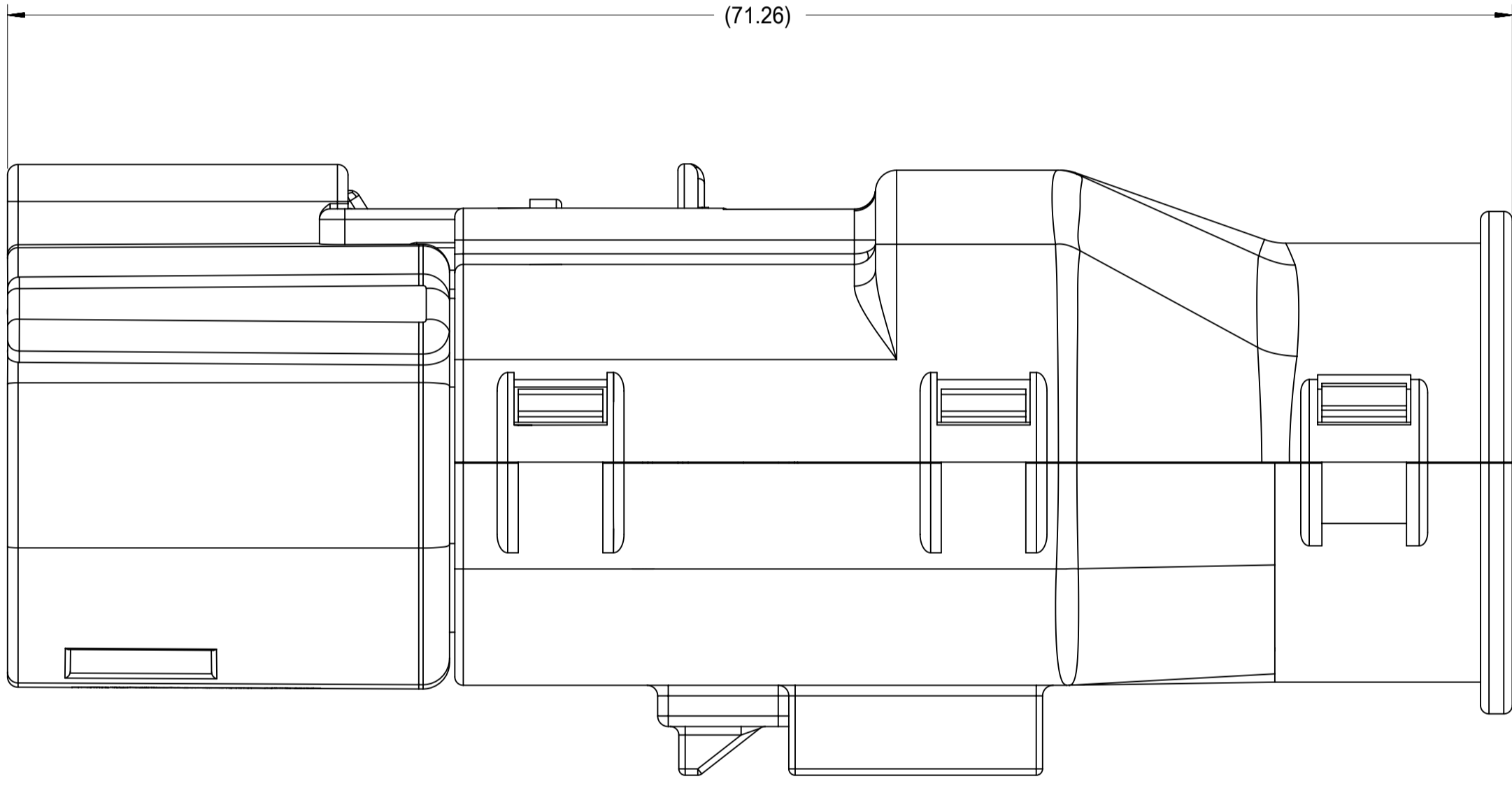
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| <b>SYMBOLS</b><br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                            |   |
|  | DIMENSION UNITS   | SCALE                      | <b>CURRENT REV DESC:</b><br><br>EC NO: 171650<br>DRWN: DDEB 2018/01/19<br>CHK'D: MVANSLAMBROU 2018/02/16<br>APPR: MVANSLAMBROU 2018/02/16<br><br>INITIAL REVISION:<br>DRWN: APROFFITT 2014/05/14<br>APPR: VKOSHY 2014/06/27 |
|  | mm  | 3:1                        |   |
|  | 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                                 |   | THIRD ANGLE PROJECTION<br> |   |
| DRAWING  |   | SERIES                     |   |
| A1-SIZE  |   | 33472                      |   |
| MATERIAL NUMBER  |   | CUSTOMER                   |   |
| SD-33472-0001  |   | GENERAL MARKET             |   |
| DOCUMENT NUMBER  |   | DOC TYPE                   |   |
| SD-33472-0001  |   | PSD                        |   |
| DOC PART   |   | REVISION                   |   |
| 001  |   | C2                         |   |
| SHEET NUMBER   |   |                            |   |
| 8 OF 11  |   |                            |   |

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

18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

| SHEET DESCRIPTION                  |  |  |  |
|------------------------------------|--|--|--|
| SCHLEMMER BACKSHELL CONFIGURATIONS |  |  |  |

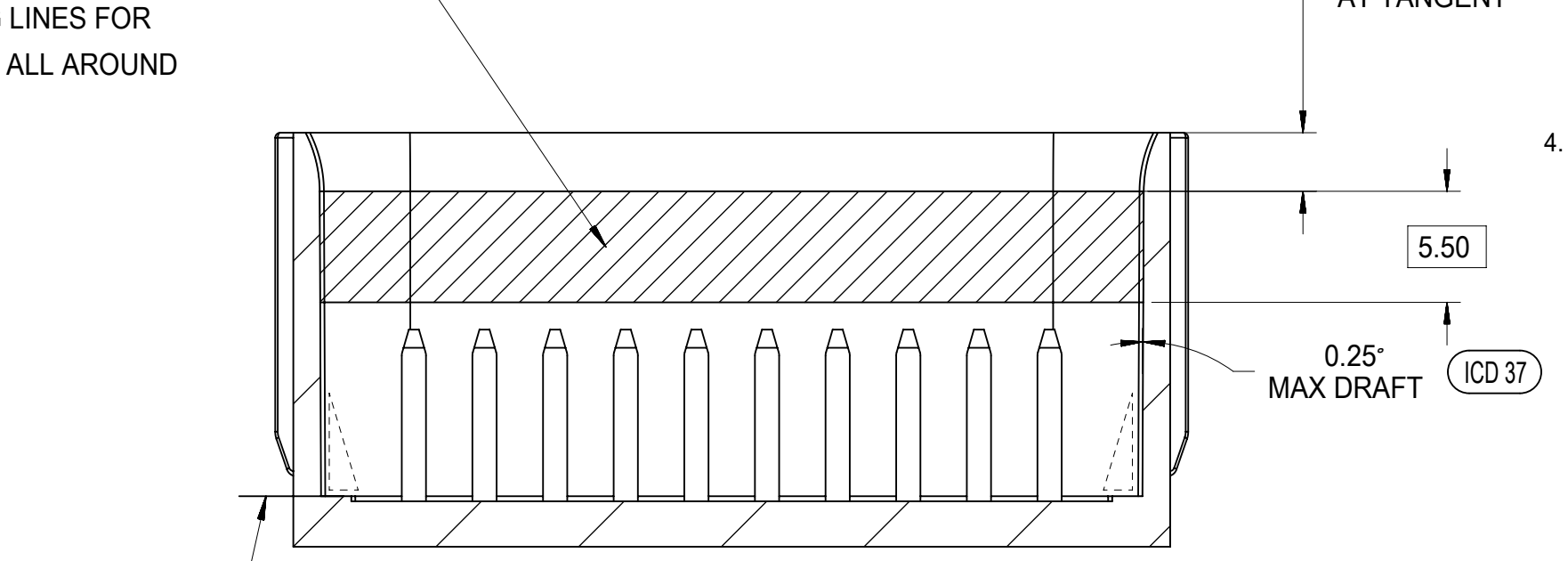
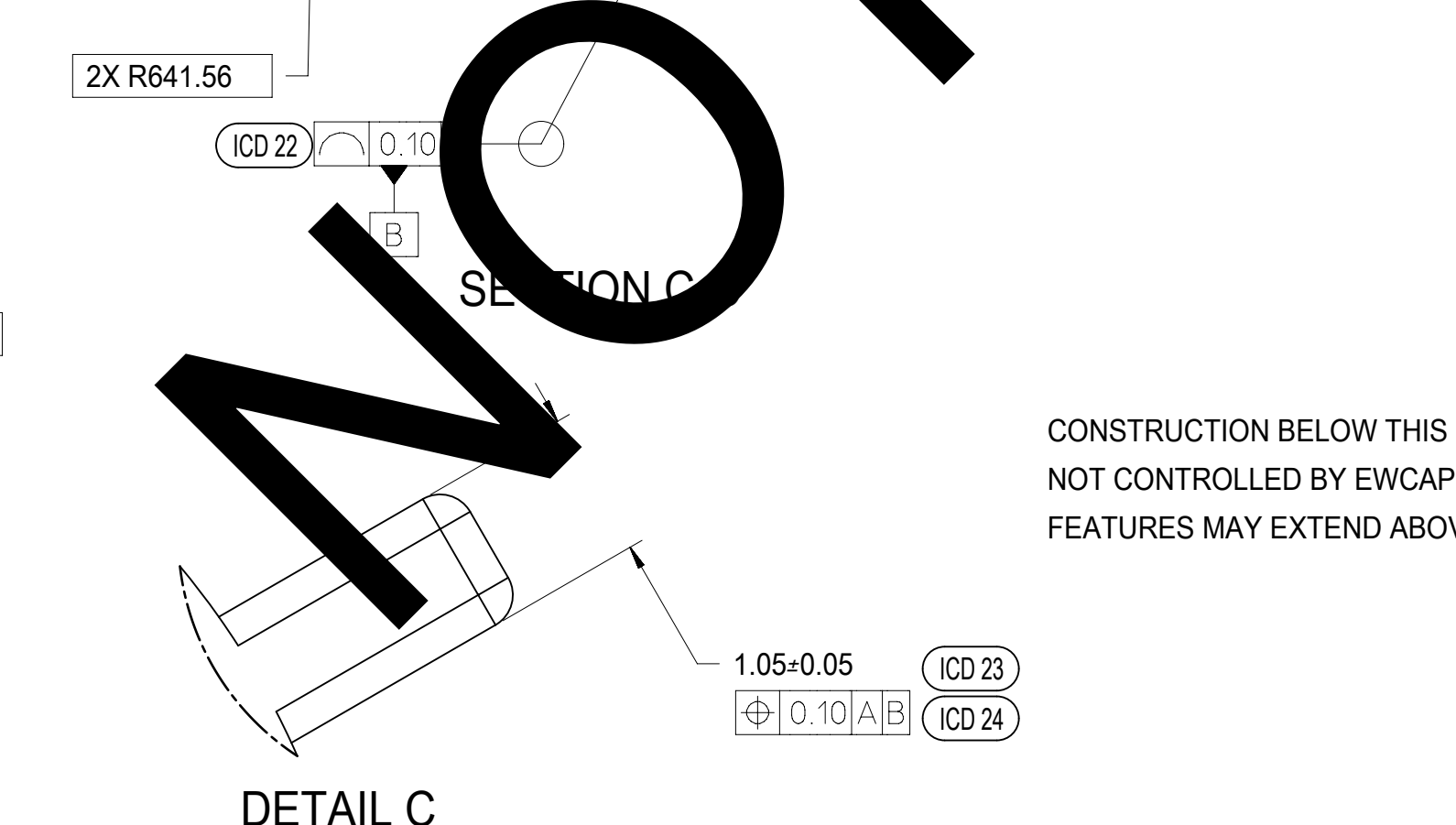
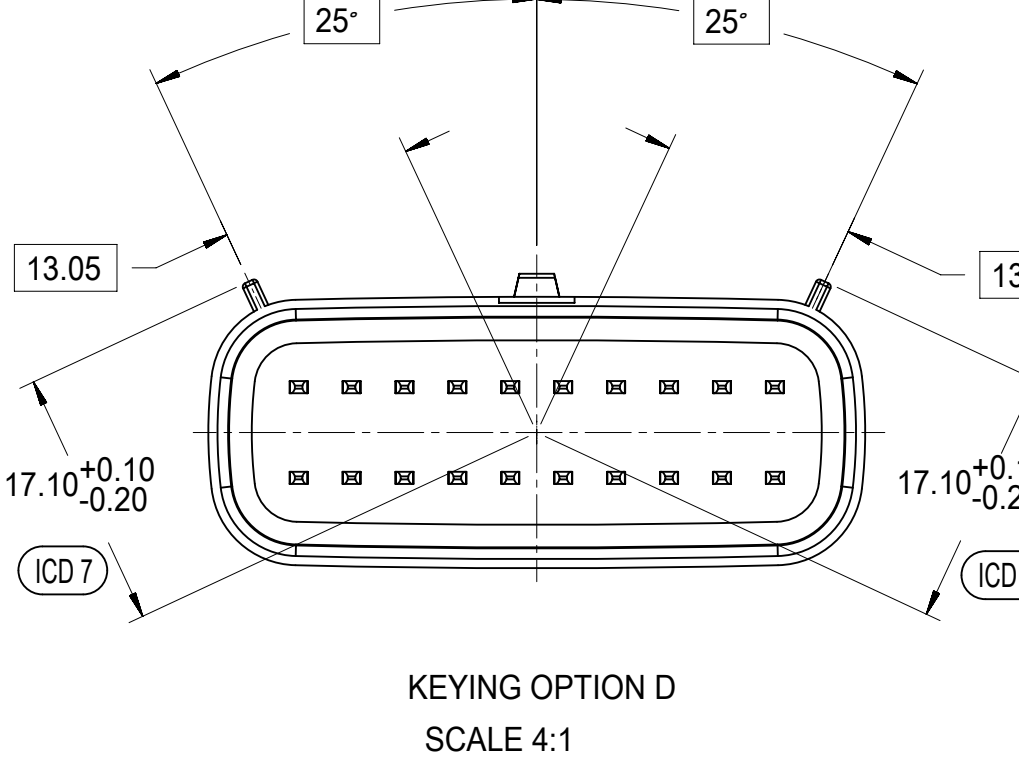
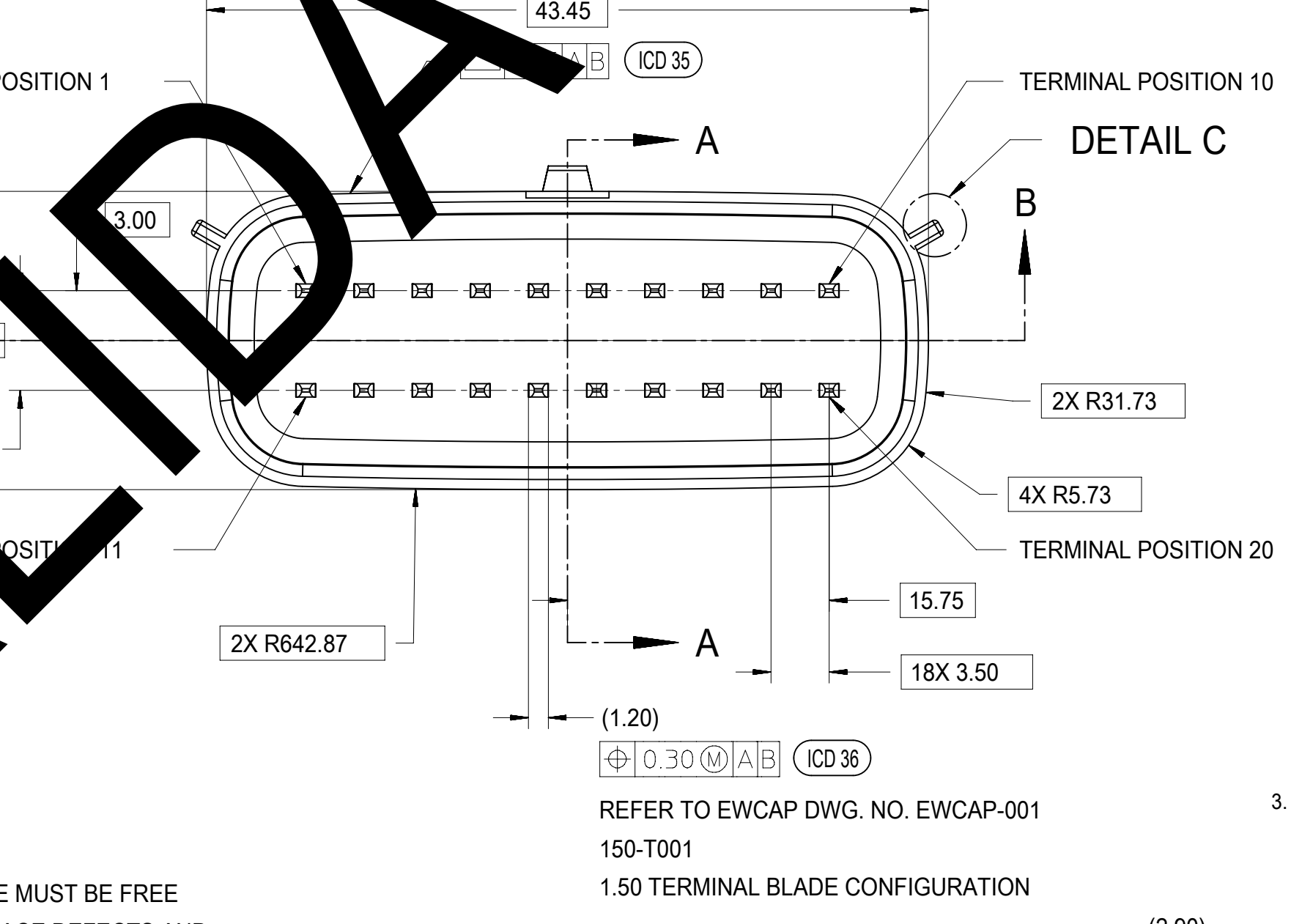
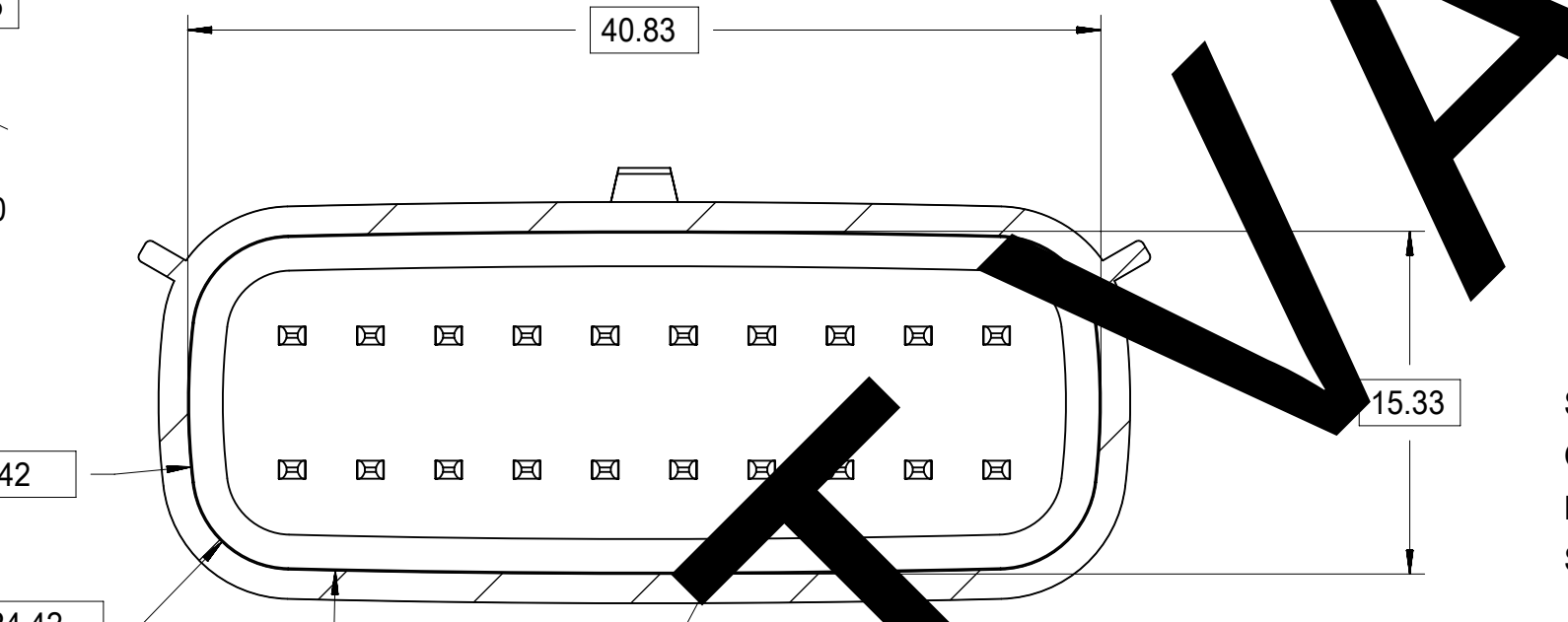
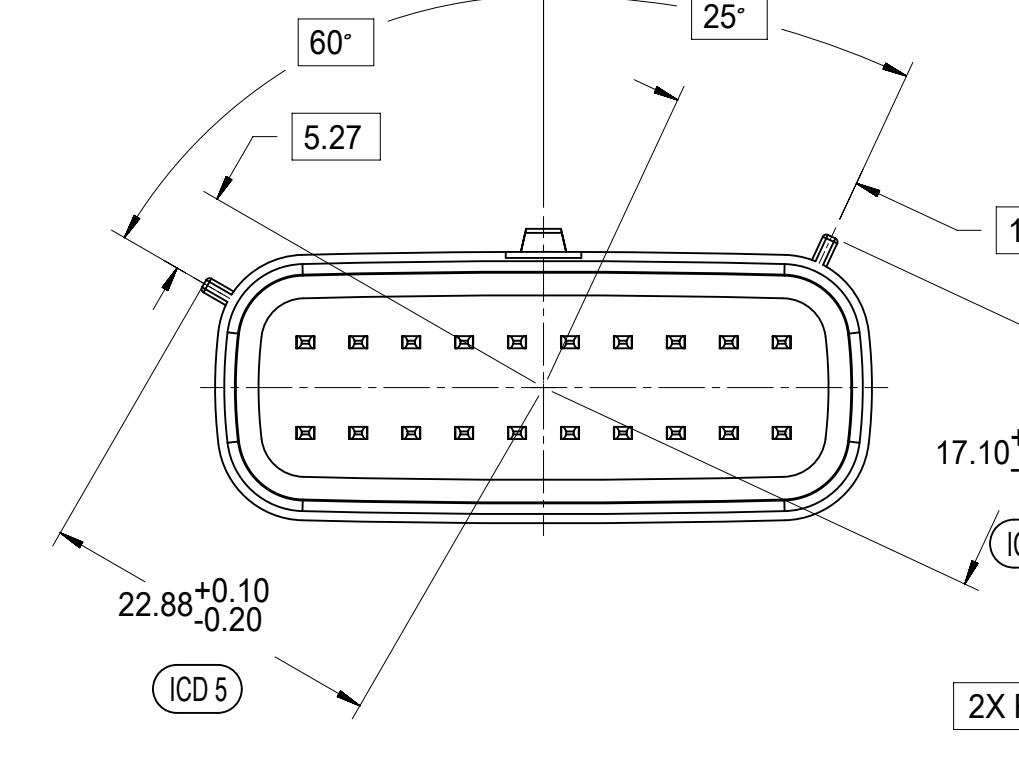
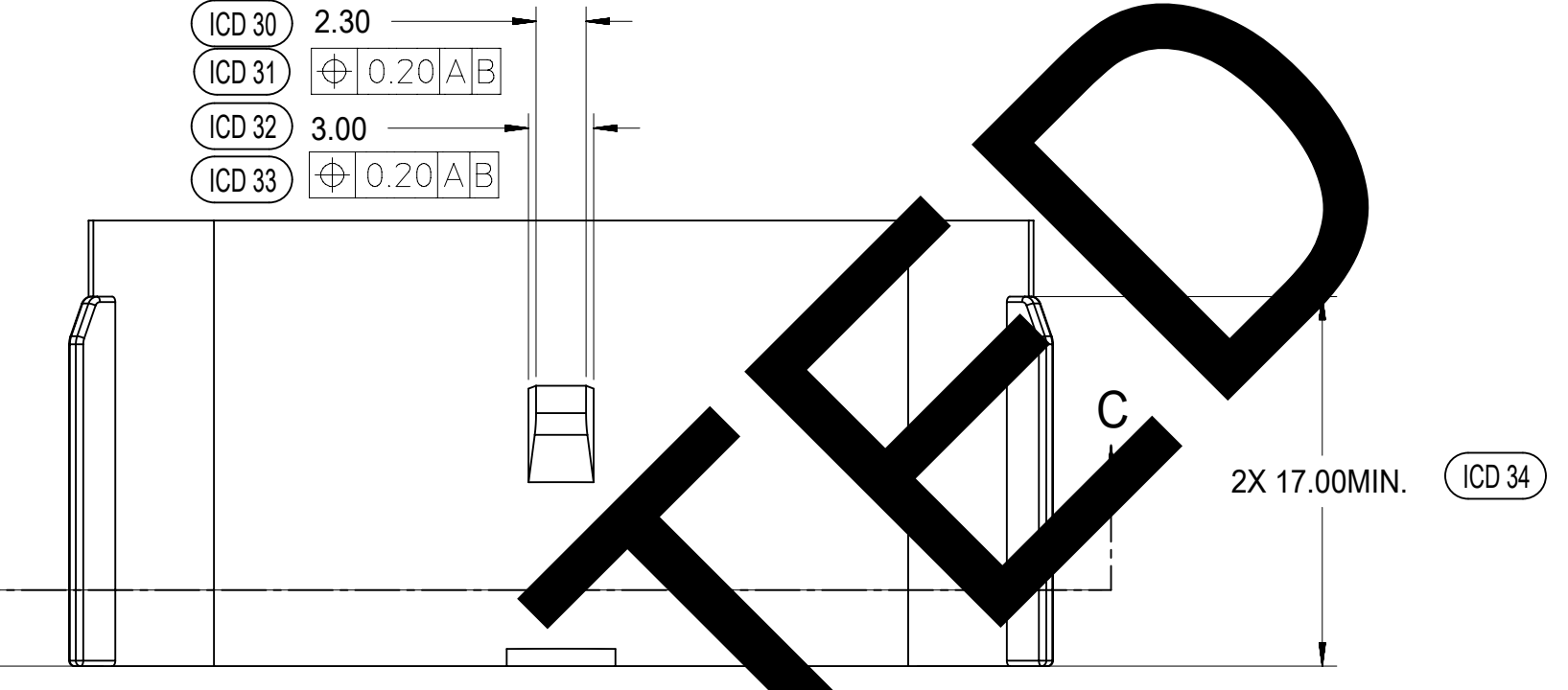
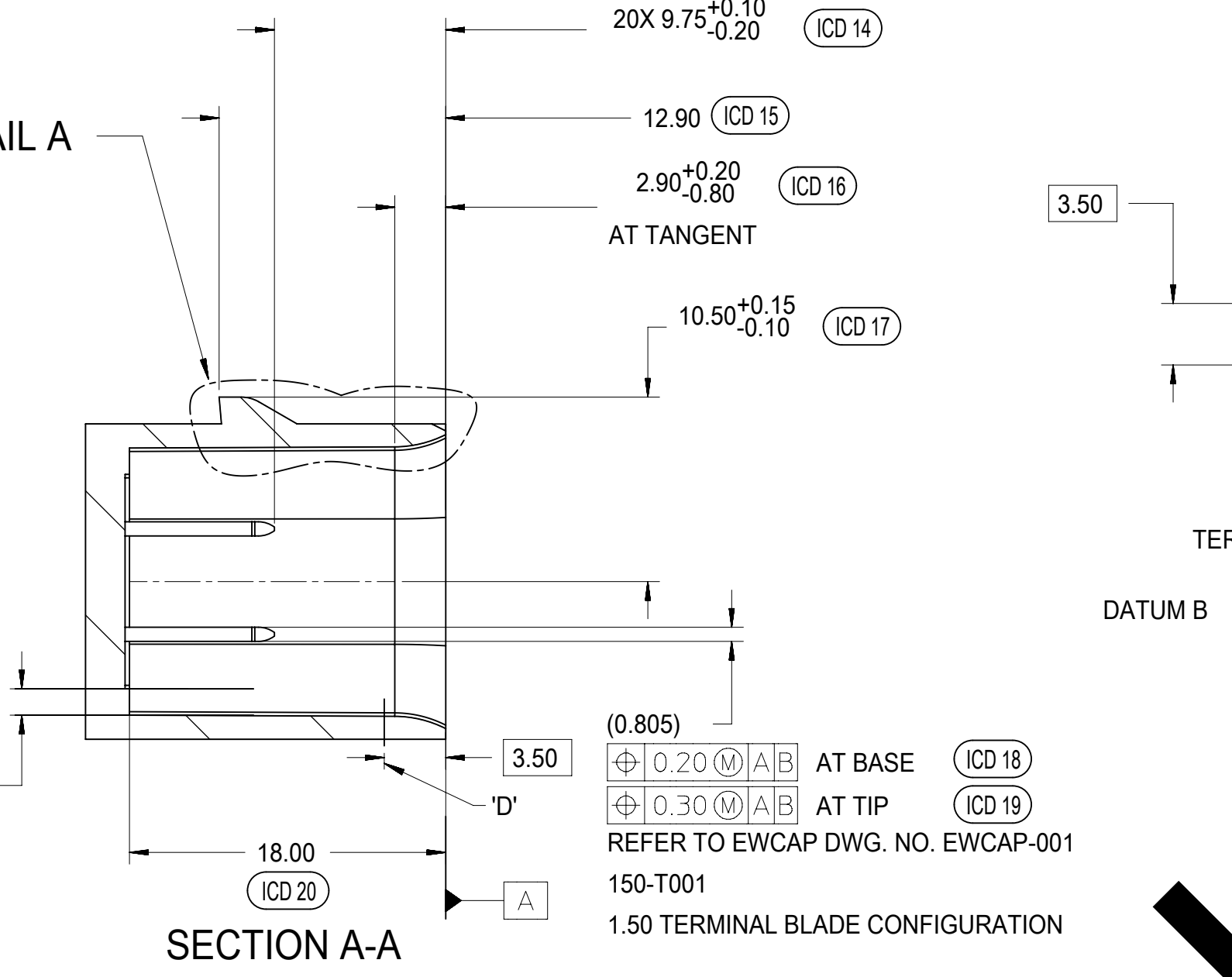
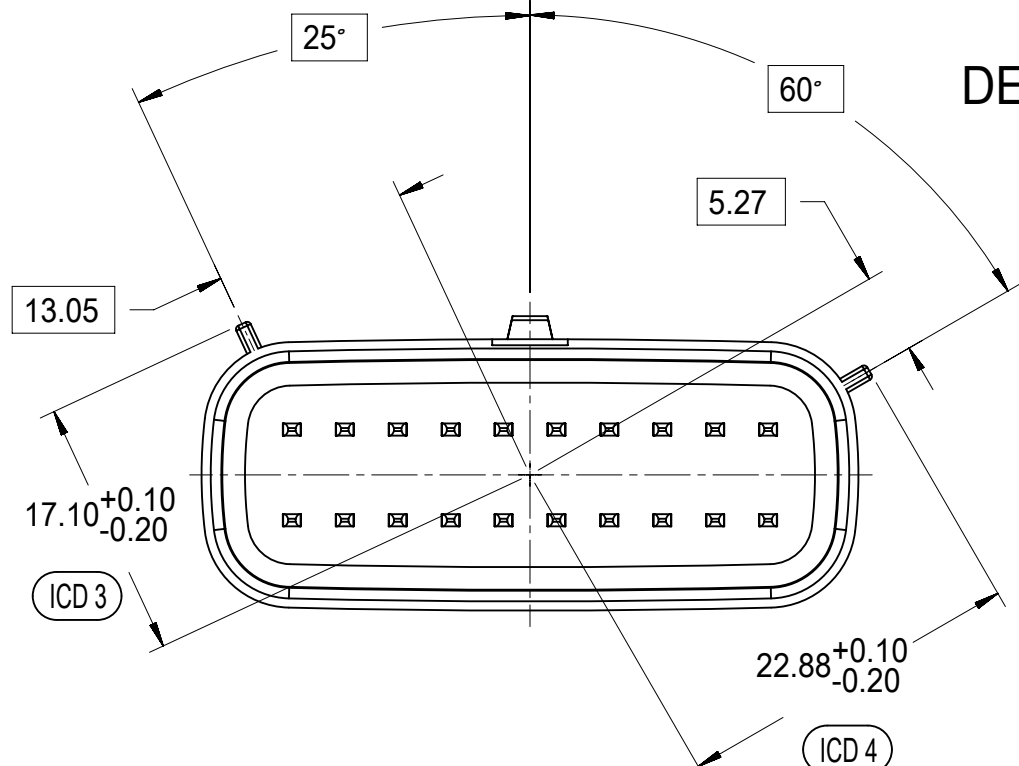
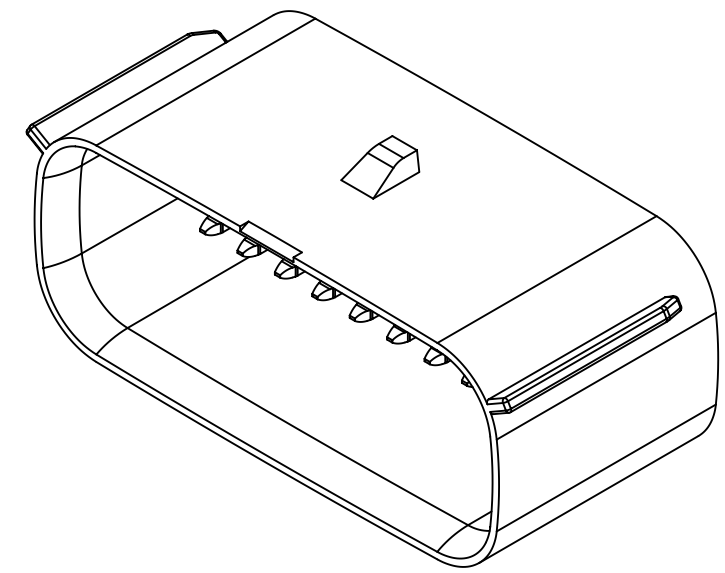
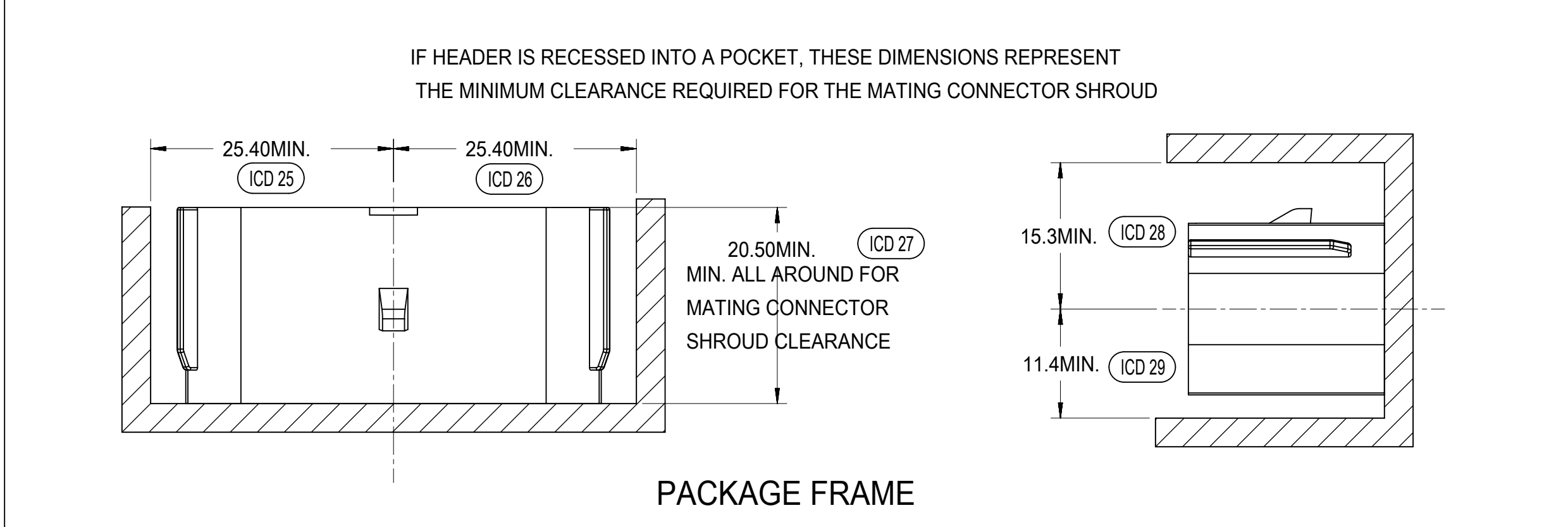
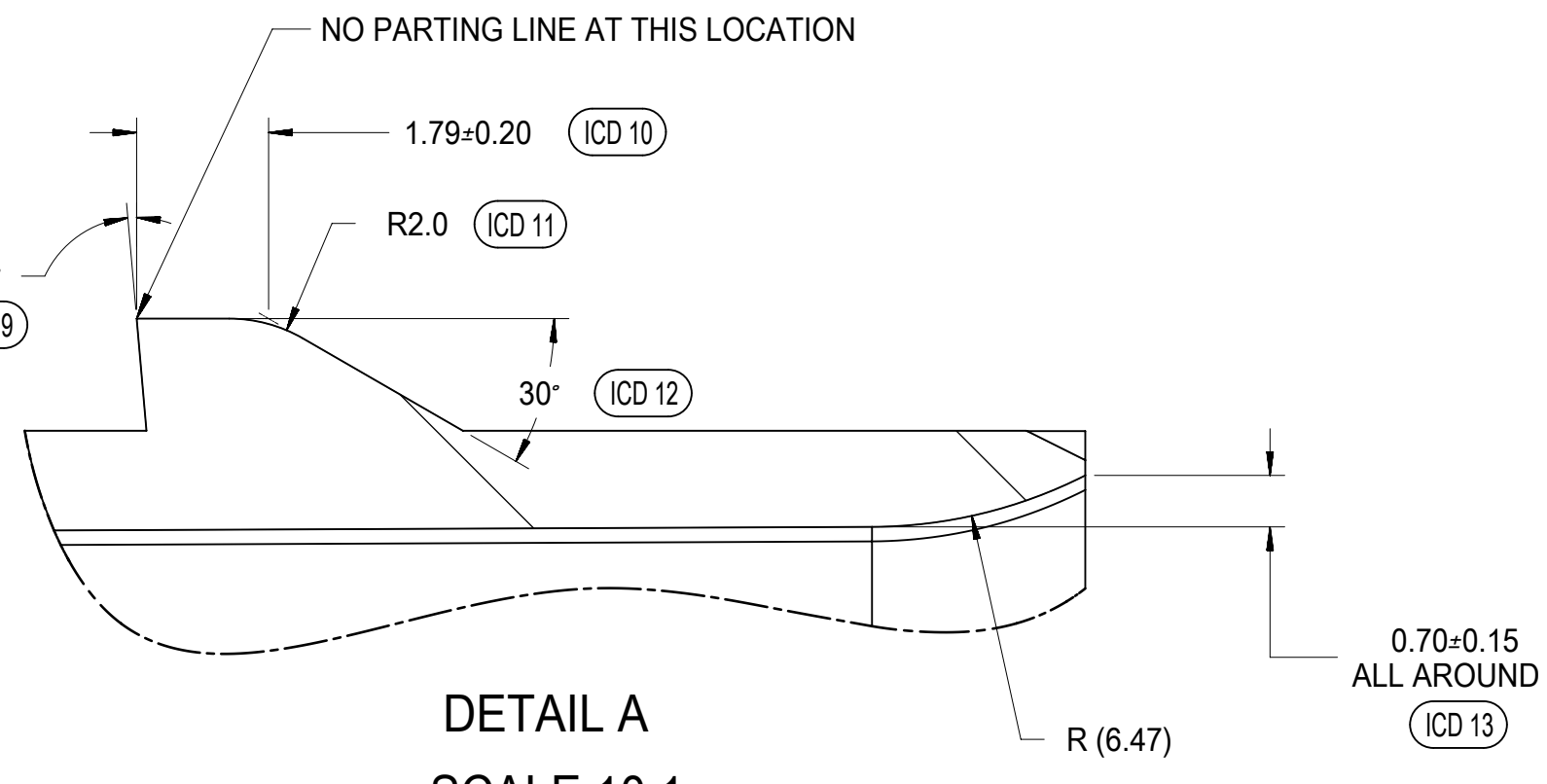
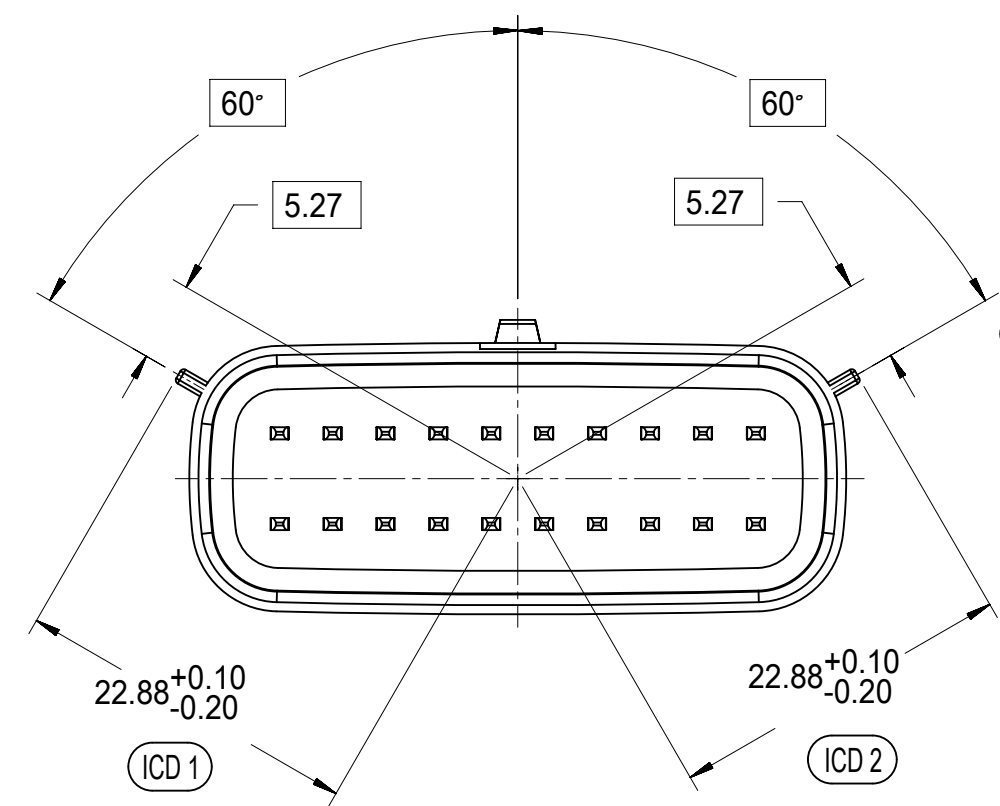
| CHARTED DIMENSIONS |            |
|--------------------|------------|
| DESCRIPTION        | DIMENSIONS |
|                    | H          |
| 2X3 W/ CLIPSLOT    | N/A        |
| 2X3 W/O CLIPSLOT   | 28.50      |
| 2X4 W/ CLIPSLOT    | N/A        |
| 2X4 W/O CLIPSLOT   | 30.75      |
| 2X6 W/ CLIPSLOT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



RECEPTACLE SEALED ASSEMBLY WITH RECEPTACLE BACKSHELL

|   |   |  |  |  |  |  |   |  |  |  |                                 |  |
|---|---|--|--|--|--|--|---|--|--|--|---------------------------------|--|
| <b>QUALITY SYMBOLS</b><br>FA = 0<br>FE = 0<br>FE = 0<br>▼ = 0<br>C = 0<br>☒ = 0<br>■ = 0<br>∇ = 0 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |  |  |  |  |   |  |  |  |                                 |  |
|   | EC NO: 171650<br>DRWN: DDEB<br>CHKD: MYANSLAMBROU<br>APPR: MYANSLAMBROU   | 2018/01/19<br>2018/02/16<br>2018/02/16 | <b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b><br>ANGULAR TOL ± 1.0 °<br>4 PLACES ±<br>3 PLACES ±<br>2 PLACES ± 0.1<br>1 PLACE ± 0.2<br>0 PLACES ±<br>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DIMENSION UNITS: mm<br>SCALE: 4:1<br>DRWN BY: APROFFITT<br>DATE: 2014/05/14<br>CHK'D BY: KBORUSZEWSKI<br>DATE: 2014/06/16<br>APPR BY: VKOSHY<br>DATE: 2014/06/27<br>DRAWING SIZE: A1<br>THIRD ANGLE PROJECTION |  |  | <b>MX150 RCPT<br/>DUAL ROW SEALED ASSEMBLY MAT SEAL</b> |  |  |  | <b>PRODUCT CUSTOMER DRAWING</b> |  |
|   | SERIES: 33472<br>MATERIAL NUMBER: [blank]<br>CUSTOMER: GENERAL MARKET   |  | DOCUMENT NUMBER: SD-33472-0001<br>DOC TYPE: PSD<br>DOC PART: 001<br>SHEET NUMBER: 9 OF 11  |  |  |  |   |  |  |  |                                 |  |
|   | RELEASE STATUS: P1<br>RELEASE DATE: 2018/02/16 22:02:25   |  |  |  |  |  |   |  |  |  |                                 |  |





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/mm<sup>2</sup> 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.

| SYMBOLS      | DIMENSION UNITS                                      | SCALE     |
|--------------|--|-----------|
| $\nabla = 0$ | mm   | 1:1       |
| $\nabla = 0$ | GENERAL TOLERANCES (UNLESS SPECIFIED)                |           |
| $\nabla = 0$ | ANGULAR TOL $\pm 1.0^\circ$                          |           |
| $\nabla = 0$ | 4 PLACES   | $\pm$     |
| $\nabla = 0$ | 3 PLACES   | $\pm$     |
| $\nabla = 0$ | 2 PLACES   | $\pm 0.1$ |
| $\nabla = 0$ | 1 PLACE  | $\pm 0.2$ |
| $\nabla = 0$ | 0 PLACES   | $\pm$     |
| $\nabla = 0$ | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |           |

| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |              | CURRENT REV DESC. |            |
|---|--------------|-------------------|------------|
| EC NO:  | 171650       | DRWN:             | DDEB       |
| CHK'D:  | MVANSLAMBROU | 2018/01/19        | 2018/02/16 |
| APPR:   | MVANSLAMBROU | 2018/02/16        | 2018/02/16 |
| INITIAL REVISION:   |              |                   |            |
| DRWN:   | APROFFITT    | 2014/05/14        | 2014/06/27 |
| APPR:   | VKOSHY       | 2014/06/27        |            |
| THIRD ANGLE PROJECTION  | DRAWING      | SERIES            |            |
|   | A1-SIZE      | 33472             |            |

|   |                |              |          |
|---|----------------|--------------|----------|
| <b>molex</b>                                    |                |              |          |
| MX150 RCPT<br>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     |          |

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

NOT VALIDATED