

| 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

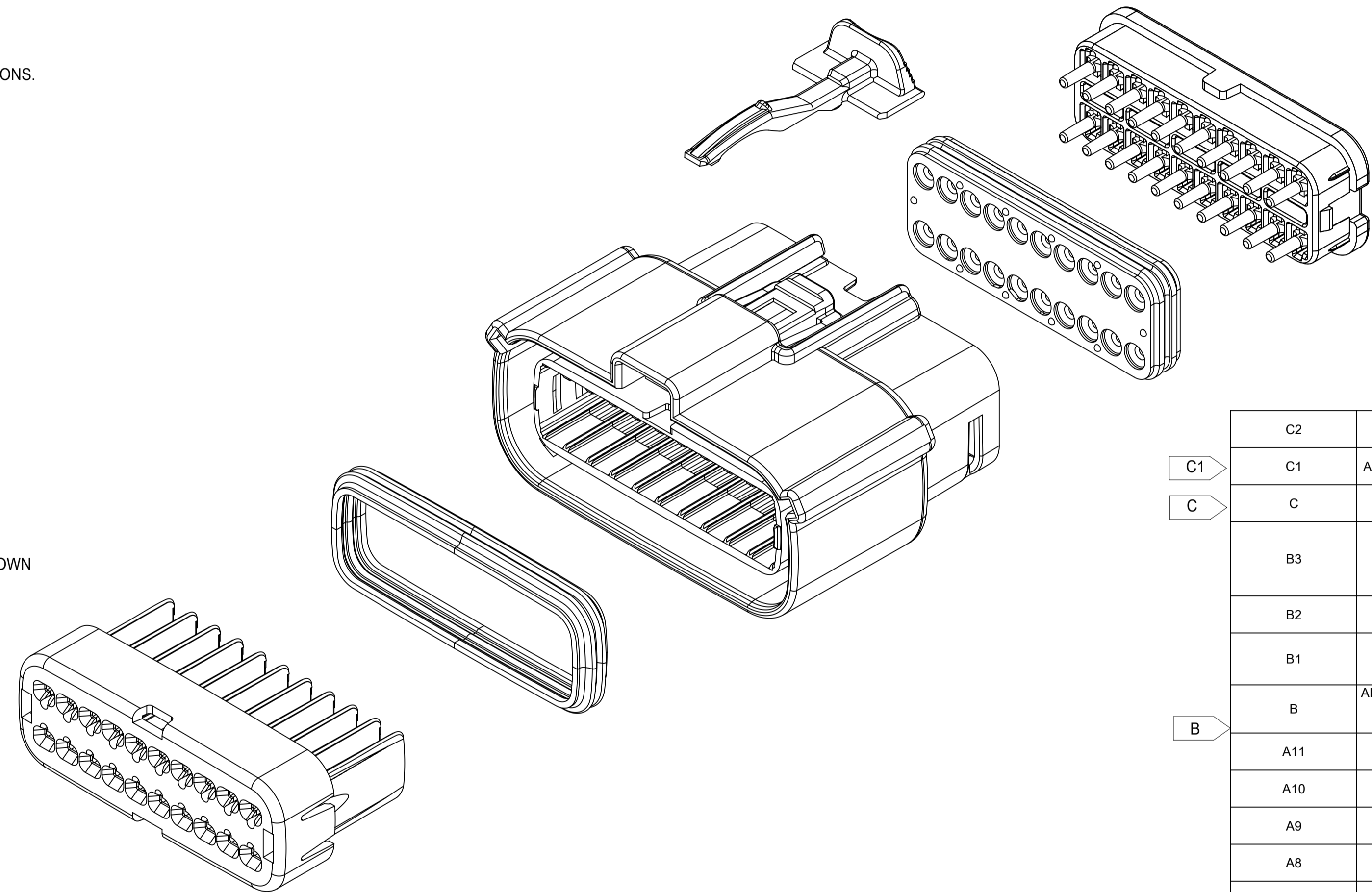
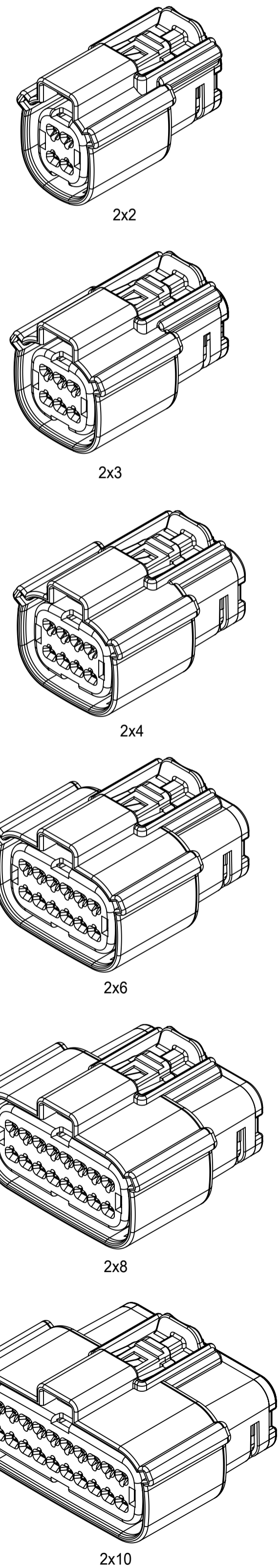
1. GENERAL:
- a. APPLICATION SPECIFICATION SEE: AS-33472-100
- CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, CONNECTOR ASSEMBLY, PACKAGING INFORMATION, CONNECTOR MATING, SERVICE INSTRUCTIONS, ELECTRICAL CONTINUITY CHECKING, CRIMPING, AND TROUBLESHOOTING.
  - DESIGNED TO MATE WITH DEVICE OR CONNECTOR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

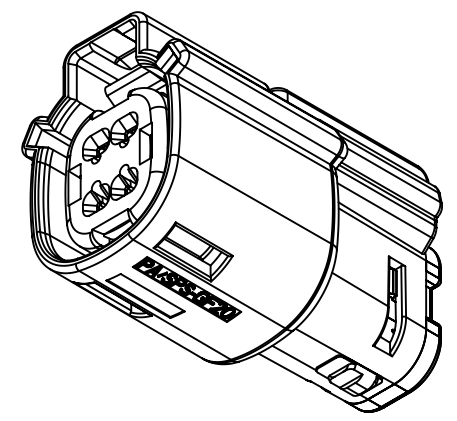
| INSPECTION NUMBER LOG |    |
|-----------------------|----|
| LAST NUMBER:          | 11 |
| ADDED:                | 11 |
| REMOVED:              |    |

|   |  |   |
|---|--|---|
| <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: <b>mm</b><br>SCALE: <b>1:1</b><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 | <p>MX150 RCPT<br/>DUAL ROW SEALED ASSEMBLY MAT SEAL</p> <p>PRODUCT CUSTOMER DRAWING</p> |
|   | DOCUMENT NUMBER: <b>SD-33472-0001</b><br>DOC TYPE: PSD<br>DOC PART: 001<br>REVISION: C2  |   |

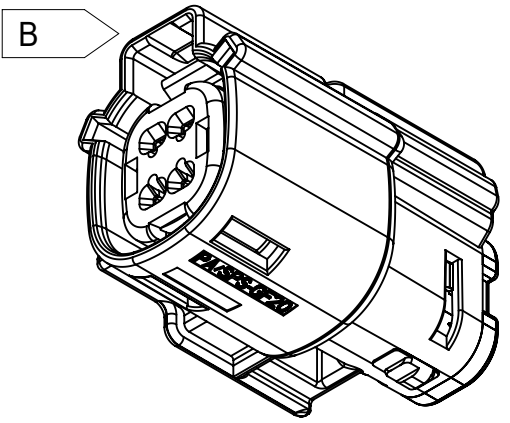
| DOCUMENT STATUS | RELEASE DATE | 2018/02/16 | 22:02:25 |
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| P1              |              |            |          |

# SHEET DESCRIPTION

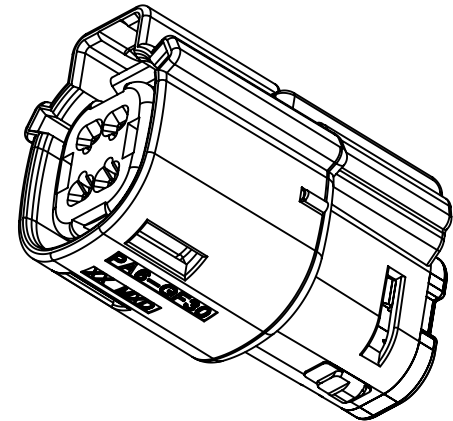
## CONFIGURATIONS



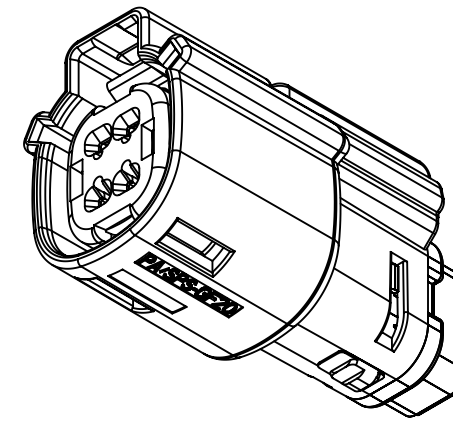
2X2 - STD.  
2X2 - TRNS. - SILICONE FREE †



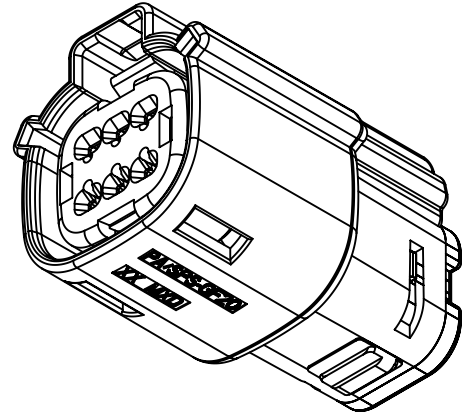
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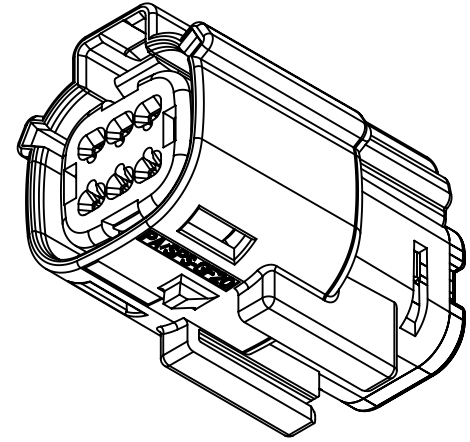
† 2X2 - UL V0



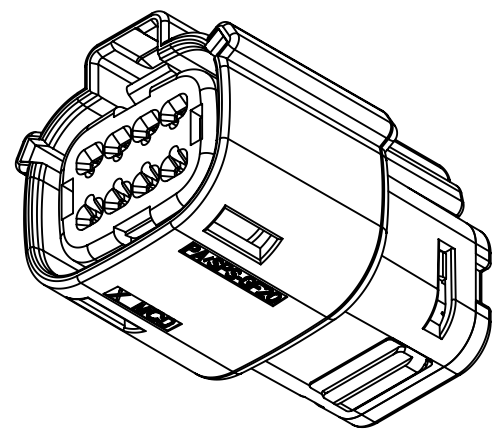
2X2 - STD. - LENGTHENED



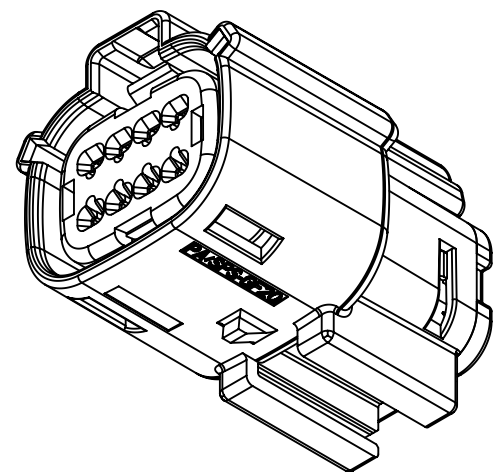
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2X3 - TRNS. - CONTAINS SILICONE †



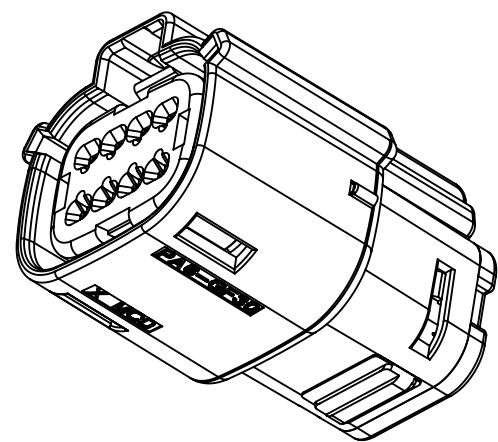
2X3 - STD. - WITH CLIPSLOT \*



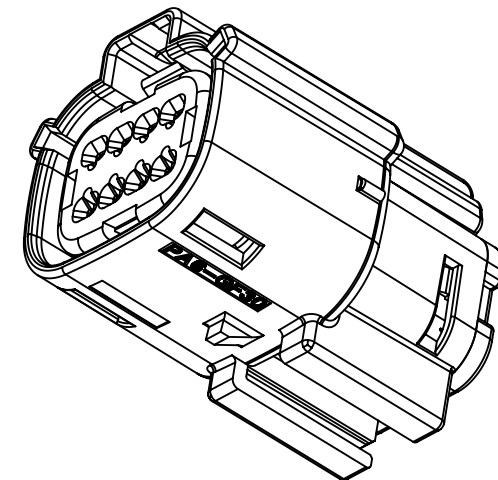
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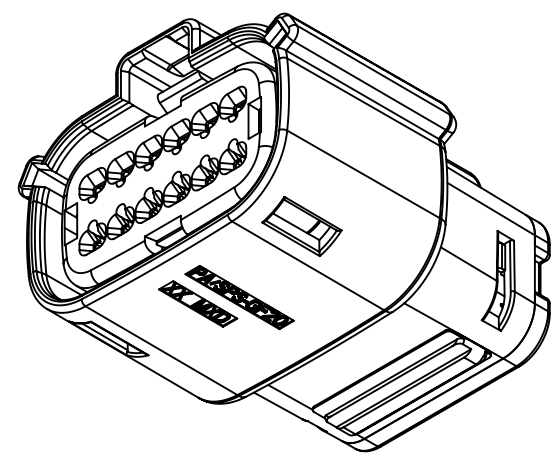
2X4 - STD. - WITH CLIPSLOT \*



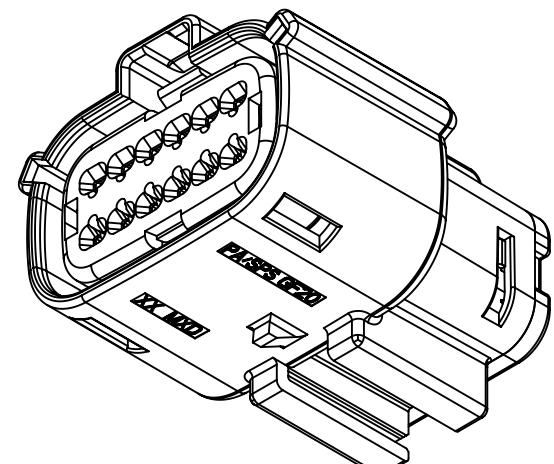
† 2X4 - UL V0



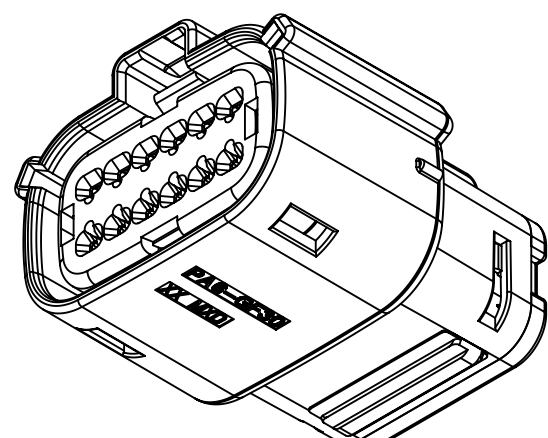
† 2X4 - UL V0-WITH CLIPSLOT\*



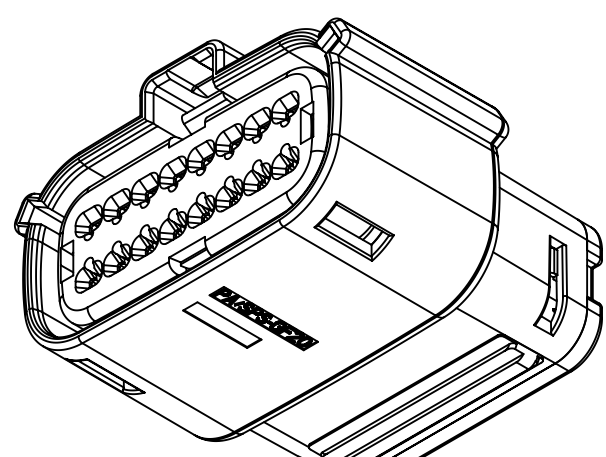
2X6 - STD.  
C1 † 2X6 - TRNS.



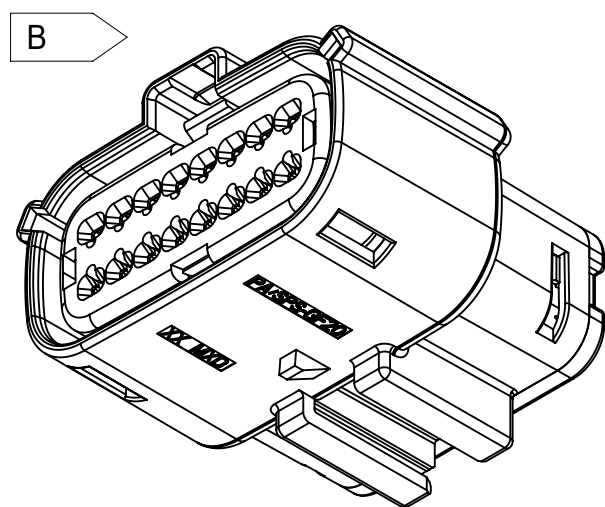
2X6 - STD. - WITH CLIPSLOT \*  
C1 † 2X6 - TRNS. - WITH CLIPSLOT \*



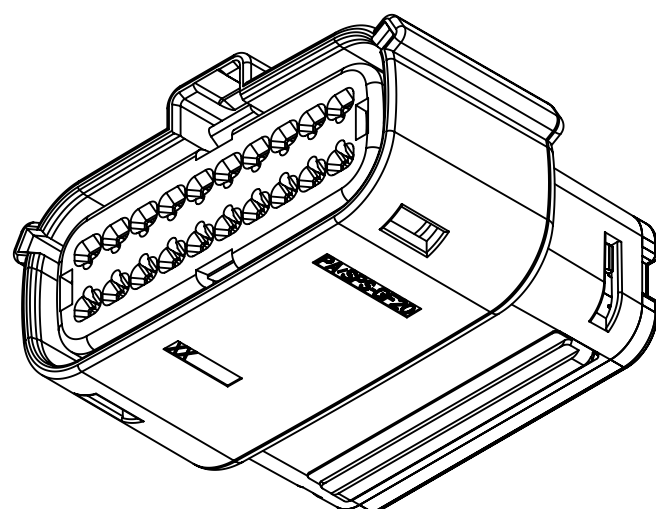
† 2X6 - UL V0



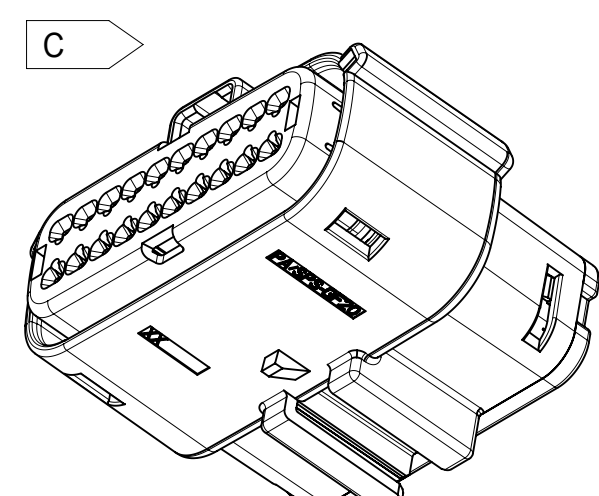
2X8 - STD.



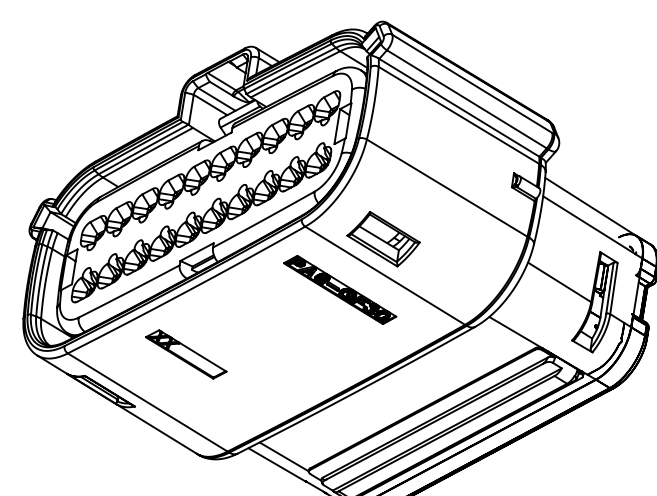
2X8 - STD. - WITH CLIPSLOT \*



2X10 - STD.



2X10 - STD. - WITH CLIPSLOT \*



† 2X10 - UL V0

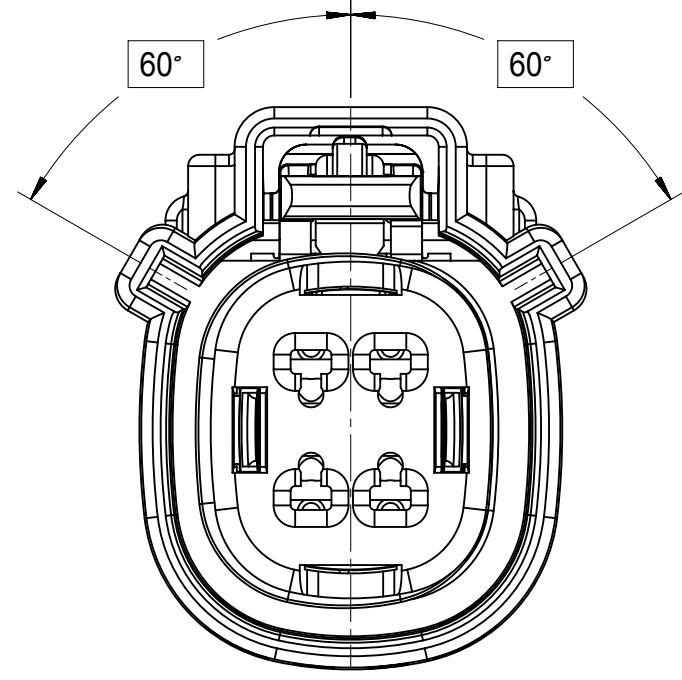
\* WITH CLIPSLOT CONFIGURATION DOES NOT MEET THE USCAR PACKAGING FRAME REQUIREMENTS  
† MINOR GEOMETRY DIFFERENCE THAN STANDARD CONFIGURATION  
SEE NOTES 1a & 2a-b FOR MORE INFORMATION

| 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   | ANGULAR TOL ± 1.0°                                   |   | CHK'D: MVANSLAMBROU                                  |                   | 2018/02/16             |                 | DUAL ROW SEALED ASSEMBLY MAT SEAL |                                |  |  |
| ▽ = 0   | 4 PLACES ±   |   | APPR: MVANSLAMBROU                                   |                   | 2018/02/16             |                 | PRODUCT CUSTOMER DRAWING          |                                |  |  |
| ▽ = 0   | 3 PLACES ±   |   | INITIAL REVISION:                                    |                   | 2014/05/14             |                 | SD-33472-0001                     |                                |  |  |
| ▽ = 0   | 2 PLACES ± 0.1                                       |   | DRWN: APROFFITT                                      |                   | 2014/06/27             |                 | PSD 001 C2                        |                                |  |  |
| ▽ = 0   | 1 PLACE ± 0.2  |   | APPR: VKOSHY   |                   | 2014/06/27             |                 | GENERAL MARKET                    |                                |  |  |
| ▽ = 0   | 0 PLACES ±   |   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                   | THIRD ANGLE PROJECTION |                 | SHEET NUMBER                      |                                |  |  |
| ▽ = 0   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |   | DRAWING  |                   | SERIES                 |                 | 2 OF 11                           |                                |  |  |
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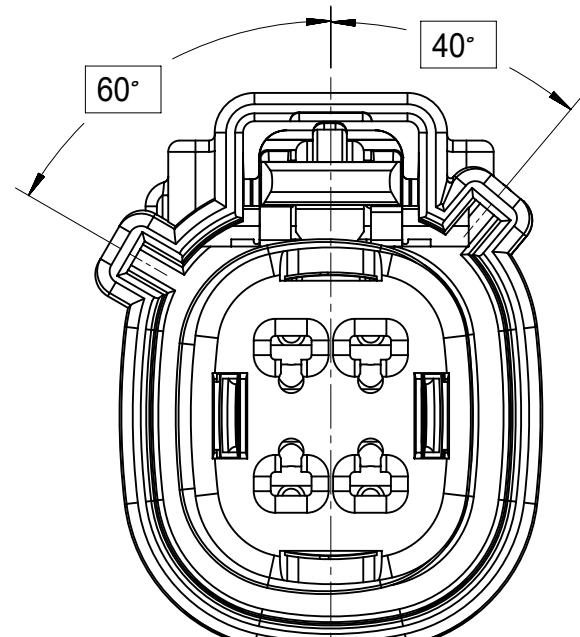
# SHEET DESCRIPTION

KEY CONFIGURATIONS

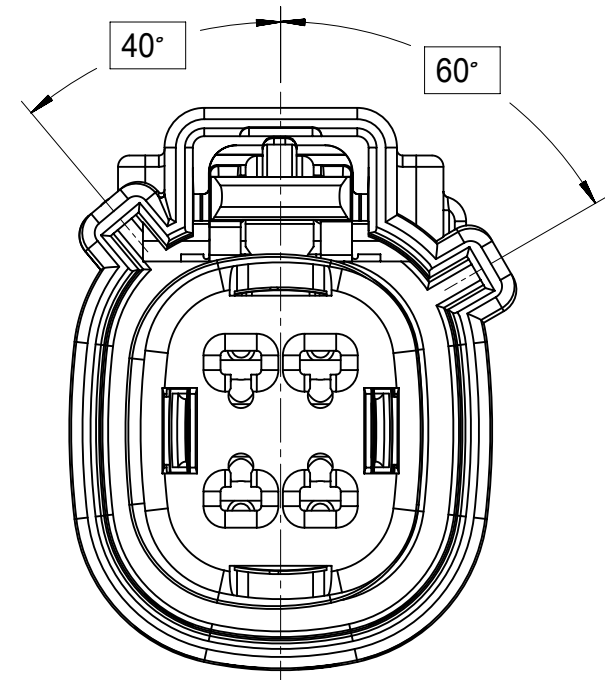
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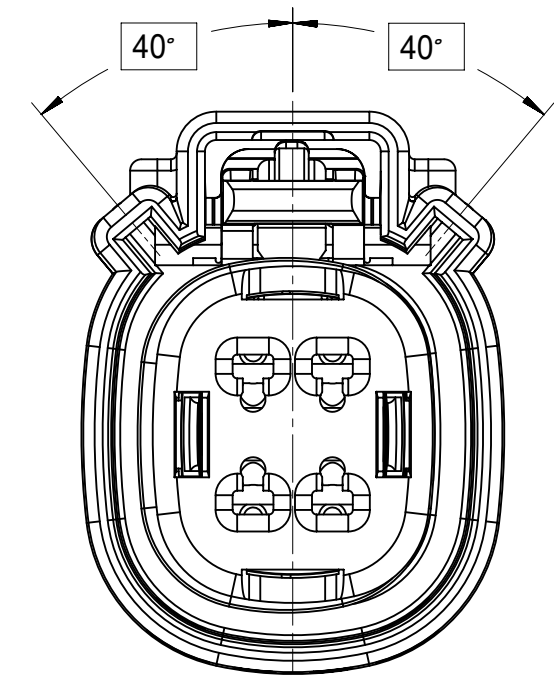
KEY A



KEY B

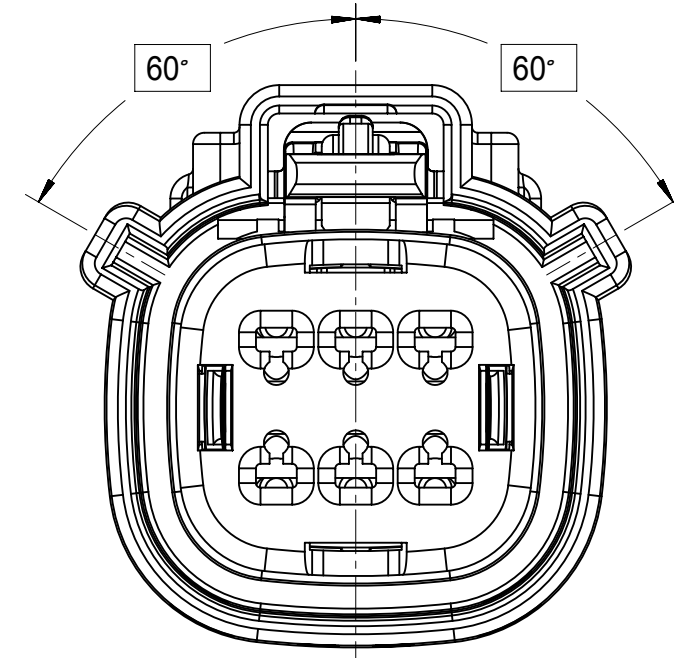


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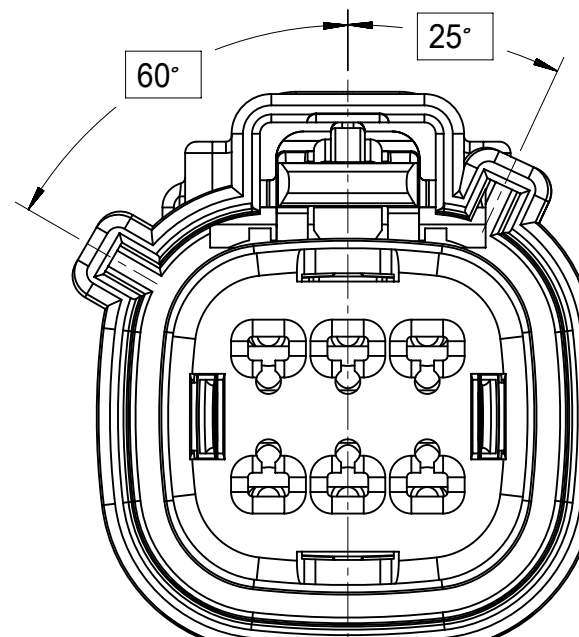


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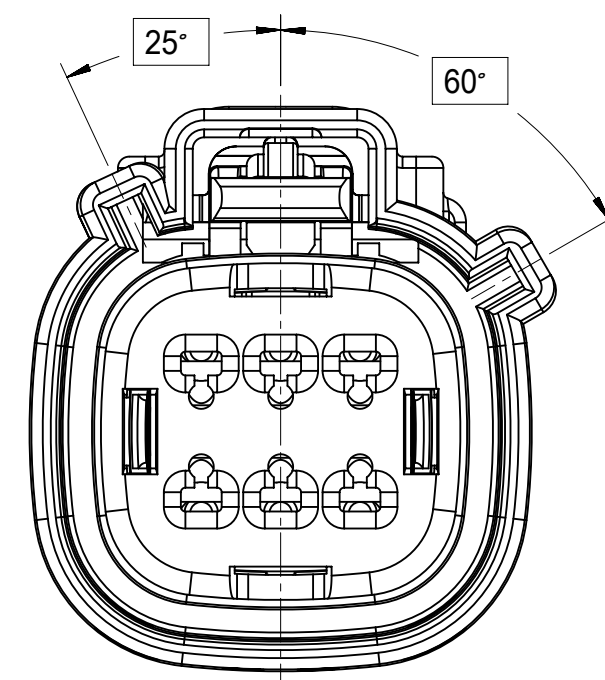
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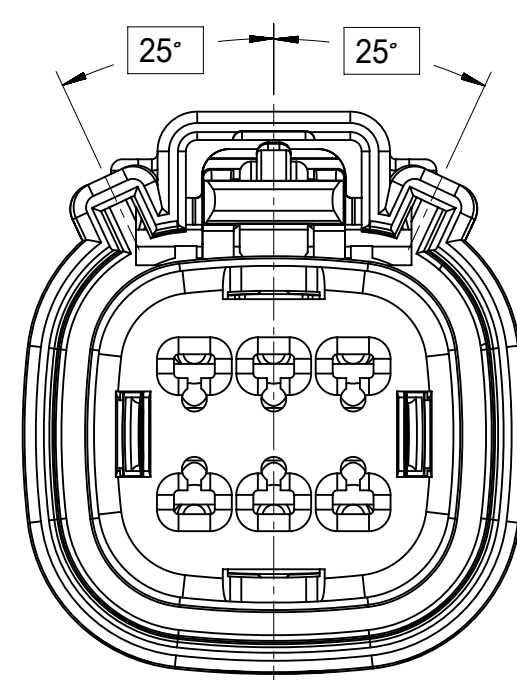
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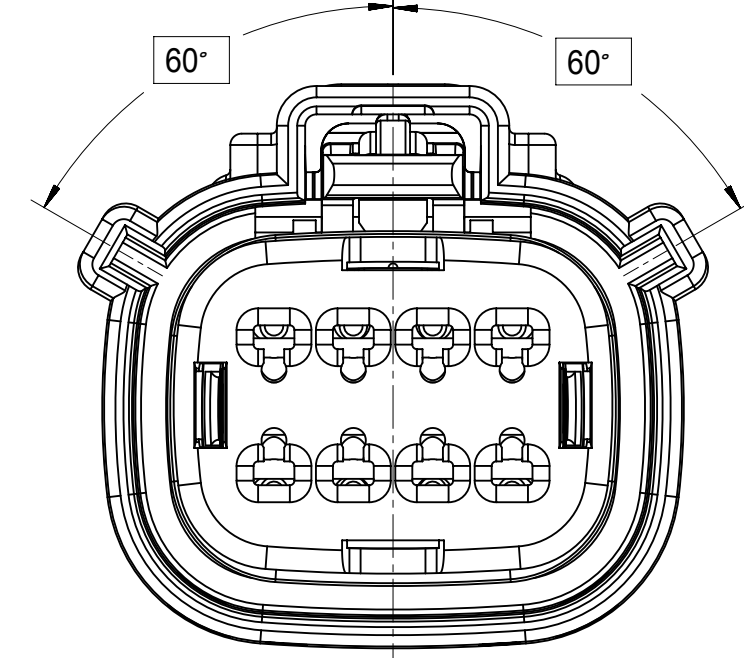


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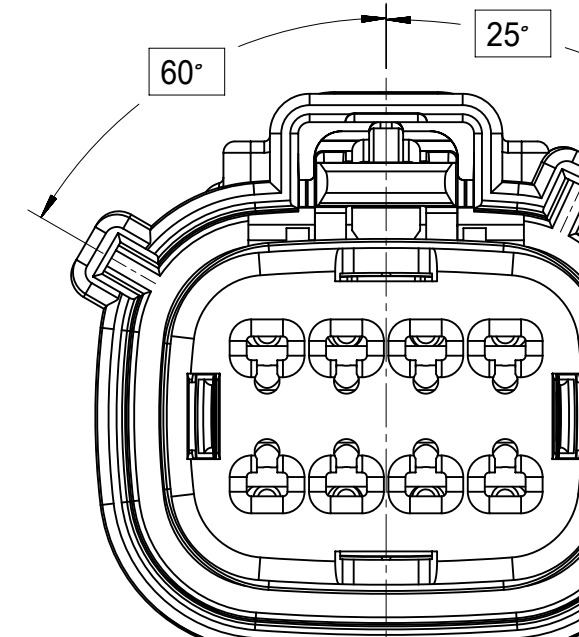


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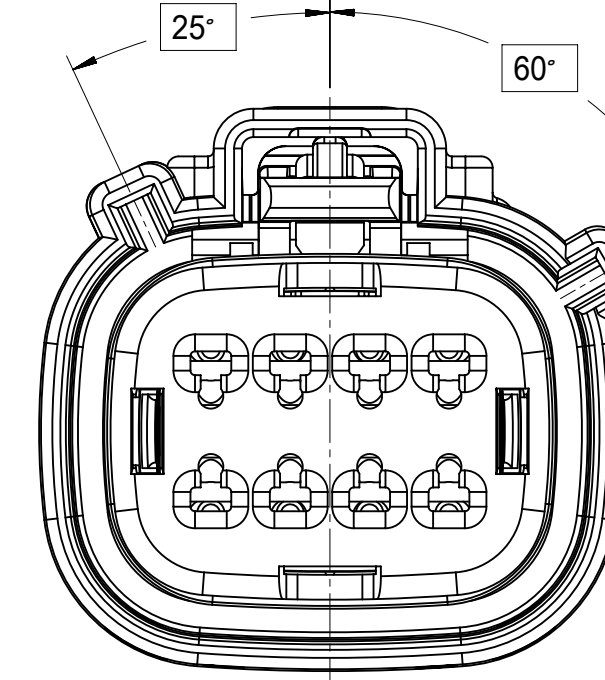
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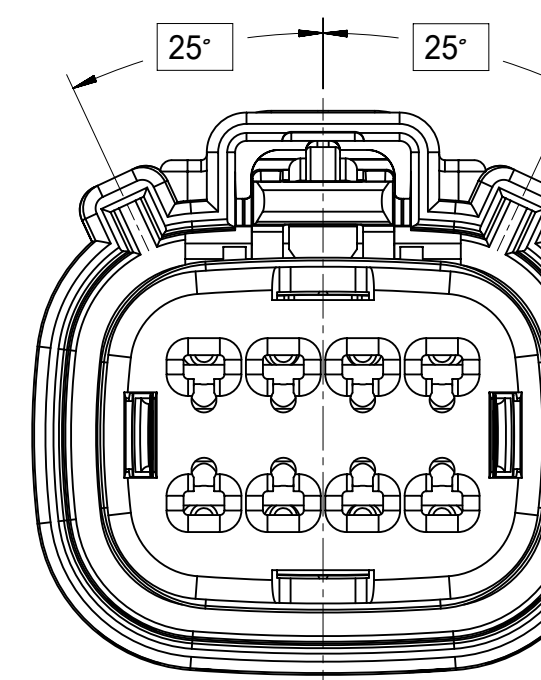
KEY A



KEY B



KEY C



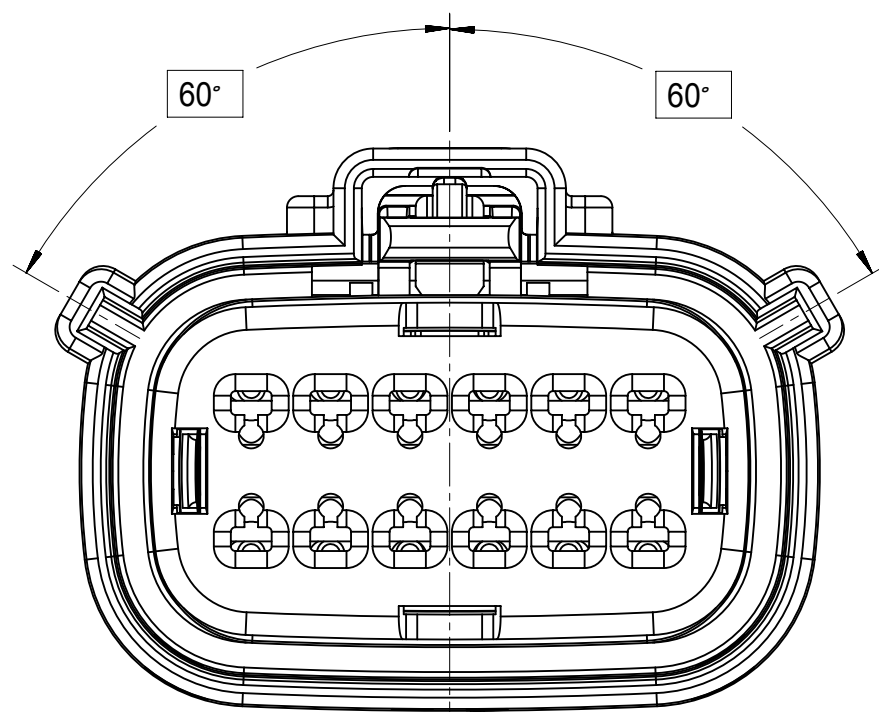
KEY D

|  |  |  |  |   |   |
|--|--|--|--|---|---|
| <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°  | 4 PLACES ±<br>3 PLACES ±<br>2 PLACES ± 0.1<br>1 PLACE ± 0.2<br>0 PLACES ±  | INITIAL REVISION:<br>DRWN: APROFFITT 2014/05/14<br>APPR: VKOSHY 2014/06/27 | MX150 RCPT<br>DUAL ROW SEALED ASSEMBLY MAT SEAL   |   |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   | THIRD ANGLE PROJECTION<br>   | DRAWING: <b>A1-SIZE</b><br>SERIES: <b>33472</b>                            | DOCUMENT NUMBER: <b>SD-33472-0001</b><br>DOC TYPE: PSD<br>DOC PART: 001<br>REVISION: C2 | PRODUCT CUSTOMER DRAWING<br>CUSTOMER: GENERAL MARKET<br>SHEET NUMBER: 3 OF 11 |

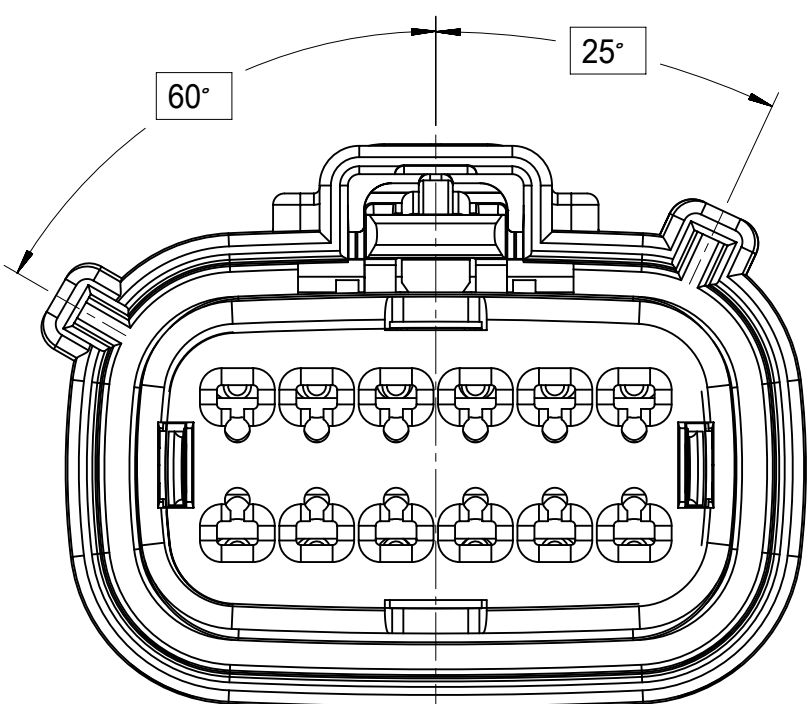
# SHEET DESCRIPTION

KEY CONFIGURATIONS CONT.

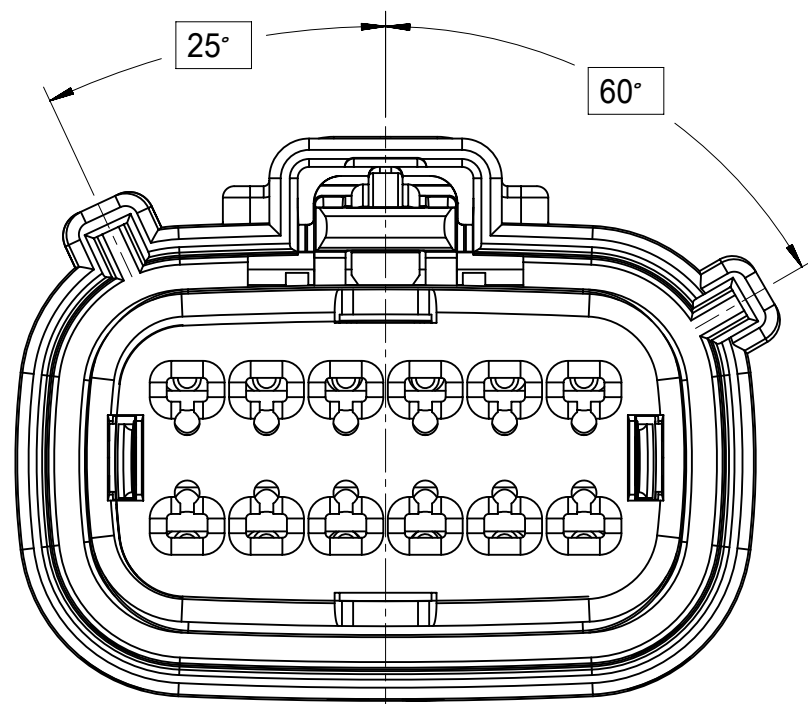
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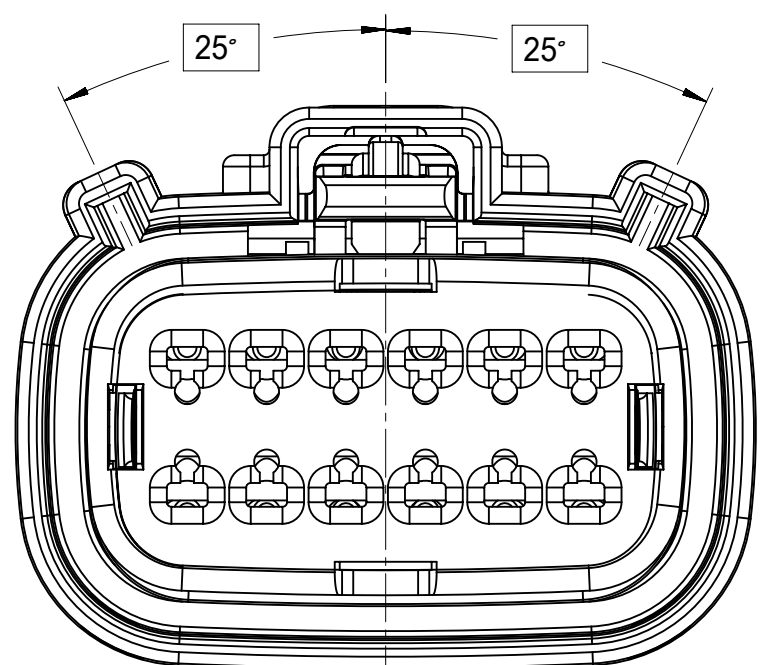
KEY A



KEY B

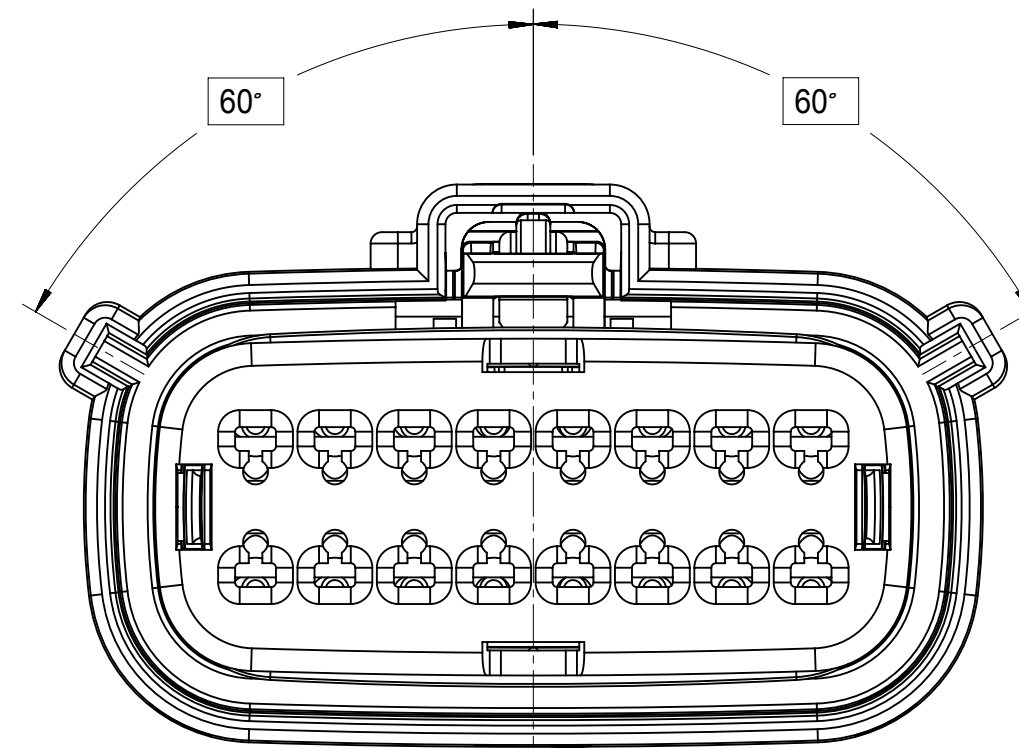


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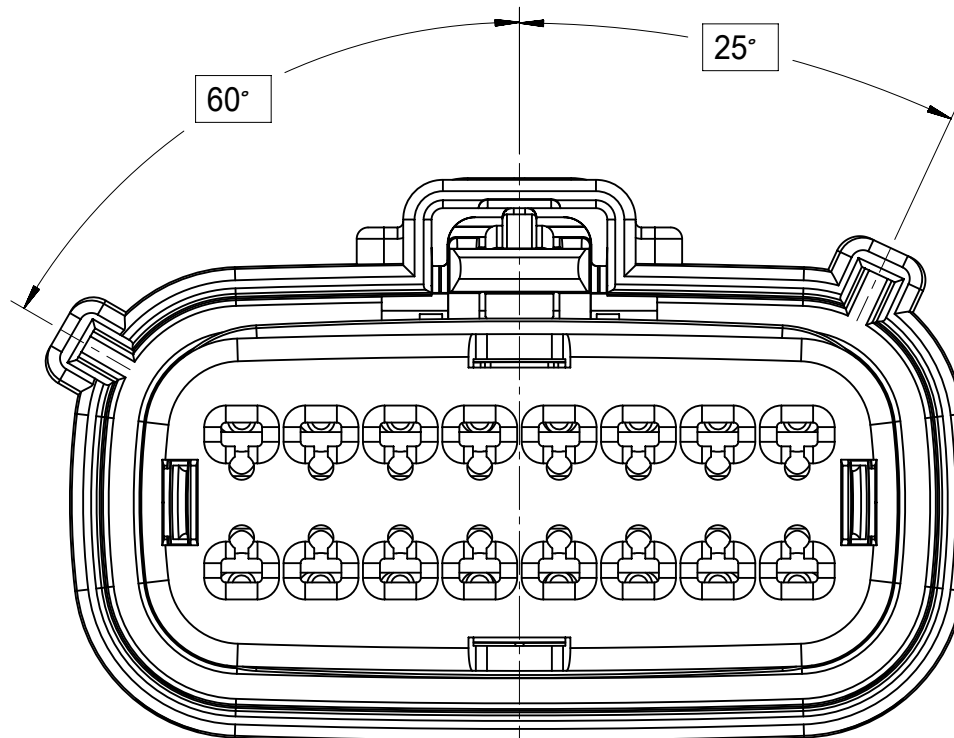


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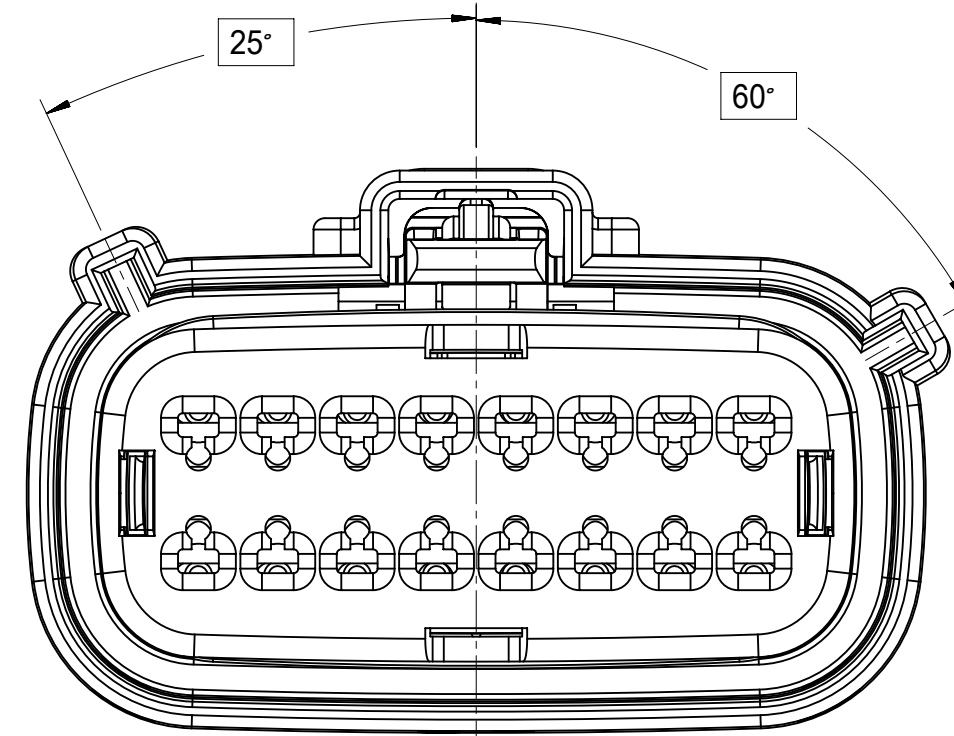
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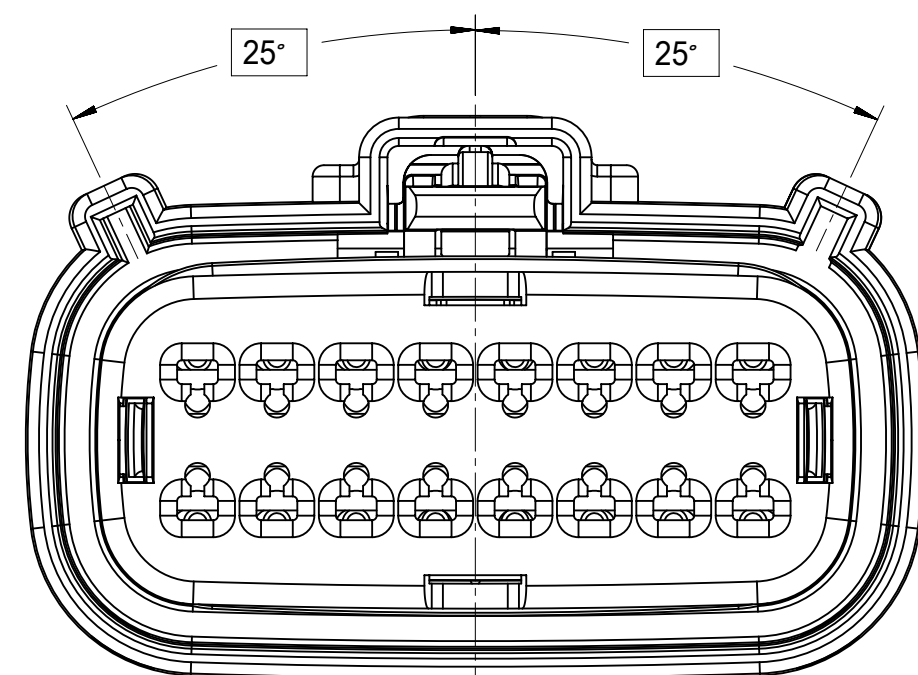
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KEY B

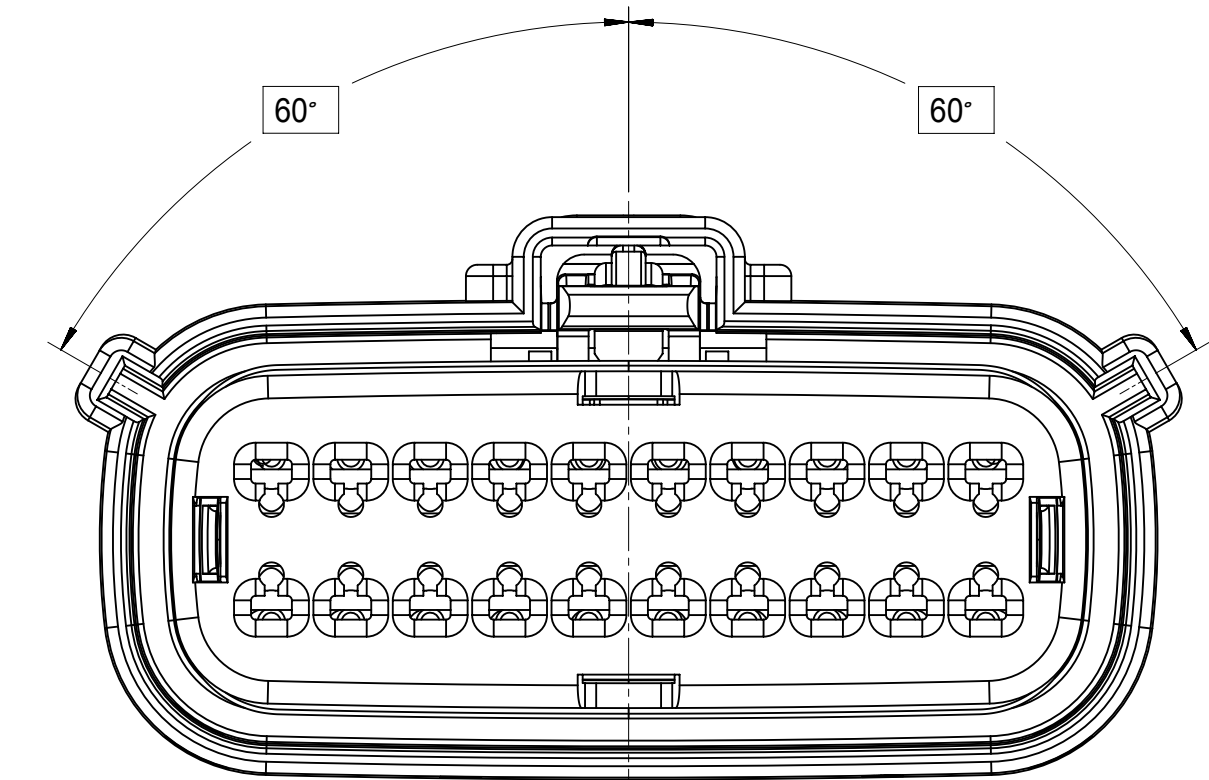


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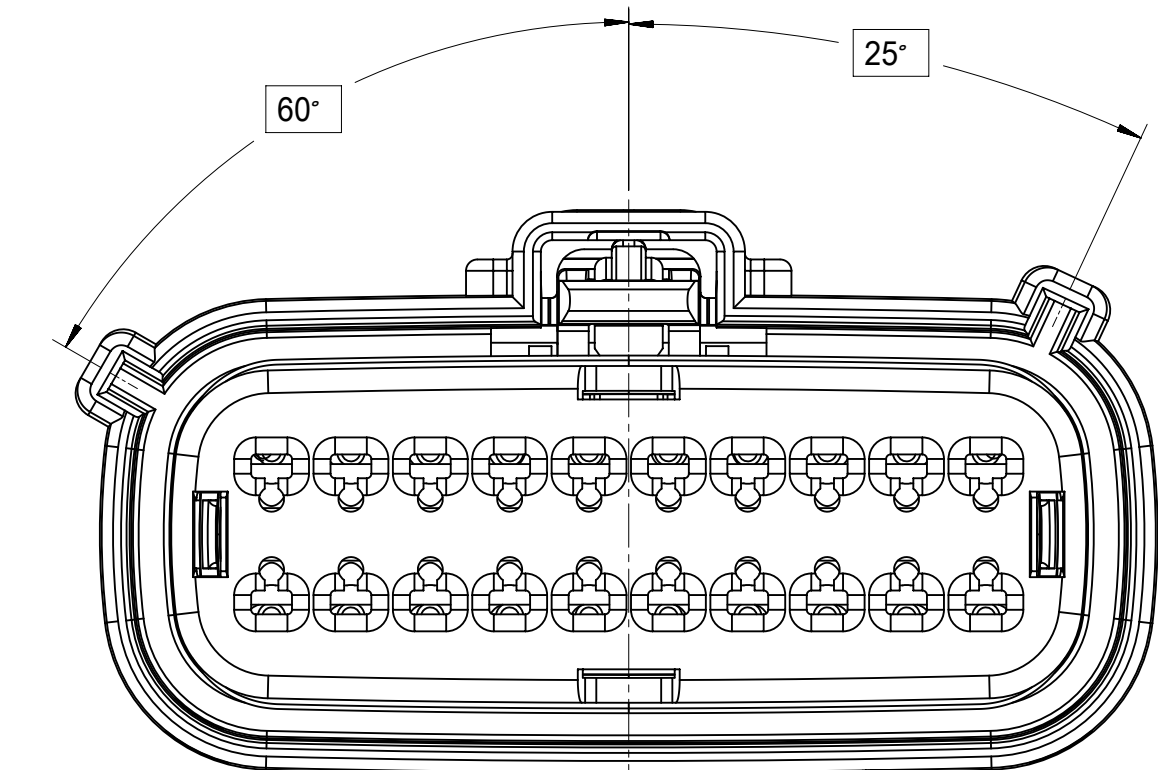


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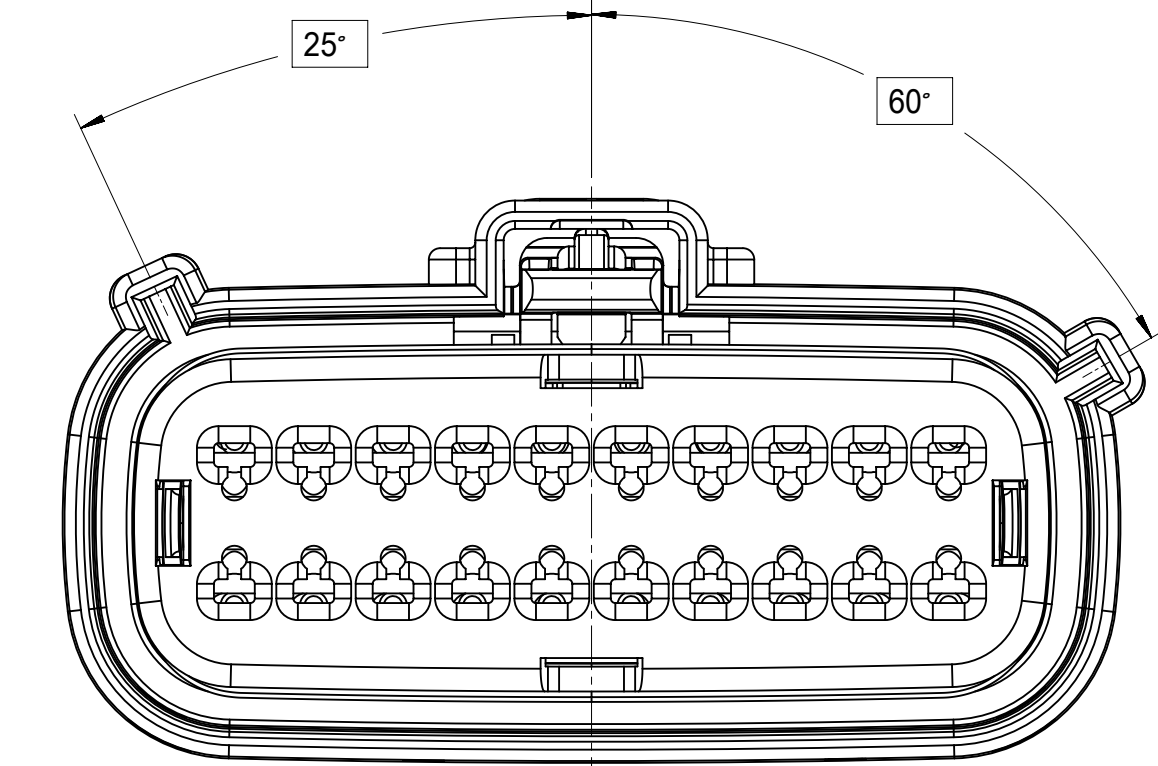
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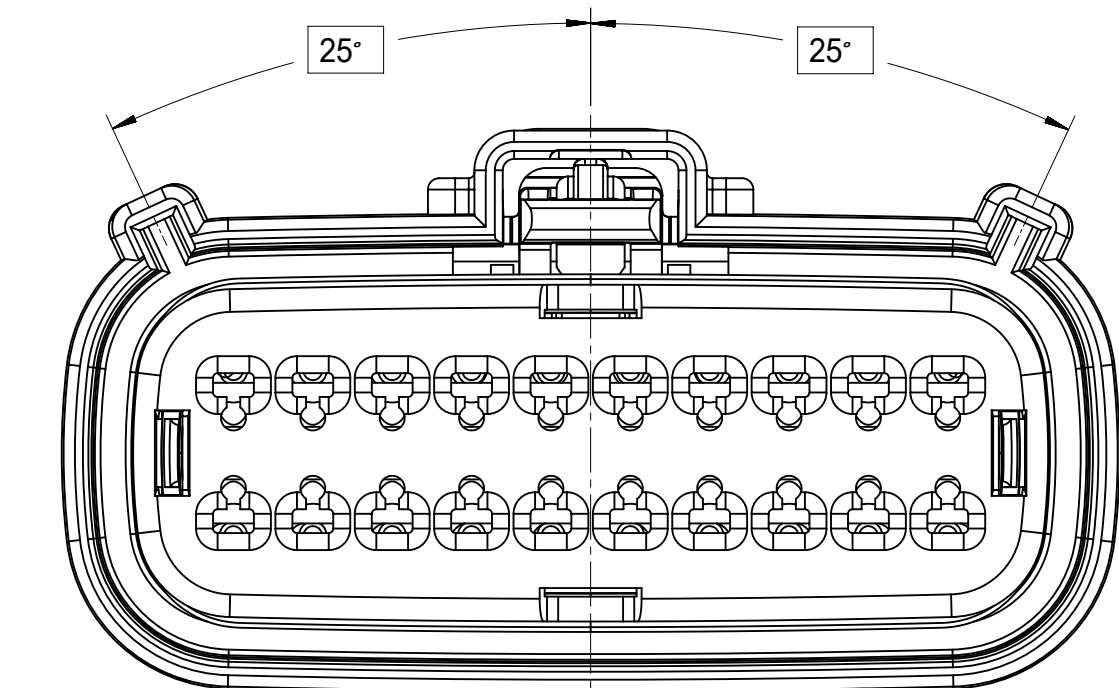
KEY A



KEY B



KEY C



KEY D

| SYMBOLS         |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |        |
|-----------------|--|---|--------|
| DIMENSION UNITS | SCALE  | CURRENT REV DESC:   |        |
| = 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 |   |        |
| = 0             | THIRD ANGLE PROJECTION                               | DRAWING   | SERIES |
| = 0             |  | A1-SIZE   | 33472  |

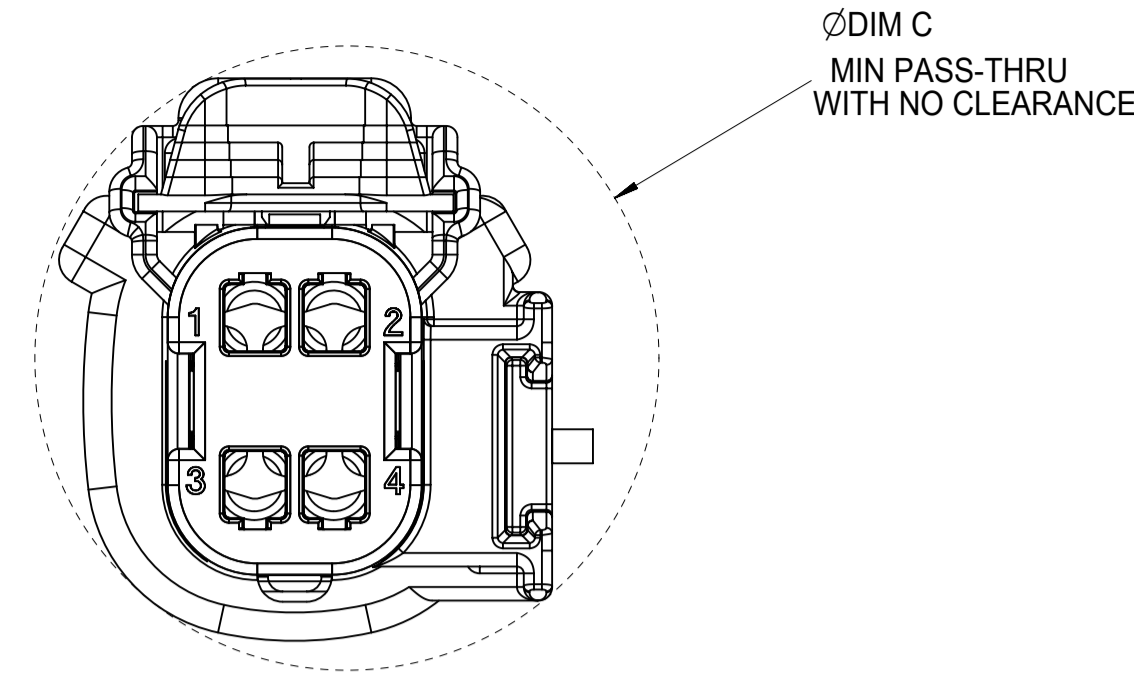
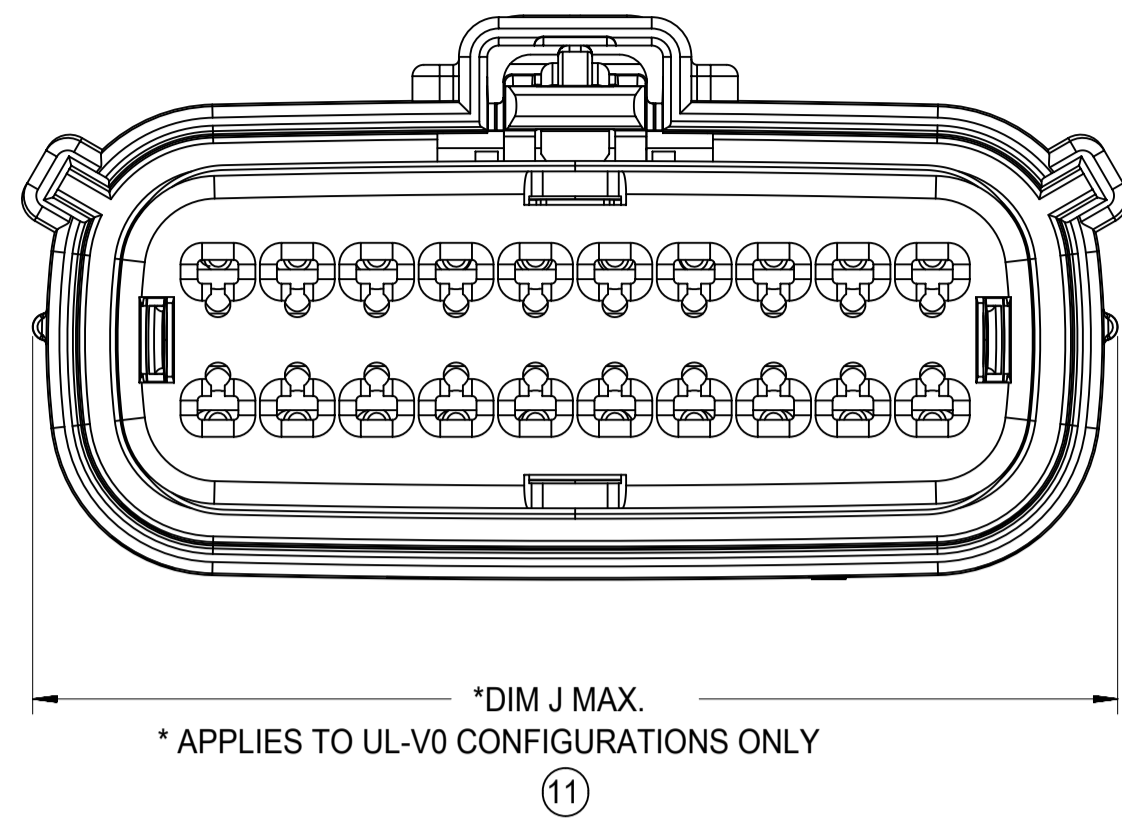
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|---------------------|------------|--------------------------|----------|--------------|
| EC NO: 171650       |            |                          |          |              |
| DRWN: DDEB          | 2018/01/19 | <b>molex</b>             |          |              |
| CHK'D: MVANSLAMBROU | 2018/02/16 |                          |          |              |
| APPR: MVANSLAMBROU  | 2018/02/16 |                          |          |              |
| INITIAL REVISION:   |            |                          |          |              |
| DRWN: APROFFITT     | 2014/05/14 | PRODUCT CUSTOMER DRAWING |          |              |
| APPR: VKOSHY        | 2014/06/27 |                          |          |              |
| DOCUMENT NUMBER     |            | DOC TYPE                 | DOC PART | REVISION     |
| SD-33472-0001       |            | PSD                      | 001      | C2           |
| MATERIAL NUMBER     |            | CUSTOMER                 |          | SHEET NUMBER |
|                     |            | GENERAL MARKET           |          | 4 OF 11      |

# SHEET DESCRIPTION

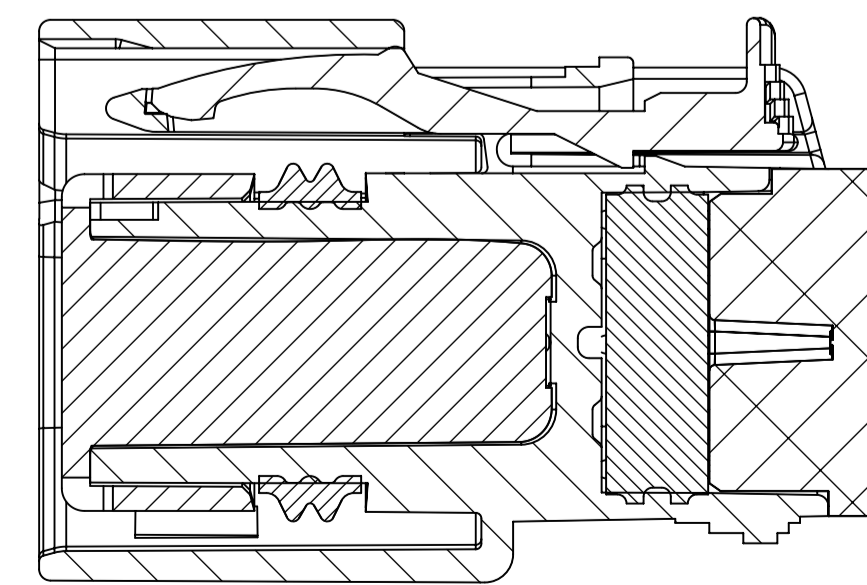
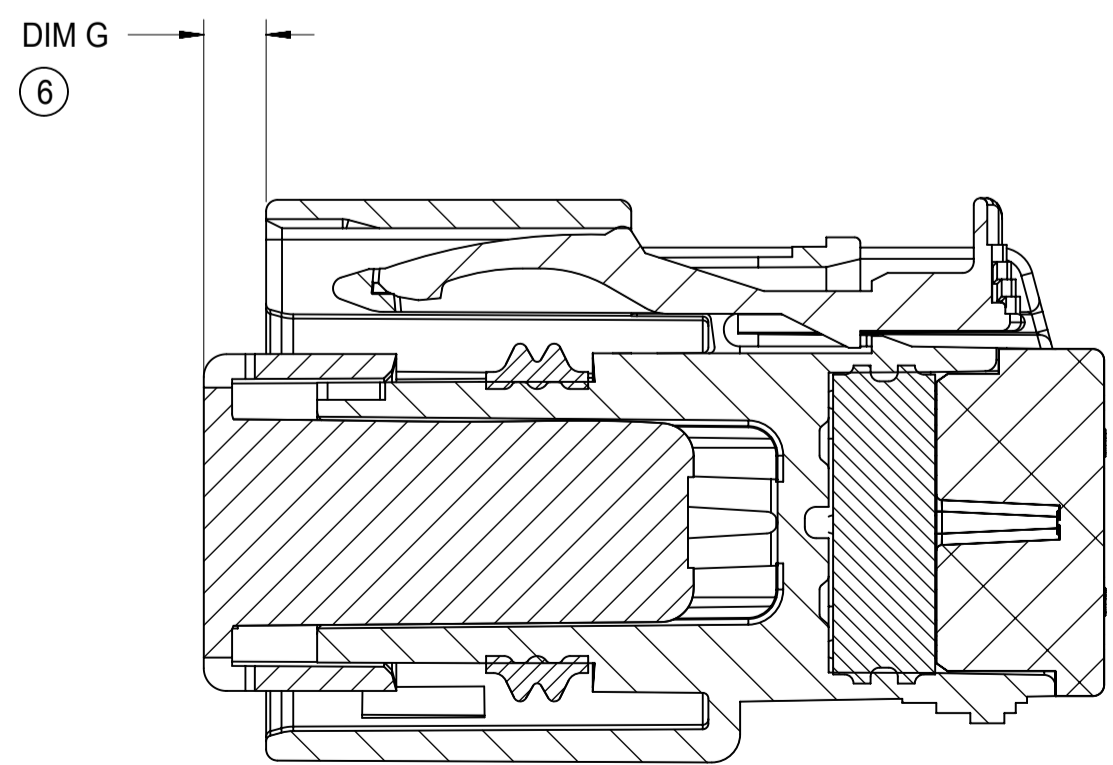
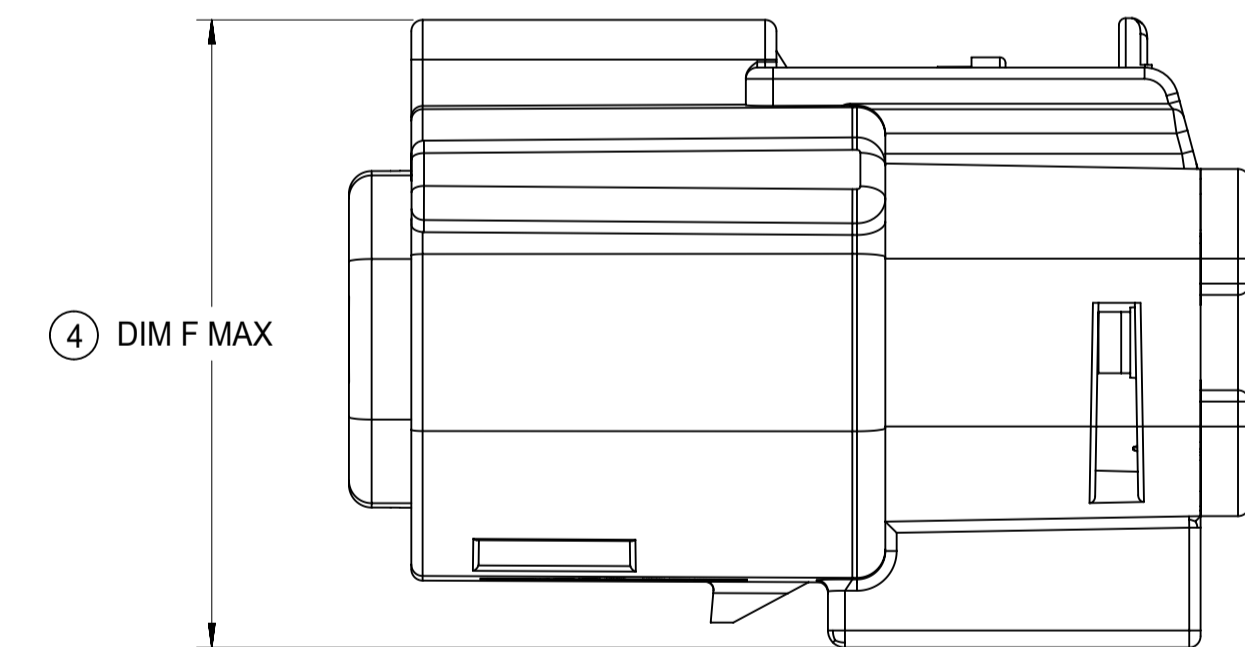
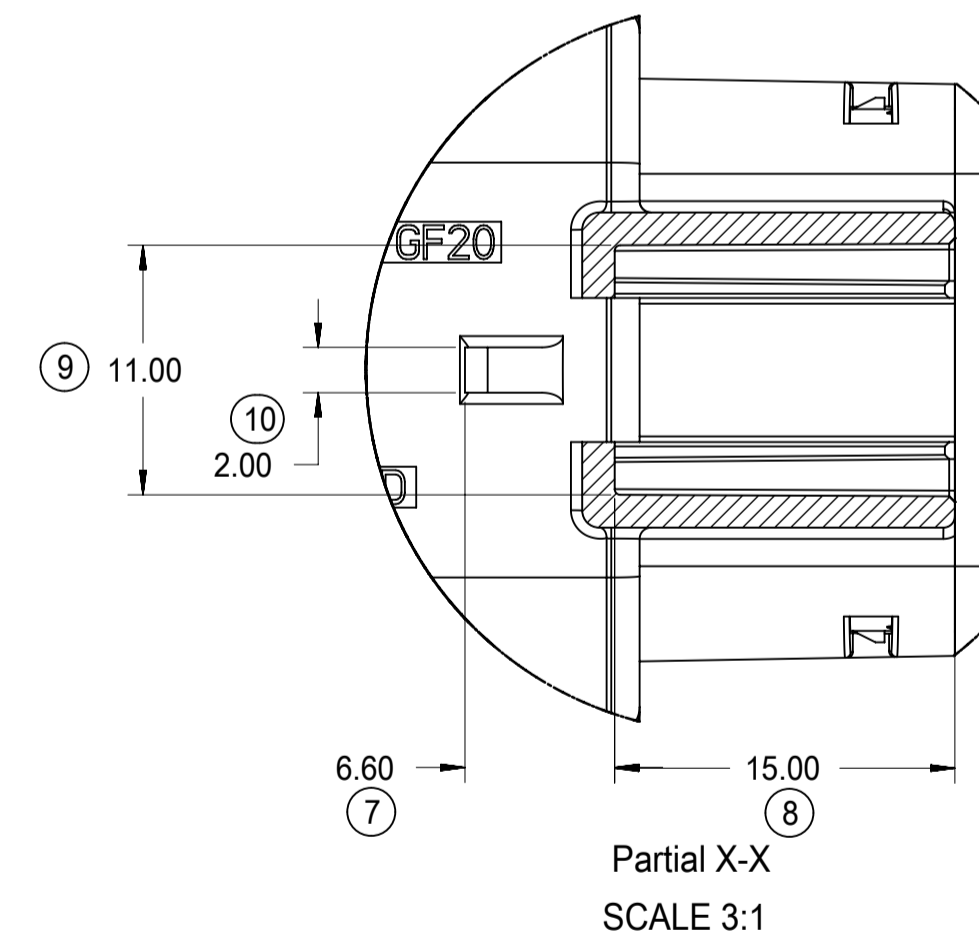
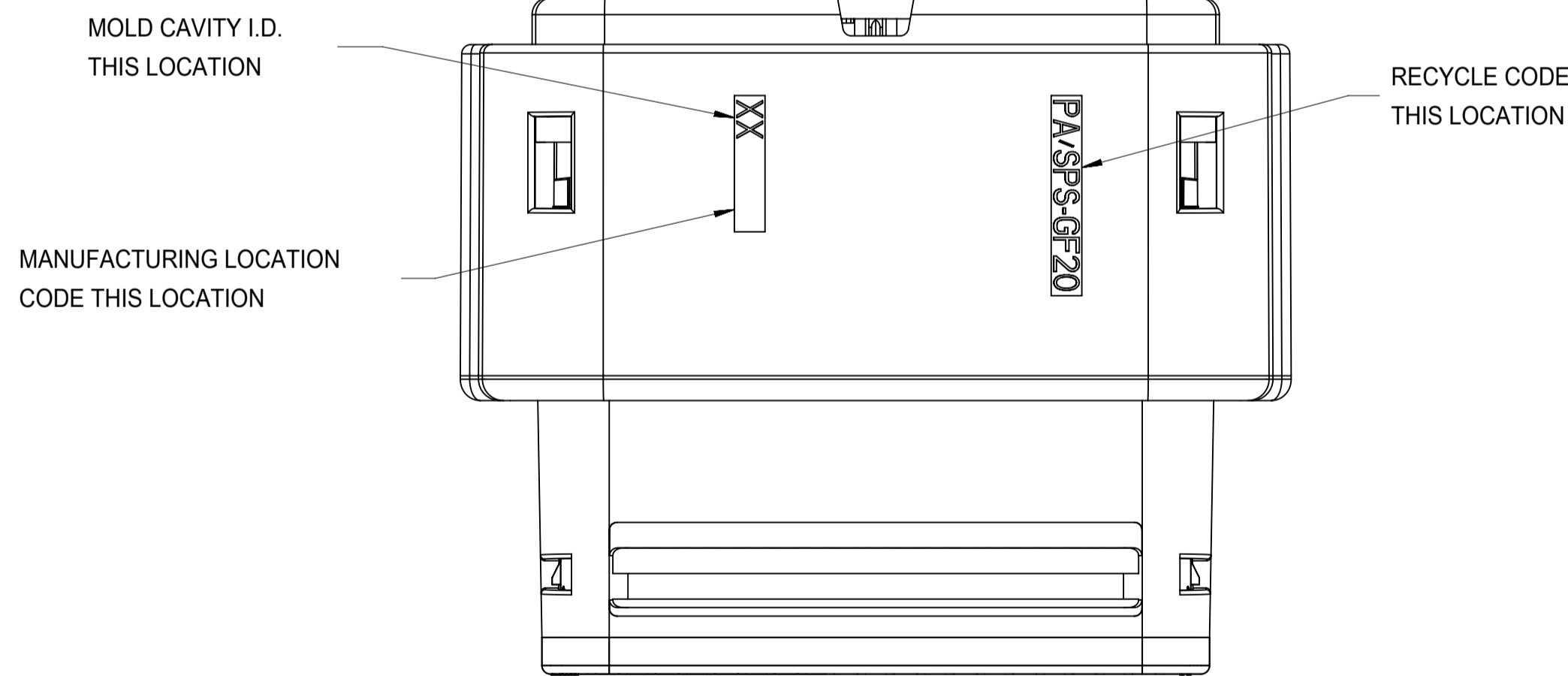
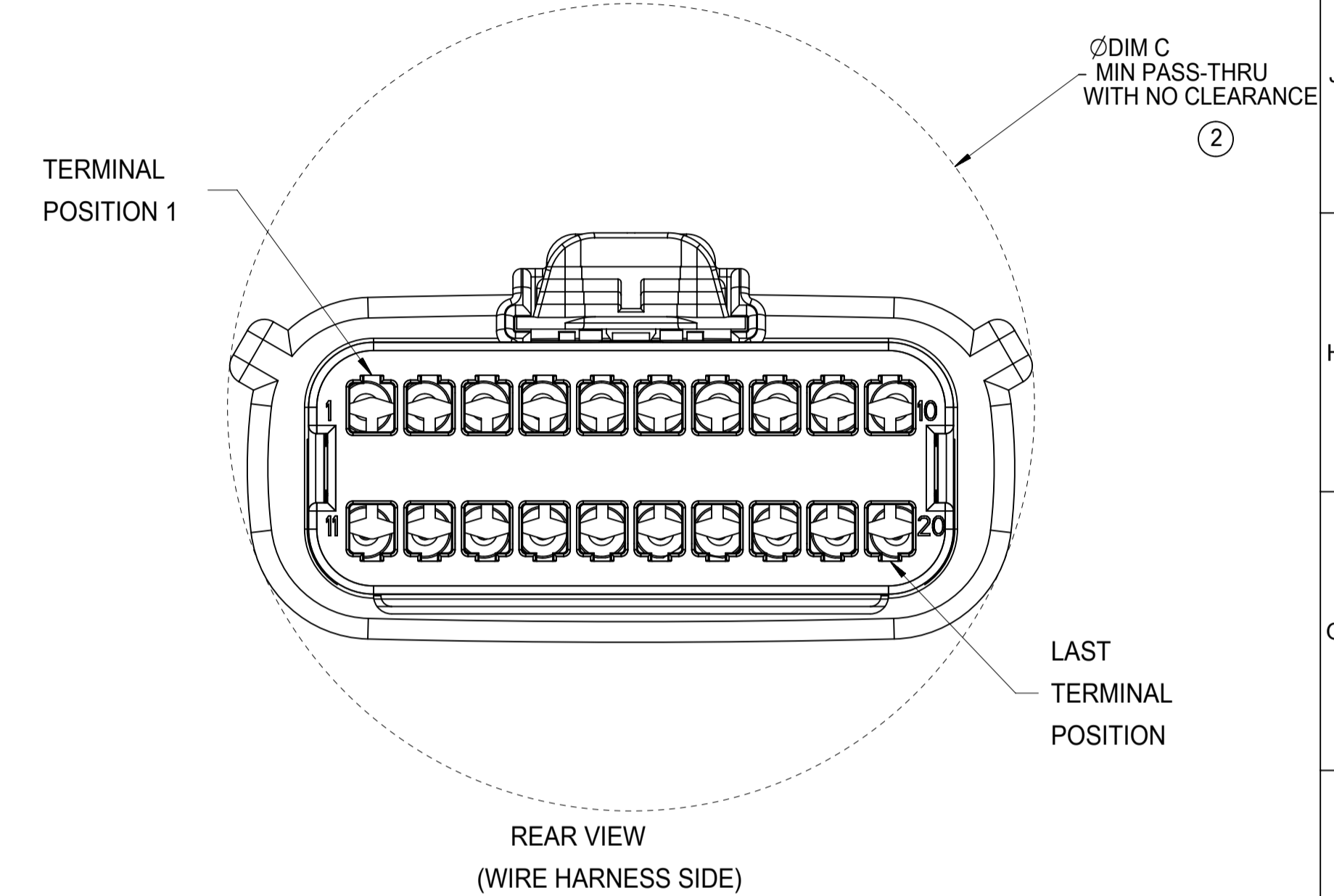
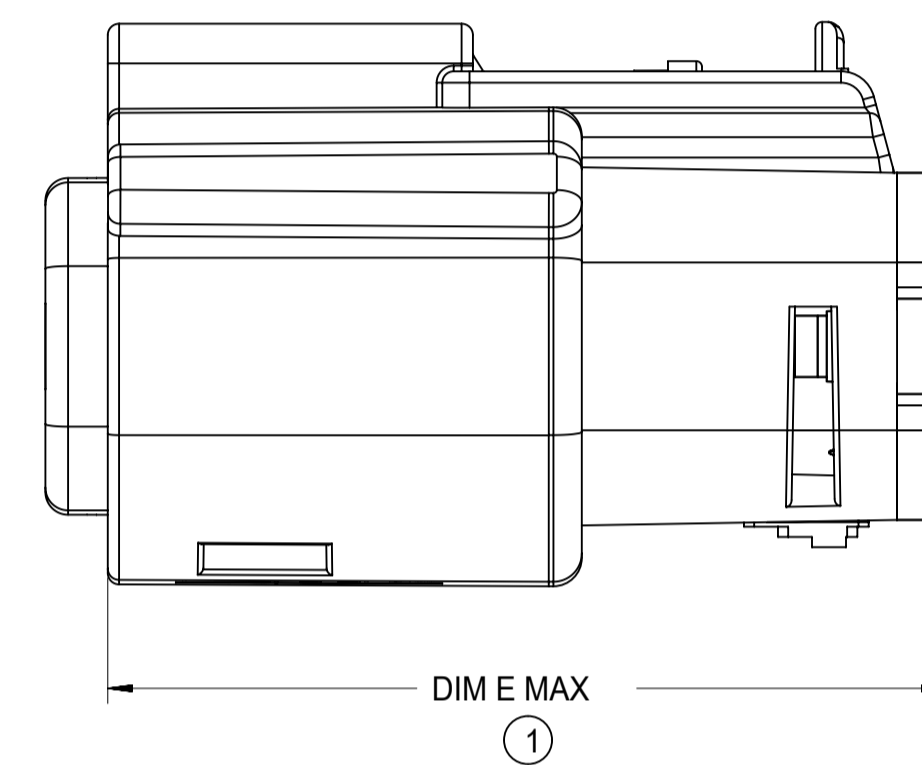
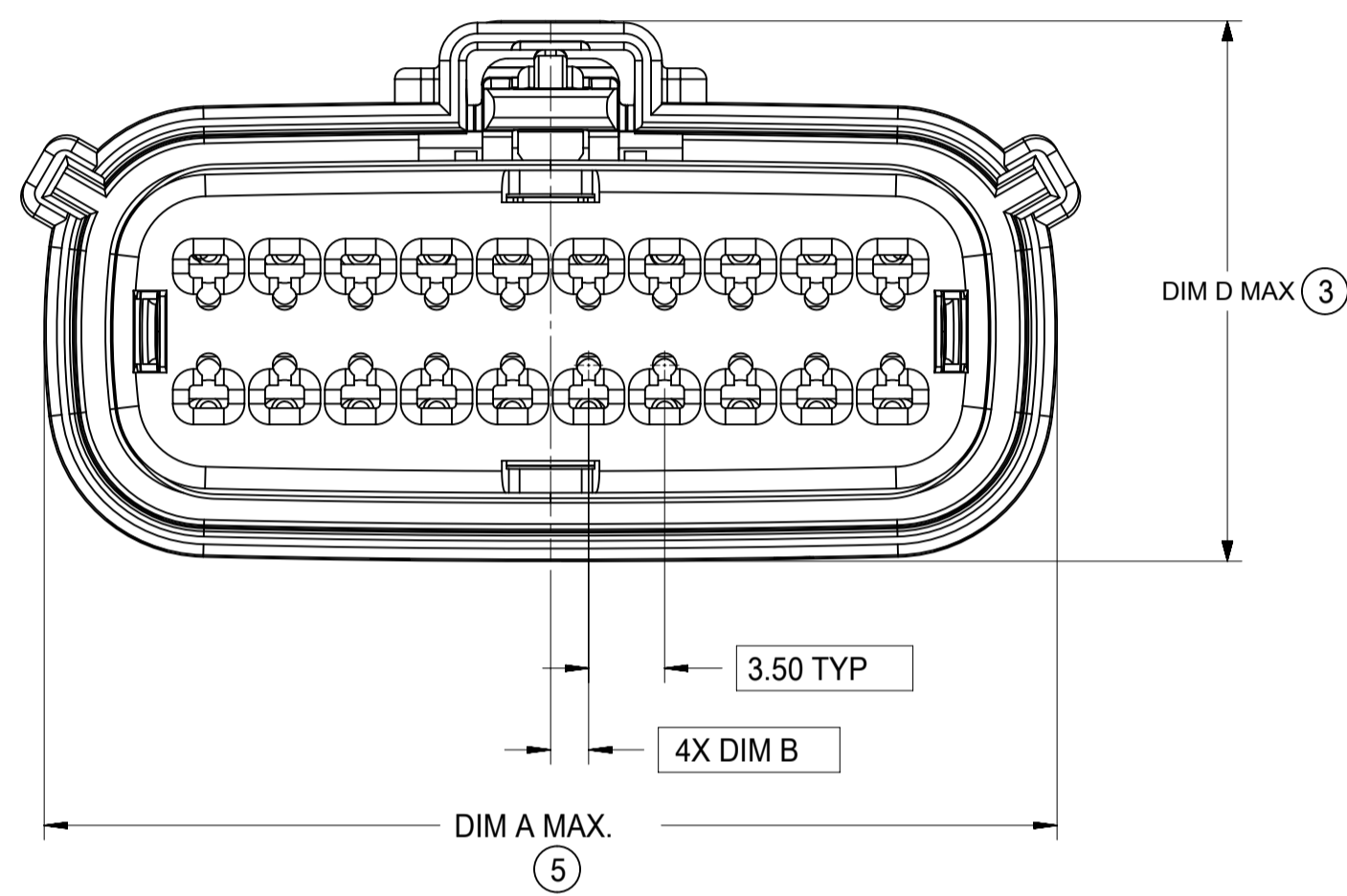
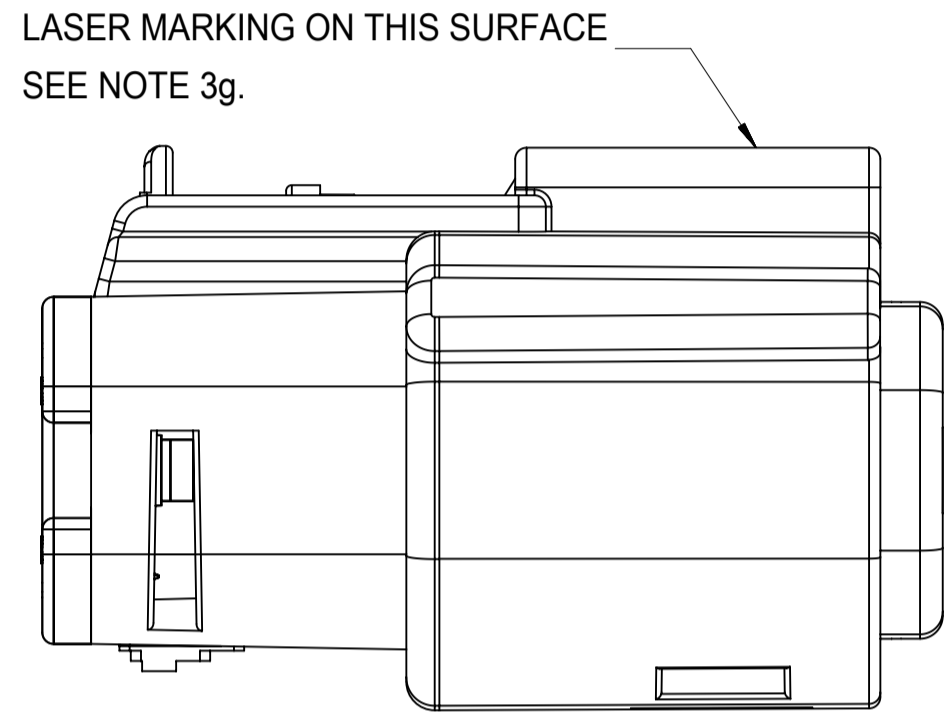
RECEPTACLE CONNECTOR ASSEMBLY

# 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

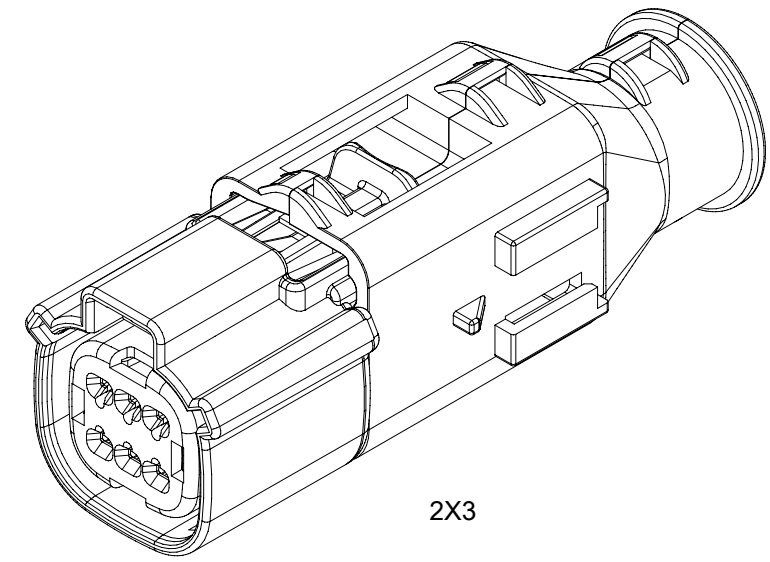
| SYMBOLS |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |         | CURRENT REV DESC:  |                 | molex   |              |
|---------|--|---|---------|--|-----------------|---|--------------|
| ▽ = 0   | mm                                       | SCALE   | 1:1     | EC NO: 171650  |                 | MX150 RCPT<br>DUAL ROW SEALED ASSEMBLY MAT SEAL |              |
| ▽ = 0   | GENERAL TOLERANCES<br>(UNLESS SPECIFIED) |   |         | DRWN: DDEB   | 2018/01/19      |   |              |
| ▽ = 0   | ANGULAR TOL ± 1.0°                       |   |         | CHK'D: MVANSLAMBROU  | 2018/02/16      | PRODUCT CUSTOMER DRAWING                        |              |
| ▽ = 0   | 4 PLACES ±                               |   |         | APPR: MVANSLAMBROU   | 2018/02/16      |   |              |
| ▽ = 0   | 3 PLACES ±                               |   |         | INITIAL REVISION:  |                 | DOCUMENT NUMBER                                 |              |
| ▽ = 0   | 2 PLACES ± 0.1                           |   |         | DRWN: APROFFITT  | 2014/05/14      | SD-33472-0001                                   |              |
| ▽ = 0   | 1 PLACE ± 0.2                            |   |         | APPR: VKOSHY   | 2014/06/27      | DOC TYPE   DOC PART   REVISION                  |              |
| ▽ = 0   | 0 PLACES ±                               |   |         | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                 | PSD 001 C2                                      |              |
| ▽ = 0   |  | THIRD ANGLE PROJECTION  | DRAWING | SERIES   | MATERIAL NUMBER | CUSTOMER  | SHEET NUMBER |
|         |  |   | A1-SIZE | 33472  |                 | GENERAL MARKET                                  | 5 OF 11      |

**SHEET DESCRIPTION**  
**BACKSHELL NOTES**

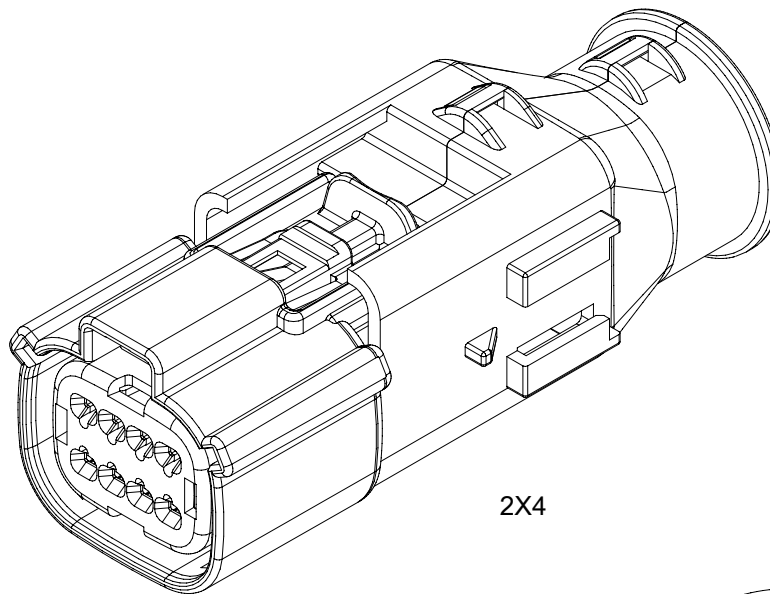
BACKSHELL NOTES: VALID UNLESS OTHERWISE SPECIFIED

**1. GENERAL:**

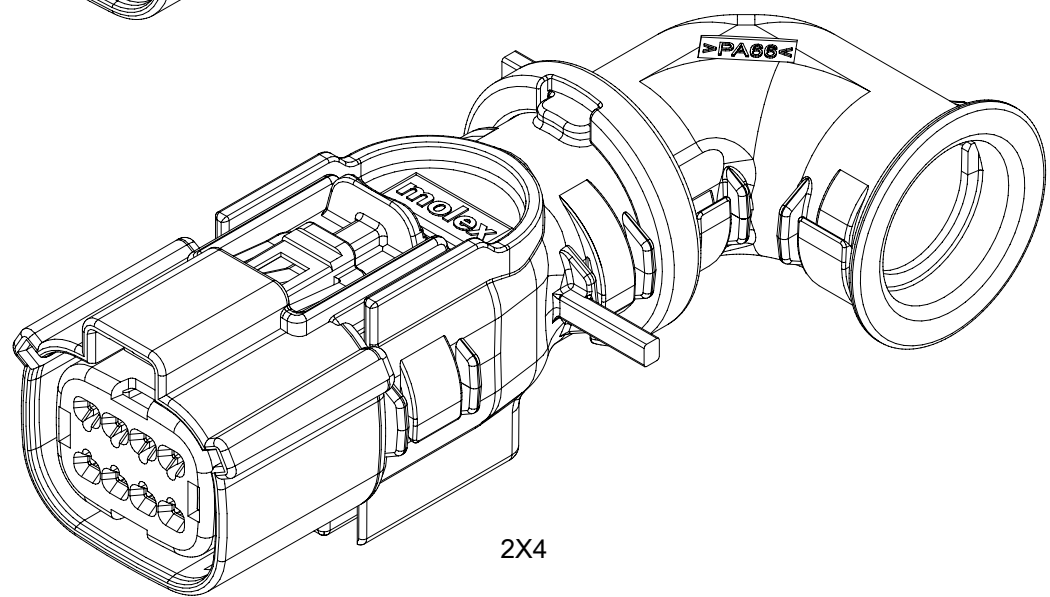
- a. APPLICATION SPECIFICATION SEE: AS-34951-001
- DESIGNED TO MATE WITH RECEPTACLE SEALED ASSEMBLY SPECIFIED IN MOLEX DRAWING SD-33472-0001.
  - SYSTEM TO BE USED WITH WIRE WITHIN DIAMETER RANGE OF 1.2mm TO 2.69mm.
  - COMPONENTS ARE OPTIONAL AND MUST BE PURCHASED SEPERATELY.
  - DESIGN IS OWNED BY SCHLEMMER FOR SCHLEMMER BACKSHELL.
  - DESIGN IS OWNED BY MOLEX FOR MOLEX BACKSHELL.
  - 90° ADAPTOR DESIGN IS OWNED BY MOLEX.
  - FOR ADDITIONAL INFORMATION SEE THE BACKSHELL COMPONENT DRAWING SD-34951-0001.



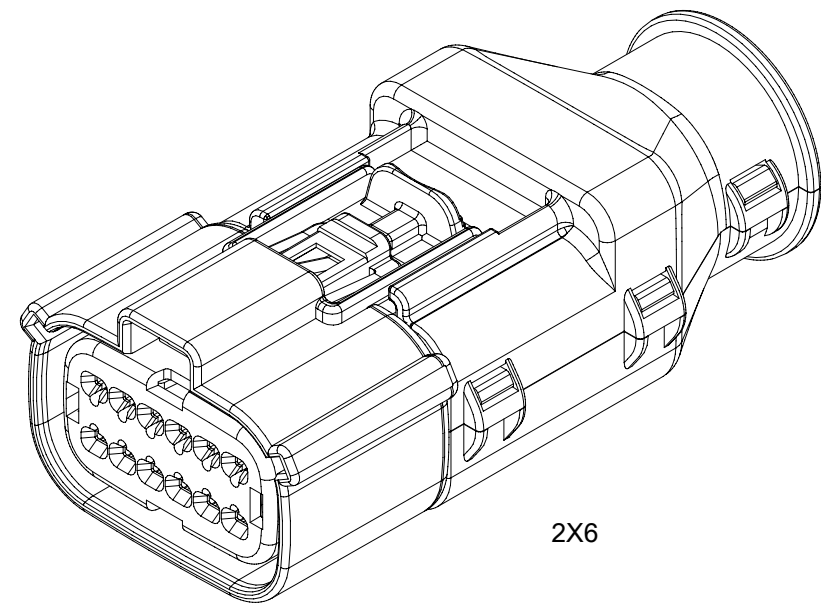
2X3



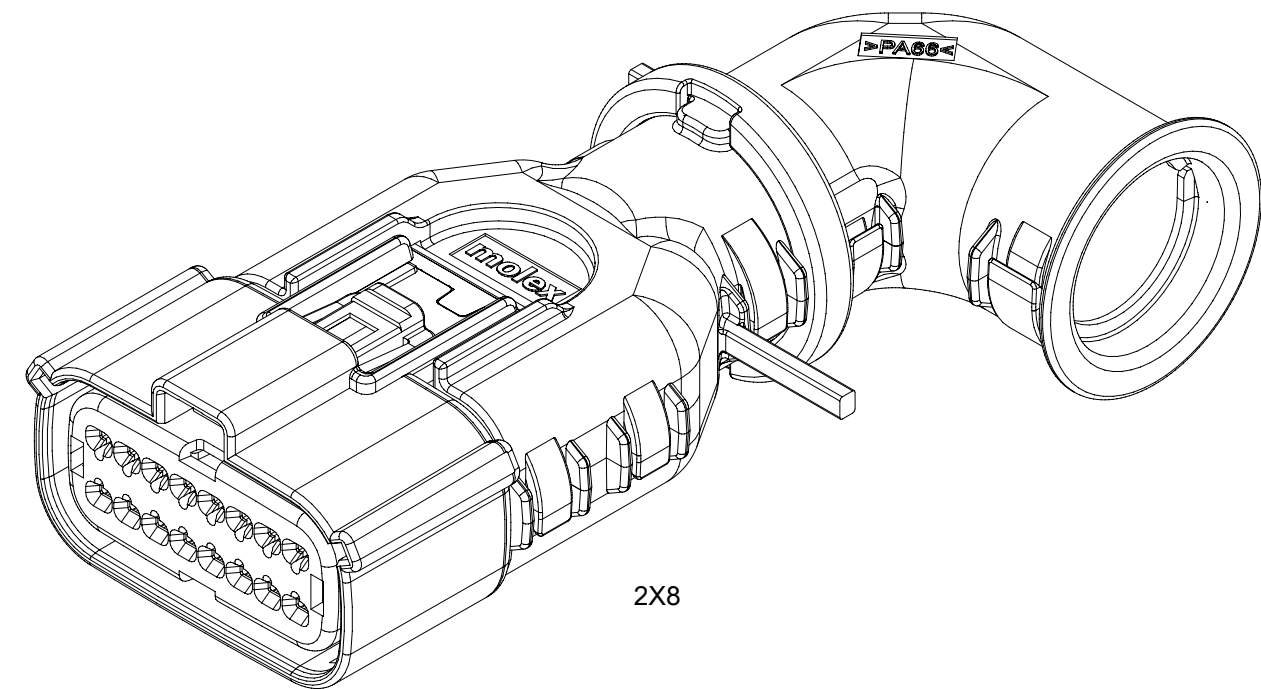
2X4



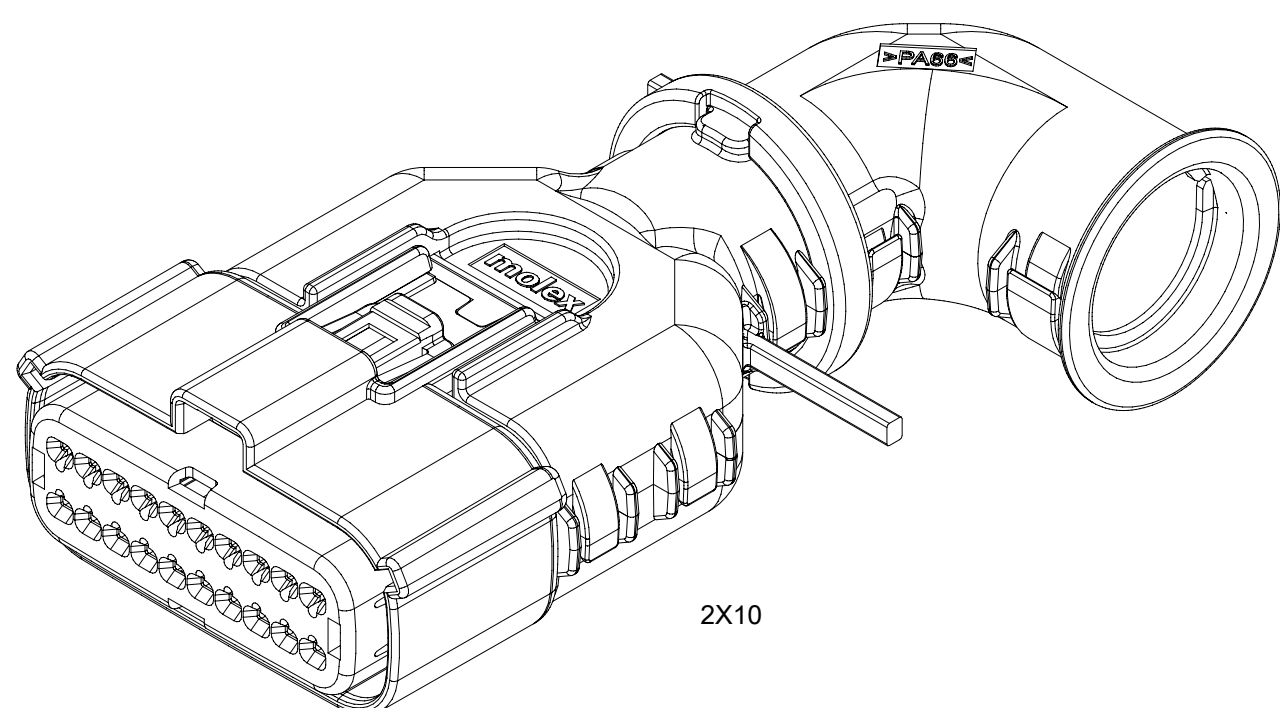
2X4



2X6



2X8



2X10

**BACKSHELL CUSTOMER MODEL NUMBER LEGEND**

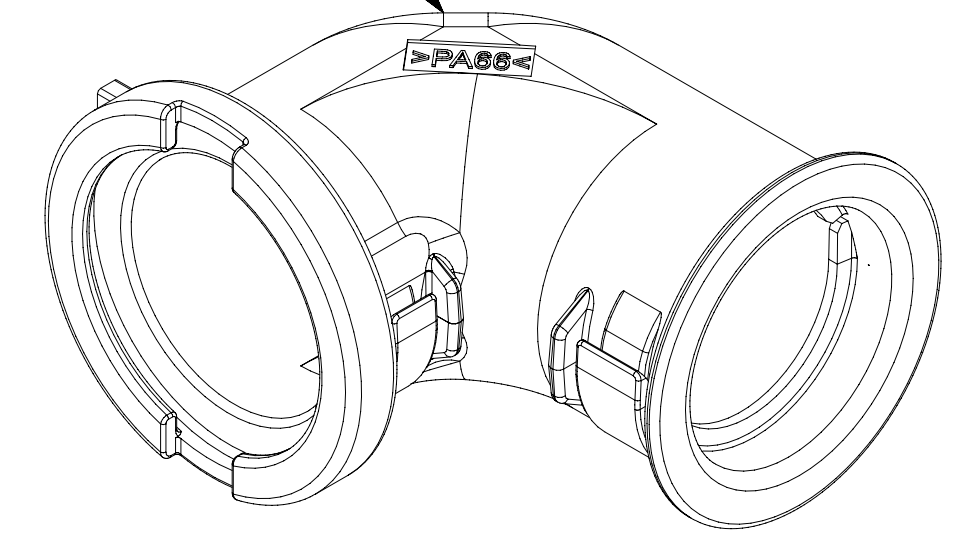
34951-XXXX

- CUSTOMER MODEL COMPONENTS**
- 0 - SCHLEMMER BACKSHELL ONLY
  - 1 - SCHLEMMER BACKSHELL & MX150 HOUSING KEY A ASSEMBLY
  - 2 - SCHLEMMER BACKSHELL & MX150 HOUSING KEY B ASSEMBLY
  - 3 - SCHLEMMER BACKSHELL & MX150 HOUSING KEY C ASSEMBLY
  - 4 - SCHLEMMER BACKSHELL & MX150 HOUSING KEY D ASSEMBLY
  - 5 - MOLEX BACKSHELL ONLY
  - 6 - MOLEX BACKSHELL & MX150 HOUSING KEY A ASSEMBLY
  - 7 - MOLEX BACKSHELL & MX150 HOUSING KEY B ASSEMBLY
  - 8 - MOLEX BACKSHELL & MX150 HOUSING KEY C ASSEMBLY
  - 9 - MOLEX BACKSHELL & MX150 HOUSING KEY D ASSEMBLY

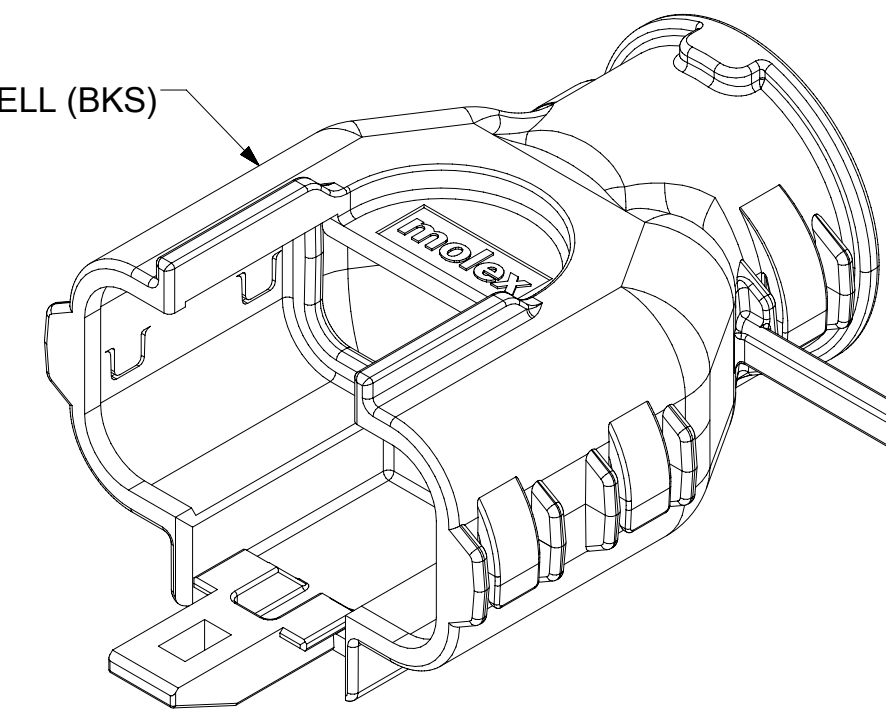
- BACKSHELL FEATURES**
- 1 - WITH RIBS
  - 2 - WITHOUT RIBS
  - 3 - 90° ADAPTOR

MX150 CIRCUIT SIZE 04, 06, 08, 12, 16, 20

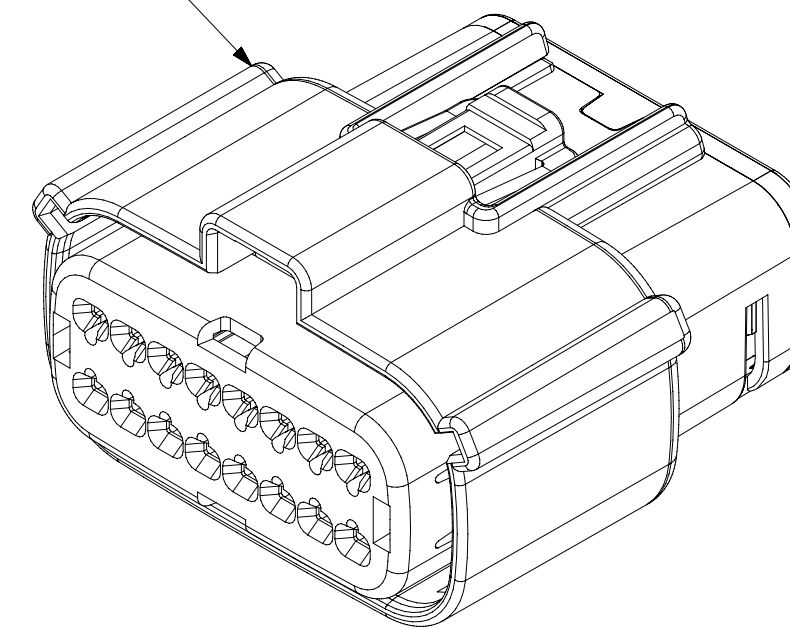
90° ADAPTOR



BACKSHELL (BKS)



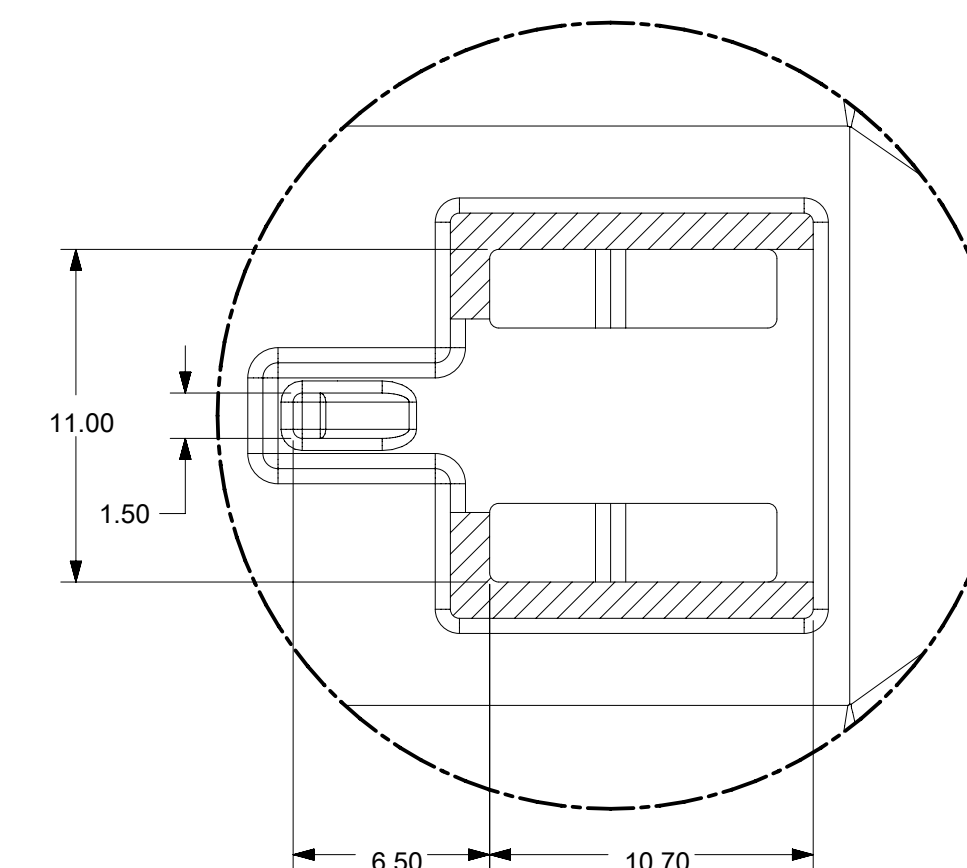
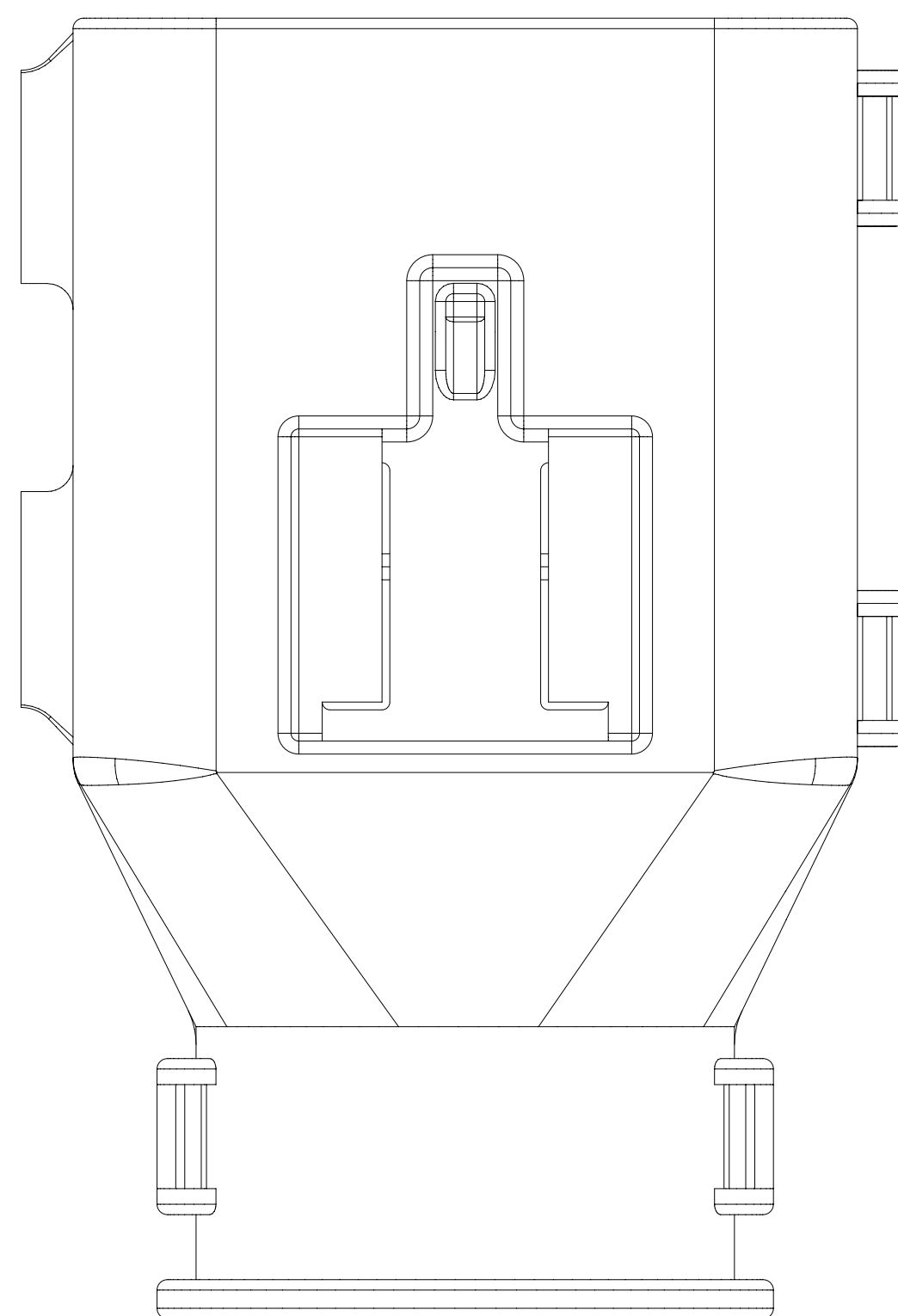
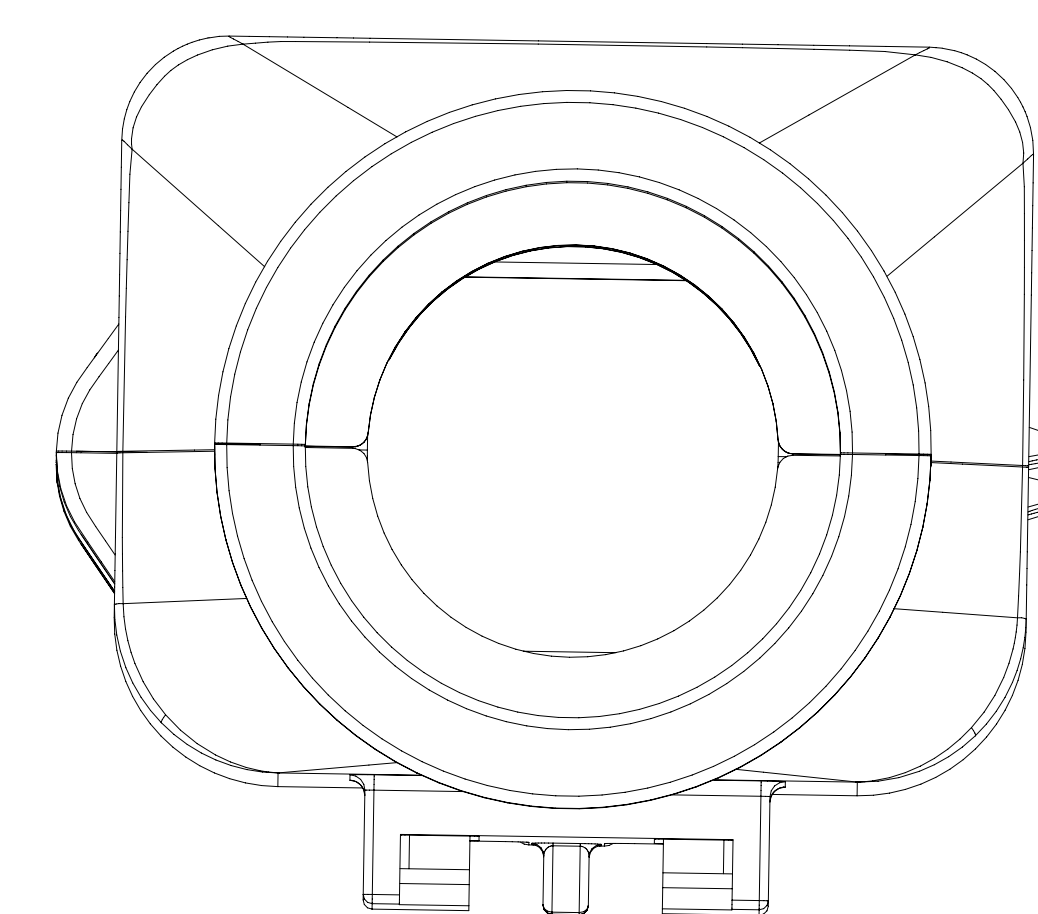
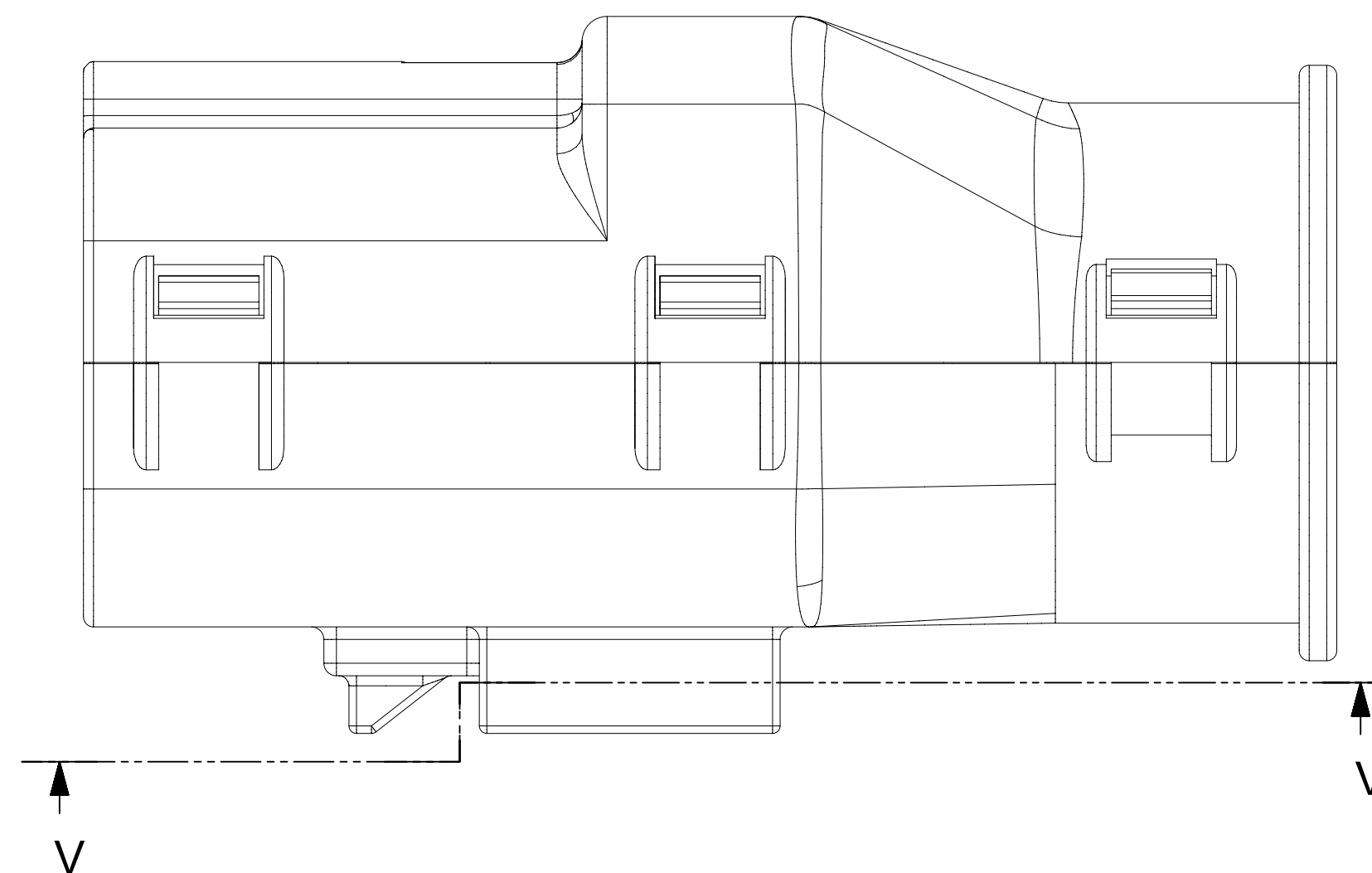
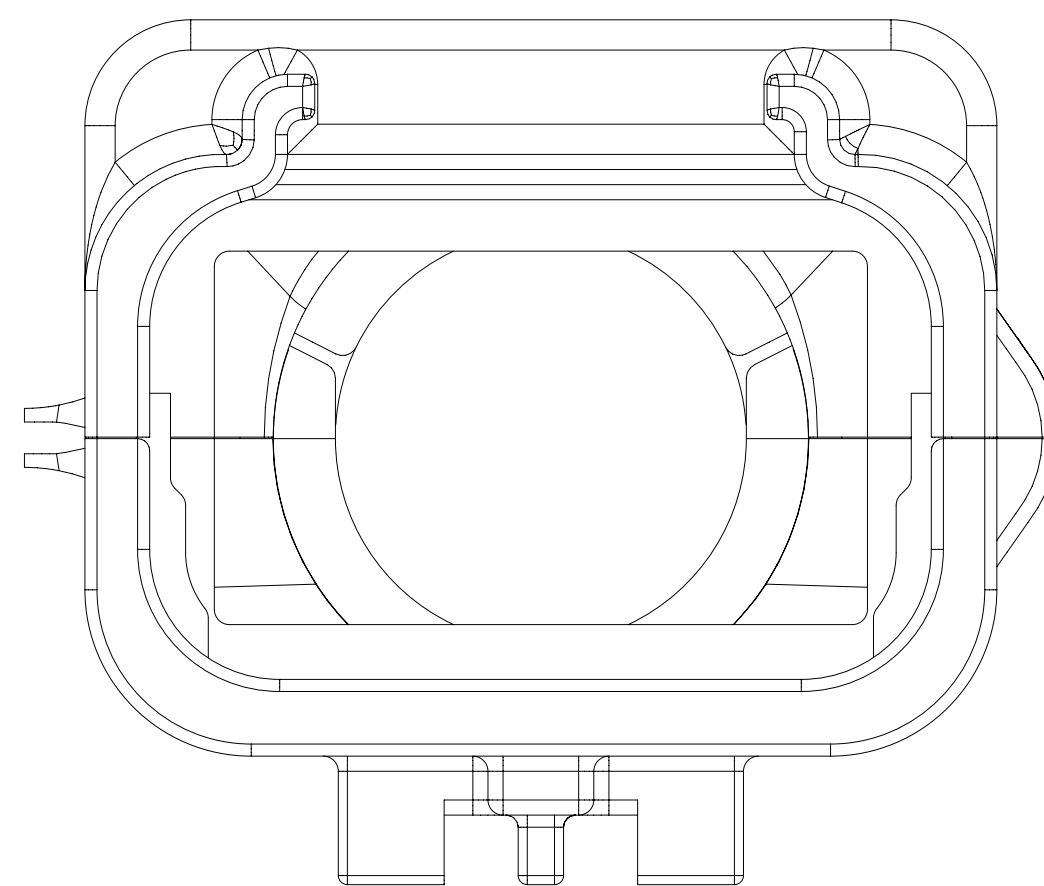
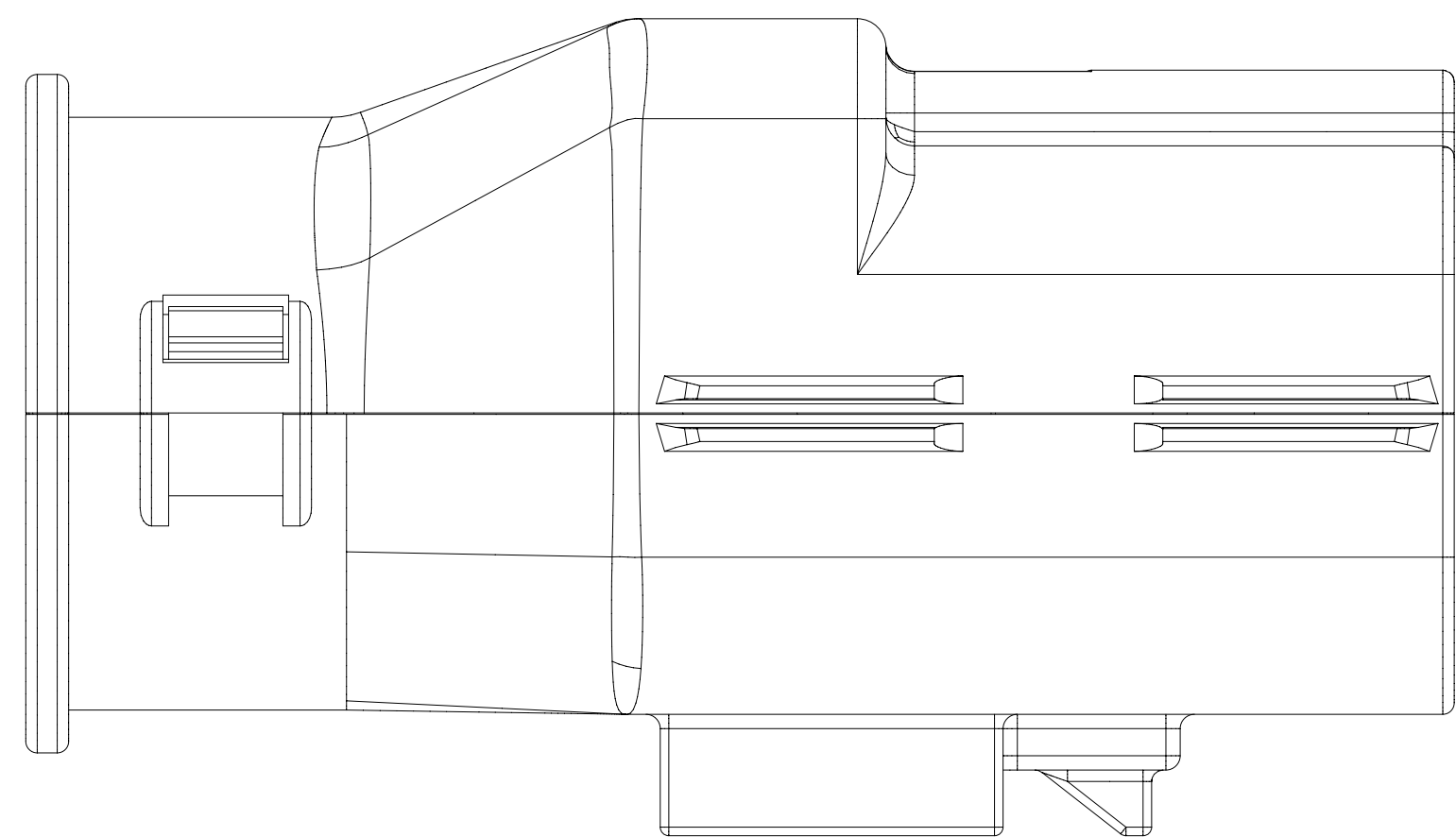
RECEPTACLE SEALED ASSEMBLY



SCALE 2:1

| SYMBOLS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |       | CURRENT REV DESC:              |         |  |  |  |
|---------|---|-------|--------------------------------|---------|--|--|--|
|         | DIMENSION UNITS   | SCALE |                                |         |  |  |  |
| ▽ = 0   | mm  | 1.5:1 |                                |         | <b>MX150 RCPT</b><br><b>DUAL ROW SEALED ASSEMBLY MAT SEAL</b>                                  |  |  |
| ▽ = 0   | GENERAL TOLERANCES (UNLESS SPECIFIED)   |       |                                |         |  |  |  |
| ▽ = 0   | ANGULAR TOL ± 1.0°  |       | EC NO: 171650                  |         | <b>PRODUCT CUSTOMER DRAWING</b>  |  |  |
| ▽ = 0   | 4 PLACES  | ±     | DRWN: DDEB 2018/01/19          |         |  |  |  |
| ▽ = 0   | 3 PLACES  | ±     | CHK'D: MVANSLAMBROU 2018/02/16 |         | DOCUMENT NUMBER: <b>SD-33472-0001</b>   DOC TYPE: PSD   DOC PART: 001   REVISION: C2           |  |  |
| ▽ = 0   | 2 PLACES  | ± 0.1 | APPR: MVANSLAMBROU 2018/02/16  |         |  |  |  |
| ▽ = 0   | 1 PLACE   | ± 0.2 | INITIAL REVISION:              |         | MATERIAL NUMBER: <b>33472</b>   CUSTOMER: <b>GENERAL MARKET</b>   SHEET NUMBER: <b>6 OF 11</b> |  |  |
| ▽ = 0   | 0 PLACES  | ±     | DRWN: APROFFITT 2014/05/14     |         |  |  |  |
| ▽ = 0   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |       | APPR: VKOSHY 2014/06/27        |         |  |  |  |
| ▽ = 0   |   |       | THIRD ANGLE PROJECTION         | DRAWING | SERIES   |  |  |
|         |   |       |                                | A1-SIZE | 33472  |  |  |

**SHEET DESCRIPTION**  
SCHLEMMER BACKSHELL

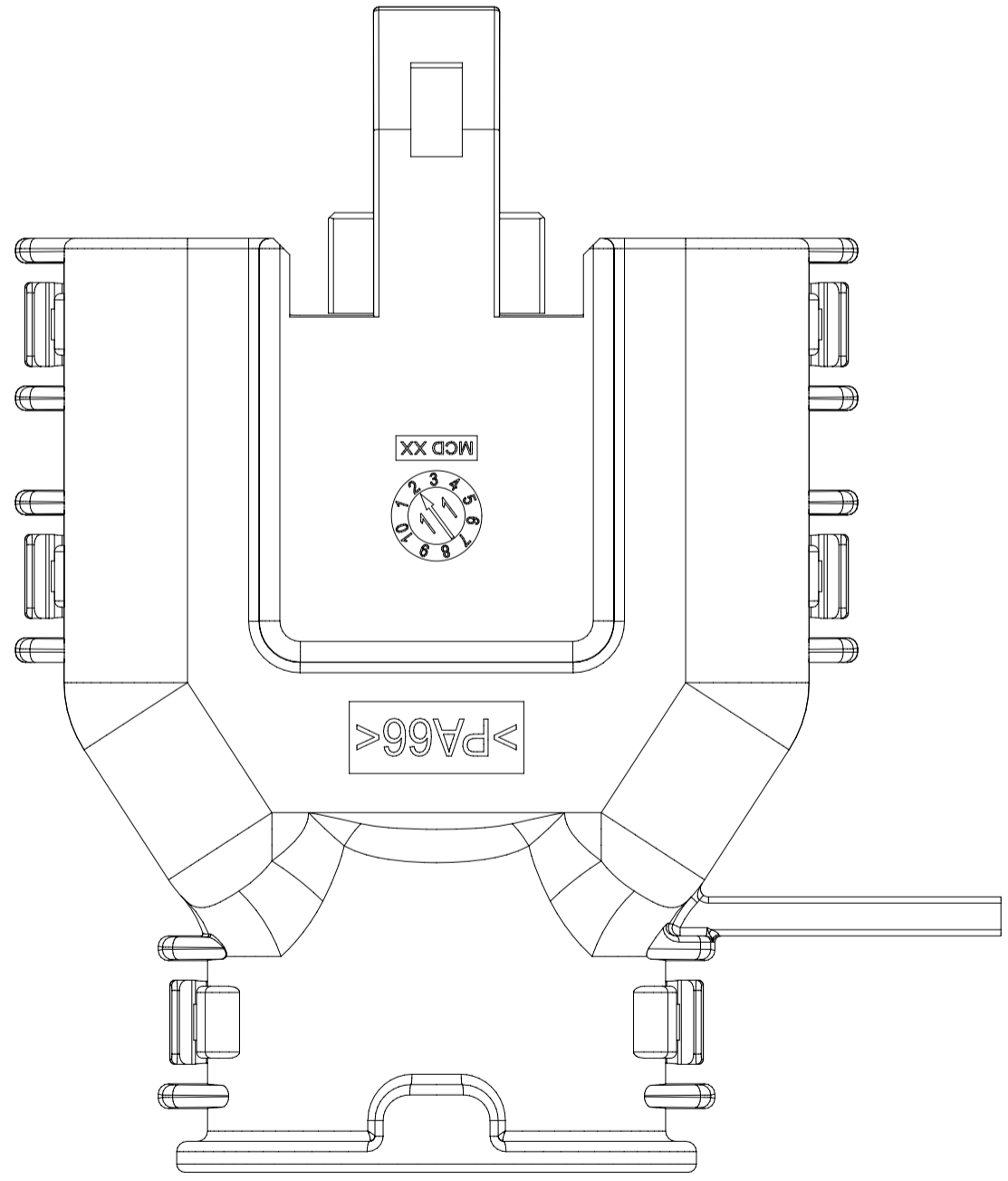
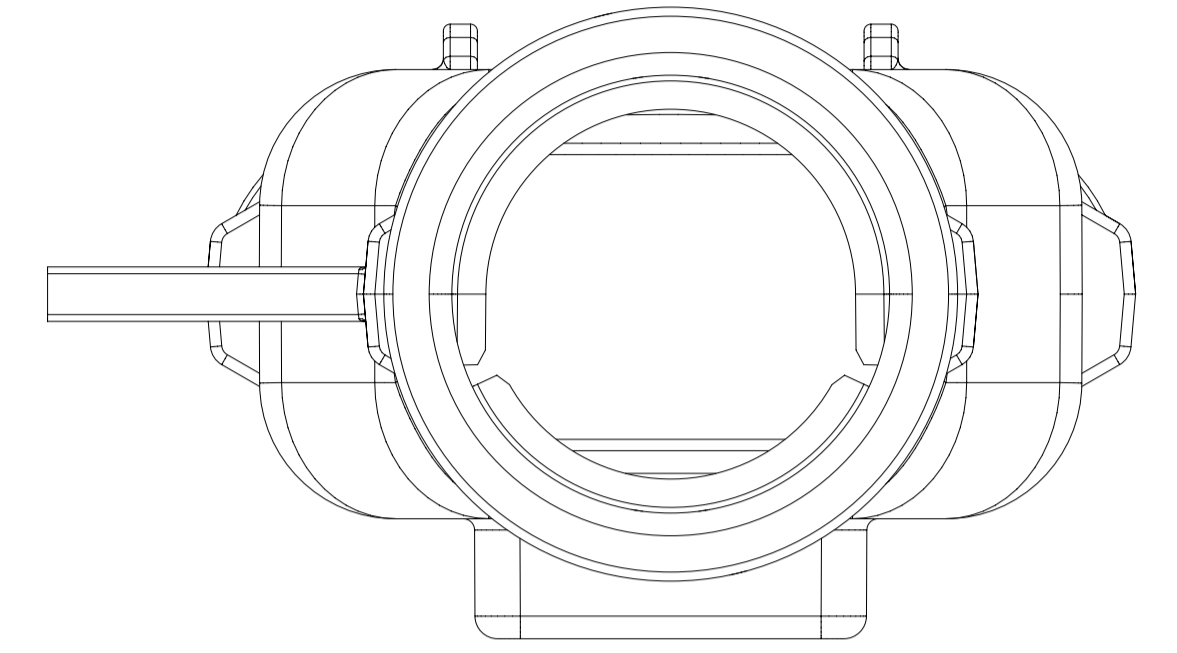
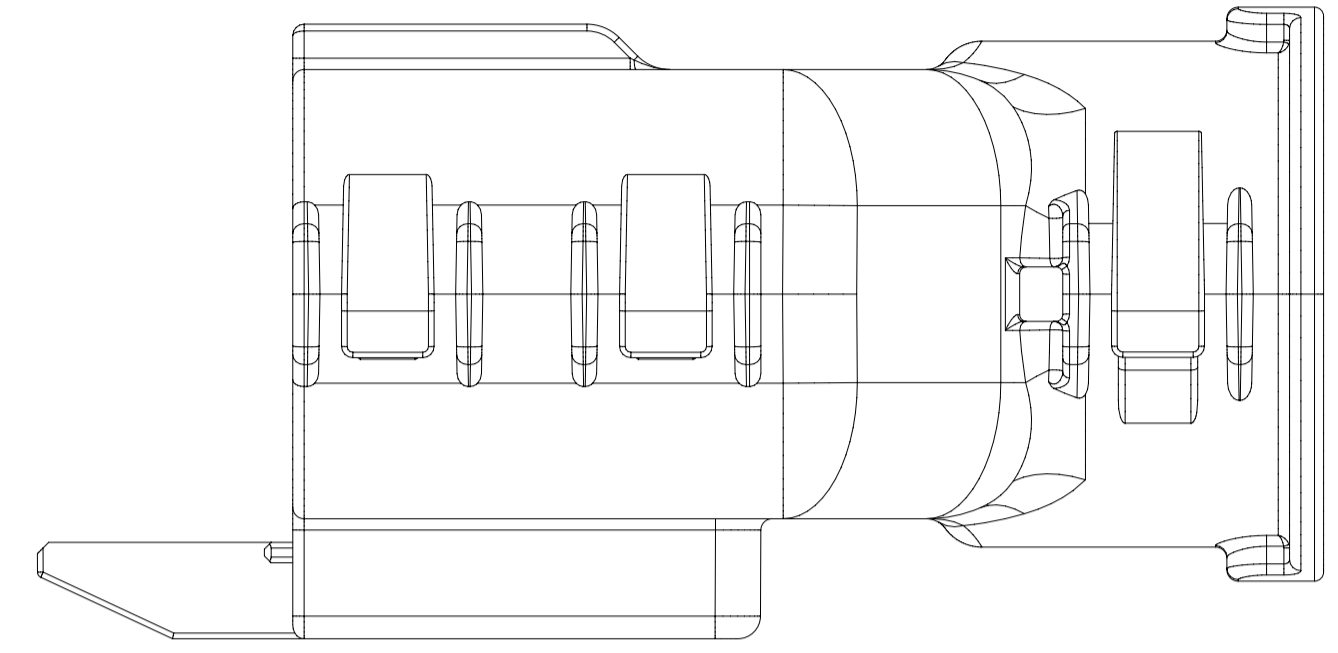
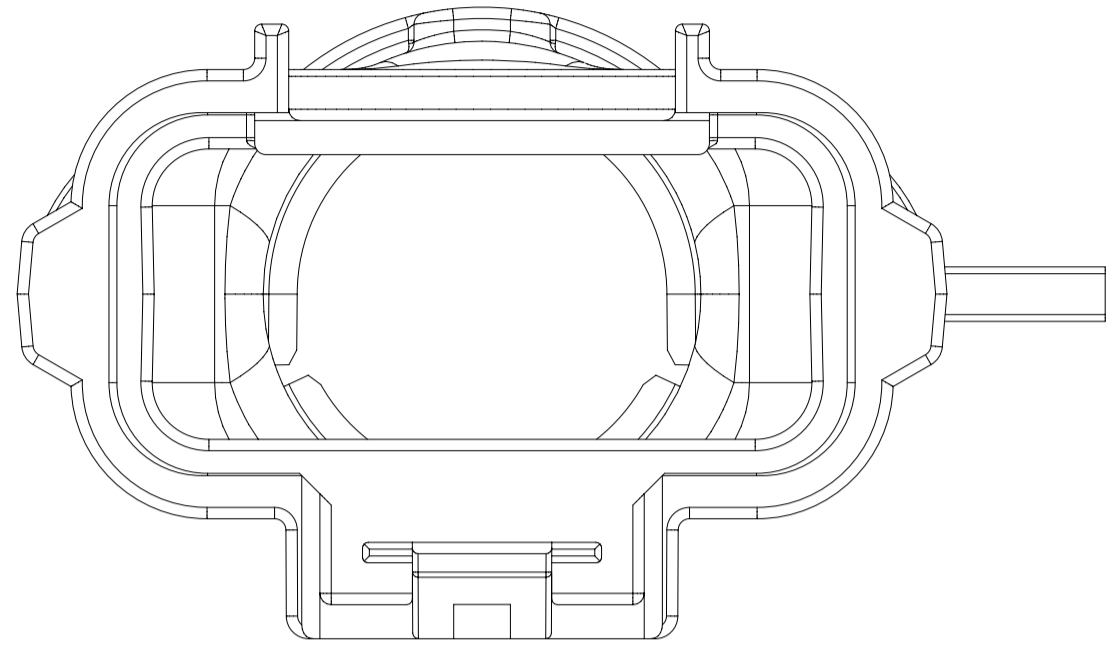
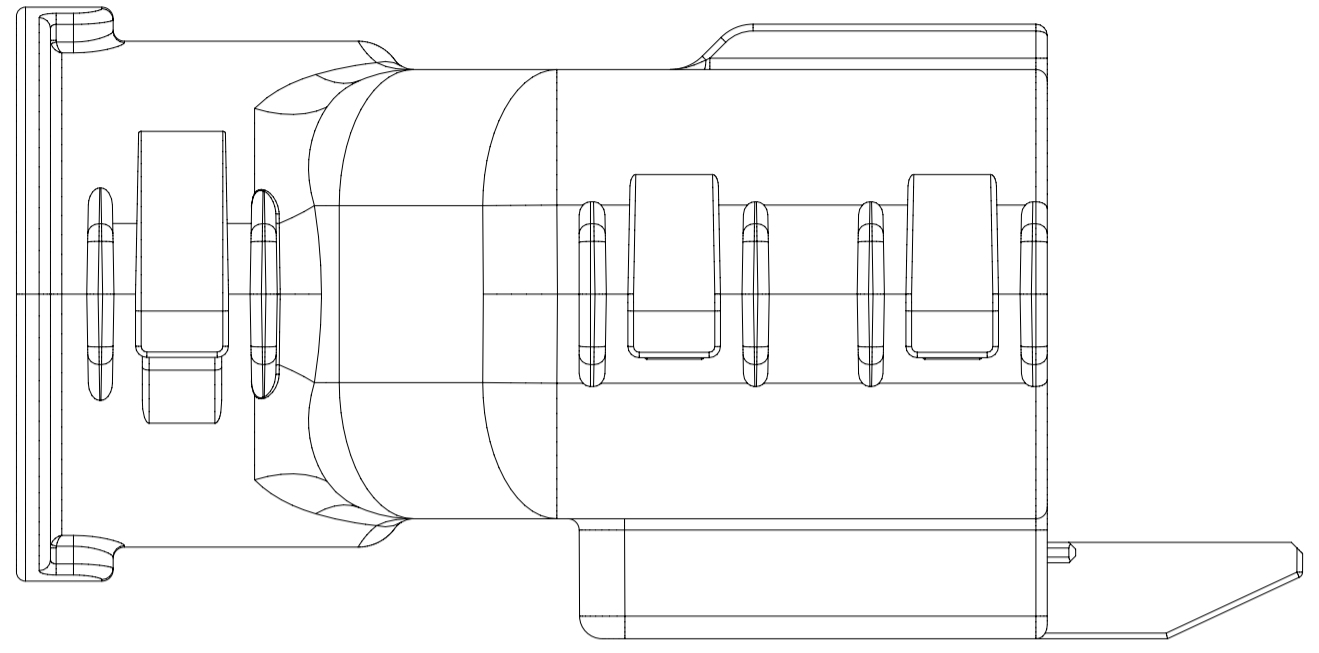


Partial V-V  
SCALE 4:1

|  |  |  |   |   |  |
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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>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                            |   |  |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   | THIRD ANGLE PROJECTION<br>   | DRAWING: <b>A1-SIZE</b><br>SERIES: <b>33472</b>     | DOCUMENT NUMBER: <b>SD-33472-0001</b><br>DOC TYPE: PSD<br>DOC PART: 001<br>REVISION: C2 | MATERIAL NUMBER<br>CUSTOMER: GENERAL MARKET<br>SHEET NUMBER: 7 OF 11 |
|  |  |  |   |   |  |

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

**SHEET DESCRIPTION**  
MOLEX BACKSHELL



|  |   |  |   |  |  |  |  |  |  |
|--|---|--|---|--|--|--|--|--|--|
| <b>SYMBOLS</b><br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br>= 0<br> | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION<br>DIMENSION UNITS    SCALE<br><b>mm</b> <b>3:1</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°   |  | INITIAL REVISION:<br>DRWN: APROFFITT    2014/05/14<br>APPR: VKOSHY    2014/06/27  |  |  |  |  | PRODUCT CUSTOMER DRAWING<br>DOCUMENT NUMBER    DOC TYPE    DOC PART    REVISION<br><b>SD-33472-0001</b> PSD    001    C2 |  |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |  | THIRD ANGLE PROJECTION  |  | DRAWING    SERIES<br><b>A1-SIZE</b> <b>33472</b> |  | MATERIAL NUMBER    CUSTOMER    SHEET NUMBER<br>GENERAL MARKET    8 OF 11 |  |  |

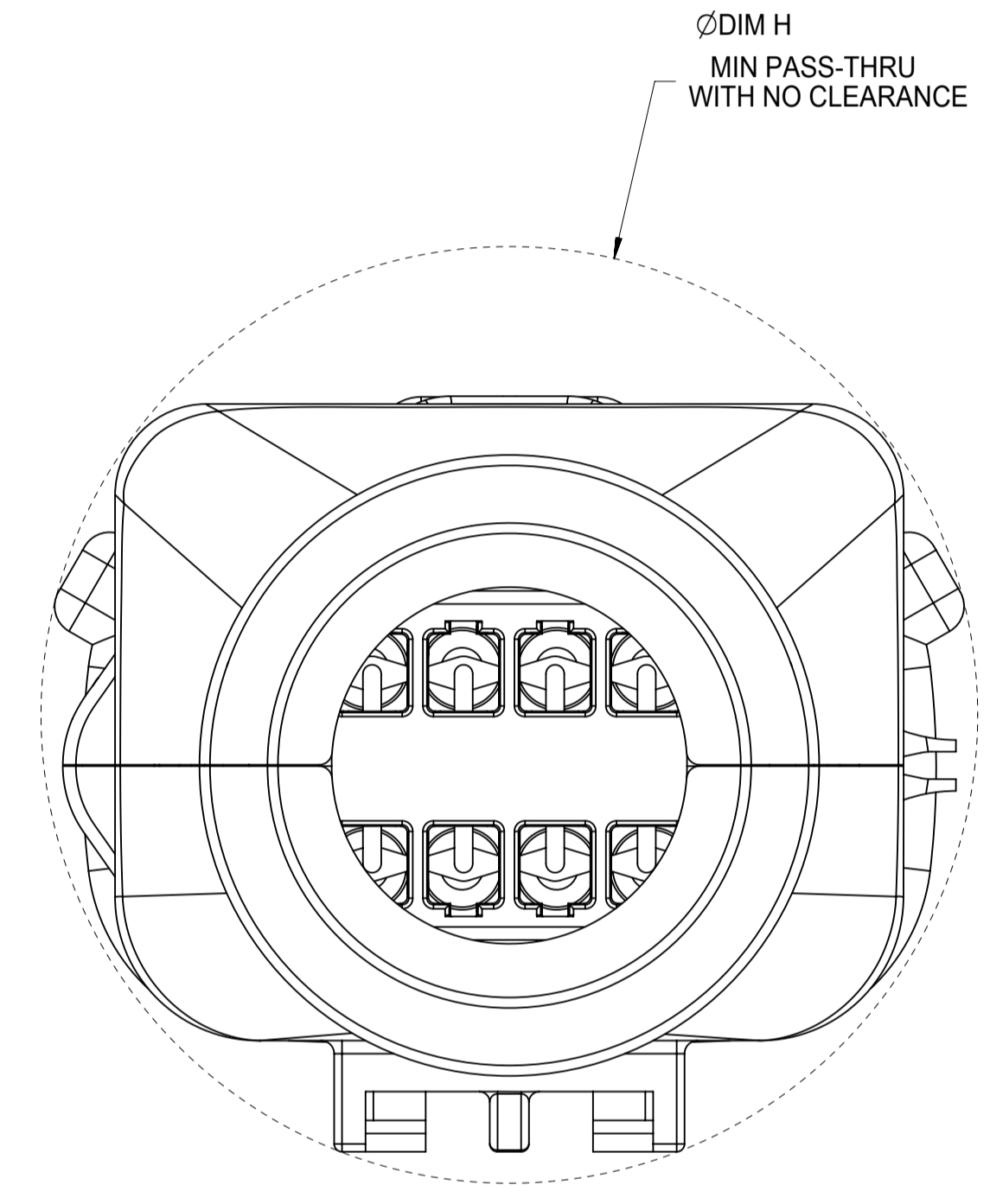
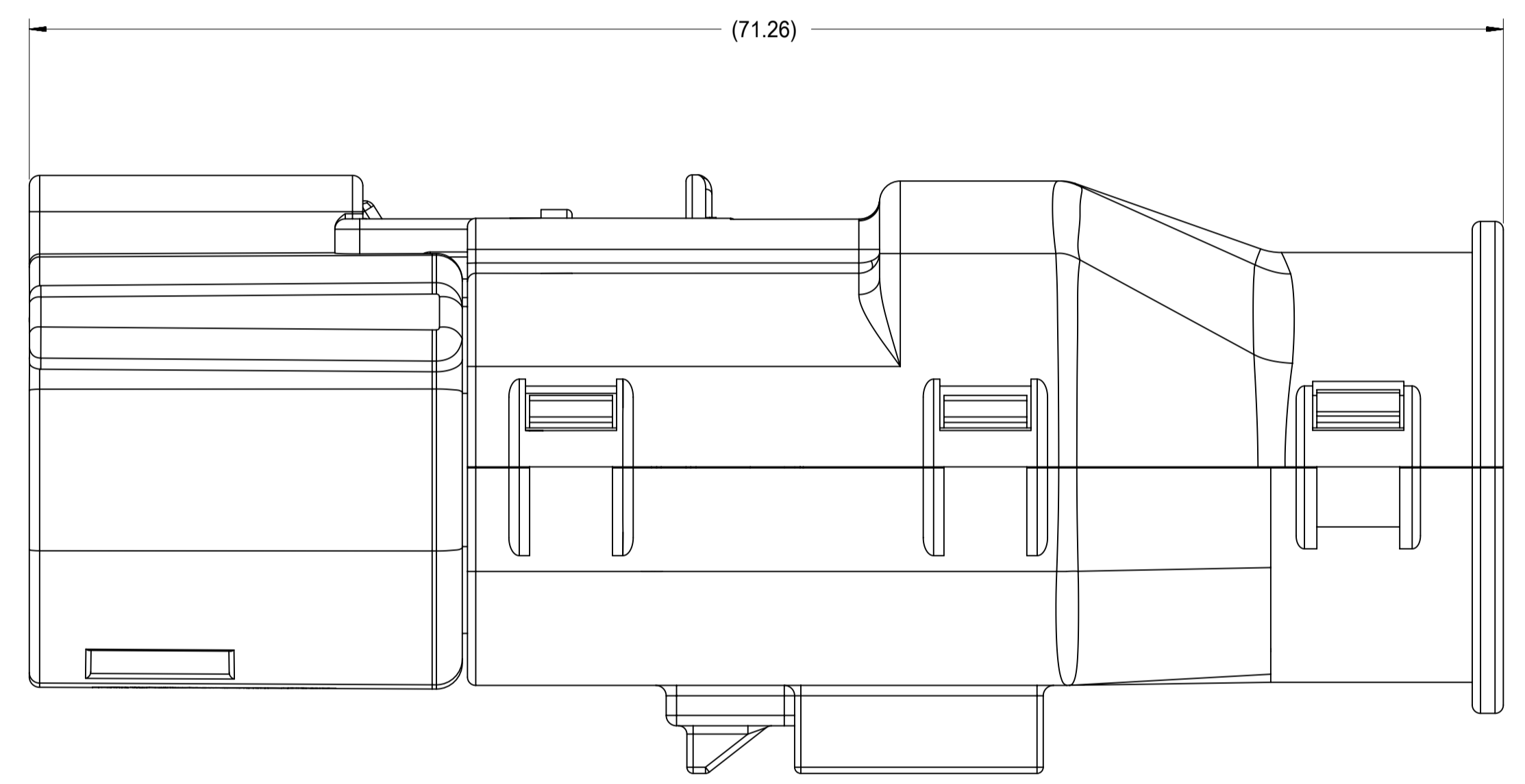
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| DOCUMENT STATUS | P1 | RELEASE DATE | 2018/02/16 | 22:02:25 |
|-----------------|----|--------------|------------|----------|

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      |

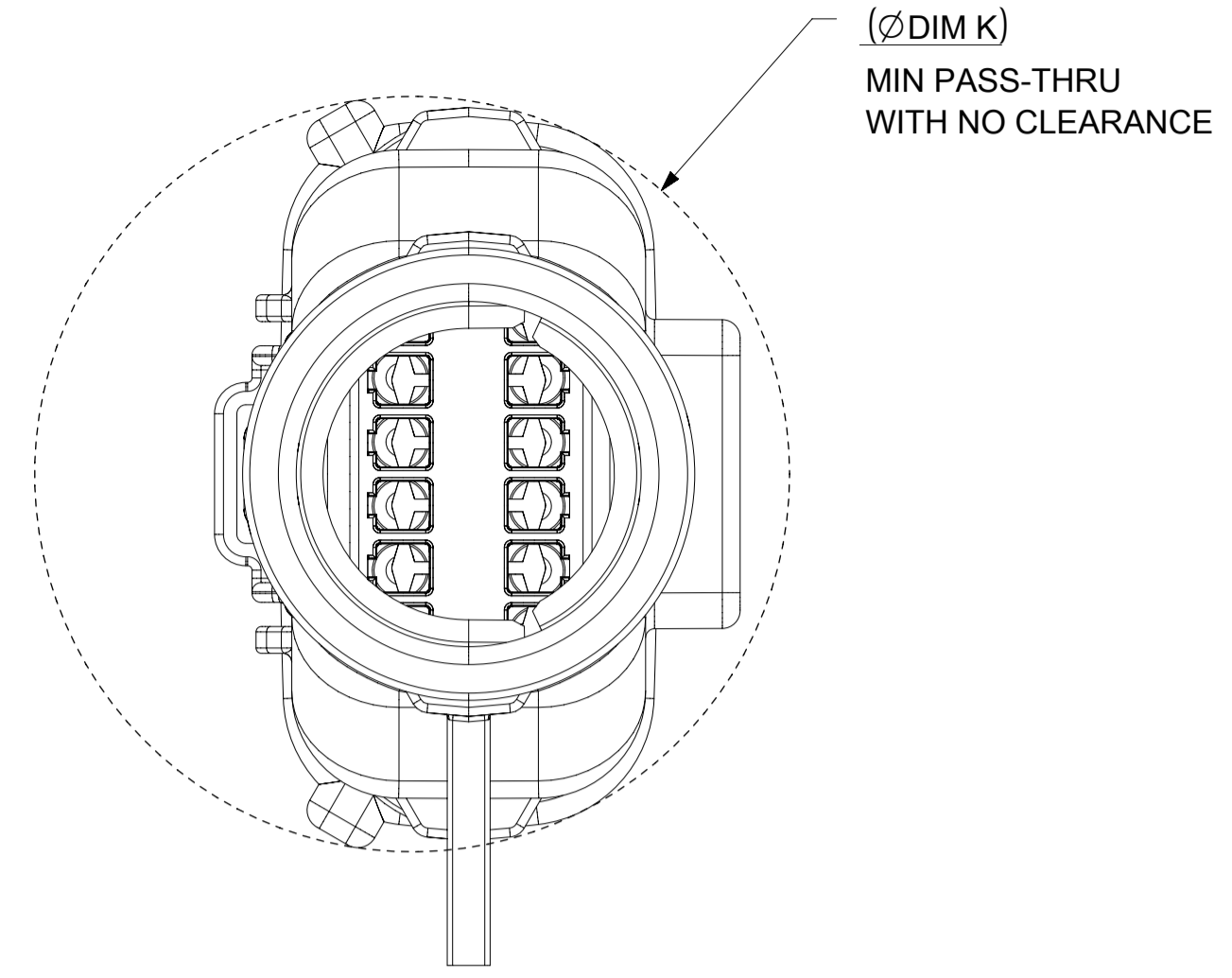
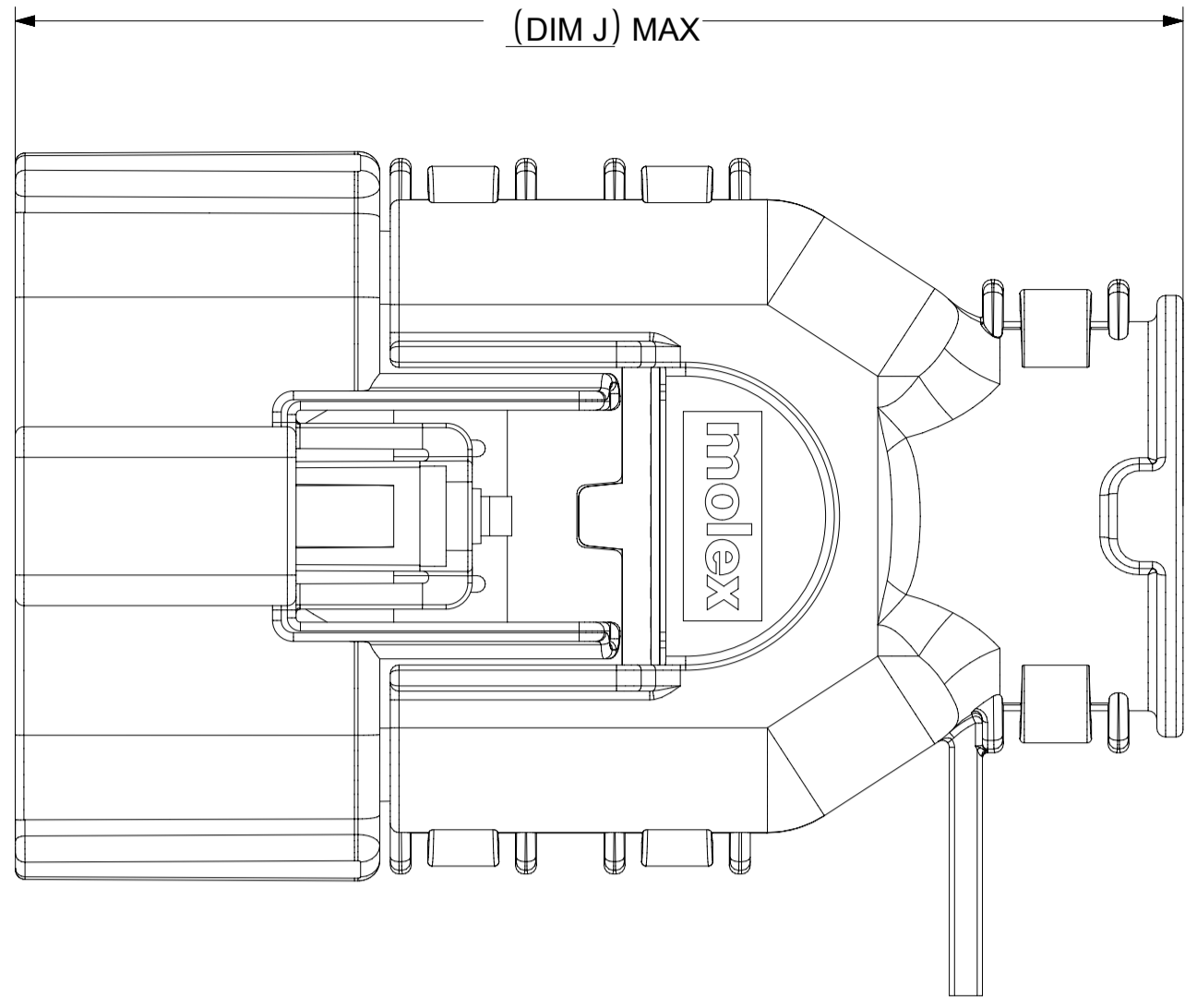


RECEPTACLE SEALED ASSEMBLY WITH RECEPTACLE BACKSHELL

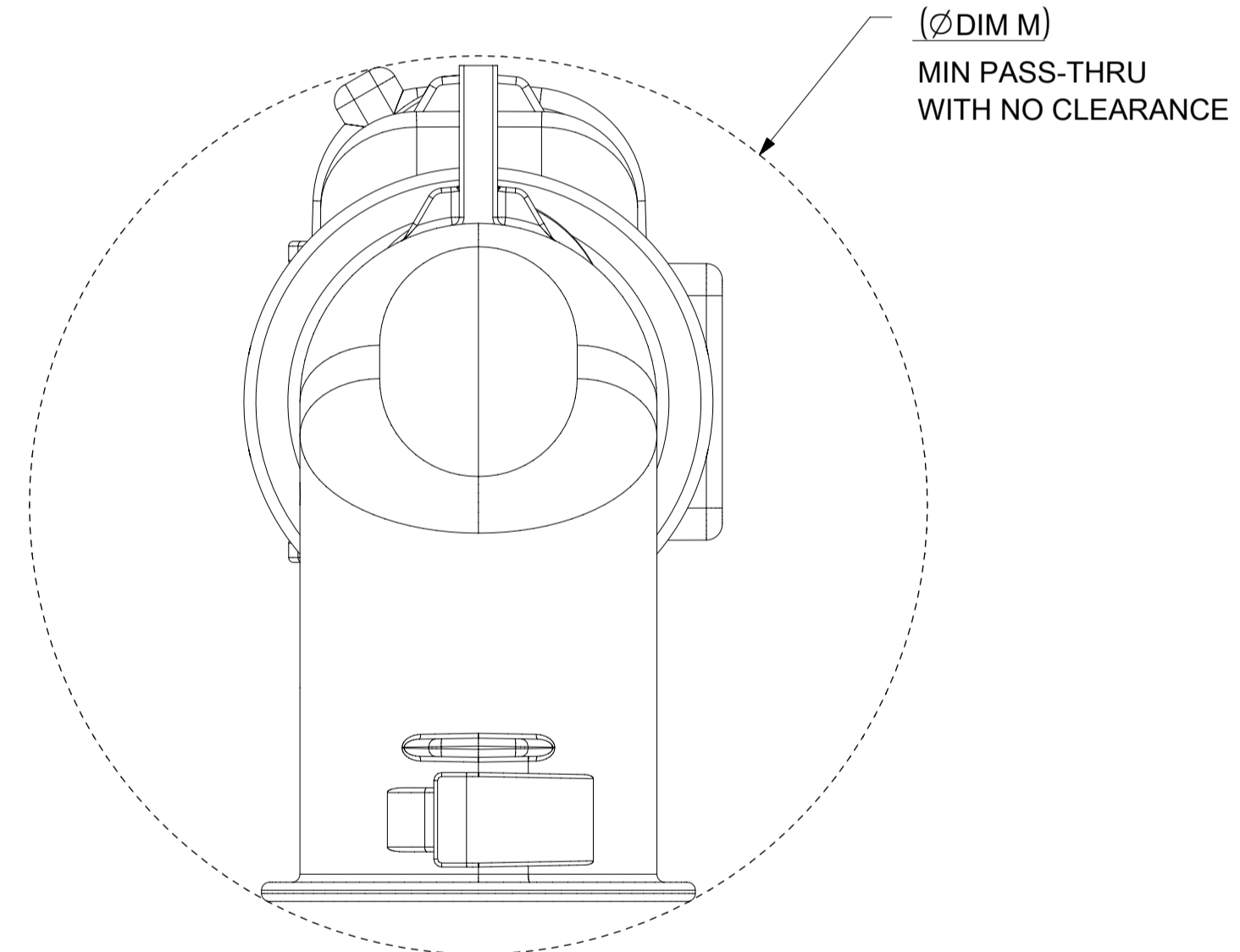
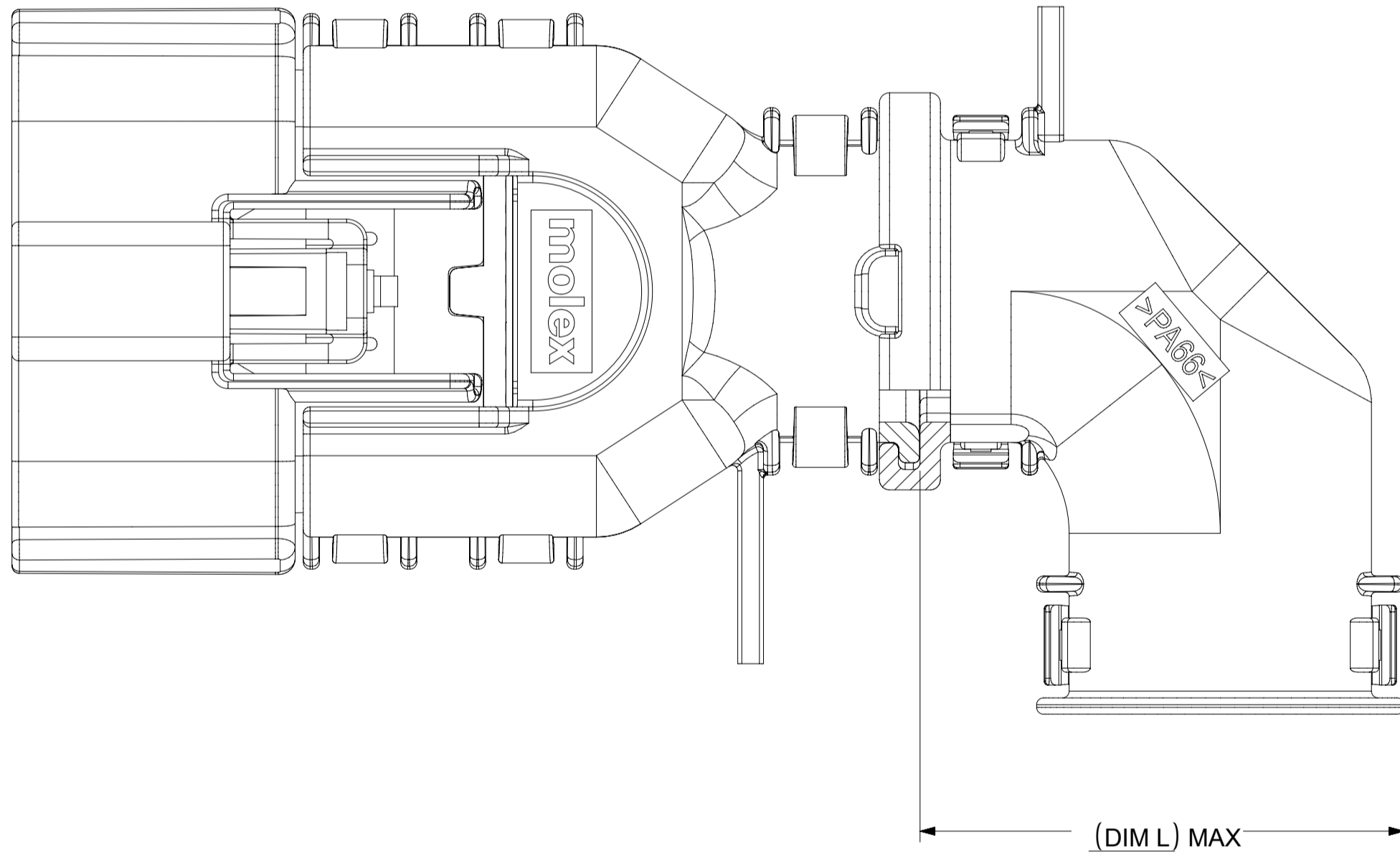
|   |               |            |                    |                    |  |              |              |                                       |                 |   |          |                 |                |
|---|---------------|------------|--------------------|--------------------|--|--------------|--------------|-------------------------------------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

**SHEET DESCRIPTION**  
MOLEX BACKSHELL CONFIGURATIONS

| DESCRIPTION       | DIMENSIONS |       |       |       |
|-------------------|------------|-------|-------|-------|
|                   | J          | K     | L     | M     |
| 2X2 W/O CLIPSLOT  | TBD        | TBD   | TBD   | TBD   |
| 2X2 W/ CLIP SLOT  | TBD        | TBD   | TBD   | TBD   |
| 2X2 LENGTHENED    | TBD        | TBD   | TBD   | TBD   |
| 2X4 W/ CLIPSLOT   | 58.39      | 32.85 | 32.10 | 44.26 |
| 2X4 W/O CLIPSLOT  | N/A        | N/A   | N/A   | N/A   |
| 2X8 W/ CLIPSLOT   | 67.19      | 42.65 | 36.10 | 56.49 |
| 2X8 W/O CLIPSLOT  | N/A        | N/A   | N/A   | N/A   |
| 2X10 W/ CLIPSLOT  | 67.19      | 42.65 | 36.10 | 56.49 |
| 2X10 W/O CLIPSLOT | N/A        | N/A   | N/A   | N/A   |

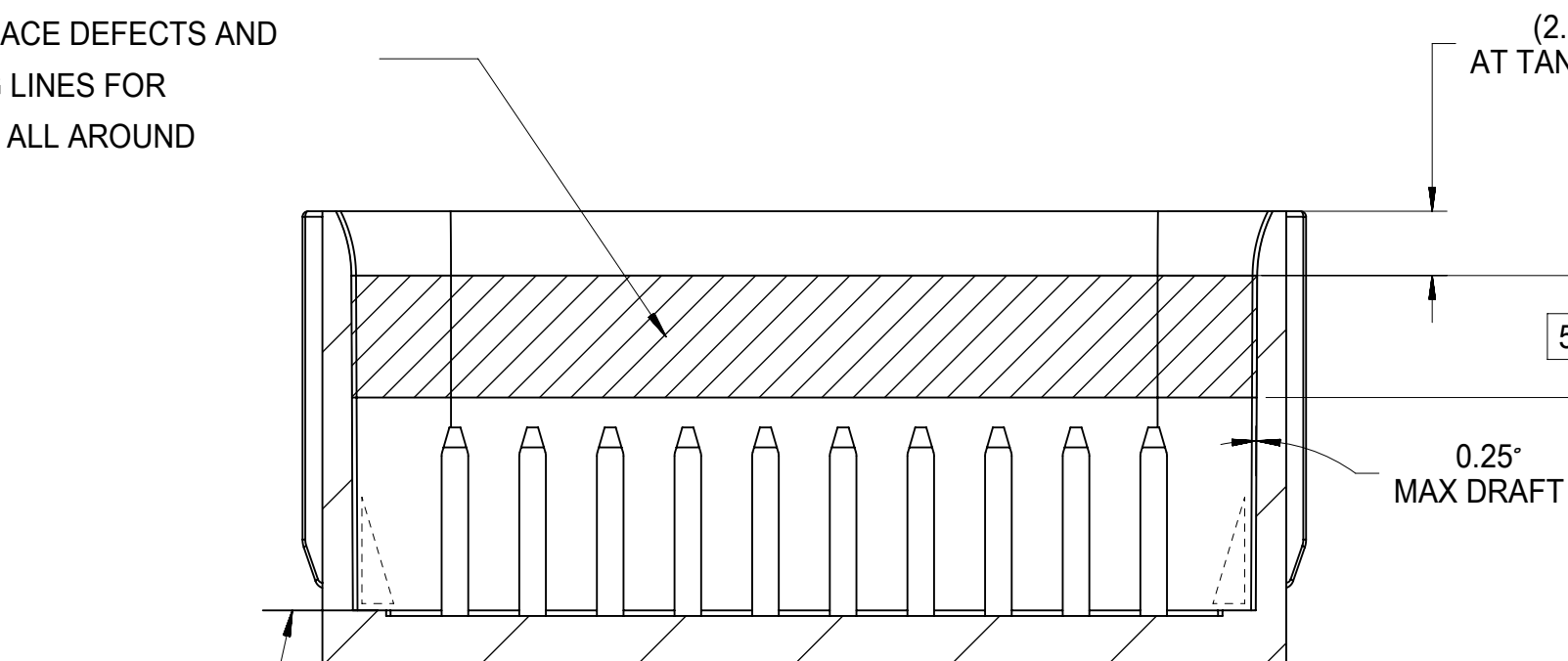
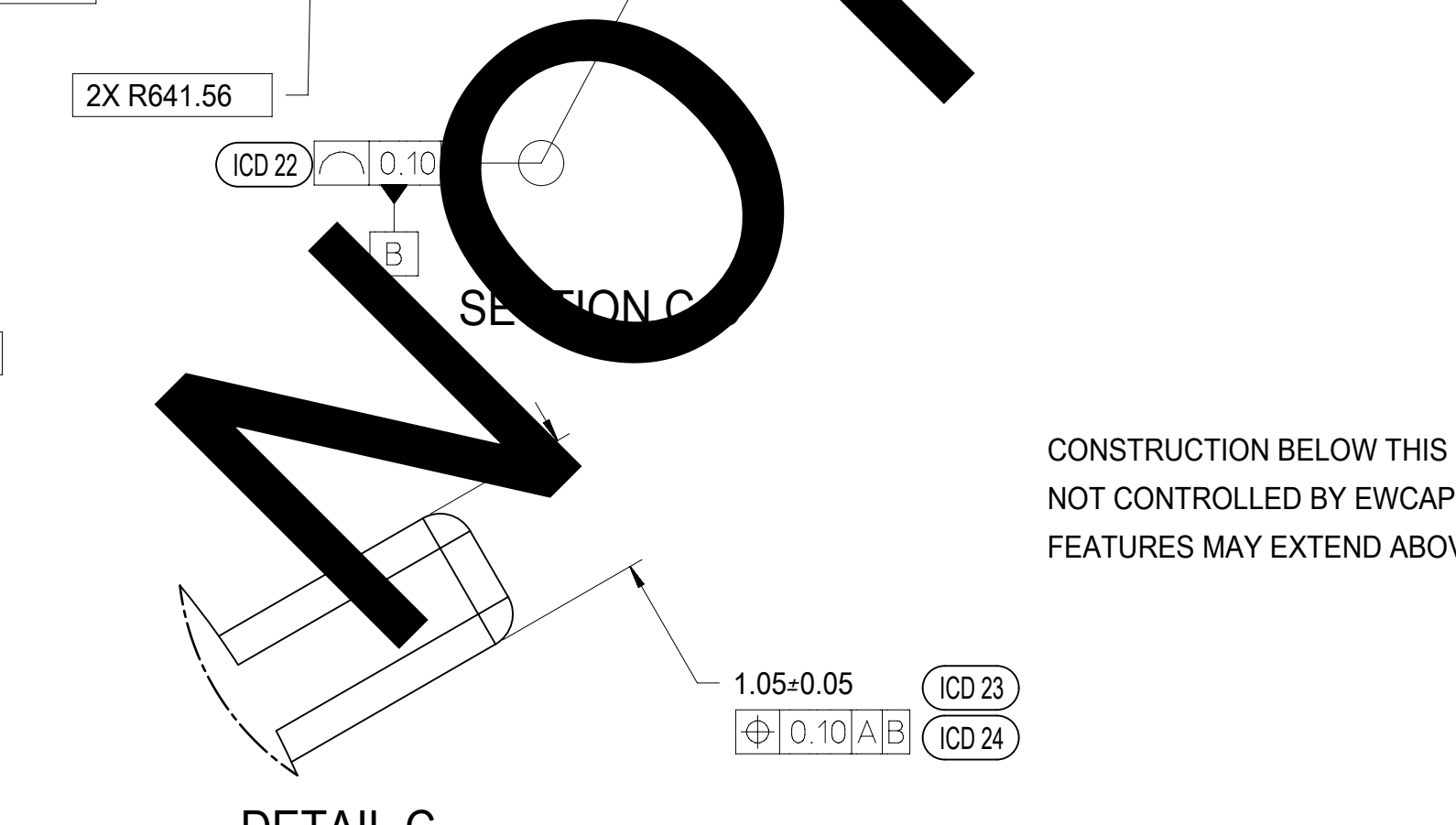
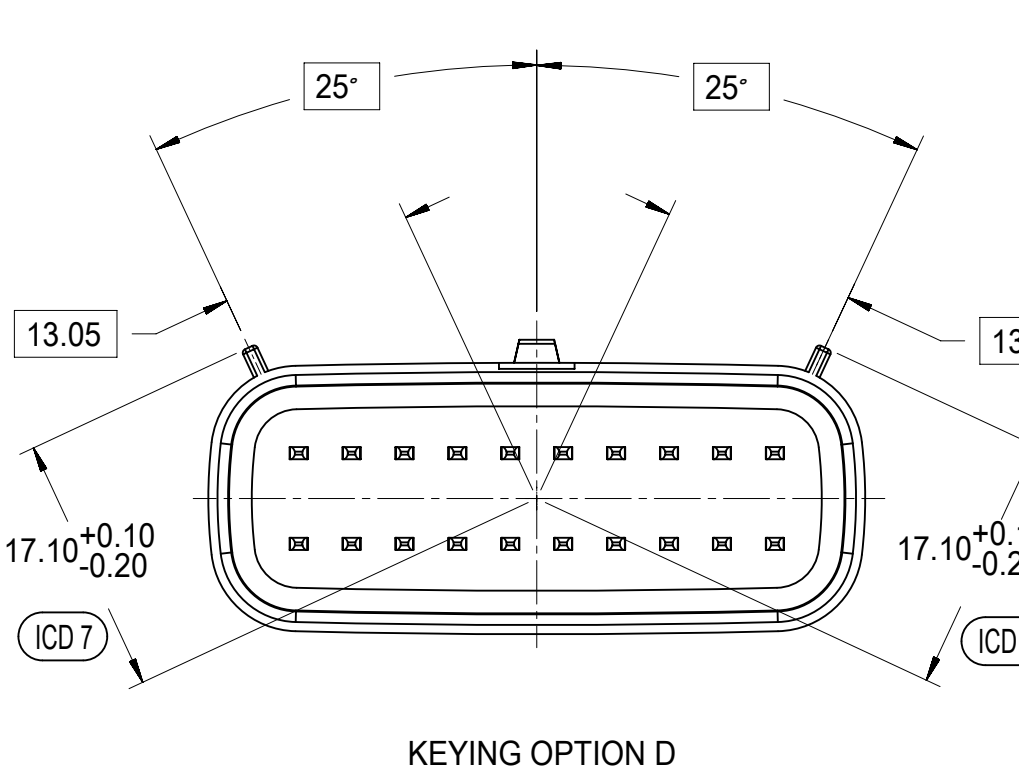
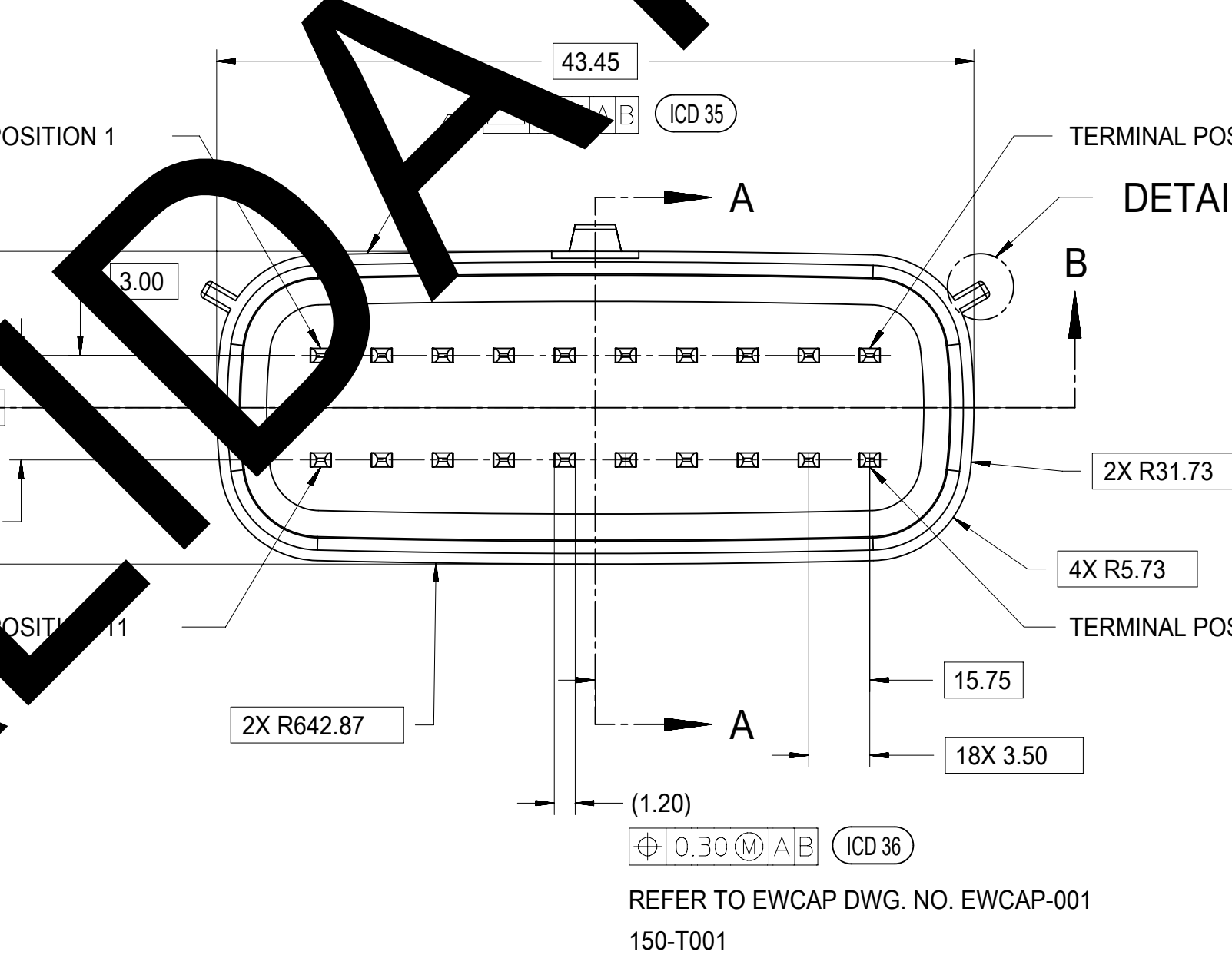
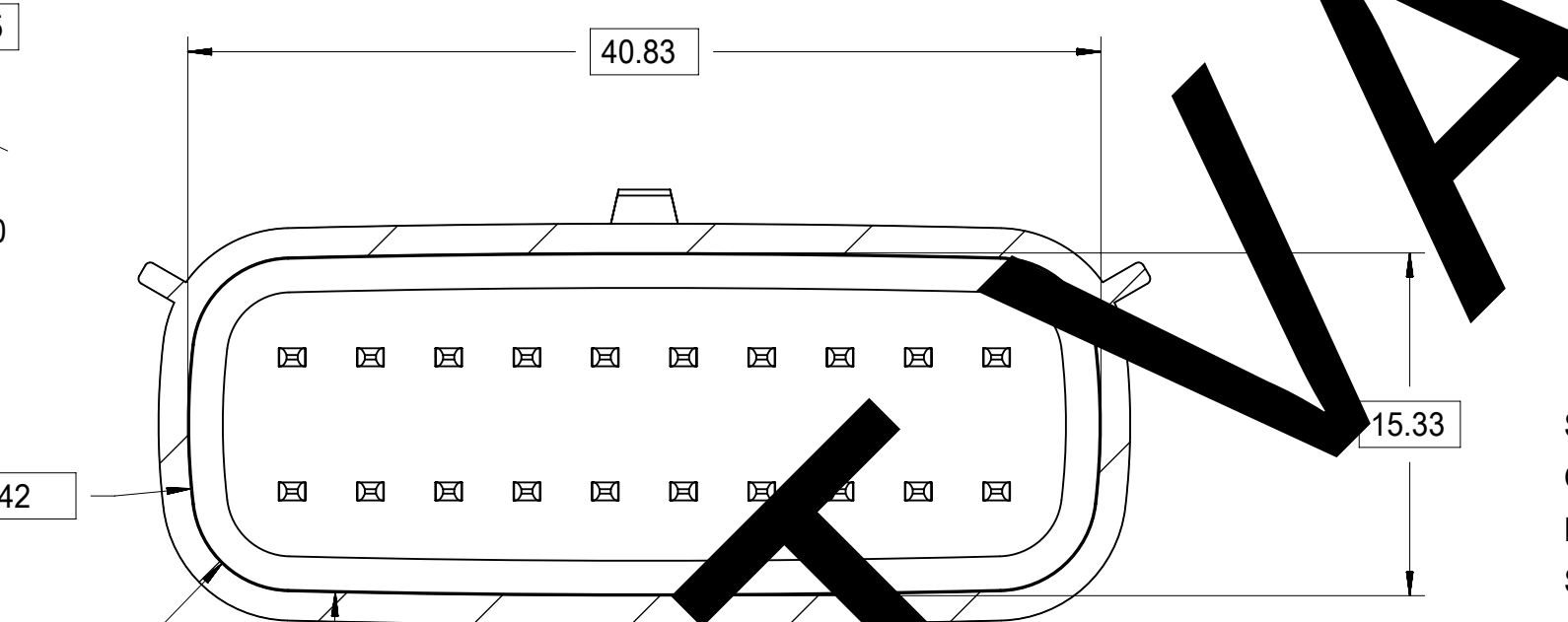
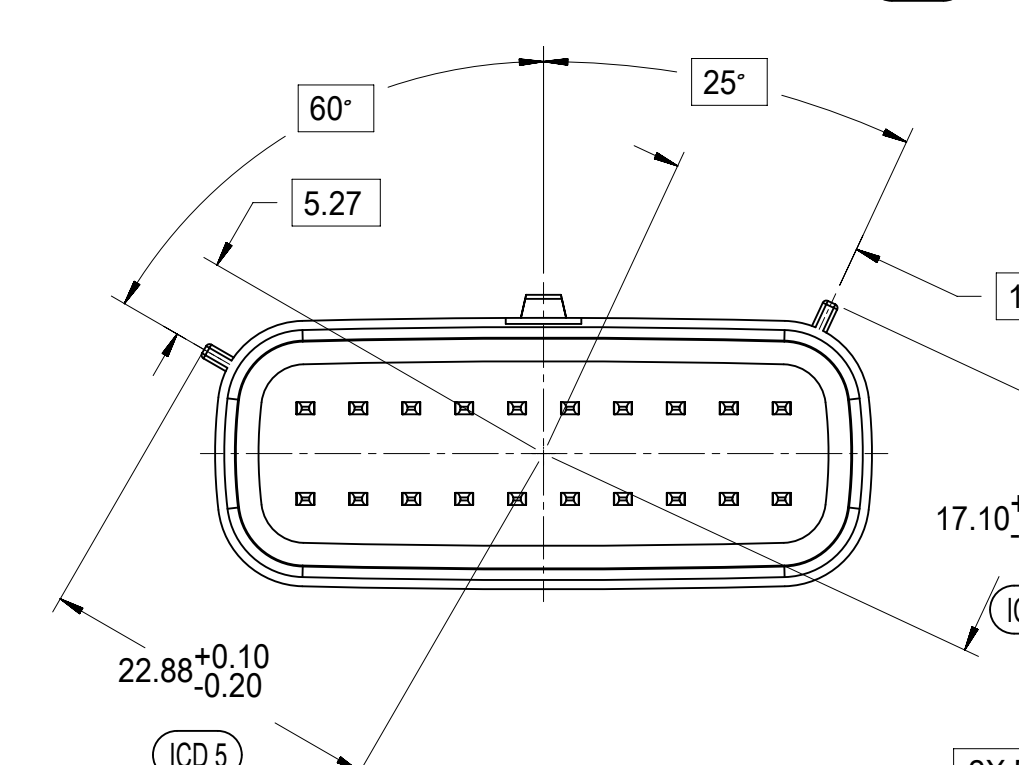
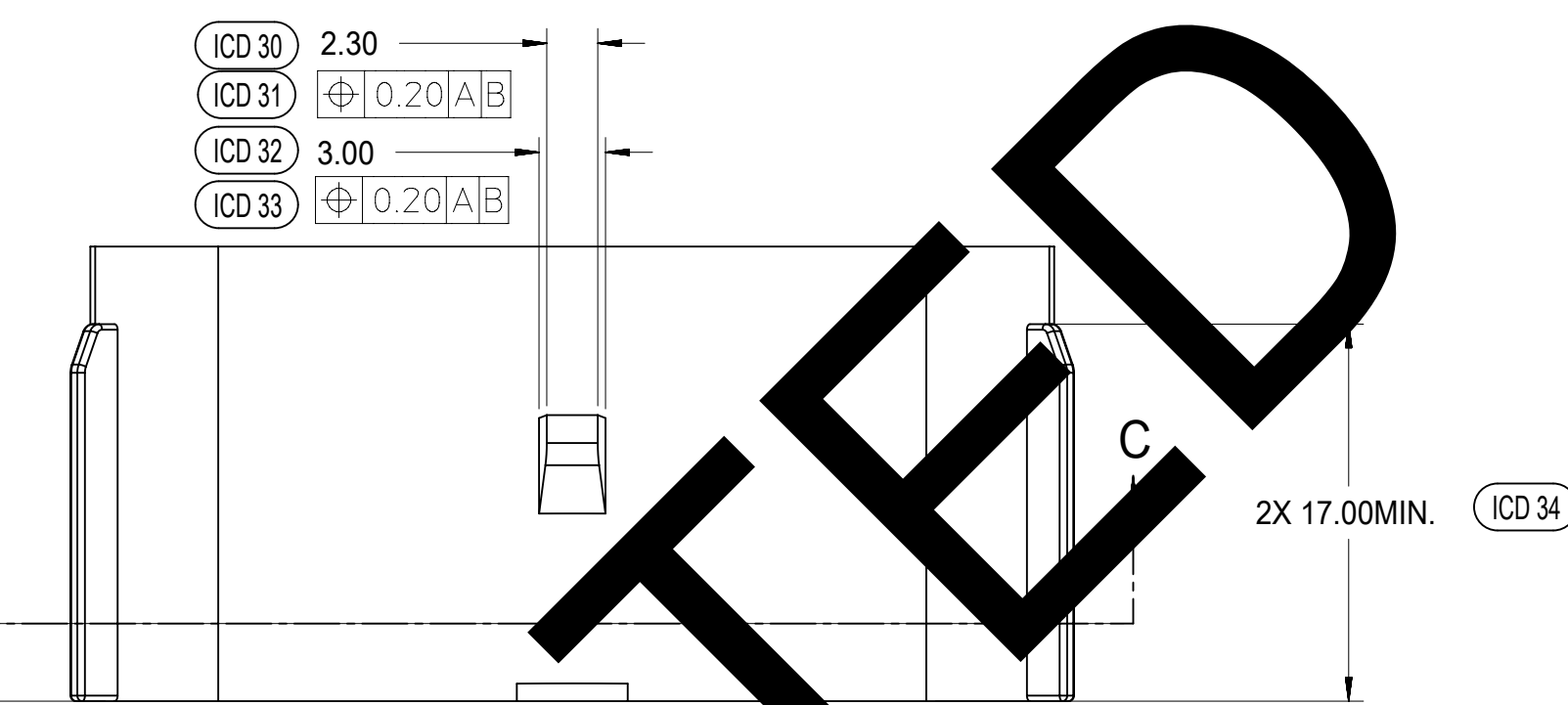
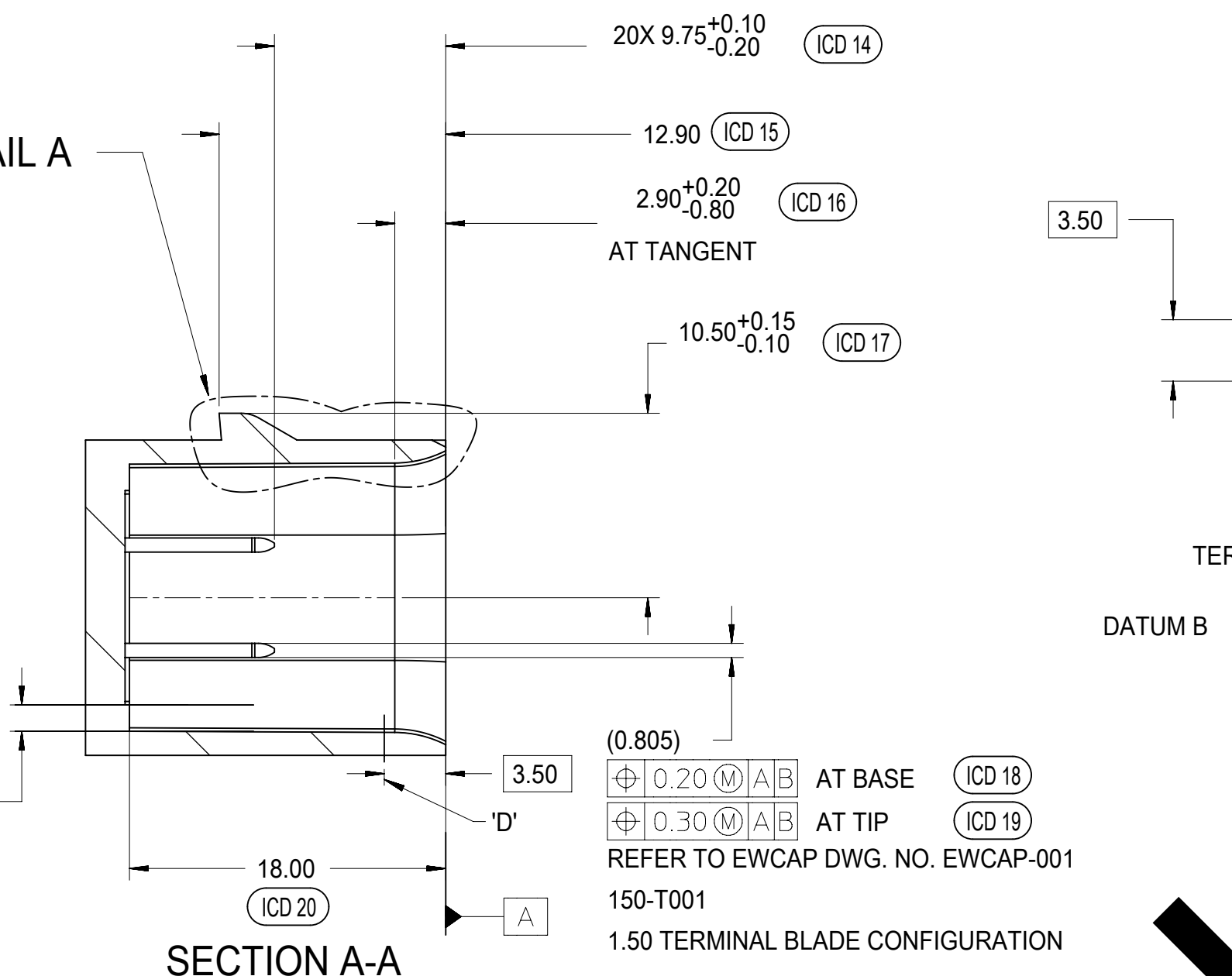
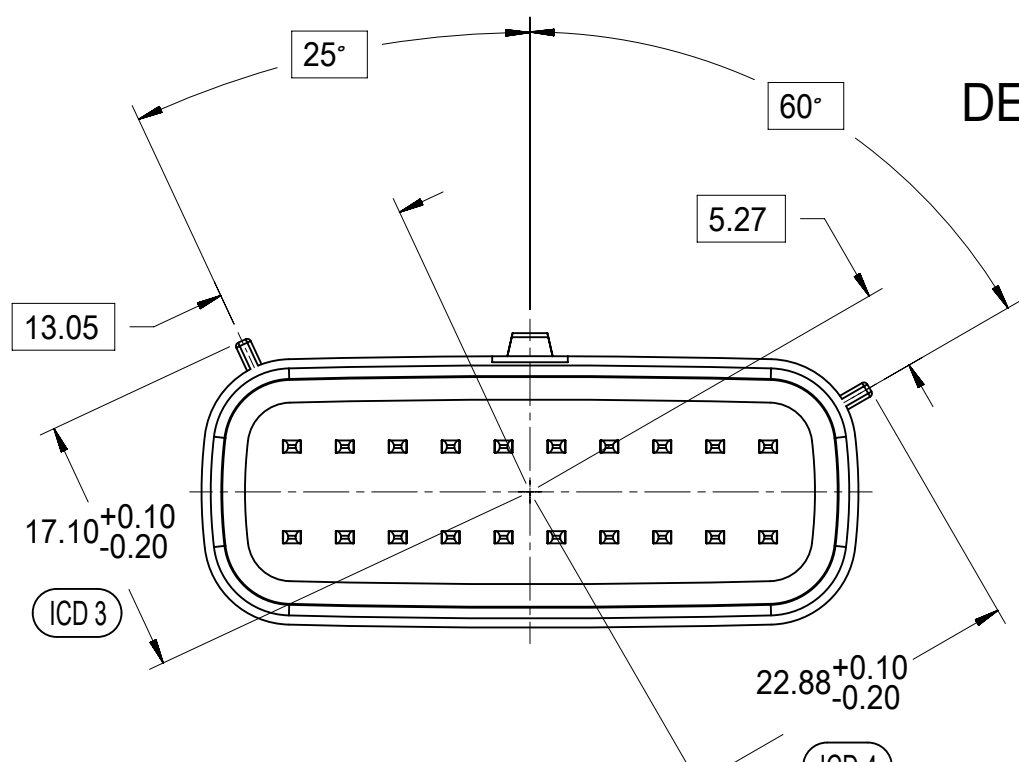
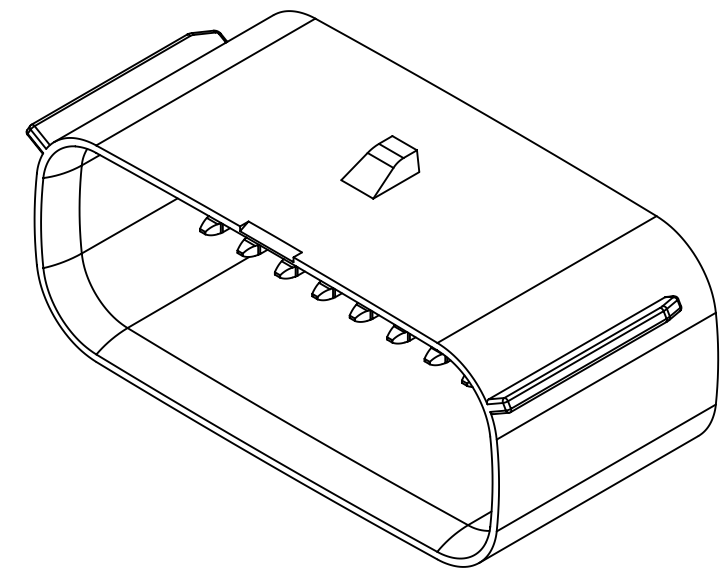
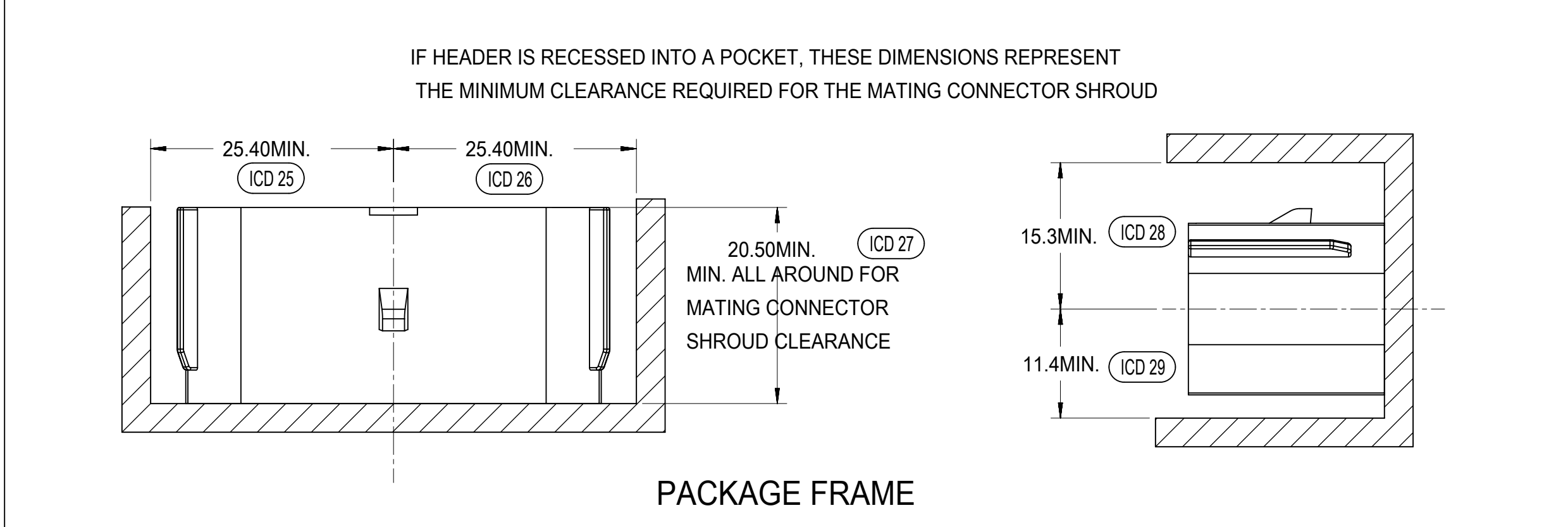
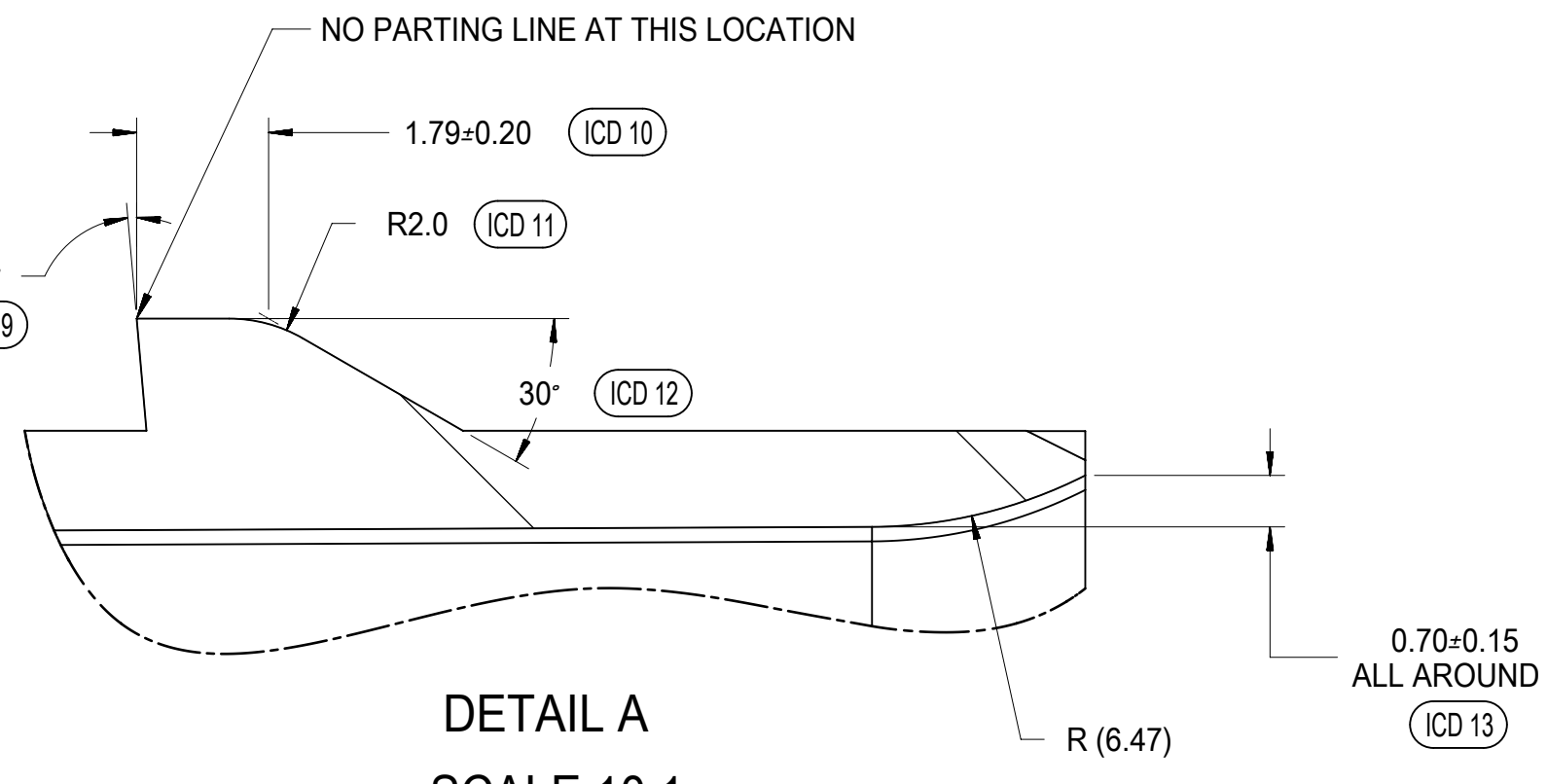
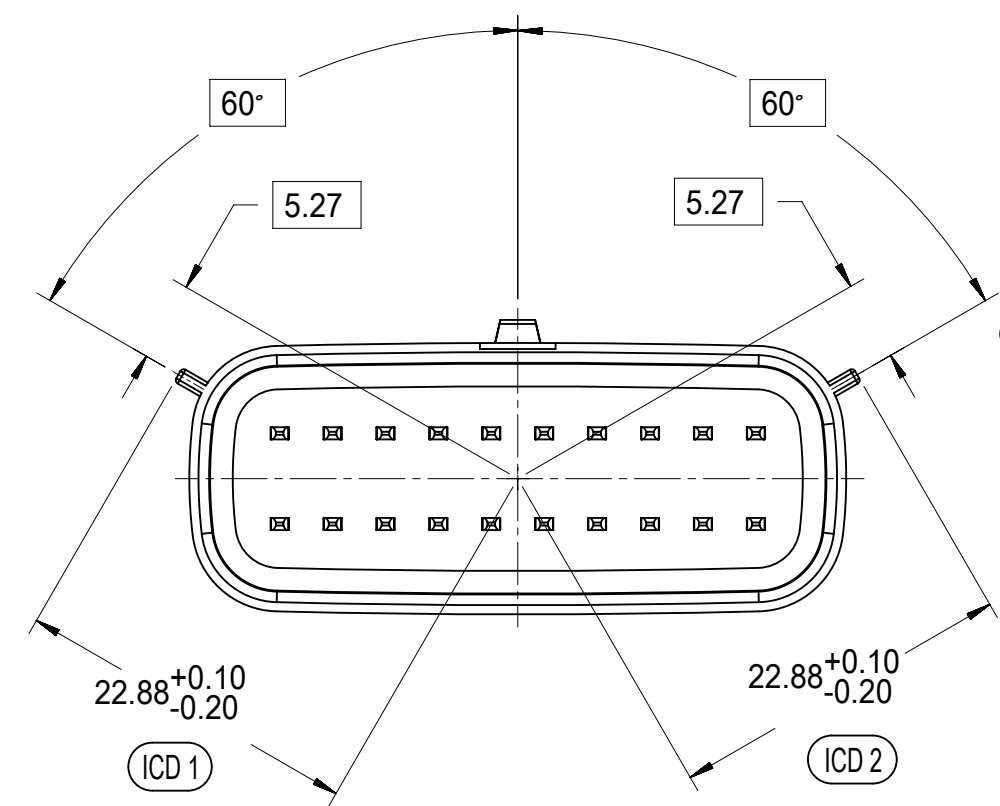


RECEPTACLE SEALED ASSEMBLY WITH RECEPTACLE BACKSHELL



ADD THE VALUE OF 'L' TO THE TOTAL DIMENSION WHENEVER ADAPTOR IS USED

|  |  |  |   |   |   |
|--|--|--|---|---|---|
| <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>2.5:1</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   |   |   |   |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   | THIRD ANGLE PROJECTION   | DRAWING: <b>A1-SIZE</b><br>SERIES: <b>33472</b>     | DOCUMENT NUMBER: <b>SD-33472-0001</b><br>DOC TYPE: PSD<br>DOC PART: 001<br>REVISION: C2 | MATERIAL NUMBER<br>CUSTOMER: GENERAL MARKET<br>SHEET NUMBER: 10 OF 11 |
|  | DOCUMENT 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.

NOT VALIDATED

| SYMBOLS | DIMENSION UNITS                                      | SCALE |
|---------|--|-------|
| ▽ = 0   | mm   | 1:1   |
| ▽ = 0   | GENERAL TOLERANCES (UNLESS SPECIFIED)                |       |
| ▽ = 0   | ANGULAR TOL ± 1.0°                                   |       |
| ▽ = 0   | 4 PLACES ±   |       |
| ▽ = 0   | 3 PLACES ±   |       |
| ▽ = 0   | 2 PLACES ±   | 0.1   |
| ▽ = 0   | 1 PLACE ±  | 0.2   |
| ▽ = 0   | 0 PLACES ±   |       |
| ▽ = 0   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |       |

| CURRENT REV DESC.      |            |
|------------------------|------------|
| EC NO: 171650          | 2018/01/19 |
| DRWN: DDEB             | 2018/02/16 |
| CHK'D: MVANSLAMBROU    | 2018/02/16 |
| APPR: MVANSLAMBROU     | 2018/02/16 |
| INITIAL REVISION:      |            |
| DRWN: APROFFITT        | 2014/05/14 |
| APPR: VKOSHY           | 2014/06/27 |
| THIRD ANGLE PROJECTION | DRAWING    |
|                        | A1-SIZE    |
| SERIES                 | 33472      |

|   |                |              |          |
|---|----------------|--------------|----------|
| <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 |            |          |

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

| TABLE OF CONTENTS |                            |
|-------------------|----------------------------|
| SHEET NO.         | SHEET DESCRIPTION          |
| 1                 | NOTES AND BOM              |
| 2                 | CONFIGURATIONS             |
| 3                 | SCHLEMMER BACKSHELL DETAIL |
| 4                 | MOLEX BACKSHELL DETAIL     |

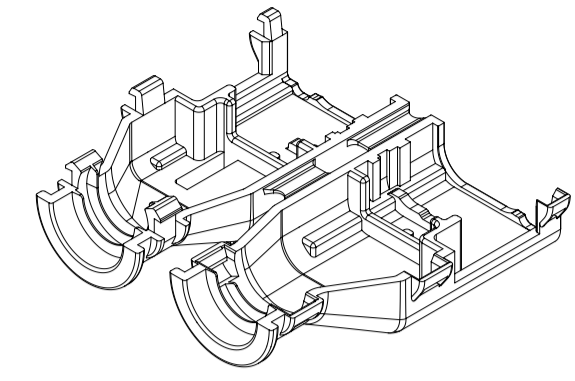
BACKSHELL NOTES: VALID UNLESS OTHERWISE SPECIFIED

1. GENERAL:
- a. APPLICATION SPECIFICATION SEE: AS-34951-001
    - DESIGNED TO MATE WITH RECEPTACLE SEALED ASSEMBLY AS SPECIFIED IN SD-33472-0001.
    - COMPONENTS ARE OPTIONAL AND MUST BE PURCHASED SEPERATELY
  - b. MOLEX PRODUCT SPECIFICATION SEE: TBD
    - BACKSHELL DESIGN IS OWNED BY MOLEX.
  - c. OUTSOURCED MFG PRODUCT SPECIFICATION
    - BACKSHELL DESIGN IS OWNED BY SCHLEMMER.
    - THESE PRODUCTS ARE ONE TIME USE ONLY.
    - REMOVAL FORCE OF THE BACKSHELL FROM THE MOLEX CONNECTOR TO BE 100N MIN.
    - REMOVAL FORCE OF SLIT CONVOLUTE FROM THE WITH RIB OPTION BACKSHELLS TO BE 100N MIN.
    - REMOVAL FORCE OF UNSLIT CONVOLUTE FROM THE WITH RIB OPTION BACKSHELLS TO BE 100N MIN.
  - d. PACKAGING SPECIFICATION: SEE BOM
  - e. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATION: QEHS-699000-300
  - f. DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS (COMPANY ID#13255)
  - g. FOLLOWING PRODUCTION CODES TO BE PRESENT
    - DATE CODE
    - MOLD CAVITY CODE
    - MOLEX LOGO
    - RECYCLE CODE
    - SUPPLIER PART NUMBER - SCHLEMMER PARTS ONLY
  - h. CONNECTOR MUST HAVE CLIPSLOT FEATURE FOR USE WITH MOLEX BACKSHELLS

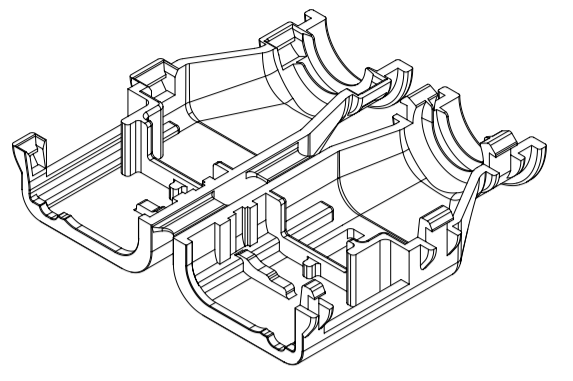
2. DESIGN - MATERIALS:
- a. PA66 0% GLASS FILLED
  - b. BLACK

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 - 2009.
  - c. CORNERS SHOWN AS SHARP TO BE R 0.1.
  - d. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (CLASS C).
  - e. ALLOWABLE FLASH, PARTING LINES MISMATCH, EJECTOR PINS MARK, AND GATE VESTIGE TO BE +0.30 MAX PROTUSION.

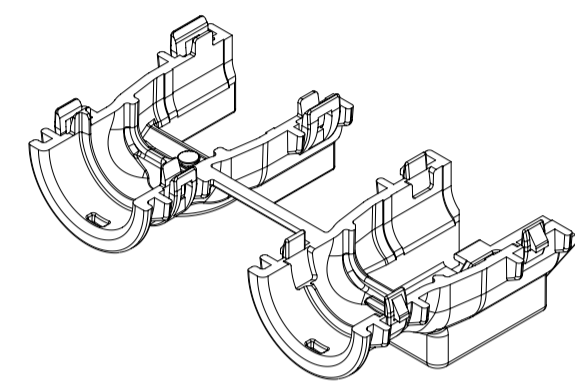
| BILL OF MATERIALS (BOM) |             |              |       |      |                 |                          |          |                |
|-------------------------|-------------|--------------|-------|------|-----------------|--------------------------|----------|----------------|
| DESCRIPTION             | PART NUMBER | CIRCUIT SIZE | COLOR | RIBS | CONVOLUTE SIZE  | PACKAGING DRAWING NUMBER | STATUS   | MANUFACTURER   |
| 2X3, WITH RIB           | 34951-0610  | 2X3          | BLACK | YES  | 9 mm DELPHI     | PK-31302-118             | SALEABLE | OUTSOURCED MFG |
| 2X3, WITHOUT RIB        | 34951-0620  | 2X3          | BLACK | NO   | 9 mm DELPHI     | PK-31302-118             | SALEABLE | OUTSOURCED MFG |
| 2X4, WITH RIB           | 34951-0811  | 2X4          | BLACK | YES  | NW 12 SCHLEMMER | 349509000 PDD            | SALEABLE | MOLEX          |
| 2X4, WITHOUT RIB        | 34951-0821  | 2X4          | BLACK | NO   | NW 12 SCHLEMMER | 349509000 PDD            | SALEABLE | MOLEX          |
| 2X6, WITH RIB           | 34951-1210  | 2X6          | BLACK | YES  | 13 mm DELPHI    | PK-31302-118             | SALEABLE | OUTSOURCED MFG |
| 2X6, WITHOUT RIB        | 34951-1220  | 2X6          | BLACK | NO   | 13 mm DELPHI    | PK-31302-118             | SALEABLE | OUTSOURCED MFG |
| 2X8, WITH RIB           | 34951-1611  | 2X8          | BLACK | YES  | NW 16 SCHLEMMER | 349509000 PDD            | SALEABLE | MOLEX          |
| 2X8, WITHOUT RIB        | 34951-1621  | 2X8          | BLACK | NO   | NW 16 SCHLEMMER | 349509000 PDD            | SALEABLE | MOLEX          |
| 2X10, WITH RIB          | 34951-2011  | 2X10         | BLACK | YES  | NW 16 SCHLEMMER | 349509000 PDD            | SALEABLE | MOLEX          |
| 2X10, WITHOUT RIB       | 34951-2021  | 2X10         | BLACK | NO   | NW 16 SCHLEMMER | 349509000 PDD            | SALEABLE | MOLEX          |



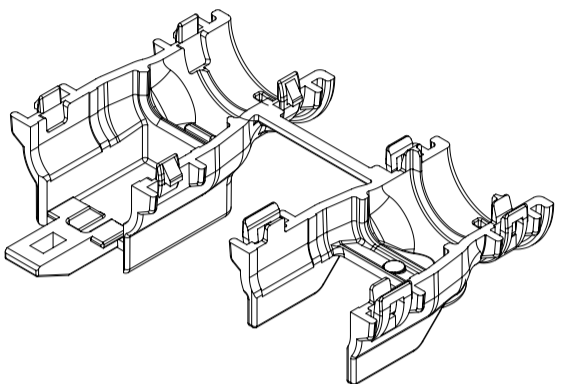
2X3 RECEPTACLE



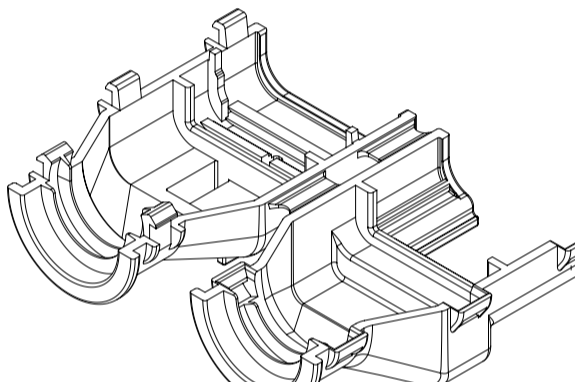
2X4 RECEPTACLE



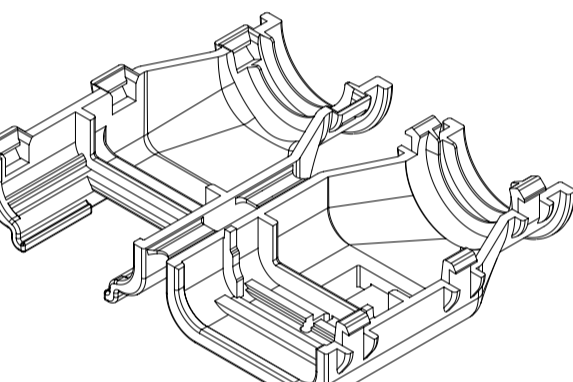
2X6 RECEPTACLE



2X8 RECEPTACLE



2X10 RECEPTACLE



|     |  |
|-----|--|
| B10 | ADDED BALLOON NUMBER TO PAGE 3 -SCHLEMMER PAGE |
| B9  | CHANGED PARTS STATUS TO SALEABLE               |
| B8  | ADDED BALLOON NO. 90                           |
| B7  | UPDATED BALLOON NUMBERS                        |
| B6  | UPDATED RIB AND WEDGE FEATURES                 |
| B3  | UPDATED TOLERANCES                             |
| B2  | ADDED BALLOONS & UPDATED BOM                   |
| B1  | ADDED MOLEX PART NUMBERS                       |
| B   | MIGRATION                                      |
| A6  | UPDATED BILL OF MATERIALS                      |
| A5  | UPDATED STATUS COLUMN                          |
| A4  | MINOR NOMENCLATURE CLEAN UP                    |
| A3  | UPDATED VIEWSET & NOTES                        |
| A2  | UPDATED REFERENCE DRAWINGS                     |
| A1  | UPDATED NOTES                                  |
| A   | INITIAL RELEASE                                |
| REV | REV DESCRIPTION                                |

| INSPECTION NUMBER LOG |                         |
|-----------------------|-------------------------|
| LAST NUMBER:          | 1 - 5                   |
| ADDED:                | 40 42 44 46 48 49 89 90 |
| REMOVED:              | 40 44                   |

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

|  |   |   |  |
|--|---|---|--|
| EC NO: 632862<br>DRWN: PPALLAN<br>CHKD: MVANSLAMBROU<br>APPR: MVANSLAMBROU | 2020/02/20<br>2020/02/26<br>2020/02/26                                    | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>DIMENSION UNITS: mm<br>SCALE: 1:1<br>DRWN BY: DAHALL<br>DATE: 2013/03/27<br>CHK'D BY: [blank]<br>DATE: [blank] | <p>MX150 DUAL ROW RECPT BACKSHELLS</p> <p>PRODUCT CUSTOMER DRAWING</p> |
|  | 4 PLACES ±<br>3 PLACES ±<br>2 PLACES ± 0.1<br>1 PLACE ± 0.2<br>0 PLACES ± | ANGULAR TOL ± 3.0 °<br>APPR BY: VKOSHY<br>DATE: 2013/04/08  |  |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS                      | DRAWING SIZE: A1<br>THIRD ANGLE PROJECTION  |  |
|  | SERIES: 34951<br>MATERIAL NUMBER: [blank]<br>CUSTOMER: GENERAL MARKET     |   |  |
| B10  |   | DOCUMENT NUMBER: SD-34951-0001<br>DOC TYPE: PSD<br>DOC PART: 001<br>SHEET NUMBER: 1 OF 4  |  |

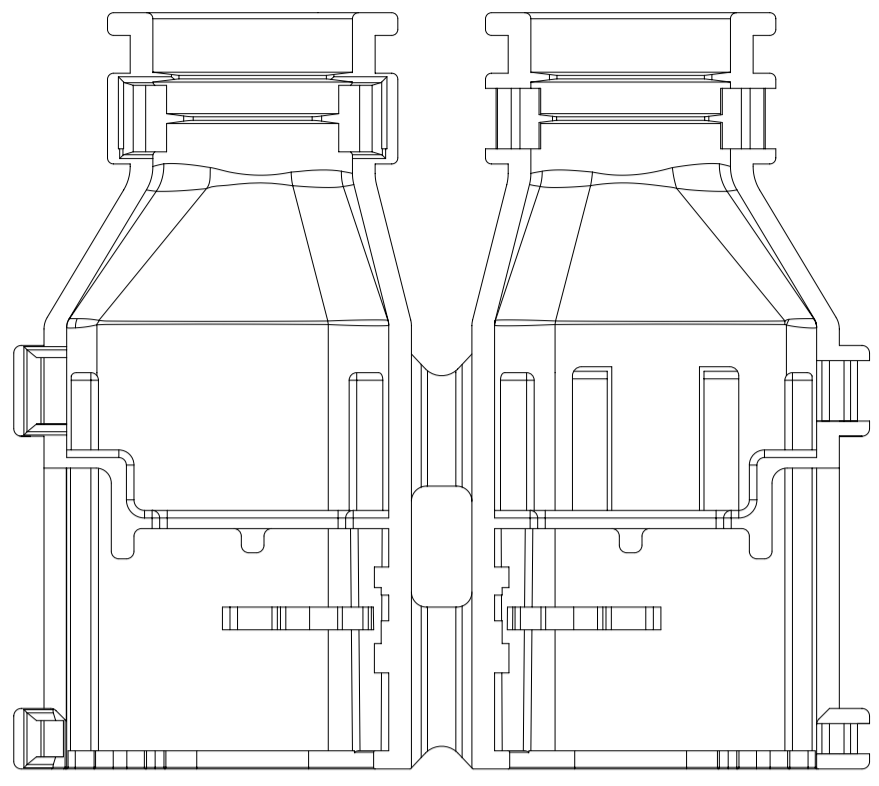
**SHEET DESCRIPTION**  
CONFIGURATIONS

WITH RIB

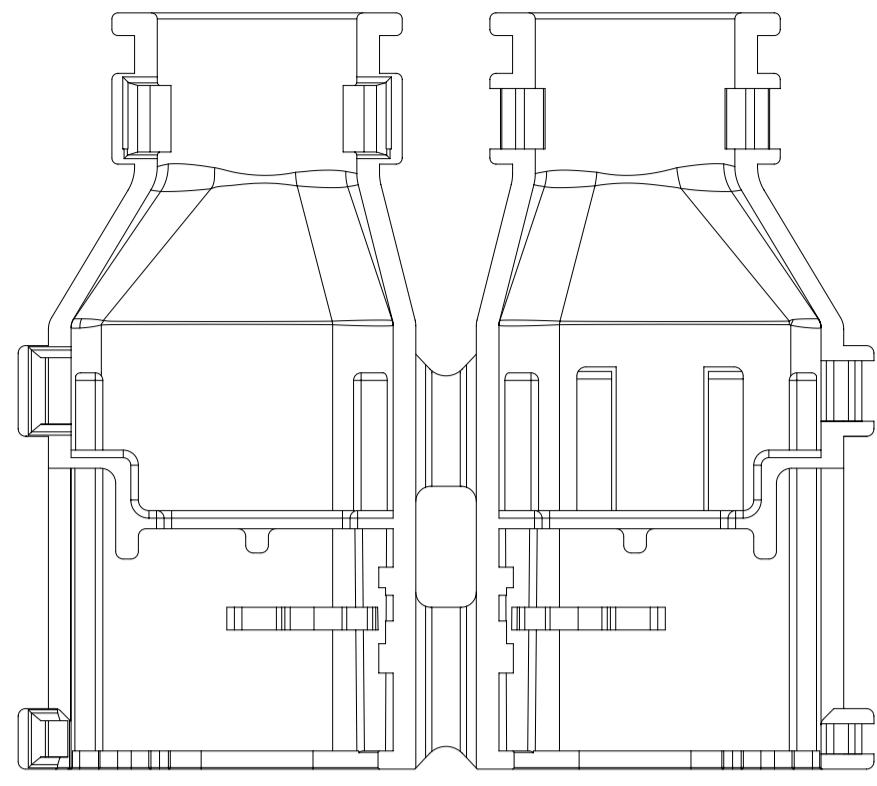
WITHOUT RIB

WITH RIB

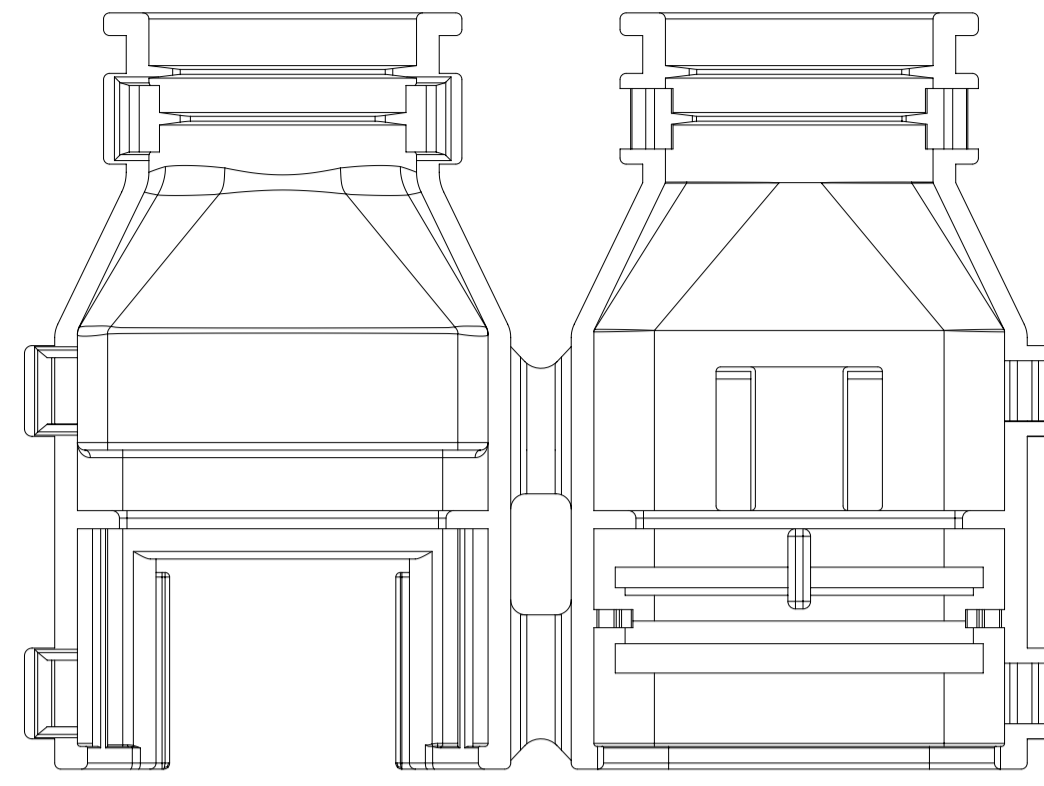
WITHOUT RIB



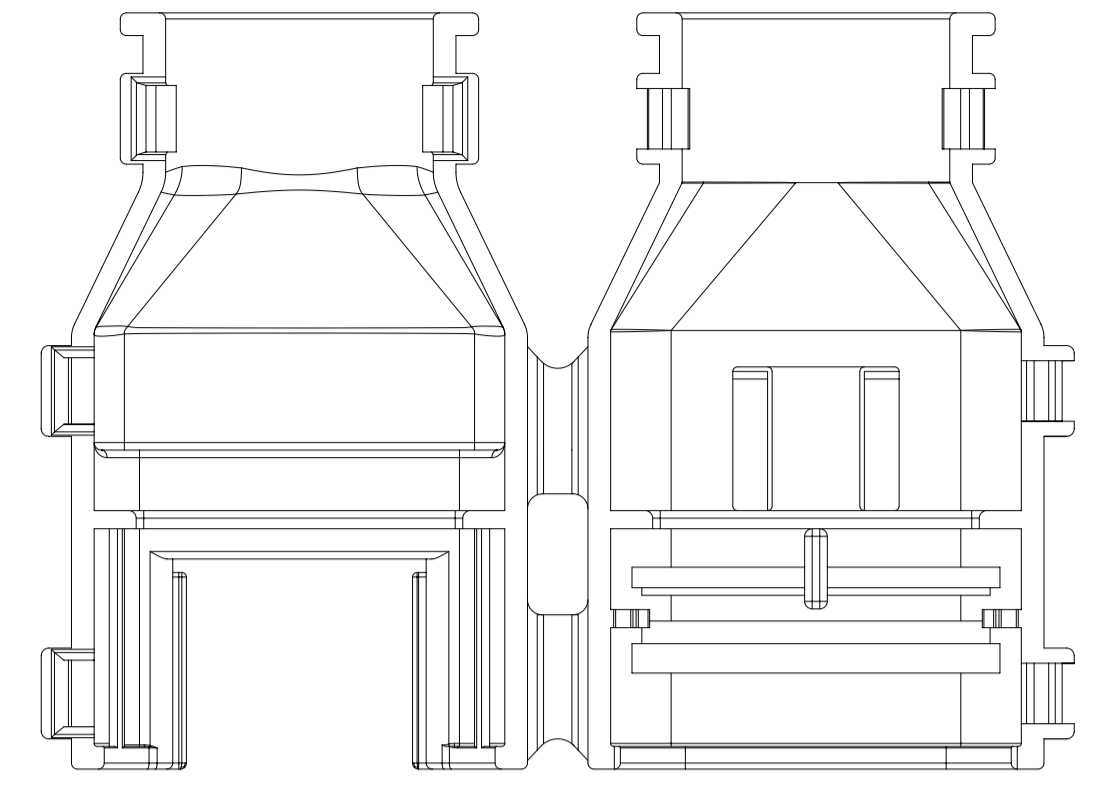
2X3  
SCHLEMMER



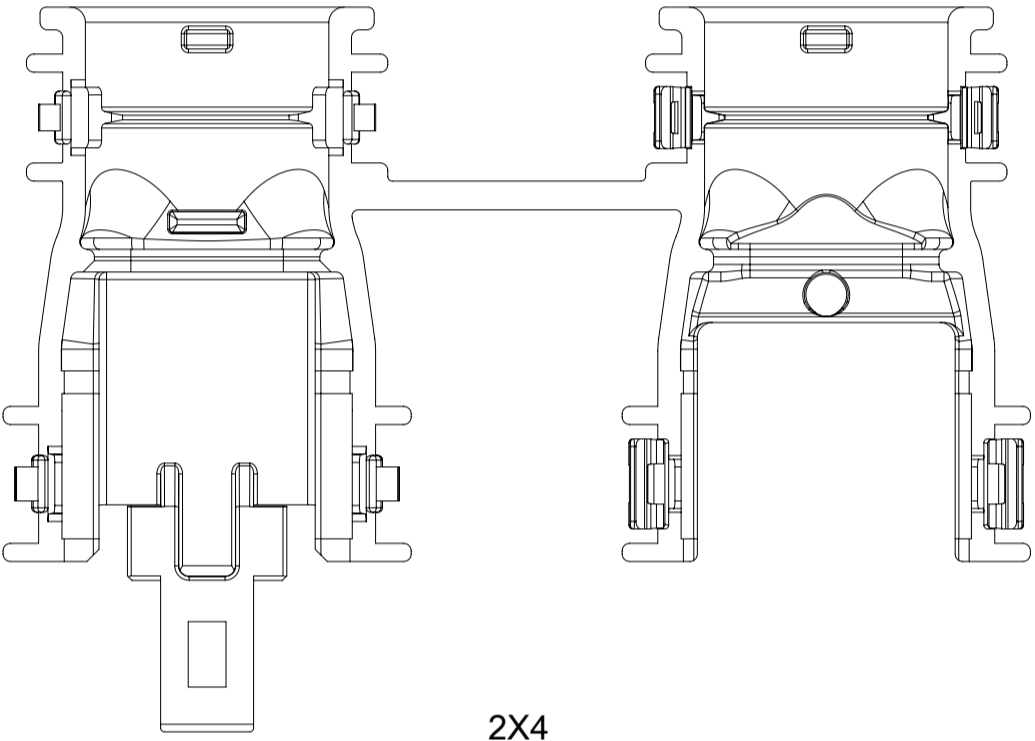
2X3  
SCHLEMMER



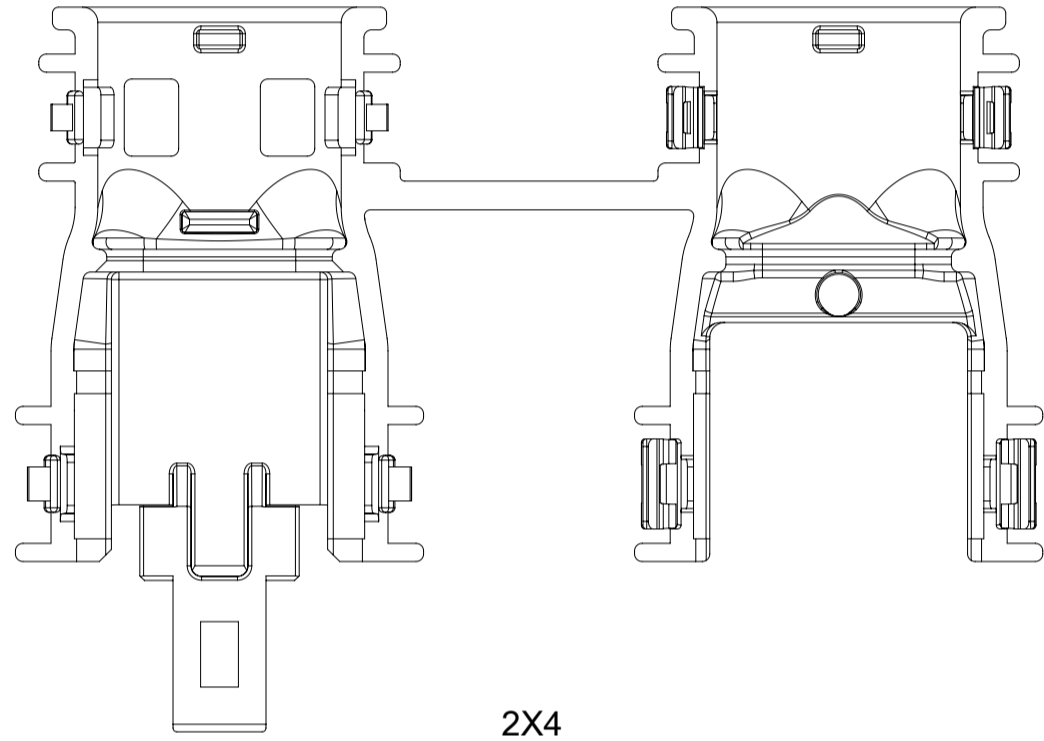
2X6  
SCHLEMMER



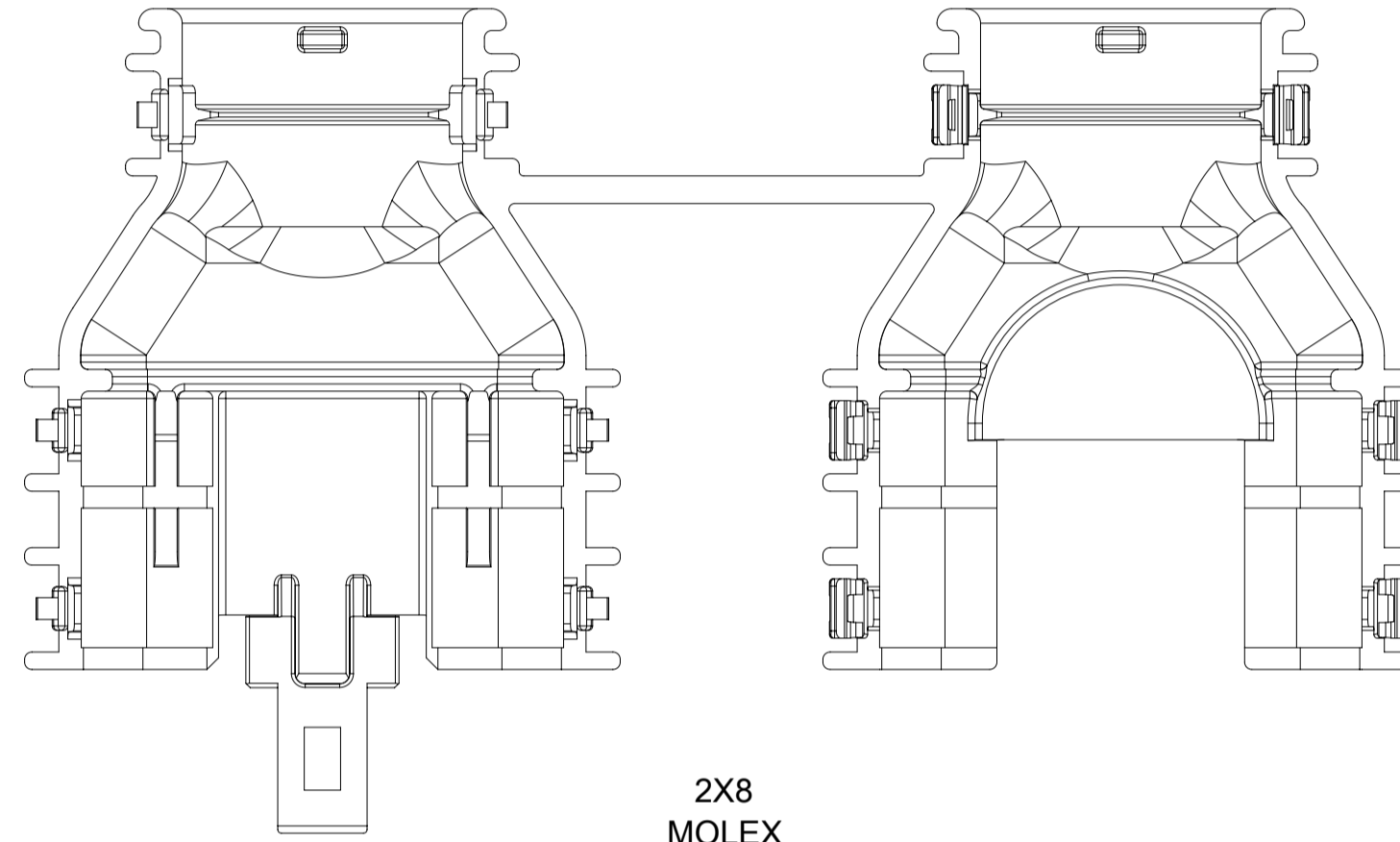
2X6  
SCHLEMMER



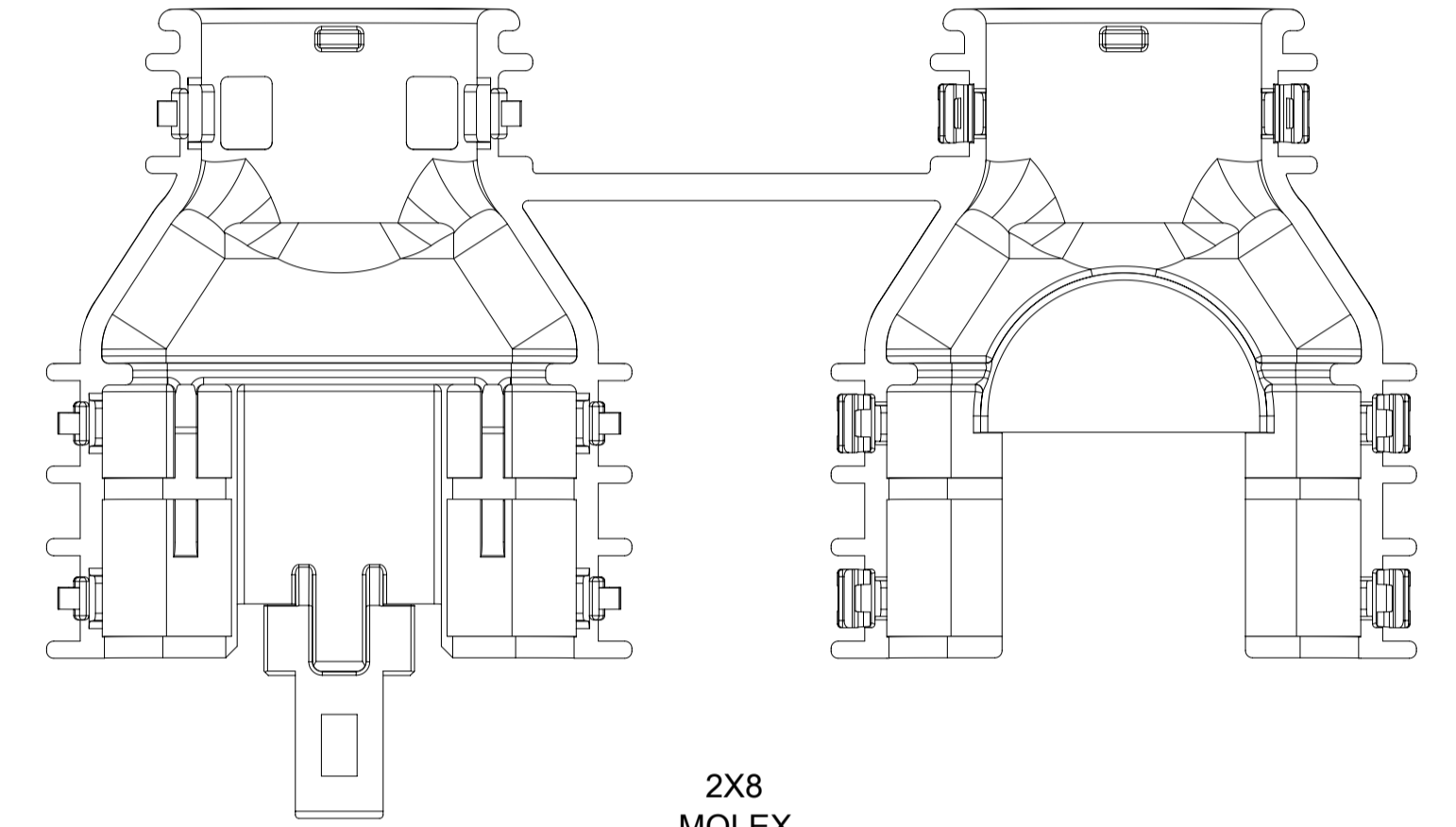
2X4  
MOLEX



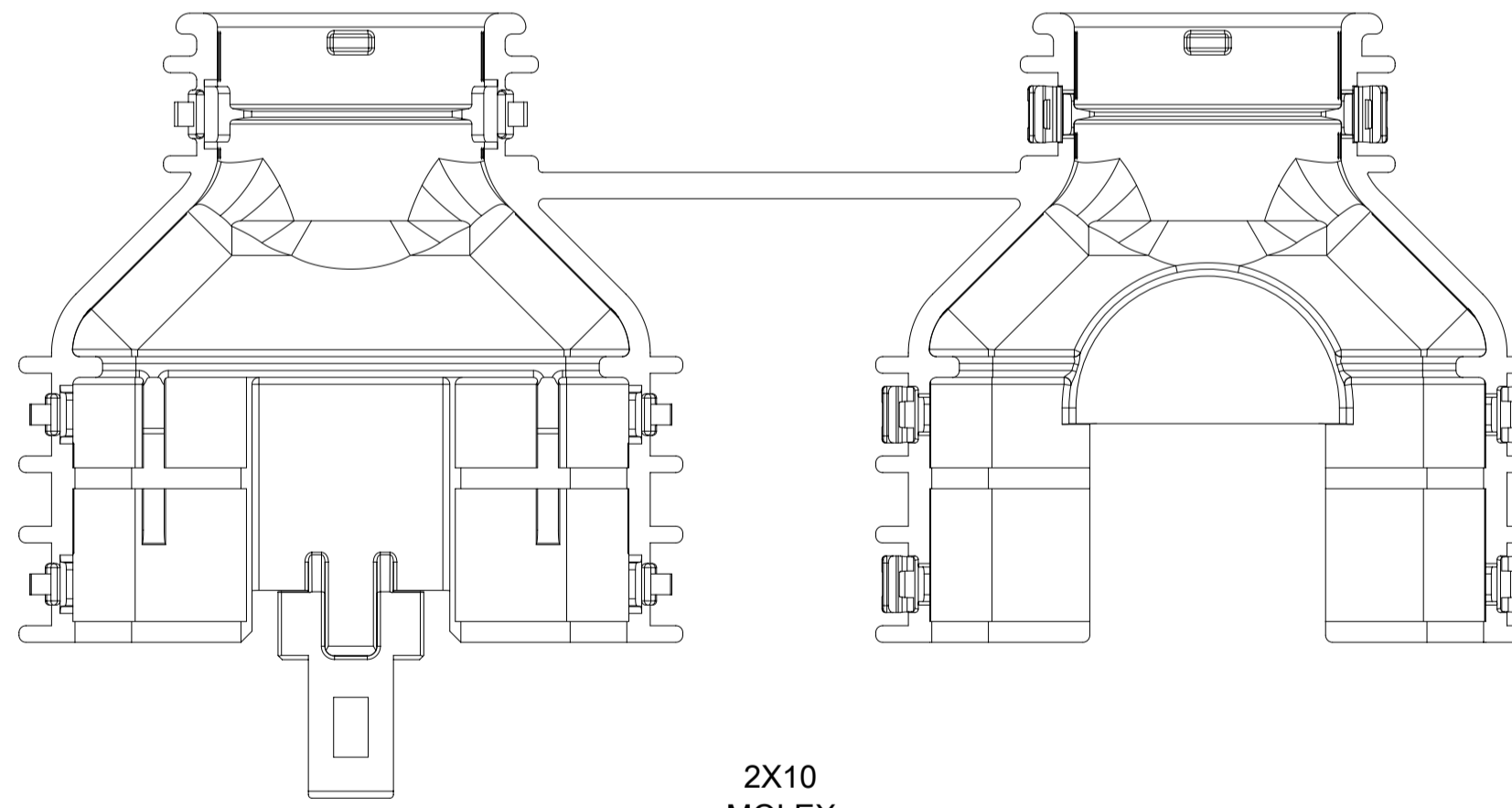
2X4  
MOLEX



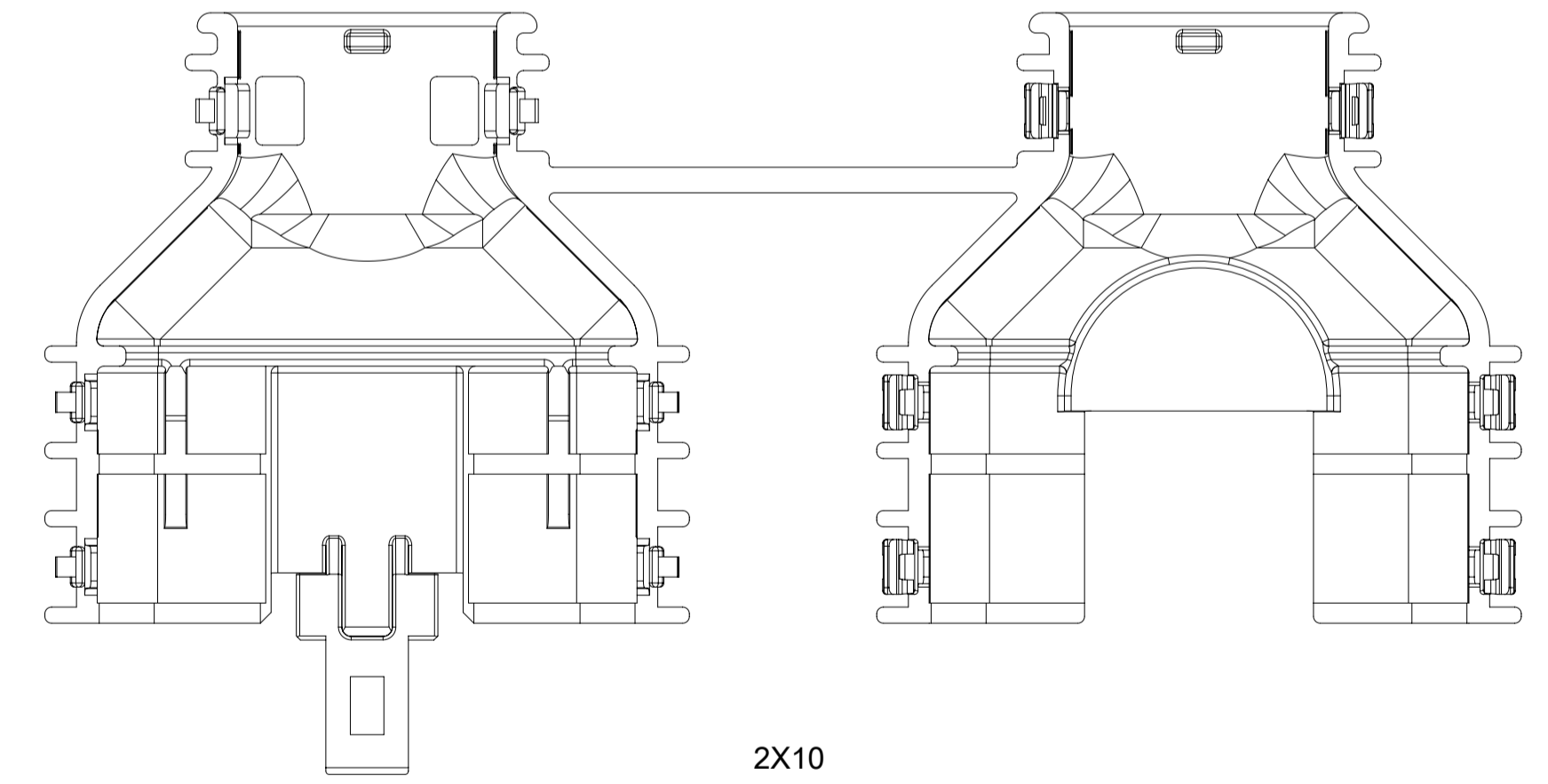
2X8  
MOLEX



2X8  
MOLEX



2X10  
MOLEX



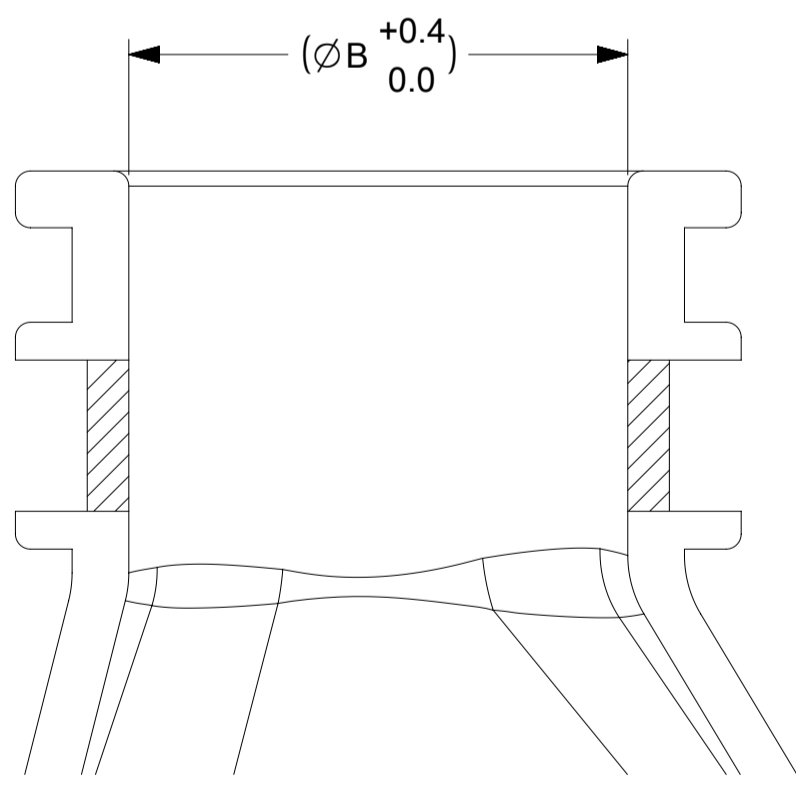
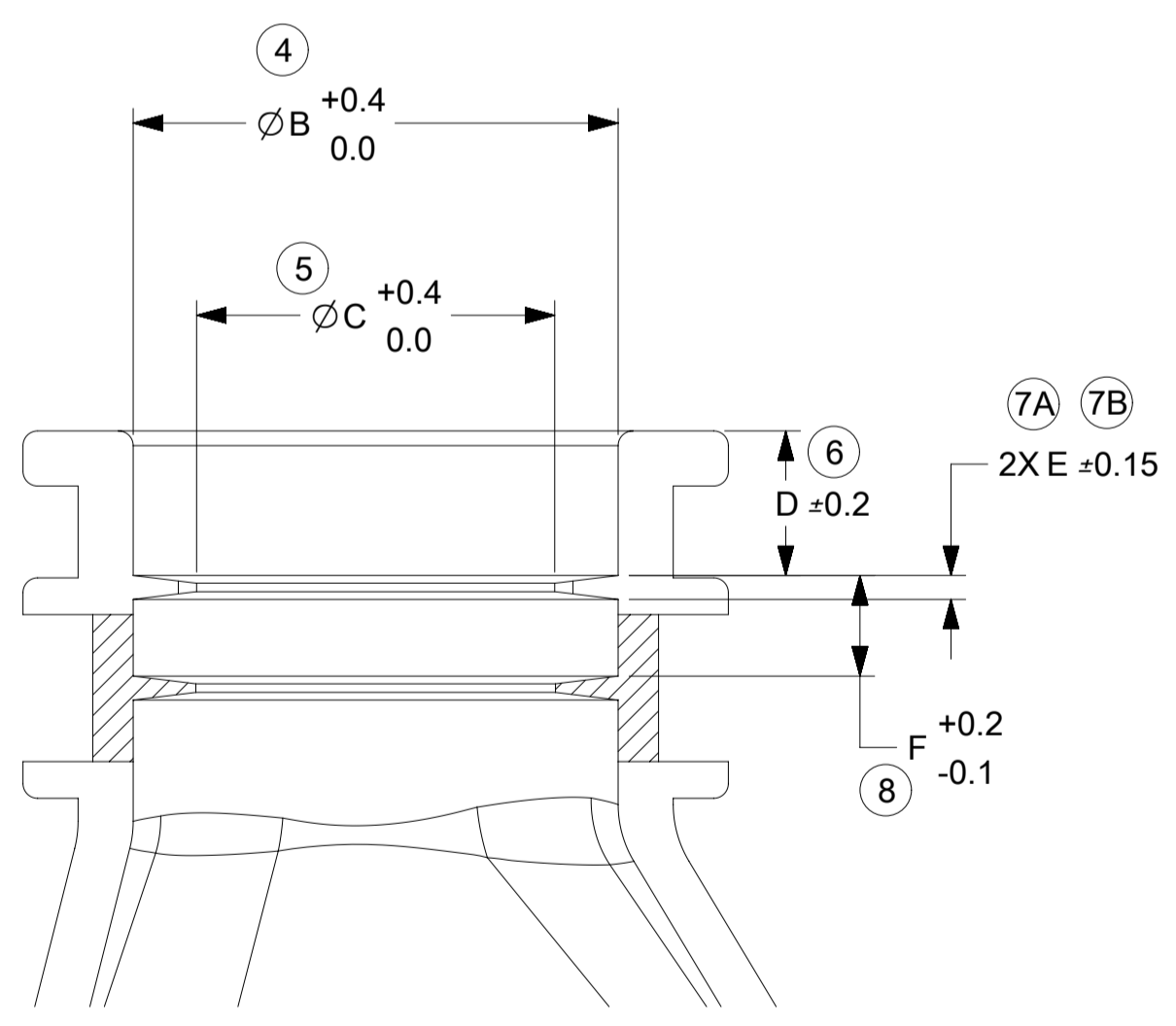
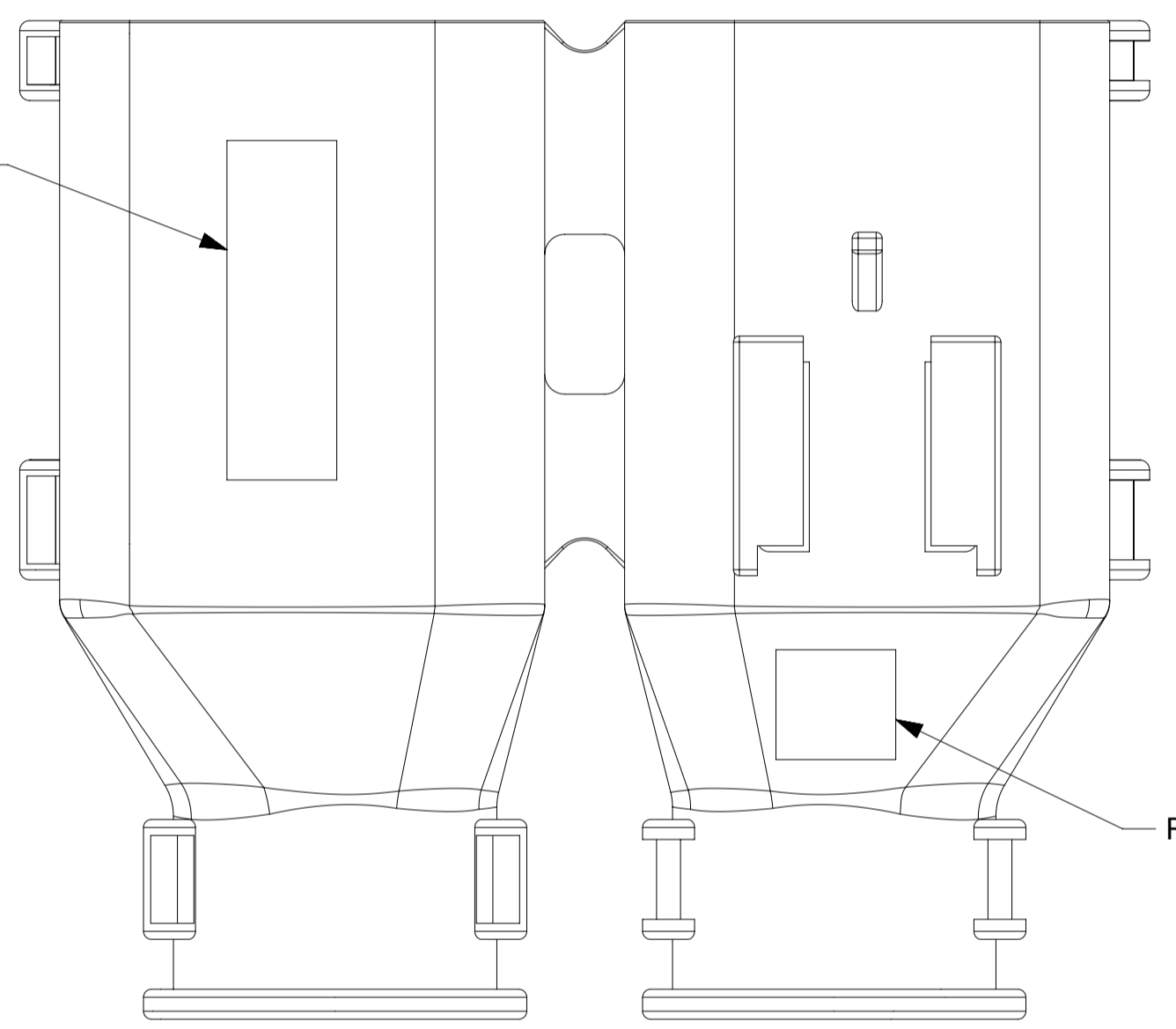
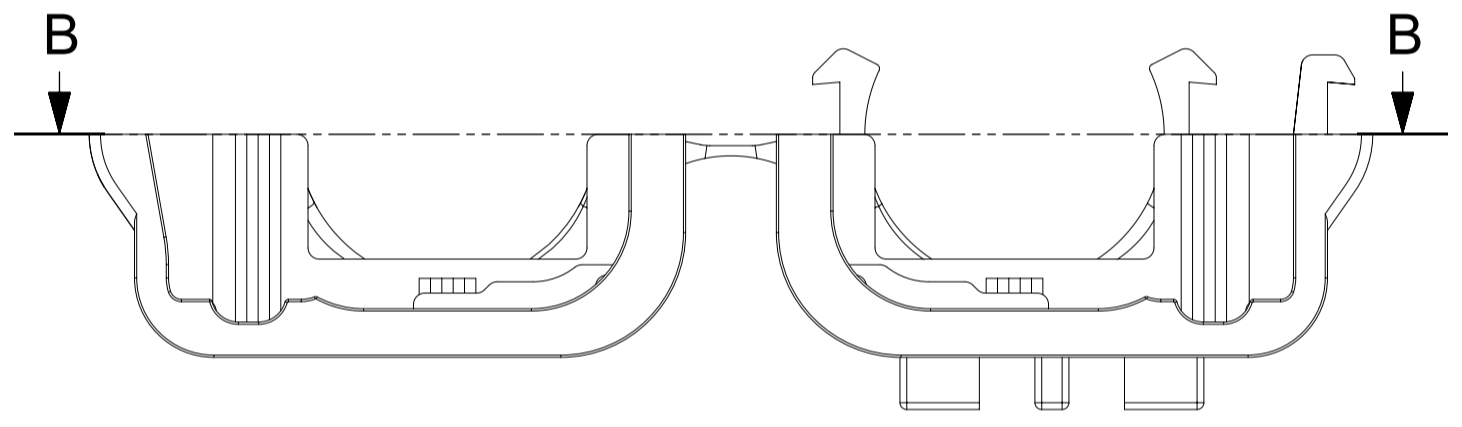
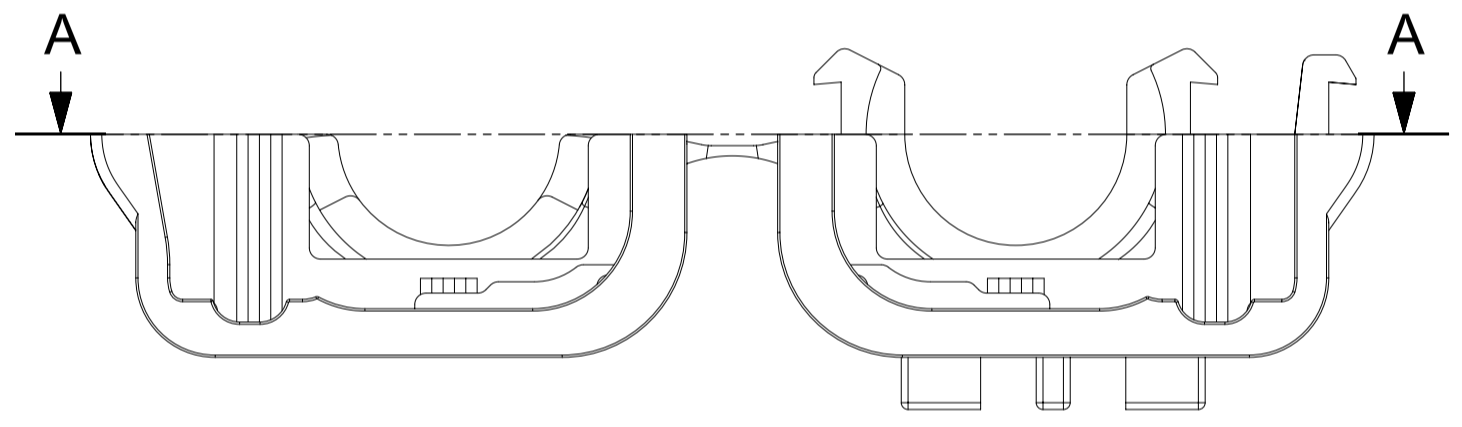
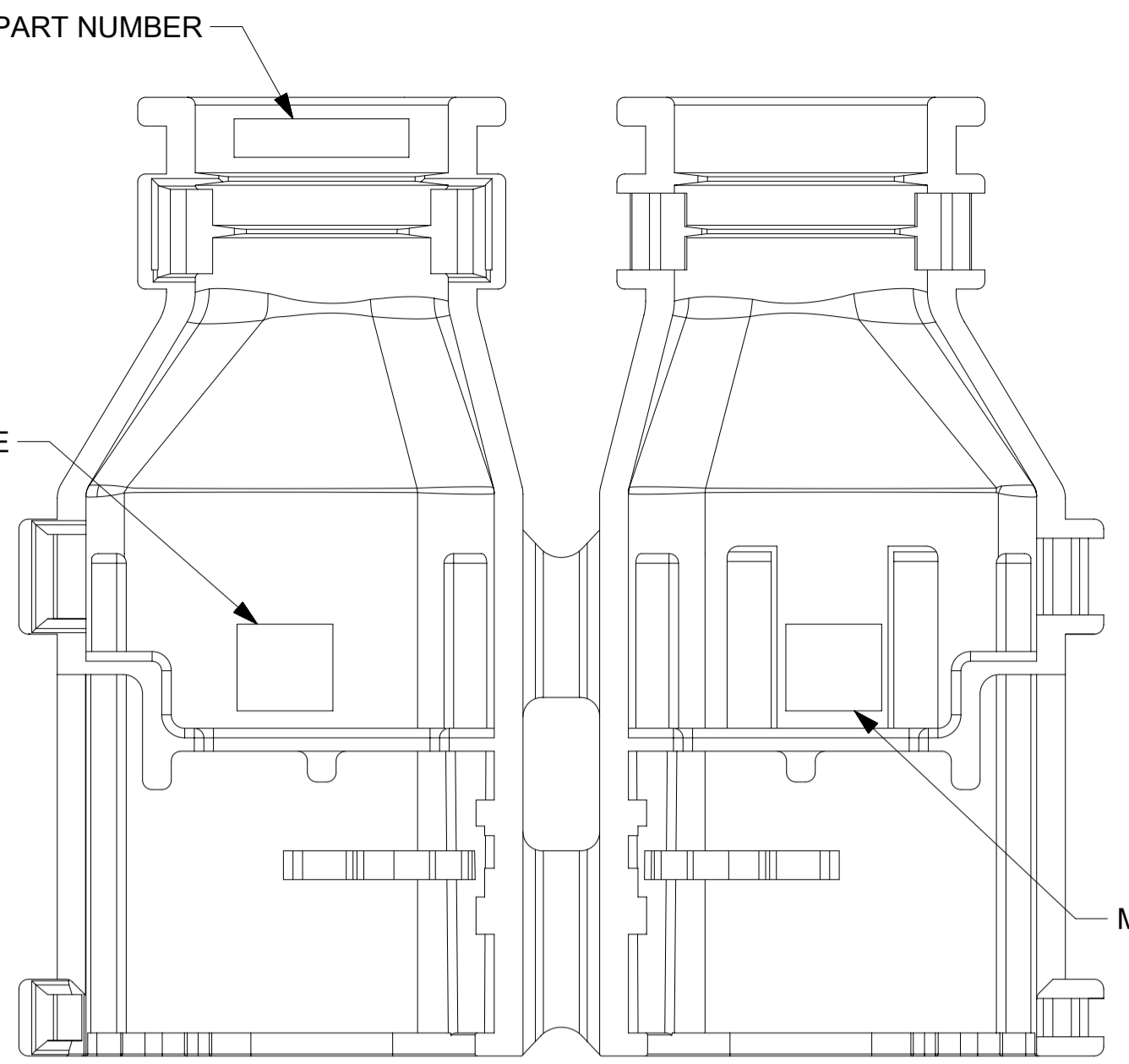
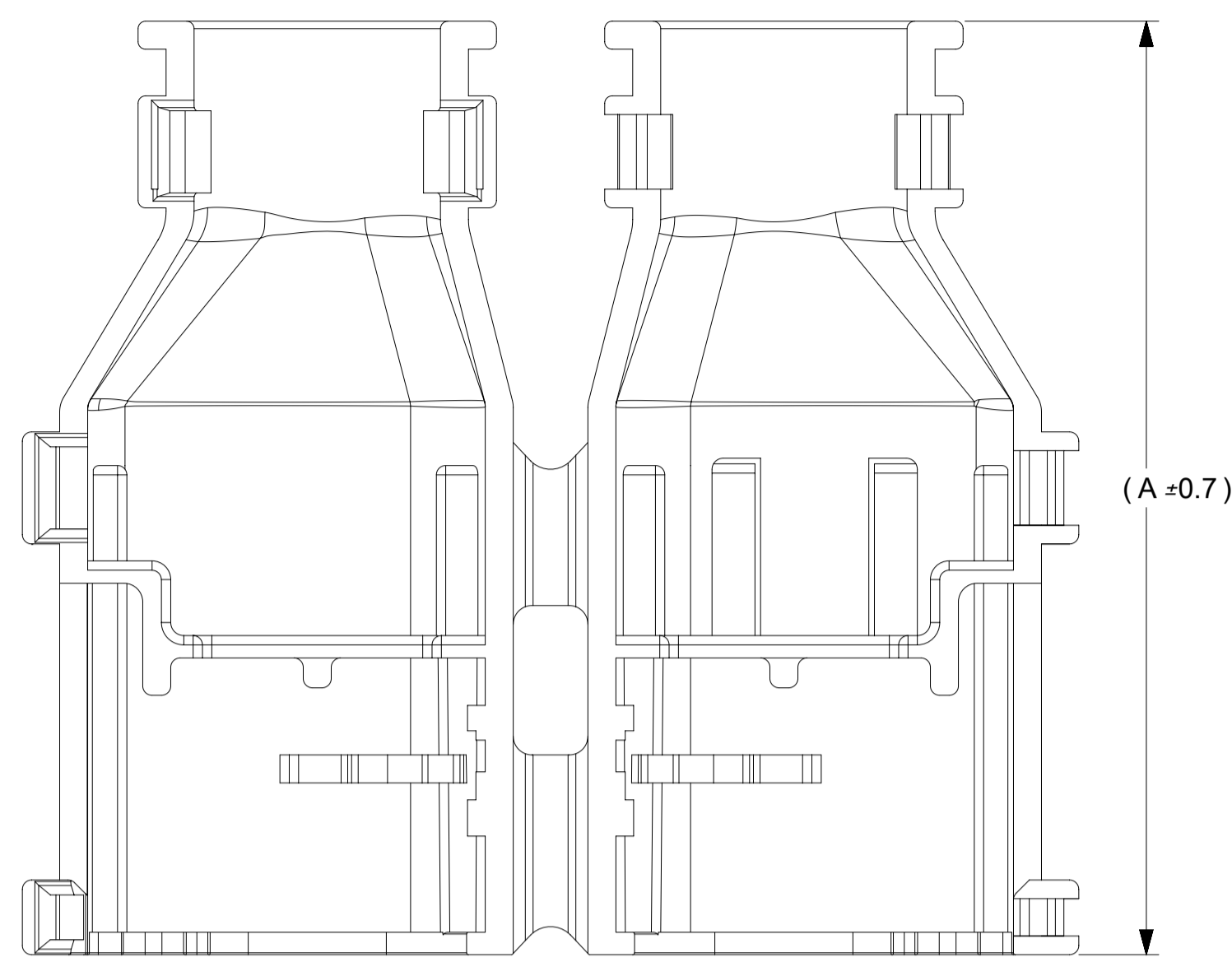
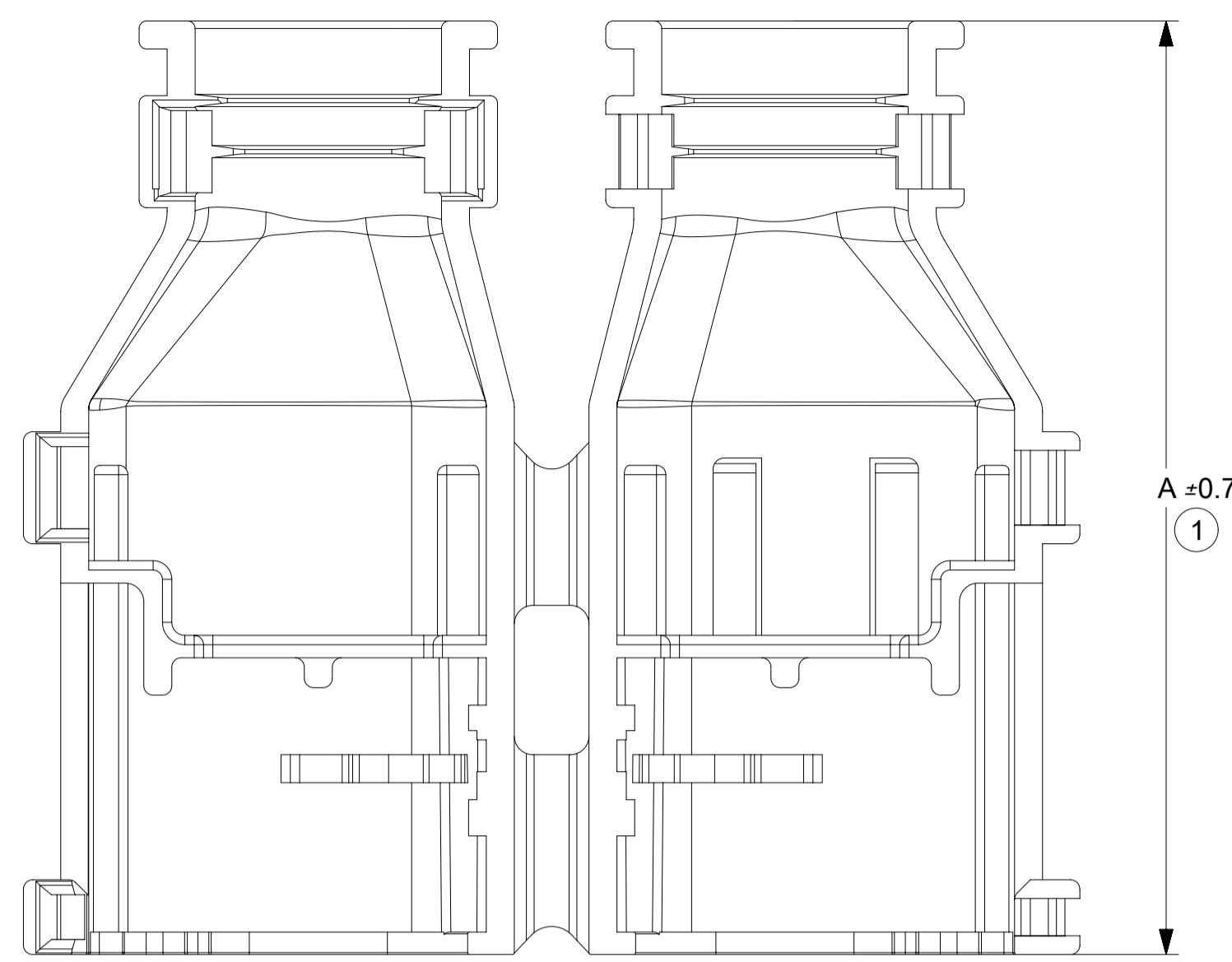
2X10  
MOLEX

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|  |   |  |   |  |  |  |
|--|---|--|---|--|--|--|
| EC NO: 632862<br>DRWN: PPALLAN<br>CHKD: MVANSLAMBROU<br>APPR: MVANSLAMBROU | 2020/02/20<br>2020/02/26<br>2020/02/26                                    | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>DIMENSION UNITS: mm<br>SCALE: 2:1 | DRWN BY: DAHALL<br>DATE: 2013/03/27                                 |  |  |  |
|  | 4 PLACES ±<br>3 PLACES ±<br>2 PLACES ± 0.1<br>1 PLACE ± 0.2<br>0 PLACES ± | ANGULAR TOL ± 3.0 °  | CHK'D BY: VKOSHY<br>DATE: 2013/04/08                                |  | MX150 DUAL ROW RECPT BACKSHELLS            |  |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS                      |  |   |  | DRAWING SIZE: A1<br>THIRD ANGLE PROJECTION | PRODUCT CUSTOMER DRAWING   |
|  | B10   | REV:   | SERIES: 34951<br>MATERIAL NUMBER: SD-34951-0001<br>DOCUMENT NUMBER: |  | DATE:                                      | CUSTOMER: GENERAL MARKET<br>DOC TYPE: PSD<br>DOC PART: 001<br>SHEET NUMBER: 2 OF 4 |

**SHEET DESCRIPTION**  
SCHLEMMER BACKSHELL DETAIL

| DESCRIPTION      | CHARTED DIMENSION |       |       |      |      |      |
|------------------|-------------------|-------|-------|------|------|------|
|                  | A                 | B     | C     | D    | E    | F    |
| 2X3, WITH RIB    | 50.00             | 13.20 | 9.75  | 3.93 | 0.65 | 2.74 |
| 2X3, WITHOUT RIB | 50.00             | 13.20 | N/A   | N/A  | N/A  | N/A  |
| 2X4, WITH RIB    | TBD               | TBD   | TBD   | TBD  | TBD  | TBD  |
| 2X4, WITHOUT RIB | TBD               | TBD   | TBD   | TBD  | TBD  | TBD  |
| 2X6, WITH RIB    | 50.00             | 17.70 | 13.60 | 3.50 | 0.83 | 3.10 |
| 2X6, WITHOUT RIB | 50.00             | 17.70 | N/A   | N/A  | N/A  | N/A  |



PARTIAL SECTION A-A  
SCALE 5:1  
WITH RIBS

PARTIAL SECTION B-B  
SCALE 5:1  
WITHOUT RIBS

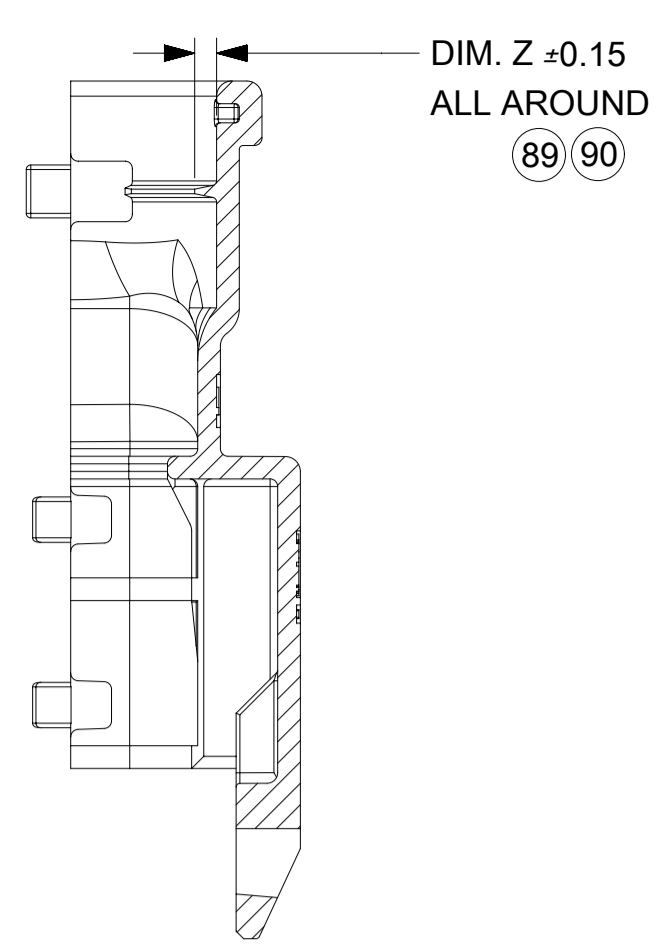
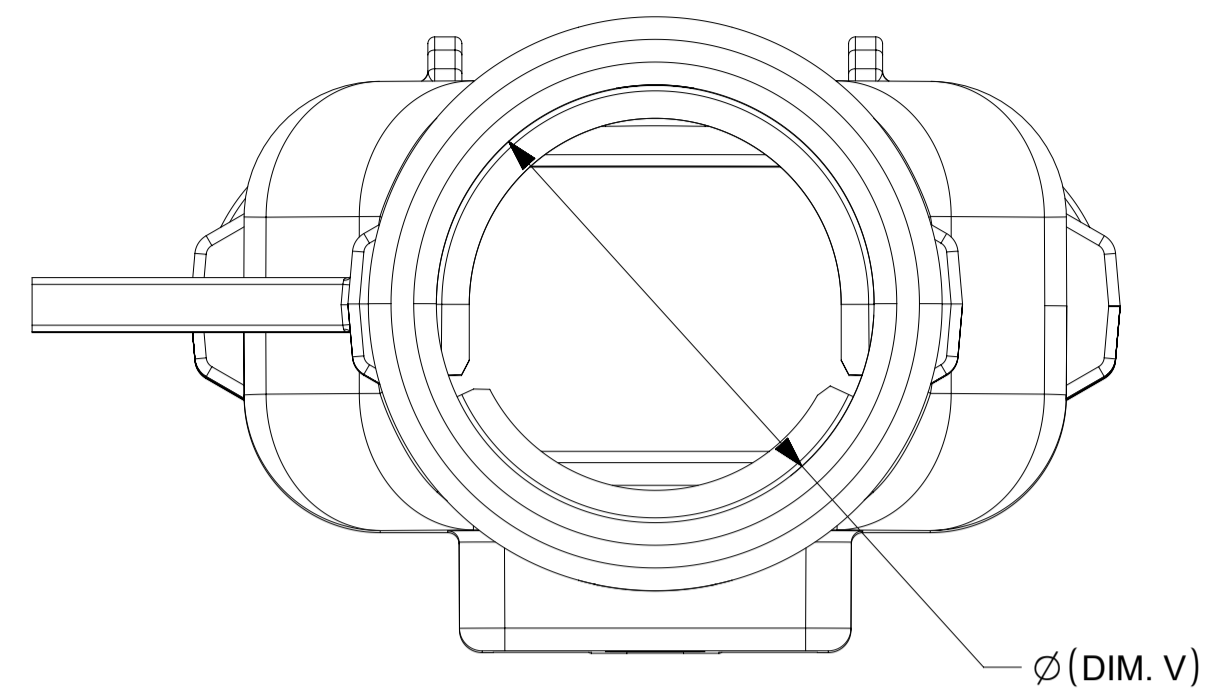
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

|  |   |  |  |  |   |
|--|---|--|--|--|---|
| EC NO: 632862<br>DRWN: PPALLAN<br>CHKD: MVANSLAMBROU<br>APPR: MVANSLAMBROU | 2020/02/20<br>2020/02/26<br>2020/02/26                                    | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>mm<br>ANGULAR TOL ± 3.0 ° | DIMENSION UNITS: mm<br>SCALE: 3:1          |  |   |
|  | 4 PLACES ±<br>3 PLACES ±<br>2 PLACES ± 0.1<br>1 PLACE ± 0.2<br>0 PLACES ± | DRWN BY: DAHALL<br>DATE: 2013/03/27                                | DRWN BY: DAHALL<br>DATE: 2013/03/27        |  | MX150 DUAL ROW RECPT BACKSHELLS   |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS                      | CHK'D BY: VKOSHY<br>DATE: 2013/04/08                               | CHK'D BY: VKOSHY<br>DATE: 2013/04/08       |  |   |
|  | B10   | A1   | DRAWING SIZE: A1<br>THIRD ANGLE PROJECTION |  | SERIES: 34951<br>MATERIAL NUMBER: SD-34951-0001<br>CUSTOMER: GENERAL MARKET |

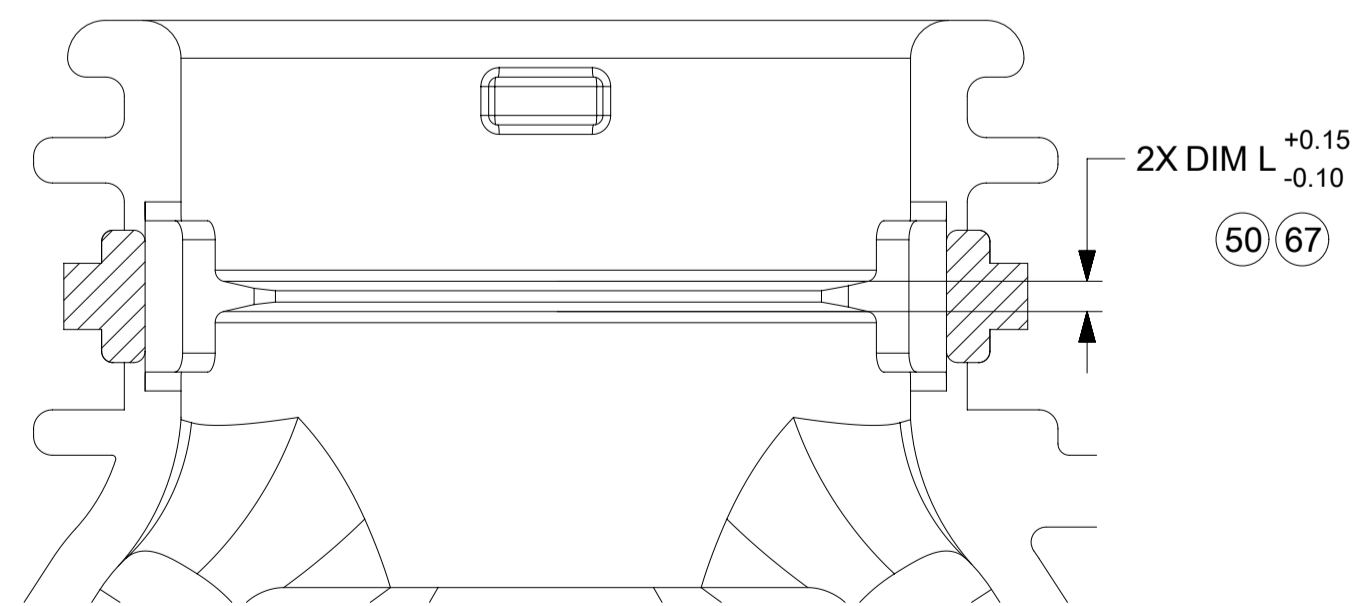
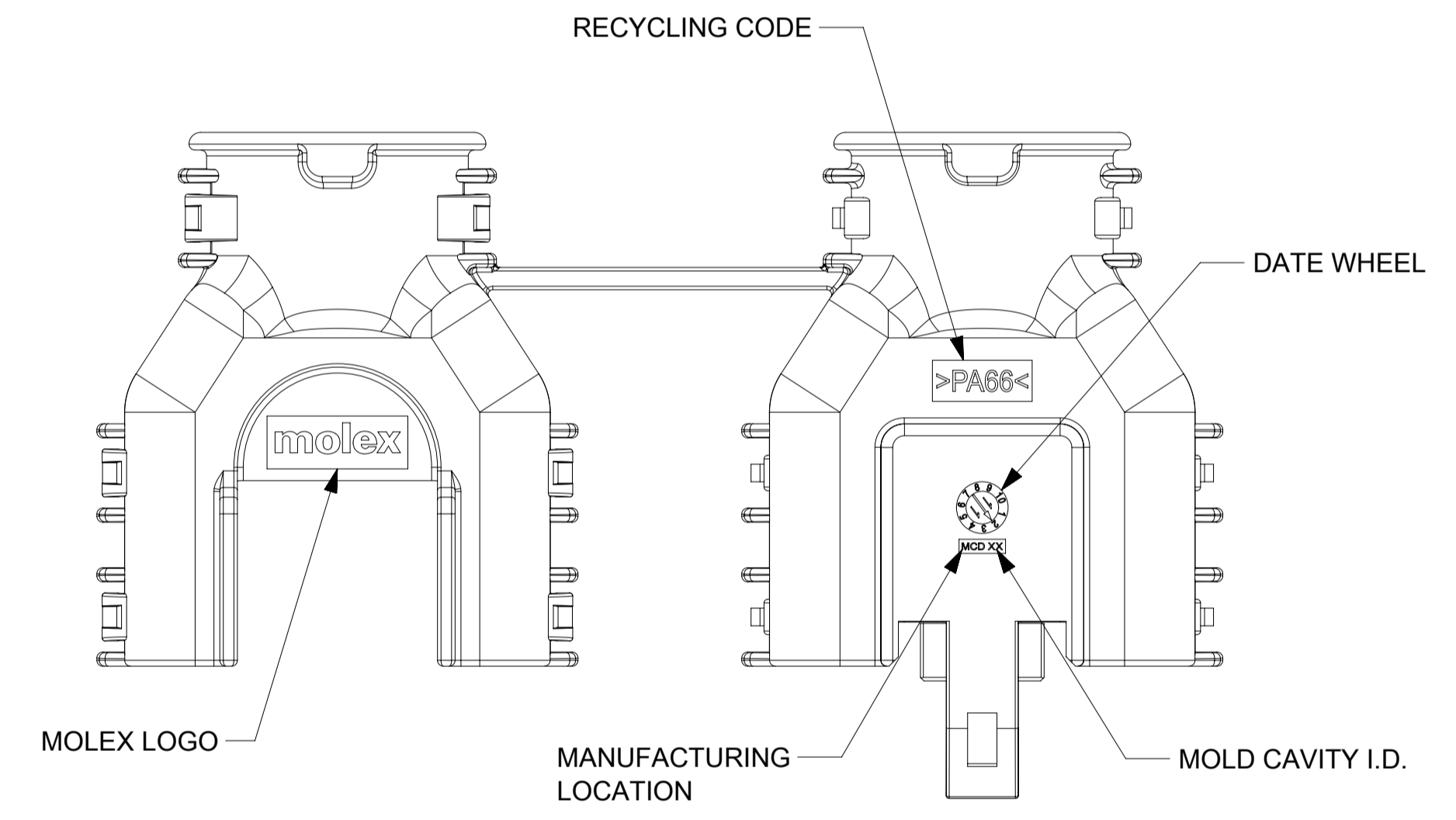
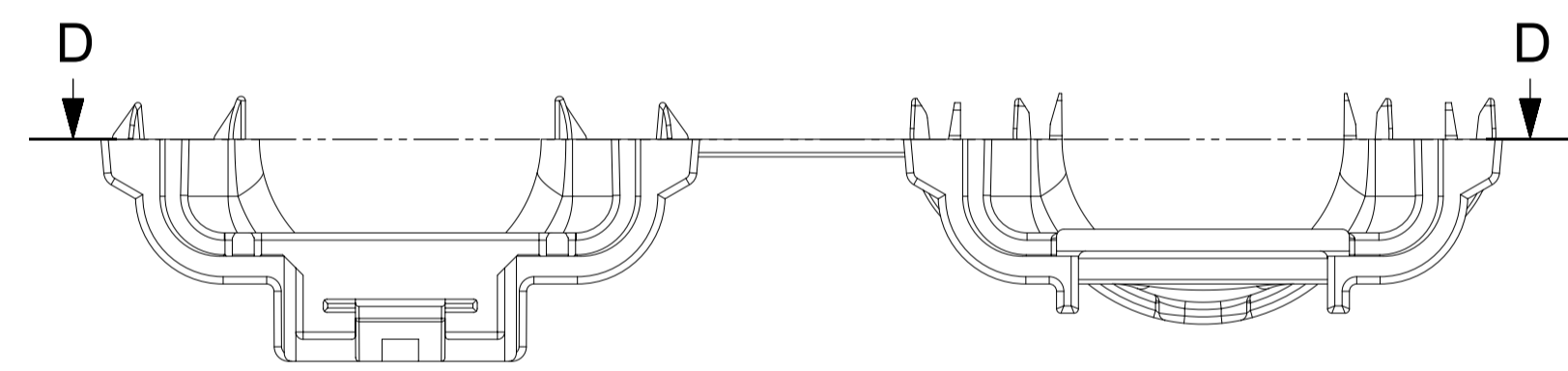
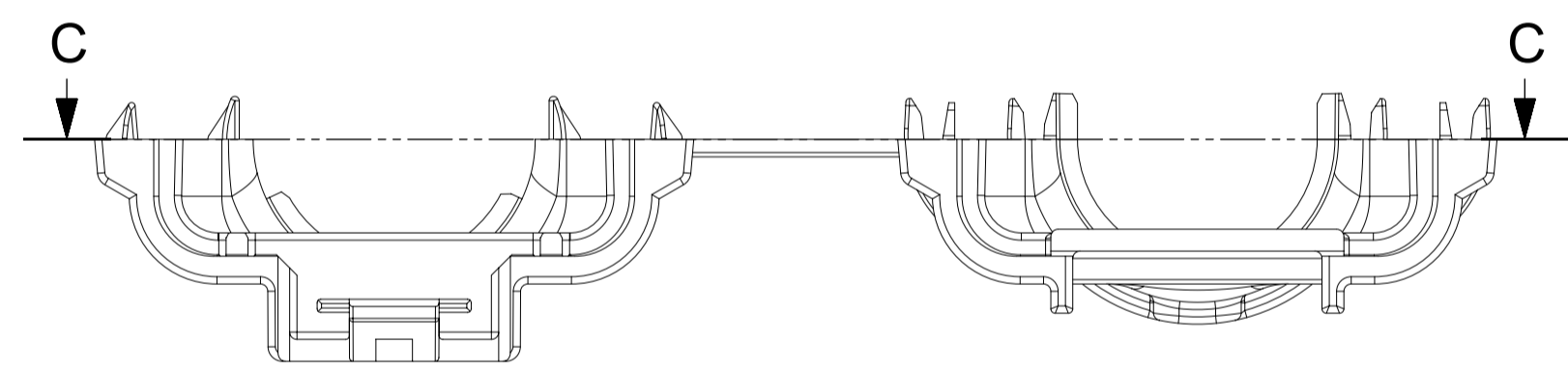
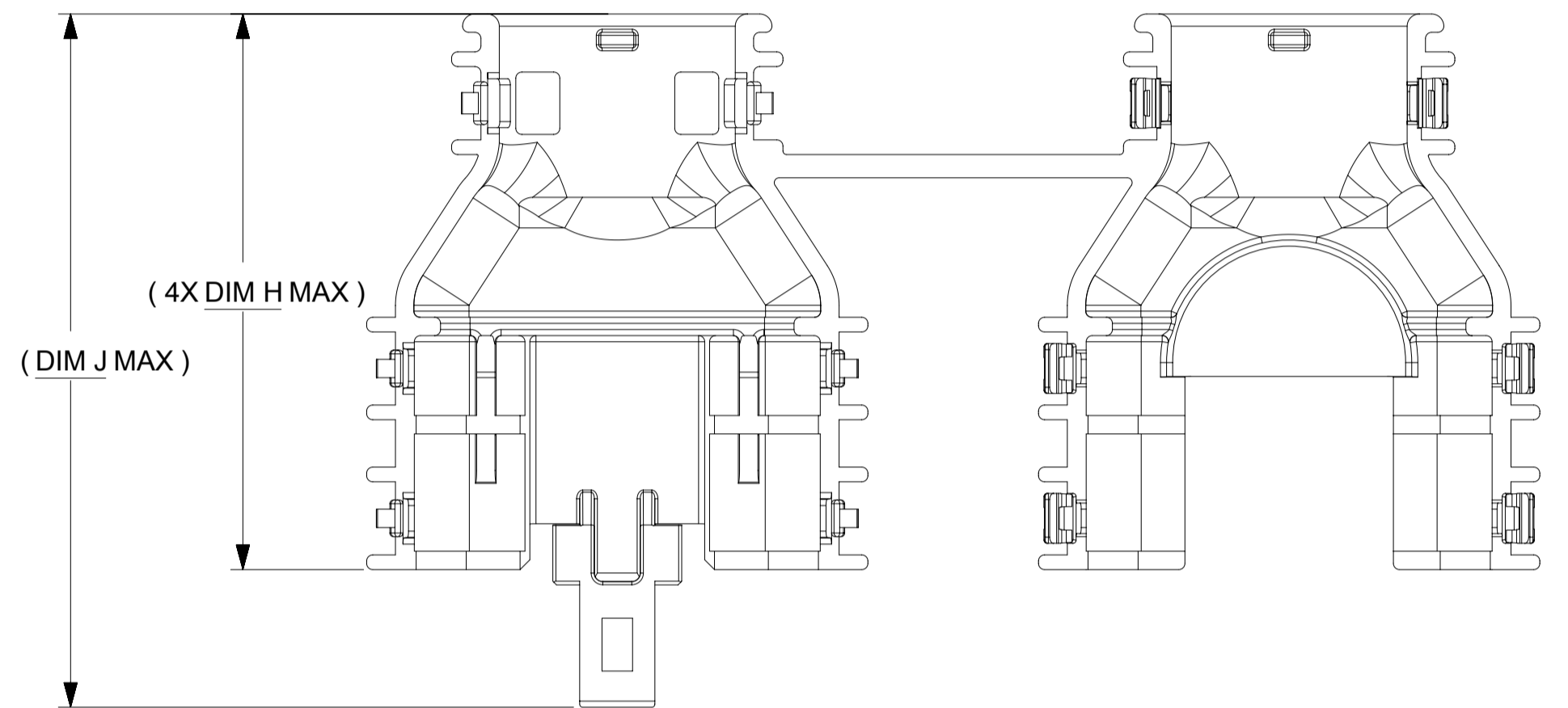
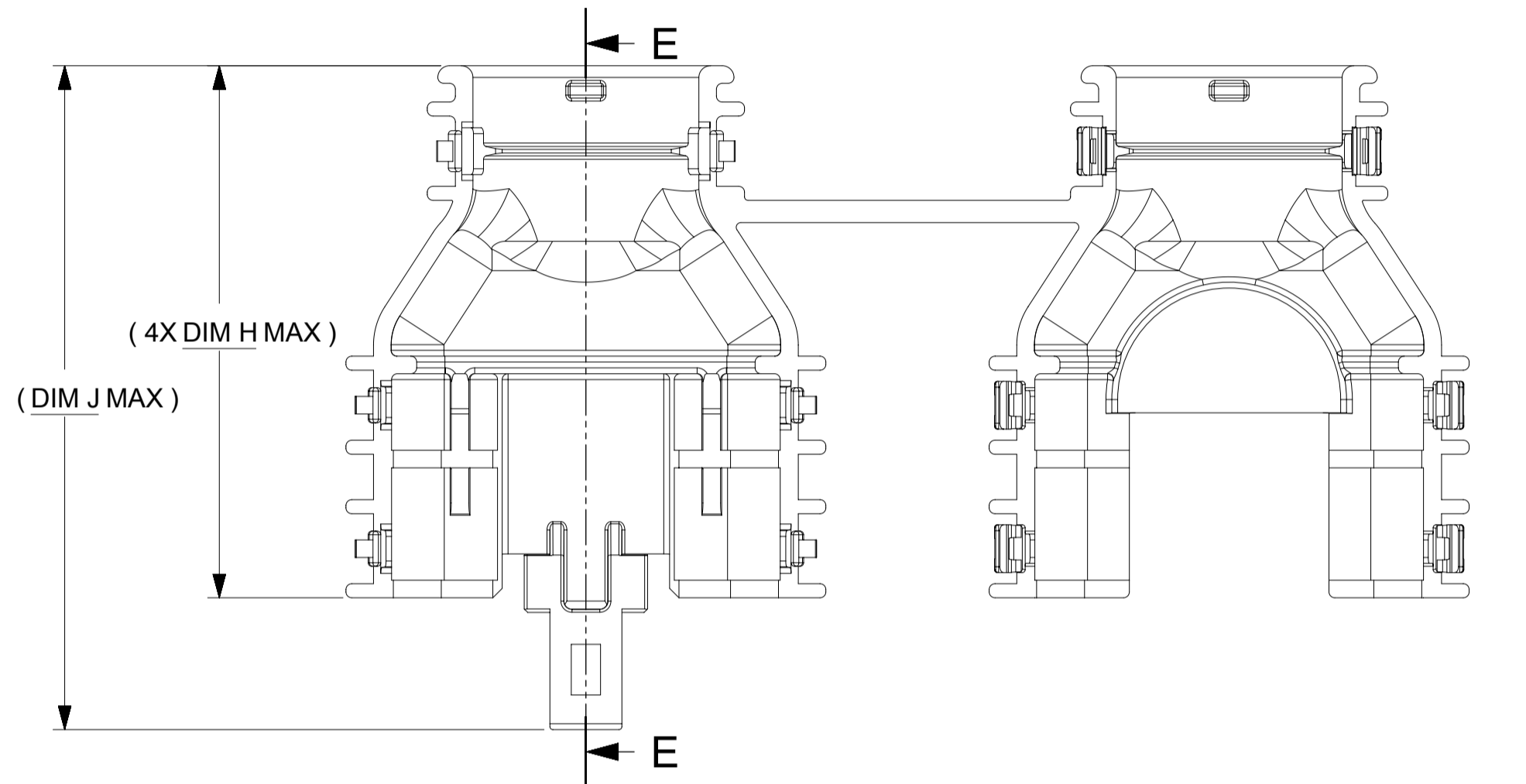
DOCUMENT NUMBER: SD-34951-0001  
 DOC TYPE: PSD  
 DOC PART: 001  
 SHEET NUMBER: 3 OF 4

**SHEET DESCRIPTION**  
MOLEX BACKSHELL DETAIL

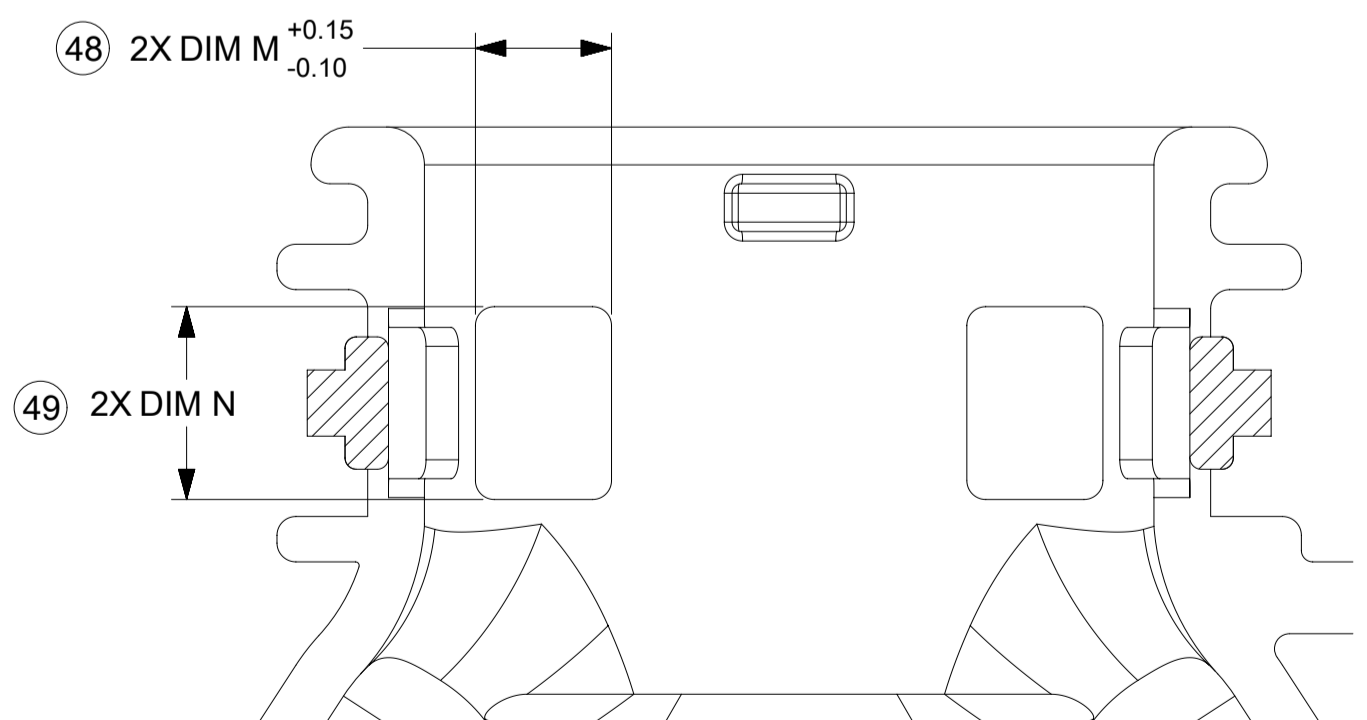
| DESCRIPTION       | CHARTED DIMENSION |       |       |       |      |      |      |      |
|-------------------|-------------------|-------|-------|-------|------|------|------|------|
|                   | V                 | H     | J     | K     | L    | M    | N    | Z    |
| 2X4, WITH RIB     | 16.10             | 36.80 | 48.11 | 16.10 | 0.80 | N/A  | N/A  | 1.35 |
| 2X4, WITHOUT RIB  | 16.10             | 36.80 | 48.11 | 16.10 | N/A  | 3.60 | 5.10 | N/A  |
| 2X8, WITH RIB     | 19.30             | 45.60 | 56.91 | 19.30 | 0.80 | N/A  | N/A  | 1.45 |
| 2X8, WITHOUT RIB  | 19.30             | 45.60 | 56.91 | 19.30 | N/A  | 3.60 | 5.10 | N/A  |
| 2X10, WITH RIB    | 19.30             | 45.60 | 56.91 | 19.30 | 0.80 | N/A  | N/A  | 1.45 |
| 2X10, WITHOUT RIB | 19.30             | 45.60 | 56.91 | 19.30 | N/A  | 3.60 | 5.10 | N/A  |



SECTION E-E



PARTIAL SECTION C-C  
SCALE 5:1  
WITH RIBS



PARTIAL SECTION D-D  
SCALE 5:1  
WITHOUT RIBS

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|  |               |  |                        |                |              |        |            |
|--|---------------|--|------------------------|----------------|--------------|--------|------------|
| EC NO: 632862<br>DRWN: PPALLAN<br>CHKD: MYANSLAMBROU<br>APPR: MYANSLAMBROU | 2020/02/20    | GENERAL TOLERANCES (UNLESS SPECIFIED)                | DIMENSION UNITS        | SCALE          |              |        |            |
|  | 2020/02/26    | ANGULAR TOL ± 3.0 °                                  | mm                     | 2:1            |              |        |            |
|  |               | 4 PLACES ±   | DRWN BY                | DATE           |              | DAHALL | 2013/03/27 |
|  |               | 3 PLACES ±   | CHK'D BY               | DATE           |              |        |            |
|  |               | 2 PLACES ± 0.1                                       | APPR BY                | DATE           |              | VKOSHY | 2013/04/08 |
|  | 1 PLACE ± 0.2 | DRAWING SIZE   | THIRD ANGLE PROJECTION | A1             |              |        |            |
|  | 0 PLACES ±    | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                        |                |              |        |            |
| B10  |               | SERIES   | MATERIAL NUMBER        | CUSTOMER       |              |        |            |
|  |               | 34951  |                        | GENERAL MARKET |              |        |            |
|  |               | DOCUMENT NUMBER                                      | DOC TYPE               | DOC PART       | SHEET NUMBER |        |            |
|  |               | SD-34951-0001  | PSD                    | 001            | 4 OF 4       |        |            |