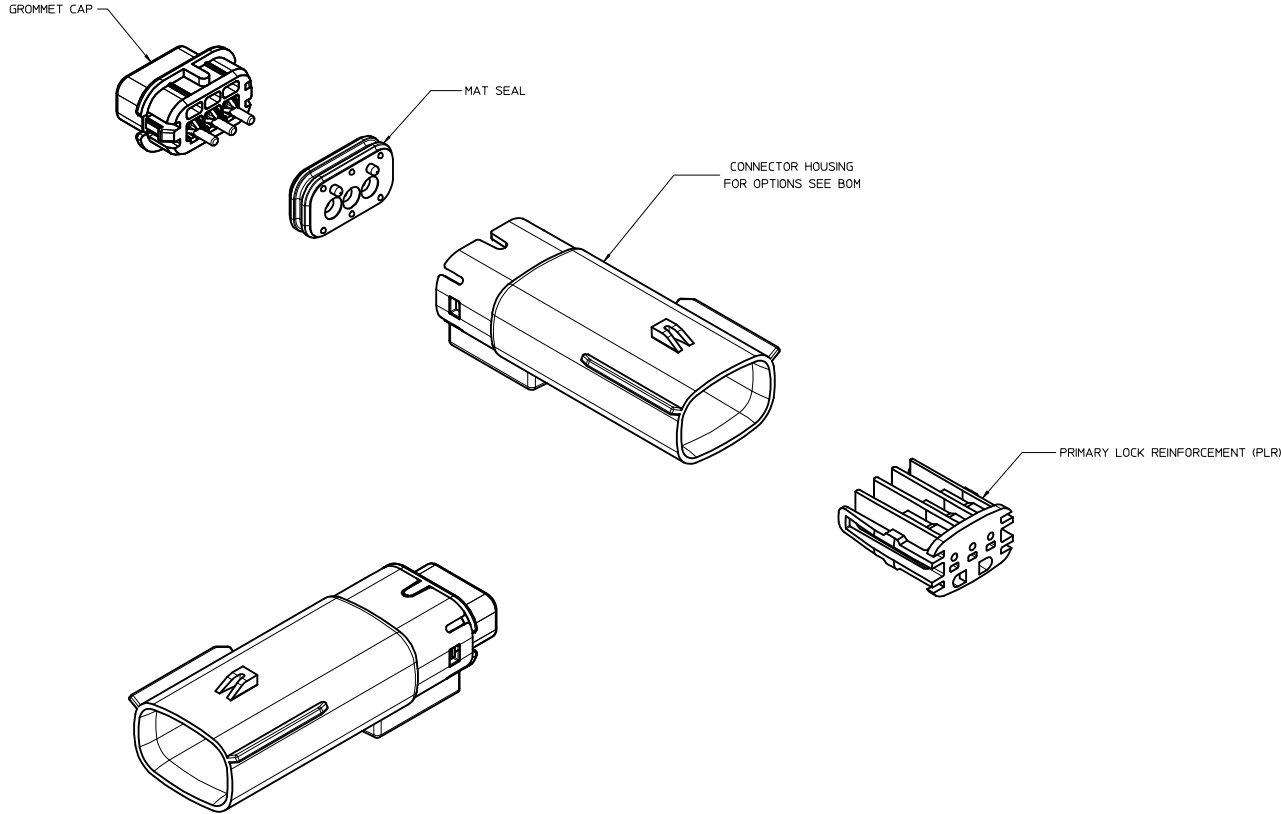


| TABLE OF CONTENTS |                       |
|-------------------|-----------------------|
| SHEET NO.         | SHEET DESCRIPTION     |
| 1                 | NOTES                 |
| 2                 | KEY CONFIGURATIONS    |
| 3                 | BLADE SEALED ASSEMBLY |
| 4                 | SYSTEM PACKAGING      |
| 5                 | BOM                   |



NOTES: VALID UNLESS OTHERWISE SPECIFIED

1. GENERAL:
  - a. APPLICATION SPECIFICATION SEE: AS-33472-100  
CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, CONNECTOR ASSEMBLY, PACKAGING INFORMATION, CONNECTOR MATING, SERVICE INSTRUCTIONS, ELECTRICAL CONTINUITY CHECKING, CRIMPING, AND TROUBLESHOOTING.  
-DESIGNED TO MATE WITH RECEPTACLE SEALED ASSEMBLY SPECIFIED IN MOLEX DRAWING SD-33471-031.  
-FOR 1.5mm BLADE TERMINALS TO BE USED WITH THIS ASSEMBLY SEE MOLEX DRAWING SD-33000-001.  
- SYSTEM TO BE USED WITH WIRE WITHIN DIAMETER RANGE OF 1.2mm TO 2.69mm.  
-ASSEMBLY SHIPPED WITH PLR IN PRE-LOCK POSITION  
-IN THE EVENT THAT THE PLR IS FOUND IN THE SEATED (FINAL LOCK) POSITION, REFER TO MOLEX SPECIFICATION PS-34646-001, AVAILABLE AT [www.molex.com](http://www.molex.com) <<http://www.molex.com>>  
-ASSEMBLY CONFORMS TO SAE/USCAR-2 REV.4 WITH THE FOLLOWING EXCEPTIONS:  
TERMINAL INSERTION FORCE FOR WIRE DIAMETER ABOVE 2.5mm NOT EXCEEDING 2.69mm SHALL NOT EXCEED 45 NEWTONS.
  - b. PRODUCT SPECIFICATION SEE: PS-33471-000  
CONTAINS: PRODUCT INTRODUCTION, PRODUCT SUMMARY, RATINGS (CURRENT, TEMPERATURE, SEALING, AND FLAMMABILITY), AND PRODUCT VALIDATION.
  - c. PACKAGING SPECIFICATION PER MOLEX DRAWING: PK-31300-635
  - d. PARTS MUST BE IN COMPLIANCE TO MOLEX CHEMICAL SUBSTANCES FOR PRODUCTS AND PACKAGING SPECIFICATIONS ES-40000-5016
  - e. DATA MUST BE SUBMITTED UNDER THE MOLEX PART NUMBER TO IMDS (COMPANY ID#13255)
2. DESIGN - MATERIALS:
  - a. CONNECTOR HOUSING, GROMMET CAP, PLR: SPS/NYLON BLEND 20% GLASS FILLED
  - b. MAT SEAL: INHERENTLY LUBRICATED SILICONE
3. DESIGN - GEOMETRY:
  - a. THIS IS A 100% CAD GENERATED PART. THE CAD MATHEMATICAL DATA IS THE MASTER FOR THIS PART. FOR DIMENSIONAL OR ANY INFORMATION NOT SHOWN ON THIS DRAWING, ANALYZE THE CAD MODEL.
  - b. GEOMETRIC DIMENSIONS AND TOLERANCES PER ASME Y14.5M - 1994
  - c. EDGES AND UNDIMENSIONED DETAILS PER ISO13715
  - d. CORNERS SHOWN AS SHARP TO BE R 0.2 MAX.
  - e. LETTERING SHALL BE 0.15 MAX RAISED IN 0.25 MAX RECESS PAD. THIS INCLUDES RECYCLING CODE, CAVITY ID, VENDOR IDENTIFICATION, AND CUSTOMER MATERIAL NUMBER.
  - f. VISUAL DEFECTS SHALL MEET COSMETIC STANDARD PS-45499-002 (Class B)
  - g. LASER MARKING: TBD

INSPECTION NUMBER LOG  
LAST NUMBER USED: 8  
ADDED:  
REMOVED:

|   |  |
|---|--|
| N   | UPDATED GROMMET CAP                                  |
| M3  | UPDATED DIMENSIONS TO MATCH MODEL                    |
| M2  | COLOR REPLACEMENT FOR KEY C AND D PER USCAR STANDARD |
| M1  | UPDATED NOTES  |
| M   | REDRAWN  |
| REV   | DESCRIPTION  |
| MM ONLY   | DESIGN UNITS   |
| SCALE 3:1   | METRIC   |
|   | THIRD ANGLE PROJECTION                               |
| DRAWN BY: DMARCOUX DATE: 06-12-02   |  |
| CHECKED BY: DGRIFFIT DATE: 06-12-02   |  |
| APPROVED BY: FHOLUB DATE: 06-12-02  |  |
| MATERIAL NO. SEE BOM  |  |
| DOCUMENT NO. SD-33481-031   |  |
| SHEET NO. 1 OF 5  |  |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |

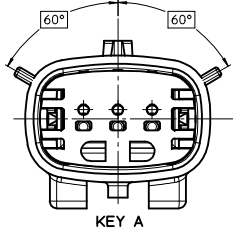
| REV | DESCRIPTION |
|-----|-------------|
| 1   | 2013/03/19  |
| 2   | 2013/03/20  |
| 3   | 2013/03/20  |
| 4   | 2013/03/20  |

| QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED)                |
|-----------------|--|
| ∇=0             | mm   |
| ∇=0             | INCH   |
| ∇=0             | ANGULAR ± 3 °  |
| ∇=0             | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |

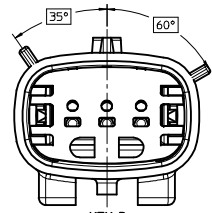
| DIMENSION STYLE | SCALE | DESIGN UNITS |
|-----------------|-------|--------------|
| MM ONLY         | 3:1   | METRIC       |

| DRAWN BY             | DATE     | TITLE                                    |
|----------------------|----------|--|
| DMARCOUX             | 06-12-02 | MX150 1X3 BLADE SEALED ASSEMBLY MAT SEAL |
| DGRIFFIT             | 06-12-02 |  |
| FHOLUB               | 06-12-02 |  |
| MATERIAL NO. SEE BOM |          | DOCUMENT NO. SD-33481-031                |
| SHEET NO. 1 OF 5     |          |  |

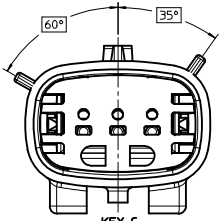
KEY CONFIGURATIONS



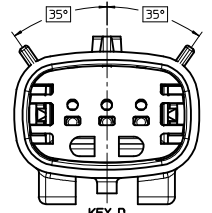
KEY A



KEY B



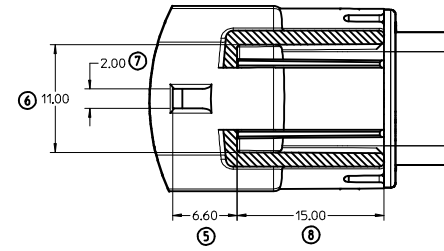
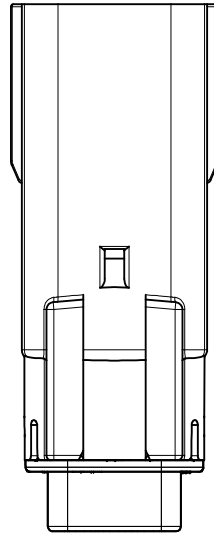
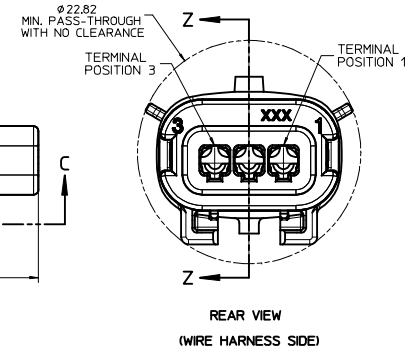
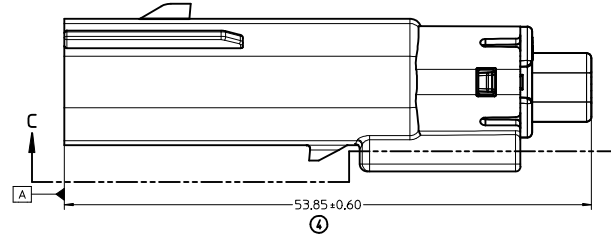
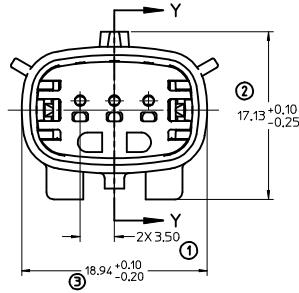
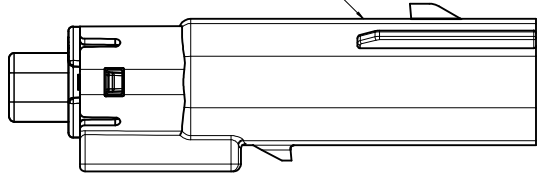
KEY C



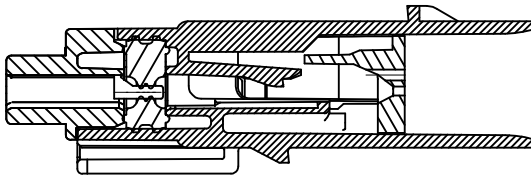
KEY D

|   |                       |  |   |         |              |  |
|---|-----------------------|--|---|---------|--------------|--|
| SEE REV. COLUMN<br>IEC NO. UAU2013-1478<br>DRAWN: PROFFITT 2013/03/20<br>CHECKED: DICK 2013/03/20<br>APPR: KOSHY 2013/03/20 | QUALITY SYMBOLS       | GENERAL TOLERANCES (UNLESS SPECIFIED)                | DIMENSION STYLE   | SCALE   | DESIGN UNITS | THIRD ANGLE PROJECTION   |
|   | ▽=0                   | mm INCH  | MM ONLY   | 4:1     | METRIC       | ☉  |
|   | ▽=0                   | 4 PLACES ± --- ± ---                                 | DRAWN BY DATE   |         |              |  |
|   | ▽=0                   | 3 PLACES ± --- ± ---                                 | CHECKED BY DATE   |         |              |  |
|   | 2 PLACES ± 0.10 ± --- | DGRAFFIT 06-12-02                                    |   |         |              | MX150 1X3 BLADE<br>SEALED ASSEMBLY<br>MAT SEAL<br><b>molex</b> |
|   | 1 PLACE ± 0.3 ± ---   | APPROVED BY DATE                                     |   |         |              |  |
|   | 0 PLACE ± ±           | FHOLUB 06-12-02                                      |   |         |              |  |
|   | ANGULAR ± 3 °         | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO.  | SEE BOM | DOCUMENT NO. | SHEET NO.  |
|   |                       |  | SIZE D  |         | SD-33481-031 | 2 OF 5   |
|   |                       |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |         |              |  |

LASER MARKING THIS SURFACE  
SEE NOTE 3g.

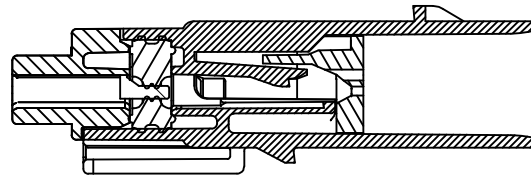


SECTION C-C



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

SECTION Z-Z



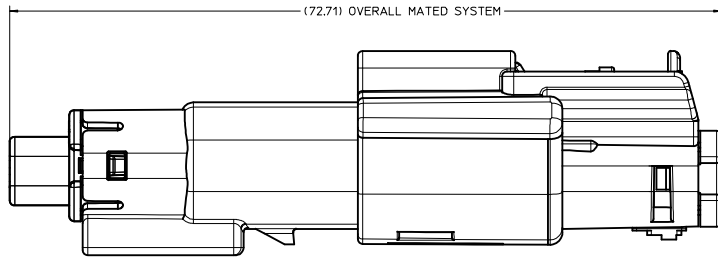
PRIMARY LOCK REINFORCEMENT (PLR) SHOWN  
IN FINAL-LOCK POSITION

SECTION Y-Y

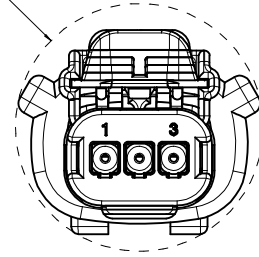
|   |   |                                      |   |                            |  |                        |                        |
|---|---|--------------------------------------|---|----------------------------|--|------------------------|------------------------|
| SEE REV. COLUMN<br>IEC NO. UAU2013-1478<br>DRAWN: PROFFITT<br>CHYKHOLOK<br>APPR: VIOSHY | 2013/03/19<br>2013/03/20  | QUALITY SYMBOLS<br>∇=0<br>∇=0<br>∇=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>mm INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± 0.10 ± ---<br>2 PLACES ± 0.3 ± ---<br>1 PLACE ± ± ---<br>0 PLACE ± ± | DIMENSION STYLE<br>MM ONLY | SCALE<br>4:1                             | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION |
|   | DRAWN BY<br>DMARCOUX  | DATE<br>06-12-02                     | CHECKED BY<br>DGRIFFIT  | DATE<br>06-12-02           | MX150 1X3 BLADE SEALED ASSEMBLY MAT SEAL |                        |                        |
|   | APPROVED BY<br>FHOLUB   | DATE<br>06-12-02                     | MATERIAL NO.<br>SEE BOM   |                            | DOCUMENT NO.<br>SD-33481-031             | SHEET NO.<br>3 OF 5    |                        |
|   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                      |   |                            |  |                        |                        |

20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

SYSTEM PACKAGING



∅25.30  
MIN. PASS-THROUGH  
WITH NO CLEARANCE

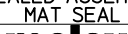


|   |                 |  |                 |          |   |                        |
|---|-----------------|--|-----------------|----------|---|------------------------|
| SEE REV. COLUMN<br>IEC NO. UAU2013-1478<br>DRAWN/PROFFITT 2013/03/19<br>CHYKHODICK 2013/03/20<br>APPR:VKOSHY 2013/03/20 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED)                | DIMENSION STYLE | SCALE    | DESIGN UNITS  | THIRD ANGLE PROJECTION |
|   | ▽=0             | 4 PLACES ± mm ± INCH                                 | MM ONLY         | 4:1      | METRIC  | ☉                      |
|   | ▽=0             | 3 PLACES ± 0.10 ± 0.004 ± 0.0016                     |                 |          |   |                        |
|   | ▽=0             | 2 PLACES ± 0.3 ± 0.012 ± 0.0048                      |                 |          |   |                        |
|   | ANGULAR ± 3 °   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | MATERIAL NO.    | DATE     | TITLE   |                        |
|   |                 |  | SEE BOM         | 06-12-02 | MX150 1X3 BLADE SEALED ASSEMBLY MAT SEAL  |                        |
|   |                 |  |                 | 06-12-02 | <b>molex</b>  |                        |
|   |                 |  |                 |          | DOCUMENT NO.  | SHEET NO.              |
|   |                 |  |                 |          | SD-33481-031  | 4 OF 5                 |
|   |                 |  |                 |          | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |

19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

| ASSEMBLY PART NUMBER | COLOR    | KEYING OPTION | CAVITY TYPE & STATUS (X = PLUGGED) |   |   | COMMENTS                            |
|----------------------|----------|---------------|------------------------------------|---|---|-------------------------------------|
|                      |          |               | 1                                  | 2 | 3 |                                     |
| 33481-0301           | BLACK    | A             |                                    |   |   |                                     |
| 33481-0302           | LT. GRAY | B             |                                    |   |   |                                     |
| 33481-0303           | BROWN    | C             |                                    |   |   | NOT RECOMMENDED, SEE P/N 33481-0322 |
| 33481-0304           | GREEN    | D             |                                    |   |   | NOT RECOMMENDED, SEE P/N 33481-0323 |
| 33481-0305           | CUSTOM   | TBD           |                                    |   |   |                                     |
| 33481-0306           | BLACK    | A             |                                    |   | X |                                     |
| 33481-0307           | LT. GRAY | B             |                                    |   | X |                                     |
| 33481-0308           | BROWN    | C             |                                    |   | X |                                     |
| 33481-0309           | GREEN    | D             |                                    |   | X |                                     |
| 33481-0310           | CUSTOM   | TBD           |                                    |   | X |                                     |
| 33481-0311           | BLACK    | A             | X                                  |   | X |                                     |
| 33481-0312           | LT. GRAY | B             | X                                  |   | X |                                     |
| 33481-0313           | BROWN    | C             | X                                  |   | X |                                     |
| 33481-0314           | GREEN    | D             | X                                  |   | X |                                     |
| 33481-0315           | CUSTOM   | TBD           | X                                  |   | X |                                     |
| 33481-0316           | BLACK    | A             | X                                  | X | X |                                     |
| 33481-0317           | LT. GRAY | B             | X                                  | X | X |                                     |
| 33481-0318           | BROWN    | C             | X                                  | X | X | NOT RECOMMENDED, SEE P/N 33481-0324 |
| 33481-0319           | GREEN    | D             | X                                  | X | X | NOT RECOMMENDED, SEE P/N 33481-0325 |
| 33481-0320           | CUSTOM   | TBD           | X                                  | X | X |                                     |
| 33481-0321           | BLACK    | A             |                                    | X |   |                                     |
| 33481-0322           | DK. GRAY | C             |                                    |   |   |                                     |
| 33481-0323           | ST. GRAY | D             |                                    |   |   |                                     |
| 33481-0324           | DK. GRAY | C             | X                                  | X | X |                                     |
| 33481-0325           | ST. GRAY | D             | X                                  | X | X |                                     |

 33481-0322  
 33481-0323  
 33481-0324  
 33481-0325

|  |                 |                                       |   |  |              |                        |
|--|-----------------|---------------------------------------|---|--|--------------|------------------------|
| <b>SEE REV. COLUMN</b><br>IEC NO. UAU2013-1478<br>DRAWN: APPROFIT 2013/03/20<br>CHECKED: DICK 2013/03/20<br>APPR: WOSHY 2013/03/20 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE   | SCALE                                    | DESIGN UNITS | THIRD ANGLE PROJECTION |
|  | ▽=0             | mm INCH                               | MM ONLY   |  | METRIC       |                        |
|  | ▽=0             | 4 PLACES ± 0.10                       | DRAWN BY DATE   | TITLE                                    |              |                        |
|  | ▽=0             | 3 PLACES ± 0.03                       | DMARCOUX 06-12-02   | MX150 1X3 BLADE SEALED ASSEMBLY MAT SEAL |              |                        |
|  | 2 PLACES ± 0.10 | CHECKED BY DATE                       |    |  |              |                        |
|  | 1 PLACE ± 0.3   | APPROVED BY DATE                      | MATERIAL NO. SEE BOM DOCUMENT NO. SD-33481-031 SHEET NO. 5 OF 5   |  |              |                        |
|  | 0 PLACE ±       | FHOLUB 06-12-02                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |              |                        |