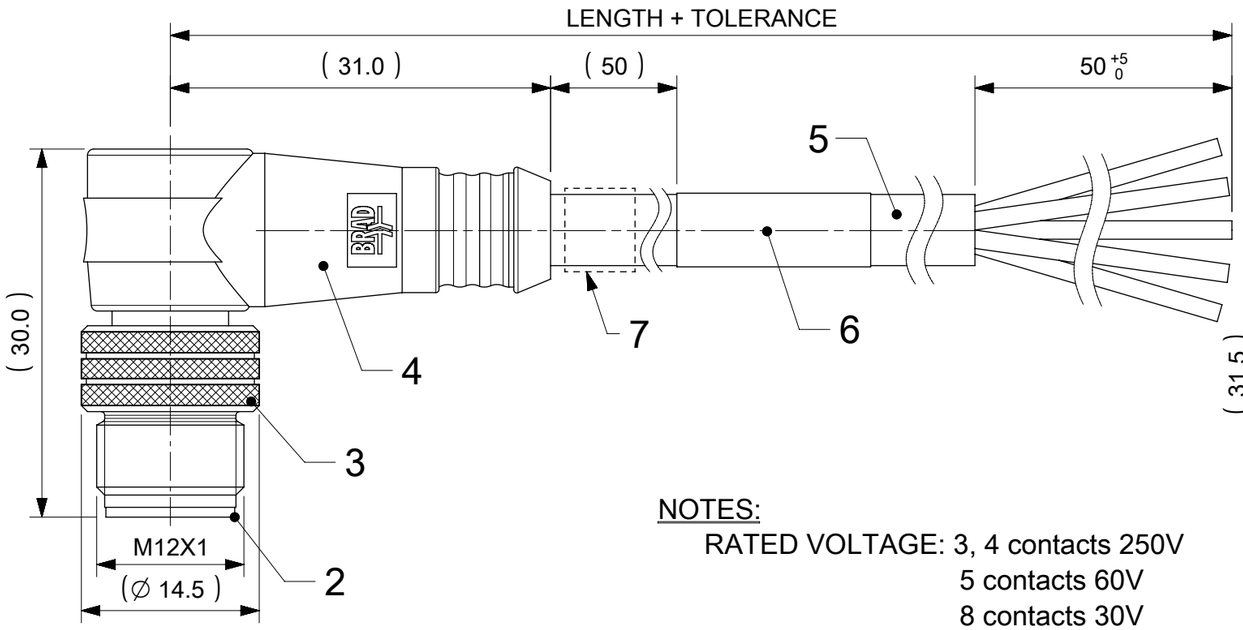
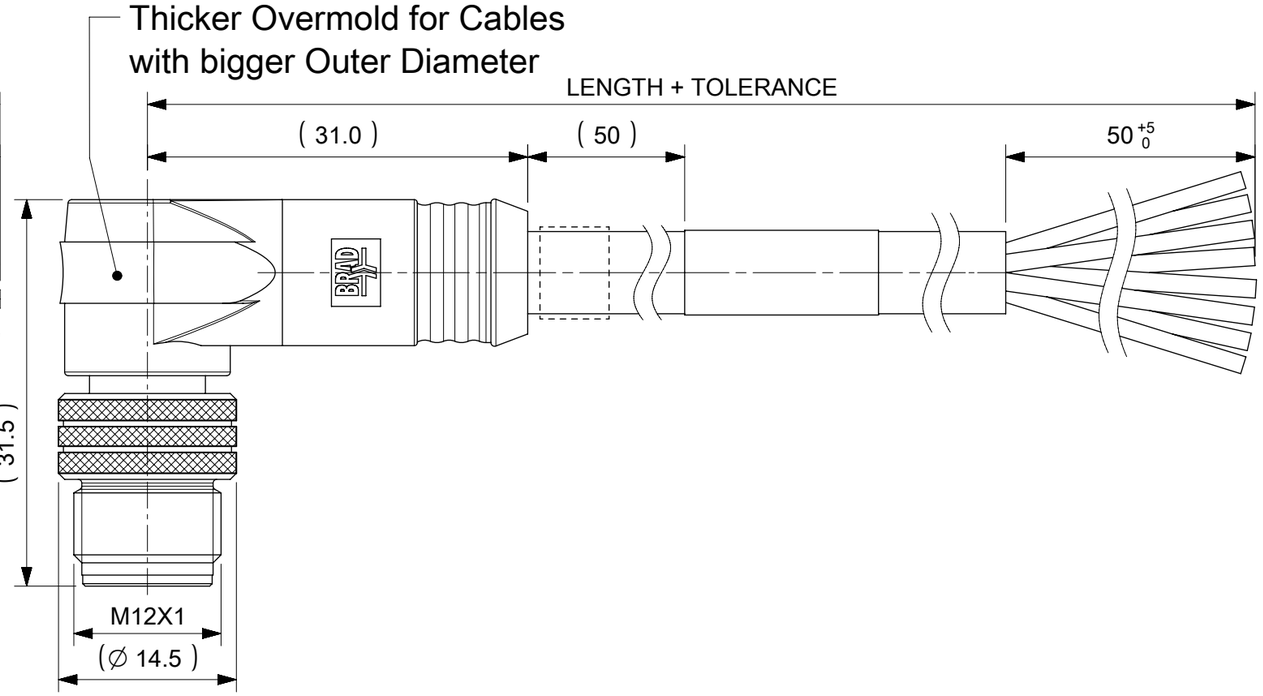
# MALE PLUG M12 90° ANGLED



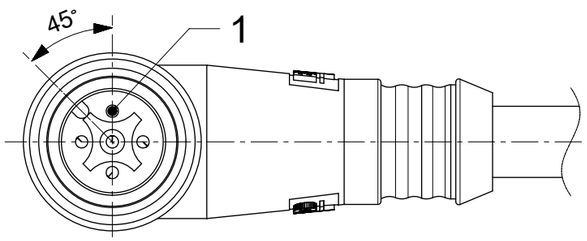

NOTES:

RATED VOLTAGE: 3, 4 contacts 250V
5 contacts 60V
8 contacts 30V

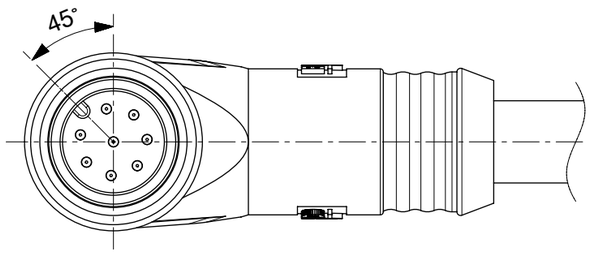
RATED CURRENT: 3, 4, 5 contacts 4A
8 contacts 2A

PROTECTION CLASS: IP 67

TEMPERATURE : SEE CABLE INFORMATION ON SHEET2

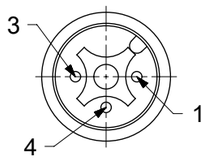
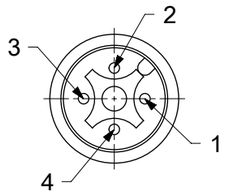
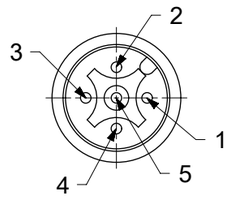
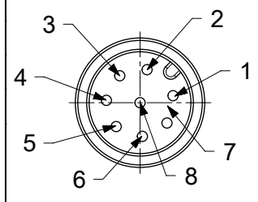



VIEW FROM THE FRONT SIDE




VIEW FROM THE FRONT SIDE

## CONTACTS POSITION FRONT VIEW:

| 3 CONTACTS | | 4 CONTACTS | | 5 CONTACTS | | 8 CONTACTS | |
|---|---|---|---|---|---|---|---|
|  | |  | |  | |  | |
| PIN | WIRE | PIN | WIRE | PIN | WIRE | PIN | WIRE |
| 1 | BROWN | 1 | BROWN | 1 | BROWN | 1 | WHITE |
| 2 | --- | 2 | WHITE | 2 | WHITE | 2 | BROWN |
| 3 | BLUE | 3 | BLUE | 3 | BLUE | 3 | GREEN |
| 4 | BLACK | 4 | BLACK | 4 | BLACK | 4 | YELLOW |
| 5 | --- | 5 | --- | 5 | GREY | 5 | GREY |
| | | | | | | 6 | PINK |
| | | | | | | 7 | BLUE |
| | | | | | | 8 | RED |
| CODING REQUIRED TO IEC 61076-2-101 | | | | | | | |

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

| ITEM | QTY. | DESCRIPTION | MATERIAL | FINISH |
|---|---|---|---|---|
| 7 | 0 OR 2 | I/D CARRIER (SEE MATRIX) | PVC | TRANSPARENT |
| 6 | 1 | LABEL YELLOW | VINYL | --- |
| 5 | - | CABLE | SEE SHEET 2 | --- |
| 4 | - | OVERMOULDING BLACK | TPU | --- |
| 3 | 1 | COUPLING NUT MALE | BRASS | NICKEL |
| 2 | 1 | INSERT MALE BLACK | PUR | --- |
| 1 | 3 / 4 / 5 / 8 | CONTACT M12 MALE | BRASS | SELECTIVE Au OVER Ni |

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

| DIMENSION UNITS | SCALE |
|---|---|
| mm | 2:1 |

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | | |
|---|---|---|
| ANGULAR TOL | ± | 1.0 ° |
| 4 PLACES | ± | |
| 3 PLACES | ± | |
| 2 PLACES | ± | 0.05 |
| 1 PLACE | ± | 0.3 |
| 0 PLACES | ± | 0.5 |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: REMOVED OBSOLETED PART NUMBER AS PER PCN#512871.

EC NO: 732259
DRWN: SANTHN 2022/12/20
CHK'D: GGA 2022/12/21
APPR: GGA 2022/12/21

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/14
APPR: RSILLER 2016/04/08

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120065

molex

CSE M12 XP AC MA RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

| DOCUMENT NUMBER | DOC TYPE | DOC PART | REVISION |
|---|---|---|---|
| 1200659138 | PSD | 000 | A6 |

| MATERIAL NUMBER | CUSTOMER | SHEET NUMBER |
|---|---|---|
| SEE SHEET 3 | GENERAL MARKET | 1 OF 3 |

| DOCUMENT STATUS | P1 | RELEASE DATE | 2022/12/21 07:37:45 |
|---|---|---|---|

FORMAT: master-lb-prod-A3
REVISION: J1
DATE: 2021/05/01

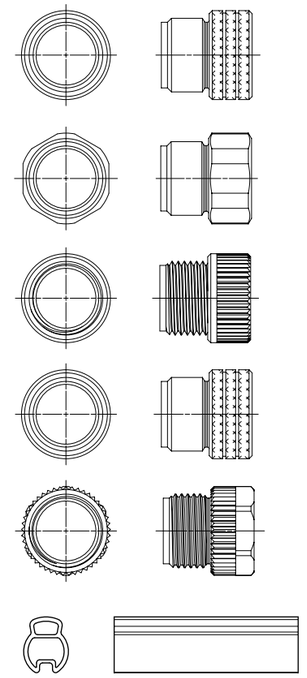
# ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

OPTIONS

| 8 | 0 | X | 0 | 0 | 7 | X | X | X | X | X | X | X | X |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

- 80=M12x1 Single ended
- Contacts: 3=3 Contacts, 4=4 Contacts, 5=5 Contacts, 8=8 Contacts
- Heads style: 007=Plug Male 90° Angled
- Cable type: See Table
- Units: M=Meter
- Length Examples: 005=0.5 unit, 010=1 unit, 100=10 units
- Overmold color: Blank (Standard)=Black; A=Grey / G=Black / Y=Yellow
- Coupling Nut: Blank (Standard) & 3=Knurled Brass Ni Plated; 1=Hexagonal Stainless steel; 5=Knurled Derlin; 7=Knurled Brass Ni Plated, Teflon Coated; 9=Knurled / Hexagonal Brass Ni Plated
- H= 2 pcs. of I/D Carrier PVC Transparent

COUPLING NUTS

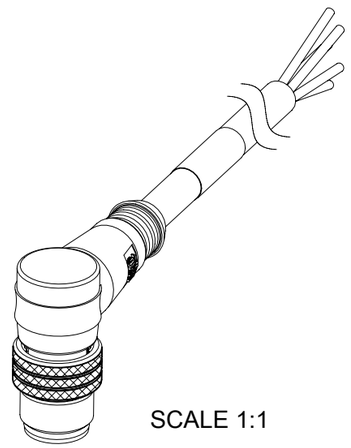


# CABLE INFORMATION (for more information see Cable Data Sheet).

| CABLE TYPE | NO. OF WIRES | CROSS SECTION | CABLE JACKET | UL | CSA | STATIC: TEMP. / BENDING RADIUS | DYNAMIC: TEMP. / BENDING RADIUS | DRAG CHAIN | SHIELD |
|---|---|---|---|---|---|---|---|---|---|
| E02 | 3 / 4 / 5 / 8 | 0.25mm² | PVC BLACK | UL 2464/1729 | C22.2 I/II A/B 80°C/300V | -30°C to +80°C, 10xO.D. | -10°C to +80°C, 15xO.D. | - | - |
| E03 | 3 / 4 / 5 | 0.34mm² | PVC BLACK | UL 2464/1729 | C22.2 I/II A/B 80°C/300V | -30°C to +80°C, 10xO.D. | -10°C to +80°C, 15xO.D. | - | - |
| H08 | 3 / 4 / 5 / 8 | 0.25mm² | PUR BLACK LS0H | UL 21198/10493 | C22.2 I/II A/B 80°C/300V | -40°C to +80°C, 5xO.D. | -25°C to +80°C, 10xO.D. | 2 000 000 cycles at 20°C, Temp. range +5°C to +60°C | - |
| H09 | 3 / 4 / 5 | 0.34mm² | PUR BLACK LS0H | UL 21198/10493 | C22.2 I/II A/B 80°C/300V | -40°C to +80°C, 5xO.D. | -25°C to +80°C, 10xO.D. | 2 000 000 cycles at 20°C, Temp. range +5°C to +60°C | - |
| P02 | 3 / 4 / 5 / 8 | 0.25mm² | PUR / PVC BLACK | - | - | -30°C to +80°C, 7xO.D. | -5°C to +80°C, 15xO.D. | - | - |
| P03 | 3 / 4 / 5 | 0.34mm² | PUR / PVC BLACK | - | - | -30°C to +80°C, 7xO.D. | -5°C to +80°C, 15xO.D. | - | - |
| E13 | 3 | 18AWG | PVC YELLOW | UL 2661/1731 | I/II A/B 80°C/300V | - | - | - | - |
| E52 | 3 / 4 / 8 | 0.34mm² | PVC GREY | - | - | -30°C to +70°C | -5°C to +70°C | - | - |
| H69 | 4 | 0.20mm² | PUR GREY LS0H | - | - | - | - | - | - |
| I03 | 3 / 4 / 5 | 0.34mm² | PVC CEI GREY | - | - | -30°C to +70°C | -5°C to +70°C | - | - |
| K03 | 4 / 5 | 0.34mm² | TPE YELLOW | - | I/II A/B 90°C/300V | -40°C to +105°C | - | - | - |
| K05 | 3 / 4 / 5 | 0.34mm² | TPE YELLOW | UL ITC E195601 or PLC | I/II A/B 90°C/300V | - | - | - | - |
| P12 | 3 / 5 | 0.50mm² | PUR BLACK | - | - | -30°C to +90°C | -5°C to +90°C | - | - |
| P82 | 3 / 4 / 5 | 0.34mm² | PUR IRR ORANGE | - | - | -50°C to +105°C, 5xO.D. | -40°C to +105°C, 7.5xO.D. | - | - |

# CABLE LENGTH TOLERANCES

| OVER | UP TO AND INCLUDING | TOLERANCES |
|---|---|---|
| 0 | 305mm | +19mm |
| 305mm | 915mm | +45mm |
| 915mm | 1830mm | +56mm |
| 1830mm | 3660mm | +89mm |
| 3660mm | 7320mm | +165mm |
| 7320mm | 14640mm | +317mm |
| 14640mm | 30500mm | +610mm |
| 30500mm | > | +2% of finished length |



SCALE 1:1

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

| DIMENSION UNITS | SCALE |
|---|---|
| mm | 1:1 |

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | | |
|---|---|---|
| ANGULAR TOL | ± | 1.0 ° |
| 4 PLACES | ± | |
| 3 PLACES | ± | |
| 2 PLACES | ± | 0.05 |
| 1 PLACE | ± | 0.3 |
| 0 PLACES | ± | 0.5 |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: REMOVED OBSOLETED PART NUMBER AS PER PCN#512871.

EC NO: 732259
DRWN: SANTHN 2022/12/20
CHK'D: GGA 2022/12/21
APPR: GGA 2022/12/21

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/14
APPR: RSILLER 2016/04/08

molex

CSE M12 XP AC MA RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

| DOCUMENT NUMBER | DOC TYPE | DOC PART | REVISION |
|---|---|---|---|
| 1200659138 | PSD | 000 | A6 |

| THIRD ANGLE PROJECTION | DRAWING | SERIES | MATERIAL NUMBER | CUSTOMER | SHEET NUMBER |
|---|---|---|---|---|---|
| | A3-SIZE | 120065 | SEE SHEET 3 | GENERAL MARKET | 2 OF 3 |

| DOCUMENT STATUS | P1 | RELEASE DATE | 2022/12/21 07:37:45 |
|---|---|---|---|

FORMAT: master-tb-prod-A3
REVISION: J1
DATE: 2021/05/01

# PART LIST

| No. | Part No. | Engineering No. | Cable Length |
|---|---|---|---|
| 1 | 1200060273 | 803007E03M020 | 2m |
| 2 | 1200060275 | 803007E03M050 | 5m |
| 3 | 1200060288 | 803007P03M020 | 2m |
| 4 | 1200060289 | 803007P03M030 | 3m |
| 5 | 1200060582 | 804007E03M010 | 1m |
| 6 | 1200060583 | 804007E03M030 | 3m |
| 7 | 1200060584 | 804007E03M050 | 5m |
| 8 | 1200060587 | 804007H69M020 | 2m |
| 9 | 1200060589 | 804007I03M020 | 2m |
| 10 | 1200060592 | 804007P03M020 | 2m |
| 11 | 1200060593 | 804007P03M030 | 3m |
| 12 | 1200060594 | 804007P03M050 | 5m |
| 13 | 1200060595 | 804007P03M100 | 10m |
| 14 | 1200060696 | 805007P03M015 | 1.5m |
| 15 | 1200060697 | 805007P03M020 | 2m |
| 16 | 1200060699 | 805007P03M040 | 4m |
| 17 | 1200061764 | 804007P03M010 | 1m |
| 18 | 1200061975 | 804007E03M020 | 2m |
| 19 | 1200062055 | 803007P03M050 | 5m |
| 20 | 1200062238 | 804007E03M100 | 10m |
| 21 | 1200062498 | 805007E03M100 | 10m |
| 22 | 1200062638 | 804007E03M006 | 0.6m |
| 23 | 1200062680 | 804007E03M0101 | 1m |
| 24 | 1200062681 | 804007E03M0201 | 2m |
| 25 | 1200062682 | 804007E03M0501 | 5m |
| 26 | 1200062929 | 805007E03M050 | 5m |
| 27 | 1200063575 | 804007E03M1001 | 10m |
| 28 | 1200063576 | 804007E03M1501 | 15m |
| 29 | 1200063656 | 804007E03M2001 | 20m |
| 30 | 1200063831 | 804007E52M100 | 10m |
| 31 | 1200064175 | 804007E03M4001 | 40m |
| 32 | 1200064178 | 804007P03M005 | 0.5m |
| 33 | 1200064280 | 804007E03M200 | 20m |
| 34 | 1200064294 | 804007P03M200 | 20m |
| 35 | 1200064394 | 804007P03M020G | 2m |

| No. | Part No. | Engineering No. | Cable Length |
|---|---|---|---|
| 36 | 1200651688 | 804007K03M050 | 5m |
| 37 | 1200651691 | 804007K05M020 | 2m |
| 38 | 1200651693 | 804007K05M050 | 5m |
| 39 | 1200651800 | 808007P02M020 | 2m |
| 40 | 1200652026 | 804007K03M100 | 10m |
| 41 | 1200652145 | 804007P03M040 | 4m |
| 42 | 1200652149 | 805007P03M060 | 6m |
| 43 | 1200652159 | 805007K03M020 | 2m |
| 44 | 1200652161 | 805007K03M050 | 5m |
| 45 | 1200655006 | 805007P03M100 | 10m |
| 46 | 1200658096 | 805007E03M020 | 2m |
| 47 | 1200658186 | 805007P03M050 | 5m |
| 48 | 1200658229 | 803007E13M050 | 5m |
| 49 | 1200658235 | 804007E03M2501 | 25m |
| 50 | 1200658327 | 805007I03M015 | 1.5m |
| 51 | 1200658506 | 803007E03M100 | 10m |
| 52 | 1200658515 | 804007E03M0501H | 5m |
| 53 | 1200658516 | 804007E03M1001H | 10m |
| 54 | 1200658522 | 805007P12M020 | 2m |
| 55 | 1200658567 | 803007E03M010 | 1m |
| 56 | 1200658568 | 803007E03M030 | 3m |
| 57 | 1200658569 | 803007E03M040 | 4m |
| 58 | 1200658572 | 804007E03M040 | 4m |
| 59 | 1200658596 | 803007I03M010 | 1m |
| 60 | 1200658597 | 803007I03M040 | 4m |
| 61 | 1200658598 | 803007I03M100 | 10m |
| 62 | 1200658602 | 804007I03M010 | 1m |
| 63 | 1200658603 | 804007I03M030 | 3m |
| 64 | 1200658604 | 804007I03M040 | 4m |
| 65 | 1200658614 | 803007P03M040 | 4m |
| 66 | 1200658615 | 803007P03M010 | 1m |
| 67 | 1200658618 | 803007P03M100 | 10m |
| 68 | 1200658720 | 803007H09M010 | 1m |
| 69 | 1200658721 | 803007H09M015 | 1.5m |
| 70 | 1200658722 | 803007H09M020 | 2m |

| No. | Part No. | Engineering No. | Cable Length |
|---|---|---|---|
| 71 | 1200658723 | 803007H09M030 | 3m |
| 72 | 1200658724 | 803007H09M040 | 4m |
| 73 | 1200658725 | 803007H09M050 | 5m |
| 74 | 1200658726 | 803007H09M100 | 10m |
| 75 | 1200658734 | 804007H09M010 | 1m |
| 76 | 1200658735 | 804007H09M015 | 1.5m |
| 77 | 1200658736 | 804007H09M020 | 2m |
| 78 | 1200658737 | 804007H09M030 | 3m |
| 79 | 1200658738 | 804007H09M040 | 4m |
| 80 | 1200658739 | 804007H09M050 | 5m |
| 81 | 1200658740 | 804007H09M100 | 10m |
| 82 | 1200658748 | 805007H09M010 | 1m |
| 83 | 1200658749 | 805007H09M015 | 1.5m |
| 84 | 1200658750 | 805007H09M020 | 2m |
| 85 | 1200658751 | 805007H09M030 | 3m |
| 86 | 1200658752 | 805007H09M040 | 4m |
| 87 | 1200658753 | 805007H09M050 | 5m |
| 88 | 1200658754 | 805007H09M100 | 10m |
| 89 | 1200658757 | 808007H08M020 | 2m |
| 90 | 1200659138 | 805007E03M010 | 1m |
| 91 | 1200659143 | 805007H09M200 | 20m |
| 92 | 1200659146 | 805007E03M200 | 20m |
| 93 | 1200659151 | 805007P03M150 | 15m |
| 94 | 1200659204 | 805007P12M050 | 5m |
| 95 | 1200659230 | 805007P03M010 | 1m |
| 96 | 1200659231 | 805007P03M200 | 20m |
| 97 | 1200659247 | 805007E03M020Y | 2m |
| 98 | 1200659249 | 805007P03M050Y | 5m |
| 99 | 1200659540 | 805007E03M030 | 3m |
| 100 | 1200657164 | 804007P03M003 | 0.3m |
| 101 | 1200657165 | 804007P03M006 | 0.6m |
| 102 | 1200657166 | 804007P03M015 | 1.5m |
| 103 | 1200657167 | 804007P03M150 | 15m |
| 104 | 1200657168 | 804007P03M500 | 50m |
| 105 | 1200657169 | 804007E03M003 | 0.3m |

| No. | Part No. | Engineering No. | Cable Length |
|---|---|---|---|
| 106 | 1200657170 | 804007E03M015 | 1.5m |
| 107 | 1200657171 | 804007E03M060 | 6m |
| 108 | 1200657172 | 804007E03M080 | 8m |
| 109 | 1200657173 | 804007E03M120 | 12m |
| 110 | 1200657174 | 804007E03M150 | 15m |
| 111 | 1200657175 | 804007E03M300 | 30m |
| 112 | | | |
| 113 | | | |
| 114 | | | |
| 115 | | | |
| 116 | | | |
| 117 | | | |
| 118 | | | |
| 119 | | | |
| 120 | | | |
| 121 | | | |
| 122 | | | |
| 123 | | | |
| 124 | | | |
| 125 | | | |
| 126 | | | |
| 127 | | | |
| 128 | | | |
| 129 | | | |
| 130 | | | |
| 131 | | | |
| 132 | | | |
| 133 | | | |
| 134 | | | |
| 135 | | | |
| 136 | | | |
| 137 | | | |
| 138 | | | |
| 139 | | | |
| 140 | | | |

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

| DIMENSION UNITS | SCALE |
|---|---|
| mm | 1:1 |

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | |
|---|---|
| ANGULAR TOL | ± 1.0 ° |
| 4 PLACES | ± |
| 3 PLACES | ± |
| 2 PLACES | ± 0.05 |
| 1 PLACE | ± 0.3 |
| 0 PLACES | ± 0.5 |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: REMOVED OBSOLETED PART NUMBER AS PER PCN#512871.

EC NO: 732259
DRWN: SANTHN 2022/12/20
CHK'D: GGA 2022/12/21
APPR: GGA 2022/12/21

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/14
APPR: RSILLER 2016/04/08

molex

CSE M12 XP AC MA RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

| DOCUMENT NUMBER | DOC TYPE | DOC PART | REVISION |
|---|---|---|---|
| 1200659138 | PSD | 000 | A6 |

| THIRD ANGLE PROJECTION | DRAWING | SERIES | MATERIAL NUMBER | CUSTOMER | SHEET NUMBER |
|---|---|---|---|---|---|
| | A3-SIZE | 120065 | SEE PART LIST | GENERAL MARKET | 3 OF 3 |

| DOCUMENT STATUS | P1 | RELEASE DATE | 2022/12/21 07:37:45 |
|---|---|---|---|

FORMAT: master-lb-prod-A3
REVISION: J1
DATE: 2021/05/01