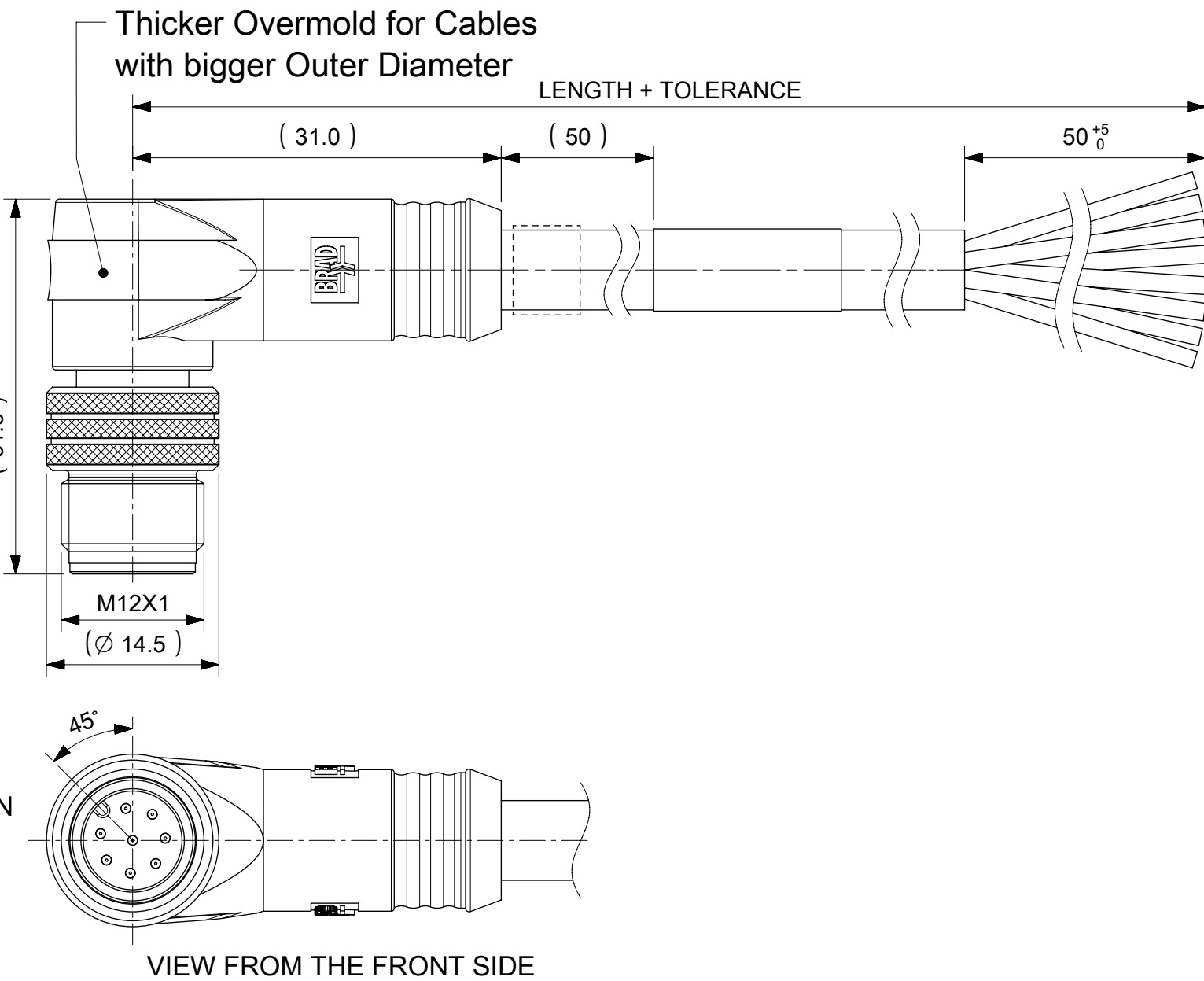
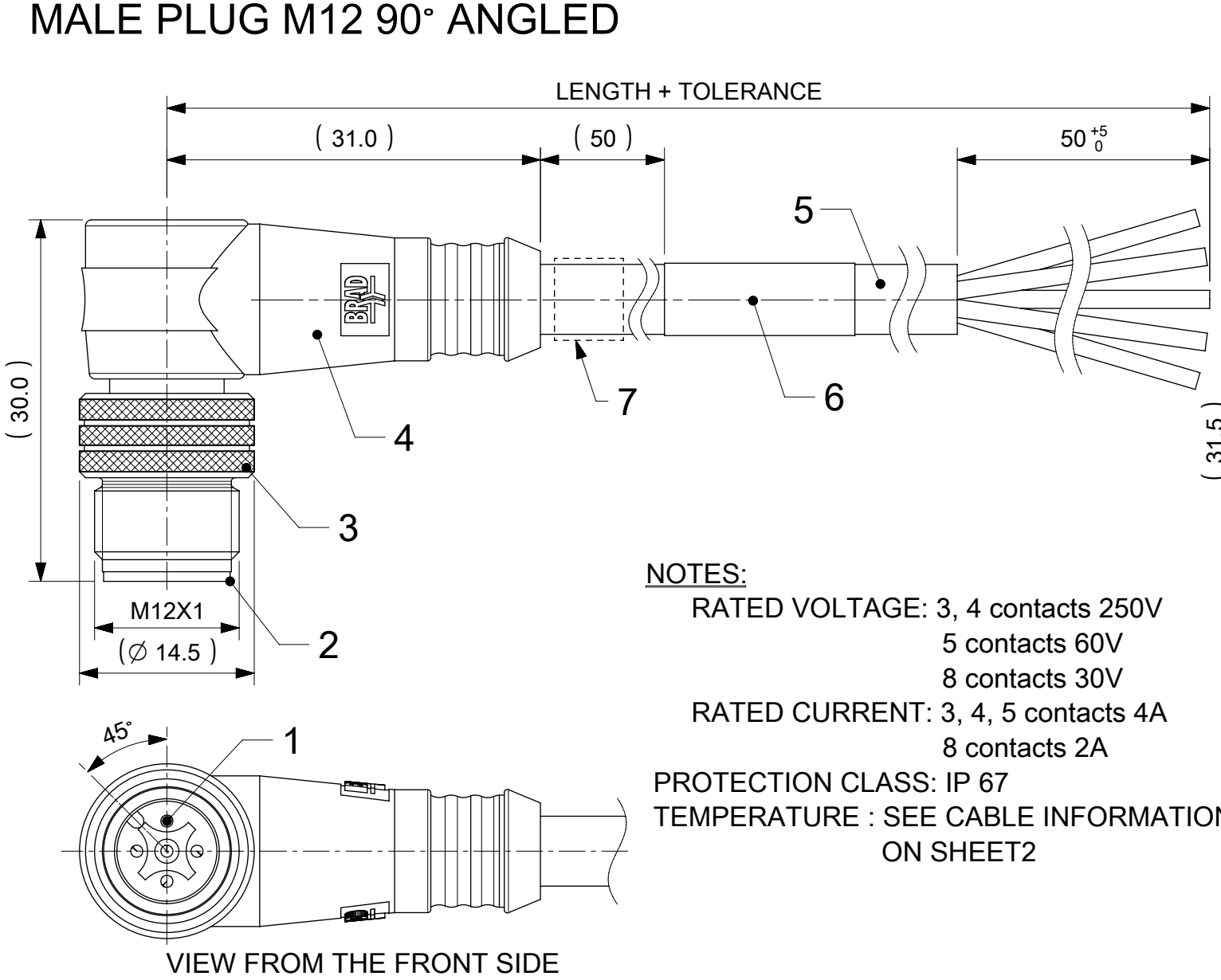


MALE PLUG M12 90° ANGLED



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

|                                                                                                                                               |               |                                                                                                                                                                                     |             |                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------|
| 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                                       |
| ITEM                                                                                                                                          | QTY.          | DESCRIPTION                                                                                                                                                                         | MATERIAL    | FINISH                                                     |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |               |                                                                                                                                                                                     |             |                                                            |
| DIMENSION UNITS<br>mm                                                                                                                         |               | SCALE<br>2:1                                                                                                                                                                        |             | <div>molex</div> <div>CSE M12 XP AC MA RA XM SE UNSH</div> |
| GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                                                                                                      |               | CURRENT REV DESC: REMOVED OBSOLETE PART<br>NUMBERS AS PER PCN#514486<br><br>EC NO: 774109<br>DRWN: VISHAH2<br>CHK'D: GGA<br>APPR: GGA<br><br>2023/12/20<br>2024/01/29<br>2024/01/29 |             |                                                            |
| ANGULAR TOL ± 1.0 °                                                                                                                           |               |                                                                                                                                                                                     |             |                                                            |
| 4 PLACES ±                                                                                                                                    |               |                                                                                                                                                                                     |             |                                                            |
| 3 PLACES ±                                                                                                                                    |               | PRODUCT CUSTOMER DRAWING                                                                                                                                                            |             |                                                            |
| 2 PLACES ± 0.05                                                                                                                               |               | DOCUMENT NUMBER                                                                                                                                                                     |             |                                                            |
| 1 PLACE ± 0.3                                                                                                                                 |               | 1200659138                                                                                                                                                                          |             |                                                            |
| 0 PLACES ± 0.5                                                                                                                                |               | DOC TYPE                                                                                                                                                                            |             |                                                            |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                    |               | DOC PART                                                                                                                                                                            |             |                                                            |
| THIRD ANGLE PROJECTION                                                                                                                        |               | REVISION                                                                                                                                                                            |             |                                                            |
|                                                                                                                                               |               | 1200659138 PSD 000 A8                                                                                                                                                               |             |                                                            |
| DRAWING                                                                                                                                       |               | SHEET NUMBER                                                                                                                                                                        |             |                                                            |
| A3-SIZE                                                                                                                                       |               | 1 OF 3                                                                                                                                                                              |             |                                                            |
| SERIES                                                                                                                                        |               | MATERIAL NUMBER                                                                                                                                                                     |             |                                                            |
| 120065                                                                                                                                        |               | SEE SHEET 3                                                                                                                                                                         |             |                                                            |
| CUSTOMER                                                                                                                                      |               | GENERAL MARKET                                                                                                                                                                      |             |                                                            |

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

80X007XXXXXX

80=M12x1  
Single ended

Contacts:  
3=3 Contacts  
4=4 Contacts  
5=5 Contacts  
8=8 Contacts

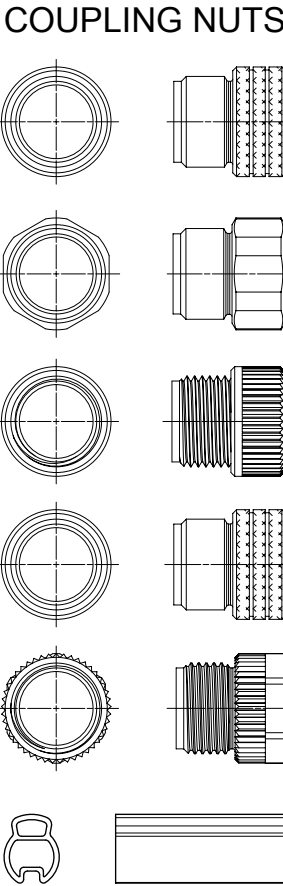
Heads style:  
007=Plug Male  
90° Angled

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 Delrin  
7=Knurled Brass Ni Plated, Teflon Coated  
9=Knurled / Hexagonal Brass Ni Plated  
  
H= 2 pcs. of I/D Carrier PVC Transparent

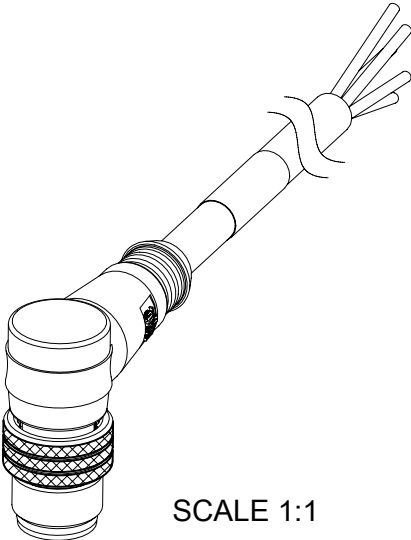


CABLE INFORMATION (for more information see Cable Data Sheet).

| 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

mm

SCALE

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 OBSOLETE PART NUMBERS AS PER PCN#514486

EC NO: 774109  
DRWN: VISHAH2  
CHK'D: GGA  
APPR: GGA  
2023/12/20  
2024/01/29  
2024/01/29

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

DOCUMENT NUMBER  
1200659138

DOC TYPE  
PSD

DOC PART  
000

REVISION  
A8

MATERIAL NUMBER  
SEE SHEET 3

CUSTOMER  
GENERAL MARKET

SHEET NUMBER  
2 OF 3

moLEX

CSE M12 XP AC MA RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

THIRD ANGLE PROJECTION

DRAWING  
A3-SIZE

SERIES  
120065

PART LIST

| No. | Part No.   | Engineering No. | Cable Length | No. | Part No.   | Engineering No. | Cable Length | No. | Part No.   | Engineering No. | Cable Length | No. | Part No.   | Engineering No. | Cable Length |
|-----|------------|-----------------|--------------|-----|------------|-----------------|--------------|-----|------------|-----------------|--------------|-----|------------|-----------------|--------------|
| 1   | 1200060273 | 803007E03M020   | 2m           | 36  | 1200651688 | 804007K03M050   | 5m           | 71  | 1200658723 | 803007H09M030   | 3m           | 106 | 1200657170 | 804007E03M015   | 1.5m         |
| 2   | 1200060275 | 803007E03M050   | 5m           | 37  | 1200651691 | 804007K05M020   | 2m           | 72  | 1200658724 | 803007H09M040   | 4m           | 107 | 1200657171 | 804007E03M060   | 6m           |
| 3   | 1200060288 | 803007P03M020   | 2m           | 38  | 1200651693 | 804007K05M050   | 5m           | 73  | 1200658725 | 803007H09M050   | 5m           | 108 | 1200657172 | 804007E03M080   | 8m           |
| 4   | 1200060289 | 803007P03M030   | 3m           | 39  | 1200651800 | 808007P02M020   | 2m           | 74  | 1200658726 | 803007H09M100   | 10m          | 109 | 1200657173 | 804007E03M120   | 12m          |
| 5   | 1200060582 | 804007E03M010   | 1m           | 40  | 1200652026 | 804007K03M100   | 10m          | 75  | 1200658734 | 804007H09M010   | 1m           | 110 | 1200657174 | 804007E03M150   | 15m          |
| 6   | 1200060583 | 804007E03M030   | 3m           | 41  | 1200652145 | 804007P03M040   | 4m           | 76  | 1200658735 | 804007H09M015   | 1.5m         | 111 | 1200657175 | 804007E03M300   | 30m          |
| 7   | 1200060584 | 804007E03M050   | 5m           | 42  | 1200652149 | 805007P03M060   | 6m           | 77  | 1200658736 | 804007H09M020   | 2m           | 112 | 1200657325 | 804007E03M250   | 25m          |
| 8   | 1200060589 | 804007I03M020   | 2m           | 43  | 1200652159 | 805007K03M020   | 2m           | 78  | 1200658737 | 804007H09M030   | 3m           | 113 |            |                 |              |
| 9   | 1200060592 | 804007P03M020   | 2m           | 44  | 1200652161 | 805007K03M050   | 5m           | 79  | 1200658738 | 804007H09M040   | 4m           | 114 |            |                 |              |
| 10  | 1200060593 | 804007P03M030   | 3m           | 45  | 1200655006 | 805007P03M100   | 10m          | 80  | 1200658739 | 804007H09M050   | 5m           | 115 |            |                 |              |
| 11  | 1200060594 | 804007P03M050   | 5m           | 46  | 1200658096 | 805007E03M020   | 2m           | 81  | 1200658740 | 804007H09M100   | 10m          | 116 |            |                 |              |
| 12  | 1200060595 | 804007P03M100   | 10m          | 47  | 1200658186 | 805007P03M050   | 5m           | 82  | 1200658748 | 805007H09M010   | 1m           | 117 |            |                 |              |
| 13  | 1200060696 | 805007P03M015   | 1.5m         | 48  | 1200658229 | 803007E13M050   | 5m           | 83  | 1200658749 | 805007H09M015   | 1.5m         | 118 |            |                 |              |
| 14  | 1200060697 | 805007P03M020   | 2m           | 49  | 1200658235 | 804007E03M2501  | 25m          | 84  | 1200658750 | 805007H09M020   | 2m           | 119 |            |                 |              |
| 15  | 1200060699 | 805007P03M040   | 4m           | 50  | 1200658327 | 805007I03M015   | 1.5m         | 85  | 1200658751 | 805007H09M030   | 3m           | 120 |            |                 |              |
| 16  | 1200061764 | 804007P03M010   | 1m           | 51  | 1200658506 | 803007E03M100   | 10m          | 86  | 1200658752 | 805007H09M040   | 4m           | 121 |            |                 |              |
| 17  | 1200061975 | 804007E03M020   | 2m           | 52  | 1200658515 | 804007E03M0501H | 5m           | 87  | 1200658753 | 805007H09M050   | 5m           | 122 |            |                 |              |
| 18  | 1200062055 | 803007P03M050   | 5m           | 53  | 1200658516 | 804007E03M1001H | 10m          | 88  | 1200658754 | 805007H09M100   | 10m          | 123 |            |                 |              |
| 19  | 1200062238 | 804007E03M100   | 10m          | 54  | 1200658522 | 805007P12M020   | 2m           | 89  | 1200658757 | 808007H08M020   | 2m           | 124 |            |                 |              |
| 20  | 1200062498 | 805007E03M100   | 10m          | 55  | 1200658567 | 803007E03M010   | 1m           | 90  | 1200659138 | 805007E03M010   | 1m           | 125 |            |                 |              |
| 21  | 1200062638 | 804007E03M006   | 0.6m         | 56  | 1200658568 | 803007E03M030   | 3m           | 91  | 1200659143 | 805007H09M200   | 20m          | 126 |            |                 |              |
| 22  | 1200062680 | 804007E03M0101  | 1m           | 57  | 1200658569 | 803007E03M040   | 4m           | 92  | 1200659146 | 805007E03M200   | 20m          | 127 |            |                 |              |
| 23  | 1200062681 | 804007E03M0201  | 2m           | 58  | 1200658572 | 804007E03M040   | 4m           | 93  | 1200659151 | 805007P03M150   | 15m          | 128 |            |                 |              |
| 24  | 1200062682 | 804007E03M0501  | 5m           | 59  | 1200658596 | 803007I03M010   | 1m           | 94  | 1200659204 | 805007P12M050   | 5m           | 129 |            |                 |              |
| 25  | 1200062929 | 805007E03M050   | 5m           | 60  | 1200658597 | 803007I03M040   | 4m           | 95  | 1200659230 | 805007P03M010   | 1m           | 130 |            |                 |              |
| 26  | 1200063575 | 804007E03M1001  | 10m          | 61  | 1200658598 | 803007I03M100   | 10m          | 96  | 1200659231 | 805007P03M200   | 20m          | 131 |            |                 |              |
| 27  | 1200063576 | 804007E03M1501  | 15m          | 62  | 1200658602 | 804007I03M010   | 1m           | 97  | 1200659247 | 805007E03M020Y  | 2m           | 132 |            |                 |              |
| 28  | 1200063656 | 804007E03M2001  | 20m          | 63  | 1200658603 | 804007I03M030   | 3m           | 98  | 1200659249 | 805007P03M050Y  | 5m           | 133 |            |                 |              |
| 29  | 1200063831 | 804007E52M100   | 10m          | 64  | 1200658604 | 804007I03M040   | 4m           | 99  | 1200659540 | 805007E03M030   | 3m           | 134 |            |                 |              |
| 30  | 1200064175 | 804007E03M4001  | 40m          | 65  | 1200658614 | 803007P03M040   | 4m           | 100 | 1200657164 | 804007P03M003   | 0.3m         | 135 |            |                 |              |
| 31  | 1200064178 | 804007P03M005   | 0.5m         | 66  | 1200658615 | 803007P03M010   | 1m           | 101 | 1200657165 | 804007P03M006   | 0.6m         | 136 |            |                 |              |
| 32  | 1200064280 | 804007E03M200   | 20m          | 67  | 1200658618 | 803007P03M100   | 10m          | 102 | 1200657166 | 804007P03M015   | 1.5m         | 137 |            |                 |              |
| 33  | 1200064294 | 804007P03M200   | 20m          | 68  | 1200658720 | 803007H09M010   | 1m           | 103 | 1200657167 | 804007P03M150   | 15m          | 138 |            |                 |              |
| 34  | 1200064394 | 804007P03M020G  | 2m           | 69  | 1200658721 | 803007H09M015   | 1.5m         | 104 | 1200657168 | 804007P03M500   | 50m          | 139 |            |                 |              |
|     |            |                 |              | 70  | 1200658722 | 803007H09M020   | 2m           | 105 | 1200657169 | 804007E03M003   | 0.3m         | 140 |            |                 |              |