

**VIEWS FROM THE FRONT SIDE FEMALE**



**NOTES:**

TEMPERATURE RANGE : SEE CABLE LIST

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

**CABLE LIST**

| CABLE TYPE | NO. OF WIRES | CROSS SECTION       | CABLE JACKET | UL       | CSA | STATIC: TEMP. / BENDING RADIUS | DYNAMIC: TEMP. / BENDING RADIUS | DRAG CHAIN                          | OTHER                |
|------------|--------------|---------------------|--------------|----------|-----|--------------------------------|---------------------------------|-------------------------------------|----------------------|
| B30        | 3 / 4 / 5    | 0.34mm <sup>2</sup> | TPU Black    | UL 21215 | YES | -40°C to +90°C<br>5xO.D.       | -25°C to +80°C<br>7.5xO.D.      | up to 5 000 000 cycles at temp 20°C | WELD SLAG RESISTANCE |
| B41        | 8            | 0.25mm <sup>2</sup> | TPU Black    |          |     |                                |                                 |                                     |                      |
| B42        | 5            | 0.34mm <sup>2</sup> | TPU Black    |          |     |                                |                                 |                                     |                      |
| B33        | 4 / 5        | 0.34mm <sup>2</sup> | TPU Gray     |          |     |                                |                                 |                                     |                      |
| B55        | 4 / 5        | 0.34mm <sup>2</sup> | TPU Yellow   |          |     |                                |                                 |                                     |                      |
| B36        | 4 / 5        | 0.34mm <sup>2</sup> | TPU Orange   |          |     |                                |                                 |                                     |                      |
| B39        | 5            | 0.34mm <sup>2</sup> | TPU Yellow   |          |     |                                |                                 |                                     |                      |

**BOM**

| ITEM | QTY.    | DESCRIPTION   | MATERIAL       | FINISH/COLOR        |
|------|---------|---------------|----------------|---------------------|
| 8    | 0/2     | I/D CARRIER   | -              | -                   |
| 7    | 1       | LABEL         | VINYL          | YELLOW              |
| 6    | 3/4/5/8 | CONTACTS      | BRASS          | GOLD OVER Ni-PLATED |
| 5    | 1       | GASKET        | FPM            | RED                 |
| 4    | 1       | FEMALE INSERT | PUR            | BLACK               |
| 3    | 1       | COUPLING NUT  | BRASS          | Ni-PLATED           |
| 2    | -       | OVERMOULD     | TPU            | BLACK               |
| 1    | -       | CABLE         | SEE CABLE LIST | SEE CABLE LIST      |

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

FUNCTIONAL SYMBOLS:  $\nabla/A = 0$ ,  $\nabla/E = 0$ ,  $\nabla/V = 0$

DIMENSION UNITS: mm | SCALE: 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

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE | SERIES: 120065 | MATERIAL NUMBER: SEE PART LIST | CUSTOMER: GENERAL MARKET

EC NO: 730989 | DRWN: ARPITT | APPR: RSILLER | 2022/12/05 | 2022/12/06 | 2022/12/06

INITIAL REVISION: DRWN: SSM | APPR: RSILLER | 2021/12/16 | 2022/02/28

DOCUMENT NUMBER: 1200652251 | DOC TYPE: PSD | DOC PART: 000 | REVISION: A1

**molex**

CSE M12 XP AC FE STR WSOR XM SE UNSH BK

PRODUCT CUSTOMER DRAWING

SHEET NUMBER: 1 OF 2

# PART NO MATRIX

8 0 X 0 0 0 B X X X X X X X X

80 = M12x1  
SINGLE ENDED

POLES:  
3 = 3 POLES  
4 = 4 POLES  
5 = 5 POLES  
8 = 8 POLES

HEADER:  
000 = FEMALE STRAIGHT

CABLE:  
B30 = 0,34mm<sup>2</sup>, TPU BLACK  
B33 = 0,34mm<sup>2</sup>, TPU GREY  
B36 = 0,34mm<sup>2</sup>, TPU ORANGE  
B39 = 0,75mm<sup>2</sup>, TPU GREY  
B41 = 0,25mm<sup>2</sup>, TPU BLACK  
B42 = 0,34mm<sup>2</sup>, TPU BLACK  
B49 = 0,25mm<sup>2</sup>, TPU ORANGE  
B55 = 0,34mm<sup>2</sup>, TPU YELLOW

UNIT:  
M = METER  
C = CENTIMETER  
T = 10 x METER

LENGTH:  
EXAMPLE:  
010 = 1 m  
050 = 5 m  
100 = 10 m

OVERMOLD COLOR:  
BLANK (STANDARD) = BK  
A = GY, G = BK, Y = YE, R = RD  
COUPLING NUT:  
BLANK (STANDARD)  
= KNURLED/HEX BRASS, Ni PLATED  
5 = KNURLED DERLIN  
7 = KNURLED BRASS Ni PLATED,  
TEFLON COATED  
H = 2x ID CARRIERS  
ALWAYS FOR CABLES B36)

# PART LIST

| Lp. | MOLEX PN   | ENGINEERING No  | L [mm] |
|-----|------------|-----------------|--------|
| 1   | 1200652247 | 803000B30M010   | 1000   |
| 2   | 1200652248 | 803000B30M020   | 2000   |
| 3   | 1200652249 | 803000B30M050   | 5000   |
| 4   | 1200652250 | 803000B30M100   | 10000  |
| 5   | 1200659784 | 803000B30M200   | 20000  |
| 6   | 1200652251 | 804000B30M010   | 1000   |
| 7   | 1200652252 | 804000B30M020   | 2000   |
| 8   | 1200659466 | 804000B30M030   | 3000   |
| 9   | 1200652253 | 804000B30M050   | 5000   |
| 10  | 1200659805 | 804000B30M075   | 7500   |
| 11  | 1200659788 | 804000B30M085   | 8500   |
| 12  | 1200659806 | 804000B30M098   | 9800   |
| 13  | 1200652254 | 804000B30M100   | 10000  |
| 14  | 1200659400 | 804000B30M150   | 15000  |
| 15  | 1200659467 | 804000B30M200   | 20000  |
| 16  | 1200659468 | 804000B30M250   | 25000  |
| 17  | 1200659469 | 804000B30M300   | 30000  |
| 18  | 1200659966 | 804000B33M005   | 500    |
| 19  | 1200659967 | 804000B33M010   | 1000   |
| 20  | 1200659456 | 804000B33M020   | 2000   |
| 21  | 1200659968 | 804000B33M030   | 3000   |
| 22  | 1200659969 | 804000B33M040   | 4000   |
| 23  | 1200659970 | 804000B33M050   | 5000   |
| 24  | 1200659461 | 804000B33M100   | 1000   |
| 25  | 1200659429 | 804000B36M0207Y | 2000   |
| 26  | 1200659430 | 804000B36M0507Y | 5000   |
| 27  | 1200659431 | 804000B36M1007Y | 10000  |
| 28  | 1200659963 | 805000B30M006   | 600    |
| 29  | 1200659518 | 805000B30M010   | 1000   |
| 30  | 1200659519 | 805000B30M020   | 2000   |

| Lp. | MOLEX PN   | ENGINEERING No  | L [mm] |
|-----|------------|-----------------|--------|
| 31  | 1200659984 | 805000B30M0207  | 2000   |
| 32  | 1200659520 | 805000B30M050   | 5000   |
| 33  | 1200659521 | 805000B30M100   | 10000  |
| 34  | 1200656214 | 805000B30M150   | 15000  |
| 35  | 1200659457 | 805000B33M020   | 2000   |
| 36  | 1200659462 | 805000B33M100   | 10000  |
| 37  | 1200656042 | 805000B39M050   | 5000   |
| 38  | 1200652255 | 805000B42M010   | 1000   |
| 39  | 1200652256 | 805000B42M020   | 2000   |
| 40  | 1200652257 | 805000B42M050   | 5000   |
| 41  | 1200652258 | 805000B42M100   | 10000  |
| 42  | 1200659543 | 805000B42M200   | 20000  |
| 43  | 1200659544 | 805000B42M300   | 30000  |
| 44  | 1200656062 | 805000B42M005   | 500    |
| 45  | 1200652306 | 808000B41M010   | 1000   |
| 46  | 1200659458 | 808000B41M020   | 2000   |
| 47  | 1200659777 | 808000B41M030   | 3000   |
| 48  | 1200652308 | 808000B41M050   | 5000   |
| 49  | 1200659463 | 808000B41M100   | 10000  |
| 50  | 1200656044 | 808000B41M150   | 15000  |
| 51  | 1200659734 | 808000B41M200   | 20000  |
| 52  | 1200656388 | 804000B36M0207H | 2000   |
| 53  | 1200656389 | 804000B36M0507H | 5000   |
| 54  | 1200656390 | 804000B36M1007H | 10000  |

| Lp. | MOLEX PN   | ENGINEERING No  | L [mm] |
|-----|------------|-----------------|--------|
| 55  | 1200656550 | 804000B36M1507Y | 15000  |
| 56  | 1200656551 | 804000B36M2007Y | 20000  |
| 57  | 1200656485 | 808000B41M250   | 25000  |
| 58  | 1200656519 | 804000B33M050A  | 5000   |
| 59  | 1200656515 | 804000B33M005A  | 500    |
| 60  | 1200656516 | 804000B33M010A  | 1000   |
| 61  | 1200656517 | 804000B33M020A  | 2000   |
| 62  | 1200656518 | 804000B33M030A  | 3000   |
| 63  | 1200656520 | 804000B33M100A  | 10000  |
| 64  | 1200656605 | 804000B33M150A  | 15000  |
| 65  | 1200656606 | 804000B33M200A  | 20000  |
| 66  | 1200656643 | 805000B33M010A  | 1000   |
| 67  | 1200656644 | 805000B33M020A  | 2000   |
| 68  | 1200656645 | 805000B33M030A  | 3000   |
| 69  | 1200656646 | 805000B33M050A  | 5000   |
| 70  | 1200656647 | 805000B33M100A  | 10000  |
| 71  | 1200656648 | 805000B33M150A  | 15000  |
| 72  | 1200656649 | 805000B33M200A  | 20000  |
| 73  | 1200652393 | 808000B41M010R  | 1000   |
| 74  | 1200656620 | 804000B55M010Y  | 1000   |
| 75  | 1200656621 | 804000B55M020Y  | 2000   |
| 76  | 1200656622 | 804000B55M030Y  | 3000   |
| 77  | 1200656623 | 804000B55M050Y  | 5000   |
| 78  | 1200656624 | 804000B55M100Y  | 10000  |

| Lp. | MOLEX PN   | ENGINEERING No  | L [mm] |
|-----|------------|-----------------|--------|
| 79  | 1200656625 | 804000B55M150Y  | 15000  |
| 80  | 1200656626 | 804000B55M200Y  | 20000  |
| 81  | 1200656650 | 805000B30M030   | 3000   |
| 82  | 1200656483 | 805000B30M200   | 20000  |
| 83  | 1200656651 | 805000B55M010Y  | 1000   |
| 84  | 1200656652 | 805000B55M020Y  | 2000   |
| 85  | 1200656653 | 805000B55M030Y  | 3000   |
| 86  | 1200656654 | 805000B55M050Y  | 5000   |
| 87  | 1200656655 | 805000B55M100Y  | 10000  |
| 88  | 1200656656 | 805000B55M150Y  | 15000  |
| 89  | 1200656657 | 805000B55M200Y  | 20000  |
| 90  | 1200656851 | 804000B36M0107Y | 1000   |
| 91  | 1200656835 | 805000B36M1007Y | 10000  |
| 92  | 1200657125 | 804000B33M300A  | 30000  |
| 93  | 1200657126 | 804000B33M400A  | 40000  |
| 94  | 1200657127 | 804000B33M500A  | 50000  |
| 95  | 1200657128 | 804000B33M700A  | 70000  |
| 96  | 1200657176 | 805000B33M005A  | 500    |
| 97  | 1200657177 | 805000B33M300A  | 30000  |
| 98  | 1200657178 | 805000B33M400A  | 40000  |
| 99  | 1200657179 | 805000B33M500A  | 50000  |
| 100 | 1200659639 | 804000B30M030R  | 3000   |
| 101 | 1200652388 | 804000B30M010R  | 1000   |

| OVER  | UP TO AND INCLUDING | TOLERANCE(+)  |
|-------|---------------------|---------------|
| 0     | 1000                | +40<br>0      |
| 1000  | 5000                | +60<br>0      |
| 5000  | 10000               | +80<br>0      |
| 10000 | 20000               | +140<br>0     |
| 20000 | 30000               | +160<br>0     |
| 30000 | >                   | +1% OF LENGTH |

|  |   |  |
|--|---|--|
| FUNCTIONAL SYMBOLS<br>∇A = 0<br>∇E = 0<br>∇F = 0                 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |
|  | DIMENSION UNITS<br><b>mm</b>  | SCALE<br><b>1:1</b>  |
| DIVISIONAL SYMBOLS   | CURRENT REV DESC: UPDATED OVM DIMENSION.  |  |
|  | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>ANGULAR TOL ± 1.0°<br>4 PLACES ±<br>3 PLACES ±<br>2 PLACES ± 0.05<br>1 PLACE ± 0.3<br>0 PLACES ± 0.5 |  |
| EC NO: 730989<br>DRWN: ARPITT<br>CHK'D: RSILLER<br>APPR: RSILLER |   | 2022/12/05<br>2022/12/06<br>2022/12/06   |
| INITIAL REVISION:<br>DRWN: SSM<br>APPR: RSILLER                  |   | 2021/12/16<br>2022/02/28   |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS             |   | THIRD ANGLE PROJECTION<br>DRAWING<br>SERIES<br>MATERIAL NUMBER<br>CUSTOMER<br>SHEET NUMBER |
| A3-SIZE<br>120065  |   | 1200652251<br>PSD 000 A1<br>2 OF 2   |

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



CONTACTS POSITION FRONT VIEW:

|             | 3 CONTACTS  | 4 CONTACTS | 5 CONTACTS | 8 CONTACTS |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
|-------------|---|------------|------------|------------|-------|---|------|---|-------|---|-----|------|---|-------|---|-------|---|------|---|-------|--|-----|------|---|-------|---|-------|---|------|---|-------|---|----------------------|--|-----|------|---|-------|---|-------|---|-------|---|--------|---|------|---|------|---|------|---|-----|
| FEMALE      |   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| CONNECTIONS | <table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>BROWN</td></tr> <tr><td>3</td><td>BLUE</td></tr> <tr><td>4</td><td>BLACK</td></tr> </table> | PIN        | WIRE       | 1          | BROWN | 3 | BLUE | 4 | BLACK | <table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>BROWN</td></tr> <tr><td>2</td><td>WHITE</td></tr> <tr><td>3</td><td>BLUE</td></tr> <tr><td>4</td><td>BLACK</td></tr> </table> | PIN | WIRE | 1 | BROWN | 2 | WHITE | 3 | BLUE | 4 | BLACK | <table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>BROWN</td></tr> <tr><td>2</td><td>WHITE</td></tr> <tr><td>3</td><td>BLUE</td></tr> <tr><td>4</td><td>BLACK</td></tr> <tr><td>5</td><td>GREY OR GREEN/YELLOW</td></tr> </table> | PIN | WIRE | 1 | BROWN | 2 | WHITE | 3 | BLUE | 4 | BLACK | 5 | GREY OR GREEN/YELLOW | <table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>WHITE</td></tr> <tr><td>2</td><td>BROWN</td></tr> <tr><td>3</td><td>GREEN</td></tr> <tr><td>4</td><td>YELLOW</td></tr> <tr><td>5</td><td>GREY</td></tr> <tr><td>6</td><td>PINK</td></tr> <tr><td>7</td><td>BLUE</td></tr> <tr><td>8</td><td>RED</td></tr> </table> | PIN | WIRE | 1 | WHITE | 2 | BROWN | 3 | GREEN | 4 | YELLOW | 5 | GREY | 6 | PINK | 7 | BLUE | 8 | RED |
| PIN         | WIRE  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 1           | BROWN   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 3           | BLUE  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 4           | BLACK   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| PIN         | WIRE  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 1           | BROWN   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 2           | WHITE   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 3           | BLUE  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 4           | BLACK   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| PIN         | WIRE  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 1           | BROWN   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 2           | WHITE   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 3           | BLUE  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 4           | BLACK   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 5           | GREY OR GREEN/YELLOW  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| PIN         | WIRE  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 1           | WHITE   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 2           | BROWN   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 3           | GREEN   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 4           | YELLOW  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 5           | GREY  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 6           | PINK  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 7           | BLUE  |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |
| 8           | RED   |            |            |            |       |   |      |   |       |   |     |      |   |       |   |       |   |      |   |       |  |     |      |   |       |   |       |   |      |   |       |   |                      |  |     |      |   |       |   |       |   |       |   |        |   |      |   |      |   |      |   |     |

FOR OPTION SEE - NUMERICAL CODE - ON SHEET 2

| ITEM | QTY.    | DESCRIPTION         | MATERIAL    | FINISH              |
|------|---------|---------------------|-------------|---------------------|
| 7    | 1       | LABEL YE            | VINYL       | -                   |
| 6    | 3/4/5/8 | CONTACT FE          | BRASS       | GOLD OVER Ni-PLATED |
| 5    | 1       | GASKET RD           | FPM         | -                   |
| 4    | 1       | INSERT M12 FE XP BK | PUR         | -                   |
| 3    | 1       | COUPLING NUT M12 FE | SEE SHEET 2 | SEE SHEET 2         |
| 2    | -       | OVERMOULDING        | SEE SHEET 2 | SEE SHEET 2         |
| 1    | -       | CABLE               | SEE SHEET 2 | -                   |

|  |   |                                   |  |  |                |                      |
|--|---|-----------------------------------|--|--|----------------|----------------------|
| FUNCTIONAL SYMBOLS<br>$\nabla_A = 0$<br>$\nabla_E = 0$<br>$\nabla_V = 0$ | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | CURRENT REV DESC: STANDARDIZATION |  | <br>CSE M12 XP AC FE STR WSOR XM SE UNSH |                |                      |
|  | DIMENSION UNITS: mm   | SCALE: 1:1                        | EC NO: 681756<br>DRWN: MKOWALCZYK01 2021/10/18<br>CHK'D: ALEKSP3 2021/10/18<br>APPR: KMARCINIAK01 2021/10/18 |  |                |                      |
|  | GENERAL TOLERANCES (UNLESS SPECIFIED)   |                                   |  | PRODUCT CUSTOMER DRAWING                 |                |                      |
|  | ANGULAR TOL ± °   |                                   |  | DOCUMENT NUMBER: 1200652251              |                |                      |
| 4 PLACES ±   |   |                                   | DOC TYPE: PSD  |  |                |                      |
| 3 PLACES ±   |   |                                   | DOC PART: 00P  |  |                |                      |
| 2 PLACES ±   |   |                                   | REVISION: B2   |  |                |                      |
| 1 PLACE ±  |   |                                   | MATERIAL NUMBER: SEE PART LIST   |  |                |                      |
| 0 PLACES ±   |   |                                   | CUSTOMER: SEE PART LIST  |  |                |                      |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS                     |   |                                   | THIRD ANGLE PROJECTION   | DRAWING: A3-SIZE                         | SERIES: 120065 | SHEET NUMBER: 1 OF 2 |

# ENGINEERING NO - NUMERICAL CODE (Available parts see PART LIST table. Other parts available upon request).

8 0 X 0 0 0 B X X M X X X X

88 = M12x1 SINGLE ENDED

POLES:  
3 = 3 POLES  
4 = 4 POLES  
5 = 5 POLES  
8 = 8 POLES

HEADER:  
000 = PLUG FEMALE STRAIRIGHT

CABLE TYPE:  
SEE TABLE

UNIT:  
M = METER

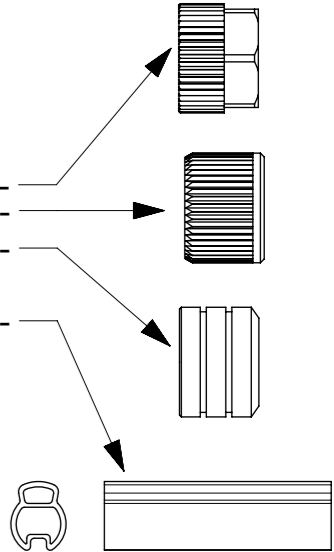
LENGTH:  
EXAMPLE:  
010 = 1 m  
050 = 5 m  
100 = 10 m

OPTIONS

Overmold color:  
Blank (Standard)=Black  
A=Grey / G=Black / Y=Yellow / R=Red

Coupling Nut:  
Blank (Standard)=Knurled/Hex Brass, Ni Plated  
5=Knurled Derlin  
7=Knurled Brass Ni Plated, Teflon Coated

H= 2 pcs. of I/D Carrier PVC Transparent  
(Cables B36 always with 2 pcs. I/D Carrier)



## 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: TEMP. / BENDING RADIUS | DRAG CHAIN                             | CABLE SPEC. DRAWING |
|------------|--------------|---------------------|--------------|--------------|-------------------------|--------------------------------|---------------------------------|------------------------------------|--|---------------------|
| B30        | 3 / 4 / 5    | 0.34mm <sup>2</sup> | TPU Black    | UL 21215/758 | C22.2 I/II A/B 80°/600V | -40°C to +90°C<br>5xO.D.       | -25°C to +80°C<br>7.5xO.D.      | -5°C to +60°C<br>7.5xO.D.          | up to 5 000 000 cycles<br>at temp 20°C | SD-120209-001       |
| B33        | 4 / 5        | 0.34mm <sup>2</sup> | TPU Gray     |              |                         |                                |                                 |                                    |  | SD-120209-001       |
| B36        | 4 / 5        | 0.34mm <sup>2</sup> | TPU Orange   |              |                         |                                |                                 |                                    |  | SD-120209-001       |
| B39        | 5            | 0.75mm <sup>2</sup> | TPU Gray     |              |                         |                                |                                 |                                    |  | n/a                 |
| B41        | 8            | 0.25mm <sup>2</sup> | TPU Black    |              |                         |                                |                                 |                                    |  | SD-120209-006       |
| B42        | 5            | 0.34mm <sup>2</sup> | TPU Black    |              |                         |                                |                                 |                                    |  | SD-120209-001       |
| B49        | 8            | 0.25mm <sup>2</sup> | TPU Orange   |              |                         |                                |                                 |                                    |  | SD-120209-006       |
| B55        | 3 / 4 / 5    | 0.34mm <sup>2</sup> | TPU Yellow   |              |                         |                                |                                 |                                    |  | n/a                 |

| OVER  | UP TO AND INCLUDING | TOLERANCE     |
|-------|---------------------|---------------|
| 0     | 1000                | +40<br>0      |
| 1000  | 5000                | +60<br>0      |
| 5000  | 10000               | +80<br>0      |
| 10000 | 20000               | +140<br>0     |
| 20000 | 30000               | +160<br>0     |
| 30000 | >                   | +1% OF LENGTH |

| FUNCTIONAL SYMBOLS                    | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION   | CURRENT REV DESC: STANDARDIZATION |                        | <b>molex</b>    |               |                               |                |                     |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |
|---------------------------------------|---|-----------------------------------|------------------------|-----------------|---------------|-------------------------------|----------------|---------------------|-----|---------------------------------------|--|--|----------------|-----------------|--|----------------|------------|--|--|------------|--|--|------------|--|--|-----------|--|--|------------|
|                                       | <table border="1"> <tr> <th>FUNCTIONAL SYMBOLS</th> <th>DIMENSION UNITS</th> <th>SCALE</th> </tr> <tr> <td><math>\nabla_A = 0</math></td> <td>mm</td> <td>1:1</td> </tr> <tr> <td colspan="3">GENERAL TOLERANCES (UNLESS SPECIFIED)</td> </tr> <tr> <td><math>\nabla_E = 0</math></td> <td colspan="2">ANGULAR TOL ± °</td> </tr> <tr> <td><math>\nabla_P = 0</math></td> <td colspan="2">4 PLACES ±</td> </tr> <tr> <td></td> <td colspan="2">3 PLACES ±</td> </tr> <tr> <td></td> <td colspan="2">2 PLACES ±</td> </tr> <tr> <td></td> <td colspan="2">1 PLACE ±</td> </tr> <tr> <td></td> <td colspan="2">0 PLACES ±</td> </tr> </table> | FUNCTIONAL SYMBOLS                | DIMENSION UNITS        |                 |               | SCALE                         | $\nabla_A = 0$ | mm                  | 1:1 | GENERAL TOLERANCES (UNLESS SPECIFIED) |  |  | $\nabla_E = 0$ | ANGULAR TOL ± ° |  | $\nabla_P = 0$ | 4 PLACES ± |  |  | 3 PLACES ± |  |  | 2 PLACES ± |  |  | 1 PLACE ± |  |  | 0 PLACES ± |
| FUNCTIONAL SYMBOLS                    | DIMENSION UNITS   | SCALE                             |                        |                 |               |                               |                |                     |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |
| $\nabla_A = 0$                        | mm  | 1:1                               |                        |                 |               |                               |                |                     |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |
| GENERAL TOLERANCES (UNLESS SPECIFIED) |   |                                   |                        |                 |               |                               |                |                     |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |
| $\nabla_E = 0$                        | ANGULAR TOL ± °   |                                   |                        |                 |               |                               |                |                     |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |
| $\nabla_P = 0$                        | 4 PLACES ±  |                                   |                        |                 |               |                               |                |                     |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |
|                                       | 3 PLACES ±  |                                   |                        |                 |               |                               |                |                     |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |
|                                       | 2 PLACES ±  |                                   |                        |                 |               |                               |                |                     |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |
|                                       | 1 PLACE ±   |                                   |                        |                 |               |                               |                |                     |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |
|                                       | 0 PLACES ±  |                                   |                        |                 |               |                               |                |                     |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |
| DIVISIONAL SYMBOLS                    | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |                                   | THIRD ANGLE PROJECTION | DRAWING A3-SIZE | SERIES 120065 | MATERIAL NUMBER SEE PART LIST | CUSTOMER       | SHEET NUMBER 2 OF 2 |     |                                       |  |  |                |                 |  |                |            |  |  |            |  |  |            |  |  |           |  |  |            |