

# FEMALE PLUG M8 STRAIGHT TO MALE PLUG M8 STRAIGHT



**NOTES:**

- RATED VOLTAGE: 3 contacts 60V AC/DC  
4 and 5 contacts 30V AC/DC
- CURRENT RATING: 3, 4, 5 contacts 3A
- PROTECTION CLASS: IP 67 in mated and locked position.
- TEMPERATURE: SEE CABLE INFORMATION
- INSULATION RESISTANCE: 10<sup>8</sup> Ω MIN.
- MATING CYCLES: MIN. 100



**CONTACTS POSITION FRONT VIEW:**

|             | 3 CONTACTS |       | 4 CONTACTS |       | 5 CONTACTS |       |
|-------------|------------|-------|------------|-------|------------|-------|
| FEMALE      |            |       |            |       |            |       |
| MALE        |            |       |            |       |            |       |
| CONNECTIONS | PIN        | WIRE  | PIN        | WIRE  | PIN        | WIRE  |
|             | 1          | BROWN | 1          | BROWN | 1          | BROWN |
|             | 3          | BLUE  | 2          | WHITE | 2          | WHITE |
|             | 4          | BLACK | 3          | BLUE  | 3          | BLUE  |
|             |            |       | 4          | BLACK | 4          | BLACK |
|             |            |       |            | 5     | GREY       |       |

CODING ACCORDING TO IEC 61076-2-104

**FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2**

| ITEM | QTY.      | DESCRIPTION             | MATERIAL    | FINISH               |
|------|-----------|-------------------------|-------------|----------------------|
| 11   | 1         | INSERT MALE BLACK       | TPU         | ---                  |
| 10   | 3 / 4 / 5 | CONTACT M8 MALE         | BRASS       | SELECTIVE Au OVER Ni |
| 9    | 1         | SLEEVE                  | BRASS       | NICKEL               |
| 8    | 1         | COUPLING NUT M8 MALE    | BRASS       | NICKEL               |
| 7    | 1         | LABEL YELLOW            | VINYL       | ---                  |
|      | -         | PRINTING FOR CABLES lxx | ---         | ---                  |
| 6    | -         | CABLE                   | SEE SHEET 2 | ---                  |
| 5    | -         | OVERMOULDING BLACK      | TPU         | ---                  |
| 4    | 1         | COUPLING NUT M8 FEMALE  | BRASS       | NICKEL               |
| 3    | 1         | INSERT FEMALE BLACK     | TPU         | ---                  |
| 2    | 1         | O-RING RED              | FKM         | ---                  |
| 1    | 3 / 4 / 5 | CONTACT M8 FEMALE       | BRASS       | SELECTIVE Au OVER Ni |

|  |   |                                     |                      |                             |  |
|--|---|-------------------------------------|----------------------|-----------------------------|--|
| 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: CORRECTION TYPO   |                      | <b>molex</b>                |  |
|  | SCALE: 2:1  | CSE M8 M8 XP AC BC FE STR MA STR XM |                      |                             |  |
|  | GENERAL TOLERANCES (UNLESS SPECIFIED)   | EC NO: 727617                       |                      | PRODUCT CUSTOMER DRAWING    |  |
|  | ANGULAR TOL ± 1.0°  | DRWN: RSILLER 2022/11/08            |                      | DOCUMENT NUMBER: 1200878240 |  |
| 3 PLACES ±   | CHK'D: THAERDT 2022/11/09   |                                     | DOC TYPE: PSD        |                             |  |
| 2 PLACES ± 0.05                                      | APPR: THAERDT 2022/11/09  |                                     | DOC PART: 000        |                             |  |
| 1 PLACE ± 0.3  | INITIAL REVISION:   |                                     | REVISION: A16        |                             |  |
| 0 PLACES ± 0.5                                       | DRWN: JMARSZALEK 2016/09/15   |                                     | SERIES: 120087       |                             |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | THIRD ANGLE PROJECTION  | DRAWING: A3-SIZE                    | SHEET NUMBER: 1 OF 4 | CUSTOMER: GENERAL MARKET    |  |

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

## OPTIONS

4 4 X 0 3 0 X X X X X X X X

44=Nano-Change  
M8x1  
Double ended

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

Heads style:  
030=Plug Female Straight  
to Plug Male Straight

Cable type: See Table

Units:  
M=Meter  
C=Centimeter

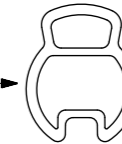
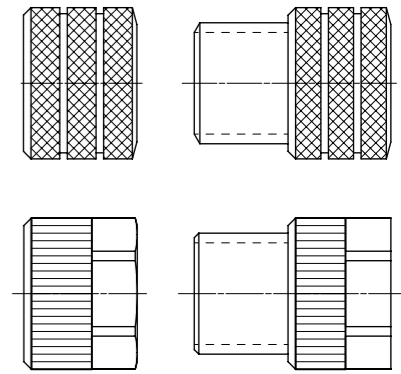
Length  
Examples:  
005=0.5 unit  
010=1 unit  
100=10 unit

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

Coupling Nut:  
Blank (Standard)=Knurled Brass Ni Plated  
9=Knurled / Hexagonal SW9 Brass Ni Plated

H= 2 pcs. of I/D Carrier PVC Transparent  
(Cables Ixx & P82 always with 2 pcs. of  
I/D Carrier)

COUPLING NUT  
FEMALE MALE



## 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    | 0.25 mm <sup>2</sup> | 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    | 0.25 mm <sup>2</sup> | 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 | -      |
| I02        | 3 / 4        | 0.25 mm <sup>2</sup> | PVC CEI GREY    | -              | -                        | -30°C to +70°C                 | -5°C to +70°C                   | -   | -      |
| P02        | 3 / 4 / 5    | 0.25 mm <sup>2</sup> | PUR / PVC BLACK | -              | -                        | -30°C to +80°C, >7xO.D.        | -5°C to +80°C, >15xO.D.         | -   | -      |
| P82        | 3            | 0.34 mm <sup>2</sup> | PUR IRR ORANGE  | -              | -                        | -50°C to +105°C, >5xO.D.       | -40°C to +105°C, >7.5xO.D.      | -   | -      |
| H70        | 5            | 0.25 mm <sup>2</sup> | PUR BLACK       | -              | -                        | -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 | -      |

## 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 |

|                    |   |   |  |                         |                       |                                       |                                 |  |
|--------------------|---|---|--|-------------------------|-----------------------|---------------------------------------|---------------------------------|--|
| 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: CORRECTION TYPO               |  |                         |                       |                                       |                                 |  |
|                    | $\nabla_A = 0$<br>$\nabla_E = 0$<br>$\nabla_V = 0$  | DIMENSION UNITS: <b>mm</b><br>SCALE: <b>2:1</b> | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>ANGULAR TOL $\pm 1.0^\circ$<br>4 PLACES $\pm$<br>3 PLACES $\pm$<br>2 PLACES $\pm 0.05$<br>1 PLACE $\pm 0.3$<br>0 PLACES $\pm 0.5$ |                         |                       |                                       |                                 | EC NO: 727617<br>DRWN: RSILLER 2022/11/08<br>CHK'D: THAERDT 2022/11/09<br>APPR: THAERDT 2022/11/09 |
| DIVISIONAL SYMBOLS | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |   | THIRD ANGLE PROJECTION   | DRAWING: <b>A3-SIZE</b> | SERIES: <b>120087</b> | MATERIAL NUMBER: <b>SEE PART LIST</b> | CUSTOMER: <b>GENERAL MARKET</b> | SHEET NUMBER: <b>2 OF 4</b>  |

# PART LIST

| No. | Molex PN   | Engineering No. | Cable Length |
|-----|------------|-----------------|--------------|
| 1   | 1200271413 | 445030H08M010   | 1m           |
| 2   | 1200280321 | 443030E02M020   | 2m           |
| 3   | 1200280343 | 443030E02M030   | 3m           |
| 4   | 1200280384 | 443030I02M006   | 0.6m         |
| 5   | 1200280427 | 443030I02M010   | 1m           |
| 6   | 1200280462 | 443030E02M050   | 5m           |
| 7   | 1200280464 | 443030E02M040   | 4m           |
| 8   | 1200281222 | 443030P82M003   | 0.3m         |
| 9   | 1200281282 | 443030E02M025   | 2.5m         |
| 10  | 1200281284 | 444030E02M015   | 1.5m         |
| 11  | 1200281309 | 445030P02M010   | 1m           |
| 12  | 1200281310 | 445030P02M050   | 5m           |
| 13  | 1200870687 | 445030P02M006   | 0.6m         |
| 14  | 1200870688 | 445030P02M030   | 3m           |
| 15  | 1200875035 | 443030E02M006   | 0.6m         |
| 16  | 1200878025 | 443030P82M006   | 0.6m         |
| 17  | 1200878035 | 445030P02M020   | 2m           |
| 18  | 1200878036 | 445030P02M040   | 4m           |
| 19  | 1200878037 | 445030P02M100   | 10m          |
| 20  | 1200878124 | 444030H08M003   | 0.3m         |
| 21  | 1200878126 | 443030H08M030   | 3m           |
| 22  | 1200878127 | 443030H08M050   | 5m           |
| 23  | 1200878139 | 445030P02M250   | 25m          |
| 24  | 1200878140 | 443030P02M010   | 1m           |
| 25  | 1200878141 | 443030P02M006   | 0.6m         |
| 26  | 1200878149 | 443030H08M020   | 2m           |
| 27  | 1200878161 | 444030E02M200   | 20m          |
| 28  | 1200878166 | 443030H08M040   | 4m           |
| 29  | 1200878233 | 443030P02M050   | 5m           |
| 30  | 1200878234 | 443030P02M100   | 10m          |
| 31  | 1200878239 | 445030E02M006   | 0.6m         |
| 32  | 1200878240 | 445030E02M020   | 2m           |
| 33  | 1200878241 | 445030E02M050   | 5m           |
| 34  | 1200878258 | 443030E02M010   | 1m           |
| 35  | 1200878272 | 443030E02M002G  | 0.2m         |


| No. | Molex PN   | Engineering No. | Cable Length |
|-----|------------|-----------------|--------------|
| 36  | 1200878273 | 443030E02M003   | 0.3m         |
| 37  | 1200878274 | 443030E02M015   | 1.5m         |
| 38  | 1200878275 | 443030E02M025H  | 2.5m         |
| 39  | 1200878276 | 443030E02M050H  | 5m           |
| 40  | 1200878277 | 443030E02M060   | 6m           |
| 41  | 1200878278 | 443030E02M100   | 10m          |
| 42  | 1200878279 | 443030E02M150   | 15m          |
| 43  | 1200878280 | 443030E02M010G  | 1m           |
| 44  | 1200878281 | 443030E02M012G  | 1.2m         |
| 45  | 1200878282 | 443030I02M003   | 0.3m         |
| 46  | 1200878283 | 443030I02M015   | 1.5m         |
| 47  | 1200878284 | 443030I02M020   | 2m           |
| 48  | 1200878285 | 443030I02M030   | 3m           |
| 49  | 1200878286 | 443030I02M040   | 4m           |
| 50  | 1200878287 | 443030I02M050   | 5m           |
| 51  | 1200878288 | 443030I02M060   | 6m           |
| 52  | 1200878289 | 443030I02M070   | 7m           |
| 53  | 1200878290 | 443030I02M100   | 10m          |
| 54  | 1200878291 | 443030I02M150   | 15m          |
| 55  | 1200878292 | 443030P02M003   | 0.3m         |
| 56  | 1200878293 | 443030P02M015   | 1.5m         |
| 57  | 1200878294 | 443030P02M020   | 2m           |
| 58  | 1200878295 | 443030P02M025   | 2.5m         |
| 59  | 1200878296 | 443030P02M030   | 3m           |
| 60  | 1200878297 | 443030P02M030G  | 3m           |
| 61  | 1200878298 | 443030P02M035   | 3.5m         |
| 62  | 1200878299 | 443030P02M040   | 4m           |
| 63  | 1200878300 | 443030P02M060   | 6m           |
| 64  | 1200878301 | 443030P02M070   | 7m           |
| 65  | 1200878302 | 443030P02M150   | 15m          |
| 66  | 1200878346 | 444030E02M003   | 0.3m         |
| 67  | 1200878347 | 444030E02M005   | 0.5m         |
| 68  | 1200878348 | 444030E02M006   | 0.6m         |
| 69  | 1200878349 | 444030E02M010   | 1m           |
| 70  | 1200878350 | 444030E02M020   | 2m           |

| No. | Molex PN   | Engineering No. | Cable Length |
|-----|------------|-----------------|--------------|
| 71  | 1200878351 | 444030E02M025   | 2.5m         |
| 72  | 1200878352 | 444030E02M030   | 3m           |
| 73  | 1200878353 | 444030E02M040   | 4m           |
| 74  | 1200878354 | 444030E02M050   | 5m           |
| 75  | 1200878355 | 444030E02M100   | 10m          |
| 76  | 1200878356 | 444030H08M020   | 2m           |
| 77  | 1200878357 | 444030P02M003   | 0.3m         |
| 78  | 1200878358 | 444030P02M006   | 0.6m         |
| 79  | 1200878359 | 444030P02M010   | 1m           |
| 80  | 1200878360 | 444030P02M020   | 2m           |
| 81  | 1200878361 | 444030P02M030   | 3m           |
| 82  | 1200878362 | 444030P02M050   | 5m           |
| 83  | 1200878494 | 443030E02M070   | 7m           |
| 84  | 1200878495 | 444030H08M010   | 1m           |
| 85  | 1200878500 | 443030H08M010   | 1m           |
| 86  | 1200878509 | 444030H08M050   | 5m           |
| 87  | 1200878535 | 443030E02M020Y  | 2m           |
| 88  | 1200878536 | 443030E02M050Y  | 5m           |
| 89  | 1200878537 | 443030E02M040Y  | 4m           |
| 90  | 1200878538 | 443030E02M006Y  | 0.6m         |
| 91  | 1200878539 | 443030H08M050Y  | 5m           |
| 92  | 1200878540 | 443030H08M020Y  | 2m           |
| 93  | 1200878541 | 443030E02M010Y  | 1m           |
| 94  | 1200878558 | 443030H08M006   | 0.6m         |
| 95  | 1200878559 | 444030H08M006   | 0.6m         |
| 96  | 1200878574 | 444030E02M003H  | 0.3m         |
| 97  | 1200878575 | 444030E02M030H  | 3m           |
| 98  | 1200878576 | 443030E02M003H  | 0.3m         |
| 99  | 1200878577 | 444030E02M006H  | 0.6m         |
| 100 | 1200878596 | 443030P02M010H  | 1m           |
| 101 | 1200878626 | 443030H08M080   | 8m           |
| 102 | 1200878627 | 445030H08M040   | 4m           |
| 103 | 1200878635 | 443030E02M080   | 8m           |
| 104 | 1200878636 | 443030H08M055   | 5.5m         |
| 105 | 1200878642 | 443030E02M006H  | 0.6m         |

| No. | Molex PN   | Engineering No. | Cable Length |
|-----|------------|-----------------|--------------|
| 106 | 1200878643 | 443030E02M010H  | 1m           |
| 107 | 1200878644 | 443030E02M020H  | 2m           |
| 108 | 1200878645 | 443030E02M030H  | 3m           |
| 109 | 1200878655 | 443030E02M040H  | 4m           |
| 110 | 1200878658 | 444030E02M250   | 25m          |
| 111 | 1200878661 | 444030E02M015H  | 1.5m         |
| 112 | 1200878663 | 443030E02M060H  | 6m           |
| 113 | 1200878665 | 444030E02M005H  | 0.5m         |
| 114 | 1200878666 | 444030E02M025H  | 2.5m         |
| 115 | 1200878671 | 443030E02M080H  | 8m           |
| 116 | 1200878689 | 443030E02M015H  | 1.5m         |
| 117 | 1200878692 | 444030E02M010H  | 1m           |
| 118 | 1200878693 | 444030E02M020H  | 2m           |
| 119 | 1200878699 | 443030H08M055H  | 5.5m         |
| 120 | 1200878808 | 443030H08M065H  | 6.5m         |
| 121 | 1200878809 | 443030E02M0039H | 0.3m         |
| 122 | 1200878810 | 444030E02M0069H | 0.6m         |
| 123 | 1200878811 | 444030E02M0309H | 3m           |
| 124 | 1200878812 | 444030P02M100   | 10m          |
| 125 | 1200878828 | 444030E02M0109H | 1m           |
| 126 | 1200878834 | 443030E02M1009H | 10m          |
| 127 | 1200878843 | 444030H08M100   | 10m          |
| 128 | 1200878844 | 444030H08M250   | 25m          |
| 129 | 1200878847 | 445030H08M006   | 0.6m         |
| 130 | 1200878850 | 443030E02M0159H | 1.5m         |
| 131 | 1200878923 | 443030E02M1509H | 15m          |
| 132 | 1200878941 | 444030H08M030   | 3m           |
| 133 | 1200878946 | 445030H08M020   | 2m           |
| 134 | 1200878947 | 445030H08M050   | 5m           |
| 135 | 1200878950 | 445030E02M010   | 1m           |
| 136 | 1200878951 | 444030H08C350   | 0.35m        |
| 137 | 1200878952 | 444030H08C750   | 0.75m        |
| 138 | 1200878978 | 443030H08M100   | 10m          |
| 139 | 1200888155 | 445030H70M020   | 2m           |
| 140 | 1200878982 | 443030H08M003H  | 0.3m         |

| No. | Molex PN   | Engineering No. | Cable Length |
|-----|------------|-----------------|--------------|
| 141 | 1200878983 | 443030H08M015H  | 1.5m         |
| 142 | 1200878984 | 443030H08M045H  | 4.5m         |
| 143 | 1200878985 | 443030H08M065   | 6.5m         |
| 144 | 1200878986 | 443030H08M075H  | 7.5m         |
| 145 | 1200878987 | 444030H08M015H  | 1.5m         |
| 146 | 1200878988 | 444030H08M025H  | 2.5m         |
| 147 | 1200878998 | 443030H08M030H  | 3m           |
| 148 | 1200878999 | 443030H08M050H  | 5m           |
| 149 | 1200879001 | 443030H08M040H  | 4m           |
| 150 | 1200878997 | 444030H08M003H  | 0.3m         |

| No. | Molex PN   | Engineering No. | Cable Length |
|-----|------------|-----------------|--------------|
| 151 | 1200879003 | 444030H08M020H  | 2m           |
| 152 | 1200879004 | 444030H08M010H  | 1m           |
| 153 | 1200879007 | 444030H08M006H  | 0.6m         |
| 154 | 1200879010 | 444030H08M030H  | 3m           |
| 155 | 1200879035 | 443030H08M006H  | 0.6m         |
| 156 | 1200879036 | 443030H08M010H  | 1m           |
| 157 | 1200879037 | 443030H08M025H  | 2.5m         |
| 158 | 1200879050 | 443030H08M080H  | 8m           |
| 159 | 1200879052 | 444030H08M035H  | 3.5m         |
| 160 | 1200879053 | 444030H08M040H  | 4m           |
| 161 | 1200879054 | 444030H08M050H  | 5m           |

|                    |   |  |  |   |  |
|--------------------|---|--|--|---|--|
| 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: CORRECTION TYPO  |  |  |  |
|                    | $\sqrt{A} = 0$<br>$\sqrt{E} = 0$<br>$\sqrt{F} = 0$  | DIMENSION UNITS: <b>mm</b><br>SCALE: <b>2:1</b><br>GENERAL TOLERANCES (UNLESS SPECIFIED):<br>ANGULAR TOL $\pm 1.0^\circ$<br>4 PLACES $\pm$<br>3 PLACES $\pm$<br>2 PLACES $\pm 0.05$<br>1 PLACE $\pm 0.3$<br>0 PLACES $\pm 0.5$ | EC NO: 727617<br>DRWN: RSILLER 2022/11/08<br>CHK'D: THAERDT 2022/11/09<br>APPR: THAERDT 2022/11/09 |   |  |
| DIVISIONAL SYMBOLS | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  | THIRD ANGLE PROJECTION   | DRAWING: <b>A3-SIZE</b><br>SERIES: <b>120087</b>   | DOCUMENT NUMBER: <b>1200878240</b><br>DOC TYPE: PSD<br>DOC PART: 000<br>REVISION: A16 | MATERIAL NUMBER: SEE PART LIST<br>CUSTOMER: GENERAL MARKET<br>SHEET NUMBER: 3 OF 4 |

