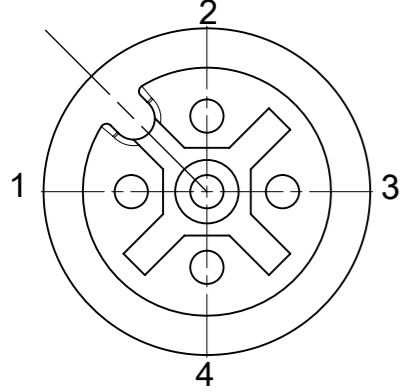


# M12 3 POLE FEMALE

Pos A & B



VIEW FROM THE FRONT SIDE

| Pin | Wire color |
|-----|------------|
| 1   | BROWN      |
| 2   | -          |
| 3   | BLUE       |
| 4   | BLACK      |

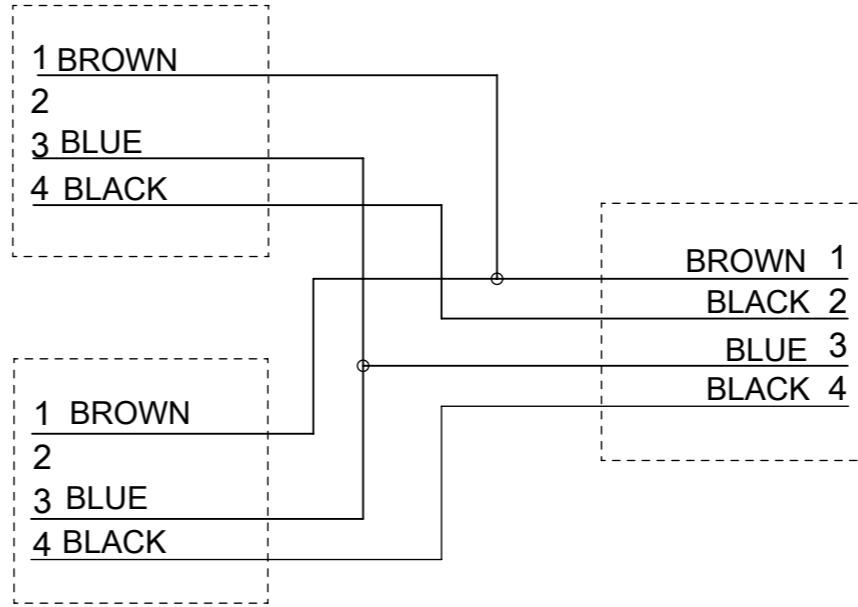
NOTES:  
 ELECTRICAL DATA:  
 VOLTAGE RATING: 250V  
 AMPERAGE RATING: 4A  
 INSULATION RESISTANCE: 10<sup>8</sup> Ω MIN.  
 MATING CYCLES: MIN. 100

ENVIRONMENTAL:  
 PROTECTION: IP67  
 OPERATING TEMPERATURE:  
 STATIC: -25°C TO +80°C  
 FLEXING: -5°C TO +80°C

Pos B  
 Female M12

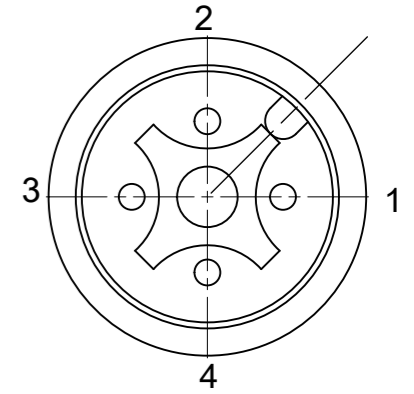
Pos A  
 Female M12

## WIRING DIAGRAM



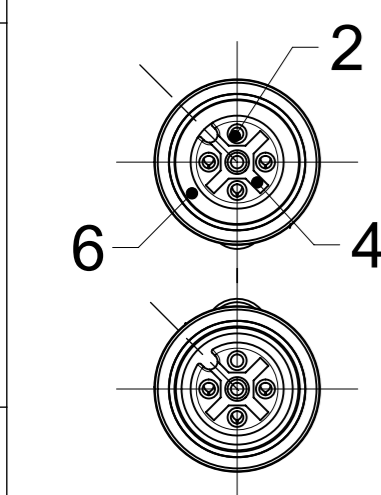
ILS  
 Male M12

# ILS M12 4 POLE MALE



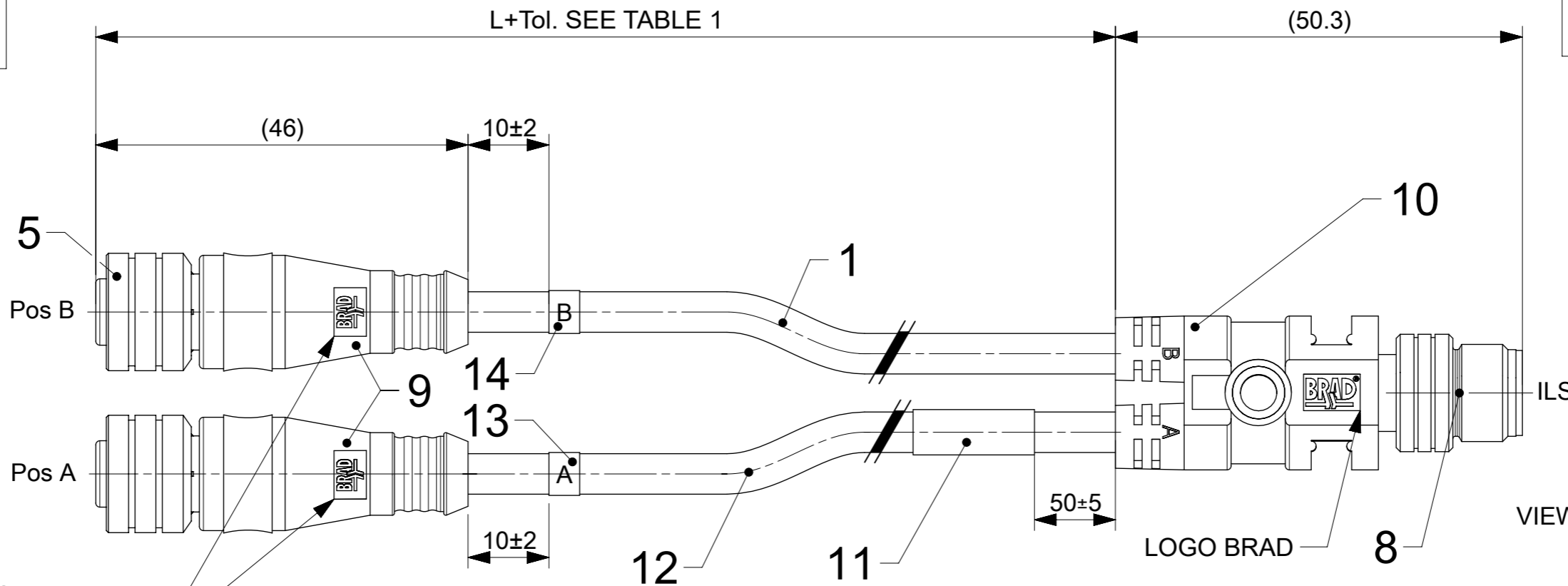
VIEW FROM THE FRONT SIDE

| Pin | Wire color |
|-----|------------|
| 1   | BROWN A+B  |
| 2   | BLACK B    |
| 3   | BLUE A+B   |
| 4   | BLACK A    |



VIEW FROM THE FRONT SIDE

LOGO BRAD

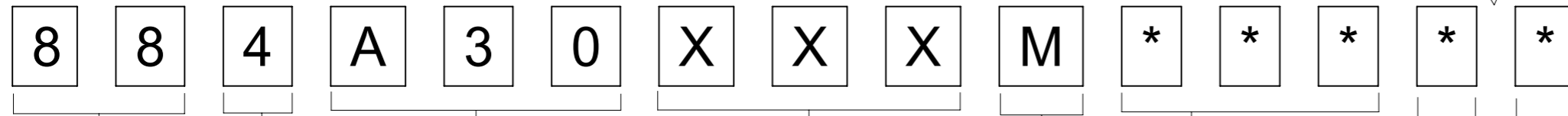


VIEW FROM THE FRONT SIDE

NOTES:  
 1. DIMENSION WITHOUT TOLERANCE ARE REFERENTIAL  
 2. FOR CABLES IXX AND IF IN MATRIX IS "H" - ADD ID-CARRIER'S ON THE BOTH SIDES HARNESS  
 3. BOM - SEE SHEET 2  
 4. MATRIX - SEE SHEET 2

|  |   |                                       |                            |   |                              |  |
|--|---|---------------------------------------|----------------------------|---|------------------------------|--|
| FUNCTIONAL SYMBOLS<br>FA = 0<br>FE = 0<br>FV = 0     | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | SCALE<br>3:2                          |                            | CURRENT REV DESC: CHANGED FROM MOLEX INTERNAL TO GENERAL MARKET |                              |  |
|  | DIMENSION UNITS<br>mm   | GENERAL TOLERANCES (UNLESS SPECIFIED) |                            |   |                              |  |
|  | ANGULAR TOL ± °   |                                       |                            |   |                              |  |
|  | 4 PLACES ±  |                                       |                            |   |                              |  |
| DIVISIONAL SYMBOLS                                   | 3 PLACES ±  |                                       |                            |   |                              |  |
|  | 2 PLACES ±  |                                       |                            |   |                              |  |
|  | 1 PLACE ±   |                                       |                            |   |                              |  |
|  | 0 PLACES ±  |                                       |                            |   |                              |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |   | THIRD ANGLE PROJECTION                | DRAWING<br>A3-SIZE         | SERIES<br>120009  | MATERIAL NUMBER<br>SEE TABLE |  |
| EC NO: 707539  |   | DRWN: RSCHIEBER                       | 2022/05/20                 |   |                              |  |
| CHK'D: RSILLER                                       |   | 2022/05/20                            | ILS 4P MM/ST 2XFE ST/ST XM |   |                              |  |
| APPR: RSILLER  |   | 2022/05/20                            | PRODUCT CUSTOMER DRAWING   |   |                              |  |
| INITIAL REVISION:                                    |   | DOCUMENT NUMBER                       |                            | DOC TYPE  | DOC PART                     |  |
| DRWN: AKONDRACIUK                                    |   | 1200090087                            |                            | PSD   | 000                          |  |
| APPR: MIWASIECZKO                                    |   | 2018/08/25                            |                            | REVISION  |                              |  |
| 2018/08/29   |   | GENERAL MARKET                        |                            | A5  |                              |  |
| SHEET NUMBER   |   | 1 OF 2                                |                            |   |                              |  |

# PART NO MATRIX



88 = M12 - M12

POLES:  
4 = 4 POLES

HEADER:  
A0 = 2x FEMALE STRAIGHT  
TO MALE ILS HEAD

CABLE TYPE:  
E03 = 0.34mm<sup>2</sup>, PVC BLACK  
I03 = 0.34mm<sup>2</sup>, PVC GREY  
S20 = 0.34mm<sup>2</sup>, PVC YELLOW  
P03 = 0.34mm<sup>2</sup>, PUR BLACK  
P82 = 0.34mm<sup>2</sup>, PUR ORANGE  
K05 = 0.34mm<sup>2</sup>, TPE YELLOW  
H09 = 0.34mm<sup>2</sup>, PUR BLACK

UNIT:  
M = METER  
F = FEET

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

OVERMOULD COLOR:  
BLANK = YELLOW  
A = GREY  
G = BLACK

COUPLING NUT:  
BLANK = STANDARD  
1 = NIERDZEWNA HEX / SS  
5 = DERLIN  
7 = TEFLON  
9 = KNU/HEX  
H = 2 PCS. OF I/D CARRIER

## BOM

| ITEM No. | MOLEX P/N  | QTY. | DESCRIPTION                              | MATERIAL   | FINISH/COLOR        |
|----------|--|------|--|------------|---------------------|
| 1        | E03 - 1202090001<br>I03 - 1302190015<br>S20 - 1202092254<br>P03 - 1202090003<br>P82 - 1202090007<br>K05 - 1302090060<br>H09 - 1202094475 | -    | CABLE                                    | TPU        | BLACK               |
| 2        | 1202060002   | 6    | CONTACT FEMALE                           | BRASS      | GOLD OVER Ni-PLATED |
| 3        | 1202050001   | 4    | CONTACT MALE                             | BRASS      | GOLD OVER Ni-PLATED |
| 4        | 1202080003   | 2    | INSERT M12 FEMALE 3P                     | TPU        | BLACK               |
| 5        | 1202070007<br>5 - 1203290009<br>7 - 1202070014<br>9 - 1202070086   | 1    | COUPLING NUT M12 FEMALE                  | SEE MATRIX | -                   |
| 6        | 1202040002   | 1    | GASKET                                   | FPM        | RED                 |
| 7        | 1202080008   | 1    | INSERT M12 MALE 4P                       | PUR        | BLACK               |
| 8        | 1202070008<br>5 - 1203290004<br>7 - 1202070068<br>9 - 1202070088   | 1    | COUPLING NUT M12 MALE                    | BRASS      | Ni-PLATED           |
| 9        | 899921504<br>967550209   | -    | OVERMOULD M12                            | TPU        | YELLOW              |
| 10       | 1302190015   | -    | OVERMOULD ILS                            | PVC        | YELLOW              |
| 10       | 1203120439   | 1    | CENTRE SPACER                            | PVC        | YELLOW              |
| 11       | 0908486995   | 1    | STANDARD LABEL                           | VINYL      | YELLOW              |
| 12       | 859993604  | 1    | LABEL A                                  | VINYL      | WHITE               |
| 13       | 859993605  | 1    | LABEL B                                  | VINYL      | WHITE               |
| 14       | 1203010001   | 2    | ID CARRIER - PATRZ UWAGA 3<br>SEE NOTE 3 | PVC        | TRANSPARENT         |

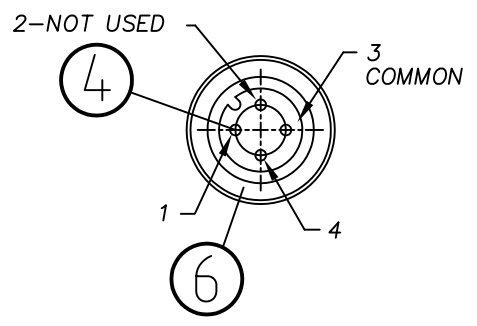
SEE MATRIX

## PART LIST

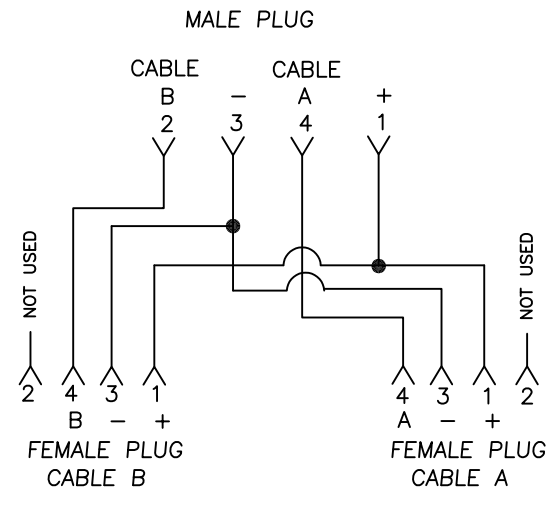
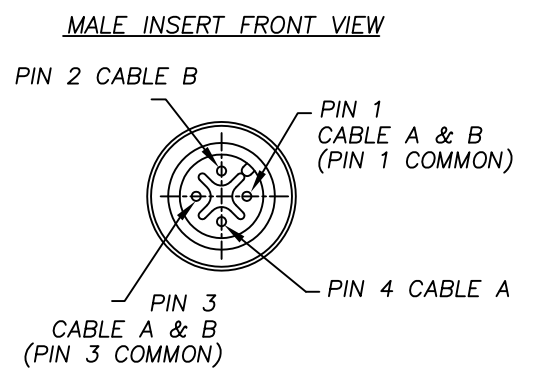
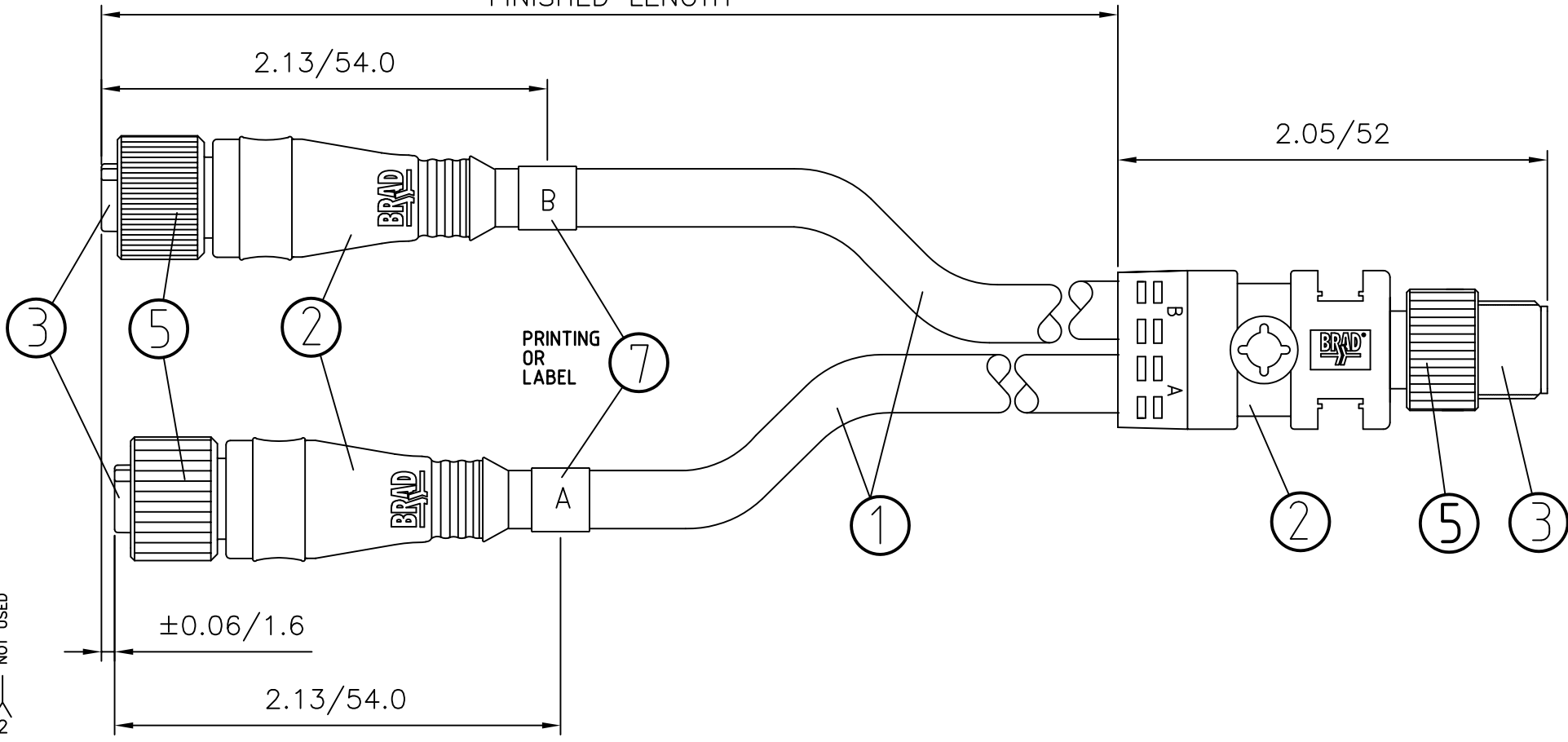
| Lp. | MOLEX PN   | ENGINEERING No. | L [mm]   | Lp. | MOLEX PN   | ENGINEERING No. | L [mm]    |
|-----|------------|-----------------|----------|-----|------------|-----------------|-----------|
| 1   | 1200090087 | 884A30E03M010   | 1000+56  | 24  | 1200090093 | 884A30P03M030   | 3000+89   |
| 2   | 1200090088 | 884A30E03M0205  | 2000+89  | 25  | 1200688018 | 884A30P03M005   | 500+45    |
| 3   | 1200090089 | 884A30E03M0505  | 5000+156 | 26  | 1200688019 | 884A30P03M006   | 600+45    |
| 4   | 1200090090 | 884A30E03M0755  | 7500+317 | 27  | 1200688020 | 884A30P03M010   | 1000+56   |
| 5   | 1200685006 | 884A30E03M030   | 3000+89  | 28  | 1200688021 | 884A30P03M050   | 5000+165  |
| 6   | 1200685027 | 884A30E03M006   | 600+45   | 29  | 1200698157 | 884A30P03M006H  | 600+45    |
| 7   | 1200685028 | 884A30E03M020   | 2000+89  | 30  | 1200688270 | 884A30P03M100   | 10000+317 |
| 8   | 1200688013 | 884A30E03M015   | 15000+56 | 31  | 1200090094 | 884A30P82M003   | 300+19    |
| 9   | 1200688015 | 884A30E03M050   | 5000+165 | 32  | 1200090095 | 884A30P82M0067  | 600+45    |
| 10  | 1200688096 | 884A30E03M003   | 300+19   | 33  | 1200685023 | 884A30P82M0037  | 300+19    |
| 11  | 1200688152 | 884A30E03M002   | 200+19   | 34  | 1200688127 | 884A30P82M0107  | 1000+56   |
| 12  | 1200688155 | 884A30E03M002H  | 200+19   | 35  | 1200680196 | 884A30K05M006   | 600+45    |
| 13  | 1200688158 | 884A30E03M040   | 4000+165 | 36  | 1200688153 | 884A30H09M020   | 2000+89   |
| 14  | 1200688168 | 884A30E03M070   | 7000+165 | 37  | 1200688154 | 884A30H09M040   | 4000+165  |
| 15  | 1200685007 | 884A30I03M003   | 300+19   | 38  | 1200688169 | 884A30H09M005   | 500+45    |
| 16  | 1200685030 | 884A30I03M020   | 2000+89  | 39  | 1200688214 | 884A30H09M0039  | 300+19    |
| 17  | 1200688016 | 884A30I03M010   | 1000+56  | 40  | 1200688138 | 884A30H09M003   | 300+19    |
| 18  | 1200688017 | 884A30I03M030   | 3000+89  | 41  | 1200688143 | 884A30H09M010   | 1000+56   |
| 19  | 1200688025 | 884A30S20M010H  | 1000+56  | 42  | 1200688144 | 884A30H09M050   | 5000+165  |
| 20  | 1200688136 | 884A30S20M003H  | 300+19   | 43  | 1200680195 | 884A30K05M003   | 300+19    |
| 21  | 1200688139 | 884A30S20M005H  | 500+45   |     |            |                 |           |
| 22  | 1200090091 | 884A30P03M003   | 300+19   |     |            |                 |           |
| 23  | 1200090092 | 884A30P03M020   | 2000+89  |     |            |                 |           |

|  |   |   |                                    |                                 |
|--|---|---|------------------------------------|---------------------------------|
| FUNCTIONAL SYMBOLS                                   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |                                    |                                 |
|  | $\nabla_A = 0$<br>$\nabla_E = 0$<br>$\nabla_P = 0$  | DIMENSION UNITS: <b>mm</b><br>SCALE: <b>1:1</b> |                                    |                                 |
| DIVISIONAL SYMBOLS                                   | GENERAL TOLERANCES (UNLESS SPECIFIED)   |   | EC NO: 707539                      |                                 |
|  | ANGULAR TOL ± °   |   | DRWN: RSCHIEBER 2022/05/20         |                                 |
|  | 4 PLACES ±  |   | CHK'D: RSILLER 2022/05/20          |                                 |
|  | 3 PLACES ±  |   | APPR: RSILLER 2022/05/20           |                                 |
| 2 PLACES ±   |   | INITIAL REVISION:                               |                                    |                                 |
| 1 PLACE ±  |   | DRWN: AKONDRACIUK 2018/08/25                    |                                    |                                 |
| 0 PLACES ±   |   | APPR: MIWASIECZKO 2018/08/29                    |                                    |                                 |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |   | THIRD ANGLE PROJECTION                          | DRAWING: <b>A3-SIZE</b>            | SERIES: <b>120009</b>           |
|  |   |   | MATERIAL NUMBER: <b>SEE TABLE</b>  | CUSTOMER: <b>GENERAL MARKET</b> |
| DOCUMENT STATUS: P1                                  |   | RELEASE DATE: 2022/05/20 09:56:11               | DOCUMENT NUMBER: <b>1200090087</b> | DOC TYPE: PSD                   |
|  |   |   | DOC PART: 000                      | REVISION: <b>A5</b>             |
|  |   |   | SHEET NUMBER: <b>2 OF 2</b>        |                                 |

FEMALE INSERT FRONT VIEW (2x)



FINISHED LENGTH



WIRING SCHEMATIC

CONNECTOR SPECIFICATION:

|                       |  |
|-----------------------|--|
| VOLTAGE RATING        | 300 V  |
| AMPERAGE RATING       | max. 4 AMPS                                      |
| PROTECTION            | IP67   |
| OPERATING TEMPERATURE | FLEXING: -5°C TO +80°C<br>STATIC: -30°C TO +80°C |
| UL CERTIFICATION      | STYLE 2464                                       |
| CSA CERTIFICATIONS    | I/II A/B 80°/300V                                |

| MATERIAL NUMBER | ENGINEERING NUMBER | FINISHED LENGTH                 |
|-----------------|--------------------|---------------------------------|
| 1200688096      | 884A30E03M003      | 0.98' +0.75" -0 [0.3M +19.1 -0] |

| ITEM | COMPONENT  | MATERIAL     | FINISH           |
|------|--|--------------|------------------|
| 7    | LABLE  | MYLAR        | BLACK/YELLOW     |
| 6    | O-RING   | VITON        | RED              |
| 5    | COUPLER  | BRASS        | NICKEL PLATED    |
| 4    | PIN CONTACT  | COPPER ALLOY | GOLD OVER NICKEL |
| 3    | INSERT   | PUR          | BLACK            |
| 2    | OVERMOLD   | PVC          | YELLOW           |
| 1    | CABLE #22-3<br>(COPPER STRANDING)<br>3 CONDUCT. 300V | JACKET: PVC  | YELLOW           |

|   |                                |   |  |                                  |   |                        |
|---|--------------------------------|---|--|----------------------------------|---|------------------------|
| DESCRIPTION<br>EC NO: WEU2010-0362<br>DRWN: BBRAUCH 2010/02/16<br>CHKD: NS<br>APPR: NSTAUDIG 2010/02/18 | QUALITY SYMBOLS                | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE  | SCALE                            | DESIGN UNITS  | THIRD ANGLE PROJECTION |
|   | $\nabla = 0$<br>$\nabla C = 0$ | mm INCH<br>4 PLACES ±--- ±---<br>3 PLACES ±--- ±---<br>2 PLACES ±--- ±0.1<br>1 PLACE ±0.3 ±---<br>ANGULAR ± --- ° | IN/MM  | 2:1                              | METRIC  |                        |
|   |                                |   | DRAWN BY DATE<br>BBRAUCH 2010/02/16<br>CHECKED BY DATE<br>NS 2010/02/17<br>APPROVED BY DATE<br>NSTAUDIG 2010/02/18 | ILS-4P-2XFE-STR-M-STR<br>-XM-PVC |   |                        |
|   |                                |   | MATERIAL NO.<br>SEE TABLE  | MOLEX INCORPORATED               |   | SHEET NO.<br>1 OF 1    |
|   | 1                              | REV   | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS   | SIZE<br>A3                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        |