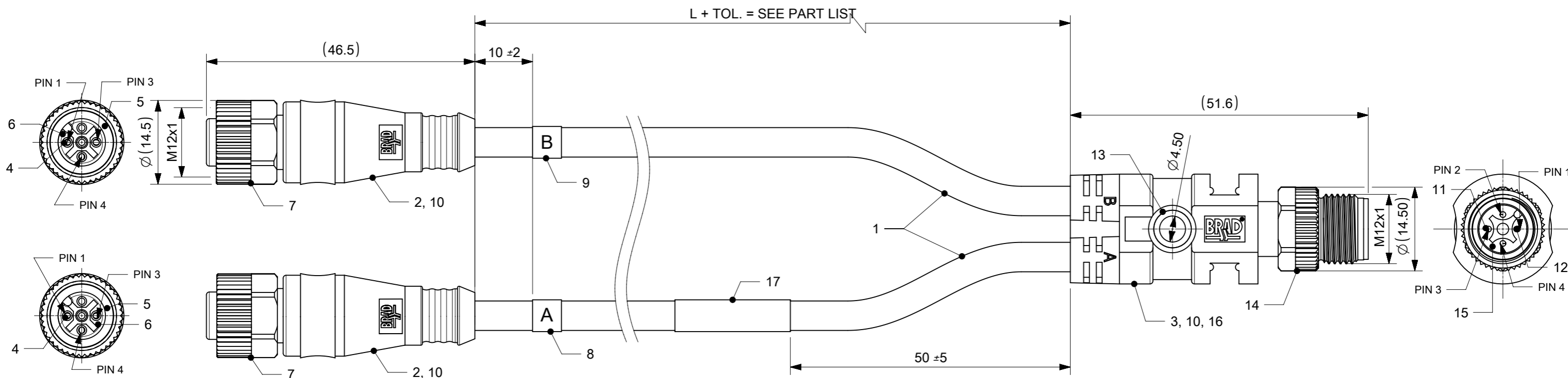
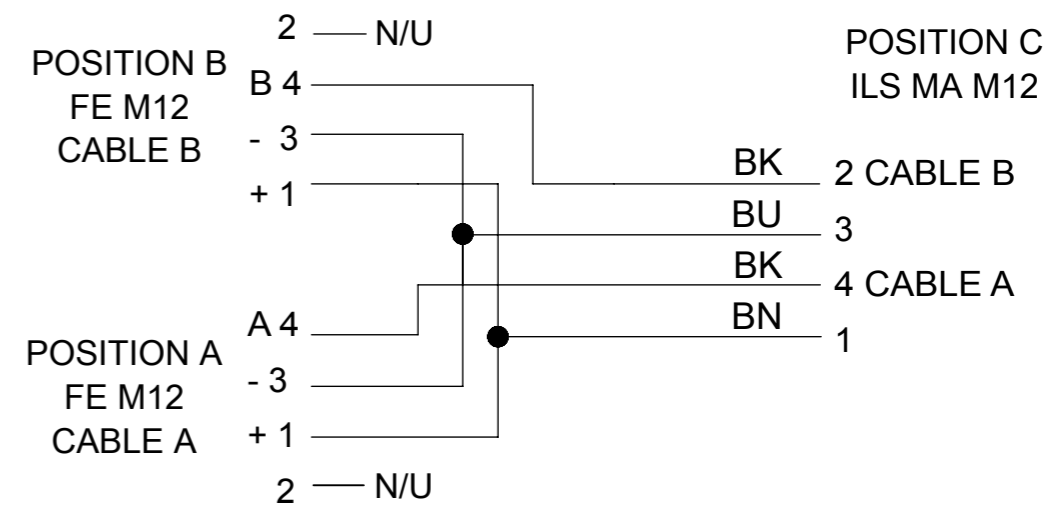


WIRING DIAGRAM



NOTES:  
 TEMPERATURE RANGE SEE TABLE ON SHEET 2  
 CONTACT CURRENT RATING 4A  
 VOLTAGE RATING 250V  
 PROTECTION CLASS IP67

|         |   |       |  |            |                        |                 |                          |
|---------|---|-------|--|------------|------------------------|-----------------|--------------------------|
| SYMBOLS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |       | CURRENT REV DESC:                                    |            |                        |                 |                          |
|         | DIMENSION UNITS   | SCALE |  |            |                        |                 |                          |
| ▽ = 0   | mm  | 3:2   | DRWN: MMATLA   | 2018/11/07 | CHK'D: DSTACHOWIAK     | 2018/11/07      | PRODUCT CUSTOMER DRAWING |
| ▽ = 0   | GENERAL TOLERANCES (UNLESS SPECIFIED)   |       | APPR: DSTACHOWIAK                                    | 2018/11/07 | INITIAL REVISION:      |                 |                          |
| ▽ = 0   | ANGULAR TOL ± °   |       | DRWN: JMARSZALEK                                     |            | 2014/11/15             | DOCUMENT NUMBER |                          |
| ▽ = 0   | 4 PLACES ±  |       | APPR: MIWASIECZKO                                    |            | 2015/06/03             | SD-120068-002   |                          |
| ▽ = 0   | 3 PLACES ±  |       | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |            | THIRD ANGLE PROJECTION | DRAWING         | DOC TYPE                 |
| ▽ = 0   | 2 PLACES ± 0.05   |       | A3-SIZE  |            | SERIES                 | 120068          | PSD                      |
| ▽ = 0   | 1 PLACE ± 0.3   |       | SEE PART LIST/SHEET 2                                |            | MATERIAL NUMBER        | GENERAL MARKET  | DOC PART                 |
| ▽ = 0   | 0 PLACES ± 0.5  |       | 1 OF 2   |            | CUSTOMER               | 1 OF 2          | REVISION                 |
| □ = 0   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |       | 1 OF 2   |            | SHEET NUMBER           |                 |                          |

# PART No MATRIX

**8 8 4 A 3 0 B 3 0 M X X X**

|                            |                       |  |   |                     |   |
|----------------------------|-----------------------|--|---|---------------------|---|
| 88 = M12x1<br>Double ended | Poles:<br>4 = 4 Poles | Heads style:<br>A30 = ILS plug Male<br>2x plug Female straight | Cable:<br>B30 = 0.34mm <sup>2</sup> TPU Black | Units:<br>M = Meter | Length<br>Examples:<br>005 = 0.5 m<br>010 = 1 m<br>020 = 2 m<br>050 = 5 m<br>100 = 10 m<br>150 = 15 m<br>200 = 20 m |
|----------------------------|-----------------------|--|---|---------------------|---|

## CABLE SPECIFICATION


| CABLE TYPE | WIRES No | WIRE GAUGE          | CABLE JACKET    | UL          | CSA | TEMP. RANGE STATIC BENDING RADIUS STATIC | TEMP. RANGE DYNAMIC BENDING RADIUS DYNAMIC | DRAG CHAIN                | OTHER INFORMATION    |
|------------|----------|---------------------|-----------------|-------------|-----|--|--|---------------------------|----------------------|
| B30        | 3        | 0.34mm <sup>2</sup> | TPU BASED BLACK | STYLE 21215 | YES | -40°C to +90°C 5xD                       | -25°C to +80°C 7.5xD                       | 5 MILLION CYCLES, AT 25°C | WELD SLAG RESISTANCE |

## BOM

| ITEM | QTY | DESCRIPTION                 | MATERIAL | FINISH/COLOR     |
|------|-----|-----------------------------|----------|------------------|
| 17   |     | LABEL                       | VINYL    | YELLOW           |
| 16   | -   | HEAT-SHRINK                 | -        | CLEAR            |
| 15   | 1   | INSERT M12 MALE 4P          | PUR      | BLACK            |
| 14   | 1   | NUT M12 MALE                | BRASS    | NICKEL           |
| 13   | 1   | CENTRE SPACER               | -        | GREY             |
| 12   | 2   | CONTACT 10 MALE 0.34-0.75   | BRASS    | GOLD OVER NICKEL |
| 11   | 2   | CONTACT 10 MALE 0.14-0.5    | BRASS    | GOLD OVER NICKEL |
| 10   | -   | CHEMLOK                     | -        | -                |
| 9    | 1   | LABEL;B B-500 WMB           | -        | BLACK            |
| 8    | 1   | LABEL;A B-500 WMA           | -        | BLACK            |
| 7    | 2   | M12 MALE COUPLING NUT       | BRASS    | NICKEL           |
| 6    | 2   | M12 INSERT 3P FEMALE        | PUR      | BLACK            |
| 5    | 2   | GASKET                      | FPM      | RED              |
| 4    | 6   | CONTACT 10 FEMALE           | BRASS    | GOLD OVER NICKEL |
| 3    | -   | MOULDING MATERIAL           | PVC      | BLACK            |
| 2    | -   | MOULDING MATERIAL           | TPU      | BLACK            |
| 1    | -   | CABLE 3X0.34mm <sup>2</sup> | TPU      | BK               |
| ITEM | QTY | DESCRIPTION                 | MATERIAL | FINISH/COLOR     |

## PART LIST

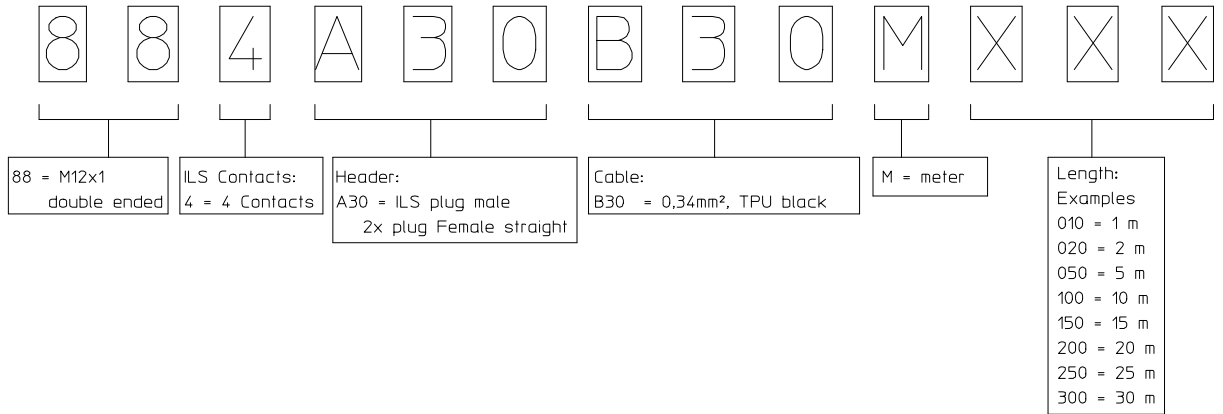
| MOLEX PN   | ENGINEERING No | L + TOL.     |
|------------|----------------|--------------|
| 1200688193 | 884A30B30M006  | 600 +40/-0   |
| 1200688194 | 884A30B30M010  | 1000 +40/-0  |
| 1200688195 | 884A30B30M020  | 2000 +60/-0  |
| 1200688196 | 884A30B30M050  | 5000 +60/-0  |
| 1200688244 | 884A30B30M030  | 3000 +60/-0  |
| 1200688245 | 884A30B30M100  | 10000 +80/-0 |

|   |   |  |   |  |
|---|---|--|---|--|
| <b>SYMBOLS</b><br>DIMENSION UNITS: mm<br>SCALE: 1:1<br>GENERAL TOLERANCES (UNLESS SPECIFIED)<br>ANGULAR TOL: ± °<br>4 PLACES: ±<br>3 PLACES: ±<br>2 PLACES: ± 0.05<br>1 PLACE: ± 0.3<br>0 PLACES: ± 0.5<br>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS<br>THIRD ANGLE PROJECTION<br>DRAWING: A3-SIZE<br>SERIES: 120068 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION<br>CURRENT REV DESC:<br>EC NO: 607243<br>DRWN: MMATLA 2018/11/07<br>CHK'D: DSTACHOWIAK 2018/11/07<br>APPR: DSTACHOWIAK 2018/11/07<br>INITIAL REVISION:<br>DRWN: JMARSZALEK 2014/11/15<br>APPR: MIWASIECZKO 2015/06/03 |  | <br>ILS M12 M12 4P AC MA TPU<br>4P AC FE STR XM DE |  |
|   | PRODUCT CUSTOMER DRAWING<br>DOCUMENT NUMBER: SD-120068-002<br>DOC TYPE: PSD<br>DOC PART: 001<br>REVISION: B3  |  |   |  |
|   | MATERIAL NUMBER: SEE PART LIST/SHEET 2<br>CUSTOMER: GENERAL MARKET<br>SHEET NUMBER: 2 OF 2  |  |   |  |
|   | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |  |   |  |

**PART LIST**

| MOLEX PN   | ENGINEERING No. | CABLE LENGTH "L" |
|------------|-----------------|------------------|
| 1200688193 | 884A30B30M006   | 0.6m             |
| 1200688194 | 884A30B30M010   | 1m               |
| 1200688195 | 884A30B30M020   | 2m               |
| 1200688196 | 884A30B30M050   | 5m               |
| 1200688244 | 884A30B30M030   | 3m               |
| 1200688245 | 884A30B30M100   | 10m              |

**NUMERICAL CODE** (Available parts see PART LIST table. Other parts available upon request).



**CABLE SPECIFICATION**

| CABLE TYPE | WIRES NO. | WIRE GAUGE          | CABLE JACKET    | UL          | CSA | Temp. range static<br>Bending radius static | Temp. range dynamic<br>Bending radius dynamic | Drag chain                | Other information    |
|------------|-----------|---------------------|-----------------|-------------|-----|---|---|---------------------------|----------------------|
| B30        | 3         | 0.34mm <sup>2</sup> | TPU Based Black | STYLE 21215 | Yes | -40°C to +90°C 5xD                          | -25°C to +80°C 7.5xD                          | 5 million cycles, at 25°C | Weld Slag Resistance |

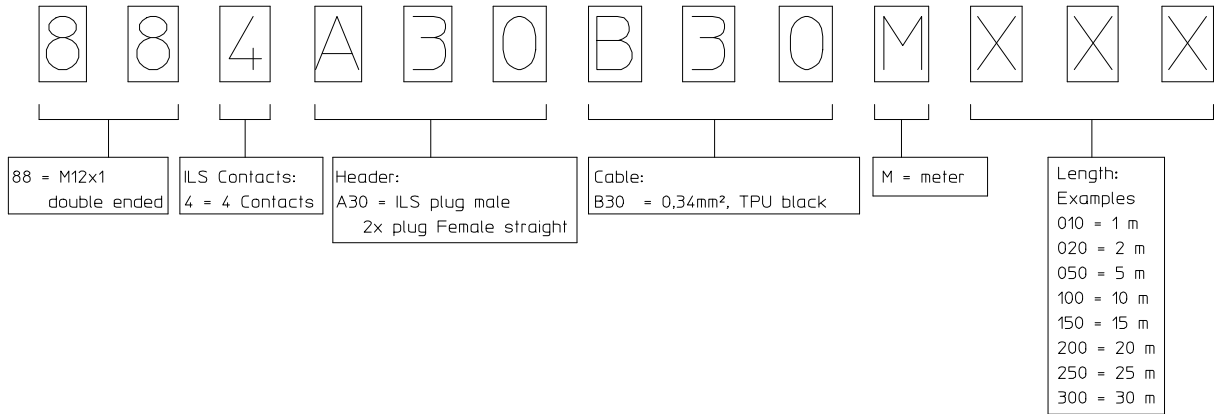
For Raw Cable Specification see SD-120209-001

|   |                    |  |  |   |                     |  |                        |  |
|---|--------------------|--|--|---|---------------------|--|------------------------|--|
| Added new PNs<br>EC NO: IPG2017-0591<br>DRWN: JMARSZALEK 2016/12/14<br>CHKD: FGAIK 2016/12/14<br>APPR: RSJLLER 2016/12/15 | DESCRIPTION<br>REV | QUALITY SYMBOLS  | GENERAL TOLERANCES (UNLESS SPECIFIED)  | DIMENSION STYLE<br><b>MM ONLY</b>   | SCALE<br>-          | DESIGN UNITS<br>METRIC                         | THIRD ANGLE PROJECTION |  |
|   |                    | ▼=0<br>□=0   | mm INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.05 ± ---<br>1 PLACE ± 0.3 ± ---<br>0 PLACE ± 0.5 ± --- | DRAWN BY DATE<br>JMARSZALEK 2014/11/15<br>CHECKED BY DATE<br>FGAIK 2014/11/15<br>APPROVED BY DATE<br>MIWASIECZKO 2015/06/03 | TITLE               | ILS M12 M12 4P AC MA TPU<br>4P AC FE STR XM DE |                        |  |
|   |                    | ANGULAR ± --- °<br>DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS  | SEE PART LIST<br>MATERIAL NO.<br>SIZE<br>A3  | DOCUMENT NO.<br>SD-120068-002   | SHEET NO.<br>2 OF 2 |  |                        |  |
|   |                    | <b>molex</b>   |  |   |                     |  |                        |  |
|   |                    | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |   |                     |  |                        |  |

PART LIST

| MOLEX PN   | ENGINEERING No. | CABLE LENGTH "L" |
|------------|-----------------|------------------|
| 1200688193 | 884A30B30M006   | 0.6m             |
| 1200688194 | 884A30B30M010   | 1m               |
| 1200688195 | 884A30B30M020   | 2m               |
| 1200688196 | 884A30B30M050   | 5m               |
| 1200688244 | 884A30B30M030   | 3m               |
| 1200688245 | 884A30B30M100   | 10m              |

NUMERICAL CODE (Available parts see PART LIST table. Other parts available upon request).



CABLE SPECIFICATION

| CABLE TYPE | WIRES NO. | WIRE GAUGE          | CABLE JACKET    | UL          | CSA | Temp. range static<br>Bending radius static | Temp. range dynamic<br>Bending radius dynamic | Drag chain                | Other information    |
|------------|-----------|---------------------|-----------------|-------------|-----|---|---|---------------------------|----------------------|
| B30        | 3         | 0.34mm <sup>2</sup> | TPU Based Black | STYLE 21215 | Yes | -40°C to +90°C 5xD                          | -25°C to +80°C 7.5xD                          | 5 million cycles, at 25°C | Weld Slag Resistance |

For Raw Cable Specification see SD-120209-001

|   |                    |  |  |   |            |  |                        |  |
|---|--------------------|--|--|---|------------|--|------------------------|--|
| Added new PNs<br>EC NO: IPG2017-0591<br>DRWN: JMARSZALEK 2016/12/14<br>CHKD: FGAIK 2016/12/14<br>APPR: RSILLER 2016/12/15 | DESCRIPTION<br>REV | QUALITY SYMBOLS  | GENERAL TOLERANCES (UNLESS SPECIFIED)  | DIMENSION STYLE<br>MM ONLY  | SCALE<br>- | DESIGN UNITS<br>METRIC                         | THIRD ANGLE PROJECTION |  |
|   |                    | ▼=0<br>◻=0   | mm INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.05 ± ---<br>1 PLACE ± 0.3 ± ---<br>0 PLACE ± 0.5 ± --- | DRAWN BY DATE<br>JMARSZALEK 2014/11/15<br>CHECKED BY DATE<br>FGAIK 2014/11/15<br>APPROVED BY DATE<br>MIWASIECZKO 2015/06/03 | TITLE      | ILS M12 M12 4P AC MA TPU<br>4P AC FE STR XM DE |                        |  |
|   |                    | ANGULAR ± --- °<br>DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS  | SEE PART LIST  | MATERIAL NO. DOCUMENT NO.<br>SD-120068-002  |            | SHEET NO.<br>2 OF 2                            |                        |  |
|   |                    | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |   |            |  |                        |  |
|   |                    | B1   |  |   |            | A3   |                        |  |