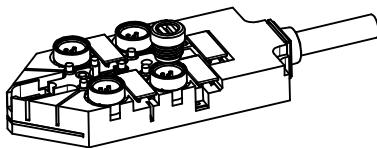
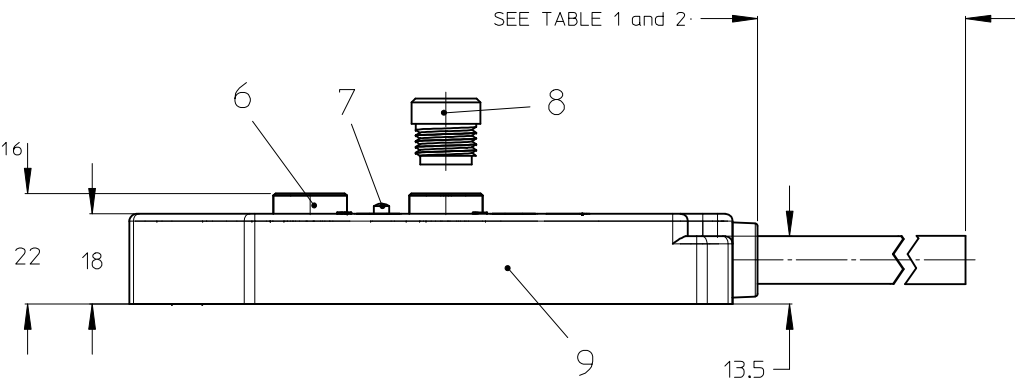
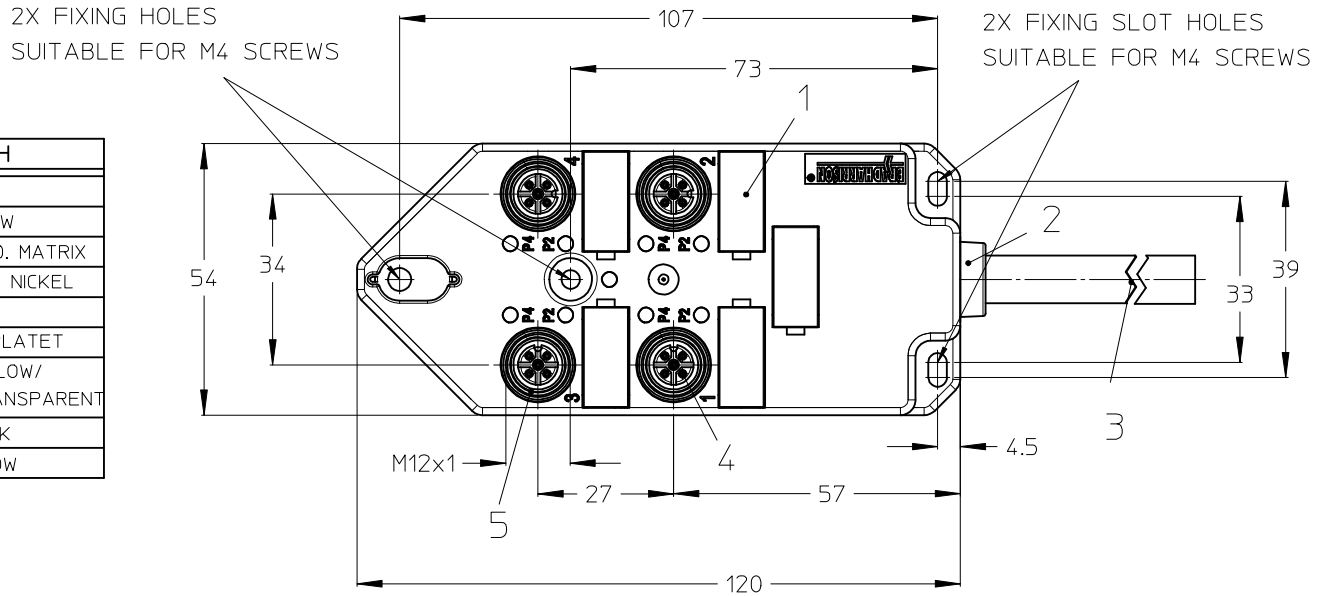


# TABLE 1 BILL OF MATERIAL

| ITEM | QTY | DESCRIPTION    | MATERIAL                        | FINISH                                  |
|------|-----|----------------|---------------------------------|---|
| 1    | 5   | LABEL          | ABS                             | WHITE                                   |
| 2    | 1   | CABLE PLATE    | PBT                             | YELLOW                                  |
| 3    | 1   | CABLE          | SEE ENG. NO. MATRIX             | SEE ENG. NO. MATRIX                     |
| 4    | 20  | CONTACT        | BRASS                           | GOLD OVER NICKEL                        |
| 5    | 4   | O-RING         | FPM                             | RED                                     |
| 6    | 4   | SHELL          | BRASS                           | NICKEL PLATET                           |
| 7    | 9   | LED            | NON LED = PBT/<br>WITH LED = PA | NON LED=YELLOW/<br>WITH LED=TRANSPARENT |
| 8    | 2   | PROTECTING CAP | PP                              | BLACK                                   |
| 9    | 1   | HOUSING        | PBT                             | YELLOW                                  |

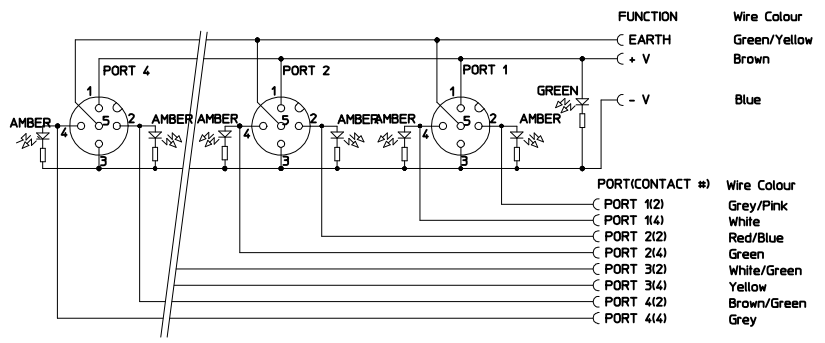
# GENERAL CHARACTERISTICS

NOMINAL VOLTAGE: 10-30 V DC  
 POLLUTION DEGREE: 3  
 RATED CURRENT: 4 A PER PORT / 12 A MAX: TOTAL  
 CONTACT RESISTANCE: ≤ 5 mOHM  
 INSULATION RESISTANCE: > 10<sup>9</sup> OHM  
 IP DEGREE OF PROTECTION: IP 67  
 IP 68 REFER TO TEST SUMMARY TS-120005-016  
 TEMPERATURE RANGE: -25°C to + 85°C  
 (BOX ONLY)  
 FLAMMABILITY:  
 Insert: V0  
 HOUSING: V0  
 POTTING MATERIAL: V0

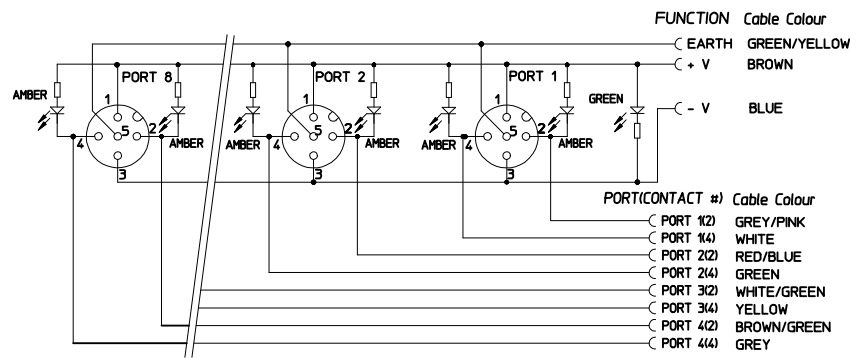


|  |   |  |   |  |  |
|--|---|--|---|--|--|
| ENTER DESCRIPTION<br>EC NO: IFG2014-0267<br>DRW:ULETTENMEIER 2013/09/24<br>CHK:RSILLER 2013/09/25<br>APPR:CBURGER 2013/10/07 | QUALITY SYMBOLS<br>▽=0<br>▽=0   | GENERAL TOLERANCES (UNLESS SPECIFIED)<br>mm INCH<br>4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.05 ± ---<br>1 PLACE ± 0.10 ± ---<br>0 PLACE ± --- ± ---<br>ANGULAR ± .5 °<br>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DIMENSION STYLE<br>MM ONLY<br>DRAWN BY DATE<br>ULETTENMEIER 2013/07/02<br>CHECKED BY DATE<br>RSILLER 2013/07/10<br>APPROVED BY DATE<br>CBURGER 2013/07/17 | SCALE<br>1:1<br>DESIGN UNITS<br>METRIC<br>THIRD ANGLE PROJECTION | TITLE<br>MPIS M12 PNP NPN NOS 5P<br>4PT AC FE STR XM |
|  | MATERIAL NO.<br>SEE TABLE 2   | DOCUMENT NO.<br>SD-120114-093  | SHEET NO.<br>1 OF 3   |  |  |
|  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |   |  |  |
|  |   |  |   |  |  |

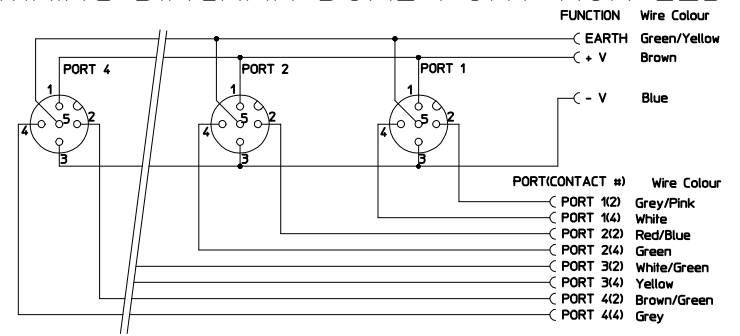
### WIRING DIAGRAM DUAL PORT PNP



### WIRING DIAGRAM DUAL PORT NPN



### WIRING DIAGRAM DUAL PORT NON LED



|  |                                      |  |                      |   |                      |  |   |                                       |  |
|--|--------------------------------------|--|----------------------|---|----------------------|--|---|---------------------------------------|--|
| <b>ENTER DESCRIPTION</b><br>EC NO: IPG2014-0267<br>DRW:ULETTEMEIER 2013/09/24<br>CHY:KDRSILLER 2013/09/25<br>APPR:CBURGER 2013/10/07 | <b>QUALITY SYMBOLS</b><br>▽=0<br>▽=0 | <b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b> |                      | <b>DIMENSION STYLE</b><br>MM ONLY   | <b>SCALE</b><br>1:1  | <b>DESIGN UNITS</b><br>METRIC          | THIRD ANGLE PROJECTION                  |                                       |  |
|  |                                      | 4 PLACES ± --- ± ---                         | 3 PLACES ± --- ± --- | 2 PLACES ± 0.05 ± ---   | 1 PLACE ± 0.10 ± --- | 0 PLACE ± --- ± ---                    | DRAWN BY DATE<br>ULETTEMEIER 2013/07/02 | CHECKED BY DATE<br>RSILLER 2013/07/10 | TITLE<br>MPIS M12 PNP NPN NOS 5P<br>4PT AC FE STR XM |
|  |                                      | ANGULAR ± .5 °                               |                      | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |                      | APPROVED BY DATE<br>CBURGER 2013/07/17 | MATERIAL NO.<br>SEE TABLE 2             |                                       | DOCUMENT NO.<br>SD-120114-093                        |
|  |                                      | SIZE<br>A3                                   |                      | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                      |  |   |                                       |  |

TABLE 2

| MOLEX P/N  | ENG. NO.       | LED |
|------------|----------------|-----|
| 1200550604 | BTY405P-FBE-10 | YES |
| 1200550671 | BTY405P-FBI-10 | YES |
| 1200550696 | BTY405P-FBI-15 | YES |
| 1200550737 | BTY405P-FBE-20 | YES |
| 1200550911 | BTY405P-FBP-30 | YES |
| 1201140037 | BTY405N-FBP-05 | YES |
| 1201140038 | BTY405N-FBP-10 | YES |
| 1201140039 | BTY405P-FBP-05 | YES |
| 1201140040 | BTY405P-FBP-10 | YES |
| 1201140041 | BTY405P-FBP-15 | YES |
| 1201140042 | BTY4050-FBP-05 | NO  |
| 1201140043 | BTY4050-FBP-10 | NO  |
| 1201140044 | BTY4050-FBP-15 | NO  |
| 1201140186 | BTY405N-FBP-25 | YES |

| MOLEX P/N  | ENG. NO.         | LED |
|------------|------------------|-----|
| 1201140187 | BTY405P-FBE-05   | YES |
| 1201140188 | BTY405P-FBP-20   | YES |
| 1201140189 | BTY4050-FBE-05   | NO  |
| 1201145036 | BTY405P-FBP-05WE | YES |
| 1201145037 | BTY405P-FBP-10WE | YES |
| 1201148028 | BTY405P-FBP-15-1 | YES |
|            |                  |     |
|            |                  |     |
|            |                  |     |
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|            |                  |     |
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|            |                  |     |

ENG. NO. MATRIX:

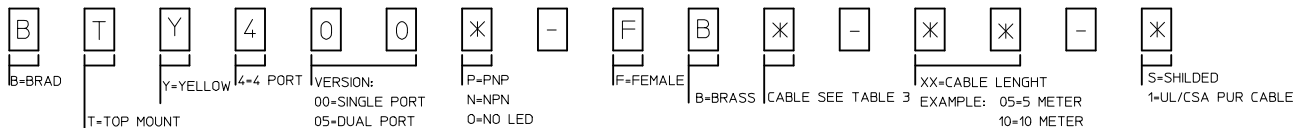


TABLE 3

| CABLE                  | TEM. RANGE STATISCH | TEM. RANGE FLEXIBLE | CABLE DIAMETER (MM) SIGLE (4POLE) 4/6/8 PORT | CABLE DIAMETER (MM) DUAL (5POLE) 4/6/8 PORT | DRAG CHAIN      | UL STYLE |
|------------------------|---------------------|---------------------|--|---|-----------------|----------|
| P=PUR/PVC/Black        | -30°C TO +90°C      | -5°C TO +90°C       | 8,4 ±0.2 / 9,5±0.2 / 9,5 ±0.2                | 9,5 ±0.2 / 9,8 ±0.2 / 11,4 ±0.2             | 1,5 MIO. CYCLES | -        |
| P=PUR/PVC/Black/UL/CSA | -25°C TO +90°C      | -                   | 7,5 ± 0,2                                    | 8,6 ± 0,2                                   | -               | -        |
| N=PVC/GREY             | -                   | -10°C TO +80°C      | 8,4 ± 0,2                                    | 9,5 ± 0,2                                   | 10 MIO. CYCLES  | 2464     |
| I=CEI/GREY             | -5°C TO +70°C       | -                   | 8,4 ± 0,2                                    | 9,5 ± 0,2                                   | -               | -        |
| E=PVC/YELLOW           | -5°C TO +70°C       | -                   | 8,4 ± 0,2                                    | 9,5 ± 0,2                                   | -               | -        |

|  |                                      |  |   |   |                                       |   |                               |  |  |
|--|--------------------------------------|--|---|---|---------------------------------------|---|-------------------------------|--|--|
| <b>ENTER DESCRIPTION</b><br>EC NO: IPG2014-0267<br>DRAWN: JULETTENMEIER 2013/09/24<br>CHKD: RSILLER 2013/09/25<br>APPR: CBURGER 2013/10/07 | <b>QUALITY SYMBOLS</b><br>▽=0<br>▽=0 | <b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>   |   | <b>DIMENSION STYLE</b><br><b>MM ONLY</b>  | <b>SCALE</b><br>1:1                   | <b>DESIGN UNITS</b><br>METRIC                               | <b>THIRD ANGLE PROJECTION</b> |  |  |
|  |                                      | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± ---<br>2 PLACES ± 0.05 ± ---<br>1 PLACE ± 0.10 ± ---<br>0 PLACE ± --- ± --- | mm INCH<br>± --- ± ---<br>± 0.05 ± ---<br>± 0.10 ± ---<br>± --- ± --- | DRAWN BY DATE<br>JULETTENMEIER 2013/07/02 | CHECKED BY DATE<br>RSILLER 2013/07/10 | <b>TITLE</b><br>MPIS M12 PNP NPN NOS 5P<br>4PT AC FE STR XM |                               |  |  |
|  |                                      | ANGULAR ± .5 °   |   | APPROVED BY DATE<br>CBURGER 2013/07/17    | <b>molex</b>                          |   |                               |  |  |
|  |                                      | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   |   | MATERIAL NO.<br><b>SEE TABLE 2</b>        | DOCUMENT NO.<br>SD-120114-093         | SHEET NO.<br>3 OF 3   |                               |  |  |

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