

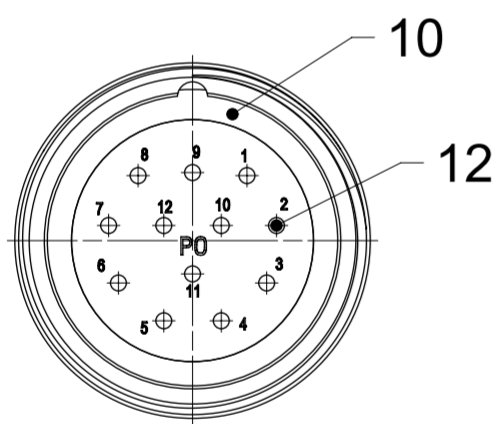
**TABLE 1**

| MOLEX P/N  | ENG. NO.        | CABLE LENGTH (mm) | LED |
|------------|-----------------|-------------------|-----|
| 1202510091 | BKB817P-FBW-003 | 300               | YES |
| 1202510092 | BKB817N-FBW-003 | 300               | YES |

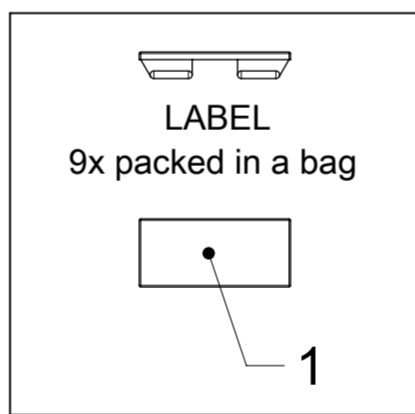
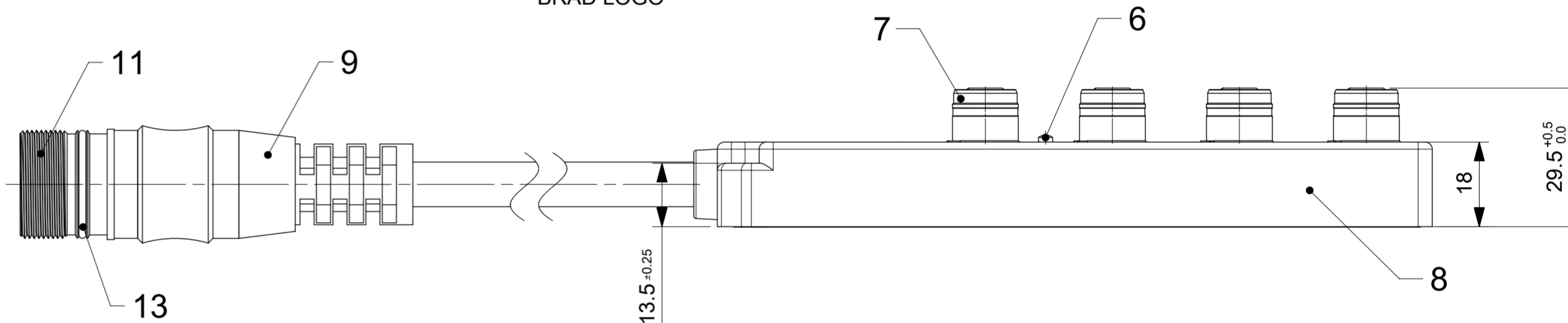
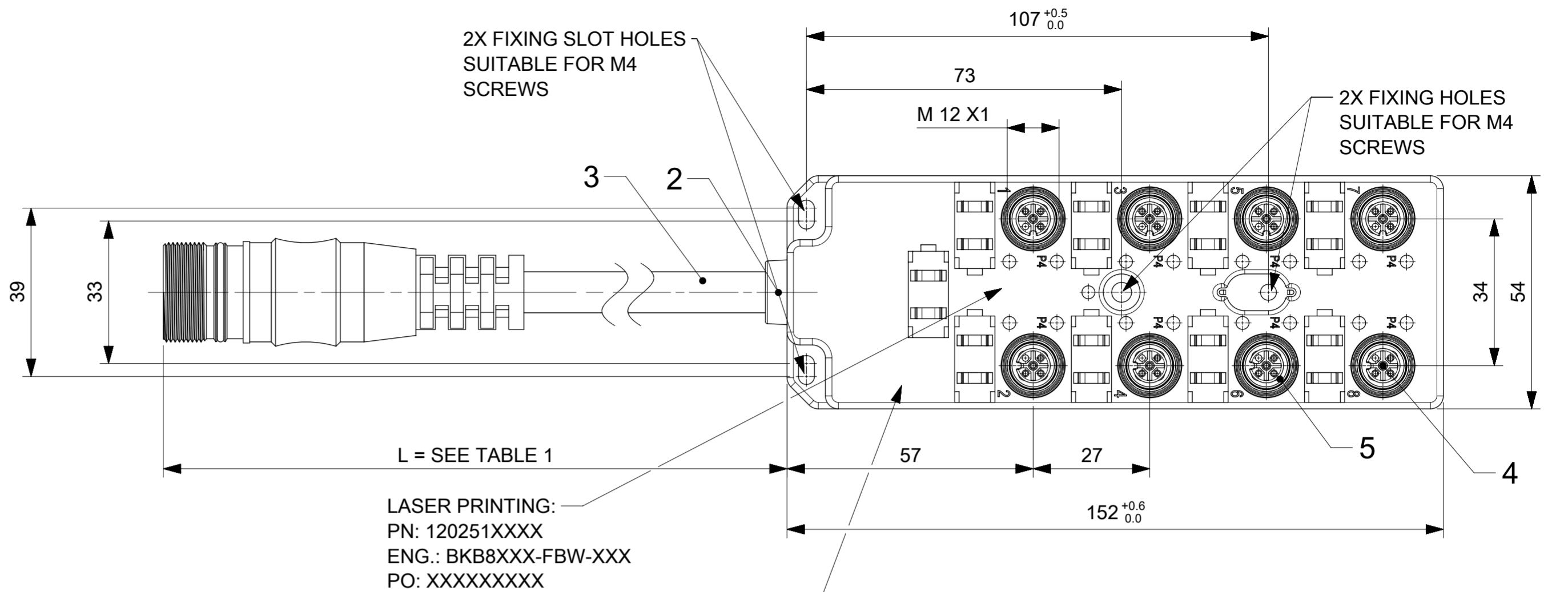
**TABLE 2 BILL OF MATERIAL**

| ITEM | DESCRIPTION | MATERIAL      | FINISH           |
|------|-------------|---------------|------------------|
| 1    | LABEL       | ABS           | WHITE            |
| 2    | CABLE PLATE | PBT           | BLACK            |
| 3    | CABLE       | TPU BASED     | BLACK            |
| 4    | CONTACT     | BRONZE        | GOLD OVER NICKEL |
| 5    | O-RING      | FPM           | RED              |
| 6    | LED         | NON LED = PA  | BLACK            |
|      |             | WITH LED = PA | TRANSPARENT      |
| 7    | SHELL       | BRASS         | NICKEL PLATED    |
| 8    | HOUSING     | PBT           | BLACK            |
| 9    | OVERMOLD    | PUR           | BLACK            |
| 10   | O-RING      | NBR           | BLACK            |
| 11   | SHELL       | BRASS         | NICKEL PLATED    |
| 12   | CONTACT     | BRONZE        | GOLD OVER NICKEL |
| 13   | O-RING      | NBR           | BLACK            |

**M23 12PIN FRONT VIEW**



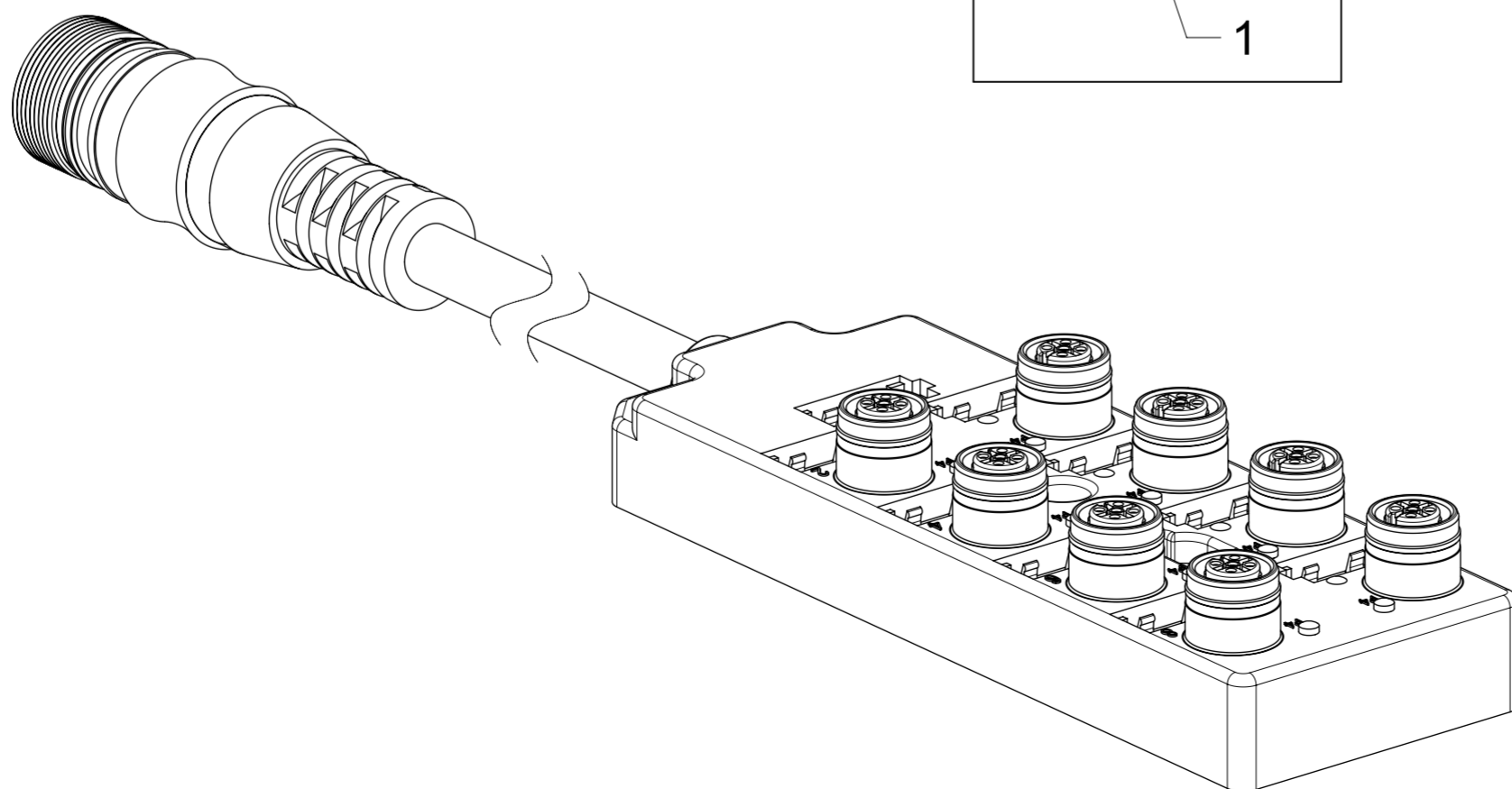
| PIN | COLOR        |
|-----|--------------|
| 1   | WHITE        |
| 2   | GREEN        |
| 3   | YELLOW       |
| 4   | GREY         |
| 5   | PINK         |
| 6   | RED          |
| 7   | BLACK        |
| 8   | VIOLET       |
| 9   | BLUE         |
| 10  | -            |
| 11  | BROWN        |
| 12  | YELLOW/GREEN |



**GENERAL CHARACTERISTICS:**

ELECTRICAL AND MECHANICAL DATA ACC. TO IEC 61076-2-101

NOMINAL VOLTAGE: 10-30 V DC  
 AMPERE RATING: 4 A PER PORT / 12 A MAX  
 AMPERE RATING WITH UL REGISTRATION: 3 A PER PORT / 9 A MAX  
 IP DEGREE OF PROTECTION: IP 67  
 TEMPERATURE RANGE: -25°C to + 85°C



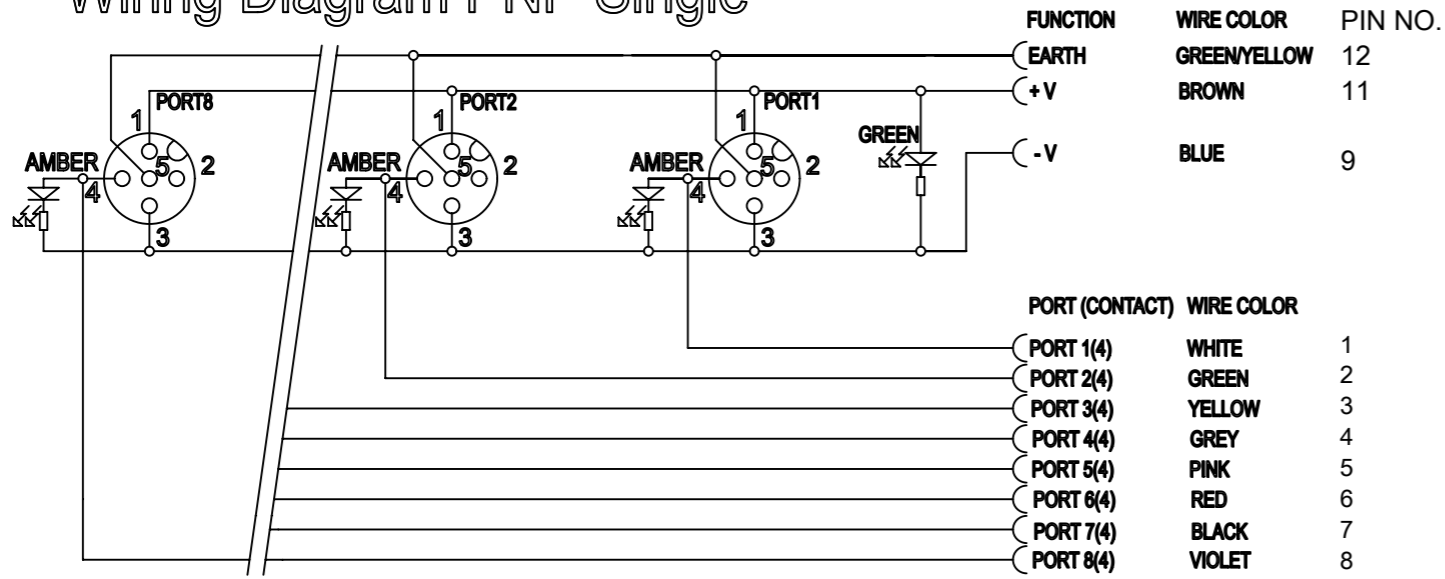
| DIMENSION UNITS                                      |        | SCALE   | CURRENT REV DESC: INITIAL RELEASE |                 |            |  |
|--|--------|---------|-----------------------------------|-----------------|------------|--|
| mm   |        | 1:1     |                                   |                 |            |  |
| GENERAL TOLERANCES (UNLESS SPECIFIED)                |        |         |                                   |                 |            |  |
| ANGULAR TOL  | ± 1.0° |         | EC NO:                            | 631635          |            |  |
| 4 PLACES   | ±      |         | DRWN:                             | MDHARMANTI      | 2020/01/28 |  |
| 3 PLACES   | ±      |         | CHK'D:                            | RSILLER         | 2020/02/05 |  |
| 2 PLACES   | ± 0.05 |         | APPR:                             | RSILLER         | 2020/02/05 |  |
| 1 PLACE  | ± 0.3  |         | INITIAL REVISION:                 |                 |            |  |
| 0 PLACES   | ± 0.5  |         | DRWN:                             | SSM             | 2019/01/04 |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |        |         | APPR:                             | RSILLER         | 2020/01/17 |  |
| THIRD ANGLE PROJECTION                               |        | DRAWING | SERIES                            | MATERIAL NUMBER | CUSTOMER   |  |
| A2-SIZE  |        | 120251  | SEE TABLE 1                       | GENERAL MARKET  |            |  |
| DOCUMENT NUMBER                                      |        |         | DOC TYPE                          | DOC PART        | REVISION   |  |
| 1202510091   |        |         | PSD                               | 000             | A1         |  |
| SHEET NUMBER   |        |         | 1 OF 2                            |                 |            |  |



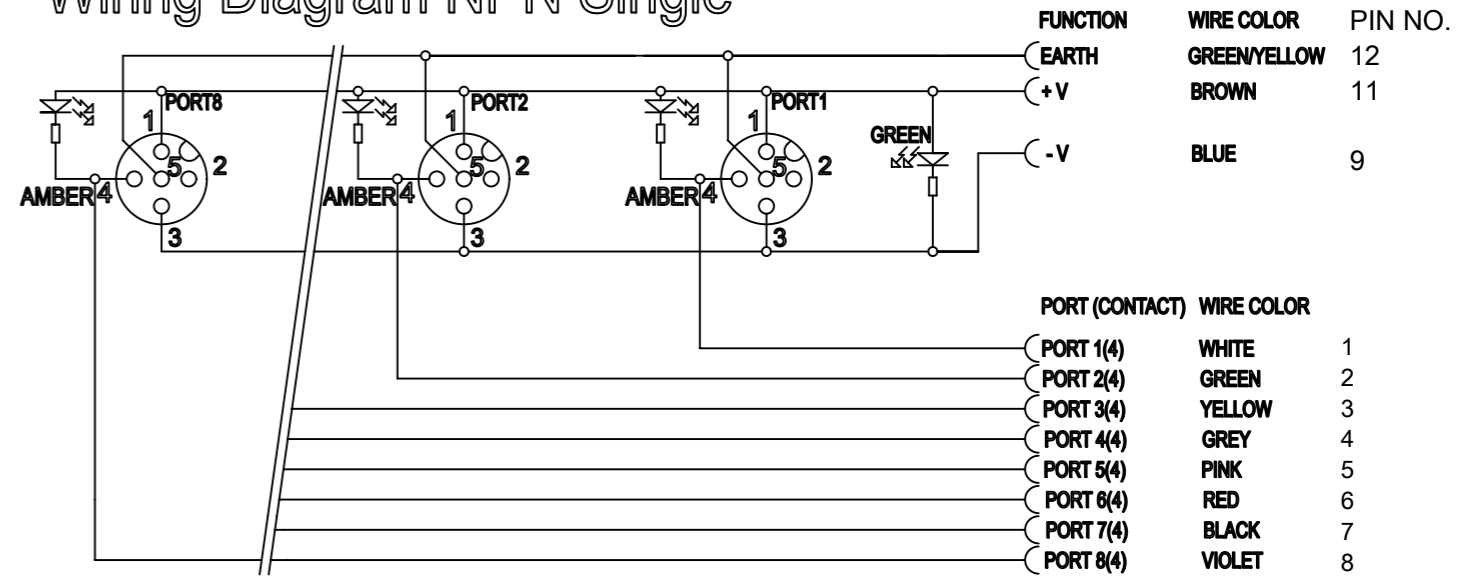
MPIS U12 PNP 4P 8PT 0.3M M23 12P BK

PRODUCT CUSTOMER DRAWING

# Wiring Diagram PNP Single



# Wiring Diagram NPN Single



## CABLE LENGTH TOLERANCES

| LENGTH [m] | TOLERANCE [mm] |
|------------|----------------|
| 0-1        | +40            |
| >1-5       | +60            |
| >5-10      | +80            |
| >10-20     | +140           |
| >20-30     | +160           |
| >30        | +1% length     |

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

|  |         |                                   |            |                                     |             |     |    |                |
|--|---------|-----------------------------------|------------|-------------------------------------|-------------|-----|----|----------------|
| DIMENSION UNITS                                      | SCALE   | CURRENT REV DESC: INITIAL RELEASE |            |                                     |             |     |    |                |
| mm   | 1:1     |                                   |            |                                     |             |     |    |                |
| GENERAL TOLERANCES (UNLESS SPECIFIED)                |         |                                   |            | MPIS U12 PNP 4P 8PT 0.3M M23 12P BK |             |     |    |                |
| ANGULAR TOL  | ± 1.0 ° |                                   |            | PRODUCT CUSTOMER DRAWING            |             |     |    |                |
| 4 PLACES   | ±       |                                   |            | DOCUMENT NUMBER                     |             |     |    |                |
| 3 PLACES   | ±       | EC NO: 631635                     | 2020/01/28 | 1202510091                          | PSD         | 000 | A1 |                |
| 2 PLACES   | ± 0.05  | DRWN: MDHARMANTI                  | 2020/02/05 | MATERIAL NUMBER                     |             |     |    |                |
| 1 PLACE  | ± 0.3   | CHK'D: RSILLER                    | 2020/02/05 | CUSTOMER                            |             |     |    |                |
| 0 PLACES   | ± 0.5   | APPR: RSILLER                     | 2020/02/05 | SHEET NUMBER                        |             |     |    |                |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |         | THIRD ANGLE PROJECTION            | DRAWING    | SERIES                              | SEE TABLE 1 |     |    | GENERAL MARKET |
|  |         |                                   | A3-SIZE    | 120251                              | 2 OF 2      |     |    |                |