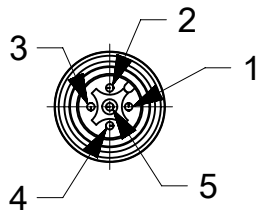
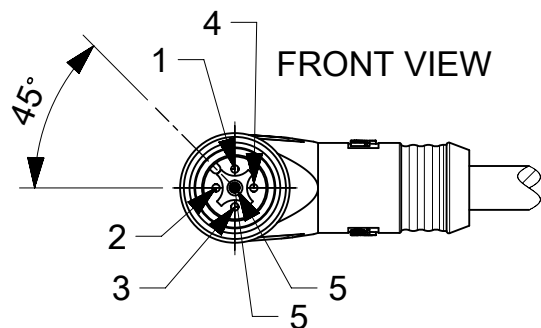
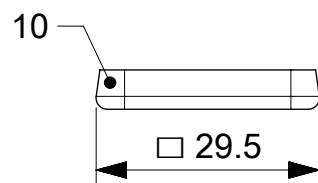
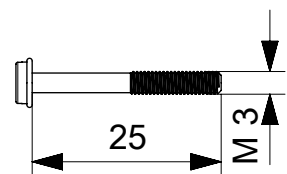


FRONT VIEW



STANDARD  
SCREW & GASKET  
Index of protection: IP65



BILL OF MATERIALS

|      |      |                             |
|------|------|-----------------------------|
| 14   | 0/2  | I/D CARRIER                 |
| 13   | 0/1  | LABEL PLASTIC               |
| 12   | 0/1  | WASHER                      |
| 11   | 0/1  | PCB                         |
| 10   | 1    | GASKET                      |
| 9    | 1    | SCREW                       |
| 8    | 4    | CONTACT DIN                 |
| 7    | 1    | INSERT DIN A                |
| 6    | -    | MOULDING MATERIAL BLACK PP  |
| 5    | 5    | CONTACT MALE                |
| 4    | 1    | M12 COUPLING NUT MALE       |
| 3    | 1    | M12 INSERT 5P MALE          |
| 2    | -    | MOULDING MATERIAL BLACK TPU |
| 1    | -    | CABLE                       |
| ITEM | QTY. | DESCRIPTION                 |

|                 |    |              |            |          |
|-----------------|----|--------------|------------|----------|
| DOCUMENT STATUS | P1 | RELEASE DATE | 2024/04/05 | 09:07:10 |
|-----------------|----|--------------|------------|----------|

L + Tolerance (see Table on sheet 3)

50 REF

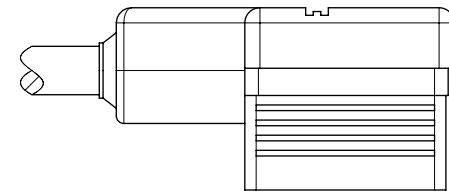
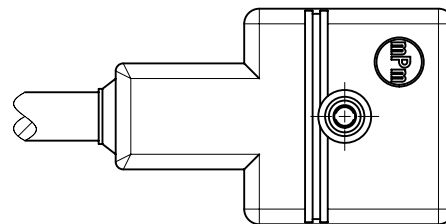
Label

L + Tolerance (see Table on sheet 3)

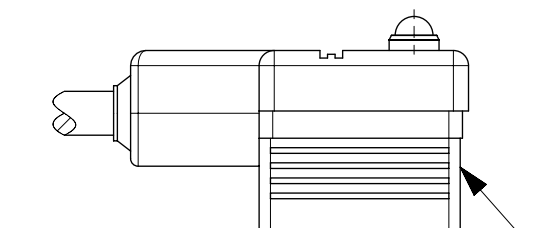
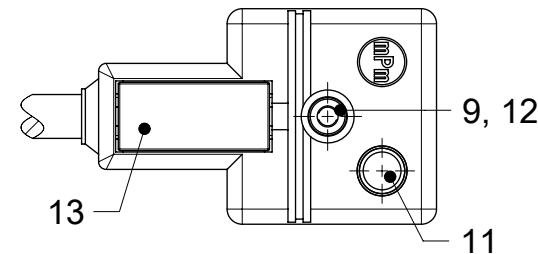
50 REF REF

Label

DIN Connector views  
for PN without LED



DIN Connector views  
for PN with LED

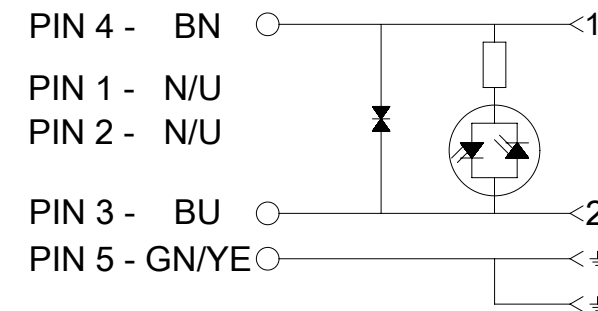


Electrical diagram printed in white

ELECTRICAL DIAGRAMS

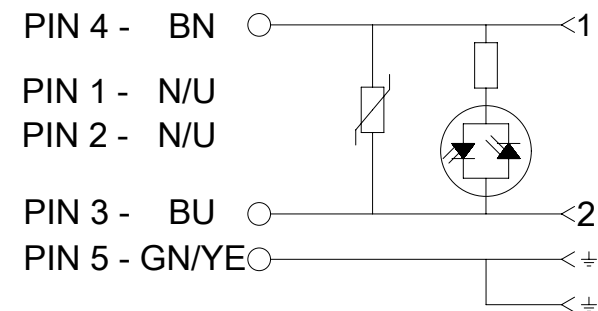
M12

DIN S0



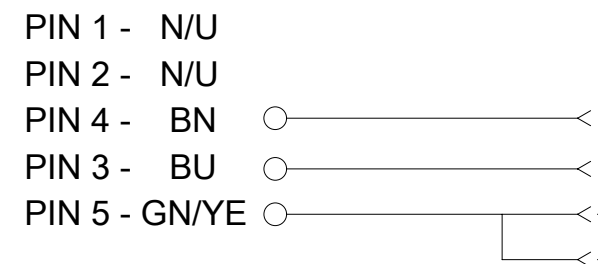
M12

DIN C4



M12

DIN



|                    |                                                                                                                                               |         |                                                                   |  |                               |  |  |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------------------------|--|-------------------------------|--|--|
| 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: RETRACTED DOCUMENT                              |  | <b>molex</b>                  |  |  |
|                    | DIMENSION UNITS                                                                                                                               | SCALE   |                                                                   |  |                               |  |  |
| DIVISIONAL SYMBOLS | mm                                                                                                                                            | 1:1     | EC NO: 782067<br>DRWN: VISHAH2<br>CHK'D: RSILLER<br>APPR: RSILLER |  | E850 DIN A / MMC 5P MM        |  |  |
|                    | GENERAL TOLERANCES (UNLESS SPECIFIED)                                                                                                         |         |                                                                   |  |                               |  |  |
| DIVISIONAL SYMBOLS | ANGULAR TOL                                                                                                                                   | ± 1.0 ° | INITIAL REVISION:<br>DRWN: APAWLAK01<br>APPR: RSILLER             |  | PRODUCT CUSTOMER DRAWING      |  |  |
|                    | 4 PLACES                                                                                                                                      | ±       |                                                                   |  |                               |  |  |
| DIVISIONAL SYMBOLS | 3 PLACES                                                                                                                                      | ±       | 2024/03/26<br>2024/04/05                                          |  | DOCUMENT NUMBER<br>1210350367 |  |  |
|                    | 2 PLACES                                                                                                                                      | ± 0.05  |                                                                   |  |                               |  |  |
| DIVISIONAL SYMBOLS | 1 PLACE                                                                                                                                       | ± 0.3   | 2016/05/30<br>2024/04/05                                          |  | DOC TYPE<br>PSD               |  |  |
|                    | 0 PLACES                                                                                                                                      | ± 0.5   |                                                                   |  |                               |  |  |
| DIVISIONAL SYMBOLS | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                    |         | THIRD ANGLE PROJECTION                                            |  | SHEET NUMBER<br>1 OF 3        |  |  |
|                    |                                                                                                                                               |         |                                                                   |  |                               |  |  |
| DIVISIONAL SYMBOLS | A3-SIZE                                                                                                                                       | 121035  | SERIES<br>121035                                                  |  | CUSTOMER<br>GENERAL MARKET    |  |  |
|                    |                                                                                                                                               |         |                                                                   |  |                               |  |  |

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

OPTIONS

E 8 5 0 X X X X X X X X X X

E=Form A  
(18mm  
contact  
spacing)

8=MMC M12  
Connector

5=5 Poles

0=Default Standard Wiring

Electrical configuration:  
0 = Without circuit  
A = S0 24V Yellow LED  
B = C4 24V Yellow LED  
C = S0 110V Yellow LED  
D = C4 110V Yellow LED  
E = S0 24V Green LED  
F = C4 24V Green LED  
G = S0 110V Green LED  
H = C4 110V Green LED  
J = S0 24V Red LED  
K = C4 24V Red LED  
L = S0 110V Red LED  
M = C4 110V Red LED  
S = C4 230V Yellow LED

DIN Earth Position - o'clock &  
M12 connector body:  
0 = Earth H6/H12, Male Straight  
2 = Earth H6/H12, Male Right Angle

Cable type:  
See Table

Units:  
M=Meter

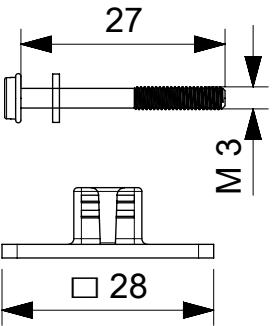
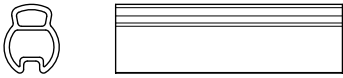
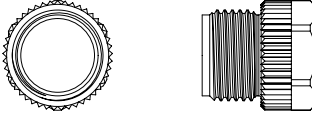
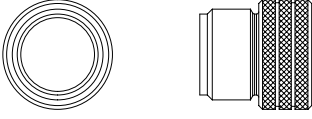
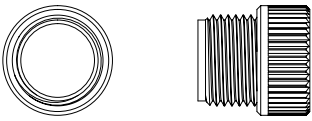
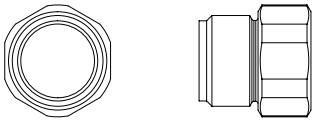
Length  
Examples:  
005=0.5 units  
010=1 units  
100=10 units

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

Coupling Nut:  
Blank (Standard)=Knurled Brass Ni Plated  
1=Hexagonal Stainless steel  
5=Knurled Derlin  
7=Knurled Brass Ni Plated, Teflon Coated  
9=Knurled / Hexagonal Brass Ni Plated

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

R= NBR Integrated Gasket & Screw (IP67)



| CABLE TYPE | NO. OF WIRES | CROSS SECTION       | CABLE JACKET   | UL       | CSA                   | STATIC: TEMP. / BENDING RADIUS | DYNAMIC: TEMP. / BENDING RADIUS | SHIELD |
|------------|--------------|---------------------|----------------|----------|-----------------------|--------------------------------|---------------------------------|--------|
| A23        | 3            | 0.75mm <sup>2</sup> | PVC BLACK      | -        | -                     | -20°C to +70°C, 3xO.D.         | -15°C to +70°C, 5xO.D.          | -      |
| A58        | 3            | 20AWG               | PVC BLACK      | UL 2661  | C22.2 II A 105°C/300V | -30°C to +105°C, 10xO.D.       | -5°C to +105°C, 15xO.D.         | -      |
| B08        | 3            | 18AWG               | PUR YELLOW     | UL 20668 | C22.2 II A 90°C/300V  | -                              | -                               | -      |
| B31        | 3            | 0.50mm <sup>2</sup> | WSOR BLACK     | UL 21215 | -                     | -                              | -25°C to +80°C, 7.5xO.D.        | -      |
| E12        | 3            | 0.50mm <sup>2</sup> | PVC BLACK      | -        | -                     | -20°C to +70°C, 3xO.D.         | -15°C to +70°C, 5xO.D.          | -      |
| I12        | 3            | 0.50mm <sup>2</sup> | CEI PVC GREY   | -        | -                     | -25°C to +70°C, 10xO.D.        | -5°C to +70°C, 15xO.D.          | -      |
| P12        | 3            | 0.50mm <sup>2</sup> | PUR BLACK      | -        | -                     | -40°C to +90°C, 7.5xO.D.       | -15°C to +90°C, 12.5xO.D.       | -      |
| P82        | 3            | 0.34mm <sup>2</sup> | PUR IRR ORANGE | -        | -                     | -50°C to +105°C, 5xO.D.        | -40°C to +105°C, 7.5xO.D.       | -      |

| Table of length tolerances [mm] |                     |           |
|---------------------------------|---------------------|-----------|
| Over                            | Up to and including | Tolerance |
| 0                               | 1000                | ±20       |
| 1000                            | 3000                | ±30       |
| 3000                            | 5000                | ±40       |
| 5000                            | 10000               | ±50       |
| 10000                           | 15000               | ±100      |
| 15000                           | 20000               | ±150      |
| 20000                           |                     | ±L/100    |

| FUNCTIONAL SYMBOLS                                         | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--|--------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------|---------|--|--------|--|--------------------------|--|----------------|--|-----------------|-------------------------------------------------------|--------------|--|
| <div>FA = 0</div>                                          | DIMENSION UNITS                                                                                                                               |  | SCALE  |                                                                                       | CURRENT REV DESC: RETRACTED DOCUMENT                              |         |  |        |  | <div>molex</div>         |  |                |  |                 |                                                       |              |  |
|                                                            | mm                                                                                                                                            |  | 1:1    |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
| <div>FE = 0</div>                                          | GENERAL TOLERANCES (UNLESS SPECIFIED)                                                                                                         |  |        |                                                                                       | EC NO: 782067<br>DRWN: VISHAH2<br>CHK'D: RSILLER<br>APPR: RSILLER |         |  |        |  | E850 DIN A / MMC 5P MM   |  |                |  |                 |                                                       |              |  |
| <div>FE = 0</div>                                          | ANGULAR TOL ± 1.0 °                                                                                                                           |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
| DIVISIONAL SYMBOLS                                         | 4 PLACES                                                                                                                                      |  | ±      |                                                                                       | 2024/03/26                                                        |         |  |        |  | PRODUCT CUSTOMER DRAWING |  |                |  |                 |                                                       |              |  |
|                                                            | 3 PLACES                                                                                                                                      |  | ±      |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 | 2024/04/05                                            |              |  |
|                                                            | 2 PLACES                                                                                                                                      |  | ± 0.05 |                                                                                       | 2024/04/05                                                        |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            | 1 PLACE                                                                                                                                       |  | ± 0.3  |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 | INITIAL REVISION:<br>DRWN: APAWLAK01<br>APPR: RSILLER |              |  |
|                                                            | 0 PLACES                                                                                                                                      |  | ± 0.5  |                                                                                       | 2016/05/30<br>2024/04/05                                          |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |                                                                                                                                               |  |        | THIRD ANGLE PROJECTION                                                                |                                                                   |         |  |        |  | DRAWING                  |  | SERIES         |  | DOCUMENT NUMBER |                                                       | DOC TYPE     |  |
|                                                            |                                                                                                                                               |  |        |  |                                                                   | A3-SIZE |  | 121035 |  | 1210350367               |  | PSD            |  | 000             |                                                       | B            |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  | MATERIAL NUMBER          |  | CUSTOMER       |  |                 |                                                       | SHEET NUMBER |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  | SEE SHEET 3              |  | GENERAL MARKET |  |                 |                                                       | 2 OF 3       |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |
|                                                            |                                                                                                                                               |  |        |                                                                                       |                                                                   |         |  |        |  |                          |  |                |  |                 |                                                       |              |  |

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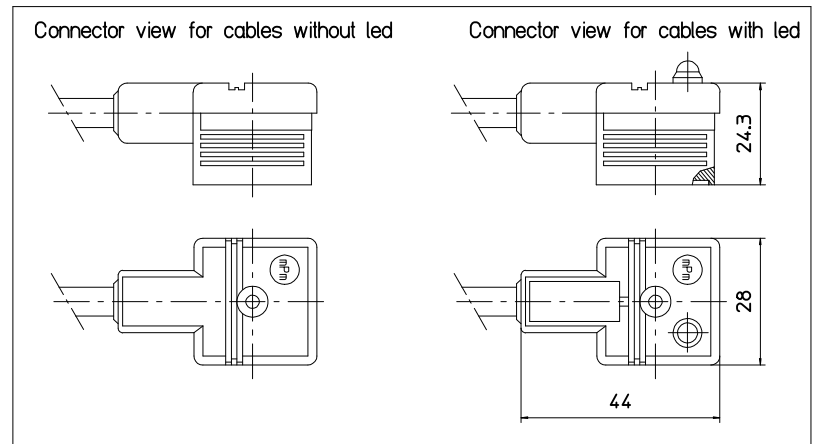
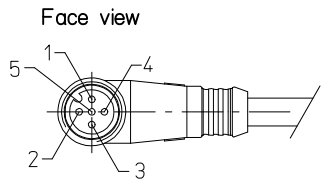
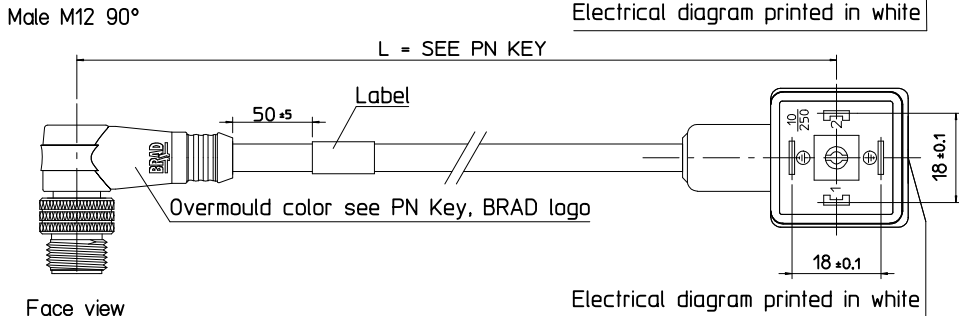
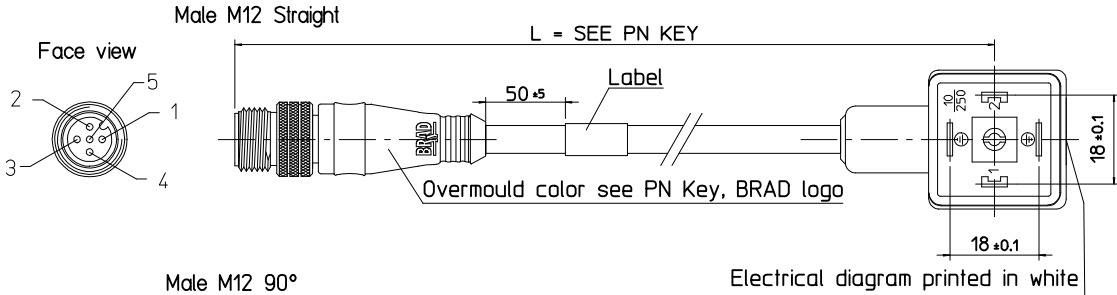
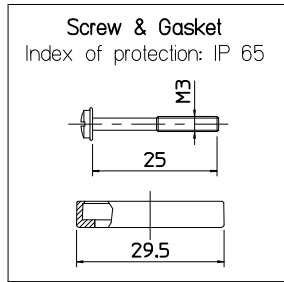
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| Table of lenght tolerances [mm] |                     |           |
|---------------------------------|---------------------|-----------|
| Over                            | Up to and including | Tolerance |
| 0                               | 1000                | ±20       |
| 1000                            | 3000                | ±30       |
| 3000                            | 5000                | ±40       |
| 5000                            | 10000               | ±50       |
| 10000                           | 15000               | ±100      |
| 15000                           | 20000               | ±150      |
| 20000                           |                     | ±L/100    |



### PART No MATRIX - PN Key

|                                            |                          |          |                                                                                                                                                                                                                                                                                                                                                                                          |   |                                                                                                                        |   |                        |   |                                                          |    |                                                                                            |    |         |            |
|--------------------------------------------|--------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------|---|------------------------|---|----------------------------------------------------------|----|--------------------------------------------------------------------------------------------|----|---------|------------|
| E                                          | 8                        | 5        | X                                                                                                                                                                                                                                                                                                                                                                                        | X | X                                                                                                                      | X | X                      | X | X                                                        | X  | X                                                                                          | X  | X       |            |
| E = Form A<br>(18mm<br>contact<br>spacing) | 8 = MMC<br>Single Keyway | 5=5 Pole | Wiring details:<br>0 = Positive<br>Switching<br>(pin 3&4)<br>1 = Negative<br>Switching<br>(pin 1&4)                                                                                                                                                                                                                                                                                      |   | XXX = Cable Type                                                                                                       |   | M = Metres<br>F = Feet |   | Length:<br>020-2 Meters<br>050-5 Meters<br>200-20 Meters |    | H/D Carrier<br>M12 Overmoulding color:<br>Blank=Black Standard<br>Y=Yellow<br>A=Grey       |    |         |            |
|                                            |                          |          | Electrical configuration:<br>0 = Without LED/without circuit<br>A = S0 24V Yellow LED<br>B = C4 24V Yellow LED<br>C = S0 110V Yellow LED<br>D = C4 110V Yellow LED<br>E = S0 24V Green LED<br>F = C4 24V Green LED<br>G = S0 110V Green LED<br>H = C4 110V Green LED<br>J = S0 24V Red LED<br>K = C4 24V Red LED<br>L = S0 110V Red LED<br>M = C4 110V Red LED<br>S = C4 230V Yellow LED |   | DIN Earth Position - o'clock &<br>M12 connector body:<br>0 = Earth H6/H12, MALE Straight<br>2 = Earth H6/H12, MALE 90° |   |                        |   |                                                          |    | Coupling Nut Material:<br>Blank=Standard<br>1=Stainless Steel<br>5=Delrin<br>7=Teflon coat |    |         |            |
|                                            |                          |          |                                                                                                                                                                                                                                                                                                                                                                                          |   |                                                                                                                        |   |                        |   |                                                          | 20 | 07                                                                                         | 08 | QUALITY | GENERAL TO |

|                                                                                                                                     |                               |                                       |       |                                                      |      |                                                                                                                               |                        |                                                |  |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------------------------|-------|------------------------------------------------------|------|-------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------------------------------|--|
| ADD CABLE B31<br>EC NO: IPG2014-0850<br>DRWN: JMARZALEK 2013/06/20<br>CHKD: MSZWAJKOWSKI 2013/11/07<br>APPR: MIWASIECZKO 2013/11/08 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) |       | DIMENSION STYLE<br>MM ONLY                           |      | SCALE                                                                                                                         | DESIGN UNITS<br>METRIC | FIRST ANGLE PROJECTION                         |  |
|                                                                                                                                     |                               |                                       |       | mm                                                   | INCH | DRAWN BY<br>JMARZALEK                                                                                                         | DATE<br>2012/11/08     | TITLE<br>E85XXXXXXXXXX<br>DIN A + CORDSETS M12 |  |
|                                                                                                                                     |                               | 4 PLACES                              | ± --- | ± ---                                                |      | CHECKED BY<br>MSZWAJKOWSKI                                                                                                    | DATE<br>2012/11/08     | <b>molex</b>                                   |  |
|                                                                                                                                     |                               | 3 PLACES                              | ± --- | ± ---                                                |      | APPROVED BY<br>MIWASIECZKO                                                                                                    | DATE<br>2012/11/09     |                                                |  |
| REV                                                                                                                                 | DESCRIPTION                   | 2 PLACES                              | ± --- | ± ---                                                |      | MATERIAL NO.                                                                                                                  |                        | DOCUMENT NO.                                   |  |
|                                                                                                                                     |                               | 1 PLACE                               | ± --- | ± ---                                                |      | SEE SHEET 3                                                                                                                   |                        | SD-121036-001                                  |  |
|                                                                                                                                     |                               | 0 PLACE                               | ± --- | ± ---                                                |      | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                        | SHEET NO.<br>1 OF 3                            |  |
|                                                                                                                                     |                               | ANGULAR ± --- °                       |       | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |      | SIZE<br>A3                                                                                                                    |                        |                                                |  |

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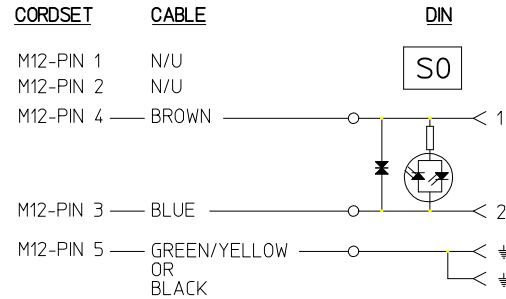
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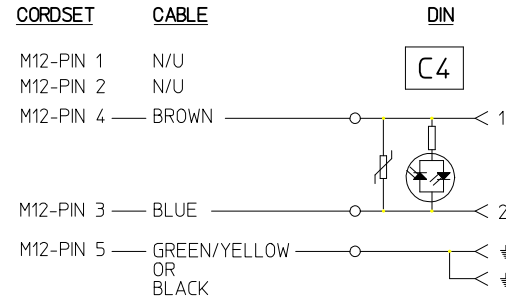
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## Electrical diagrams

Electrical diagram with circuit S0 (zener diode) for:



Electrical diagram with circuit C4 (VDR) for:



## Cable type

| Cable Type | Jacket Material | Jacket Color | Wire cross section  | Braid |
|------------|-----------------|--------------|---------------------|-------|
| A23        | PVC             | Black        | 0.75mm <sup>2</sup> | no    |
| A58        | PVC             | Black        | 20AWG               | no    |
| B08        | PUR             | Yellow       | 18AWG               | no    |
| E03        | PVC             | Black        | 0.34mm <sup>2</sup> | no    |
| E12        | PVC             | Black        | 0.5mm <sup>2</sup>  | no    |
| I12        | CEI PVC         | Grey         | 0.5mm <sup>2</sup>  | no    |
| P12        | PUR             | Black        | 0.5mm <sup>2</sup>  | no    |
| P82        | PUR IRR         | Orange       | 0.34mm <sup>2</sup> | no    |
| S26        | PVC             | Yellow       | 0.34mm <sup>2</sup> | yes   |
| B31        | PUR             | Black        | 0.5mm <sup>2</sup>  | no    |

|                                                                                                                                      |                                   |                                       |                                                            |  |              |              |                                                                                                                                  |  |           |  |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------|------------------------------------------------------------|--|--------------|--------------|----------------------------------------------------------------------------------------------------------------------------------|--|-----------|--|
| ADD CABLE B31<br>EC NO: IPG2014-0850<br>DRWN: JMARSZALEK 2013/06/20<br>CHKD: MSZWAJKOWSKI 2013/11/07<br>APPR: MIWASIECZKO 2013/11/08 | QUALITY SYMBOLS<br><br>▽=0<br>◁=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE                                            |  | SCALE        | DESIGN UNITS | FIRST ANGLE PROJECTION                                                                                                           |  |           |  |
|                                                                                                                                      |                                   |                                       | MM ONLY                                                    |  | 1:1          | METRIC       |                                                                                                                                  |  |           |  |
|                                                                                                                                      |                                   |                                       |                                                            |  | TITLE        |              | E85XXXXXXXXXX<br>DIN A + CORDSETS M12                                                                                            |  |           |  |
|                                                                                                                                      |                                   |                                       |                                                            |  |              |              |                                                                                                                                  |  |           |  |
|                                                                                                                                      |                                   |                                       |                                                            |  |              |              | molex                                                                                                                            |  |           |  |
|                                                                                                                                      |                                   |                                       |                                                            |  |              |              |                                                                                                                                  |  |           |  |
|                                                                                                                                      |                                   |                                       |                                                            |  |              |              |                                                                                                                                  |  |           |  |
|                                                                                                                                      |                                   |                                       | ANGULAR ±---°                                              |  | MATERIAL NO. |              | DOCUMENT NO.                                                                                                                     |  | SHEET NO. |  |
|                                                                                                                                      |                                   |                                       | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |  | SEE SHEET 3  |              | SD-121036-001                                                                                                                    |  | 2 OF 3    |  |
|                                                                                                                                      |                                   |                                       |                                                            |  | SIZE A3      |              | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |           |  |

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PART LIST

| Pos. | Molex PN:  | Engineering No.: | Pos. | Molex PN:  | Engineering No.: | Pos. | Molex PN:  | Engineering No.: | Pos. | Molex PN:  | Engineering No.: | Pos. | Molex PN: | Engineering No.: |
|------|------------|------------------|------|------------|------------------|------|------------|------------------|------|------------|------------------|------|-----------|------------------|
| 1    | 1210350133 | E85000P12M006    | 41   | 1210360356 | E850B0P12M030    | 81   | 1210360678 | E850B2E12M003    | 121  | 1210360893 | E850B0B31M006    | 161  |           |                  |
| 2    | 1210350148 | E85000P12M020    | 42   | 1210360399 | E850B0P12M003    | 82   | 1210360686 | E850A2A58M010    | 122  | 1210360894 | E850B0B31M010    | 162  |           |                  |
| 3    | 1210350156 | E85000P12M010    | 43   | 1210360453 | E850B0P12M012    | 83   | 1210360694 | E850A0A58M006    | 123  | 1210360895 | E850B0B31M015    | 163  |           |                  |
| 4    | 1210350157 | E85000P12M030    | 44   | 1210360454 | E850B0P12M013    | 84   | 1210360696 | E85002E12M003    | 124  | 1210360896 | E850B0B31M030    | 164  |           |                  |
| 5    | 1210350201 | E85000E12M010    | 45   | 1210360455 | E850B0P12M014    | 85   | 1210360708 | E850B0A23M030    | 125  | 1210360897 | E850B2B31M006    | 165  |           |                  |
| 6    | 1210350202 | E85002P12M015    | 46   | 1210360456 | E850B0P12M017    | 86   | 1210360719 | E850B2A23M017    | 126  | 1210360898 | E850B2B31M010    | 166  |           |                  |
| 7    | 1210350207 | E85000E12M003    | 47   | 1210360457 | E850B2P12M005    | 87   | 1210360725 | E850D0A23M030    | 127  | 1210360899 | E850B2B31M015    | 167  |           |                  |
| 8    | 1210350208 | E85000E12M006    | 48   | 1210360458 | E850D0P12M010    | 88   | 1210360743 | E850B2I12M006    | 128  | 1210360900 | E850B2B31M030    | 168  |           |                  |
| 9    | 1210350209 | E85000P12M003    | 49   | 1210360491 | E850A0A58M010    | 89   | 1210360745 | E850B0I12M006    | 129  | 1210361900 | E850B0A23M015    | 169  |           |                  |
| 10   | 1210350210 | E85000P82M030    | 50   | 1210360492 | E850A0A58M015    | 90   | 1210360754 | E850A0A58M005    | 130  |            |                  | 170  |           |                  |
| 11   | 1210350242 | E85002E12M006    | 51   | 1210360493 | E850A0A58M030    | 91   | 1210360756 | E85002E12M030    | 131  |            |                  | 171  |           |                  |
| 12   | 1210350290 | E85000E12M030    | 52   | 1210360494 | E850A0A58M050    | 92   | 1210360771 | E850A0P12M030    | 132  |            |                  | 172  |           |                  |
| 13   | 1210350291 | E85000E12M050    | 53   | 1210360495 | E850A0A58M100    | 93   | 1210360772 | E850A0P12M040    | 133  |            |                  | 173  |           |                  |
| 14   | 1210350292 | E85000P12M100    | 54   | 1210360496 | E850B2B08M030    | 94   | 1210360773 | E850A0P12M100    | 134  |            |                  | 174  |           |                  |
| 15   | 1210350309 | E85002A23M020    | 55   | 1210360497 | E850B2P12M025G   | 95   | 1210360774 | E850A2P12M010    | 135  |            |                  | 175  |           |                  |
| 16   | 1210350310 | E85002A23M030    | 56   | 1210360542 | E850B0E12M0155   | 96   | 1210360775 | E850A2P12M015    | 136  |            |                  | 176  |           |                  |
| 17   | 1210350311 | E85002A23M040    | 57   | 1210360557 | E850B0E12M006    | 97   | 1210360776 | E850A2P12M020    | 137  |            |                  | 177  |           |                  |
| 18   | 1210350313 | E85000P12M017    | 58   | 1210360558 | E850B0E12M030    | 98   | 1210360788 | E850D0P12M006    | 138  |            |                  | 178  |           |                  |
| 19   | 1210350326 | E85000P12M050    | 59   | 1210360559 | E850B0E12M050    | 99   | 1210360789 | E850D0P12M020    | 139  |            |                  | 179  |           |                  |
| 20   | 1210350339 | E85002P12M020    | 60   | 1210360560 | E850B0P12M0201   | 100  | 1210360795 | E850A0P12M006    | 140  |            |                  | 180  |           |                  |
| 21   | 1210350348 | E85000P12M015    | 61   | 1210360574 | E850B0E12M020    | 101  | 1210360796 | E850C0P12M006    | 141  |            |                  | 181  |           |                  |
| 22   | 1210350349 | E85000P12M009    | 62   | 1210360576 | E850B2E12M010    | 102  | 1210360797 | E850A0P12M010    | 142  |            |                  | 182  |           |                  |
| 23   | 1210360178 | E850A0P12M020    | 63   | 1210360585 | E850A0A58M020    | 103  | 1210360798 | E850C0P12M010    | 143  |            |                  | 183  |           |                  |
| 24   | 1210360184 | E850B0I12M010    | 64   | 1210360586 | E850B0A58M020    | 104  | 1210360799 | E850C0P12M020    | 144  |            |                  | 184  |           |                  |
| 25   | 1210360186 | E850B0I12M020    | 65   | 1210360588 | E850B0B08M003    | 105  | 1210360813 | E850A0A58M007    | 145  |            |                  | 185  |           |                  |
| 26   | 1210360187 | E850B0I12M030    | 66   | 1210360589 | E850B0B08M010    | 106  | 1210360815 | E850B0I12M010Y   | 146  |            |                  | 186  |           |                  |
| 27   | 1210360192 | E850B0P12M006    | 67   | 1210360590 | E850B0B08M020    | 107  | 1210360816 | E850B0I12M020Y   | 147  |            |                  | 187  |           |                  |
| 28   | 1210360193 | E850B0P12M010    | 68   | 1210360593 | E850B0P12M040    | 108  | 1210360817 | E850B0I12M030Y   | 148  |            |                  | 188  |           |                  |
| 29   | 1210360194 | E850B0P12M015    | 69   | 1210360594 | E850B0P12M100    | 109  | 1210360819 | E850B0I12M006Y   | 149  |            |                  | 189  |           |                  |
| 30   | 1210360195 | E850B0P12M020    | 70   | 1210360595 | E850B0S26M010H   | 110  | 1210360821 | E850B2P12M015    | 150  |            |                  | 190  |           |                  |
| 31   | 1210360196 | E850B0P12M050    | 71   | 1210360596 | E850B2E12M006    | 111  | 1210360844 | E850B0P12M021    | 151  |            |                  | 191  |           |                  |
| 32   | 1210360198 | E850B0S26M015    | 72   | 1210360601 | E850K0E12M010    | 112  | 1210360845 | E850B0P12M024    | 152  |            |                  | 192  |           |                  |
| 33   | 1210360199 | E850B0S26M020    | 73   | 1210360627 | E850B0E12M010    | 113  | 1210360846 | E850B0P12M027    | 153  |            |                  | 193  |           |                  |
| 34   | 1210360203 | E850B2I12M010    | 74   | 1210360628 | E850B0S26M015H   | 114  | 1210360847 | E850B0P12M058    | 154  |            |                  | 194  |           |                  |
| 35   | 1210360206 | E850B2I12M050    | 75   | 1210360629 | E850B2P12M0105   | 115  | 1210360848 | E850B0P12M080    | 155  |            |                  | 195  |           |                  |
| 36   | 1210360208 | E850B2P12M006    | 76   | 1210360651 | E850B2P12M020H   | 116  | 1210360849 | E850B0P12M085    | 156  |            |                  | 196  |           |                  |
| 37   | 1210360209 | E850B2P12M010    | 77   | 1210360658 | E850B0A58M006    | 117  | 1210360850 | E850B0P12M090    | 157  |            |                  | 197  |           |                  |
| 38   | 1210360210 | E850B2P12M020    | 78   | 1210360659 | E850B0A58M015    | 118  | 1210360853 | E850B2P12M003    | 158  |            |                  | 198  |           |                  |
| 39   | 1210360211 | E850B2P12M030    | 79   | 1210360667 | E850A0A58M070    | 119  | 1210360857 | E850B0P12M010H   | 159  |            |                  | 199  |           |                  |
| 40   | 1210360212 | E850B2P12M050    | 80   | 1210360675 | E850C0A58M100    | 120  | 1210360858 | E850B0P12M020H   | 160  |            |                  | 200  |           |                  |

ADD NEW PN  
EC NO: IPG2014-0850  
DRWN: MARSZALEK 2013/06/20  
CHKD: MSZWAJKOWSKI 2013/11/07  
APPR: MIWASIECZKO 2013/11/08

QUALITY SYMBOLS  
=0  
=0

REV DESCRIPTION

GENERAL TOLERANCES (UNLESS SPECIFIED)

|          |       |       |
|----------|-------|-------|
|          | mm    | INCH  |
| 4 PLACES | ± --- | ± --- |
| 3 PLACES | ± --- | ± --- |
| 2 PLACES | ± --- | ± --- |
| 1 PLACE  | ± --- | ± --- |
| 0 PLACE  | ± --- | ± --- |

ANGULAR ±---°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE  
MM ONLY

DRAWN BY DATE  
JMARSZALEK 2012/11/08

CHECKED BY DATE  
MSZWAJKOWSKI 2012/11/08

APPROVED BY DATE  
MIWASIECZKO 2012/11/09

MATERIAL NO.

SIZE  
A3

SCALE  
1:1

DESIGN UNITS  
METRIC

FIRST ANGLE PROJECTION

TITLE  
E85XXXXXXXXXX  
DIN A + CORDSETS M12

molex

SD-121036-001

DOCUMENT NO.

SHEET NO.  
3 OF 3

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