

REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 501)

PHYSICAL CHARACTERISTICS

-INSULATOR MATERIAL: THERMOPLASTIC UL94V0

-CONTACT MATERIAL: BRASS  
GOLD OVER NICKEL

-ACCESSORIES: BRASS,cadmium plated yellow passivation

-SHELLS: STEEL,cadmium plated yellow passivation

ELECTRICAL CHARACTERISTICS

-NOMINAL CURRENT: 7.5A

-CONTACT RESISTANCE: <= 7.3 m ohms

-CONTACT/CONTACT : >=1000 V

-CONTACT/GROUND : >=1200 V

-INSULATION RESISTANCE: >=5000 MOhms

ENVIRONMENTAL CHARACTERISTICS

- CLIMATIC CATEGORY: 55/125/56

TEMPERATURE RANGE -55°C TO +125°C

DAMP HEAT STEADY STATE 56 DAYS

SALT SPRAY 48 HOURS

MECHANICAL CHARACTERISTICS

- RETENTION AGAINST TORQUE: - Threaded insert: 0.7 N.m minimum

- Female screw : 0.5 N.m minimum

Series

DBML25P043

Shell size: E A B C D  
see sheet 2

Front accessory definition  
see sheet 2

Blank :without accessory  
F :floating mounting  
L :threaded insert M3  
O :threaded insert UNC 4-40  
V :female screw UNC 4-40

Contact number (see sheet 2)

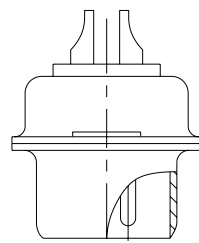
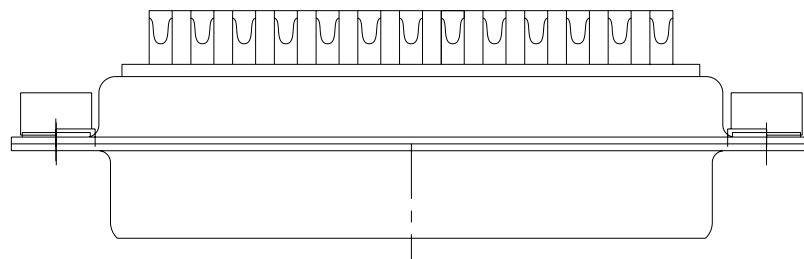
9,15,25,37,50

Contacts

P :Pin

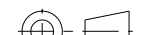
Plating

Blank :solder bucket 500 matings/unmatings  
043 :solder bucket 500 matings/unmatings  
for harsh environment



25 WAY for Example

| rev | ecn no    | dr  | date       |
|-----|-----------|-----|------------|
| A   | LS06-0174 | MPE | 2006/11/14 |
| B   | LS07-0273 | MPE | 2007/10/30 |
| C   | LS08-0044 | MPE | 2008/02/04 |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |

|                                                                                       |          |            |                                                                                                 |        |                                                  |                         |                                                                                                     |              |                                                                                       |  |
|---------------------------------------------------------------------------------------|----------|------------|-------------------------------------------------------------------------------------------------|--------|--------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------|--|
| www.fciconnect.com                                                                    |          |            | surface -  |        | tolerance std<br>ISO 1302    ISO 406    ISO 1101 |                         | projection<br> |              |  |  |
|                                                                                       |          |            | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                           |        |                                                  |                         |                                                                                                     |              |                                                                                       |  |
| Dr                                                                                    | M PESSON | 2006/11/14 | ANGULAR                                                                                         | LINEAR | 0.X                                              | ±0.3                    | size<br>A2                                                                                          | Scale<br>2:1 |                                                                                       |  |
| Eng                                                                                   | P LEGARE | 2006/11/14 |                                                                                                 |        | 0.XX                                             | ±0.1                    |                                                                                                     |              |                                                                                       |  |
| Chr                                                                                   | P LEGARE | 2006/11/14 |                                                                                                 |        | 0.XXX                                            | ±0.05                   |                                                                                                     |              |                                                                                       |  |
| Appr                                                                                  | P LEGARE | 2006/11/14 | 0°    ±2°                                                                                       |        |                                                  |                         | ECN                                                                                                 |              | LS08-0044                                                                             |  |
|                                                                                       |          |            | Product family                                                                                  |        |                                                  |                         | -                                                                                                   | Spec ref     |                                                                                       |  |
|  |          |            | title<br>SUB    MALE DM HE501 series                                                            |        |                                                  | dwg no<br>C01-8637-1737 |                                                                                                     |              | Rev.<br>C                                                                             |  |
|                                                                                       |          |            | with solder bucket                                                                              |        |                                                  |                         |                                                                                                     |              |                                                                                       |  |
|                                                                                       |          |            | catalog no                                                                                      |        |                                                  | CUSTOMER                |                                                                                                     |              | sheet 1 of 4                                                                          |  |



| CROSS REFERENCES HE501 and FCI |         |                   |
|--------------------------------|---------|-------------------|
| HE501 P/N                      | FCI P/N | FRONT ACCESSORY   |
| HE501NxxAS                     | D*MxxP  | without           |
| HE501FxxAS                     | D*MFxxP | floating mounting |

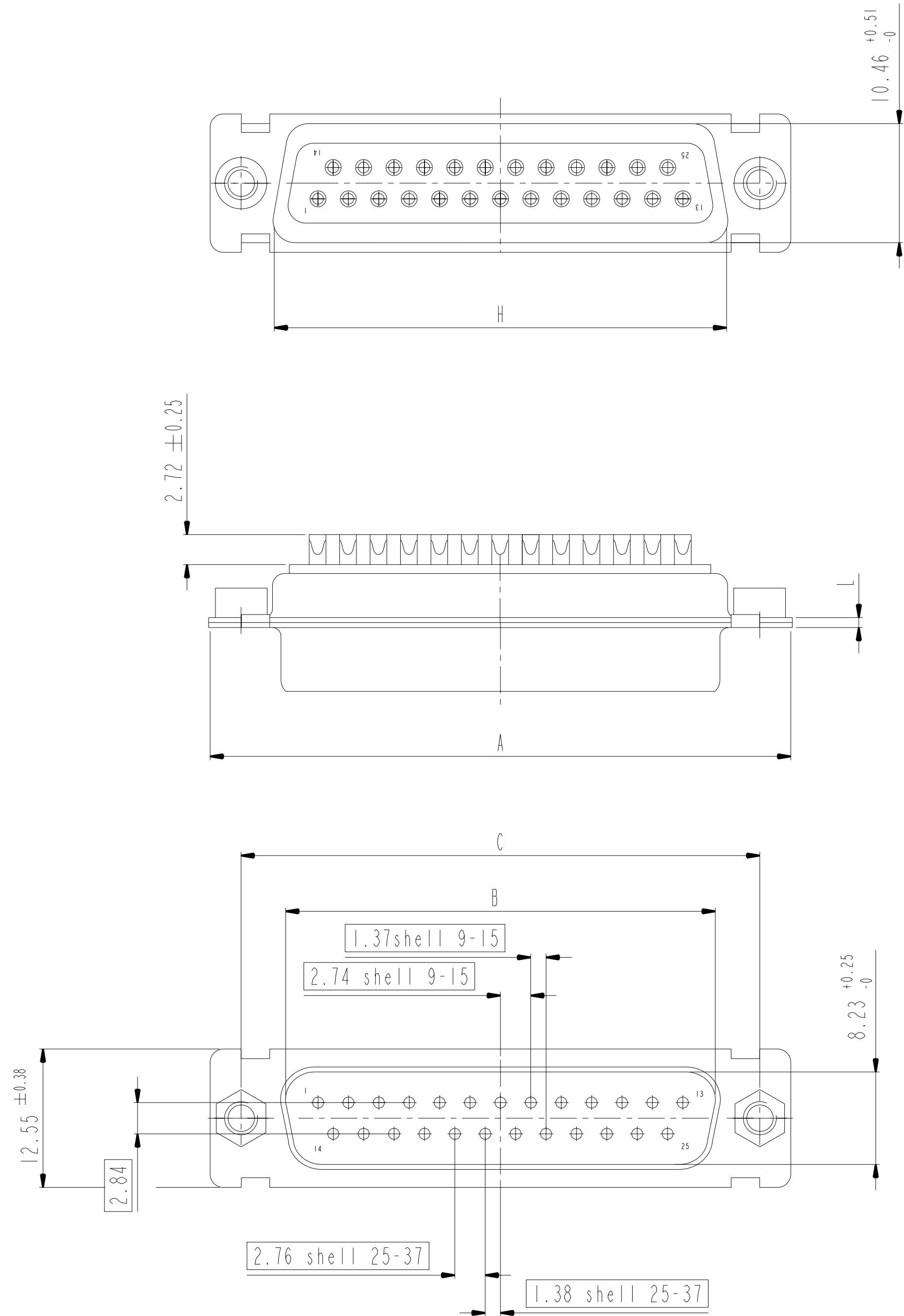
| PART NUMBER | FRONT ACCESSORY       |
|-------------|-----------------------|
| D*MxxP      | without               |
| D*MFxxP     | floating mounting     |
| D*MLxxP     | insert M3             |
| D*MOxxP     | insert UNC 4.40       |
| D*MVxxP     | female screw UNC 4.40 |

| PART NUMBER | FRONT ACCESSORY       |
|-------------|-----------------------|
| D*MxxP043   | without               |
| D*MFxxP043  | floating mounting     |
| D*MLxxP043  | insert M3             |
| D*MOxxP043  | insert UNC 4.40       |
| D*MVxxP043  | female screw UNC 4.40 |

| shell size | Contact number |
|------------|----------------|
| *          | XX             |
| E          | 09             |
| A          | 15             |
| B          | 25             |
| C          | 37             |
| D          | 50             |

SCALE: 4

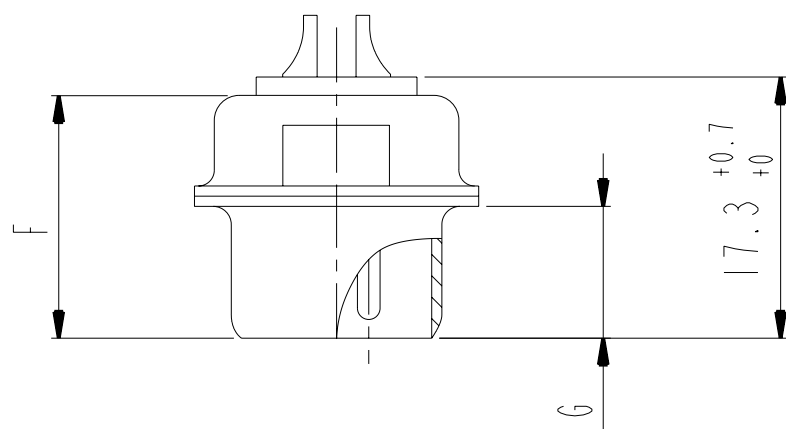
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|---------------------------------------------------------------------------------------|----------|------------|-------------------------------------------------------------------------------------------------|--------|--------------------------------------------------|--|-----------------------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------------|--|
| www.fciconnect.com                                                                    |          |            | surface -  |        | tolerance std<br>ISO 1302    ISO 406    ISO 1101 |  | projection<br> |              | mm<br> |  |
|                                                                                       |          |            | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                           |        |                                                  |  |                                                                                                     |              |                                                                                             |  |
| Dr                                                                                    | M PESSON | 2006/11/14 | ANGULAR                                                                                         | LINEAR | 0.X    ±0.3                                      |  | size<br>A2                                                                                          | Scale<br>2:1 |                                                                                             |  |
| Eng                                                                                   | P LEGARE | 2006/11/14 |                                                                                                 |        | 0.XX    ±0.1                                     |  |                                                                                                     |              |                                                                                             |  |
| Chr                                                                                   | P LEGARE | 2006/11/14 |                                                                                                 |        | 0.XXX    ±0.05                                   |  |                                                                                                     |              |                                                                                             |  |
| Appr                                                                                  | P LEGARE | 2006/11/14 | 0°    ±2°                                                                                       |        |                                                  |  | ECN    LS08-0044                                                                                    |              |                                                                                             |  |
|                                                                                       |          |            | Product family                                                                                  |        |                                                  |  | -    Spec ref                                                                                       |              |                                                                                             |  |
|  |          |            | SUB    MALE DM HE501 series                                                                     |        |                                                  |  | dwg no                                                                                              |              | Rev.                                                                                        |  |
|                                                                                       |          |            | with solder bucket                                                                              |        |                                                  |  | C01-8637-1737                                                                                       |              | C                                                                                           |  |
|                                                                                       |          |            | catalog no                                                                                      |        |                                                  |  | CUSTOMER                                                                                            |              | sheet 2 of 4                                                                                |  |



## DIMENSIONS FOR SHELL E,A,B,C

Dimensions are in millimeters

| Shell size | Number of contacts | A <sup>+0.76<br/>-0</sup> | B <sup>+0.25<br/>-0</sup> | C <sup>±0.12</sup> | F <sup>+0.57<br/>-0</sup> | G <sup>+0.25<br/>-0</sup>   | H <sup>+0.51<br/>-0</sup> | L <sup>+0.22<br/>-0</sup> |
|------------|--------------------|---------------------------|---------------------------|--------------------|---------------------------|-----------------------------|---------------------------|---------------------------|
| E          | 09                 | 30.43                     | 16.79                     | 24.99              | 10.47                     | 5.9 <sup>+0.15<br/>-0</sup> | 19.02                     | 0.80                      |
| A          | 15                 | 38.76                     | 25.12                     | 33.32              | 10.47                     | 5.9 <sup>+0.15<br/>-0</sup> | 27.25                     | 0.80                      |
| B          | 25                 | 52.65                     | 38.84                     | 47.04              | 10.43                     | 5.7 <sup>+0.25<br/>-0</sup> | 41.02                     | 0.80                      |
| C          | 37                 | 68.94                     | 55.30                     | 63.50              | 10.56                     | 5.7 <sup>+0.25<br/>-0</sup> | 57.45                     | 0.90                      |



scale 3

|                                                                                       |          |            |                                                             |        |       |                      |          |              |  |  |
|---------------------------------------------------------------------------------------|----------|------------|-------------------------------------------------------------|--------|-------|----------------------|----------|--------------|--|--|
| www.fciconnect.com                                                                    |          |            | surface - <input checked="" type="checkbox"/> tolerance std |        |       | projection           |          | mm           |  |  |
|                                                                                       |          |            | ISO 1302                                                    |        |       | ISO 406 ISO 1101     |          |              |  |  |
|                                                                                       |          |            | TOLERANCES UNLESS OTHERWISE SPECIFIED                       |        |       |                      |          |              |  |  |
| Dr                                                                                    | M PESSON | 2006/11/14 | ANGULAR                                                     | LINEAR | 0.x   | ±0.3                 | size A2  | Scale 2:1    |  |  |
| Eng                                                                                   | P LEGARE | 2006/11/14 |                                                             |        | 0.xx  | ±0.1                 |          |              |  |  |
| Chr                                                                                   | P LEGARE | 2006/11/14 |                                                             |        | 0.xxx | ±0.05                |          |              |  |  |
| Appr                                                                                  | P LEGARE | 2006/11/14 | Product family                                              |        |       | -                    | Spec ref |              |  |  |
|  |          |            | title SUB MALE DM HE501 series                              |        |       | dwg no C01-8637-1737 |          | Rev. C       |  |  |
|                                                                                       |          |            | with solder bucket                                          |        |       |                      |          |              |  |  |
|                                                                                       |          |            | catalog no                                                  |        |       | CUSTOMER             |          | sheet 3 of 4 |  |  |
|                                                                                       |          |            |                                                             |        |       |                      |          |              |  |  |

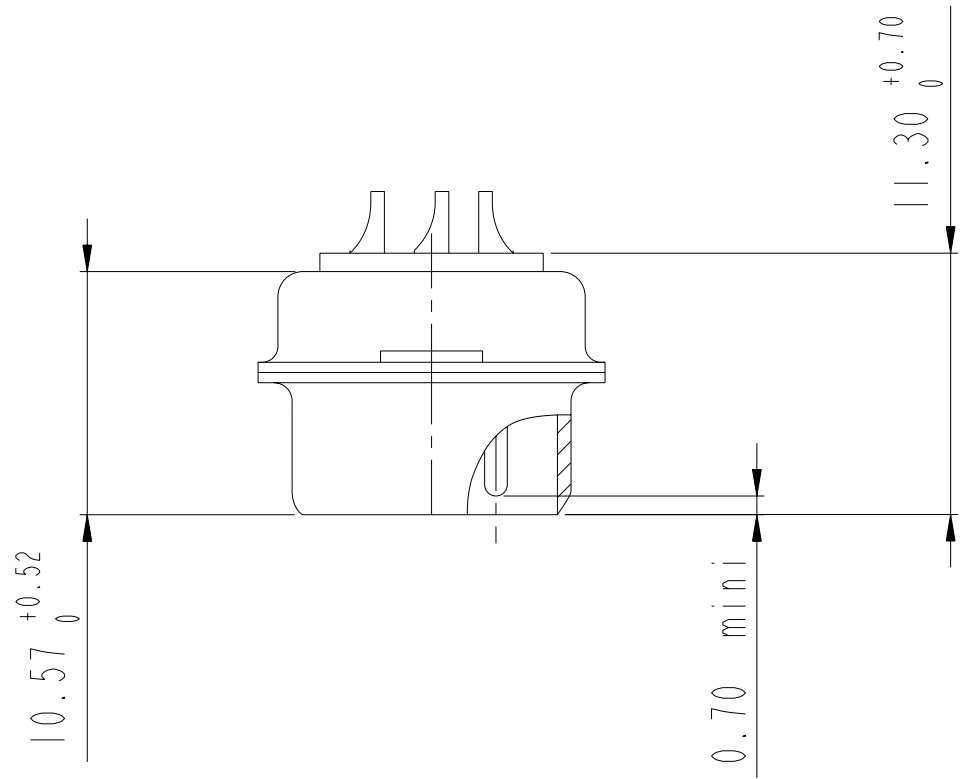
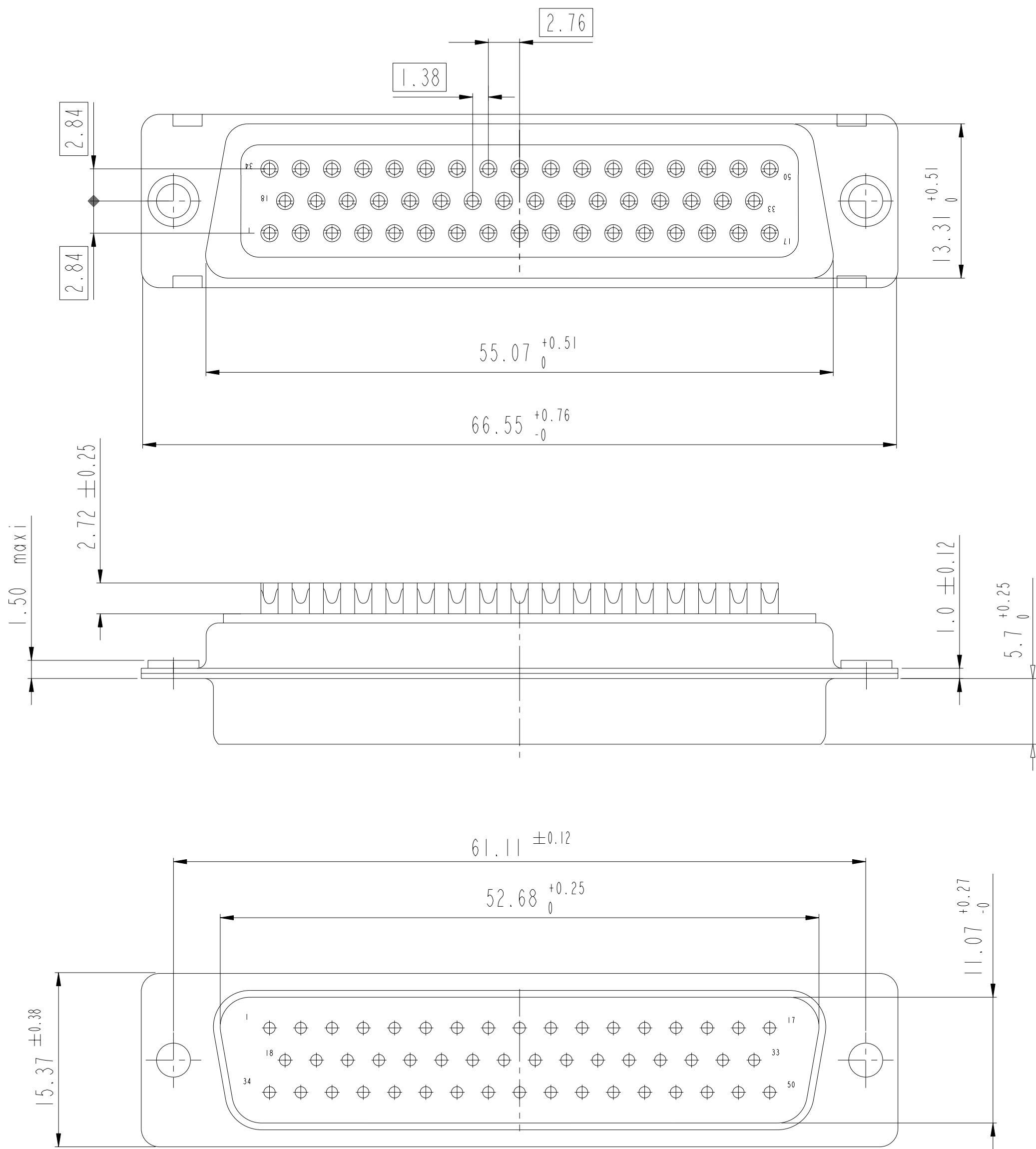
PDS: Rev: C

STATUS: Released

Printed: 03/18/2015



DIMENSIONS FOR SHELL SIZE D (50 CONTACTS)



scale 3

|                                                                                       |          |            |                                                      |        |                                |       |                                                                                                  |           |                                                                                          |  |  |
|---------------------------------------------------------------------------------------|----------|------------|------------------------------------------------------|--------|--------------------------------|-------|--------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------|--|--|
| www.fciconnect.com                                                                    |          |            | surface <input checked="" type="checkbox"/> ISO 1302 |        | tolerance std ISO 406 ISO 1101 |       | projection  |           | mm  |  |  |
|                                                                                       |          |            | TOLERANCES UNLESS OTHERWISE SPECIFIED                |        |                                |       |                                                                                                  |           |                                                                                          |  |  |
| Dr                                                                                    | M PESSON | 2006/11/14 | ANGULAR                                              | LINEAR | 0.X                            | ±0.3  | size A2                                                                                          | Scale 2:1 |                                                                                          |  |  |
| Eng                                                                                   | P LEGARE | 2006/11/14 |                                                      |        | 0.XX                           | ±0.1  |                                                                                                  |           |                                                                                          |  |  |
| Chr                                                                                   | P LEGARE | 2006/11/14 |                                                      |        | 0° ±2°                         | 0.XXX | ±0.05                                                                                            |           |                                                                                          |  |  |
| Appr                                                                                  | P LEGARE | 2006/11/14 | Product family                                       |        |                                | -     | ECN LS08-0044                                                                                    |           | Spec ref                                                                                 |  |  |
|  |          |            | SUB MALE DM HE501 series                             |        |                                |       | C01-8637-1737                                                                                    |           | Rev. C                                                                                   |  |  |
| with solder bucket                                                                    |          |            |                                                      |        |                                |       |                                                                                                  |           |                                                                                          |  |  |
| catalog no                                                                            |          |            | -                                                    |        |                                |       | CUSTOMER                                                                                         |           | sheet 4 of 4                                                                             |  |  |

PDS: Rev: C

STATUS: Released

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