

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

# DBML25P043

Series

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

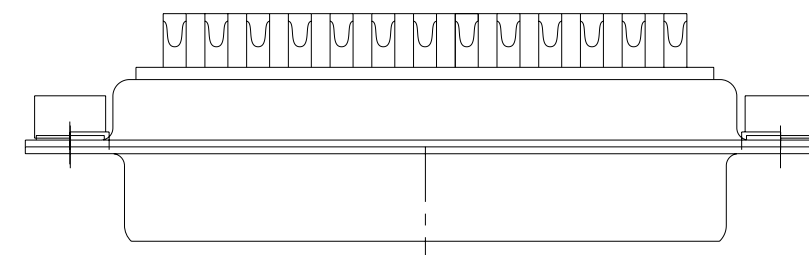
Contact number (see sheet 2)  
**9,15,25,37,50**

Contacts

- P** : Pin

Plating

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

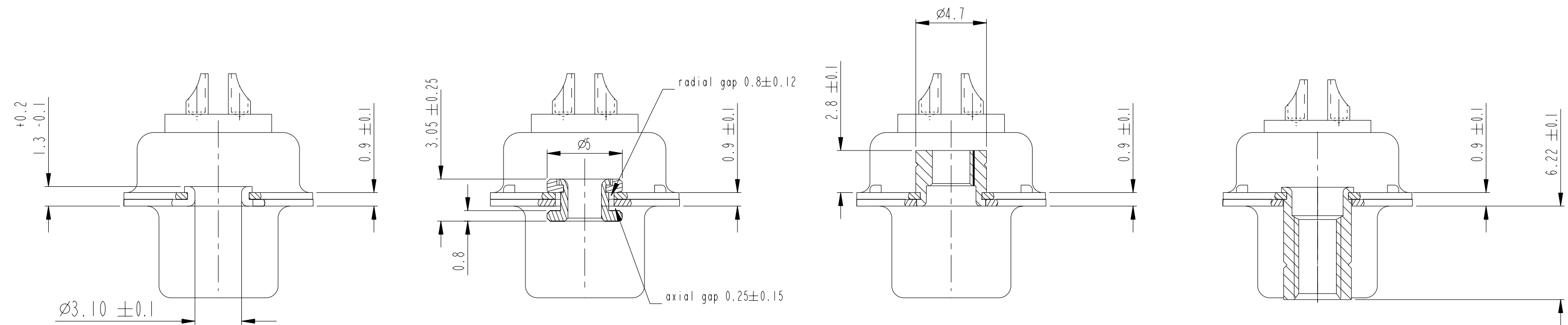


25 WAY for Example

| 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 <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                        | 0.X ±0.3    | size A2               |
| Eng                                   | P LEGARE | 2006/11/14   | LINEAR                         | 0.XX ±0.1   | Scale 2:1             |
| Chr                                   | P LEGARE | 2006/11/14   | 0° ±2°                         | 0.XXX ±0.05 | ECN LS08-0044         |
| Appr                                  | P LEGARE | 2006/11/14   | Product family                 | -           | Spec ref              |
| FCJ                                   |          |  | SUB MALE DM HE501 series       |             | Rev. C                |
|                                       |          |  | with solder bucket             |             | diag no C01-8637-1737 |
|                                       |          |  | CUSTOMER                       |             | sheet 1 of 4          |

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|                 |               |                     |                                  |                         |
|-----------------|---------------|---------------------|----------------------------------|-------------------------|
| FRONT ACCESSORY | Blank without | F floating mounting | L insert M3<br>O insert UNC 4.40 | V female screw UNC 4.40 |
|-----------------|---------------|---------------------|----------------------------------|-------------------------|

| 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 |

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

| 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 |

CROSS REFERENCES HE501 and FC1

| HE501 P/N  | FC1 P/N | FRONT ACCESSORY   |
|------------|---------|-------------------|
| HE501NxxAS | D*MxxP  | without           |
| HE501FxxAS | D*MFxxP | floating mounting |

SCALE: 4

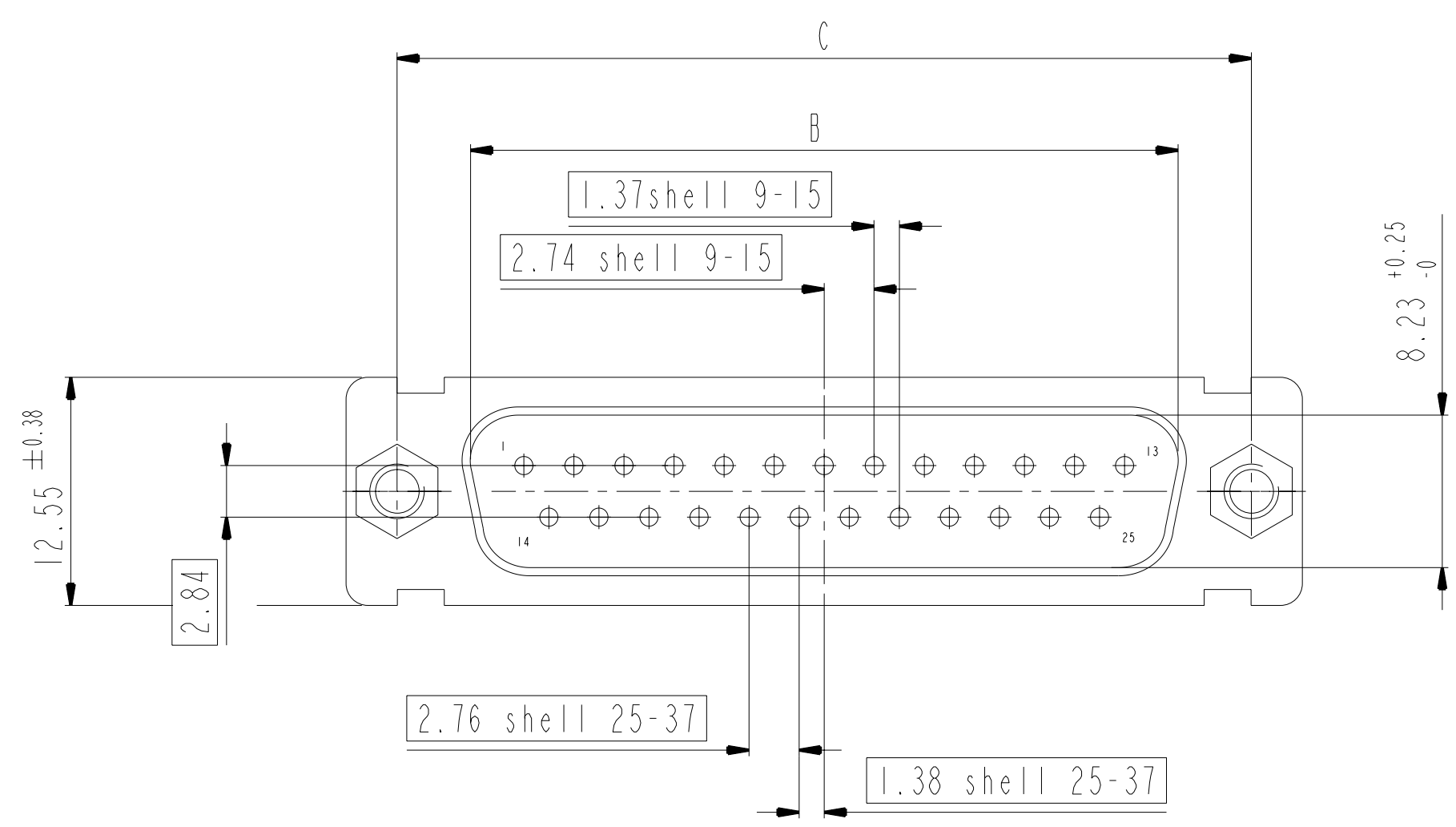
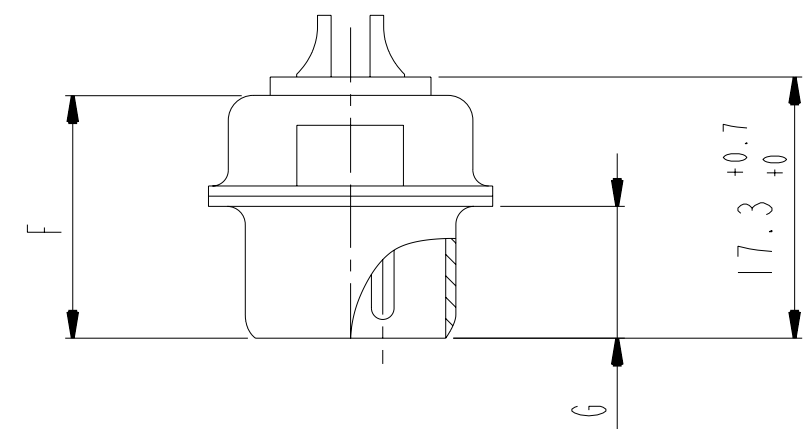
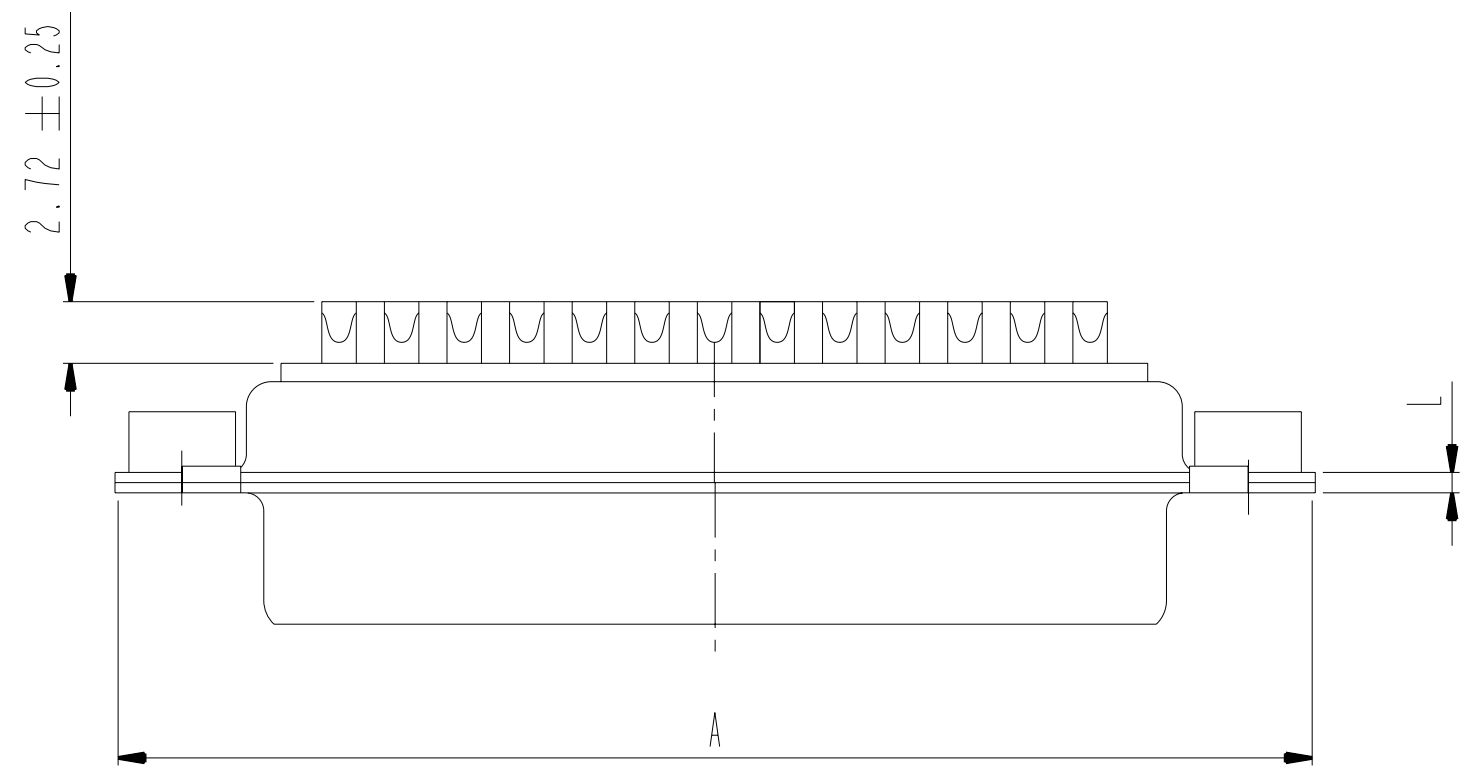
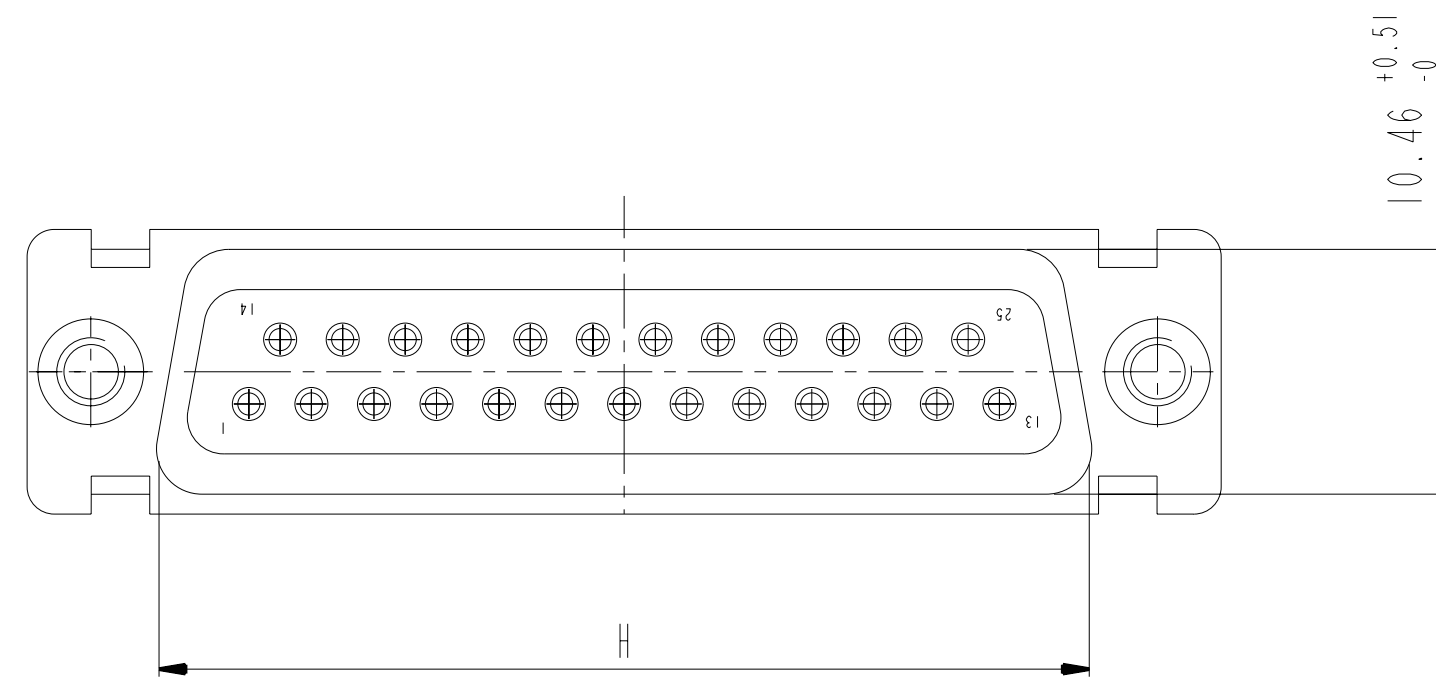
|                                       |          |  |                                |            |               |
|---------------------------------------|----------|--|--------------------------------|------------|---------------|
| www.fciconnect.com                    |          | surface <input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

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# DIMENSIONS FOR SHELL E, A, B, C

Dimensions are in millimeters

| Shell size | Number of contacts | A $\begin{smallmatrix} +0.76 \\ -0 \end{smallmatrix}$ | B $\begin{smallmatrix} +0.25 \\ -0 \end{smallmatrix}$ | C $\pm 0.12$ | F $\begin{smallmatrix} +0.57 \\ -0 \end{smallmatrix}$ | G $\begin{smallmatrix} +0.25 \\ -0 \end{smallmatrix}$   | H $\begin{smallmatrix} +0.51 \\ -0 \end{smallmatrix}$ | L $\begin{smallmatrix} +0.22 \\ -0 \end{smallmatrix}$ |
|------------|--------------------|---|---|--------------|---|---|---|---|
| E          | 09                 | 30.43   | 16.79   | 24.99        | 10.47   | 5.9 $\begin{smallmatrix} +0.15 \\ -0 \end{smallmatrix}$ | 19.02   | 0.80  |
| A          | 15                 | 38.76   | 25.12   | 33.32        | 10.47   | 5.9 $\begin{smallmatrix} +0.15 \\ -0 \end{smallmatrix}$ | 27.25   | 0.80  |
| B          | 25                 | 52.65   | 38.84   | 47.04        | 10.43   | 5.7 $\begin{smallmatrix} +0.25 \\ -0 \end{smallmatrix}$ | 41.02   | 0.80  |
| C          | 37                 | 68.94   | 55.30   | 63.50        | 10.56   | 5.7 $\begin{smallmatrix} +0.25 \\ -0 \end{smallmatrix}$ | 57.45   | 0.90  |

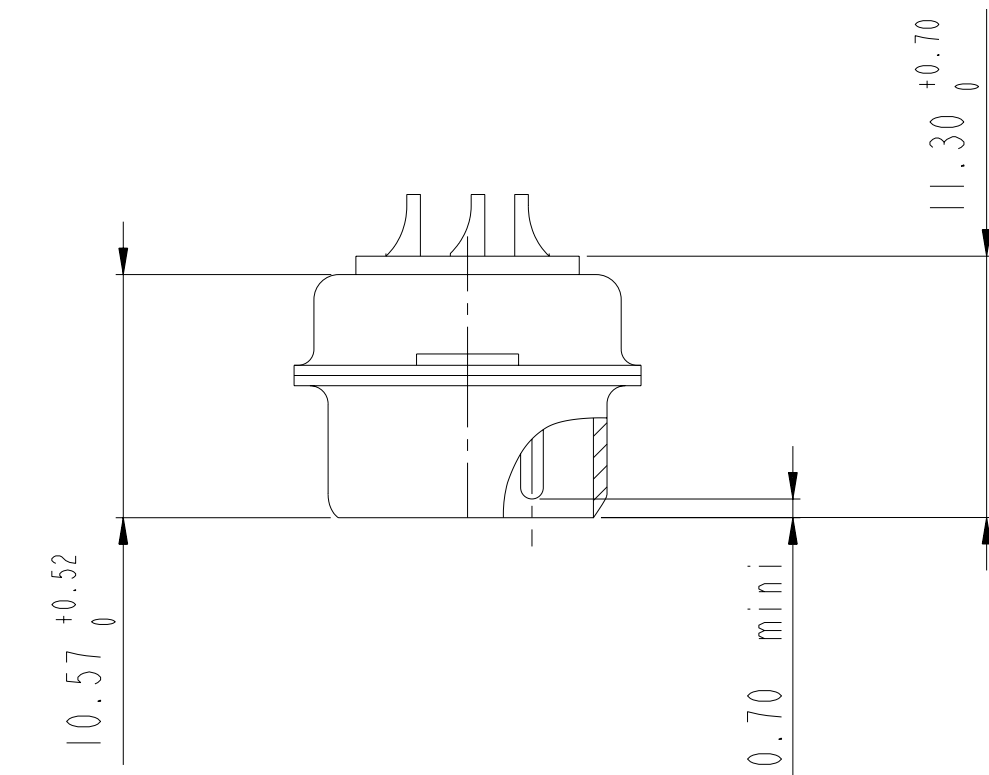
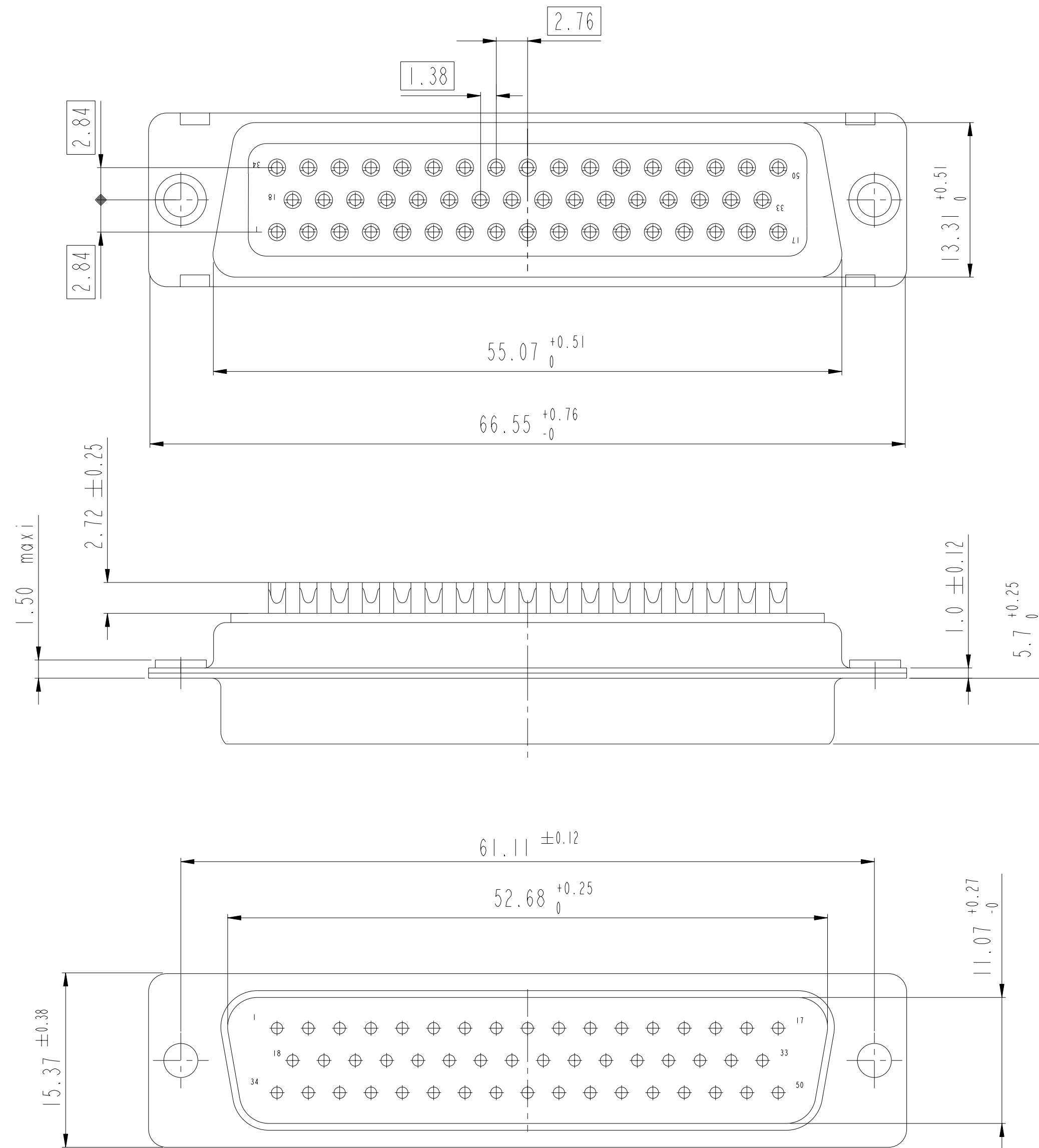


scale 3

|                                       |          |  |                                |              |           |
|---------------------------------------|----------|--|--------------------------------|--------------|-----------|
| 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                        | 0.X          | ±0.3      |
| Eng                                   | P LEGARE | 2006/11/14   | LINEAR                         | 0.XX         | ±0.1      |
| Chr                                   | P LEGARE | 2006/11/14   | 0° ±2°                         | 0.XXX        | ±0.05     |
| Appr                                  | P LEGARE | 2006/11/14   | Product family                 | - Spec ref   |           |
| SUB MALE DM HE501 series              |          |  | size                           | A2           | Scale 2:1 |
| with solder bucket                    |          |  | ECN                            | LS08-0044    |           |
| catalog no                            |          |  | CUSTOMER                       | sheet 3 of 4 |           |

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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                        | 0.X           | ±0.3         |
| Eng                      | P LEGARE | 2006/11/14   | LINEAR                         | 0.XX          | ±0.1         |
| Chr                      | P LEGARE | 2006/11/14   | 0° ±2°                         | 0.XXX         | ±0.05        |
| Appr                     | P LEGARE | 2006/11/14   | Product family                 | - Spec ref    |              |
| SUB MALE DM HE501 series |          |  | size A2                        | Scale 2:1     | Rev. C       |
| with solder bucket       |          |  | catalog no                     | C01-8637-1737 | sheet 4 of 4 |
| CUSTOMER                 |          |  | STATUS: Released               |               |              |

PDS: Rev: C

STATUS: Released

Printed on 18/01/2015