

## REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 507)

## PHYSICAL CHARACTERISTICS

-INSULATOR MATERIAL: THERMOPLASTIC UL94V0

-CONTACT MATERIAL: BRASS(SIGNAL CONTACT)

BRASS (POWERS CONTACT)

-ACCESSORIES: BRASS

-SHELLS: STEEL

## ELECTRICAL CHARACTERISTICS

-NOMINAL CURRENT: 7.5A (SIGNAL CONTACT)

30A (POWER CONTACT)

-CONTACT RESISTANCE: <=7.3 m Ohms(SIGNAL and POWER)

-CONTACT/CONTACT : >=1000 V

-CONTACT/GROUND : >=1200 V

-INSULATION RESISTANCE: >=5000 MOhms

- CLIMATIC CATEGORY: 55/125/21

TEMPERATURE RANGE -55°C TO +125°C

DAMP HEAT STEADY STATE 21 DAYS

SALT SPRAY 48 HOURS

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

- Female screw : 0.5 N.m minimum

## NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-22-008.
- The housing will withstand exposure to 260°C peak temperature for 3.5 seconds in a wave solder application with a 1.6mm minimum thick circuit board. See application notes/procedures if they are available.
- Termination plating spec:
  - Signal contacts: Ni + Gold
  - Power contacts: Ni 1.27µm+Sn 2.5 to 7.5µm,pure bright
- Active area plating spec:
  - Signal and power contacts: Ni + Gold
- Shell plating :2 to 4µm Cu + Ni + 3 to 10µm Sn,pure bright
- Accessories: Sn pure bright + Nickel
- Packaging spec: See GS-14-920

Series

# DBL13W3P700G30LF

Shell size: **A B C**  
see sheet 3

Front accessory definition  
see sheet 2

**blank** :without accessory  
**L** :threaded insert M3  
**O** :threaded insert UNC 4-40  
**V** :female screw UNC 4-40

Layout of contacts (see sheets)

Contacts

**P** :Pin

Termination type

**7** Right angle/USA

Plating

**00** 200 matings/unmatings  
**43** 500 matings/unmatings

PCB accessories definition  
see sheet 2

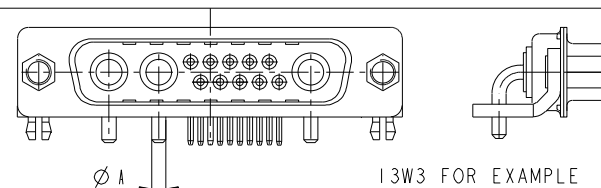
**A** :without accessory  
**H** :Metal brackets+harpoons for PCB 2.40mm  
**G** :Metal brackets+harpoons for PCB 1.60mm  
**M** :Metal brackets

Power contacts

**00** :Not fitted with power contact (signal contacts always fitted)  
**30** :Fitted with power contacts 30 Amp.

TABLE 1:PCB HOLE DIAMETERS

| POWER CONTACTS    |                                 | ACCESSORIES        |                    | SIGNAL CONTACTS    |
|-------------------|---------------------------------|--------------------|--------------------|--------------------|
| 30 A              | 2.00                            | Ø2.40              | Ø3.10              | Ø0.90 min          |
| Max current power | ØA <sup>+0.1</sup> <sub>0</sub> | PCB HOLE<br>+/-0.1 | PCB HOLE<br>+/-0.1 | PCB HOLE<br>+/-0.1 |



|                    |          |                                       |                  |            |          |
|--------------------|----------|---------------------------------------|------------------|------------|----------|
| www.fciconnect.com |          | surface                               | tolerance std    | projection | mm       |
|                    |          | ISO 1302                              | ISO 406 ISO 1101 | mm         |          |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                  |            |          |
| Dr                 | M PESSON | 2005-10-11                            | ANGULAR          | 0.X        | ±0.3     |
| Eng                | P LEGARE | 2005-10-11                            | LINEAR           | 0.XX       | ±0.1     |
| Chr                |          |                                       |                  | 0.XXX      | ±0.05    |
| Appr               |          |                                       | Product family   | ECN        | F09-0092 |
|                    |          |                                       |                  | Spec ref   |          |

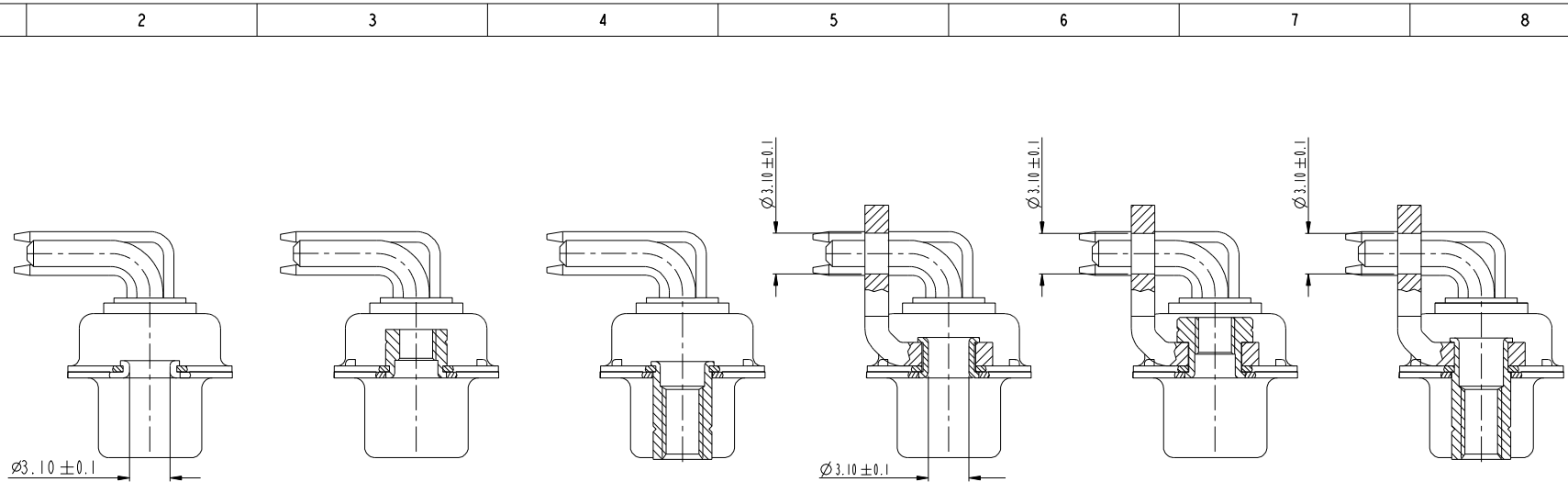
| rev | ecn no    | dr  | date       |
|-----|-----------|-----|------------|
| A   | LS05-0101 | MPE | 2005-10-11 |
| B   | LS06-0208 | LGO | 2006-12-12 |
| C   | LS07-0273 | MPE | 2007/10/31 |
| D   | F09-0092  | LSA | 2009/09/16 |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |

|     |                                 |        |               |      |   |
|-----|---------------------------------|--------|---------------|------|---|
| FCI | SUB MALE DW US foot print       | ang no | C01-8639-2305 | Rev. | D |
|     | mixed power right angled solder |        |               |      |   |
|     |                                 |        |               |      |   |
|     |                                 |        |               |      |   |

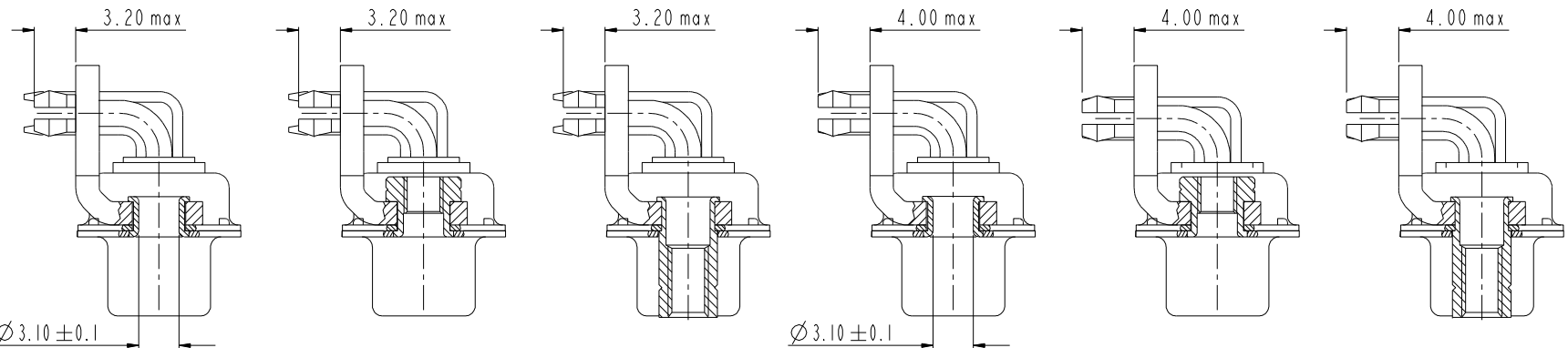
PDM: Rev: D

STATUS: Released

Printed: Apr 28, 2015



|                 |               |                                  |                   |                  |                                  |                   |
|-----------------|---------------|----------------------------------|-------------------|------------------|----------------------------------|-------------------|
| FRONT ACCESSORY | Blank Without | L insert M3<br>O insert UNC 4.40 | V insert UNC 4.40 | Blank Without    | L insert M3<br>O insert UNC 4.40 | V insert UNC 4.40 |
| PCB ACCESSORIES | A Without     | A Without                        | A Without         | M Metal brackets | M Metal brackets                 | M Metal bracket   |



|                 |                                               |                                               |                                               |                                               |                                               |                                               |
|-----------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| FRONT ACCESSORY | Blank Without                                 | L insert M3<br>O insert UNC 4.40              | V insert UNC 4.40                             | Blank Without                                 | L insert M3<br>O insert UNC 4.40              | V insert UNC 4.40                             |
| PCB ACCESSORIES | G Metal brackets +<br>harpoons for PCB 1.60mm | G Metal brackets +<br>harpoons for PCB 1.60mm | G Metal brackets +<br>harpoons for PCB 1.60mm | H Metal brackets +<br>harpoons for PCB 2.40mm | H Metal brackets +<br>harpoons for PCB 2.40mm | H Metal brackets +<br>harpoons for PCB 2.40mm |

SCALE:4

|                                       |          |                     |                                   |                  |          |  |
|---------------------------------------|----------|---------------------|-----------------------------------|------------------|----------|--|
| www.fciconnect.com                    |          | surface<br>ISO 1302 | tolerance std<br>ISO 406 ISO 1101 | projection<br>mm | mm       |  |
| TOLERANCES UNLESS OTHERWISE SPECIFIED |          | 0.X                 | ±0.3                              | size             | A2       |  |
| Dr                                    | M PESSON | 2005-10-11          | ANGULAR                           | 0.XX             | ±0.1     |  |
| Eng                                   | P LEGARE | 2005-10-11          | LINEAR                            | 0.XXX            | ±0.05    |  |
| Chr                                   |          |                     | 0° ±2°                            | ECN              | F09-0092 |  |
| Appr                                  |          |                     | Product family                    | Spec ref         |          |  |

|     |       |                                                              |        |               |      |   |
|-----|-------|--------------------------------------------------------------|--------|---------------|------|---|
| FCI | title | SUB MALE DW US foot print<br>mixed power right angled solder | eng no | C01-8639-2305 | Rev. | D |
|-----|-------|--------------------------------------------------------------|--------|---------------|------|---|

|   | I | 2 | 3 | 4 | 5 | 6 | 7 | 8 |   |
|---|---|---|---|---|---|---|---|---|---|
| A |   |   |   |   |   |   |   |   | A |
| B |   |   |   |   |   |   |   |   | B |
| C |   |   |   |   |   |   |   |   | C |
| D |   |   |   |   |   |   |   |   | D |
| E |   |   |   |   |   |   |   |   | E |
| F |   |   |   |   |   |   |   |   | F |

| PART NUMBER     | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES               |
|-----------------|------|-----------------------|-----------------------|----------------------------------|
| D*xWxP700A30LF  | 30   | 200                   | without               | without                          |
| D*LxWxP700A30LF | 30   | 200                   | insert M3             | without                          |
| D*OxWxP700A30LF | 30   | 200                   | insert UNC 4.40       | without                          |
| D*VxWxP700A30LF | 30   | 200                   | female screw UNC 4.40 | without                          |
| D*xWxP700H30LF  | 30   | 200                   | without               | metal bracket+harpoon PCB 2.40mm |
| D*LxWxP700H30LF | 30   | 200                   | insert M3             | metal bracket+harpoon PCB 2.40mm |
| D*OxWxP700H30LF | 30   | 200                   | insert UNC 4.40       | metal bracket+harpoon PCB 2.40mm |
| D*VxWxP700H30LF | 30   | 200                   | female screw UNC 4.40 | metal bracket+harpoon PCB 2.40mm |
| D*xWxP700G30LF  | 30   | 200                   | without               | metal bracket+harpoon PCB 1.60mm |
| D*LxWxP700G30LF | 30   | 200                   | insert M3             | metal bracket+harpoon PCB 1.60mm |
| D*OxWxP700G30LF | 30   | 200                   | insert UNC 4.40       | metal bracket+harpoon PCB 1.60mm |
| D*VxWxP700G30LF | 30   | 200                   | female screw UNC 4.40 | metal bracket+harpoon PCB 1.60mm |
| D*xWxP700M30LF  | 30   | 200                   | without               | metal bracket                    |
| D*LxWxP700M30LF | 30   | 200                   | insert M3             | metal bracket                    |
| D*OxWxP700M30LF | 30   | 200                   | insert UNC 4.40       | metal bracket                    |
| D*VxWxP700M30LF | 30   | 200                   | female screw UNC 4.40 | metal bracket                    |

shell size

#

A

A

B

B

B

C

C

C

LAYOUTS

xWx

11W1

7W2

21W1

17W2

13W3

25W3

21WA4

27W2

| PART NUMBER     | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES               |
|-----------------|------|-----------------------|-----------------------|----------------------------------|
| D*xWxP743A30LF  | 30   | 500                   | without               | without                          |
| D*LxWxP743A30LF | 30   | 500                   | insert M3             | without                          |
| D*OxWxP743A30LF | 30   | 500                   | insert UNC 4.40       | without                          |
| D*VxWxP743A30LF | 30   | 500                   | female screw UNC 4.40 | without                          |
| D*xWxP743H30LF  | 30   | 500                   | without               | metal bracket+harpoon PCB 2.40mm |
| D*LxWxP743H30LF | 30   | 500                   | insert M3             | metal bracket+harpoon PCB 2.40mm |
| D*OxWxP743H30LF | 30   | 500                   | insert UNC 4.40       | metal bracket+harpoon PCB 2.40mm |
| D*VxWxP743H30LF | 30   | 500                   | female screw UNC 4.40 | metal bracket+harpoon PCB 2.40mm |
| D*xWxP743G30LF  | 30   | 500                   | without               | metal bracket+harpoon PCB 1.60mm |
| D*LxWxP743G30LF | 30   | 500                   | insert M3             | metal bracket+harpoon PCB 1.60mm |
| D*OxWxP743G30LF | 30   | 500                   | insert UNC 4.40       | metal bracket+harpoon PCB 1.60mm |
| D*VxWxP543G30LF | 30   | 500                   | female screw UNC 4.40 | metal bracket+harpoon PCB 1.60mm |
| D*xWxP743M30LF  | 30   | 500                   | without               | metal bracket                    |
| D*LxWxP743M30LF | 30   | 500                   | insert M3             | metal bracket                    |
| D*OxWxP743M30LF | 30   | 500                   | insert UNC 4.40       | metal bracket                    |
| D*VxWxP743M30LF | 30   | 500                   | female screw UNC 4.40 | metal bracket                    |

www.fciconnect.com

surface  
ISO 1302

tolerance std  
ISO 406 ISO 1101

projection  
mm

TOLERANCES UNLESS OTHERWISE SPECIFIED

size  
A2

Scale  
2:1

Dr M PESSON 2005-10-11

Eng P LEGARE 2005-10-11

Chr

Appr

Product family

Spec ref

ECN F09-0092

FCI

Sub MALE DW US foot print

mixed power right angled solder

Org no

C01-8639-2305

Rev.

D

CUSTOMER

Printed: Apr 28, 2015

REV F - 2005-03-20

1

2

3

4

5

6

7

8

A

B

C

D

E

F

1

2

3

4

5

6

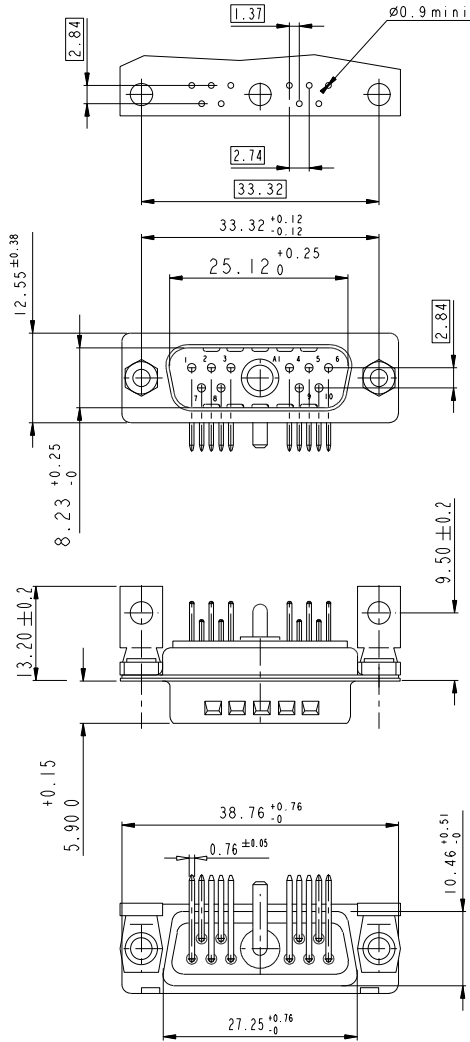
7

8

11W1

# LAYOUT AND CONNECTOR DIMENSIONS

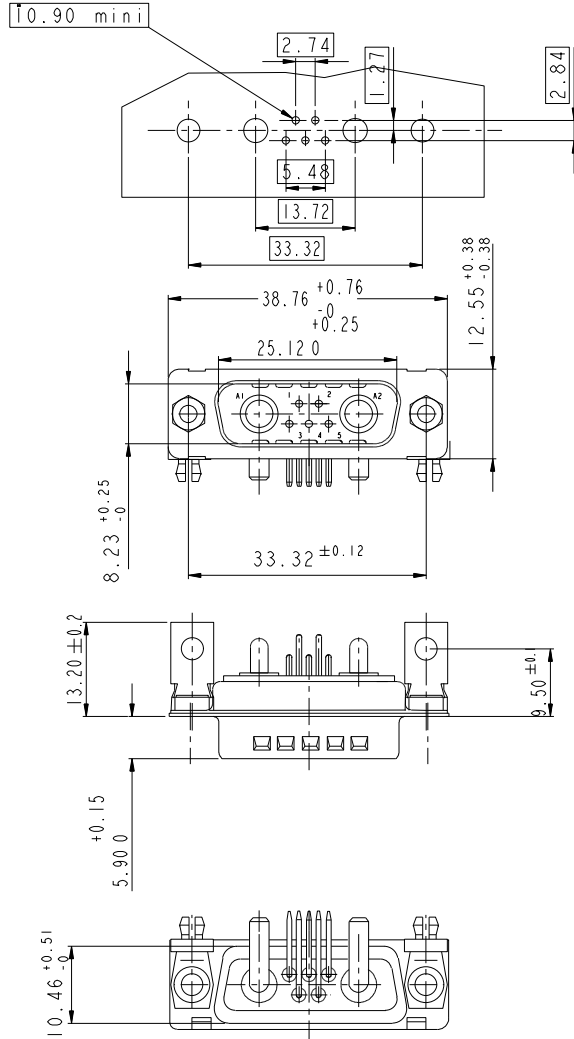
For PCB hole diameters see table 1 sheet 1



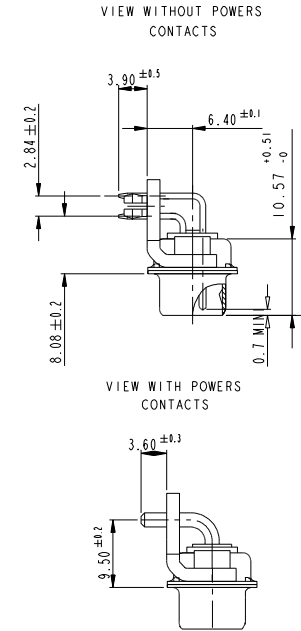
7W2

# LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1



# SIDE VIEW FOR ALL LAYOUTS



A

B

C

D

E

F

|                    |          |                                       |                                   |                  |              |
|--------------------|----------|---------------------------------------|-----------------------------------|------------------|--------------|
| www.fciconnect.com |          | surface<br>ISO 1302                   | tolerance std<br>ISO 406 ISO 1101 | projection<br>mm | mm           |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                                   | size<br>A2       | Scale<br>2:1 |
| Dr                 | M PESSON | 2005-10-11                            | ANGULAR                           | 0.X              | ±0.3         |
| Eng                | P LEGARE | 2005-10-11                            | LINEAR                            | 0.XX             | ±0.1         |
| Chr                |          |                                       | 0° ±2°                            | 0.XXX            | ±0.05        |
| Appr               |          |                                       | Product family                    | ECN              | F09-0092     |
|                    |          |                                       |                                   | Spec ref         |              |

|     |  |                                                                       |                          |           |
|-----|--|-----------------------------------------------------------------------|--------------------------|-----------|
| FCI |  | title<br>SUB MALE DW US foot print<br>mixed power right angled solder | part no<br>C01-8639-2305 | Rev.<br>D |
|-----|--|-----------------------------------------------------------------------|--------------------------|-----------|

1

2

3

4

5

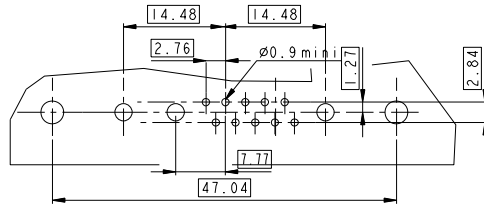
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7

8

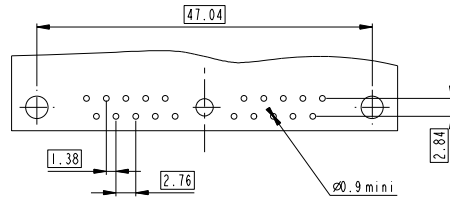
13W3

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1



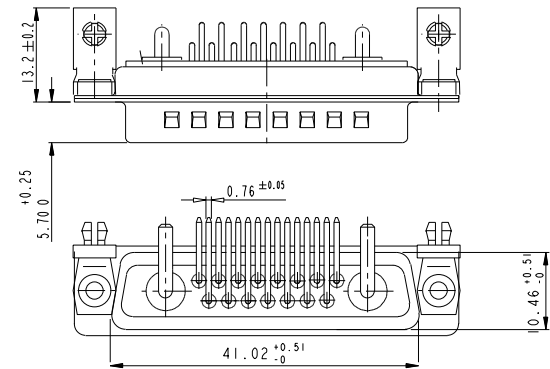
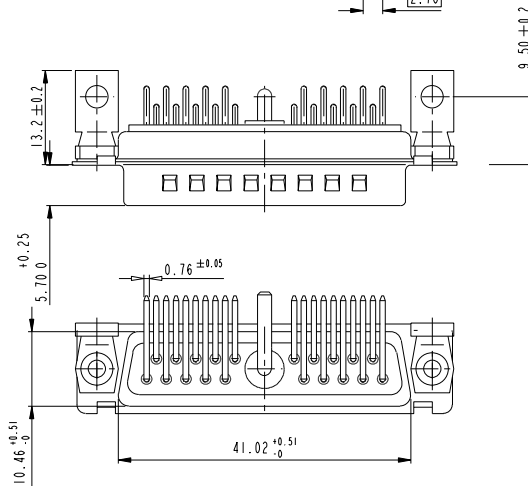
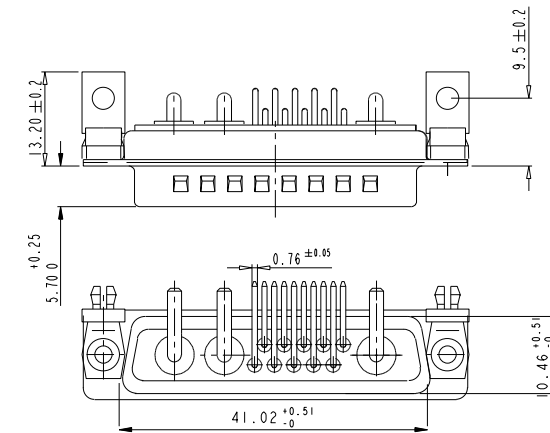
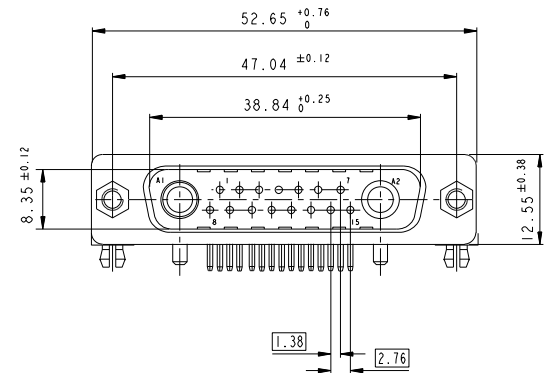
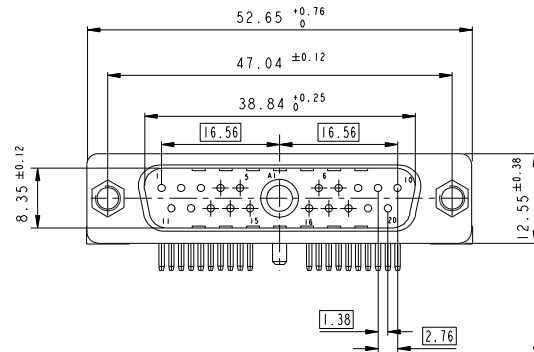
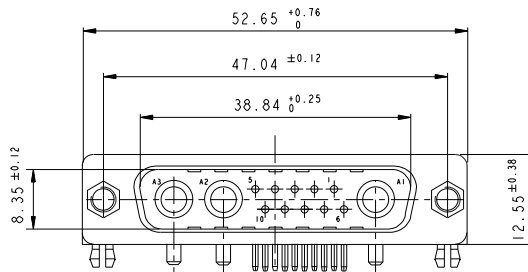
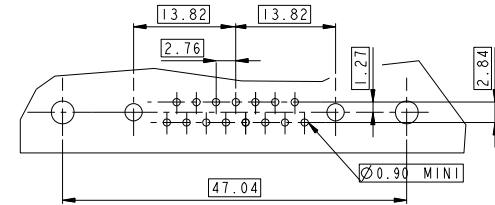
21W1

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1



17W2

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1

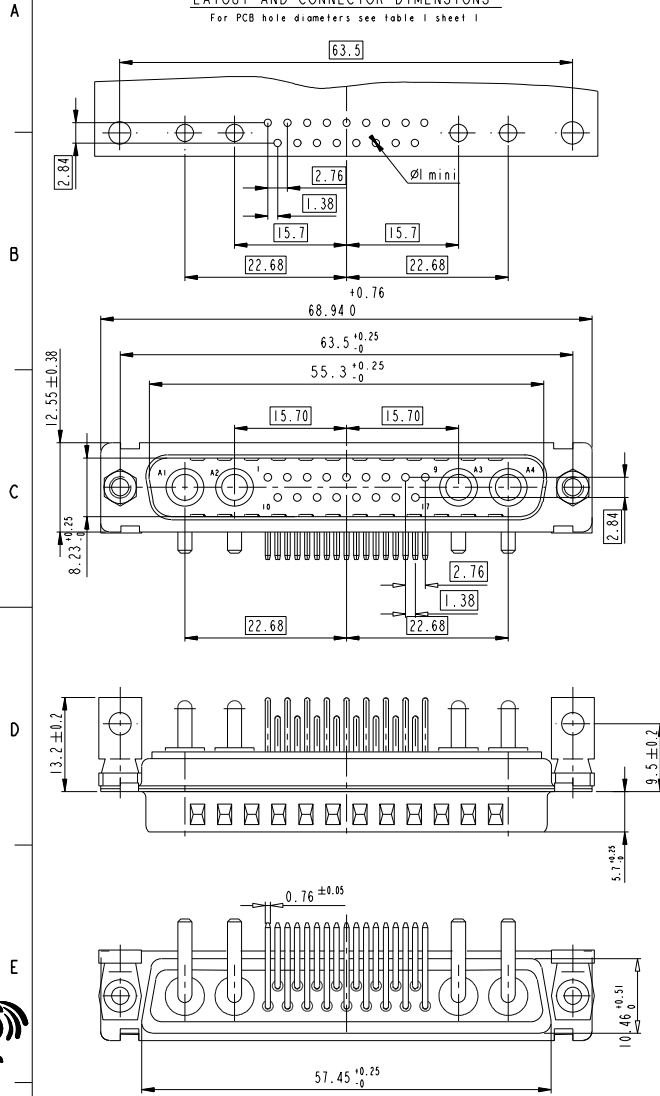


|                                       |                     |                     |                                   |                  |          |
|---------------------------------------|---------------------|---------------------|-----------------------------------|------------------|----------|
| www.fciconnect.com                    |                     | surface<br>ISO 1302 | tolerance std<br>ISO 406 ISO 1101 | projection<br>mm | mm       |
| TOLERANCES UNLESS OTHERWISE SPECIFIED |                     | 0.X                 | ±0.3                              | size             | A2       |
| Dr                                    | M PESSON 2005-10-11 | ANGULAR             | ±0.1                              | Scale            | 2:1      |
| Eng                                   | P LEGARE 2005-10-11 | LINEAR              | 0.XX                              | ECN              | F09-0092 |
| Chr                                   |                     | 0° ±2°              | ±0.05                             | Spec ref         |          |
| Appr                                  |                     | Product family      |                                   |                  |          |

|     |             |                                 |        |               |      |
|-----|-------------|---------------------------------|--------|---------------|------|
| FCI | title       | SUB MALE DW US foot print       | ang no | C01-8639-2305 | Rev. |
|     | description | mixed power right angled solder |        |               | D    |

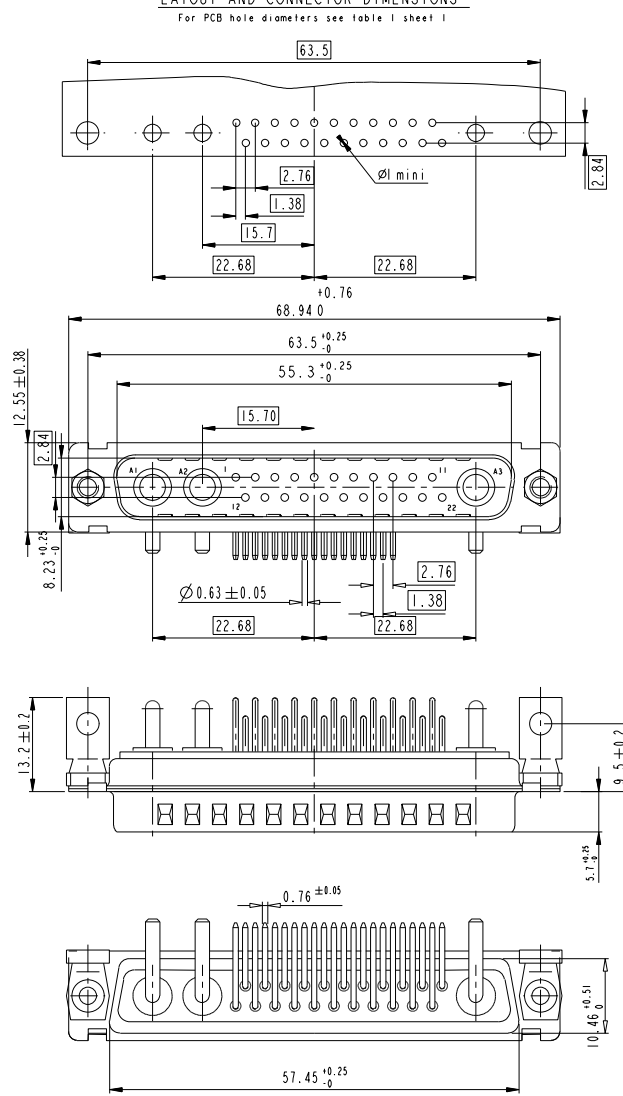
21WA4

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1



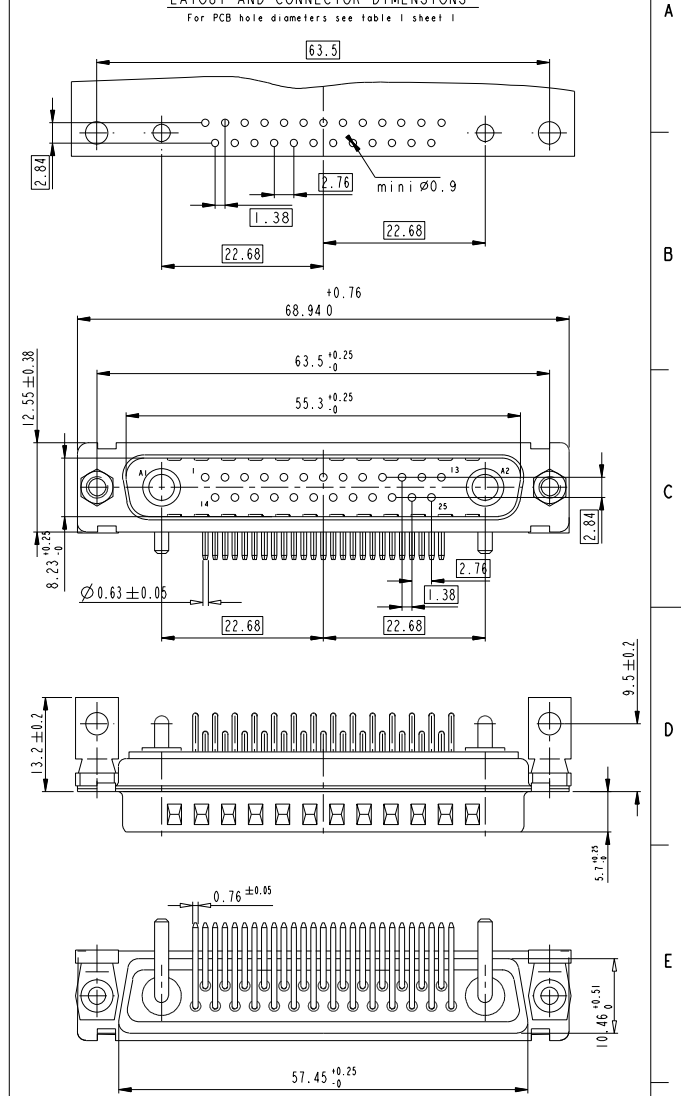
25W3

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1



27W2

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1



|                    |          |                                       |                                   |                  |              |
|--------------------|----------|---------------------------------------|-----------------------------------|------------------|--------------|
| www.fciconnect.com |          | surface<br>ISO 1302                   | tolerance std<br>ISO 406 ISO 1101 | projection<br>mm | mm           |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                                   | size<br>A2       | Scale<br>2:1 |
| Dr                 | M PESSON | 2005-10-11                            | ANGULAR                           | 0.X              | ±0.3         |
| Eng                | P LEGARE | 2005-10-11                            | LINEAR                            | 0.XX             | ±0.1         |
| Chr                |          |                                       | 0° ±2°                            | 0.XXX            | ±0.05        |
| Appr               |          |                                       | Product family                    | ECN              | F09-0092     |
|                    |          |                                       |                                   | Spec ref         |              |

|     |                                                                       |                          |           |
|-----|-----------------------------------------------------------------------|--------------------------|-----------|
| FCI | title<br>SUB MALE DW US foot print<br>mixed power right angled solder | part no<br>C01-8639-2305 | Rev.<br>D |
|-----|-----------------------------------------------------------------------|--------------------------|-----------|