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REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 507)

PHYSICAL CHARACTERISTICS

-INSULATOR MATERIAL: THERMOPLASTIC UL94V0

-CONTACT MATERIAL: PHOSPHOR BRONZE( SIGNAL CONTACT )

BRASS (POWERS CONTACT)

-ACCESSORIES: BRASS

-SHELLS: STEEL

ELECTRICAL CHARACTERISTICS

-NOMINAL CURRENT: 7.5A (SIGNAL CONTACT)

30A or 40A (POWER CONTACT)

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

-CONTACT/CONTACT : >=1000 V

-CONTACT/GROUND : >=1200 V

-INSULATION RESISTANCE: >=5000 MOhms

ENVIRONMENTAL CHARACTERISTICS

- CLIMATIC CATEGORY: 55/125/21

TEMPERATURE RANGE -55°C TO +125°C

DAMP HEAT STEADY STATE 21 DAYS

SALT SPRAY 48 HOURS

MECHANICAL CHARACTERISTICS

- 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 7.5µ,pure bright

- Active area plating spec:

- Signal and power contacts: Ni + Gold

- Shell plating :2 to 4µm Cu + nickel + 3 to 10µmm Sn,pure bright

- Accessories: Sn pure bright + nickel

- Packaging spec: See GS-14-920

Series

Shell size: E A B C D (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 sheet 3)

Contacts

S :Socket

Termination type

5 Right angle/Europe standard

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.

40 :Fitted with power contacts 40 Amp.

DBL13W3S500G30LF

See note RoHS

TABLE 1:PCB HOLE DIAMETERS

| POWER CONTACTS    |                                 |               | ACCESSORIES   | SIGNAL CONTACT |
|-------------------|---------------------------------|---------------|---------------|----------------|
| 30 A              | 2.00                            | Ø2.40         | Ø3.10         | Ø0.9 min       |
| 40 A              | 2.80                            | Ø3.10         |               |                |
| Max current power | ØA <sup>+0.1</sup> <sub>0</sub> | PCB HOLE ±0.1 | PCB HOLE ±0.1 | PCB HOLE       |

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

E

F10-0060

LSA

2010/06/01

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-

-

-

-

-

-

Dr

M PESSON

2005-10-11

Eng

P LEGARE

2005-10-11

Chr

Appr

surface

ISO 1302

- ✓

tolerance std

ISO 406

ISO 1101

projection

ISO 1101

mm

TOLERANCES UNLESS OTHERWISE SPECIFIED

ANGULAR

0° ±2°

LINEAR

0.X ±0.3

0.XX ±0.1

0.XXX ±0.05

size

A2

Scale

2:1

ECN

F10-0060

Product family

-

Spec ref

-

title

SUB FEMALE DMW EUROPE

mixed power right angled solder

catalog no

-

dwg no

C01-8639-2300

Rev.

E

sheet 1 of 7

www.fciconnect.com

Dr

M PESSON

2005-10-11

Eng

P LEGARE

2005-10-11

Chr

Appr

surface

ISO 1302

- ✓

tolerance std

ISO 406

ISO 1101

projection

ISO 1101

mm

TOLERANCES UNLESS OTHERWISE SPECIFIED

ANGULAR

0° ±2°

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0.XXX ±0.05

size

A2

Scale

2:1

ECN

F10-0060

Product family

-

Spec ref

-

title

SUB FEMALE DMW EUROPE

mixed power right angled solder

catalog no

-

dwg no

C01-8639-2300

Rev.

E

sheet 1 of 7

13W3 FOR EXAMPLE

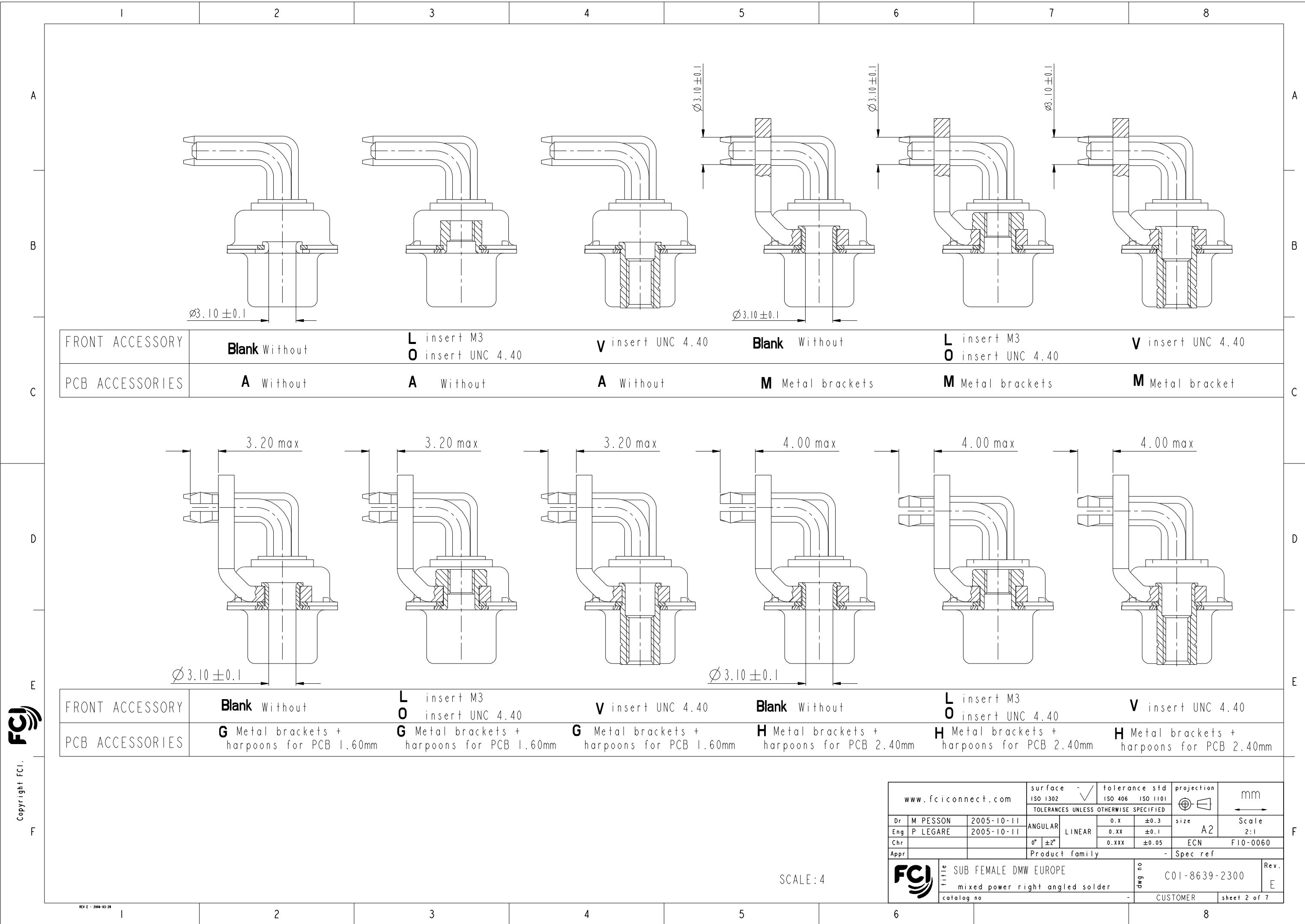
Ø A

FCI

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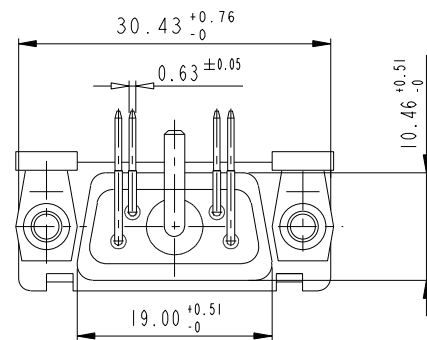
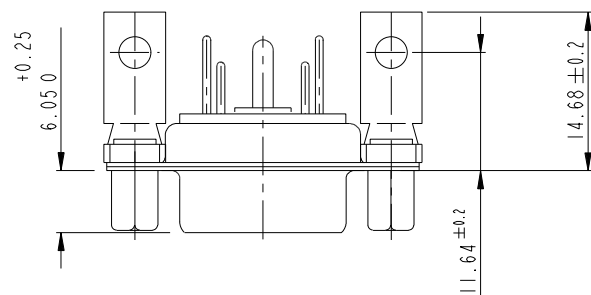
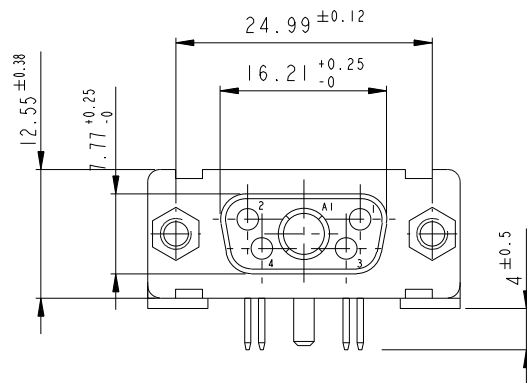
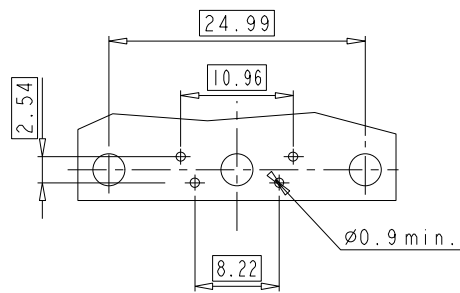
REV E - 2006-03-28

PDM: Rev:E STATUSReleased Printed: Oct 01, 2010



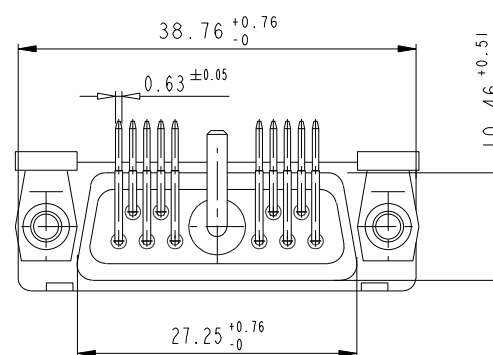
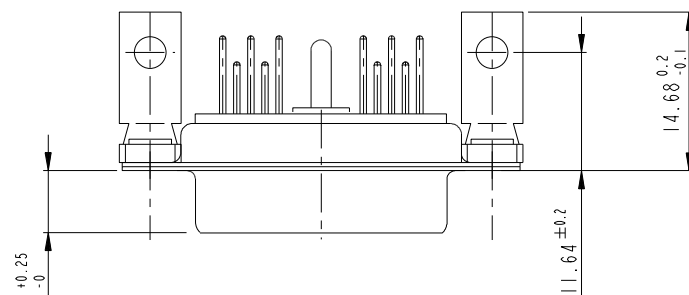
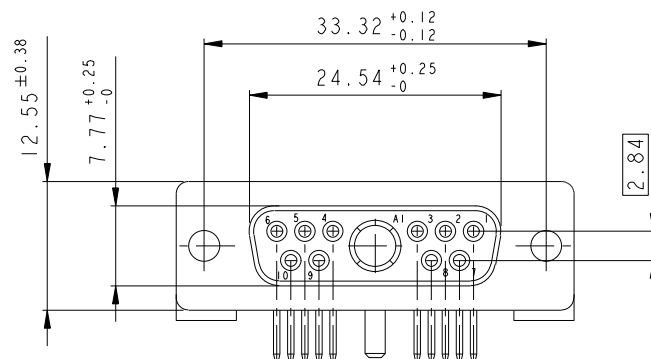
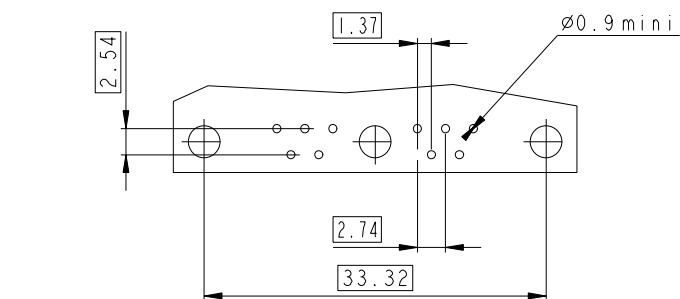


5W1

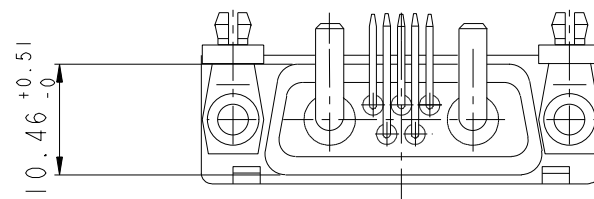
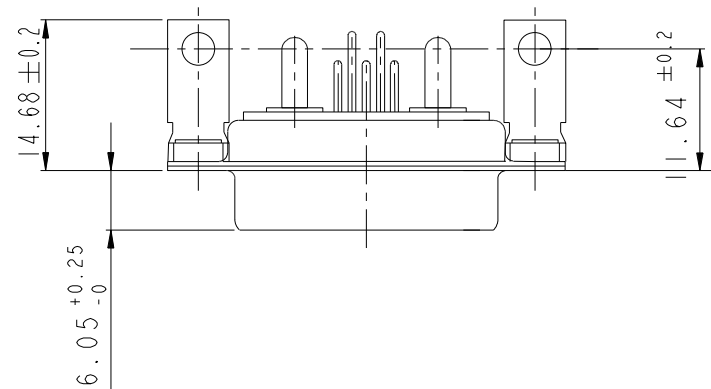
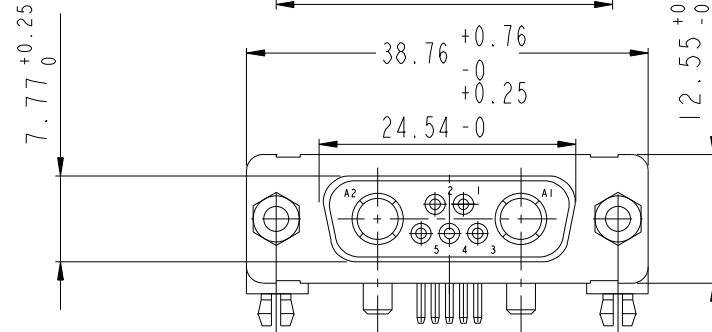
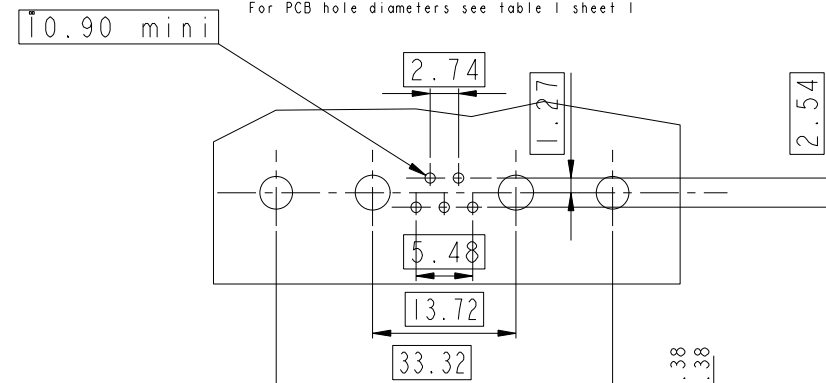
LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table I sheet I

Floating signal contacts

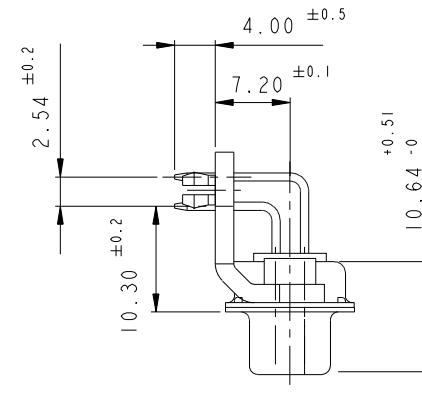
11W1

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

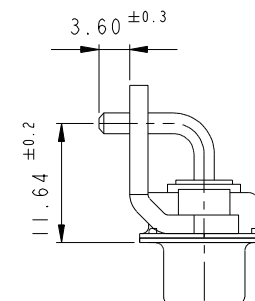
7W2

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table I sheet ISIDE VIEW FOR ALL LAYOUTS  
(except size D)

## VIEW WITHOUT POWERS CONTACTS



## VIEW WITH POWERS CONTACTS

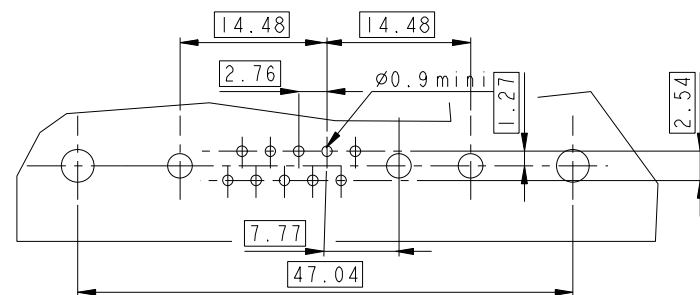


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|                    |          |            |                                       |        |                  |                      |              |
|--------------------|----------|------------|---------------------------------------|--------|------------------|----------------------|--------------|
| www.fciconnect.com |          |            | surface                               | ✓      | tolerance std    | projection           | mm           |
|                    |          |            | ISO 1302                              |        | ISO 406 ISO 1101 |                      |              |
|                    |          |            | TOLERANCES UNLESS OTHERWISE SPECIFIED |        |                  |                      |              |
| Dr                 | M PESSON | 2005-10-11 | ANGULAR                               |        | 0.X              | ±0.3                 | size A2      |
| Eng                | P LEGARE | 2005-10-11 |                                       | LINEAR | 0.XX             | ±0.1                 | Scale 2:1    |
| Chr                |          |            | 0° ±2°                                |        | 0.XXX            | ±0.05                | ECN F10-0060 |
| Appr               |          |            | Product family                        |        | Spec ref         |                      |              |
| FCI                |          |            | SUB FEMALE DMW EUROPE                 |        |                  | dwg no C01-8639-2300 |              |
|                    |          |            | mixed power right angled solder       |        |                  | Rev. E               |              |
|                    |          |            | catalog no                            |        |                  | CUSTOMER             |              |
|                    |          |            |                                       |        |                  | sheet 4 of 7         |              |

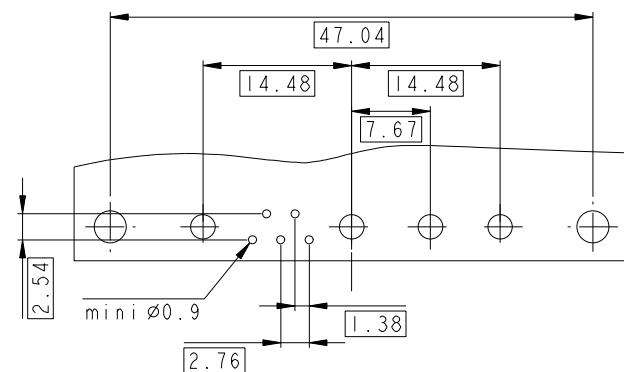
13W3

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



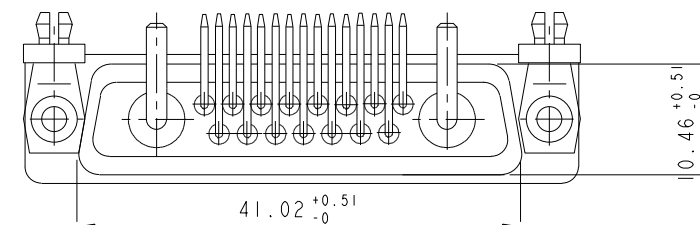
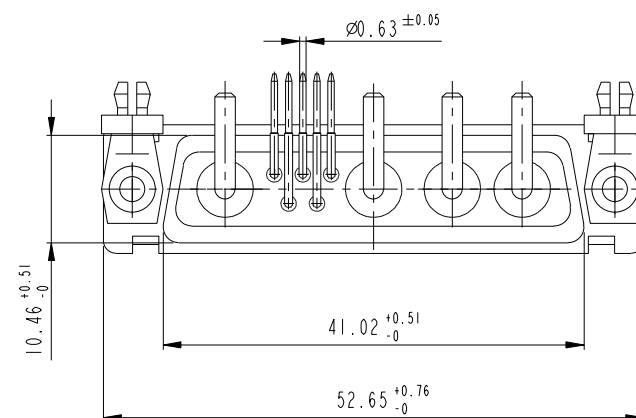
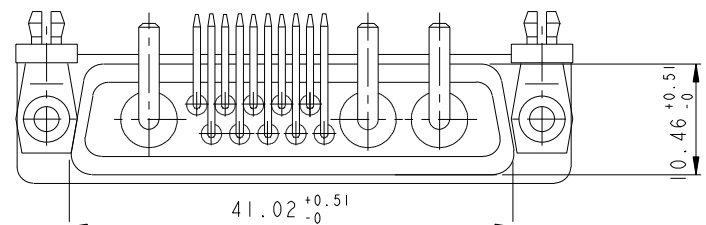
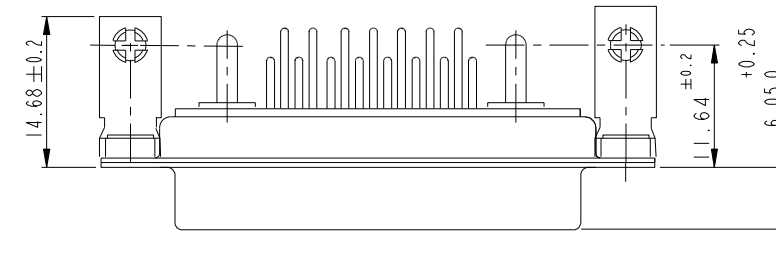
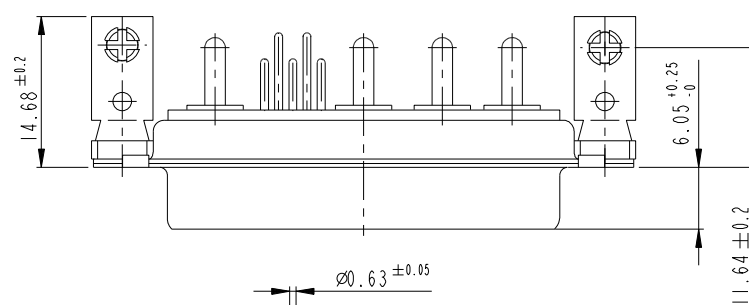
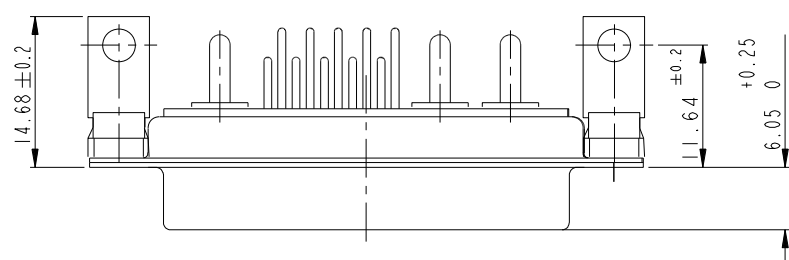
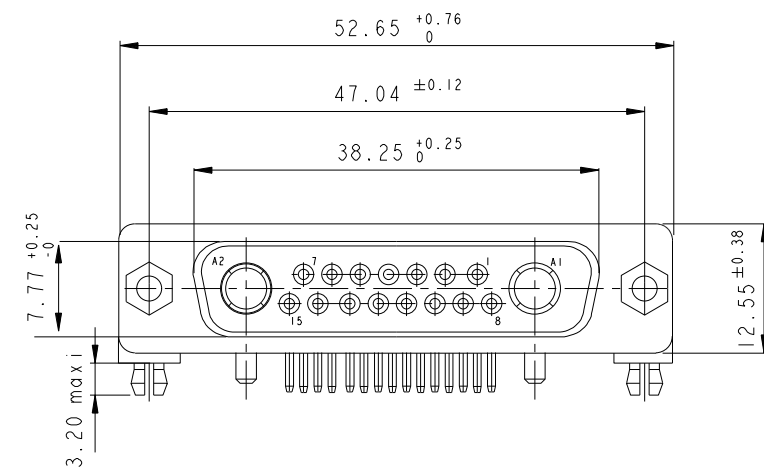
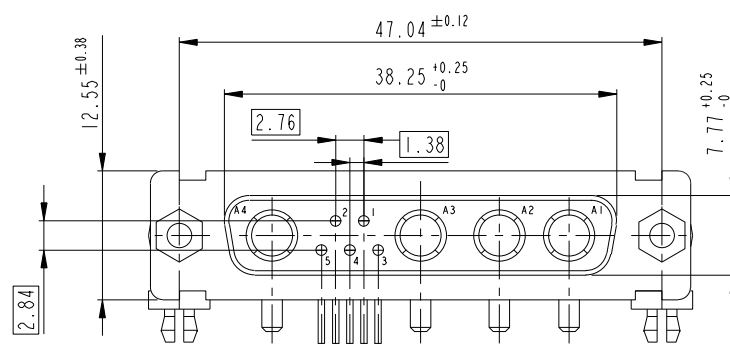
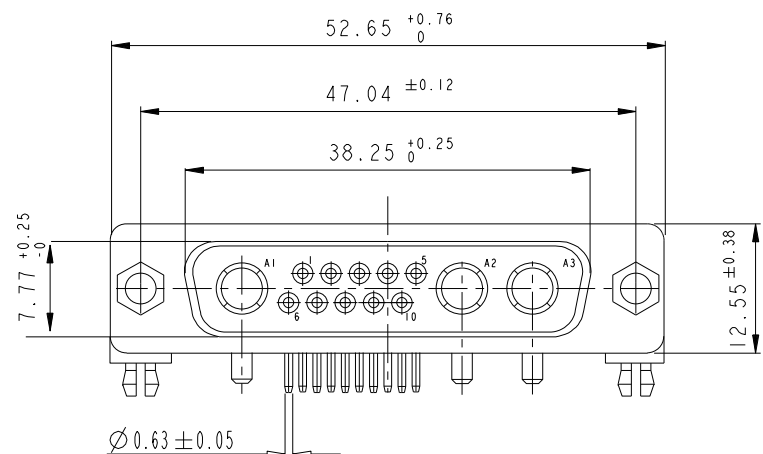
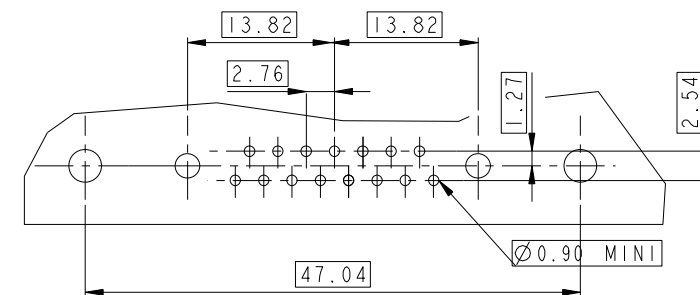
9W4

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



17W2

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



Floating signal contacts

|                                                                                       |          |            |                                                                                                 |        |                                            |       |                                                                                                     |               |                                                                                             |          |
|---------------------------------------------------------------------------------------|----------|------------|-------------------------------------------------------------------------------------------------|--------|--------------------------------------------|-------|-----------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------------|----------|
| www.fciconnect.com                                                                    |          |            | surface -  |        | tolerance std<br>ISO 1302 ISO 406 ISO 1101 |       | projection<br> |               | mm<br> |          |
|                                                                                       |          |            | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                           |        |                                            |       |                                                                                                     |               |                                                                                             |          |
| Dr                                                                                    | M PESSON | 2005-10-11 | ANGULAR                                                                                         | LINEAR | 0.X                                        | ±0.3  | size<br>A2                                                                                          | Scale<br>2:1  |                                                                                             |          |
| Eng                                                                                   | P LEGARE | 2005-10-11 |                                                                                                 |        | 0.XX                                       | ±0.1  |                                                                                                     |               |                                                                                             |          |
| Chr                                                                                   |          |            |                                                                                                 |        | 0° ±2°                                     | 0.XXX |                                                                                                     | ±0.05         | ECN F10-0060                                                                                |          |
| Appr                                                                                  |          |            | Product family                                                                                  |        |                                            |       | -                                                                                                   | Spec ref      |                                                                                             |          |
|  |          | title      | SUB FEMALE DMW EUROPE                                                                           |        |                                            |       | dwg no                                                                                              | C01-8639-2300 |                                                                                             | Rev<br>E |
|                                                                                       |          |            | mixed power right angled solder                                                                 |        |                                            |       |                                                                                                     |               |                                                                                             |          |
|                                                                                       |          |            | catalog no                                                                                      |        |                                            |       |                                                                                                     |               |                                                                                             |          |
|                                                                                       |          |            |                                                                                                 |        |                                            |       | -                                                                                                   | CUSTOMER      | sheet 5 of 7                                                                                |          |



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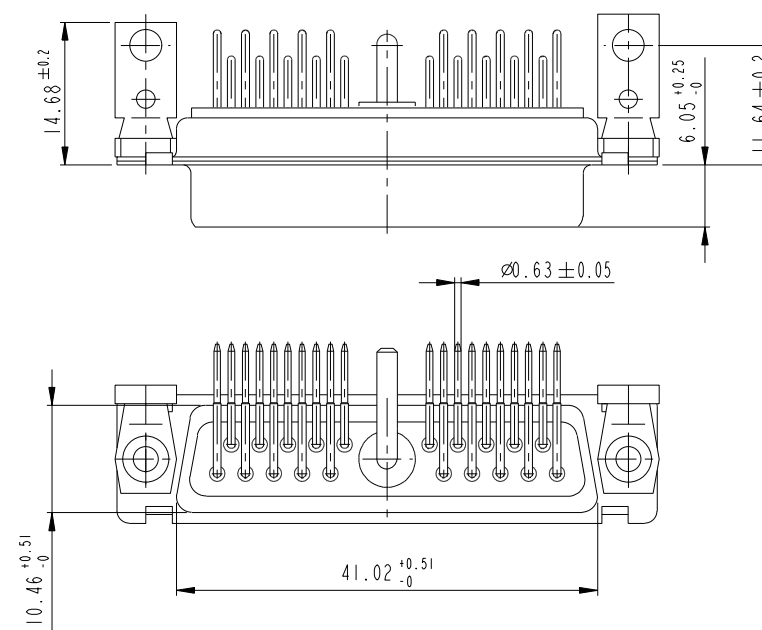
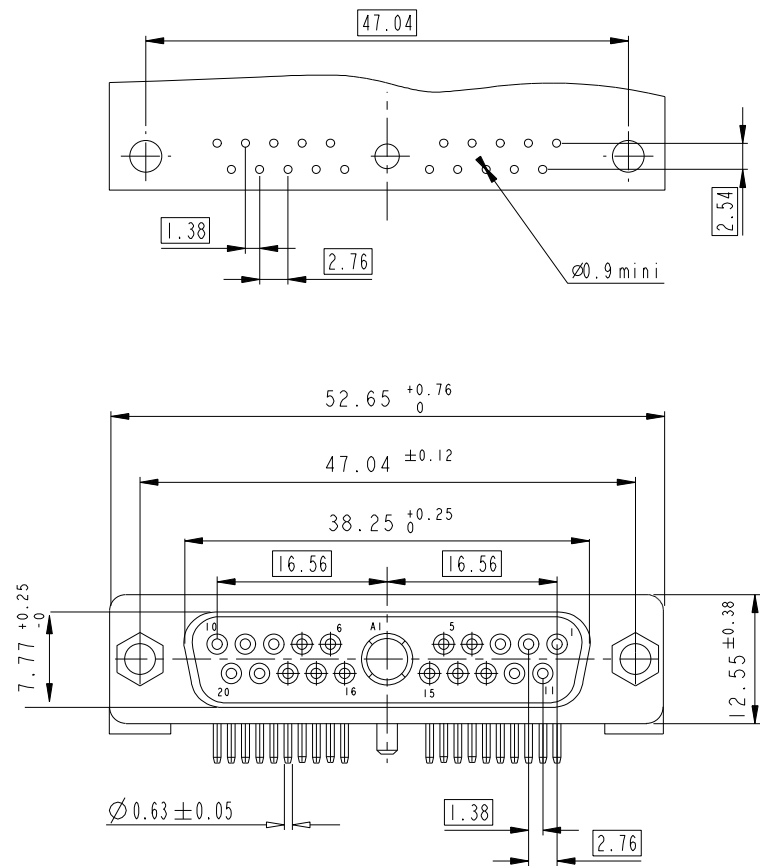
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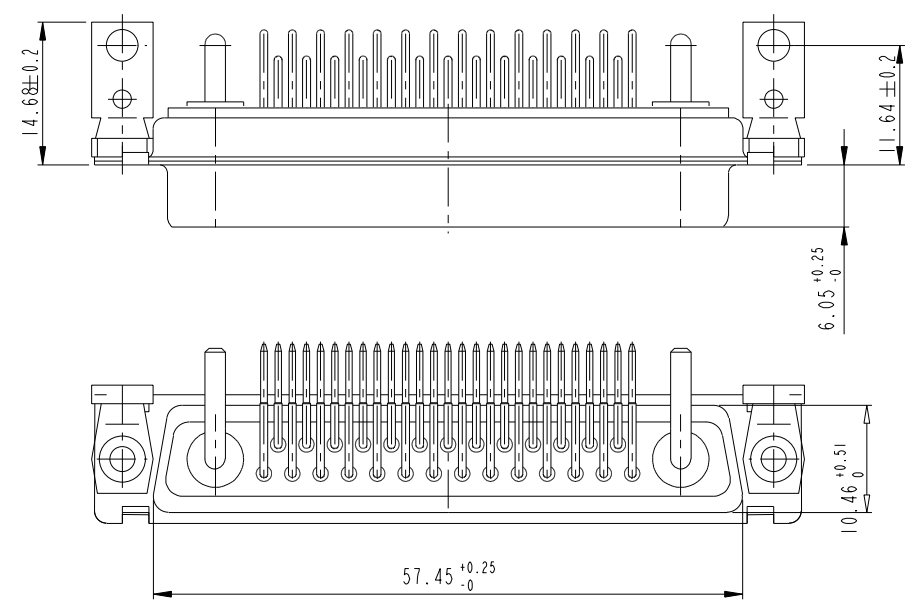
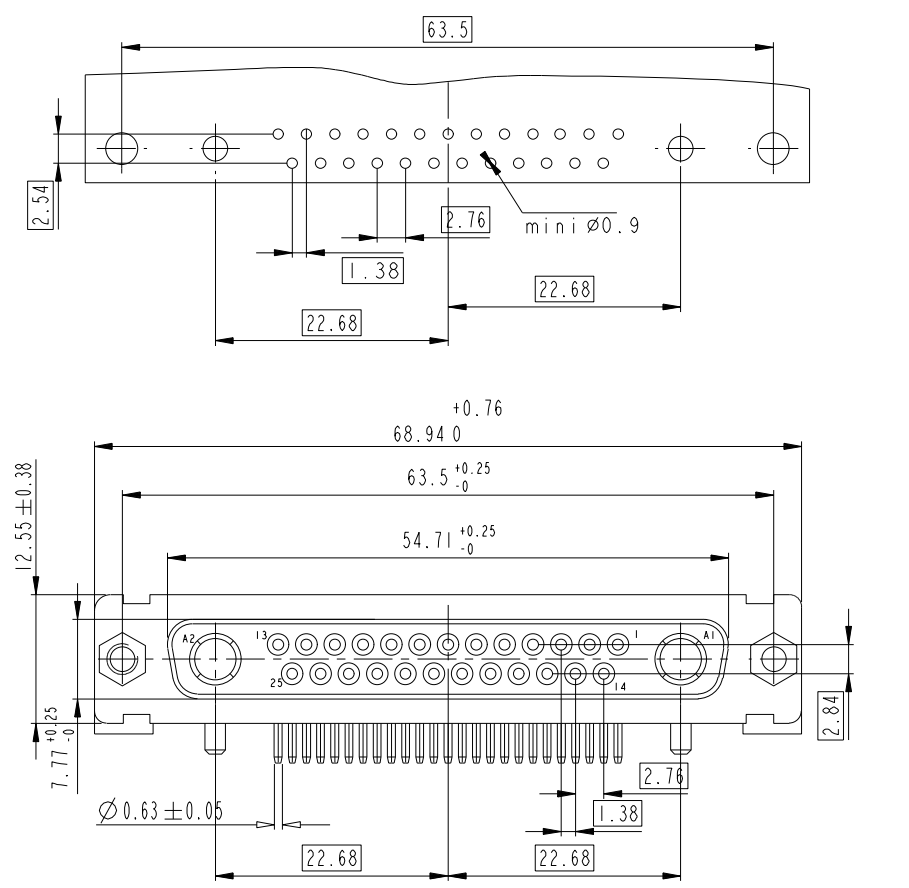
21W1

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



27W2

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



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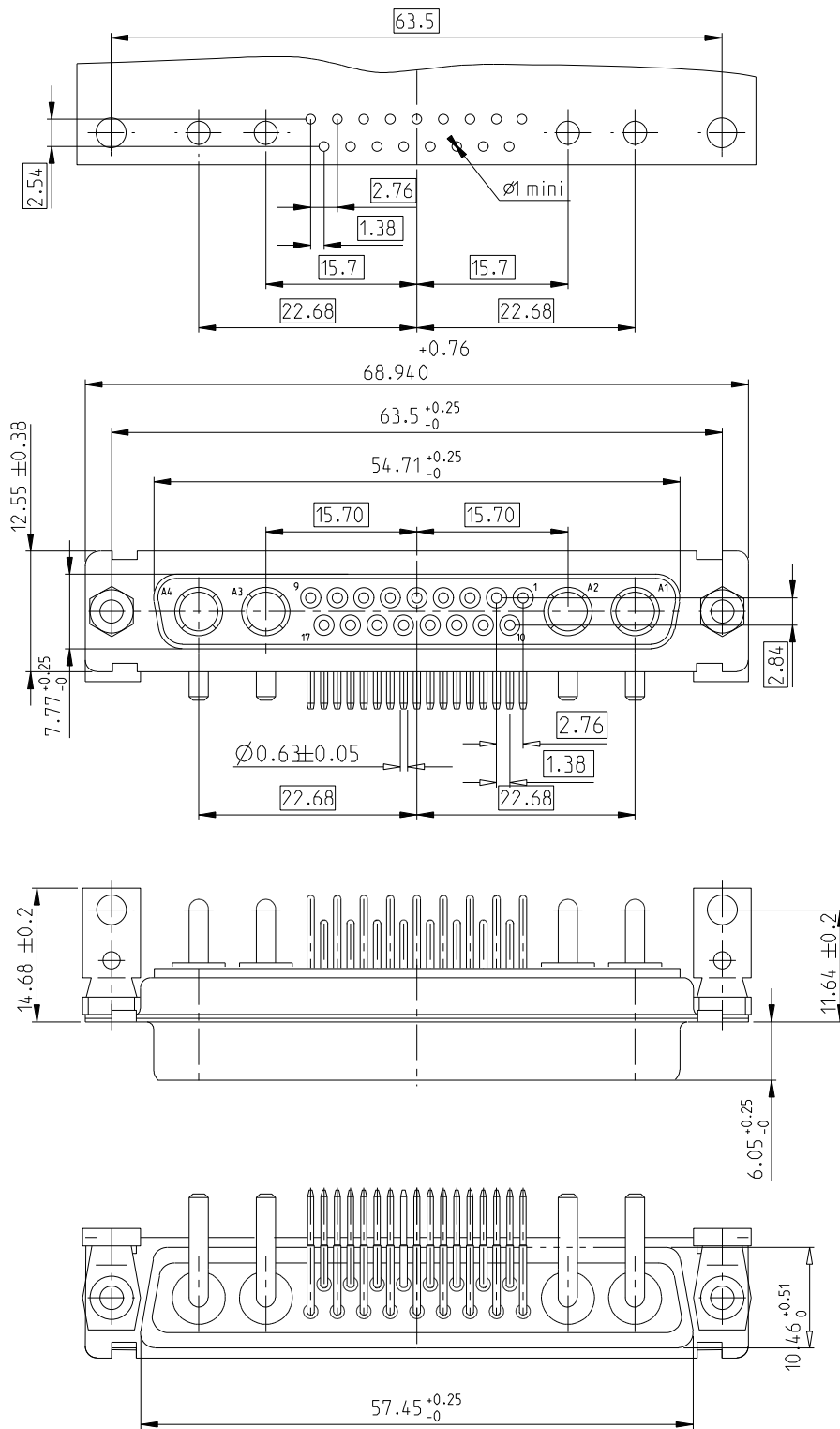
|                    |          |                                       |                  |               |            |                |               |            |     |
|--------------------|----------|---------------------------------------|------------------|---------------|------------|----------------|---------------|------------|-----|
| www.fciconnect.com |          | surface                               | -                | tolerance std | ISO 1302   | ISO 406        | ISO 1101      | projection | mm  |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                  |               |            |                |               |            |     |
| Dr                 | M PESSON | 2005-10-11                            | ANGULAR          | 0.X           | $\pm 0.3$  | size           | A2            | Scale      | 2:1 |
| Eng                | P LEGARE | 2005-10-11                            | LINEAR           | 0.XX          | $\pm 0.1$  | ECN            | F10-0060      | Rev.       | E   |
| Chr                |          |                                       | 0° $\pm 2^\circ$ | 0.XXX         | $\pm 0.05$ | Product family | -             | Spec ref   |     |
| Appr               |          |                                       |                  |               |            |                |               |            |     |
| FCI                |          | SUB FEMALE DMW EUROPE                 |                  |               | dwg no     |                | C01-8639-2300 |            |     |
|                    |          | mixed power right angled solder       |                  |               | catalog no |                | CUSTOMER      |            |     |
|                    |          |                                       |                  |               |            |                | sheet 6 of 7  |            |     |



21W A4

LAYOUT AND CONNECTOR DIMENSIONS

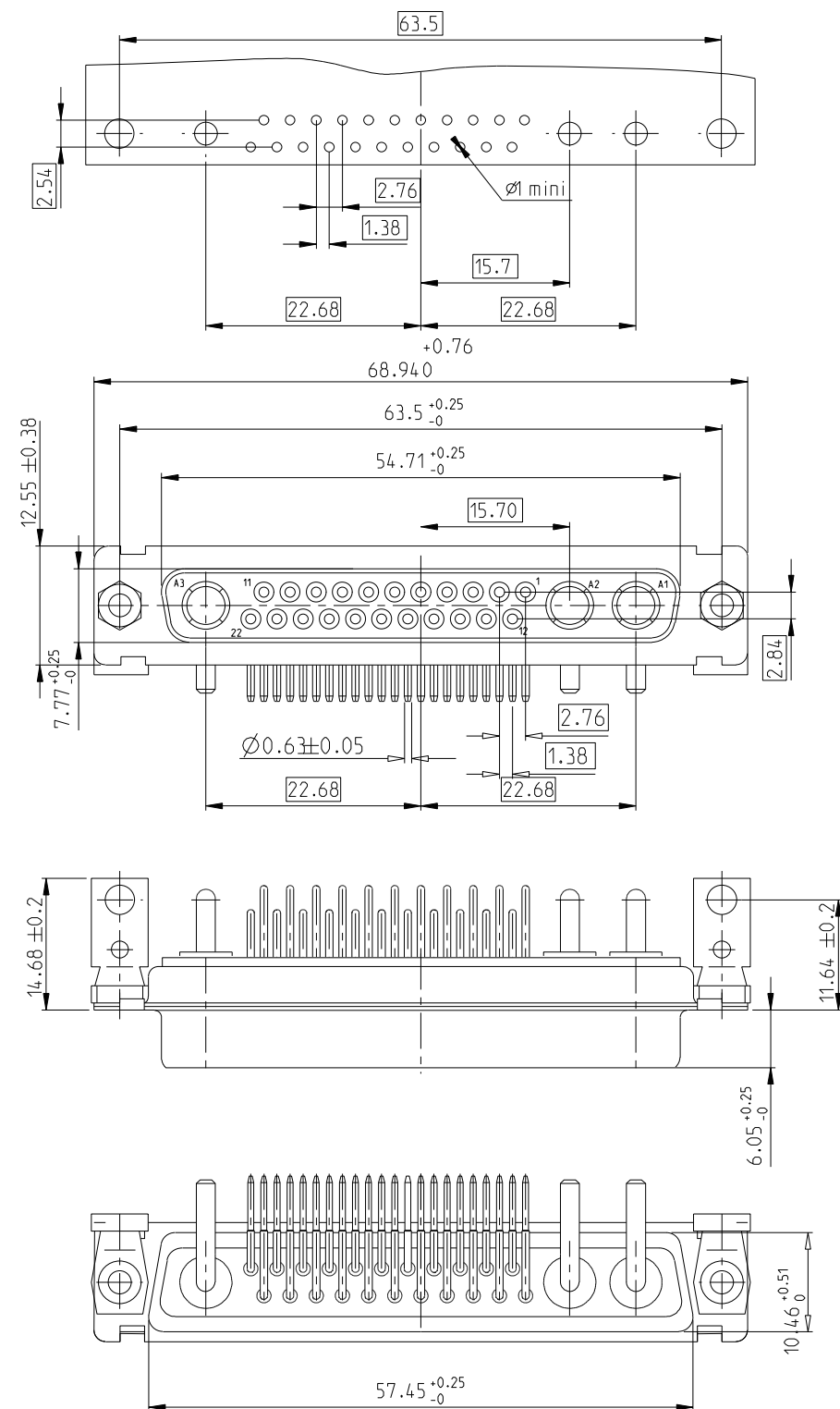
For PCB hole diameters see table 1 sheet 1



25W 3

LAYOUT AND CONNECTOR DIMENSIONS

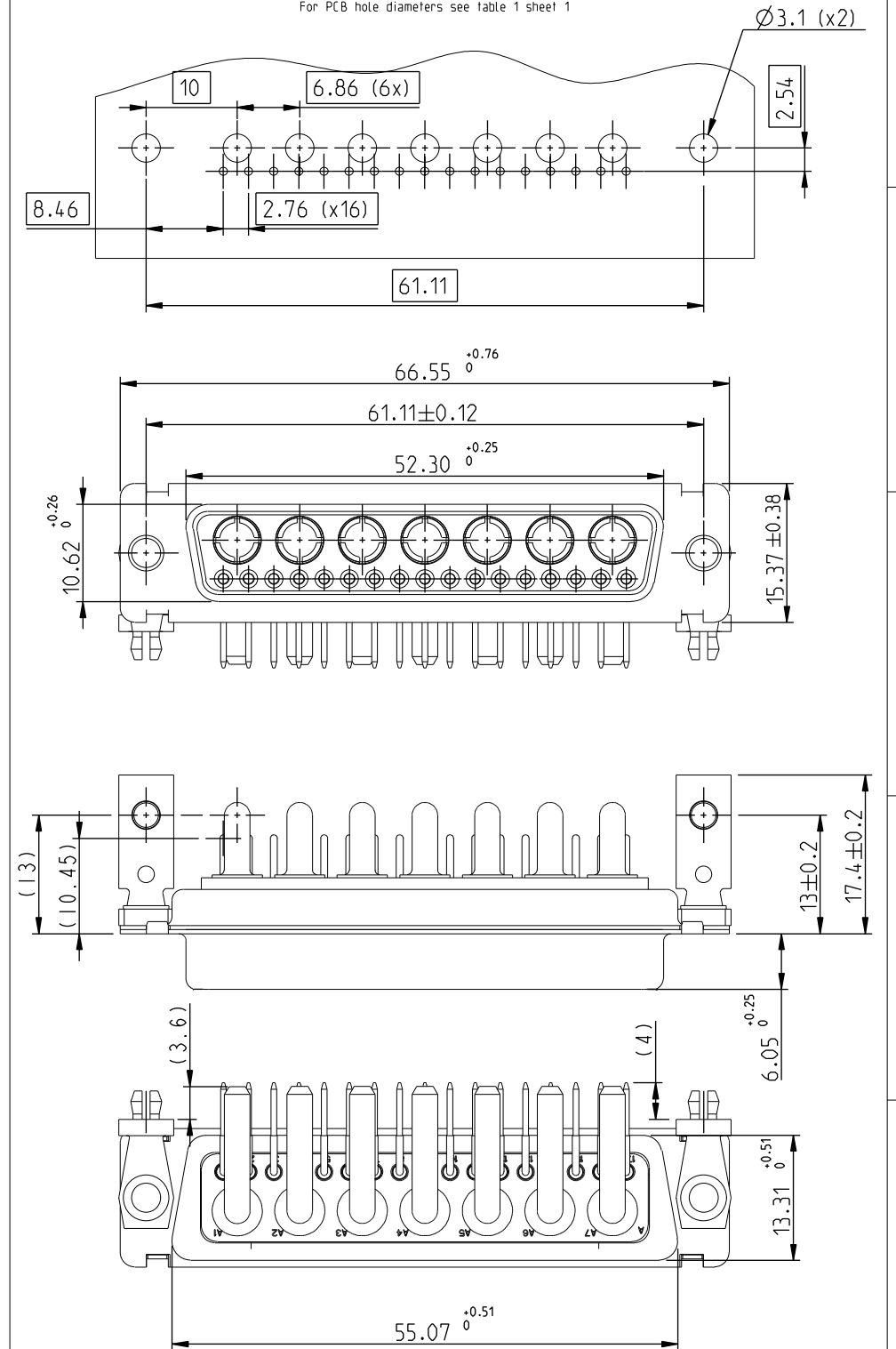
For PCB hole diameters see table 1 sheet 1



24W 7

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1



|                                                                                       |          |            |                                       |        |                                          |       |                                                                                                     |           |                                                                                       |               |  |               |
|---------------------------------------------------------------------------------------|----------|------------|---------------------------------------|--------|------------------------------------------|-------|-----------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------|---------------|--|---------------|
| www.fciconnect.com                                                                    |          |            | surface<br>ISO 1302                   |        | - ✓<br>tolerance std<br>ISO 406 ISO 1101 |       | projection<br> |           |  |               |  |               |
|                                                                                       |          |            | TOLERANCES UNLESS OTHERWISE SPECIFIED |        |                                          |       |                                                                                                     |           |                                                                                       |               |  |               |
| Dr                                                                                    | M PESSON | 2005-10-11 | ANGULAR                               | LINEAR | 0.X                                      | ±0.3  | size                                                                                                | A2        |                                                                                       |               |  |               |
| Eng                                                                                   | P LEGARE | 2005-10-11 |                                       |        | 0.XX                                     | ±0.1  |                                                                                                     | Scale 2:1 |                                                                                       |               |  |               |
| Chr                                                                                   |          |            | 0° ±2°                                |        | 0.XXX                                    | ±0.05 | ECN                                                                                                 |           | F10-0060                                                                              |               |  |               |
| Appr                                                                                  |          |            | Product family                        |        |                                          |       | -                                                                                                   | Spec ref  |                                                                                       |               |  |               |
|  |          | title      | SUB FEMALE DMW EUROPE                 |        |                                          |       |                                                                                                     | dwg no    |                                                                                       | C01-8639-2300 |  | Rev.<br><br>E |
|                                                                                       |          |            | mixed power right angled solder       |        |                                          |       |                                                                                                     |           |                                                                                       |               |  |               |
|                                                                                       |          |            | catalog no                            |        | -                                        |       |                                                                                                     | CUSTOMER  |                                                                                       | sheet 7 of 7  |  |               |
|                                                                                       |          |            |                                       |        |                                          |       |                                                                                                     |           |                                                                                       |               |  |               |