

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 (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 24 HOURS

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

- Female screw : 0.5 N.m Maximum

NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-47-0004.
- 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/GxT
  - Power contacts: Ni 1.27µmi+Sn 2.5 to 7.5µ,pure bright
- Active area plating spec:
  - Signal and power contacts: Ni + Gold/GxT
- Shell plating :2 to 4µm Cu + Ni + 3 to 10µmm Sn,pure bright
- Accessories: Sn pure bright + Nickel
- Packaging spec: See GS-14-920

Series

DBL13W3S700G30LF

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

**S** :Socket

Termination type

**7** Right angle/USA

Plating

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

PCB accessories definition  
see sheet 2

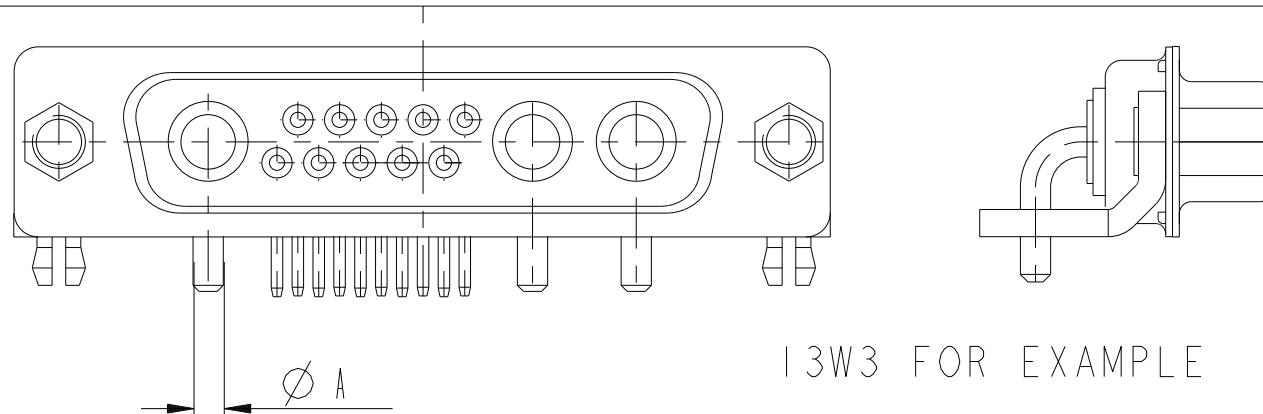
**A** :without accessory  
**H** :Metal brackets+harpoons for PCB 2.40mm  
**G** :Metal brackets+harpoons for PCB 1.60mm  
**M** :Metal brackets

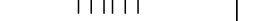
Power contacts

**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              | ø1.00              |
| Max current power | ØA±0.10 | PCB HOLE<br>+/-0.1 | PCB HOLE<br>+/-0.1 | PCB HOLE<br>+/-0.1 |



|                     |  |                |  |                                       |  |              |  |                                                                                       |  |                                                                                       |  |         |  |                |  |          |  |     |  |
|---------------------|--|----------------|--|---------------------------------------|--|--------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------|--|----------------|--|----------|--|-----|--|
| spec ref            |  |                |  | dr 1. Product Eng                     |  | 2015/06/12   |  | projection                                                                            |  | mm                                                                                    |  | size A2 |  | scale 1:1      |  |          |  |     |  |
| tolerance std       |  |                |  | eng Paul Mithun                       |  | 2019/02/20   |  |  |  |  |  | ecn no  |  | ELX-1-32325-2  |  |          |  |     |  |
| ISO 406<br>ISO 1101 |  |                |  | TOLERANCES UNLESS OTHERWISE SPECIFIED |  | chr -        |  |                                                                                       |  |                                                                                       |  | -       |  | rel level      |  | Released |  |     |  |
| ISO 1101            |  |                |  | appr K-Paul Biju                      |  | 2019/02/20   |  | product family                                                                        |  |                                                                                       |  | -       |  |                |  |          |  |     |  |
| surface             |  | linear         |  | 0.X ±3                                |  | Amphenol FCI |  | SUB FEMALE DW US foot print                                                           |  |                                                                                       |  | dwg no  |  | C01-8639-2301C |  |          |  | rev |  |
| ISO 1302            |  | 0.XX ±0.10     |  | 0.XXX ±0.05                           |  | title        |  | mixed power right angled solder                                                       |  |                                                                                       |  |         |  |                |  |          |  | E   |  |
|                     |  | angular 0° ±2° |  |                                       |  | cat. no.     |  | -                                                                                     |  | Product - Customer Drw                                                                |  |         |  | sheet 1 of 6   |  |          |  |     |  |



| PART NUMBER     | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES               |
|-----------------|------|-----------------------|-----------------------|----------------------------------|
| D*xWxS700A30LF  | 30   | 200                   | without               | without                          |
| D*LxWxS700A30LF | 30   | 200                   | insert M3             | without                          |
| D*OxWxS700A30LF | 30   | 200                   | insert UNC 4.40       | without                          |
| D*VxWxS700A30LF | 30   | 200                   | female screw UNC 4.40 | without                          |
| D*xWxS700H30LF  | 30   | 200                   | without               | metal bracket+harpoon PCB 2.40mm |
| D*LxWxS700H30LF | 30   | 200                   | insert M3             | metal bracket+harpoon PCB 2.40mm |
| D*OxWxS700H30LF | 30   | 200                   | insert UNC 4.40       | metal bracket+harpoon PCB 2.40mm |
| D*VxWxS700H30LF | 30   | 200                   | female screw UNC 4.40 | metal bracket+harpoon PCB 2.40mm |
| D*xWxS700G30LF  | 30   | 200                   | without               | metal bracket+harpoon PCB 1.60mm |
| D*LxWxS700G30LF | 30   | 200                   | insert M3             | metal bracket+harpoon PCB 1.60mm |
| D*OxWxS700G30LF | 30   | 200                   | insert UNC 4.40       | metal bracket+harpoon PCB 1.60mm |
| D*VxWxS700G30LF | 30   | 200                   | female screw UNC 4.40 | metal bracket+harpoon PCB 1.60mm |
| D*xWxS700M30LF  | 30   | 200                   | without               | metal bracket                    |
| D*LxWxS700M30LF | 30   | 200                   | insert M3             | metal bracket                    |
| D*OxWxS700M30LF | 30   | 200                   | insert UNC 4.40       | metal bracket                    |
| D*VxWxS700M30LF | 30   | 200                   | female screw UNC 4.40 | metal bracket                    |

shell size \* LAYOUTS  
xWx

A

A

B

B

B

C

C

C

11W1

7W2

21W1

17W2

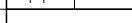
13W3

25W3

21WA4

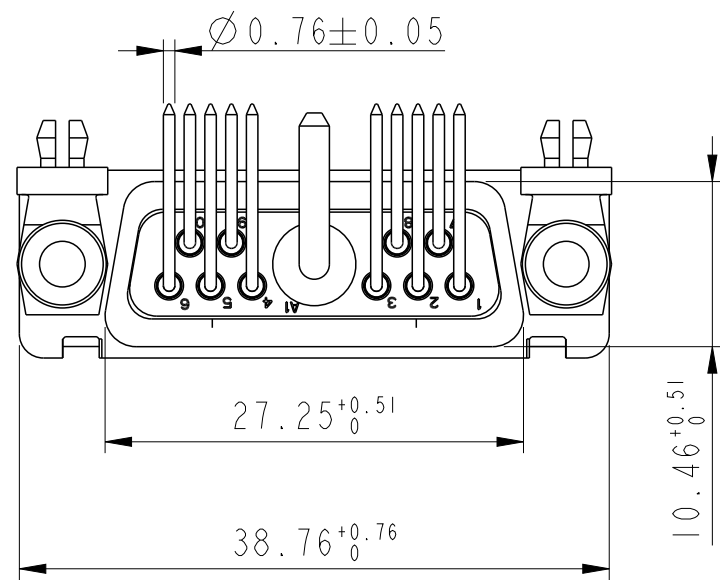
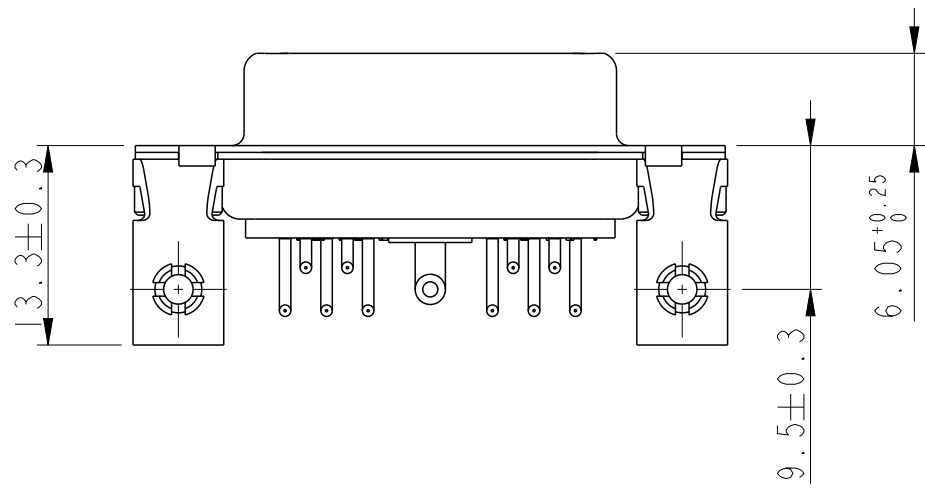
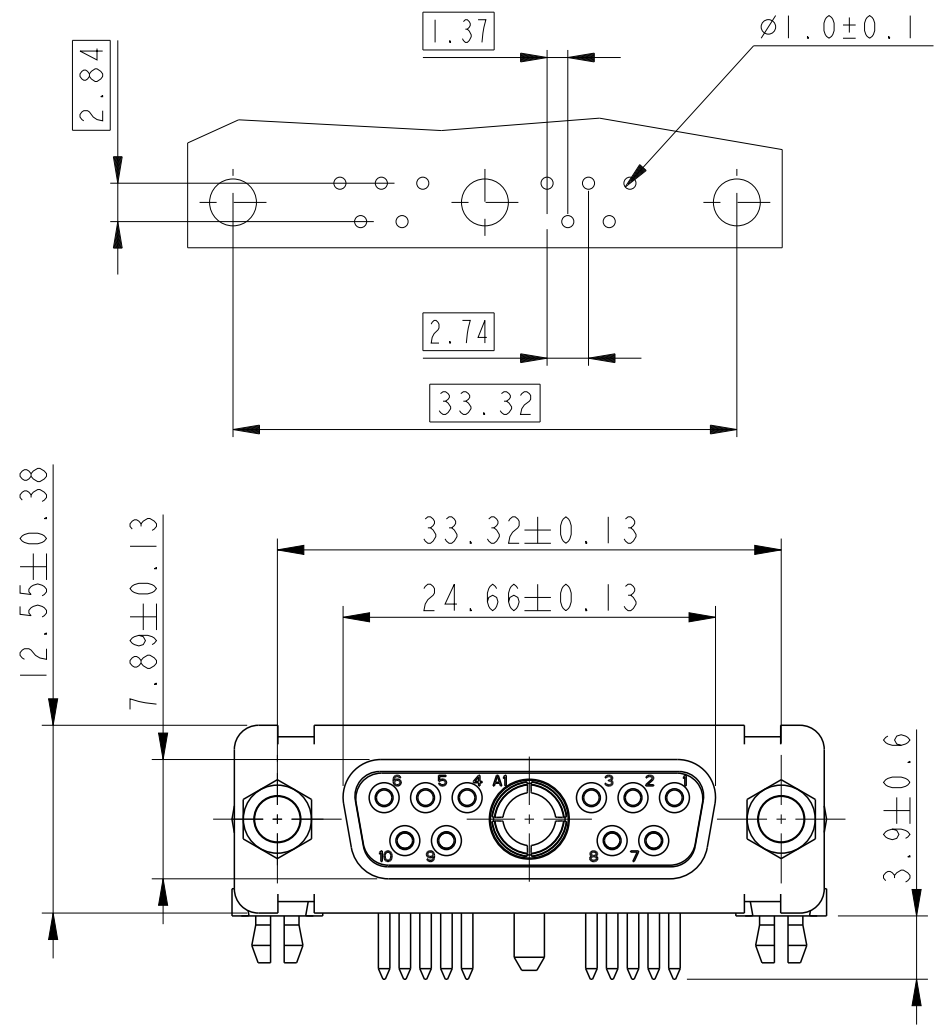
27W2

| PART NUMBER     | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES               |
|-----------------|------|-----------------------|-----------------------|----------------------------------|
| D*xWxS743A30LF  | 30   | 500                   | without               | without                          |
| D*LxWxS743A30LF | 30   | 500                   | insert M3             | without                          |
| D*OxWxS743A30LF | 30   | 500                   | insert UNC 4.40       | without                          |
| D*VxWxS743A30LF | 30   | 500                   | female screw UNC 4.40 | without                          |
| D*xWxS743H30LF  | 30   | 500                   | without               | metal bracket+harpoon PCB 2.40mm |
| D*LxWxS743H30LF | 30   | 500                   | insert M3             | metal bracket+harpoon PCB 2.40mm |
| D*OxWxS743H30LF | 30   | 500                   | insert UNC 4.40       | metal bracket+harpoon PCB 2.40mm |
| D*VxWxS743H30LF | 30   | 500                   | female screw UNC 4.40 | metal bracket+harpoon PCB 2.40mm |
| D*xWxS743G30LF  | 30   | 500                   | without               | metal bracket+harpoon PCB 1.60mm |
| D*LxWxS743G30LF | 30   | 500                   | insert M3             | metal bracket+harpoon PCB 1.60mm |
| D*OxWxS743G30LF | 30   | 500                   | insert UNC 4.40       | metal bracket+harpoon PCB 1.60mm |
| D*VxWxS543G30LF | 30   | 500                   | female screw UNC 4.40 | metal bracket+harpoon PCB 1.60mm |
| D*xWxS743M30LF  | 30   | 500                   | without               | metal bracket                    |
| D*LxWxS743M30LF | 30   | 500                   | insert M3             | metal bracket                    |
| D*OxWxS743M30LF | 30   | 500                   | insert UNC 4.40       | metal bracket                    |
| D*VxWxS743M30LF | 30   | 500                   | female screw UNC 4.40 | metal bracket                    |

|               |          |          |  |                |            |                                                                                       |                                                                                       |                |                        |       |           |                |              |     |   |
|---------------|----------|----------|--|----------------|------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------|------------------------|-------|-----------|----------------|--------------|-----|---|
| spec ref      |          | dr       |  | 1, Product Eng | 2015/06/12 |  |  | size           | A2                     | scale | 1:1       |                |              |     |   |
| tolerance std |          | eng      |  | Paul Mithun    | 2019/02/20 |                                                                                       |                                                                                       | ecn no         | ELX-132325-2           |       |           |                |              |     |   |
| ISO 406       |          | chr      |  | -              | -          |                                                                                       |                                                                                       |                |                        |       |           |                |              |     |   |
| ISO 1101      |          | appr     |  | K-Paul Biju    | 2019/02/20 |                                                                                       |                                                                                       |                |                        |       |           |                |              |     |   |
|               |          |          |  |                |            |                                                                                       |                                                                                       | product family |                        | -     | rel level |                | Released     |     |   |
| surface       | - linear | 0.X      |  | ±3             |            |  | SUB FEMALE DW US foot print                                                           |                |                        |       | dwg no    | C01-8639-2301C |              | rev | E |
|               |          | 0.XX     |  | ±0.10          |            |                                                                                       | mixed power right angled solder                                                       |                |                        |       |           |                |              |     |   |
|               |          | 0.XXX    |  | ±0.05          |            |                                                                                       |                                                                                       |                |                        |       |           |                |              |     |   |
|               |          | ISO 1302 |  | angular        |            |                                                                                       |                                                                                       |                |                        |       |           | 0° ±2°         |              |     |   |
|               |          |          |  |                |            | cat. no.                                                                              |                                                                                       | -              | Product - Customer Drw |       |           |                | sheet 3 of 6 |     |   |

LAYOUT AND CONNECTOR DIMENSIONS

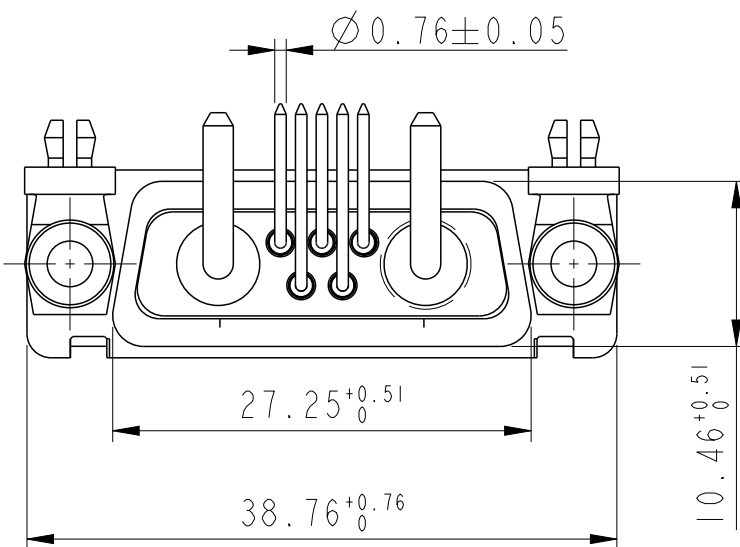
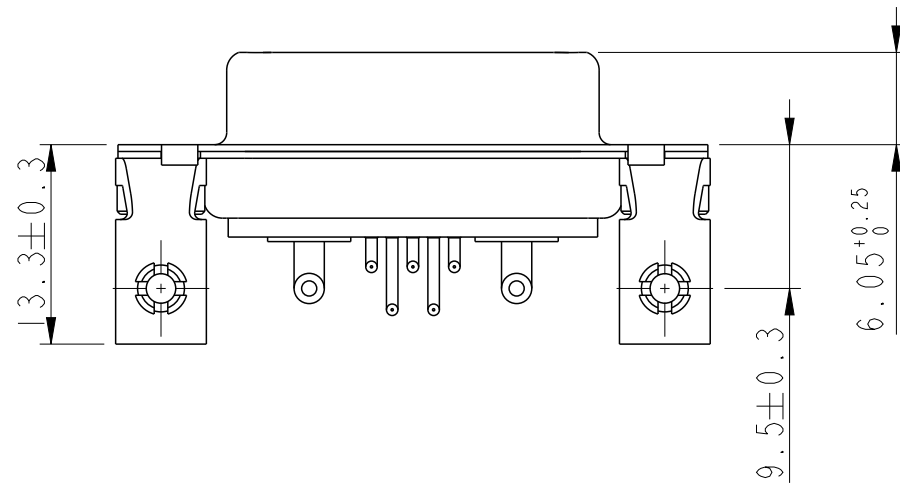
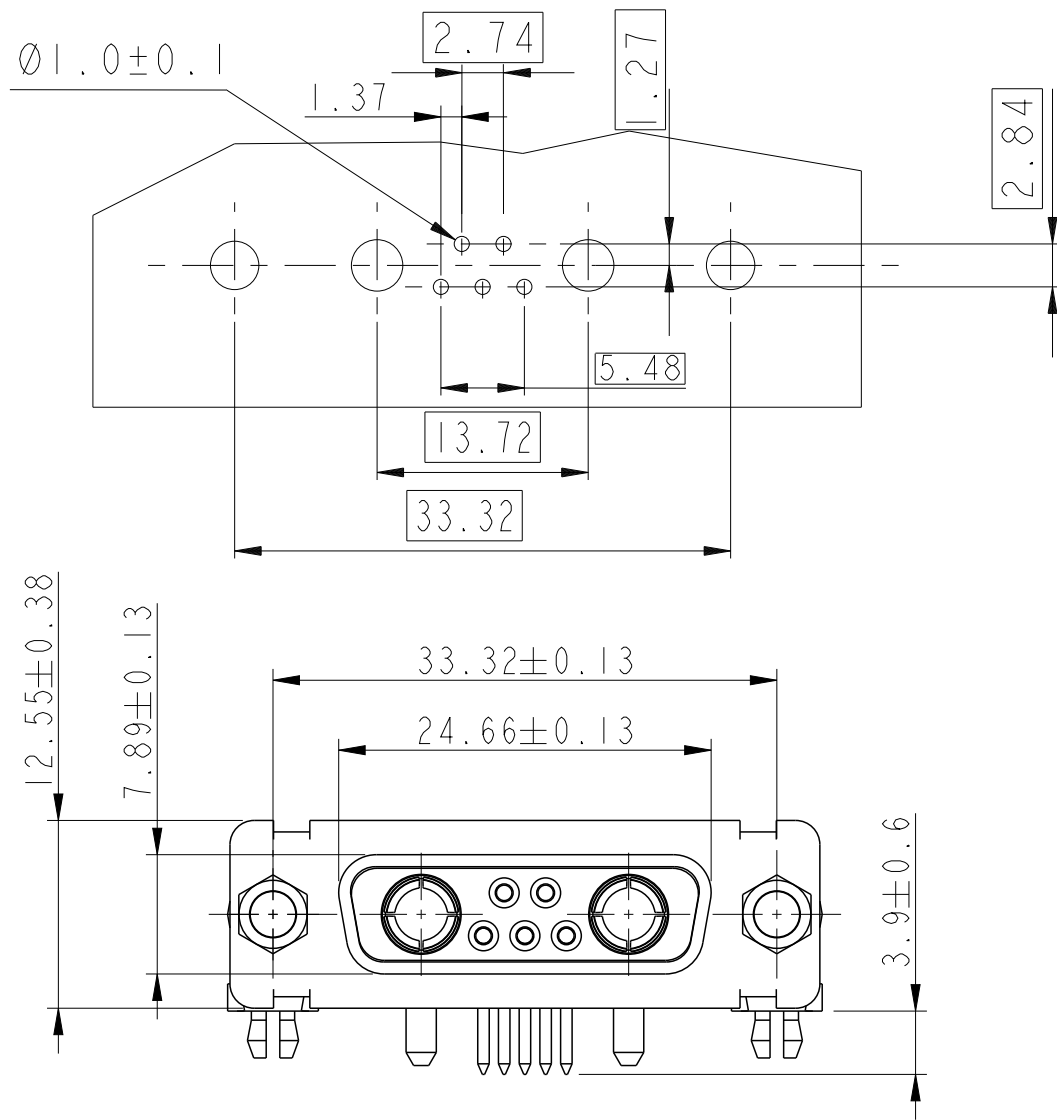
For PCB hole diameters see table I sheet I



7W2

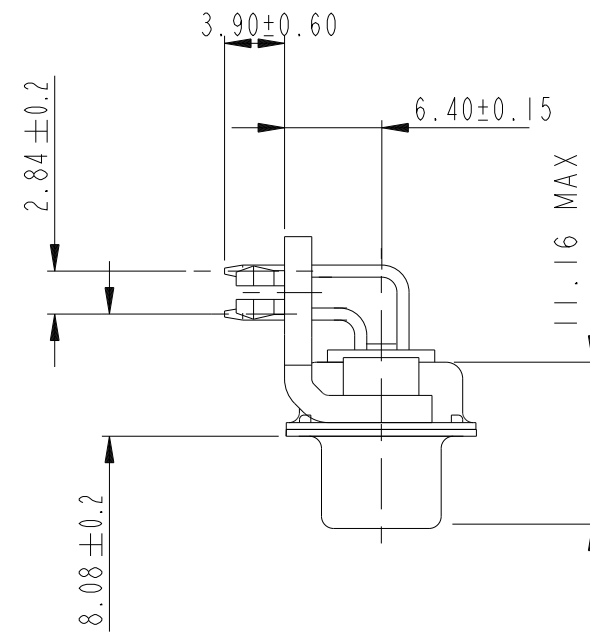
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table I sheet I

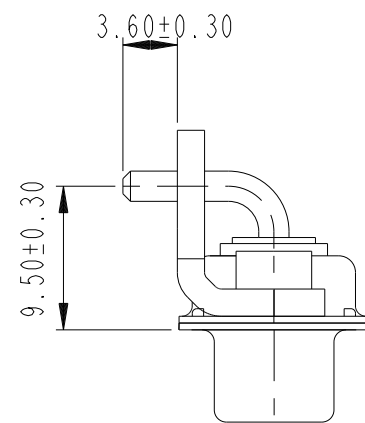


SIDE VIEW FOR ALL LAYOUTS

VIEW WITHOUT POWERS  
CONTACTS



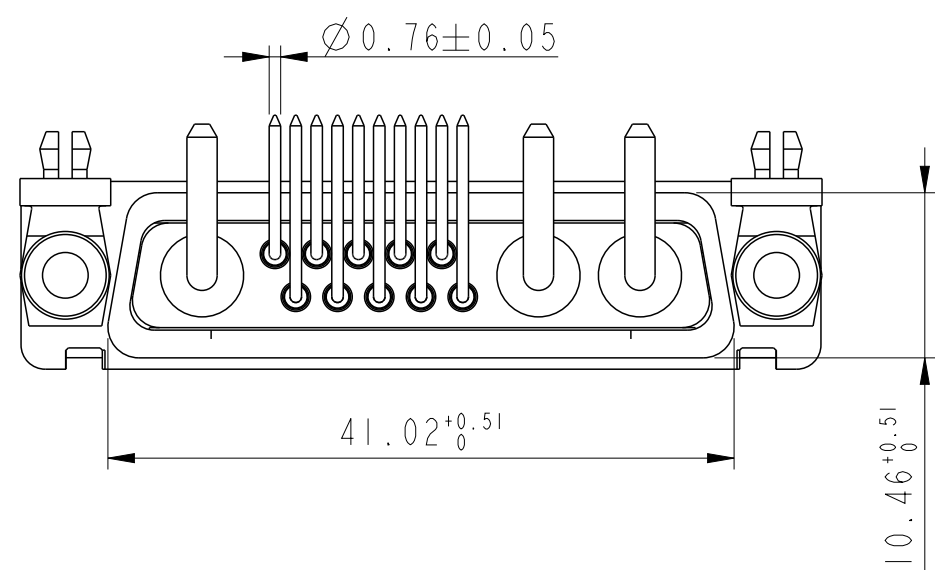
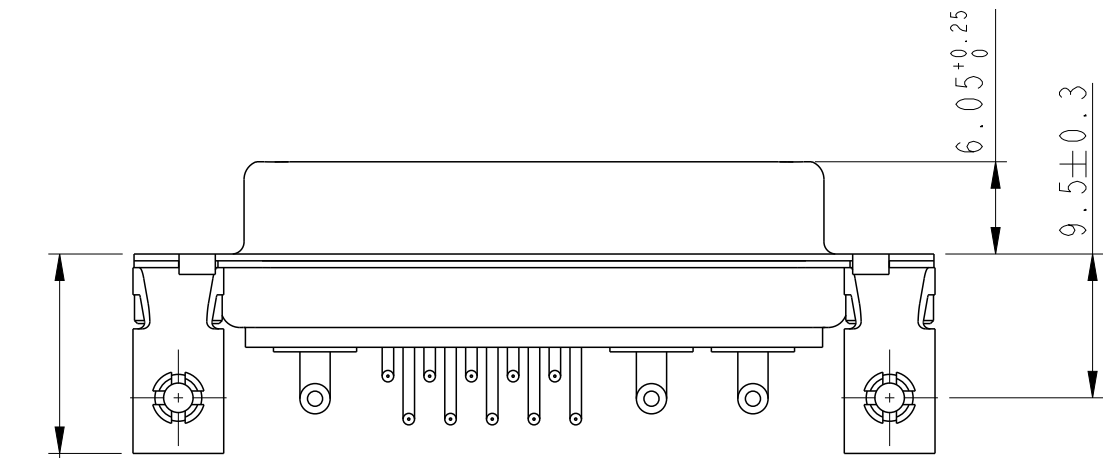
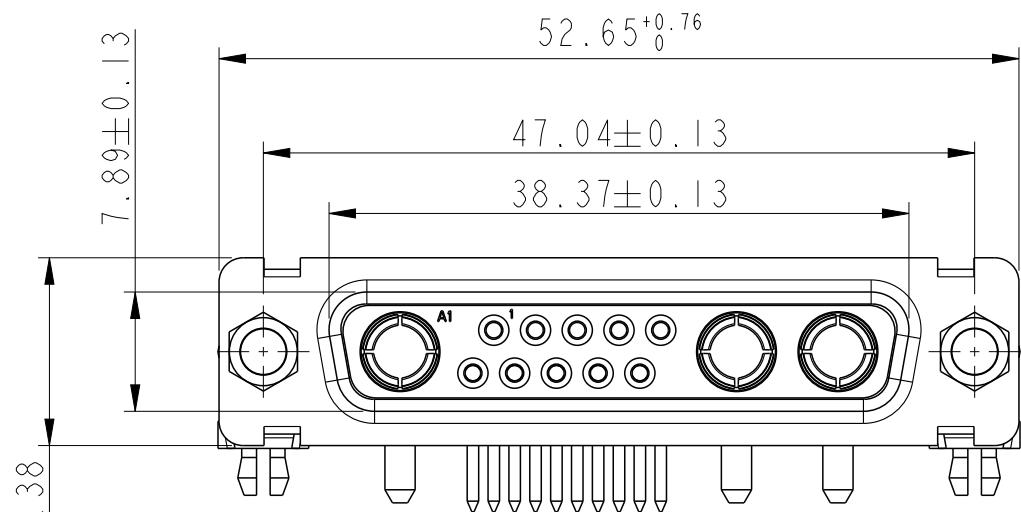
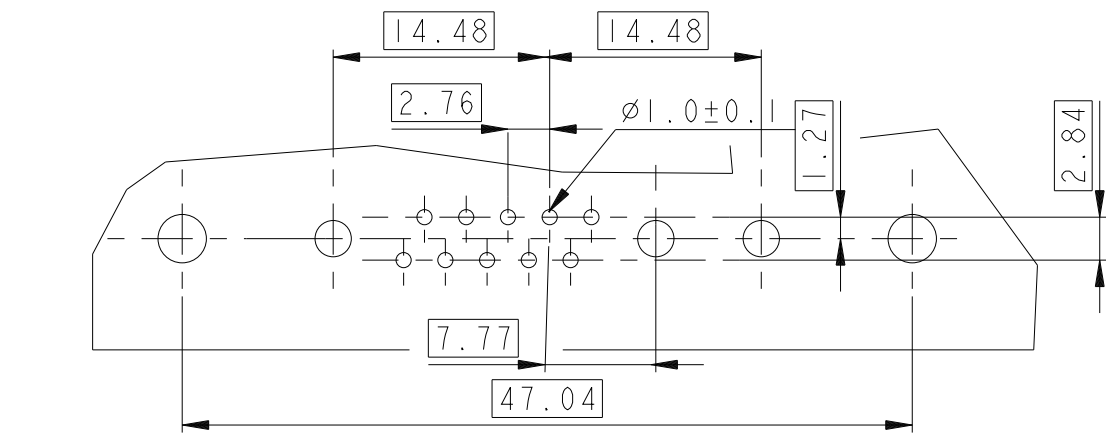
VIEW WITH POWERS  
CONTACTS



|               |         |                |            |                 |             |                                 |                        |                |           |
|---------------|---------|----------------|------------|-----------------|-------------|---------------------------------|------------------------|----------------|-----------|
| spec ref      | dr      | 1, Product Eng | 2015/06/12 | projection      | mm          | size                            | A2                     | scale          | 2:1       |
| tolerance std | eng     | Paul Mithun    | 2019/02/20 | chr             | -           | ecn no                          | ELX-132325-2           |                |           |
| ISO 406       | chr     | -              | -          | appr            | K-Paul Biju | 2019/02/20                      | product family         | -              | rel level |
| ISO 1101      | appr    | K-Paul Biju    | 2019/02/20 | product family  | -           | rel level                       | Released               |                |           |
| surface       | linear  | 0.X            | ±3         | Amphenol<br>FCi | title       | SUB FEMALE DW US foot print     | dwg no                 | C01-8639-2301C | rev       |
| ISO 1302      | angular | 0°             | ±2°        |                 |             | mixed power right angled solder |                        |                | E         |
|               |         |                |            |                 | cat. no.    | -                               | Product - Customer Drw | sheet 4 of 6   |           |

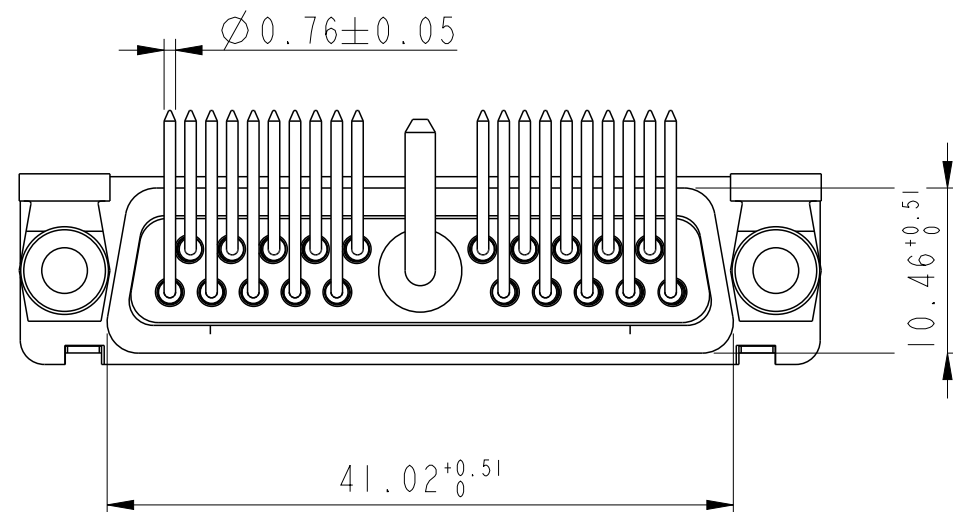
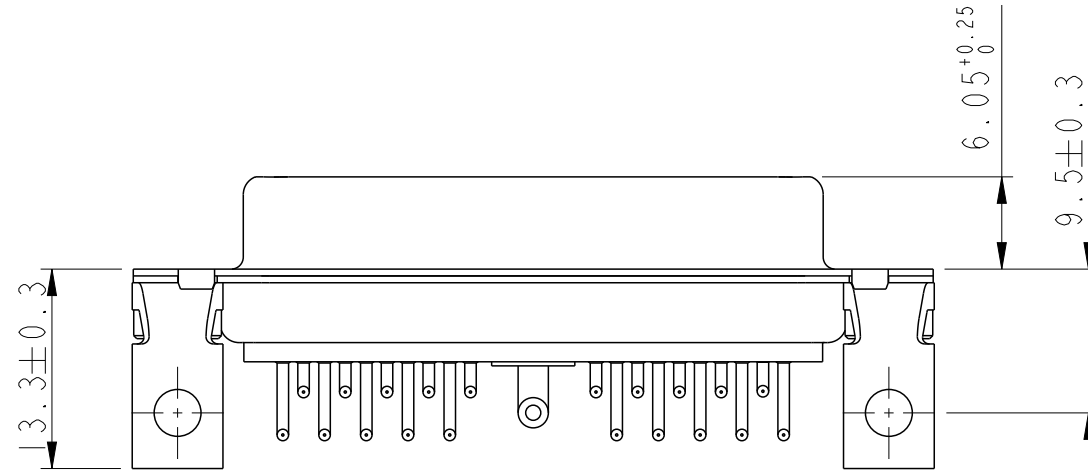
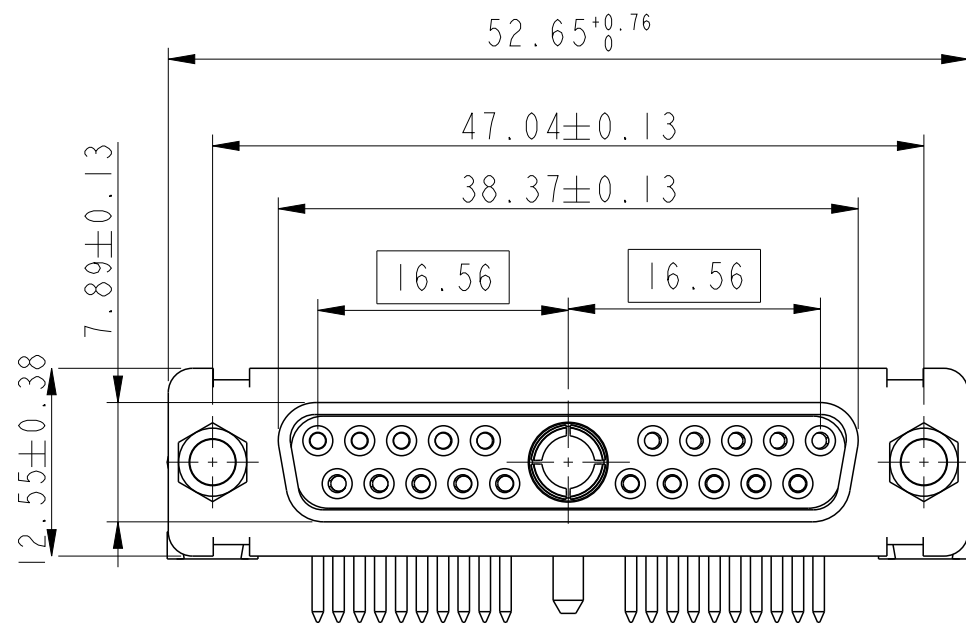
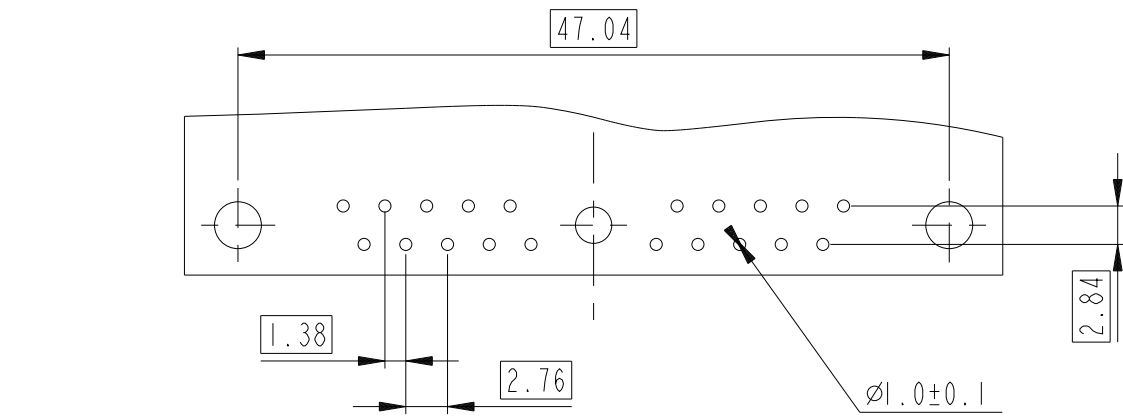
13W3

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



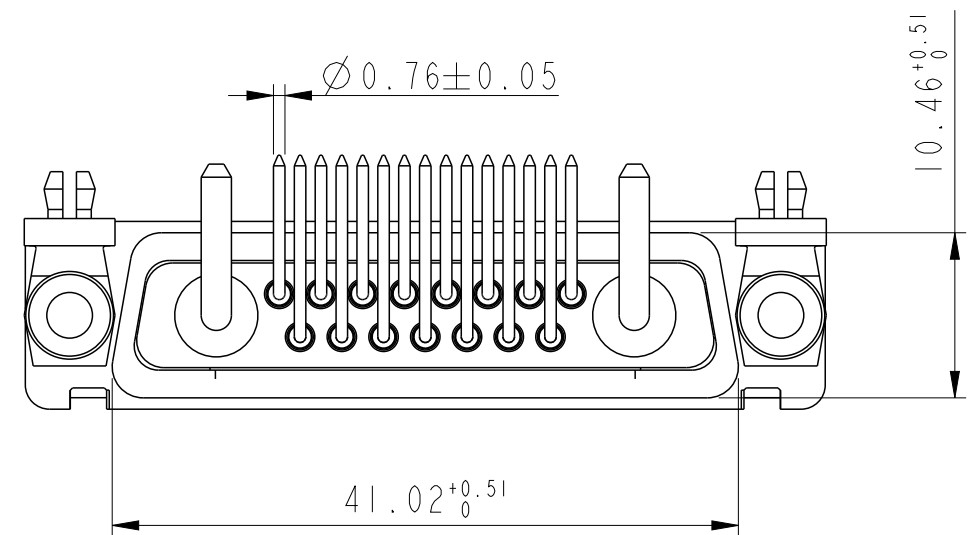
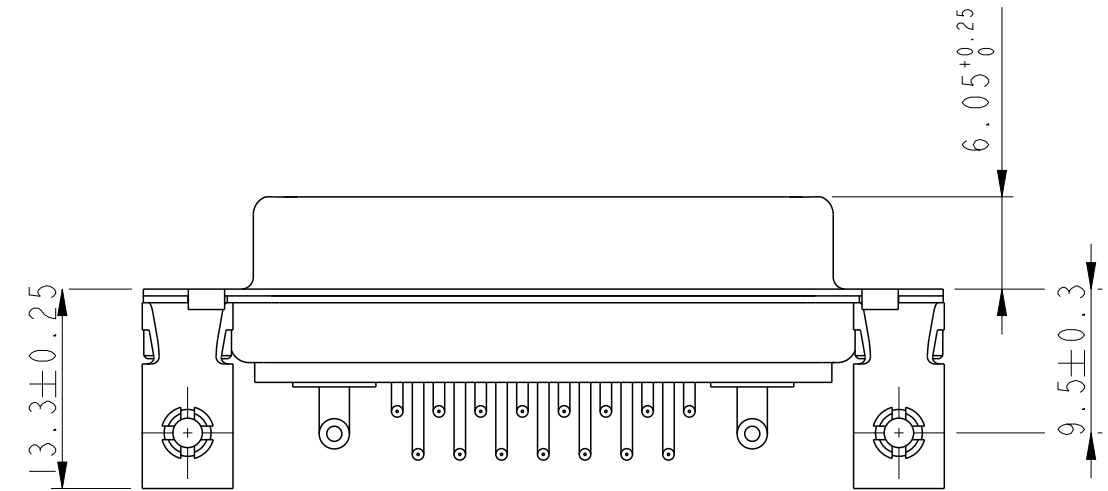
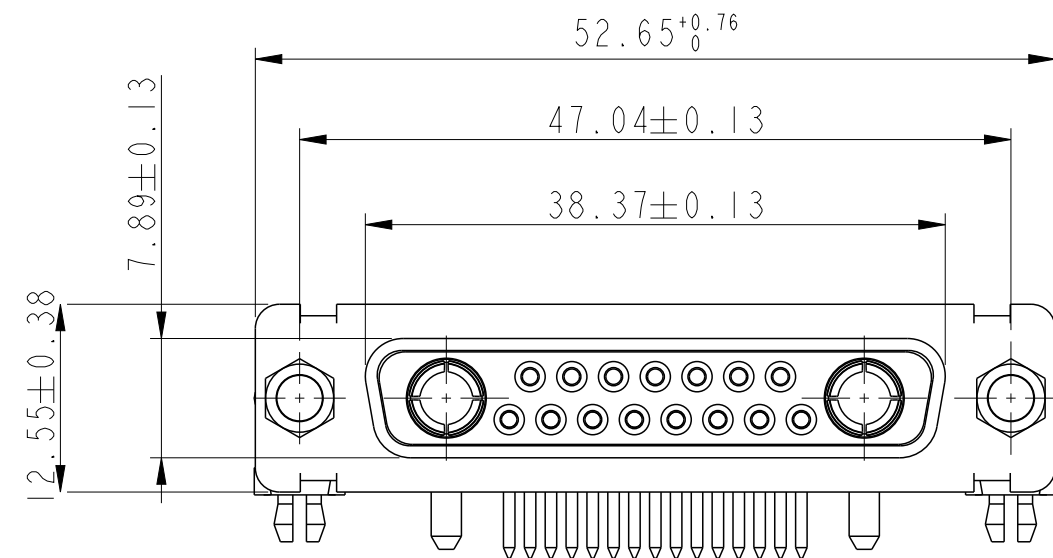
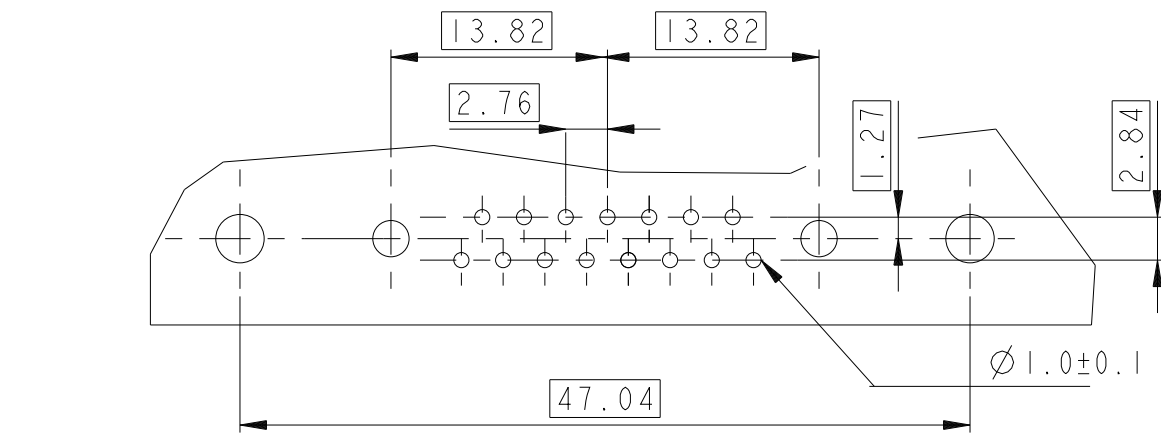
21W1

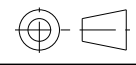
LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table I sheet I



17W2

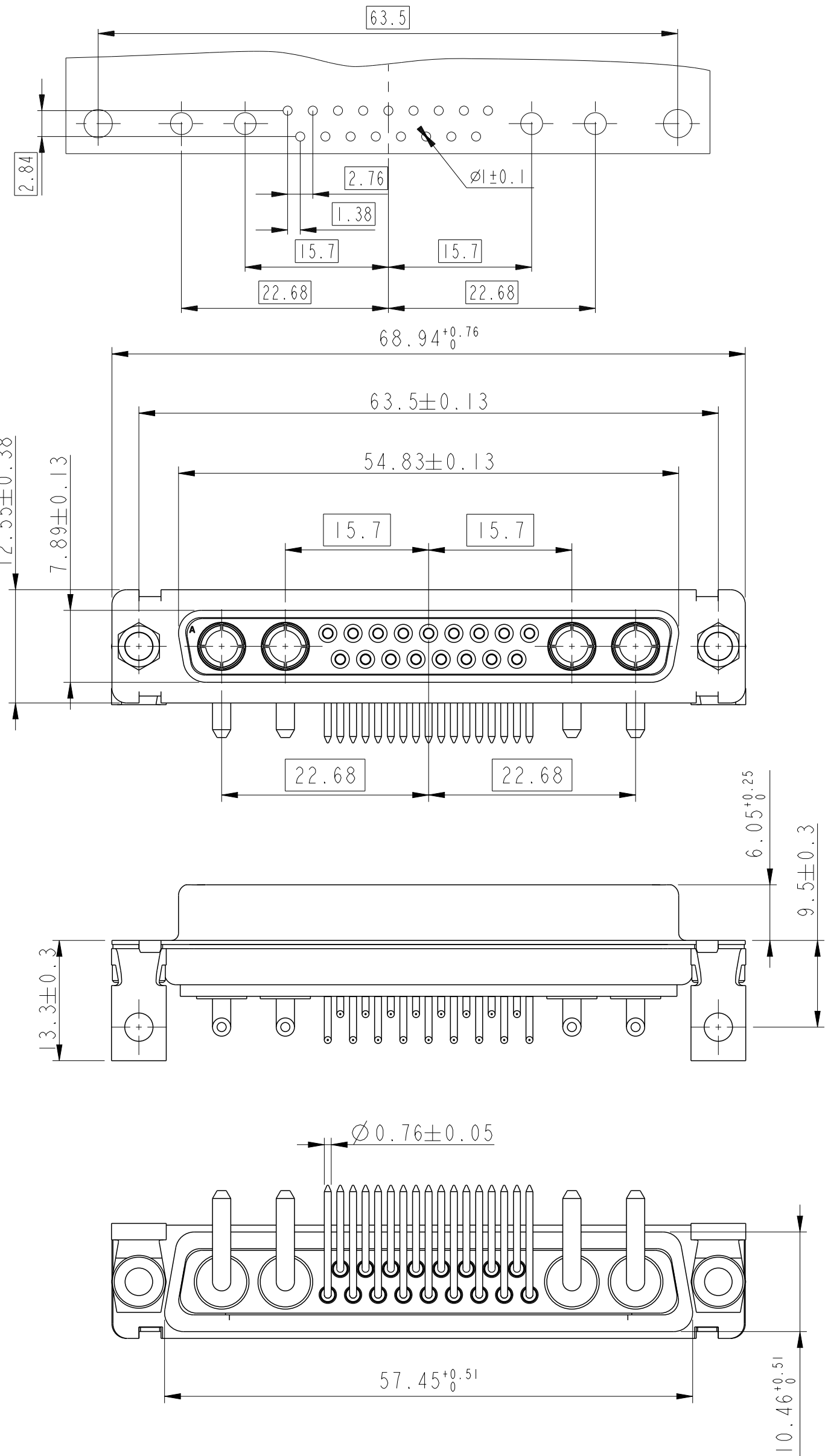
LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table I sheet I



|               |  |         |  |                 |  |                                 |  |                                                                                       |  |                        |  |                |  |          |  |
|---------------|--|---------|--|-----------------|--|---------------------------------|--|---------------------------------------------------------------------------------------|--|------------------------|--|----------------|--|----------|--|
| spec ref      |  | dr      |  | 1, Product Eng  |  | 2015/06/12                      |  | projection                                                                            |  | size                   |  | scale          |  |          |  |
| tolerance std |  | eng     |  | Paul Mithun     |  | 2019/02/20                      |  |  |  | A2                     |  | 2:1            |  |          |  |
| ISO 406       |  | chr     |  | -               |  | -                               |  |                                                                                       |  | ecn no                 |  | ELX-132325-2   |  |          |  |
| ISO 1101      |  | appr    |  | K-Paul Biju     |  | 2019/02/20                      |  |                                                                                       |  | product family         |  | -              |  | Released |  |
| surface       |  | linear  |  | Amphenol<br>FCi |  | title                           |  | SUB FEMALE DW US foot print                                                           |  | dwg no                 |  | C01-8639-2301C |  | rev      |  |
| ISO 1302      |  |         |  |                 |  | mixed power right angled solder |  |                                                                                       |  |                        |  |                |  | E        |  |
|               |  | angular |  |                 |  | 0°                              |  | ±2°                                                                                   |  |                        |  |                |  |          |  |
|               |  |         |  |                 |  | cat. no.                        |  | -                                                                                     |  | Product - Customer Drw |  | sheet 5 of 6   |  |          |  |

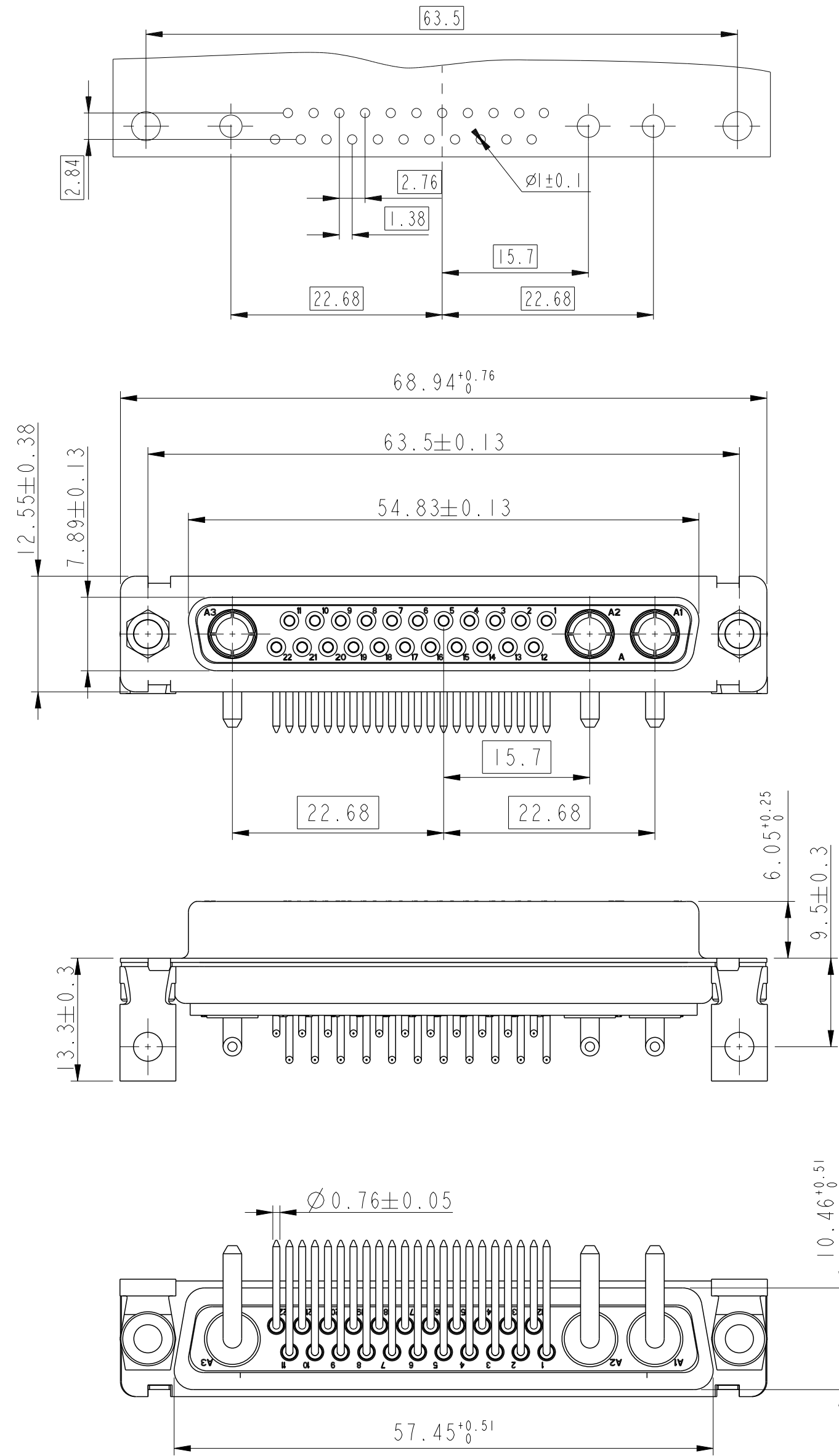
# 21WA4

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



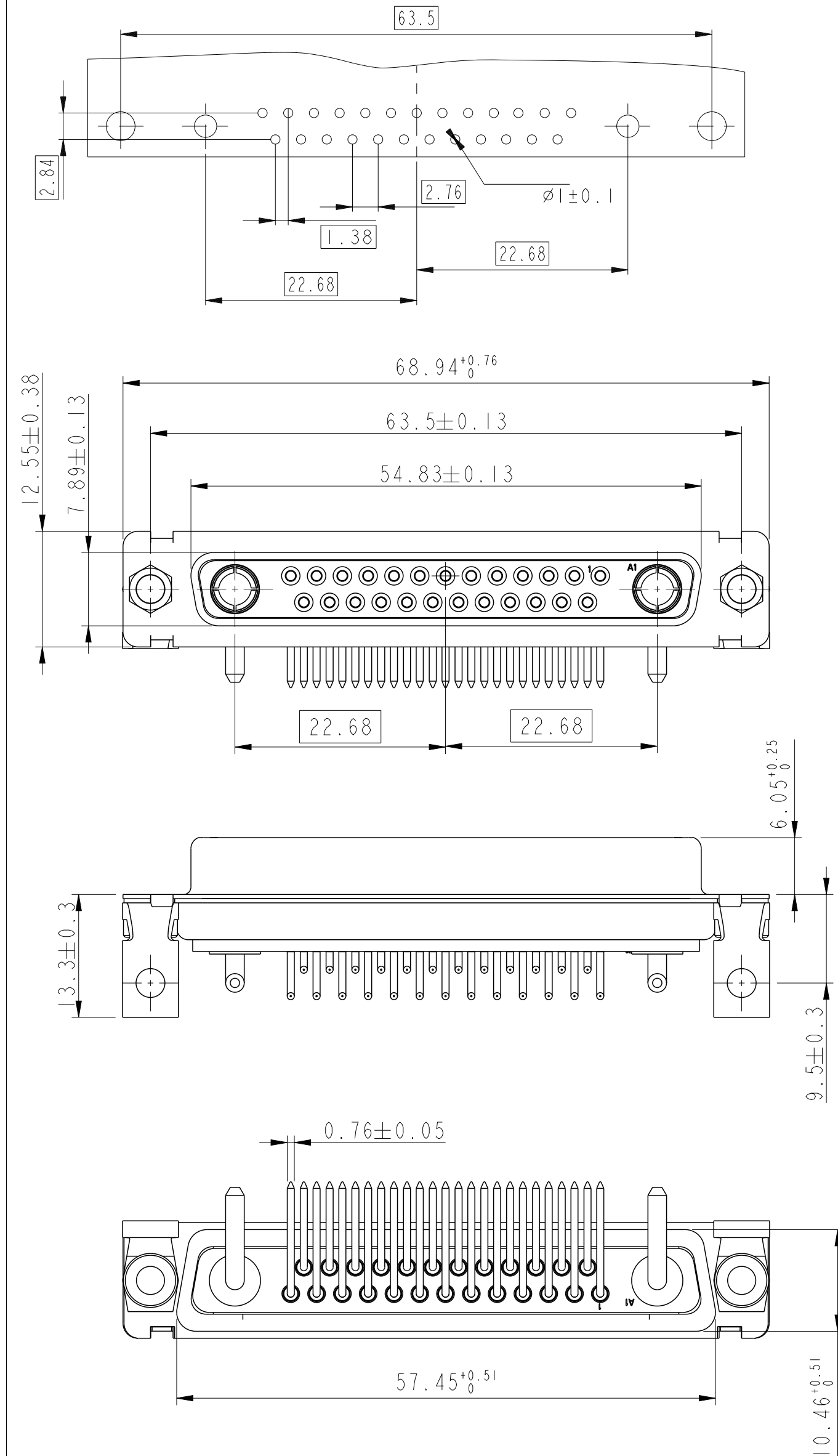
# 25W3

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



|               |         |                |            |                |       |                                 |             |                        |              |
|---------------|---------|----------------|------------|----------------|-------|---------------------------------|-------------|------------------------|--------------|
| spec ref      | dr      | 1, Product Eng | 2015/06/12 | projection     | mm    | size                            | A2          | scale                  | 2:1          |
| tolerance std | eng     | Paul Mithun    | 2019/02/20 | chr            | -     | ecn no                          | ELX-32325-2 | rel level              | Released     |
| ISO 406       | app     | K-Paul Biju    | 2019/02/20 | product family | -     | cat. no.                        | -           | Product - Customer Drw | sheet 6 of 6 |
| ISO 1101      | surface | linear         | 0.X        | ±3             | 0.XX  | ±0.10                           | 0.XXX       | ±±0.05                 | ±2°          |
| ISO 1302      | angular | 0°             | ±2°        | Amphenol FCI   | title | SUB FEMALE DW US foot print     | dwg no      | C01-8639-2301C         | rev          |
|               |         |                |            |                |       | mixed power right angled solder |             |                        | E            |