

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

DBL13W3S700G30LF

Series

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

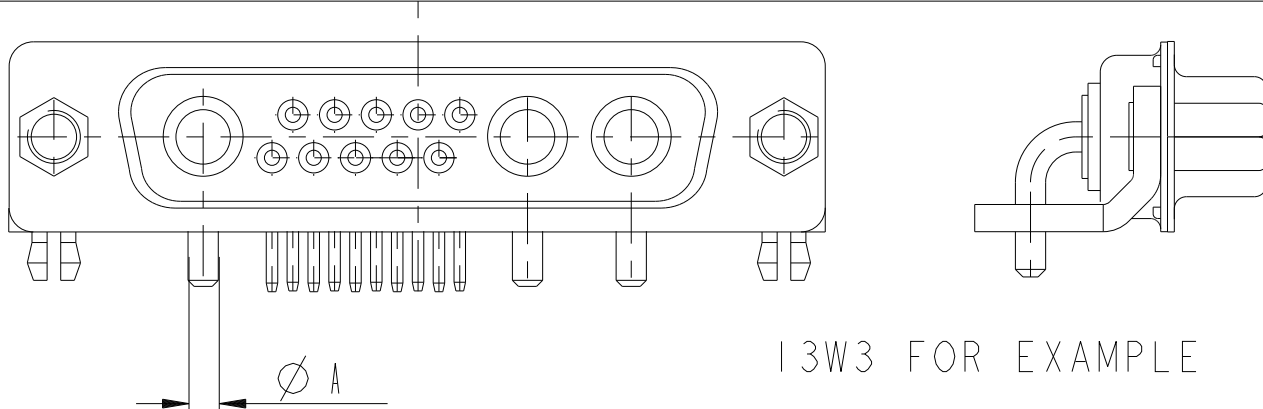
- A :without accessory
- H :Metal brackets+harpoons for PCB 2.40mm
- G :Metal brackets+harpoons for PCB 1.60mm
- M :Metal brackets

Power contacts

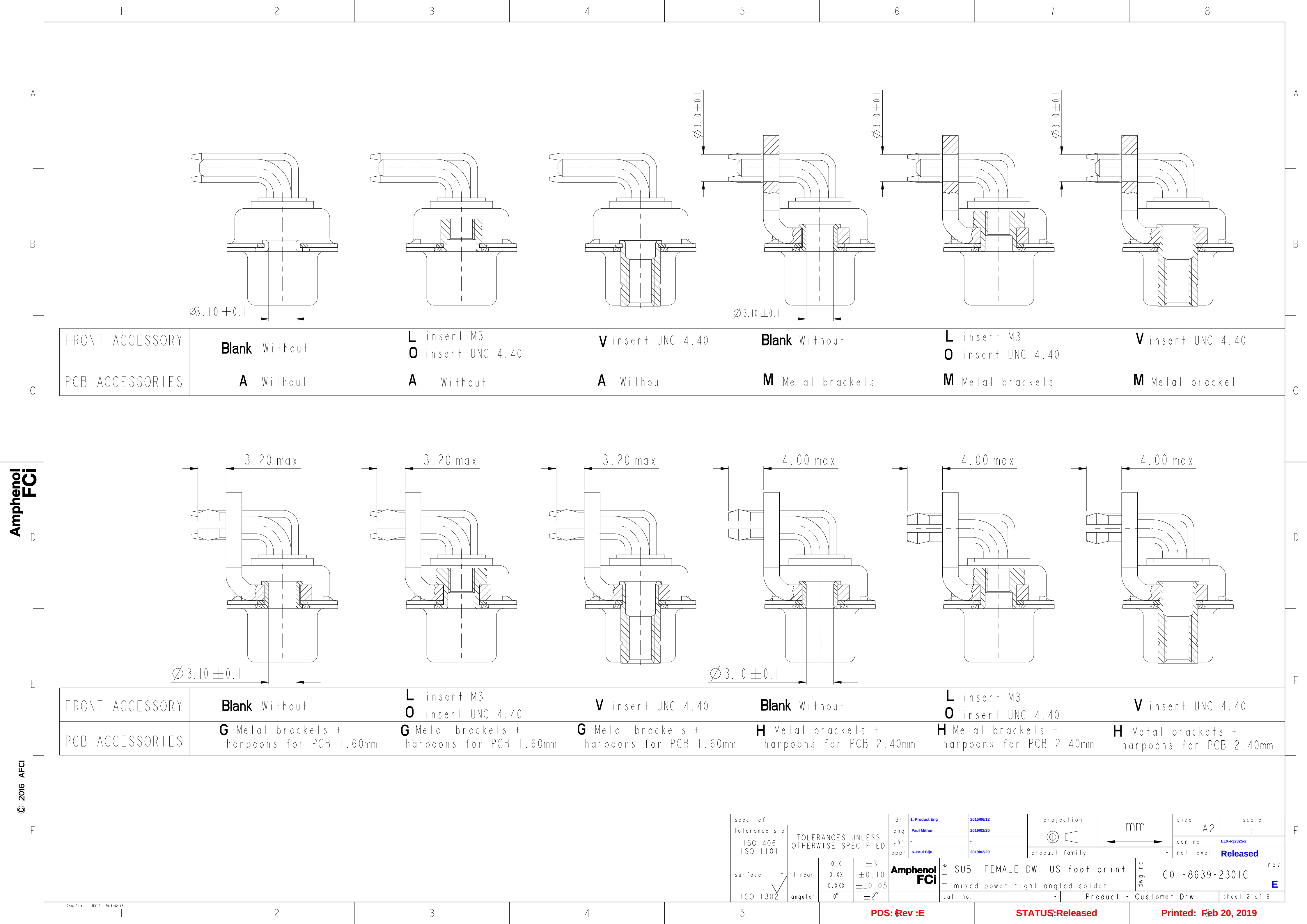
- 00 :Not fitted with power contact (signal contacts always fitted)
- 30 :Fitted with power contacts 30 Amp.

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 |  | TOLERANCES UNLESS OTHERWISE SPECIFIED |  | eng Paul Mithun   |  | 2019/02/20 |  |              |  |                                   |  | ecn no                |  | ELX-1-32325-2 |  |
| ISO 406       |  |                                       |  | chr -             |  | -          |  |              |  |                                   |  | rel level             |  | Released      |  |
| ISO 1101      |  |                                       |  | appr K-Paul Biju  |  | 2019/02/20 |  |              |  |                                   |  | product family        |  | -             |  |
| surface       |  |                                       |  | linear            |  | 0.X ±3     |  | Amphenol FCI |  | title SUB FEMALE DW US foot print |  | dwg no C01-8639-2301C |  | rev E         |  |
|               |  |                                       |  | 0.XX ±0.10        |  |            |  |              |  |                                   |  |                       |  |               |  |
|               |  |                                       |  | 0.XXX ±0.05       |  |            |  |              |  |                                   |  |                       |  |               |  |
| ISO 1302      |  | 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

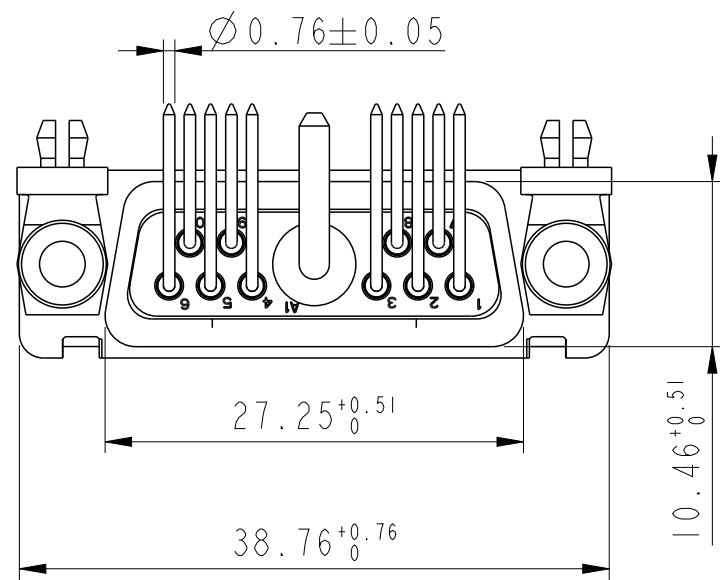
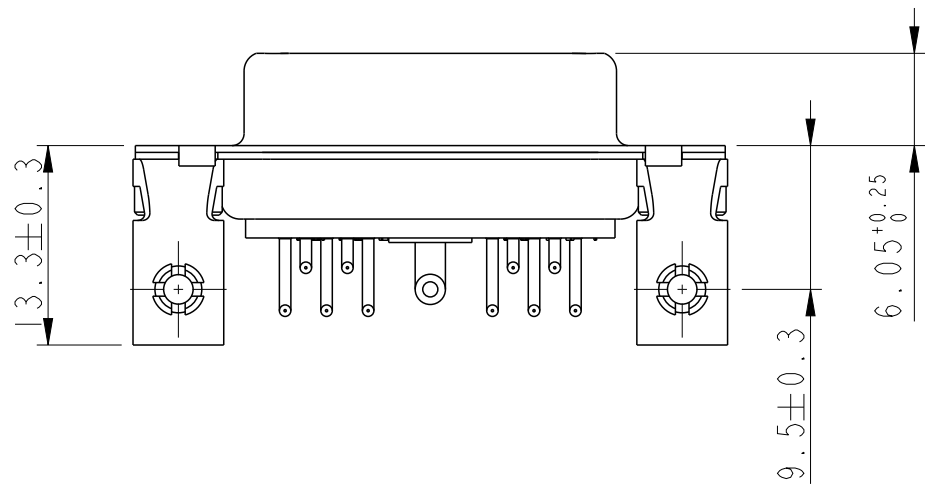
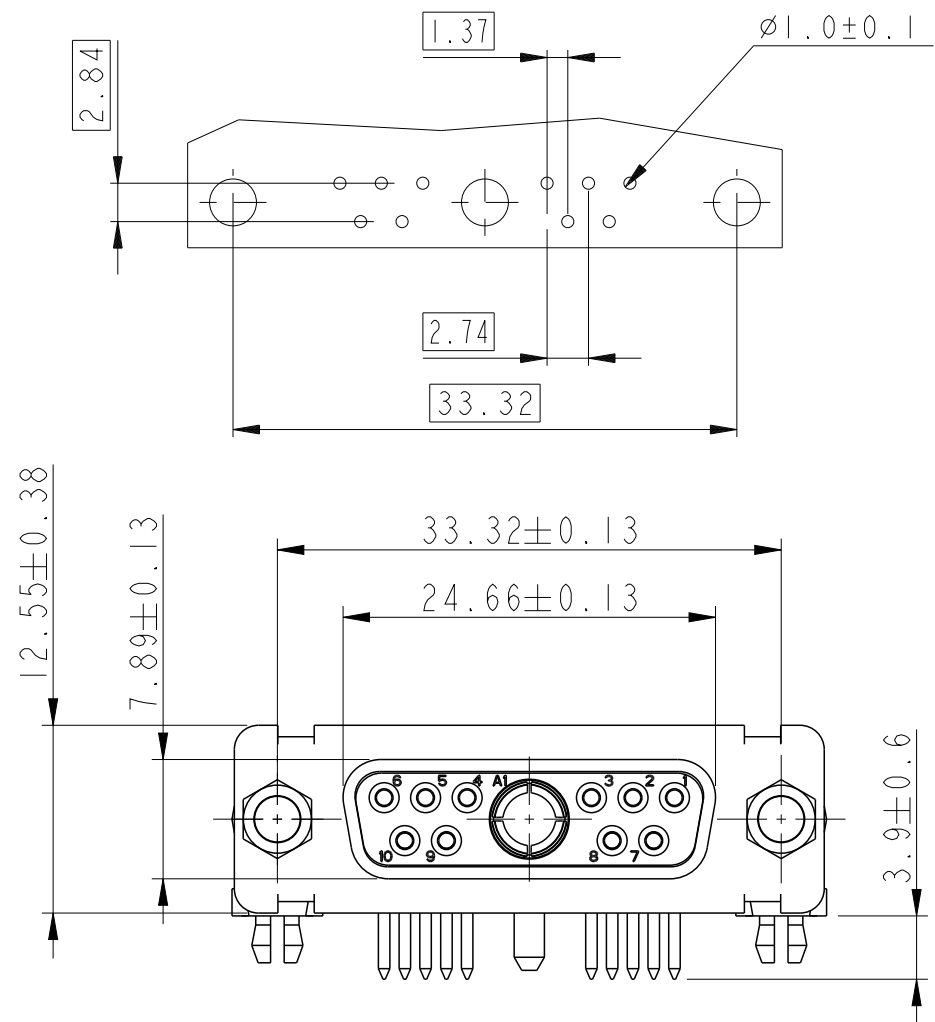
27W2

| 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 |  | projection     |  | mm       |  | 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         |  |                |  | title    |  | SUB FEMALE DW US foot print |  | eng no                 |  | C01-8639-2301C |  |     |  |  |  | rev |  | E |  |
| ISO 1302      |  | angular |  | 0°             |  | ±2°        |  |                |  | cat. no. |  | -                           |  | Product - Customer Drw |  | sheet 3 of 6   |  |     |  |  |  |     |  |   |  |
|               |  |         |  |                |  |            |  |                |  |          |  |                             |  |                        |  |                |  |     |  |  |  |     |  |   |  |

LAYOUT AND CONNECTOR DIMENSIONS

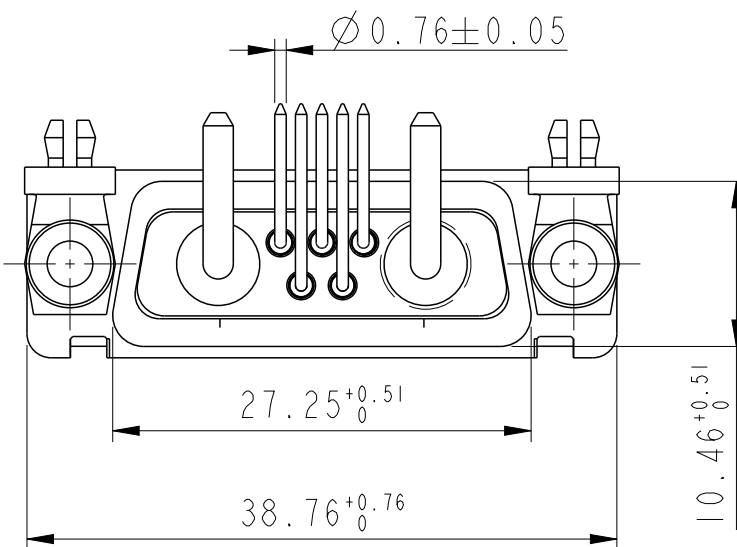
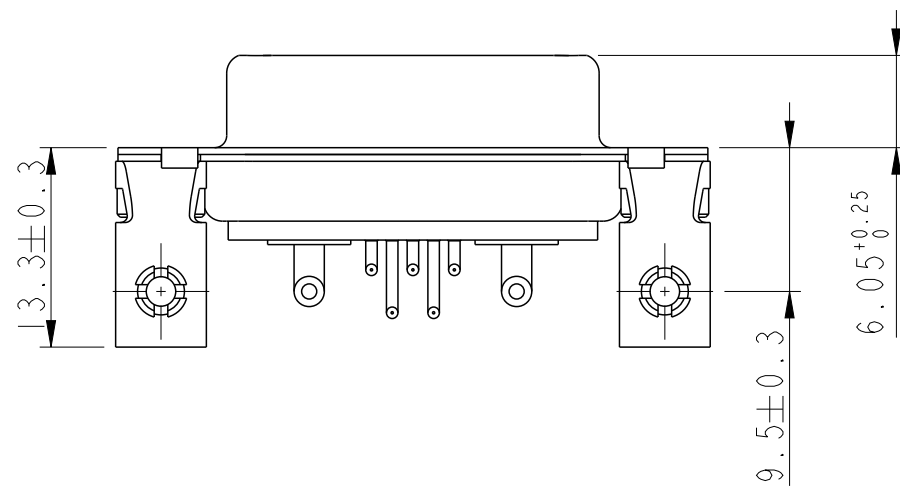
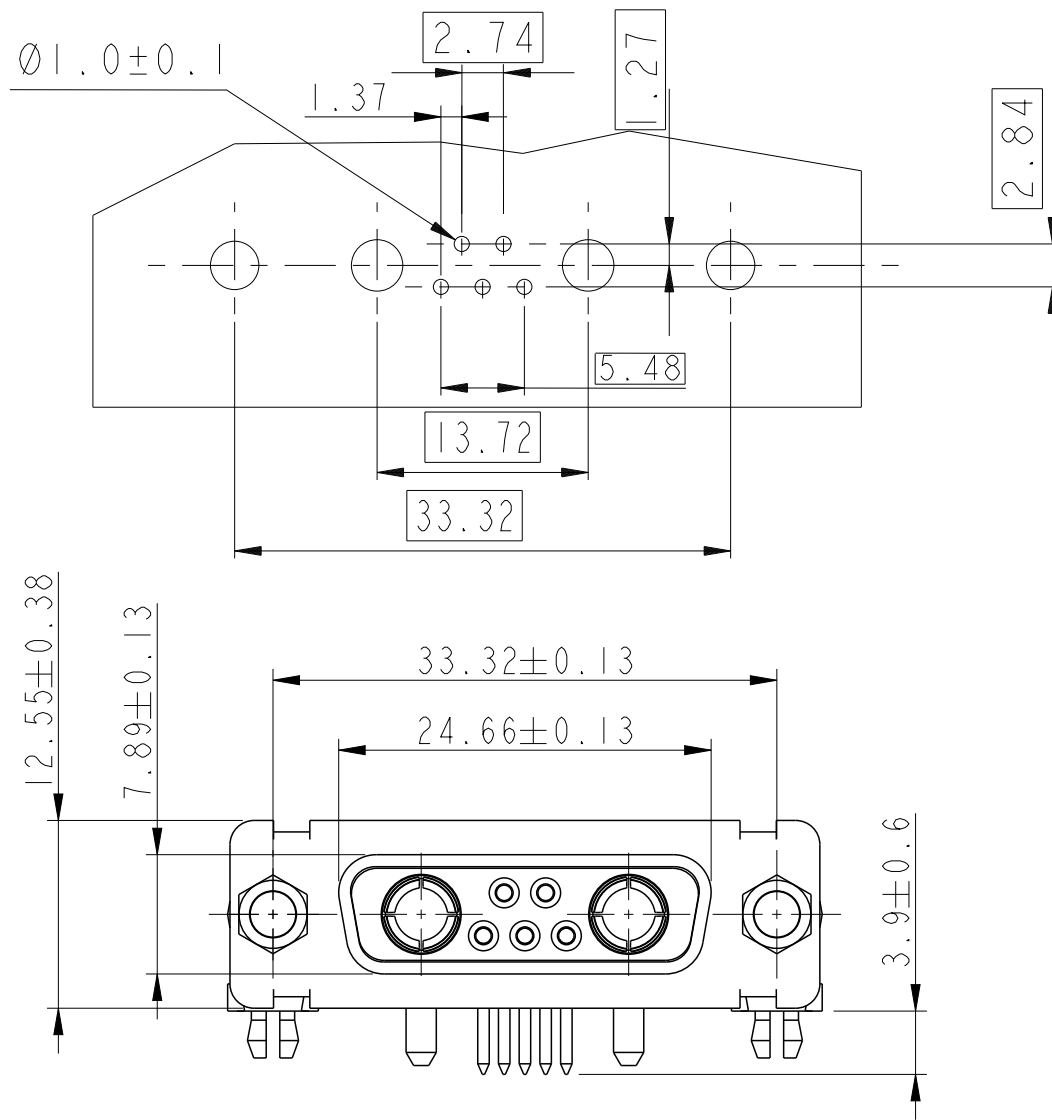
For PCB hole diameters see table I sheet I



7W2

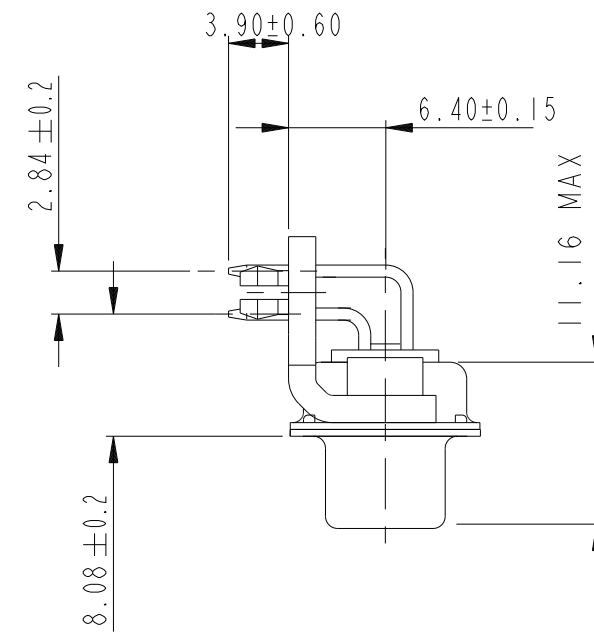
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table I sheet I

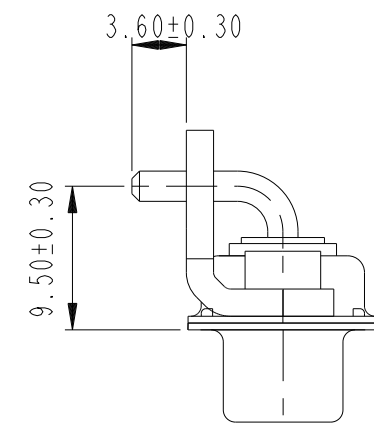


SIDE VIEW FOR ALL LAYOUTS

VIEW WITHOUT POWERS CONTACTS



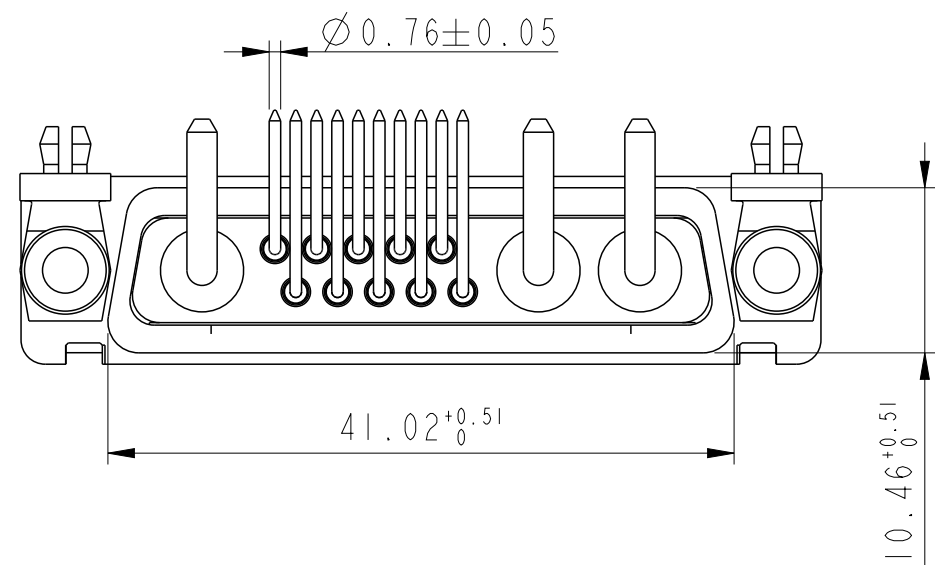
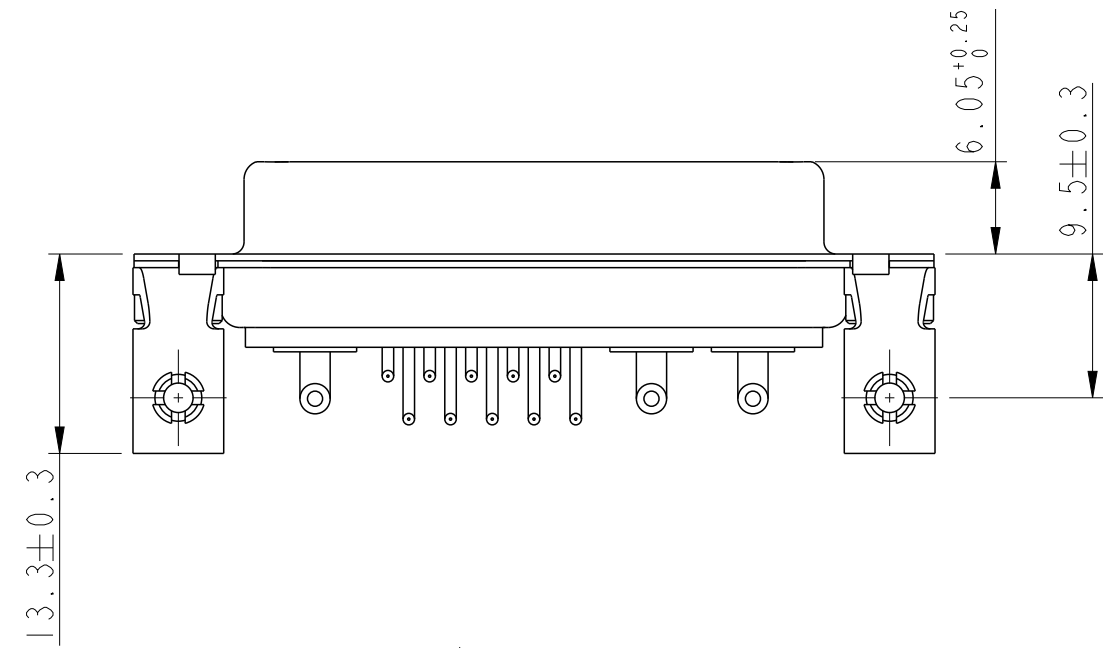
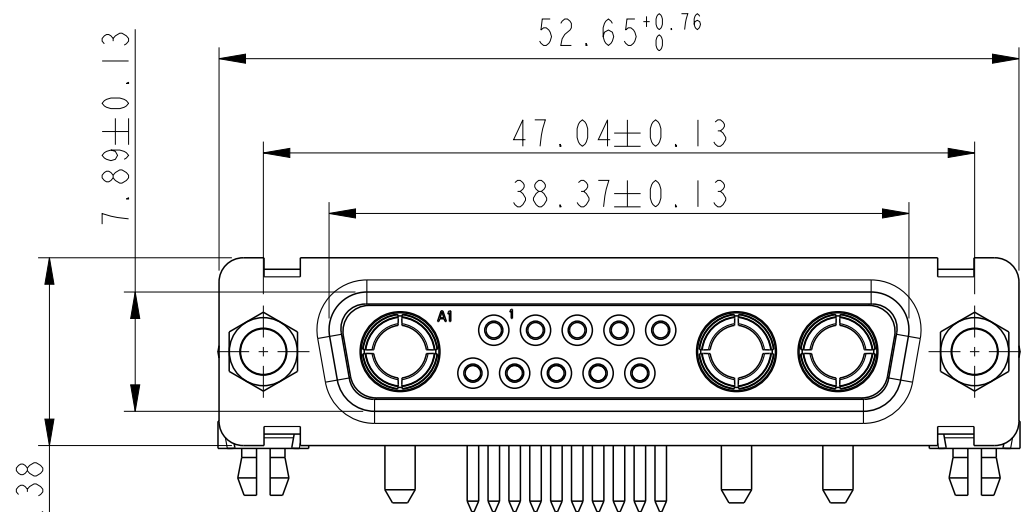
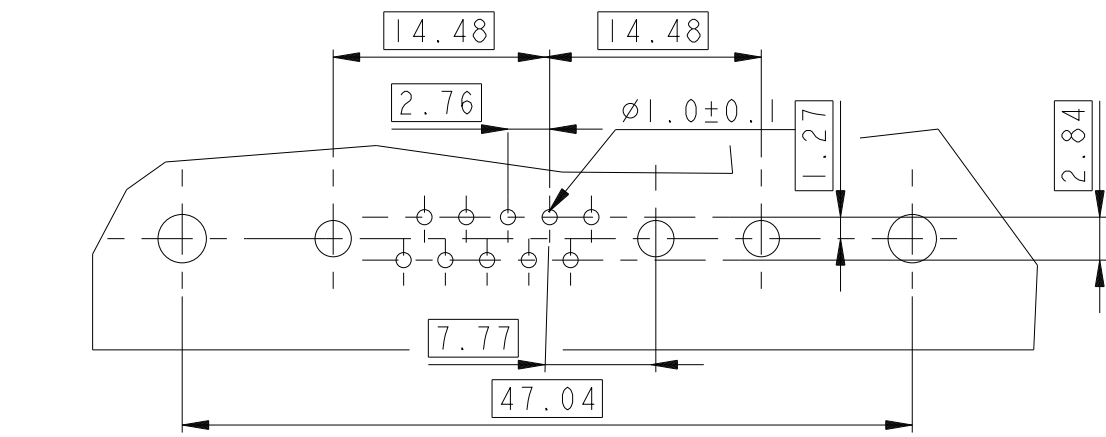
VIEW WITH POWERS CONTACTS



|               |         |                |            |              |             |                                 |                        |                |           |
|---------------|---------|----------------|------------|--------------|-------------|---------------------------------|------------------------|----------------|-----------|
| 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    | -              |            |              |             |                                 |                        |                |           |
| surface       | linear  | 0.X            | ±3         | Amphenol 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   |           |

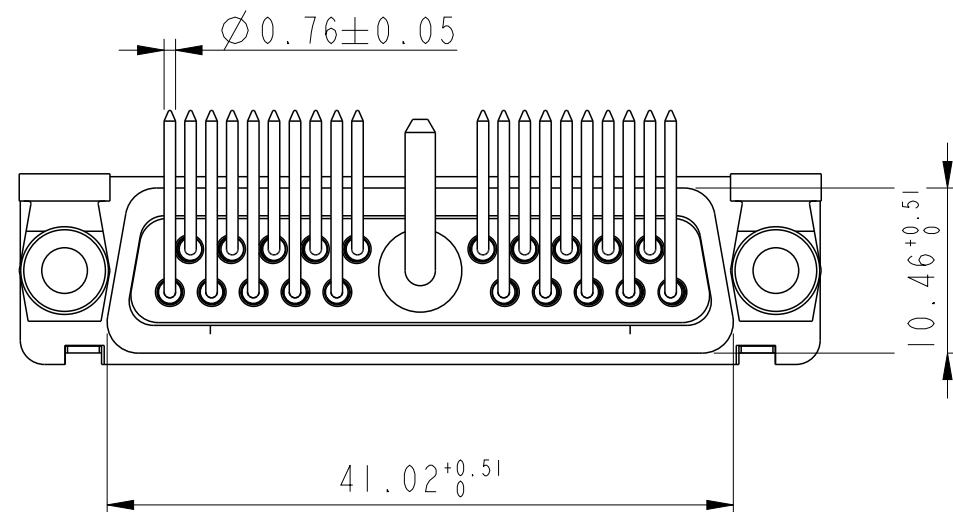
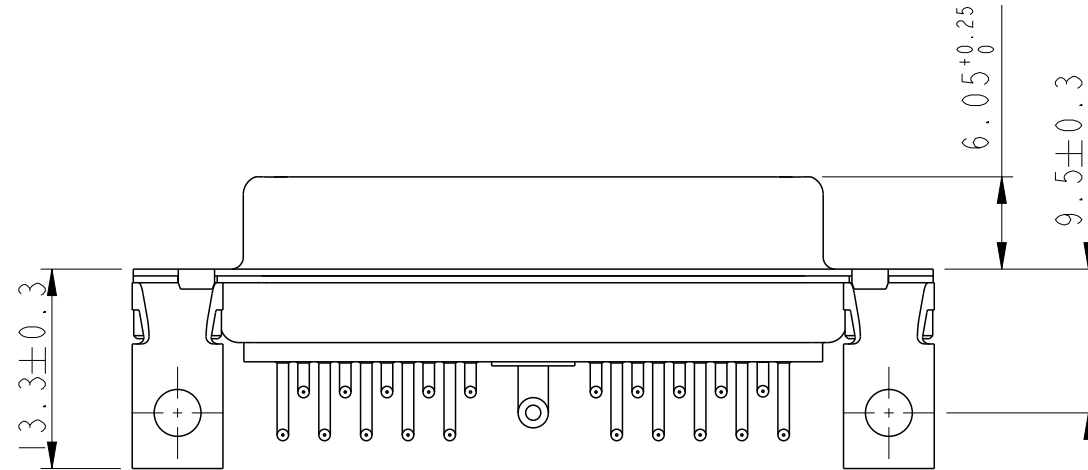
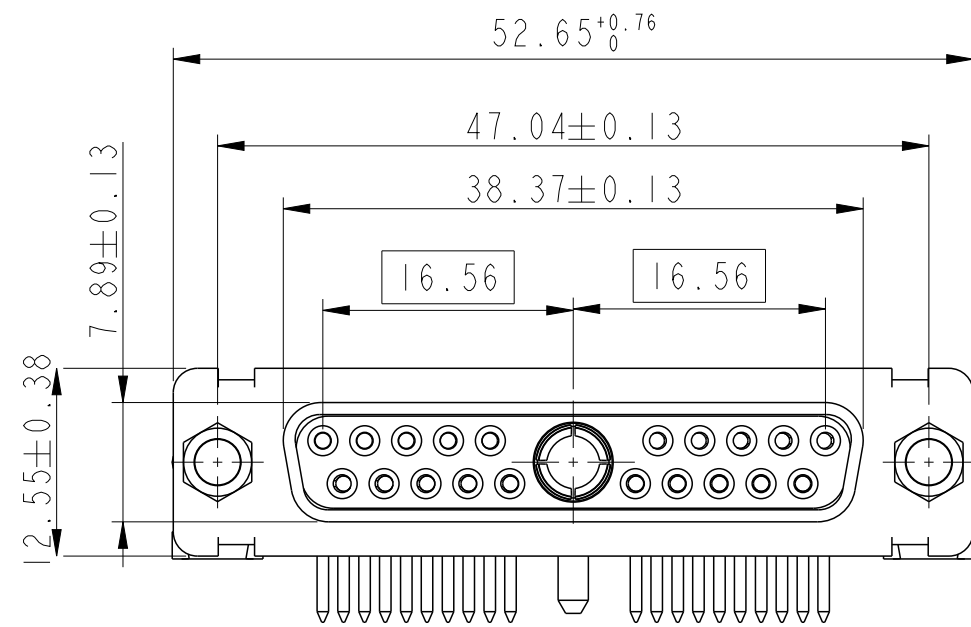
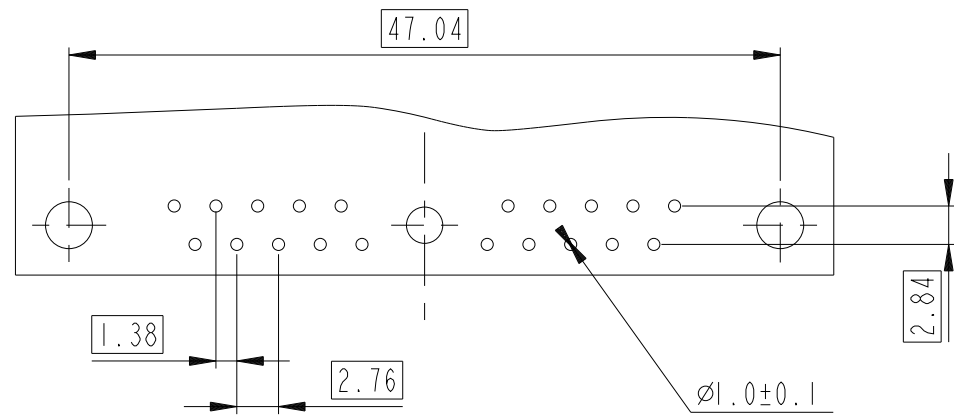
13W3

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



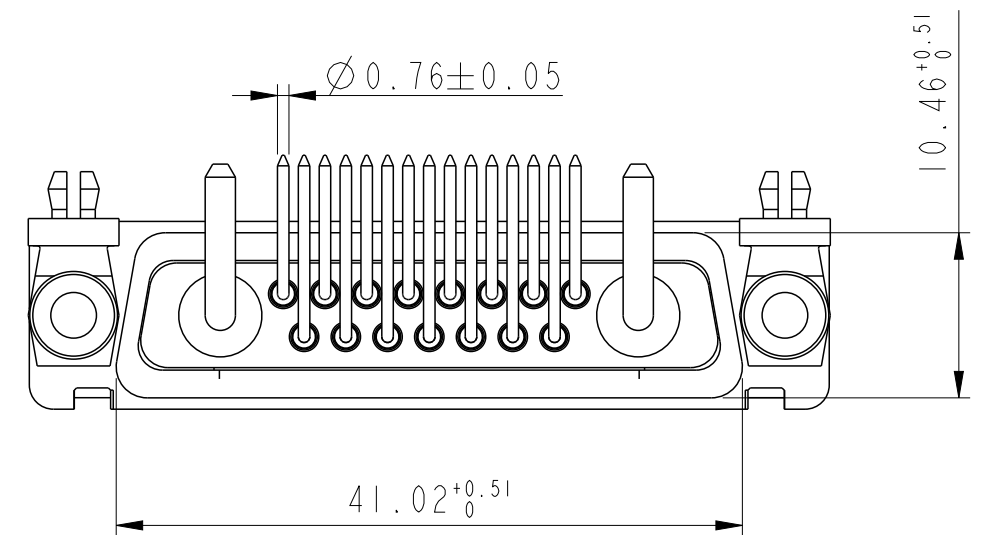
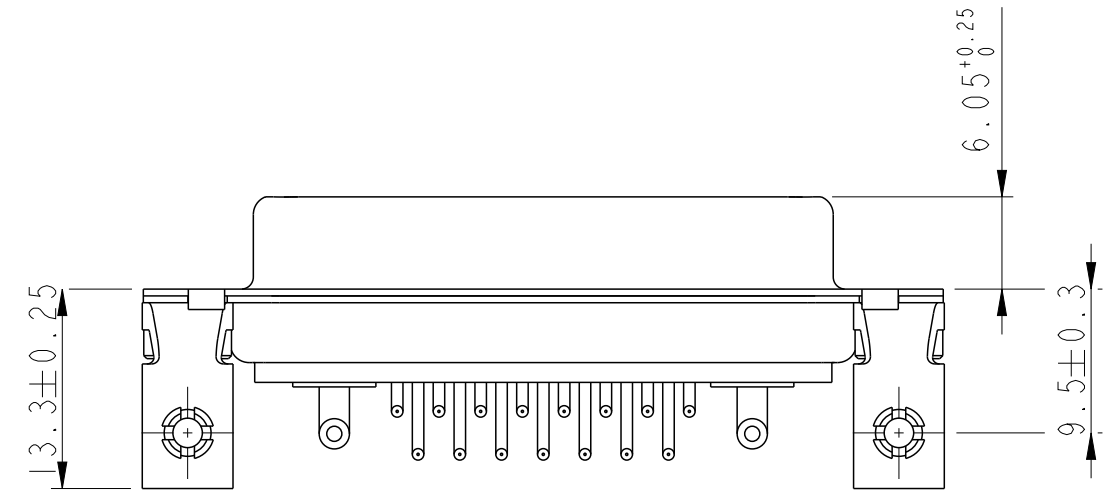
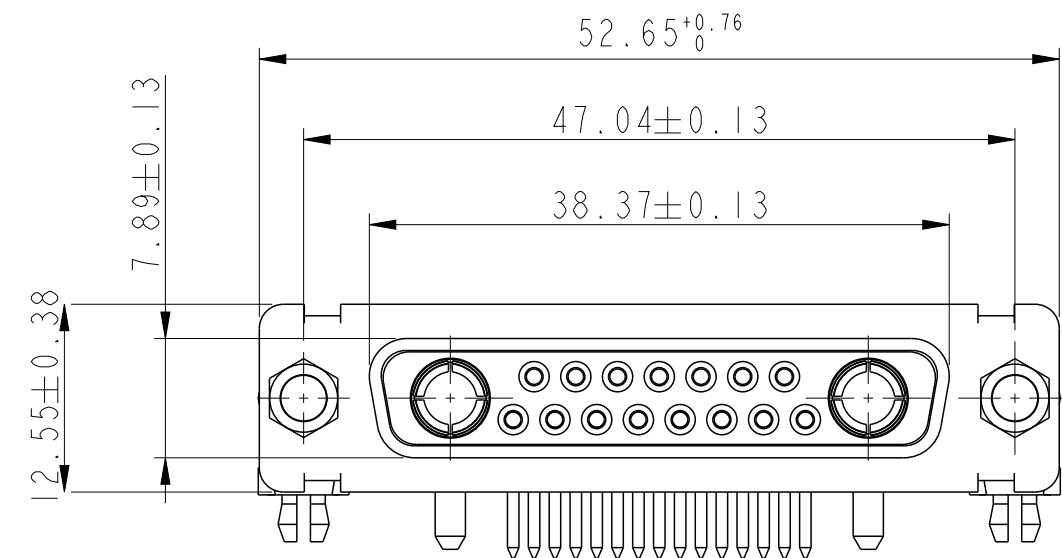
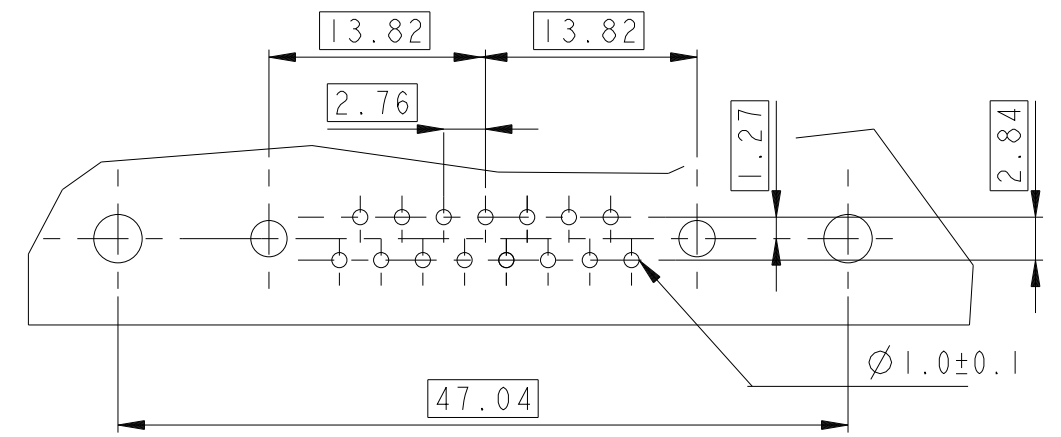
21W1

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



17W2

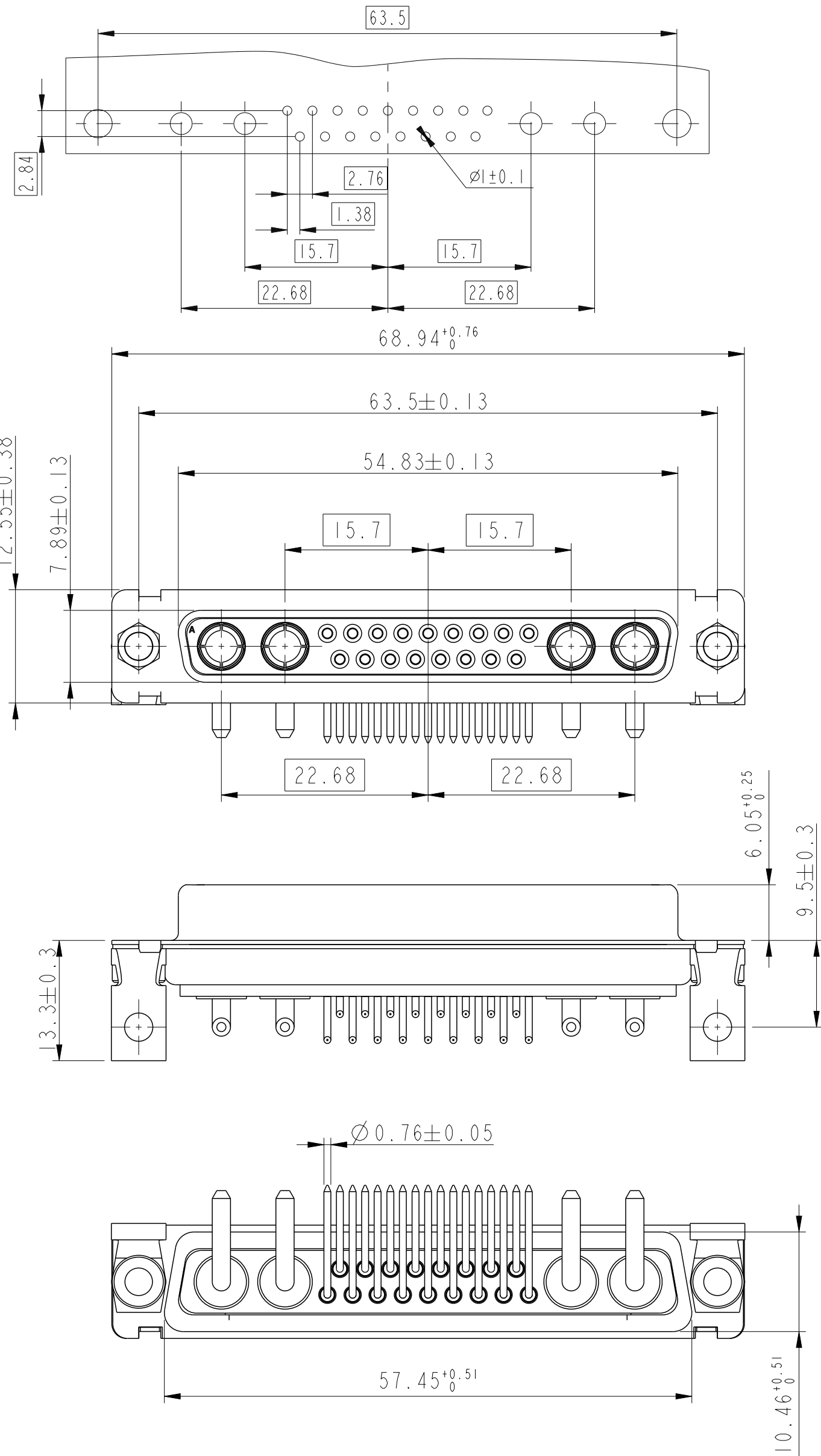
LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table I sheet I



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

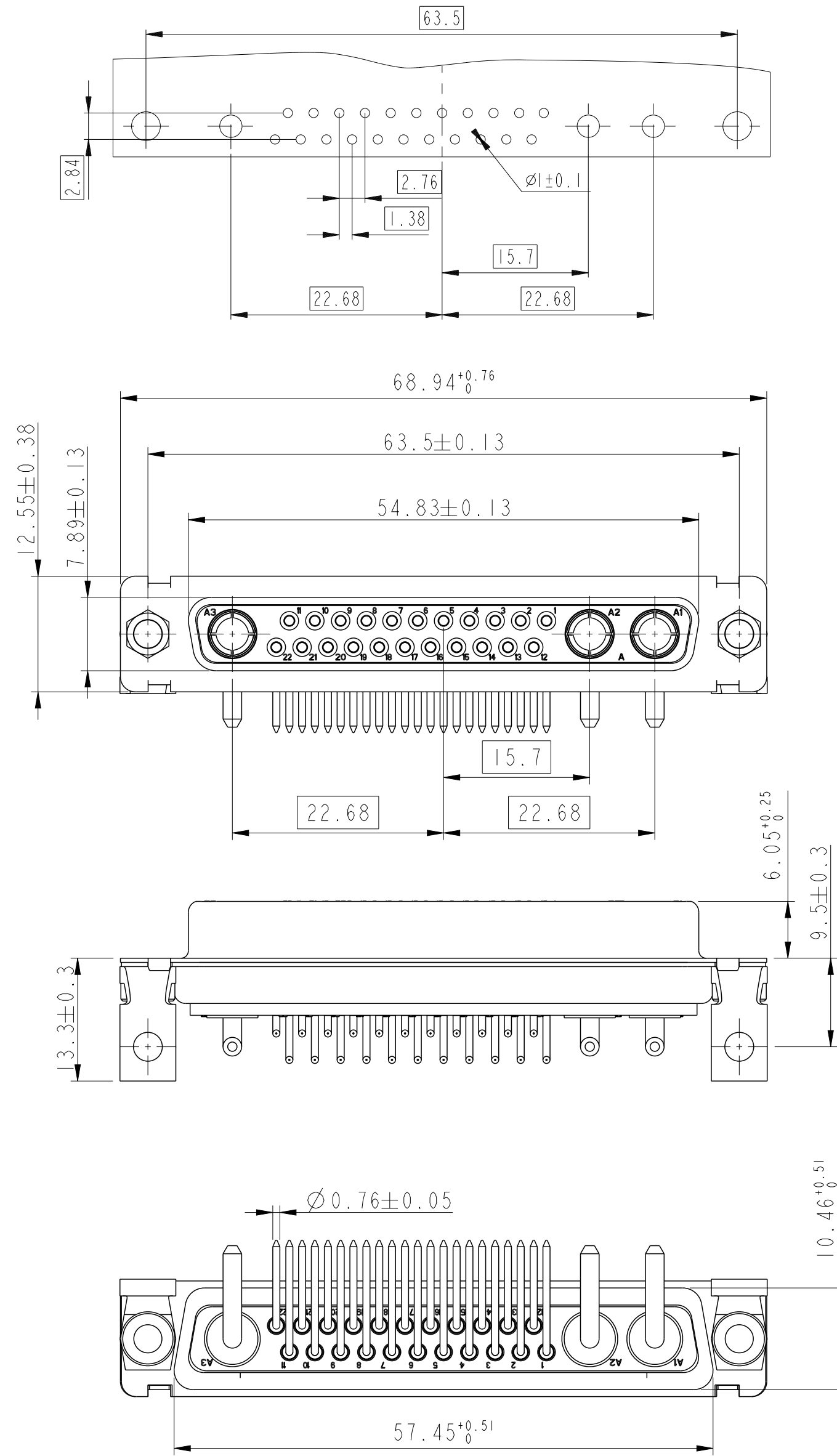
# 21WA4

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



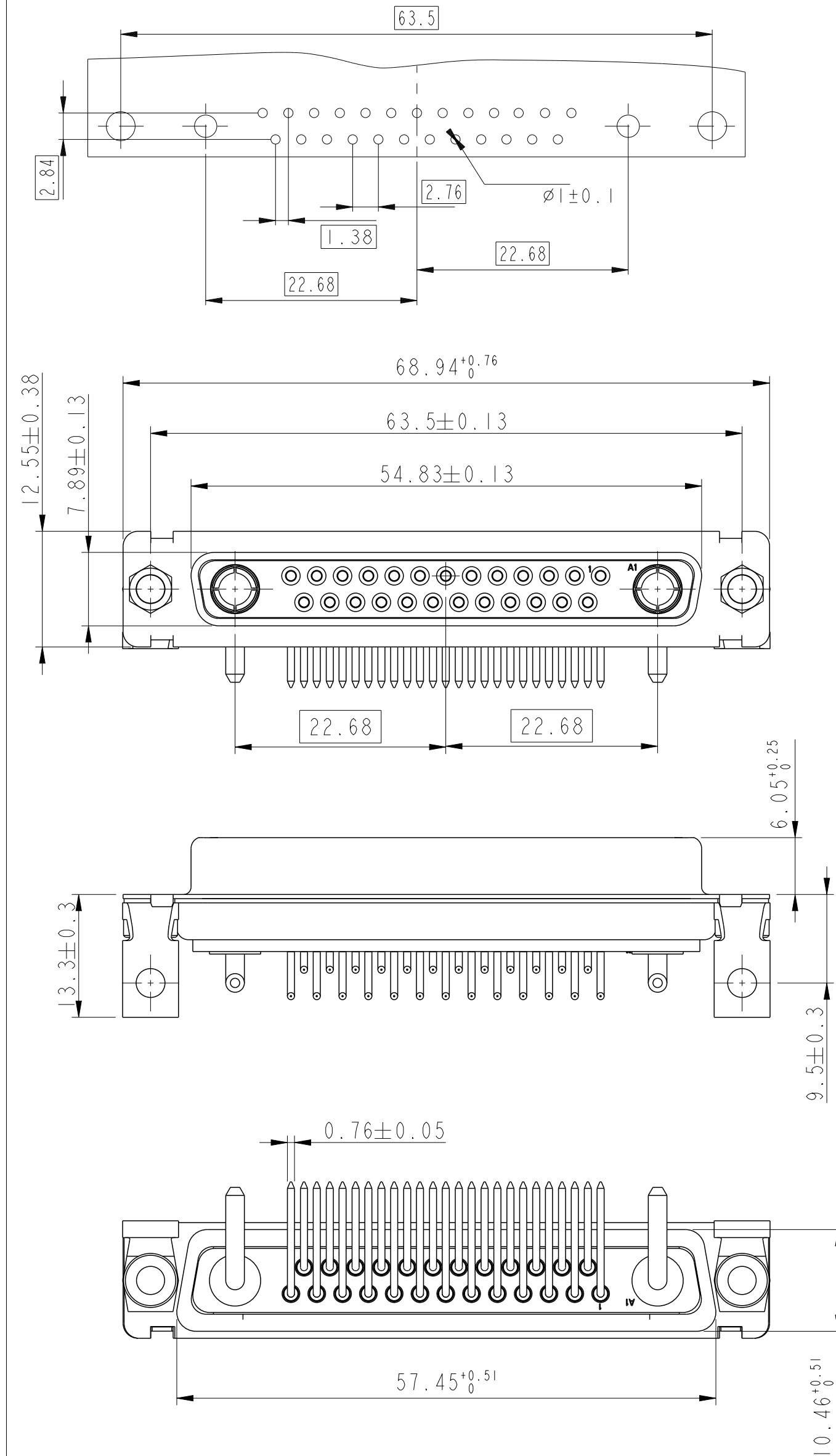
# 25W3

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-132325-2 | rel level              | Released     |
| ISO 406       | appr    | K-Paul Biju    | 2019/02/20 | product family | -     | cat. no.                        | -            | Product - Customer Drw | sheet 6 of 6 |
| ISO 1101      |         |                |            |                |       |                                 |              |                        |              |
| surface       | linear  | 0.X            | ±3         | Amphenol FCI   | title | SUB FEMALE DW US foot print     | dwg no       | C01-8639-2301C         | rev          |
| ISO 1302      | angular | 0.XX           | ±0.10      |                |       | mixed power right angled solder |              |                        | E            |
|               |         | 0.XXX          | ±±0.05     |                |       |                                 |              |                        |              |
|               |         | 0°             | ±2°        |                |       |                                 |              |                        |              |