

REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 507)

PHYSICAL CHARACTERISTICS

-INSULATOR MATERIAL: THERMOPLASTIC ,UL94V0

-CONTACT MATERIAL: BRASS

-ACCESSORIES: BRASS

-SHELLS: STEEL

ELECTRICAL CHARACTERISTICS

-NOMINAL CURRENT: 30A

-CONTACT RESISTANCE: <= 7.3 m ohms

-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 24 HOURS

MECHANICAL CHARACTERISTICS

- 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:
  - Ni 1.27µmi+Sn 2.5 to 7.5µ(pure bright
- Active area plating spec:
  - 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

DBL5W5P700G30LF

Shell size: **E 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

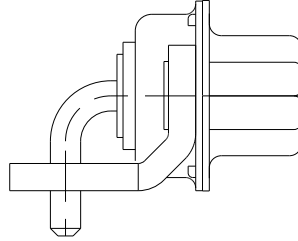
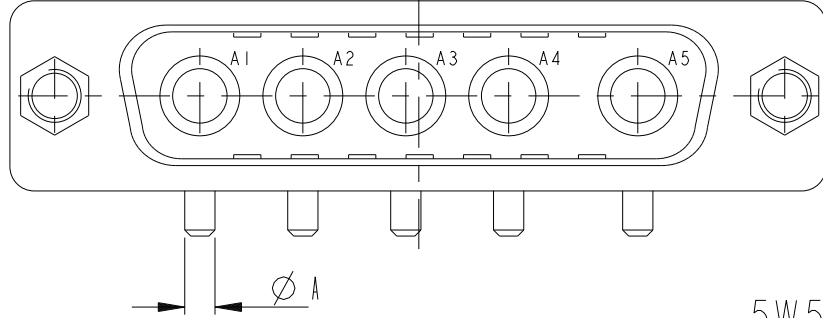
**A** :without accessory  
**H** :Metal brackets+harpoons for PCB 2.40mm  
**G** :Metal brackets+harpoons for PCB 1.60mm  
**M** :Metal brackets

Power contacts

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

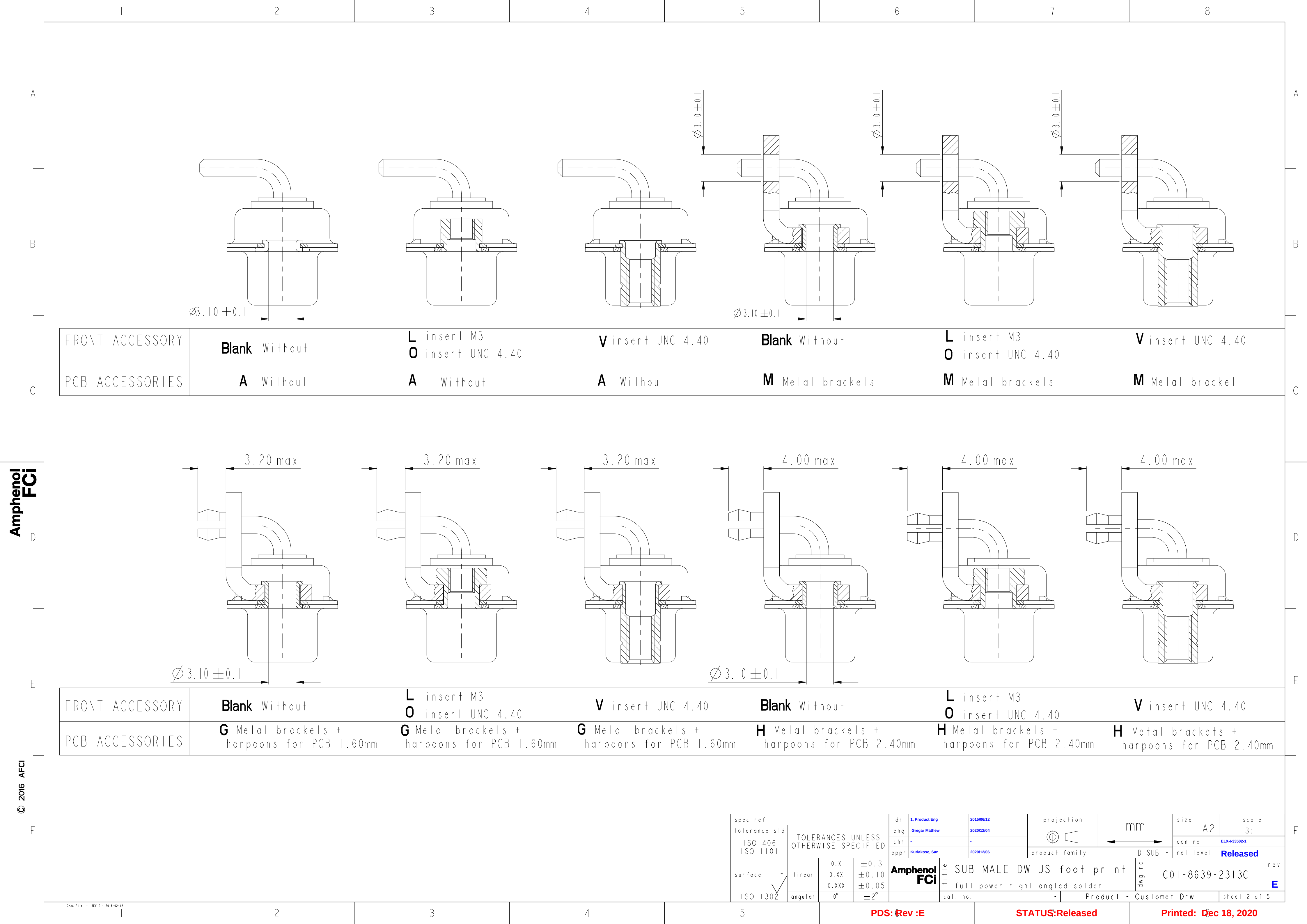
TABLE 1:PCB HOLE DIAMETERS

| POWER CONTACTS    |          |                    | ACCESSORIES        |
|-------------------|----------|--------------------|--------------------|
| 30 A              | Ø2.00    | Ø2.40              | Ø3.10              |
| Max current power | Ø A ±0.1 | PCB HOLE<br>+/-0.1 | PCB HOLE<br>+/-0.1 |



5W5 FOR EXAMPLE

|                                                                                                                                         |  |                                                                                                                    |                                                                                                   |                |                                    |                                                                                                                        |                                                                                                                |                           |                        |                                             |                             |                |  |         |
|-----------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------|------------------------|---------------------------------------------|-----------------------------|----------------|--|---------|
| spec ref                                                                                                                                |  | dr                                                                                                                 |                                                                                                   | 1, Product Eng | 2015/06/12                         | <div>projection</div> <div></div> | <div>mm</div> <div></div> | size                      | A2                     | scale                                       | 3:1                         |                |  |         |
| tolerance std                                                                                                                           |  | eng                                                                                                                |                                                                                                   | Gregar Mathew  | 2020/12/04                         |                                                                                                                        |                                                                                                                | ecn no                    | ELX-133502-1           | rel level                                   | Released                    |                |  |         |
| ISO 406                                                                                                                                 |  | chr                                                                                                                |                                                                                                   | -              | -                                  |                                                                                                                        |                                                                                                                |                           |                        |                                             |                             |                |  |         |
| ISO 1101                                                                                                                                |  | appr                                                                                                               |                                                                                                   | Kuriakose, San | 2020/12/06                         |                                                                                                                        |                                                                                                                |                           |                        |                                             |                             | product family |  | D SUB - |
| <div>surface</div> <div></div> <div>ISO 1302</div> |  | <div>linear</div> <div></div> | <div>0.X</div> <div>±0.3</div> <div>0.XX</div> <div>±0.10</div> <div>0.XXX</div> <div>±0.05</div> |                | <div>Amphenol</div> <div>FCI</div> | title                                                                                                                  |                                                                                                                | SUB MALE DW US foot print |                        | <div>dwg no</div> <div>C01-8639-2313C</div> | <div>rev</div> <div>E</div> |                |  |         |
|                                                                                                                                         |  |                                                                                                                    |                                                                                                   |                |                                    | full power right angled solder                                                                                         |                                                                                                                |                           |                        |                                             |                             |                |  |         |
|                                                                                                                                         |  |                                                                                                                    |                                                                                                   |                |                                    | cat. no.                                                                                                               |                                                                                                                | -                         | Product - Customer Drw |                                             |                             | sheet 1 of 5   |  |         |
|                                                                                                                                         |  |                                                                                                                    |                                                                                                   |                |                                    | angular                                                                                                                |                                                                                                                | 0°                        | ±2°                    |                                             |                             |                |  |         |

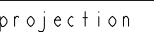


| PART NUMBER     | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES               |
|-----------------|------|-----------------------|-----------------------|----------------------------------|
| D*xWxP700A30LF  | 30   | 200                   | without               | without                          |
| 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 \*  
LAYOUTS  
xWx

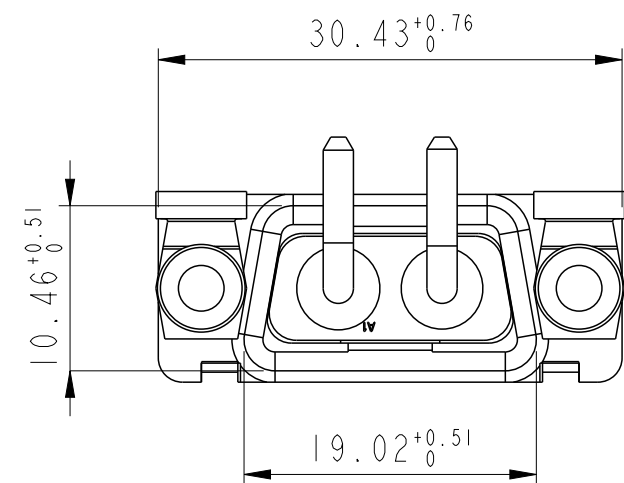
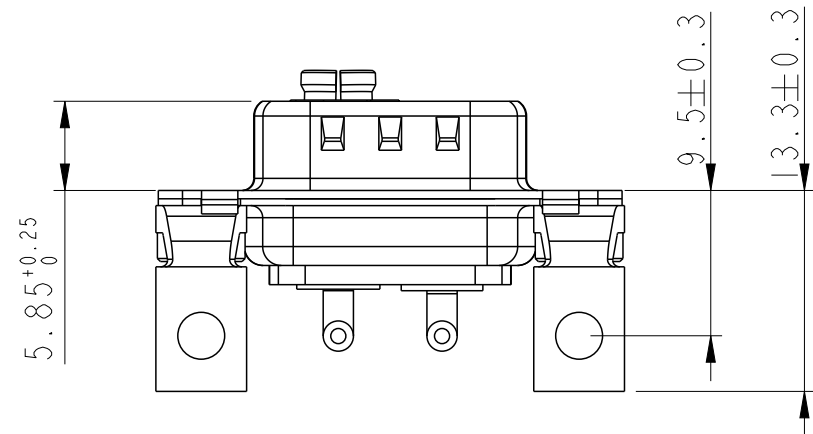
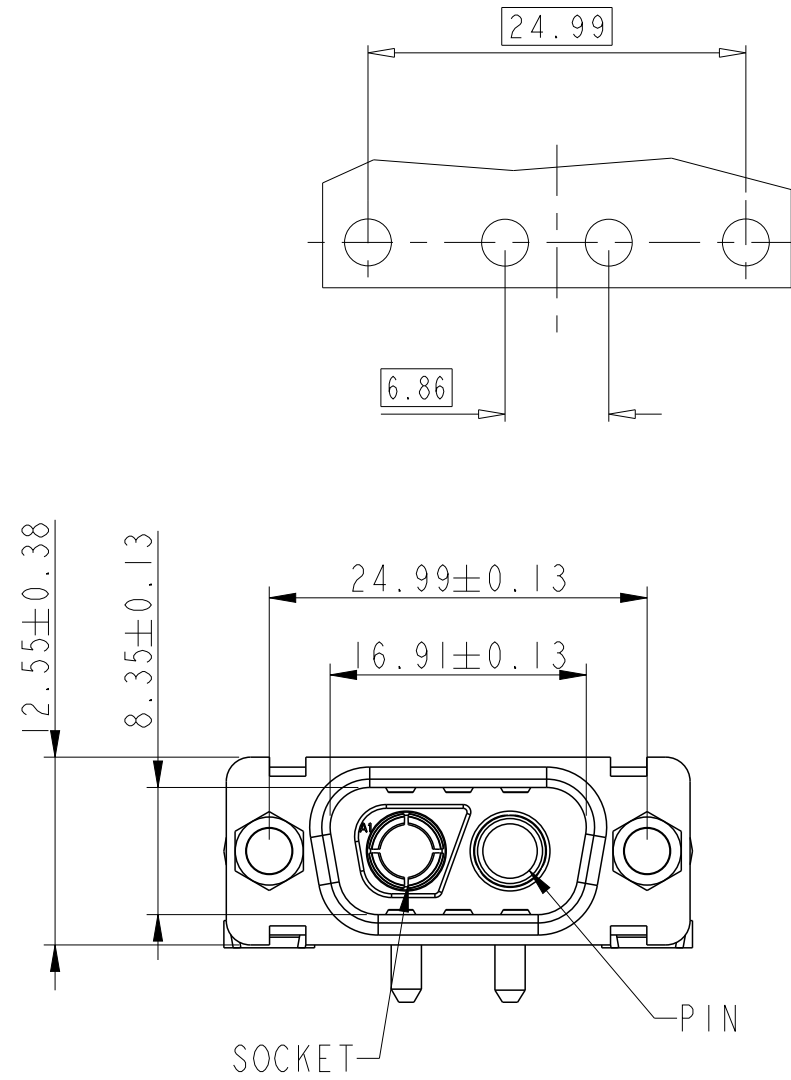
E  
A  
A  
B  
C  
  
2V2  
3V3  
3W3  
5W5  
8W8

| 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                    |

|                                        |  |                                      |       |                |                                    |                                                                                       |                                                                                       |                |                        |           |              |                |
|----------------------------------------|--|--------------------------------------|-------|----------------|------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------|------------------------|-----------|--------------|----------------|
| spec ref                               |  | dr                                   |       | 1, Product Eng | 2015/06/12                         |  |  | size           | A2                     | scale     | 3:1          |                |
| tolerance std                          |  | eng                                  |       | Gregar Mathew  | 2020/12/04                         |                                                                                       |                                                                                       | ecn no         | ELX-133502-1           | rel level | Released     |                |
| ISO 406                                |  | chr                                  |       | -              | -                                  |                                                                                       |                                                                                       |                |                        |           |              |                |
| ISO 1101                               |  | appr                                 |       | Kuriakose, San | 2020/12/06                         |                                                                                       |                                                                                       |                |                        |           |              | product family |
| <div>surface</div> <div>ISO 1302</div> |  | <div>linear</div> <div>angular</div> | 0.X   | ±0.3           | <div>Amphenol</div> <div>FCI</div> | SUB MALE DW US foot print                                                             |                                                                                       | C01-8639-2313C |                        | rev       |              | E              |
|                                        |  |                                      | 0.XX  | ±0.10          |                                    |                                                                                       |                                                                                       |                |                        |           |              |                |
|                                        |  |                                      | 0.XXX | ±0.05          |                                    |                                                                                       |                                                                                       |                |                        |           |              |                |
|                                        |  |                                      | 0°    | ±2°            |                                    |                                                                                       |                                                                                       |                |                        |           |              |                |
|                                        |  |                                      |       |                |                                    | cat. no.                                                                              |                                                                                       | -              | Product - Customer Drw |           | sheet 3 of 5 |                |

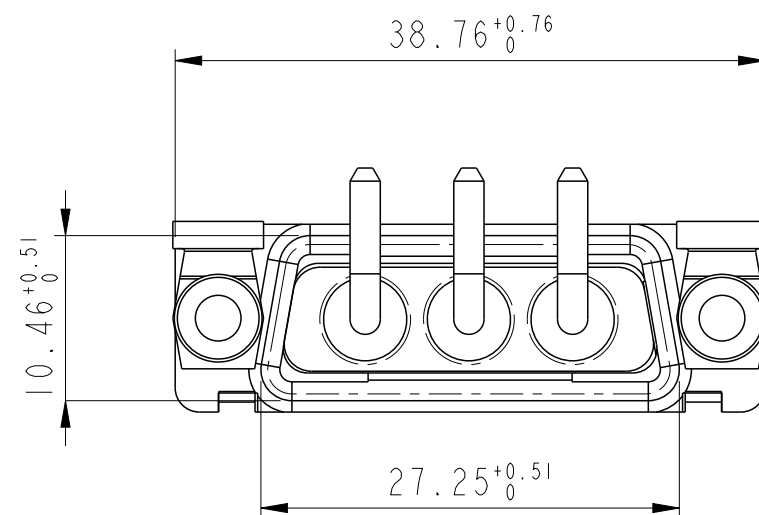
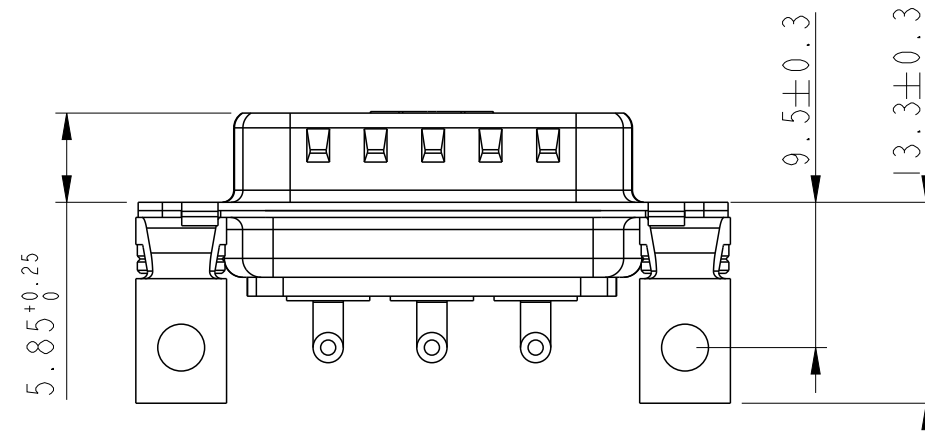
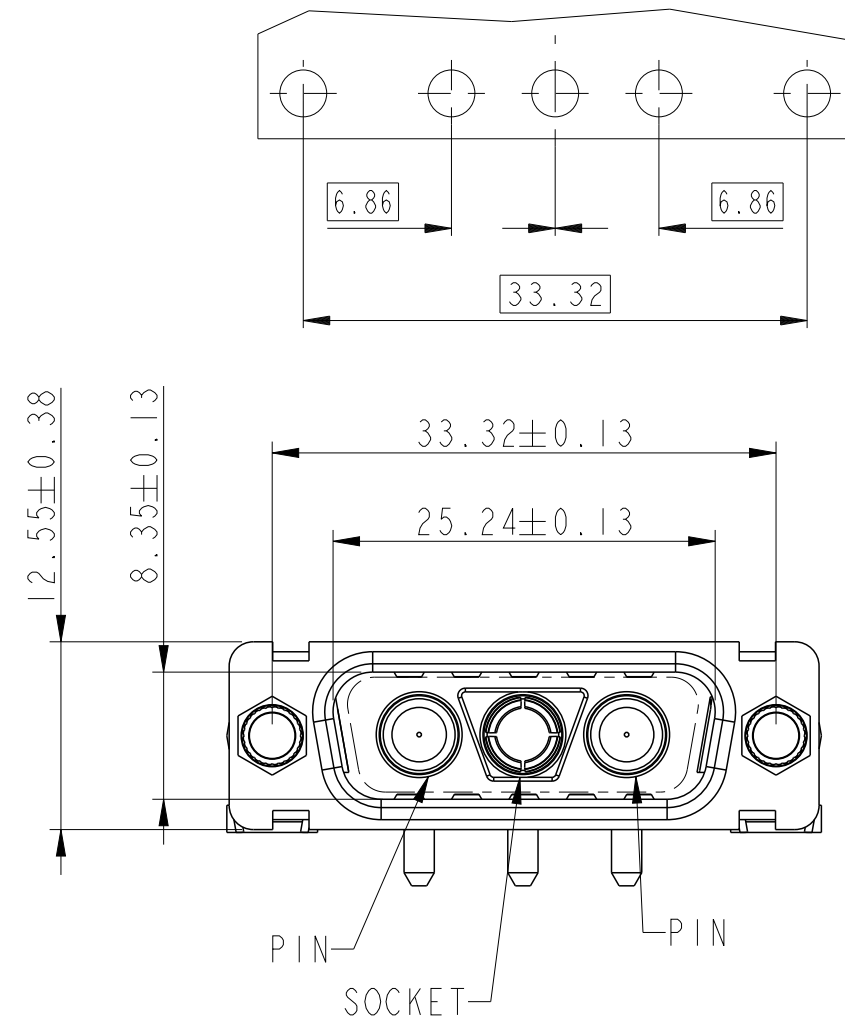
2V2

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



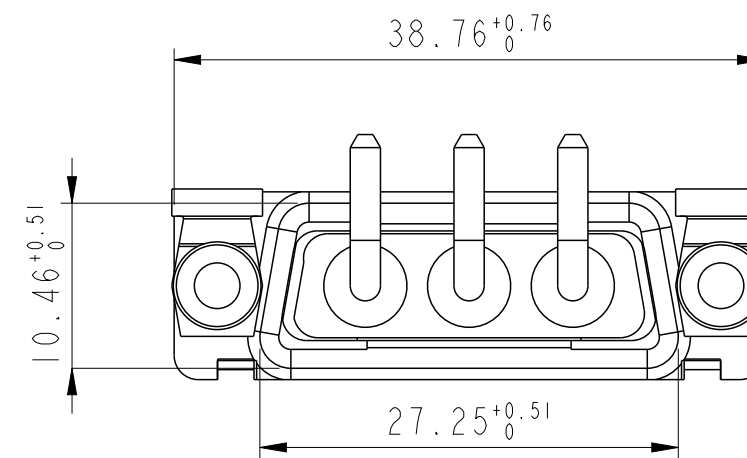
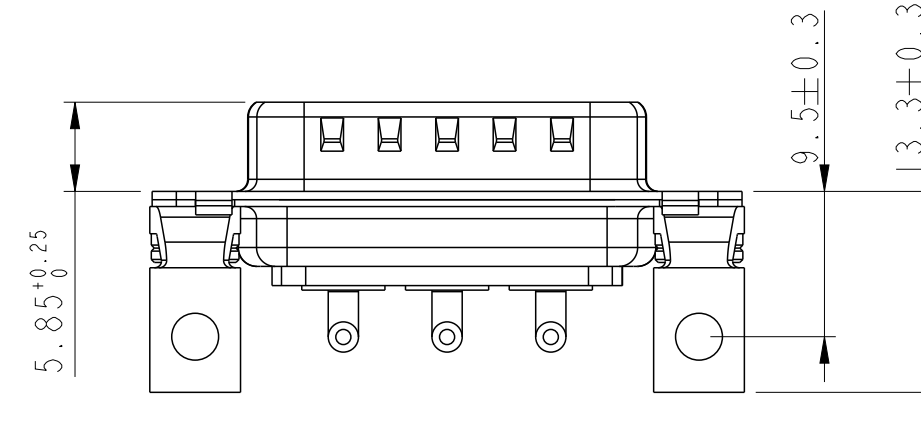
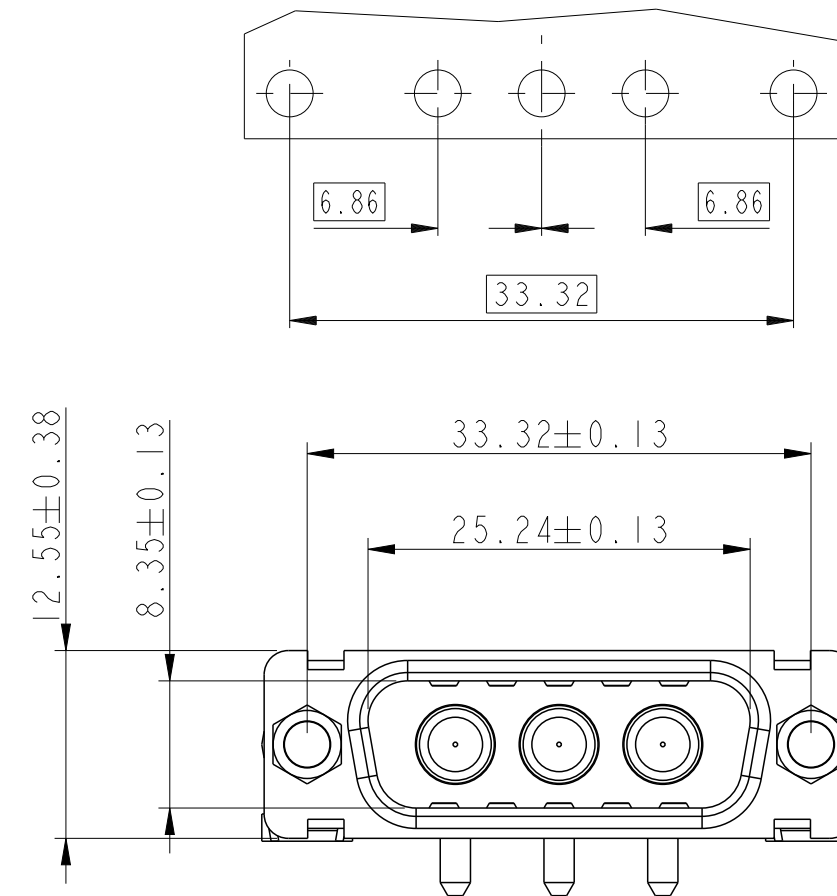
3V3

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

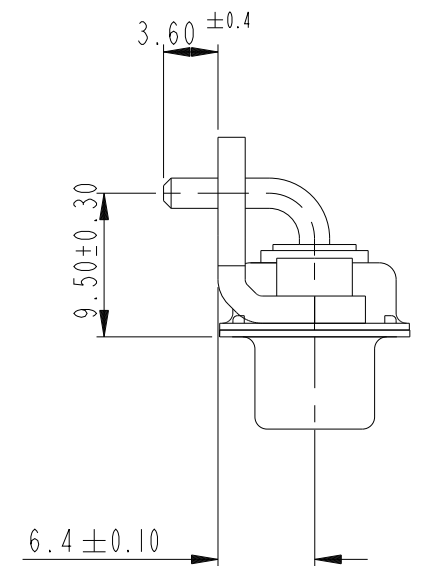


3W3

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



SIDE VIEW FOR ALL LAYOUTS

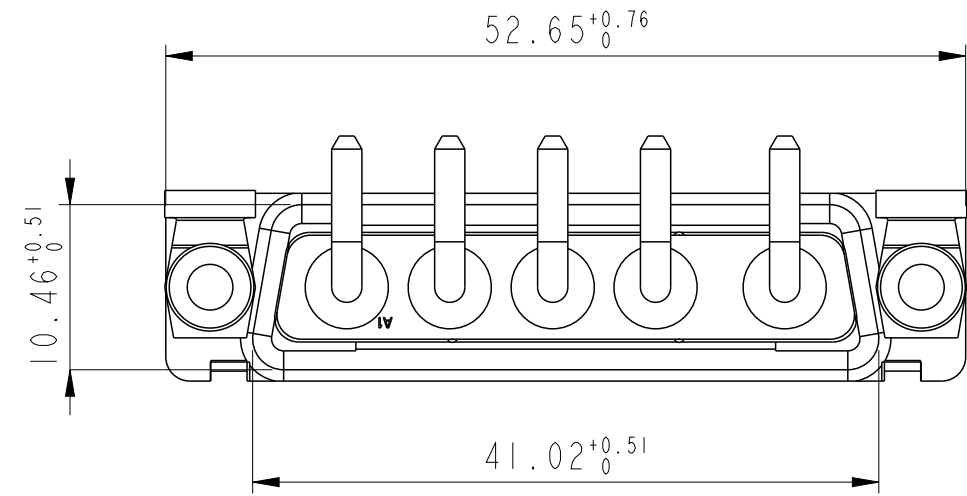
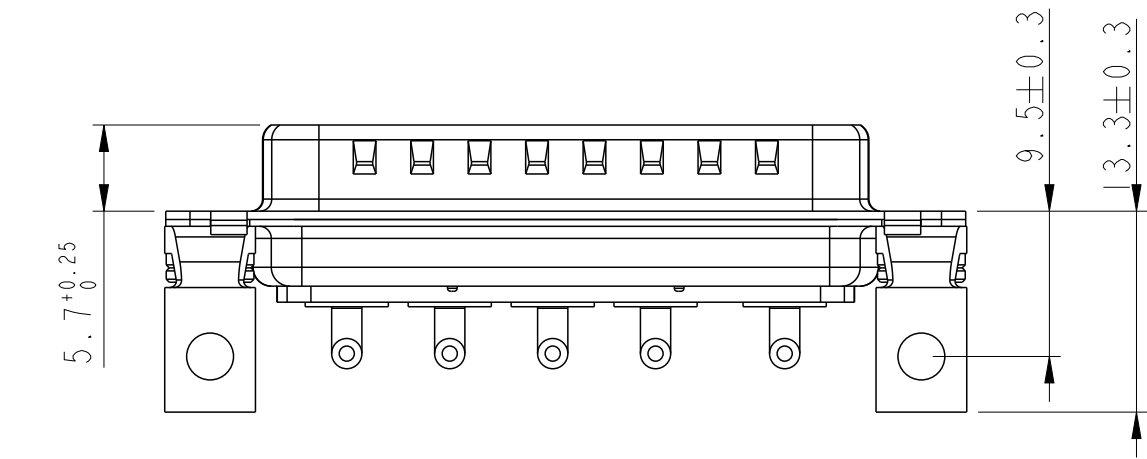
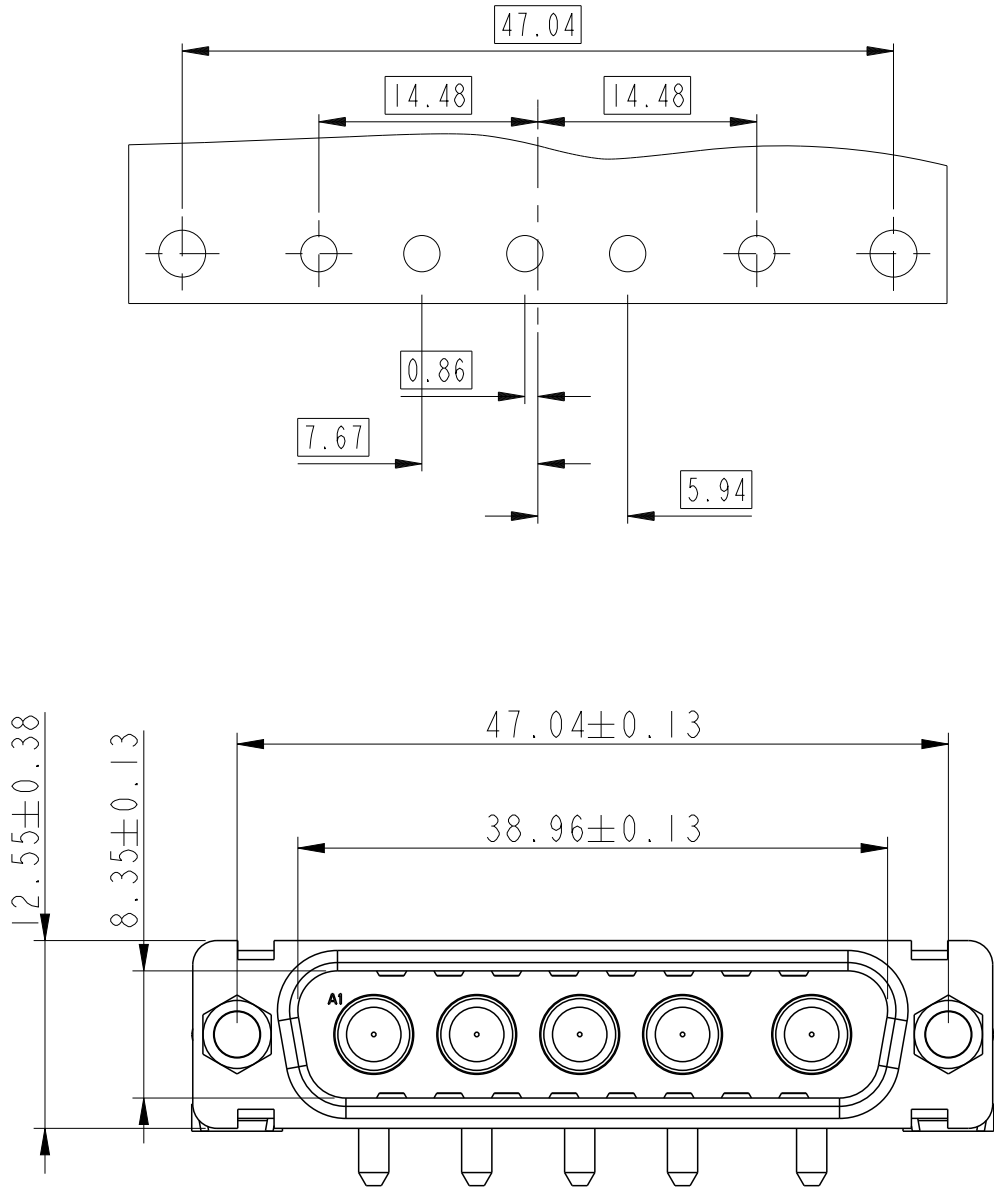


|               |  |         |  |                |  |            |  |                                                                                       |  |                                                                                       |  |                           |  |                        |  |                |  |          |  |
|---------------|--|---------|--|----------------|--|------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------|--|------------------------|--|----------------|--|----------|--|
| spec ref      |  | dr      |  | 1, Product Eng |  | 2015/06/12 |  | projection                                                                            |  | mm                                                                                    |  | size                      |  | A2                     |  | scale          |  | 2:1      |  |
| tolerance std |  | eng     |  | Gregar Mathew  |  | 2020/12/04 |  |  |  |  |  | ecn no                    |  | ELX-1-33502-1          |  |                |  |          |  |
| ISO 406       |  | chr     |  | -              |  | -          |  | -                                                                                     |  | -                                                                                     |  | product family            |  | D SUB -                |  | rel level      |  | Released |  |
| ISO 1101      |  | appr    |  | Kuriakose, San |  | 2020/12/06 |  | -                                                                                     |  | -                                                                                     |  | -                         |  | -                      |  | -              |  | -        |  |
| surface       |  | linear  |  | 0.X            |  | ±0.3       |  | Amphenol                                                                              |  | title                                                                                 |  | SUB MALE DW US foot print |  | dwg no                 |  | C01-8639-2313C |  | rev      |  |
| ISO 1302      |  | angular |  | 0°             |  | ±2°        |  | FCI                                                                                   |  | cat. no.                                                                              |  | -                         |  | Product - Customer Drw |  | sheet 4 of 5   |  | E        |  |
|               |  |         |  | 0.XX           |  | ±0.10      |  |                                                                                       |  |                                                                                       |  |                           |  |                        |  |                |  |          |  |
|               |  |         |  | 0.XXX          |  | ±0.05      |  |                                                                                       |  |                                                                                       |  |                           |  |                        |  |                |  |          |  |
|               |  |         |  |                |  |            |  |                                                                                       |  |                                                                                       |  |                           |  |                        |  |                |  |          |  |

5W5

LAYOUT AND CONNECTOR DIMENSIONS

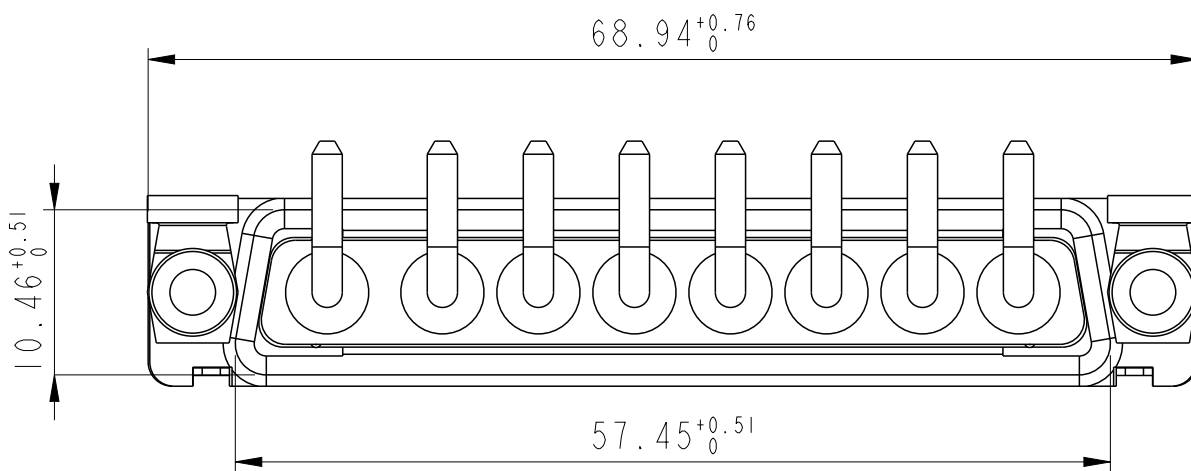
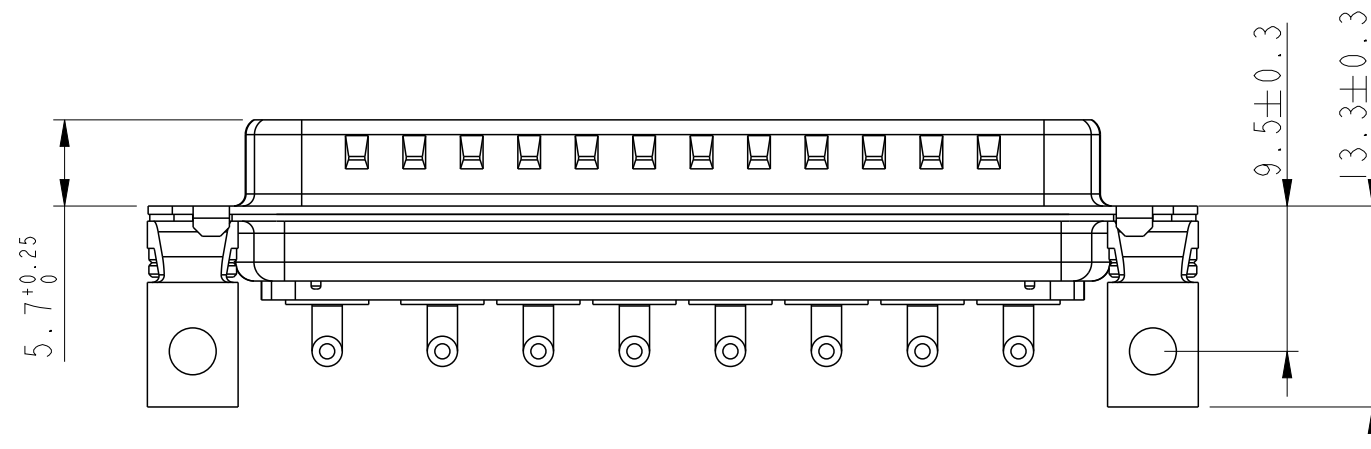
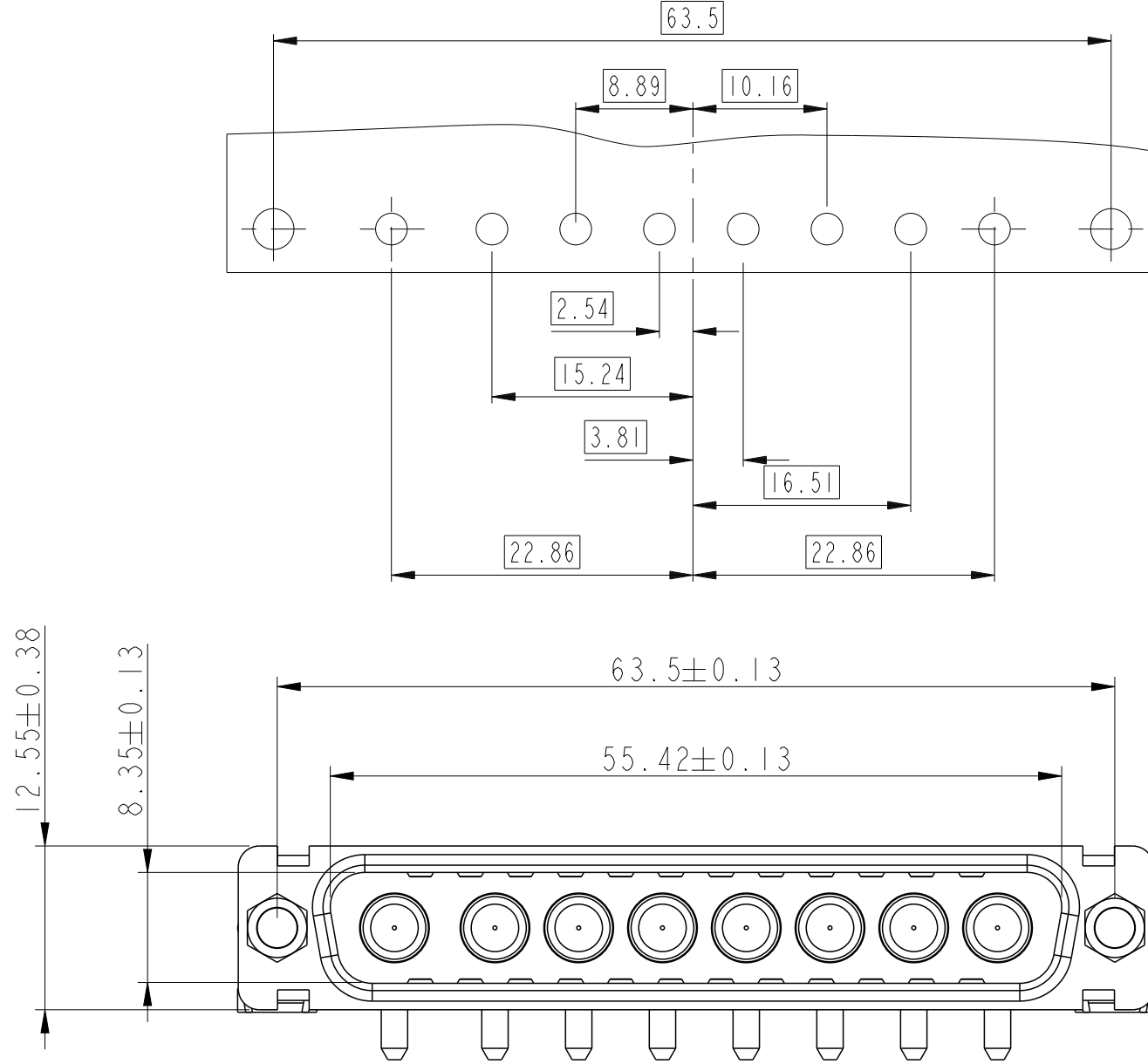
For PCB hole diameters see table I sheet I

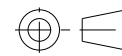


8W8

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table I sheet I



|               |  |         |       |                |            |                                                                                                                        |                                                                                                                |                                |              |           |                        |  |              |   |
|---------------|--|---------|-------|----------------|------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------|--------------|-----------|------------------------|--|--------------|---|
| spec ref      |  | dr      |       | 1, Product Eng | 2015/06/12 | <div>projection</div> <div></div> | <div>mm</div> <div></div> | size                           | A2           | scale     | 2:1                    |  |              |   |
| tolerance std |  | eng     |       | Gregar Mathew  | 2020/12/04 |                                                                                                                        |                                                                                                                | ecn no                         | ELX-133502-1 | rel level | Released               |  |              |   |
| ISO 406       |  | chr     |       | -              | -          |                                                                                                                        |                                                                                                                |                                |              |           |                        |  |              |   |
| ISO 1101      |  | appr    |       | Kuriakose, San | 2020/12/06 |                                                                                                                        |                                                                                                                |                                |              |           |                        |  |              |   |
|               |  |         |       |                |            |                                                                                                                        | product family                                                                                                 |                                | D SUB -      |           |                        |  |              |   |
| surface       |  | linear  | 0.X   |                | ±0.3       |                                                                                                                        | Amphenol FCI                                                                                                   | SUB MALE DW US foot print      |              | dwg no    | C01-8639-2313C         |  | rev          | E |
| ISO 1302      |  |         | 0.XX  |                | ±0.10      |                                                                                                                        |                                                                                                                | full power right angled solder |              |           |                        |  |              |   |
|               |  |         | 0.XXX |                | ±0.05      |                                                                                                                        |                                                                                                                |                                |              |           |                        |  |              |   |
|               |  | angular | 0°    |                | ±2°        |                                                                                                                        | cat. no.                                                                                                       |                                | -            |           | Product - Customer Drw |  | sheet 5 of 5 |   |