

## 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 or 40A

-CONTACT RESISTANCE: <= 7.3 mOhms

-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 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:
  - Ni 1.27µm+Sn 2.5 to 7.5µm(pure bright)
- Active area plating spec:
  - Ni + Gold
- 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

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

**I** :female screw M3

Layout of contacts (see sheet 3)

Contacts

**P** Pin

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

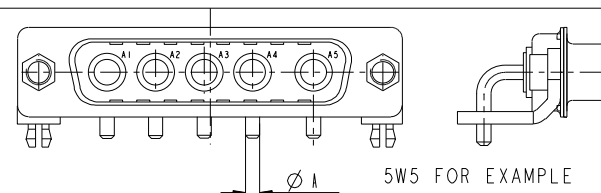
**00** :Not fitted with power contact (signal contacts always fitted)

**30** :Fitted with power contacts 30 Amp.

**40** :Fitted with power contacts 40 Amp.

TABLE 1:PCB HOLE DIAMETERS

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



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

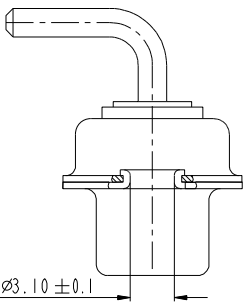
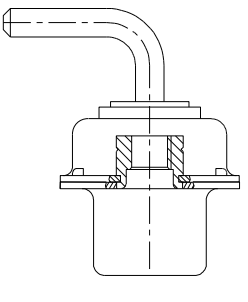
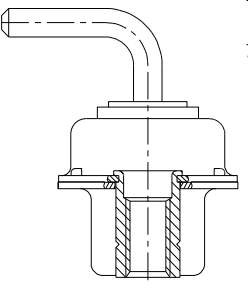
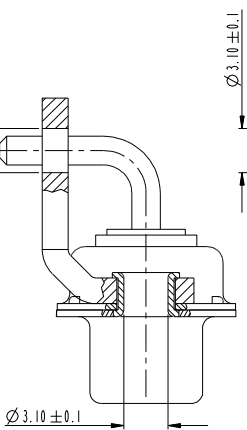
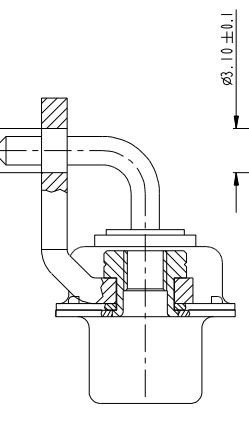
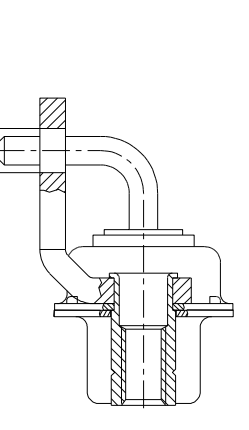
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|-----|-----------|-----|------------|-------------------------------|--------------------------------|---------------|----------|-------|-------|
| rev | ecn no    | dr  | date       | title                         | sub                            | part          | customer | sheet | total |
| A   | LS05-0113 | MPE | 2005-10-11 | SUB MALE DW EUROPE foot print | full power right angled solder | C01-8639-2312 |          | 4     |       |
| B   | LS06-0208 | LGO | 2006-12-13 |                               |                                |               |          |       |       |
| C   | LS07-0213 | MPE | 2007-11-05 |                               |                                |               |          |       |       |
| D   | F09-0083  | LSA | 2009-07-15 |                               |                                |               |          |       |       |
| E   | F09-0092  | LSA | 2009-09-16 |                               |                                |               |          |       |       |
|     |           |     |            |                               |                                |               |          |       |       |
|     |           |     |            |                               |                                |               |          |       |       |

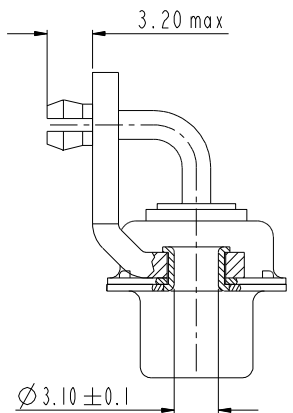
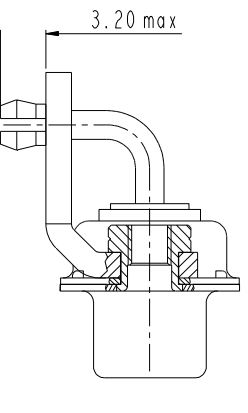
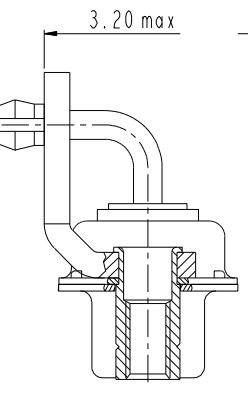
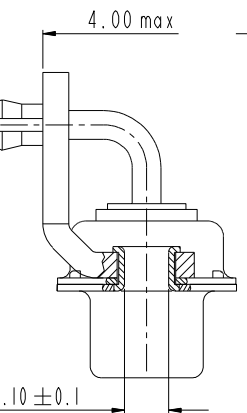
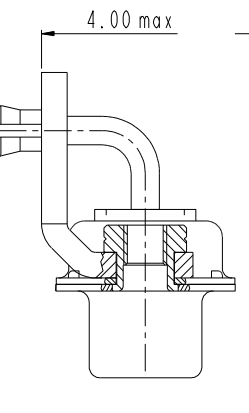
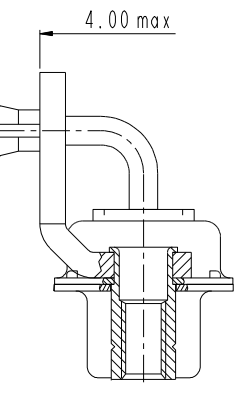
PDM-REV-E

STATUS Released

Printed: Apr 28, 2015

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| A |   |   |   |   |   |   |   |   |
| B |   |   |   |   |   |   |   |   |
| C |   |   |   |   |   |   |   |   |
| D |   |   |   |   |   |   |   |   |
| E |   |   |   |   |   |   |   |   |
| F |   |   |   |   |   |   |   |   |

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

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

SCALE: 4

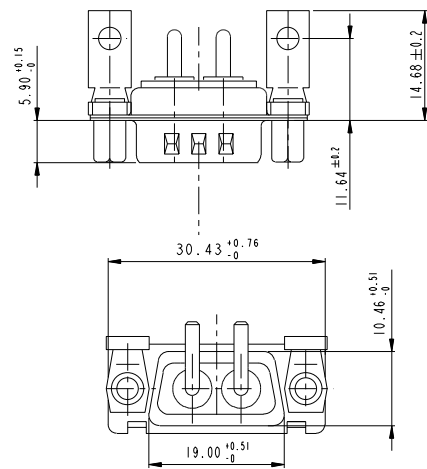
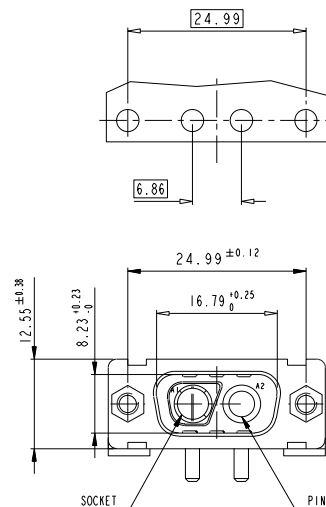
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|---------------------------------------|---------------------|---------------------|-----------------------------------|------------------|
| www.fciconnect.com                    |                     | surface<br>ISO 1302 | tolerance std<br>ISO 406 ISO 1101 | projection<br>mm |
| 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 F09-0092     |
| Appr                                  |                     | Product family      |                                   | Spec ref         |

|          |                                                                       |                      |        |
|----------|-----------------------------------------------------------------------|----------------------|--------|
| FCI      | title SUB MALE DW EUROPE foot print<br>full power right angled solder | eng no C01-8639-2312 | Rev. E |
| customer | Printed: Apr 28, 2015                                                 | Sheet 2 of 4         |        |

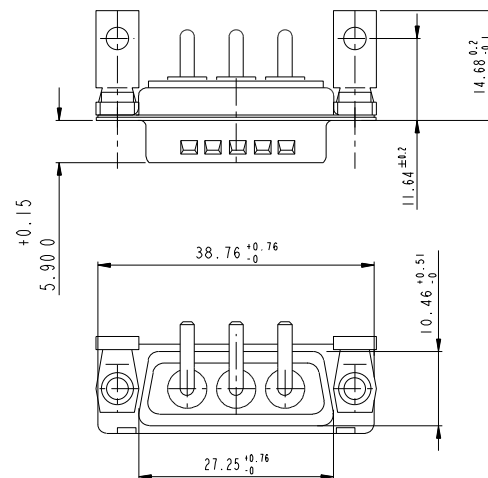
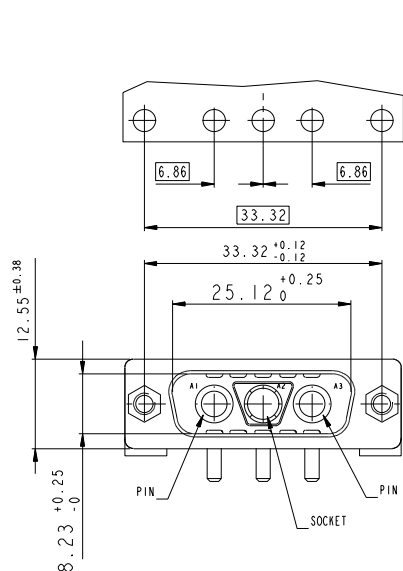
PDM-REV-E STATUS Released

Released Jun 20, 2015

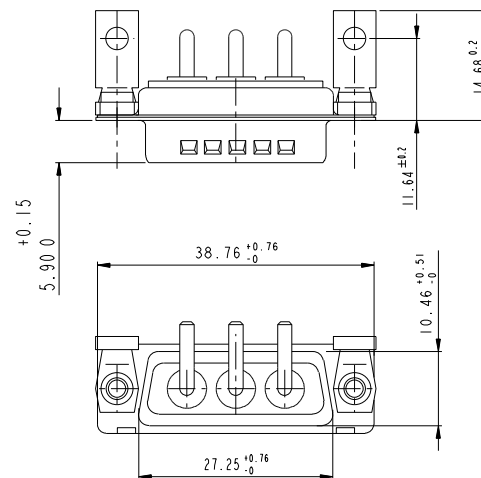
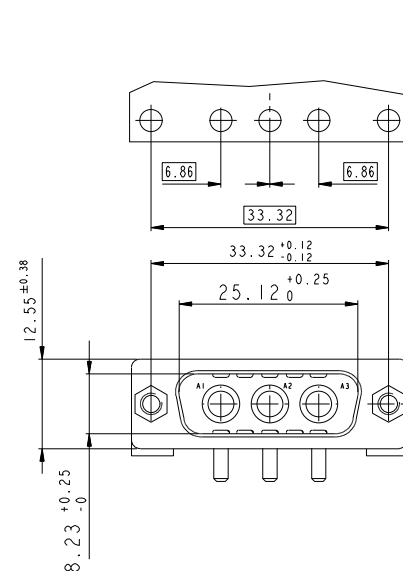
2V2

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

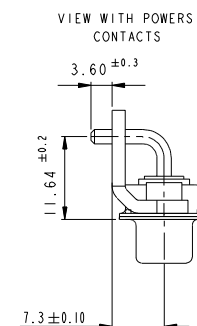
3V3

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

3W3



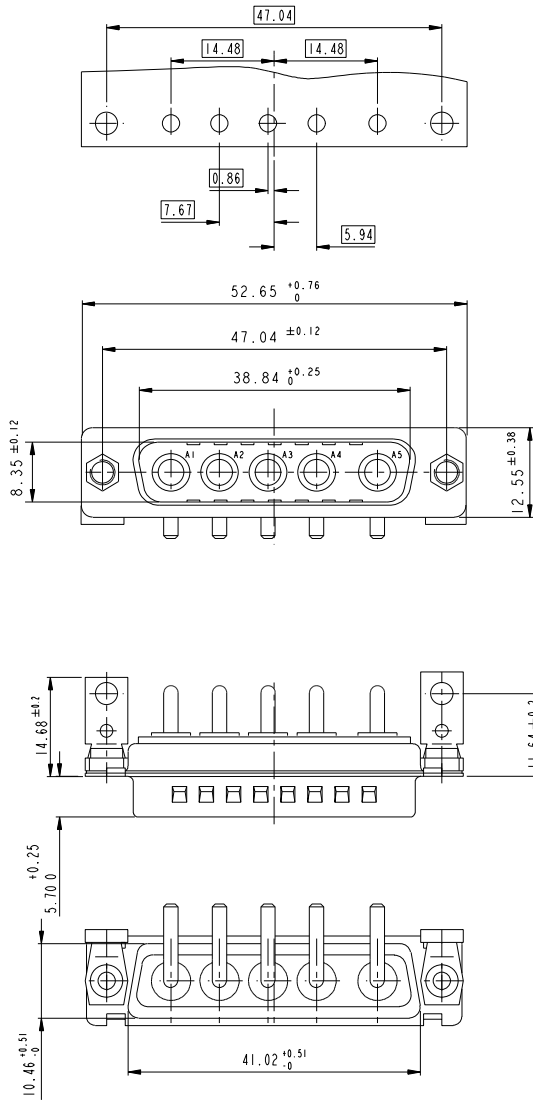
## SIDE VIEW FOR ALL LAYOUTS



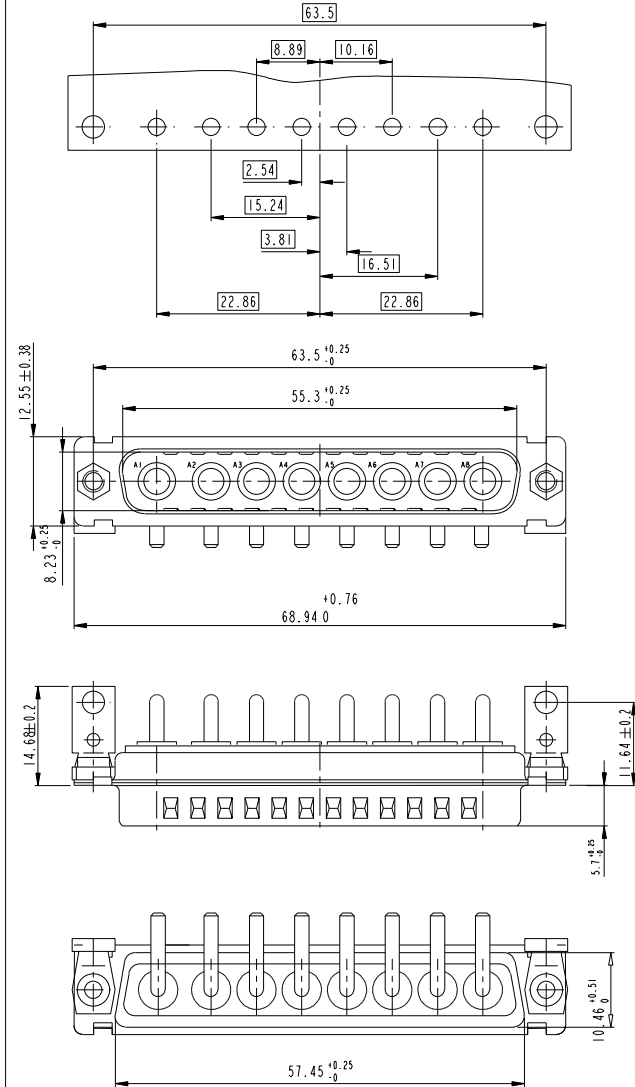
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|---------------------------------------|----------|---------------------|-----------------------------------|------------------|----------|
| www.fciconnect.com                    |          | surface<br>ISO 1302 | tolerance std<br>ISO 406 ISO 1101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

|                                |  |                       |      |
|--------------------------------|--|-----------------------|------|
| SUB MALE DW EUROPE foot print  |  | 001-8639-2312         | Rev. |
| full power right angled solder |  |                       | E    |
| CUSTOMER                       |  | Printed: Jun 20, 2015 |      |

# 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



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

|                                     |  |                       |              |
|-------------------------------------|--|-----------------------|--------------|
| Title SUB MALE DW EUROPE foot print |  | part no C01-8639-2312 | Rev. E       |
| full power right angled solder      |  | CUSTOMER              | Sheet 4 of 4 |