

## 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: 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

## PRESS FIT PERFORMANCES

| PRESS FIT CONTACTS     |          |
|------------------------|----------|
| INSERTION FORCE        | <= 200 N |
| Average insertion 160N |          |
| EXTRACTION FORCE       | >= 30 N  |

## NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-22-008.
- Termination plating spec:
  - Ni 1.27µm+Sn 0.5 to 1.5µ(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

# DBL5W5P81C6M40LF

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 sheet 3)

Contacts

**P** : Pin

Termination type

**81C** Right angle/Europe standard

Plating

**5** 200 matings/unmatings

**6** 500 matings/unmatings

PCB accessories definition(see sheet 2)

**M** Metal brackets

**A** Without accessory

Power contacts

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

See note RoHS

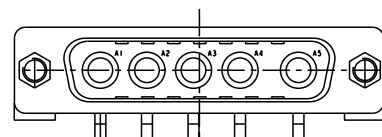
TABLE 1:PCB HOLE DIAMETERS

| P.C.B<br>HOLE<br>DEFINITION | DRILL DIAMETER             | SnPb holes for CONTACTS         | Sn holes for CONTACTS           | holes ACCESSORIES |
|-----------------------------|----------------------------|---------------------------------|---------------------------------|-------------------|
|                             | Ø3.22 REF(NOTE 3)          | Ø3.22 REF(NOTE 3)               | Ø3.22 REF(NOTE 3)               |                   |
|                             | DRILLED HOLE               | Ø3.19-3.25                      | Ø3.19-3.25                      |                   |
|                             | COPPER PLATING             | 25µ MINI (RECOMMENDED 50µ MAXI) | 25µ MINI (RECOMMENDED 50µ MAXI) |                   |
|                             | TIN-LEAD PLATING           | 15µ MAXI (RECOMMENDED 5µ MINI)  |                                 |                   |
| (NOTE-1 AND 2)              | TIN PLATING                |                                 | 0.8 tol,2µ                      | Ø3.10±0.10        |
|                             | FINISH HOLE (AFTER REFLOW) | Ø 3.02-3.20                     | Ø3.08-3.20                      |                   |

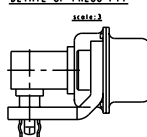
NOTE-1:THESE DIMENSIONS MUST BE RESPECT TO SECURE PRESS-FIT PIN PERFORMANCES.

NOTE-2: ACCORDING TO IEC-352-5 SPEC.

NOTE-3: MAJOR REQUIREMENT FOR PRESS FIT PIN PERFORMANCE



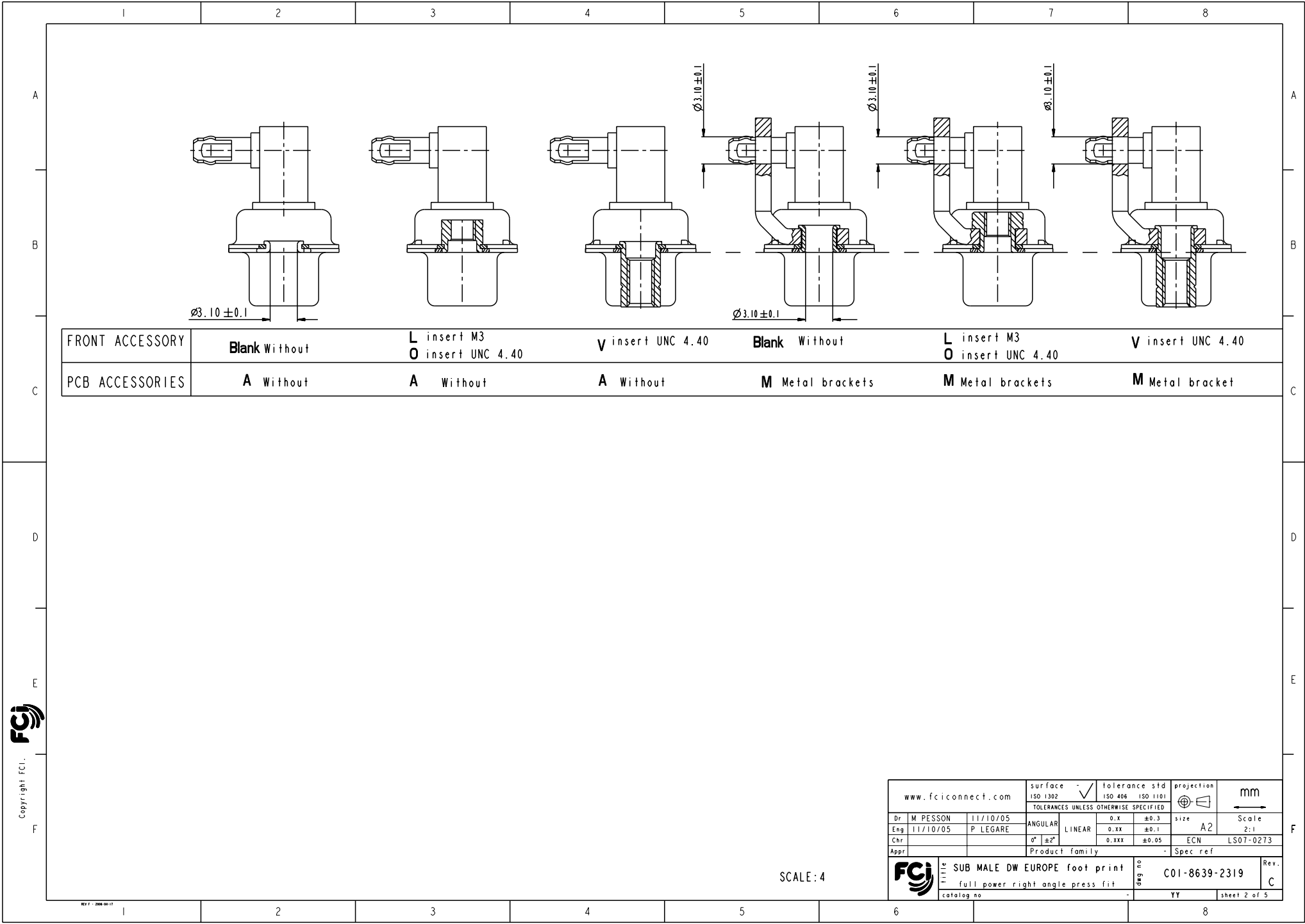
DETAIL OF PRESS FIT



5W5 FOR EXAMPLE

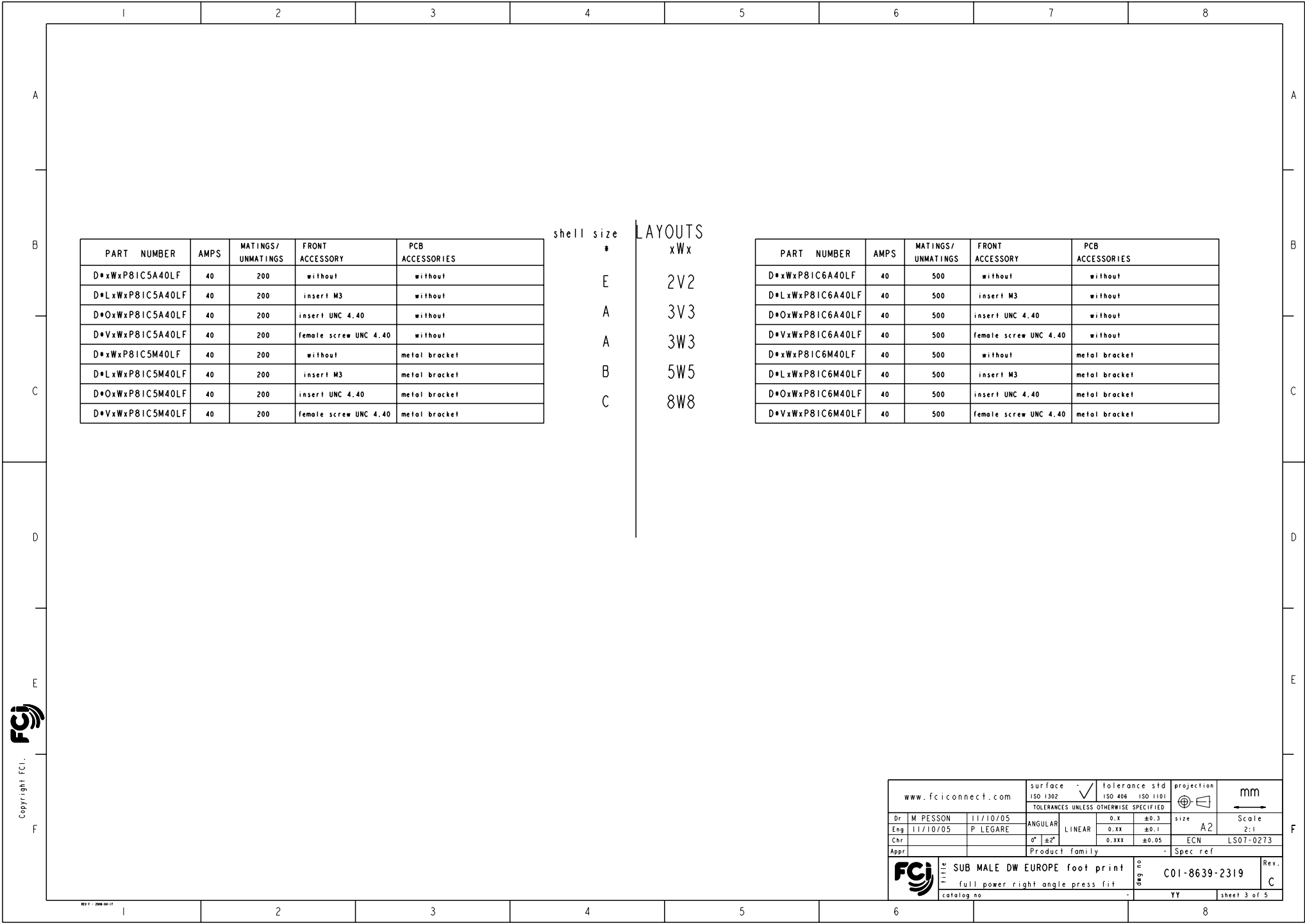
| rev | ecn no    | dr  | date       |
|-----|-----------|-----|------------|
| B   | LS06-0208 | LGO | 2006/12/13 |
| C   | LS07-0273 | MPE | 2007/11/05 |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |

|                    |  |                                       |        |               |            |               |           |
|--------------------|--|---------------------------------------|--------|---------------|------------|---------------|-----------|
| www.fciconnect.com |  | surface                               | -      | tolerance std | projection | mm            |           |
|                    |  | ISO 1302                              | ✓      | ISO 406       | ISO 1101   |               |           |
|                    |  | TOLERANCES UNLESS OTHERWISE SPECIFIED |        |               |            |               |           |
|                    |  | ANGULAR                               | LINEAR | 0.X           | ±0.3       | size          | Scale     |
|                    |  | 0° ±2°                                |        | 0.XX          | ±0.1       | A2            | 2:1       |
|                    |  |                                       |        | 0.XXX         | ±0.05      | ECN           | LS07-0273 |
|                    |  | Product family                        |        |               |            | Spec ref      |           |
|                    |  | SUB MALE DW EUROPE foot print         |        |               |            | C01-8639-2319 |           |
|                    |  | full power right angle press fit      |        |               |            | C             |           |
|                    |  | catalog no                            |        |               |            | YY            |           |
|                    |  |                                       |        |               |            | sheet 1 of 5  |           |



SCALE: 4

|                    |          |                                       |                |               |          |              |            |       |
|--------------------|----------|---------------------------------------|----------------|---------------|----------|--------------|------------|-------|
| www.fciconnect.com |          | surface                               | ISO 1302       | tolerance std | ISO 406  | ISO 1101     | projection | mm    |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                |               |          |              |            |       |
| Dr                 | M PESSON | 11/10/05                              | ANGULAR        | 0.X           | ±0.3     | size         | A2         | Scale |
| Eng                | 11/10/05 | P LEGARE                              | LINEAR         | 0.XX          | ±0.1     |              |            | 2:1   |
| Chr                |          |                                       | 0° ±2°         | 0.XXX         | ±0.05    | ECN          | LS07-0273  |       |
| Appr               |          |                                       | Product family |               | Spec ref |              |            |       |
| FCI                |          | SUB MALE DW EUROPE foot print         |                | C01-8639-2319 |          | Rev.         |            |       |
|                    |          | full power right angle press fit      |                | YY            |          | C            |            |       |
|                    |          | catalog no                            |                |               |          | sheet 2 of 5 |            |       |



| PART NUMBER      | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES |
|------------------|------|-----------------------|-----------------------|--------------------|
| D*xWxP81C5A40LF  | 40   | 200                   | without               | without            |
| D*LxWxP81C5A40LF | 40   | 200                   | insert M3             | without            |
| D*OxWxP81C5A40LF | 40   | 200                   | insert UNC 4.40       | without            |
| D*VxWxP81C5A40LF | 40   | 200                   | female screw UNC 4.40 | without            |
| D*xWxP81C5M40LF  | 40   | 200                   | without               | metal bracket      |
| D*LxWxP81C5M40LF | 40   | 200                   | insert M3             | metal bracket      |
| D*OxWxP81C5M40LF | 40   | 200                   | insert UNC 4.40       | metal bracket      |
| D*VxWxP81C5M40LF | 40   | 200                   | female screw UNC 4.40 | metal bracket      |

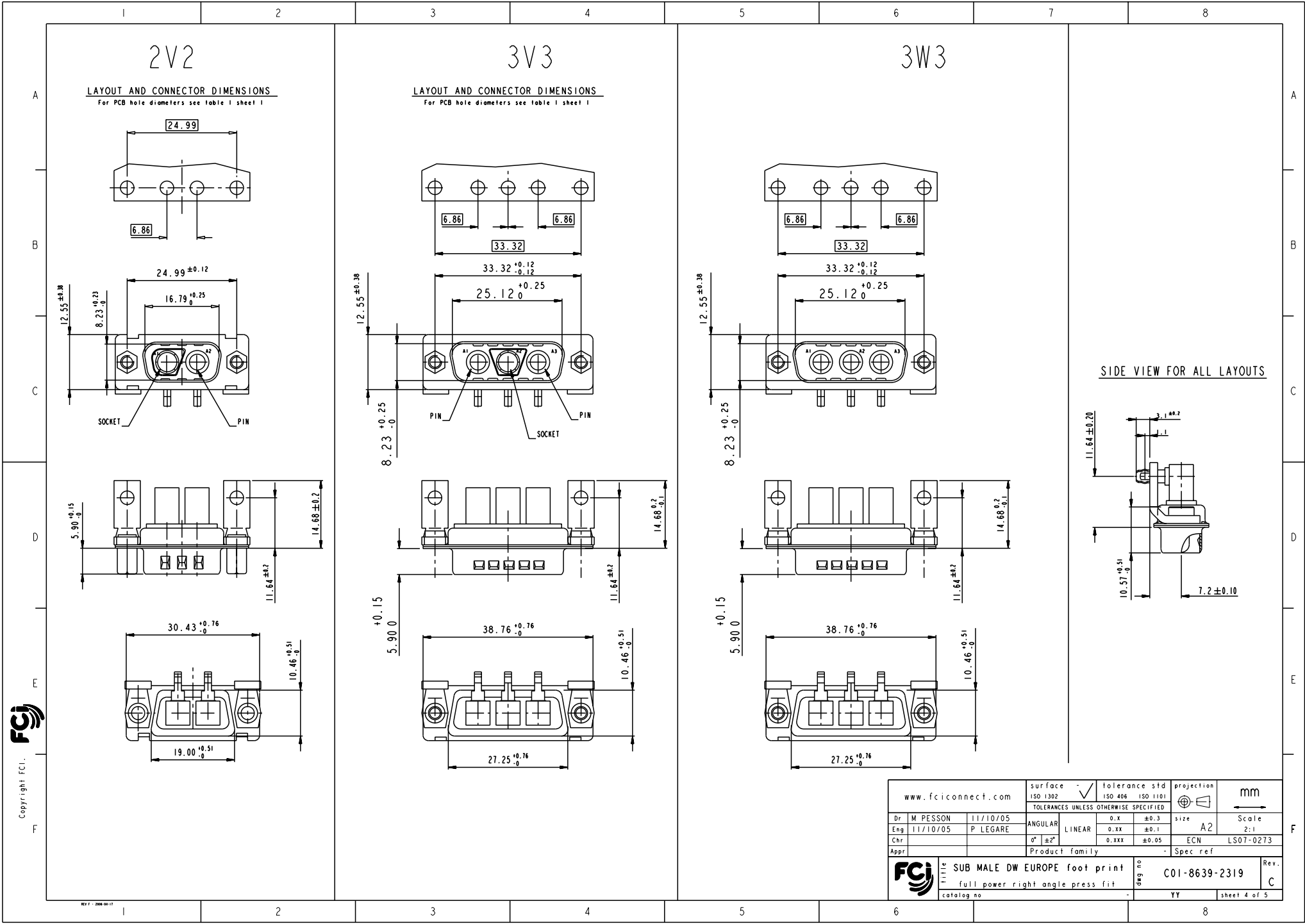
shell size  
#  
E  
A  
A  
B  
C

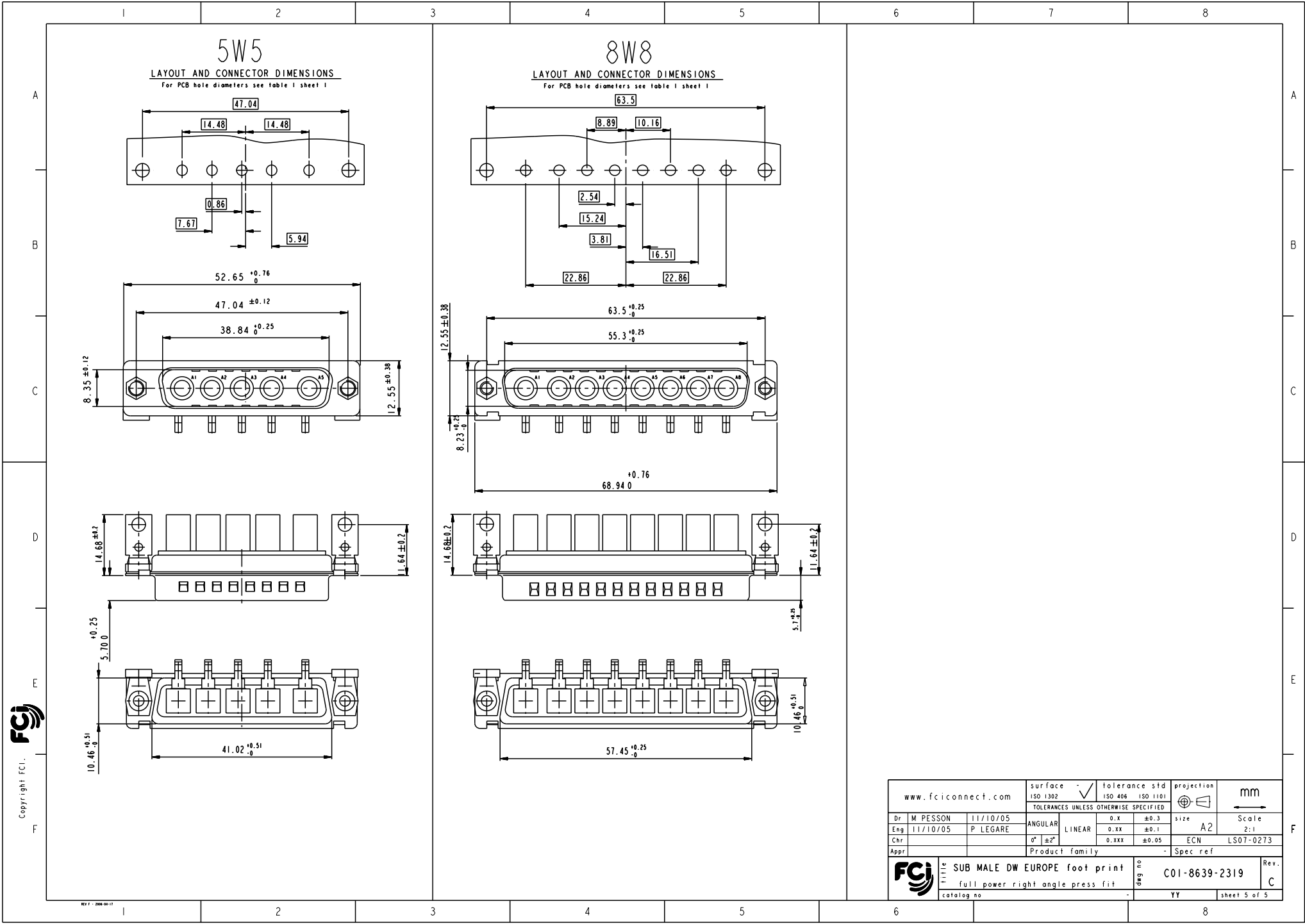
LAYOUTS  
xWx  
2V2  
3V3  
3W3  
5W5  
8W8

| PART NUMBER      | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES |
|------------------|------|-----------------------|-----------------------|--------------------|
| D*xWxP81C6A40LF  | 40   | 500                   | without               | without            |
| D*LxWxP81C6A40LF | 40   | 500                   | insert M3             | without            |
| D*OxWxP81C6A40LF | 40   | 500                   | insert UNC 4.40       | without            |
| D*VxWxP81C6A40LF | 40   | 500                   | female screw UNC 4.40 | without            |
| D*xWxP81C6M40LF  | 40   | 500                   | without               | metal bracket      |
| D*LxWxP81C6M40LF | 40   | 500                   | insert M3             | metal bracket      |
| D*OxWxP81C6M40LF | 40   | 500                   | insert UNC 4.40       | metal bracket      |
| D*VxWxP81C6M40LF | 40   | 500                   | female screw UNC 4.40 | metal bracket      |

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|                    |  |                                  |   |                                       |                  |               |  |           |
|--------------------|--|----------------------------------|---|---------------------------------------|------------------|---------------|--|-----------|
| www.fciconnect.com |  | surface<br>ISO 1302              | - | tolerance std<br>ISO 406 ISO 1101     | projection<br>mm | size A2       |  | Scale 2:1 |
| Dr M PESSON        |  | 11/10/05                         |   | TOLERANCES UNLESS OTHERWISE SPECIFIED |                  | size A2       |  | Scale 2:1 |
| Eng 11/10/05       |  | P LEGARE                         |   | ANGULAR                               | 0.X ±0.3         | ECN           |  | LS07-0273 |
| Chr                |  |                                  |   | LINEAR                                | 0.XX ±0.1        | Spec ref      |  |           |
| Appr               |  |                                  |   | 0° ±2°                                | 0.XXX ±0.05      |               |  |           |
| FCi                |  | SUB MALE DW EUROPE foot print    |   | Product family                        |                  |               |  |           |
| Title              |  | full power right angle press fit |   | deg no                                |                  | C01-8639-2319 |  | Rev. C    |
| catalog no         |  |                                  |   | YY                                    |                  | sheet 3 of 5  |  |           |





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|                    |          |          |                                                                                       |        |                                                                                                  |                                                                                          |              |         |               |        |
|--------------------|----------|----------|---------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------|---------|---------------|--------|
| www.fciconnect.com |          |          | surface - <input checked="" type="checkbox"/> tolerance std ISO 1302 ISO 406 ISO 1101 |        | projection  | mm  |              |         |               |        |
|                    |          |          | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                 |        |                                                                                                  |     |              |         |               |        |
| Dr                 | M PESSON | 11/10/05 | ANGULAR                                                                               | LINEAR | 0.X                                                                                              |                                                                                          | ±0.3         | size A2 | Scale 2:1     |        |
| Eng                | 11/10/05 | P LEGARE |                                                                                       |        | 0.XX                                                                                             |                                                                                          | ±0.1         |         |               |        |
| Chr                |          |          |                                                                                       |        | 0° ±2°                                                                                           |                                                                                          | 0.XXX        |         |               | ±0.05  |
| Appr               |          |          | Product family                                                                        |        |                                                                                                  | ECN LS07-0273                                                                            |              |         |               |        |
|                    |          |          | Product family                                                                        |        |                                                                                                  | Spec ref                                                                                 |              |         |               |        |
| FCi                |          |          |                                                                                       |        |                                                                                                  | SUB MALE DW EUROPE foot print                                                            |              |         | C01-8639-2319 | Rev. C |
|                    |          |          |                                                                                       |        |                                                                                                  | full power right angle press fit                                                         |              |         |               |        |
|                    |          |          | catalog no                                                                            |        | -                                                                                                | YY                                                                                       | sheet 5 of 5 |         |               |        |