

## 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

# DBL5W5S81C6M40LF

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

**S** : Socket

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

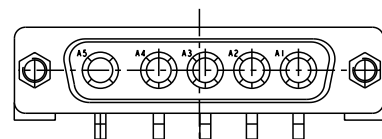
TABLE 1:PCB HOLE DIAMETERS

| 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                      |                   |

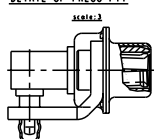
NOTE-1:THESE DIMENSIONS MUST BE RESPECT TO SECURE PRESS-FIT PIN PERFORMANCES.

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

NOTE-3: MAJOR REQUIREMENT FOR PRESS FIT PIN PERFORMANCE



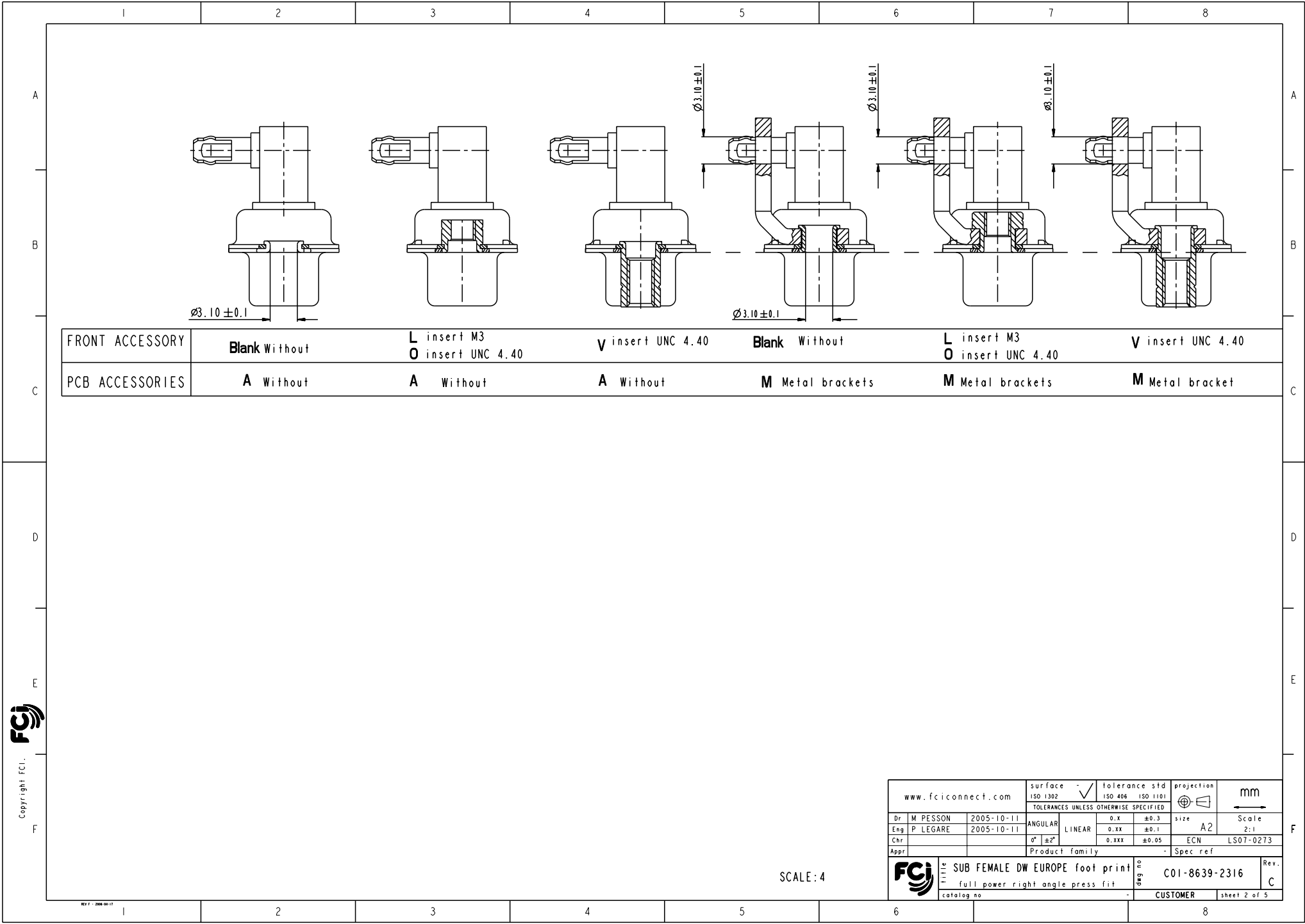
DETAIL OF PRESS FIT



5W5 FOR EXAMPLE

| rev | ecn no    | dr  | date       |
|-----|-----------|-----|------------|
| A   | LS05-0113 | MPE | 2005-10-11 |
| B   | LS06-0208 | LGO | 2006-12-13 |
| C   | LS07-0273 | MPE | 2007-11-05 |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |

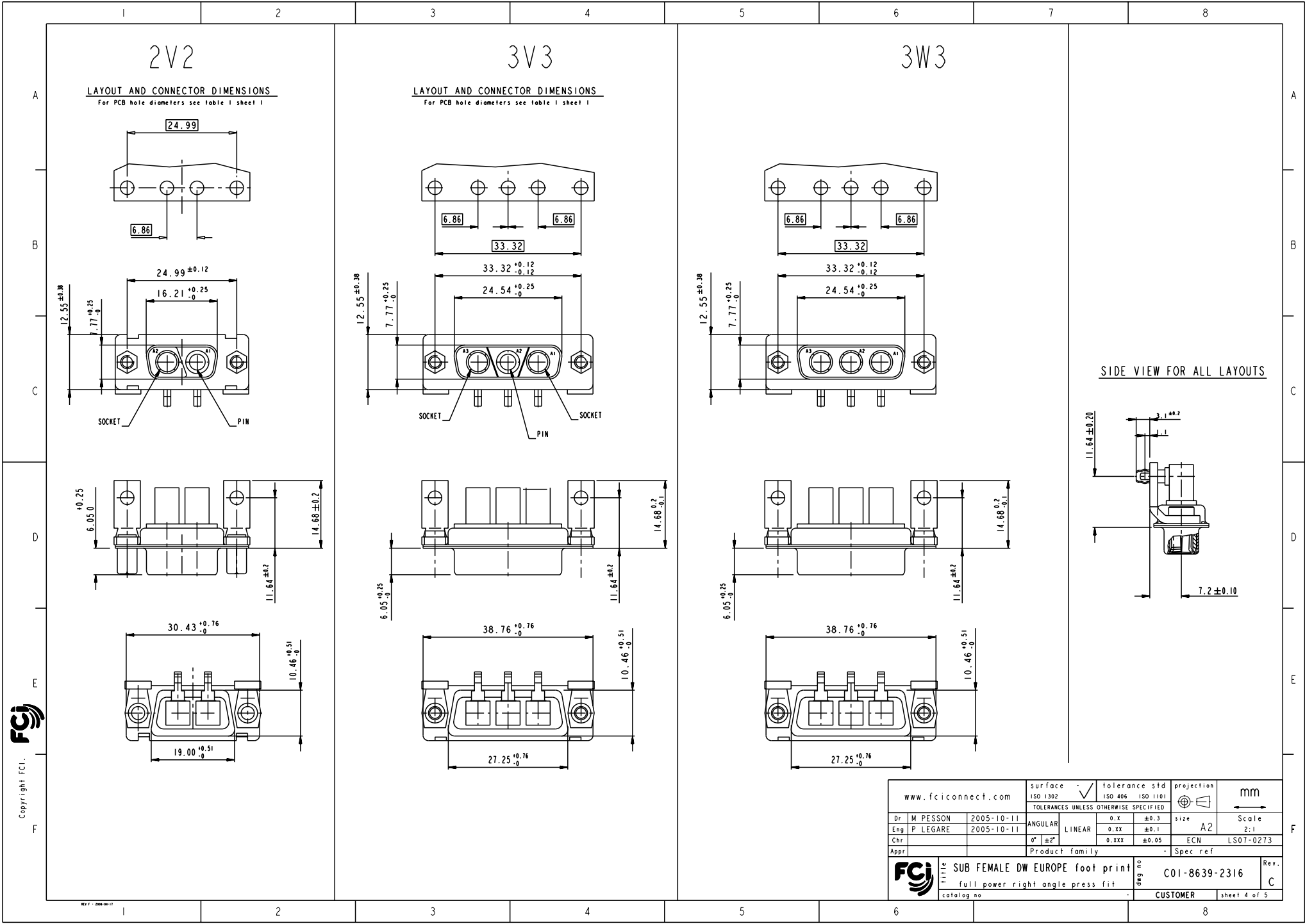
|                    |  |                                       |                |               |            |               |           |
|--------------------|--|---------------------------------------|----------------|---------------|------------|---------------|-----------|
| www.fciconnect.com |  | surface                               | -              | tolerance std | projection | mm            |           |
|                    |  | ISO 1302                              | ✓              | ISO 406       | ISO 1101   |               |           |
|                    |  | TOLERANCES UNLESS OTHERWISE SPECIFIED |                |               |            |               |           |
| Dr M PESSON        |  | 2005-10-11                            | ANGULAR        | 0.X           | ±0.3       | size          | Scale     |
| Eng P LEGARE       |  | 2005-10-11                            | LINEAR         | 0.XX          | ±0.1       | A2            | 2:1       |
| Chr                |  |                                       | 0° ±2°         | 0.XXX         | ±0.05      | ECN           | LS07-0273 |
| Appr               |  |                                       | Product family |               | - Spec ref |               |           |
| FCI                |  | SUB FEMALE DW EUROPE foot print       |                | dag no        |            | C01-8639-2316 |           |
|                    |  | full power right angle press fit      |                |               |            | Rev. C        |           |
|                    |  | catalog no                            |                |               |            | CUSTOMER      |           |
|                    |  |                                       |                |               |            | sheet 1 of 5  |           |

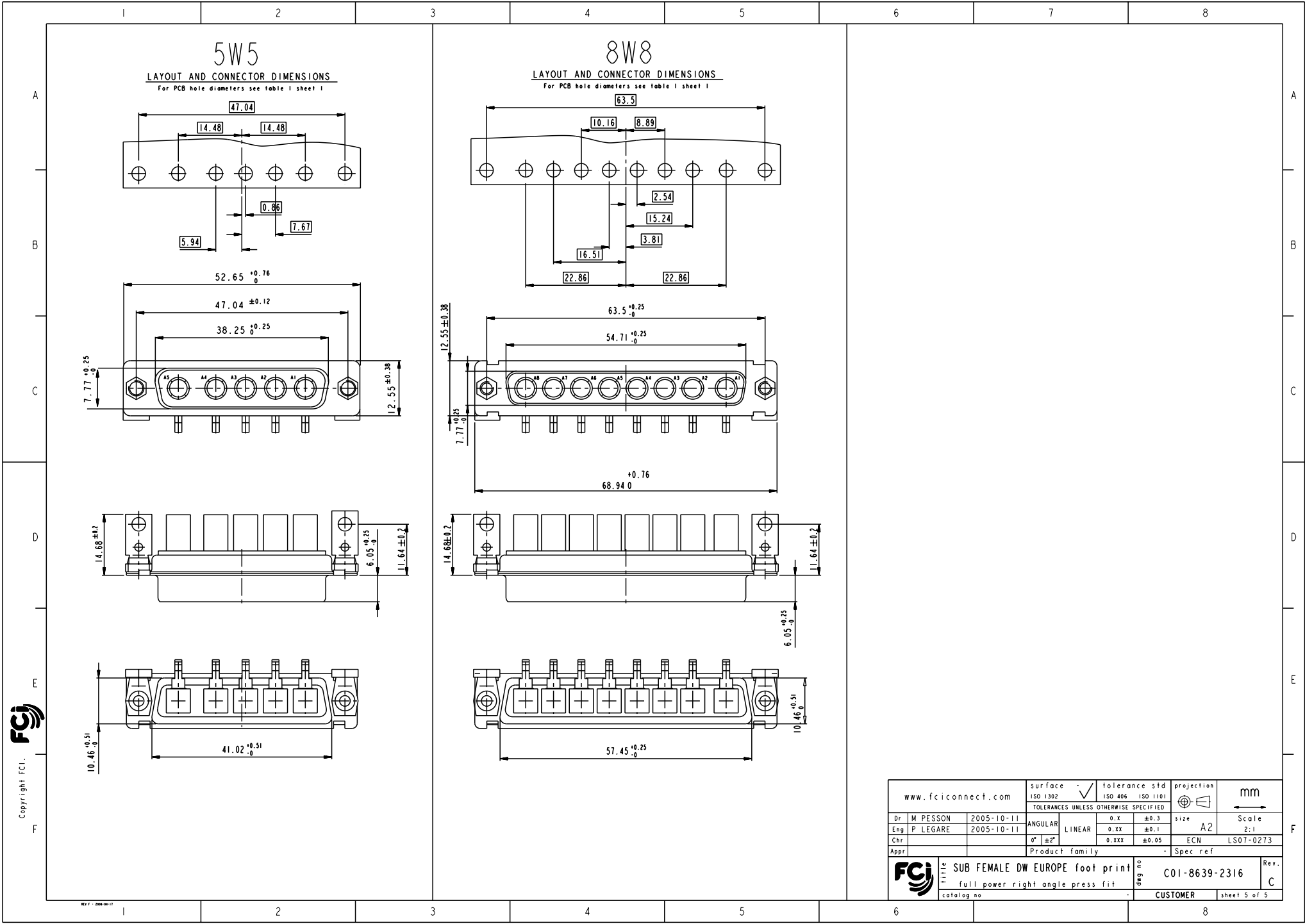


|                    |          |                                       |                |                          |          |                  |           |
|--------------------|----------|---------------------------------------|----------------|--------------------------|----------|------------------|-----------|
| www.fciconnect.com |          | surface<br>ISO 1302                   | -              | tolerance std<br>ISO 406 | ISO 1101 | projection<br>mm | mm        |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                |                          |          | size             | Scale     |
| Dr                 | M PESSON | 2005-10-11                            | ANGULAR        | 0.X                      | ±0.3     | A2               | 2:1       |
| Eng                | P LEGARE | 2005-10-11                            | LINEAR         | 0.XX                     | ±0.1     | ECN              | LS07-0273 |
| Chr                |          |                                       | 0° ±2°         | 0.XXX                    | ±0.05    | Spec ref         |           |
| Appr               |          |                                       | Product family |                          |          |                  |           |
| FCI                |          | SUB FEMALE DW EUROPE foot print       |                | C01-8639-2316            |          | Rev. C           |           |
|                    |          | full power right angle press fit      |                | CUSTOMER                 |          | sheet 2 of 5     |           |
|                    |          | catalog no                            |                |                          |          |                  |           |

| shell | size | LAYOUTS |
|-------|------|---------|
|       | #    | xWx     |
| E     |      | 2V2     |
| A     |      | 3V3     |
| A     |      | 3W3     |
| B     |      | 5W5     |
| C     |      | 8W8     |

|                                                                                       |          |            |                                                                                          |        |                                                                                                  |                           |                                                                                          |              |
|---------------------------------------------------------------------------------------|----------|------------|------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------------------|--------------|
| www.fciconnect.com                                                                    |          |            | surface - <input checked="" type="checkbox"/> tolerance std<br>ISO 1302 ISO 406 ISO 1101 |        | projection  |                           | mm  |              |
|                                                                                       |          |            | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                    |        |             |                           |                                                                                          |              |
| Dr                                                                                    | M PESSON | 2005-10-11 | ANGULAR                                                                                  | 0. x   | ±0.3                                                                                             | size                      | A2                                                                                       | Scale<br>2:1 |
| Eng                                                                                   | P LEGARE | 2005-10-11 | LINEAR                                                                                   | 0. xxx | ±0.1                                                                                             |                           |                                                                                          |              |
| Chr                                                                                   |          |            | 0° ±2°                                                                                   | 0. xxx | ±0.05                                                                                            | ECN                       | LS07-0273                                                                                |              |
| Appr                                                                                  |          |            | Product family                                                                           |        |                                                                                                  | - Spec ref                |                                                                                          |              |
|  |          |            | title SUB FEMALE DW EUROPE foot print                                                    |        |                                                                                                  | drawing no. C01-8639-2316 |                                                                                          | Rev. C       |
|                                                                                       |          |            | full power right angle press fit                                                         |        |                                                                                                  | CUSTOMER                  |                                                                                          | sheet 3 of 3 |
| catalog no.                                                                           |          |            |                                                                                          |        |                                                                                                  |                           |                                                                                          |              |





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|                                                                                       |          |            |                                                        |        |                                |       |                                                                                                  |           |                                                                                          |              |
|---------------------------------------------------------------------------------------|----------|------------|--------------------------------------------------------|--------|--------------------------------|-------|--------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------|--------------|
| www.fciconnect.com                                                                    |          |            | surface - <input checked="" type="checkbox"/> ISO 1302 |        | tolerance std ISO 406 ISO 1101 |       | projection  |           | mm  |              |
| TOLERANCES UNLESS OTHERWISE SPECIFIED                                                 |          |            |                                                        |        |                                |       |                                                                                                  |           |                                                                                          |              |
| Dr                                                                                    | M PESSON | 2005-10-11 | ANGULAR                                                | LINEAR | 0.X                            | ±0.3  | size A2                                                                                          | Scale 2:1 |                                                                                          |              |
| Eng                                                                                   | P LEGARE | 2005-10-11 |                                                        |        | 0.XX                           | ±0.1  |                                                                                                  |           |                                                                                          |              |
| Chr                                                                                   |          |            |                                                        |        | 0° ±2°                         | 0.XXX |                                                                                                  |           | ±0.05                                                                                    |              |
| Appr                                                                                  |          |            | Product family                                         |        |                                |       | - Spec ref                                                                                       |           |                                                                                          |              |
|  |          |            | SUB FEMALE DW EUROPE foot print                        |        |                                |       | C01-8639-2316                                                                                    |           |                                                                                          | Rev.         |
|                                                                                       |          |            | full power right angle press fit                       |        |                                |       |                                                                                                  |           |                                                                                          | C            |
| catalog no                                                                            |          |            | -                                                      |        |                                |       | CUSTOMER                                                                                         |           |                                                                                          | sheet 5 of 5 |