

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

# DBL5W5P81C6M40LF

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

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

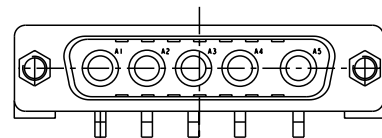
Power contacts  
**40** : Fitted with power contacts 40 Amp.

See note RoHS

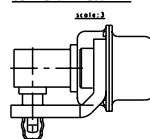
TABLE 1: PCB HOLE DIAMETERS

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

- 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

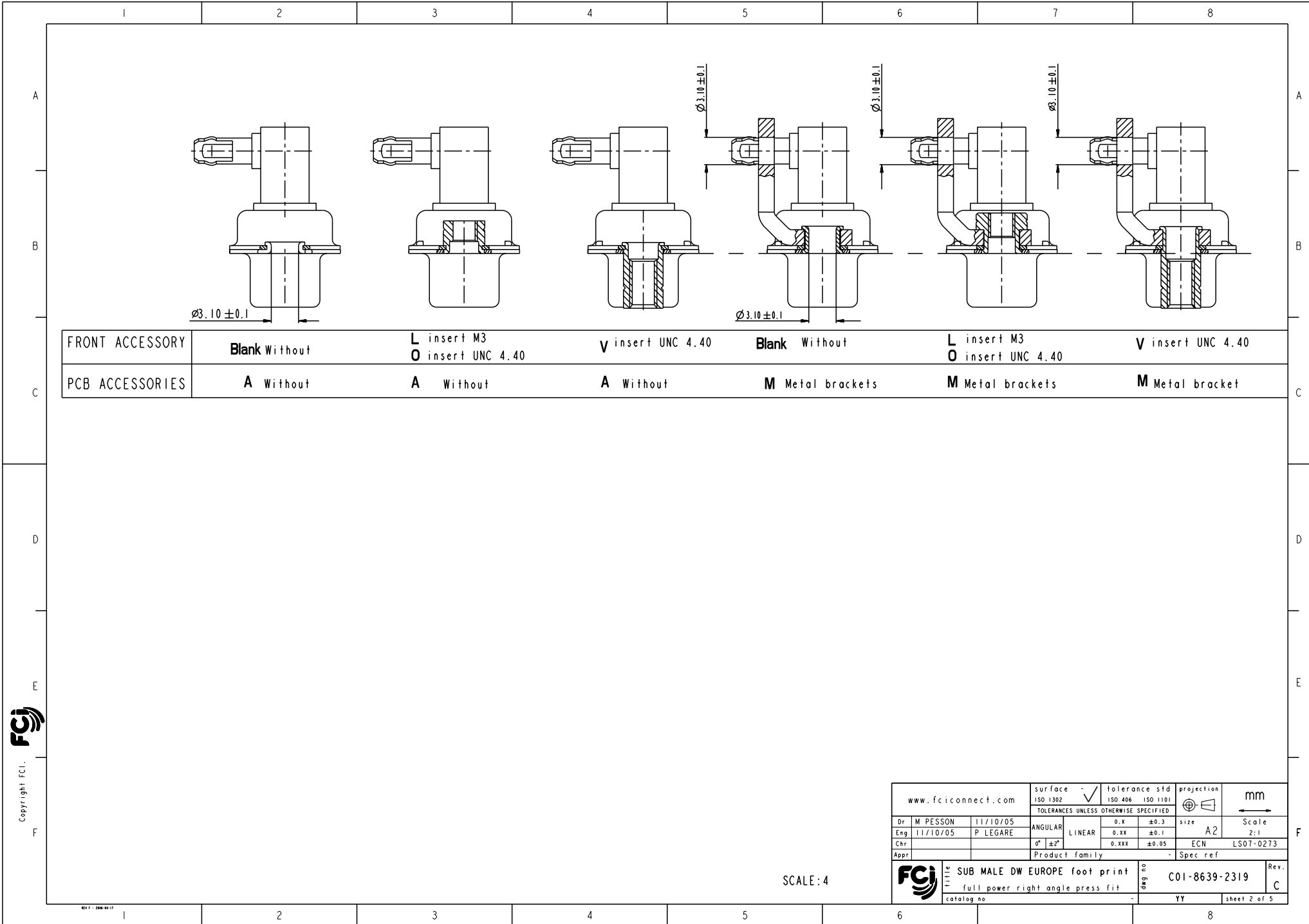


5W5 FOR EXAMPLE

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



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FRONT ACCESSORY	Blank Without	L insert M3 O insert UNC 4.40	V insert UNC 4.40	Blank Without	L insert M3 O insert UNC 4.40	V insert UNC 4.40
PCB ACCESSORIES	A Without	A Without	A Without	M Metal brackets	M Metal brackets	M Metal bracket

SCALE: 4

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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
Eng 11/10/05	P LEGARE	LINEAR	0.XX ±0.1	Scale 2:1
Chr		0° ±2°	0.XXX ±0.05	ECN LS07-0273
Appr		Product family		Spec ref
<b>FCI</b>		SUB MALE DW EUROPE foot print full power right angle press fit		Rev. C
catalog no		ang no	C01-8639-2319	
		YY	sheet 2 of 5	

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB 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 2V2

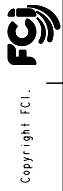
A 3V3

A 3W3

B 5W5

C 8W8

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB 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

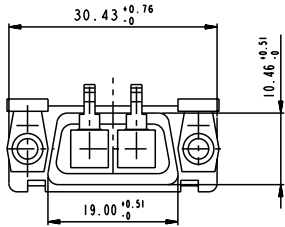
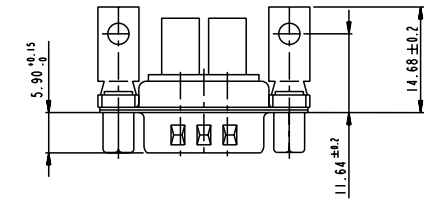
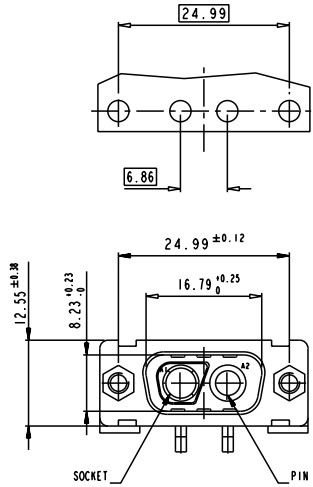


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www.fciconnect.com		surface ISO 1302	tolerance std ISO 406 ISO 1101	projection mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED		
Dr M PESSON	11/10/05	ANGULAR	0.X ±0.3	size A2 Scale 2:1
Eng 11/10/05	P LEGARE	LINEAR	0.XX ±0.1	ECN LS07-0273
Chr		0° ±2°	0.XXX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

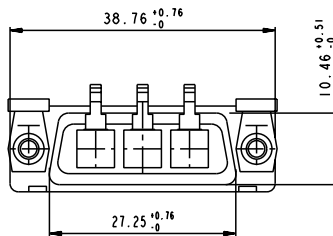
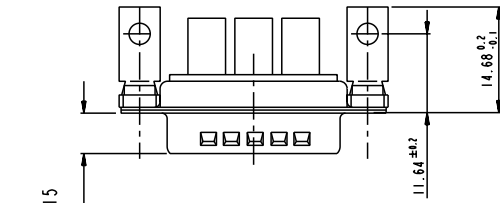
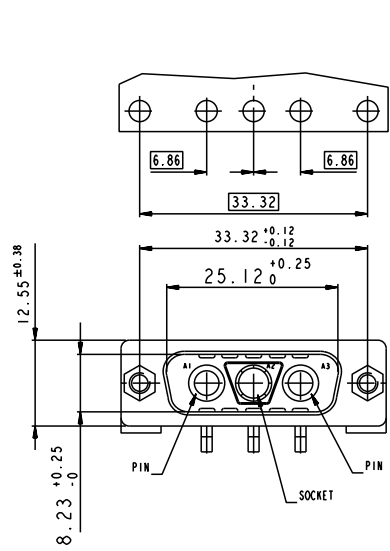
2V2

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

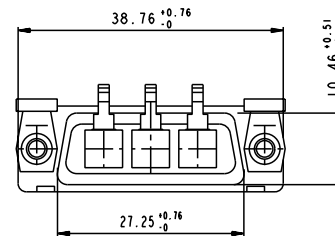
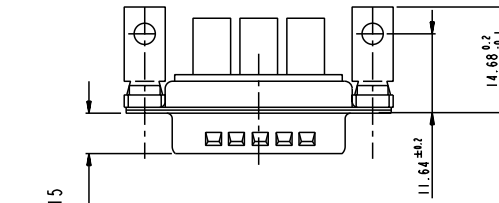
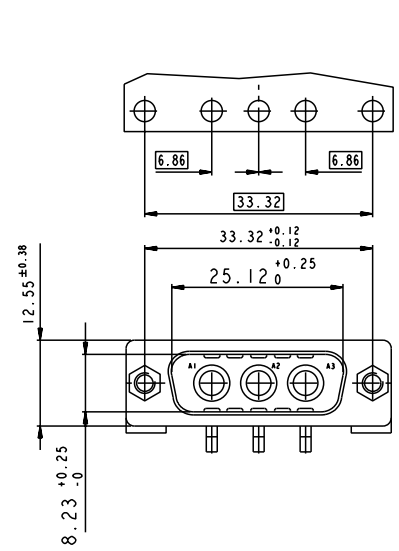


3V3

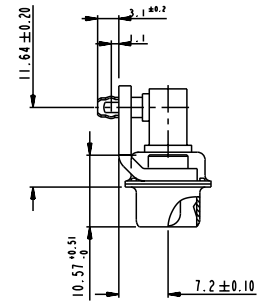
LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1



3W3



SIDE VIEW FOR ALL LAYOUTS



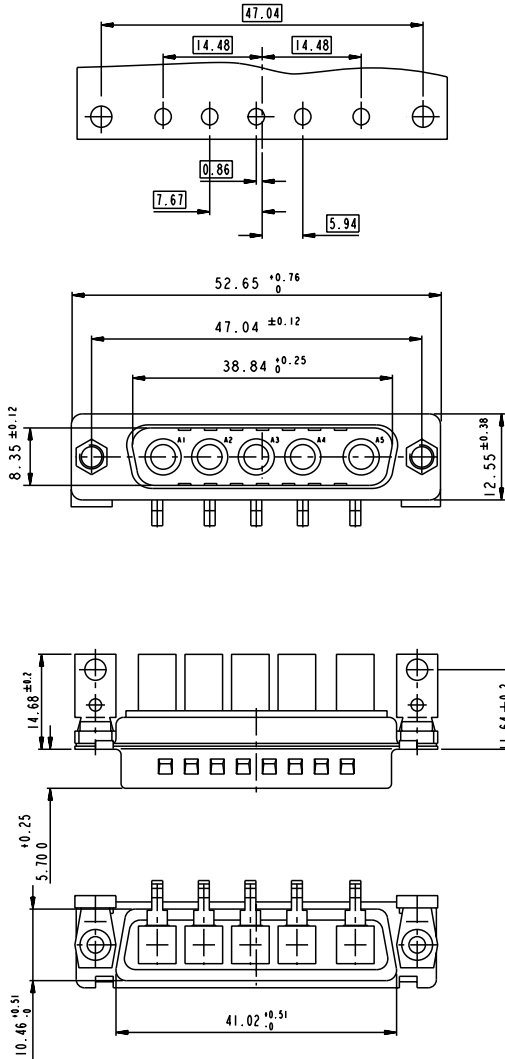
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www.fciconnect.com		surface ISO 1302	tolerance std ISO 406 ISO 1101	projection mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED		
Dr M PESSON	11/10/05	ANGULAR	0.X ± 0.3	size A2 Scale 2:1
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Chr		0° ± 2°	0.XXX ± 0.05	Spec ref
Appr		Product family		
FCJ		Title SUB MALE DW EUROPE foot print full power right angle press fit		Rev. C
catalog no		ang no	C01-8639-2319	
		YY	sheet 4 of 5	

# 5W5

## LAYOUT AND CONNECTOR DIMENSIONS

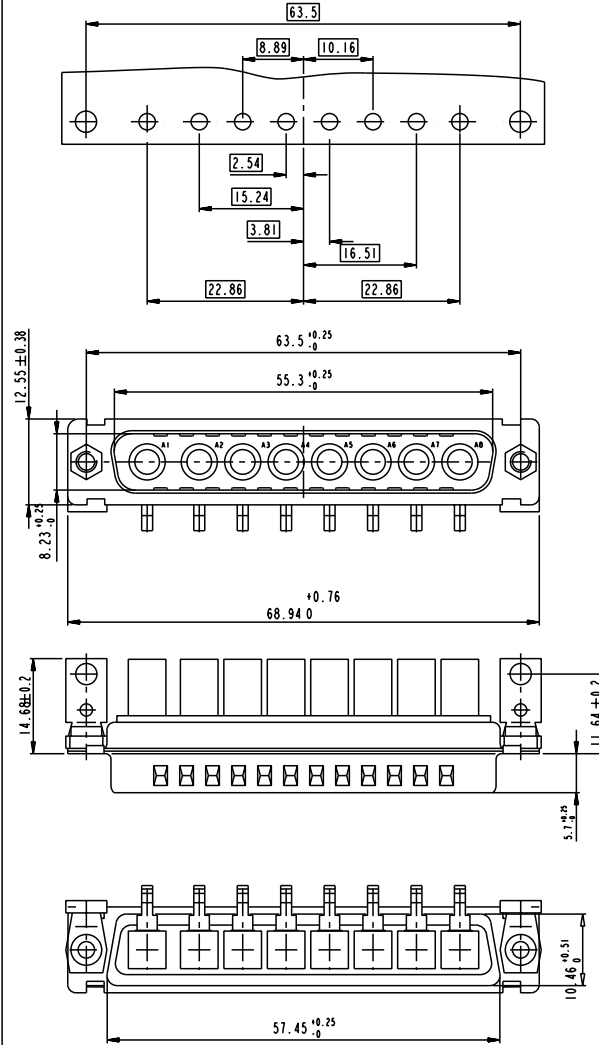
For PCB hole diameters see table 1 sheet 1



# 8W8

## LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1



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