

REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 501)

PHYSICAL CHARACTERISTICS

-INSULATOR MATERIAL: THERMOPLASTIC UL94V0

-CONTACT MATERIAL: PHOSPHOR BRONZE,
GOLD OVER NICKEL

-ACCESSORIES: STEEL FOR METAL BRACKETS,
cadmium plated yellow passivation
THERMOPLASTIC UL94V0 FOR PLASTIC BRACKETS

BRASS FOR OTHERS ACCESSORIES,
cadmium plated yellow passivation

-SHELLS: STEEL, cadmium plated yellow passivation

ELECTRICAL CHARACTERISTICS

-NOMINAL CURRENT: 7.5A

-CONTACT RESISTANCE: <=7.3 m Ohms

-CONTACT/CONTACT : >=1000 V

-CONTACT/GROUND : >=1200 V

-INSULATION RESISTANCE: >=5000 MOhms

ENVIRONMENTAL CHARACTERISTICS

- CLIMATIC CATEGORY: 55/125/56

TEMPERATURE RANGE -55°C TO +125°C

DAMP HEAT STEADY STATE 56 DAYS

SALT SPRAY 48 HOURS

MECHANICAL CHARACTERISTICS

RETENTION AGAINST TORQUE: -Threaded insert:0.7 N.m min

-Female screw:0.5 N.m min

Series

DBML25S500M

Shell size: **E A B C D**
(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)

9,15,25,37,50

Contacts

S :Socket

Termination type

5 Right angle/Europe standard

Plating

00 Right angle 500 matings/unmatings

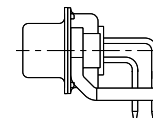
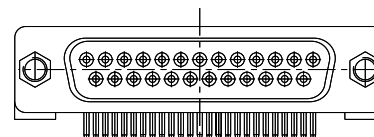
43 Right angle 500 matings/unmatings
for harsh environment

PCB accessories definition(see sheet 2)

Blank :Plastic brackets

C :Without brackets

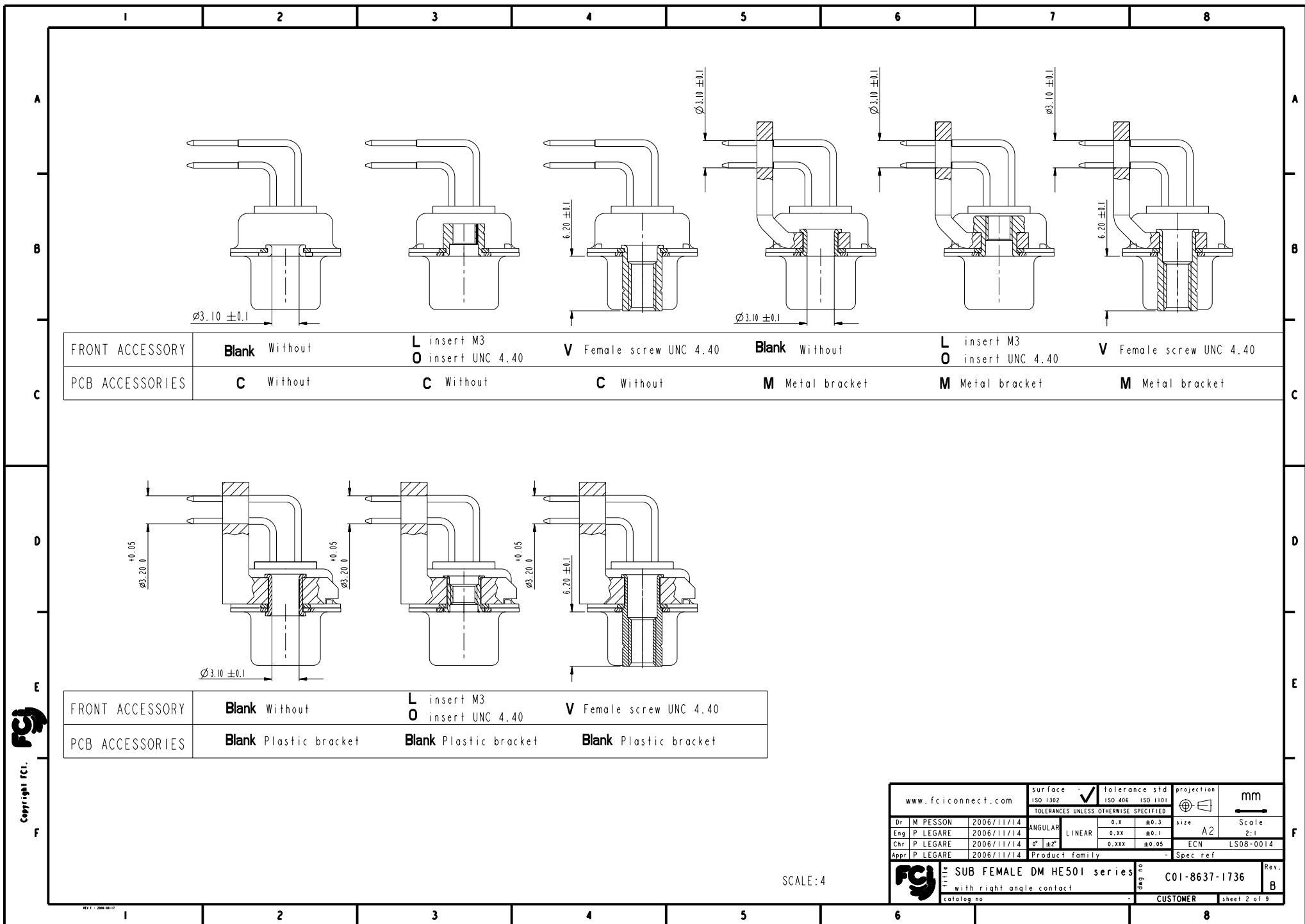
M :Metal brackets



25 WAY for Example

rev	acc no	dr	date
A	3506-0174	MPE	2006/11/14
B	3508-0014	MPE	2007/01/17
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

www.fciconnect.com				surface ☒ tolerance std ISO 1302 ISO 406 ISO 1101			projection		mm		
				TOLERANCES UNLESS OTHERWISE SPECIFIED							
Dr	M	PESSON	2006/11/14	ANGULAR	LINEAR	0.X	±0.3	size	A2	Scale 2:1	
Eng	P	LEGARE	2006/11/14			0.XX	±0.1				
Chr	P	LEGARE	2006/11/14	0° ±2°		0.XXX	±0.05	ECN	LS08-0014		
Appr	P	LEGARE	2006/11/14	Product family				Spec ref			
				SUB FEMALE DM HE501 series				deg no	C01-8637-1736		Rev
				with right angle contact							B
catalog no								CUSTOMER		sheet 1 of 9	



PART NUMBER	FRONT ACCESSORY	PCB ACCESSORY
D*MxxS500C	without	without
D*MLxxS500C	insert M3	without
D*MOxxS500C	insert UNC 4.40	without
D*MVxxS500C	female screw UNC 4.40	without
D*MxxS500M	without	Metal bracket
D*MLxxS500M	insert M3	Metal bracket
D*MOxxS500M	insert UNC 4.40	Metal bracket
D*MVxxS500M	female screw UNC 4.40	Metal bracket
D*MxxS500	without	Plastic bracket
D*MLxxS500	insert M3	Plastic bracket
D*MOxxS500	insert UNC 4.40	Plastic bracket
D*MVxxS500	female screw UNC 4.40	Plastic bracket

shell size	Contact number
X	XX
E	09
A	15
B	25
C	37
D	50

PART NUMBER	FRONT ACCESSORY	PCB ACCESSORY
D*MxxS543C	without	without
D*MLxxS543C	insert M3	without
D*MOxxS543C	insert UNC 4.40	without
D*MVxxS543C	female screw UNC 4.40	without
D*MxxS543M	without	Metal bracket
D*MLxxS543M	insert M3	Metal bracket
D*MOxxS543M	insert UNC 4.40	Metal bracket
D*MVxxS543M	female screw UNC 4.40	Metal bracket
D*MxxS543	without	Plastic bracket
D*MLxxS543	insert M3	Plastic bracket
D*MOxxS543	insert UNC 4.40	Plastic bracket
D*MVxxS543	female screw UNC 4.40	Plastic bracket

CROSS REFERENCES HE501 and FCI

HE501 P/N	FCI P/N	FRONT ACCESSORY	PCB ACCESSORY
HE501PxxVS6	D*MxxS500	without	Plastic bracket
HE501MxxVS6	D*MxxS500M	without	Metal bracket

www.fciconnect.com

surface

ISO 1302

☒

tolerance std

ISO 406

ISO 1101

projection

mm

TOLERANCES UNLESS OTHERWISE SPECIFIED

0.X

±0.3

0.XX

±0.1

0.XXX

±0.05

Dr

M PESSON

2006/11/14

ANGULAR

LINEAR

size

A2

Scale

2:1

Eng

P LEGARE

2006/11/14

0° ±2°

ECN

LS08-0014

Chr

P LEGARE

2006/11/14

Product family

-

Spec ref

-

Appr

P LEGARE

2006/11/14

Product family

-

Spec ref

-

SUB FEMALE DM HE501 series

with right angle contact

deg no

C01-8637-1736

Rev.

B

catalog no

CUSTOMER

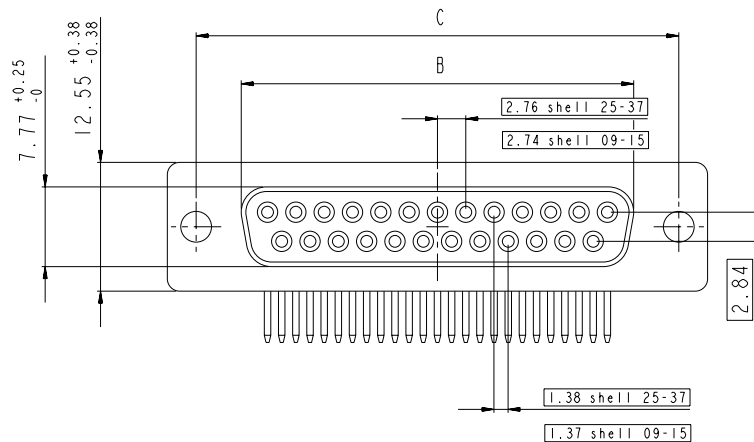
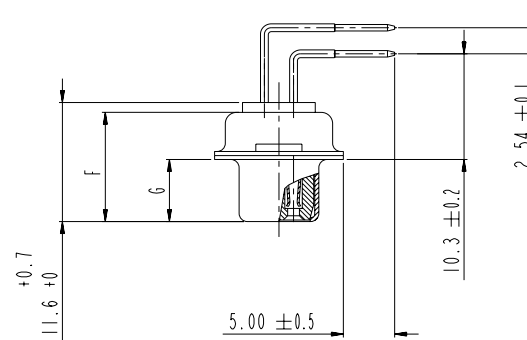
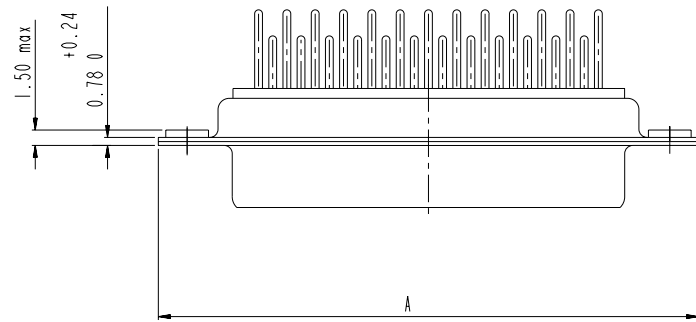
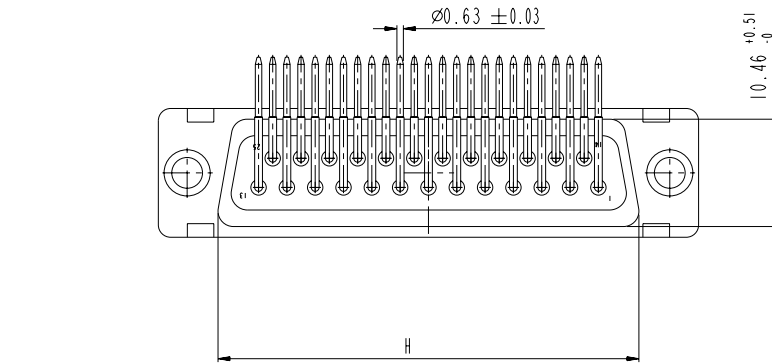
sheet 3 of 9

Copyright FCI

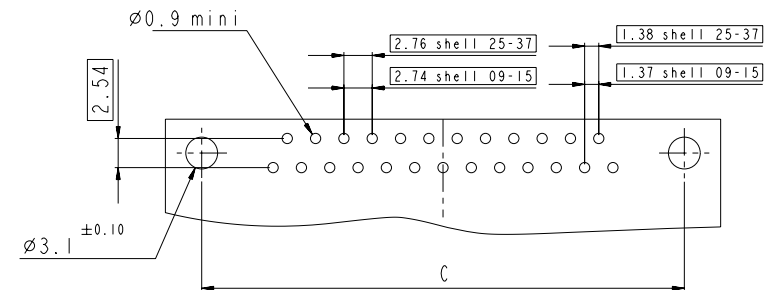
DIMENSION FOR SHELL E,A,B,C WITHOUT BRACKET

Dimensions are in millimeters

Shell size	Number of contacts	A ^{+0.76} ₋₀	B ^{+0.25} ₋₀	C ± 0.12	F ^{+0.57} ₋₀	G ^{+0.25} ₋₀	H ^{+0.51} ₋₀
E	09	30.43	16.21	24.99	10.64	6.05	19.02
A	15	38.76	24.54	33.32	10.64	6.05	27.25
B	25	52.65	38.25	47.04	10.64	6.05	41.02
C	37	68.94	54.71	63.50	10.64	6.05	57.45



LAYOUT DIMENSIONS



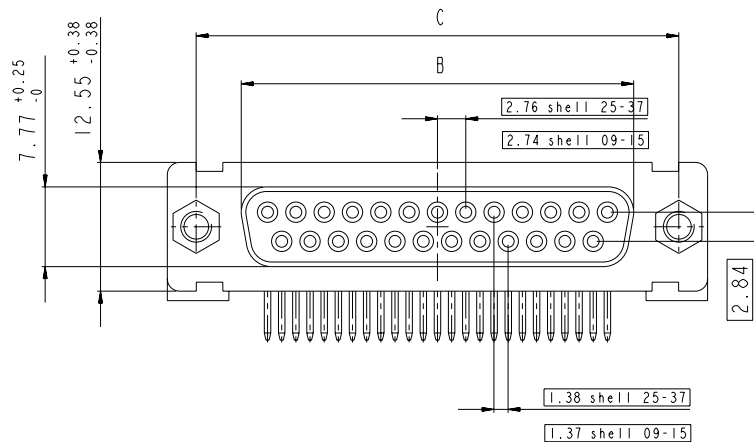
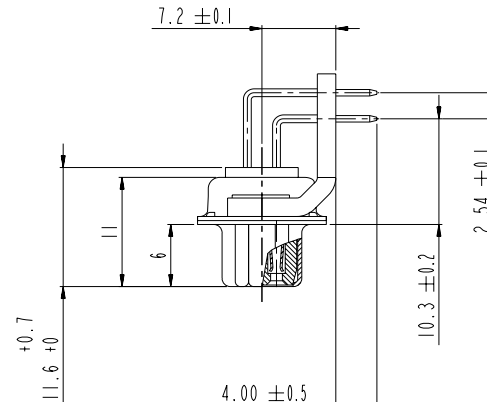
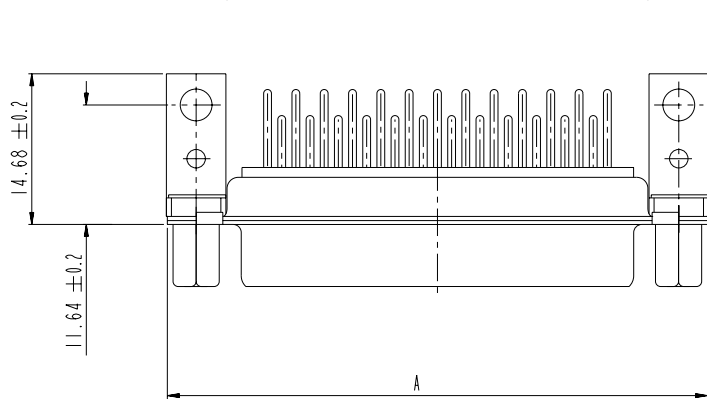
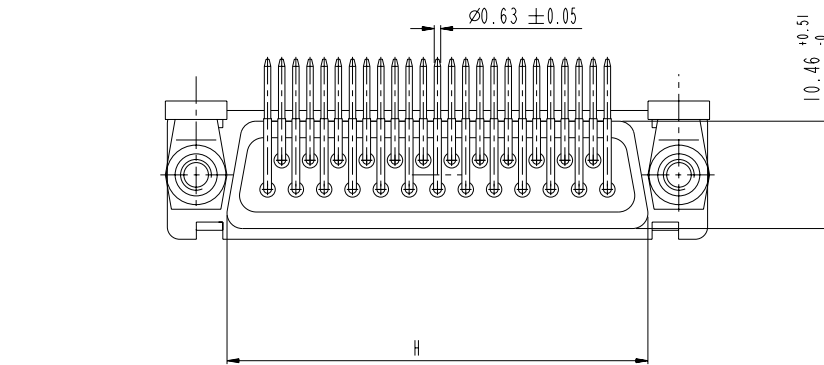
SCALE: 3

www.fciconnect.com		surface -	tolerance std	projection	mm
		ISO 1302	ISO 406	ISO 1101	
		TOLERANCES UNLESS OTHERWISE SPECIFIED			
Dr	M PESSON	2006/11/14	ANGULAR	0.X	±0.3
Eng	P LEGARE	2006/11/14	LINEAR	0.XX	±0.1
Chr	P LEGARE	2006/11/14	0° ±2°	0.XXX	±0.05
Appr	P LEGARE	2006/11/14	Product family	Spec ref	
SUB FEMALE DM HE501 series		C01-8637-1736		Rev. B	
with right angle contact		CUSTOMER		sheet 4 of 9	

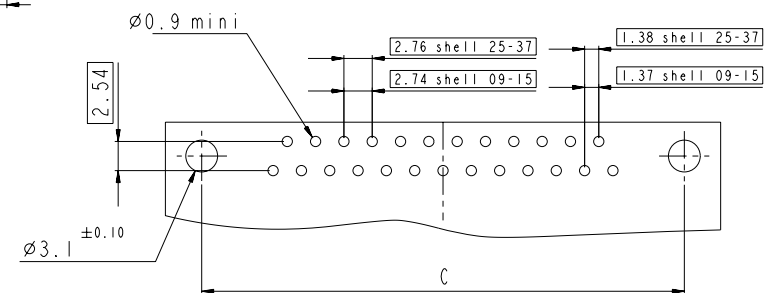
DIMENSION FOR SHELL E,A,B,C WITH METAL BRACKET

Dimensions are in millimeters

Shell size	Number of contacts	A ^{+0.76} ₋₀	B ^{+0.25} ₋₀	C ± 0.12	F ^{+0.57} ₋₀	G ^{+0.25} ₋₀	H ^{+0.51} ₋₀
E	09	30.43	16.21	24.99	10.64	6.05	19.02
A	15	38.76	24.54	33.32	10.64	6.05	27.25
B	25	52.65	38.25	47.04	10.64	6.05	41.02
C	37	68.94	54.71	63.50	10.64	6.05	57.45

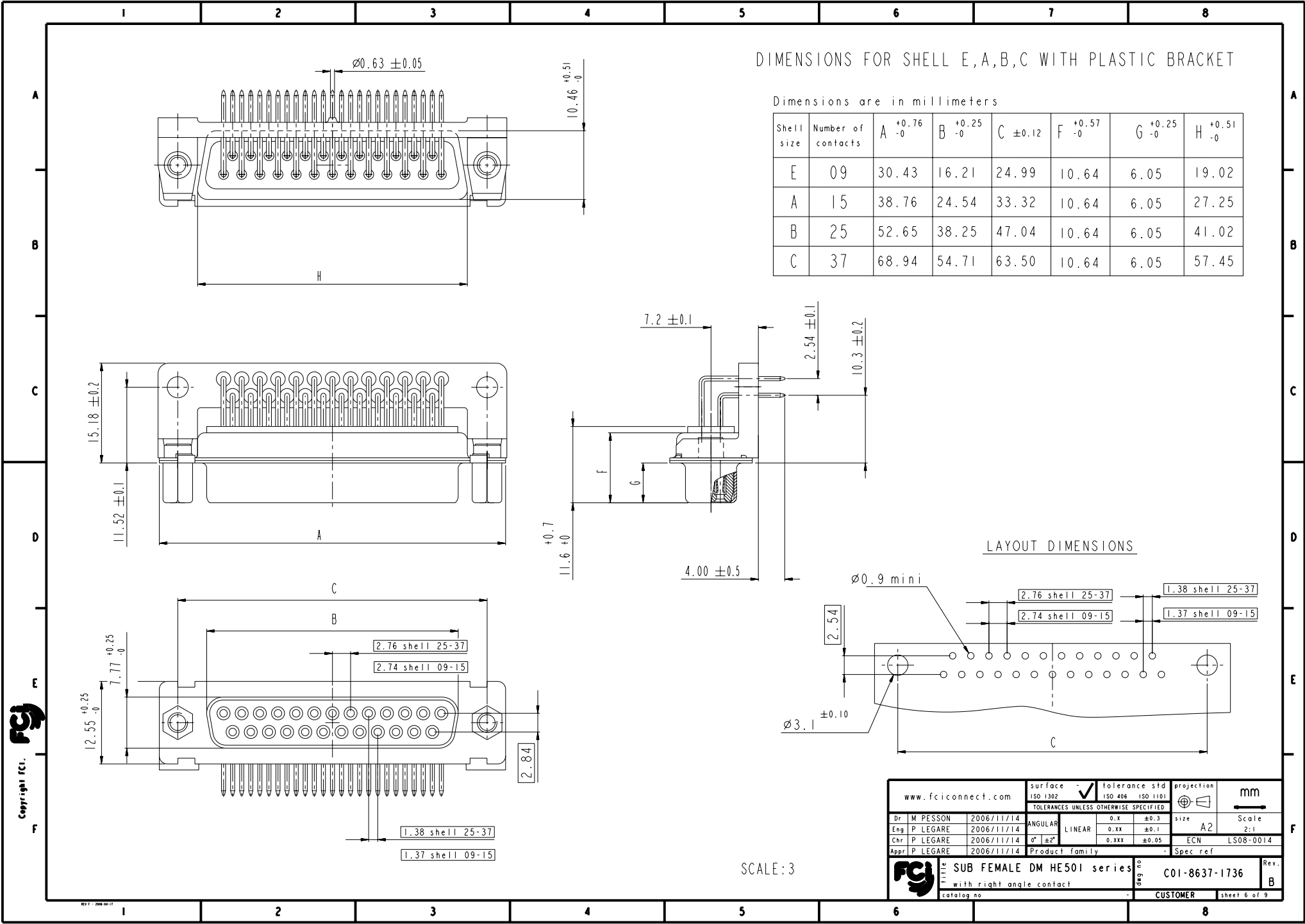


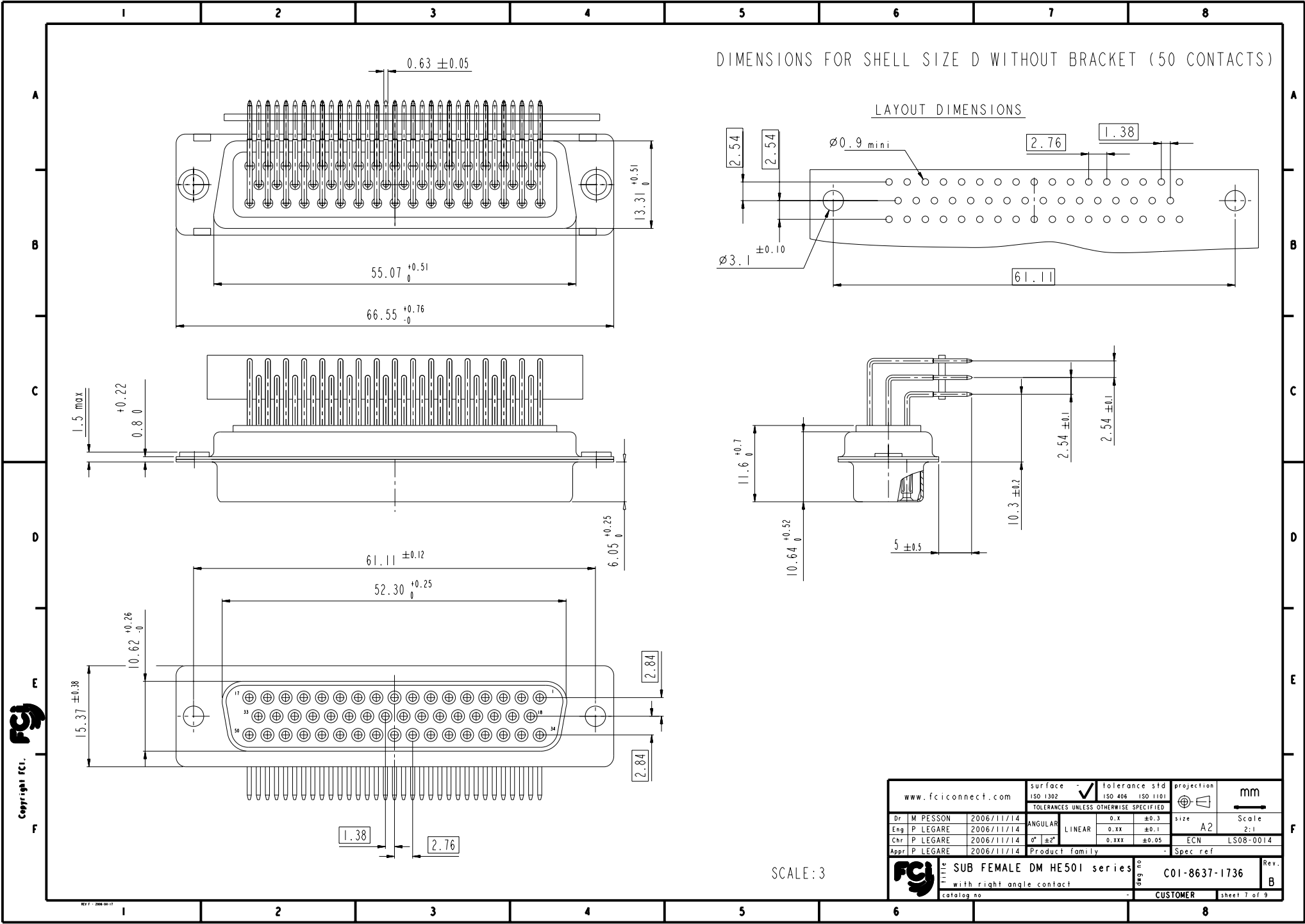
LAYOUT DIMENSIONS



SCALE: 3

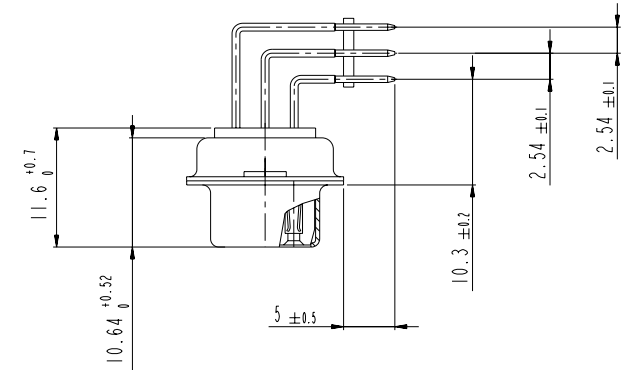
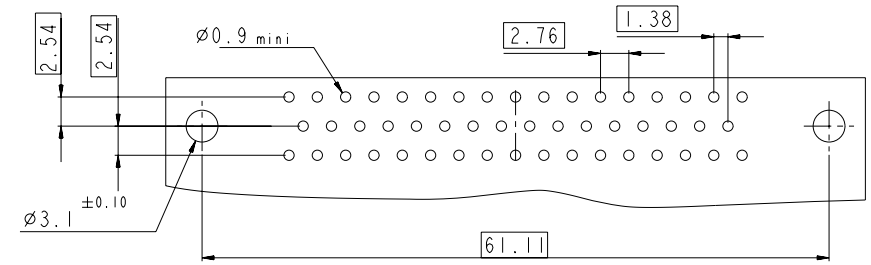
www.fciconnect.com			surface - ☒ tolerance std ISO 1302 ISO 406 ISO 1101			projection 		mm 		
TOLERANCES UNLESS OTHERWISE SPECIFIED										
Dr	M PESSON	2006/11/14	ANGULAR	LINEAR	0.X ±0.3	size	A2	Scale	2:1	
Eng	P LEGARE	2006/11/14			0.XX ±0.1					
Chr	P LEGARE	2006/11/14	0° ±2°		0.XXX ±0.05	ECN	LS08-0014			
Appr	P LEGARE	2006/11/14	Product family				Spec ref			
			SUB FEMALE DM HE501 series				C01-8637-1736		Rev.	B
			with right angle contact							
catalog no			-				CUSTOMER		sheet 5 of 9	





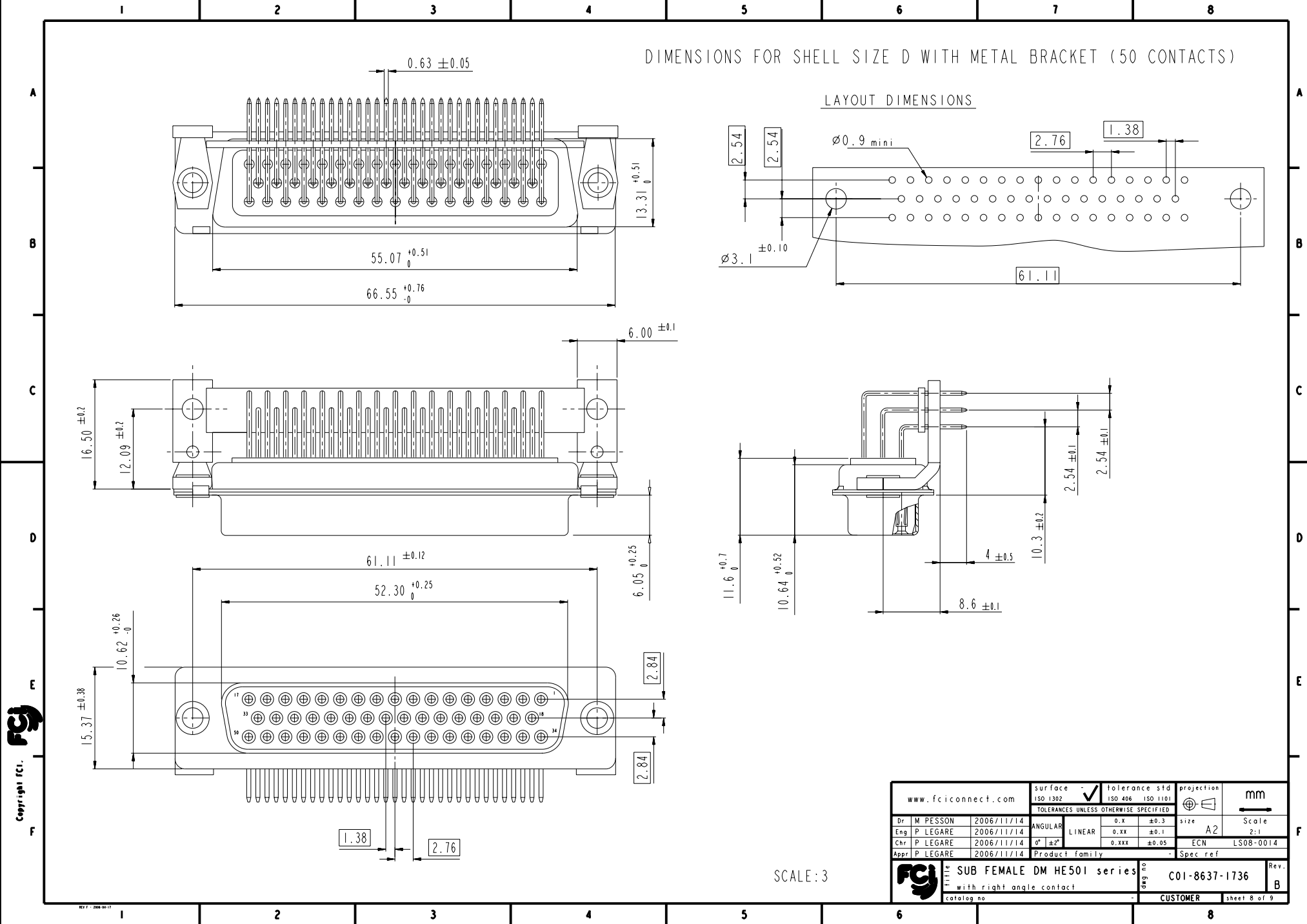
DIMENSIONS FOR SHELL SIZE D WITHOUT BRACKET (50 CONTACTS)

LAYOUT DIMENSIONS



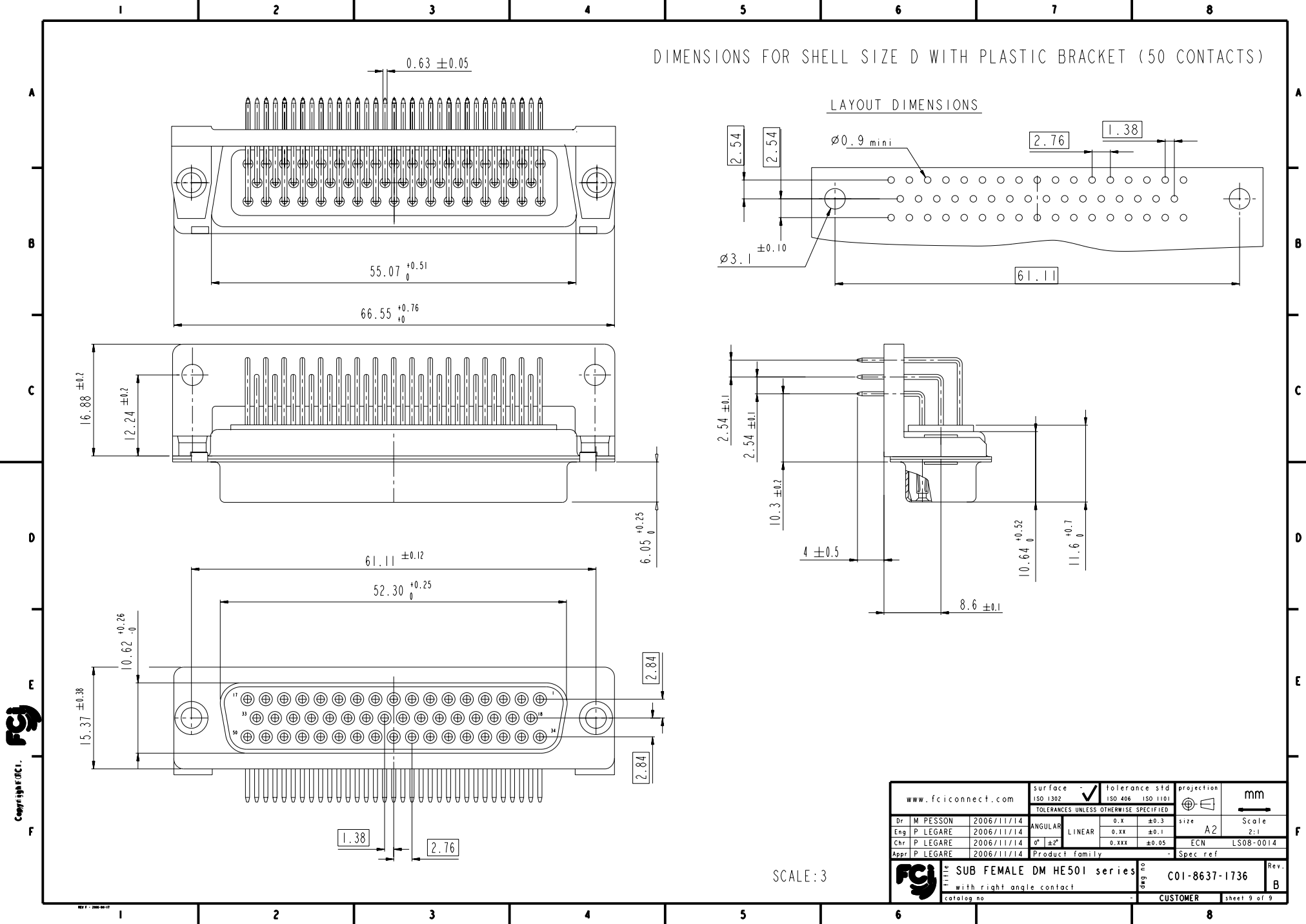
SCALE:3

www.fciconnect.com		surface	ISO 1302	tolerance std	ISO 406	ISO 1101	projection	mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED					size	Scale
Dr	M PESSON	2006/11/14	ANGULAR	0.X	±0.3		A2	2:1
Eng	P LEGARE	2006/11/14	LINEAR	0.XX	±0.1		ECN	LS08-0014
Chr	P LEGARE	2006/11/14	0° ±2°	0.XXX	±0.05		Spec ref	
Appr	P LEGARE	2006/11/14	Product family					
SUB FEMALE DM HE501 series		with right angle contact		C01-8637-1736		Rev.		B
catalog no		CUSTOMER		sheet 7 of 9				



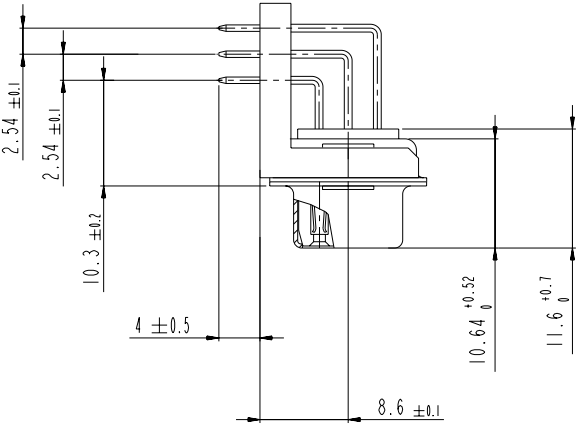
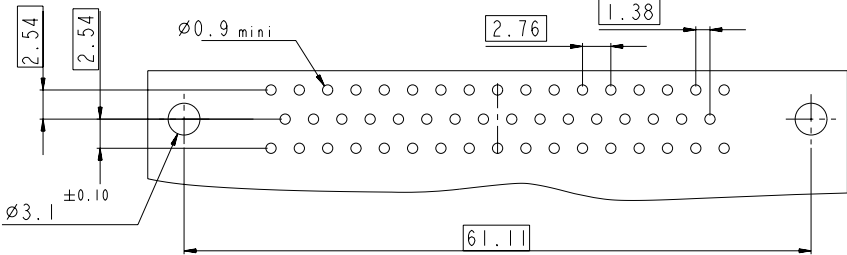
SCALE:3

www.fciconnect.com			surface  tolerance std		ISO 1302 ISO 406 ISO 1101		projection 		mm 		
			TOLERANCES UNLESS OTHERWISE SPECIFIED								
Dr	M PESSON	2006/11/14	ANGULAR		0.X	±0.3	size	A2	Scale		
Eng	P LEGARE	2006/11/14	LINEAR		0.XX	±0.1					
Chr	P LEGARE	2006/11/14	0° ±2°		0.XXX	±0.05	ECN	LS08-0014			
Appr	P LEGARE	2006/11/14	Product family				Spec ref				
			SUB FEMALE DM HE501 series				C01-8637-1736		Rev.		
			with right angle contact						B		
catalog no							CUSTOMER		sheet 8 of 9		



DIMENSIONS FOR SHELL SIZE D WITH PLASTIC BRACKET (50 CONTACTS)

LAYOUT DIMENSIONS



SCALE:3

www.fciconnect.com		surface	ISO 1302	tolerance std	ISO 406	ISO 1101	projection	mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED						
Dr	M PESSON	2006/11/14	ANGULAR	0.X	±0.3		size	A2
Eng	P LEGARE	2006/11/14	LINEAR	0.XX	±0.1		Scale	2:1
Chr	P LEGARE	2006/11/14	0° ±2°	0.XXX	±0.05		ECN	LS08-0014
Appr	P LEGARE	2006/11/14	Product family	-				
		Title		SUB FEMALE DM HE501 series		C01-8637-1736		Rev.
		with right angle contact						B
		catalog no				CUSTOMER		sheet 9 of 9