

REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 501)

PHYSICAL CHARACTERISTICS

-INSULATOR MATERIAL: THERMOPLASTIC UL94V0

-CONTACT MATERIAL: BRASS,
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

DBML25P500M

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

P :Pin

Termination type

5 Right angle/Europe standard

Plating

00 Right angle 500 matings/unmatings

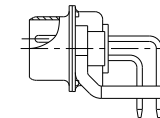
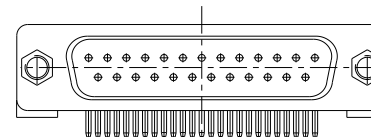
43 Right angle 500 matings/unmatings
for harsh environment

PCB accessories definition(see sheet 2)

Blank :Plastic brackets

C :Without brackets

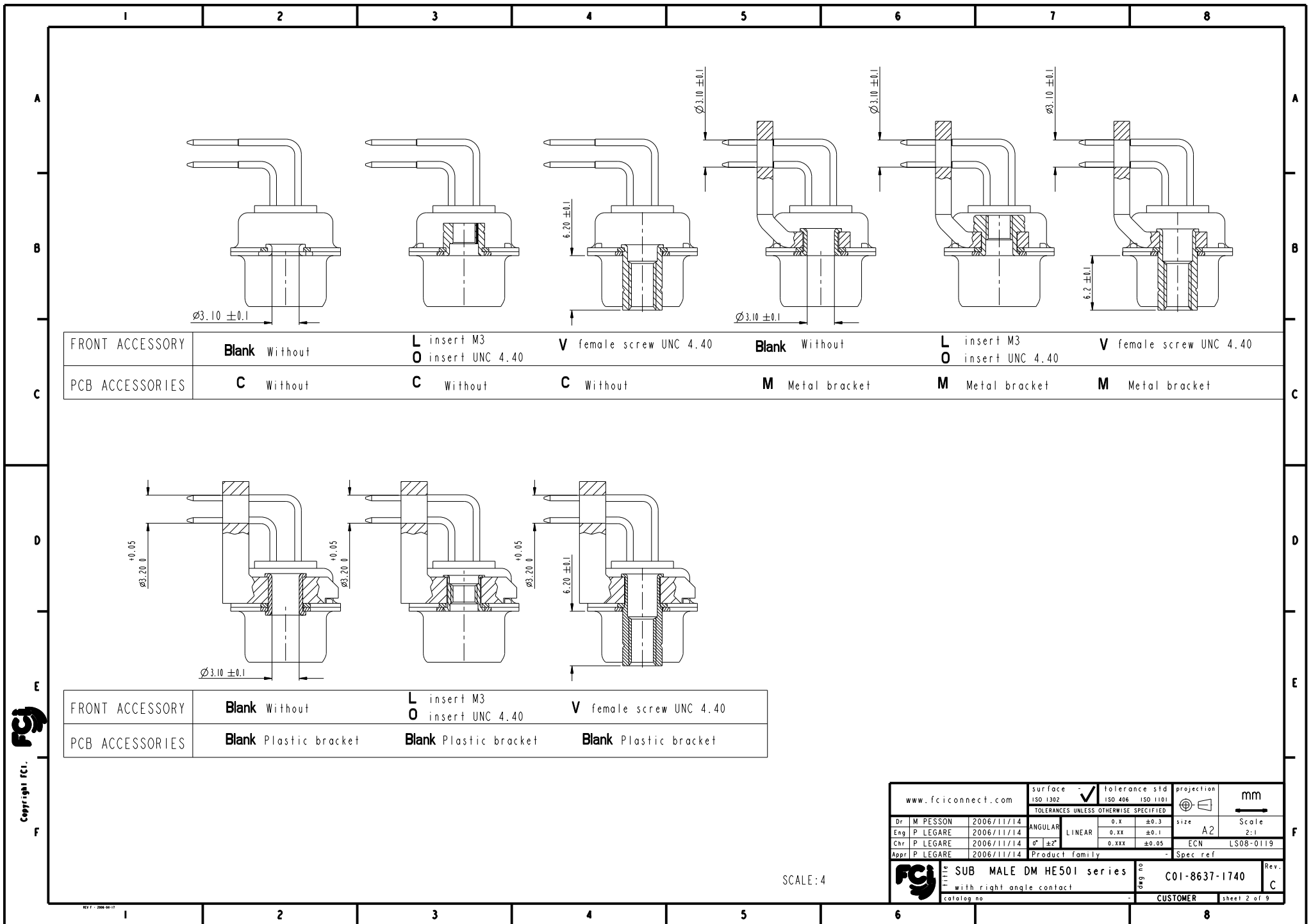
M :Metal brackets



25 WAY for Example

rev	acc no	dr	date
A	306-0174	MPE	2006/11/14
B	307-0065	MPE	2007/03/02
C	308-0119	MPE	2008/04/29
-	-	-	-
-	-	-	-
-	-	-	-

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
Appr	P LEGARE	2006/11/14	Product family			- Spec ref			
			SUB MALE DM HE501 series			deg no C01-8637-1740		Rev. C	
with right angle contact						CUSTOMER		sheet 1 of 9	



PART NUMBER	FRONT ACCESSORY	PCB ACCESSORY
D*MxxP500C	without	without
D*MLxxP500C	insert M3	without
D*MOxxP500C	insert UNC 4.40	without
D*MVxxP500C	female screw UNC 4.40	without
D*MxxP500M	without	Metal bracket
D*MLxxP500M	insert M3	Metal bracket
D*MOxxP500M	insert UNC 4.40	Metal bracket
D*MVxxP500M	female screw UNC 4.40	Metal bracket
D*MxxP500	without	Plastic bracket
D*MLxxP500	insert M3	Plastic bracket
D*MOxxP500	insert UNC 4.40	Plastic bracket
D*MVxxP500	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*MxxP543C	without	without
D*MLxxP543C	insert M3	without
D*MOxxP543C	insert UNC 4.40	without
D*MVxxP543C	female screw UNC 4.40	without
D*MxxP543M	without	Metal bracket
D*MLxxP543M	insert M3	Metal bracket
D*MOxxP543M	insert UNC 4.40	Metal bracket
D*MVxxP543M	female screw UNC 4.40	Metal bracket
D*MxxP543	without	Plastic bracket
D*MLxxP543	insert M3	Plastic bracket
D*MOxxP543	insert UNC 4.40	Plastic bracket
D*MVxxP543	female screw UNC 4.40	Plastic bracket

CROSS REFERENCES HE501 and FCI

HE501 P/N	FCI P/N	FRONT ACCESSORY	PCB ACCESSORY
HE501PxxVP6	D*MxxP500	without	Plastic bracket
HE501MxxVP6	D*MxxP500M	without	Metal bracket

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www.fciconnect.com			surface ☒ tolerance std 150 1302 150 406 150 1161			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	LS08-0119	
Appr	P LEGARE	2006/11/14	Product family				- Spec ref		
			title SUB MALE DM HE501 series with right angle contact				part no C01-8637-1740		Rev C
catalog no			CUSTOMER				sheet 3 of 9		

C

D

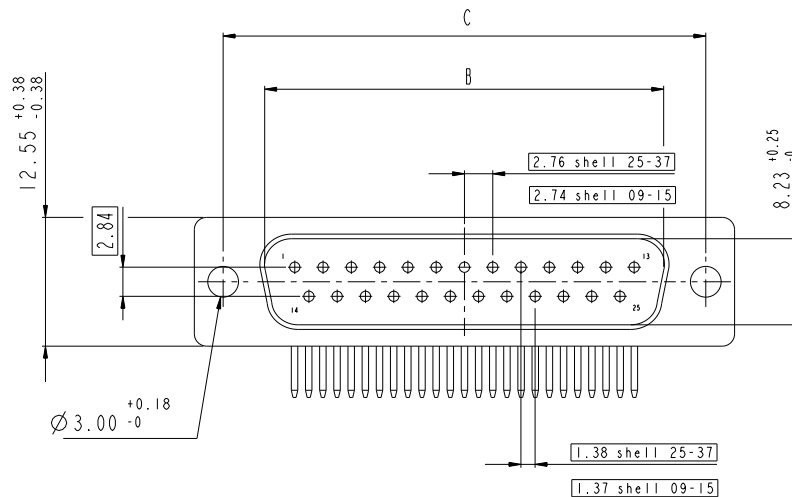
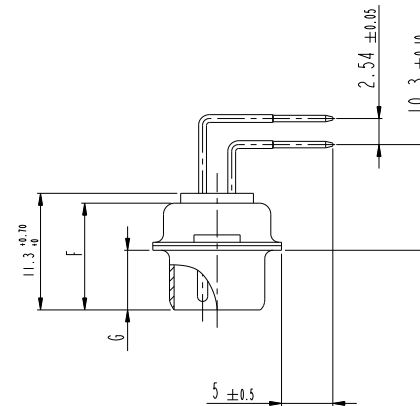
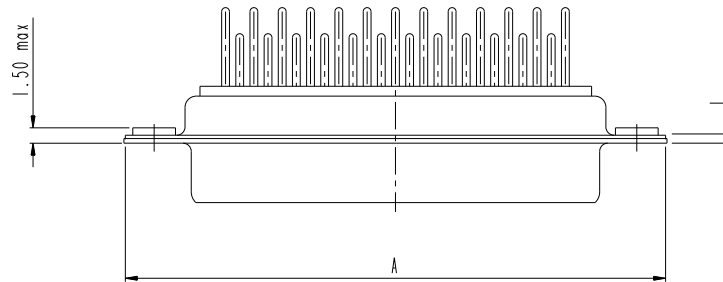
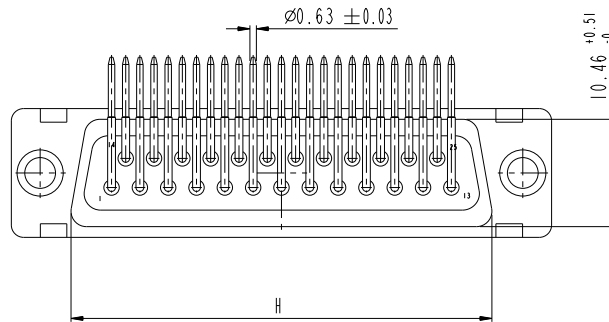
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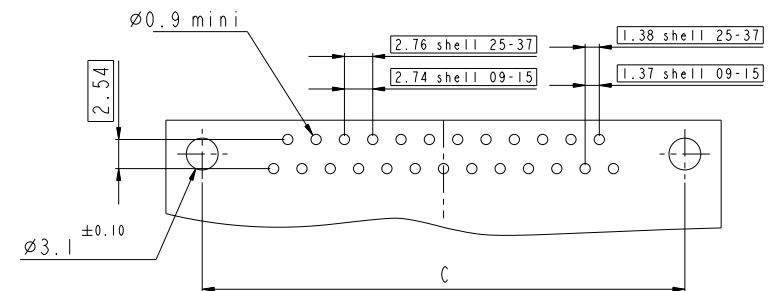
DIMENSION FOR SHELL E,A,B,C WITHOUT BRACKET

Dimensions are in millimeters

Shell size	Number of contacts	A $\begin{smallmatrix} +0.76 \\ -0 \end{smallmatrix}$	B $\begin{smallmatrix} +0.25 \\ -0 \end{smallmatrix}$	C ± 0.12	F $\begin{smallmatrix} +0.57 \\ -0 \end{smallmatrix}$	G $\begin{smallmatrix} +0.25 \\ -0 \end{smallmatrix}$	H $\begin{smallmatrix} +0.51 \\ -0 \end{smallmatrix}$	L $\begin{smallmatrix} +0.22 \\ -0 \end{smallmatrix}$
E	09	30.43	16.79	24.99	10.47	5.9 $\begin{smallmatrix} +0.15 \\ -0 \end{smallmatrix}$	19.02	0.80
A	15	38.76	25.12	33.32	10.47	5.9 $\begin{smallmatrix} +0.15 \\ -0 \end{smallmatrix}$	27.25	0.80
B	25	52.65	38.84	47.04	10.43	5.7 $\begin{smallmatrix} +0.25 \\ -0 \end{smallmatrix}$	41.02	0.80
C	37	68.94	55.30	63.50	10.56	5.7 $\begin{smallmatrix} +0.25 \\ -0 \end{smallmatrix}$	57.45	0.90

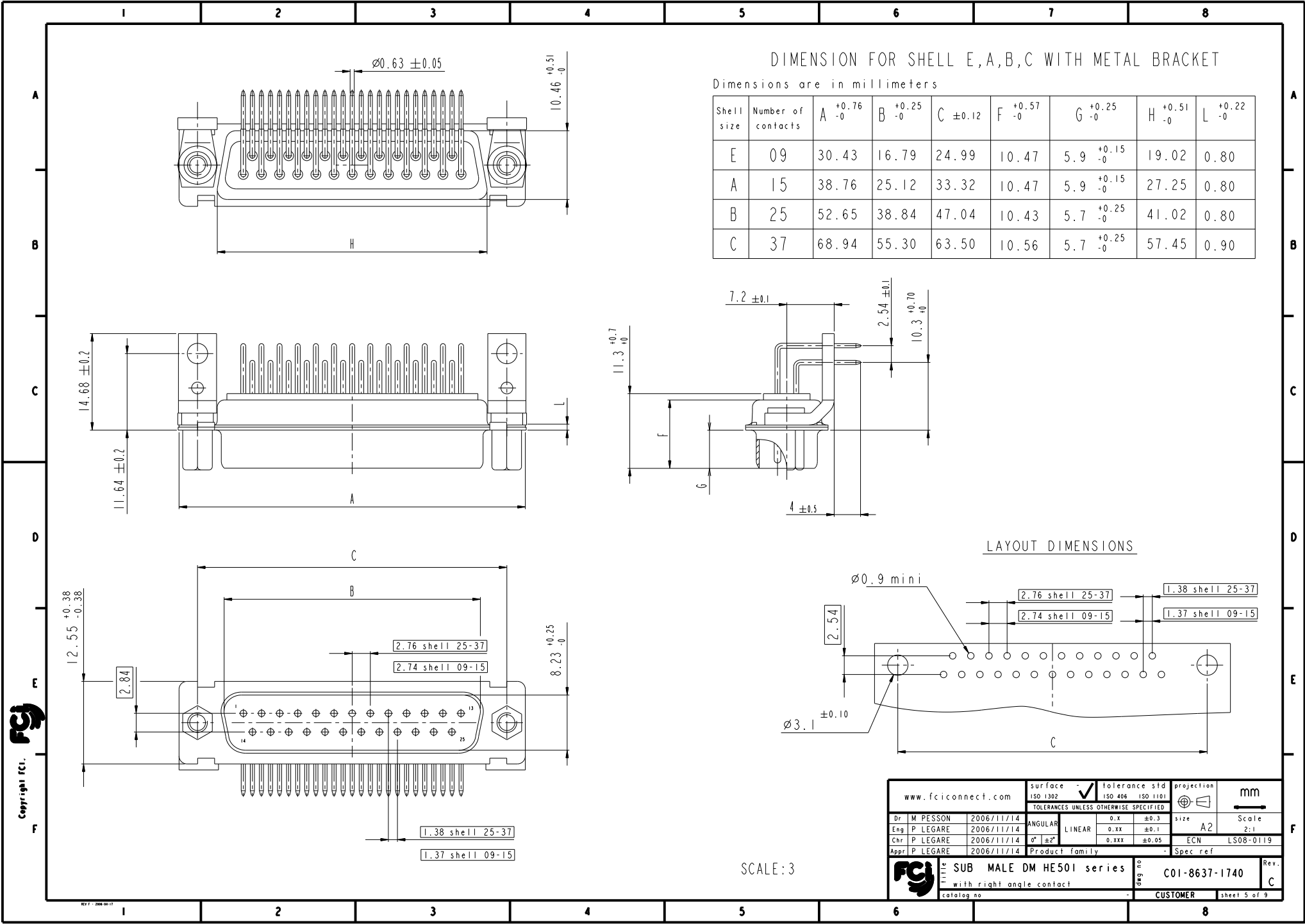


LAYOUT DIMENSIONS

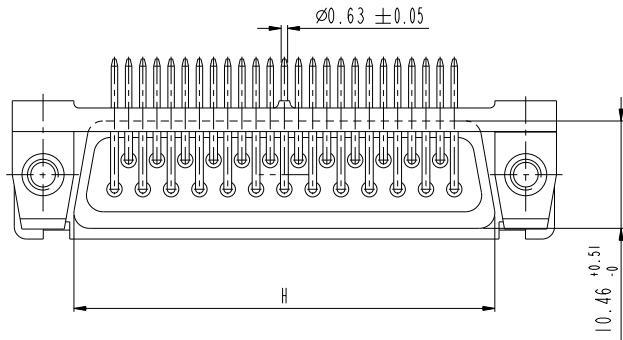


SCALE: 3

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 MALE DM HE501 series		deg no		C01-8637-1740	
with right angle contact		Rev.		C	
catalog no		CUSTOMER		sheet 4 of 9	



1 2 3 4 5 6 7 8



DIMENSION FOR SHELL E,A,B,C WITH PLASTIC 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	L ^{+0.22} ₋₀
E	09	30.43	16.79	24.99	10.47	5.9 ^{+0.15} ₋₀	19.02	0.80
A	15	38.76	25.12	33.32	10.47	5.9 ^{+0.15} ₋₀	27.25	0.80
B	25	52.65	38.84	47.04	10.43	5.7 ^{+0.25} ₋₀	41.02	0.80
C	37	68.94	55.30	63.50	10.56	5.7 ^{+0.25} ₋₀	57.45	0.90

A

B

A

B

C

C

D

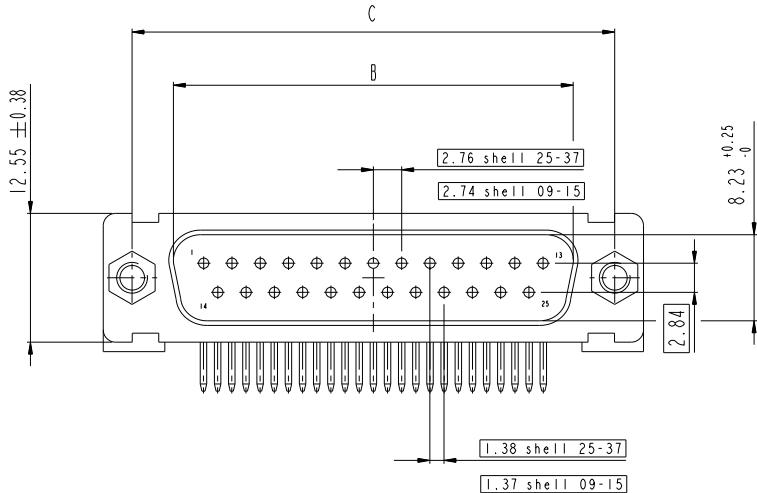
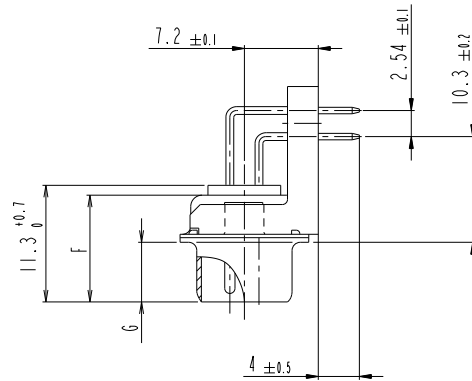
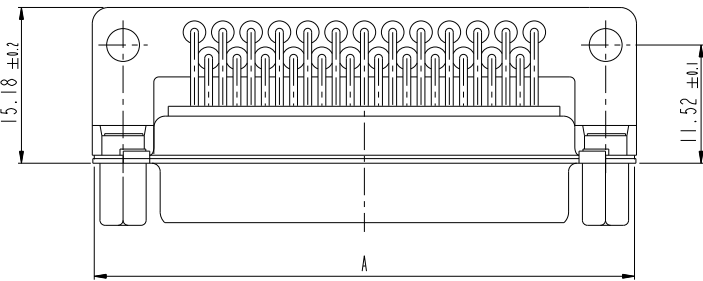
D

E

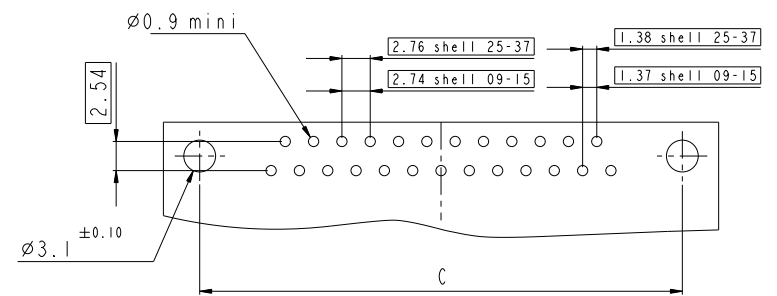
E

F

F

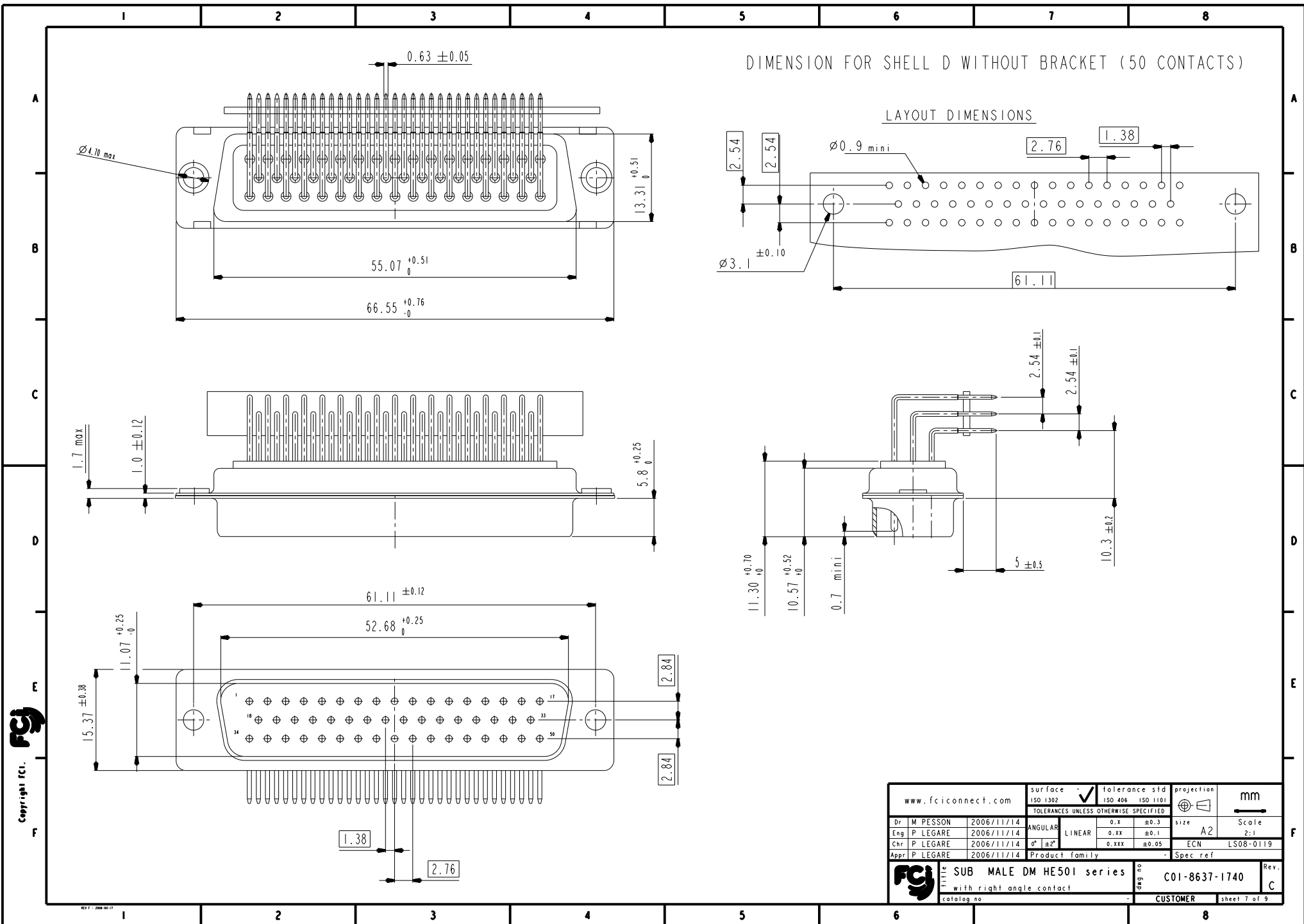


LAYOUT DIMENSIONS



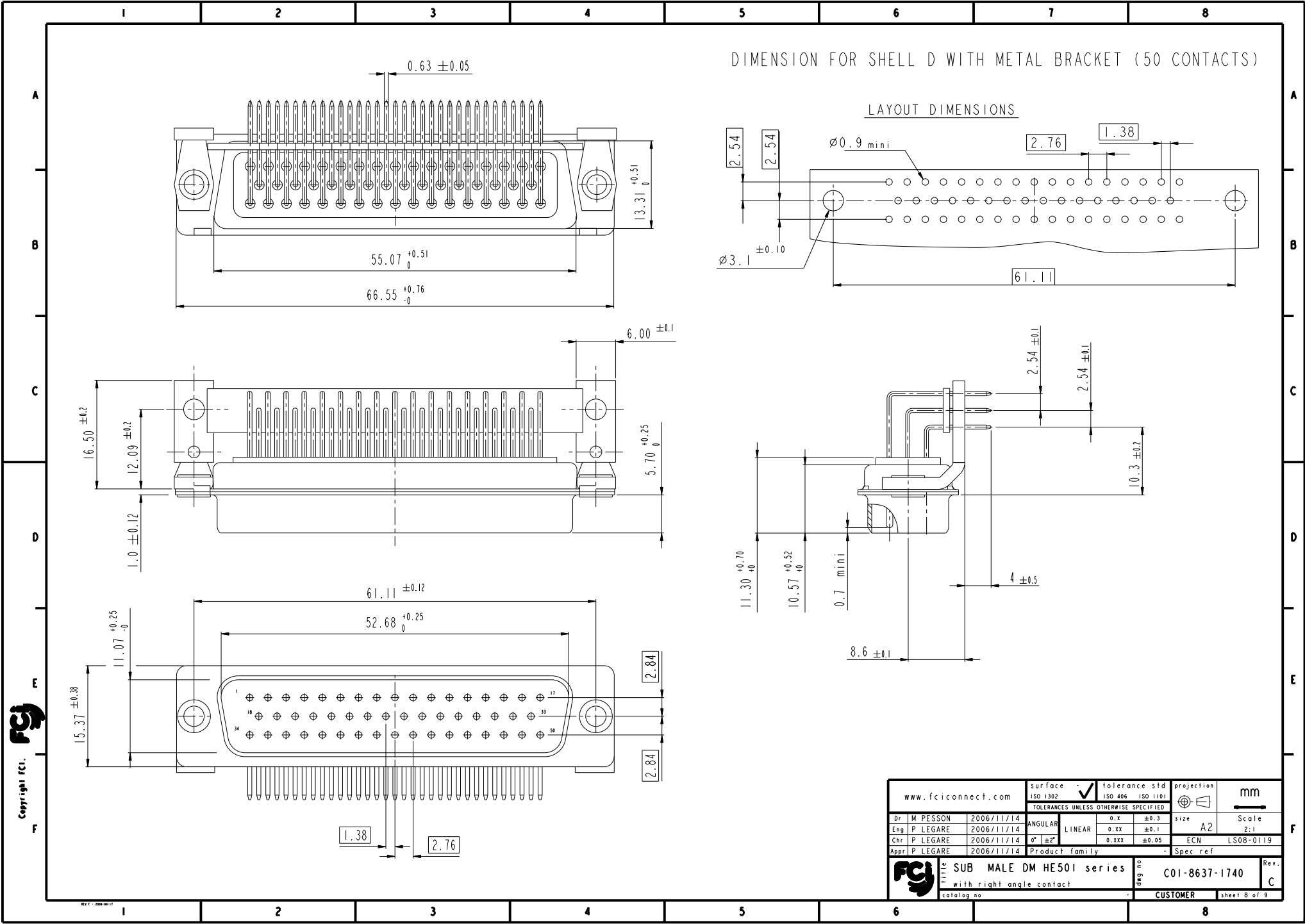
www.fciconnect.com		surface -	tolerance std	projection	mm
		ISO 1302	ISO 406	ISO 1101	
		TOLERANCES UNLESS OTHERWISE SPECIFIED			
Dr	M PESSON	2006/11/14	ANGULAR	0.X	±0.3
Eng	P LEGARE	2006/11/14	LINEAR	0.XX	±0.1
Chr	P LEGARE	2006/11/14	0° ±2°	0.XXX	±0.05
Appr	P LEGARE	2006/11/14	Product family	- Spec ref	
SUB MALE DM HE501 series		C01-8637-1740		Rev. C	
with right angle contact		CUSTOMER		sheet 6 of 9	

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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	ECN LS08-0119
Eng	P LEGARE	2006/11/14			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 MALE DM HE501 series				C01-8637-1740		Rev. C
			with right angle contact						
catalog no			CUSTOMER				sheet 7 of 9		



DIMENSION FOR SHELL D WITH METAL BRACKET (50 CONTACTS)

LAYOUT DIMENSIONS

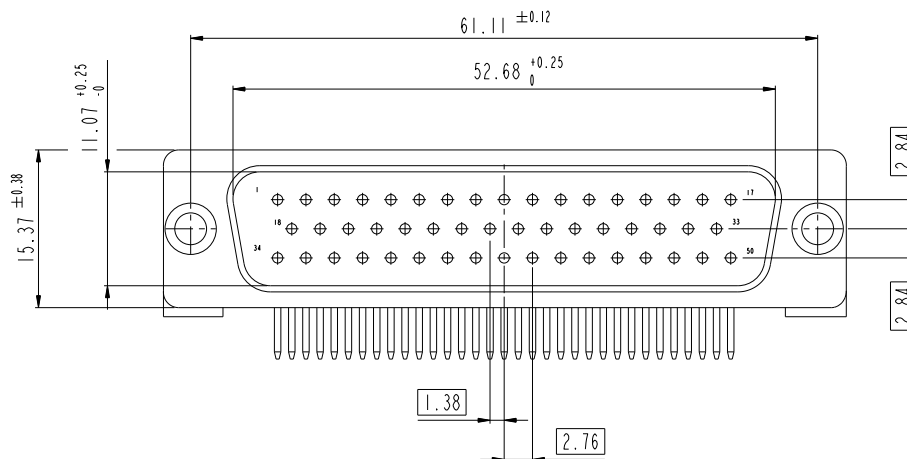
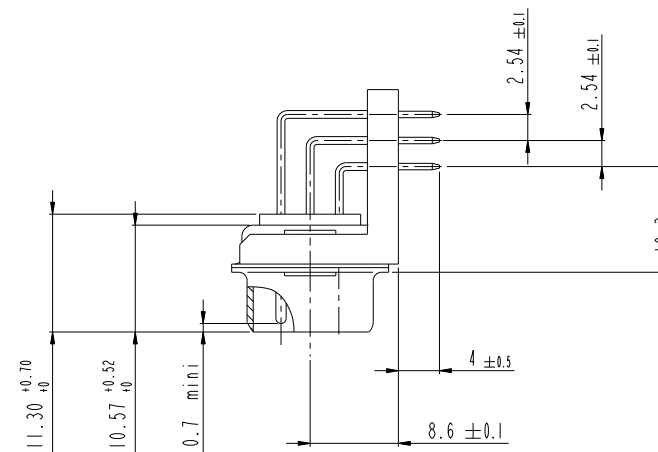
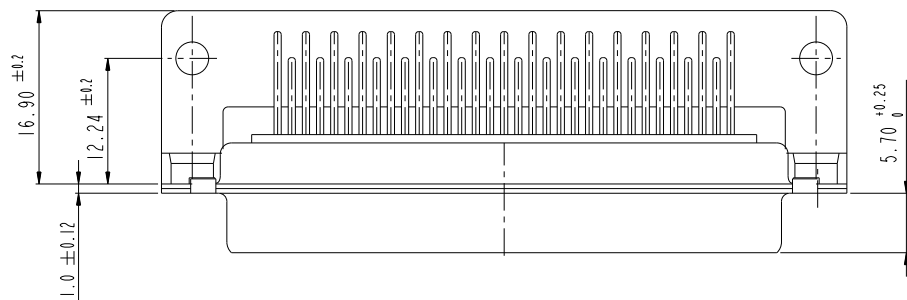
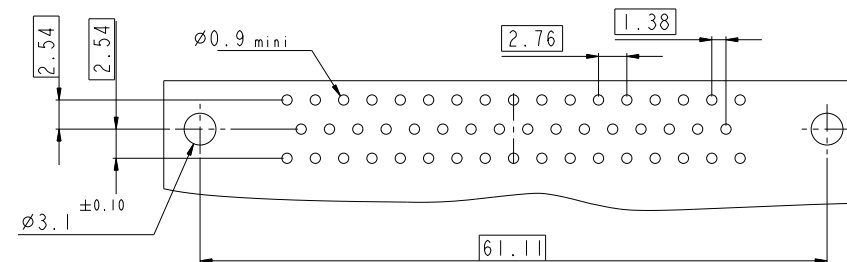
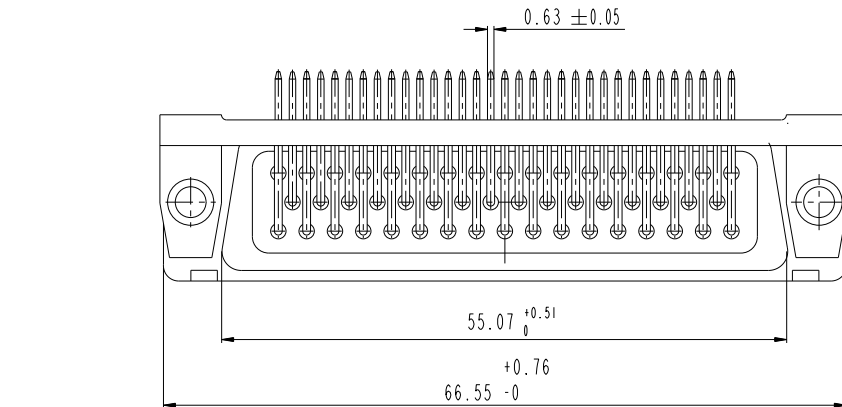
www.fciconnect.com		surface	ISO 1302	tolerance std	ISO 406	ISO 1101	projection	mm
		TOLERANCES UNLESS OTHERWISE SPECIFIED					size	Scale
Dr	M PESSON	2006/11/14	ANGULAR	0.X	±0.3		A2	2:1
Eng	P LEGARE	2006/11/14	LINEAR	0.XX	±0.1		ECN	LS08-0119
Chr	P LEGARE	2006/11/14	0° ±2°	0.XXX	±0.05		Spec ref	
Appr	P LEGARE	2006/11/14	Product family					
SUB MALE DM HE501 series		with right angle contact		C01-8637-1740		Rev.		
catalog no		CUSTOMER		sheet 8 of 9		C		



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

LAYOUT DIMENSIONS



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
Eng	P LEGARE	2006/11/14			0.xx	±0.1	2:1		
Chr	P LEGARE	2006/11/14	0° ±2°		0.xxx	±0.05	ECN	LS08-0119	
Appr	P LEGARE	2006/11/14	Product family				Spec ref		
			SUB MALE DM HE501 series				C01-8637-1740		Rev
			with right angle contact						C
catalog no							CUSTOMER		sheet 9 of 9