

REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 507)

PHYSICAL CHARACTERISTICS

- INSULATOR MATERIAL: THERMOPLASTIC UL94V0
- CONTACT MATERIAL: BRASS (SIGNAL CONTACT)
- BRASS (POWERS CONTACT)
- ACCESSORIES: BRASS
- SHELLS: STEEL

ELECTRICAL CHARACTERISTICS

- NOMINAL CURRENT: 7.5A (SIGNAL CONTACT)
- 30A or 40A (POWER CONTACT)
- CONTACT RESISTANCE: <=7.3 m Ohms(SIGNAL and POWER)
- 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 maximum
- Female screw : 0.5 N.m maximum

NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-47-0004.
- The housing will withstand exposure to 260°C peak temperature for 3.5 seconds in a wave solder application with a 1.6mm minimum thick circuit board. See application notes/procedures if they are available.
- Termination plating spec:
 - Signal contacts: Ni + Gold/GxT
 - Power contacts: Ni 1.27µmi+Sn 2.5 to 7.5µ,pure bright
- Active area plating spec:
 - Signal and power contacts: Ni + Gold/GxT
- 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

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
5 Right angle/Europe standard

Plating
00 200 matings/unmatings
43 500 matings/unmatings

PCB accessories definition(see sheet 2)
A :without accessory
H :Metal brackets+harpoons for PCB 2.40mm
G :Metal brackets+harpoons for PCB 1.60mm
M :Metal brackets

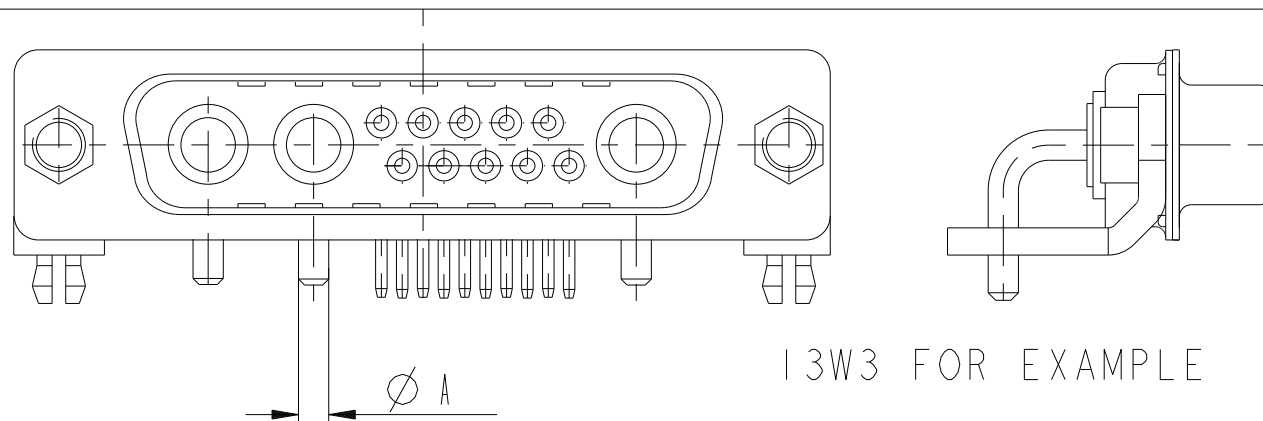
Power contacts
30 :Fitted with power contacts 30 Amp.
40 :Fitted with power contacts 40 Amp.

DBL13W3P500G30LF

See note RoHS

TABLE 1:PCB HOLE DIAMETERS

POWER CONTACTS			ACCESSORIES	SIGNAL CONTACT
30 A	2.00	Ø2.40	Ø3.10	Ø1.00
40 A	2.80	Ø3.10		
Max current Power	ØA±0.10	PCB HOLE ±0.10	PCB HOLE ±0.10	PCB HOLE ±0.10



spec ref		dr		1, Product Eng		2015/06/16		projection		mm		size		A2		scale		1:1					
tolerance std		eng		Gregar Mathew		2019/11/11						ecn no		ELX-1-33009-1		rel level		Released					
ISO 1101		chr		-		-																	
ISO 406		appr		Varma Sudhir		2019/11/12														product family		-	
surface		linear		0.X		±0.3		Amphenol FCI		title		SUB MALE DW EUROPE FOOT PRINT		dwg no		C01-8639-2304c		rev		E			
ISO 1302				0.XX		±0.10.10																MIXED POWER RIGHT ANGL SOLDER	
		angular		0°		±2°																cat. no.	
TOLERANCES UNLESS OTHERWISE SPECIFIED																							

Amphenol
FCi

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C	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

F	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	G Metal brackets + harpoons for PCB 1.60mm	G Metal brackets + harpoons for PCB 1.60mm	G Metal brackets + harpoons for PCB 1.60mm	H Metal brackets + harpoons for PCB 2.40mm	H Metal brackets + harpoons for PCB 2.40mm	H Metal brackets + harpoons for PCB 2.40mm

spec ref				dr	1. Product Eng		2015/06/16		projection 	mm 	size	A2	scale	3:1		
tolerance std				eng	Gregar Mathew		2019/11/11				ecn no	ELX-133009-1				
ISO 1101				chr	-		-									
ISO 1101				appr	Varma Sudhir		2019/11/12				product family		-	rel level	Released	
ISO 406																
surface	linear	0.X	±0.30	Amphenol FCi	title	SUB MALE DW EUROPE FOOT PRINT					dwg no	C01-8639-2304c		rev	E	
		0.XX	±0.10													
		0.XXX	±0.05													
		angular	0°													±°2
	ISO 1302		angular		0°		±2		cat. no.		-		Product - Customer Drw			sheet 2 of 7

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxP500A30LF	30	200	without	without
D*LxWxP500A30LF	30	200	insert M3	without
D*OxWxP500A30LF	30	200	insert UNC 4.40	without
D*VxWxP500A30LF	30	200	female screw UNC 4.40	without
D*xWxP500H30LF	30	200	without	metal bracket+harpoon PCB 2.40mm
D*LxWxP500H30LF	30	200	insert M3	metal bracket+harpoon PCB 2.40mm
D*OxWxP500H30LF	30	200	insert UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*VxWxP500H30LF	30	200	female screw UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*xWxP500G30LF	30	200	without	metal bracket+harpoon PCB 1.60mm
D*LxWxP500G30LF	30	200	insert M3	metal bracket+harpoon PCB 1.60mm
D*OxWxP500G30LF	30	200	insert UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*VxWxP500G30LF	30	200	female screw UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*xWxP500M30LF	30	200	without	metal bracket
D*LxWxP500M30LF	30	200	insert M3	metal bracket
D*OxWxP500M30LF	30	200	insert UNC 4.40	metal bracket
D*VxWxP500M30LF	30	200	female screw UNC 4.40	metal bracket

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxP500A40LF	40	200	without	without
D*LxWxP500A40LF	40	200	insert M3	without
D*OxWxP500A40LF	40	200	insert UNC 4.40	without
D*VxWxP500A40LF	40	200	female screw UNC 4.40	without
D*xWxP500H40LF	40	200	without	metal bracket+harpoon PCB 2.40mm
D*LxWxP500H40LF	40	200	insert M3	metal bracket+harpoon PCB 2.40mm
D*OxWxP500H40LF	40	200	insert UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*VxWxP500H40LF	40	200	female screw UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*xWxP500G40LF	40	200	without	metal bracket+harpoon PCB 1.60mm
D*LxWxP500G40LF	40	200	insert M3	metal bracket+harpoon PCB 1.60mm
D*OxWxP500G40LF	40	200	insert UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*VxWxP500G40LF	40	200	female screw UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*xWxP500M40LF	40	200	without	metal bracket
D*LxWxP500M40LF	40	200	insert M3	metal bracket
D*OxWxP500M40LF	40	200	insert UNC 4.40	metal bracket
D*VxWxP500M40LF	40	200	female screw UNC 4.40	metal bracket

shell size
*
E
A
A
B
B
B
C
C
C

LAYOUTS
xWx
5W1
11W1
7W2
21W1
17W2
13W3
9W4
25W3
21WA4
27W2

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxP543A30LF	30	500	without	without
D*LxWxP543A30LF	30	500	insert M3	without
D*OxWxP543A30LF	30	500	insert UNC 4.40	without
D*VxWxP543A30LF	30	500	female screw UNC 4.40	without
D*xWxP543H30LF	30	500	without	metal bracket+harpoon PCB 2.40mm
D*LxWxP543H30LF	30	500	insert M3	metal bracket+harpoon PCB 2.40mm
D*OxWxP543H30LF	30	500	insert UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*VxWxP543H30LF	30	500	female screw UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*xWxP543G30LF	30	500	without	metal bracket+harpoon PCB 1.60mm
D*LxWxP543G30LF	30	500	insert M3	metal bracket+harpoon PCB 1.60mm
D*OxWxP543G30LF	30	500	insert UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*VxWxP543G30LF	30	500	female screw UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*xWxP543M30LF	30	500	without	metal bracket
D*LxWxP543M30LF	30	500	insert M3	metal bracket
D*OxWxP543M30LF	30	500	insert UNC 4.40	metal bracket
D*VxWxP543M30LF	30	500	female screw UNC 4.40	metal bracket

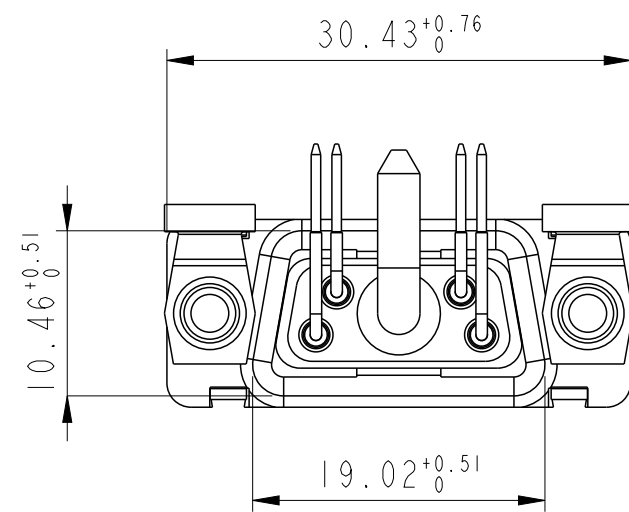
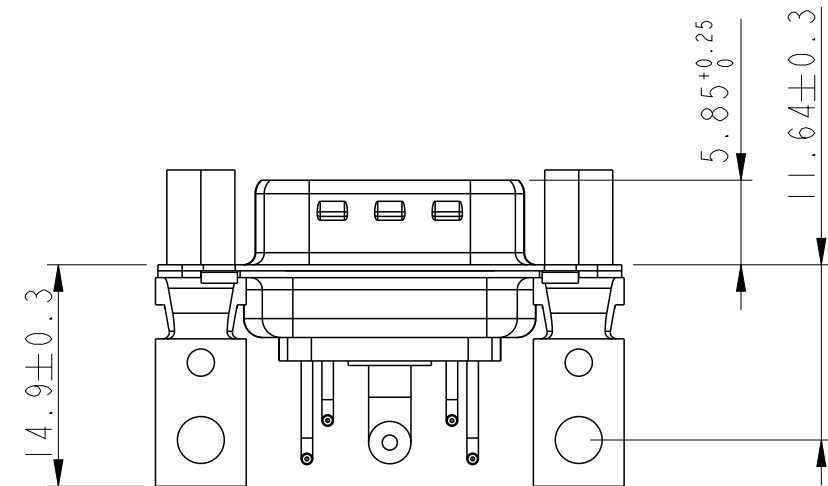
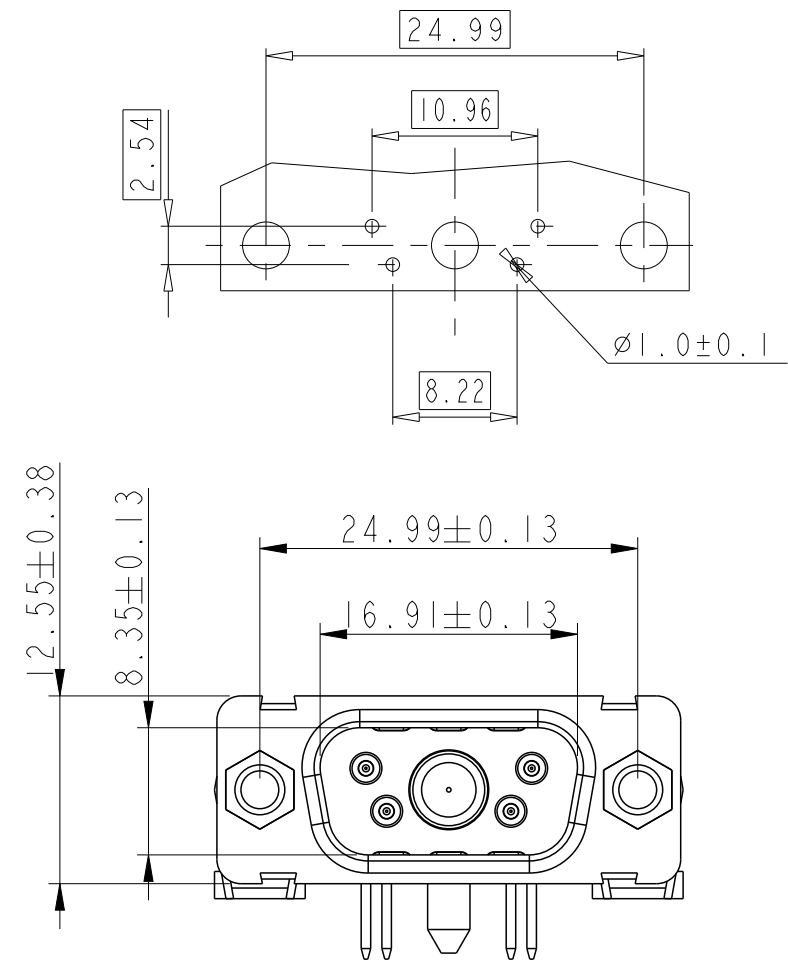
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D*LxWxP543A40LF	40	500	insert M3	without
D*OxWxP543A40LF	40	500	insert UNC 4.40	without
D*VxWxP543A40LF	40	500	female screw UNC 4.40	without
D*xWxP543H40LF	40	500	without	metal bracket+harpoon PCB 2.40mm
D*LxWxP543H40LF	40	500	insert M3	metal bracket+harpoon PCB 2.40mm
D*OxWxP543H40LF	40	500	insert UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*VxWxP543H40LF	40	500	female screw UNC 4.40	metal bracket+harpoon PCB 2.40mm
D*xWxP543G40LF	40	500	without	metal bracket+harpoon PCB 1.60mm
D*LxWxP543G40LF	40	500	insert M3	metal bracket+harpoon PCB 1.60mm
D*OxWxP543G40LF	40	500	insert UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*VxWxP543G40LF	40	500	female screw UNC 4.40	metal bracket+harpoon PCB 1.60mm
D*xWxP543M40LF	40	500	without	metal bracket
D*LxWxP543M40LF	40	500	insert M3	metal bracket
D*OxWxP543M40LF	40	500	insert UNC 4.40	metal bracket
D*VxWxP543M40LF	40	500	female screw UNC 4.40	metal bracket

spec ref		dr		1, Product Eng	2015/06/16			size	A2	scale	3:1			
tolerance std		eng		Gregar Mathew	2019/11/11			ecn no	ELX-133009-1	rel level	Released			
ISO 1101		chr		-	-									
ISO 406		appr		Varma Sudhir	2019/11/12									
						product family		0 SUB						
surface	linear	0.X		±0.30			SUB MALE DW EUROPE FOOT PRINT				dwg no	C01-8639-2304c	rev	E
		0.XX		±0.10										
		0.XXX		±0.05			MIXED POWER RIGHT ANGL SOLDER							
		ISO 1302		angular										
			cat. no.		-		Product - Customer Drw				sheet 3 of 7			

5W1

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table I sheet I

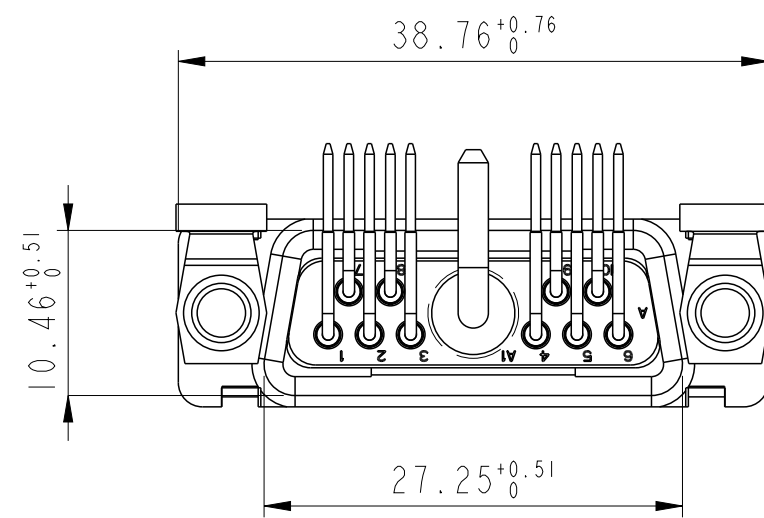
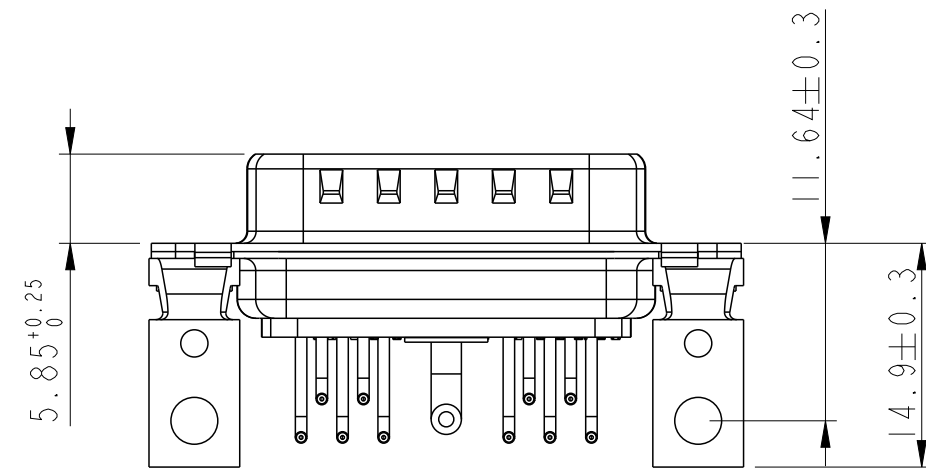
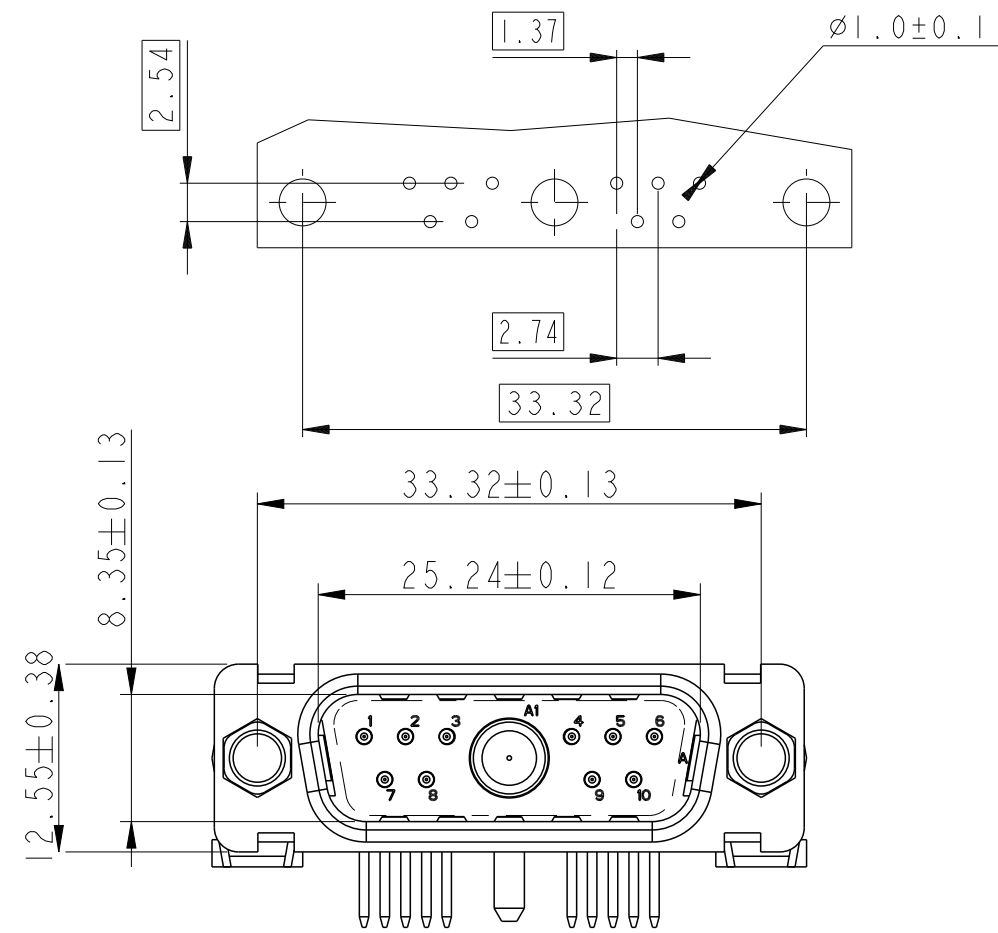


Floating signal contacts

11W1

LAYOUT AND CONNECTOR DIMENSIONS

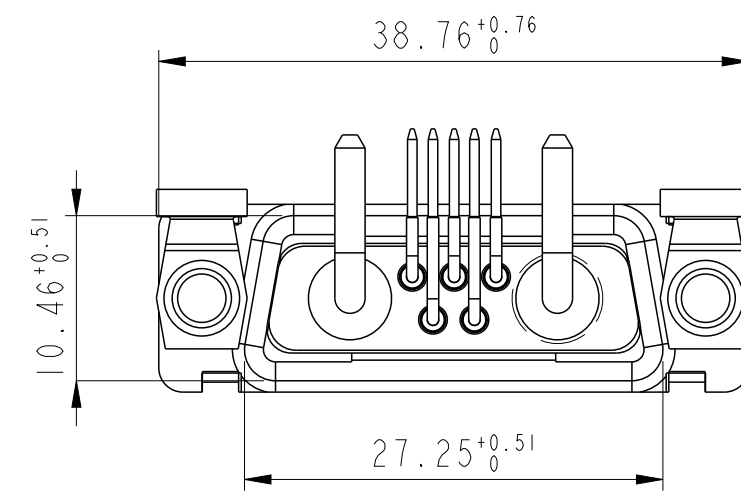
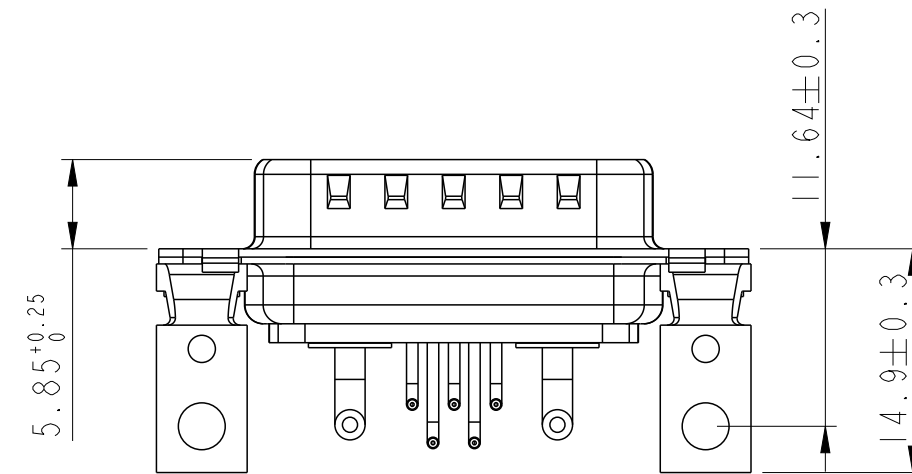
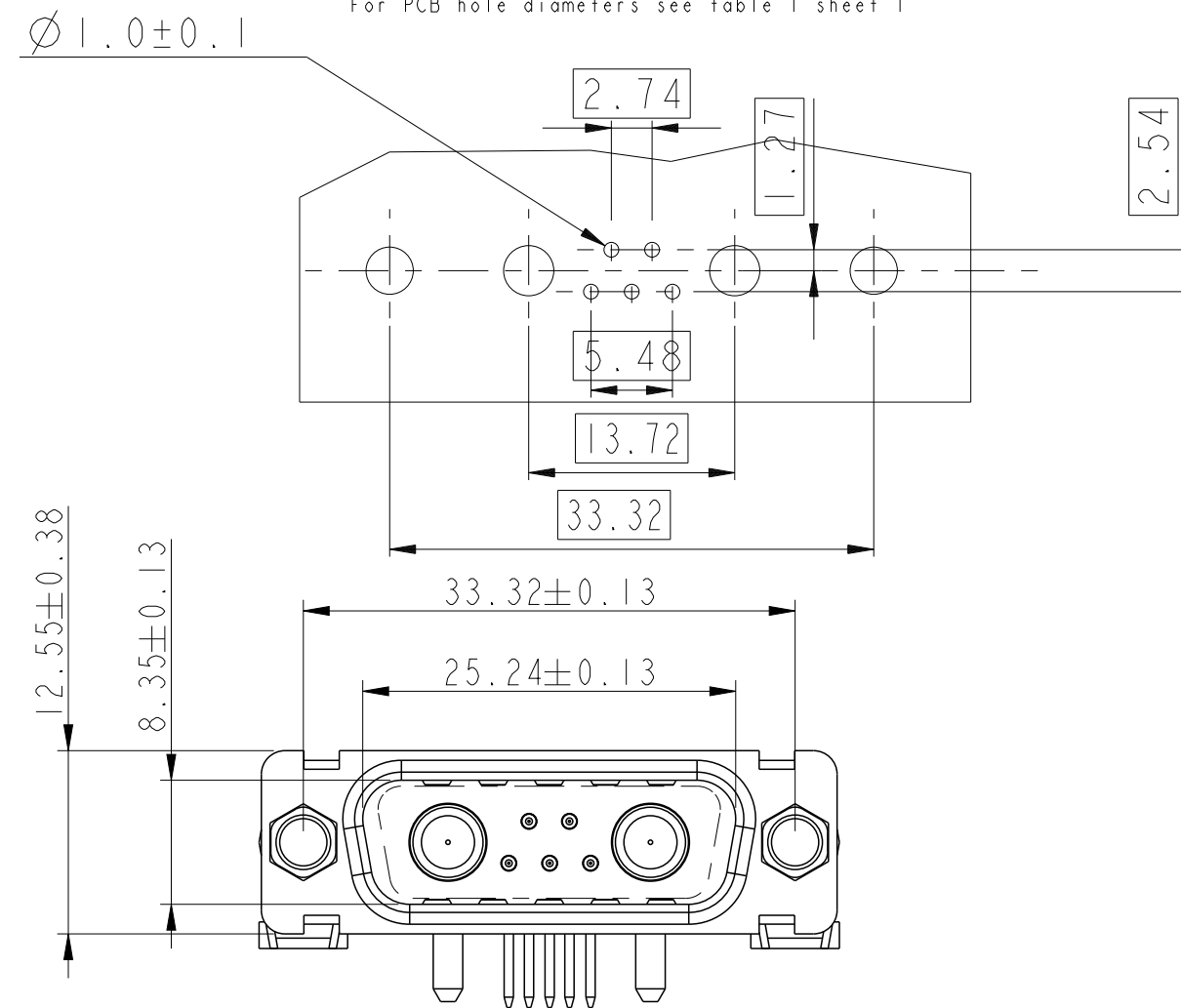
For PCB hole diameters see table I sheet I



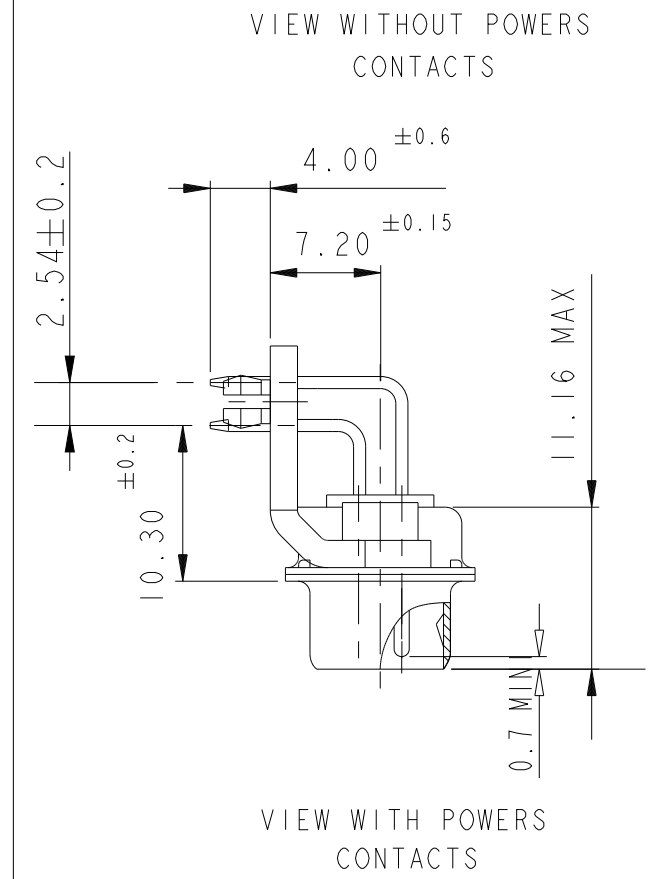
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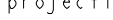
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table I sheet I



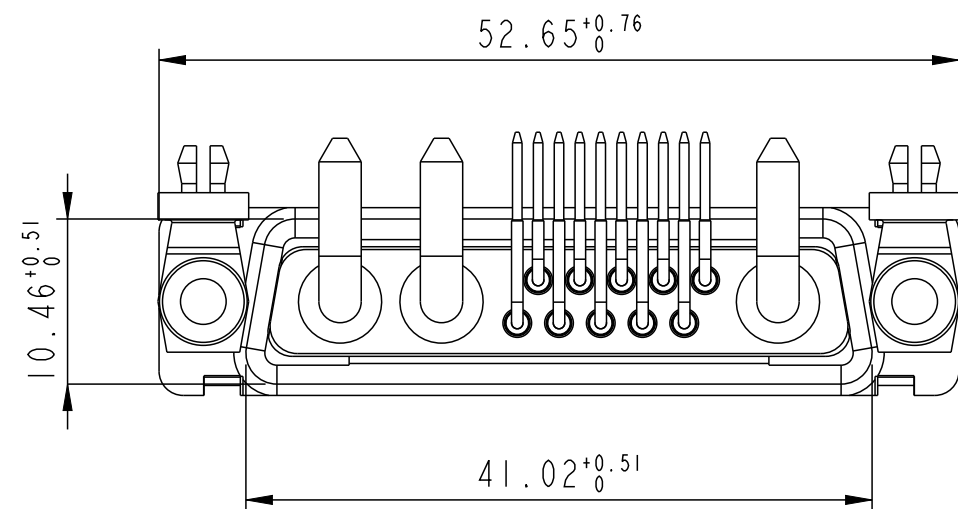
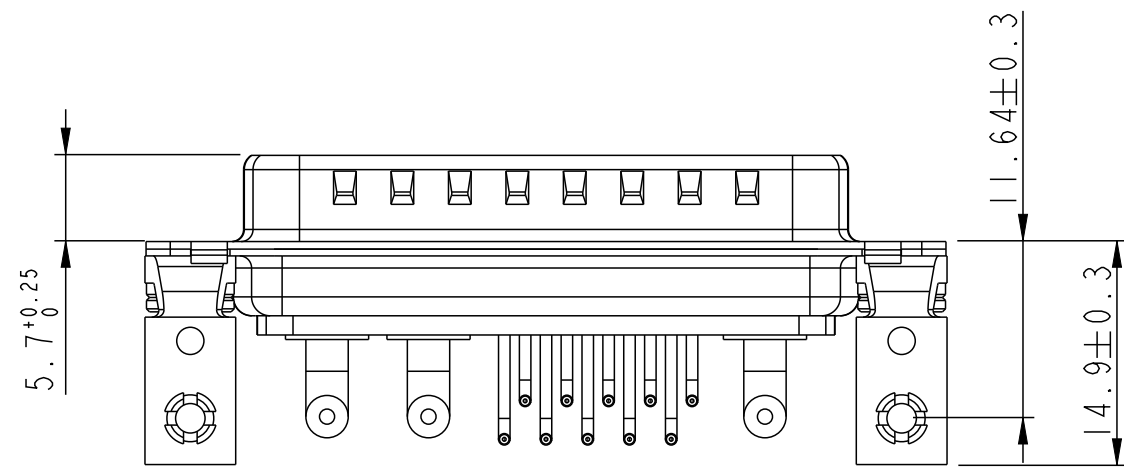
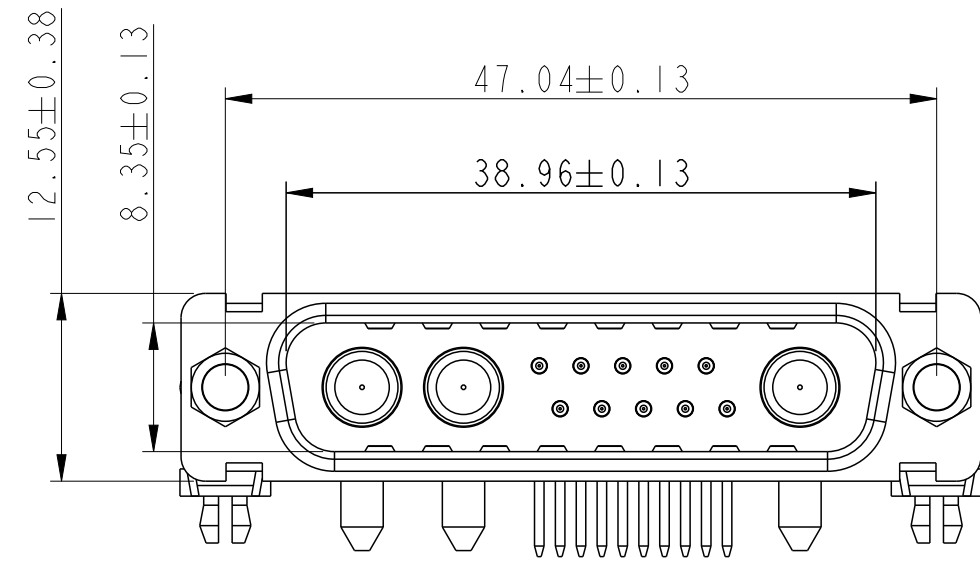
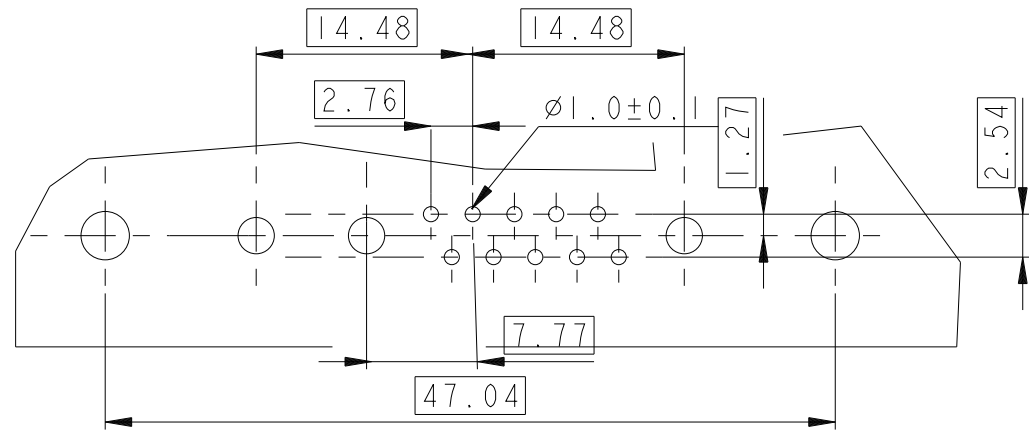
SIDE VIEW FOR ALL LAYOUTS



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tolerance std		eng		Gregar Mathew		2019/11/11						A2		2:1			
ISO 1101 ISO 406		chr		-		-						ecn no		ELX-133009-1			
		appr		Varma Sudhir		2019/11/12		product family		D SUB -		rel level		Released			
surface		linear		Amphenol FCi		title		SUB MALE DW EUROPE FOOT PRINT		dwg no		C01-8639-2304c		rev			
																±0.30	
																±0.10	

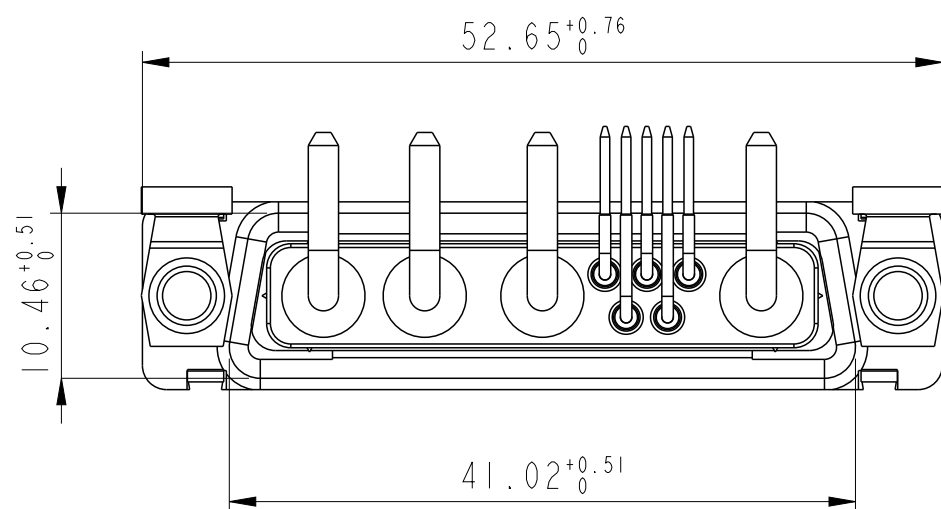
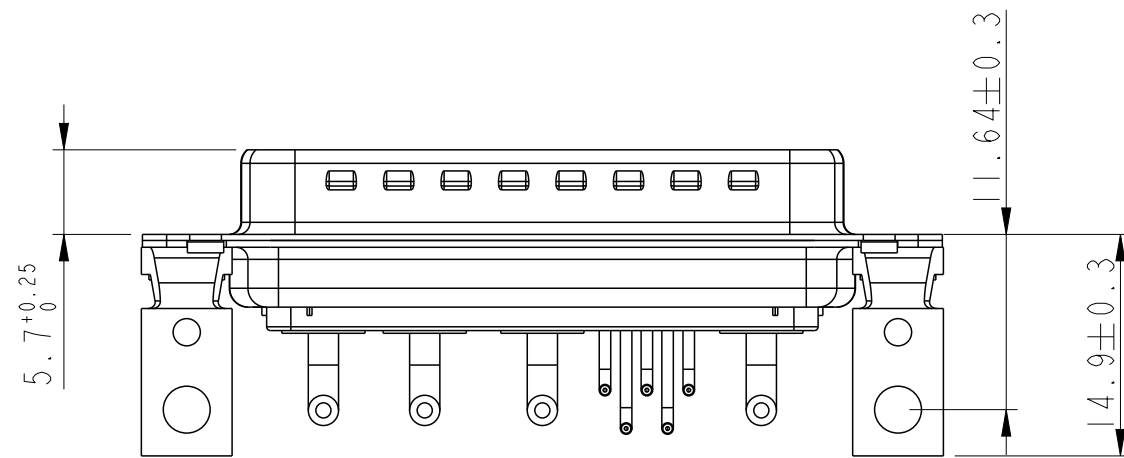
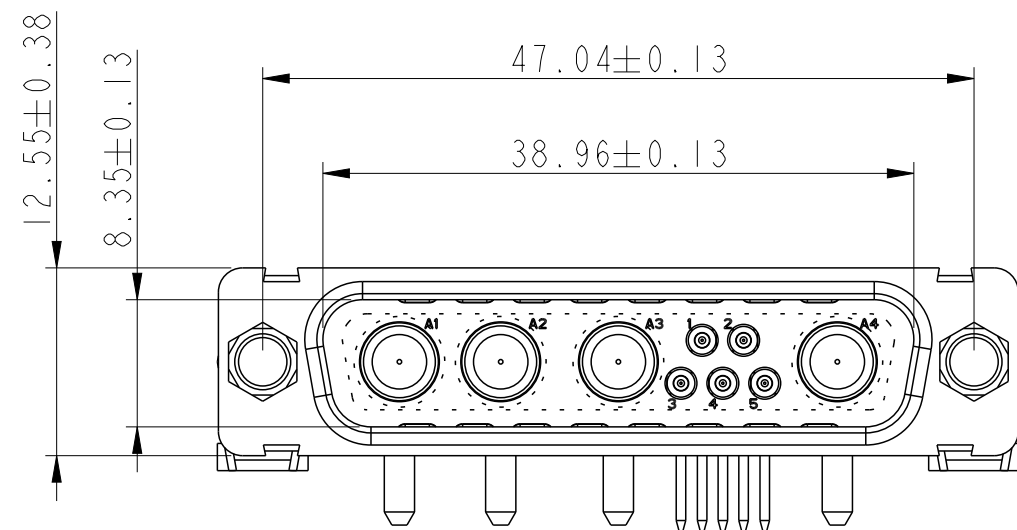
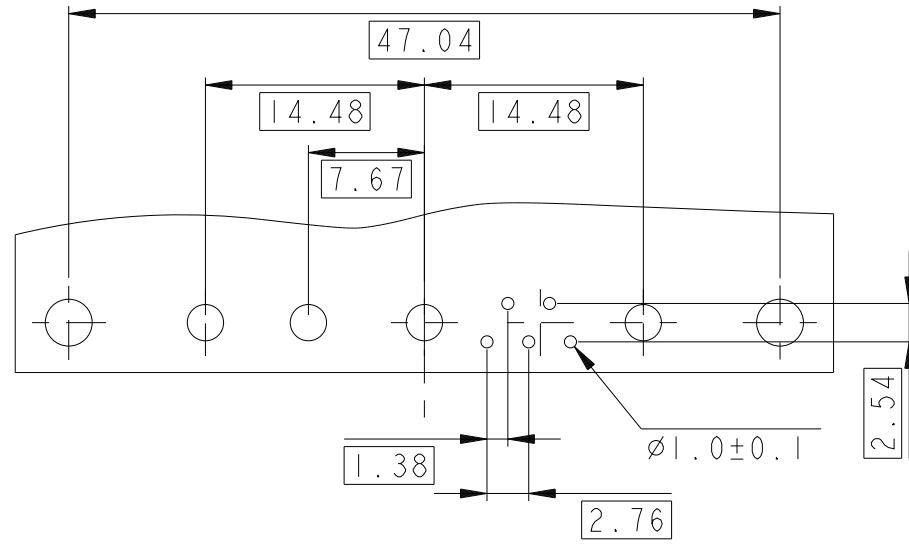
13W3

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



9W4

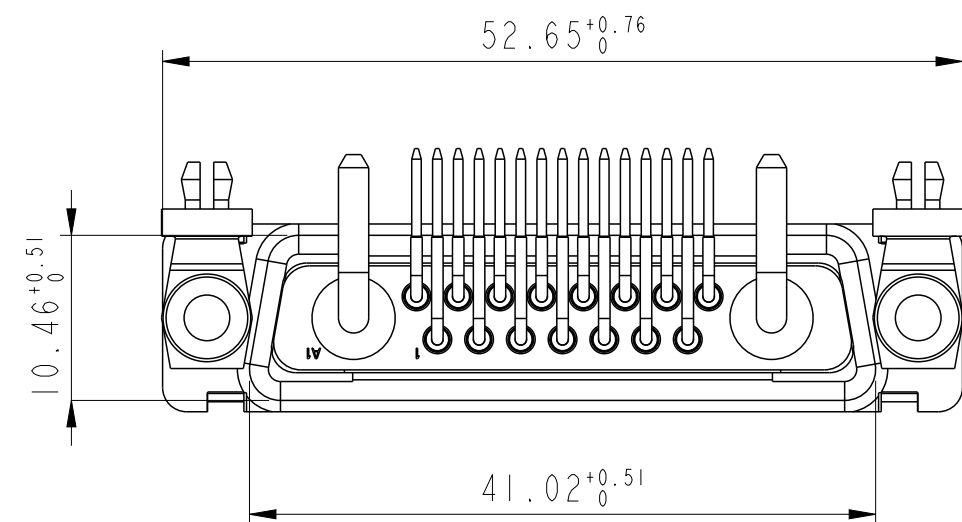
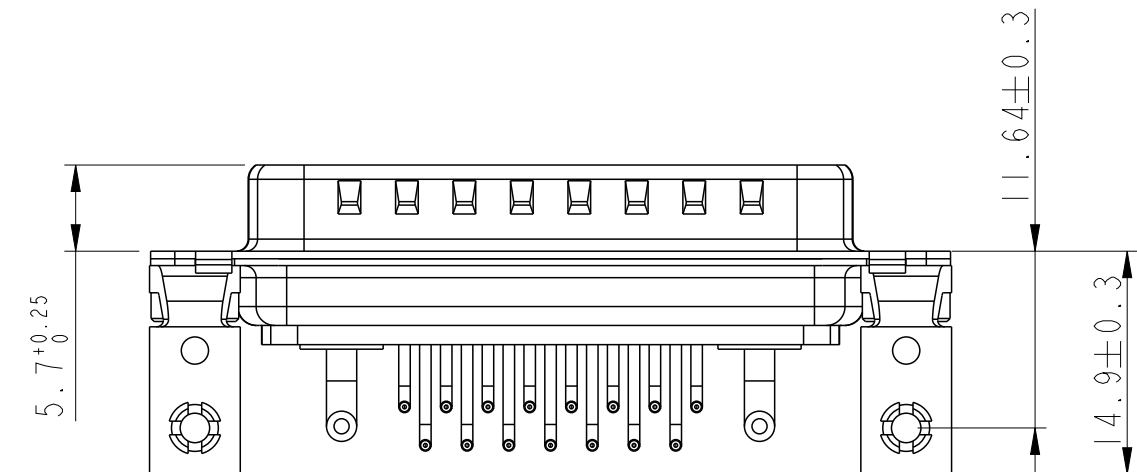
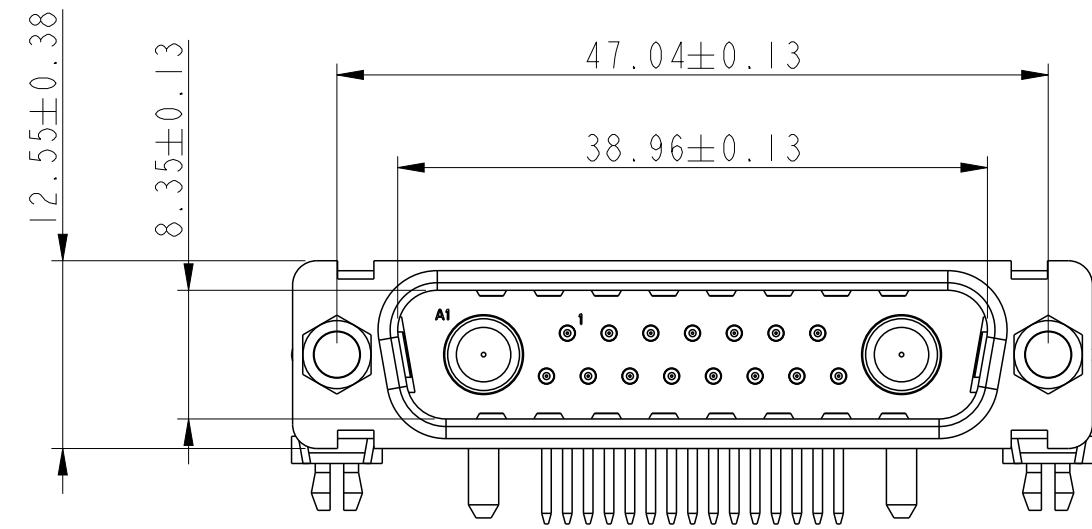
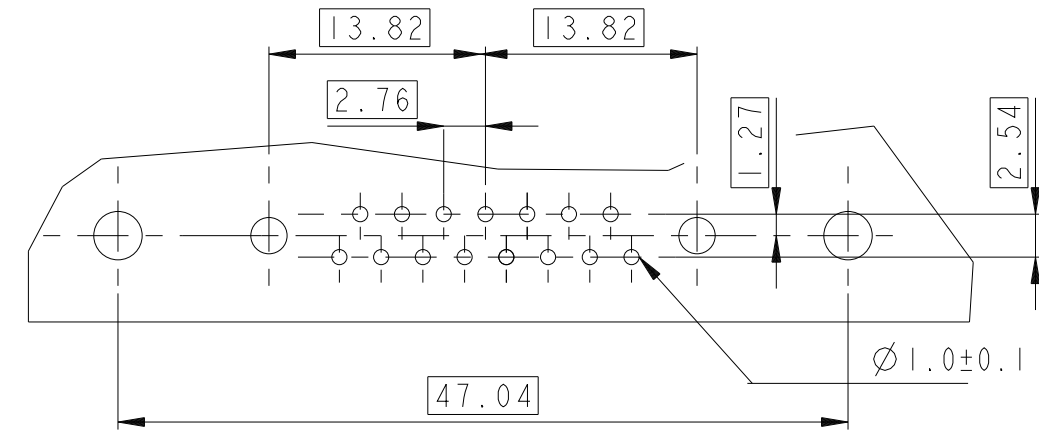
LAYOUT AND CONNECTOR DIMENSIONS
For PCB hole diameters see table I sheet I

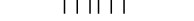


Floating signal contacts

17W2

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



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tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng		Gregar Mathew		2019/11/11						ecn no		ELX-133009-1		rel level		Released	
ISO 1101				chr		-		-													
ISO 406				appr		Varma Sudhir		2019/11/12													
								product family				D SUB -									
surface		linear		Amphenol FCi		title		SUB MALE DW EUROPE FOOT PRINT		MIXED POWER RIGHT ANGL SOLDER		dwg no		C01-8639-2304c		rev		E			
		0.X																		±0.30	
		0.XX																		±0.10	
		0.XXX																			
ISO 1302		angular																			
		0°																			
		±0.005																			
		±2°																			

21W1

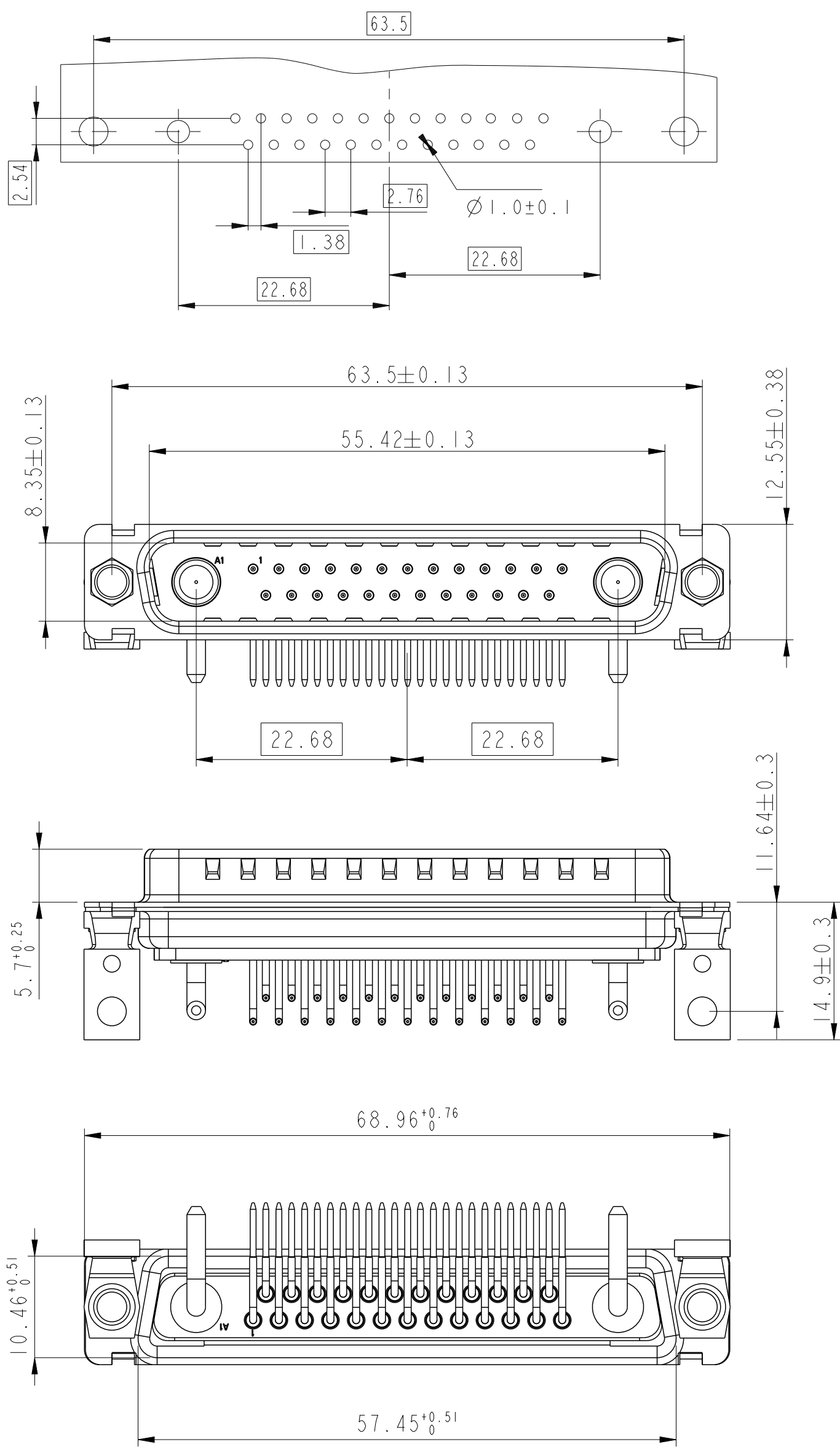
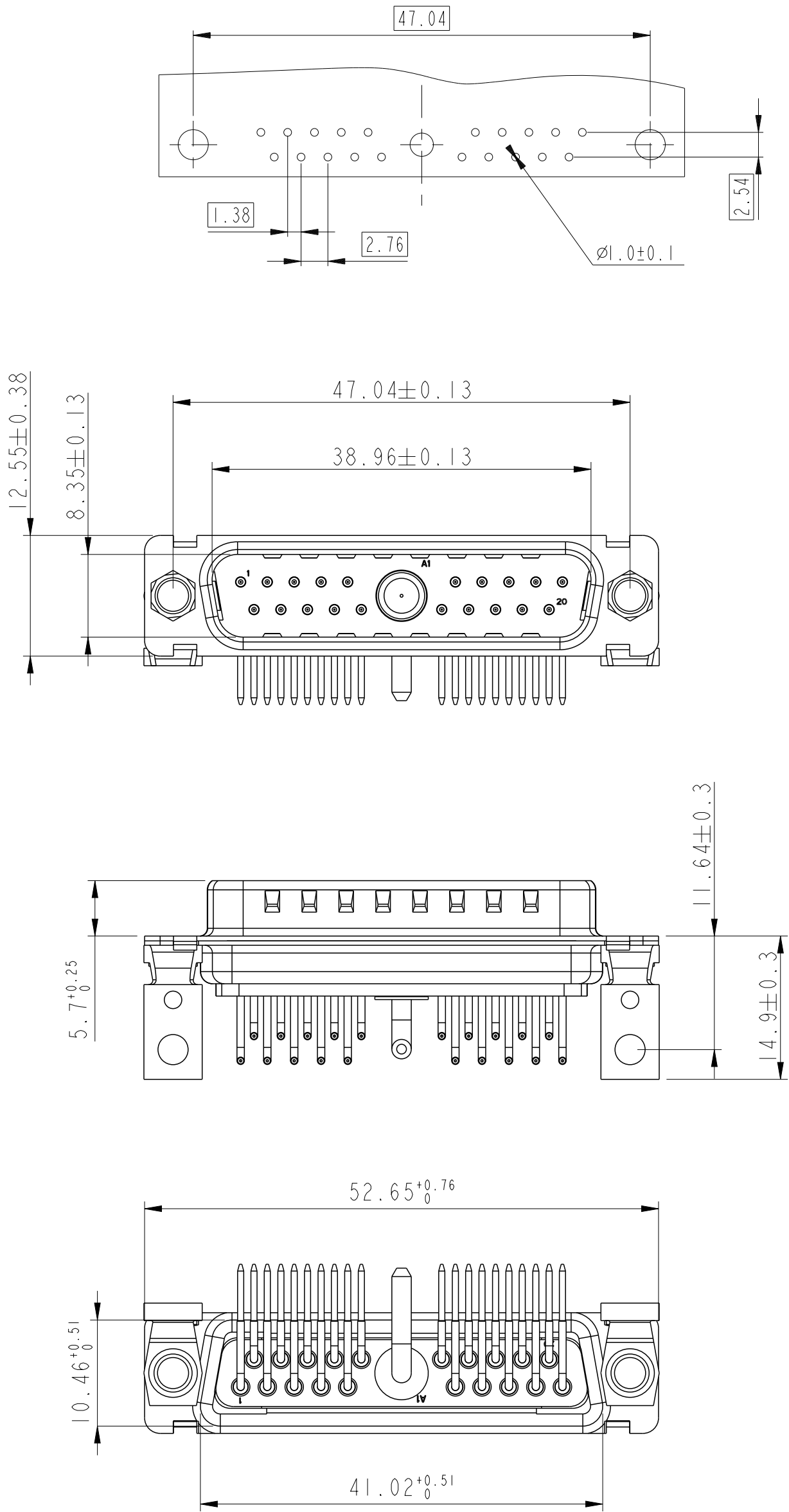
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table I sheet I

27W2

LAYOUT AND CONNECTOR DIMENSIONS

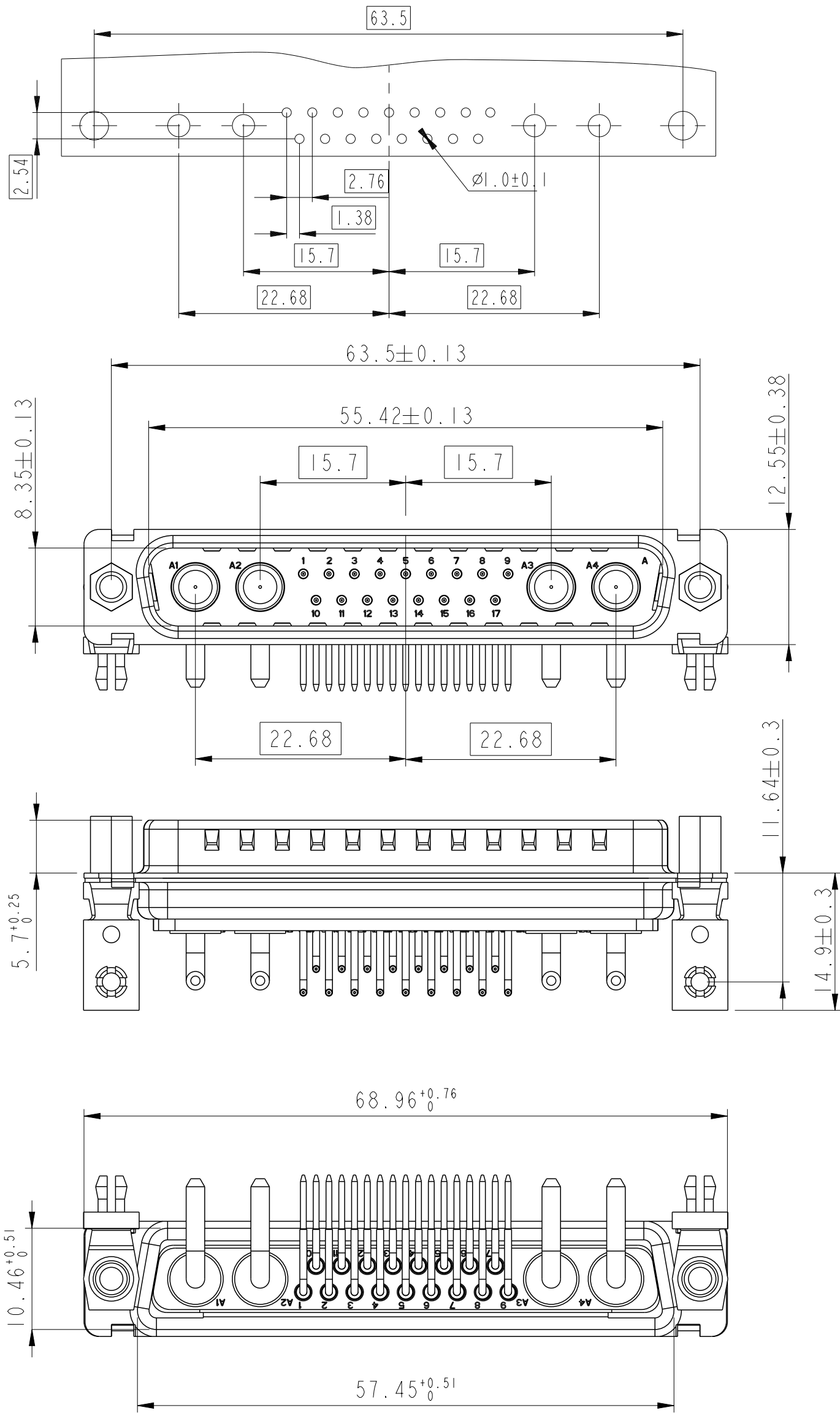
For PCB hole diameters see table I sheet I



spec ref			dr		1. Product Eng		2015/06/16		projection		mm		size		A2		scale		2:1			
tolerance std			eng		Gregar Mathew		2019/11/11						ecn no		ELX-133009-1							
ISO 1101			chr		-		-						rel level		Released							
ISO 406			appr		Varma Sudhir		2019/11/12						product family		D SUB-							
surface			linear		0.X		±0.30		Amphenol FCI		title		SUB MALE DW EUROPE FOOT PRINT		dwg no		C01-8639-2304c		rev		E	
					0.XX		±0.10															
					0.XXX		±0.005															
					angular		0°															
ISO 1302					cat. no.		-		Product - Customer Drw		sheet 6 of 7											

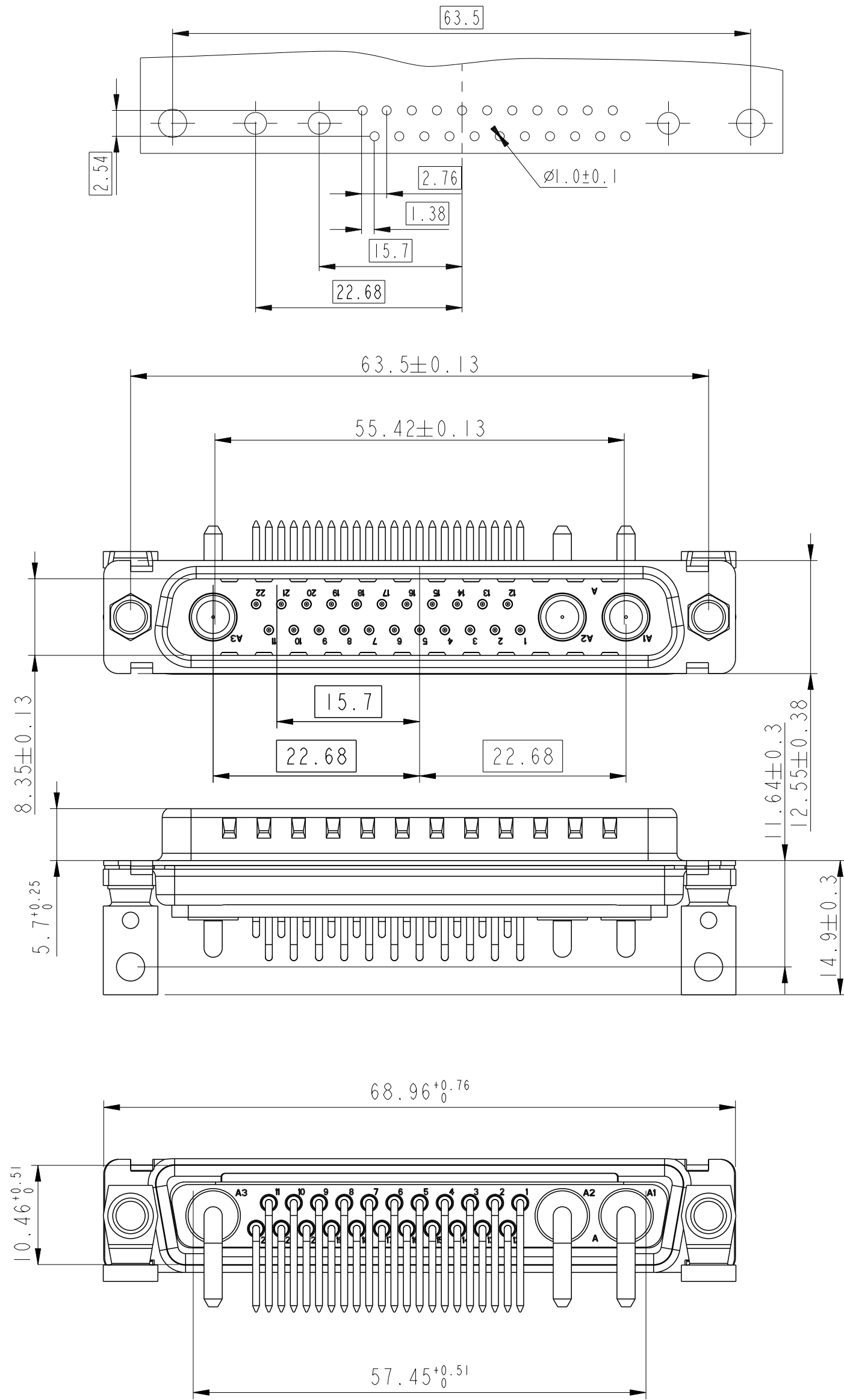
21WA4

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



25W3

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



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tolerance std		eng		Gregar Mathew		2019/11/11						A2		2:1									
ISO 1101		chr		-		-						ecn no		ELX-133009-1									
ISO 406		appr		Varma Sudhir		2019/11/12						product family		-		rel level		Released					
surface		linear		0.X		±0.30		Amphenol FCi		title		SUB MALE DW EUROPE FOOT PRINT		dwg no		C01-8639-2304c		rev		E			
ISO 1302				0.XX		±0.10																MIXED POWER RIGHT ANGL SOLDER	
				0.XXX		±0.05																	
		angular		0°		±2°																	