

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

DBL13W3P500G30LF

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

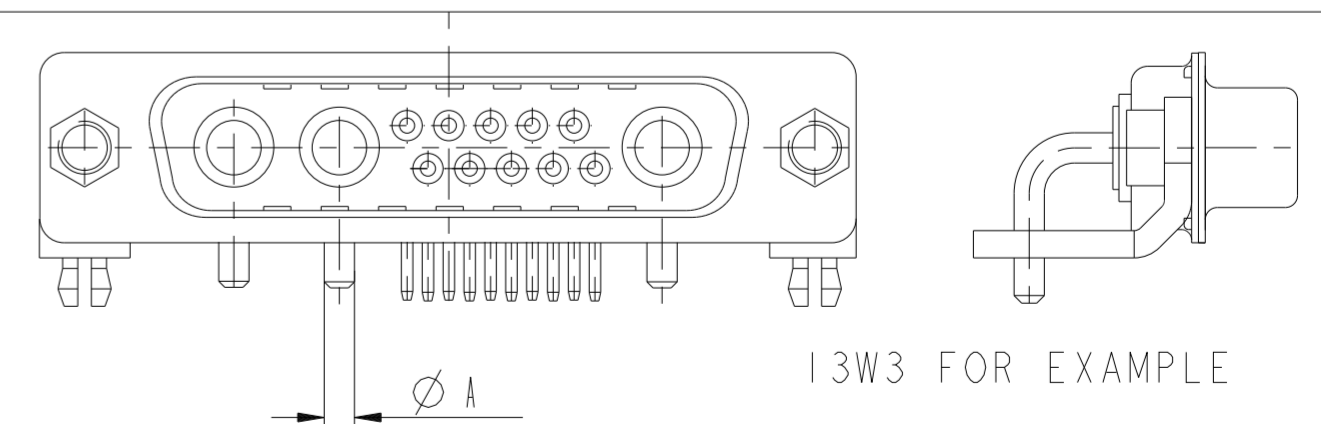
PCB accessories definition(see sheet 2)
A : without accessory
H : Metal brackets+harpoons for PCB 2.40mm
G : Metal brackets+harpoons for PCB 1.60mm
M : Metal brackets

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

See note RoHS

TABLE 1: PCB HOLE DIAMETERS

POWER CONTACTS			ACCESSORIES	SIGNAL CONTACT
30 A	2.00	∅2.40	∅3.10	∅1.00
40 A	2.80	∅3.10		
Max current Power	∅A±0.10	PCB HOLE ±0.10	PCB HOLE ±0.10	PCB HOLE ±0.10



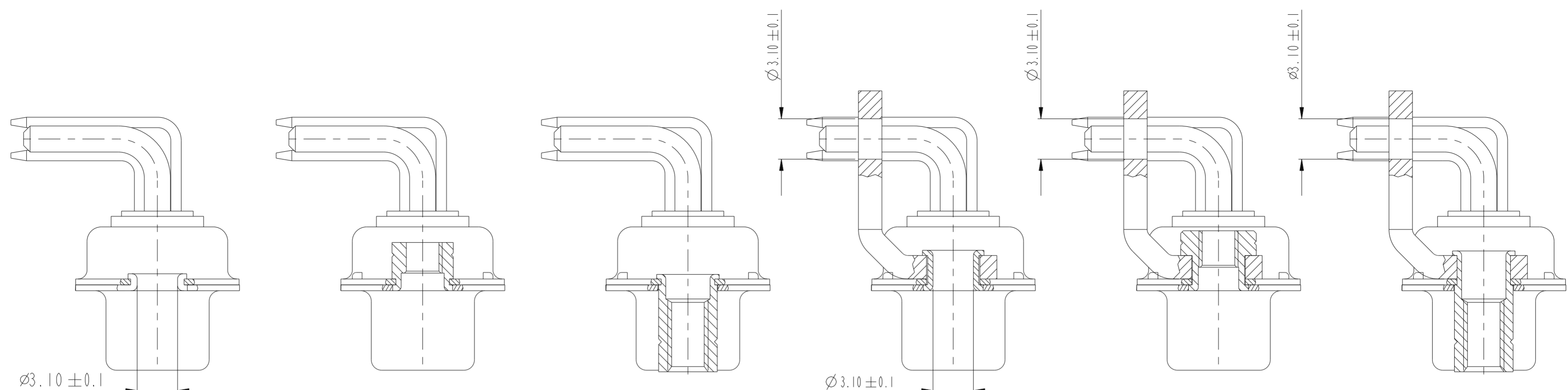
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ISO 1101 ISO 406	chr -	-				
TOLERANCES UNLESS OTHERWISE SPECIFIED			product family	-	-	-
surface	linear	0.X ±0.3 0.XX ±0.10.1 0.XXX ±0.05			SUB MALE DW EUROPE FOOT PRINT	
ISO 1302	angular	0° ±2°	MIXED POWER RIGHT ANGL SOLDER		cat. no. C01-8639-2304c	rev E
			Product - Customer Drw		sheet 1 of 7	

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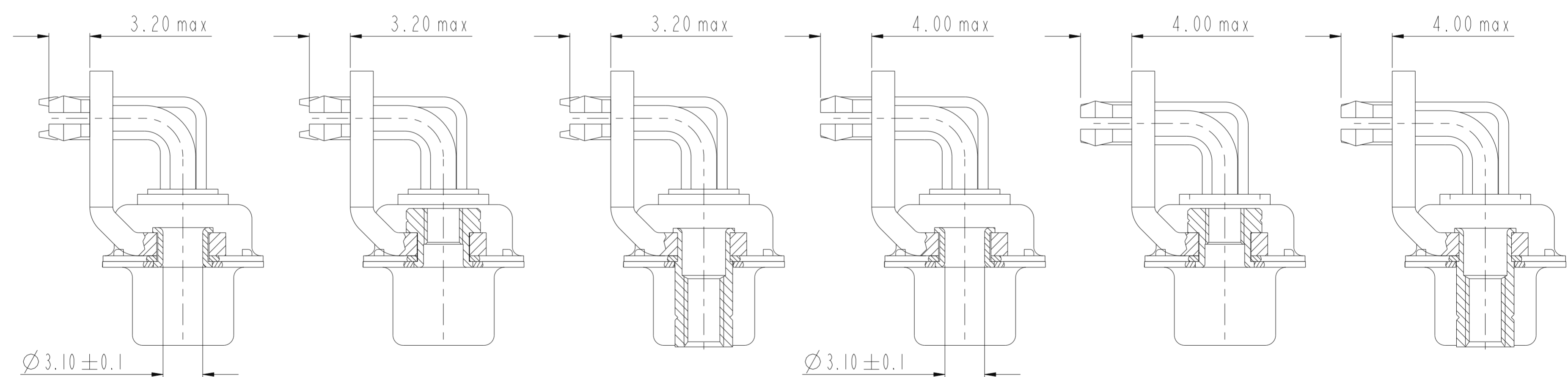
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FRONT ACCESSORY	Blank Without	L insert M3 O insert UNC 4.40	V insert UNC 4.40	Blank Without	L insert M3 O insert UNC 4.40	V insert UNC 4.40
PCB ACCESSORIES	A Without	A Without	A Without	M Metal brackets	M Metal brackets	M Metal bracket



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-33009-1	rel level	Released
ISO 1101 ISO 1101 ISO 406	chr	-	appr						
surface	linear	0.X	±0.30			SUB MALE DW EUROPE FOOT PRINT MIXED POWER RIGHT ANGL SOLDER		C01-8639-2304c	rev E
ISO 1302		0.XX	±0.10						
	angular	0°	±2°						
cat. no.		-		Product - Customer Drw		sheet 2 of 7			

PDS: Rev :E

STATUS:Released

Printed: Nov 12, 2019

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

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

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxP543A40LF	40	500	without	without
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

shell size *
 E 5W1
 A 11W1
 A 7W2
 B 21W1
 B 17W2
 B 13W3
 B 9W4
 C 25W3
 C 21WA4
 C 27W2

LAYOUTS
xWx

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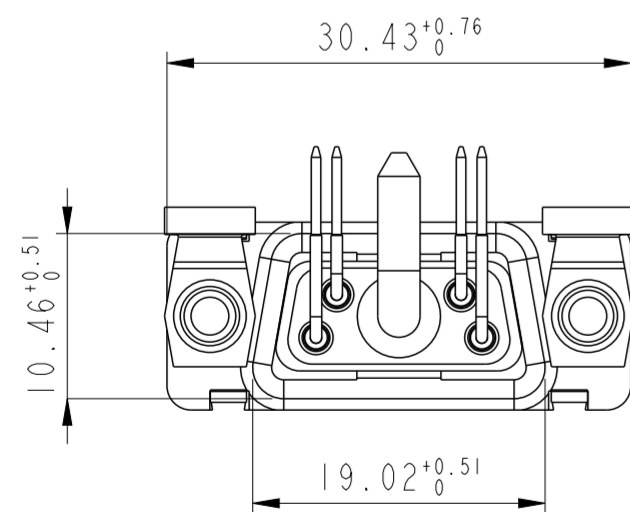
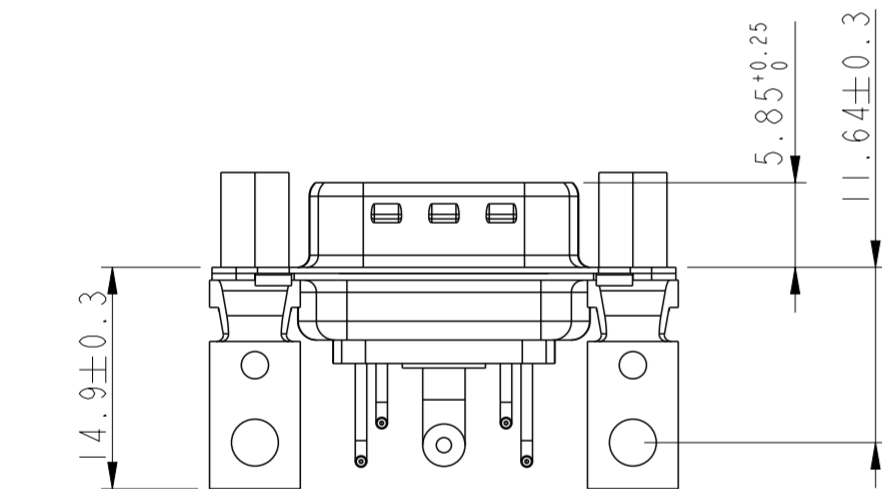
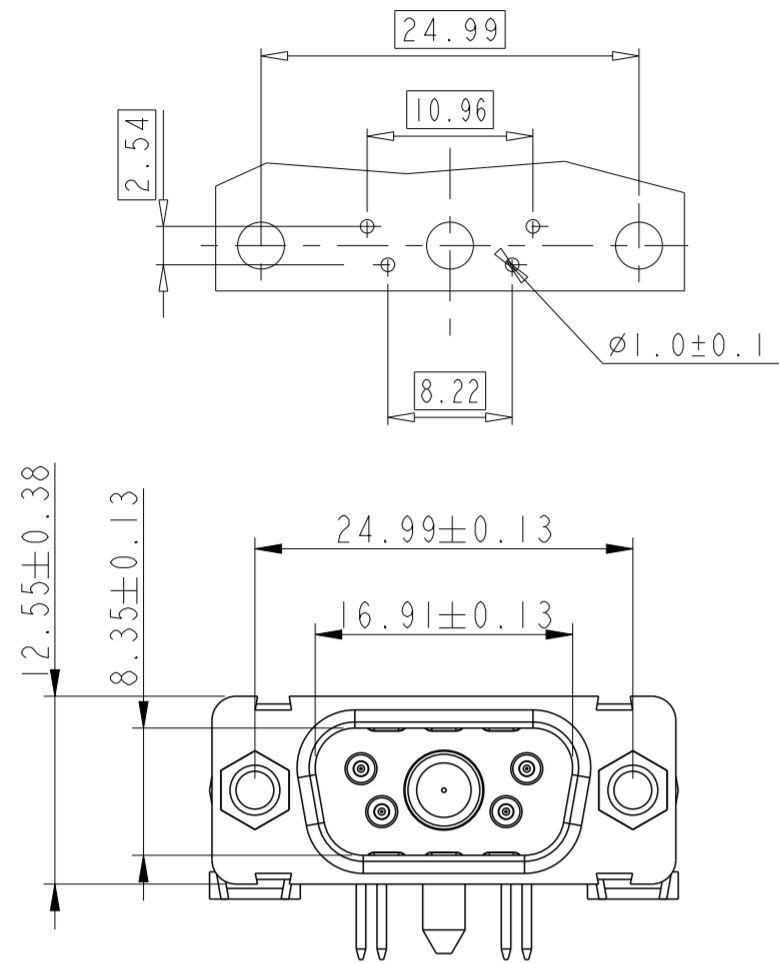
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tolerance std	eng Gregor Mathew	2019/11/11		mm	ecn no ELX-33009-1	rel level Released
ISO 1101 ISO 406	chr -	-				
surface	linear	0.X ±0.30 0.XX ±0.10 0.XXX ±0.05	Amphenol FCI		SUB MALE DW EUROPE FOOT PRINT	
	angular	0° ±2	MIXED POWER RIGHT ANGL SOLDER		C01-8639-2304c	
ISO 1302	appr Varma Sudhir	2019/11/12	product family	D SUB	cat. no.	Product - Customer Drw sheet 3 of 7

5W1

LAYOUT AND CONNECTOR DIMENSIONS

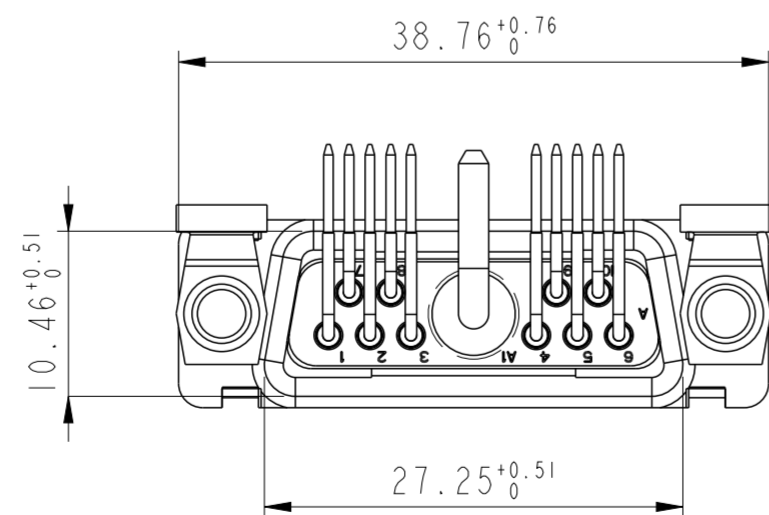
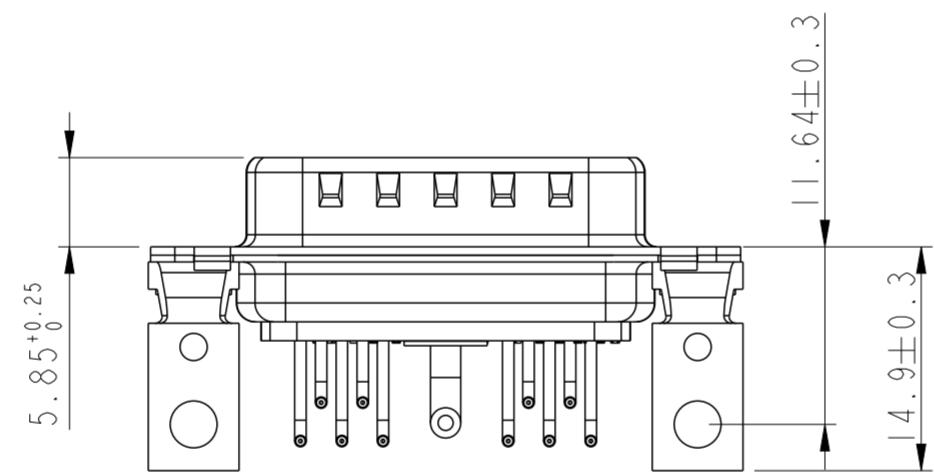
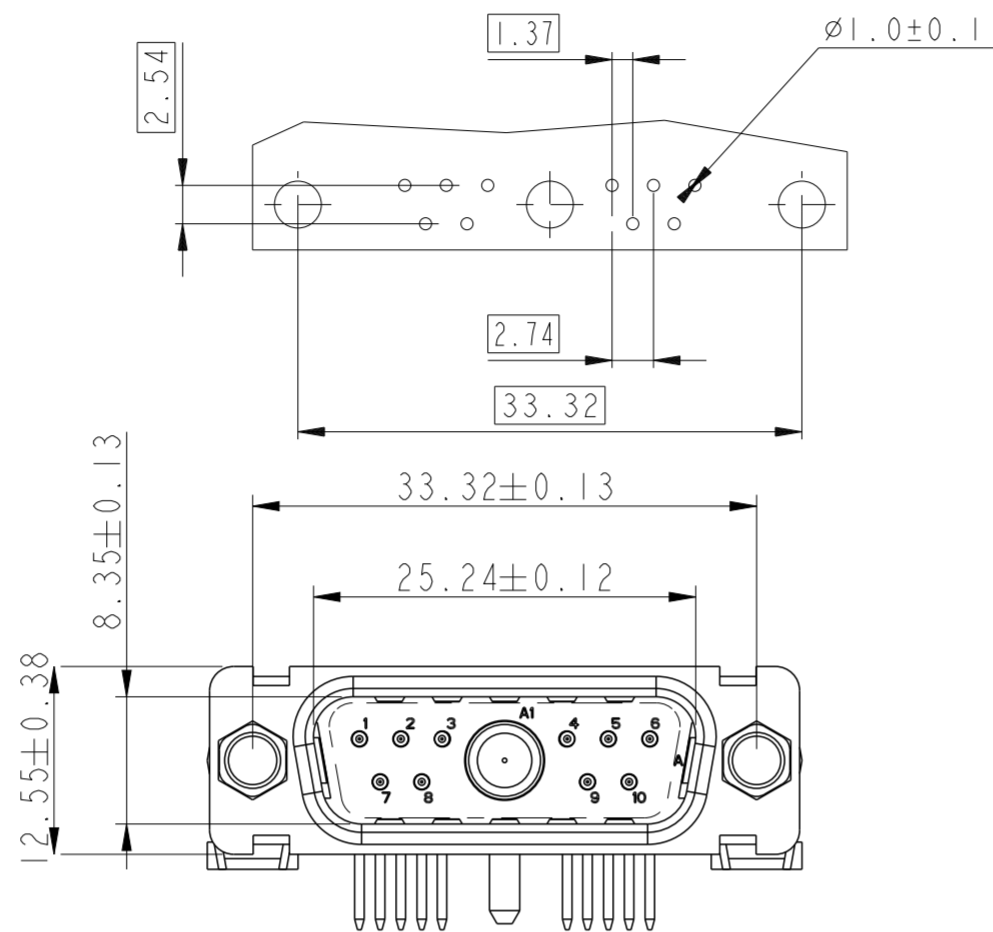
For PCB hole diameters see table I sheet 1



11W1

LAYOUT AND CONNECTOR DIMENSIONS

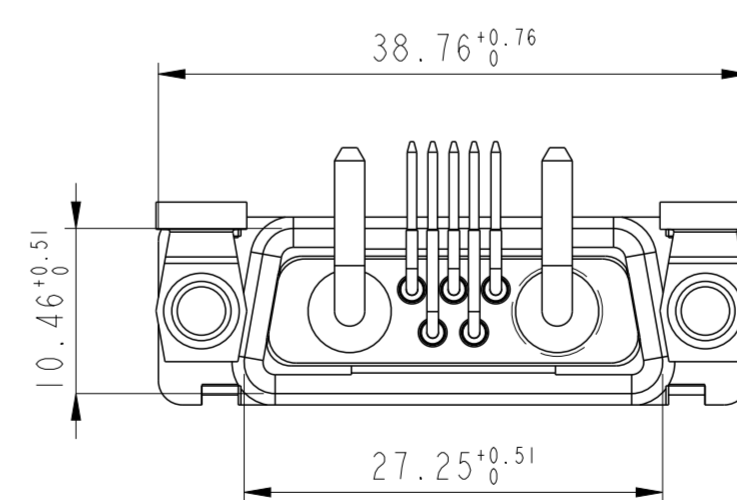
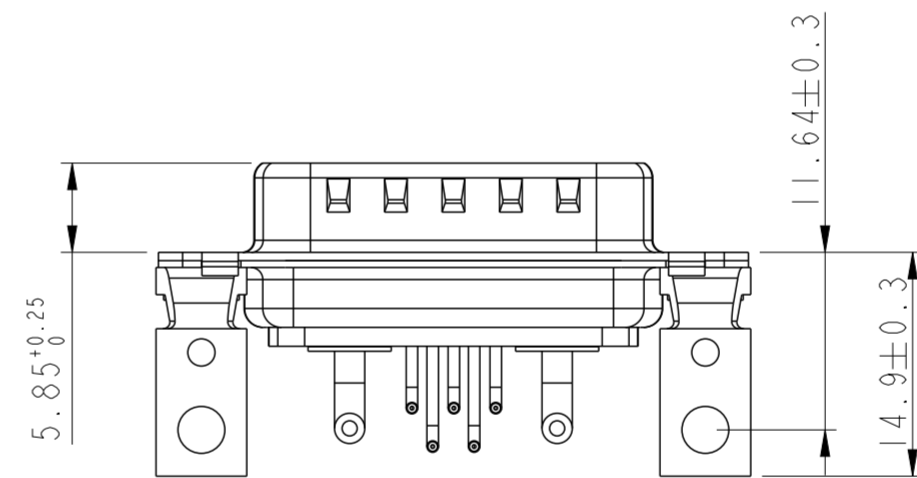
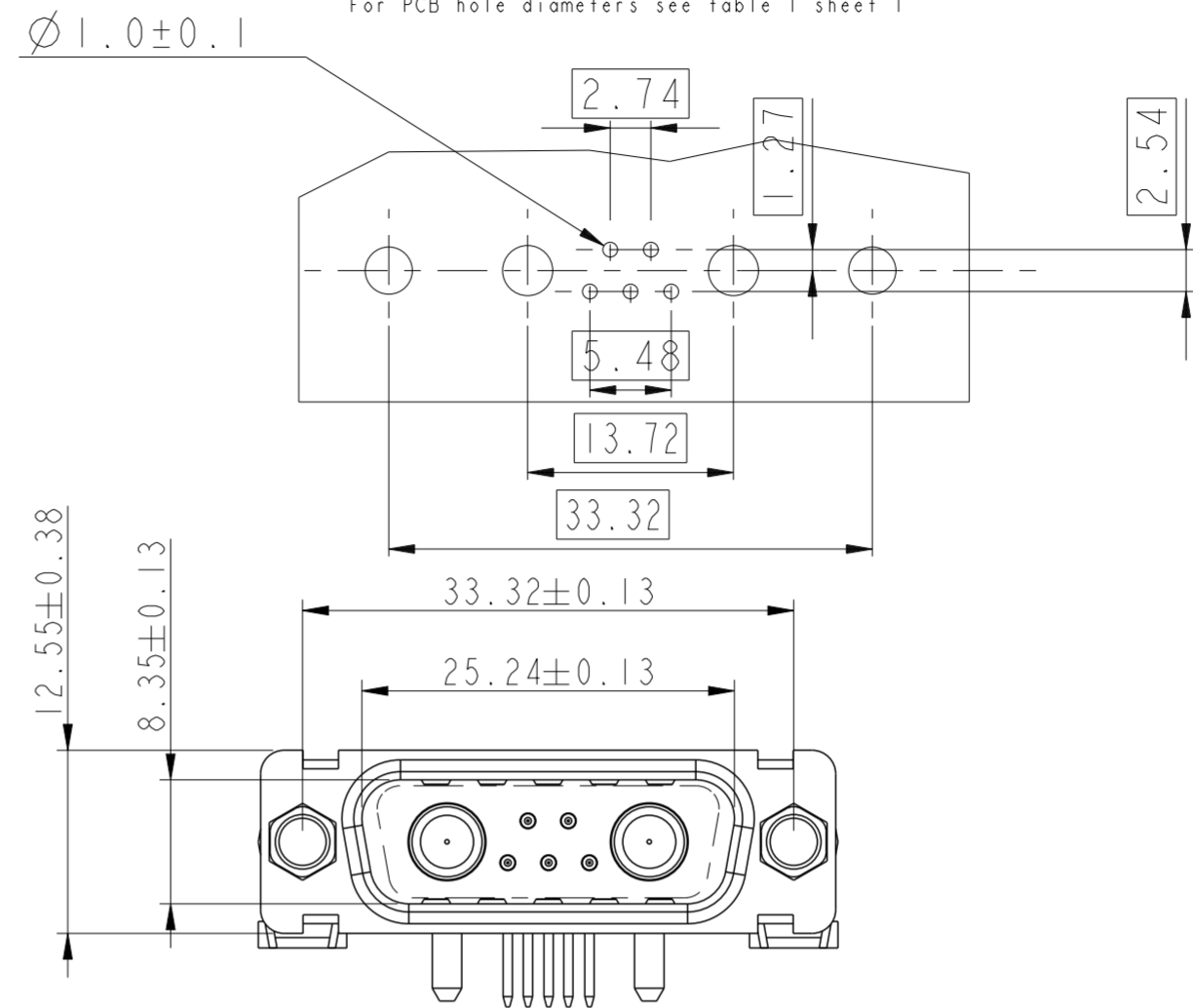
For PCB hole diameters see table I sheet 1



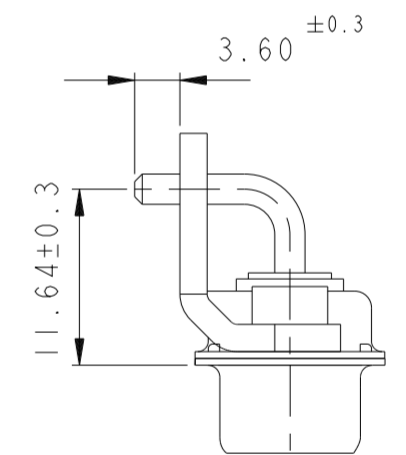
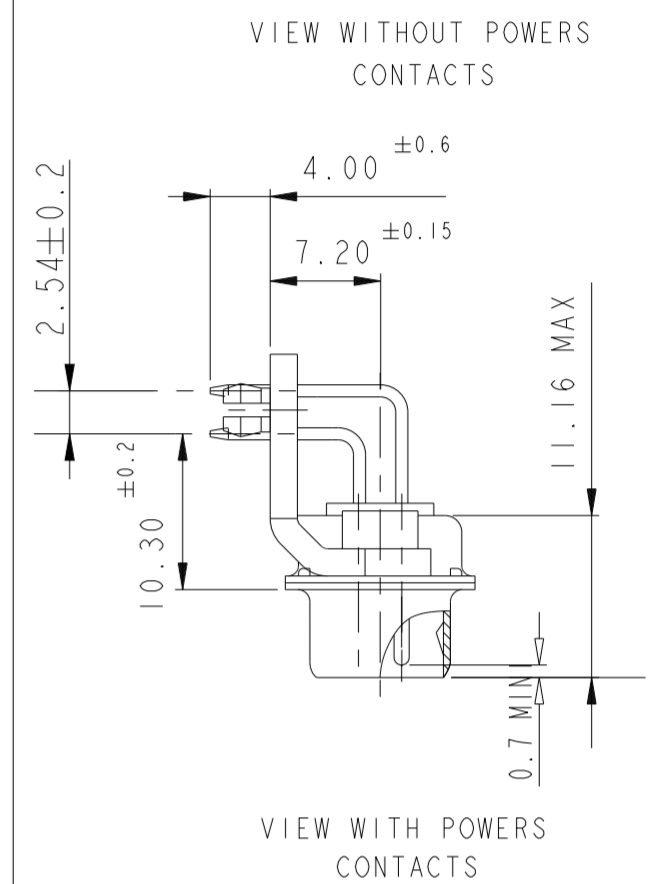
7W2

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table I sheet 1



SIDE VIEW FOR ALL LAYOUTS



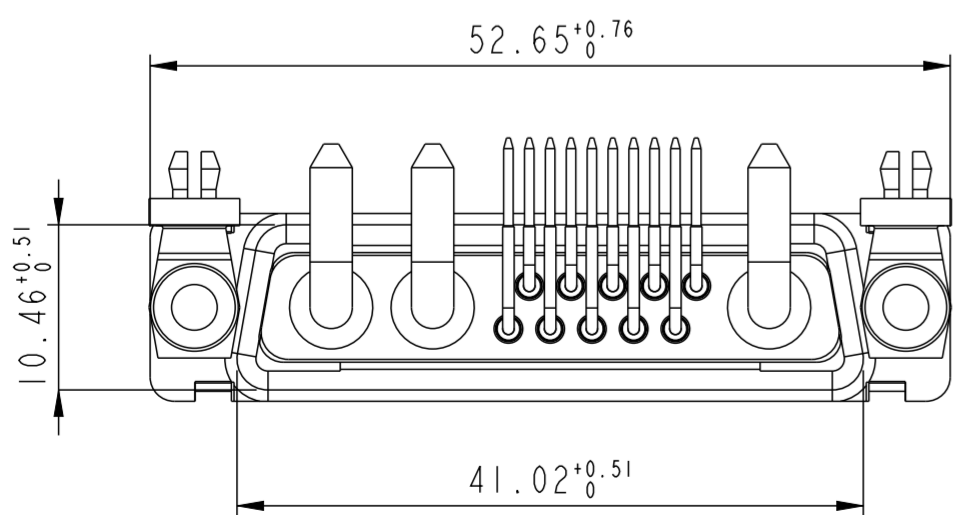
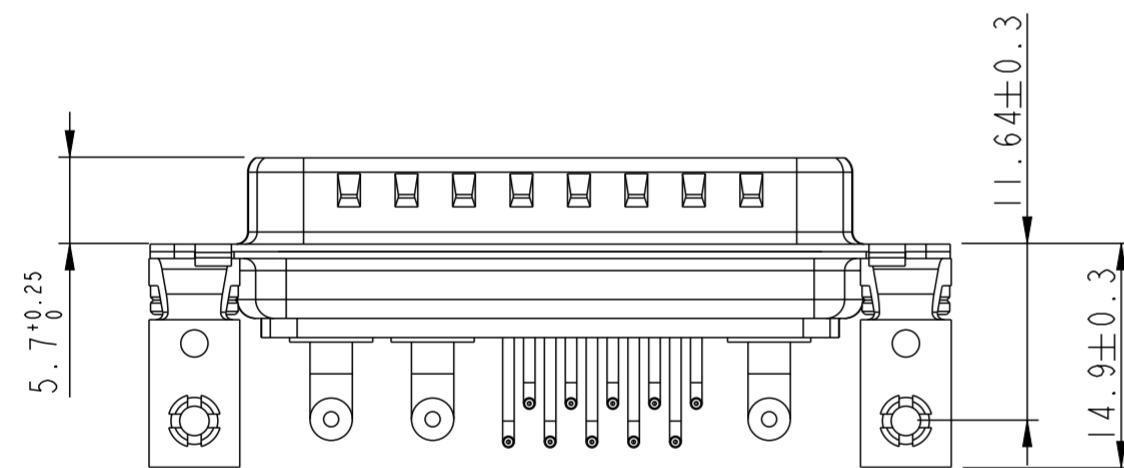
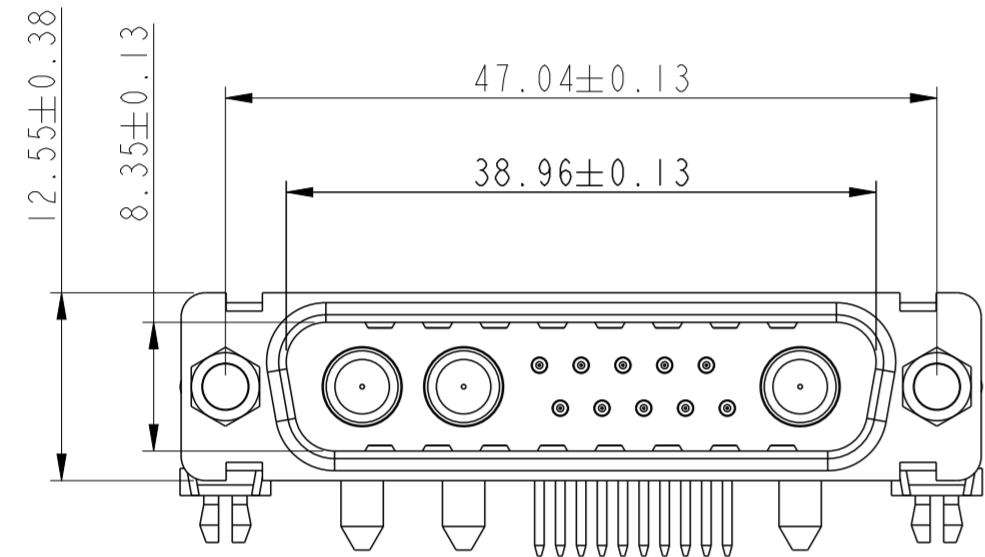
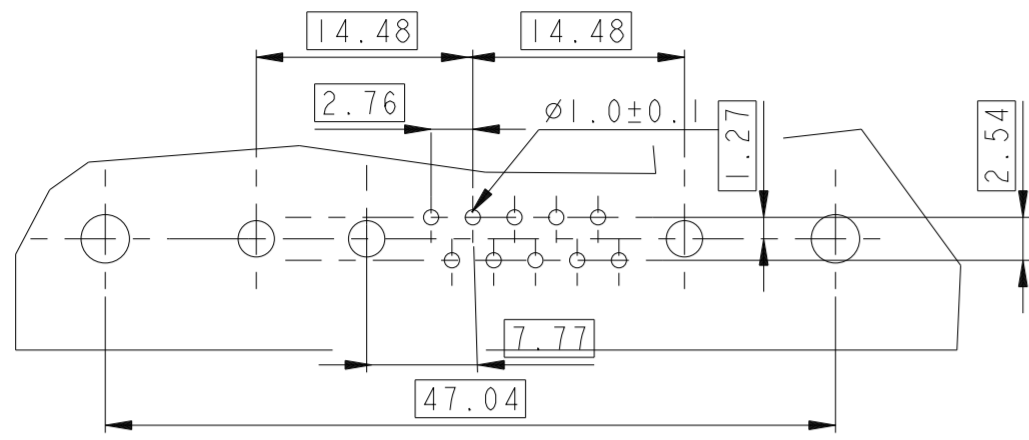
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tolerance std	eng	Gregar Mathew	2019/11/11		mm	ecn no	ELX-33009-1	rel level	Released
ISO 1101	chr	-	2019/11/12						
ISO 406	appr	Varma Sudhir	2019/11/12	product family	D SUB	rel level	Released		
surface	linear	0.X	±0.30	Amphenol FCI		dwg no	C01-8639-2304c	rev	E
ISO 1302	angular	0.XX	±0.10	TITLE		cat. no.	-	Product - Customer Drw	sheet 4 of 7
		0.XXX	±0.05	SUB MALE DW EUROPE FOOT PRINT					
		0°	±2°	MIXED POWER RIGHT ANGL SOLDER					

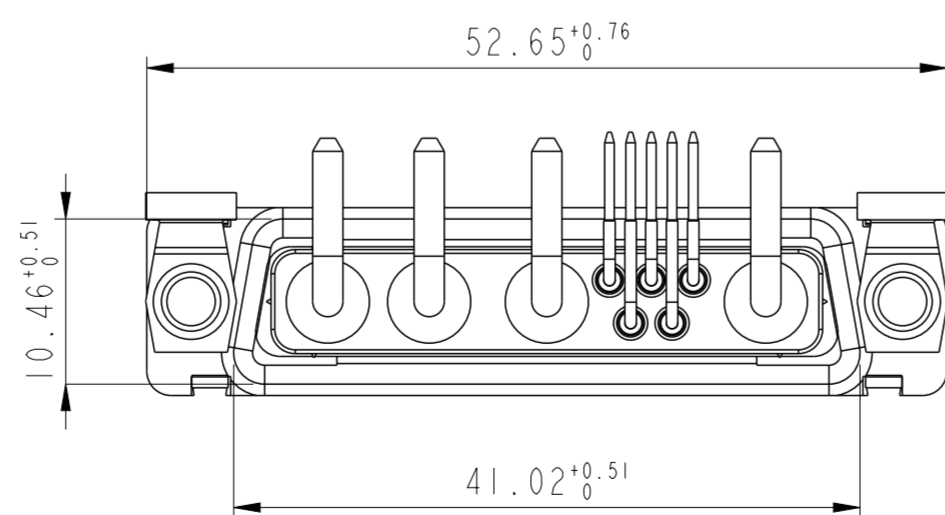
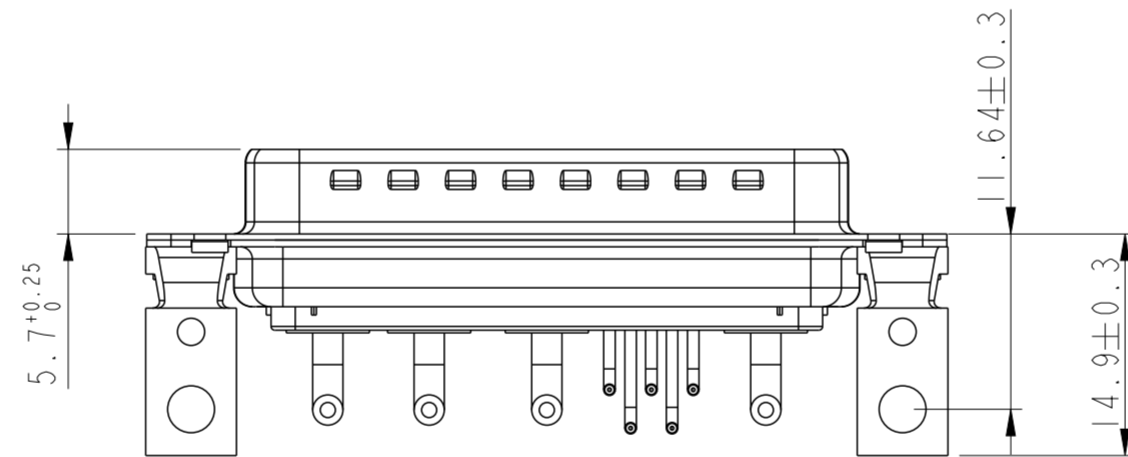
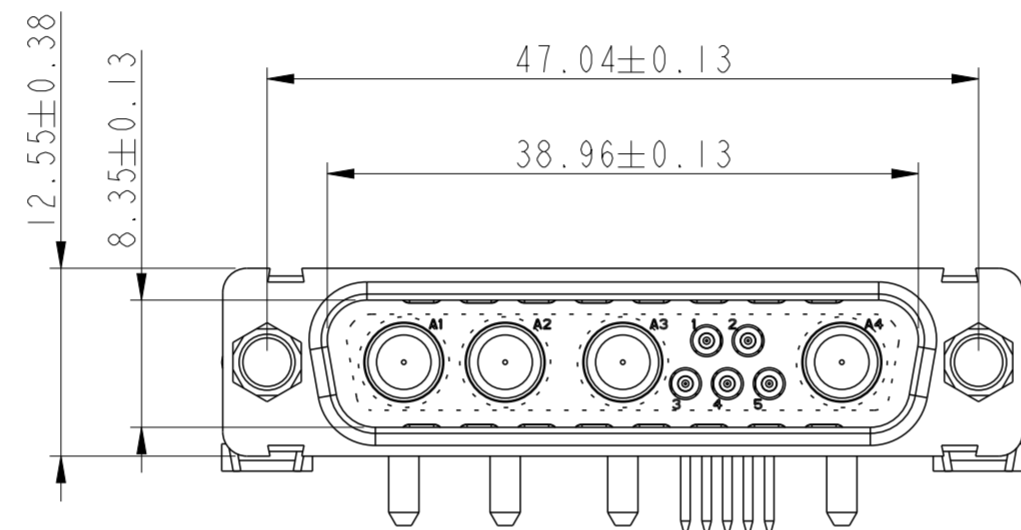
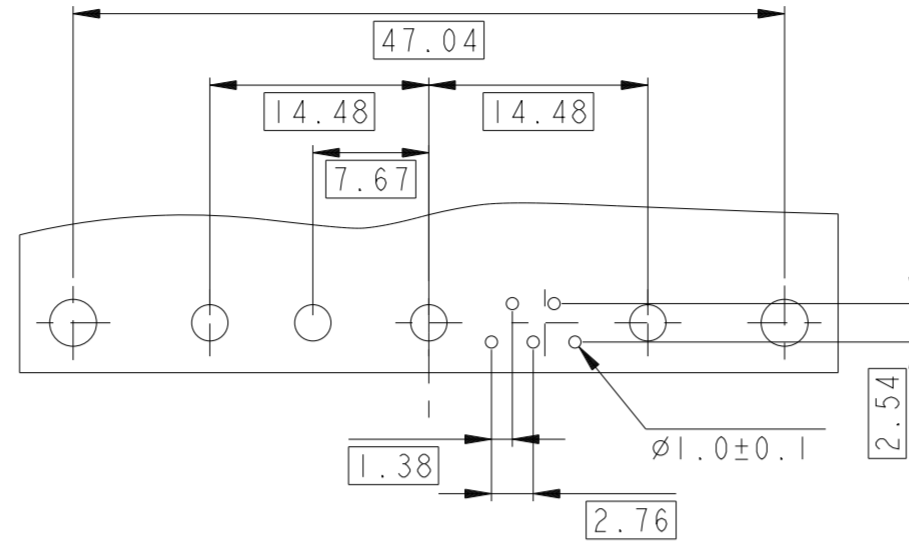
13W3

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



9W4

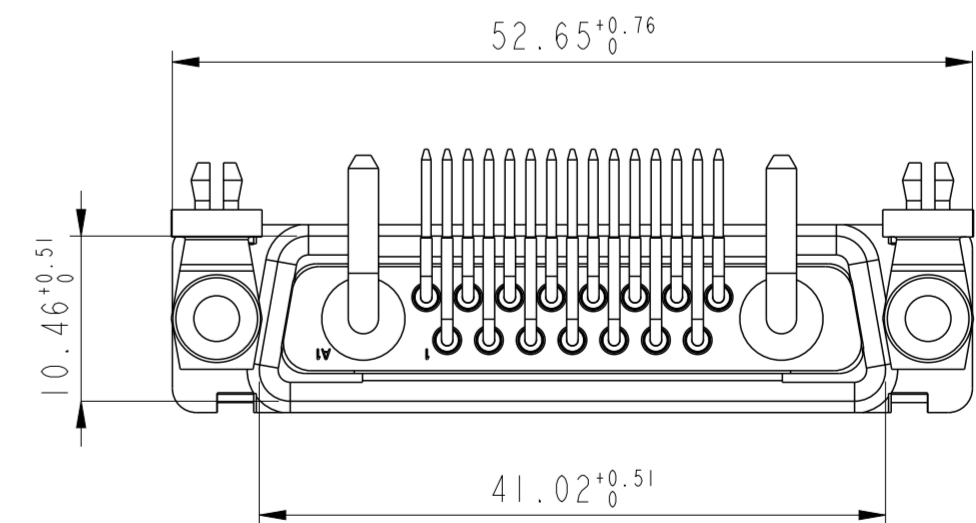
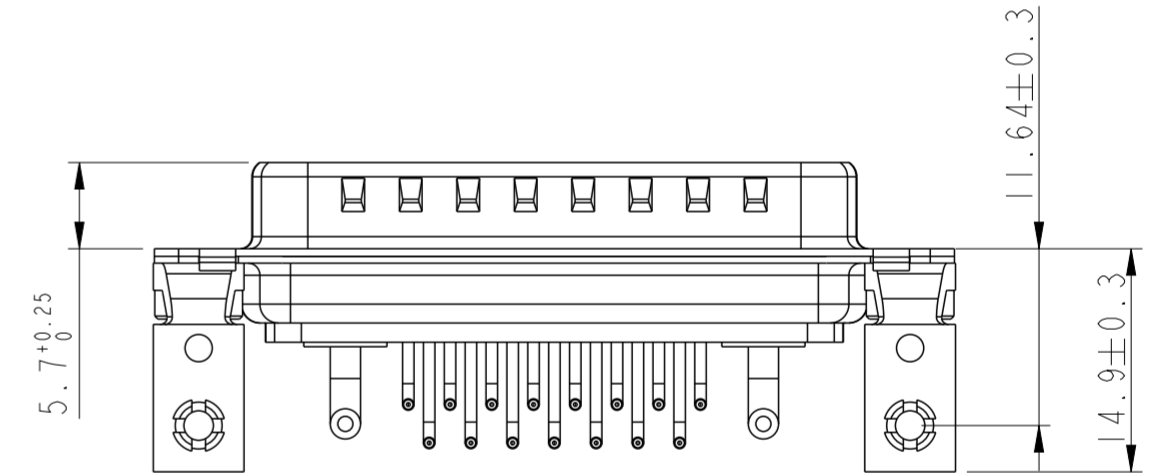
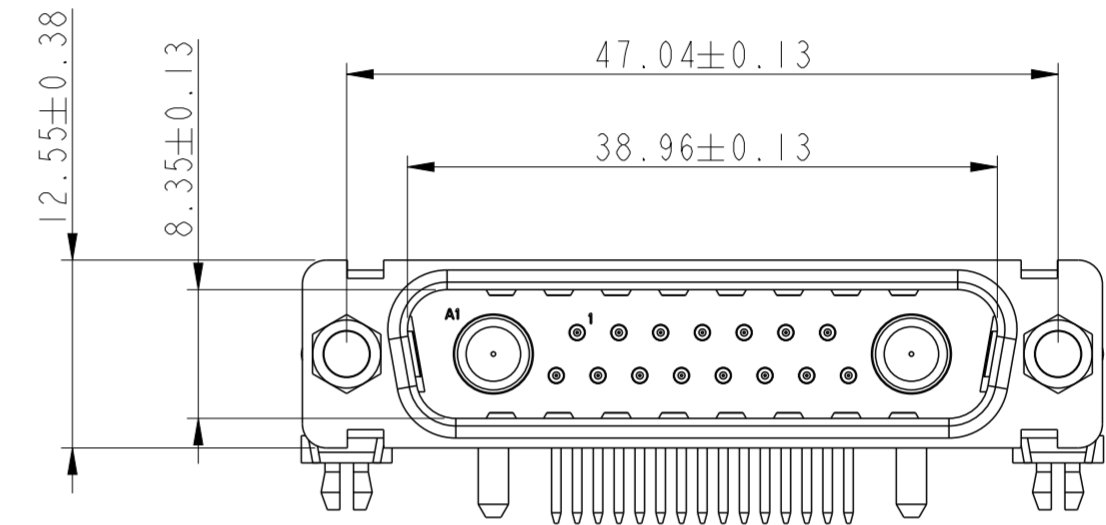
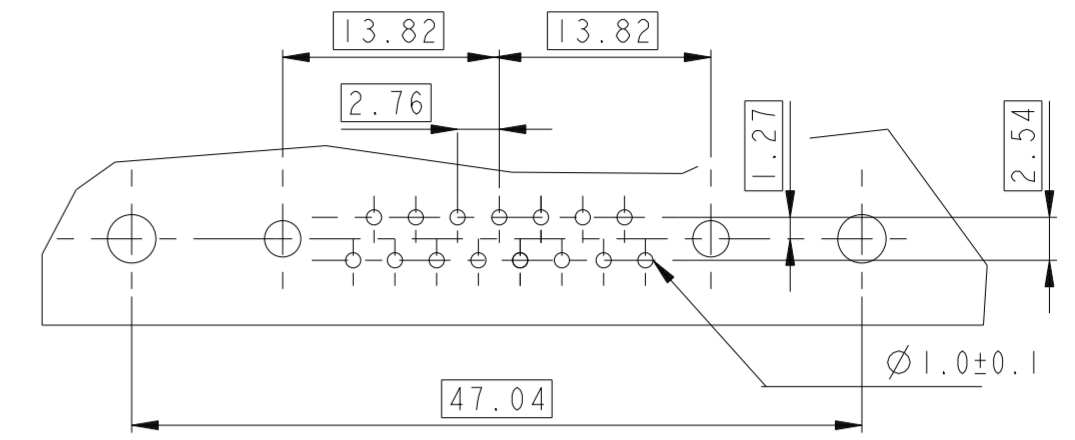
LAYOUT AND CONNECTOR DIMENSIONS
For PCB hole diameters see table I sheet I



Floating signal contacts

17W2

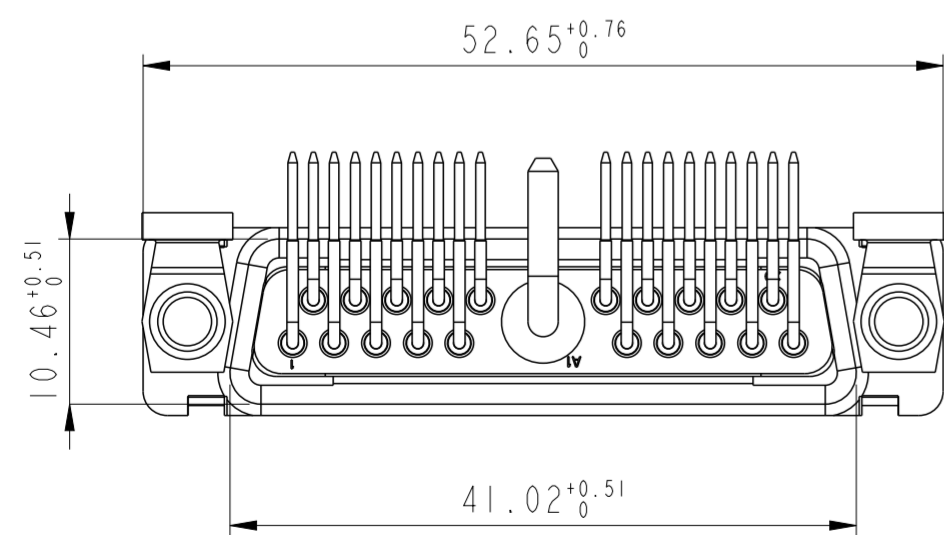
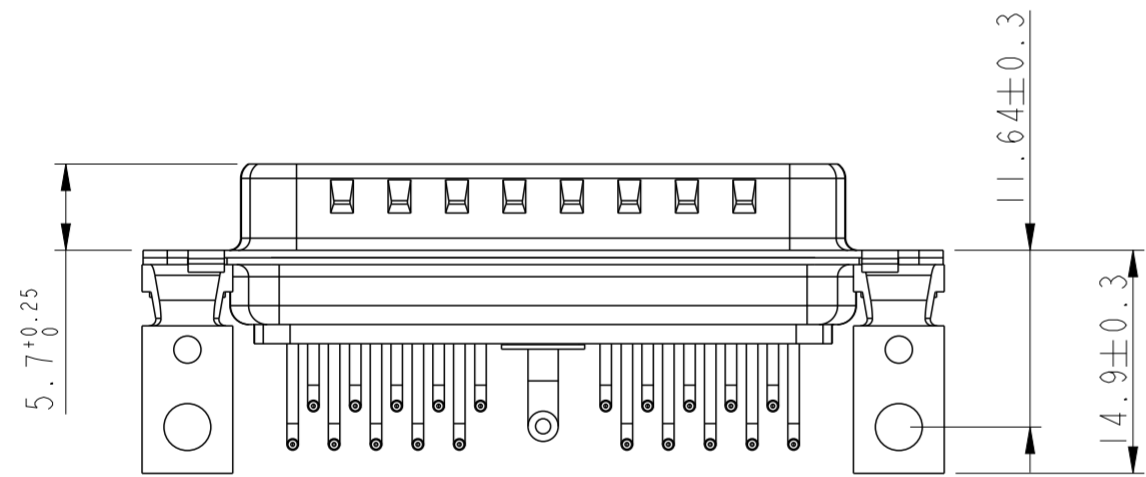
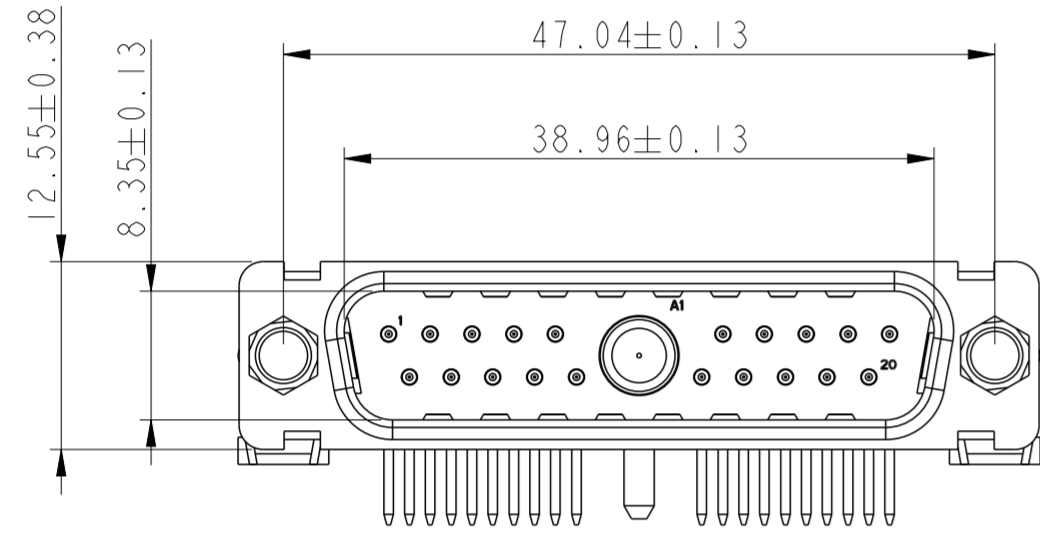
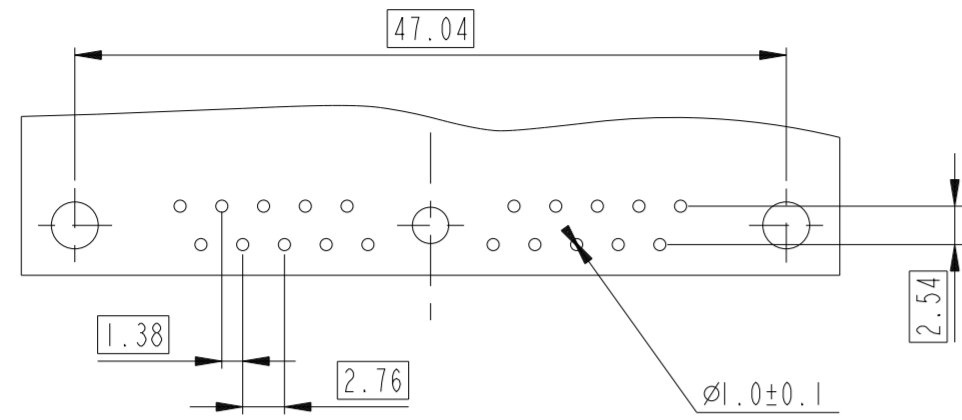
LAYOUT AND CONNECTOR DIMENSIONS
For PCB hole diameters see table I sheet I



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ISO 1101	chr	-	2019/11/12			product family	D SUB	rel level
ISO 406	appr	Varma Sudhir	2019/11/12	SUB MALE DW EUROPE FOOT PRINT		dwg no	C01-8639-2304c	
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ISO 1302	angular	0°	±2	cat. no.		Product - Customer Draw		sheet 5 of 7

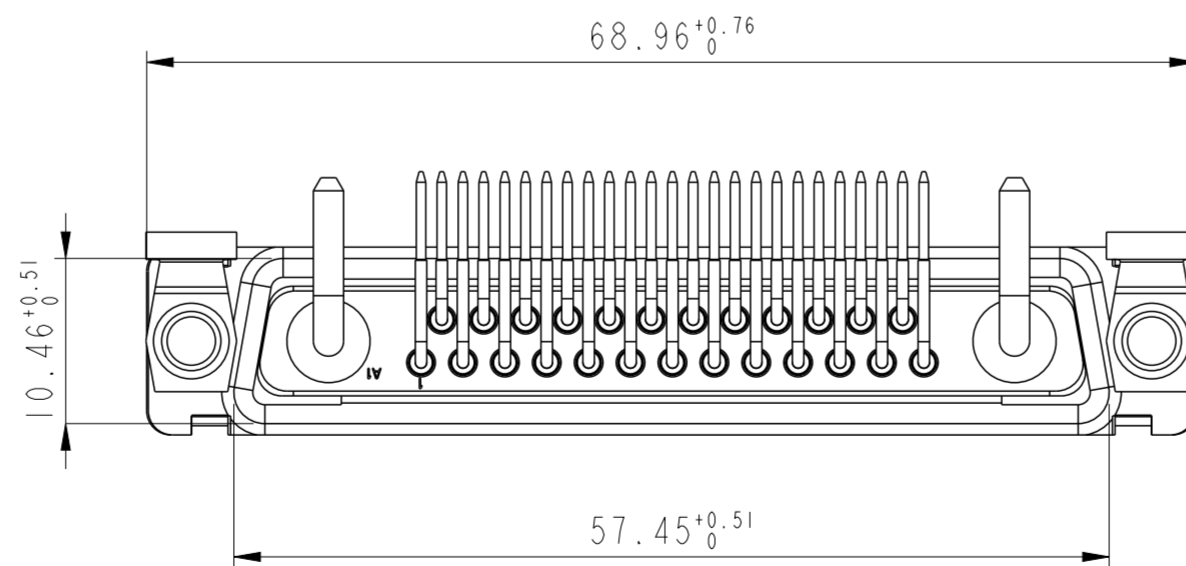
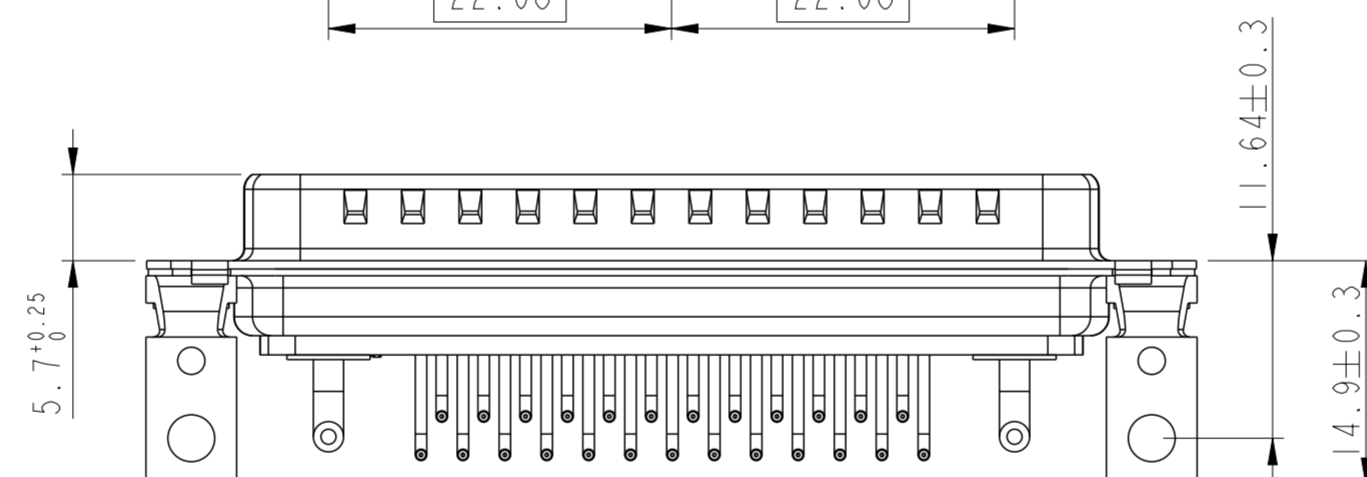
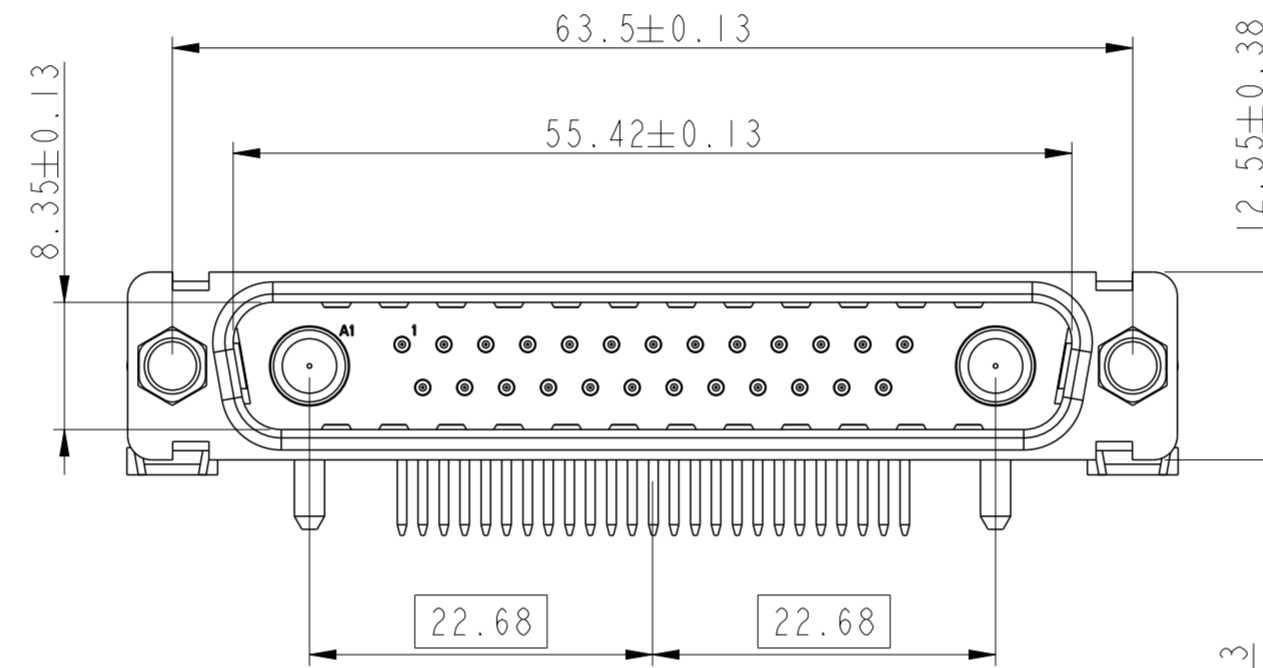
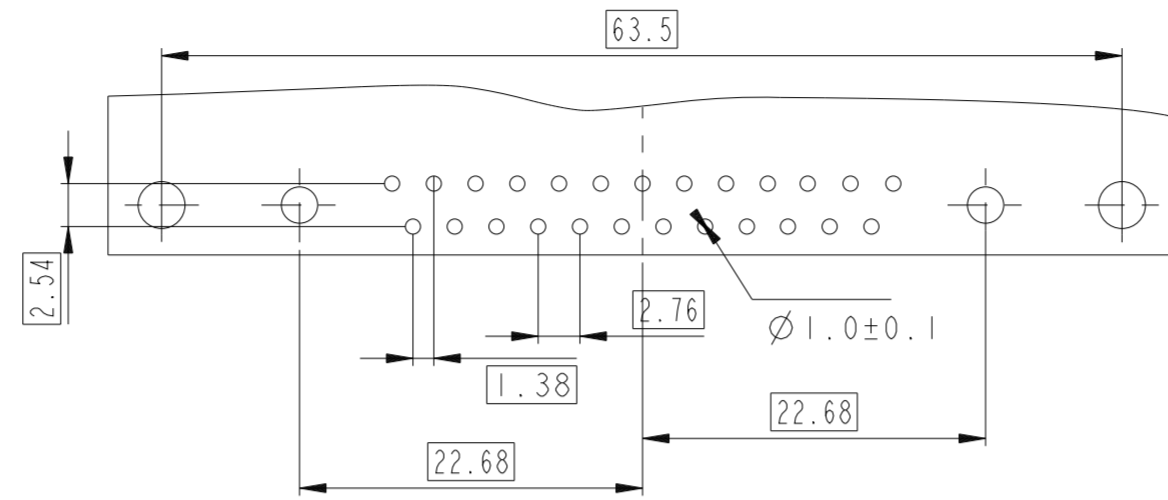
21W1

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



27W2

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



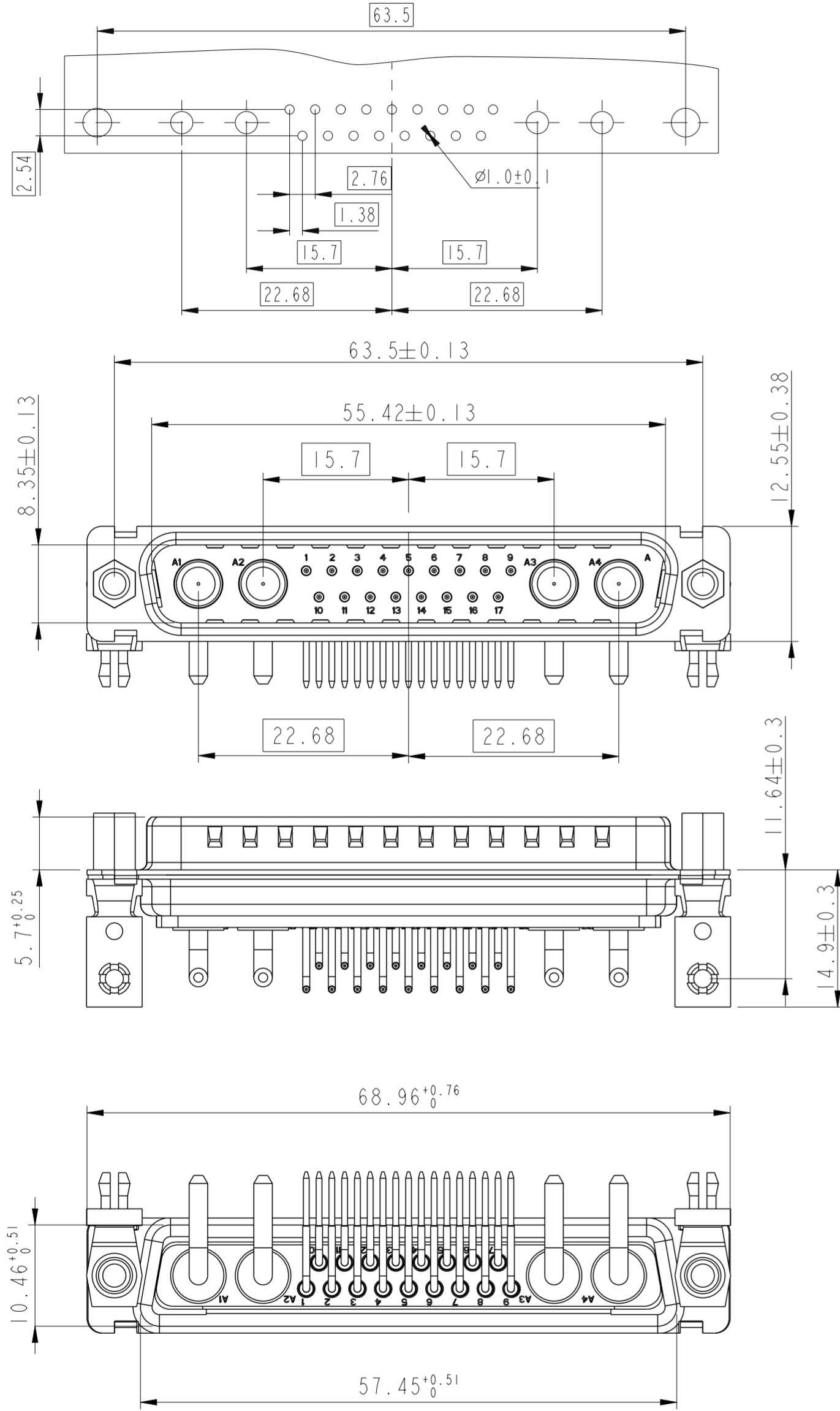
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ISO 1101 ISO 406	chr	-	appr						
surface	linear	0.X	±0.30	Amphenol FCI		title	SUB MALE DW EUROPE FOOT PRINT		rev
ISO 1302	angular	0°	±2°	MIXED POWER RIGHT ANGL SOLDER		dwg no	C01-8639-2304c		E
cat. no.		-		Product - Customer Drw		sheet 6 of 7			

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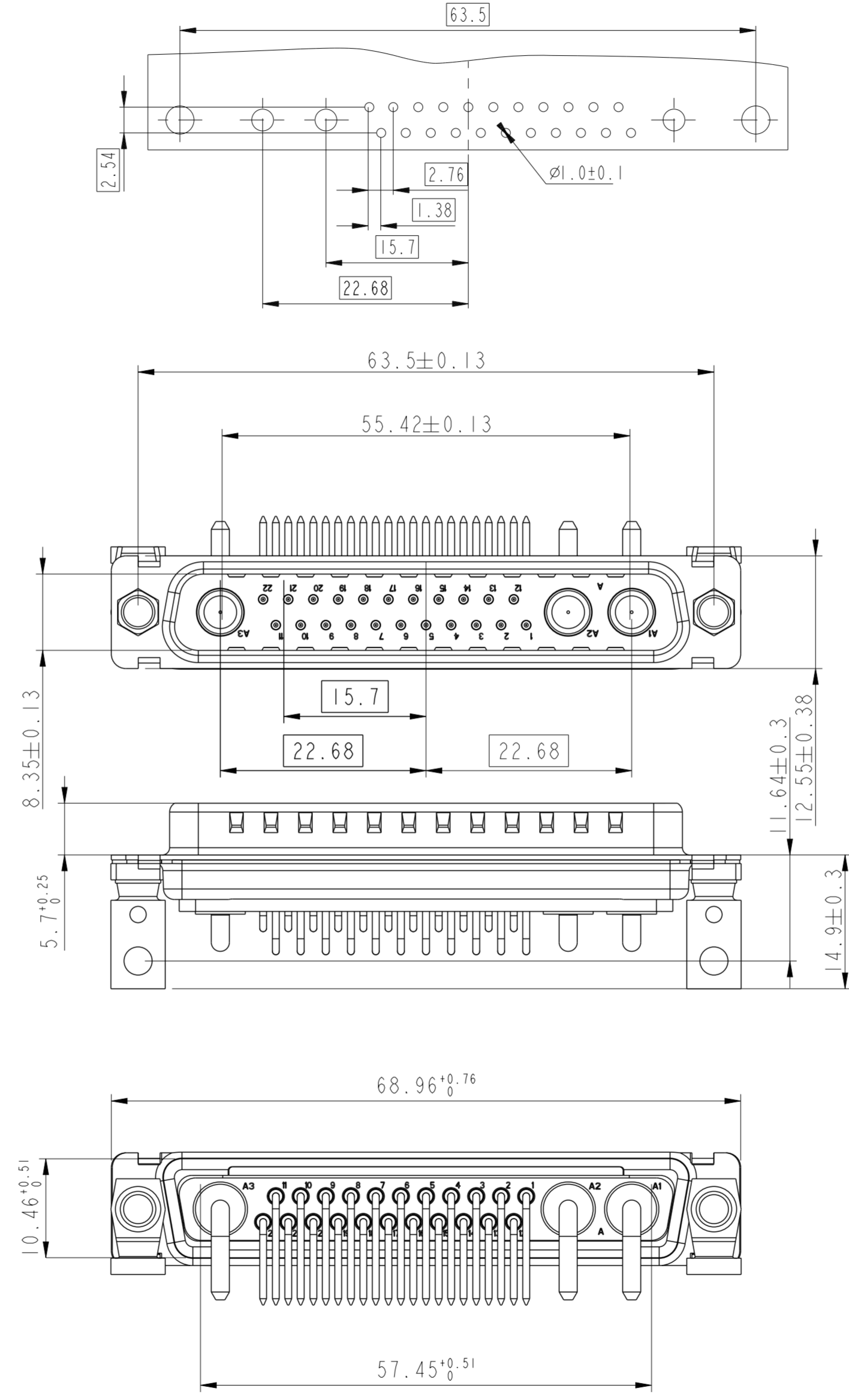
21WA4

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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spec ref	dr	1, Product Eng	2015/06/16	projection	mm	size	A2	scale	2:1
tolerance std	eng	Gregar Mathew	2019/11/11		mm	ecn no	ELX-33009-1	rel level	Released
ISO 1101 ISO 406	chr	-	apppr						
surface	linear	0.X	±0.30	Amphenol FCI		title SUB MALE DW EUROPE FOOT PRINT MIXED POWER RIGHT ANGL SOLDER		dwg no C01-8639-2304c	rev E
ISO 1302	angular	0°	±2°	cat. no.		Product - Customer Drw		sheet 7 of 7	

PDS: Rev :E

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Printed: Nov 12, 2019