

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

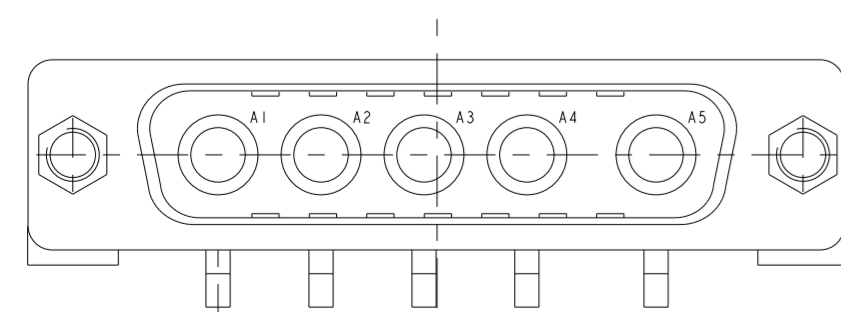
- RETENTION AGAINST TORQUE: - Threaded insert: 0.7 N.m maximum
- Female screw : 0.5 N.m maximum

PRESS FIT PERFORMANCES

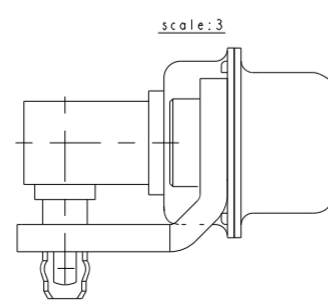
PRESS FIT CONTACTS	
INSERTION FORCE	<= 200 N Average insertion 160N
EXTRACTION FORCE	>= 30 N

NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-47-0004.
- Termination plating spec:
 - Ni 1.27µm+Sn 0.5 to 1.5µ(pure bright)
- Active area plating spec:
 - 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



DETAIL OF PRESS FIT



5W5 FOR EXAMPLE

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.

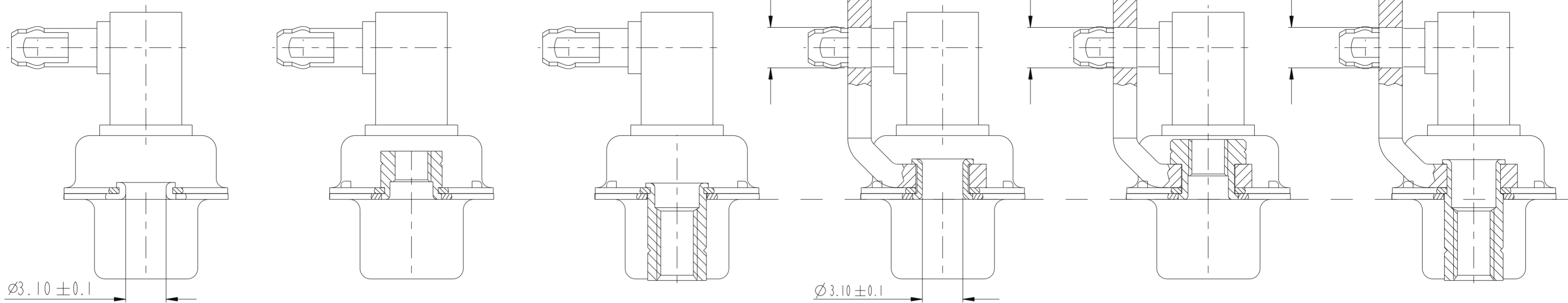
See note RoHS

TABLE 1:PCB HOLE DIAMETERS

P.C.B HOLE DEFINITION (NOTE-1 AND 2)	DRILL DIAMETER	SnPb holes for CONTACTS	Sn holes for CONTACTS	holes ACCESSORIES
			ø3.22 REF(NOTE 3)	ø3.22 REF(NOTE 3)
	DRILLED HOLE	ø3.19-3.25	ø3.19-3.25	
	COPPER PLATING	25µ MINI (RECOMMENDED 50µ MAXI)	25µ MINI (RECOMMENDED 50µ MAXI)	
	TIN-LEAD PLATING	15µ MAXI (RECOMMENDED 5µ MINI)		
	TIN PLATING		0.8 to 1,2µ	
	FINISH HOLE (AFTER REFLOW)	ø 3.02-3.20	ø3.08-3.20	

- 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

spec ref	dr	1, Product Eng	2015/06/16	projection	mm	size	A2	scale	1:1
tolerance std	eng	Paul Mithun	2019/07/29		mm	ecn no	ELX-34084-1	rel level	Released
	chr								
	appr	Varma Sudhir	2019/07/29	product family					
surface	linear	0.X	±0.30		SUB MALE DW EUROPE FOOTPRINT	C01-8639-2319	rev	D	sheet 1 of 5
		0.XX	±0.10						
		0.XXX	±0.05						
	angular	0°	±2°	cat. no.		Product - Customer Drw			



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

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spec ref	dr		1, Product Eng	2015/06/16	projection	mm	size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Paul Mithun	2019/07/29	ecn no	ELX-34084-1		
			chr	-	product family	D SUB	rel level	Released		
			appr	Varma Sudhir	2019/07/29					
surface	linear	0.X	±0.30	Amphenol FCi	SUB MALE DW EUROPE FOOTPRINT FULL POWER RIGHT ANGLE PRESS FIT	cat. no.	-	Product - Customer Drw	sheet 2 of 5	rev
		0.XX	±0.10							
		0.XXX	±0.05							
	angular	0°	±2°							D

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A
B
C
D
E
F

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

A

A

B

C

LAYOUTS

xWx

2V2

3V3

3W3

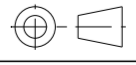
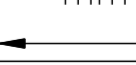
5W5

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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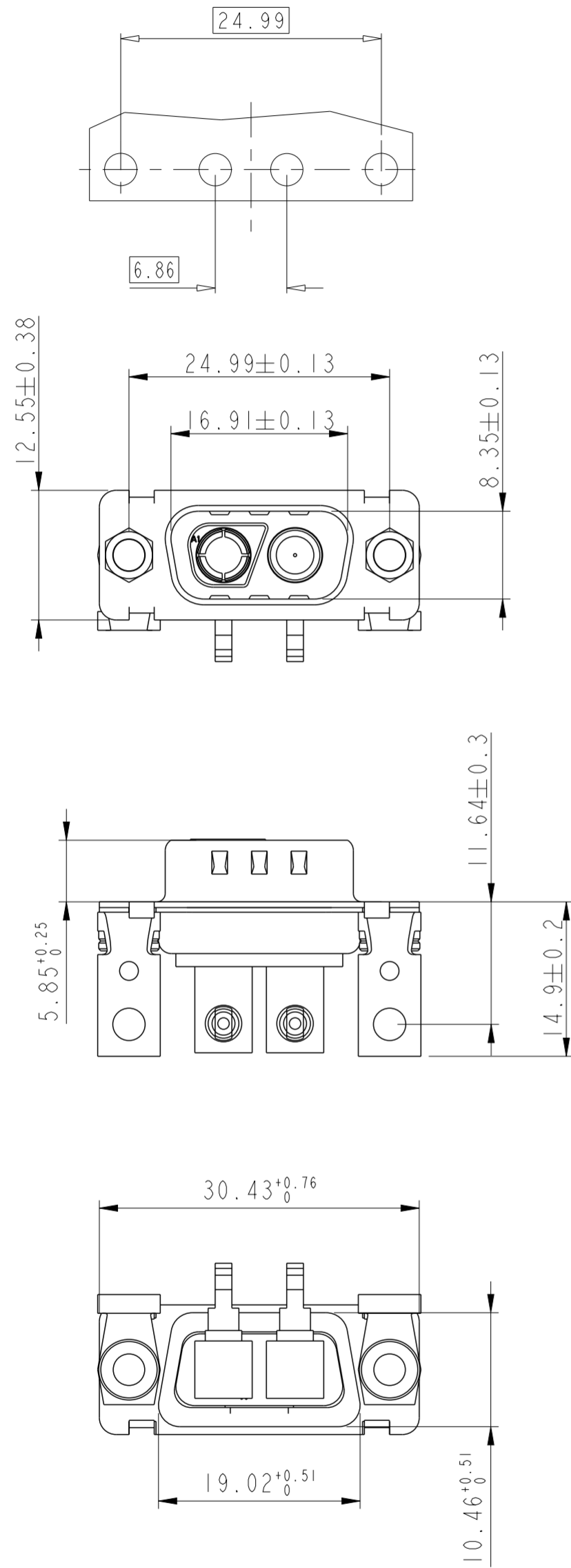
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spec ref	dr	1, Product Eng	2015/06/16	projection	mm	size	A2	scale	3:1	
tolerance std	eng	Paul Mithun	2019/07/29			ecn no	ELX-34084-1	rel level	Released	
TOLERANCES UNLESS OTHERWISE SPECIFIED surface ✓	chr	-	product family							D SUB
	appr	Varma Sudhir	2019/07/29							rel level
	linear	0.X	±0.30	Amphenol FCI	SUB MALE DW EUROPE FOOTPRINT FULL POWER RIGHT ANGLE PRESS FIT	title C01-8639-2319	rev D	angular 0° ±2°	cat. no. - Product - Customer Drw sheet 3 of 5	
		0.XX	±0.10							
		0.XXX	±0.05							

2V2

LAYOUT AND CONNECTOR DIMENSIONS

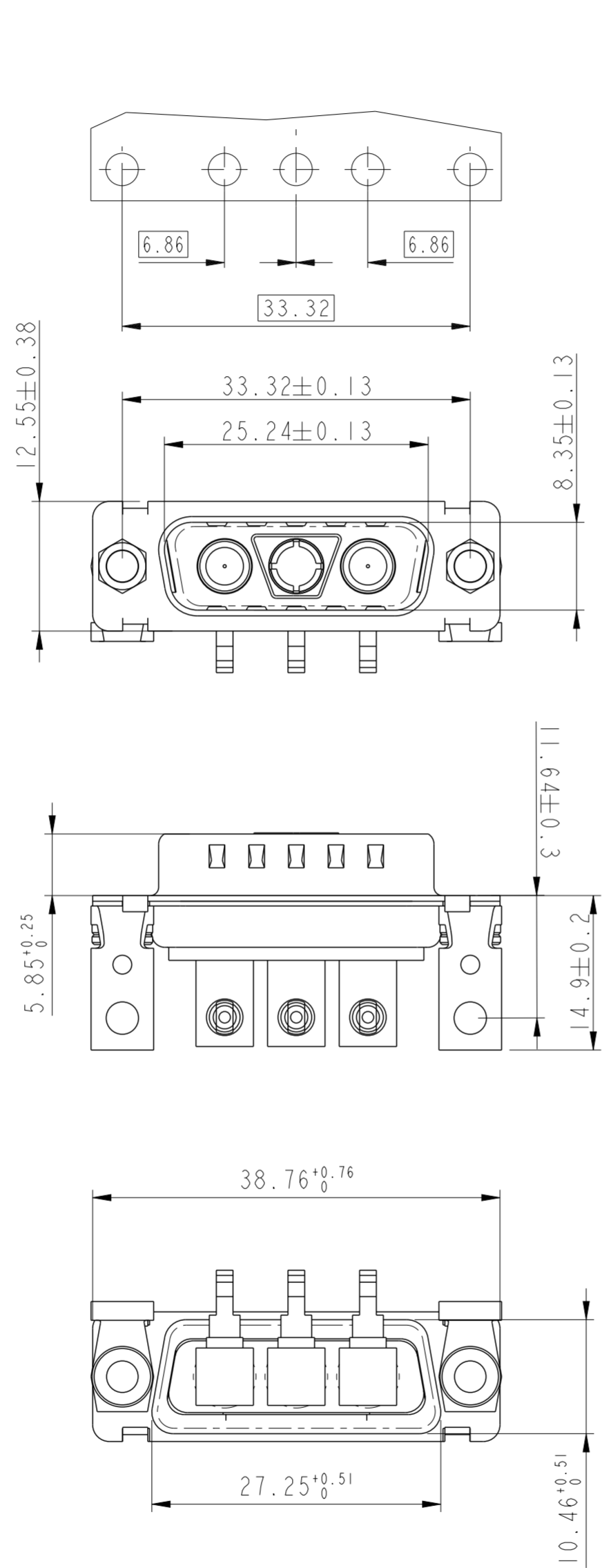
For PCB hole diameters see table I sheet I



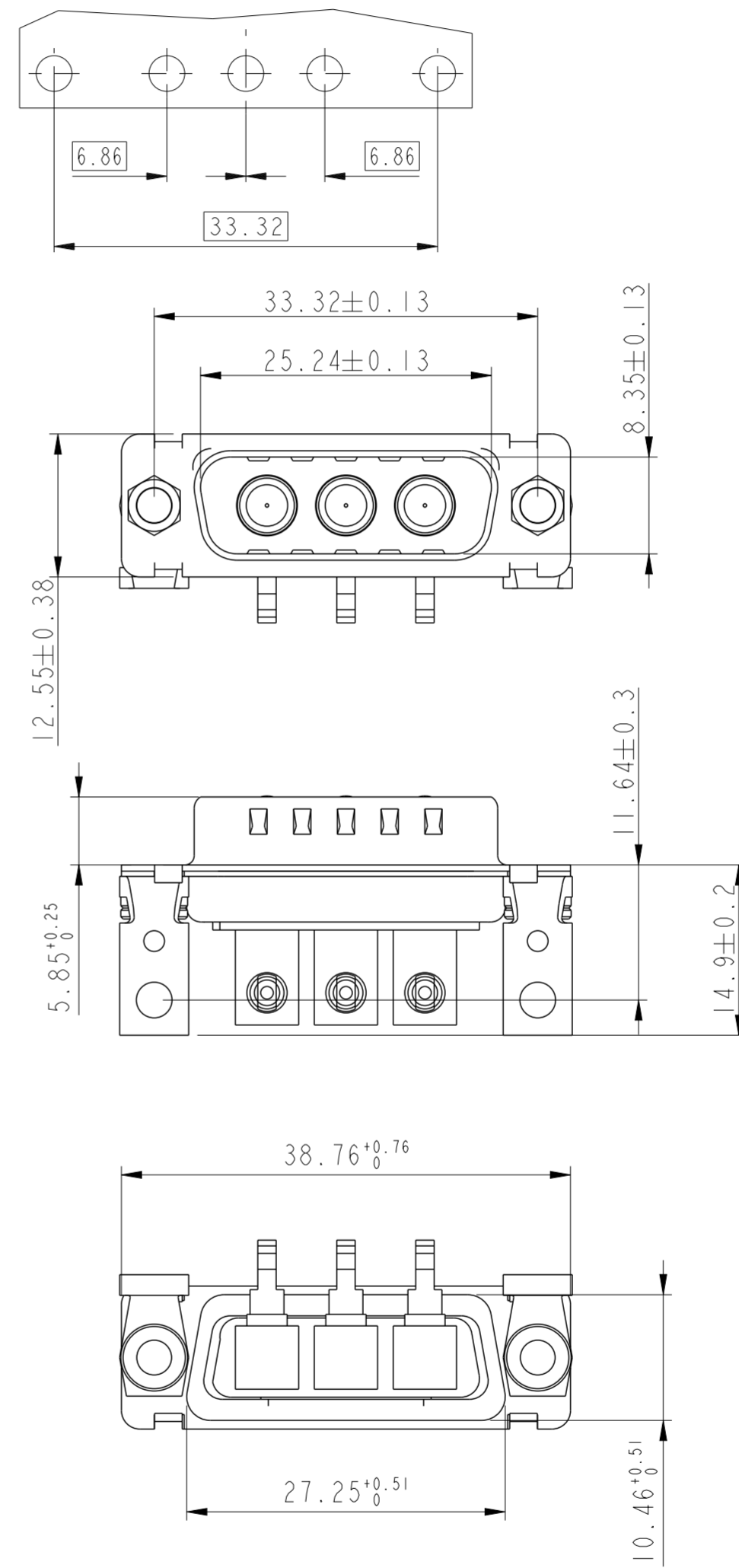
3V3

LAYOUT AND CONNECTOR DIMENSIONS

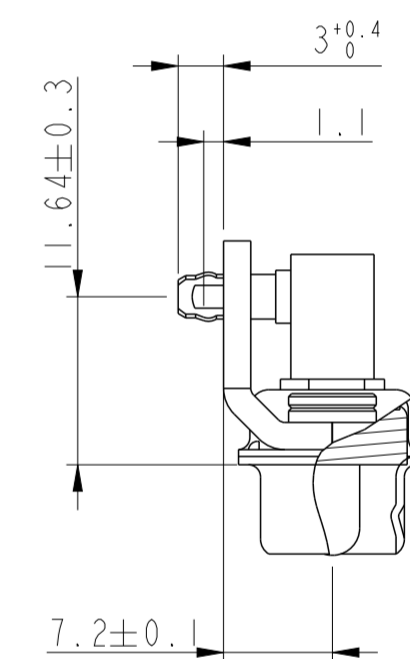
For PCB hole diameters see table I sheet I



3W3



SIDE VIEW FOR ALL LAYOUTS



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spec ref	dr	1, Product Eng	2015/06/16	projection	mm	size	A2	scale	2:1	
tolerance std	eng	Paul Mithun	2019/07/29			ecn no	ELX-34084-1			
TOLERANCES UNLESS OTHERWISE SPECIFIED	chr	-	-			rel level	Released			
	appr	Varma Sudhir	2019/07/29			product family	D SUB	rel level	Released	
surface	linear	0.X	±0.30	Amphenol FCI		dwg no	C01-8639-2319	rev	D	
		0.XX	±0.10	SUB MALE DW EUROPE FOOTPRINT		cat. no.	-	Product - Customer Drw	sheet 4 of 5	
	angular	0°	±2°	FULL POWER RIGHT ANGLE PRESS FIT						

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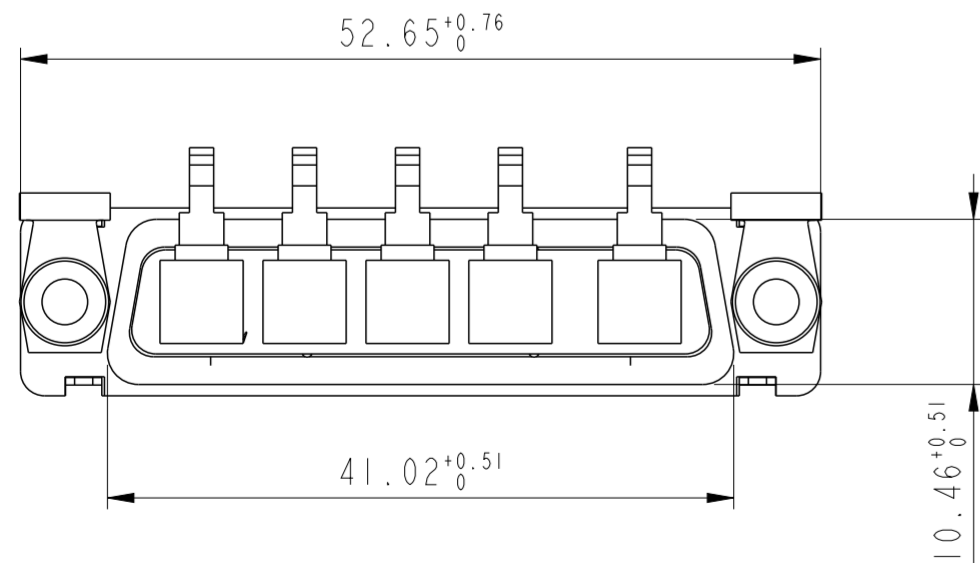
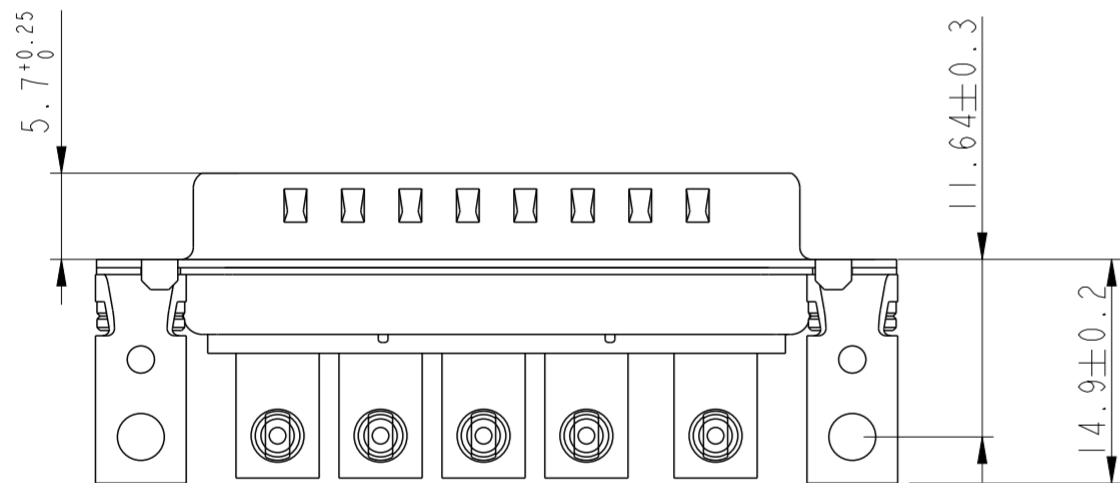
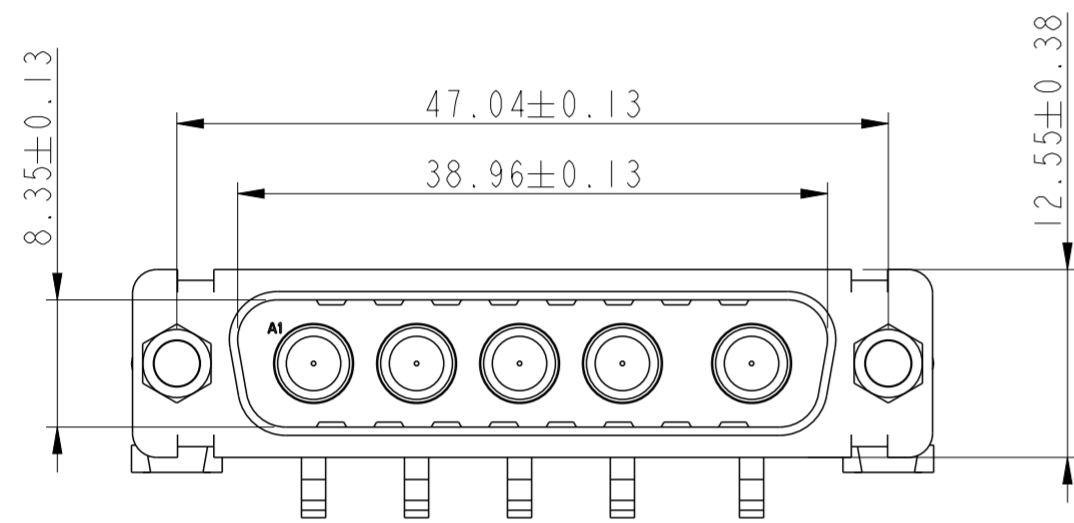
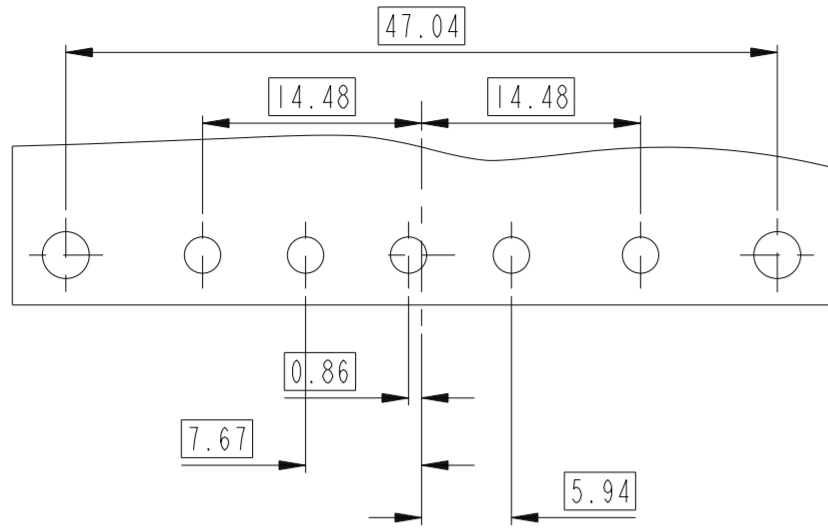
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5W5

LAYOUT AND CONNECTOR DIMENSIONS

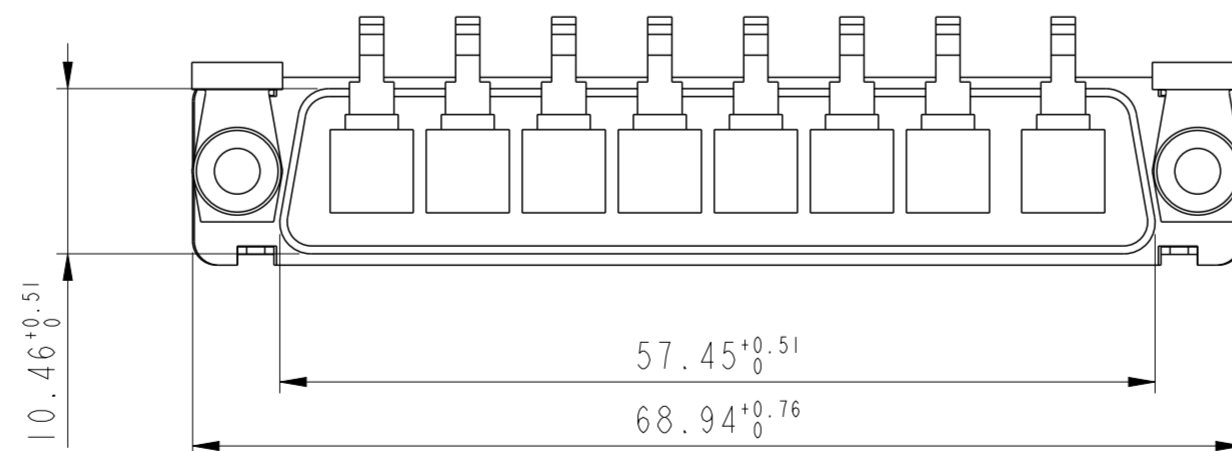
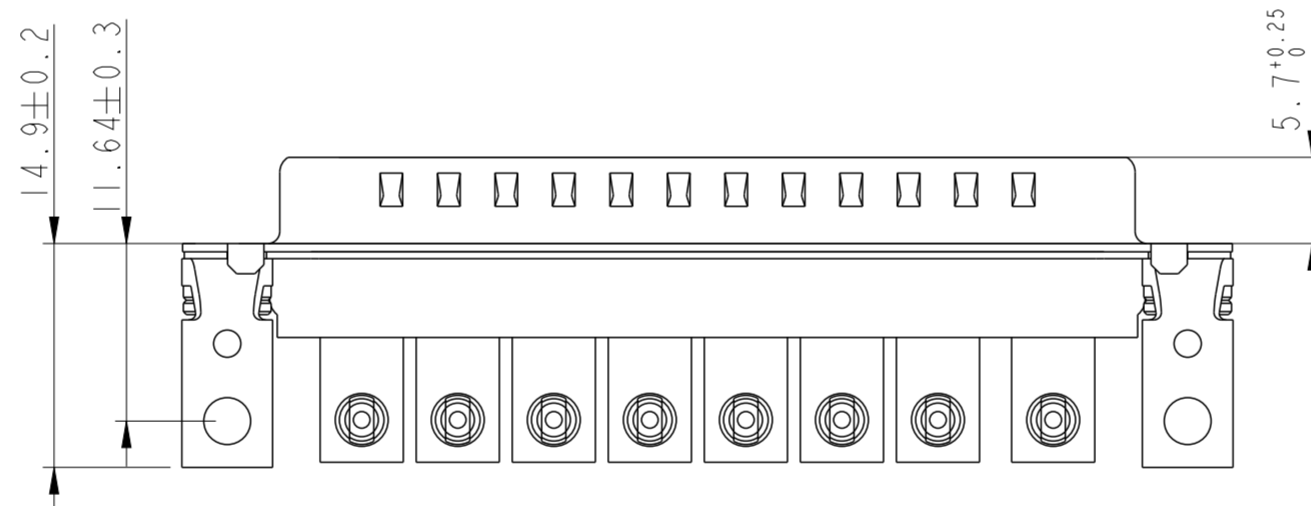
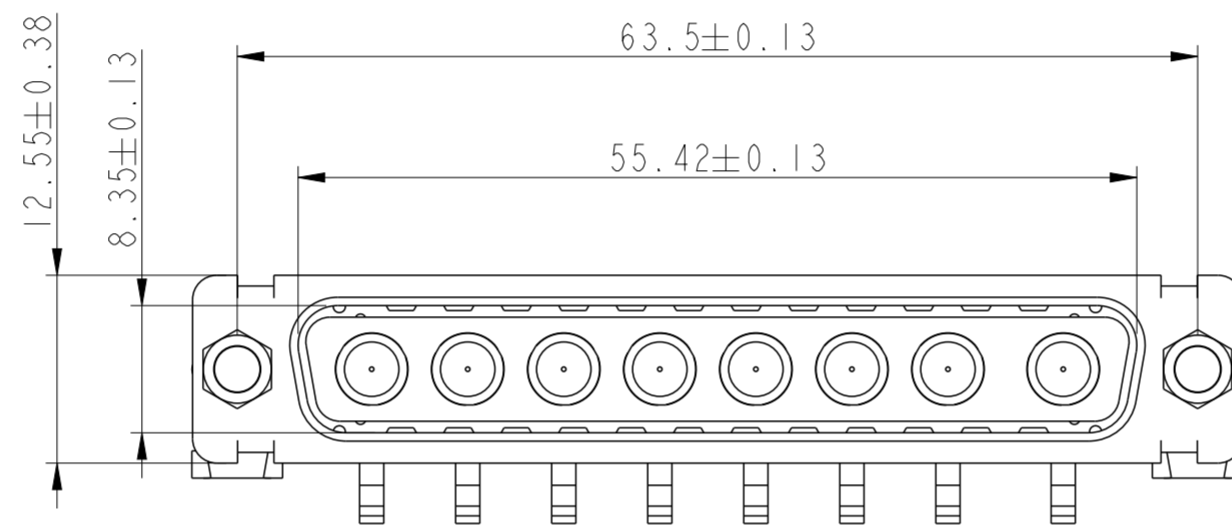
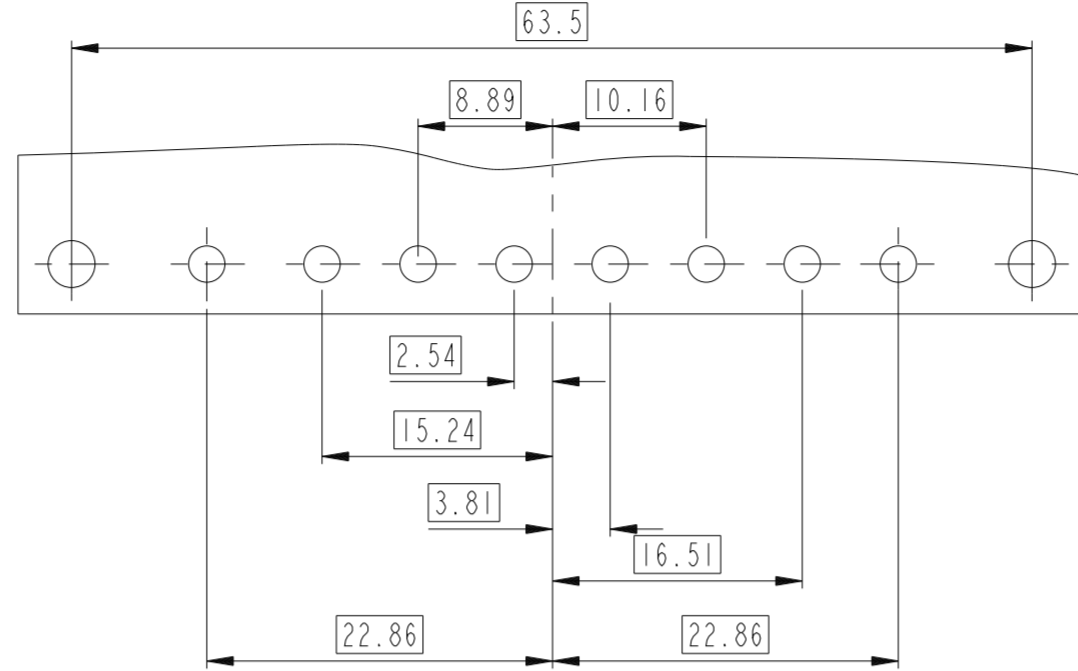
For PCB hole diameters see table I sheet I



8W8

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table I sheet I



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tolerance std	eng	Paul Mithun	2019/07/29		mm	ecn no	ELX-34084-1	rel level	Released
TOLERANCES UNLESS OTHERWISE SPECIFIED	chr	-	-						
	appr	Varma Sudhir	2019/07/29						
surface	linear	0.X	±0.30	product family	D SUB	rel level	Released	title	SUB MALE DW EUROPE FOOTPRINT
		0.XX	±0.10	Amphenol FCi		dwg no	C01-8639-2319	rev	D
	angular	0°	±2°			cat. no.	-	Product - Customer Drw	sheet 5 of 5

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