

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

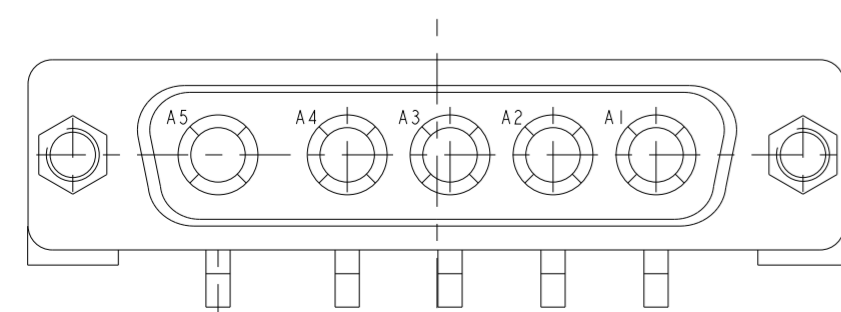
- RETENTION AGAINST TORQUE: - Threaded insert: 0.7 N.m minimum
- Female screw : 0.5 N.m minimum

PRESS FIT PERFORMANCES

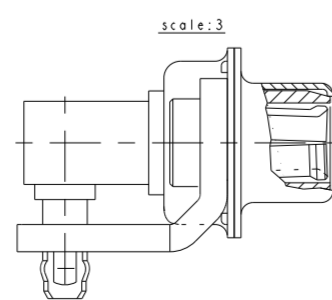
PRESS FIT CONTACTS	
INSERTION FORCE	<= 200 N Average insertion 160N
EXTRACTION FORCE	>= 30 N

NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-47-0004.
- Termination plating spec:
 - Ni 1.27µmi+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

DBL5W5S81C6M40LF

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
S : Socket

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	DRILL DIAMETER	SnPb holes for CONTACTS	Sn holes for CONTACTS	holes ACCESSORIES
		DRILLED HOLE	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		
(NOTE-1 AND 2) 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	2015/06/12	projection	mm	size	A2	scale	1:1
tolerance std	eng	Gregar Mathew	2020/12/04		mm	ecn no	ELX-433502-1	rel level	Released
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-						
surface	linear	0.X	±0.3		SUB FEMALE DW EUROPE foot print	cat. no.	C01-8639-2316C	rev	D
		0.XX	±0.1						
		0.XXX	±0.05						
angular	0°	±2°			full power right angle press fit				

1 2 3 4 5 6 7 8

A

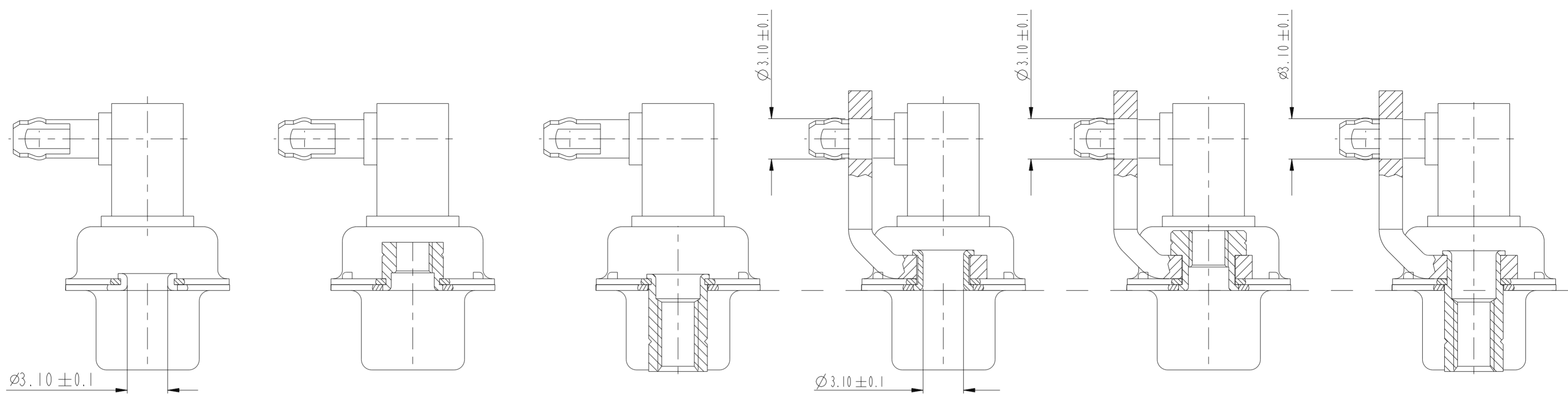
B

C

D

E

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	A Without	A Without	A Without	M Metal brackets	M Metal brackets	M Metal bracket

Amphenol FCI

© 2016 AFci

spec ref	dr	1, Product Eng	2015/06/12	projection	mm	size	A2	scale	3:1	
tolerance std	eng	Gregar Mathew	2020/12/04			ecn no	ELX-433502-1			
TOLERANCES UNLESS OTHERWISE SPECIFIED 0.X ±0.3 0.XX ±0.1 0.XXX ±0.05 angular 0° ±2°	chr	-	product family			D SUB -	rel level	Released		
	appr	Kuriakosa, San	2020/12/06					rev	D	
surface	Amphenol FCI	SUB FEMALE DW EUROPE foot print		cat. no.	-	Product - Customer Drw	sheet 2 of 5			

A
B
C
D
E
F

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxS8IC5A40LF	40	200	without	without
D*LxWxS8IC5A40LF	40	200	insert M3	without
D*OxWxS8IC5A40LF	40	200	insert UNC 4.40	without
D*VxWxS8IC5A40LF	40	200	female screw UNC 4.40	without
D*xWxS8IC5M40LF	40	200	without	metal bracket
D*LxWxS8IC5M40LF	40	200	insert M3	metal bracket
D*OxWxS8IC5M40LF	40	200	insert UNC 4.40	metal bracket
D*VxWxS8IC5M40LF	40	200	female screw UNC 4.40	metal bracket

shell size

*

E

A

A

B

C

LAYOUTS

xWx

2V2

3V3

3W3

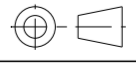
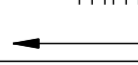
5W5

8W8

PART NUMBER	AMPS	MATINGS/ UNMATINGS	FRONT ACCESSORY	PCB ACCESSORIES
D*xWxS8IC6A40LF	40	500	without	without
D*LxWxS8IC6A40LF	40	500	insert M3	without
D*OxWxS8IC6A40LF	40	500	insert UNC 4.40	without
D*VxWxS8IC6A40LF	40	500	female screw UNC 4.40	without
D*xWxS8IC6M40LF	40	500	without	metal bracket
D*LxWxS8IC6M40LF	40	500	insert M3	metal bracket
D*OxWxS8IC6M40LF	40	500	insert UNC 4.40	metal bracket
D*VxWxS8IC6M40LF	40	500	female screw UNC 4.40	metal bracket

Amphenol
FCI

© 2016 APCI

spec ref	dr	1, Product Eng	2015/06/12	projection	mm	size	A2	scale	3:1	
tolerance std	eng	Gregar Mathew	2020/12/04			ecn no	ELX-33502-1	rel level	Released	
TOLERANCES UNLESS OTHERWISE SPECIFIED surface ✓	chr	-	product family							D SUB
	appr	Kuriakose, San	2020/12/06							
	linear	0.X	±0.3	Amphenol FCI SUB FEMALE DW EUROPE foot print full power right angle press fit	cat. no. -	Product - Customer Drw	sheet 3 of 5	rev D		
		0.XX	±0.1							
	angular	0°	±2°							

PDS: Rev :D

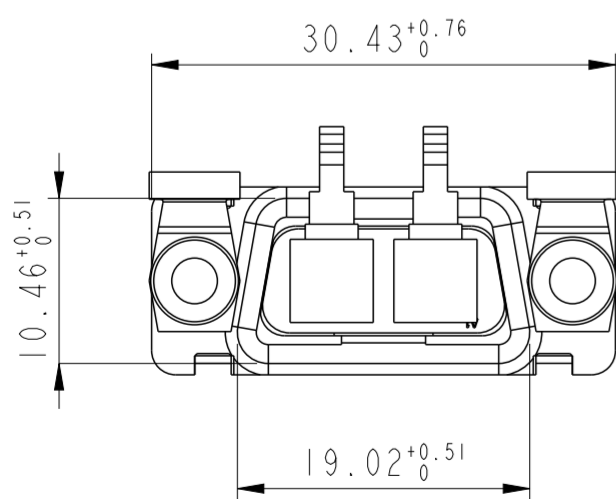
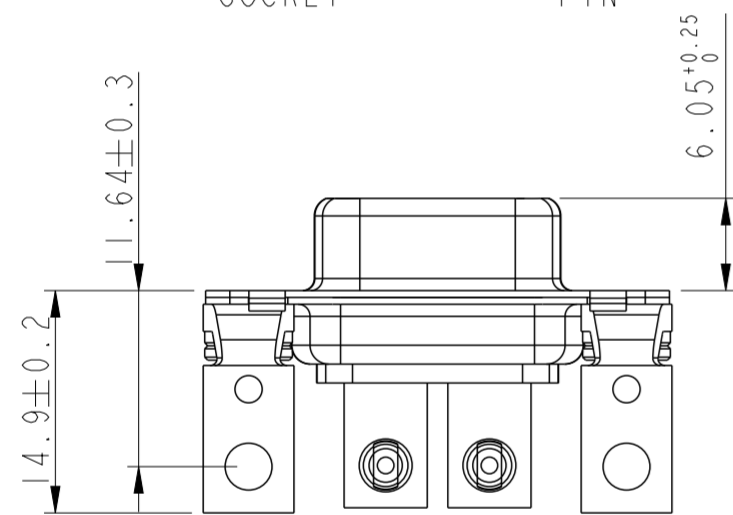
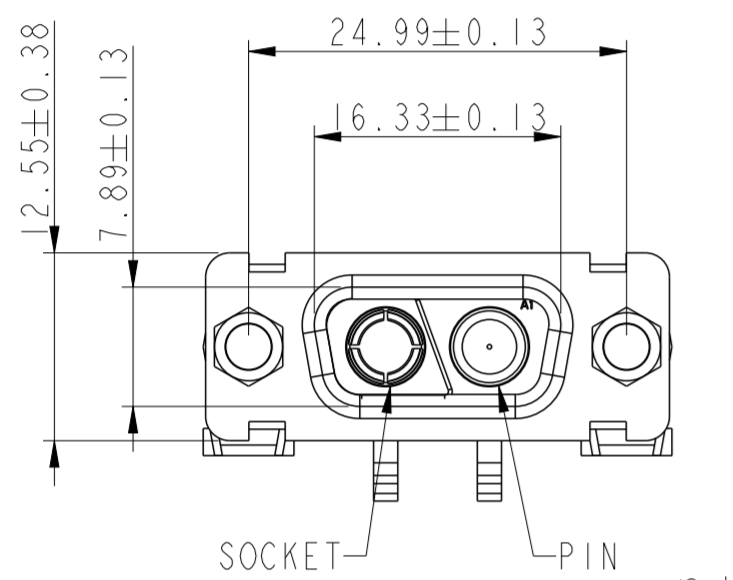
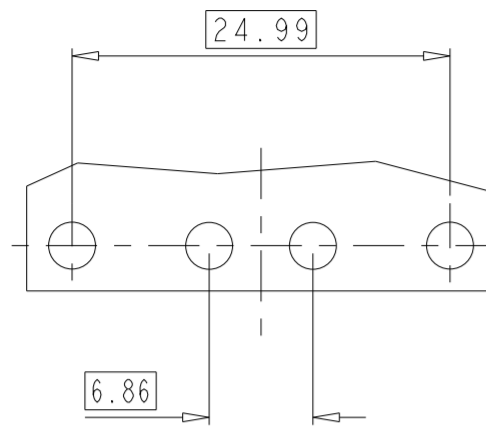
STATUS:Released

Printed: Dec 18, 2020

2V2

LAYOUT AND CONNECTOR DIMENSIONS

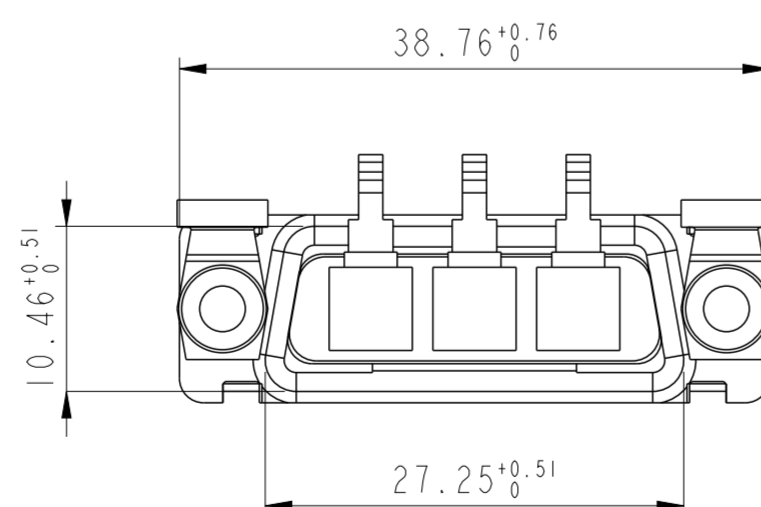
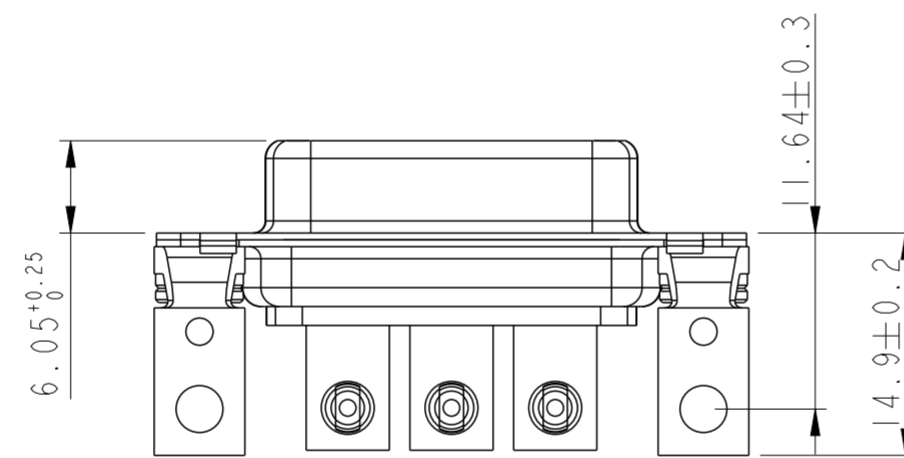
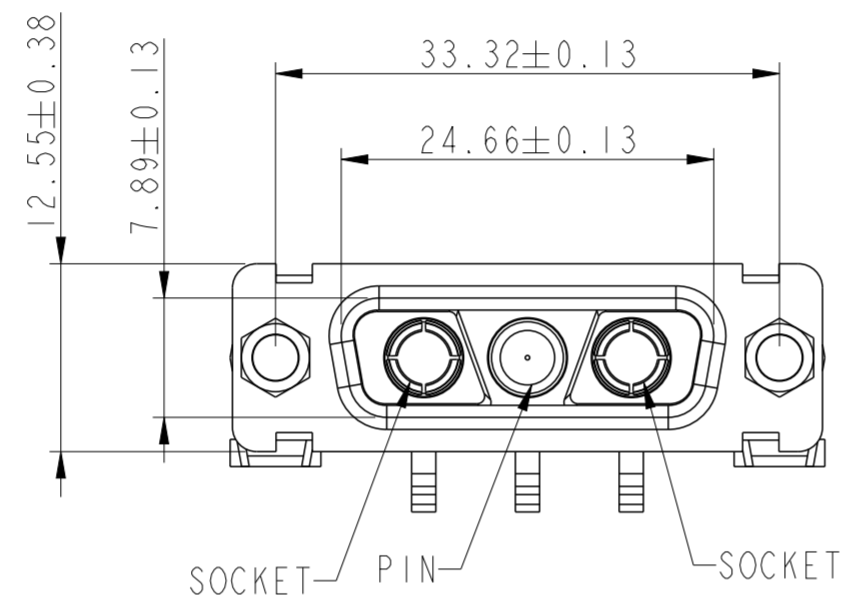
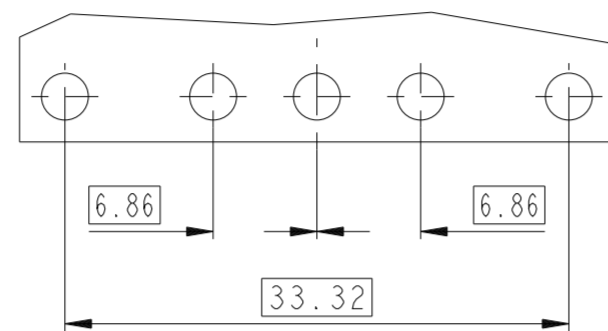
For PCB hole diameters see table I sheet I



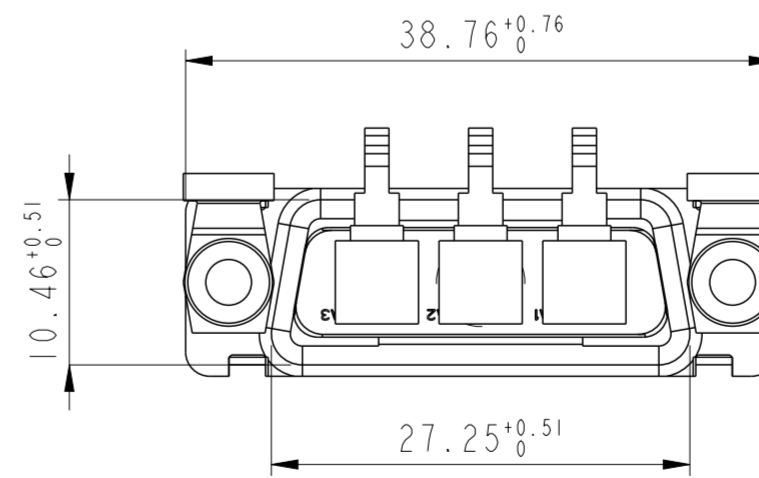
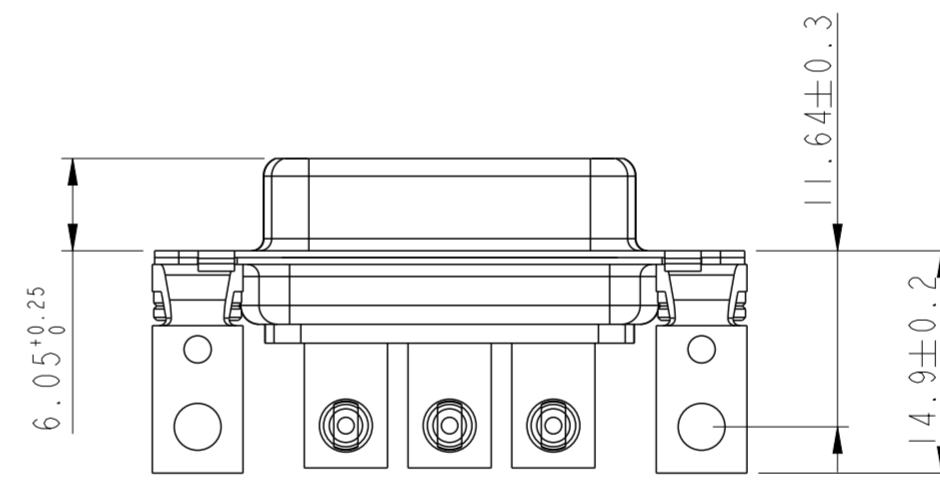
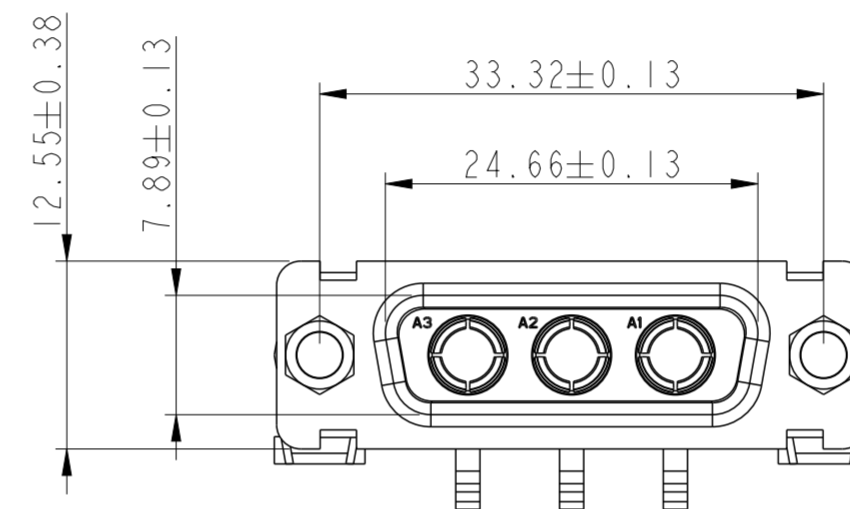
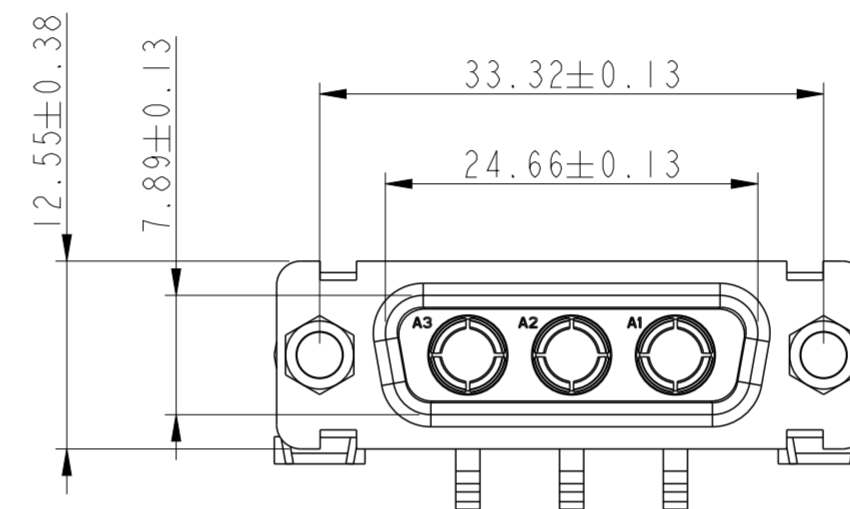
3V3

LAYOUT AND CONNECTOR DIMENSIONS

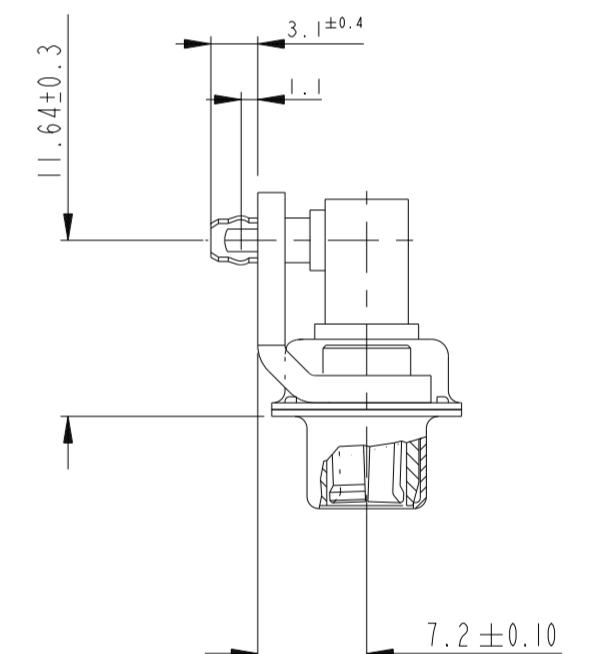
For PCB hole diameters see table I sheet I



3W3



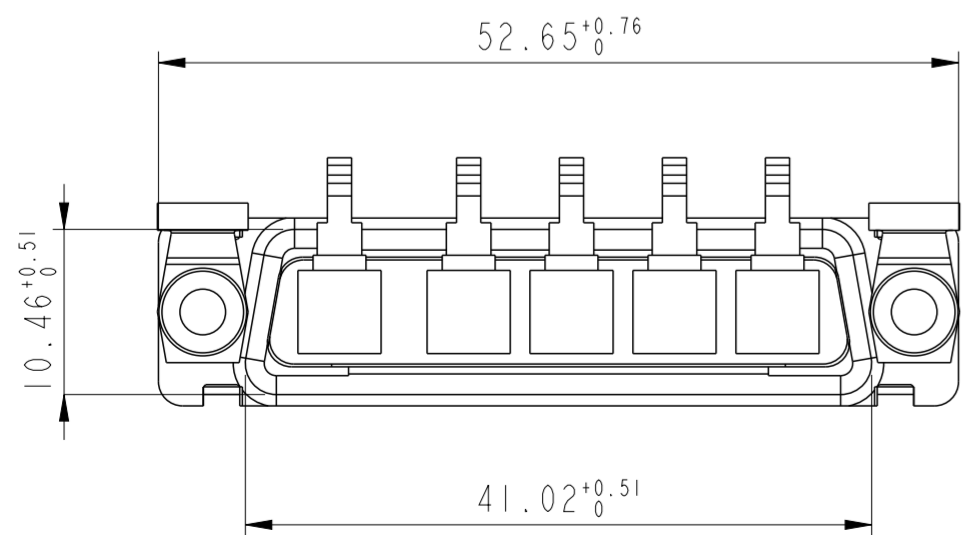
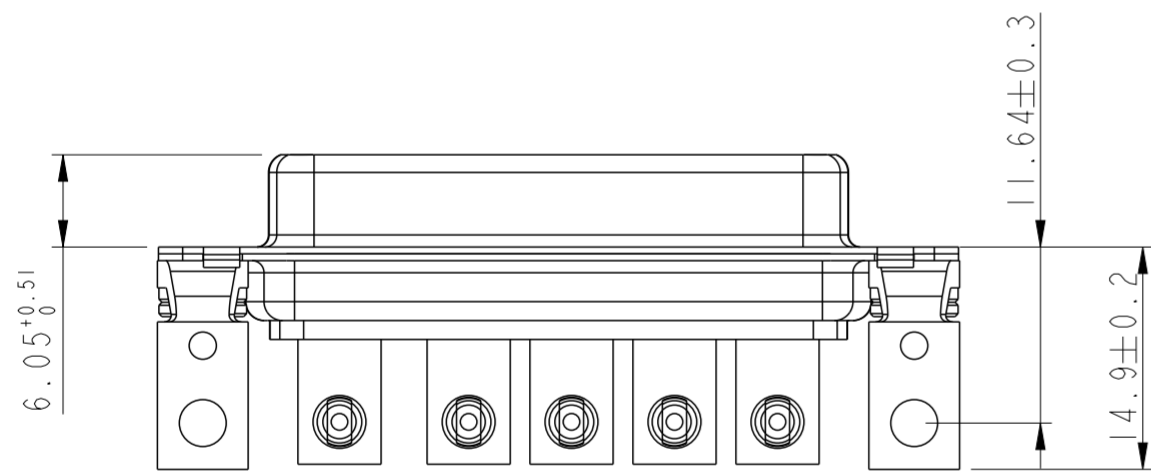
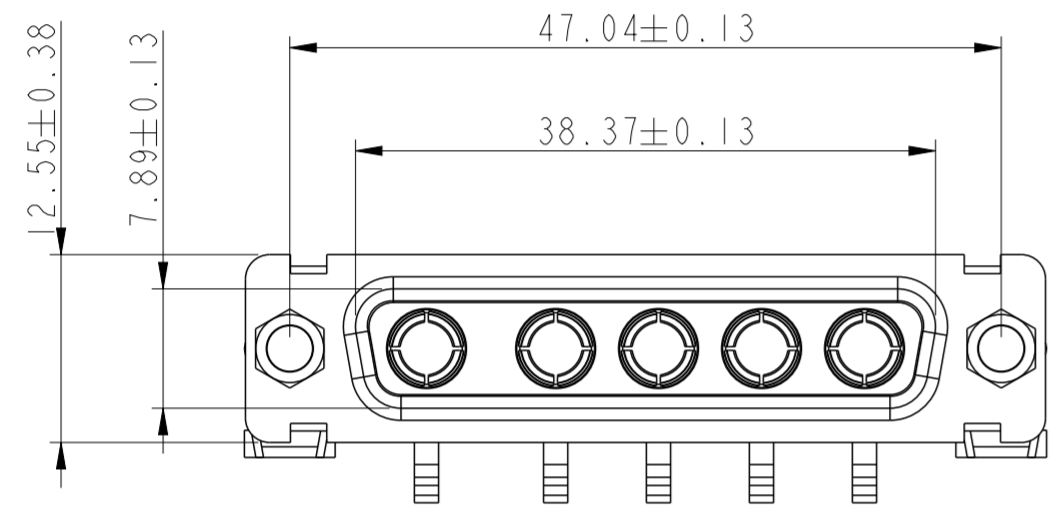
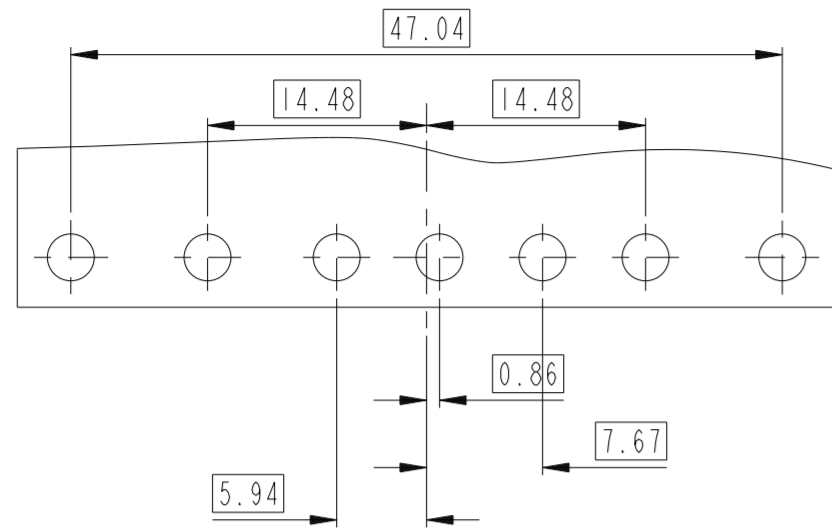
SIDE VIEW FOR ALL LAYOUTS



spec ref	dr	1, Product Eng	2015/06/12	projection	mm	size	A2	scale	2:1
tolerance std	eng	Gregar Mathew	2020/12/04		mm	ecn no	ELX-33502-1	rel level	Released
TOLERANCES UNLESS OTHERWISE SPECIFIED	chr	-	-						
	appr	Kuriakosa, San	2020/12/06						
surface	linear	0.X	±0.3	product family	D SUB	rel level	Released	rev	D
		0.XX	±0.1	Amphenol FCI	SUB FEMALE DW EUROPE foot print		dwg no	C01-8639-2316C	
		0.XXX	±0.05	full power right angle press fit	cat. no.	Product - Customer Drw	sheet 4 of 5		
	angular	0°	±2°						

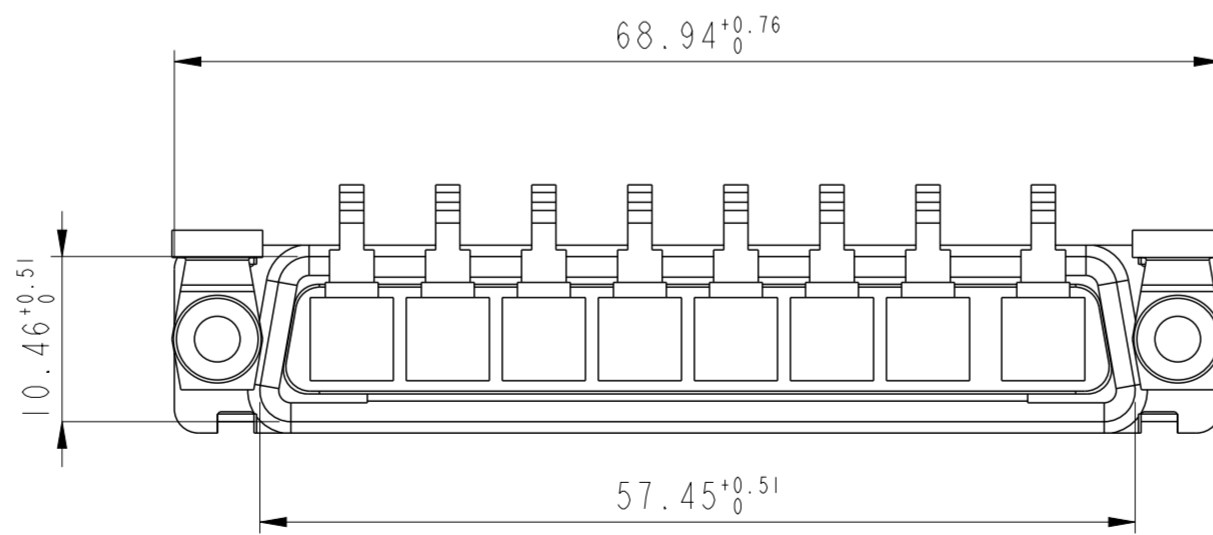
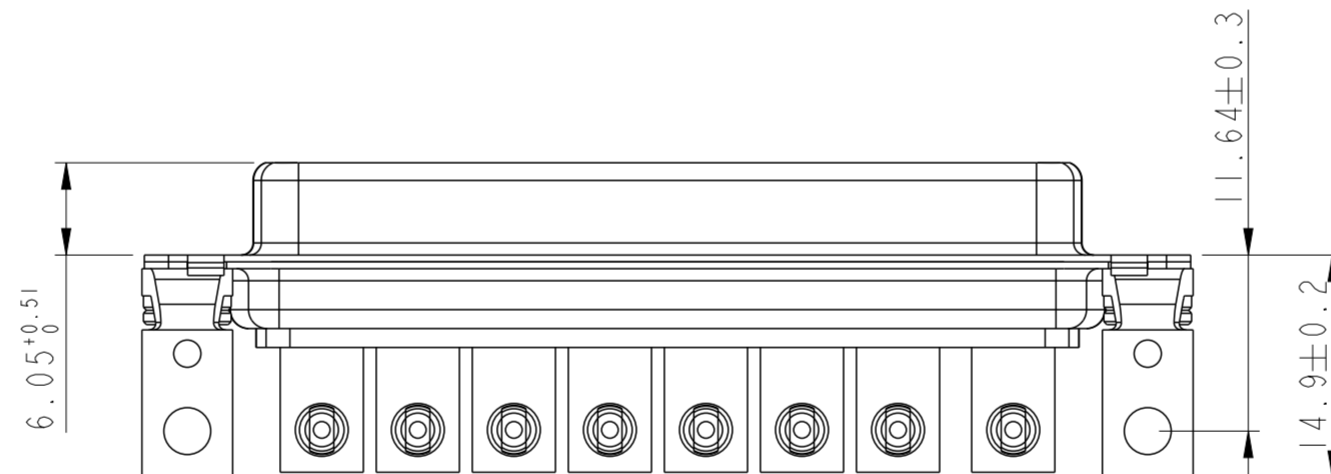
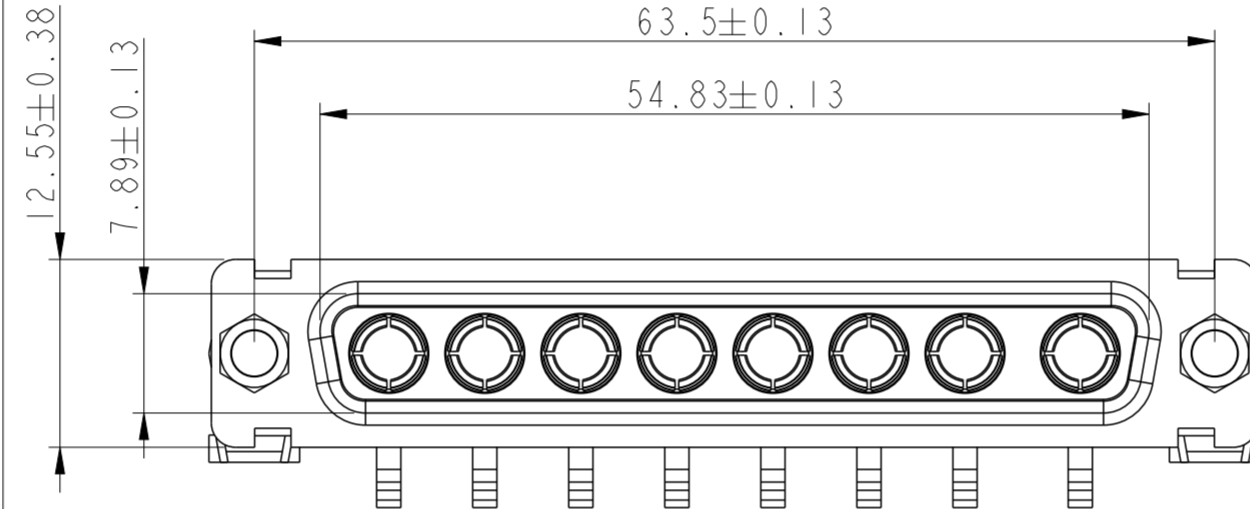
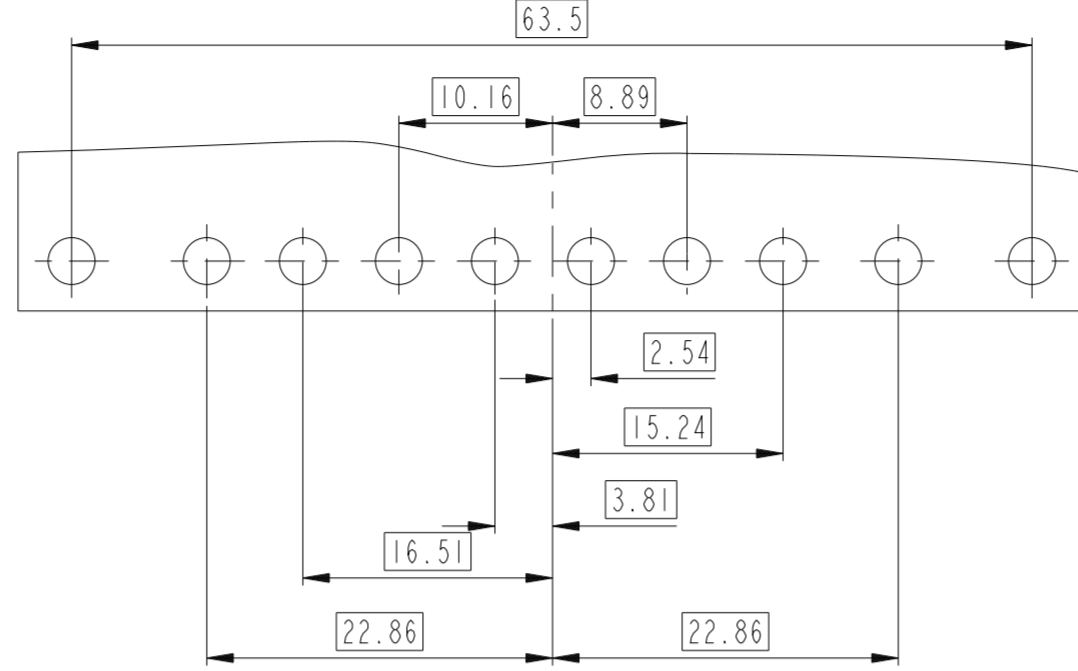
5W5

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



8W8

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



spec ref	dr	1, Product Eng	2015/06/12	projection	mm	size	A2	scale	2:1
tolerance std	eng	Gregar Mathew	2020/12/04		mm	ecn no	ELX-33502-1	rel level	Released
TOLERANCES UNLESS OTHERWISE SPECIFIED	chr	-	-			product family	D SUB -		
	appr	Kuriakosa, San	2020/12/06			title	SUB FEMALE DW EUROPE foot print		
surface	linear	0.X	±0.3	Amphenol FCI	full power right angle press fit	dwg no	C01-8639-2316C	rev	D
		0.XX	±0.1			cat. no.	-	Product - Customer Drw	sheet 5 of 5
	angular	0°	±2°						