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

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.

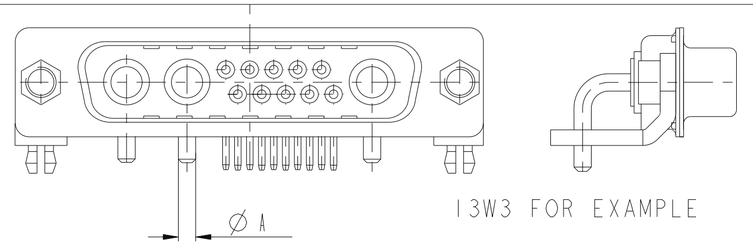
See note RoHS

NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-47-0004.
- The housing will whistand 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

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



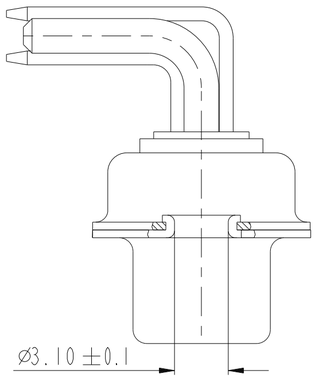
13W3 FOR EXAMPLE

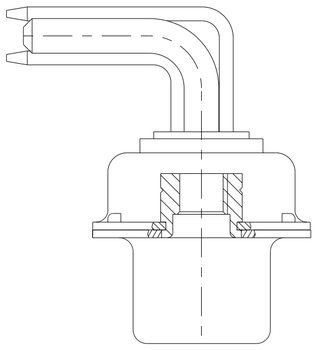
spec ref			dr	1, Product Eng	2015/06/16	projection	mm	size A2 / scale 1:1
tolerance std ISO 1101 ISO 406	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Gregar Mathew	2019/11/11			ecn no ELX-I-33009-1
			chr	-	-			
			appr	Varma Sudhir	2019/11/12	product family -		rel level Released
surface - ISO 1302	linear	0.X ±0.3	Amphenol FCi	title	SUB MALE DW EUROPE FOOT PRINT		dwg no C01-8639-2304c	rev E
		0.XX ±0.10			MIXED POWER RIGHT ANGL SOLDER			
		0.XXX ±0.05		cat. no. -		Product - Customer Drw		sheet 1 of 7
	angular	0° ±2°						

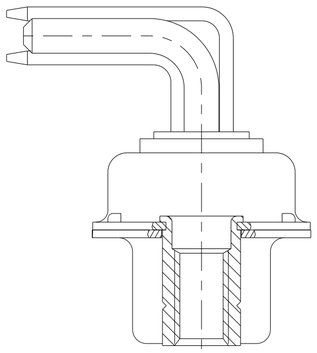
© 2016 AFCI

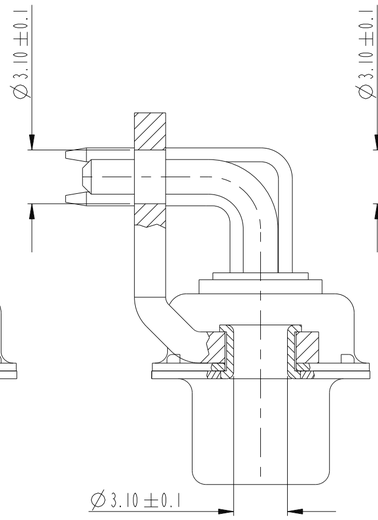
Creo File - REV E - 2016-02-12

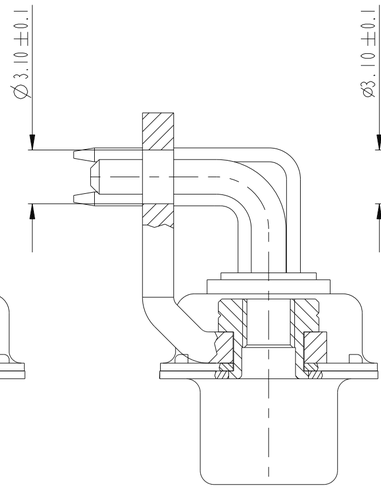
PDS: Rev :E STATUS:Released Printed: Nov 12, 2019

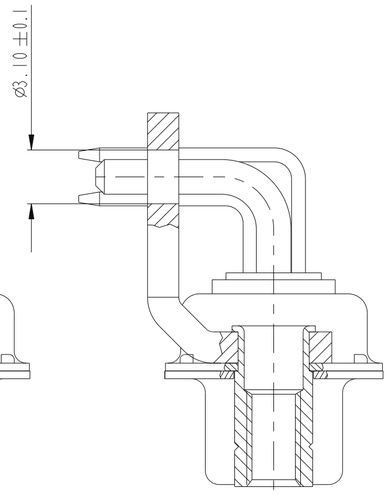




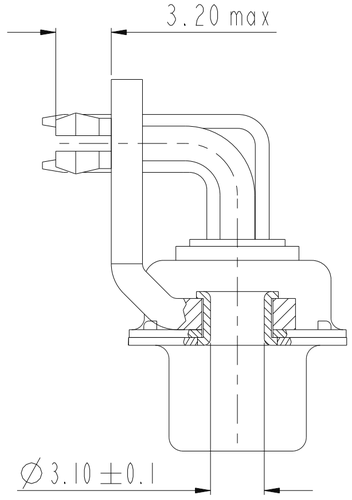


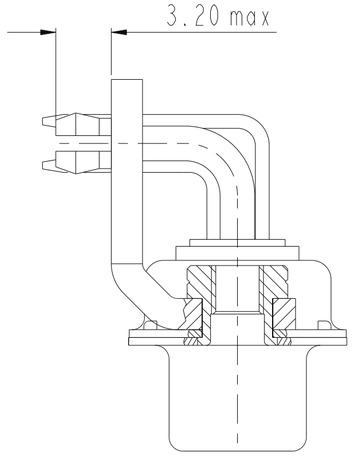


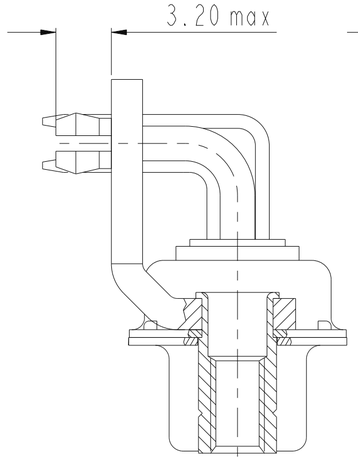


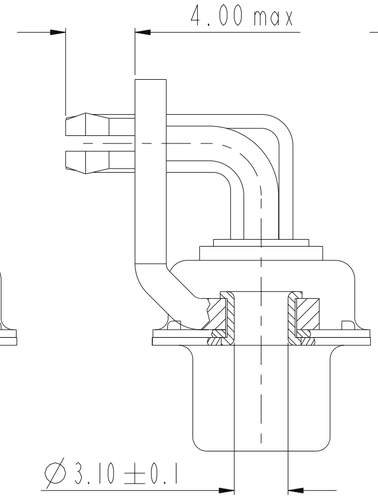


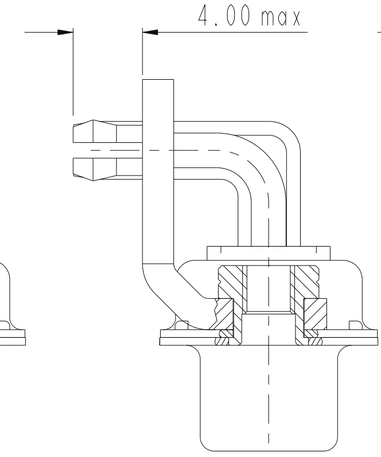
FRONT ACCESSORY	**Blank** Without	**L** insert M3 **O** insert UNC 4.40	**V** insert UNC 4.40	**Blank** Without	**L** insert M3 **O** insert UNC 4.40	**V** insert UNC 4.40
PCB ACCESSORIES	**A** Without	**A** Without	**A** Without	**M** Metal brackets	**M** Metal brackets	**M** Metal bracket

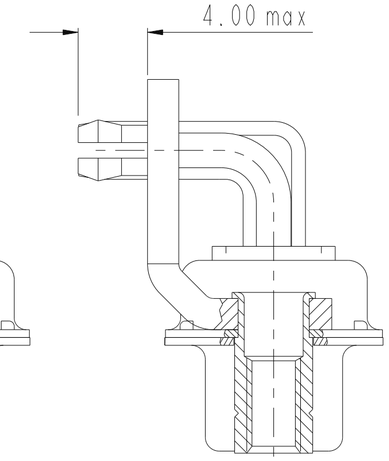












FRONT ACCESSORY	**Blank** Without	**L** insert M3 **O** insert UNC 4.40	**V** insert UNC 4.40	**Blank** Without	**L** insert M3 **O** insert UNC 4.40	**V** insert UNC 4.40
PCB ACCESSORIES	**G** Metal brackets + harpoons for PCB 1.60mm	**G** Metal brackets + harpoons for PCB 1.60mm	**G** Metal brackets + 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

© 2016 AFCI

spec ref				dr	1, Product Eng	2015/06/16	projection
tolerance std ISO 1101 ISO 1101 ISO 406	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Gregar Mathew	2019/11/11	mm
				chr	-	-	
				appr	Varma Sudhir	2019/11/12	product family: -

size: A2	scale: 3:1					
ecn no: ELX-I-33009-1	rel level: Released					
surface: - ISO 1302	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
		0.XX	±0.10			
		0.XXX	±0.05			
	angular	0°	±°2		cat. no. -	Product - Customer Drw / sheet 2 of 7

Creo File - REV E - 2016-02-12

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

shell size *	LAYOUTS xWx
E	5WI
A	11WI
A	7W2
B	21WI
B	17W2
B	13W3
B	9W4
C	25W3
C	21WA4
C	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

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

© 2016 AFCI

spec ref			dr	1, Product Eng	2015/06/16	projection	mm
tolerance std ISO 1101 ISO 406	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Gregar Mathew	2019/11/11		
			chr	-	-		
			appr	Varma Sudhir	2019/11/12	product family	D SUB

size	scale
A2	3:1

ecn no ELX-I-33009-1

rel level **Released**

surface			
ISO 1302	linear	0.X	±0.30
		0.XX	±0.10
		0.XXX	±0.05
	angular	0°	±°2

Amphenol FCI

title: SUB MALE DW EUROPE FOOT PRINT
MIXED POWER RIGHT ANGL SOLDER

dwg no C01-8639-2304c

rev E

cat. no. - | Product - Customer Drw | sheet 3 of 7

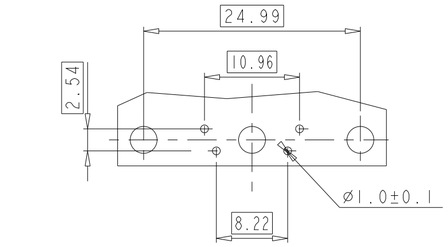
Cres File - REV E - 2016-02-12

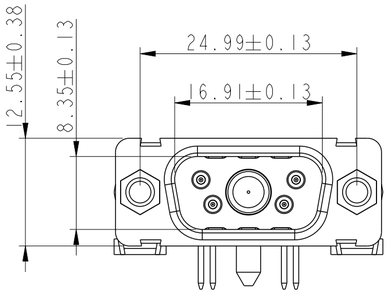
PDS: Rev :E | STATUS: Released | Printed: Nov 12, 2019

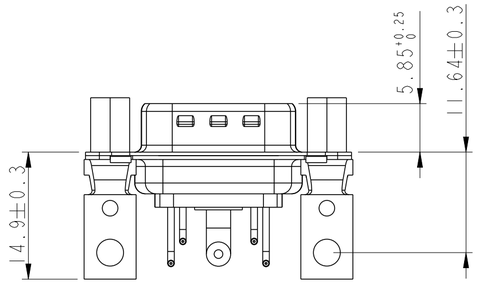
5W1

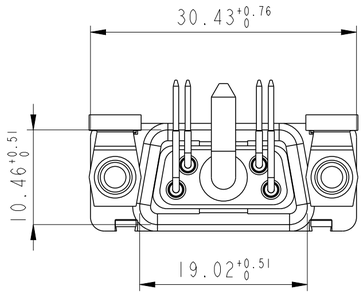
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1







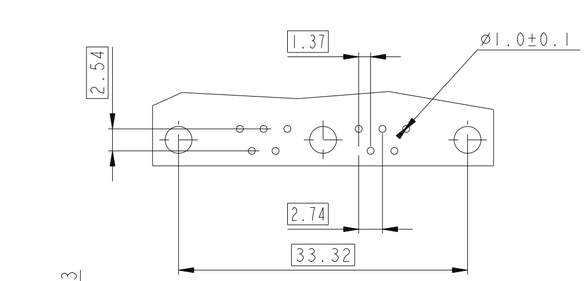


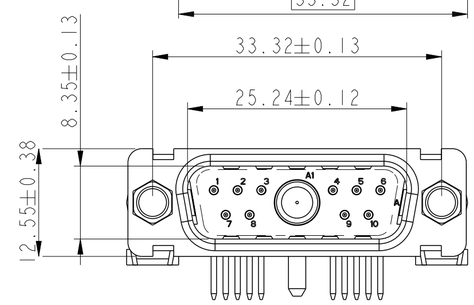
Floating signal contacts

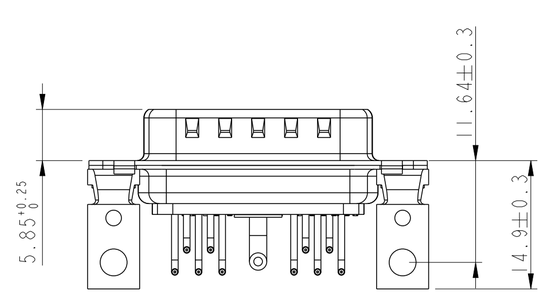
11W1

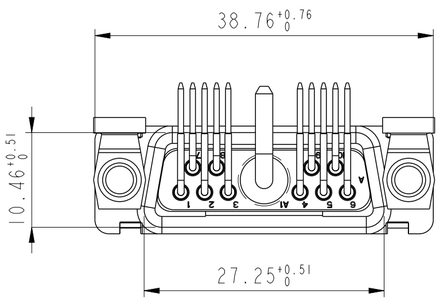
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1





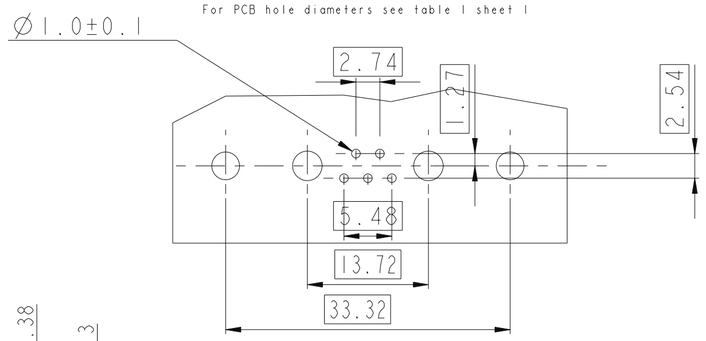


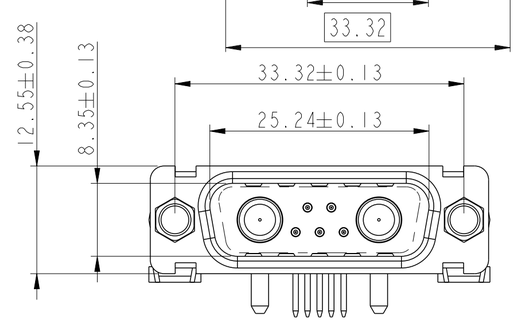


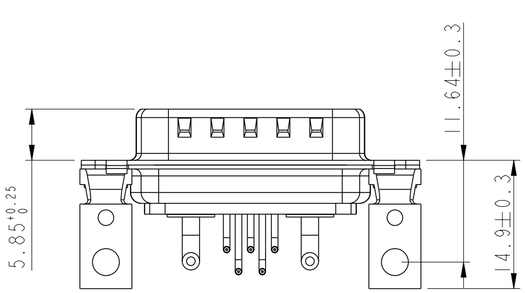
7W2

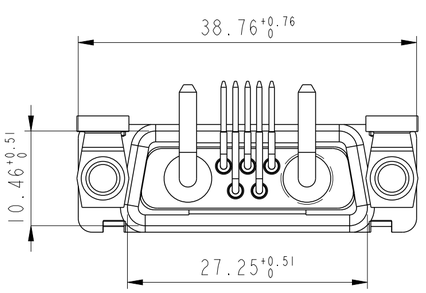
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1



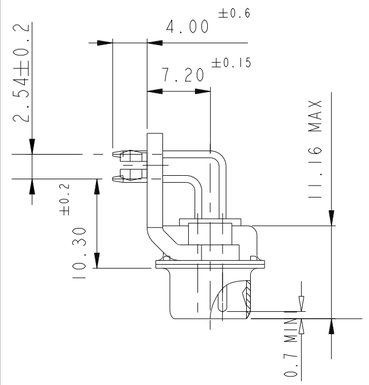




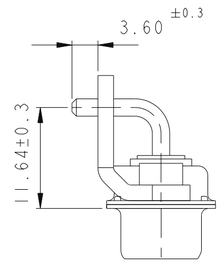


SIDE VIEW FOR ALL LAYOUTS

VIEW WITHOUT POWERS CONTACTS



VIEW WITH POWERS CONTACTS



© 2016 AFCI

spec ref				dr	1, Product Eng	2015/06/16	projection
tolerance std ISO 1101 ISO 406	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Gregar Mathew	2019/11/11	mm
				chr	-	-	
				appr	Varma Sudhir	2019/11/12	product family D SUB -
surface - ISO 1302	linear	0.X	±0.30	Amphenol FCi	title: SUB MALE DW EUROPE FOOT PRINT MIXED POWER RIGHT ANGL SOLDER		dwg no C01-8639-2304c
		0.XX	±0.10				
		0.XXX	±0.05				
	angular	0°	±°2		cat. no. -	Product - Customer Drw	

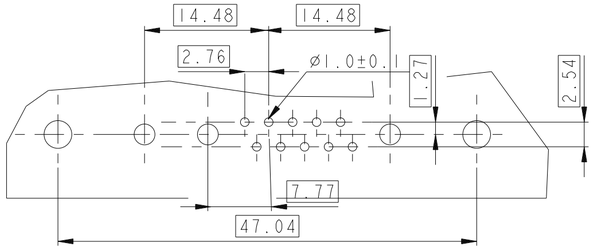
size A2	scale 2:1	rev E
ecn no ELX-I-33009-1		
rel level Released		
sheet 4 of 7		

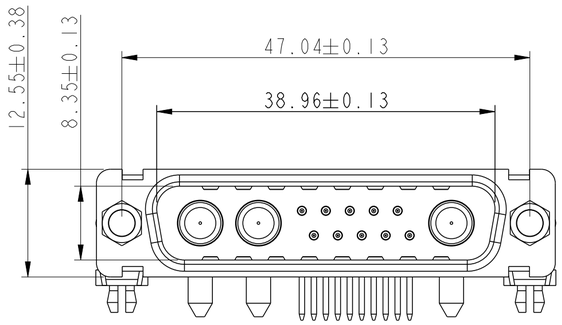
PDS: Rev :E | STATUS: Released | Printed: Nov 12, 2019

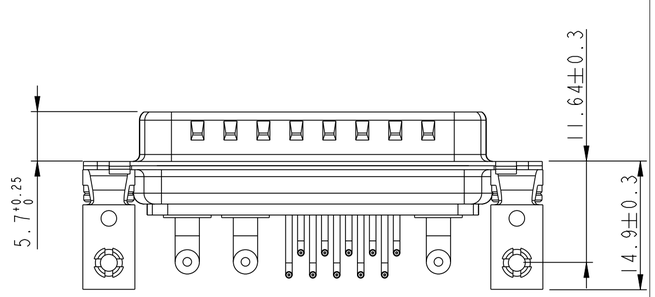
13W3

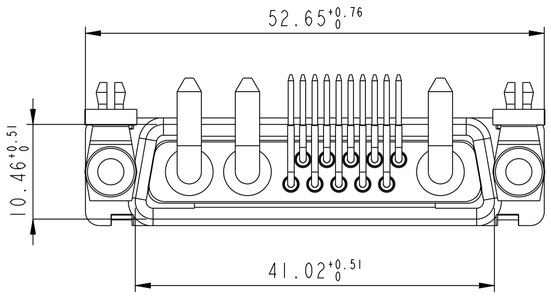
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1

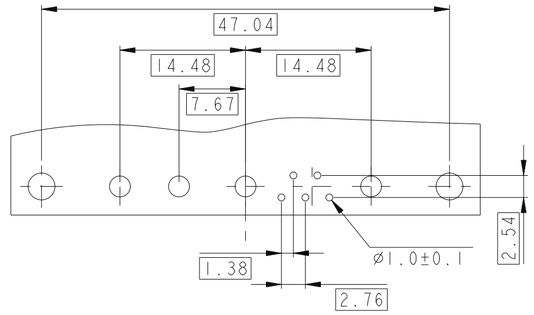






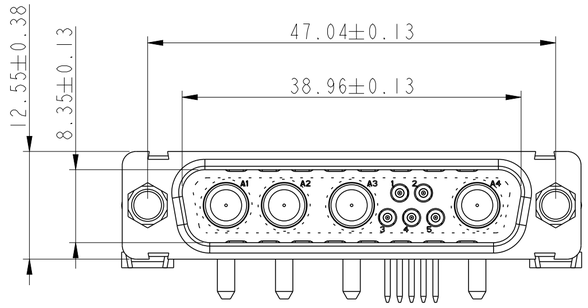


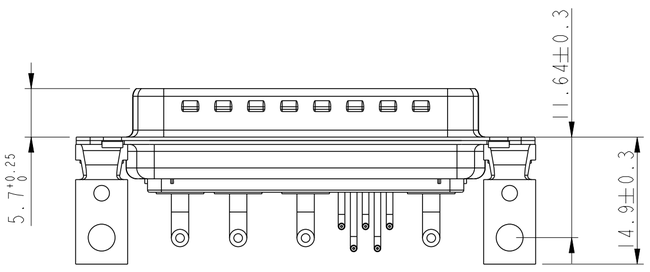
9W4

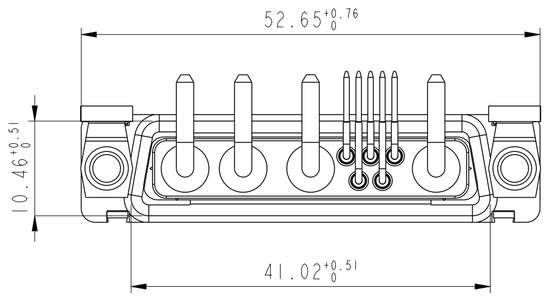


LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1





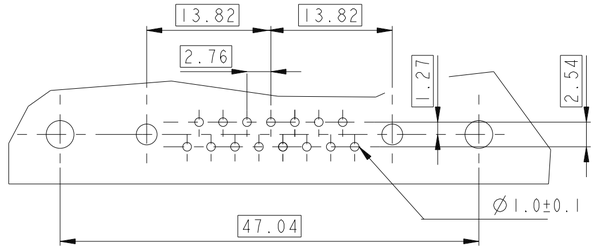


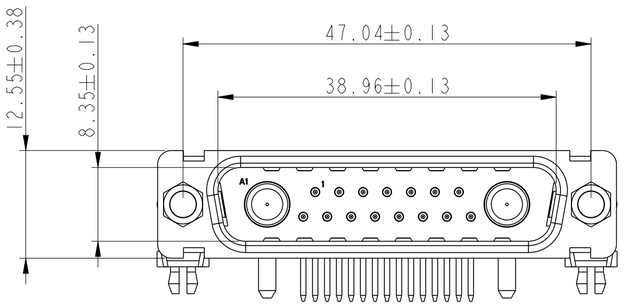
Floating signal contacts

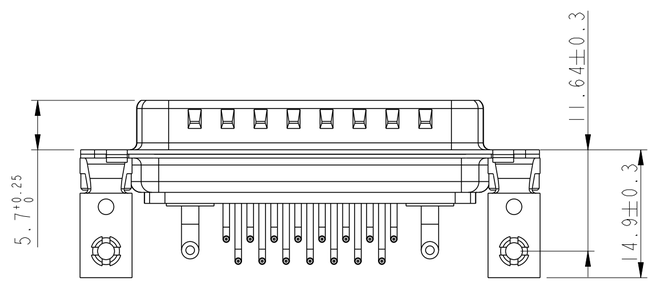
17W2

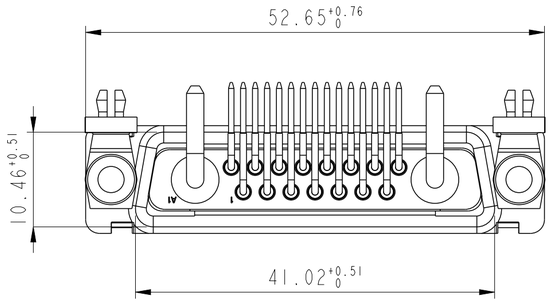
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1









spec ref				dr	1, Product Eng	2015/06/16	projection	mm
tolerance std ISO 1101 ISO 406	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Gregar Mathew	2019/11/11		
				chr	-	-		
				appr	Varma Sudhir	2019/11/12	product family	D SUB -
surface - ISO 1302	linear	0.X	±0.30	Amphenol FCi	title	SUB MALE DW EUROPE FOOT PRINT	dwg no	C01-8639-2304c
		0.XX	±0.10			MIXED POWER RIGHT ANGL SOLDER		
		0.XXX	±0.005					
	angular	0°	±°2		cat. no.	-	Product - Customer Drw	

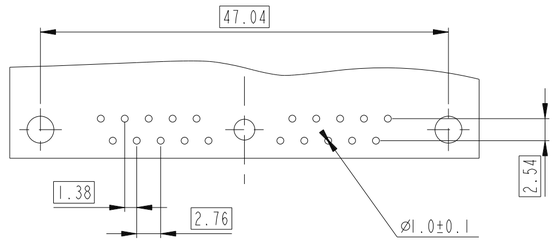
size A2 | scale 2:1 | ecn no ELX-I-33009-1 | rel level Released | rev E | sheet 5 of 7

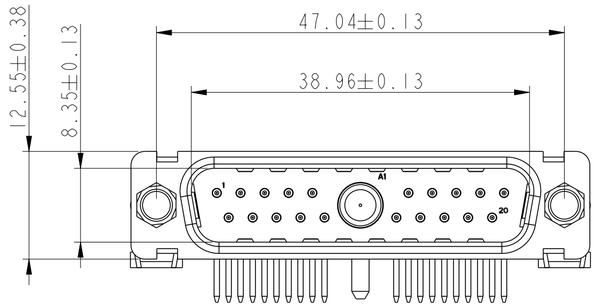
© 2016 AFCI

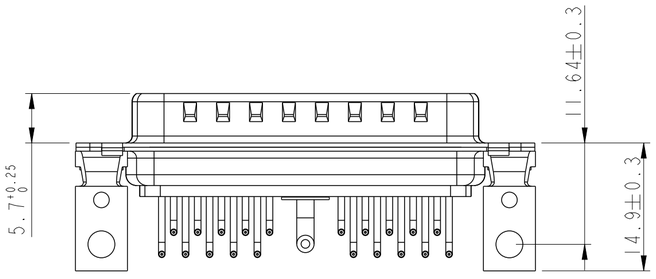
21W1

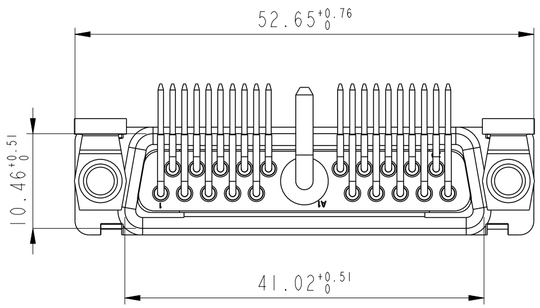
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1





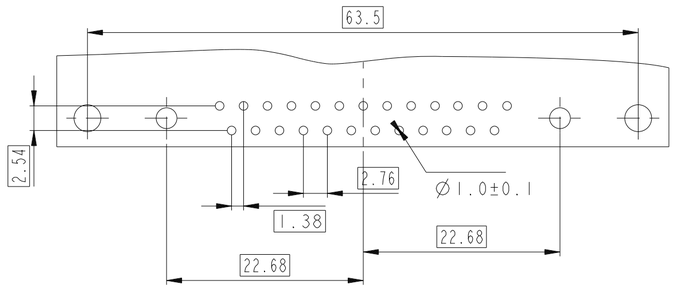


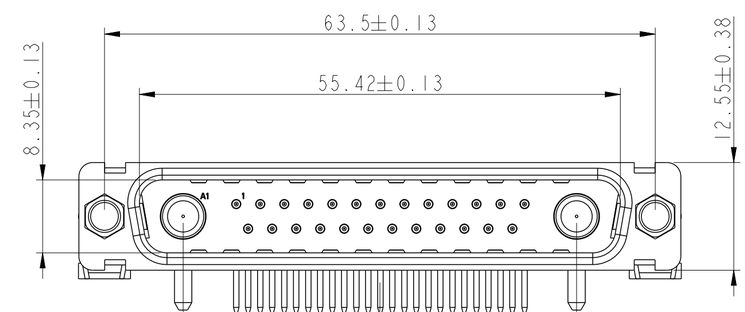


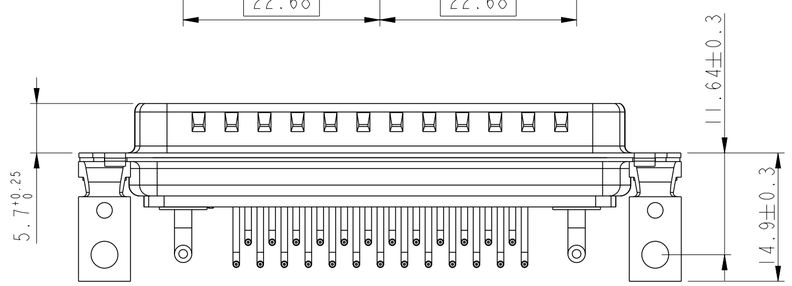
27W2

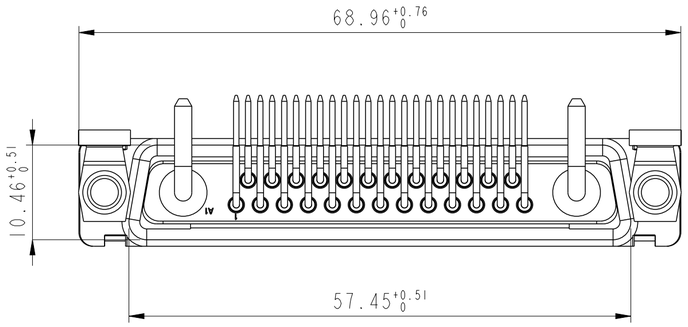
LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1









© 2016 AFCI

spec ref				dr	1, Product Eng	2015/06/16	projection: mm; size: A2; scale: 2:1
tolerance std: ISO 1101, ISO 406	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Gregar Mathew	2019/11/11	ecn no: ELX-I-33009-1
				chr	-	-	
				appr	Varma Sudhir	2019/11/12	product family: D SUB-; rel level: Released
surface: ~ ISO 1302	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
		0.XX	±0.10				
		0.XXX	±0.005				
	angular	0°	±2°		cat. no. -	Product - Customer Drw	sheet 6 of 7

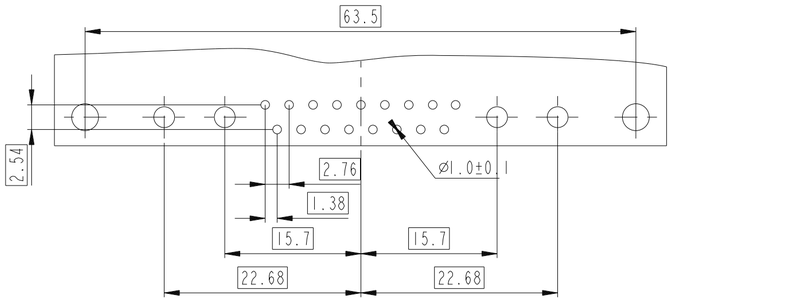
Creo File - REV E - 2016-02-12

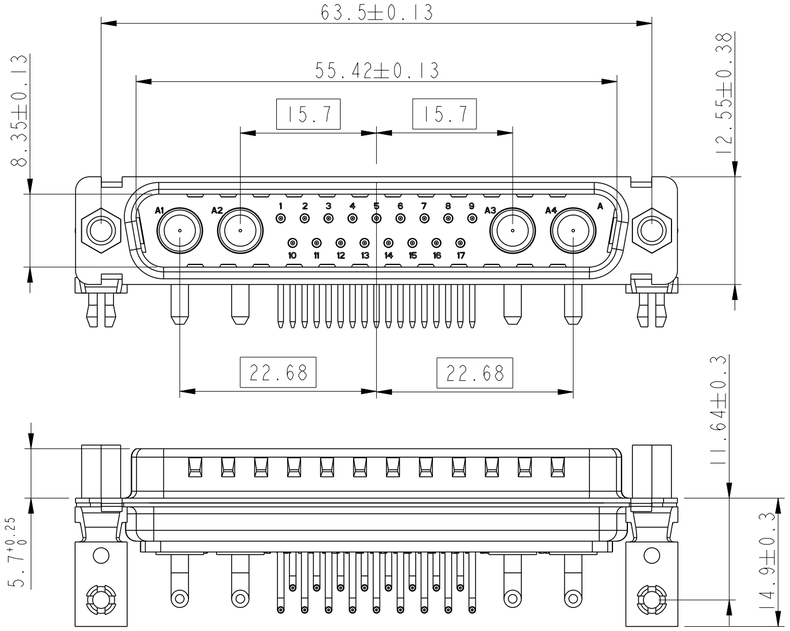
PDS: Rev :E STATUS: Released Printed: Nov 12, 2019

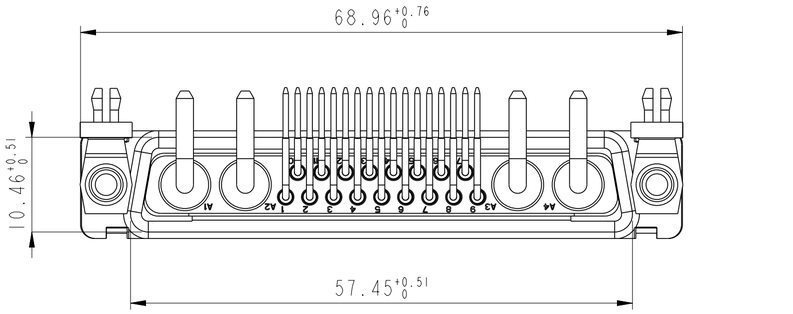
21WA4

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1



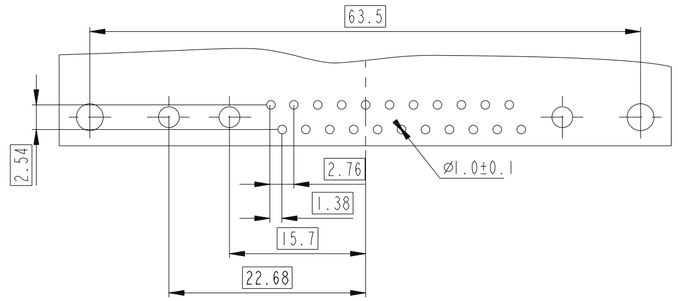


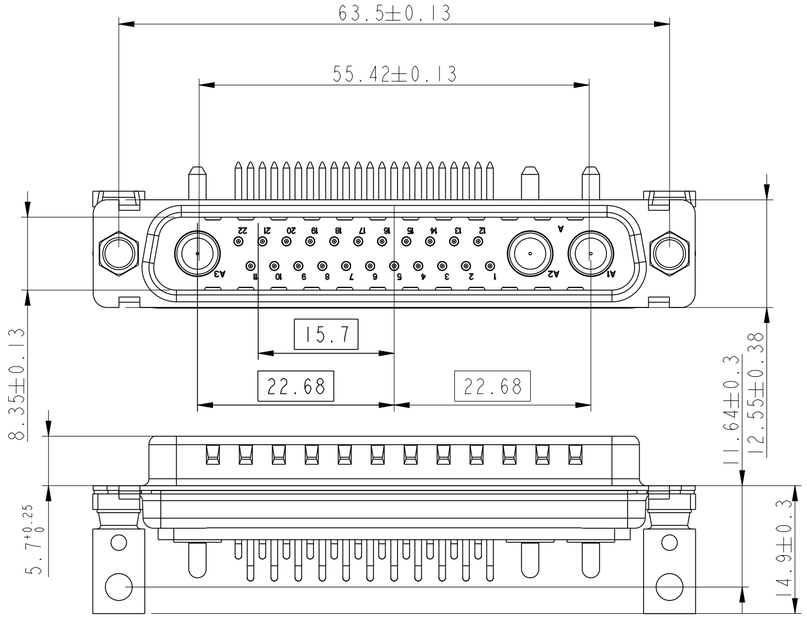


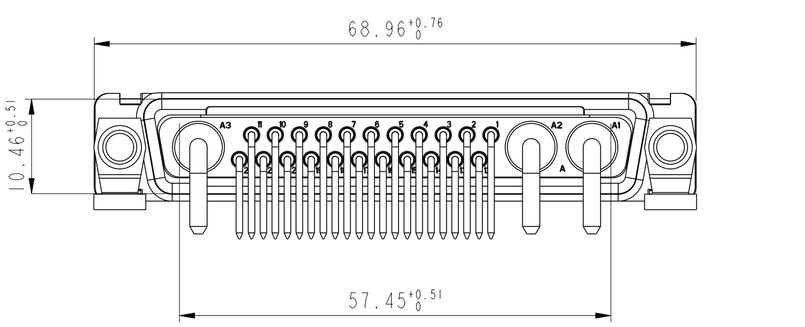
25W3

LAYOUT AND CONNECTOR DIMENSIONS

For PCB hole diameters see table 1 sheet 1







© 2016 AFCI

spec ref				dr	1, Product Eng	2015/06/16	projection	mm	size A2 / scale 2:1
tolerance std ISO 1101 ISO 406	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Gregar Mathew	2019/11/11			ecn no ELX-I-33009-1
				chr	-	-			
				appr	Varma Sudhir	2019/11/12	product family -		rel level Released
surface - ISO 1302	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
		0.XX	±0.10						
		0.XXX	±0.05						
	angular	0°	±2°		cat. no. -		Product - Customer Drw		sheet 7 of 7

Creo File - REV E - 2016-02-12

PDS: Rev :E STATUS: Released Printed: Nov 12, 2019