

## Fixed Machined Contact Connector

- Standards:
- UL File: E119881
  - Connectors according to MIL C24308

### SPECIFICATIONS:

#### MATERIALS AND PLATINGS

|                     |                                                                                                                                                                                         |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shells              | Steel yellow chromated over zinc or tinned steel with or without dimples on plug connector                                                                                              |
| Insulator           | Glass-filled thermoplastic, UL 94V-0                                                                                                                                                    |
| Rear Insert         | Brass, 118µ" up to 197µ" (3µm up to 5µm) tinned over nickel 78µ" up to 118µ" (2µm up to 3µm)                                                                                            |
| Boardlock           | Tin-lead plating 157µ" up to 236µ" (4µm up to 6µm) over nickel                                                                                                                          |
| Screwlock           | 78µ" up to 118µ" (2µm up to 3µm) Brass, 236µ" up to 394µ" (6µm up to 10µm) tinned over nickel 78µ" up to 118µ" (2µm up to 3µm)                                                          |
| Contacts            | D: brass<br>DF: pin = brass<br>Socket = copper alloy                                                                                                                                    |
| Right Angle Version | Selective gold in mating area over 78µ" up to 118µ" (2µm up to 3µm) nickel; 118µ" up to 197µ" (3µm up to 5µm) tin-lead on termination area over 78µ" up to 118µ" (2µm up to 3µm) nickel |
| Straight Version    | Full gold plating over 78µ" up to 118µ" (2µm up to 3µm) nickel                                                                                                                          |

#### ELECTRICAL DATA

|                       |                                  |
|-----------------------|----------------------------------|
| Current Rating        | 7.5 A                            |
| Voltage Rating        | 300 V AC/rms 50Hz                |
| Withstanding Voltage  | 1000V AC/rms 50Hz for one minute |
| Insulation Resistance | 5000MΩ                           |
| Contact Resistance    | D: 8.5mΩ max.<br>DF: 5mΩ max.    |

#### CLIMATIC DATA

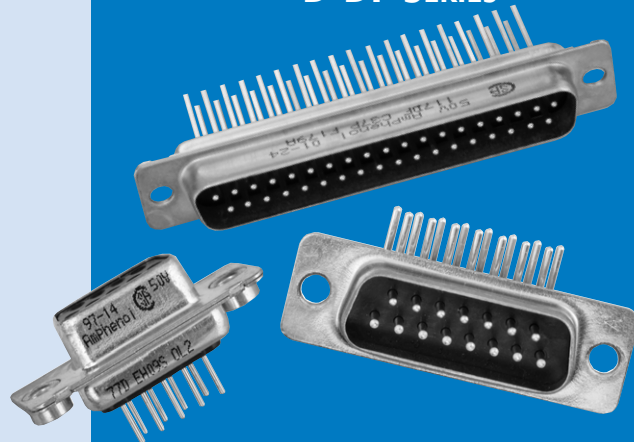
|                       |                                                                                                  |
|-----------------------|--------------------------------------------------------------------------------------------------|
| Operating Temperature | D: -67°F (-55°C) to +185°F (85°C), peak at 257°F (125°C)<br>DF: -67°F (-55°C) to + 257°F (125°C) |
|-----------------------|--------------------------------------------------------------------------------------------------|

#### MECHANICAL DATA

| No. of Contacts | Mate (max.)   | Unmate (min.) |
|-----------------|---------------|---------------|
| 9 (size E)      | 6.74 (3.05)   | 0.79 (0.36)   |
| 15 (size A)     | 11.24 (5.09)  | 1.01 (0.46)   |
| 25 (size B)     | 18.66 (8.44)  | 1.8 (0.81)    |
| 37 (size C)     | 27.65 (12.51) | 2.47 (1.1)    |
| 50 (size D)     | 32.38 (14.65) | 3.56 (1.6)    |

INCHES (MM)

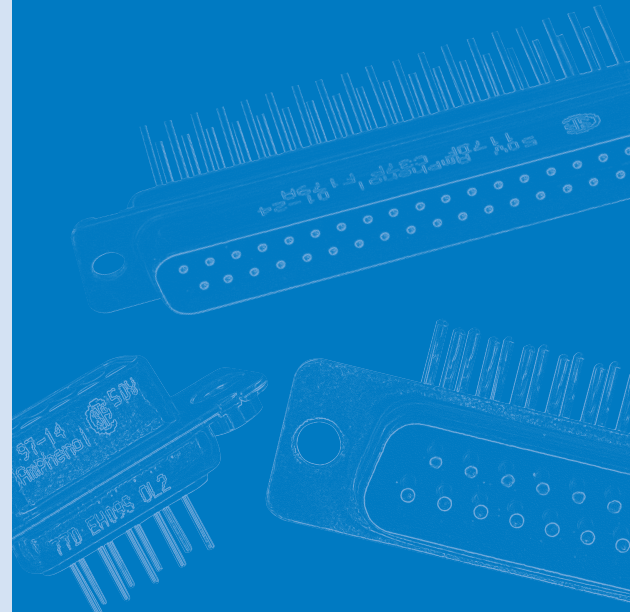
## D-DF SERIES

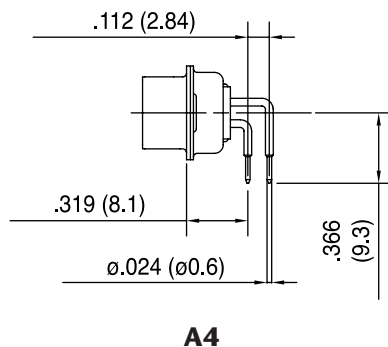
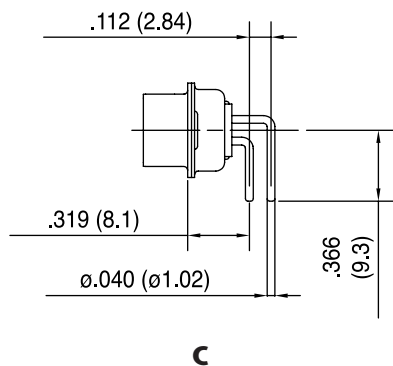
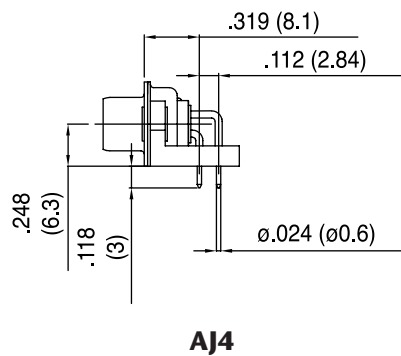
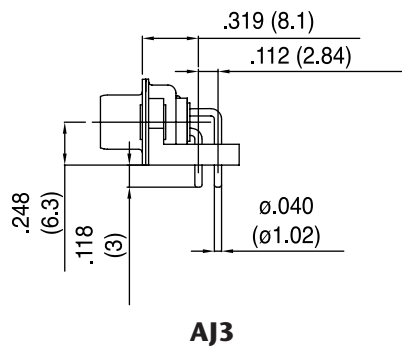
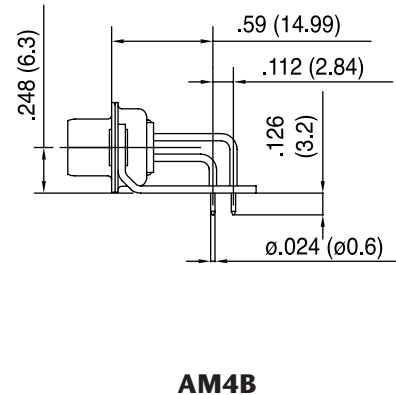
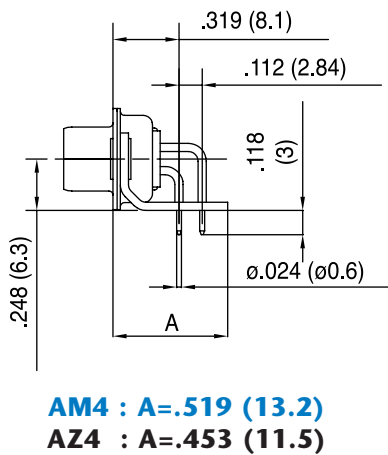
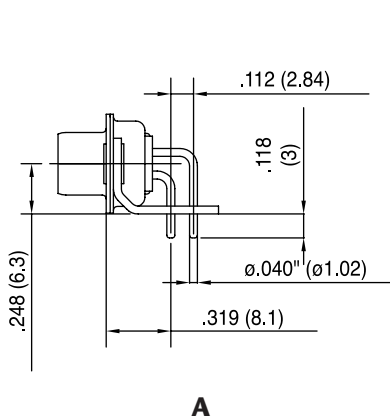
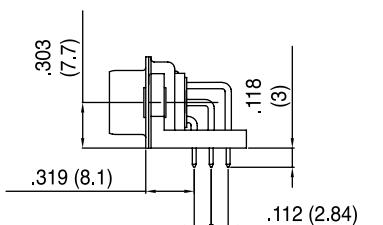


The Amphenol SD series features precision formed contacts, and 4 finger boardlocks.

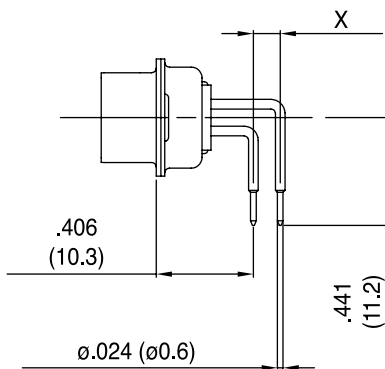
This series gives you Amphenol's high standards of quality and reliability to meet all of your commercial requirements.

- Industrial
- Telecom
- Any industry standard I / O connections



*Without bracket**Plastic bracket**Metal bracket**50 contacts*

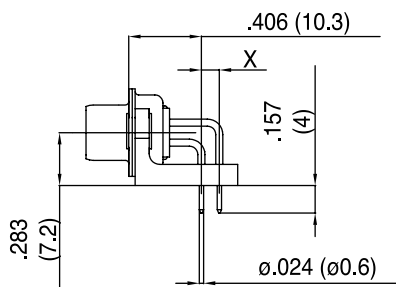
### Without bracket



**1AON : X= .100 (2.54)**

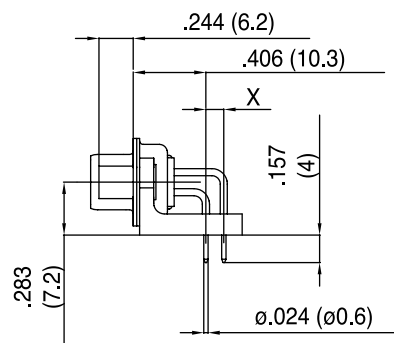
**1BON : X= .112 (2.84)**

### Plastic bracket



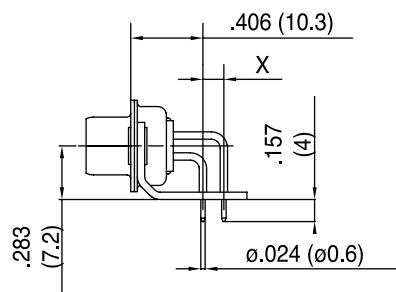
**1APN : X= .100 (2.54)**

**1BPN : X= .112 (2.84)**



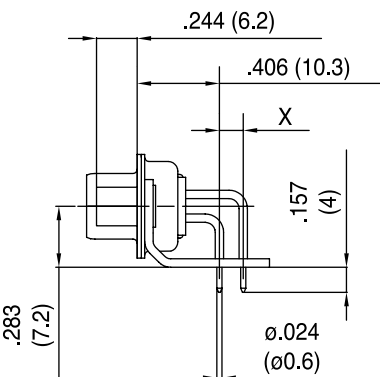
**1AUN : X= .100 (2.54)**

**1BUN : X= .112 (2.84)**



**1AMN : X= .100 (2.54)**

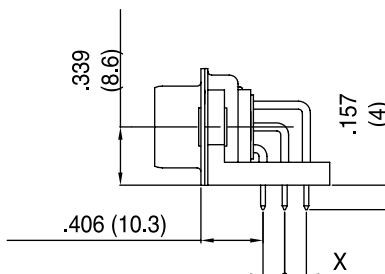
**1BMN : X= .112 (2.84)**



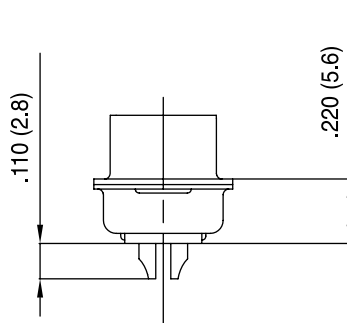
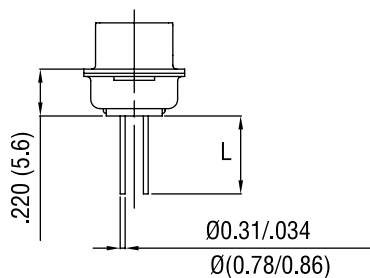
**1ATN : X= .100 (2.54)**

**1BTN : X= .112 (2.84)**

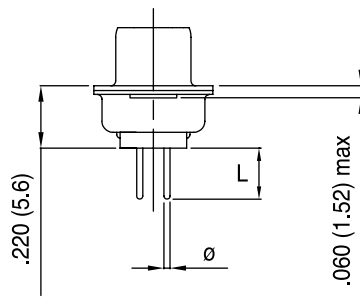
### 50 contacts



INCHES (MM)

*Solder cup**Wire Wrap*

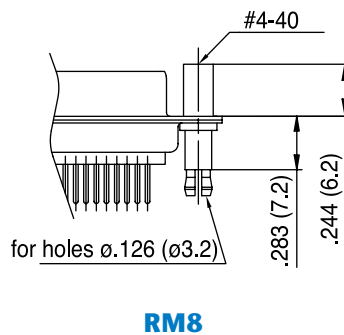
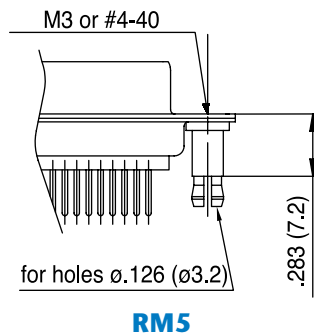
| Termination | Nb of wraps | L          |
|-------------|-------------|------------|
| F179        | 2           | .378 (9.6) |
| F179A       | 3           | .512 (13)  |

*Straight PCB*

| Termination | Ø           | L          |
|-------------|-------------|------------|
| U           | .024 (0.6)  | .126 (3.2) |
| V           | .040 (1.02) | .095 (2.4) |
| T           | .024 (0.6)  | .157 (4)   |
| OL2         | .02 (0.6)   | .217 (5.5) |

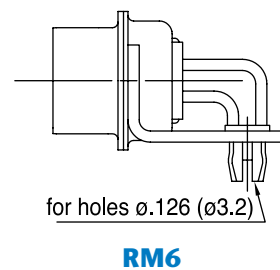
*Grounding tabs*

For straight termination



For R/A termination

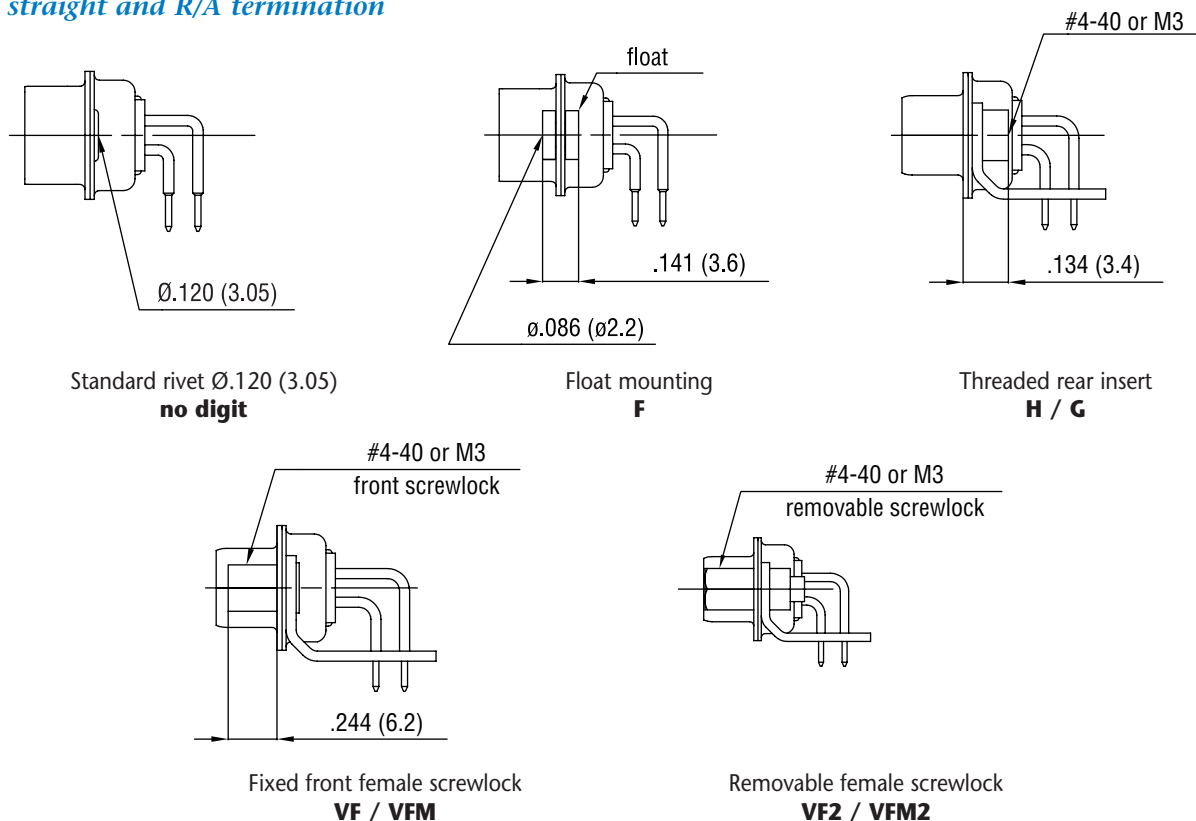
FOR PCB .062 (1.6)



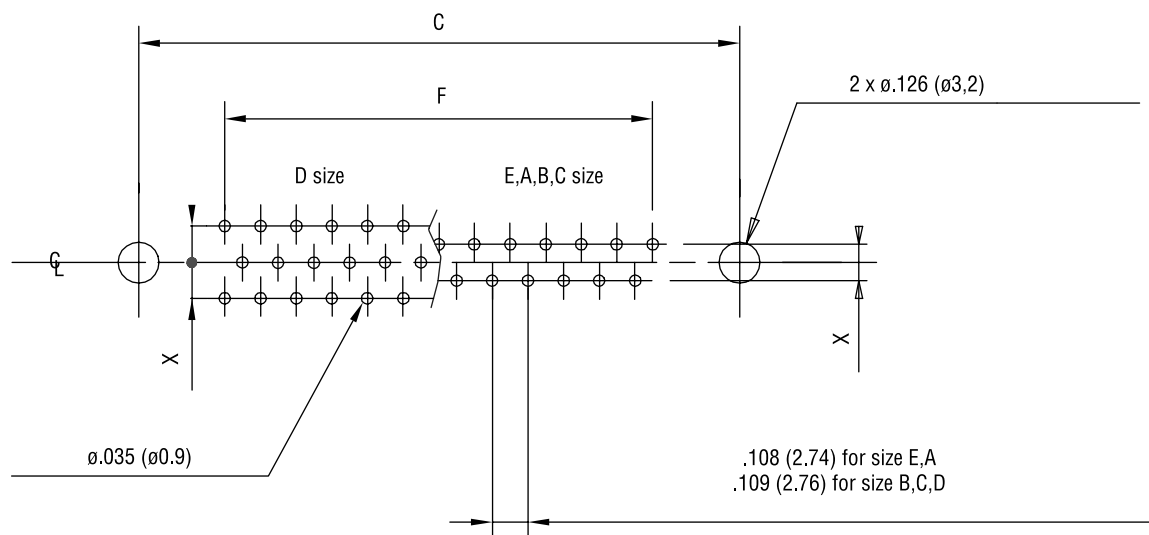
# Screw-Machined Contacts Fixed Machined Contact Connector

**D-DF SERIES**

*For straight and R/A termination*



## RECOMMENDED PCB LAYOUT



For straight PCB: X = .112 (2.84)

For right angle PCB: MIL: X = .112 (2.84)

European: X = .100 (2.54), .112 (2.84) in option

|                        | size E       | size A       | size B        | size C        | size D       |
|------------------------|--------------|--------------|---------------|---------------|--------------|
| <b>C ± .004 (0.1)</b>  | .984 (25)    | 1.311 (33.3) | 1.85 (47)     | 2.5 (63.5)    | 2.406 (61.1) |
| <b>F ± .002 (0.05)</b> | .431 (10.96) | .755 (19.18) | 1.304 (33.12) | 1.956 (49.68) | 1.74 (44.2)  |

INCHES (MM)

## ORDERING INFORMATION

XXXXXX X X XX X XXXXXX XXXX X

|                  |                                                                                                               |
|------------------|---------------------------------------------------------------------------------------------------------------|
| 8μ"<br>(0.2μm)   | 17D: yellow chromated shell<br>77D: tinned shell for receptacle<br>717D: tinned shell + dimples for plug      |
| 20μ"<br>(0.5μm)  | 17DF: yellow chromated shell<br>77DF: tinned shell for receptacle<br>717DF: tinned shell + dimples for plug   |
| 30μ"<br>(0.76μm) | 117DF: yellow chromated shell<br>177DF: tinned shell for receptacle<br>777DF: tinned shell + dimples for plug |

Shell size: E, A, B, C, D

## Mounting Options:

H rear insert 4-40  
G rear insert M3  
F float mounting  
no digit standard rivet .122 (ø 3.1)  
\*H, G must also be used to specify the threading of RM5 grounding tabs.

Configuration: 09, 15, 25, 37, 50

## Contact type:

P pin  
S socket

For specific product

## Grounding tabs:

RM5 for straight PCB mounting\*  
RM8 for straight PCB mounting + female lock  
RM6 for right angle PCB mounting  
VF front screwlock 4-40  
VFM front screwlock M3  
VF2 removable screwlock 4-40  
VFM2 removable screwlock M3

## Termination:

solder cup: no digit

## Wire Wrap:

F179 length .378 (9.6)  
F179A length .512 (13)

## Straight PCB:

U length .126 (3.2) tail ø.024 (ø0.6)  
V length .094 (2.4) tail ø.040 (ø1.02)  
T length .157 (4) tail ø.024 (ø0.6)  
OL2 length .216 (5.5) tail ø.024 (ø0.6)

## Right Angle Connector:

MIL footprint

without bracket: C tail ø.040 (ø1.02)  
A4 tail ø.024 (ø0.6)  
plastic bracket: AJ3 tail ø.040 (ø1.02)  
AJ4 tail ø.024 (ø0.6)  
metal bracket: A tail ø.040 (ø1.02)  
AM4 A ø.519 (13.2)  
AZ4 A ø.453 (11.5)  
AM4B footprint ø.590 (14.99)

European footprint

without bracket: 1AON X .100 (2.54)  
1BON X .112 (2.84)  
plastic bracket: 1APN X .100 (2.54)  
1BPN X .112 (2.84)  
1AUN X .100 (2.54)  
1BUN X .112 (2.84)  
metal bracket: 1AMN X .100 (2.54)  
1BMN X .112 (2.84)  
1ATN X .100 (2.54)  
1BTN X .112 (2.84)

: Standard options

For special request, please consult factory

For Filtered D-Sub, see page 56.

# AMEYA360

Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit [www.ameya360.com](http://www.ameya360.com)

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd  
Minhang District, Shanghai , China

➤ Sales :

Direct     +86 (21) 6401-6692  
  
Email       amall@ameya360.com  
  
QQ         800077892  
  
Skype      ameyasales1 ameyasales2

➤ Customer Service :

Email       service@ameya360.com

➤ Partnership :

Tel         +86 (21) 64016692-8333  
  
Email      mkt@ameya360.com