

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 78µ" up to 118µ" (2µm up to 3µm) |
| Screwlock | Brass, 236µ" up to 394µ" (6µm up to 10µm) tinned over nickel 78µ" up to 118µ" (2µm up to 3µm) |
| Contacts | D: brass DF: pin = brass 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. DF: 5mΩ max. |

CLIMATIC DATA

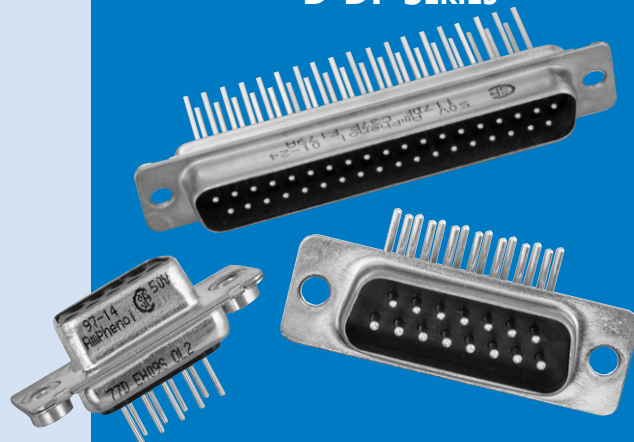
| | |
|------------------------------|--|
| Operating Temperature | D: -67°F (-55°C) to +185°F (85°C), peak at 257°F (125°C) DF: -67°F (-55°C) to + 257°F (125°C) |
|------------------------------|--|

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)

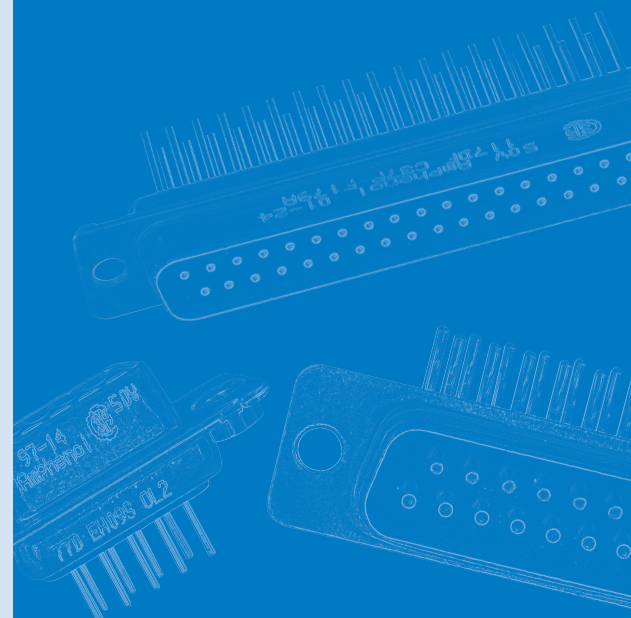
D-DF SERIES



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.

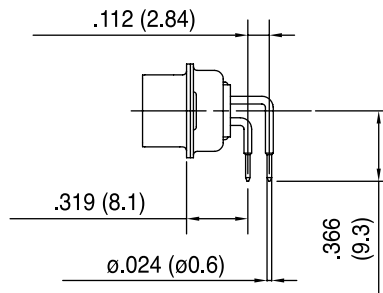
- Industrial
- Telecom
- Any industry standard I / O connections



Without bracket



C



A4

Plastic bracket

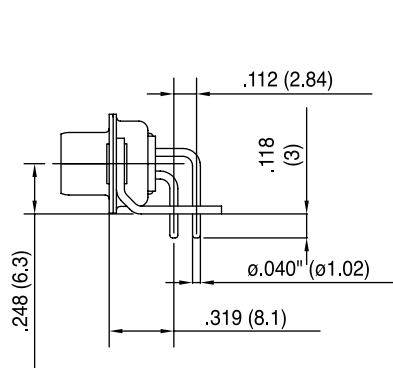


AJ3



AJ4

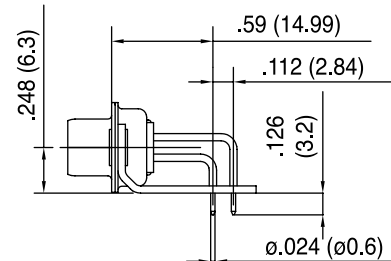
Metal bracket



A

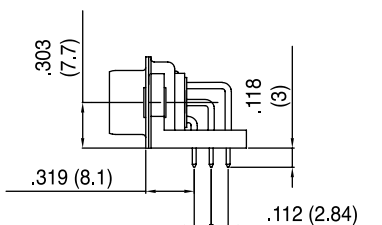


AM4 : A=.519 (13.2)
AZ4 : A=.453 (11.5)

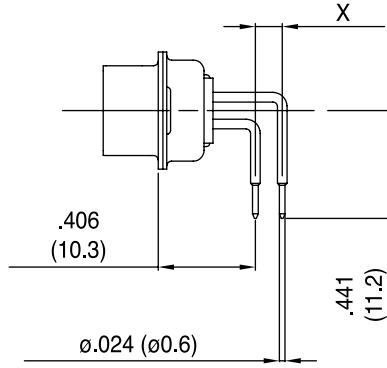


AM4B

50 contacts

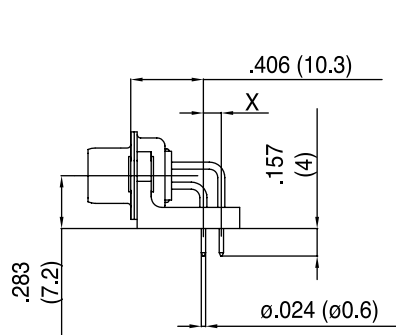


Without bracket

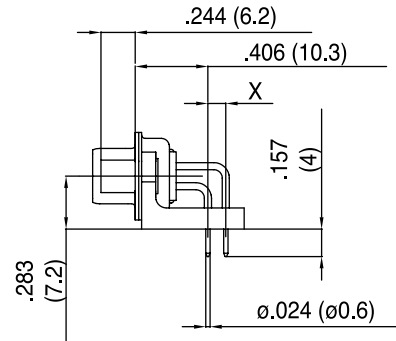


1AON : X= .100 (2.54)
1BON : X= .112 (2.84)

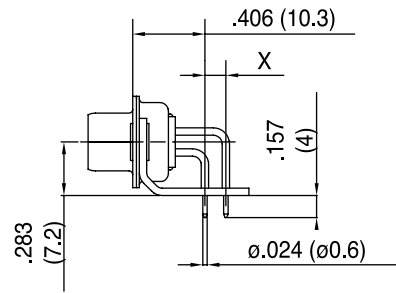
Plastic bracket



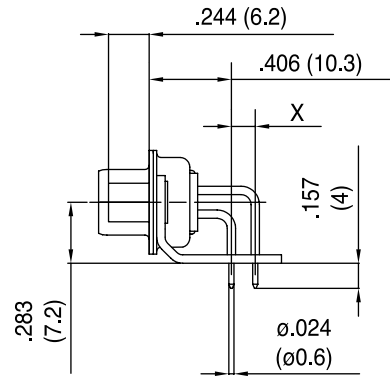
1APN : X= .100 (2.54)
1BPN : X= .112 (2.84)



1AUN : X= .100 (2.54)
1BUN : X= .112 (2.84)

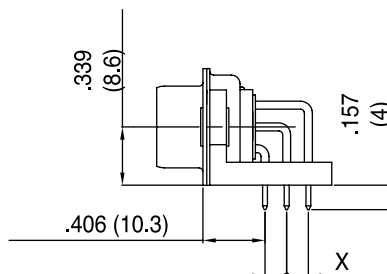


1AMN : X= .100 (2.54)
1BMN : X= .112 (2.84)



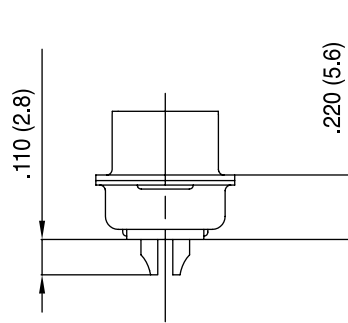
1ATN : X= .100 (2.54)
1BTN : X= .112 (2.84)

50 contacts

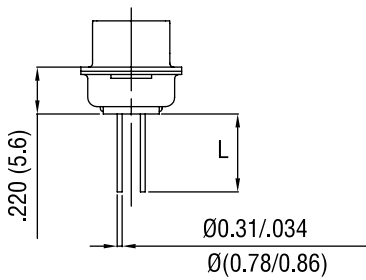


INCHES (MM)

Solder cup

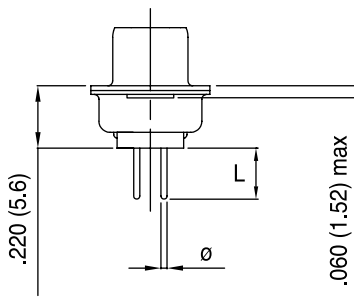


Wire Wrap



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

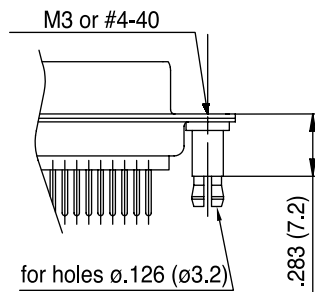
Straight PCB



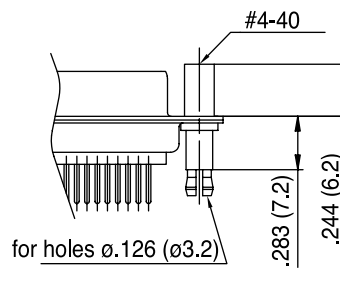
| Termination | Ø | L |
|-------------|-------------|------------|
| U | .024 (0.6) | .126 (3.2) |
| V | .040 (1.02) | .095 (2.4) |
| T | .024 (0.6) | .157 (4) |
| OL2 | .02 (0.6) | .217 (5.5) |

Grounding tabs

For straight termination



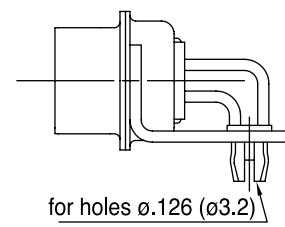
RM5



RM8

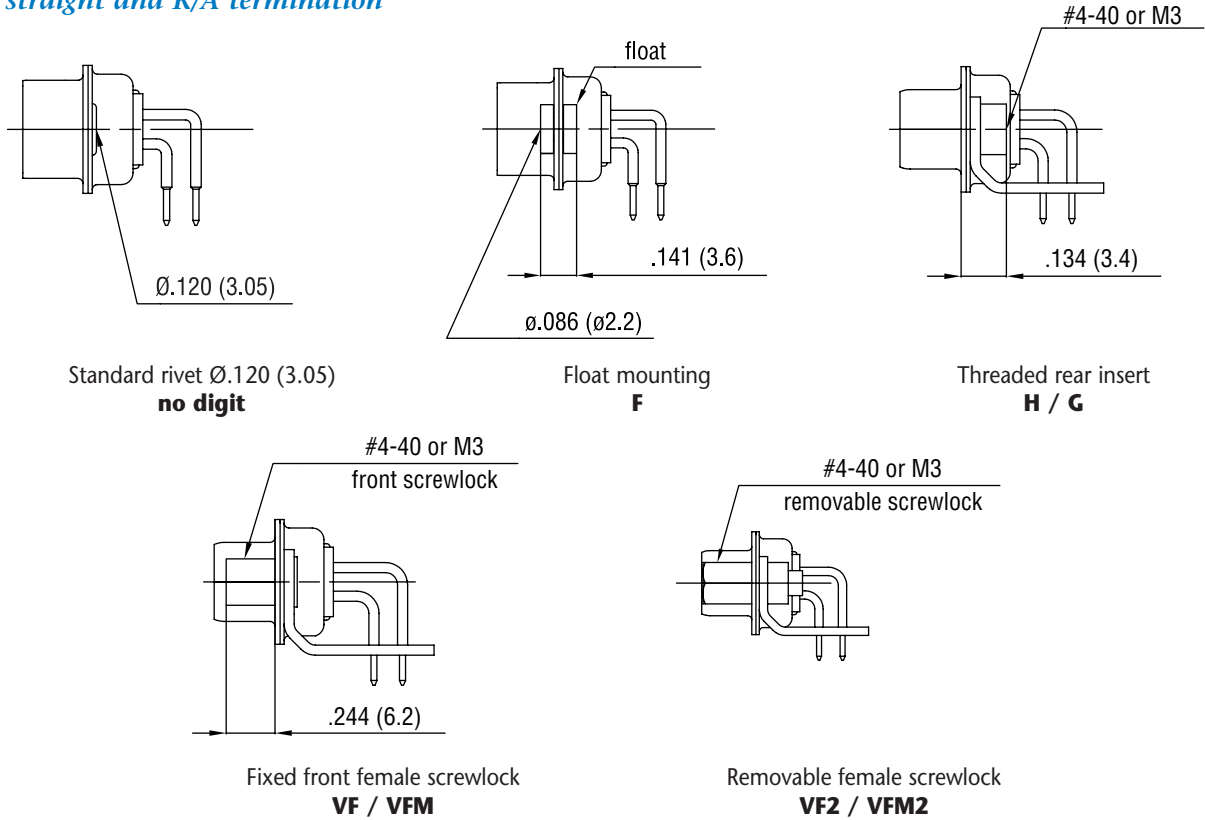
For R/A termination

FOR PCB .062 (1.6)

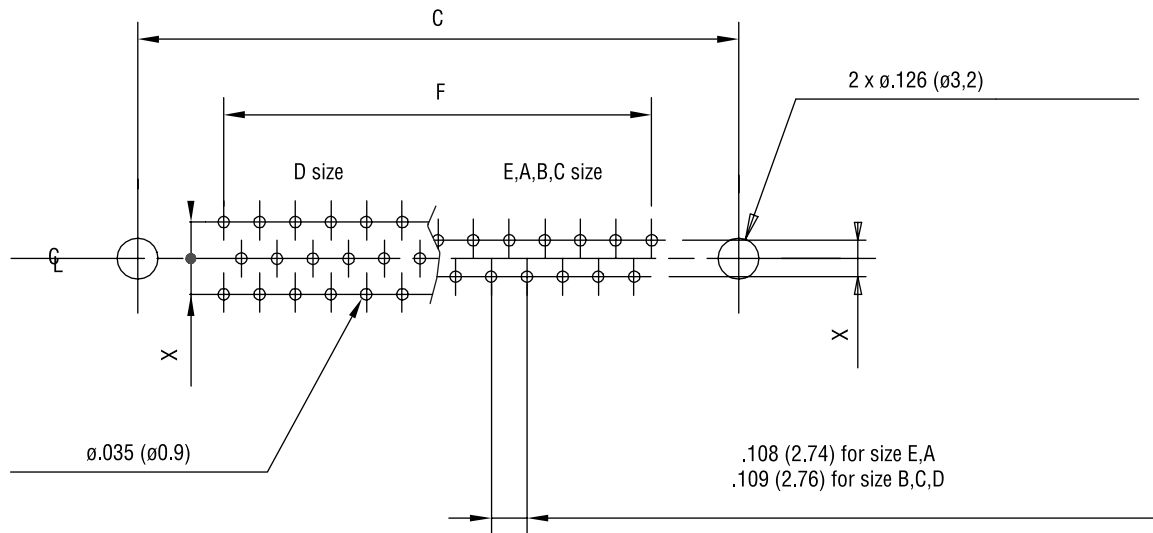


RM6

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 |
|---------------------------------------|--------------|--------------|---------------|---------------|--------------|
| C $\pm .004$ (0.1) | .984 (25) | 1.311 (33.3) | 1.85 (47) | 2.5 (63.5) | 2.406 (61.1) |
| F $\pm .002$ (0.05) | .431 (10.96) | .755 (19.18) | 1.304 (33.12) | 1.956 (49.68) | 1.74 (44.2) |

INCHES (MM)

ORDERING INFORMATION

XXXXX X X XX X XXXXX XXXX X

| | |
|------------------|--|
| 8µ" (0.2µm) | 17D: yellow chromated shell 77D: tinned shell for receptacle 717D: tinned shell + dimples for plug |
| 20µ" (0.5µm) | 17DF: yellow chromated shell 77DF: tinned shell for receptacle 717DF: tinned shell + dimples for plug |
| 30µ" (0.76µm) | 117DF: yellow chromated shell 177DF: tinned shell for receptacle 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
- VF2M 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.