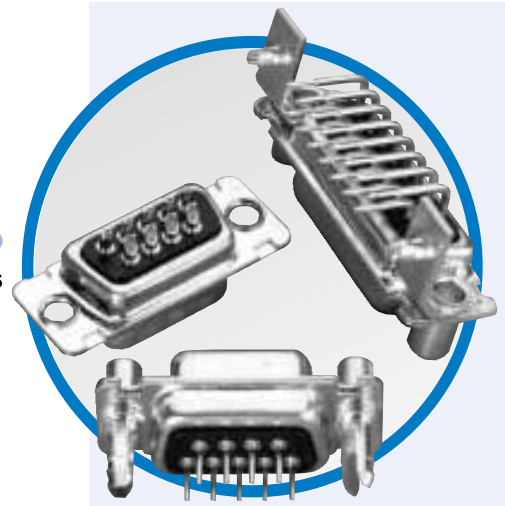


# D-DF

D-Sub connectors - Screw-machined Contacts

## FIXED MACHINED CONTACT CONNECTOR



MAIN CHARACTERISTICS

### Specifications

- UL File: E64911
- Connectors according to: MIL C24308 - NFC93425-HE5

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

Electrical Data	
<b>Current rating</b>	7.5 A
<b>Voltage rating</b>	300 V AC/rms 50Hz
<b>Withstanding voltage</b>	1000V AC/rms 50Hz for one minute
<b>Insulation resistance</b>	5000MΩ
<b>Contact resistance</b>	<p><b>D:</b> 8.5mΩ max</p> <p><b>DF:</b> 5mΩ max</p>

Climatic Data	
<b>Operating temperature</b>	<p><b>D:</b> -55°C to +85°C (peaks at 125°C)</p> <p><b>DF:</b> -55°C to +125°C</p>
<b>Operating temperature</b>	48 hours
<b>Operating temperature</b>	<p><b>D:</b> 21 days (40°C - 95% HR)</p> <p><b>DF:</b> 56 days (40°C - 95% HR)</p>

Mechanical Data		
<b>Mating and unmating force</b>		
Unit: kg ( lb)		
No. of Cts	Mate (max)	Unmate (min)
9 (size E)	3.05 (6.74)	0.36 (0.79)
15 (size A)	5.09 (11.24)	0.46 (1.01)
25 (size B)	8.44 (18.66)	0.81 (1.8)
37 (size C)	12.51 (27.65)	1.1 (2.47)
50 (size D)	14.65 (32.38)	1.6 (3.56)

DESCRIPTION

Amphenol's 17D and 17DF series fixed contact D-Subminiature connector is suitable for industrial or telecom use.

The machined contact provide stability and reliability.

This series offers the broadest range of termination options in the Amphenol line.

*Connectors  
for industrial  
and  
telecom use*

APPLICATIONS

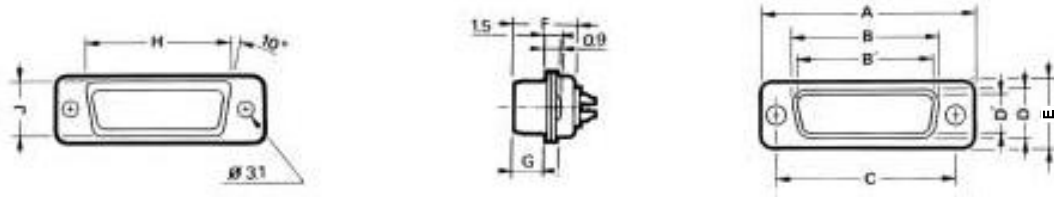
- Industrial
- Telecom
- Any industry standard I / O connections

D-DF / E18



**Amphenol**

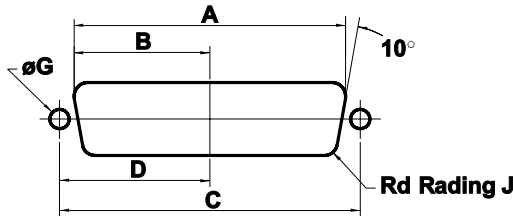
## Shell size dimensions



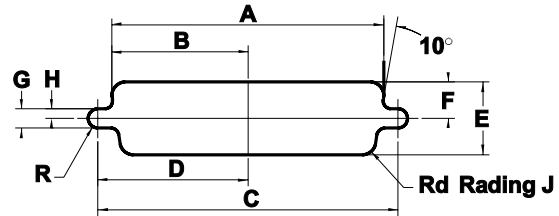
Shell size	Contact P: Pin S: Socket	A ±0.25 (±.010)	B 0/-0.20 (0/-0.008)	B' +0.20/0 (+.008/0)	C ±0.10 (±.004)	D 0/-0.25 (0/-0.010)	D' +0.25/0 (+.010/0)	E ±0.20 (±.008)	F +0.05/-0.20 (+.002/-0.008)	F' +0.10/-0.20 (+.004/-0.008)	G +0.10/-0.20 (+.004/-0.008)	G' ±0.10 (±.004)	H +0.10/-0.40 (+.004/-0.016)	J 0/-0.50 (0/-0.020)
E	P	30.7 (1.209")		16.8 (.661")	25.0 (.984")		8.2 (.323")	12.4 (.488")		10.9 (.429")		5.9 (.232")	19.4 (.764")	11.0 (.433")
	S		16.4 (.646")			8.0 (.315")			11.1 (.437")		6.2 (.244")			
A	P	39.0 (1.535")		25.1 (.988")	33.3 (1.311")		8.2 (.323")	12.4 (.488")		10.9 (.429")		5.9 (.232")	27.7 (1.091")	11.0 (.433")
	S		24.8 (.976")			8.0 (.315")			11.1 (.437")		6.2 (.244")			
B	P	52.9 (2.083")		38.8 (1.528")	47.0 (1.850")		8.2 (.323")	12.4 (.488")		11.0 (.433")		5.8 (.228")	41.4 (1.630")	11.0 (.433")
	S		38.5 (1.513")			8.0 (.315")			11.1 (.437")		6.2 (.244")			
C	P	69.2 (2.724")		55.3 (2.177")	63.5 (2.500")		8.2 (.323")	12.4 (.488")		11.0 (.433")		5.8 (.228")	57.9 (2.280")	11.0 (.433")
	S		54.9 (2.161")			8.0 (.315")			11.1 (.437")		6.2 (.244")			
D	P	66.8 (2.630")		52.7 (2.075")	61.1 (2.406")		11.0 (.433")	15.2 (.598")		11.0 (.433")		5.8 (.228")	55.5 (2.185")	13.8 (.543")
	S		52.5 (2.067")			10.9 (.429")			11.1 (.437")		6.2 (.244")			

## Panel cutouts

### Optimal cutout for rear mounting



### Standard cutout



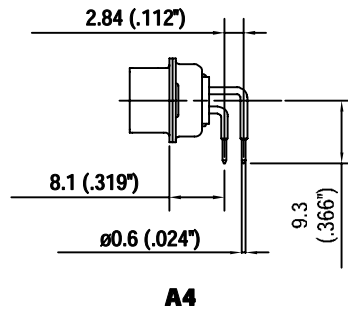
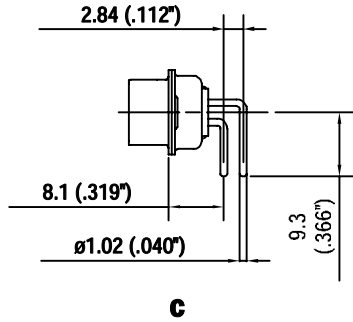
Shell size	Mounting method	A ±0.20 (±.008)	B ±0.20 (±.008)	C ±0.20 (±.008)	D ±0.20 (±.008)	E ±0.20 (±.008)	F ±0.20 (±.008)	G ±0.20 (±.008)	H ±0.20 (±.008)	J ±0.20 (±.008)
E	Front	22.2 (.874")	11.1 (.437")	25.0 (.984")	12.5 (.492")	13.0 (.512")	6.5 (.256")	3.0 (.118")	1.5 (.059")	2.1 (.083")
	Rear	20.5 (.807")	10.2 (.402")							3.4 (.134")
A	Front	30.5 (1.201")	15.3 (.602")	33.3 (1.311")	16.7 (.657")	13.0 (.512")	6.5 (.256")	3.0 (.118")	1.5 (.059")	2.1 (.083")
	Rear	28.8 (1.134")	14.4 (.567")							3.4 (.134")
B	Front	44.3 (1.744")	22.1 (.870")	47.0 (1.850")	23.5 (.925")	13.0 (.512")	6.5 (.256")	3.0 (.118")	1.5 (.059")	2.1 (.083")
	Rear	42.5 (1.673")	21.3 (.839")							3.4 (.134")
C	Front	60.7 (2.390")	30.4 (1.197")	63.5 (2.500")	31.7 (1.248")	13.0 (.512")	6.5 (.256")	3.0 (.118")	1.5 (.059")	2.1 (.083")
	Rear	59.1 (2.327")	29.5 (1.161")							3.4 (.134")
D	Front	58.3 (2.295")	29.2 (1.150")	61.1 (2.406")	30.6 (1.205")	15.8 (.622")	7.9 (.311")	3.0 (.118")	1.5 (.059")	2.1 (.083")
	Rear	56.3 (2.217")	28.2 (1.110")							3.4 (.134")

## Termination

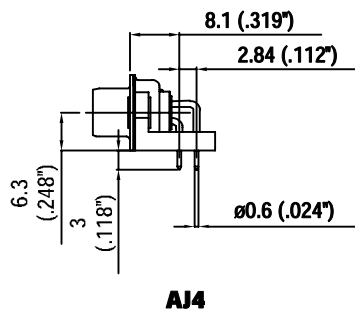
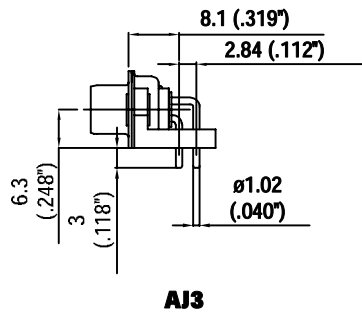
### Right angle:

### MIL Footprint

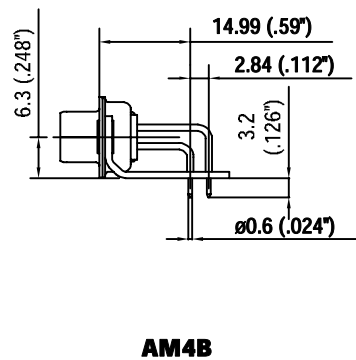
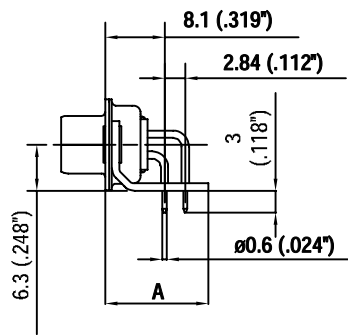
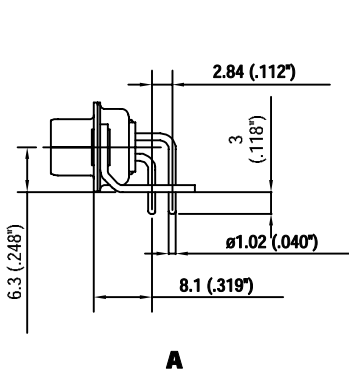
#### without bracket:



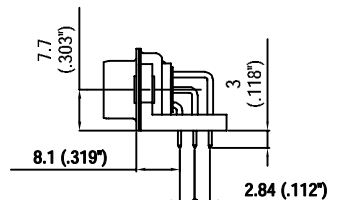
#### plastic bracket:



#### metal bracket:



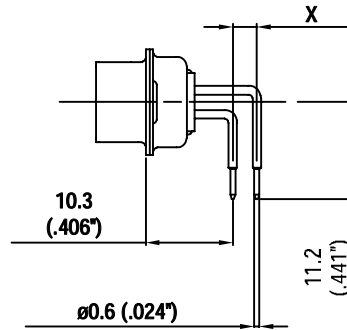
#### 50 contacts:



## Termination

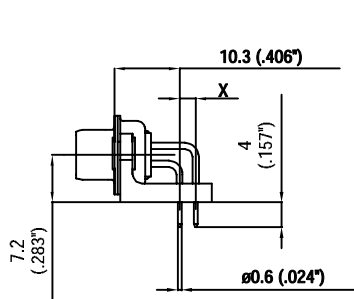
### European footprint

**without bracket:**

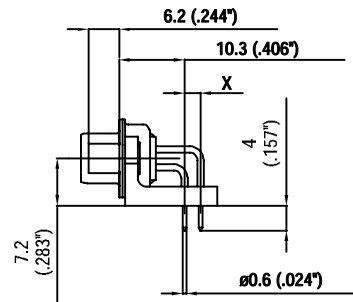


**1AON : X=2.54mm**  
**1BON : X=2.84mm**

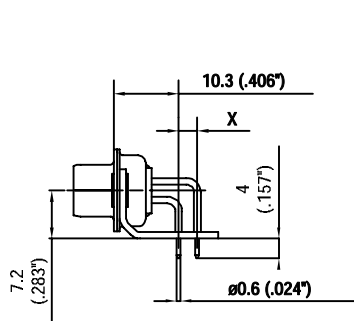
**plastic bracket:**



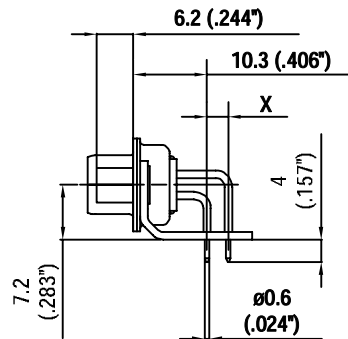
**1APN : X=2.54mm**  
**1BPN : X=2.84mm**



**1AUN : X=2.54mm**  
**1BUN : X=2.84mm**

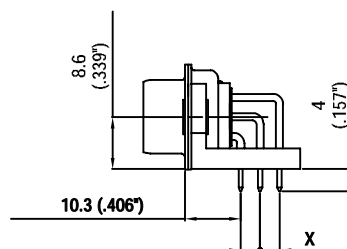


**1AMN : X=2.54mm**  
**1BMN : X=2.84mm**



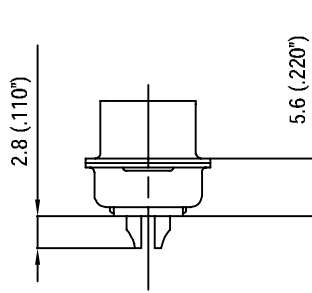
**1ATN : X=2.54mm**  
**1BTN : X=2.84mm**  
 (front screwlock 4.40 threaded)

**50 contacts:**

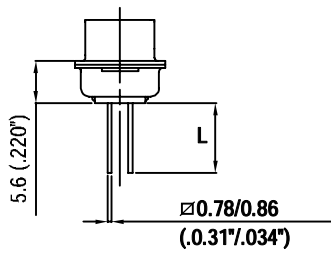


## Termination

### Solder Cup:

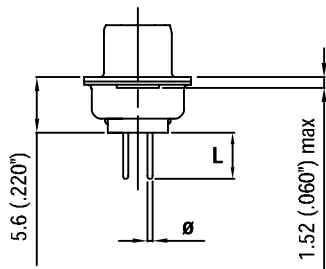


### Wire Wrap:



termination	Nb of wraps	L
<b>F179</b>	2	9.6mm (.378")
<b>F179A</b>	3	13mm (.512")

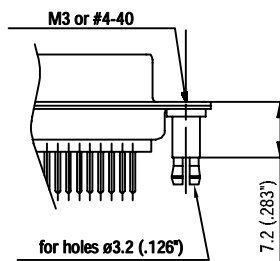
### Straight PCB:



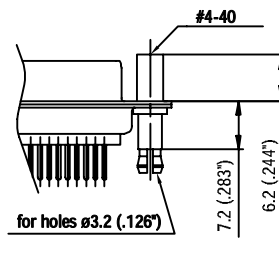
termination	$\varnothing$	L
<b>U</b>	0.6mm (.024")	3.2mm (.126")
<b>V</b>	1.02mm (.040")	2.4mm (.095")
<b>T</b>	0.6mm (.024")	4mm (.157")
<b>OL2</b>	0.6mm (.02")	5.5mm (.217")

### Grounding tabs

#### For straight termination

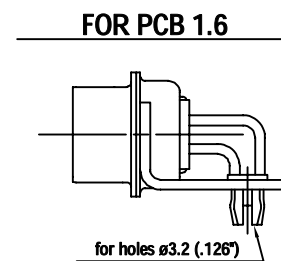


**RM5**



**RM8**

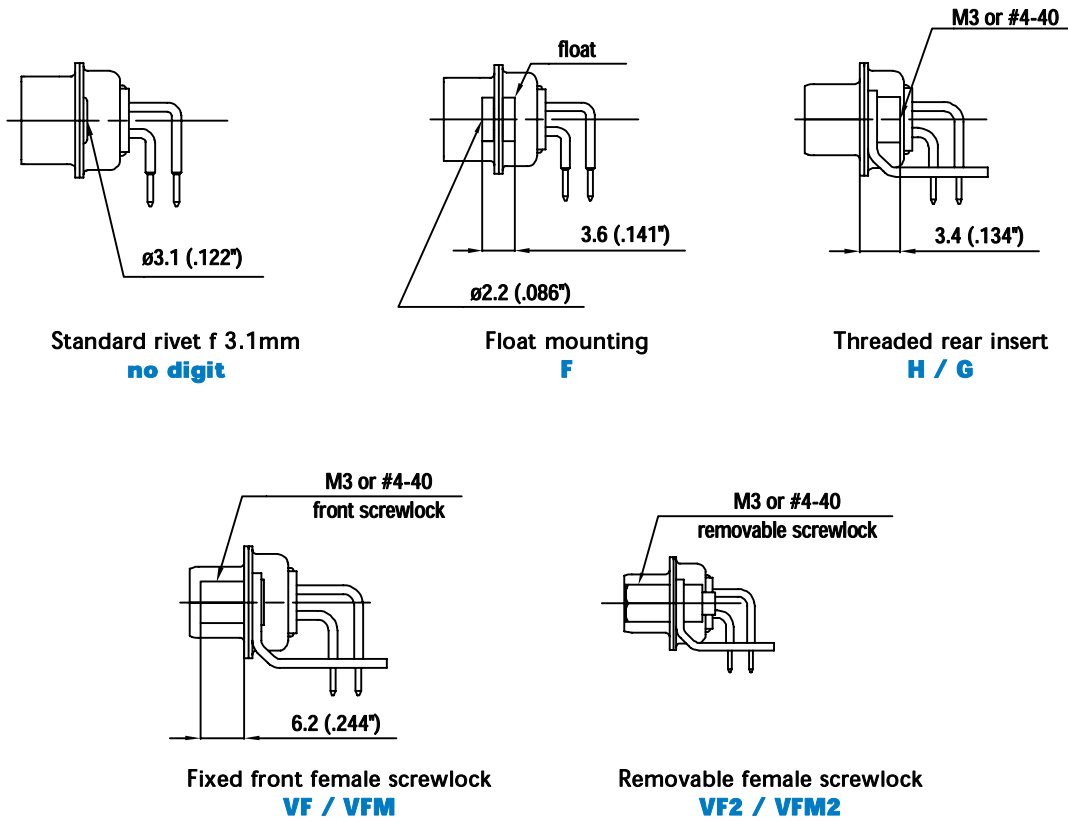
#### For R/A termination



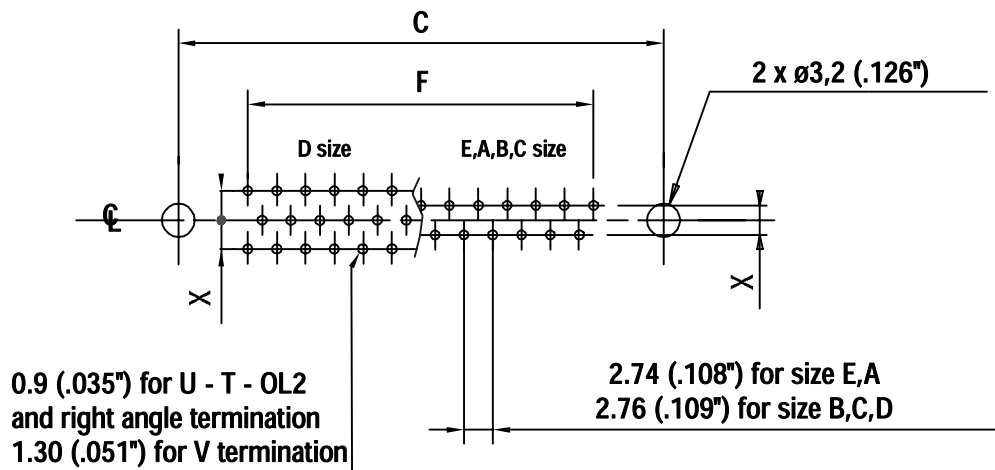
**RM6**

## Panel mounting option

For straight and R/A termination



## Recommended PCB Layout



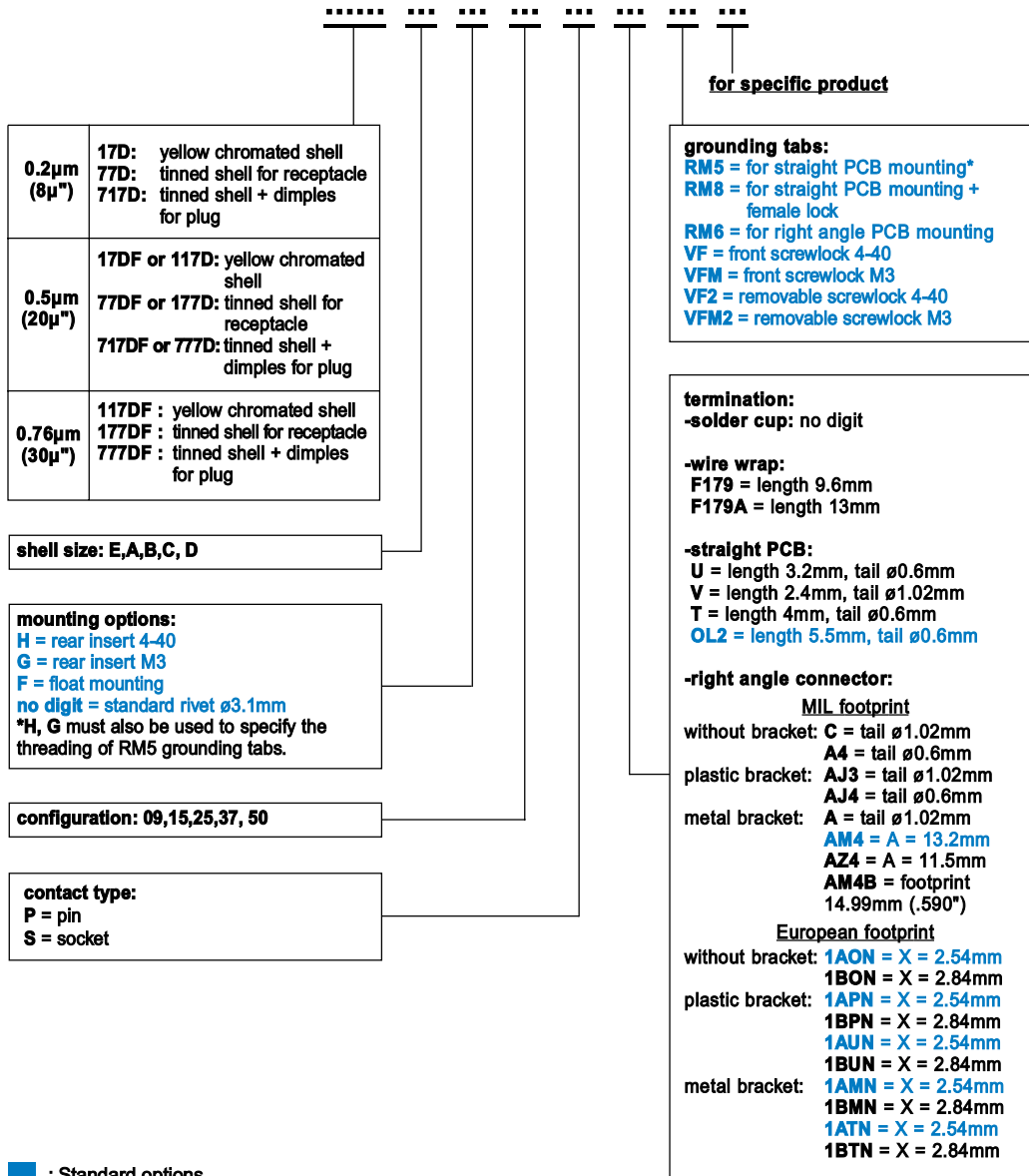
For straight PCB: X = 2.84mm (.112")

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

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

	size E	size A	size B	size C	size D
<b>C <math>\pm 0,1</math> (.004)</b>	25 (.984)	33.3 (1.311)	47 (1.85)	63.5 (2.5)	61.1 (2.406)
<b>F <math>\pm 0,05</math> (.002)</b>	10.96 (.431)	19.18 (.755)	33.12 (1.304)	49.68 (1.956)	44.2 (1.74)

## How to order



**For special request, please consult factory**

