

## SECTION 2

# COMBINATION D-SUB CONNECTORS

Combination D-SUB Connectors provide the ideal solution for applications to require power, signal and coaxial connections within one connector. This series of connectors achieves space saving on PCB's and I/O designs.

Within this product family are various pin out configurations possible. Almost endless selections can be created mixing power, signal and coaxial contacts.



Examples are coaxial contacts handling frequencies up to 2 GHz. Power contacts from 10 amp to 40 amp current handling. Signal contacts in various styles complete the product offering.



Industry standard terminations types, solder cup, PCB contacts in straight and angled pin configurations. Crimp types and wire wrap contacts.

**Here are just a few Product characteristics:**

- Space savings on the PCB
- Different wire terminations are possible in a single connector
- Cost savings - mixed layout
- Insertable and removable coaxial, power, high voltage and signal contacts
- Precision machined contacts
- Various quality classes are available
- Wide product range

A wide range of standard pin configurations fully loaded with signal contacts are available. Specially configured contacts with power, coaxial and signal contacts can be constructed. Please use the Part Number Creator on page 2|2 and 2|3 or contact technical support at your closest CONEC office.



# PART NUMBER CREATOR

for standard version

**3 003W3 S X X 6 1 A 1 0 X**

<b>Product Line</b> 3 = Shell steel tin plated 1 = Brass tin plated* 5 = Shell yellow chromated* (not RoHS compliant) A = Stainless steel*		*on request	
<b>Shell size and design</b> 1 = 5W1, 2W2C 2 = 3W3, 7W2, 11W1, 3W3C 3 = 5W5, 9W4, 13W3, 17W2, 21W1 4 = 8W8, 13W6, 17W5, 21WA4, 25W3, 27W2 5 = 24W7, 36W4, 43W2, 47W1		Empty positions ADD „0“ = 003W3	
<b>Contact type</b> P = Plug connector S = Socket connector			
<b>Surface/Quality class for SIGNAL contacts</b> A = Quality class 3 = 50 mating cycles B = Quality class 2 = 200 mating cycles* C = Quality class 1 = 500 mating cycles J = Special application = > 500 mating cycles (on request)* X = Crimp and 3W3, 5W5, 8W8, 2W2C, 3W3C (no contacts are supplied with the connector)		*on request	
<b>Termination only for SIGNAL contacts</b> K = Crimp without contacts M = Solder cup N = Wire wrap, .500" / 12.7 mm P = Press fit R = Solder pin, straight, .220" / 5.6 mm T = Solder pin, angled, .280" / 7.19 mm		U = Solder pin, angled, .370" / 9.40 mm W* = Solder pin, angled, .450" / 11.43 mm X = 3W3, 5W5, 8W8, 2W2C, 3W3C Z* = Solder pin, angled, .540" / 13.84 mm * = please contact us	
<b>Termination for HIGH POWER- or COAXIAL contacts</b>			
<b>Quality class 3 / Quality class 1</b> C1 = Solder/Crimp angled 10 A C2 = Solder/Crimp angled 20 A C3 = Solder/Crimp angled 30 A C4 = Solder/Crimp angled 40 A F2,61 / F1,41 = Solder cup 10 A F4,62 / F3,42 = Solder cup 20 A F6,63 / F5,43 = Solder cup 30 A F8,64 / F7,44 = Solder cup 40 A 68 / 48 = Solder pin, straight 20 A, D= .077" / 1.95 mm 69 / 49 = Solder pin, straight 20 A, D= .102" / 2.60 mm 70 / 50 = Solder pin, straight 20 A, D= .110" / 2.85 mm 71 / 51 = Solder pin, straight 30 A, D= .130" / 3.18 mm 72 / 52 = Solder pin, straight 40 A, D= .150" / 3.75 mm		<b>Quality class 3 / Quality class 1</b> 59 / 55 = Solder pin, angled 15 A 73 / 56 = Solder pin, angled 20 A 74 / 57 = Solder pin, angled 30 A 75 / 58 = Solder pin, angled 40 A 77 / 60 = Solder pin, angled 40 A 81 / 66 = Solder pin, angled 20 A 82 / 67 = Solder pin, angled 30 A 85 / 65 = Solder pin, angled 30 A G7 / 76 = 3 Solder pins Straight 50 Ω G9 / 78 = 3 Solder pins angled 50 Ω H1 / 79 = 3 Solder pins angled 50 Ω H4 / 80 = 5 Solder pins angled 50 Ω G8 / 86 = 3 Solder pins Straight 75 Ω	
		<b>Quality class 3 / Quality class 1</b> H2 / 88 = 3 Solder pins angled 75 Ω H3 / 89 = 3 Solder pins angled 75 Ω H5 / 90 = 5 Solder pins angled 75 Ω 91 = Screw termination 20 A / P1 = press fit 30A / P2 = press fit 30A / P4 = press fit 30A 99 = no high power, coax or crimp contacts loaded Coaxial contacts with cable termination must be ordered separately.	
<b>Mounting style</b> A1 = Riveted A2 = M3 threaded insert A3 = 4-40 UNC threaded insert A4 = M3 threaded rear spacer A5 = 4-40 UNC threaded rear spacer A6 = Float fastening A7 = Threaded rear spacer for M3 press fit A8 = Threaded rear spacer for 4-40 UNC press fit C1 = M3 threaded rear spacer with PCB clip, PCB .063" / 1.60 mm C2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063" / 1.60 mm C3 = M3 threaded rear spacer with PCB clip, PCB .091" / 2.30 mm C4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091" / 2.30 mm C5 = M3 threaded rear spacer with PCB clip, PCB .126" / 3.20 mm C6 = 4-40 UNC Threaded rear spacer with PCB clip, PCB .126" / 3.20 mm D1 = M3 clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm D2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm D3 = M3 clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm D4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm D5 = M3 clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm D6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm E1 = M3 threaded rear spacer with PCB clip, PCB .063" / 1.60 mm E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063" / 1.60 mm E3 = M3 threaded rear spacer with PCB clip, PCB .091" / 2.30 mm E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091" / 2.30 mm E5 = M3 threaded rear spacer with PCB clip, PCB .126" / 3.20 mm		E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126" / 3.20 mm F1 = M3 clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm F2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm F3 = M3 clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm F4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm F5 = M3 clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm F6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm G1 = Metal bracket, M3 threaded insert for .370" / 9.40 mm G2 = Metal bracket, 4-40 UNC threaded insert for .370" / 9.40 mm G3 = Metal bracket, M3 threaded insert and clip for .370" / 9.40 mm G4 = Metal bracket, 4-40 UNC threaded insert and clip for .370" / 9.40 mm H1 = Metal bracket, M3 threaded lock for .370" / 9.40 mm H2 = Metal bracket, 4-40 UNC threaded lock for .370" / 9.40 mm H3 = Metal bracket, M3 threaded lock and clip for .370" / 9.40 mm H4 = Metal bracket, 4-40 UNC threaded lock and clip for .370" / 9.40 mm N1 = Metal bracket, M3 threaded insert for .280" / 7.19 mm N2 = Metal bracket, 4-40 UNC threaded insert for .280" / 7.19 mm N3 = Metal bracket, M3 threaded insert and clip for .280" / 7.19 mm N4 = Metal bracket, 4-40 UNC threaded insert and clip for .280" / 7.19 mm P1 = Metal bracket, M3 threaded lock for .280" / 7.19 mm P2 = Metal bracket, 4-40 UNC threaded lock for .280" / 7.19 mm P3 = Metal bracket, M3 threaded lock and clip for .280" / 7.19 mm P4 = Metal bracket, 4-40 UNC threaded lock and clip for .280" / 7.19 mm W1 = Threaded rear spacer with M3 press in pin W2 = Threaded rear spacer with 4-40 UNC press in pin	
OX = Standard			

# PART NUMBER CREATOR

for High Density

3 H19W1 S C M 4 1 A 1 O X

## Product Line

- 1 = Shell brass tin plated
- 3 = Shell tin plated\*
- 5 = Shell yellow chromated\* (not RoHS compliant)
- A = Shell stainless steel\* \*on request

## Shell size and design

- 2 =19W1
- 3 =15W4
- 4 =45W2 H = High Density

## Contact type

- P = Plug connector
- S = Socket connector

## Quality class for SIGNAL contacts

- A = Quality class 3 = 50 mating cycles
- B = Quality class 2 = 200 mating cycles\*
- C = Quality class 1 = 500 mating cycles
- J = Special application = > 500 mating cycles\* \*on request

## Termination only for SIGNAL contacts

- M = Solder cup
- P = Press-fit\*
- R = Solder pin, straight
- W = Solder pin, angled .450" / 11,43 mm\*
- T = Solder pin, angled .350" / 7,98 mm \*on request

## Termination for HIGH POWER- or COAXIAL contacts

### Quality class 3/Quality class 1

- F2,61/F1,41 = Solder cup 10 A
- F4,62/F3,42 = Solder cup 20 A
- F6,63/F5,43 = Solder cup 30 A
- F8,64/F7,44 = Solder cup 40 A
- 68/48 = Solder pin, straight 20 A, D= .077"/1.95 mm
- 69/49 = Solder pin, straight 20 A, D= .102"/2.60 mm
- 70/50 = Solder pin, straight 20 A, D= .110"/2.85 mm
- 71/51 = Solder pin, straight 30 A, D= .130"/3.18 mm
- 72/52 = Solder pin, straight 40 A, D= .150"/3.75 mm
- 59/55 = Solder pin, angled 15 A
- 73/56 = Solder pin, angled 20 A
- 74/57 = Solder pin, angled 30 A
- 75/58 = Solder pin, angled 40 A

### Quality class 3/Quality class 1

- 77/60 = Solder pin, angled 40 A
- 81/66 = Solder pin, angled 20 A
- 82/67 = Solder pin, angled 30 A
- 85/65 = Solder pin, angled 30 A
- G7/76 = 3 Solder pins Straight 50 Ω
- G9/78 = 3 Solder pins angled 50 Ω
- H1/79 = 3 Solder pins angled 50 Ω
- H4/80 = 5 Solder pins angled 50 Ω
- G8/86 = 3 Solder pins Straight 75 Ω
- H2/88 = 3 Solder pins angled 75 Ω
- H3/89 = 3 Solder pins angled 75 Ω
- H5/90 = 5 Solder pins angled 75 Ω
- 91 = Screw termination 20 A

### Quality class 1

- P1 = press fit 30A
  - P2 = press fit 30A
  - P4 = press fit 30A
  - 99 = no high power, coax or crimp contacts loaded
- Coaxial contacts with cable termination must be ordered separately.

## Mounting style

- |  |  |
|--|--|
| A1 = Riveted   | F3 = M3 clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm       |
| A2 = M3 threaded insert  | F4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm |
| A3 = 4-40 UNC threaded insert  | F5 = M3 clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm       |
| A4 = M3 threaded rear spacer   | F6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm |
| A5 = 4-40 UNC threaded rear spacer   | G5 = Metal bracket, M3 threaded insert for .350"/7,98 mm                     |
| A6 = Float fastening   | G6 = Metal bracket, 4-40 UNC threaded insert for .350"/7,98 mm               |
| A7 = Threaded rear spacer for M3 press fit                                   | G7 = Metal bracket, M3 threaded insert and Clip for .350"/7,98 mm            |
| A8 = Threaded rear spacer for 4-40 UNC press fit                             | G8 = Metal bracket, 4-40 UNC threaded insert and Clip for .350"/7,98 mm      |
| E1 = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm                | H5 = Metal bracket, M3 threaded lock for .350"/7,98 mm                       |
| E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm          | H6 = Metal bracket, 4-40 UNC threaded lock for .350"/7,98 mm                 |
| E3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm                | H7 = Metal bracket, M3 threaded lock and Clip for .350"/7,98 mm              |
| E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm          | H8 = Metal bracket, 4-40 UNC threaded lock and Clip for .350"/7,98 mm        |
| E5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm                | W1 = Threaded rear spacer with M3 press in pin                               |
| E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm          | W2 = Threaded rear spacer with 4-40 UNC press in pin                         |
| F1 = M3 clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm       |  |
| F2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm |  |

- OX = Standard

# TECHNICAL DATA

## Standard version

Materials	Connector with signal contacts	Coaxial contacts	High power contacts	High voltage contacts
Insulator Green standard / black crimp	PBTP, GV (UL94 V-0)			
Shell	steel tin plated brass tin / stainless steel on request			
Contact plating	Gold plated over nickel			
Contact material	CU alloy			
Retaining clip	CU alloy			
Insulator		PTFE/PBTP/PI		PTFE
<b>Mechanical and electrical characteristics</b>				
Current rating	7,5A (UL) / 5A (CSA, VDE)			
Test voltage between 2 contacts contact and shell	1000 V, 50Hz 1 min.		1000 V, 50Hz 1 min.	
Resistance between mated contacts	max. 8 mΩ	max. 2.7 mΩ	max. 1 mΩ	max. 2.7 mΩ
Insulation resistance	≥5 GΩ	≥ 10 GΩ	≥ 5 GΩ	≥ 2x10 <sup>7</sup> MΩ
Volume resistivity	10 <sup>16</sup> Ωcm			
Dielectric impedance	50KV/mm			
Characteristic impedance		50/75 Ω		
VSWR-value at according MIL-C-39012	1.2GHz 1.5GHz 2.0GHz	≤1,2 ≤1,3 ≤1,5		
Dielectric voltage		750V 50Hz		3.8kV
Frequency range		0-2GHz		
Working voltage	250 V	250 V	250 V	max. 2.8kV
Temperature range	-55°C to +125°C			
Insertion force per contact	3.4N	7N	7N	5N
Extraction force per contact	0.2N	7N	approx. 5N	approx. 2.5N
Mating cycles	A = Quality class 3 = 50 mating cycles, B = Quality class 2 = 200 mating cycles, C = Quality class 1 = 500 mating cycles			

Technical specifications are subject to change without notice.

# TECHNICAL DATA

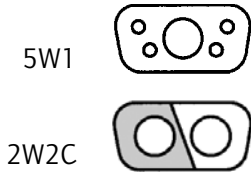
## High Density

Materials	Connector with signal contacts	Coaxial contacts	High power contacts	High voltage contacts
Insulator Green standard / black crimp	PBTP, GV (UL94 V-0)			
Shell	steel tin plated brass tin / stainless steel on request			
Contact plating	Gold plated over nickel			
Contact material	CU alloy			
Retaining clip	CU alloy			
Insulator		PTFE/PBTP/PI		PTFE
<b>Mechanical and electrical characteristics</b>				
Current rating	3 A (ULVDE) / 2,5 A (CSA)			
Test voltage between 2 contacts contact and shell	1000 V, 50Hz 1 min.		1000 V, 50Hz 1 min.	
Resistance between mated contacts	max. 10mΩ	max. 2.7mΩ	max. 1mΩ	max. 2.7mΩ
Insulation resistance	≥5GΩ	≥10 GΩ	≥ 5GΩ	2x10 <sup>7</sup> MΩ
Volume resistivity	10 <sup>16</sup> Ωcm			
Dielectric impedance	50kV/mm			
Characteristic impedance		50/75 Ω		
VSWR-value at according MIL-C-39012	1.2GHz 1.5GHz 2.0GHz	≤ 1.2 ≤ 1.3 ≤ 1.5		
Dielectric voltage		750V 50Hz		3.8kV
Frequency range		0-2GHz		
Working voltage	60V	250 V	250 V	max. 2.8kV
Temperature range	-55°C to +125°C			
Insertion force per contact	3,4N	7N	7N	5N
Extraction force per contact	0,2N	7N	approx. 5N	approx. 2.5N
Mating cycles	A =Quality class 3 = 50 mating cycles, B =Quality class 2 = 200 mating cycles, C = Quality class 1 = 500 mating cycles			

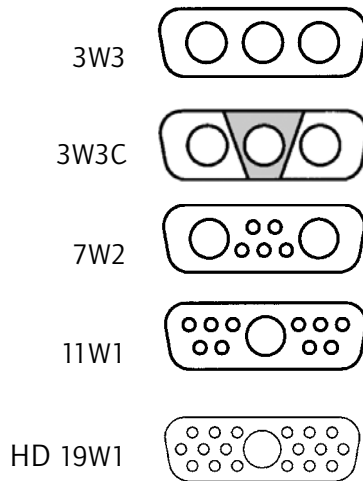
Technical specifications are subject to change without notice.

# PIN CONFIGURATION – MATING SIDE OF SOCKET CONNECTOR

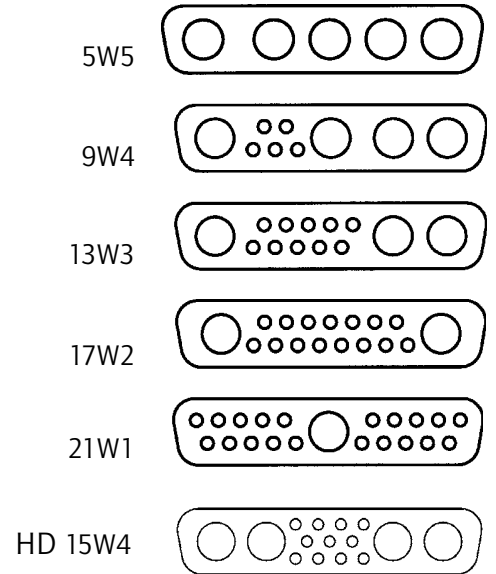
## SHELL SIZE 1



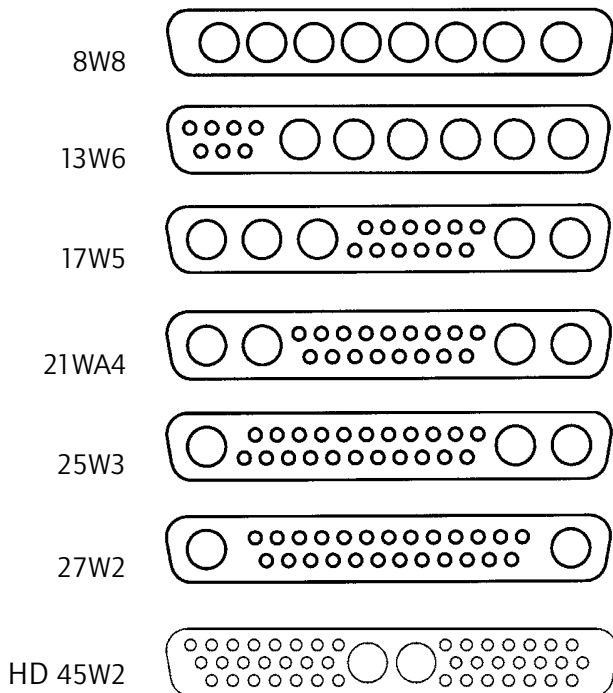
## SHELL SIZE 2



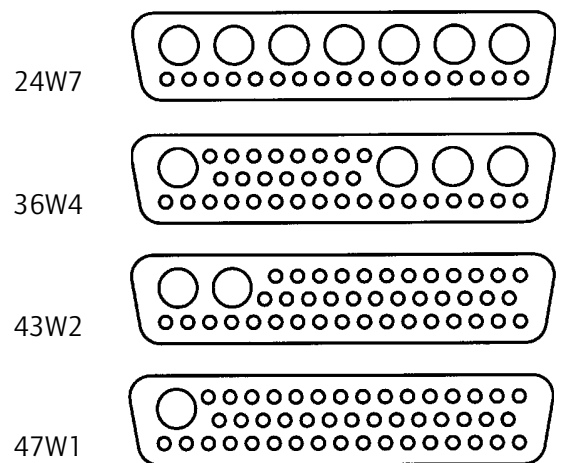
## SHELL SIZE 3



## SHELL SIZE 4



## SHELL SIZE 5



Connectors 3W3, 5W5 and 8W8 with female insulators: Socket contacts are fingerprobe safe according to UL 1950 and CSA 22.2.950.

# TECHNICAL INFORMATION

## SKIN EFFECT

Alternating currents do not uniformly occupy the entire cross section of the conductor, rather inductance effect in the conductor deflects the current towards the surface of the conductor, whereby this deflection increases with the frequency.

The resistive attenuation of a transmission line increases with the frequency as a result of this skin effect.

The skin depth (equivalent thickness of the layer in which current flows) can be determined using

$$\delta = \frac{1}{\sqrt{f \pi \sigma \mu_0 \mu_r}}$$

f = frequency

$\sigma$  = conductivity of the conductor material

$\sigma_{Ag} = 62 \times 10^6 \text{ S/m}$

$\sigma_{Cu} = 58 \times 10^6 \text{ S/m}$

$\mu_0 = 1,256 \cdot 10^{-6} \text{ Vs / Am}$

$\mu_r$  ... relative permeability constant for the employed material

## VSWR-VALUE

The ratio between the value of the largest and the smallest voltages on a loss-free line is known as the ripple or voltage standing wave ratio s (where  $1 \leq s < \infty$ ). The reciprocal value of the VSWR is known as the inverse voltage standing wave ratio m (where  $0 < m \leq 1$ ).

(VSWR = Voltage standing wave ratio)

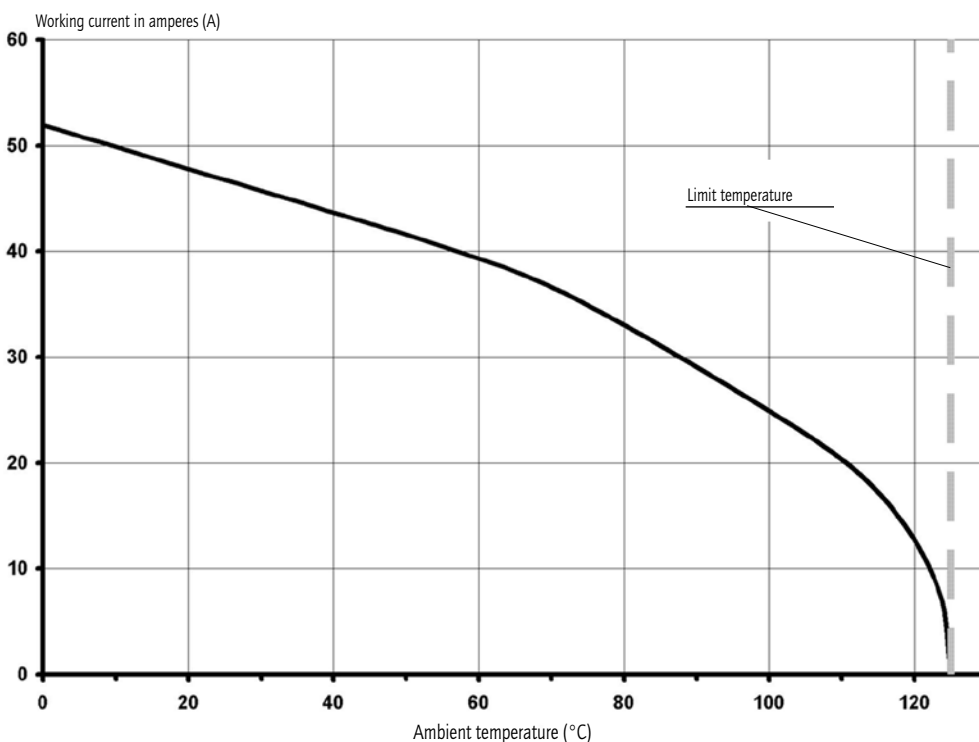
The value of s is linked with the → reflection coefficient r on s transmission line according to the equation

$$s = \frac{(1 + |r|)}{(1 - |r|)}$$

## DERATING CURVE

Measurement is according to DIN 41640 part 3 whereas all power contacts are connected in series.

For test procedure – product-no. 3008W8SXX99A has been equipped with 132C11049X and 3008W8PXX99AA10X with 131C11049X.



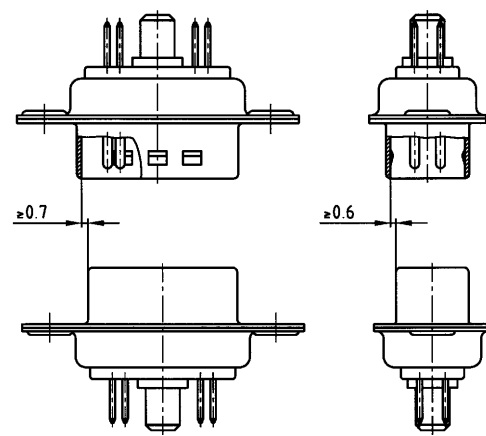


# MATING CONDITIONS

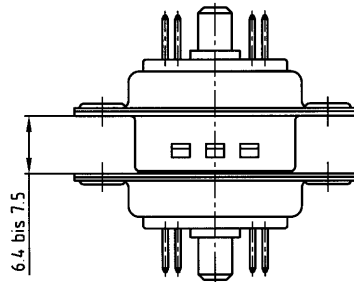
Float mount tolerance guide



Rigid mount tolerance guide



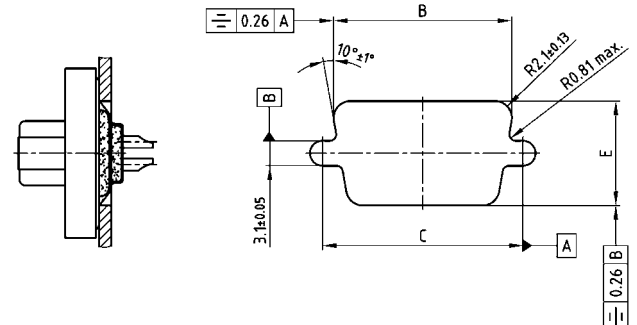
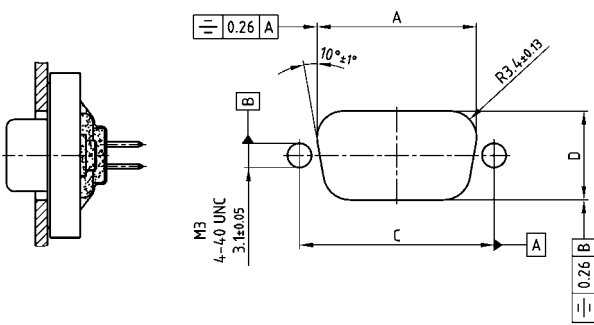
Rigid mount vertical to tolerance guide



## PANEL CUT-OUT

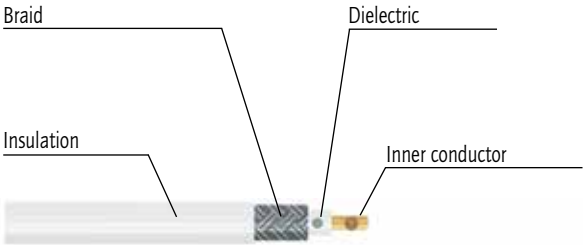
Rear panel mounting

Front panel mounting



Shell size	A ± 0,13	B ± 0,13	C ± 0,13	D ± 0,13	E ± 0,13
1	20.50	22.20	25.00	11.40	13.00
2	28.80	30.50	33.30	11.40	13.00
3	42.50	44.30	47.04	11.40	13.00
4	59.10	60.70	63.50	11.40	13.00
5	56.30	58.30	61.10	14.10	15.80

# CRIMPING INSTRUCTIONS FOR COAX CONTACTS



Strip the wire  
Using dimensions shown on the  
individual product drawings



Slide sleeve over coax cable



Crimp the inner contact on the  
inner conductor



Snap the inner contact into  
the outer contact



Slide braid over outer contact



Crimp the sleeve on to outer  
contact

# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder cup – Precision machined contacts – For wire size AWG 20

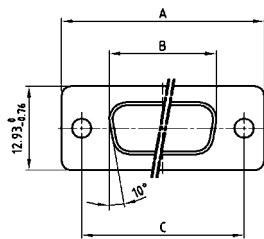


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

- Suitable for wire size AWG 20
- Mounting styles:
  - with through-hole,  $\varnothing .118''/3 \text{ mm}$
  - with 4-40 UNC or M3 threaded insert
  - with floating mount
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

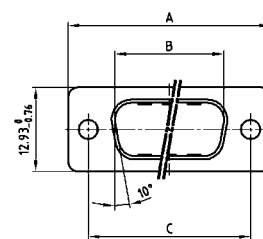
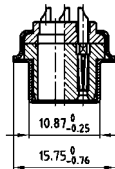
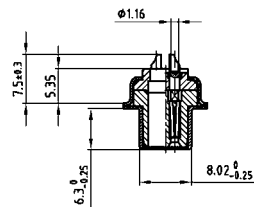
## SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

Shell size 1-4

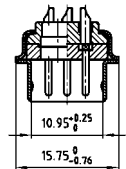
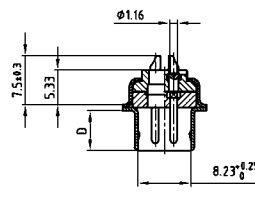
Shell size 5



Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4

Shell size 5



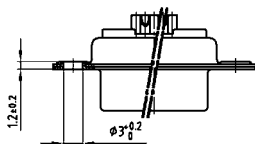
## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style	Part Number
5W1	Through-hole	3005W1SAM99A10X
7W2	Through-hole	3007W2SAM99A10X
11W1	Through-hole	3011W1SAM99A10X
9W4	Through-hole	3009W4SAM99A10X
13W3	Through-hole	3013W3SAM99A10X
17W2	Through-hole	3017W2SAM99A10X
21W1	Through-hole	3021W1SAM99A10X
13W6	Through-hole	3013W6SAM99A10X
17W5	Through-hole	3017W5SAM99A10X
21WA4	Through-hole	321WA4SAM99A10X
25W3	Through-hole	3025W3SAM99A10X
27W2	Through-hole	3027W2SAM99A10X
24W7	Through-hole	3024W7SAM99A10X
36W4	Through-hole	3036W4SAM99A10X
43W2	Through-hole	3043W2SAM99A10X
47W1	Through-hole	3047W1SAM99A10X

### PLUG CONNECTOR

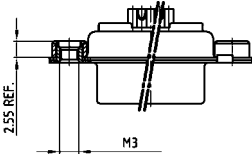
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PAM99A10X
7W2	Through-hole	3007W2PAM99A10X
11W1	Through-hole	3011W1PAM99A10X
9W4	Through-hole	3009W4PAM99A10X
13W3	Through-hole	3013W3PAM99A10X
17W2	Through-hole	3017W2PAM99A10X
21W1	Through-hole	3021W1PAM99A10X
13W6	Through-hole	3013W6PAM99A10X
17W5	Through-hole	3017W5PAM99A10X
21WA4	Through-hole	321WA4PAM99A10X
25W3	Through-hole	3025W3PAM99A10X
27W2	Through-hole	3027W2PAM99A10X
24W7	Through-hole	3024W7PAM99A10X
36W4	Through-hole	3036W4PAM99A10X
43W2	Through-hole	3043W2PAM99A10X
47W1	Through-hole	3047W1PAM99A10X



# COMBINATION D-SUB – MOUNTING STYLES

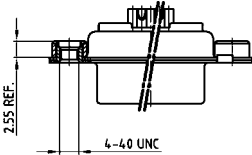
Solder cup – Precision machined contacts – For wire size AWG 20

ORDER DATA



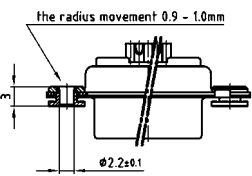
SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SAM99A20X
7W2	Threaded insert	3007W2SAM99A20X
11W1	Threaded insert	3011W1SAM99A20X
9W4	Threaded insert	3009W4SAM99A20X
13W3	Threaded insert	3013W3SAM99A20X
17W2	Threaded insert	3017W2SAM99A20X
21W1	Threaded insert	3021W1SAM99A20X
13W6	Threaded insert	3013W6SAM99A20X
17W5	Threaded insert	3017W5SAM99A20X
21WA4	Threaded insert	321WA4SAM99A20X
25W3	Threaded insert	3025W3SAM99A20X
27W2	Threaded insert	3027W2SAM99A20X
24W7	Threaded insert	3024W7SAM99A20X
36W4	Threaded insert	3036W4SAM99A20X
43W2	Threaded insert	3043W2SAM99A20X
47W1	Threaded insert	3047W1SAM99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PAM99A20X
7W2	Threaded insert	3007W2PAM99A20X
11W1	Threaded insert	3011W1PAM99A20X
9W4	Threaded insert	3009W4PAM99A20X
13W3	Threaded insert	3013W3PAM99A20X
17W2	Threaded insert	3017W2PAM99A20X
21W1	Threaded insert	3021W1PAM99A20X
13W6	Threaded insert	3013W6PAM99A20X
17W5	Threaded insert	3017W5PAM99A20X
21WA4	Threaded insert	321WA4PAM99A20X
25W3	Threaded insert	3025W3PAM99A20X
27W2	Threaded insert	3027W2PAM99A20X
24W7	Threaded insert	3024W7PAM99A20X
36W4	Threaded insert	3036W4PAM99A20X
43W2	Threaded insert	3043W2PAM99A20X
47W1	Threaded insert	3047W1PAM99A20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAM99A30X
7W2	Threaded insert	3007W2SAM99A30X
11W1	Threaded insert	3011W1SAM99A30X
9W4	Threaded insert	3009W4SAM99A30X
13W3	Threaded insert	3013W3SAM99A30X
17W2	Threaded insert	3017W2SAM99A30X
21W1	Threaded insert	3021W1SAM99A30X
13W6	Threaded insert	3013W6SAM99A30X
17W5	Threaded insert	3017W5SAM99A30X
21WA4	Threaded insert	321WA4SAM99A30X
25W3	Threaded insert	3025W3SAM99A30X
27W2	Threaded insert	3027W2SAM99A30X
24W7	Threaded insert	3024W7SAM99A30X
36W4	Threaded insert	3036W4SAM99A30X
43W2	Threaded insert	3043W2SAM99A30X
47W1	Threaded insert	3047W1SAM99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAM99A30X
7W2	Threaded insert	3007W2PAM99A30X
11W1	Threaded insert	3011W1PAM99A30X
9W4	Threaded insert	3009W4PAM99A30X
13W3	Threaded insert	3013W3PAM99A30X
17W2	Threaded insert	3017W2PAM99A30X
21W1	Threaded insert	3021W1PAM99A30X
13W6	Threaded insert	3013W6PAM99A30X
17W5	Threaded insert	3017W5PAM99A30X
21WA4	Threaded insert	321WA4PAM99A30X
25W3	Threaded insert	3025W3PAM99A30X
27W2	Threaded insert	3027W2PAM99A30X
24W7	Threaded insert	3024W7PAM99A30X
36W4	Threaded insert	3036W4PAM99A30X
43W2	Threaded insert	3043W2PAM99A30X
47W1	Threaded insert	3047W1PAM99A30X



SOCKET CONNECTOR		
Design	Mounting style	Part Number
5W1	Floating mount	3005W1SAM99A60X
7W2	Floating mount	3007W2SAM99A60X
11W1	Floating mount	3011W1SAM99A60X
9W4	Floating mount	3009W4SAM99A60X
13W3	Floating mount	3013W3SAM99A60X
17W2	Floating mount	3017W2SAM99A60X
21W1	Floating mount	3021W1SAM99A60X
13W6	Floating mount	3013W6SAM99A60X
17W5	Floating mount	3017W5SAM99A60X
21WA4	Floating mount	321WA4SAM99A60X
25W3	Floating mount	3025W3SAM99A60X
27W2	Floating mount	3027W2SAM99A60X
24W7	Floating mount	3024W7SAM99A60X
36W4	Floating mount	3036W4SAM99A60X
43W2	Floating mount	3043W2SAM99A60X
47W1	Floating mount	3047W1SAM99A60X

PLUG CONNECTOR		
Design	Mounting style	Part Number
5W1	Floating mount	3005W1PAM99A60X
7W2	Floating mount	3007W2PAM99A60X
11W1	Floating mount	3011W1PAM99A60X
9W4	Floating mount	3009W4PAM99A60X
13W3	Floating mount	3013W3PAM99A60X
17W2	Floating mount	3017W2PAM99A60X
21W1	Floating mount	3021W1PAM99A60X
13W6	Floating mount	3013W6PAM99A60X
17W5	Floating mount	3017W5PAM99A60X
21WA4	Floating mount	321WA4PAM99A60X
25W3	Floating mount	3025W3PAM99A60X
27W2	Floating mount	3027W2PAM99A60X
24W7	Floating mount	3024W7PAM99A60X
36W4	Floating mount	3036W4PAM99A60X
43W2	Floating mount	3043W2PAM99A60X
47W1	Floating mount	3047W1PAM99A60X

# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts

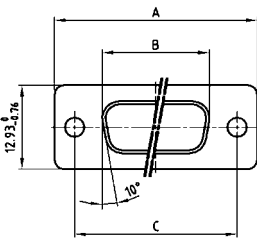


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

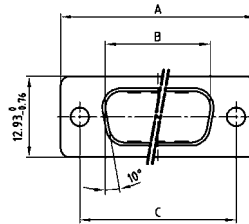
- Mounting styles:
  - with through-hole,  $\varnothing .118''/3 \text{ mm}$
  - with 4-40 UNC or M3 threaded insert
  - with 4-40 UNC or M3 threaded rear spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> / <sub>-0.11</sub>

## PLUG CONNECTOR



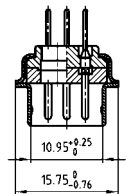
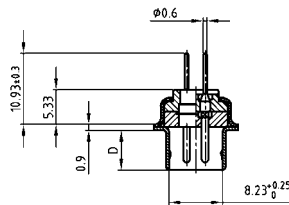
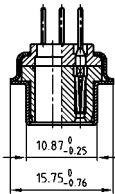
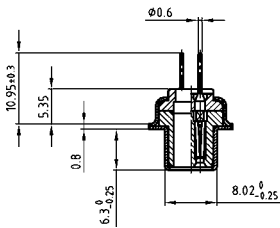
Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> / <sub>-0.11</sub>	5.99

Shell size 1-4

Shell size 5

Shell size 1-4

Shell size 5



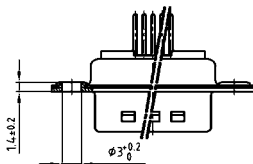
## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style	Part Number
5W1	Through-hole	3005W1SAR99A10X
7W2	Through-hole	3007W2SAR99A10X
11W1	Through-hole	3011W1SAR99A10X
9W4	Through-hole	3009W4SAR99A10X
13W3	Through-hole	3013W3SAR99A10X
17W2	Through-hole	3017W2SAR99A10X
21W1	Through-hole	3021W1SAR99A10X
13W6	Through-hole	3013W6SAR99A10X
17W5	Through-hole	3017W5SAR99A10X
21WA4	Through-hole	321WA4SAR99A10X
25W3	Through-hole	3025W3SAR99A10X
27W2	Through-hole	3027W2SAR99A10X
24W7	Through-hole	3024W7SAR99A10X
36W4	Through-hole	3036W4SAR99A10X
43W2	Through-hole	3043W2SAR99A10X
47W1	Through-hole	3047W1SAR99A10X

### PLUG CONNECTOR

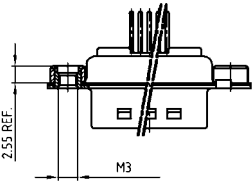
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PAR99A10X
7W2	Through-hole	3007W2PAR99A10X
11W1	Through-hole	3011W1PAR99A10X
9W4	Through-hole	3009W4PAR99A10X
13W3	Through-hole	3013W3PAR99A10X
17W2	Through-hole	3017W2PAR99A10X
21W1	Through-hole	3021W1PAR99A10X
13W6	Through-hole	3013W6PAR99A10X
17W5	Through-hole	3017W5PAR99A10X
21WA4	Through-hole	321WA4PAR99A10X
25W3	Through-hole	3025W3PAR99A10X
27W2	Through-hole	3027W2PAR99A10X
24W7	Through-hole	3024W7PAR99A10X
36W4	Through-hole	3036W4PAR99A10X
43W2	Through-hole	3043W2PAR99A10X
47W1	Through-hole	3047W1PAR99A10X



# COMBINATION D-SUB – MOUNTING STYLES

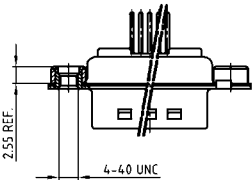
Solder pin – Straight – Precision machined contacts

ORDER DATA



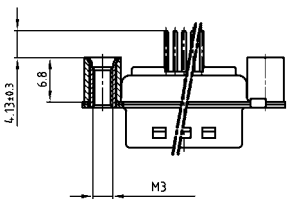
SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SAR99A20X
7W2	Threaded insert	3007W2SAR99A20X
11W1	Threaded insert	3011W1SAR99A20X
9W4	Threaded insert	3009W4SAR99A20X
13W3	Threaded insert	3013W3SAR99A20X
17W2	Threaded insert	3017W2SAR99A20X
21W1	Threaded insert	3021W1SAR99A20X
13W6	Threaded insert	3013W6SAR99A20X
17W5	Threaded insert	3017W5SAR99A20X
21WA4	Threaded insert	321WA4SAR99A20X
25W3	Threaded insert	3025W3SAR99A20X
27W2	Threaded insert	3027W2SAR99A20X
24W7	Threaded insert	3024W7SAR99A20X
36W4	Threaded insert	3036W4SAR99A20X
43W2	Threaded insert	3043W2SAR99A20X
47W1	Threaded insert	3047W1SAR99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PAR99A20X
7W2	Threaded insert	3007W2PAR99A20X
11W1	Threaded insert	3011W1PAR99A20X
9W4	Threaded insert	3009W4PAR99A20X
13W3	Threaded insert	3013W3PAR99A20X
17W2	Threaded insert	3017W2PAR99A20X
21W1	Threaded insert	3021W1PAR99A20X
13W6	Threaded insert	3013W6PAR99A20X
17W5	Threaded insert	3017W5PAR99A20X
21WA4	Threaded insert	321WA4PAR99A20X
25W3	Threaded insert	3025W3PAR99A20X
27W2	Threaded insert	3027W2PAR99A20X
24W7	Threaded insert	3024W7PAR99A20X
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43W2	Threaded insert	3043W2PAR99A20X
47W1	Threaded insert	3047W1PAR99A20X



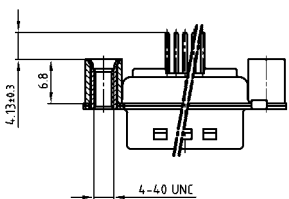
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAR99A30X
7W2	Threaded insert	3007W2SAR99A30X
11W1	Threaded insert	3011W1SAR99A30X
9W4	Threaded insert	3009W4SAR99A30X
13W3	Threaded insert	3013W3SAR99A30X
17W2	Threaded insert	3017W2SAR99A30X
21W1	Threaded insert	3021W1SAR99A30X
13W6	Threaded insert	3013W6SAR99A30X
17W5	Threaded insert	3017W5SAR99A30X
21WA4	Threaded insert	321WA4SAR99A30X
25W3	Threaded insert	3025W3SAR99A30X
27W2	Threaded insert	3027W2SAR99A30X
24W7	Threaded insert	3024W7SAR99A30X
36W4	Threaded insert	3036W4SAR99A30X
43W2	Threaded insert	3043W2SAR99A30X
47W1	Threaded insert	3047W1SAR99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAR99A30X
7W2	Threaded insert	3007W2PAR99A30X
11W1	Threaded insert	3011W1PAR99A30X
9W4	Threaded insert	3009W4PAR99A30X
13W3	Threaded insert	3013W3PAR99A30X
17W2	Threaded insert	3017W2PAR99A30X
21W1	Threaded insert	3021W1PAR99A30X
13W6	Threaded insert	3013W6PAR99A30X
17W5	Threaded insert	3017W5PAR99A30X
21WA4	Threaded insert	321WA4PAR99A30X
25W3	Threaded insert	3025W3PAR99A30X
27W2	Threaded insert	3027W2PAR99A30X
24W7	Threaded insert	3024W7PAR99A30X
36W4	Threaded insert	3036W4PAR99A30X
43W2	Threaded insert	3043W2PAR99A30X
47W1	Threaded insert	3047W1PAR99A30X



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1SAR99A40X
7W2	Threaded rear spacer	3007W2SAR99A40X
11W1	Threaded rear spacer	3011W1SAR99A40X
9W4	Threaded rear spacer	3009W4SAR99A40X
13W3	Threaded rear spacer	3013W3SAR99A40X
17W2	Threaded rear spacer	3017W2SAR99A40X
21W1	Threaded rear spacer	3021W1SAR99A40X
13W6	Threaded rear spacer	3013W6SAR99A40X
17W5	Threaded rear spacer	3017W5SAR99A40X
21WA4	Threaded rear spacer	321WA4SAR99A40X
25W3	Threaded rear spacer	3025W3SAR99A40X
27W2	Threaded rear spacer	3027W2SAR99A40X
24W7	Threaded rear spacer	3024W7SAR99A40X
36W4	Threaded rear spacer	3036W4SAR99A40X
43W2	Threaded rear spacer	3043W2SAR99A40X
47W1	Threaded rear spacer	3047W1SAR99A40X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1PAR99A40X
7W2	Threaded rear spacer	3007W2PAR99A40X
11W1	Threaded rear spacer	3011W1PAR99A40X
9W4	Threaded rear spacer	3009W4PAR99A40X
13W3	Threaded rear spacer	3013W3PAR99A40X
17W2	Threaded rear spacer	3017W2PAR99A40X
21W1	Threaded rear spacer	3021W1PAR99A40X
13W6	Threaded rear spacer	3013W6PAR99A40X
17W5	Threaded rear spacer	3017W5PAR99A40X
21WA4	Threaded rear spacer	321WA4PAR99A40X
25W3	Threaded rear spacer	3025W3PAR99A40X
27W2	Threaded rear spacer	3027W2PAR99A40X
24W7	Threaded rear spacer	3024W7PAR99A40X
36W4	Threaded rear spacer	3036W4PAR99A40X
43W2	Threaded rear spacer	3043W2PAR99A40X
47W1	Threaded rear spacer	3047W1PAR99A40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1SAR99A50X
7W2	Threaded rear spacer	3007W2SAR99A50X
11W1	Threaded rear spacer	3011W1SAR99A50X
9W4	Threaded rear spacer	3009W4SAR99A50X
13W3	Threaded rear spacer	3013W3SAR99A50X
17W2	Threaded rear spacer	3017W2SAR99A50X
21W1	Threaded rear spacer	3021W1SAR99A50X
13W6	Threaded rear spacer	3013W6SAR99A50X
17W5	Threaded rear spacer	3017W5SAR99A50X
21WA4	Threaded rear spacer	321WA4SAR99A50X
25W3	Threaded rear spacer	3025W3SAR99A50X
27W2	Threaded rear spacer	3027W2SAR99A50X
24W7	Threaded rear spacer	3024W7SAR99A50X
36W4	Threaded rear spacer	3036W4SAR99A50X
43W2	Threaded rear spacer	3043W2SAR99A50X
47W1	Threaded rear spacer	3047W1SAR99A50X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1PAR99A50X
7W2	Threaded rear spacer	3007W2PAR99A50X
11W1	Threaded rear spacer	3011W1PAR99A50X
9W4	Threaded rear spacer	3009W4PAR99A50X
13W3	Threaded rear spacer	3013W3PAR99A50X
17W2	Threaded rear spacer	3017W2PAR99A50X
21W1	Threaded rear spacer	3021W1PAR99A50X
13W6	Threaded rear spacer	3013W6PAR99A50X
17W5	Threaded rear spacer	3017W5PAR99A50X
21WA4	Threaded rear spacer	321WA4PAR99A50X
25W3	Threaded rear spacer	3025W3PAR99A50X
27W2	Threaded rear spacer	3027W2PAR99A50X
24W7	Threaded rear spacer	3024W7PAR99A50X
36W4	Threaded rear spacer	3036W4PAR99A50X
43W2	Threaded rear spacer	3043W2PAR99A50X
47W1	Threaded rear spacer	3047W1PAR99A50X

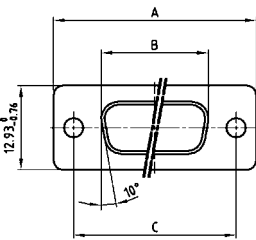
# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

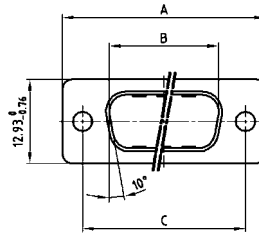
## SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

Shell size 1-4

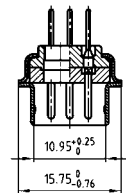
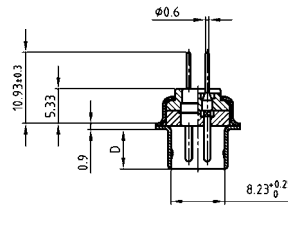
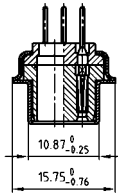
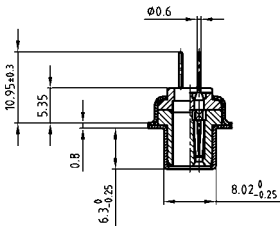
Shell size 5



Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4

Shell size 5



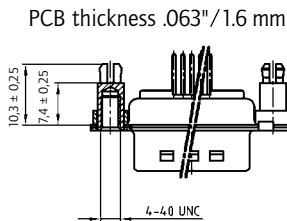
## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99E20X
7W2	Threaded rear spacer PCB clip	3007W2SAR99E20X
11W1	Threaded rear spacer PCB clip	3011W1SAR99E20X
9W4	Threaded rear spacer PCB clip	3009W4SAR99E20X
13W3	Threaded rear spacer PCB clip	3013W3SAR99E20X
17W2	Threaded rear spacer PCB clip	3017W2SAR99E20X
21W1	Threaded rear spacer PCB clip	3021W1SAR99E20X
13W6	Threaded rear spacer PCB clip	3013W6SAR99E20X
17W5	Threaded rear spacer PCB clip	3017W5SAR99E20X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99E20X
25W3	Threaded rear spacer PCB clip	3025W3SAR99E20X
27W2	Threaded rear spacer PCB clip	3027W2SAR99E20X
24W7	Threaded rear spacer PCB clip	3024W7SAR99E20X
36W4	Threaded rear spacer PCB clip	3036W4SAR99E20X
43W2	Threaded rear spacer PCB clip	3043W2SAR99E20X
47W1	Threaded rear spacer PCB clip	3047W1SAR99E20X

### PLUG CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99E20X
7W2	Threaded rear spacer PCB clip	3007W2PAR99E20X
11W1	Threaded rear spacer PCB clip	3011W1PAR99E20X
9W4	Threaded rear spacer PCB clip	3009W4PAR99E20X
13W3	Threaded rear spacer PCB clip	3013W3PAR99E20X
17W2	Threaded rear spacer PCB clip	3017W2PAR99E20X
21W1	Threaded rear spacer PCB clip	3021W1PAR99E20X
13W6	Threaded rear spacer PCB clip	3013W6PAR99E20X
17W5	Threaded rear spacer PCB clip	3017W5PAR99E20X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99E20X
25W3	Threaded rear spacer PCB clip	3025W3PAR99E20X
27W2	Threaded rear spacer PCB clip	3027W2PAR99E20X
24W7	Threaded rear spacer PCB clip	3024W7PAR99E20X
36W4	Threaded rear spacer PCB clip	3036W4PAR99E20X
43W2	Threaded rear spacer PCB clip	3043W2PAR99E20X
47W1	Threaded rear spacer PCB clip	3047W1PAR99E20X

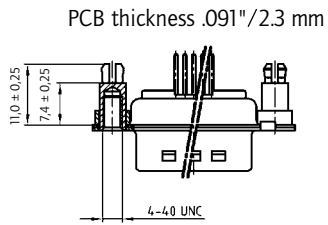


PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

# COMBINATION D-SUB – MOUNTING STYLES

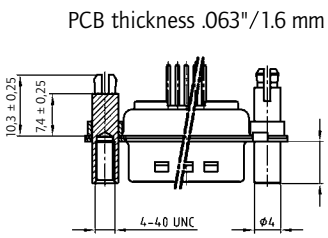
## Solder pin – Straight – Precision machined contacts

**ORDER DATA**



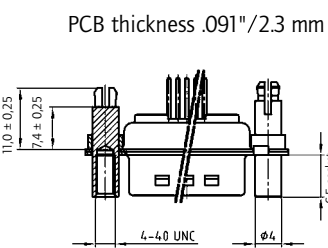
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99E40X
7W2	Threaded rear spacer PCB clip	3007W2SAR99E40X
11W1	Threaded rear spacer PCB clip	3011W1SAR99E40X
9W4	Threaded rear spacer PCB clip	3009W4SAR99E40X
13W3	Threaded rear spacer PCB clip	3013W3SAR99E40X
17W2	Threaded rear spacer PCB clip	3017W2SAR99E40X
21W1	Threaded rear spacer PCB clip	3021W1SAR99E40X
13W6	Threaded rear spacer PCB clip	3013W6SAR99E40X
17W5	Threaded rear spacer PCB clip	3017W5SAR99E40X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99E40X
25W3	Threaded rear spacer PCB clip	3025W3SAR99E40X
27W2	Threaded rear spacer PCB clip	3027W2SAR99E40X
24W7	Threaded rear spacer PCB clip	3024W7SAR99E40X
36W4	Threaded rear spacer PCB clip	3036W4SAR99E40X
43W2	Threaded rear spacer PCB clip	3043W2SAR99E40X
47W1	Threaded rear spacer PCB clip	3047W1SAR99E40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99E40X
7W2	Threaded rear spacer PCB clip	3007W2PAR99E40X
11W1	Threaded rear spacer PCB clip	3011W1PAR99E40X
9W4	Threaded rear spacer PCB clip	3009W4PAR99E40X
13W3	Threaded rear spacer PCB clip	3013W3PAR99E40X
17W2	Threaded rear spacer PCB clip	3017W2PAR99E40X
21W1	Threaded rear spacer PCB clip	3021W1PAR99E40X
13W6	Threaded rear spacer PCB clip	3013W6PAR99E40X
17W5	Threaded rear spacer PCB clip	3017W5PAR99E40X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99E40X
25W3	Threaded rear spacer PCB clip	3025W3PAR99E40X
27W2	Threaded rear spacer PCB clip	3027W2PAR99E40X
24W7	Threaded rear spacer PCB clip	3024W7PAR99E40X
36W4	Threaded rear spacer PCB clip	3036W4PAR99E40X
43W2	Threaded rear spacer PCB clip	3043W2PAR99E40X
47W1	Threaded rear spacer PCB clip	3047W1PAR99E40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1SAR99F20X
7W2	Front/Threaded rear spacer PCB clip	3007W2SAR99F20X
11W1	Front/Threaded rear spacer PCB clip	3011W1SAR99F20X
9W4	Front/Threaded rear spacer PCB clip	3009W4SAR99F20X
13W3	Front/Threaded rear spacer PCB clip	3013W3SAR99F20X
17W2	Front/Threaded rear spacer PCB clip	3017W2SAR99F20X
21W1	Front/Threaded rear spacer PCB clip	3021W1SAR99F20X
13W6	Front/Threaded rear spacer PCB clip	3013W6SAR99F20X
17W5	Front/Threaded rear spacer PCB clip	3017W5SAR99F20X
21WA4	Front/Threaded rear spacer PCB clip	321WA4SAR99F20X
25W3	Front/Threaded rear spacer PCB clip	3025W3SAR99F20X
27W2	Front/Threaded rear spacer PCB clip	3027W2SAR99F20X
24W7	Front/Threaded rear spacer PCB clip	3024W7SAR99F20X
36W4	Front/Threaded rear spacer PCB clip	3036W4SAR99F20X
43W2	Front/Threaded rear spacer PCB clip	3043W2SAR99F20X
47W1	Front/Threaded rear spacer PCB clip	3047W1SAR99F20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1PAR99F20X
7W2	Front/Threaded rear spacer PCB clip	3007W2PAR99F20X
11W1	Front/Threaded rear spacer PCB clip	3011W1PAR99F20X
9W4	Front/Threaded rear spacer PCB clip	3009W4PAR99F20X
13W3	Front/Threaded rear spacer PCB clip	3013W3PAR99F20X
17W2	Front/Threaded rear spacer PCB clip	3017W2PAR99F20X
21W1	Front/Threaded rear spacer PCB clip	3021W1PAR99F20X
13W6	Front/Threaded rear spacer PCB clip	3013W6PAR99F20X
17W5	Front/Threaded rear spacer PCB clip	3017W5PAR99F20X
21WA4	Front/Threaded rear spacer PCB clip	321WA4PAR99F20X
25W3	Front/Threaded rear spacer PCB clip	3025W3PAR99F20X
27W2	Front/Threaded rear spacer PCB clip	3027W2PAR99F20X
24W7	Front/Threaded rear spacer PCB clip	3024W7PAR99F20X
36W4	Front/Threaded rear spacer PCB clip	3036W4PAR99F20X
43W2	Front/Threaded rear spacer PCB clip	3043W2PAR99F20X
47W1	Front/Threaded rear spacer PCB clip	3047W1PAR99F20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1SAR99F40X
7W2	Front/Threaded rear spacer PCB clip	3007W2SAR99F40X
11W1	Front/Threaded rear spacer PCB clip	3011W1SAR99F40X
9W4	Front/Threaded rear spacer PCB clip	3009W4SAR99F40X
13W3	Front/Threaded rear spacer PCB clip	3013W3SAR99F40X
17W2	Front/Threaded rear spacer PCB clip	3017W2SAR99F40X
21W1	Front/Threaded rear spacer PCB clip	3021W1SAR99F40X
13W6	Front/Threaded rear spacer PCB clip	3013W6SAR99F40X
17W5	Front/Threaded rear spacer PCB clip	3017W5SAR99F40X
21WA4	Front/Threaded rear spacer PCB clip	321WA4SAR99F40X
25W3	Front/Threaded rear spacer PCB clip	3025W3SAR99F40X
27W2	Front/Threaded rear spacer PCB clip	3027W2SAR99F40X
24W7	Front/Threaded rear spacer PCB clip	3024W7SAR99F40X
36W4	Front/Threaded rear spacer PCB clip	3036W4SAR99F40X
43W2	Front/Threaded rear spacer PCB clip	3043W2SAR99F40X
47W1	Front/Threaded rear spacer PCB clip	3047W1SAR99F40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1PAR99F40X
7W2	Front/Threaded rear spacer PCB clip	3007W2PAR99F40X
11W1	Front/Threaded rear spacer PCB clip	3011W1PAR99F40X
9W4	Front/Threaded rear spacer PCB clip	3009W4PAR99F40X
13W3	Front/Threaded rear spacer PCB clip	3013W3PAR99F40X
17W2	Front/Threaded rear spacer PCB clip	3017W2PAR99F40X
21W1	Front/Threaded rear spacer PCB clip	3021W1PAR99F40X
13W6	Front/Threaded rear spacer PCB clip	3013W6PAR99F40X
17W5	Front/Threaded rear spacer PCB clip	3017W5PAR99F40X
21WA4	Front/Threaded rear spacer PCB clip	321WA4PAR99F40X
25W3	Front/Threaded rear spacer PCB clip	3025W3PAR99F40X
27W2	Front/Threaded rear spacer PCB clip	3027W2PAR99F40X
24W7	Front/Threaded rear spacer PCB clip	3024W7PAR99F40X
36W4	Front/Threaded rear spacer PCB clip	3036W4PAR99F40X
43W2	Front/Threaded rear spacer PCB clip	3043W2PAR99F40X
47W1	Front/Threaded rear spacer PCB clip	3047W1PAR99F40X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter



# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

Shell size 1-4



Shell size 5



## DESCRIPTION

- Threaded rear spacer .256"/6.5 mm
- Mounting style:
  - with 4-40 UNC threaded rear spacer with PCB clip
  - for PCB thickness .063"/1.6 mm
  - for PCB thickness .091"/2.3 mm
  - for PCB thickness .126"/3.2 mm
- M3 and PCB clip with front spacer available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## PLUG CONNECTOR



Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4



Shell size 5



## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99C20X
7W2	Threaded rear spacer PCB clip	3007W2SAR99C20X
11W1	Threaded rear spacer PCB clip	3011W1SAR99C20X
9W4	Threaded rear spacer PCB clip	3009W4SAR99C20X
13W3	Threaded rear spacer PCB clip	3013W3SAR99C20X
17W2	Threaded rear spacer PCB clip	3017W2SAR99C20X
21W1	Threaded rear spacer PCB clip	3021W1SAR99C20X
13W6	Threaded rear spacer PCB clip	3013W6SAR99C20X
17W5	Threaded rear spacer PCB clip	3017W5SAR99C20X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99C20X
25W3	Threaded rear spacer PCB clip	3025W3SAR99C20X
27W2	Threaded rear spacer PCB clip	3027W2SAR99C20X
24W7	Threaded rear spacer PCB clip	3024W7SAR99C20X
36W4	Threaded rear spacer PCB clip	3036W4SAR99C20X
43W2	Threaded rear spacer PCB clip	3043W2SAR99C20X
47W1	Threaded rear spacer PCB clip	3047W1SAR99C20X

### PLUG CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99C20X
7W2	Threaded rear spacer PCB clip	3007W2PAR99C20X
11W1	Threaded rear spacer PCB clip	3011W1PAR99C20X
9W4	Threaded rear spacer PCB clip	3009W4PAR99C20X
13W3	Threaded rear spacer PCB clip	3013W3PAR99C20X
17W2	Threaded rear spacer PCB clip	3017W2PAR99C20X
21W1	Threaded rear spacer PCB clip	3021W1PAR99C20X
13W6	Threaded rear spacer PCB clip	3013W6PAR99C20X
17W5	Threaded rear spacer PCB clip	3017W5PAR99C20X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99C20X
25W3	Threaded rear spacer PCB clip	3025W3PAR99C20X
27W2	Threaded rear spacer PCB clip	3027W2PAR99C20X
24W7	Threaded rear spacer PCB clip	3024W7PAR99C20X
36W4	Threaded rear spacer PCB clip	3036W4PAR99C20X
43W2	Threaded rear spacer PCB clip	3043W2PAR99C20X
47W1	Threaded rear spacer PCB clip	3047W1PAR99C20X

PCB thickness .063"/1.6 mm



PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# COMBINATION D-SUB – MOUNTING STYLES

## Solder pin – Straight – Precision machined contacts

ORDER DATA

PCB thickness .091"/2.3 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99C40X
7W2	Threaded rear spacer PCB clip	3007W2SAR99C40X
11W1	Threaded rear spacer PCB clip	3011W1SAR99C40X
9W4	Threaded rear spacer PCB clip	3009W4SAR99C40X
13W3	Threaded rear spacer PCB clip	3013W3SAR99C40X
17W2	Threaded rear spacer PCB clip	3017W2SAR99C40X
21W1	Threaded rear spacer PCB clip	3021W1SAR99C40X
13W6	Threaded rear spacer PCB clip	3013W6SAR99C40X
17W5	Threaded rear spacer PCB clip	3017W5SAR99C40X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99C40X
25W3	Threaded rear spacer PCB clip	3025W3SAR99C40X
27W2	Threaded rear spacer PCB clip	3027W2SAR99C40X
24W7	Threaded rear spacer PCB clip	3024W7SAR99C40X
36W4	Threaded rear spacer PCB clip	3036W4SAR99C40X
43W2	Threaded rear spacer PCB clip	3043W2SAR99C40X
47W1	Threaded rear spacer PCB clip	3047W1SAR99C40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99C40X
7W2	Threaded rear spacer PCB clip	3007W2PAR99C40X
11W1	Threaded rear spacer PCB clip	3011W1PAR99C40X
9W4	Threaded rear spacer PCB clip	3009W4PAR99C40X
13W3	Threaded rear spacer PCB clip	3013W3PAR99C40X
17W2	Threaded rear spacer PCB clip	3017W2PAR99C40X
21W1	Threaded rear spacer PCB clip	3021W1PAR99C40X
13W6	Threaded rear spacer PCB clip	3013W6PAR99C40X
17W5	Threaded rear spacer PCB clip	3017W5PAR99C40X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99C40X
25W3	Threaded rear spacer PCB clip	3025W3PAR99C40X
27W2	Threaded rear spacer PCB clip	3027W2PAR99C40X
24W7	Threaded rear spacer PCB clip	3024W7PAR99C40X
36W4	Threaded rear spacer PCB clip	3036W4PAR99C40X
43W2	Threaded rear spacer PCB clip	3043W2PAR99C40X
47W1	Threaded rear spacer PCB clip	3047W1PAR99C40X

PCB thickness .126"/3.2 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99C60X
7W2	Threaded rear spacer PCB clip	3007W2SAR99C60X
11W1	Threaded rear spacer PCB clip	3011W1SAR99C60X
9W4	Threaded rear spacer PCB clip	3009W4SAR99C60X
13W3	Threaded rear spacer PCB clip	3013W3SAR99C60X
17W2	Threaded rear spacer PCB clip	3017W2SAR99C60X
21W1	Threaded rear spacer PCB clip	3021W1SAR99C60X
13W6	Threaded rear spacer PCB clip	3013W6SAR99C60X
17W5	Threaded rear spacer PCB clip	3017W5SAR99C60X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99C60X
25W3	Threaded rear spacer PCB clip	3025W3SAR99C60X
27W2	Threaded rear spacer PCB clip	3027W2SAR99C60X
24W7	Threaded rear spacer PCB clip	3024W7SAR99C60X
36W4	Threaded rear spacer PCB clip	3036W4SAR99C60X
43W2	Threaded rear spacer PCB clip	3043W2SAR99C60X
47W1	Threaded rear spacer PCB clip	3047W1SAR99C60X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99C60X
7W2	Threaded rear spacer PCB clip	3007W2PAR99C60X
11W1	Threaded rear spacer PCB clip	3011W1PAR99C60X
9W4	Threaded rear spacer PCB clip	3009W4PAR99C60X
13W3	Threaded rear spacer PCB clip	3013W3PAR99C60X
17W2	Threaded rear spacer PCB clip	3017W2PAR99C60X
21W1	Threaded rear spacer PCB clip	3021W1PAR99C60X
13W6	Threaded rear spacer PCB clip	3013W6PAR99C60X
17W5	Threaded rear spacer PCB clip	3017W5PAR99C60X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99C60X
25W3	Threaded rear spacer PCB clip	3025W3PAR99C60X
27W2	Threaded rear spacer PCB clip	3027W2PAR99C60X
24W7	Threaded rear spacer PCB clip	3024W7PAR99C60X
36W4	Threaded rear spacer PCB clip	3036W4PAR99C60X
43W2	Threaded rear spacer PCB clip	3043W2PAR99C60X
47W1	Threaded rear spacer PCB clip	3047W1PAR99C60X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

# COMBINATION D-SUB WITH SIGNAL CONTACTS

Press-fit – Straight – Precision machined contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

Shell size 1-4

Shell size 5

## DESCRIPTION

- Mounting styles:
  - with 4-40 UNC or M3 threaded rear spacer
  - with M3 or 4-40 UNC rear press-fit spacer
- For .040" / 1.0 mm<sup>+0.003"/0.09 mm</sup><sub>-.002"/0.06 mm</sub> finished through-hole diameter  
Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)
- For power contacts please contact factory

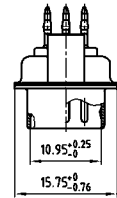
## PLUG CONNECTOR



Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4

Shell size 5



## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1SAP99A70X
7W2	Threaded rear spacer	3007W2SAP99A70X
11W1	Threaded rear spacer	3011W1SAP99A70X
9W4	Threaded rear spacer	3009W4SAP99A70X
13W3	Threaded rear spacer	3013W3SAP99A70X
17W2	Threaded rear spacer	3017W2SAP99A70X
21W1	Threaded rear spacer	3021W1SAP99A70X
13W6	Threaded rear spacer	3013W6SAP99A70X
17W5	Threaded rear spacer	3017W5SAP99A70X
21WA4	Threaded rear spacer	321WA4SAP99A70X
25W3	Threaded rear spacer	3025W3SAP99A70X
27W2	Threaded rear spacer	3027W2SAP99A70X
24W7	Threaded rear spacer	3024W7SAP99A70X
36W4	Threaded rear spacer	3036W4SAP99A70X
43W2	Threaded rear spacer	3043W2SAP99A70X
47W1	Threaded rear spacer	3047W1SAP99A70X

### PLUG CONNECTOR

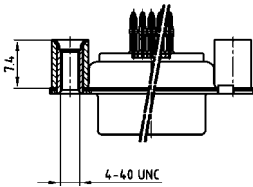
Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1PAP99A70X
7W2	Threaded rear spacer	3007W2PAP99A70X
11W1	Threaded rear spacer	3011W1PAP99A70X
9W4	Threaded rear spacer	3009W4PAP99A70X
13W3	Threaded rear spacer	3013W3PAP99A70X
17W2	Threaded rear spacer	3017W2PAP99A70X
21W1	Threaded rear spacer	3021W1PAP99A70X
13W6	Threaded rear spacer	3013W6PAP99A70X
17W5	Threaded rear spacer	3017W5PAP99A70X
21WA4	Threaded rear spacer	321WA4PAP99A70X
25W3	Threaded rear spacer	3025W3PAP99A70X
27W2	Threaded rear spacer	3027W2PAP99A70X
24W7	Threaded rear spacer	3024W7PAP99A70X
36W4	Threaded rear spacer	3036W4PAP99A70X
43W2	Threaded rear spacer	3043W2PAP99A70X
47W1	Threaded rear spacer	3047W1PAP99A70X



# COMBINATION D-SUB – MOUNTING STYLES

Press-fit – Straight – Precision machined contacts

ORDER DATA



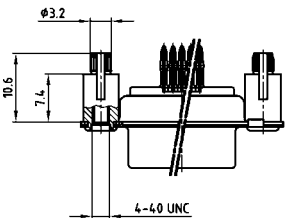
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1SAP99A80X
7W2	Threaded rear spacer	3007W2SAP99A80X
11W1	Threaded rear spacer	3011W1SAP99A80X
9W4	Threaded rear spacer	3009W4SAP99A80X
13W3	Threaded rear spacer	3013W3SAP99A80X
17W2	Threaded rear spacer	3017W2SAP99A80X
21W1	Threaded rear spacer	3021W1SAP99A80X
13W6	Threaded rear spacer	3013W6SAP99A80X
17W5	Threaded rear spacer	3017W5SAP99A80X
21WA4	Threaded rear spacer	321WA4SAP99A80X
25W3	Threaded rear spacer	3025W3SAP99A80X
27W2	Threaded rear spacer	3027W2SAP99A80X
24W7	Threaded rear spacer	3024W7SAP99A80X
36W4	Threaded rear spacer	3036W4SAP99A80X
43W2	Threaded rear spacer	3043W2SAP99A80X
47W1	Threaded rear spacer	3047W1SAP99A80X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1PAP99A80X
7W2	Threaded rear spacer	3007W2PAP99A80X
11W1	Threaded rear spacer	3011W1PAP99A80X
9W4	Threaded rear spacer	3009W4PAP99A80X
13W3	Threaded rear spacer	3013W3PAP99A80X
17W2	Threaded rear spacer	3017W2PAP99A80X
21W1	Threaded rear spacer	3021W1PAP99A80X
13W6	Threaded rear spacer	3013W6PAP99A80X
17W5	Threaded rear spacer	3017W5PAP99A80X
21WA4	Threaded rear spacer	321WA4PAP99A80X
25W3	Threaded rear spacer	3025W3PAP99A80X
27W2	Threaded rear spacer	3027W2PAP99A80X
24W7	Threaded rear spacer	3024W7PAP99A80X
36W4	Threaded rear spacer	3036W4PAP99A80X
43W2	Threaded rear spacer	3043W2PAP99A80X
47W1	Threaded rear spacer	3047W1PAP99A80X



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Rear press-fit spacer	3005W1SAP99W10X
7W2	Rear press-fit spacer	3007W2SAP99W10X
11W1	Rear press-fit spacer	3011W1SAP99W10X
9W4	Rear press-fit spacer	3009W4SAP99W10X
13W3	Rear press-fit spacer	3013W3SAP99W10X
17W2	Rear press-fit spacer	3017W2SAP99W10X
21W1	Rear press-fit spacer	3021W1SAP99W10X
13W6	Rear press-fit spacer	3013W6SAP99W10X
17W5	Rear press-fit spacer	3017W5SAP99W10X
21WA4	Rear press-fit spacer	321WA4SAP99W10X
25W3	Rear press-fit spacer	3025W3SAP99W10X
27W2	Rear press-fit spacer	3027W2SAP99W10X
24W7	Rear press-fit spacer	3024W7SAP99W10X
36W4	Rear press-fit spacer	3036W4SAP99W10X
43W2	Rear press-fit spacer	3043W2SAP99W10X
47W1	Rear press-fit spacer	3047W1SAP99W10X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Rear press-fit spacer	3005W1PAP99W10X
7W2	Rear press-fit spacer	3007W2PAP99W10X
11W1	Rear press-fit spacer	3011W1PAP99W10X
9W4	Rear press-fit spacer	3009W4PAP99W10X
13W3	Rear press-fit spacer	3013W3PAP99W10X
17W2	Rear press-fit spacer	3017W2PAP99W10X
21W1	Rear press-fit spacer	3021W1PAP99W10X
13W6	Rear press-fit spacer	3013W6PAP99W10X
17W5	Rear press-fit spacer	3017W5PAP99W10X
21WA4	Rear press-fit spacer	321WA4PAP99W10X
25W3	Rear press-fit spacer	3025W3PAP99W10X
27W2	Rear press-fit spacer	3027W2PAP99W10X
24W7	Rear press-fit spacer	3024W7PAP99W10X
36W4	Rear press-fit spacer	3036W4PAP99W10X
43W2	Rear press-fit spacer	3043W2PAP99W10X
47W1	Rear press-fit spacer	3047W1PAP99W10X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Rear press-fit spacer	3005W1SAP99W20X
7W2	Rear press-fit spacer	3007W2SAP99W20X
11W1	Rear press-fit spacer	3011W1SAP99W20X
9W4	Rear press-fit spacer	3009W4SAP99W20X
13W3	Rear press-fit spacer	3013W3SAP99W20X
17W2	Rear press-fit spacer	3017W2SAP99W20X
21W1	Rear press-fit spacer	3021W1SAP99W20X
13W6	Rear press-fit spacer	3013W6SAP99W20X
17W5	Rear press-fit spacer	3017W5SAP99W20X
21WA4	Rear press-fit spacer	321WA4SAP99W20X
25W3	Rear press-fit spacer	3025W3SAP99W20X
27W2	Rear press-fit spacer	3027W2SAP99W20X
24W7	Rear press-fit spacer	3024W7SAP99W20X
36W4	Rear press-fit spacer	3036W4SAP99W20X
43W2	Rear press-fit spacer	3043W2SAP99W20X
47W1	Rear press-fit spacer	3047W1SAP99W20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Rear press-fit spacer	3005W1PAP99W20X
7W2	Rear press-fit spacer	3007W2PAP99W20X
11W1	Rear press-fit spacer	3011W1PAP99W20X
9W4	Rear press-fit spacer	3009W4PAP99W20X
13W3	Rear press-fit spacer	3013W3PAP99W20X
17W2	Rear press-fit spacer	3017W2PAP99W20X
21W1	Rear press-fit spacer	3021W1PAP99W20X
13W6	Rear press-fit spacer	3013W6PAP99W20X
17W5	Rear press-fit spacer	3017W5PAP99W20X
21WA4	Rear press-fit spacer	321WA4PAP99W20X
25W3	Rear press-fit spacer	3025W3PAP99W20X
27W2	Rear press-fit spacer	3027W2PAP99W20X
24W7	Rear press-fit spacer	3024W7PAP99W20X
36W4	Rear press-fit spacer	3036W4PAP99W20X
43W2	Rear press-fit spacer	3043W2PAP99W20X
47W1	Rear press-fit spacer	3047W1PAP99W20X

Rear press-fit spacer (snap in) .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB WITH SIGNAL CONTACTS

Wire wrap – Precision machined contacts



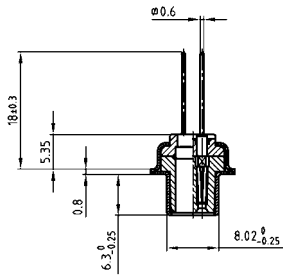
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR

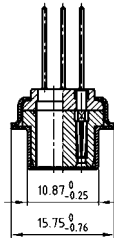


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

Shell size 1-4



Shell size 5



## DESCRIPTION

- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## PLUG CONNECTOR

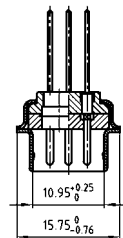


Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4



Shell size 5



## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style	Part Number
5W1	Through-hole	3005W1SAN99A10X
7W2	Through-hole	3007W2SAN99A10X
11W1	Through-hole	3011W1SAN99A10X
9W4	Through-hole	3009W4SAN99A10X
13W3	Through-hole	3013W3SAN99A10X
17W2	Through-hole	3017W2SAN99A10X
21W1	Through-hole	3021W1SAN99A10X
13W6	Through-hole	3013W6SAN99A10X
17W5	Through-hole	3017W5SAN99A10X
21WA4	Through-hole	321WA4SAN99A10X
25W3	Through-hole	3025W3SAN99A10X
27W2	Through-hole	3027W2SAN99A10X
24W7	Through-hole	3024W7SAN99A10X
36W4	Through-hole	3036W4SAN99A10X
43W2	Through-hole	3043W2SAN99A10X
47W1	Through-hole	3047W1SAN99A10X

### PLUG CONNECTOR

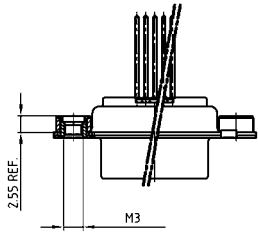
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PAN99A10X
7W2	Through-hole	3007W2PAN99A10X
11W1	Through-hole	3011W1PAN99A10X
9W4	Through-hole	3009W4PAN99A10X
13W3	Through-hole	3013W3PAN99A10X
17W2	Through-hole	3017W2PAN99A10X
21W1	Through-hole	3021W1PAN99A10X
13W6	Through-hole	3013W6PAN99A10X
17W5	Through-hole	3017W5PAN99A10X
21WA4	Through-hole	321WA4PAN99A10X
25W3	Through-hole	3025W3PAN99A10X
27W2	Through-hole	3027W2PAN99A10X
24W7	Through-hole	3024W7PAN99A10X
36W4	Through-hole	3036W4PAN99A10X
43W2	Through-hole	3043W2PAN99A10X
47W1	Through-hole	3047W1PAN99A10X



# COMBINATION D-SUB – MOUNTING STYLES

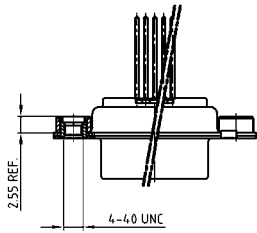
Wire wrap – Precision machined contacts

ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SAN99A20X
7W2	Threaded insert	3007W2SAN99A20X
11W1	Threaded insert	3011W1SAN99A20X
9W4	Threaded insert	3009W4SAN99A20X
13W3	Threaded insert	3013W3SAN99A20X
17W2	Threaded insert	3017W2SAN99A20X
21W1	Threaded insert	3021W1SAN99A20X
13W6	Threaded insert	3013W6SAN99A20X
17W5	Threaded insert	3017W5SAN99A20X
21WA4	Threaded insert	321WA4SAN99A20X
25W3	Threaded insert	3025W3SAN99A20X
27W2	Threaded insert	3027W2SAN99A20X
24W7	Threaded insert	3024W7SAN99A20X
36W4	Threaded insert	3036W4SAN99A20X
43W2	Threaded insert	3043W2SAN99A20X
47W1	Threaded insert	3047W1SAN99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PAN99A20X
7W2	Threaded insert	3007W2PAN99A20X
11W1	Threaded insert	3011W1PAN99A20X
9W4	Threaded insert	3009W4PAN99A20X
13W3	Threaded insert	3013W3PAN99A20X
17W2	Threaded insert	3017W2PAN99A20X
21W1	Threaded insert	3021W1PAN99A20X
13W6	Threaded insert	3013W6PAN99A20X
17W5	Threaded insert	3017W5PAN99A20X
21WA4	Threaded insert	321WA4PAN99A20X
25W3	Threaded insert	3025W3PAN99A20X
27W2	Threaded insert	3027W2PAN99A20X
24W7	Threaded insert	3024W7PAN99A20X
36W4	Threaded insert	3036W4PAN99A20X
43W2	Threaded insert	3043W2PAN99A20X
47W1	Threaded insert	3047W1PAN99A20X

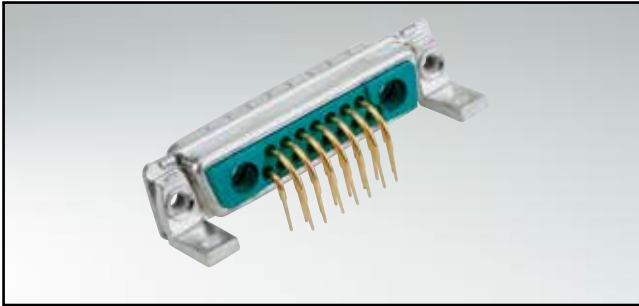


SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAN99A30X
7W2	Threaded insert	3007W2SAN99A30X
11W1	Threaded insert	3011W1SAN99A30X
9W4	Threaded insert	3009W4SAN99A30X
13W3	Threaded insert	3013W3SAN99A30X
17W2	Threaded insert	3017W2SAN99A30X
21W1	Threaded insert	3021W1SAN99A30X
13W6	Threaded insert	3013W6SAN99A30X
17W5	Threaded insert	3017W5SAN99A30X
21WA4	Threaded insert	321WA4SAN99A30X
25W3	Threaded insert	3025W3SAN99A30X
27W2	Threaded insert	3027W2SAN99A30X
24W7	Threaded insert	3024W7SAN99A30X
36W4	Threaded insert	3036W4SAN99A30X
43W2	Threaded insert	3043W2SAN99A30X
47W1	Threaded insert	3047W1SAN99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAN99A30X
7W2	Threaded insert	3007W2PAN99A30X
11W1	Threaded insert	3011W1PAN99A30X
9W4	Threaded insert	3009W4PAN99A30X
13W3	Threaded insert	3013W3PAN99A30X
17W2	Threaded insert	3017W2PAN99A30X
21W1	Threaded insert	3021W1PAN99A30X
13W6	Threaded insert	3013W6PAN99A30X
17W5	Threaded insert	3017W5PAN99A30X
21WA4	Threaded insert	321WA4PAN99A30X
25W3	Threaded insert	3025W3PAN99A30X
27W2	Threaded insert	3027W2PAN99A30X
24W7	Threaded insert	3024W7PAN99A30X
36W4	Threaded insert	3036W4PAN99A30X
43W2	Threaded insert	3043W2PAN99A30X
47W1	Threaded insert	3047W1PAN99A30X

# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Angled – .318" / 7.19 mm – Precision machined contacts – Metal bracket

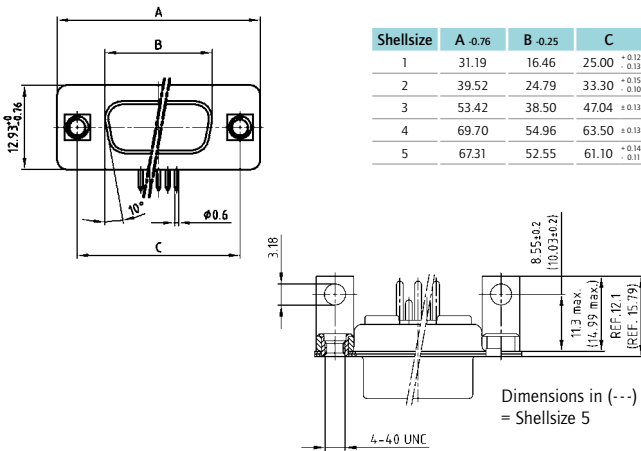


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

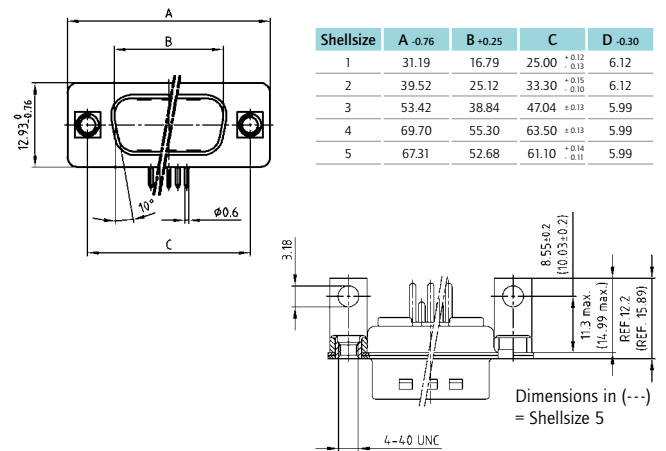
## DESCRIPTION

- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket and 4-40 UNC front spacer
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

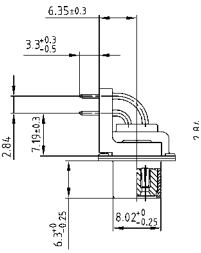
## SOCKET CONNECTOR



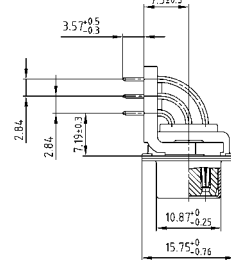
## PLUG CONNECTOR



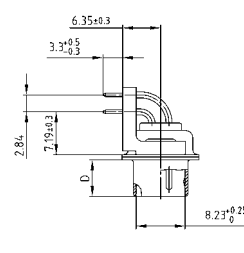
Shell size 1-4



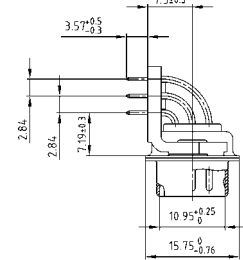
Shell size 5



Shell size 1-4



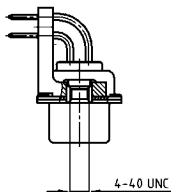
Shell size 5



## ORDER DATA

SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAT99N20X
7W2	Threaded insert	3007W2SAT99N20X
11W1	Threaded insert	3011W1SAT99N20X
9W4	Threaded insert	3009W4SAT99N20X
13W3	Threaded insert	3013W3SAT99N20X
17W2	Threaded insert	3017W2SAT99N20X
21W1	Threaded insert	3021W1SAT99N20X
13W6	Threaded insert	3013W6SAT99N20X
17W5	Threaded insert	3017W5SAT99N20X
21WA4	Threaded insert	321WA4SAT99N20X
25W3	Threaded insert	3025W3SAT99N20X
27W2	Threaded insert	3027W2SAT99N20X
24W7	Threaded insert	3024W7SAT99N20X
36W4	Threaded insert	3036W4SAT99N20X
43W2	Threaded insert	3043W2SAT99N20X
47W1	Threaded insert	3047W1SAT99N20X

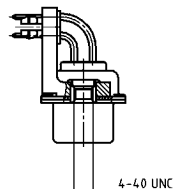
PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAT99N20X
7W2	Threaded insert	3007W2PAT99N20X
11W1	Threaded insert	3011W1PAT99N20X
9W4	Threaded insert	3009W4PAT99N20X
13W3	Threaded insert	3013W3PAT99N20X
17W2	Threaded insert	3017W2PAT99N20X
21W1	Threaded insert	3021W1PAT99N20X
13W6	Threaded insert	3013W6PAT99N20X
17W5	Threaded insert	3017W5PAT99N20X
21WA4	Threaded insert	321WA4PAT99N20X
25W3	Threaded insert	3025W3PAT99N20X
27W2	Threaded insert	3027W2PAT99N20X
24W7	Threaded insert	3024W7PAT99N20X
36W4	Threaded insert	3036W4PAT99N20X
43W2	Threaded insert	3043W2PAT99N20X
47W1	Threaded insert	3047W1PAT99N20X



# COMBINATION D-SUB – MOUNTING STYLES

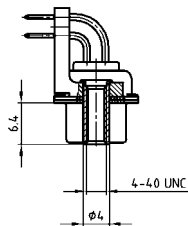
Solder pin – Angled – .318" / 7.19 mm – Precision machined contacts – Metal bracket

ORDER DATA



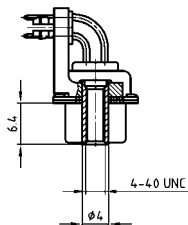
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1SAT99N40X
7W2	Threaded insert / PCB clip	3007W2SAT99N40X
11W1	Threaded insert / PCB clip	3011W1SAT99N40X
9W4	Threaded insert / PCB clip	3009W4SAT99N40X
13W3	Threaded insert / PCB clip	3013W3SAT99N40X
17W2	Threaded insert / PCB clip	3017W2SAT99N40X
21W1	Threaded insert / PCB clip	3021W1SAT99N40X
13W6	Threaded insert / PCB clip	3013W6SAT99N40X
17W5	Threaded insert / PCB clip	3017W5SAT99N40X
21WA4	Threaded insert / PCB clip	321WA4SAT99N40X
25W3	Threaded insert / PCB clip	3025W3SAT99N40X
27W2	Threaded insert / PCB clip	3027W2SAT99N40X
24W7	Threaded insert / PCB clip	3024W7SAT99N40X
36W4	Threaded insert / PCB clip	3036W4SAT99N40X
43W2	Threaded insert / PCB clip	3043W2SAT99N40X
47W1	Threaded insert / PCB clip	3047W1SAT99N40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1PAT99N40X
7W2	Threaded insert / PCB clip	3007W2PAT99N40X
11W1	Threaded insert / PCB clip	3011W1PAT99N40X
9W4	Threaded insert / PCB clip	3009W4PAT99N40X
13W3	Threaded insert / PCB clip	3013W3PAT99N40X
17W2	Threaded insert / PCB clip	3017W2PAT99N40X
21W1	Threaded insert / PCB clip	3021W1PAT99N40X
13W6	Threaded insert / PCB clip	3013W6PAT99N40X
17W5	Threaded insert / PCB clip	3017W5PAT99N40X
21WA4	Threaded insert / PCB clip	321WA4PAT99N40X
25W3	Threaded insert / PCB clip	3025W3PAT99N40X
27W2	Threaded insert / PCB clip	3027W2PAT99N40X
24W7	Threaded insert / PCB clip	3024W7PAT99N40X
36W4	Threaded insert / PCB clip	3036W4PAT99N40X
43W2	Threaded insert / PCB clip	3043W2PAT99N40X
47W1	Threaded insert / PCB clip	3047W1PAT99N40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1SAT99P20X
7W2	Front spacer	3007W2SAT99P20X
11W1	Front spacer	3011W1SAT99P20X
9W4	Front spacer	3009W4SAT99P20X
13W3	Front spacer	3013W3SAT99P20X
17W2	Front spacer	3017W2SAT99P20X
21W1	Front spacer	3021W1SAT99P20X
13W6	Front spacer	3013W6SAT99P20X
17W5	Front spacer	3017W5SAT99P20X
21WA4	Front spacer	321WA4SAT99P20X
25W3	Front spacer	3025W3SAT99P20X
27W2	Front spacer	3027W2SAT99P20X
24W7	Front spacer	3024W7SAT99P20X
36W4	Front spacer	3036W4SAT99P20X
43W2	Front spacer	3043W2SAT99P20X
47W1	Front spacer	3047W1SAT99P20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1PAT99P20X
7W2	Front spacer	3007W2PAT99P20X
11W1	Front spacer	3011W1PAT99P20X
9W4	Front spacer	3009W4PAT99P20X
13W3	Front spacer	3013W3PAT99P20X
17W2	Front spacer	3017W2PAT99P20X
21W1	Front spacer	3021W1PAT99P20X
13W6	Front spacer	3013W6PAT99P20X
17W5	Front spacer	3017W5PAT99P20X
21WA4	Front spacer	321WA4PAT99P20X
25W3	Front spacer	3025W3PAT99P20X
27W2	Front spacer	3027W2PAT99P20X
24W7	Front spacer	3024W7PAT99P20X
36W4	Front spacer	3036W4PAT99P20X
43W2	Front spacer	3043W2PAT99P20X
47W1	Front spacer	3047W1PAT99P20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1SAT99P40X
7W2	Front spacer / PCB clip	3007W2SAT99P40X
11W1	Front spacer / PCB clip	3011W1SAT99P40X
9W4	Front spacer / PCB clip	3009W4SAT99P40X
13W3	Front spacer / PCB clip	3013W3SAT99P40X
17W2	Front spacer / PCB clip	3017W2SAT99P40X
21W1	Front spacer / PCB clip	3021W1SAT99P40X
13W6	Front spacer / PCB clip	3013W6SAT99P40X
17W5	Front spacer / PCB clip	3017W5SAT99P40X
21WA4	Front spacer / PCB clip	321WA4SAT99P40X
25W3	Front spacer / PCB clip	3025W3SAT99P40X
27W2	Front spacer / PCB clip	3027W2SAT99P40X
24W7	Front spacer / PCB clip	3024W7SAT99P40X
36W4	Front spacer / PCB clip	3036W4SAT99P40X
43W2	Front spacer / PCB clip	3043W2SAT99P40X
47W1	Front spacer / PCB clip	3047W1SAT99P40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1PAT99P40X
7W2	Front spacer / PCB clip	3007W2PAT99P40X
11W1	Front spacer / PCB clip	3011W1PAT99P40X
9W4	Front spacer / PCB clip	3009W4PAT99P40X
13W3	Front spacer / PCB clip	3013W3PAT99P40X
17W2	Front spacer / PCB clip	3017W2PAT99P40X
21W1	Front spacer / PCB clip	3021W1PAT99P40X
13W6	Front spacer / PCB clip	3013W6PAT99P40X
17W5	Front spacer / PCB clip	3017W5PAT99P40X
21WA4	Front spacer / PCB clip	321WA4PAT99P40X
25W3	Front spacer / PCB clip	3025W3PAT99P40X
27W2	Front spacer / PCB clip	3027W2PAT99P40X
24W7	Front spacer / PCB clip	3024W7PAT99P40X
36W4	Front spacer / PCB clip	3036W4PAT99P40X
43W2	Front spacer / PCB clip	3043W2PAT99P40X
47W1	Front spacer / PCB clip	3047W1PAT99P40X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness



# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR



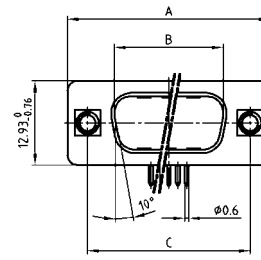
Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup> / <sub>-0.10</sub>
4	69.70	54.96	63.50 <sup>+0.13</sup> / <sub>-0.14</sub>
5	67.31	52.55	61.10 <sup>+0.14</sup> / <sub>-0.11</sub>



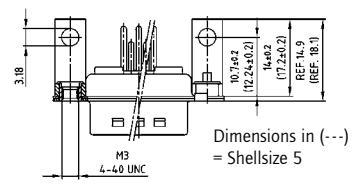
## DESCRIPTION

- Mounting styles:
  - with mounting bracket and threaded insert
  - with mounting bracket with 4-40 UNC front spacer
  - with mounting bracket, PCB clip and threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

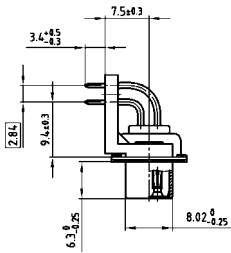
## PLUG CONNECTOR



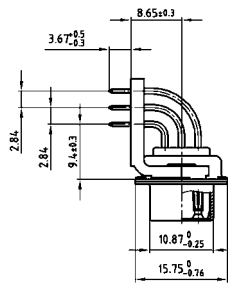
Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup> / <sub>-0.10</sub>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup> / <sub>-0.14</sub>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> / <sub>-0.11</sub>	5.99



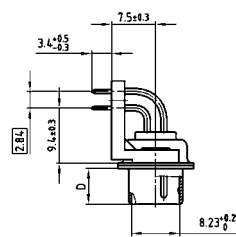
Shell size 1-4



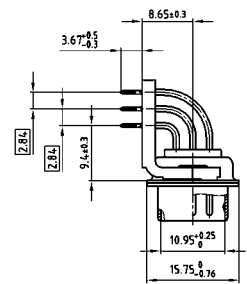
Shell size 5



Shell size 1-4



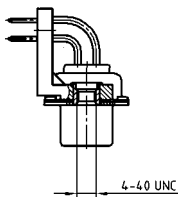
Shell size 5



## ORDER DATA

SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAU99G20X
7W2	Threaded insert	3007W2SAU99G20X
11W1	Threaded insert	3011W1SAU99G20X
9W4	Threaded insert	3009W4SAU99G20X
13W3	Threaded insert	3013W3SAU99G20X
17W2	Threaded insert	3017W2SAU99G20X
21W1	Threaded insert	3021W1SAU99G20X
13W6	Threaded insert	3013W6SAU99G20X
17W5	Threaded insert	3017W5SAU99G20X
21WA4	Threaded insert	321WA4SAU99G20X
25W3	Threaded insert	3025W3SAU99G20X
27W2	Threaded insert	3027W2SAU99G20X
24W7	Threaded insert	3024W7SAU99G20X
36W4	Threaded insert	3036W4SAU99G20X
43W2	Threaded insert	3043W2SAU99G20X
47W1	Threaded insert	3047W1SAU99G20X

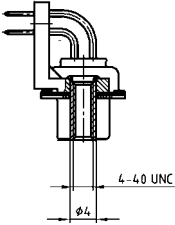
PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAU99G20X
7W2	Threaded insert	3007W2PAU99G20X
11W1	Threaded insert	3011W1PAU99G20X
9W4	Threaded insert	3009W4PAU99G20X
13W3	Threaded insert	3013W3PAU99G20X
17W2	Threaded insert	3017W2PAU99G20X
21W1	Threaded insert	3021W1PAU99G20X
13W6	Threaded insert	3013W6PAU99G20X
17W5	Threaded insert	3017W5PAU99G20X
21WA4	Threaded insert	321WA4PAU99G20X
25W3	Threaded insert	3025W3PAU99G20X
27W2	Threaded insert	3027W2PAU99G20X
24W7	Threaded insert	3024W7PAU99G20X
36W4	Threaded insert	3036W4PAU99G20X
43W2	Threaded insert	3043W2PAU99G20X
47W1	Threaded insert	3047W1PAU99G20X



# COMBINATION D-SUB – MOUNTING STYLES

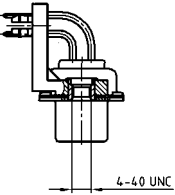
Solder pin – Angled – .370" / 9.4 mm – Precision machined contacts – Metal bracket

ORDER DATA



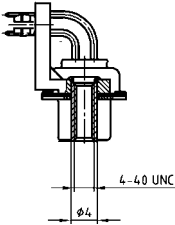
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1SAU99H20X
7W2	Front spacer	3007W2SAU99H20X
11W1	Front spacer	3011W1SAU99H20X
9W4	Front spacer	3009W4SAU99H20X
13W3	Front spacer	3013W3SAU99H20X
17W2	Front spacer	3017W2SAU99H20X
21W1	Front spacer	3021W1SAU99H20X
13W6	Front spacer	3013W6SAU99H20X
17W5	Front spacer	3017W5SAU99H20X
21WA4	Front spacer	321WA4SAU99H20X
25W3	Front spacer	3025W3SAU99H20X
27W2	Front spacer	3027W2SAU99H20X
24W7	Front spacer	3024W7SAU99H20X
36W4	Front spacer	3036W4SAU99H20X
43W2	Front spacer	3043W2SAU99H20X
47W1	Front spacer	3047W1SAU99H20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1PAU99H20X
7W2	Front spacer	3007W2PAU99H20X
11W1	Front spacer	3011W1PAU99H20X
9W4	Front spacer	3009W4PAU99H20X
13W3	Front spacer	3013W3PAU99H20X
17W2	Front spacer	3017W2PAU99H20X
21W1	Front spacer	3021W1PAU99H20X
13W6	Front spacer	3013W6PAU99H20X
17W5	Front spacer	3017W5PAU99H20X
21WA4	Front spacer	321WA4PAU99H20X
25W3	Front spacer	3025W3PAU99H20X
27W2	Front spacer	3027W2PAU99H20X
24W7	Front spacer	3024W7PAU99H20X
36W4	Front spacer	3036W4PAU99H20X
43W2	Front spacer	3043W2PAU99H20X
47W1	Front spacer	3047W1PAU99H20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1SAU99G40X
7W2	Threaded insert / PCB clip	3007W2SAU99G40X
11W1	Threaded insert / PCB clip	3011W1SAU99G40X
9W4	Threaded insert / PCB clip	3009W4SAU99G40X
13W3	Threaded insert / PCB clip	3013W3SAU99G40X
17W2	Threaded insert / PCB clip	3017W2SAU99G40X
21W1	Threaded insert / PCB clip	3021W1SAU99G40X
13W6	Threaded insert / PCB clip	3013W6SAU99G40X
17W5	Threaded insert / PCB clip	3017W5SAU99G40X
21WA4	Threaded insert / PCB clip	321WA4SAU99G40X
25W3	Threaded insert / PCB clip	3025W3SAU99G40X
27W2	Threaded insert / PCB clip	3027W2SAU99G40X
24W7	Threaded insert / PCB clip	3024W7SAU99G40X
36W4	Threaded insert / PCB clip	3036W4SAU99G40X
43W2	Threaded insert / PCB clip	3043W2SAU99G40X
47W1	Threaded insert / PCB clip	3047W1SAU99G40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1PAU99G40X
7W2	Threaded insert / PCB clip	3007W2PAU99G40X
11W1	Threaded insert / PCB clip	3011W1PAU99G40X
9W4	Threaded insert / PCB clip	3009W4PAU99G40X
13W3	Threaded insert / PCB clip	3013W3PAU99G40X
17W2	Threaded insert / PCB clip	3017W2PAU99G40X
21W1	Threaded insert / PCB clip	3021W1PAU99G40X
13W6	Threaded insert / PCB clip	3013W6PAU99G40X
17W5	Threaded insert / PCB clip	3017W5PAU99G40X
21WA4	Threaded insert / PCB clip	321WA4PAU99G40X
25W3	Threaded insert / PCB clip	3025W3PAU99G40X
27W2	Threaded insert / PCB clip	3027W2PAU99G40X
24W7	Threaded insert / PCB clip	3024W7PAU99G40X
36W4	Threaded insert / PCB clip	3036W4PAU99G40X
43W2	Threaded insert / PCB clip	3043W2PAU99G40X
47W1	Threaded insert / PCB clip	3047W1PAU99G40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1SAU99H40X
7W2	Front spacer / PCB clip	3007W2SAU99H40X
11W1	Front spacer / PCB clip	3011W1SAU99H40X
9W4	Front spacer / PCB clip	3009W4SAU99H40X
13W3	Front spacer / PCB clip	3013W3SAU99H40X
17W2	Front spacer / PCB clip	3017W2SAU99H40X
21W1	Front spacer / PCB clip	3021W1SAU99H40X
13W6	Front spacer / PCB clip	3013W6SAU99H40X
17W5	Front spacer / PCB clip	3017W5SAU99H40X
21WA4	Front spacer / PCB clip	321WA4SAU99H40X
25W3	Front spacer / PCB clip	3025W3SAU99H40X
27W2	Front spacer / PCB clip	3027W2SAU99H40X
24W7	Front spacer / PCB clip	3024W7SAU99H40X
36W4	Front spacer / PCB clip	3036W4SAU99H40X
43W2	Front spacer / PCB clip	3043W2SAU99H40X
47W1	Front spacer / PCB clip	3047W1SAU99H40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1PAU99H40X
7W2	Front spacer / PCB clip	3007W2PAU99H40X
11W1	Front spacer / PCB clip	3011W1PAU99H40X
9W4	Front spacer / PCB clip	3009W4PAU99H40X
13W3	Front spacer / PCB clip	3013W3PAU99H40X
17W2	Front spacer / PCB clip	3017W2PAU99H40X
21W1	Front spacer / PCB clip	3021W1PAU99H40X
13W6	Front spacer / PCB clip	3013W6PAU99H40X
17W5	Front spacer / PCB clip	3017W5PAU99H40X
21WA4	Front spacer / PCB clip	321WA4PAU99H40X
25W3	Front spacer / PCB clip	3025W3PAU99H40X
27W2	Front spacer / PCB clip	3027W2PAU99H40X
24W7	Front spacer / PCB clip	3024W7PAU99H40X
36W4	Front spacer / PCB clip	3036W4PAU99H40X
43W2	Front spacer / PCB clip	3043W2PAU99H40X
47W1	Front spacer / PCB clip	3047W1PAU99H40X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB HIGH DENSITY WITH SIGNAL CONTACTS

Solder cup – Precision machined contacts – For wire size AWG 22



RoHS compliant

## DESCRIPTION

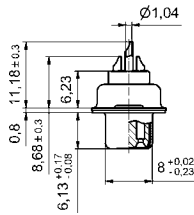
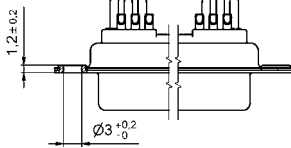
- Suitable for wire size AWG 22
- Mounting styles:
  - with through-hole,  $\varnothing$  .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
2	39.52	24.79	33.30 $^{+0.15}_{-0.10}$
3	53.42	38.50	47.04 $^{+0.13}$
4	69.70	54.96	63.50 $^{+0.13}$

Mounting style: Through-hole



Mounting style Threaded insert

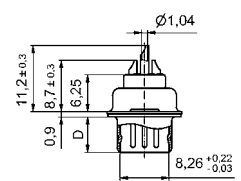
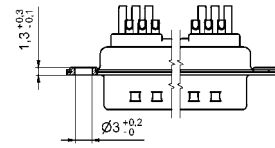


## PLUG CONNECTOR



Shellsize	A -0.76	B -0.25	C	D -0.30
2	39.52	25.12	33.30 $^{+0.15}_{-0.10}$	6.12
3	53.42	38.84	47.04 $^{+0.13}$	5.99
4	69.70	55.30	63.50 $^{+0.13}$	5.99

Mounting style: Through-hole



Mounting style Threaded insert



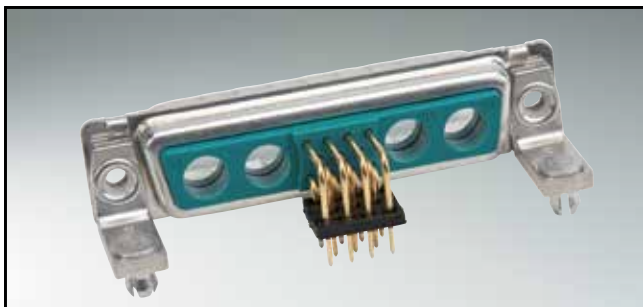
## ORDER DATA

SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	Through-hole	3H19W1SAM99A10X
15W4	Through-hole	3H15W4SAM99A10X
45W2	Through-hole	3H45W2SAM99A10X
19W1	M3 threaded insert	3H19W1SAM99A20X
15W4	M3 threaded insert	3H15W4SAM99A20X
45W2	M3 threaded insert	3H45W2SAM99A20X
19W1	4-40 UNC threaded insert	3H19W1SAM99A30X
15W4	4-40 UNC threaded insert	3H15W4SAM99A30X
45W2	4-40 UNC threaded insert	3H45W2SAM99A30X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	Through-hole	3H19W1PAM99A10X
15W4	Through-hole	3H15W4PAM99A10X
45W2	Through-hole	3H45W2PAM99A10X
19W1	M3 threaded insert	3H19W1PAM99A20X
15W4	M3 threaded insert	3H15W4PAM99A20X
45W2	M3 threaded insert	3H45W2PAM99A20X
19W1	4-40 UNC threaded insert	3H19W1PAM99A30X
15W4	4-40 UNC threaded insert	3H15W4PAM99A30X
45W2	4-40 UNC threaded insert	3H45W2PAM99A30X

# COMBINATION D-SUB HIGH DENSITY WITH SIGNAL CONTACTS

Solder pin – angled – ,350"/7,98 mm – Precision machined contacts – Metal bracket



RoHS compliant

## DESCRIPTION

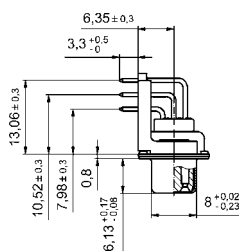
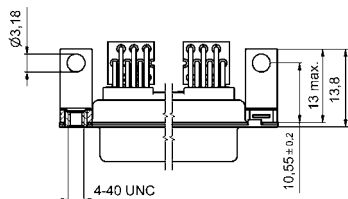
- Mounting styles:
  - mounting bracket and threaded insert 4-40 UNC
  - mounting bracket with front spacer 4-40 UNC
  - mounting bracket, PCB clip and threaded insert 4-40 UNC
  - mounting bracket, PCB clip and frontspacer 4-40 UNC
- Threaded lock M3 available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR

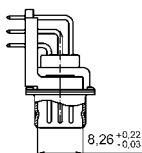


Shellsize	A -0.76	B -0.25	C
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup> / <sub>-0.10</sub>
4	69.70	54.96	63.50 <sup>+0.13</sup> / <sub>-0.10</sub>

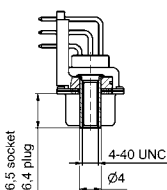
Mounting style: Through-hole



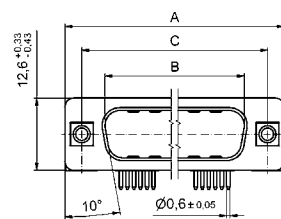
Mounting style: Threaded insert



Mounting style: Front spacer

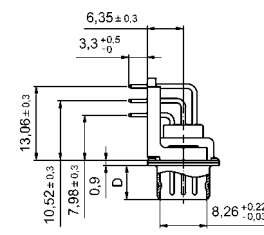
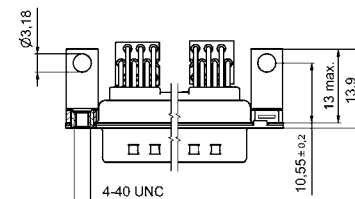


## PLUG CONNECTOR

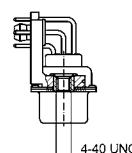


Shellsize	A -0.76	B -0.25	C	D -0.30
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup> / <sub>-0.10</sub>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup> / <sub>-0.10</sub>	5.99

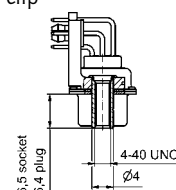
Mounting style: Through-hole



Mounting style: Threaded insert



Mounting style: Front spacer and PCB clip



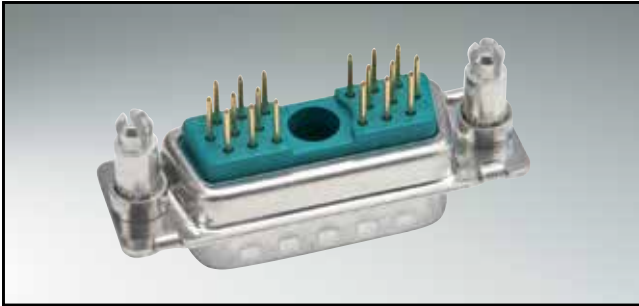
## ORDER DATA

SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded insert	3H19W1SAT99G60X
15W4	4-40 UNC threaded insert	3H15W4SAT99G60X
45W2	4-40 UNC threaded insert	3H45W2SAT99G60X
19W1	4-40 UNC threaded insert and PCB clip	3H19W1SAT99G80X
15W4	4-40 UNC threaded insert and PCB clip	3H15W4SAT99G80X
45W2	4-40 UNC threaded insert and PCB clip	3H45W2SAT99G80X
19W1	4-40 UNC front spacer	3H19W1SAT99H60X
15W4	4-40 UNC front spacer	3H15W4SAT99H60X
45W2	4-40 UNC front spacer	3H45W2SAT99H60X
19W1	4-40 UNC front spacer and PCB clip	3H19W1SAT99H80X
15W4	4-40 UNC front spacer and PCB clip	3H15W4SAT99H80X
45W2	4-40 UNC front spacer and PCB clip	3H45W2SAT99H80X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded insert	3H19W1PAT99G60X
15W4	4-40 UNC threaded insert	3H15W4PAT99G60X
45W2	4-40 UNC threaded insert	3H45W2PAT99G60X
19W1	4-40 UNC threaded insert and PCB clip	3H19W1PAT99G80X
15W4	4-40 UNC threaded insert and PCB clip	3H15W4PAT99G80X
45W2	4-40 UNC threaded insert and PCB clip	3H45W2PAT99G80X
19W1	4-40 UNC front spacer	3H19W1PAT99H60X
15W4	4-40 UNC front spacer	3H15W4PAT99H60X
45W2	4-40 UNC front spacer	3H45W2PAT99H60X
19W1	4-40 UNC front spacer and PCB clip	3H19W1PAT99H80X
15W4	4-40 UNC front spacer and PCB clip	3H15W4PAT99H80X
45W2	4-40 UNC front spacer and PCB clip	3H45W2PAT99H80X

# COMBINATION D-SUB HIGH DENSITY – WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

- Mounting styles:
  - with through-hole,  $\varnothing .118''/3 \text{ mm}$
  - with 4-40 UNC threaded insert
  - with 4-40 UNC threaded rear spacer
  - with 4-40 UNC threaded lock and spacer clip
- M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR



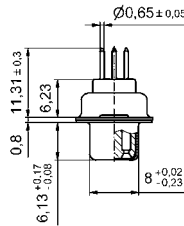
Shellsize	A -0.76	B -0.25	C	
2	39.52	24.79	33.30	$^{+0.15}_{-0.10}$
3	53.42	38.50	47.04	$\pm 0.13$
4	69.70	54.96	63.50	$\pm 0.13$

## PLUG CONNECTOR

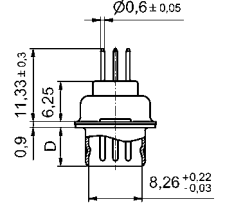


Shellsize	A -0.76	B +0.25	C	D -0.30	
2	39.52	25.12	33.30	$^{+0.15}_{-0.10}$	6.12
3	53.42	38.84	47.04	$\pm 0.13$	5.99
4	69.70	55.30	63.50	$\pm 0.13$	5.99

Mounting style: Through-hole



Mounting style: Through-hole



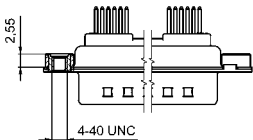
## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style	Part Number
19W1	Through-hole	3H19W1SAR99A10X
15W4	Through-hole	3H15W4SAR99A10X
45W2	Through-hole	3H45W2SAR99A10X
19W1	4-40 UNC threaded insert	3H19W1SAR99A30X
15W4	4-40 UNC threaded insert	3H15W4SAR99A30X
45W2	4-40 UNC threaded insert	3H45W2SAR99A30X

### PLUG CONNECTOR

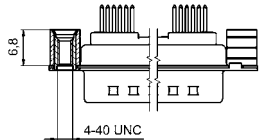
Design	Mounting style	Part Number
19W1	Through-hole	3H19W1PAR99A10X
15W4	Through-hole	3H15W4PAR99A10X
45W2	Through-hole	3H45W2PAR99A10X
19W1	4-40 UNC threaded insert	3H19W1PAR99A30X
15W4	4-40 UNC threaded insert	3H15W4PAR99A30X
45W2	4-40 UNC threaded insert	3H45W2PAR99A30X



# COMBINATION D-SUB HIGH DENSITY – MOUNTING STYLES

## Solder pin – Straight – Precision machined contacts

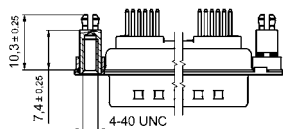
**ORDER DATA**



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer	3H19W1SAR99A50X
15W4	4-40 UNC threaded rear spacer	3H15W4SAR99A50X
45W2	4-40 UNC threaded rear spacer	3H45W2SAR99A50X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer	3H19W1PAR99A50X
15W4	4-40 UNC threaded rear spacer	3H15W4PAR99A50X
45W2	4-40 UNC threaded rear spacer	3H45W2PAR99A50X

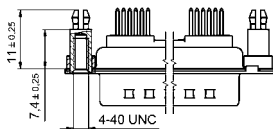
PCB thickness .063"/1,6 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1SAR99E20X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4SAR99E20X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2SAR99E20X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1PAR99E20X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4PAR99E20X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2PAR99E20X

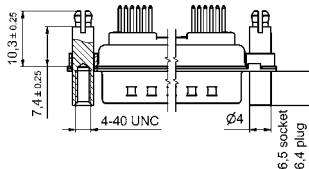
PCB thickness .091"/2,3 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1SAR99E40X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4SAR99E40X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2SAR99E40X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1SAR99E40X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4SAR99E40X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2SAR99E40X

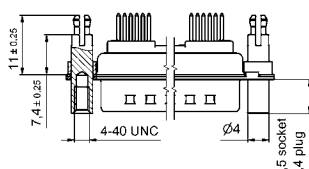
PCB thickness .063"/1,6 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1SAR99F20X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4SAR99F20X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2SAR99F20X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1PAR99F20X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4PAR99F20X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2PAR99F20X

PCB thickness .091"/2,3 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1SAR99F40X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4SAR99F40X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2SAR99F40X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1PAR99F40X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4PAR99F40X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2PAR99F40X

PCB clip .122" x 3.1 ± .004" / 0.10 mm hole diameter

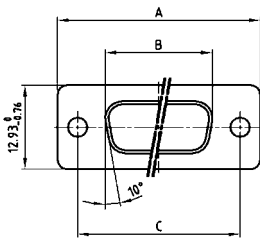
# COMBINATION D-SUB WITHOUT CONTACTS

For straight high power, coaxial or high voltage contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR

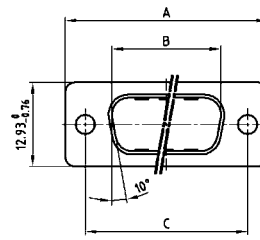


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>

## DESCRIPTION

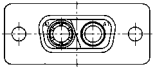
- Designs: 2W2C; 3W3; 3W3C; 5W5; 8W8
- Mounting styles:
  - with through-hole, Ø .118"/3 mm, with 4-40 UNC threaded insert, with 4-40 UNC threaded rear spacer,
  - with 4-40 UNC threaded rear spacer with PCB clip .291"/7.4 mm for PCB thickness .063"/1.6 mm, .091"/2.3 mm, .126"/3.2 mm
- On request: Threaded rear spacer with PCB clip .256"/6.5 mm available
- On request: M3 thread design available
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

## PLUG CONNECTOR

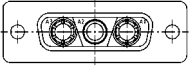


Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99

## Coded socket connectors

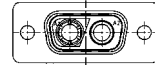


2W2C = 1 Socket – 1 Plug

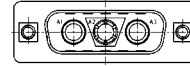


3W3C = 2 Sockets – 1 Plug

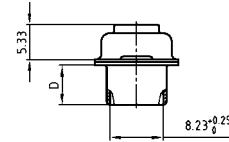
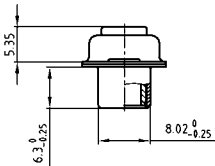
## Coded plug connectors



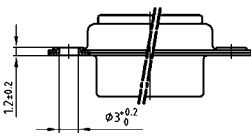
2W2C = 1 Plug – 1 Socket



3W3C = 2 Plugs – 1 Socket

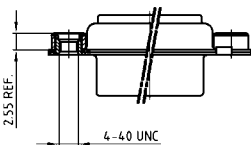


## ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style	Part Number
3W3	Through-hole	3003W3SXX99A10X
5W5	Through-hole	3005W5SXX99A10X
8W8	Through-hole	3008W8SXX99A10X
Coded version		
2W2C	Through-hole	302W2CSXX99A10X
3W3C	Through-hole	303W3CSXX99A10X

PLUG CONNECTOR		
Design	Mounting style	Part Number
3W3	Through-hole	3003W3PXX99A10X
5W5	Through-hole	3005W5PXX99A10X
8W8	Through-hole	3008W8PXX99A10X
Coded version		
2W2C	Through-hole	302W2CPXX99A10X
3W3C	Through-hole	303W3CPXX99A10X



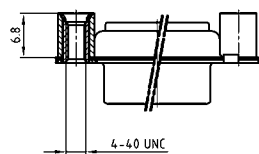
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3SXX99A30X
5W5	Threaded insert	3005W5SXX99A30X
8W8	Threaded insert	3008W8SXX99A30X
Coded version		
2W2C	Threaded insert	302W2CSXX99A30X
3W3C	Threaded insert	303W3CSXX99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3PXX99A30X
5W5	Threaded insert	3005W5PXX99A30X
8W8	Threaded insert	3008W8PXX99A30X
Coded version		
2W2C	Threaded insert	302W2CPXX99A30X
3W3C	Threaded insert	303W3CPXX99A30X

# COMBINATION D-SUB – MOUNTING STYLES

For straight high power, coaxial or high voltage contacts

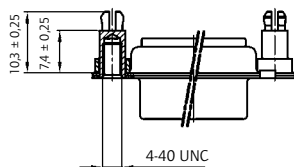
**ORDER DATA**



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer	3003W3SXX99A50X
5W5	Threaded rear spacer	3005W5SXX99A50X
8W8	Threaded rear spacer	3008W8SXX99A50X
Coded version		
2W2C	Threaded rear spacer	302W2CSXX99A50X
3W3C	Threaded rear spacer	303W3CSXX99A50X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer	3003W3PXX99A50X
5W5	Threaded rear spacer	3005W5PXX99A50X
8W8	Threaded rear spacer	3008W8PXX99A50X
Coded version		
2W2C	Threaded rear spacer	302W2CPXX99A50X
3W3C	Threaded rear spacer	303W3CPXX99A50X

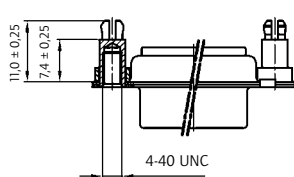
PCB thickness .063"/1.6 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3SXX99E20X
5W5	Threaded rear spacer PCB clip	3005W5SXX99E20X
8W8	Threaded rear spacer PCB clip	3008W8SXX99E20X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CSXX99E20X
3W3C	Threaded rear spacer PCB clip	303W3CSXX99E20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3PXX99E20X
5W5	Threaded rear spacer PCB clip	3005W5PXX99E20X
8W8	Threaded rear spacer PCB clip	3008W8PXX99E20X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CPXX99E20X
3W3C	Threaded rear spacer PCB clip	303W3CPXX99E20X

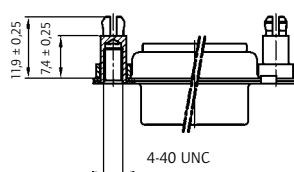
PCB thickness .091"/2.3 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3SXX99E40X
5W5	Threaded rear spacer PCB clip	3005W5SXX99E40X
8W8	Threaded rear spacer PCB clip	3008W8SXX99E40X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CSXX99E40X
3W3C	Threaded rear spacer PCB clip	303W3CSXX99E40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3PXX99E40X
5W5	Threaded rear spacer PCB clip	3005W5PXX99E40X
8W8	Threaded rear spacer PCB clip	3008W8PXX99E40X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CPXX99E40X
3W3C	Threaded rear spacer PCB clip	303W3CPXX99E40X

PCB thickness .126"/3.2 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3SXX99E60X
5W5	Threaded rear spacer PCB clip	3005W5SXX99E60X
8W8	Threaded rear spacer PCB clip	3008W8SXX99E60X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CSXX99E60X
3W3C	Threaded rear spacer PCB clip	303W3CSXX99E60X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3PXX99E60X
5W5	Threaded rear spacer PCB clip	3005W5PXX99E60X
8W8	Threaded rear spacer PCB clip	3008W8PXX99E60X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CPXX99E60X
3W3C	Threaded rear spacer PCB clip	303W3CPXX99E60X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter



# COMBINATION D-SUB WITHOUT CONTACTS

For angled high power or coaxial contacts – Short metal bracket

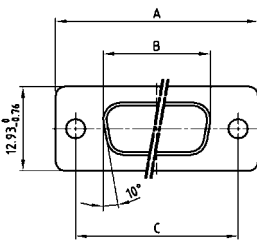


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

- Designs: 2W2C; 3W3; 3W3C; 5W5; 8W8
- Mounting styles:
  - Mounting bracket and 4-40 UNC threaded insert
  - Mounting bracket with 4-40 UNC front spacer
  - Mounting bracket, PCB clip and 4-40 UNC threaded insert
  - Mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>

## PLUG CONNECTOR



Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99

## Coded socket connectors



2W2C = 1 Socket – 1 Plug



3W3C = 2 Sockets – 1 Plug

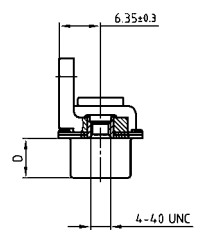
## Coded plug connectors



2W2C = 1 Plug – 1 Socket



3W3C = 2 Plugs – 1 Socket



## ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3SXX99N20X
5W5	Threaded insert	3005W5SXX99N20X
8W8	Threaded insert	3008W8SXX99N20X
Coded version		
2W2C	Threaded insert	302W2CSXX99N20X
3W3C	Threaded insert	303W3CSXX99N20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3PXX99N20X
5W5	Threaded insert	3005W5PXX99N20X
8W8	Threaded insert	3008W8PXX99N20X
Coded version		
2W2C	Threaded insert	302W2CPXX99N20X
3W3C	Threaded insert	303W3CPXX99N20X

# COMBINATION D-SUB – MOUNTING STYLES

For angled high power or coaxial contacts – Short metal bracket

ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3SXX99P20X
5W5	Front spacer	3005W5SXX99P20X
8W8	Front spacer	3008W8SXX99P20X
Coded version		
2W2C	Front spacer	302W2CSXX99P20X
3W3C	Front spacer	303W3CSXX99P20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3PXX99P20X
5W5	Front spacer	3005W5PXX99P20X
8W8	Front spacer	3008W8PXX99P20X
Coded version		
2W2C	Front spacer	302W2CPXX99P20X
3W3C	Front spacer	303W3CPXX99P20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert/PCB clip	3003W3SXX99N40X
5W5	Threaded insert/PCB clip	3005W5SXX99N40X
8W8	Threaded insert/PCB clip	3008W8SXX99N40X
Coded version		
2W2C	Threaded insert/PCB clip	302W2CSXX99N40X
3W3C	Threaded insert/PCB clip	303W3CSXX99N40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert/PCB clip	3003W3PXX99N40X
5W5	Threaded insert/PCB clip	3005W5PXX99N40X
8W8	Threaded insert/PCB clip	3008W8PXX99N40X
Coded version		
2W2C	Threaded insert/PCB clip	302W2CPXX99N40X
3W3C	Threaded insert/PCB clip	303W3CPXX99N40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer/PCB clip	3003W3SXX99P40X
5W5	Front spacer/PCB clip	3005W5SXX99P40X
8W8	Front spacer/PCB clip	3008W8SXX99P40X
Coded version		
2W2C	Front spacer/PCB clip	302W2CSXX99P40X
3W3C	Front spacer/PCB clip	303W3CSXX99P40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer/PCB clip	3003W3PXX99P40X
5W5	Front spacer/PCB clip	3005W5PXX99P40X
8W8	Front spacer/PCB clip	3008W8PXX99P40X
Coded version		
2W2C	Front spacer/PCB clip	302W2CPXX99P40X
3W3C	Front spacer/PCB clip	303W3CPXX99P40X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB WITHOUT CONTACTS

For angled high power or coaxial contacts – Long metal bracket



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

## DESCRIPTION

- Designs: 2W2C; 3W3; 3W3C; 5W5; 8W8
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket with 4-40 UNC front spacer
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>

## PLUG CONNECTOR



Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99

## CODED SOCKET CONNECTORS



2W2C = 1 Socket – 1 Plug



3W3C = 2 Sockets – 1 Plug

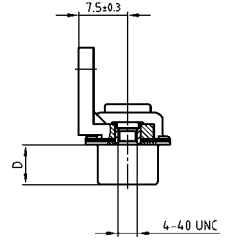
## CODED PLUG CONNECTORS



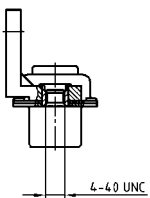
2W2C = 1 Plug – 1 Socket



3W3C = 2 Plugs – 1 Socket



## ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3SXX99G20X
5W5	Threaded insert	3005W5SXX99G20X
8W8	Threaded insert	3008W8SXX99G20X
Coded version		
2W2C	Threaded insert	302W2CSXX99G20X
3W3C	Threaded insert	303W3CSXX99G20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3PXX99G20X
5W5	Threaded insert	3005W5PXX99G20X
8W8	Threaded insert	3008W8PXX99G20X
Coded version		
2W2C	Threaded insert	302W2CPXX99G20X
3W3C	Threaded insert	303W3CPXX99G20X

# COMBINATION D-SUB – MOUNTING STYLES

For angled high power or coaxial contacts – Long metal bracket

ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3SXX99H20X
5W5	Front spacer	3005W5SXX99H20X
8W8	Front spacer	3008W8SXX99H20X
Coded version		
2W2C	Front spacer	302W2CSXX99H20X
3W3C	Front spacer	303W3CSXX99H20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3PXX99H20X
5W5	Front spacer	3005W5PXX99H20X
8W8	Front spacer	3008W8PXX99H20X
Coded version		
2W2C	Front spacer	302W2CPXX99H20X
3W3C	Front spacer	303W3CPXX99H20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert/PCB clip	3003W3SXX99G40X
5W5	Threaded insert/PCB clip	3005W5SXX99G40X
8W8	Threaded insert/PCB clip	3008W8SXX99G40X
Coded version		
2W2C	Threaded insert/PCB clip	302W2CSXX99G40X
3W3C	Threaded insert/PCB clip	303W3CSXX99G40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert/PCB clip	3003W3PXX99G40X
5W5	Threaded insert/PCB clip	3005W5PXX99G40X
8W8	Threaded insert/PCB clip	3008W8PXX99G40X
Coded version		
2W2C	Threaded insert/PCB clip	302W2CPXX99G40X
3W3C	Threaded insert/PCB clip	303W3CPXX99G40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer/PCB clip	3003W3SXX99H40X
5W5	Front spacer/PCB clip	3005W5SXX99H40X
8W8	Front spacer/PCB clip	3008W8SXX99H40X
Coded version		
2W2C	Front spacer/PCB clip	302W2CSXX99H40X
3W3C	Front spacer/PCB clip	303W3CSXX99H40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer/PCB clip	3003W3PXX99H40X
5W5	Front spacer/PCB clip	3005W5PXX99H40X
8W8	Front spacer/PCB clip	3008W8PXX99H40X
Coded version		
2W2C	Front spacer/PCB clip	302W2CPXX99H40X
3W3C	Front spacer/PCB clip	303W3CPXX99H40X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB WIHTOUT CONTACTS

Crimp body – For wire size AWG 20...24 and AWG 26...28

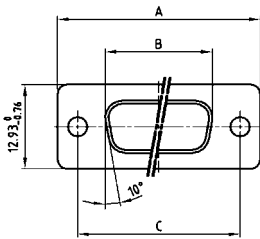


RoHS compliant – CSA listed, File No.: LR 115000-1 –UL listed, File No.: E 228329

## DESCRIPTION

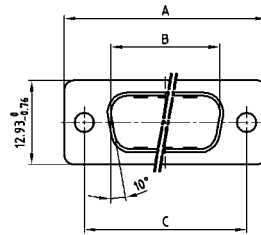
- For precision machined contacts for wire size AWG 20...24 and AWG 26...28
- Mounting styles:
  - with through-hole, Ø .118" / 3 mm
  - with 4-40 UNC or M3 threaded insert
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

## SOCKET CONNECTOR

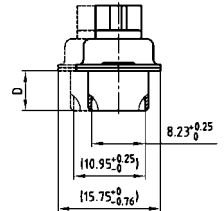
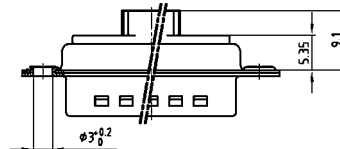
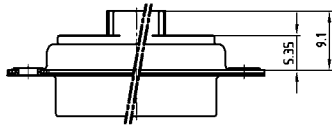


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

## PLUG CONNECTOR



Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99



Shell size 5 = Dim. in (.)

Shell size 5 = Dim. in (.)

## ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style	Part Number
5W1	Through-hole	3005W1SXX99A10X
7W2	Through-hole	3007W2SXX99A10X
11W1	Through-hole	3011W1SXX99A10X
9W4	Through-hole	3009W4SXX99A10X
13W3	Through-hole	3013W3SXX99A10X
17W2	Through-hole	3017W2SXX99A10X
21W1	Through-hole	3021W1SXX99A10X
13W6	Through-hole	3013W6SXX99A10X
17W5	Through-hole	3017W5SXX99A10X
21WA4	Through-hole	321WA4SXX99A10X
25W3	Through-hole	3025W3SXX99A10X
27W2	Through-hole	3027W2SXX99A10X
24W7	Through-hole	3024W7SXX99A10X
36W4	Through-hole	3036W4SXX99A10X
43W2	Through-hole	3043W2SXX99A10X
47W1	Through-hole	3047W1SXX99A10X

PLUG CONNECTOR		
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PXX99A10X
7W2	Through-hole	3007W2PXX99A10X
11W1	Through-hole	3011W1PXX99A10X
9W4	Through-hole	3009W4PXX99A10X
13W3	Through-hole	3013W3PXX99A10X
17W2	Through-hole	3017W2PXX99A10X
21W1	Through-hole	3021W1PXX99A10X
13W6	Through-hole	3013W6PXX99A10X
17W5	Through-hole	3017W5PXX99A10X
21WA4	Through-hole	321WA4PXX99A10X
25W3	Through-hole	3025W3PXX99A10X
27W2	Through-hole	3027W2PXX99A10X
24W7	Through-hole	3024W7PXX99A10X
36W4	Through-hole	3036W4PXX99A10X
43W2	Through-hole	3043W2PXX99A10X
47W1	Through-hole	3047W1PXX99A10X

# COMBINATION D-SUB – MOUNTING STYLES

Crimp body (without contacts) – For wire size AWG 20...24 and AWG 26...28

ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SXX99A20X
7W2	Threaded insert	3007W2SXX99A20X
11W1	Threaded insert	3011W1SXX99A20X
9W4	Threaded insert	3009W4SXX99A20X
13W3	Threaded insert	3013W3SXX99A20X
17W2	Threaded insert	3017W2SXX99A20X
21W1	Threaded insert	3021W1SXX99A20X
13W6	Threaded insert	3013W6SXX99A20X
17W5	Threaded insert	3017W5SXX99A20X
21WA4	Threaded insert	321WA4SXX99A20X
25W3	Threaded insert	3025W3SXX99A20X
27W2	Threaded insert	3027W2SXX99A20X
24W7	Threaded insert	3024W7SXX99A20X
36W4	Threaded insert	3036W4SXX99A20X
43W2	Threaded insert	3043W2SXX99A20X
47W1	Threaded insert	3047W1SXX99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PXX99A20X
7W2	Threaded insert	3007W2PXX99A20X
11W1	Threaded insert	3011W1PXX99A20X
9W4	Threaded insert	3009W4PXX99A20X
13W3	Threaded insert	3013W3PXX99A20X
17W2	Threaded insert	3017W2PXX99A20X
21W1	Threaded insert	3021W1PXX99A20X
13W6	Threaded insert	3013W6PXX99A20X
17W5	Threaded insert	3017W5PXX99A20X
21WA4	Threaded insert	321WA4PXX99A20X
25W3	Threaded insert	3025W3PXX99A20X
27W2	Threaded insert	3027W2PXX99A20X
24W7	Threaded insert	3024W7PXX99A20X
36W4	Threaded insert	3036W4PXX99A20X
43W2	Threaded insert	3043W2PXX99A20X
47W1	Threaded insert	3047W1PXX99A20X

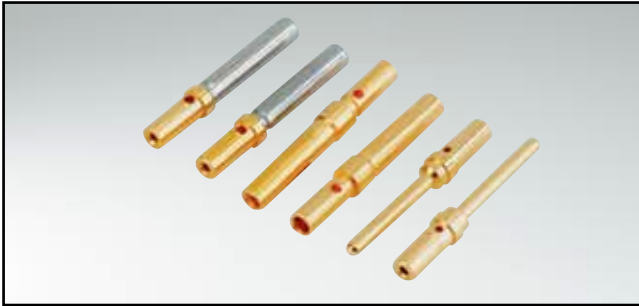


SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SXX99A30X
7W2	Threaded insert	3007W2SXX99A30X
11W1	Threaded insert	3011W1SXX99A30X
9W4	Threaded insert	3009W4SXX99A30X
13W3	Threaded insert	3013W3SXX99A30X
17W2	Threaded insert	3017W2SXX99A30X
21W1	Threaded insert	3021W1SXX99A30X
13W6	Threaded insert	3013W6SXX99A30X
17W5	Threaded insert	3017W5SXX99A30X
21WA4	Threaded insert	321WA4SXX99A30X
25W3	Threaded insert	3025W3SXX99A30X
27W2	Threaded insert	3027W2SXX99A30X
24W7	Threaded insert	3024W7SXX99A30X
36W4	Threaded insert	3036W4SXX99A30X
43W2	Threaded insert	3043W2SXX99A30X
47W1	Threaded insert	3047W1SXX99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PXX99A30X
7W2	Threaded insert	3007W2PXX99A30X
11W1	Threaded insert	3011W1PXX99A30X
9W4	Threaded insert	3009W4PXX99A30X
13W3	Threaded insert	3013W3PXX99A30X
17W2	Threaded insert	3017W2PXX99A30X
21W1	Threaded insert	3021W1PXX99A30X
13W6	Threaded insert	3013W6PXX99A30X
17W5	Threaded insert	3017W5PXX99A30X
21WA4	Threaded insert	321WA4PXX99A30X
25W3	Threaded insert	3025W3PXX99A30X
27W2	Threaded insert	3027W2PXX99A30X
24W7	Threaded insert	3024W7PXX99A30X
36W4	Threaded insert	3036W4PXX99A30X
43W2	Threaded insert	3043W2PXX99A30X
47W1	Threaded insert	3047W1PXX99A30X

# COMBINATION D-SUB CONTACTS

Crimp contacts – Precision machined – For wire size AWG 20...24 and AWG 26...28



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

- For wire size AWG 20...24 and AWG 26–28
- Quality class 3
- Quality class 1 and another quality classes on request

## PRODUCT DRAWING

Signal socket crimp contact  
(Closed entry version)

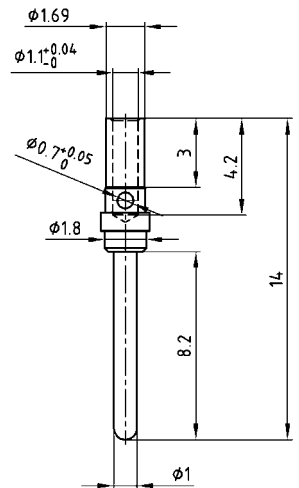


AWG	A +0.04
20-24	Ø 1.16
26-28	Ø 0.65

Signal socket crimp contact  
(Standard version)



Signal plug crimp contact  
(Standard version)



## Designs

Contact material Socket	Copper alloy
Closed entry version	Stainless steel sleeve
Contact material plug	Brass
Quality class 1	500 mating cycles
Quality class 3	50 mating cycles

## ORDER DATA

### SOCKET CONTACT

Contact type	AWG	Quality class	Part Number
Socket* / Closed entry	20...24	1	132C15019X
Socket* / Closed entry	26...28	1	132C15029X
Socket / Standard	20...24	3	162A18709X
Socket / Standard	26...28	3	162A18719X

\*Preferred type

### PLUG CONTACT

Contact type	AWG	Quality class	Part Number
Plug / Standard	20...24	1	131C15019X
Plug / Standard	26...28	1	131C15029X
Plug / Standard	20...24	3	131A15019X
Plug / Standard	26...28	3	131A15029X

# COMBINATION D-SUB CONTACTS

High power contacts – Solder cup – Straight



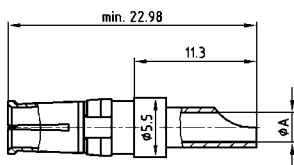
RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

## DESCRIPTION

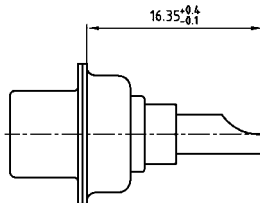
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side gold or tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

## PRODUCT DRAWING

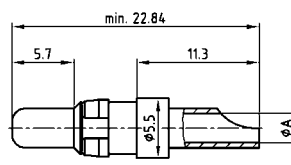
Socket contact



Installation dimension

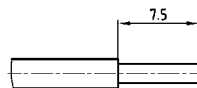


Plug contact

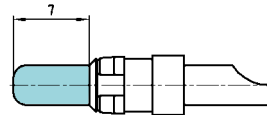


AWG	Current rating	ØA <sup>+0.15</sup>
16-20	10A	1.80
12-14	20A	2.70
10-12	30A	3.50
8-10	40A	4.80

Wire stripping



Premating contact



## ORDER DATA

SOCKET CONTACT					
AWG	Quality class	Code* tin plated	Part Number tin plated	Code* gold plated	Part Number gold plated
16...20	1	F1	13-003501	41	132C10019X
16...20	3	F2	13-003503	61	132A10019X
12...14	1	F3	13-003511	42	132C10029X
12...14	3	F4	13-003513	62	132A10029X
10...12	1	F5	13-003521	43	132C10039X
10...12	3	F6	13-003523	63	132A10039X
8...10	1	F7	13-003531	44	132C10049X
8...10	3	F8	13-003533	64	132A10049X

PLUG CONTACT					
AWG	Quality class	Code* tin plated	Part Number tin plated	Code* gold plated	Part Number gold plated
16...20	1	F1	13-003541	41	131C10019X
16...20	3	F2	13-003543	61	131A10019X
12...14	1	F3	13-003551	42	131C10029X
12...14	3	F4	13-003553	62	131A10029X
10...12	1	F5	13-003561	43	131C10039X
10...12	3	F6	13-003563	63	131A10039X
8...10	1	F7	13-003571	44	131C10049X
8...10	3	F8	13-003573	64	131A10049X

PREMATING CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number gold plated
16-20	10 A	1	13-003581	1	131C10119X
12-14	20 A	1	13-003591	1	131C10129X
10-12	30 A	1	13-003601	1	131C10139X
8-10	40 A	1	13-003611	1	131C10149X

\*Code use with part number creator



# COMBINATION D-SUB CONTACTS

High power contacts – Screw termination – Straight – For wire size AWG 14



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

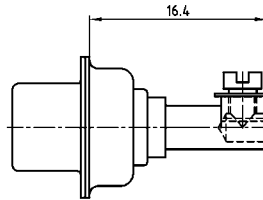
- Precision machined contacts for wire size **AWG 14**, max. 20 A
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request
- For field attachable applications

## PRODUCT DRAWING

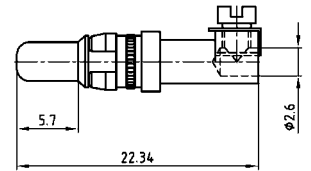
Socket contact



Installation dimension

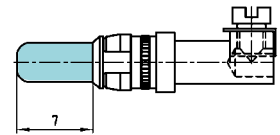


Plug contact



AWG	Current rating	ØA <sup>+0.15</sup>
16-20	10A	1.80
12-14	20A	2.70
10-12	30A	3.50
8-10	40A	4.80

Premating contact



## ORDER DATA

SOCKET CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Socket	14	20 A	1	132C36009X
Socket	14	20 A	3	132A36009X

PLUG CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Plug	14	20 A	1	131C36009X
Plug	14	20 A	3	131A36009X
Plug premating	14	20 A	1	131C36109X

# COMBINATION D-SUB CONTACTS

## High power contacts – Crimp – Straight



RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side gold or tin plated
- Other quality classes on request

### PRODUCT DRAWING

Socket contact



Installation dimension



Plug contact

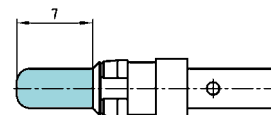


AWG	Current rating	ØA <sup>+0.15</sup>
16-20	10A	1.70
12-14	20A	2.60
10-12	30A	3.70
8-10	40A	4.60

Wire stripping



Premating contact



### ORDER DATA

SOCKET CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number gold plated
16-20	10 A	1	13-003621	1	132C11019X
16-20	10 A	3	13-003623	3	132A11019X
12-14	20 A	1	13-003631	1	132C11029X
12-14	20 A	3	13-003633	3	132A11029X
10-12	30 A	1	13-003641	1	132C11039X
10-12	30 A	3	13-003643	3	132A11039X
8-10	40 A	1	13-003651	1	132C11049X
8-10	40 A	3	13-003653	3	132A11049X

PLUG CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number gold plated
16-20	10 A	1	13-003661	1	131C11019X
16-20	10 A	3	13-003663	3	131A11019X
12-14	20 A	1	13-003671	1	131C11029X
12-14	20 A	3	13-003673	3	131A11029X
10-12	30 A	1	13-003681	1	131C11039X
10-12	30 A	3	13-003683	3	131A11039X
8-10	40 A	1	13-003691	1	131C11049X
8-10	40 A	3	13-003693	3	131A11049X

PREMATING CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number tin plated
16-20	10 A	1	13-003701	1	131C11119X
12-14	20 A	1	13-003711	1	131C11129X
10-12	30 A	1	13-003721	1	131C11139X
8-10	40 A	1	13-003731	1	131C11149X

# COMBINATION D-SUB CONTACTS

High power contacts – Solder cup or crimp – angled



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request

## PRODUCT DRAWING

Socket contact



Installation dimension  
Shell size 1-4



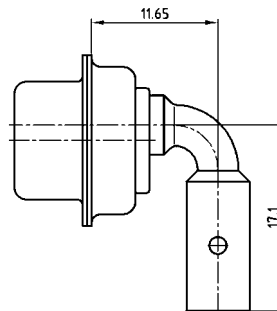
Plug contact



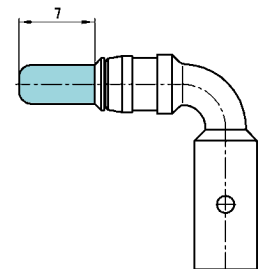
Wire stripping



Installation dimension  
Shell size 5



Premating contact



AWG	Current rating	Ø A +0.15	Crimp Plier Part.no. 360X12269X
16-20	10A	1.70	1.40/1.25
12-14	20A	2.60	1.85/1.65
10-12	30A	3.70	2.30/2.05
8-10	40A	4.60	2.30/2.05

## ORDER DATA

SOCKET CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Socket	16...20	10 A	1	132C16019X
Socket	16...20	10 A	3	132A16019X
Socket	12...14	20 A	1	132C16029X
Socket	12...14	20 A	3	132A16029X
Socket	10...12	30 A	1	132C16039X
Socket	10...12	30 A	3	132A16039X
Socket	8...10	40 A	1	132C16049X
Socket	8...10	40 A	3	132A16049X

PLUG CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Plug	16...20	10 A	1	131C16019X
Plug	16...20	10 A	3	131A16019X
Plug	12...14	20 A	1	131C16029X
Plug	12...14	20 A	3	131A16029X
Plug	10...12	30 A	1	131C16039X
Plug	10...12	30 A	3	131A16039X
Plug	8...10	40 A	1	131C16049X
Plug	8...10	40 A	3	131A16049X

PREMATING CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Plug premating	16...20	10 A	1	131C16119X
Plug premating	12...14	20 A	1	131C16129X
Plug premating	10...12	30 A	1	131C16139X
Plug premating	8...10	40 A	1	131C16149X

# COMBINATION D-SUB CONTACTS

High power contacts – Solder pin – angled



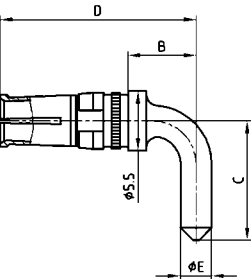
RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

**DESCRIPTION**

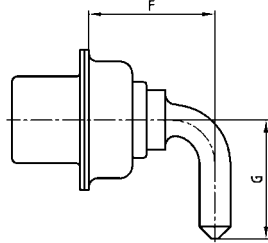
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

**PRODUCT DRAWING**

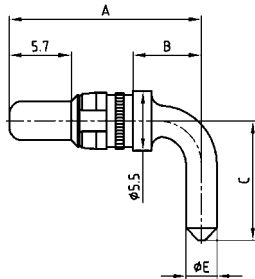
Socket contact



Installation dimension Shell size 1-4

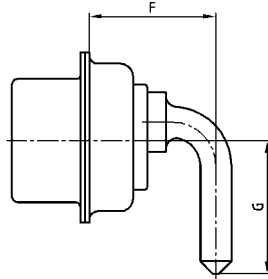


Plug contact

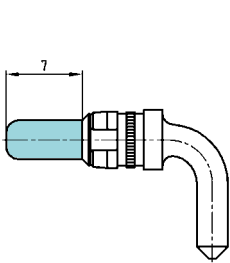


Shellsize	Current rating	Termination	A	B	C	D	ØE	F	G
1-4	15A	55/59	14.54	3.00	10.50	14.68	1.90	8.35	10.50
1-4	20A	56/73	17.84	6.30	11.00	17.98	2.85	11.65	11.00
1-4	30A	57/74	26.54	15.00	9.50	26.68	3.20	20.35	9.50
1-4	40A	58/75	17.84	6.30	11.00	17.98	3.75	11.65	11.00
5	20A	66/81	20.39	8.85	14.00	20.53	2.85	14.20	12.58
5	30A	67/82	20.39	8.85	14.00	20.53	3.20	14.20	12.58
5	30A	65/85	26.54	15.00	13.50	26.68	3.20	20.35	12.08
5	40A	60/77	20.39	8.85	14.00	20.53	3.75	14.20	12.58

Installation dimension Shell size 5



Premating contact



**hole diameter of PCB:**

1.95 = 2.30 ± 0.1
2.60 = 3.00 ± 0.1
2.85 = 3.20 ± 0.1
3.18 = 3.60 ± 0.1
3.75 = 4.10 ± 0.1

**ORDER DATA**

SOCKET CONTACT				
Contact type	Shell size	Quality class	Termination*	Part Number
Socket	1-4	1	55	132C13009X
Socket	1-4	3	59	132A13009X
Socket	1-4	1	56	132C13019X
Socket	1-4	3	73	132A13019X
Socket	1-4	1	57	132C13029X
Socket	1-4	3	74	132A13029X
Socket	1-4	1	58	132C13039X
Socket	1-4	3	75	132A13039X
Socket	5	1	66	132C13060X
Socket	5	3	81	132A13060X
Socket	5	1	67	132C13070X
Socket	5	3	82	132A13070X
Socket	5	1	65	132C13059X
Socket	5	3	85	132A13059X
Socket	5	1	60	132C13049X
Socket	5	3	77	132A13049X

PLUG CONTACT				
Contact type	Shell size	Quality class	Termination*	Part Number
Plug	1-4	1	55	131C13009X
Plug	1-4	3	59	131A13009X
Plug	1-4	1	56	131C13019X
Plug	1-4	3	73	131A13019X
Plug	1-4	1	57	131C13029X
Plug	1-4	3	74	131A13029X
Plug	1-4	1	58	131C13039X
Plug	1-4	3	75	131A13039X
Plug	5	1	66	131C13060X
Plug	5	3	81	131A13060X
Plug	5	1	67	131C13070X
Plug	5	3	82	131A13070X
Plug	5	1	65	131C13059X
Plug	5	3	85	131A13059X
Plug	5	1	60	131C13049X
Plug	5	3	77	131A13049X
Plug premating	1-4	1		131C13109X
Plug premating	1-4	1		131C13119X
Plug premating	1-4	1		131C13129X
Plug premating	1-4	1		131C13139X
Plug premating	5	1		131C13160X
Plug premating	5	1		131C13170X
Plug premating	5	1		131C13159X
Plug premating	5	1		131C13149X

\*Code use with part number creator

# COMBINATION D-SUB CONTACTS

## High power contacts – Solder pin – Straight



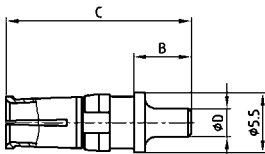
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

### DESCRIPTION

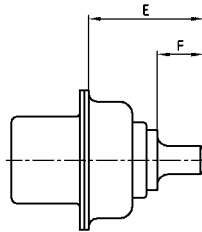
- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Mating side gold plated
- Termination side tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### PRODUCT DRAWING

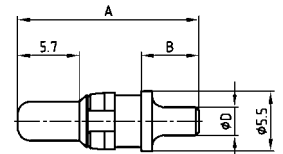
Socket contact



Installation dimension

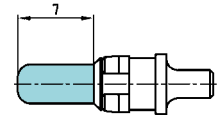


Plug contact



Current rating	Termination	A	B	C	Ø D	E	F
20A	48/68**	15.84	4.60	15.98	1.95	9.65	3.80
20A	49/69	16.84	5.30	16.98	2.60	10.65	4.30
20A	50/70**	16.24	4.70	16.38	2.85	10.05	3.70
30A	51/71	19.04	7.50	19.18	3.18	12.85	6.70
40A	52/72	17.29	5.75	17.43	3.75	11.10	4.75

Premating contact



**PCB hole diameter at:**

- 1.95 = 2.30 ± 0.1
- 2.60 = 3.00 ± 0.1
- 2.85 = 3.20 ± 0.1
- 3.18 = 3.60 ± 0.1
- 3.75 = 4.10 ± 0.1

### ORDER DATA

SOCKET CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Socket	20 A	1	48**	132C12019X
Socket	20 A	3	68**	132A12019X
Socket	20 A	1	49	132C12029X
Socket	20 A	3	69	132A12029X
Socket	20 A	1	50**	132C12039X
Socket	20 A	3	70**	132A12039X
Socket	30 A	1	51	132C12049X
Socket	30 A	3	71	132A12049X
Socket	40 A	1	52	132C12059X
Socket	40 A	3	72	132A12059X

PLUG CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Plug	20 A	1	48**	131C12019X
Plug	20 A	3	68**	131A12019X
Plug	20 A	1	49	131C12029X
Plug	20 A	3	69	131A12029X
Plug	20 A	1	50**	131C12039X
Plug	20 A	3	70**	131A12039X
Plug	30 A	1	51	131C12049X
Plug	30 A	3	71	131A12049X
Plug	40 A	1	52	131C12059X
Plug	40 A	3	72	131A12059X

PREMATING CONTACT			
Contact type	Ampere	Quality class	Part Number
Plug premating	20A/ Ø .077"/1.95	1	131C12119X
Plug premating	20A/ Ø .102"/2.60	1	131C12129X
Plug premating	20A/ Ø .112"/2.85	1	131C12139X
Plug premating	30A/ Ø .125"/3.18	1	131C12149X
Plug premating	40A/ Ø .148"/3.75	1	131C12159X

\*Code use with part number creator  
 \*\*not suitable for PCB 2.3 + 3.2 mm

# COMBINATION D-SUB CONTACTS

## High power contacts – Press-fit version – Straight



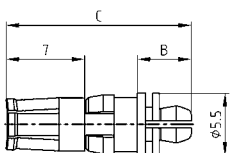
RoHS compliant

### DESCRIPTION

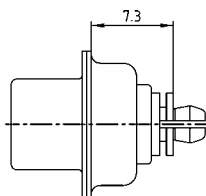
- Precision machined contacts
- Quality class 1: 500 mating cycles
- Mating area gold plated
- Press-fit area tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### PRODUCT DRAWING

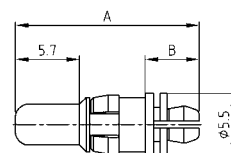
Socket contact



Installation dimension

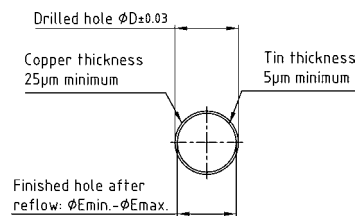


Plug contact



Termination Type	Ampere	A	B	C	D +0.03	E min.	E max.
P1	30A	16.34	4.8	16.48	3.13	2.96	3.11
P2	30A	16.34	4.8	16.48	3.27	3.10	3.25
P4	30A	15.94	4.4	16.08	3.22	3.02	3.20

PCB hole drilling for high power pressfit contact



### ORDER DATA

SOCKET CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Socket	30 A	1	P1	132C00229A
Socket	30 A	1	P2	132C00299A
Socket	30 A	1	P4	132C19019X

PLUG CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Plug	30 A	1	P1	131C00319A
Plug	30 A	1	P2	131C00389A
Plug	30 A	1	P4	131C19019X

# COMBINATION D-SUB CONTACTS

High voltage contacts – Solder termination – Straight and angled – For wire size AWG 20



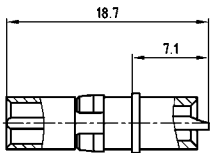
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

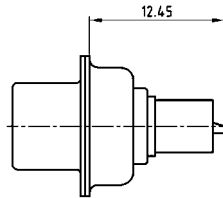
- Precision machined contacts for wire size **AWG 20**, max. 2,8 kV
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request

## PRODUCT DRAWING

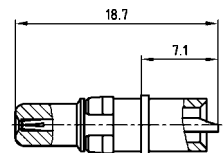
Socket contact straight



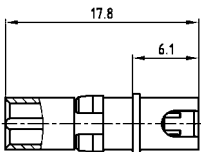
Installation dimension straight



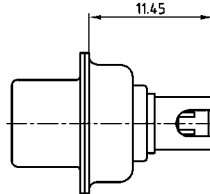
Plug contact straight



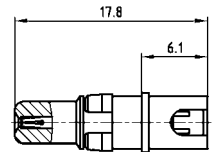
Socket contact angled



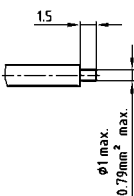
Installation dimension angled



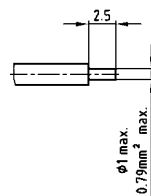
Plug contact angled



Wire stripping



Wire stripping



## ORDER DATA

SOCKET CONTACT			PLUG CONTACT		
Contact type	AWG	Part Number	Contact type	AWG	Part Number
Socket/Straight	20	132J14019X	Plug/Straight	20	131J14019X
Socket/Angled	20	132J14519X	Plug/Angled	20	131J14519X

# COMBINATION D-SUB CONTACTS

Coaxial contacts – Straight – Inner conductor solder-, outer conductor crimp- / solder termination



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

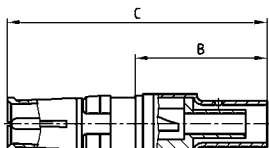
## DESCRIPTION

- 50 Ω and 75 Ω-design
- Contact platings mating area:
  - .051 μm / 1.3 μm Au inner conductor /
  - .032 μm / 0.8 μm Au outer conductor
  - .008 μm / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μm / 0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

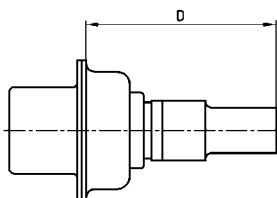
## PRODUCT DRAWING

### 50 Ω version

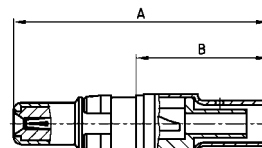
Socket contact



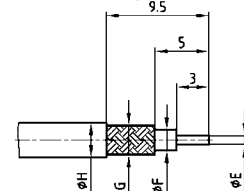
Installation dimension



Plug contact



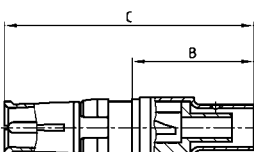
Wire stripping



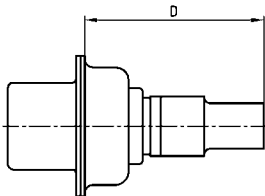
Usable Cables RG	A	B	C	D max.	Ø E max.	Ø F max.	Ø G max.	Ø H max.
178BU, 196AU, 404 U	22.50	11.20	23.00	17.55	0.85	1.20	1.40	2.30
174U, 188AU, 316U	22.50	11.20	23.00	17.55	0.85	1.90	2.30	3.20
180BU	22.50	11.20	23.00	17.55	0.85	2.80	3.10	4.50
58CU, 141AU	26.30	14.80	26.80	20.15	1.00	3.00	3.60	5.20
316U double braided	23.50	12.20	24.00	17.55	0.85	1.90	2.70	3.20

### 75 Ω version

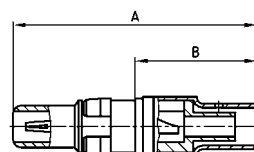
Socket contact



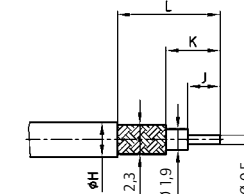
Installation dimension



Plug contact



Wire stripping



Usable Cables RG	A	B	C	D max.	Ø H max.	J	K	L
179BU, 187AU	18.55	7.30	19.05	12.80	3.20	2.00	3.10	6.00
179BU, 187AU	22.50	11.20	23.00	16.70	3.20	3.00	5.00	9.50

## ORDER DATA

SOCKET CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003004	132J20019X
50 Ω	174U, 188AU, 316U	13-003014	132J20029X
50 Ω	180BU	13-003024	132J20039X
50 Ω	58CU, 141AU	13-003034	132J20049X
50 Ω	316U double braided	13-003044	132J20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003054	132J30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003064	132J30029X

PLUG CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003074	131J20019X
50 Ω	174U, 188AU, 316U	13-003084	131J20029X
50 Ω	180BU	13-003094	131J20039X
50 Ω	58CU, 141AU	13-003104	131J20049X
50 Ω	316U double braided	13-003114	131J20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003124	131J30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003134	131J30029X

SOCKET CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003003	132A20019X
50 Ω	174U, 188AU, 316U	13-003013	132A20029X
50 Ω	180BU	13-003023	132A20039X
50 Ω	58CU, 141AU	13-003033	132A20049X
50 Ω	316U double braided	13-003043	132A20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003053	132A30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003063	132A30029X

PLUG CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003073	131A20019X
50 Ω	174U, 188AU, 316U	13-003083	131A20029X
50 Ω	180BU	13-003093	131A20039X
50 Ω	58CU, 141AU	13-003103	131A20049X
50 Ω	316U double braided	13-003113	131A20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003123	131A30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003133	131A30029X



# COMBINATION D-SUB CONTACTS

Coaxial contacts – Straight – Inner and outer conductor crimp termination



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

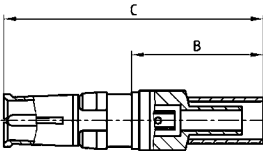
## DESCRIPTION

- 50 Ω and 75 Ω-design
- Contact platings mating area:
  - .051 μm / 1.3 μm Au inner conductor /
  - .032 μm / 0.8 μm Au outer conductor
  - .008 μm / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μm / 0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

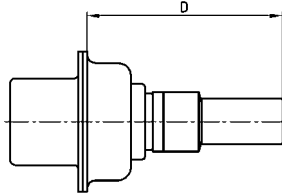
## PRODUCT DRAWING

### 50 Ω version

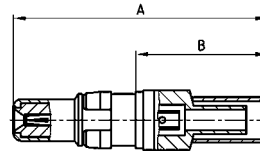
Socket contact



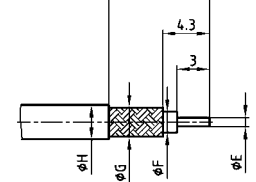
Installation dimension



Plug contact



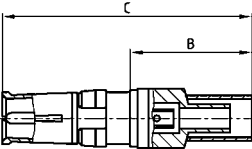
Wire stripping



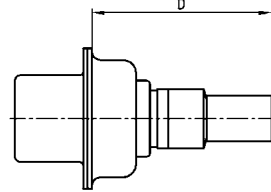
Usable Cables RG	A	B	C	D max.	Ø E max.	Ø F max.	Ø G max.	Ø H max.
174Bu, 188AU, 316U	22.50	11.20	23.00	16.60	0.60	1.90	2.30	3.20
316U double braided	22.50	11.20	23.00	16.60	0.60	1.90	3.00	3.80
58CU, 141AU	22.20	10.90	22.70	16.30	1.30	3.70	4.30	5.20

### 75 Ω version

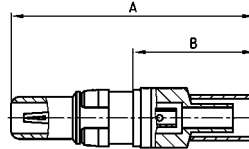
Socket contact



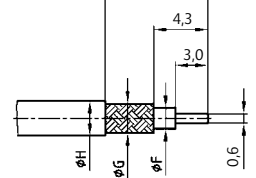
Installation dimension



Plug contact



Wire stripping



Usable Cables RG	A	B	C	D	Ø F max.	Ø G max.	Ø H max.	L
179BU, 187AU	22.45	11.20	22.95	16.70	1.90	2.30	3.20	9.30
180BU	21.65	10.40	22.15	15.90	2.80	3.20	4.50	8.80

## ORDER DATA

### SOCKET CONTACT

Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003144	132J21019X
50 Ω	316U double braided	13-003154	132J21029X
50 Ω	58CU, 141AU	13-003164	132J21039X
75 Ω	179BU, 187AU	13-003174	132J31019X
75 Ω	180BU	13-003184	132J31029X

### PLUG CONTACT

Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003194	131J21019X
50 Ω	316U double braided	13-003204	131J21029X
50 Ω	58CU, 141AU	13-003214	131J21039X
75 Ω	179BU, 187AU	13-003224	131J31019X
75 Ω	180BU	13-003234	131J31029X

### BUCHSENKONTAKT

Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003143	132A21019X
50 Ω	316U double braided	13-003153	132A21029X
50 Ω	58CU, 141AU	13-003163	132A21039X
75 Ω	179BU, 187AU	13-003173	132A31019X
75 Ω	180BU	13-003183	132A31029X

### PLUG CONTACT

Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003193	131A21019X
50 Ω	316U double braided	13-003203	131A21029X
50 Ω	58CU, 141AU	13-003213	131A21039X
75 Ω	179BU, 187AU	13-003223	131A31019X
75 Ω	180BU	13-003233	131A31029X

# COMBINATION D-SUB CONTACTS

Coaxial contacts – Angled – Inner conductor solder-, outer conductor crimp- / Solder termination



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

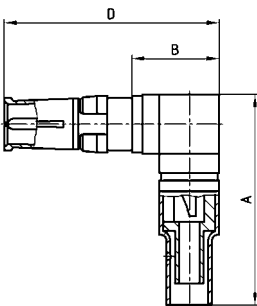
## DESCRIPTION

- 50 Ω design
- Contact platings mating area:
  - .051 μ" / 1.3 μm Au inner conductor /
  - .032 μ" / 0.8 μm Au outer conductor
  - .008 μ" / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μ" / 0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

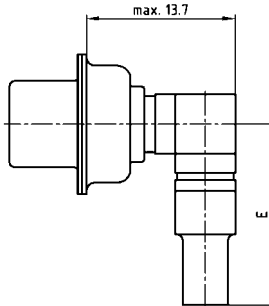
## PRODUCT DRAWING

### 50 Ω version

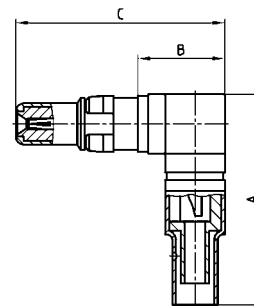
Socket contact



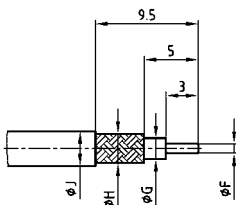
Installation dimension



Plug contact



Wire stripping



Usable Cables RG	A	B	C	D	E	Ø F max.	Ø G max.	Ø H max.	Ø J max.
174U, 188AU, 316U	18.50	8.20	19.30	19.80	15.70	0.85	1.90	2.30	3.20
178BU, 196AU, 404U	18.50	8.20	19.30	19.80	15.70	0.85	1.20	1.40	2.30
316U double braided	19.50	8.20	19.30	19.80	16.70	0.85	1.90	2.70	3.50

## ORDER DATA

SOCKET CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003244	132J22029X
50 Ω	174U, 188AU, 316U	13-003254	132J22019X
50 Ω	316U double braided	13-003264	132J22039X

PLUG CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003274	131J22029X
50 Ω	174U, 188AU, 316U	13-003284	131J22019X
50 Ω	316U double braided	13-003294	131J22039X

SOCKET CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003243	132A22029X
50 Ω	174U, 188AU, 316U	13-003253	132A22019X
50 Ω	316U double braided	13-003263	132A22039X

PLUG CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003273	131A22029X
50 Ω	174U, 188AU, 316U	13-003283	131A22019X
50 Ω	316U double braided	13-003293	131A22039X

# COMBINATION D-SUB CONTACTS

## Coaxial contacts – Angled – Inner- and outer conductor crimp termination



RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

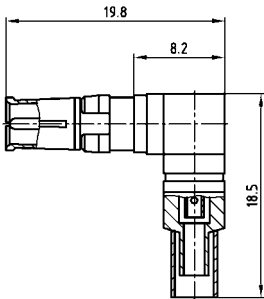
### DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 μ"/1.3 μm Au inner conductor / .032 μ"/0.8 μm Au outer conductor
  - .008 μ"/0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μ"/0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

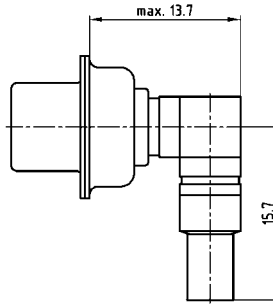
### PRODUCT DRAWING

#### 50 Ω version

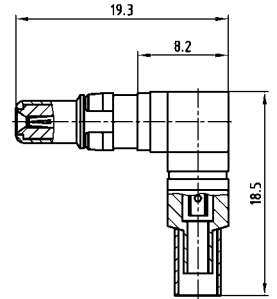
Socket contact



Installation dimension

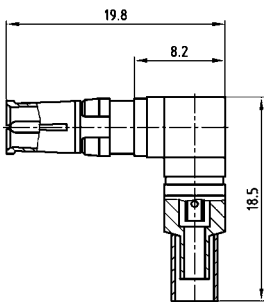


Plug contact

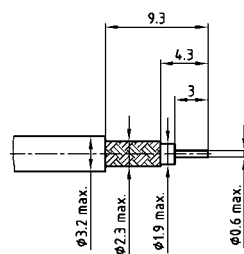


#### 75 Ω version

Socket contact

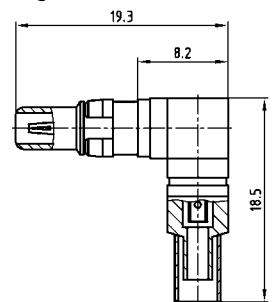


Wire stripping



verwendbare Kabel: RG- 174U, 188AU, 316U  
Usable Cables

Plug contact



### ORDER DATA

SOCKET CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003304	132J23019X
75 Ω	179BU, 187AU	13-003314	132J33019X

PLUG CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003324	131J23019X
75 Ω	179BU, 187AU	13-003334	131J33019X

SOCKET CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003303	132A23019X
75 Ω	179BU, 187AU	13-003313	132A33019X

PLUG CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003323	131A23019X
75 Ω	179BU, 187AU	13-003333	131A33019X

# COMBINATION D-SUB CONTACTS

Coaxial contacts – Straight – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

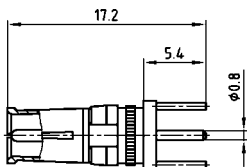
## DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 μ" / 1.3 μm Au inner conductor /
  - .032 μ" / 0.8 μm Au outer conductor
  - .008 μ" / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μ" / 0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

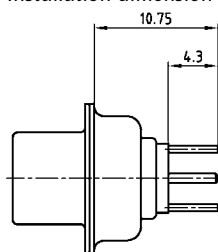
## PRODUCT DRAWING

### 50 Ω version

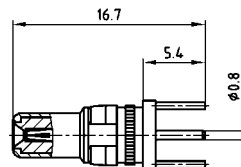
Socket contact



Installation dimension

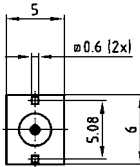
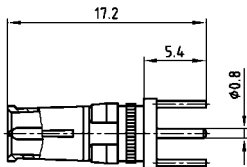


Plug contact

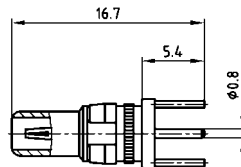


### 75 Ω version

Socket contact



Plug contact



## ORDER DATA

SOCKET CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	L1	13-003344	76	132J24019X
75 Ω	L2	13-003354	86	132J34019X

PLUG CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	L1	13-003364	76	131J24019X
75 Ω	L2	13-003374	86	131J34019X

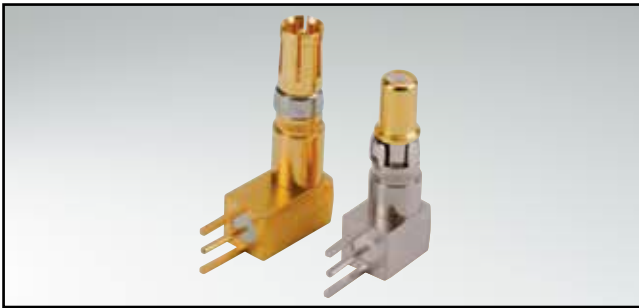
SOCKET CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	L3	13-003343	G7	132A24019X
75 Ω	L4	13-003353	G8	132A34019X

PLUG CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	L3	13-003363	G7	131A24019X
75 Ω	L4	13-003373	G8	131A34019X

\*Code use with part number creator

# COMBINATION D-SUB CONTACTS

Coaxial contacts – Angled – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

- 50 Ω and 75 Ω-design
- Contact platings mating area:
  - .051 μm / 1.3 μm Au inner conductor /
  - .032 μm / 0.8 μm Au outer conductor
  - .008 μm / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μm / 0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

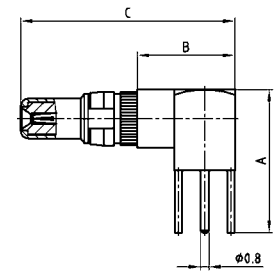
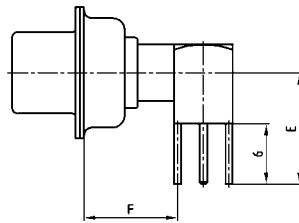
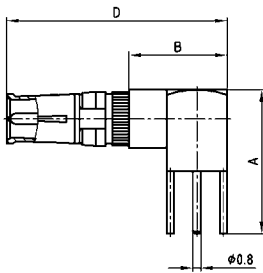
## PRODUCT DRAWING

### 50 Ω version

Socket contact

Installation dimension

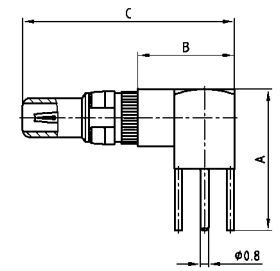
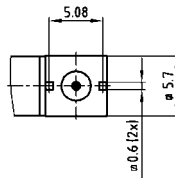
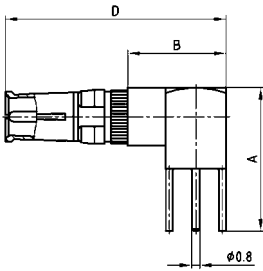
Plug contact



### 75 Ω version

Socket contact

Plug contact



Shellsize	A	B	C	D	E	F
1-4	13.80	9.30	20.70	21.20	11.00	9.30
5	16.80	11.80	23.20	23.70	14.00	11.80

## ORDER DATA

SOCKET CONTACT					
Imp.	Shell size	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	1-4	L5	13-003384	78	132J25019X
50 Ω	5	L6	13-003394	79	132J25029X
75 Ω	1-4	L7	13-003404	88	132J35019X
75 Ω	5	L8	13-003414	89	132J35029X

PLUG CONTACT					
Imp.	Shell size	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	1-4	L5	13-003424	78	131J25019X
50 Ω	5	L6	13-003434	79	131J25029X
75 Ω	1-4	L7	13-003444	88	131J35019X
75 Ω	5	L8	13-003454	89	131J35029X

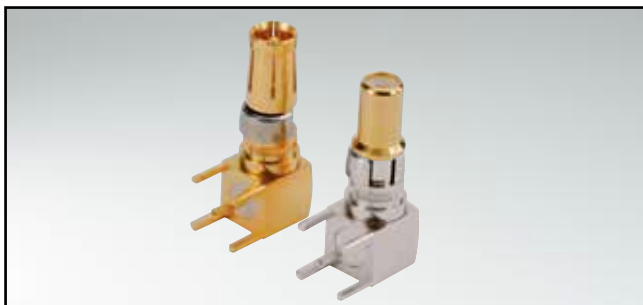
SOCKET CONTACT					
Imp.	Shell size	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	1-4	L9	13-003383	G9	132A25019X
50 Ω	5	M1	13-003393	H1	132A25029X
75 Ω	1-4	M2	13-003403	H2	132A35019X
75 Ω	5	M3	13-003413	H3	132A35029X

PLUG CONTACT					
Imp.	Shell size	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	1-4	L9	13-003423	G9	131A25019X
50 Ω	5	M1	13-003433	H1	131A25029X
75 Ω	1-4	M2	13-003443	H2	131A35019X
75 Ω	5	M3	13-003453	H3	131A35029X

\*Code use with part number creator

# COMBINATION D-SUB CONTACTS

Coaxial contacts – Angled – PCB termination – 5 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

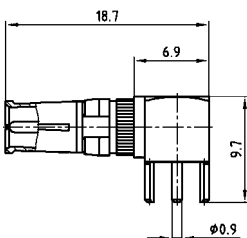
## DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 μ"/1.3 μm Au inner conductor /
  - .032 μ"/0.8 μm Au outer conductor
  - .008μ"/0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μ"/0.2 μm Au
  - tin plated
- Other platings on request

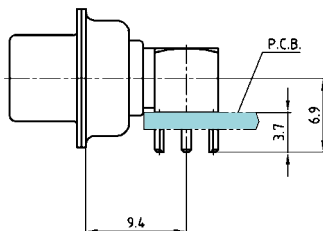
## PRODUCT DRAWING

### 50 Ω version

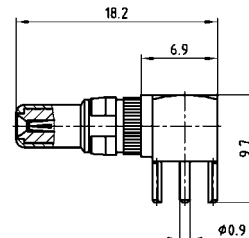
Socket contact



Installation dimension

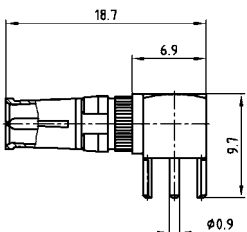


Plug contact

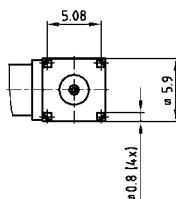


### 75 Ω version

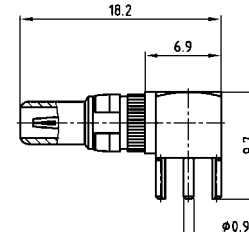
Socket contact



For mounting connector on edge of PCB without metal bracket



Plug contact



## ORDER DATA

SOCKET CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	M4	13-003464	80	132J25519X
75 Ω	M5	13-003474	90	132J35519X

PLUG CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	M4	13-003484	80	131J25519X
75 Ω	M5	13-003494	90	131J35519X

SOCKET CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	M6	13-003463	H4	132A25519X
75 Ω	M7	13-003473	H5	132A35519X

PLUG CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	M6	13-003483	H4	131A25519X
75 Ω	M7	13-003493	H5	131A35519X

\*Code use with part number creator

# COMBINATION D-SUB – DUAL PORT WITH SIGNAL AND POWER CONTACTS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm



RoHS compliant

## DESCRIPTION

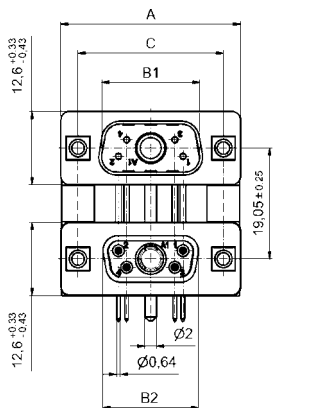
- Designs: 5W1/ 7W2/ 13W3/ 17W2/ 17W5
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Other variations on request
- Upper connector is rotated 180 degrees

## PRODUCT DRAWING

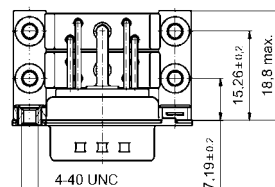
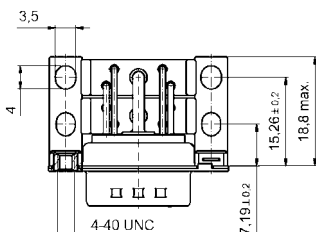
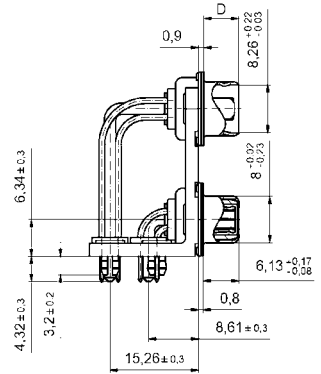
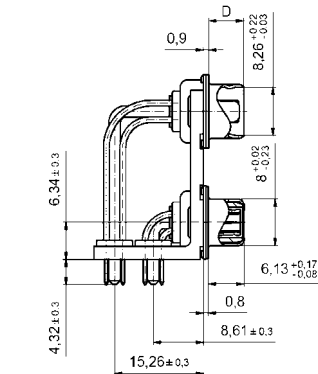
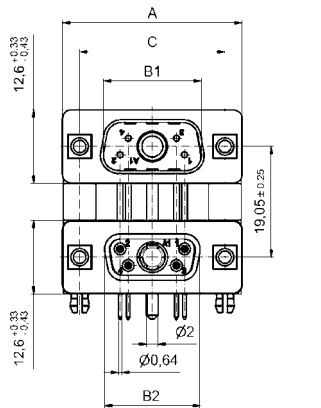
Type	A <sup>+0</sup> / <sub>-0.76</sub>	B1 <sup>+0.25</sup> / <sub>-0</sub>	B2 <sup>+0</sup> / <sub>-0.25</sub>	C	D <sup>+0</sup> / <sub>-0.3</sub>
5W1	31.19	16.79	16.46	25.00 <sup>+0.02</sup> / <sub>-0.02</sub>	6.12
7W2	39.52	25.12	24.79	33.30 <sup>+0.02</sup> / <sub>-0.02</sub>	6.12
13W3	53.42	38.84	38.50	47.04 <sup>+0.02</sup> / <sub>-0.02</sub>	5.99
17W2	53.42	38.84	38.50	47.04 <sup>+0.02</sup> / <sub>-0.02</sub>	5.99
17W5	69.70	55.30	54.96	63.50 <sup>+0.02</sup> / <sub>-0.02</sub>	5.99

Graphical representation of only one variant!

Mounting style: 4-40 UNC threaded insert



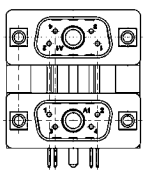
Mounting style: PCB clip and 4-40 UNC threaded insert



# COMBINATION D-SUB – DUAL PORT VARIATIONS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm

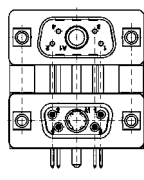
**ORDER DATA**



Variation:  
plug upper –  
plug bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001013
2 X 7W2	Threaded insert	13-001023
2 X 13W3	Threaded insert	13-001033
2 X 17W2	Threaded insert	13-001043
2 X 17W5	Threaded insert	13-001053

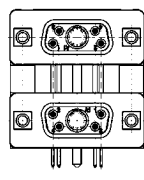
Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001213
2 X 7W2	Threaded insert/PCB clip	13-001223
2 X 13W3	Threaded insert/PCB clip	13-001233
2 X 17W2	Threaded insert/PCB clip	13-001243
2 X 17W5	Threaded insert/PCB clip	13-001253



Variation:  
plug upper –  
socket bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001063
2 X 7W2	Threaded insert	13-001073
2 X 13W3	Threaded insert	13-001083
2 X 17W2	Threaded insert	13-001093
2 X 17W5	Threaded insert	13-001103

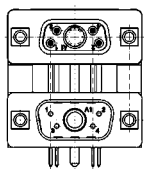
Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001263
2 X 7W2	Threaded insert/PCB clip	13-001273
2 X 13W3	Threaded insert/PCB clip	13-001283
2 X 17W2	Threaded insert/PCB clip	13-001293
2 X 17W5	Threaded insert/PCB clip	13-001303



Variation:  
socket upper –  
socket bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001113
2 X 7W2	Threaded insert	13-001123
2 X 13W3	Threaded insert	13-001133
2 X 17W2	Threaded insert	13-001143
2 X 17W5	Threaded insert	13-001153

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001313
2 X 7W2	Threaded insert/PCB clip	13-001323
2 X 13W3	Threaded insert/PCB clip	13-001333
2 X 17W2	Threaded insert/PCB clip	13-001343
2 X 17W5	Threaded insert/PCB clip	13-001353



Variation:  
socket upper –  
plug bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001163
2 X 7W2	Threaded insert	13-001173
2 X 13W3	Threaded insert	13-001183
2 X 17W2	Threaded insert	13-001193
2 X 17W5	Threaded insert	13-001203

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001363
2 X 7W2	Threaded insert/PCB clip	13-001373
2 X 13W3	Threaded insert/PCB clip	13-001383
2 X 17W2	Threaded insert/PCB clip	13-001393
2 X 17W5	Threaded insert/PCB clip	13-001403

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness



# COMBINATION D-SUB – DUAL PORT WITH POWER CONTACTS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm



RoHS compliant

## DESCRIPTION

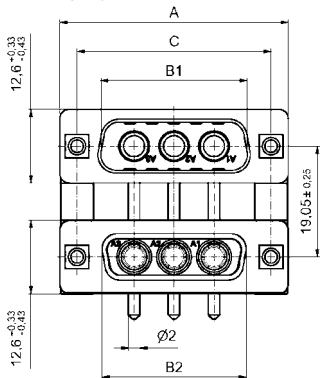
- Designs: 2W2C/3W3/3W3C/5W5/8W8
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Upper connector is rotated 180 degrees

## PRODUCT DRAWING

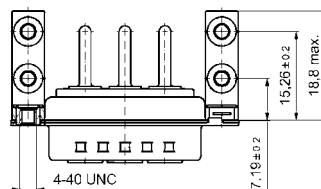
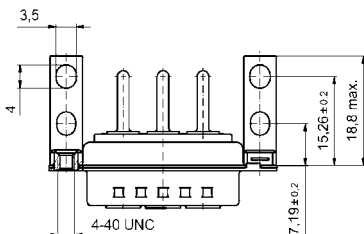
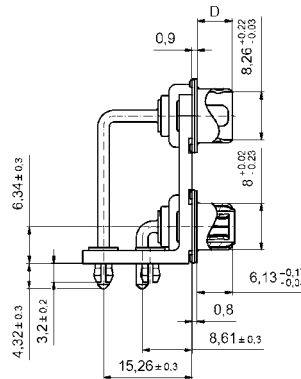
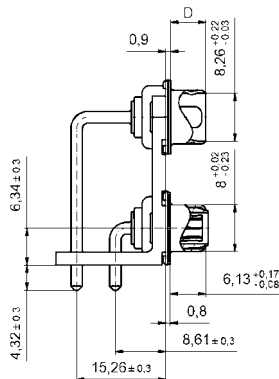
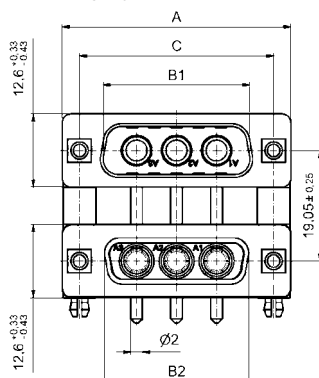
Type	A <sup>+0</sup> / <sub>-0.76</sub>	B1 <sup>+0.25</sup> / <sub>-0</sub>	B2 <sup>+0</sup> / <sub>-0.25</sub>	C	D <sup>+0</sup> / <sub>-0.3</sub>
2W2C	31.19	16.79	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
3W3	39.52	25.12	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3W3C	39.52	25.12	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
5W5	53.42	38.84	38.50	47.04 <sup>+0.13</sup> / <sub>-0.13</sub>	5.99
8W8	69.70	55.30	54.96	63.50 <sup>+0.13</sup> / <sub>-0.13</sub>	5.99

Graphical representation of only one variant!

Mounting style: 4-40 UNC threaded insert



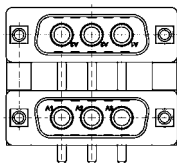
Mounting style: PCB clip and 4-40 UNC threaded insert



# COMBINATION D-SUB – DUAL PORT VARIATIONS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm

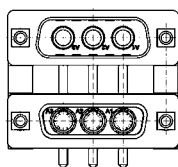
**ORDER DATA**



Design	Mounting style 4-40 UNC	Part Number
2 X 3W3	Threaded insert	13-001413
2 X 3W3	Threaded insert	13-001423
2 X 3W3C	Threaded insert	13-001433
2 X 5W5	Threaded insert	13-001443
2 X 8W8	Threaded insert	13-001453

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001613
2 X 3W3	Threaded insert/PCB clip	13-001623
2 X 3W3C	Threaded insert/PCB clip	13-001633
2 X 5W5	Threaded insert/PCB clip	13-001643
2 X 8W8	Threaded insert/PCB clip	13-001653

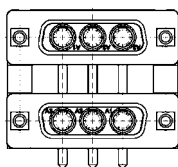
Variation:  
plug upper –  
plug bottom



Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert	13-001463
2 X 3W3	Threaded insert	13-001473
2 X 3W3C	Threaded insert	13-001483
2 X 5W5	Threaded insert	13-001493
2 X 8W8	Threaded insert	13-001503

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001663
2 X 3W3	Threaded insert/PCB clip	13-001673
2 X 3W3C	Threaded insert/PCB clip	13-001683
2 X 5W5	Threaded insert/PCB clip	13-001693
2 X 8W8	Threaded insert/PCB clip	13-001703

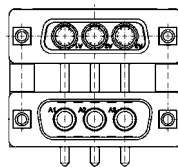
Variation:  
plug upper –  
socket bottom



Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert	13-001513
2 X 3W3	Threaded insert	13-001523
2 X 3W3C	Threaded insert	13-001533
2 X 5W5	Threaded insert	13-001543
2 X 8W8	Threaded insert	13-001553

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001713
2 X 3W3	Threaded insert/PCB clip	13-001723
2 X 3W3C	Threaded insert/PCB clip	13-001733
2 X 5W5	Threaded insert/PCB clip	13-001743
2 X 8W8	Threaded insert/PCB clip	13-001753

Variation:  
socket upper –  
socket bottom



Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert	13-001563
2 X 3W3	Threaded insert	13-001573
2 X 3W3C	Threaded insert	13-001583
2 X 5W5	Threaded insert	13-001593
2 X 8W8	Threaded insert	13-001603

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001763
2 X 3W3	Threaded insert/PCB clip	13-001773
2 X 3W3C	Threaded insert/PCB clip	13-001783
2 X 5W5	Threaded insert/PCB clip	13-001793
2 X 8W8	Threaded insert/PCB clip	13-001803

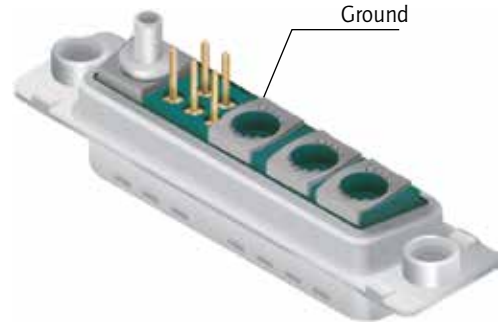
Variation:  
socket upper –  
plug bottom

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

## COMBINATION D-SUB ACCESSORIES

### Grounding for coaxial contacts

To optimize a perfect ground connection from the coaxial contact (outer conductor) to the metal shell. (Factory installed)..



### Guide post

For safe mating of male and female connectors with contact loss. Guide post made for metal can be installed after connector is mounted.



### Part Number

Guide post      160X11279X

### Hole plug

The hole plug can be used for both male and female connector. The assembly is implemented from the mating side. The hole plug is used to plug un wanted holes in the insulator.

Material: Polyester GF UL 94 V-0  
 Colour: black



### Part Number

Hole plug      160X0939X

## CONVERSION TABLE

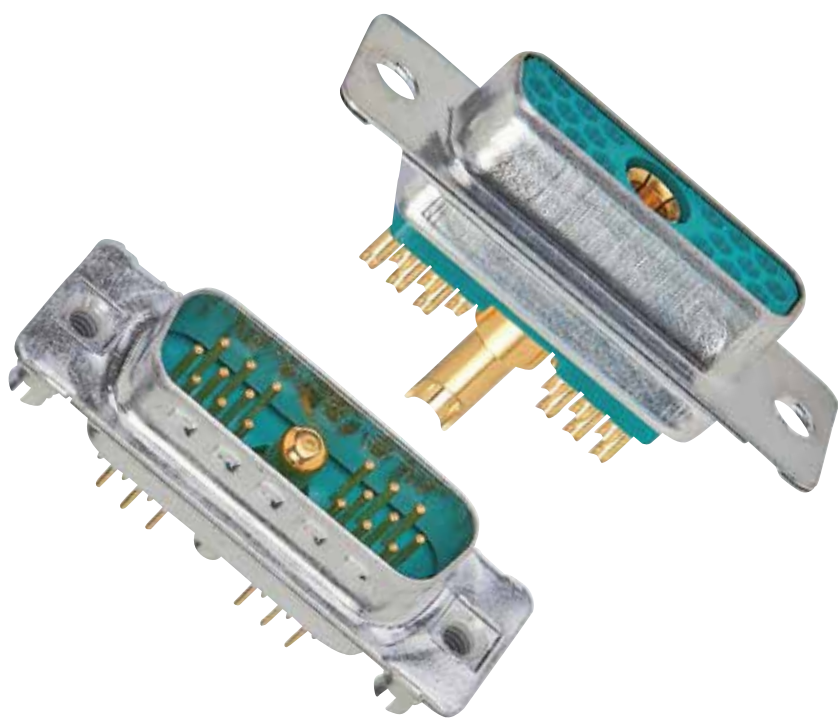
$\mu\text{m}$ 1/1000 mm	$\mu\text{inch}$ 1/1000 inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
0,10	4	3,30	.130	10,16	.400	19,50	.768	30,90	1.217	49,50	1.949
0,20	8	3,40	.134	10,26	.402	19,70	.776	31,00	1.220	49,90	1.965
0,25	10	3,50	.138	10,36	.406	19,80	.780	31,20	1.228	50,10	1.972
0,30	12	3,60	.142	10,56	.413	19,90	.783	31,50	1.240	50,30	1.980
0,50	20	3,70	.146	10,66	.417	20,00	.787	31,70	1.248	50,50	1.988
0,70	28	3,80	.150	10,76	.421	20,10	.791	32,00	1.260	50,70	1.996
0,75	30	3,81	.150	11,00	.433	20,30	.799	32,20	1.268	50,80	2.000
0,80	32	3,90	.154	11,20	.441	20,32	.800	32,30	1.272	51,40	2.024
1,00	39	4,00	.158	11,40	.449	20,50	.807	32,50	1.280	51,50	2.028
1,27	50	4,10	.161	11,50	.453	21,00	.827	32,80	1.291	52,00	2.047
2,00	79	4,20	.165	11,60	.457	21,10	.831	33,00	1.299	52,30	2.059
2,50	98	4,30	.169	11,90	.469	21,70	.854	33,10	1.303	52,80	2.079
3,00	118	4,50	.177	12,00	.472	22,00	.866	33,30	1.311	53,00	2.087
4,00	157	4,70	.185	12,20	.480	22,10	.870	33,80	1.331	53,20	2.095
5,00	197	4,90	.193	12,30	.484	22,20	.874	34,00	1.339	53,80	2.118
<b>mm</b>	<b>inch</b>	5,00	.197	12,40	.488	22,30	.878	34,20	1.346	54,00	2.126
0,10	.004	5,08	.200	12,50	.492	22,40	.882	34,40	1.354	54,20	2.134
0,20	.008	5,10	.201	12,70	.500	22,50	.886	35,00	1.378	54,90	2.161
0,25	.012	5,20	.205	12,90	.508	22,60	.890	35,40	1.394	55,00	2.165
0,35	.014	5,30	.209	13,00	.512	22,80	.898	35,50	1.398	55,40	2.181
0,40	.016	5,40	.213	13,10	.516	22,86	.900	35,56	1.400	55,70	2.193
0,45	.018	5,50	.217	13,20	.520	22,90	.902	35,60	1.402	56,60	2.228
0,50	.020	5,60	.220	13,50	.532	23,00	.906	36,00	1.417	57,40	2.260
0,55	.022	5,70	.224	13,60	.535	23,10	.909	36,50	1.437	57,80	2.276
0,60	.024	5,80	.228	13,70	.539	23,30	.917	36,60	1.441	57,90	2.280
0,64	.025	6,00	.236	13,90	.547	23,50	.925	36,70	1.445	58,42	2.300
0,65	.026	6,10	.240	14,00	.551	24,00	.945	37,00	1.457	59,00	2.323
0,70	.028	6,40	.252	14,30	.563	24,30	.957	37,30	1.469	59,20	2.331
0,75	.030	6,50	.256	14,40	.567	24,60	.969	37,50	1.476	59,80	2.354
0,80	.032	6,60	.260	14,50	.571	24,90	.980	37,60	1.480	59,90	2.358
0,85	.034	6,70	.264	14,70	.579	25,00	.984	37,70	1.484	60,00	2.362
0,90	.035	6,80	.268	14,80	.583	25,10	.998	37,90	1.492	60,96	2.400
1,00	.039	6,90	.272	14,90	.587	25,40	1.000	38,00	1.496	61,10	2.406
1,20	.047	7,00	.276	14,98	.590	25,60	1.008	38,10	1.500	62,00	2.441
1,25	.049	7,10	.280	15,00	.591	25,90	1.020	39,00	1.535	63,00	2.480
1,27	.050	7,20	.283	15,20	.598	26,00	1.024	39,20	1.543	63,50	2.500
1,30	.051	7,40	.291	15,24	.600	26,30	1.035	39,30	1.547	64,00	2.520
1,35	.053	7,50	.295	15,40	.606	26,60	1.047	39,90	1.571	65,00	2.560
1,40	.055	7,60	.299	15,50	.610	26,70	1.051	40,00	1.575	67,00	2.638
1,45	.057	7,62	.300	15,60	.614	27,00	1.063	40,30	1.587	68,00	2.677
1,50	.059	7,70	.303	15,90	.626	27,20	1.071	40,40	1.591	69,00	2.717
1,60	.063	7,80	.307	16,00	.630	27,40	1.079	40,60	1.598	70,00	2.756
1,70	.067	7,98	.314	16,20	.638	27,50	1.093	41,00	1.614	71,00	2.795
1,80	.071	8,00	.315	16,50	.650	27,90	1.098	41,60	1.638	74,00	2.913
1,85	.073	8,18	.318	16,60	.654	27,94	1.100	42,70	1.681	75,00	2.953
1,90	.075	8,20	.323	16,80	.661	28,00	1.102	43,18	1.700	76,20	3.000
2,00	.079	8,30	.327	17,00	.669	28,20	1.110	44,20	1.740	77,00	3.032
2,10	.083	8,40	.331	17,20	.677	28,50	1.122	44,80	1.764	78,74	3.100
2,20	.087	8,50	.335	17,30	.681	28,70	1.130	45,80	1.803	80,00	3.150
2,30	.091	8,60	.339	17,50	.689	29,00	1.142	46,30	1.823	81,28	3.200
2,40	.095	8,90	.350	17,60	.693	29,20	1.150	46,70	1.839	84,00	3.307
2,50	.098	9,00	.354	17,70	.697	29,40	1.158	47,00	1.850	85,00	3.346
2,54	.100	9,10	.358	17,78	.700	29,50	1.161	47,20	1.858	86,36	3.400
2,60	.102	9,20	.362	17,80	.701	29,70	1.169	47,30	1.862	88,90	3.500
2,70	.106	9,30	.366	17,90	.705	29,90	1.177	47,50	1.870	90,00	3.543
2,80	.110	9,40	.370	18,00	.709	30,00	1.181	47,80	1.882	91,44	3.600
2,84	.112	9,50	.374	18,10	.713	30,20	1.189	48,00	1.890	94,00	3.701
2,90	.114	9,60	.378	18,30	.721	30,40	1.197	48,10	1.894	95,00	3.740
3,00	.118	9,70	.382	18,60	.732	30,48	1.200	48,26	1.900	100,00	3.937
3,10	.122	9,90	.390	19,00	.748	30,50	1.201	48,80	1.921	110,00	4.331
3,20	.126	10,00	.395	19,20	.756	30,80	1.213	49,10	1.933	120,00	4.724

## SECTION 2

# COMBINATION D-SUB CONNECTORS

Combination D-SUB Connectors provide the ideal solution for applications to require power, signal and coaxial connections within one connector. This series of connectors achieves space saving on PCB's and I/O designs.

Within this product family are various pin out configurations possible. Almost endless selections can be created mixing power, signal and coaxial contacts.



Examples are coaxial contacts handling frequencies up to 2 GHz. Power contacts from 10 amp to 40 amp current handling. Signal contacts in various styles complete the product offering.



Industry standard terminations types, solder cup, PCB contacts in straight and angled pin configurations. Crimp types and wire wrap contacts.

**Here are just a few Product characteristics:**

- Space savings on the PCB
- Different wire terminations are possible in a single connector
- Cost savings - mixed layout
- Insertable and removable coaxial, power, high voltage and signal contacts
- Precision machined contacts
- Various quality classes are available
- Wide product range

A wide range of standard pin configurations fully loaded with signal contacts are available. Specially configured contacts with power, coaxial and signal contacts can be constructed. Please use the Part Number Creator on page 2|2 and 2|3 or contact technical support at your closest CONEC office.



# PART NUMBER CREATOR

for standard version

**3 003W3 S X X 6 1 A 1 0 X**

**Product Line**

- 3 = Shell steel tin plated
- 1 = Brass tin plated\*
- 5 = Shell yellow chromated\* (not RoHS compliant)
- A = Stainless steel\* \*on request

**Shell size and design**

- 1 = 5W1, 2W2C
- 2 = 3W3, 7W2, 11W1, 3W3C
- 3 = 5W5, 9W4, 13W3, 17W2, 21W1
- 4 = 8W8, 13W6, 17W5, 21WA4, 25W3, 27W2
- 5 = 24W7, 36W4, 43W2, 47W1 Empty positions ADD „0“ = 003W3

**Contact type**

- P = Plug connector
- S = Socket connector

**Surface/Quality class for SIGNAL contacts**

- A = Quality class 3 = 50 mating cycles
- B = Quality class 2 = 200 mating cycles\*
- C = Quality class 1 = 500 mating cycles
- J = Special application = > 500 mating cycles (on request)\*
- X = Crimp and 3W3, 5W5, 8W8, 2W2C, 3W3C (no contacts are supplied with the connector) \*on request

**Termination only for SIGNAL contacts**

- K = Crimp without contacts
- M = Solder cup
- N = Wire wrap, .500" / 12.7 mm
- P = Press fit
- R = Solder pin, straight, .220" / 5.6 mm
- T = Solder pin, angled, .280" / 7.19 mm
- U = Solder pin, angled, .370" / 9.40 mm
- W\* = Solder pin, angled, .450" / 11.43 mm
- X = 3W3, 5W5, 8W8, 2W2C, 3W3C
- Z\* = Solder pin, angled, .540" / 13.84 mm
- \* = please contact us

**Termination for HIGH POWER- or COAXIAL contacts**

- |   |  |  |
|---|--|--|
| <b>Quality class 3 / Quality class 1</b>                | <b>Quality class 3 / Quality class 1</b> | <b>Quality class 3 / Quality class 1</b> |
| C1 = Solder/Crimp angled 10 A                           | 59 / 55 = Solder pin, angled 15 A        | H2 / 88 = 3 Solder pins angled 75 Ω      |
| C2 = Solder/Crimp angled 20 A                           | 73 / 56 = Solder pin, angled 20 A        | H3 / 89 = 3 Solder pins angled 75 Ω      |
| C3 = Solder/Crimp angled 30 A                           | 74 / 57 = Solder pin, angled 30 A        | H5 / 90 = 5 Solder pins angled 75 Ω      |
| C4 = Solder/Crimp angled 40 A                           | 75 / 58 = Solder pin, angled 40 A        | 91 = Screw termination 20 A              |
| F2,61 / F1,41 = Solder cup 10 A                         | 77 / 60 = Solder pin, angled 40 A        | / P1 = press fit 30A                     |
| F4,62 / F3,42 = Solder cup 20 A                         | 81 / 66 = Solder pin, angled 20 A        | / P2 = press fit 30A                     |
| F6,63 / F5,43 = Solder cup 30 A                         | 82 / 67 = Solder pin, angled 30 A        | / P4 = press fit 30A                     |
| F8,64 / F7,44 = Solder cup 40 A                         | 85 / 65 = Solder pin, angled 30 A        | 99 = no high power, coax or crimp        |
| 68 / 48 = Solder pin, straight 20 A, D= .077" / 1.95 mm | G7 / 76 = 3 Solder pins Straight 50 Ω    | contacts loaded                          |
| 69 / 49 = Solder pin, straight 20 A, D= .102" / 2.60 mm | G9 / 78 = 3 Solder pins angled 50 Ω      | Coaxial contacts with cable              |
| 70 / 50 = Solder pin, straight 20 A, D= .110" / 2.85 mm | H1 / 79 = 3 Solder pins angled 50 Ω      | termination must be ordered separately.  |
| 71 / 51 = Solder pin, straight 30 A, D= .130" / 3.18 mm | H4 / 80 = 5 Solder pins angled 50 Ω      |  |
| 72 / 52 = Solder pin, straight 40 A, D= .150" / 3.75 mm | G8 / 86 = 3 Solder pins Straight 75 Ω    |  |

**Mounting style**

- |  |  |
|--|--|
| A1 = Riveted   | E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126" / 3.20 mm          |
| A2 = M3 threaded insert  | F1 = M3 clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm       |
| A3 = 4-40 UNC threaded insert  | F2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm |
| A4 = M3 threaded rear spacer   | F3 = M3 clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm       |
| A5 = 4-40 UNC threaded rear spacer   | F4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm |
| A6 = Float fastening   | F5 = M3 clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm       |
| A7 = Threaded rear spacer for M3 press fit                                     | F6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm |
| A8 = Threaded rear spacer for 4-40 UNC press fit                               | G1 = Metal bracket, M3 threaded insert for .370" / 9.40 mm                     |
| C1 = M3 threaded rear spacer with PCB clip, PCB .063" / 1.60 mm                | G2 = Metal bracket, 4-40 UNC threaded insert for .370" / 9.40 mm               |
| C2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063" / 1.60 mm          | G3 = Metal bracket, M3 threaded insert and clip for .370" / 9.40 mm            |
| C3 = M3 threaded rear spacer with PCB clip, PCB .091" / 2.30 mm                | G4 = Metal bracket, 4-40 UNC threaded insert and clip for .370" / 9.40 mm      |
| C4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091" / 2.30 mm          | H1 = Metal bracket, M3 threaded lock for .370" / 9.40 mm                       |
| C5 = M3 threaded rear spacer with PCB clip, PCB .126" / 3.20 mm                | H2 = Metal bracket, 4-40 UNC threaded lock for .370" / 9.40 mm                 |
| C6 = 4-40 UNC Threaded rear spacer with PCB clip, PCB .126" / 3.20 mm          | H3 = Metal bracket, M3 threaded lock and clip for .370" / 9.40 mm              |
| D1 = M3 clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm       | H4 = Metal bracket, 4-40 UNC threaded lock and clip for .370" / 9.40 mm        |
| D2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063" / 1.60 mm | N1 = Metal bracket, M3 threaded insert for .280" / 7.19 mm                     |
| D3 = M3 clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm       | N2 = Metal bracket, 4-40 UNC threaded insert for .280" / 7.19 mm               |
| D4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091" / 2.30 mm | N3 = Metal bracket, M3 threaded insert and clip for .280" / 7.19 mm            |
| D5 = M3 clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm       | N4 = Metal bracket, 4-40 UNC threaded insert and clip for .280" / 7.19 mm      |
| D6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126" / 3.20 mm | P1 = Metal bracket, M3 threaded lock for .280" / 7.19 mm                       |
| E1 = M3 threaded rear spacer with PCB clip, PCB .063" / 1.60 mm                | P2 = Metal bracket, 4-40 UNC threaded lock for .280" / 7.19 mm                 |
| E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063" / 1.60 mm          | P3 = Metal bracket, M3 threaded lock and clip for .280" / 7.19 mm              |
| E3 = M3 threaded rear spacer with PCB clip, PCB .091" / 2.30 mm                | P4 = Metal bracket, 4-40 UNC threaded lock and clip for .280" / 7.19 mm        |
| E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091" / 2.30 mm          | W1 = Threaded rear spacer with M3 press in pin                                 |
| E5 = M3 threaded rear spacer with PCB clip, PCB .126" / 3.20 mm                | W2 = Threaded rear spacer with 4-40 UNC press in pin                           |

OX = Standard

# PART NUMBER CREATOR

for High Density

3 H19W1 S C M 4 1 A 1 O X

## Product Line

- 1 = Shell brass tin plated
- 3 = Shell tin plated\*
- 5 = Shell yellow chromated\* (not RoHS compliant)
- A = Shell stainless steel\* \*on request

## Shell size and design

- 2 =19W1
- 3 =15W4
- 4 =45W2 H = High Density

## Contact type

- P = Plug connector
- S = Socket connector

## Quality class for SIGNAL contacts

- A = Quality class 3 = 50 mating cycles
- B = Quality class 2 = 200 mating cycles\*
- C = Quality class 1 = 500 mating cycles
- J = Special application = > 500 mating cycles\* \*on request

## Termination only for SIGNAL contacts

- M = Solder cup
- P = Press-fit\*
- R = Solder pin, straight
- W = Solder pin, angled .450" / 11,43 mm\*
- T = Solder pin, angled .350" / 7,98 mm \*on request

## Termination for HIGH POWER- or COAXIAL contacts

### Quality class 3/Quality class 1

- F2,61/F1,41 = Solder cup 10 A
- F4,62/F3,42 = Solder cup 20 A
- F6,63/F5,43 = Solder cup 30 A
- F8,64/F7,44 = Solder cup 40 A
- 68/48 = Solder pin, straight 20 A, D= .077"/1.95 mm
- 69/49 = Solder pin, straight 20 A, D= .102"/2.60 mm
- 70/50 = Solder pin, straight 20 A, D= .110"/2.85 mm
- 71/51 = Solder pin, straight 30 A, D= .130"/3.18 mm
- 72/52 = Solder pin, straight 40 A, D= .150"/3.75 mm
- 59/55 = Solder pin, angled 15 A
- 73/56 = Solder pin, angled 20 A
- 74/57 = Solder pin, angled 30 A
- 75/58 = Solder pin, angled 40 A

### Quality class 3/Quality class 1

- 77/60 = Solder pin, angled 40 A
- 81/66 = Solder pin, angled 20 A
- 82/67 = Solder pin, angled 30 A
- 85/65 = Solder pin, angled 30 A
- G7/76 = 3 Solder pins Straight 50 Ω
- G9/78 = 3 Solder pins angled 50 Ω
- H1/79 = 3 Solder pins angled 50 Ω
- H4/80 = 5 Solder pins angled 50 Ω
- G8/86 = 3 Solder pins Straight 75 Ω
- H2/88 = 3 Solder pins angled 75 Ω
- H3/89 = 3 Solder pins angled 75 Ω
- H5/90 = 5 Solder pins angled 75 Ω
- 91 = Screw termination 20 A

### Quality class 1

- P1 = press fit 30A
  - P2 = press fit 30A
  - P4 = press fit 30A
  - 99 = no high power, coax or crimp contacts loaded
- Coaxial contacts with cable termination must be ordered separately.

## Mounting style

- |  |  |
|--|--|
| A1 = Riveted   | F3 = M3 clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm       |
| A2 = M3 threaded insert  | F4 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .091"/2.30 mm |
| A3 = 4-40 UNC threaded insert  | F5 = M3 clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm       |
| A4 = M3 threaded rear spacer   | F6 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .126"/3.20 mm |
| A5 = 4-40 UNC threaded rear spacer   | G5 = Metal bracket, M3 threaded insert for .350"/7,98 mm                     |
| A6 = Float fastening   | G6 = Metal bracket, 4-40 UNC threaded insert for .350"/7,98 mm               |
| A7 = Threaded rear spacer for M3 press fit                                   | G7 = Metal bracket, M3 threaded insert and Clip for .350"/7,98 mm            |
| A8 = Threaded rear spacer for 4-40 UNC press fit                             | G8 = Metal bracket, 4-40 UNC threaded insert and Clip for .350"/7,98 mm      |
| E1 = M3 threaded rear spacer with PCB clip, PCB .063"/1.60 mm                | H5 = Metal bracket, M3 threaded lock for .350"/7,98 mm                       |
| E2 = 4-40 UNC threaded rear spacer with PCB clip, PCB .063"/1.60 mm          | H6 = Metal bracket, 4-40 UNC threaded lock for .350"/7,98 mm                 |
| E3 = M3 threaded rear spacer with PCB clip, PCB .091"/2.30 mm                | H7 = Metal bracket, M3 threaded lock and Clip for .350"/7,98 mm              |
| E4 = 4-40 UNC threaded rear spacer with PCB clip, PCB .091"/2.30 mm          | H8 = Metal bracket, 4-40 UNC threaded lock and Clip for .350"/7,98 mm        |
| E5 = M3 threaded rear spacer with PCB clip, PCB .126"/3.20 mm                | W1 = Threaded rear spacer with M3 press in pin                               |
| E6 = 4-40 UNC threaded rear spacer with PCB clip, PCB .126"/3.20 mm          | W2 = Threaded rear spacer with 4-40 UNC press in pin                         |
| F1 = M3 clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm       |  |
| F2 = 4-40 UNC clip and threaded rear spacer with PCB clip, PCB .063"/1.60 mm |  |

- OX = Standard



# TECHNICAL DATA

## Standard version

Materials	Connector with signal contacts	Coaxial contacts	High power contacts	High voltage contacts
Insulator Green standard / black crimp	PBTP, GV (UL94 V-0)			
Shell	steel tin plated brass tin / stainless steel on request			
Contact plating	Gold plated over nickel			
Contact material	CU alloy			
Retaining clip	CU alloy			
Insulator		PTFE/PBTP/PI		PTFE
<b>Mechanical and electrical characteristics</b>				
Current rating	7,5A (UL) / 5A (CSA, VDE)			
Test voltage between 2 contacts contact and shell	1000 V, 50Hz 1 min.		1000 V, 50Hz 1 min.	
Resistance between mated contacts	max. 8 mΩ	max. 2.7 mΩ	max. 1 mΩ	max. 2.7 mΩ
Insulation resistance	≥5 GΩ	≥ 10 GΩ	≥ 5 GΩ	≥ 2x10 <sup>7</sup> MΩ
Volume resistivity	10 <sup>16</sup> Ωcm			
Dielectric impedance	50KV/mm			
Characteristic impedance		50/75 Ω		
VSWR-value at according MIL-C-39012	1.2GHz 1.5GHz 2.0GHz	≤1,2 ≤1,3 ≤1,5		
Dielectric voltage		750V 50Hz		3.8kV
Frequency range		0-2GHz		
Working voltage	250 V	250 V	250 V	max. 2.8kV
Temperature range	-55°C to +125°C			
Insertion force per contact	3.4N	7N	7N	5N
Extraction force per contact	0.2N	7N	approx. 5N	approx. 2.5N
Mating cycles	A = Quality class 3 = 50 mating cycles, B = Quality class 2 = 200 mating cycles, C = Quality class 1 = 500 mating cycles			

Technical specifications are subject to change without notice.

# TECHNICAL DATA

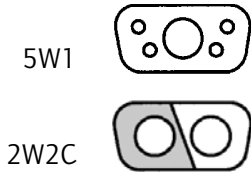
## High Density

Materials	Connector with signal contacts	Coaxial contacts	High power contacts	High voltage contacts
Insulator Green standard / black crimp	PBTP, GV (UL94 V-0)			
Shell	steel tin plated brass tin / stainless steel on request			
Contact plating	Gold plated over nickel			
Contact material	CU alloy			
Retaining clip	CU alloy			
Insulator		PTFE/PBTP/PI		PTFE
<b>Mechanical and electrical characteristics</b>				
Current rating	3 A (ULVDE) / 2,5 A (CSA)			
Test voltage between 2 contacts contact and shell	1000 V, 50Hz 1 min.		1000 V, 50Hz 1 min.	
Resistance between mated contacts	max. 10mΩ	max. 2.7mΩ	max. 1mΩ	max. 2.7mΩ
Insulation resistance	≥5GΩ	≥10 GΩ	≥ 5GΩ	2x10 <sup>7</sup> MΩ
Volume resistivity	10 <sup>16</sup> Ωcm			
Dielectric impedance	50kV/mm			
Characteristic impedance		50/75 Ω		
VSWR-value at according MIL-C-39012	1.2GHz 1.5GHz 2.0GHz	≤ 1.2 ≤ 1.3 ≤ 1.5		
Dielectric voltage		750V 50Hz		3.8kV
Frequency range		0-2GHz		
Working voltage	60V	250 V	250 V	max. 2.8kV
Temperature range	-55°C to +125°C			
Insertion force per contact	3,4N	7N	7N	5N
Extraction force per contact	0,2N	7N	approx. 5N	approx. 2.5N
Mating cycles	A =Quality class 3 = 50 mating cycles, B =Quality class 2 = 200 mating cycles, C = Quality class 1 = 500 mating cycles			

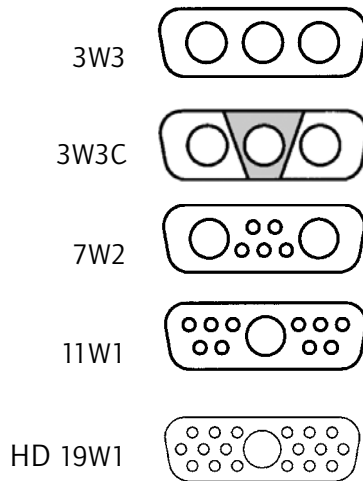
Technical specifications are subject to change without notice.

# PIN CONFIGURATION – MATING SIDE OF SOCKET CONNECTOR

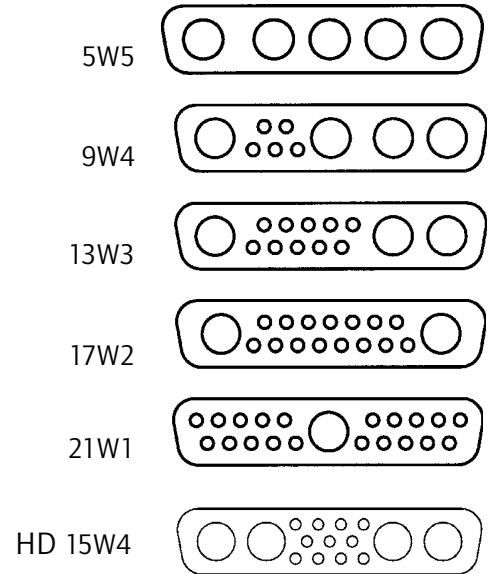
## SHELL SIZE 1



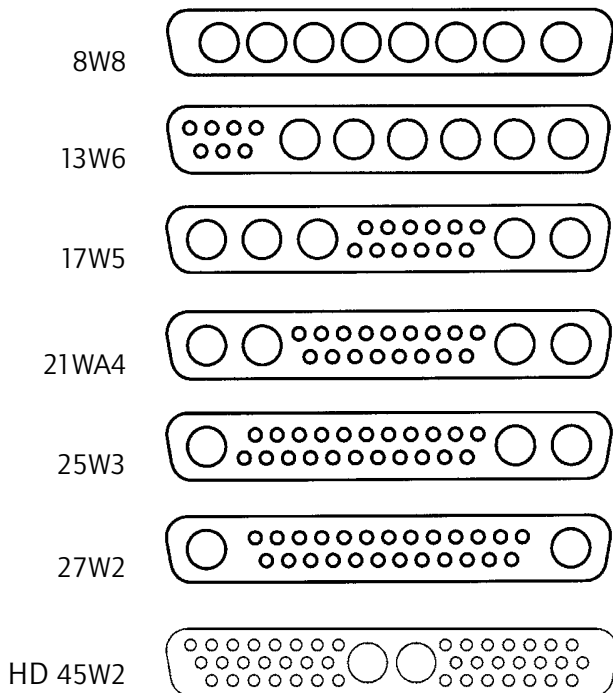
## SHELL SIZE 2



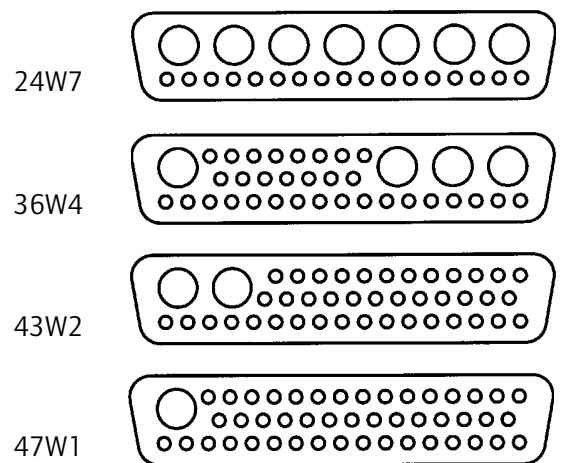
## SHELL SIZE 3



## SHELL SIZE 4



## SHELL SIZE 5



Connectors 3W3, 5W5 and 8W8 with female insulators: Socket contacts are fingerprobe safe according to UL 1950 and CSA 22.2.950.

# TECHNICAL INFORMATION

## SKIN EFFECT

Alternating currents do not uniformly occupy the entire cross section of the conductor, rather inductance effect in the conductor deflects the current towards the surface of the conductor, whereby this deflection increases with the frequency.

The resistive attenuation of a transmission line increases with the frequency as a result of this skin effect.

The skin depth (equivalent thickness of the layer in which current flows) can be determined using

$$\delta = \frac{1}{\sqrt{f \pi \sigma \mu_0 \mu_r}}$$

f = frequency

$\sigma$  = conductivity of the conductor material

$\sigma_{Ag} = 62 \times 10^6 \text{ S/m}$

$\sigma_{Cu} = 58 \times 10^6 \text{ S/m}$

$\mu_0 = 1,256 \cdot 10^{-6} \text{ Vs / Am}$

$\mu_r$  ... relative permeability constant for the employed material

## VSWR-VALUE

The ratio between the value of the largest and the smallest voltages on a loss-free line is known as the ripple or voltage standing wave ratio s (where  $1 \leq s < \infty$ ). The reciprocal value of the VSWR is known as the inverse voltage standing wave ratio m (where  $0 < m \leq 1$ ).

(VSWR = Voltage standing wave ratio)

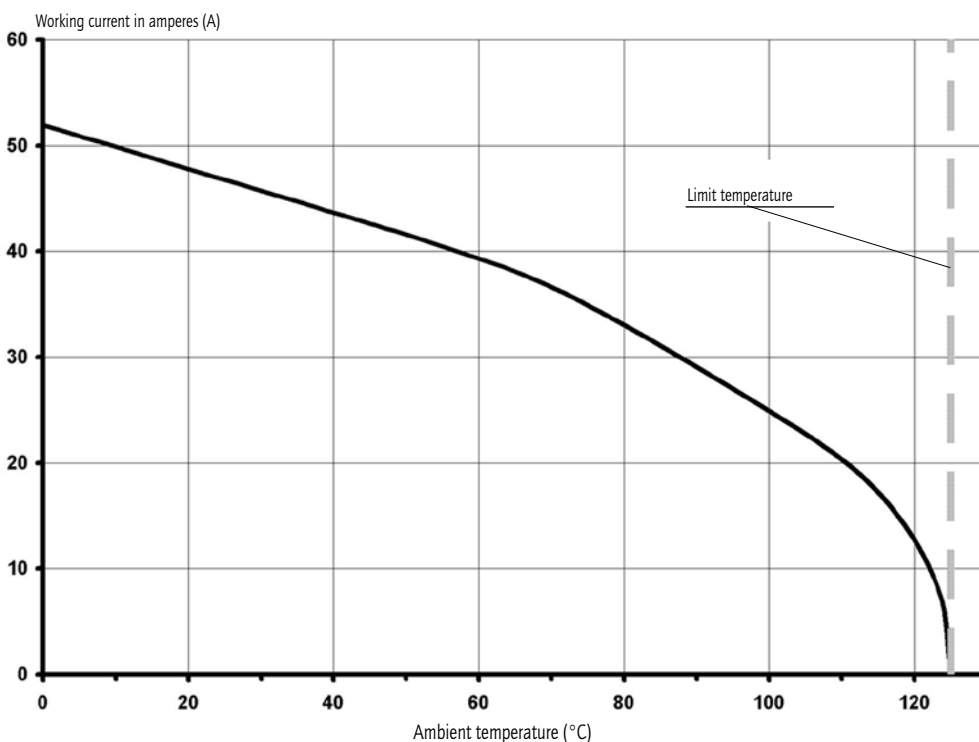
The value of s is linked with the → reflection coefficient r on s transmission line according to the equation

$$s = \frac{(1 + |r|)}{(1 - |r|)}$$

## DERATING CURVE

Measurement is according to DIN 41640 part 3 whereas all power contacts are connected in series.

For test procedure – product-no. 3008W8SXX99A has been equipped with 132C11049X and 3008W8PXX99AA10X with 131C11049X.

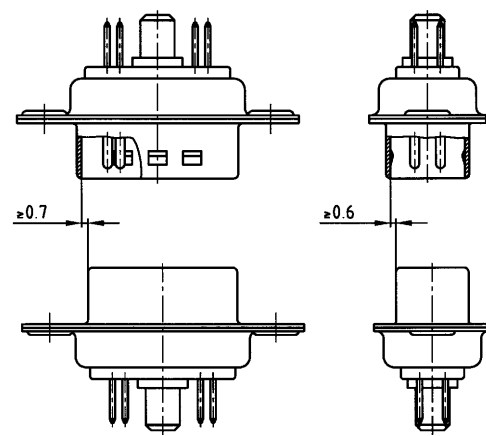


# MATING CONDITIONS

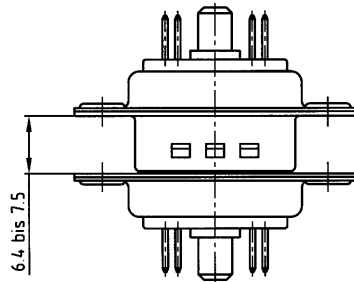
Float mount tolerance guide



Rigid mount tolerance guide



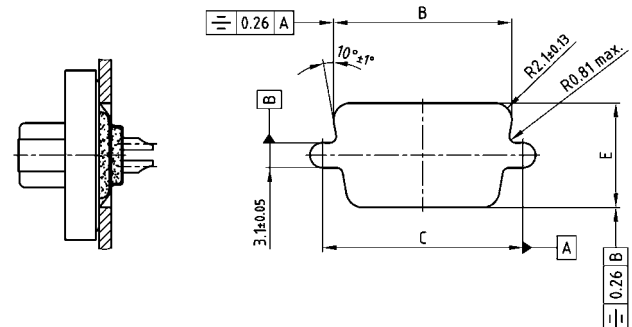
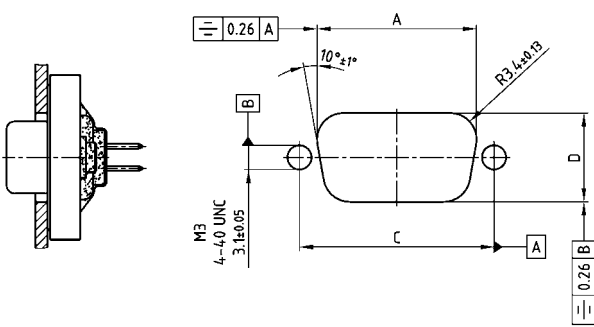
Rigid mount vertical to tolerance guide



PANEL CUT-OUT

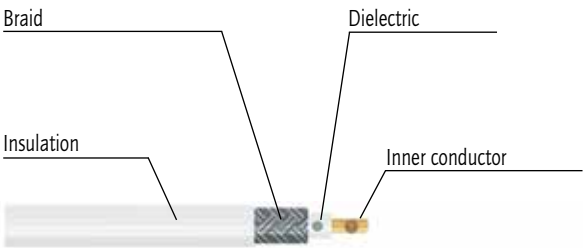
Rear panel mounting

Front panel mounting



Shell size	A ± 0,13	B ± 0,13	C ± 0,13	D ± 0,13	E ± 0,13
1	20.50	22.20	25.00	11.40	13.00
2	28.80	30.50	33.30	11.40	13.00
3	42.50	44.30	47.04	11.40	13.00
4	59.10	60.70	63.50	11.40	13.00
5	56.30	58.30	61.10	14.10	15.80

# CRIMPING INSTRUCTIONS FOR COAX CONTACTS



Strip the wire  
Using dimensions shown on the  
individual product drawings



Slide sleeve over coax cable



Crimp the inner contact on the  
inner conductor



Snap the inner contact into  
the outer contact



Slide braid over outer contact



Crimp the sleeve on to outer  
contact

# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder cup – Precision machined contacts – For wire size AWG 20

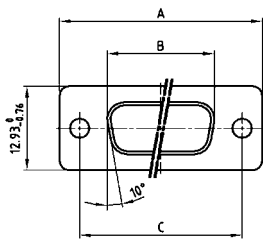


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

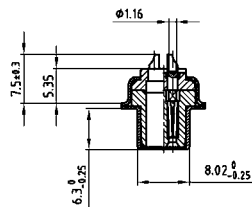
- Suitable for wire size AWG 20
- Mounting styles:
  - with through-hole,  $\varnothing$  .118" / 3 mm
  - with 4-40 UNC or M3 threaded insert
  - with floating mount
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

## SOCKET CONNECTOR

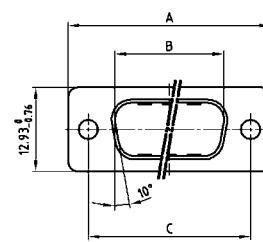
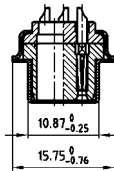


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

Shell size 1-4

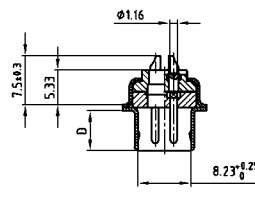


Shell size 5

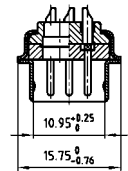


Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4



Shell size 5



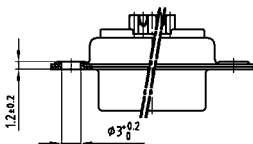
## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style	Part Number
5W1	Through-hole	3005W1SAM99A10X
7W2	Through-hole	3007W2SAM99A10X
11W1	Through-hole	3011W1SAM99A10X
9W4	Through-hole	3009W4SAM99A10X
13W3	Through-hole	3013W3SAM99A10X
17W2	Through-hole	3017W2SAM99A10X
21W1	Through-hole	3021W1SAM99A10X
13W6	Through-hole	3013W6SAM99A10X
17W5	Through-hole	3017W5SAM99A10X
21WA4	Through-hole	321WA4SAM99A10X
25W3	Through-hole	3025W3SAM99A10X
27W2	Through-hole	3027W2SAM99A10X
24W7	Through-hole	3024W7SAM99A10X
36W4	Through-hole	3036W4SAM99A10X
43W2	Through-hole	3043W2SAM99A10X
47W1	Through-hole	3047W1SAM99A10X

### PLUG CONNECTOR

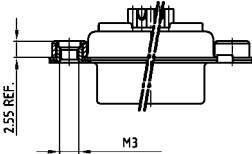
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PAM99A10X
7W2	Through-hole	3007W2PAM99A10X
11W1	Through-hole	3011W1PAM99A10X
9W4	Through-hole	3009W4PAM99A10X
13W3	Through-hole	3013W3PAM99A10X
17W2	Through-hole	3017W2PAM99A10X
21W1	Through-hole	3021W1PAM99A10X
13W6	Through-hole	3013W6PAM99A10X
17W5	Through-hole	3017W5PAM99A10X
21WA4	Through-hole	321WA4PAM99A10X
25W3	Through-hole	3025W3PAM99A10X
27W2	Through-hole	3027W2PAM99A10X
24W7	Through-hole	3024W7PAM99A10X
36W4	Through-hole	3036W4PAM99A10X
43W2	Through-hole	3043W2PAM99A10X
47W1	Through-hole	3047W1PAM99A10X



# COMBINATION D-SUB – MOUNTING STYLES

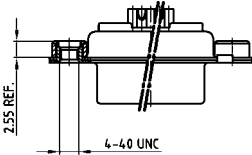
Solder cup – Precision machined contacts – For wire size AWG 20

ORDER DATA



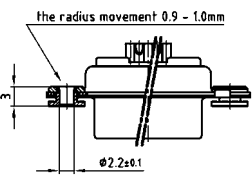
SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SAM99A20X
7W2	Threaded insert	3007W2SAM99A20X
11W1	Threaded insert	3011W1SAM99A20X
9W4	Threaded insert	3009W4SAM99A20X
13W3	Threaded insert	3013W3SAM99A20X
17W2	Threaded insert	3017W2SAM99A20X
21W1	Threaded insert	3021W1SAM99A20X
13W6	Threaded insert	3013W6SAM99A20X
17W5	Threaded insert	3017W5SAM99A20X
21WA4	Threaded insert	321WA4SAM99A20X
25W3	Threaded insert	3025W3SAM99A20X
27W2	Threaded insert	3027W2SAM99A20X
24W7	Threaded insert	3024W7SAM99A20X
36W4	Threaded insert	3036W4SAM99A20X
43W2	Threaded insert	3043W2SAM99A20X
47W1	Threaded insert	3047W1SAM99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PAM99A20X
7W2	Threaded insert	3007W2PAM99A20X
11W1	Threaded insert	3011W1PAM99A20X
9W4	Threaded insert	3009W4PAM99A20X
13W3	Threaded insert	3013W3PAM99A20X
17W2	Threaded insert	3017W2PAM99A20X
21W1	Threaded insert	3021W1PAM99A20X
13W6	Threaded insert	3013W6PAM99A20X
17W5	Threaded insert	3017W5PAM99A20X
21WA4	Threaded insert	321WA4PAM99A20X
25W3	Threaded insert	3025W3PAM99A20X
27W2	Threaded insert	3027W2PAM99A20X
24W7	Threaded insert	3024W7PAM99A20X
36W4	Threaded insert	3036W4PAM99A20X
43W2	Threaded insert	3043W2PAM99A20X
47W1	Threaded insert	3047W1PAM99A20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAM99A30X
7W2	Threaded insert	3007W2SAM99A30X
11W1	Threaded insert	3011W1SAM99A30X
9W4	Threaded insert	3009W4SAM99A30X
13W3	Threaded insert	3013W3SAM99A30X
17W2	Threaded insert	3017W2SAM99A30X
21W1	Threaded insert	3021W1SAM99A30X
13W6	Threaded insert	3013W6SAM99A30X
17W5	Threaded insert	3017W5SAM99A30X
21WA4	Threaded insert	321WA4SAM99A30X
25W3	Threaded insert	3025W3SAM99A30X
27W2	Threaded insert	3027W2SAM99A30X
24W7	Threaded insert	3024W7SAM99A30X
36W4	Threaded insert	3036W4SAM99A30X
43W2	Threaded insert	3043W2SAM99A30X
47W1	Threaded insert	3047W1SAM99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAM99A30X
7W2	Threaded insert	3007W2PAM99A30X
11W1	Threaded insert	3011W1PAM99A30X
9W4	Threaded insert	3009W4PAM99A30X
13W3	Threaded insert	3013W3PAM99A30X
17W2	Threaded insert	3017W2PAM99A30X
21W1	Threaded insert	3021W1PAM99A30X
13W6	Threaded insert	3013W6PAM99A30X
17W5	Threaded insert	3017W5PAM99A30X
21WA4	Threaded insert	321WA4PAM99A30X
25W3	Threaded insert	3025W3PAM99A30X
27W2	Threaded insert	3027W2PAM99A30X
24W7	Threaded insert	3024W7PAM99A30X
36W4	Threaded insert	3036W4PAM99A30X
43W2	Threaded insert	3043W2PAM99A30X
47W1	Threaded insert	3047W1PAM99A30X



SOCKET CONNECTOR		
Design	Mounting style	Part Number
5W1	Floating mount	3005W1SAM99A60X
7W2	Floating mount	3007W2SAM99A60X
11W1	Floating mount	3011W1SAM99A60X
9W4	Floating mount	3009W4SAM99A60X
13W3	Floating mount	3013W3SAM99A60X
17W2	Floating mount	3017W2SAM99A60X
21W1	Floating mount	3021W1SAM99A60X
13W6	Floating mount	3013W6SAM99A60X
17W5	Floating mount	3017W5SAM99A60X
21WA4	Floating mount	321WA4SAM99A60X
25W3	Floating mount	3025W3SAM99A60X
27W2	Floating mount	3027W2SAM99A60X
24W7	Floating mount	3024W7SAM99A60X
36W4	Floating mount	3036W4SAM99A60X
43W2	Floating mount	3043W2SAM99A60X
47W1	Floating mount	3047W1SAM99A60X

PLUG CONNECTOR		
Design	Mounting style	Part Number
5W1	Floating mount	3005W1PAM99A60X
7W2	Floating mount	3007W2PAM99A60X
11W1	Floating mount	3011W1PAM99A60X
9W4	Floating mount	3009W4PAM99A60X
13W3	Floating mount	3013W3PAM99A60X
17W2	Floating mount	3017W2PAM99A60X
21W1	Floating mount	3021W1PAM99A60X
13W6	Floating mount	3013W6PAM99A60X
17W5	Floating mount	3017W5PAM99A60X
21WA4	Floating mount	321WA4PAM99A60X
25W3	Floating mount	3025W3PAM99A60X
27W2	Floating mount	3027W2PAM99A60X
24W7	Floating mount	3024W7PAM99A60X
36W4	Floating mount	3036W4PAM99A60X
43W2	Floating mount	3043W2PAM99A60X
47W1	Floating mount	3047W1PAM99A60X



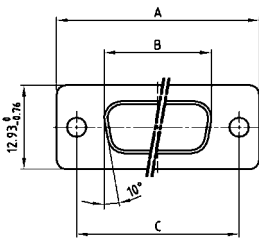
# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

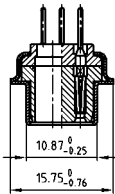
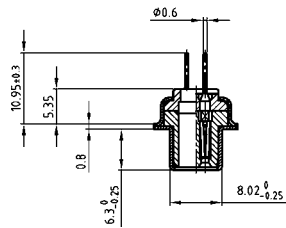
## SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

Shell size 1-4

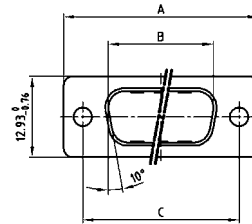
Shell size 5



## DESCRIPTION

- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
  - with 4-40 UNC or M3 threaded rear spacer
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

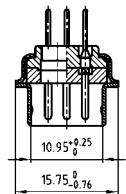
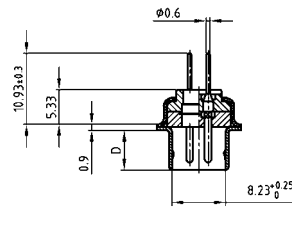
## PLUG CONNECTOR



Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4

Shell size 5



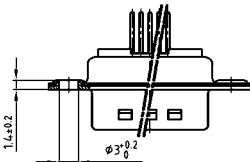
## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style	Part Number
5W1	Through-hole	3005W1SAR99A10X
7W2	Through-hole	3007W2SAR99A10X
11W1	Through-hole	3011W1SAR99A10X
9W4	Through-hole	3009W4SAR99A10X
13W3	Through-hole	3013W3SAR99A10X
17W2	Through-hole	3017W2SAR99A10X
21W1	Through-hole	3021W1SAR99A10X
13W6	Through-hole	3013W6SAR99A10X
17W5	Through-hole	3017W5SAR99A10X
21WA4	Through-hole	321WA4SAR99A10X
25W3	Through-hole	3025W3SAR99A10X
27W2	Through-hole	3027W2SAR99A10X
24W7	Through-hole	3024W7SAR99A10X
36W4	Through-hole	3036W4SAR99A10X
43W2	Through-hole	3043W2SAR99A10X
47W1	Through-hole	3047W1SAR99A10X

### PLUG CONNECTOR

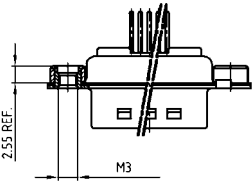
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PAR99A10X
7W2	Through-hole	3007W2PAR99A10X
11W1	Through-hole	3011W1PAR99A10X
9W4	Through-hole	3009W4PAR99A10X
13W3	Through-hole	3013W3PAR99A10X
17W2	Through-hole	3017W2PAR99A10X
21W1	Through-hole	3021W1PAR99A10X
13W6	Through-hole	3013W6PAR99A10X
17W5	Through-hole	3017W5PAR99A10X
21WA4	Through-hole	321WA4PAR99A10X
25W3	Through-hole	3025W3PAR99A10X
27W2	Through-hole	3027W2PAR99A10X
24W7	Through-hole	3024W7PAR99A10X
36W4	Through-hole	3036W4PAR99A10X
43W2	Through-hole	3043W2PAR99A10X
47W1	Through-hole	3047W1PAR99A10X



# COMBINATION D-SUB – MOUNTING STYLES

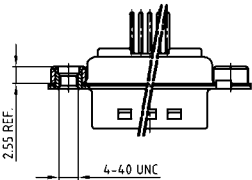
Solder pin – Straight – Precision machined contacts

ORDER DATA



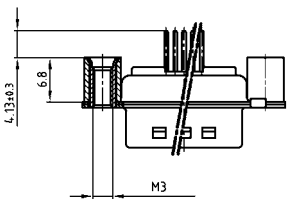
SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SAR99A20X
7W2	Threaded insert	3007W2SAR99A20X
11W1	Threaded insert	3011W1SAR99A20X
9W4	Threaded insert	3009W4SAR99A20X
13W3	Threaded insert	3013W3SAR99A20X
17W2	Threaded insert	3017W2SAR99A20X
21W1	Threaded insert	3021W1SAR99A20X
13W6	Threaded insert	3013W6SAR99A20X
17W5	Threaded insert	3017W5SAR99A20X
21WA4	Threaded insert	321WA4SAR99A20X
25W3	Threaded insert	3025W3SAR99A20X
27W2	Threaded insert	3027W2SAR99A20X
24W7	Threaded insert	3024W7SAR99A20X
36W4	Threaded insert	3036W4SAR99A20X
43W2	Threaded insert	3043W2SAR99A20X
47W1	Threaded insert	3047W1SAR99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PAR99A20X
7W2	Threaded insert	3007W2PAR99A20X
11W1	Threaded insert	3011W1PAR99A20X
9W4	Threaded insert	3009W4PAR99A20X
13W3	Threaded insert	3013W3PAR99A20X
17W2	Threaded insert	3017W2PAR99A20X
21W1	Threaded insert	3021W1PAR99A20X
13W6	Threaded insert	3013W6PAR99A20X
17W5	Threaded insert	3017W5PAR99A20X
21WA4	Threaded insert	321WA4PAR99A20X
25W3	Threaded insert	3025W3PAR99A20X
27W2	Threaded insert	3027W2PAR99A20X
24W7	Threaded insert	3024W7PAR99A20X
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43W2	Threaded insert	3043W2PAR99A20X
47W1	Threaded insert	3047W1PAR99A20X



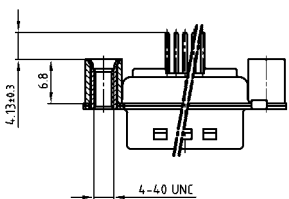
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAR99A30X
7W2	Threaded insert	3007W2SAR99A30X
11W1	Threaded insert	3011W1SAR99A30X
9W4	Threaded insert	3009W4SAR99A30X
13W3	Threaded insert	3013W3SAR99A30X
17W2	Threaded insert	3017W2SAR99A30X
21W1	Threaded insert	3021W1SAR99A30X
13W6	Threaded insert	3013W6SAR99A30X
17W5	Threaded insert	3017W5SAR99A30X
21WA4	Threaded insert	321WA4SAR99A30X
25W3	Threaded insert	3025W3SAR99A30X
27W2	Threaded insert	3027W2SAR99A30X
24W7	Threaded insert	3024W7SAR99A30X
36W4	Threaded insert	3036W4SAR99A30X
43W2	Threaded insert	3043W2SAR99A30X
47W1	Threaded insert	3047W1SAR99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAR99A30X
7W2	Threaded insert	3007W2PAR99A30X
11W1	Threaded insert	3011W1PAR99A30X
9W4	Threaded insert	3009W4PAR99A30X
13W3	Threaded insert	3013W3PAR99A30X
17W2	Threaded insert	3017W2PAR99A30X
21W1	Threaded insert	3021W1PAR99A30X
13W6	Threaded insert	3013W6PAR99A30X
17W5	Threaded insert	3017W5PAR99A30X
21WA4	Threaded insert	321WA4PAR99A30X
25W3	Threaded insert	3025W3PAR99A30X
27W2	Threaded insert	3027W2PAR99A30X
24W7	Threaded insert	3024W7PAR99A30X
36W4	Threaded insert	3036W4PAR99A30X
43W2	Threaded insert	3043W2PAR99A30X
47W1	Threaded insert	3047W1PAR99A30X



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1SAR99A40X
7W2	Threaded rear spacer	3007W2SAR99A40X
11W1	Threaded rear spacer	3011W1SAR99A40X
9W4	Threaded rear spacer	3009W4SAR99A40X
13W3	Threaded rear spacer	3013W3SAR99A40X
17W2	Threaded rear spacer	3017W2SAR99A40X
21W1	Threaded rear spacer	3021W1SAR99A40X
13W6	Threaded rear spacer	3013W6SAR99A40X
17W5	Threaded rear spacer	3017W5SAR99A40X
21WA4	Threaded rear spacer	321WA4SAR99A40X
25W3	Threaded rear spacer	3025W3SAR99A40X
27W2	Threaded rear spacer	3027W2SAR99A40X
24W7	Threaded rear spacer	3024W7SAR99A40X
36W4	Threaded rear spacer	3036W4SAR99A40X
43W2	Threaded rear spacer	3043W2SAR99A40X
47W1	Threaded rear spacer	3047W1SAR99A40X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1PAR99A40X
7W2	Threaded rear spacer	3007W2PAR99A40X
11W1	Threaded rear spacer	3011W1PAR99A40X
9W4	Threaded rear spacer	3009W4PAR99A40X
13W3	Threaded rear spacer	3013W3PAR99A40X
17W2	Threaded rear spacer	3017W2PAR99A40X
21W1	Threaded rear spacer	3021W1PAR99A40X
13W6	Threaded rear spacer	3013W6PAR99A40X
17W5	Threaded rear spacer	3017W5PAR99A40X
21WA4	Threaded rear spacer	321WA4PAR99A40X
25W3	Threaded rear spacer	3025W3PAR99A40X
27W2	Threaded rear spacer	3027W2PAR99A40X
24W7	Threaded rear spacer	3024W7PAR99A40X
36W4	Threaded rear spacer	3036W4PAR99A40X
43W2	Threaded rear spacer	3043W2PAR99A40X
47W1	Threaded rear spacer	3047W1PAR99A40X

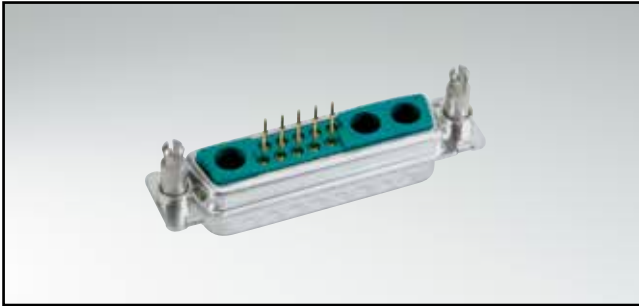


SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1SAR99A50X
7W2	Threaded rear spacer	3007W2SAR99A50X
11W1	Threaded rear spacer	3011W1SAR99A50X
9W4	Threaded rear spacer	3009W4SAR99A50X
13W3	Threaded rear spacer	3013W3SAR99A50X
17W2	Threaded rear spacer	3017W2SAR99A50X
21W1	Threaded rear spacer	3021W1SAR99A50X
13W6	Threaded rear spacer	3013W6SAR99A50X
17W5	Threaded rear spacer	3017W5SAR99A50X
21WA4	Threaded rear spacer	321WA4SAR99A50X
25W3	Threaded rear spacer	3025W3SAR99A50X
27W2	Threaded rear spacer	3027W2SAR99A50X
24W7	Threaded rear spacer	3024W7SAR99A50X
36W4	Threaded rear spacer	3036W4SAR99A50X
43W2	Threaded rear spacer	3043W2SAR99A50X
47W1	Threaded rear spacer	3047W1SAR99A50X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1PAR99A50X
7W2	Threaded rear spacer	3007W2PAR99A50X
11W1	Threaded rear spacer	3011W1PAR99A50X
9W4	Threaded rear spacer	3009W4PAR99A50X
13W3	Threaded rear spacer	3013W3PAR99A50X
17W2	Threaded rear spacer	3017W2PAR99A50X
21W1	Threaded rear spacer	3021W1PAR99A50X
13W6	Threaded rear spacer	3013W6PAR99A50X
17W5	Threaded rear spacer	3017W5PAR99A50X
21WA4	Threaded rear spacer	321WA4PAR99A50X
25W3	Threaded rear spacer	3025W3PAR99A50X
27W2	Threaded rear spacer	3027W2PAR99A50X
24W7	Threaded rear spacer	3024W7PAR99A50X
36W4	Threaded rear spacer	3036W4PAR99A50X
43W2	Threaded rear spacer	3043W2PAR99A50X
47W1	Threaded rear spacer	3047W1PAR99A50X

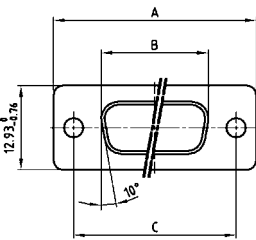
# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR



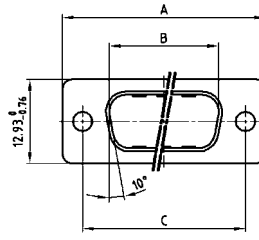
Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

Shell size 1-4

## DESCRIPTION

- **Threaded rear spacer .291" / 7.4 mm**  
(the same installation high as D-SUB Standard on PCB)
- **Mounting styles:**
  - with 4-40 UNC threaded rear spacer with PCB clip (M3 on request)
  - with 4-40 UNC front and threaded rear spacer with PCB clip (M3 on request)  
for PCB thickness .063" / 1.6 mm and .091" / 2.3 mm
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

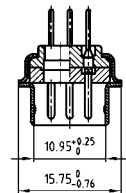
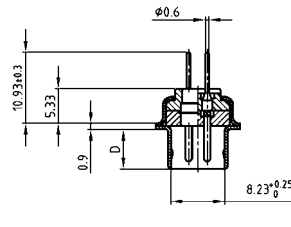
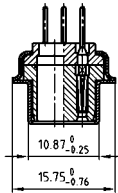
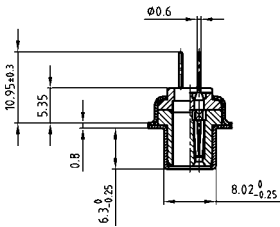
## PLUG CONNECTOR



Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4

Shell size 5



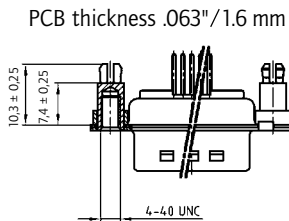
## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99E20X
7W2	Threaded rear spacer PCB clip	3007W2SAR99E20X
11W1	Threaded rear spacer PCB clip	3011W1SAR99E20X
9W4	Threaded rear spacer PCB clip	3009W4SAR99E20X
13W3	Threaded rear spacer PCB clip	3013W3SAR99E20X
17W2	Threaded rear spacer PCB clip	3017W2SAR99E20X
21W1	Threaded rear spacer PCB clip	3021W1SAR99E20X
13W6	Threaded rear spacer PCB clip	3013W6SAR99E20X
17W5	Threaded rear spacer PCB clip	3017W5SAR99E20X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99E20X
25W3	Threaded rear spacer PCB clip	3025W3SAR99E20X
27W2	Threaded rear spacer PCB clip	3027W2SAR99E20X
24W7	Threaded rear spacer PCB clip	3024W7SAR99E20X
36W4	Threaded rear spacer PCB clip	3036W4SAR99E20X
43W2	Threaded rear spacer PCB clip	3043W2SAR99E20X
47W1	Threaded rear spacer PCB clip	3047W1SAR99E20X

### PLUG CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99E20X
7W2	Threaded rear spacer PCB clip	3007W2PAR99E20X
11W1	Threaded rear spacer PCB clip	3011W1PAR99E20X
9W4	Threaded rear spacer PCB clip	3009W4PAR99E20X
13W3	Threaded rear spacer PCB clip	3013W3PAR99E20X
17W2	Threaded rear spacer PCB clip	3017W2PAR99E20X
21W1	Threaded rear spacer PCB clip	3021W1PAR99E20X
13W6	Threaded rear spacer PCB clip	3013W6PAR99E20X
17W5	Threaded rear spacer PCB clip	3017W5PAR99E20X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99E20X
25W3	Threaded rear spacer PCB clip	3025W3PAR99E20X
27W2	Threaded rear spacer PCB clip	3027W2PAR99E20X
24W7	Threaded rear spacer PCB clip	3024W7PAR99E20X
36W4	Threaded rear spacer PCB clip	3036W4PAR99E20X
43W2	Threaded rear spacer PCB clip	3043W2PAR99E20X
47W1	Threaded rear spacer PCB clip	3047W1PAR99E20X

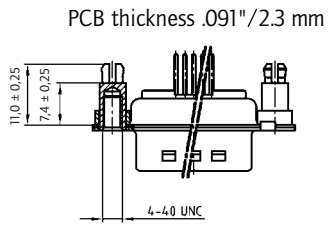


PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

# COMBINATION D-SUB – MOUNTING STYLES

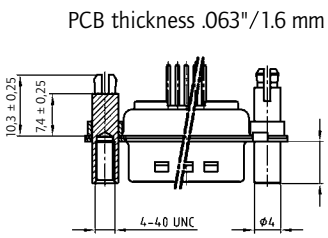
## Solder pin – Straight – Precision machined contacts

ORDER DATA



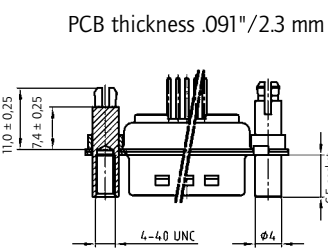
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99E40X
7W2	Threaded rear spacer PCB clip	3007W2SAR99E40X
11W1	Threaded rear spacer PCB clip	3011W1SAR99E40X
9W4	Threaded rear spacer PCB clip	3009W4SAR99E40X
13W3	Threaded rear spacer PCB clip	3013W3SAR99E40X
17W2	Threaded rear spacer PCB clip	3017W2SAR99E40X
21W1	Threaded rear spacer PCB clip	3021W1SAR99E40X
13W6	Threaded rear spacer PCB clip	3013W6SAR99E40X
17W5	Threaded rear spacer PCB clip	3017W5SAR99E40X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99E40X
25W3	Threaded rear spacer PCB clip	3025W3SAR99E40X
27W2	Threaded rear spacer PCB clip	3027W2SAR99E40X
24W7	Threaded rear spacer PCB clip	3024W7SAR99E40X
36W4	Threaded rear spacer PCB clip	3036W4SAR99E40X
43W2	Threaded rear spacer PCB clip	3043W2SAR99E40X
47W1	Threaded rear spacer PCB clip	3047W1SAR99E40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99E40X
7W2	Threaded rear spacer PCB clip	3007W2PAR99E40X
11W1	Threaded rear spacer PCB clip	3011W1PAR99E40X
9W4	Threaded rear spacer PCB clip	3009W4PAR99E40X
13W3	Threaded rear spacer PCB clip	3013W3PAR99E40X
17W2	Threaded rear spacer PCB clip	3017W2PAR99E40X
21W1	Threaded rear spacer PCB clip	3021W1PAR99E40X
13W6	Threaded rear spacer PCB clip	3013W6PAR99E40X
17W5	Threaded rear spacer PCB clip	3017W5PAR99E40X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99E40X
25W3	Threaded rear spacer PCB clip	3025W3PAR99E40X
27W2	Threaded rear spacer PCB clip	3027W2PAR99E40X
24W7	Threaded rear spacer PCB clip	3024W7PAR99E40X
36W4	Threaded rear spacer PCB clip	3036W4PAR99E40X
43W2	Threaded rear spacer PCB clip	3043W2PAR99E40X
47W1	Threaded rear spacer PCB clip	3047W1PAR99E40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1SAR99F20X
7W2	Front/Threaded rear spacer PCB clip	3007W2SAR99F20X
11W1	Front/Threaded rear spacer PCB clip	3011W1SAR99F20X
9W4	Front/Threaded rear spacer PCB clip	3009W4SAR99F20X
13W3	Front/Threaded rear spacer PCB clip	3013W3SAR99F20X
17W2	Front/Threaded rear spacer PCB clip	3017W2SAR99F20X
21W1	Front/Threaded rear spacer PCB clip	3021W1SAR99F20X
13W6	Front/Threaded rear spacer PCB clip	3013W6SAR99F20X
17W5	Front/Threaded rear spacer PCB clip	3017W5SAR99F20X
21WA4	Front/Threaded rear spacer PCB clip	321WA4SAR99F20X
25W3	Front/Threaded rear spacer PCB clip	3025W3SAR99F20X
27W2	Front/Threaded rear spacer PCB clip	3027W2SAR99F20X
24W7	Front/Threaded rear spacer PCB clip	3024W7SAR99F20X
36W4	Front/Threaded rear spacer PCB clip	3036W4SAR99F20X
43W2	Front/Threaded rear spacer PCB clip	3043W2SAR99F20X
47W1	Front/Threaded rear spacer PCB clip	3047W1SAR99F20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1PAR99F20X
7W2	Front/Threaded rear spacer PCB clip	3007W2PAR99F20X
11W1	Front/Threaded rear spacer PCB clip	3011W1PAR99F20X
9W4	Front/Threaded rear spacer PCB clip	3009W4PAR99F20X
13W3	Front/Threaded rear spacer PCB clip	3013W3PAR99F20X
17W2	Front/Threaded rear spacer PCB clip	3017W2PAR99F20X
21W1	Front/Threaded rear spacer PCB clip	3021W1PAR99F20X
13W6	Front/Threaded rear spacer PCB clip	3013W6PAR99F20X
17W5	Front/Threaded rear spacer PCB clip	3017W5PAR99F20X
21WA4	Front/Threaded rear spacer PCB clip	321WA4PAR99F20X
25W3	Front/Threaded rear spacer PCB clip	3025W3PAR99F20X
27W2	Front/Threaded rear spacer PCB clip	3027W2PAR99F20X
24W7	Front/Threaded rear spacer PCB clip	3024W7PAR99F20X
36W4	Front/Threaded rear spacer PCB clip	3036W4PAR99F20X
43W2	Front/Threaded rear spacer PCB clip	3043W2PAR99F20X
47W1	Front/Threaded rear spacer PCB clip	3047W1PAR99F20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1SAR99F40X
7W2	Front/Threaded rear spacer PCB clip	3007W2SAR99F40X
11W1	Front/Threaded rear spacer PCB clip	3011W1SAR99F40X
9W4	Front/Threaded rear spacer PCB clip	3009W4SAR99F40X
13W3	Front/Threaded rear spacer PCB clip	3013W3SAR99F40X
17W2	Front/Threaded rear spacer PCB clip	3017W2SAR99F40X
21W1	Front/Threaded rear spacer PCB clip	3021W1SAR99F40X
13W6	Front/Threaded rear spacer PCB clip	3013W6SAR99F40X
17W5	Front/Threaded rear spacer PCB clip	3017W5SAR99F40X
21WA4	Front/Threaded rear spacer PCB clip	321WA4SAR99F40X
25W3	Front/Threaded rear spacer PCB clip	3025W3SAR99F40X
27W2	Front/Threaded rear spacer PCB clip	3027W2SAR99F40X
24W7	Front/Threaded rear spacer PCB clip	3024W7SAR99F40X
36W4	Front/Threaded rear spacer PCB clip	3036W4SAR99F40X
43W2	Front/Threaded rear spacer PCB clip	3043W2SAR99F40X
47W1	Front/Threaded rear spacer PCB clip	3047W1SAR99F40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front/Threaded rear spacer PCB clip	3005W1PAR99F40X
7W2	Front/Threaded rear spacer PCB clip	3007W2PAR99F40X
11W1	Front/Threaded rear spacer PCB clip	3011W1PAR99F40X
9W4	Front/Threaded rear spacer PCB clip	3009W4PAR99F40X
13W3	Front/Threaded rear spacer PCB clip	3013W3PAR99F40X
17W2	Front/Threaded rear spacer PCB clip	3017W2PAR99F40X
21W1	Front/Threaded rear spacer PCB clip	3021W1PAR99F40X
13W6	Front/Threaded rear spacer PCB clip	3013W6PAR99F40X
17W5	Front/Threaded rear spacer PCB clip	3017W5PAR99F40X
21WA4	Front/Threaded rear spacer PCB clip	321WA4PAR99F40X
25W3	Front/Threaded rear spacer PCB clip	3025W3PAR99F40X
27W2	Front/Threaded rear spacer PCB clip	3027W2PAR99F40X
24W7	Front/Threaded rear spacer PCB clip	3024W7PAR99F40X
36W4	Front/Threaded rear spacer PCB clip	3036W4PAR99F40X
43W2	Front/Threaded rear spacer PCB clip	3043W2PAR99F40X
47W1	Front/Threaded rear spacer PCB clip	3047W1PAR99F40X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts



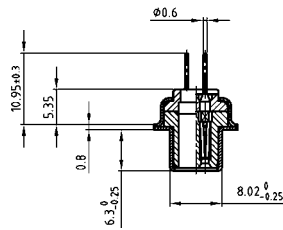
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR

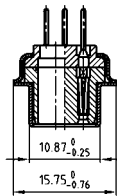


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

Shell size 1-4



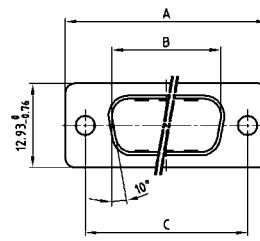
Shell size 5



## DESCRIPTION

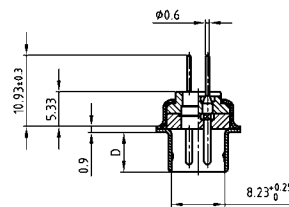
- Threaded rear spacer .256"/6.5 mm
- Mounting style:
  - with 4-40 UNC threaded rear spacer with PCB clip
  - for PCB thickness .063"/1.6 mm
  - for PCB thickness .091"/2.3 mm
  - for PCB thickness .126"/3.2 mm
- M3 and PCB clip with front spacer available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## PLUG CONNECTOR

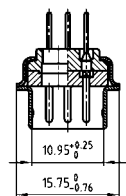


Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4



Shell size 5



## ORDER DATA

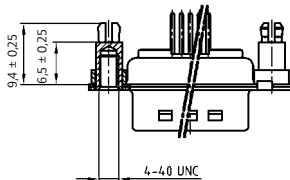
### SOCKET CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99C20X
7W2	Threaded rear spacer PCB clip	3007W2SAR99C20X
11W1	Threaded rear spacer PCB clip	3011W1SAR99C20X
9W4	Threaded rear spacer PCB clip	3009W4SAR99C20X
13W3	Threaded rear spacer PCB clip	3013W3SAR99C20X
17W2	Threaded rear spacer PCB clip	3017W2SAR99C20X
21W1	Threaded rear spacer PCB clip	3021W1SAR99C20X
13W6	Threaded rear spacer PCB clip	3013W6SAR99C20X
17W5	Threaded rear spacer PCB clip	3017W5SAR99C20X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99C20X
25W3	Threaded rear spacer PCB clip	3025W3SAR99C20X
27W2	Threaded rear spacer PCB clip	3027W2SAR99C20X
24W7	Threaded rear spacer PCB clip	3024W7SAR99C20X
36W4	Threaded rear spacer PCB clip	3036W4SAR99C20X
43W2	Threaded rear spacer PCB clip	3043W2SAR99C20X
47W1	Threaded rear spacer PCB clip	3047W1SAR99C20X

### PLUG CONNECTOR

Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99C20X
7W2	Threaded rear spacer PCB clip	3007W2PAR99C20X
11W1	Threaded rear spacer PCB clip	3011W1PAR99C20X
9W4	Threaded rear spacer PCB clip	3009W4PAR99C20X
13W3	Threaded rear spacer PCB clip	3013W3PAR99C20X
17W2	Threaded rear spacer PCB clip	3017W2PAR99C20X
21W1	Threaded rear spacer PCB clip	3021W1PAR99C20X
13W6	Threaded rear spacer PCB clip	3013W6PAR99C20X
17W5	Threaded rear spacer PCB clip	3017W5PAR99C20X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99C20X
25W3	Threaded rear spacer PCB clip	3025W3PAR99C20X
27W2	Threaded rear spacer PCB clip	3027W2PAR99C20X
24W7	Threaded rear spacer PCB clip	3024W7PAR99C20X
36W4	Threaded rear spacer PCB clip	3036W4PAR99C20X
43W2	Threaded rear spacer PCB clip	3043W2PAR99C20X
47W1	Threaded rear spacer PCB clip	3047W1PAR99C20X

PCB thickness .063"/1.6 mm



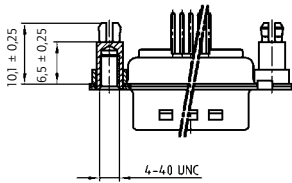
PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter

# COMBINATION D-SUB – MOUNTING STYLES

## Solder pin – Straight – Precision machined contacts

ORDER DATA

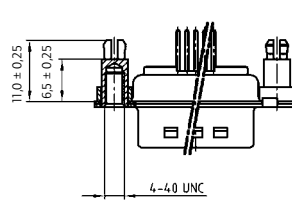
PCB thickness .091"/2.3 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99C40X
7W2	Threaded rear spacer PCB clip	3007W2SAR99C40X
11W1	Threaded rear spacer PCB clip	3011W1SAR99C40X
9W4	Threaded rear spacer PCB clip	3009W4SAR99C40X
13W3	Threaded rear spacer PCB clip	3013W3SAR99C40X
17W2	Threaded rear spacer PCB clip	3017W2SAR99C40X
21W1	Threaded rear spacer PCB clip	3021W1SAR99C40X
13W6	Threaded rear spacer PCB clip	3013W6SAR99C40X
17W5	Threaded rear spacer PCB clip	3017W5SAR99C40X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99C40X
25W3	Threaded rear spacer PCB clip	3025W3SAR99C40X
27W2	Threaded rear spacer PCB clip	3027W2SAR99C40X
24W7	Threaded rear spacer PCB clip	3024W7SAR99C40X
36W4	Threaded rear spacer PCB clip	3036W4SAR99C40X
43W2	Threaded rear spacer PCB clip	3043W2SAR99C40X
47W1	Threaded rear spacer PCB clip	3047W1SAR99C40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99C40X
7W2	Threaded rear spacer PCB clip	3007W2PAR99C40X
11W1	Threaded rear spacer PCB clip	3011W1PAR99C40X
9W4	Threaded rear spacer PCB clip	3009W4PAR99C40X
13W3	Threaded rear spacer PCB clip	3013W3PAR99C40X
17W2	Threaded rear spacer PCB clip	3017W2PAR99C40X
21W1	Threaded rear spacer PCB clip	3021W1PAR99C40X
13W6	Threaded rear spacer PCB clip	3013W6PAR99C40X
17W5	Threaded rear spacer PCB clip	3017W5PAR99C40X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99C40X
25W3	Threaded rear spacer PCB clip	3025W3PAR99C40X
27W2	Threaded rear spacer PCB clip	3027W2PAR99C40X
24W7	Threaded rear spacer PCB clip	3024W7PAR99C40X
36W4	Threaded rear spacer PCB clip	3036W4PAR99C40X
43W2	Threaded rear spacer PCB clip	3043W2PAR99C40X
47W1	Threaded rear spacer PCB clip	3047W1PAR99C40X

PCB thickness .126"/3.2 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1SAR99C60X
7W2	Threaded rear spacer PCB clip	3007W2SAR99C60X
11W1	Threaded rear spacer PCB clip	3011W1SAR99C60X
9W4	Threaded rear spacer PCB clip	3009W4SAR99C60X
13W3	Threaded rear spacer PCB clip	3013W3SAR99C60X
17W2	Threaded rear spacer PCB clip	3017W2SAR99C60X
21W1	Threaded rear spacer PCB clip	3021W1SAR99C60X
13W6	Threaded rear spacer PCB clip	3013W6SAR99C60X
17W5	Threaded rear spacer PCB clip	3017W5SAR99C60X
21WA4	Threaded rear spacer PCB clip	321WA4SAR99C60X
25W3	Threaded rear spacer PCB clip	3025W3SAR99C60X
27W2	Threaded rear spacer PCB clip	3027W2SAR99C60X
24W7	Threaded rear spacer PCB clip	3024W7SAR99C60X
36W4	Threaded rear spacer PCB clip	3036W4SAR99C60X
43W2	Threaded rear spacer PCB clip	3043W2SAR99C60X
47W1	Threaded rear spacer PCB clip	3047W1SAR99C60X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer PCB clip	3005W1PAR99C60X
7W2	Threaded rear spacer PCB clip	3007W2PAR99C60X
11W1	Threaded rear spacer PCB clip	3011W1PAR99C60X
9W4	Threaded rear spacer PCB clip	3009W4PAR99C60X
13W3	Threaded rear spacer PCB clip	3013W3PAR99C60X
17W2	Threaded rear spacer PCB clip	3017W2PAR99C60X
21W1	Threaded rear spacer PCB clip	3021W1PAR99C60X
13W6	Threaded rear spacer PCB clip	3013W6PAR99C60X
17W5	Threaded rear spacer PCB clip	3017W5PAR99C60X
21WA4	Threaded rear spacer PCB clip	321WA4PAR99C60X
25W3	Threaded rear spacer PCB clip	3025W3PAR99C60X
27W2	Threaded rear spacer PCB clip	3027W2PAR99C60X
24W7	Threaded rear spacer PCB clip	3024W7PAR99C60X
36W4	Threaded rear spacer PCB clip	3036W4PAR99C60X
43W2	Threaded rear spacer PCB clip	3043W2PAR99C60X
47W1	Threaded rear spacer PCB clip	3047W1PAR99C60X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

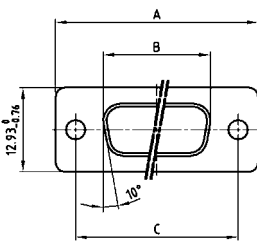
# COMBINATION D-SUB WITH SIGNAL CONTACTS

Press-fit – Straight – Precision machined contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR



Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

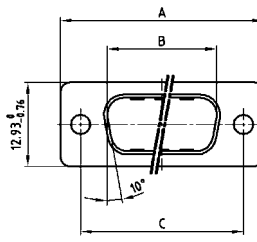
Shell size 1-4

Shell size 5

## DESCRIPTION

- Mounting styles:
  - with 4-40 UNC or M3 threaded rear spacer
  - with M3 or 4-40 UNC rear press-fit spacer
- For .040" / 1.0 mm<sup>+0.003"/0.09 mm</sup><sub>-.002"/0.06 mm</sub> finished through-hole diameter  
Refer to product drawing for details
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)
- For power contacts please contact factory

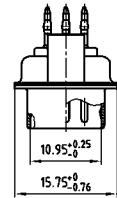
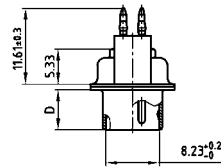
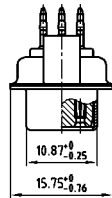
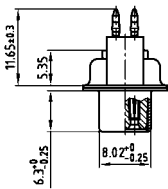
## PLUG CONNECTOR



Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4

Shell size 5



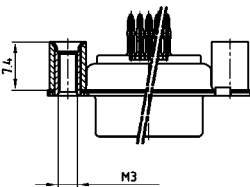
## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1SAP99A70X
7W2	Threaded rear spacer	3007W2SAP99A70X
11W1	Threaded rear spacer	3011W1SAP99A70X
9W4	Threaded rear spacer	3009W4SAP99A70X
13W3	Threaded rear spacer	3013W3SAP99A70X
17W2	Threaded rear spacer	3017W2SAP99A70X
21W1	Threaded rear spacer	3021W1SAP99A70X
13W6	Threaded rear spacer	3013W6SAP99A70X
17W5	Threaded rear spacer	3017W5SAP99A70X
21WA4	Threaded rear spacer	321WA4SAP99A70X
25W3	Threaded rear spacer	3025W3SAP99A70X
27W2	Threaded rear spacer	3027W2SAP99A70X
24W7	Threaded rear spacer	3024W7SAP99A70X
36W4	Threaded rear spacer	3036W4SAP99A70X
43W2	Threaded rear spacer	3043W2SAP99A70X
47W1	Threaded rear spacer	3047W1SAP99A70X

### PLUG CONNECTOR

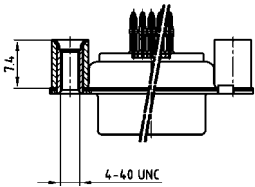
Design	Mounting style M3	Part Number
5W1	Threaded rear spacer	3005W1PAP99A70X
7W2	Threaded rear spacer	3007W2PAP99A70X
11W1	Threaded rear spacer	3011W1PAP99A70X
9W4	Threaded rear spacer	3009W4PAP99A70X
13W3	Threaded rear spacer	3013W3PAP99A70X
17W2	Threaded rear spacer	3017W2PAP99A70X
21W1	Threaded rear spacer	3021W1PAP99A70X
13W6	Threaded rear spacer	3013W6PAP99A70X
17W5	Threaded rear spacer	3017W5PAP99A70X
21WA4	Threaded rear spacer	321WA4PAP99A70X
25W3	Threaded rear spacer	3025W3PAP99A70X
27W2	Threaded rear spacer	3027W2PAP99A70X
24W7	Threaded rear spacer	3024W7PAP99A70X
36W4	Threaded rear spacer	3036W4PAP99A70X
43W2	Threaded rear spacer	3043W2PAP99A70X
47W1	Threaded rear spacer	3047W1PAP99A70X



# COMBINATION D-SUB – MOUNTING STYLES

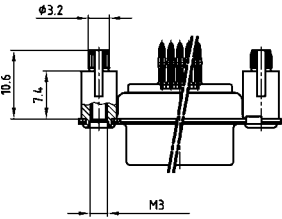
Press-fit – Straight – Precision machined contacts

ORDER DATA



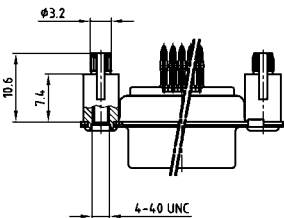
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1SAP99A80X
7W2	Threaded rear spacer	3007W2SAP99A80X
11W1	Threaded rear spacer	3011W1SAP99A80X
9W4	Threaded rear spacer	3009W4SAP99A80X
13W3	Threaded rear spacer	3013W3SAP99A80X
17W2	Threaded rear spacer	3017W2SAP99A80X
21W1	Threaded rear spacer	3021W1SAP99A80X
13W6	Threaded rear spacer	3013W6SAP99A80X
17W5	Threaded rear spacer	3017W5SAP99A80X
21WA4	Threaded rear spacer	321WA4SAP99A80X
25W3	Threaded rear spacer	3025W3SAP99A80X
27W2	Threaded rear spacer	3027W2SAP99A80X
24W7	Threaded rear spacer	3024W7SAP99A80X
36W4	Threaded rear spacer	3036W4SAP99A80X
43W2	Threaded rear spacer	3043W2SAP99A80X
47W1	Threaded rear spacer	3047W1SAP99A80X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded rear spacer	3005W1PAP99A80X
7W2	Threaded rear spacer	3007W2PAP99A80X
11W1	Threaded rear spacer	3011W1PAP99A80X
9W4	Threaded rear spacer	3009W4PAP99A80X
13W3	Threaded rear spacer	3013W3PAP99A80X
17W2	Threaded rear spacer	3017W2PAP99A80X
21W1	Threaded rear spacer	3021W1PAP99A80X
13W6	Threaded rear spacer	3013W6PAP99A80X
17W5	Threaded rear spacer	3017W5PAP99A80X
21WA4	Threaded rear spacer	321WA4PAP99A80X
25W3	Threaded rear spacer	3025W3PAP99A80X
27W2	Threaded rear spacer	3027W2PAP99A80X
24W7	Threaded rear spacer	3024W7PAP99A80X
36W4	Threaded rear spacer	3036W4PAP99A80X
43W2	Threaded rear spacer	3043W2PAP99A80X
47W1	Threaded rear spacer	3047W1PAP99A80X



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Rear press-fit spacer	3005W1SAP99W10X
7W2	Rear press-fit spacer	3007W2SAP99W10X
11W1	Rear press-fit spacer	3011W1SAP99W10X
9W4	Rear press-fit spacer	3009W4SAP99W10X
13W3	Rear press-fit spacer	3013W3SAP99W10X
17W2	Rear press-fit spacer	3017W2SAP99W10X
21W1	Rear press-fit spacer	3021W1SAP99W10X
13W6	Rear press-fit spacer	3013W6SAP99W10X
17W5	Rear press-fit spacer	3017W5SAP99W10X
21WA4	Rear press-fit spacer	321WA4SAP99W10X
25W3	Rear press-fit spacer	3025W3SAP99W10X
27W2	Rear press-fit spacer	3027W2SAP99W10X
24W7	Rear press-fit spacer	3024W7SAP99W10X
36W4	Rear press-fit spacer	3036W4SAP99W10X
43W2	Rear press-fit spacer	3043W2SAP99W10X
47W1	Rear press-fit spacer	3047W1SAP99W10X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Rear press-fit spacer	3005W1PAP99W10X
7W2	Rear press-fit spacer	3007W2PAP99W10X
11W1	Rear press-fit spacer	3011W1PAP99W10X
9W4	Rear press-fit spacer	3009W4PAP99W10X
13W3	Rear press-fit spacer	3013W3PAP99W10X
17W2	Rear press-fit spacer	3017W2PAP99W10X
21W1	Rear press-fit spacer	3021W1PAP99W10X
13W6	Rear press-fit spacer	3013W6PAP99W10X
17W5	Rear press-fit spacer	3017W5PAP99W10X
21WA4	Rear press-fit spacer	321WA4PAP99W10X
25W3	Rear press-fit spacer	3025W3PAP99W10X
27W2	Rear press-fit spacer	3027W2PAP99W10X
24W7	Rear press-fit spacer	3024W7PAP99W10X
36W4	Rear press-fit spacer	3036W4PAP99W10X
43W2	Rear press-fit spacer	3043W2PAP99W10X
47W1	Rear press-fit spacer	3047W1PAP99W10X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Rear press-fit spacer	3005W1SAP99W20X
7W2	Rear press-fit spacer	3007W2SAP99W20X
11W1	Rear press-fit spacer	3011W1SAP99W20X
9W4	Rear press-fit spacer	3009W4SAP99W20X
13W3	Rear press-fit spacer	3013W3SAP99W20X
17W2	Rear press-fit spacer	3017W2SAP99W20X
21W1	Rear press-fit spacer	3021W1SAP99W20X
13W6	Rear press-fit spacer	3013W6SAP99W20X
17W5	Rear press-fit spacer	3017W5SAP99W20X
21WA4	Rear press-fit spacer	321WA4SAP99W20X
25W3	Rear press-fit spacer	3025W3SAP99W20X
27W2	Rear press-fit spacer	3027W2SAP99W20X
24W7	Rear press-fit spacer	3024W7SAP99W20X
36W4	Rear press-fit spacer	3036W4SAP99W20X
43W2	Rear press-fit spacer	3043W2SAP99W20X
47W1	Rear press-fit spacer	3047W1SAP99W20X

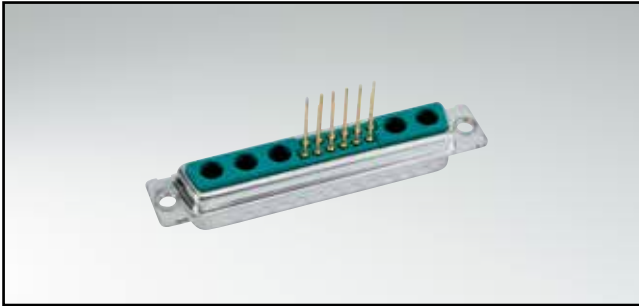
PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Rear press-fit spacer	3005W1PAP99W20X
7W2	Rear press-fit spacer	3007W2PAP99W20X
11W1	Rear press-fit spacer	3011W1PAP99W20X
9W4	Rear press-fit spacer	3009W4PAP99W20X
13W3	Rear press-fit spacer	3013W3PAP99W20X
17W2	Rear press-fit spacer	3017W2PAP99W20X
21W1	Rear press-fit spacer	3021W1PAP99W20X
13W6	Rear press-fit spacer	3013W6PAP99W20X
17W5	Rear press-fit spacer	3017W5PAP99W20X
21WA4	Rear press-fit spacer	321WA4PAP99W20X
25W3	Rear press-fit spacer	3025W3PAP99W20X
27W2	Rear press-fit spacer	3027W2PAP99W20X
24W7	Rear press-fit spacer	3024W7PAP99W20X
36W4	Rear press-fit spacer	3036W4PAP99W20X
43W2	Rear press-fit spacer	3043W2PAP99W20X
47W1	Rear press-fit spacer	3047W1PAP99W20X

Rear press-fit spacer (snap in) .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness



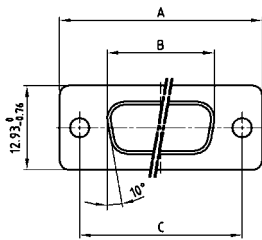
# COMBINATION D-SUB WITH SIGNAL CONTACTS

Wire wrap – Precision machined contacts



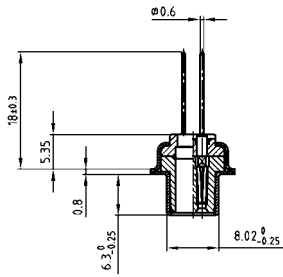
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR

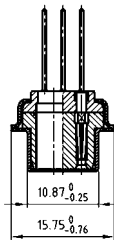


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

Shell size 1-4



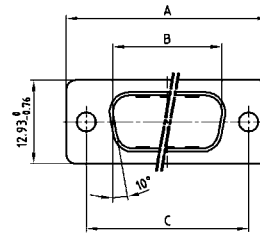
Shell size 5



## DESCRIPTION

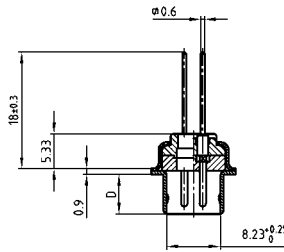
- Mounting styles:
  - with through-hole, Ø .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## PLUG CONNECTOR

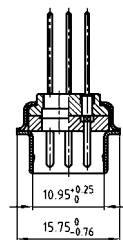


Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

Shell size 1-4



Shell size 5



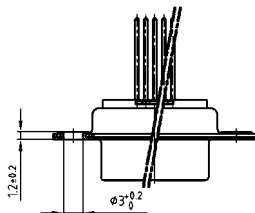
## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style	Part Number
5W1	Through-hole	3005W1SAN99A10X
7W2	Through-hole	3007W2SAN99A10X
11W1	Through-hole	3011W1SAN99A10X
9W4	Through-hole	3009W4SAN99A10X
13W3	Through-hole	3013W3SAN99A10X
17W2	Through-hole	3017W2SAN99A10X
21W1	Through-hole	3021W1SAN99A10X
13W6	Through-hole	3013W6SAN99A10X
17W5	Through-hole	3017W5SAN99A10X
21WA4	Through-hole	321WA4SAN99A10X
25W3	Through-hole	3025W3SAN99A10X
27W2	Through-hole	3027W2SAN99A10X
24W7	Through-hole	3024W7SAN99A10X
36W4	Through-hole	3036W4SAN99A10X
43W2	Through-hole	3043W2SAN99A10X
47W1	Through-hole	3047W1SAN99A10X

### PLUG CONNECTOR

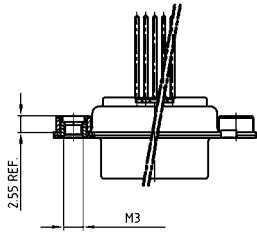
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PAN99A10X
7W2	Through-hole	3007W2PAN99A10X
11W1	Through-hole	3011W1PAN99A10X
9W4	Through-hole	3009W4PAN99A10X
13W3	Through-hole	3013W3PAN99A10X
17W2	Through-hole	3017W2PAN99A10X
21W1	Through-hole	3021W1PAN99A10X
13W6	Through-hole	3013W6PAN99A10X
17W5	Through-hole	3017W5PAN99A10X
21WA4	Through-hole	321WA4PAN99A10X
25W3	Through-hole	3025W3PAN99A10X
27W2	Through-hole	3027W2PAN99A10X
24W7	Through-hole	3024W7PAN99A10X
36W4	Through-hole	3036W4PAN99A10X
43W2	Through-hole	3043W2PAN99A10X
47W1	Through-hole	3047W1PAN99A10X



# COMBINATION D-SUB – MOUNTING STYLES

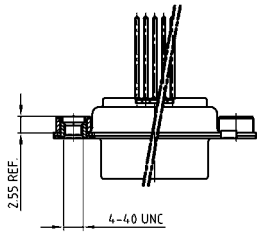
Wire wrap – Precision machined contacts

ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SAN99A20X
7W2	Threaded insert	3007W2SAN99A20X
11W1	Threaded insert	3011W1SAN99A20X
9W4	Threaded insert	3009W4SAN99A20X
13W3	Threaded insert	3013W3SAN99A20X
17W2	Threaded insert	3017W2SAN99A20X
21W1	Threaded insert	3021W1SAN99A20X
13W6	Threaded insert	3013W6SAN99A20X
17W5	Threaded insert	3017W5SAN99A20X
21WA4	Threaded insert	321WA4SAN99A20X
25W3	Threaded insert	3025W3SAN99A20X
27W2	Threaded insert	3027W2SAN99A20X
24W7	Threaded insert	3024W7SAN99A20X
36W4	Threaded insert	3036W4SAN99A20X
43W2	Threaded insert	3043W2SAN99A20X
47W1	Threaded insert	3047W1SAN99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PAN99A20X
7W2	Threaded insert	3007W2PAN99A20X
11W1	Threaded insert	3011W1PAN99A20X
9W4	Threaded insert	3009W4PAN99A20X
13W3	Threaded insert	3013W3PAN99A20X
17W2	Threaded insert	3017W2PAN99A20X
21W1	Threaded insert	3021W1PAN99A20X
13W6	Threaded insert	3013W6PAN99A20X
17W5	Threaded insert	3017W5PAN99A20X
21WA4	Threaded insert	321WA4PAN99A20X
25W3	Threaded insert	3025W3PAN99A20X
27W2	Threaded insert	3027W2PAN99A20X
24W7	Threaded insert	3024W7PAN99A20X
36W4	Threaded insert	3036W4PAN99A20X
43W2	Threaded insert	3043W2PAN99A20X
47W1	Threaded insert	3047W1PAN99A20X

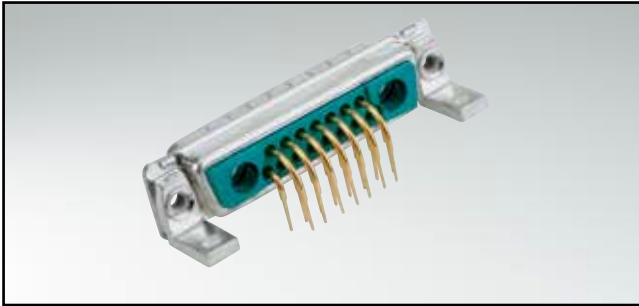


SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAN99A30X
7W2	Threaded insert	3007W2SAN99A30X
11W1	Threaded insert	3011W1SAN99A30X
9W4	Threaded insert	3009W4SAN99A30X
13W3	Threaded insert	3013W3SAN99A30X
17W2	Threaded insert	3017W2SAN99A30X
21W1	Threaded insert	3021W1SAN99A30X
13W6	Threaded insert	3013W6SAN99A30X
17W5	Threaded insert	3017W5SAN99A30X
21WA4	Threaded insert	321WA4SAN99A30X
25W3	Threaded insert	3025W3SAN99A30X
27W2	Threaded insert	3027W2SAN99A30X
24W7	Threaded insert	3024W7SAN99A30X
36W4	Threaded insert	3036W4SAN99A30X
43W2	Threaded insert	3043W2SAN99A30X
47W1	Threaded insert	3047W1SAN99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAN99A30X
7W2	Threaded insert	3007W2PAN99A30X
11W1	Threaded insert	3011W1PAN99A30X
9W4	Threaded insert	3009W4PAN99A30X
13W3	Threaded insert	3013W3PAN99A30X
17W2	Threaded insert	3017W2PAN99A30X
21W1	Threaded insert	3021W1PAN99A30X
13W6	Threaded insert	3013W6PAN99A30X
17W5	Threaded insert	3017W5PAN99A30X
21WA4	Threaded insert	321WA4PAN99A30X
25W3	Threaded insert	3025W3PAN99A30X
27W2	Threaded insert	3027W2PAN99A30X
24W7	Threaded insert	3024W7PAN99A30X
36W4	Threaded insert	3036W4PAN99A30X
43W2	Threaded insert	3043W2PAN99A30X
47W1	Threaded insert	3047W1PAN99A30X

# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Angled – .318" / 7.19 mm – Precision machined contacts – Metal bracket

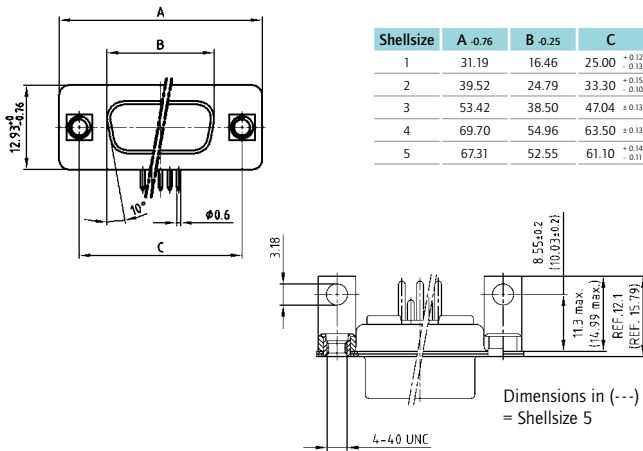


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

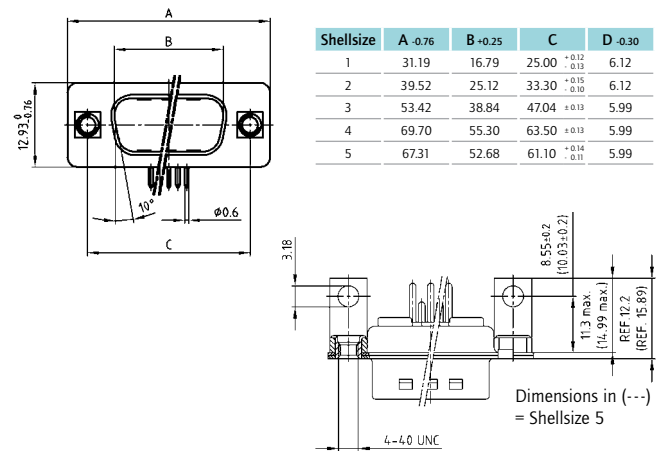
## DESCRIPTION

- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket and 4-40 UNC front spacer
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

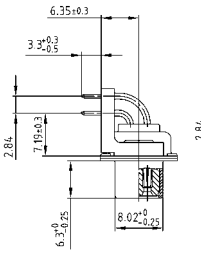
## SOCKET CONNECTOR



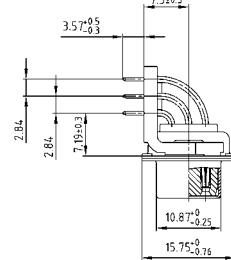
## PLUG CONNECTOR



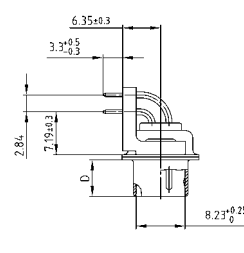
Shell size 1-4



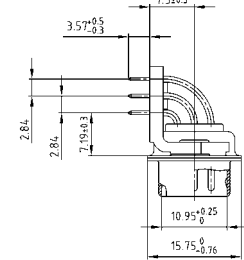
Shell size 5



Shell size 1-4



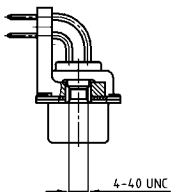
Shell size 5



## ORDER DATA

SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAT99N20X
7W2	Threaded insert	3007W2SAT99N20X
11W1	Threaded insert	3011W1SAT99N20X
9W4	Threaded insert	3009W4SAT99N20X
13W3	Threaded insert	3013W3SAT99N20X
17W2	Threaded insert	3017W2SAT99N20X
21W1	Threaded insert	3021W1SAT99N20X
13W6	Threaded insert	3013W6SAT99N20X
17W5	Threaded insert	3017W5SAT99N20X
21WA4	Threaded insert	321WA4SAT99N20X
25W3	Threaded insert	3025W3SAT99N20X
27W2	Threaded insert	3027W2SAT99N20X
24W7	Threaded insert	3024W7SAT99N20X
36W4	Threaded insert	3036W4SAT99N20X
43W2	Threaded insert	3043W2SAT99N20X
47W1	Threaded insert	3047W1SAT99N20X

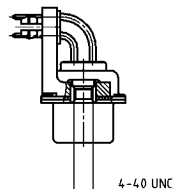
PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAT99N20X
7W2	Threaded insert	3007W2PAT99N20X
11W1	Threaded insert	3011W1PAT99N20X
9W4	Threaded insert	3009W4PAT99N20X
13W3	Threaded insert	3013W3PAT99N20X
17W2	Threaded insert	3017W2PAT99N20X
21W1	Threaded insert	3021W1PAT99N20X
13W6	Threaded insert	3013W6PAT99N20X
17W5	Threaded insert	3017W5PAT99N20X
21WA4	Threaded insert	321WA4PAT99N20X
25W3	Threaded insert	3025W3PAT99N20X
27W2	Threaded insert	3027W2PAT99N20X
24W7	Threaded insert	3024W7PAT99N20X
36W4	Threaded insert	3036W4PAT99N20X
43W2	Threaded insert	3043W2PAT99N20X
47W1	Threaded insert	3047W1PAT99N20X



# COMBINATION D-SUB – MOUNTING STYLES

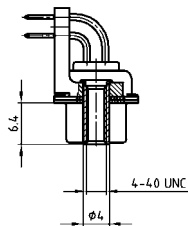
Solder pin – Angled – .318" / 7.19 mm – Precision machined contacts – Metal bracket

ORDER DATA



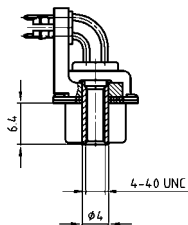
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1SAT99N40X
7W2	Threaded insert / PCB clip	3007W2SAT99N40X
11W1	Threaded insert / PCB clip	3011W1SAT99N40X
9W4	Threaded insert / PCB clip	3009W4SAT99N40X
13W3	Threaded insert / PCB clip	3013W3SAT99N40X
17W2	Threaded insert / PCB clip	3017W2SAT99N40X
21W1	Threaded insert / PCB clip	3021W1SAT99N40X
13W6	Threaded insert / PCB clip	3013W6SAT99N40X
17W5	Threaded insert / PCB clip	3017W5SAT99N40X
21WA4	Threaded insert / PCB clip	321WA4SAT99N40X
25W3	Threaded insert / PCB clip	3025W3SAT99N40X
27W2	Threaded insert / PCB clip	3027W2SAT99N40X
24W7	Threaded insert / PCB clip	3024W7SAT99N40X
36W4	Threaded insert / PCB clip	3036W4SAT99N40X
43W2	Threaded insert / PCB clip	3043W2SAT99N40X
47W1	Threaded insert / PCB clip	3047W1SAT99N40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1PAT99N40X
7W2	Threaded insert / PCB clip	3007W2PAT99N40X
11W1	Threaded insert / PCB clip	3011W1PAT99N40X
9W4	Threaded insert / PCB clip	3009W4PAT99N40X
13W3	Threaded insert / PCB clip	3013W3PAT99N40X
17W2	Threaded insert / PCB clip	3017W2PAT99N40X
21W1	Threaded insert / PCB clip	3021W1PAT99N40X
13W6	Threaded insert / PCB clip	3013W6PAT99N40X
17W5	Threaded insert / PCB clip	3017W5PAT99N40X
21WA4	Threaded insert / PCB clip	321WA4PAT99N40X
25W3	Threaded insert / PCB clip	3025W3PAT99N40X
27W2	Threaded insert / PCB clip	3027W2PAT99N40X
24W7	Threaded insert / PCB clip	3024W7PAT99N40X
36W4	Threaded insert / PCB clip	3036W4PAT99N40X
43W2	Threaded insert / PCB clip	3043W2PAT99N40X
47W1	Threaded insert / PCB clip	3047W1PAT99N40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1SAT99P20X
7W2	Front spacer	3007W2SAT99P20X
11W1	Front spacer	3011W1SAT99P20X
9W4	Front spacer	3009W4SAT99P20X
13W3	Front spacer	3013W3SAT99P20X
17W2	Front spacer	3017W2SAT99P20X
21W1	Front spacer	3021W1SAT99P20X
13W6	Front spacer	3013W6SAT99P20X
17W5	Front spacer	3017W5SAT99P20X
21WA4	Front spacer	321WA4SAT99P20X
25W3	Front spacer	3025W3SAT99P20X
27W2	Front spacer	3027W2SAT99P20X
24W7	Front spacer	3024W7SAT99P20X
36W4	Front spacer	3036W4SAT99P20X
43W2	Front spacer	3043W2SAT99P20X
47W1	Front spacer	3047W1SAT99P20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1PAT99P20X
7W2	Front spacer	3007W2PAT99P20X
11W1	Front spacer	3011W1PAT99P20X
9W4	Front spacer	3009W4PAT99P20X
13W3	Front spacer	3013W3PAT99P20X
17W2	Front spacer	3017W2PAT99P20X
21W1	Front spacer	3021W1PAT99P20X
13W6	Front spacer	3013W6PAT99P20X
17W5	Front spacer	3017W5PAT99P20X
21WA4	Front spacer	321WA4PAT99P20X
25W3	Front spacer	3025W3PAT99P20X
27W2	Front spacer	3027W2PAT99P20X
24W7	Front spacer	3024W7PAT99P20X
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43W2	Front spacer	3043W2PAT99P20X
47W1	Front spacer	3047W1PAT99P20X



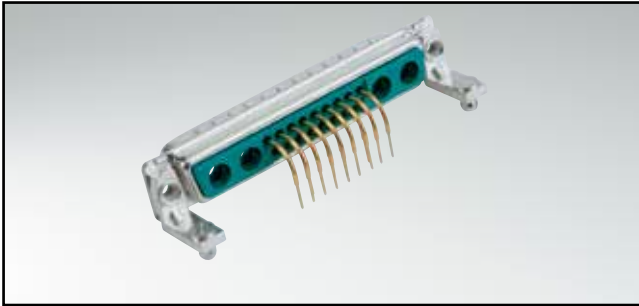
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1SAT99P40X
7W2	Front spacer / PCB clip	3007W2SAT99P40X
11W1	Front spacer / PCB clip	3011W1SAT99P40X
9W4	Front spacer / PCB clip	3009W4SAT99P40X
13W3	Front spacer / PCB clip	3013W3SAT99P40X
17W2	Front spacer / PCB clip	3017W2SAT99P40X
21W1	Front spacer / PCB clip	3021W1SAT99P40X
13W6	Front spacer / PCB clip	3013W6SAT99P40X
17W5	Front spacer / PCB clip	3017W5SAT99P40X
21WA4	Front spacer / PCB clip	321WA4SAT99P40X
25W3	Front spacer / PCB clip	3025W3SAT99P40X
27W2	Front spacer / PCB clip	3027W2SAT99P40X
24W7	Front spacer / PCB clip	3024W7SAT99P40X
36W4	Front spacer / PCB clip	3036W4SAT99P40X
43W2	Front spacer / PCB clip	3043W2SAT99P40X
47W1	Front spacer / PCB clip	3047W1SAT99P40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1PAT99P40X
7W2	Front spacer / PCB clip	3007W2PAT99P40X
11W1	Front spacer / PCB clip	3011W1PAT99P40X
9W4	Front spacer / PCB clip	3009W4PAT99P40X
13W3	Front spacer / PCB clip	3013W3PAT99P40X
17W2	Front spacer / PCB clip	3017W2PAT99P40X
21W1	Front spacer / PCB clip	3021W1PAT99P40X
13W6	Front spacer / PCB clip	3013W6PAT99P40X
17W5	Front spacer / PCB clip	3017W5PAT99P40X
21WA4	Front spacer / PCB clip	321WA4PAT99P40X
25W3	Front spacer / PCB clip	3025W3PAT99P40X
27W2	Front spacer / PCB clip	3027W2PAT99P40X
24W7	Front spacer / PCB clip	3024W7PAT99P40X
36W4	Front spacer / PCB clip	3036W4PAT99P40X
43W2	Front spacer / PCB clip	3043W2PAT99P40X
47W1	Front spacer / PCB clip	3047W1PAT99P40X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

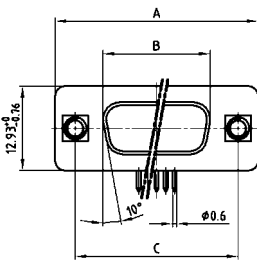
# COMBINATION D-SUB WITH SIGNAL CONTACTS

Solder pin – Angled – .370"/9.4 mm – Precision machined contacts – Metal bracket

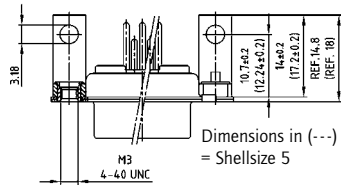


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR

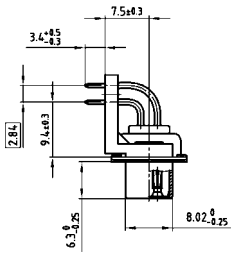


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup> / <sub>-0.10</sub>
4	69.70	54.96	63.50 <sup>+0.13</sup> / <sub>-0.14</sub>
5	67.31	52.55	61.10 <sup>+0.14</sup> / <sub>-0.11</sub>

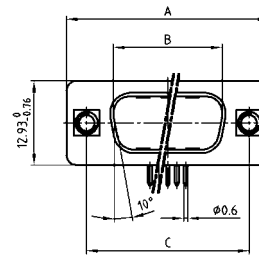
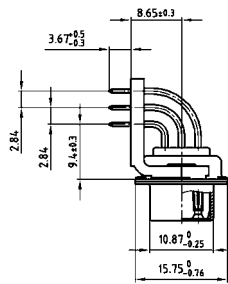


Dimensions in (---)  
= Shellsize 5

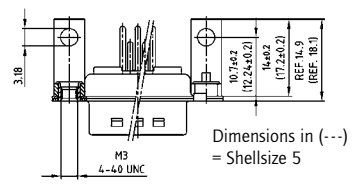
Shell size 1-4



Shell size 5

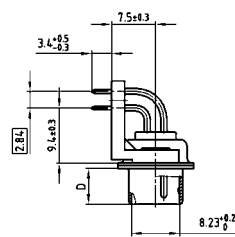


Shellsize	A -0.76	B -0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup> / <sub>-0.10</sub>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup> / <sub>-0.14</sub>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> / <sub>-0.11</sub>	5.99

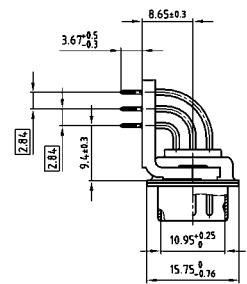


Dimensions in (---)  
= Shellsize 5

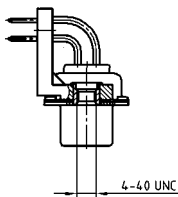
Shell size 1-4



Shell size 5



## ORDER DATA



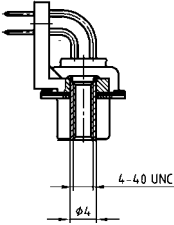
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SAU99G20X
7W2	Threaded insert	3007W2SAU99G20X
11W1	Threaded insert	3011W1SAU99G20X
9W4	Threaded insert	3009W4SAU99G20X
13W3	Threaded insert	3013W3SAU99G20X
17W2	Threaded insert	3017W2SAU99G20X
21W1	Threaded insert	3021W1SAU99G20X
13W6	Threaded insert	3013W6SAU99G20X
17W5	Threaded insert	3017W5SAU99G20X
21WA4	Threaded insert	321WA4SAU99G20X
25W3	Threaded insert	3025W3SAU99G20X
27W2	Threaded insert	3027W2SAU99G20X
24W7	Threaded insert	3024W7SAU99G20X
36W4	Threaded insert	3036W4SAU99G20X
43W2	Threaded insert	3043W2SAU99G20X
47W1	Threaded insert	3047W1SAU99G20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PAU99G20X
7W2	Threaded insert	3007W2PAU99G20X
11W1	Threaded insert	3011W1PAU99G20X
9W4	Threaded insert	3009W4PAU99G20X
13W3	Threaded insert	3013W3PAU99G20X
17W2	Threaded insert	3017W2PAU99G20X
21W1	Threaded insert	3021W1PAU99G20X
13W6	Threaded insert	3013W6PAU99G20X
17W5	Threaded insert	3017W5PAU99G20X
21WA4	Threaded insert	321WA4PAU99G20X
25W3	Threaded insert	3025W3PAU99G20X
27W2	Threaded insert	3027W2PAU99G20X
24W7	Threaded insert	3024W7PAU99G20X
36W4	Threaded insert	3036W4PAU99G20X
43W2	Threaded insert	3043W2PAU99G20X
47W1	Threaded insert	3047W1PAU99G20X

# COMBINATION D-SUB – MOUNTING STYLES

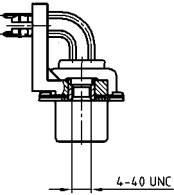
Solder pin – Angled – .370" / 9.4 mm – Precision machined contacts – Metal bracket

ORDER DATA



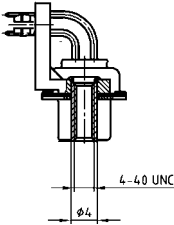
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1SAU99H20X
7W2	Front spacer	3007W2SAU99H20X
11W1	Front spacer	3011W1SAU99H20X
9W4	Front spacer	3009W4SAU99H20X
13W3	Front spacer	3013W3SAU99H20X
17W2	Front spacer	3017W2SAU99H20X
21W1	Front spacer	3021W1SAU99H20X
13W6	Front spacer	3013W6SAU99H20X
17W5	Front spacer	3017W5SAU99H20X
21WA4	Front spacer	321WA4SAU99H20X
25W3	Front spacer	3025W3SAU99H20X
27W2	Front spacer	3027W2SAU99H20X
24W7	Front spacer	3024W7SAU99H20X
36W4	Front spacer	3036W4SAU99H20X
43W2	Front spacer	3043W2SAU99H20X
47W1	Front spacer	3047W1SAU99H20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer	3005W1PAU99H20X
7W2	Front spacer	3007W2PAU99H20X
11W1	Front spacer	3011W1PAU99H20X
9W4	Front spacer	3009W4PAU99H20X
13W3	Front spacer	3013W3PAU99H20X
17W2	Front spacer	3017W2PAU99H20X
21W1	Front spacer	3021W1PAU99H20X
13W6	Front spacer	3013W6PAU99H20X
17W5	Front spacer	3017W5PAU99H20X
21WA4	Front spacer	321WA4PAU99H20X
25W3	Front spacer	3025W3PAU99H20X
27W2	Front spacer	3027W2PAU99H20X
24W7	Front spacer	3024W7PAU99H20X
36W4	Front spacer	3036W4PAU99H20X
43W2	Front spacer	3043W2PAU99H20X
47W1	Front spacer	3047W1PAU99H20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1SAU99G40X
7W2	Threaded insert / PCB clip	3007W2SAU99G40X
11W1	Threaded insert / PCB clip	3011W1SAU99G40X
9W4	Threaded insert / PCB clip	3009W4SAU99G40X
13W3	Threaded insert / PCB clip	3013W3SAU99G40X
17W2	Threaded insert / PCB clip	3017W2SAU99G40X
21W1	Threaded insert / PCB clip	3021W1SAU99G40X
13W6	Threaded insert / PCB clip	3013W6SAU99G40X
17W5	Threaded insert / PCB clip	3017W5SAU99G40X
21WA4	Threaded insert / PCB clip	321WA4SAU99G40X
25W3	Threaded insert / PCB clip	3025W3SAU99G40X
27W2	Threaded insert / PCB clip	3027W2SAU99G40X
24W7	Threaded insert / PCB clip	3024W7SAU99G40X
36W4	Threaded insert / PCB clip	3036W4SAU99G40X
43W2	Threaded insert / PCB clip	3043W2SAU99G40X
47W1	Threaded insert / PCB clip	3047W1SAU99G40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert / PCB clip	3005W1PAU99G40X
7W2	Threaded insert / PCB clip	3007W2PAU99G40X
11W1	Threaded insert / PCB clip	3011W1PAU99G40X
9W4	Threaded insert / PCB clip	3009W4PAU99G40X
13W3	Threaded insert / PCB clip	3013W3PAU99G40X
17W2	Threaded insert / PCB clip	3017W2PAU99G40X
21W1	Threaded insert / PCB clip	3021W1PAU99G40X
13W6	Threaded insert / PCB clip	3013W6PAU99G40X
17W5	Threaded insert / PCB clip	3017W5PAU99G40X
21WA4	Threaded insert / PCB clip	321WA4PAU99G40X
25W3	Threaded insert / PCB clip	3025W3PAU99G40X
27W2	Threaded insert / PCB clip	3027W2PAU99G40X
24W7	Threaded insert / PCB clip	3024W7PAU99G40X
36W4	Threaded insert / PCB clip	3036W4PAU99G40X
43W2	Threaded insert / PCB clip	3043W2PAU99G40X
47W1	Threaded insert / PCB clip	3047W1PAU99G40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1SAU99H40X
7W2	Front spacer / PCB clip	3007W2SAU99H40X
11W1	Front spacer / PCB clip	3011W1SAU99H40X
9W4	Front spacer / PCB clip	3009W4SAU99H40X
13W3	Front spacer / PCB clip	3013W3SAU99H40X
17W2	Front spacer / PCB clip	3017W2SAU99H40X
21W1	Front spacer / PCB clip	3021W1SAU99H40X
13W6	Front spacer / PCB clip	3013W6SAU99H40X
17W5	Front spacer / PCB clip	3017W5SAU99H40X
21WA4	Front spacer / PCB clip	321WA4SAU99H40X
25W3	Front spacer / PCB clip	3025W3SAU99H40X
27W2	Front spacer / PCB clip	3027W2SAU99H40X
24W7	Front spacer / PCB clip	3024W7SAU99H40X
36W4	Front spacer / PCB clip	3036W4SAU99H40X
43W2	Front spacer / PCB clip	3043W2SAU99H40X
47W1	Front spacer / PCB clip	3047W1SAU99H40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Front spacer / PCB clip	3005W1PAU99H40X
7W2	Front spacer / PCB clip	3007W2PAU99H40X
11W1	Front spacer / PCB clip	3011W1PAU99H40X
9W4	Front spacer / PCB clip	3009W4PAU99H40X
13W3	Front spacer / PCB clip	3013W3PAU99H40X
17W2	Front spacer / PCB clip	3017W2PAU99H40X
21W1	Front spacer / PCB clip	3021W1PAU99H40X
13W6	Front spacer / PCB clip	3013W6PAU99H40X
17W5	Front spacer / PCB clip	3017W5PAU99H40X
21WA4	Front spacer / PCB clip	321WA4PAU99H40X
25W3	Front spacer / PCB clip	3025W3PAU99H40X
27W2	Front spacer / PCB clip	3027W2PAU99H40X
24W7	Front spacer / PCB clip	3024W7PAU99H40X
36W4	Front spacer / PCB clip	3036W4PAU99H40X
43W2	Front spacer / PCB clip	3043W2PAU99H40X
47W1	Front spacer / PCB clip	3047W1PAU99H40X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB HIGH DENSITY WITH SIGNAL CONTACTS

Solder cup – Precision machined contacts – For wire size AWG 22

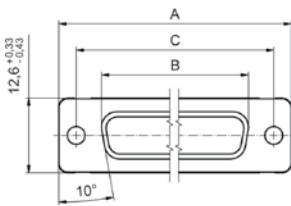


RoHS compliant

## DESCRIPTION

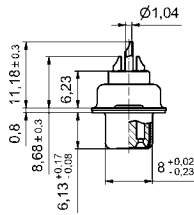
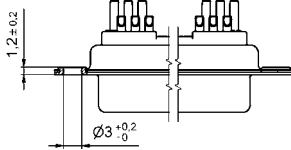
- Suitable for wire size AWG 22
- Mounting styles:
  - with through-hole,  $\varnothing$  .118"/3 mm
  - with 4-40 UNC or M3 threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR

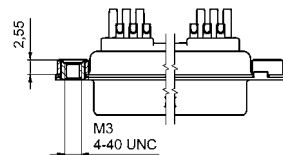


Shellsize	A -0.76	B -0.25	C		
2	39.52	24.79	33.30	$^{+0.15}$	$^{-0.10}$
3	53.42	38.50	47.04	$^{+0.13}$	
4	69.70	54.96	63.50	$^{+0.13}$	

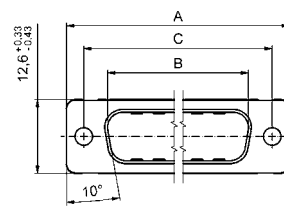
Mounting style: Through-hole



Mounting style Threaded insert

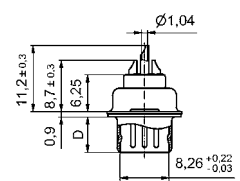
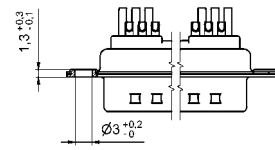


## PLUG CONNECTOR

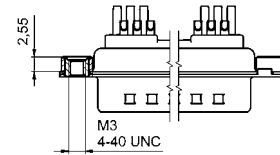


Shellsize	A -0.76	B -0.25	C	D -0.30	
2	39.52	25.12	33.30	$^{+0.15}$	6.12
3	53.42	38.84	47.04	$^{+0.13}$	5.99
4	69.70	55.30	63.50	$^{+0.13}$	5.99

Mounting style: Through-hole



Mounting style Threaded insert



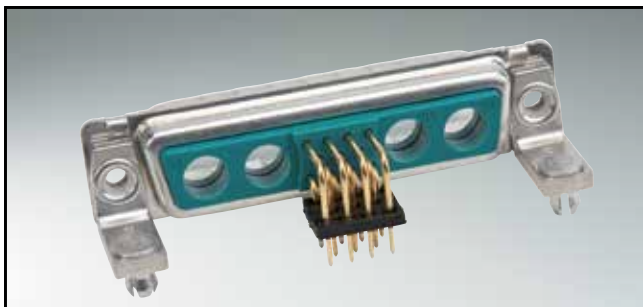
## ORDER DATA

SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	Through-hole	3H19W1SAM99A10X
15W4	Through-hole	3H15W4SAM99A10X
45W2	Through-hole	3H45W2SAM99A10X
19W1	M3 threaded insert	3H19W1SAM99A20X
15W4	M3 threaded insert	3H15W4SAM99A20X
45W2	M3 threaded insert	3H45W2SAM99A20X
19W1	4-40 UNC threaded insert	3H19W1SAM99A30X
15W4	4-40 UNC threaded insert	3H15W4SAM99A30X
45W2	4-40 UNC threaded insert	3H45W2SAM99A30X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	Through-hole	3H19W1PAM99A10X
15W4	Through-hole	3H15W4PAM99A10X
45W2	Through-hole	3H45W2PAM99A10X
19W1	M3 threaded insert	3H19W1PAM99A20X
15W4	M3 threaded insert	3H15W4PAM99A20X
45W2	M3 threaded insert	3H45W2PAM99A20X
19W1	4-40 UNC threaded insert	3H19W1PAM99A30X
15W4	4-40 UNC threaded insert	3H15W4PAM99A30X
45W2	4-40 UNC threaded insert	3H45W2PAM99A30X

# COMBINATION D-SUB HIGH DENSITY WITH SIGNAL CONTACTS

Solder pin – angled – ,350"/7,98 mm – Precision machined contacts – Metal bracket

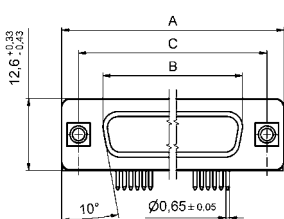


RoHS compliant

## DESCRIPTION

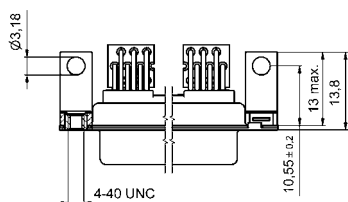
- Mounting styles:
  - mounting bracket and threaded insert 4-40 UNC
  - mounting bracket with front spacer 4-40 UNC
  - mounting bracket, PCB clip and threaded insert 4-40 UNC
  - mounting bracket, PCB clip and frontspacer 4-40 UNC
- Threaded lock M3 available on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR

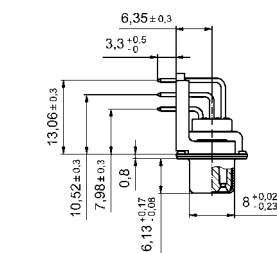
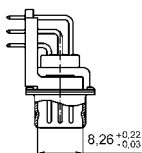


Shellsize	A -0.76	B -0.25	C
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>

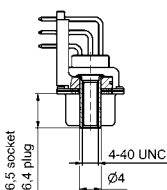
Mounting style: Through-hole



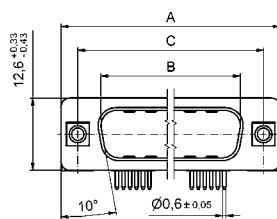
Mounting style: Threaded insert



Mounting style: Front spacer

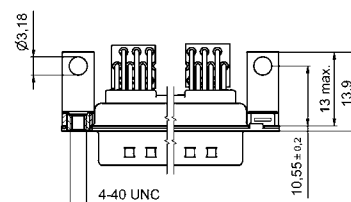


## PLUG CONNECTOR

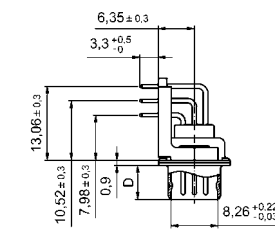
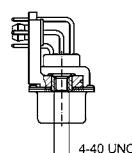


Shellsize	A -0.76	B -0.25	C	D -0.30
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99

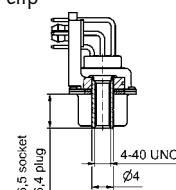
Mounting style: Through-hole



Mounting style: Threaded insert



Mounting style: Front spacer and PCB clip



## ORDER DATA

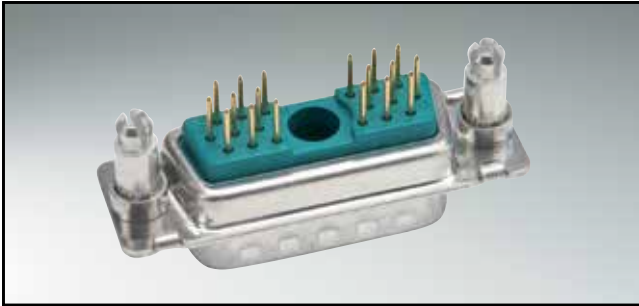
SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded insert	3H19W1SAT99G60X
15W4	4-40 UNC threaded insert	3H15W4SAT99G60X
45W2	4-40 UNC threaded insert	3H45W2SAT99G60X
19W1	4-40 UNC threaded insert and PCB clip	3H19W1SAT99G80X
15W4	4-40 UNC threaded insert and PCB clip	3H15W4SAT99G80X
45W2	4-40 UNC threaded insert and PCB clip	3H45W2SAT99G80X
19W1	4-40 UNC front spacer	3H19W1SAT99H60X
15W4	4-40 UNC front spacer	3H15W4SAT99H60X
45W2	4-40 UNC front spacer	3H45W2SAT99H60X
19W1	4-40 UNC front spacer and PCB clip	3H19W1SAT99H80X
15W4	4-40 UNC front spacer and PCB clip	3H15W4SAT99H80X
45W2	4-40 UNC front spacer and PCB clip	3H45W2SAT99H80X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded insert	3H19W1PAT99G60X
15W4	4-40 UNC threaded insert	3H15W4PAT99G60X
45W2	4-40 UNC threaded insert	3H45W2PAT99G60X
19W1	4-40 UNC threaded insert and PCB clip	3H19W1PAT99G80X
15W4	4-40 UNC threaded insert and PCB clip	3H15W4PAT99G80X
45W2	4-40 UNC threaded insert and PCB clip	3H45W2PAT99G80X
19W1	4-40 UNC front spacer	3H19W1PAT99H60X
15W4	4-40 UNC front spacer	3H15W4PAT99H60X
45W2	4-40 UNC front spacer	3H45W2PAT99H60X
19W1	4-40 UNC front spacer and PCB clip	3H19W1PAT99H80X
15W4	4-40 UNC front spacer and PCB clip	3H15W4PAT99H80X
45W2	4-40 UNC front spacer and PCB clip	3H45W2PAT99H80X



# COMBINATION D-SUB HIGH DENSITY – WITH SIGNAL CONTACTS

Solder pin – Straight – Precision machined contacts

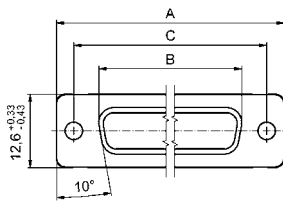


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

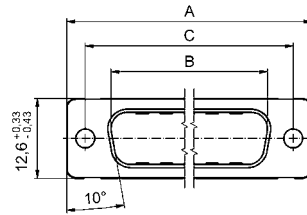
- Mounting styles:
  - with through-hole,  $\varnothing .118''/3 \text{ mm}$
  - with 4-40 UNC threaded insert
  - with 4-40 UNC threaded rear spacer
  - with 4-40 UNC threaded lock and spacer clip
- M3 thread on request
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR



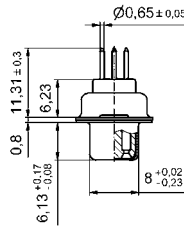
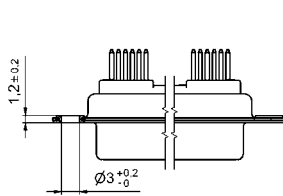
Shellsize	A -0.76	B -0.25	C	
2	39.52	24.79	33.30	$^{+0.15}_{-0.10}$
3	53.42	38.50	47.04	$\pm 0.13$
4	69.70	54.96	63.50	$\pm 0.13$

## PLUG CONNECTOR

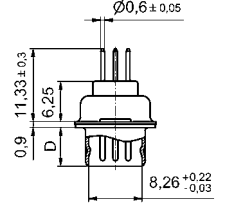
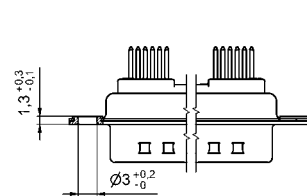


Shellsize	A -0.76	B +0.25	C	D -0.30	
2	39.52	25.12	33.30	$^{+0.15}_{-0.10}$	6.12
3	53.42	38.84	47.04	$\pm 0.13$	5.99
4	69.70	55.30	63.50	$\pm 0.13$	5.99

Mounting style: Through-hole



Mounting style: Through-hole



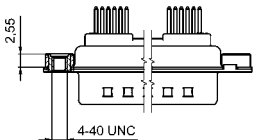
## ORDER DATA

### SOCKET CONNECTOR

Design	Mounting style	Part Number
19W1	Through-hole	3H19W1SAR99A10X
15W4	Through-hole	3H15W4SAR99A10X
45W2	Through-hole	3H45W2SAR99A10X
19W1	4-40 UNC threaded insert	3H19W1SAR99A30X
15W4	4-40 UNC threaded insert	3H15W4SAR99A30X
45W2	4-40 UNC threaded insert	3H45W2SAR99A30X

### PLUG CONNECTOR

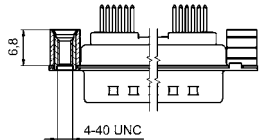
Design	Mounting style	Part Number
19W1	Through-hole	3H19W1PAR99A10X
15W4	Through-hole	3H15W4PAR99A10X
45W2	Through-hole	3H45W2PAR99A10X
19W1	4-40 UNC threaded insert	3H19W1PAR99A30X
15W4	4-40 UNC threaded insert	3H15W4PAR99A30X
45W2	4-40 UNC threaded insert	3H45W2PAR99A30X



# COMBINATION D-SUB HIGH DENSITY – MOUNTING STYLES

## Solder pin – Straight – Precision machined contacts

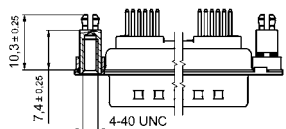
### ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer	3H19W1SAR99A50X
15W4	4-40 UNC threaded rear spacer	3H15W4SAR99A50X
45W2	4-40 UNC threaded rear spacer	3H45W2SAR99A50X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer	3H19W1PAR99A50X
15W4	4-40 UNC threaded rear spacer	3H15W4PAR99A50X
45W2	4-40 UNC threaded rear spacer	3H45W2PAR99A50X

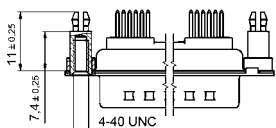
PCB thickness .063"/1,6 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1SAR99E20X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4SAR99E20X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2SAR99E20X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1PAR99E20X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4PAR99E20X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2PAR99E20X

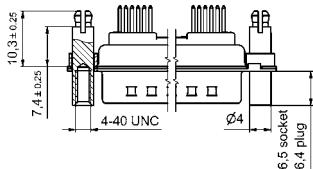
PCB thickness .091"/2,3 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1SAR99E40X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4SAR99E40X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2SAR99E40X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded rear spacer with PCB clip	3H19W1SAR99E40X
15W4	4-40 UNC threaded rear spacer with PCB clip	3H15W4SAR99E40X
45W2	4-40 UNC threaded rear spacer with PCB clip	3H45W2SAR99E40X

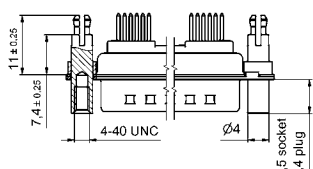
PCB thickness .063"/1,6 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1SAR99F20X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4SAR99F20X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2SAR99F20X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1PAR99F20X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4PAR99F20X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2PAR99F20X

PCB thickness .091"/2,3 mm



SOCKET CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1SAR99F40X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4SAR99F40X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2SAR99F40X

PLUG CONNECTOR		
Design	Mounting style	Part Number
19W1	4-40 UNC threaded lock and spacer clip	3H19W1PAR99F40X
15W4	4-40 UNC threaded lock and spacer clip	3H15W4PAR99F40X
45W2	4-40 UNC threaded lock and spacer clip	3H45W2PAR99F40X

PCB clip .122" x 3.1 ± .004" / 0.10 mm hole diameter

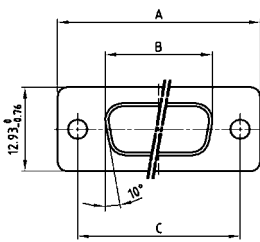
# COMBINATION D-SUB WITHOUT CONTACTS

For straight high power, coaxial or high voltage contacts



RoHS compliant – CSA listed, File No.: LR 115000-1 –UL listed, File No.: E 228329

## SOCKET CONNECTOR

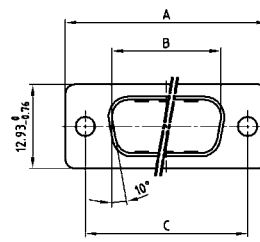


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>

## DESCRIPTION

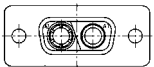
- Designs: 2W2C; 3W3; 3W3C; 5W5; 8W8
- Mounting styles:
  - with through-hole, Ø .118"/3 mm, with 4-40 UNC threaded insert, with 4-40 UNC threaded rear spacer,
  - with 4-40 UNC threaded rear spacer with PCB clip .291"/7.4 mm for PCB thickness .063"/1.6 mm, .091"/2.3 mm, .126"/3.2 mm
- On request: Threaded rear spacer with PCB clip .256"/6.5 mm available
- On request: M3 thread design available
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

## PLUG CONNECTOR

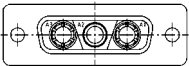


Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99

## Coded socket connectors

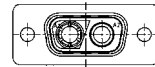


2W2C = 1 Socket – 1 Plug



3W3C = 2 Sockets – 1 Plug

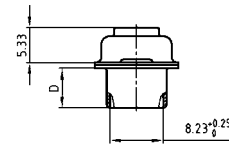
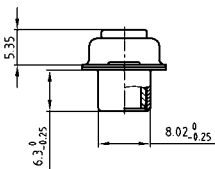
## Coded plug connectors



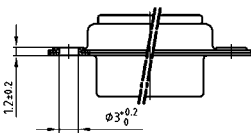
2W2C = 1 Plug – 1 Socket



3W3C = 2 Plugs – 1 Socket

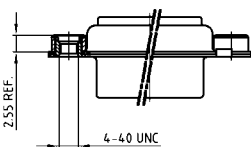


## ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style	Part Number
3W3	Through-hole	3003W3SXX99A10X
5W5	Through-hole	3005W5SXX99A10X
8W8	Through-hole	3008W8SXX99A10X
Coded version		
2W2C	Through-hole	302W2CSXX99A10X
3W3C	Through-hole	303W3CSXX99A10X

PLUG CONNECTOR		
Design	Mounting style	Part Number
3W3	Through-hole	3003W3PXX99A10X
5W5	Through-hole	3005W5PXX99A10X
8W8	Through-hole	3008W8PXX99A10X
Coded version		
2W2C	Through-hole	302W2CPXX99A10X
3W3C	Through-hole	303W3CPXX99A10X



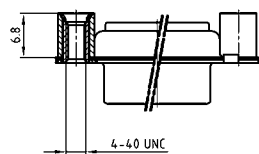
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3SXX99A30X
5W5	Threaded insert	3005W5SXX99A30X
8W8	Threaded insert	3008W8SXX99A30X
Coded version		
2W2C	Threaded insert	302W2CSXX99A30X
3W3C	Threaded insert	303W3CSXX99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3PXX99A30X
5W5	Threaded insert	3005W5PXX99A30X
8W8	Threaded insert	3008W8PXX99A30X
Coded version		
2W2C	Threaded insert	302W2CPXX99A30X
3W3C	Threaded insert	303W3CPXX99A30X

# COMBINATION D-SUB – MOUNTING STYLES

For straight high power, coaxial or high voltage contacts

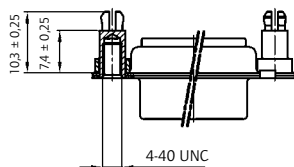
ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer	3003W3SXX99A50X
5W5	Threaded rear spacer	3005W5SXX99A50X
8W8	Threaded rear spacer	3008W8SXX99A50X
Coded version		
2W2C	Threaded rear spacer	302W2CSXX99A50X
3W3C	Threaded rear spacer	303W3CSXX99A50X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer	3003W3PXX99A50X
5W5	Threaded rear spacer	3005W5PXX99A50X
8W8	Threaded rear spacer	3008W8PXX99A50X
Coded version		
2W2C	Threaded rear spacer	302W2CPXX99A50X
3W3C	Threaded rear spacer	303W3CPXX99A50X

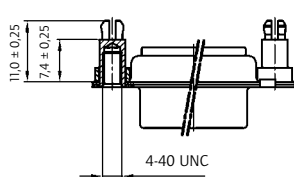
PCB thickness .063"/1.6 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3SXX99E20X
5W5	Threaded rear spacer PCB clip	3005W5SXX99E20X
8W8	Threaded rear spacer PCB clip	3008W8SXX99E20X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CSXX99E20X
3W3C	Threaded rear spacer PCB clip	303W3CSXX99E20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3PXX99E20X
5W5	Threaded rear spacer PCB clip	3005W5PXX99E20X
8W8	Threaded rear spacer PCB clip	3008W8PXX99E20X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CPXX99E20X
3W3C	Threaded rear spacer PCB clip	303W3CPXX99E20X

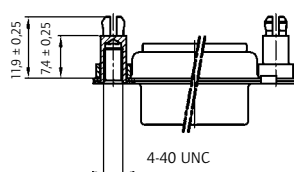
PCB thickness .091"/2.3 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3SXX99E40X
5W5	Threaded rear spacer PCB clip	3005W5SXX99E40X
8W8	Threaded rear spacer PCB clip	3008W8SXX99E40X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CSXX99E40X
3W3C	Threaded rear spacer PCB clip	303W3CSXX99E40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3PXX99E40X
5W5	Threaded rear spacer PCB clip	3005W5PXX99E40X
8W8	Threaded rear spacer PCB clip	3008W8PXX99E40X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CPXX99E40X
3W3C	Threaded rear spacer PCB clip	303W3CPXX99E40X

PCB thickness .126"/3.2 mm



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3SXX99E60X
5W5	Threaded rear spacer PCB clip	3005W5SXX99E60X
8W8	Threaded rear spacer PCB clip	3008W8SXX99E60X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CSXX99E60X
3W3C	Threaded rear spacer PCB clip	303W3CSXX99E60X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded rear spacer PCB clip	3003W3PXX99E60X
5W5	Threaded rear spacer PCB clip	3005W5PXX99E60X
8W8	Threaded rear spacer PCB clip	3008W8PXX99E60X
Coded version		
2W2C	Threaded rear spacer PCB clip	302W2CPXX99E60X
3W3C	Threaded rear spacer PCB clip	303W3CPXX99E60X

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter

# COMBINATION D-SUB WITHOUT CONTACTS

For angled high power or coaxial contacts – Short metal bracket

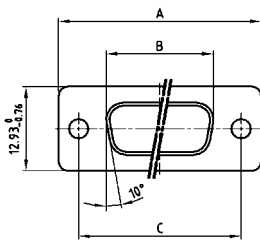


RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

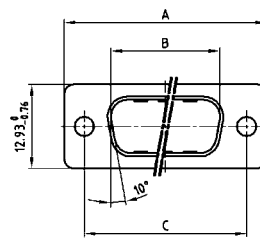
- Designs: 2W2C; 3W3; 3W3C; 5W5; 8W8
- Mounting styles:
  - Mounting bracket and 4-40 UNC threaded insert
  - Mounting bracket with 4-40 UNC front spacer
  - Mounting bracket, PCB clip and 4-40 UNC threaded insert
  - Mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR



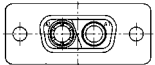
Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>

## PLUG CONNECTOR

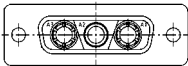


Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99

## Coded socket connectors

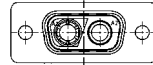


2W2C = 1 Socket – 1 Plug

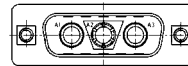


3W3C = 2 Sockets – 1 Plug

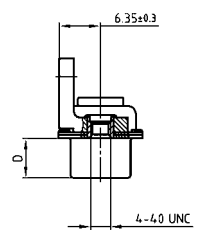
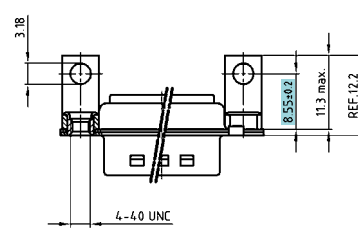
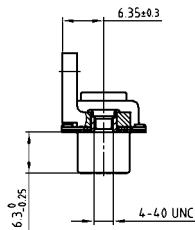
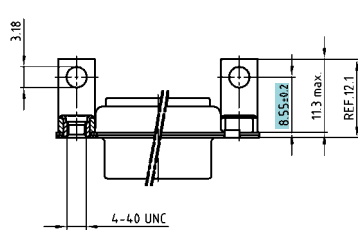
## Coded plug connectors



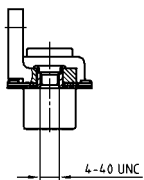
2W2C = 1 Plug – 1 Socket



3W3C = 2 Plugs – 1 Socket



## ORDER DATA



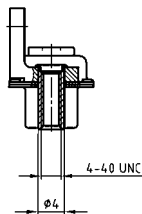
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3SXX99N20X
5W5	Threaded insert	3005W5SXX99N20X
8W8	Threaded insert	3008W8SXX99N20X
Coded version		
2W2C	Threaded insert	302W2CSXX99N20X
3W3C	Threaded insert	303W3CSXX99N20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3PXX99N20X
5W5	Threaded insert	3005W5PXX99N20X
8W8	Threaded insert	3008W8PXX99N20X
Coded version		
2W2C	Threaded insert	302W2CPXX99N20X
3W3C	Threaded insert	303W3CPXX99N20X

# COMBINATION D-SUB – MOUNTING STYLES

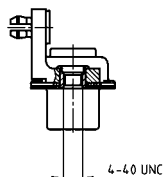
For angled high power or coaxial contacts – Short metal bracket

ORDER DATA



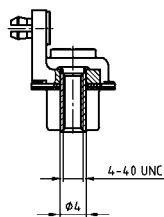
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3SXX99P20X
5W5	Front spacer	3005W5SXX99P20X
8W8	Front spacer	3008W8SXX99P20X
Coded version		
2W2C	Front spacer	302W2CSXX99P20X
3W3C	Front spacer	303W3CSXX99P20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3PXX99P20X
5W5	Front spacer	3005W5PXX99P20X
8W8	Front spacer	3008W8PXX99P20X
Coded version		
2W2C	Front spacer	302W2CPXX99P20X
3W3C	Front spacer	303W3CPXX99P20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert/PCB clip	3003W3SXX99N40X
5W5	Threaded insert/PCB clip	3005W5SXX99N40X
8W8	Threaded insert/PCB clip	3008W8SXX99N40X
Coded version		
2W2C	Threaded insert/PCB clip	302W2CSXX99N40X
3W3C	Threaded insert/PCB clip	303W3CSXX99N40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert/PCB clip	3003W3PXX99N40X
5W5	Threaded insert/PCB clip	3005W5PXX99N40X
8W8	Threaded insert/PCB clip	3008W8PXX99N40X
Coded version		
2W2C	Threaded insert/PCB clip	302W2CPXX99N40X
3W3C	Threaded insert/PCB clip	303W3CPXX99N40X



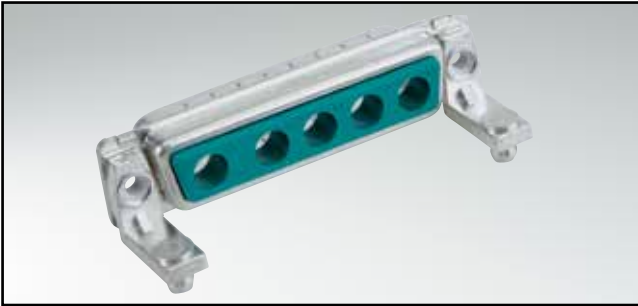
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer/PCB clip	3003W3SXX99P40X
5W5	Front spacer/PCB clip	3005W5SXX99P40X
8W8	Front spacer/PCB clip	3008W8SXX99P40X
Coded version		
2W2C	Front spacer/PCB clip	302W2CSXX99P40X
3W3C	Front spacer/PCB clip	303W3CSXX99P40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer/PCB clip	3003W3PXX99P40X
5W5	Front spacer/PCB clip	3005W5PXX99P40X
8W8	Front spacer/PCB clip	3008W8PXX99P40X
Coded version		
2W2C	Front spacer/PCB clip	302W2CPXX99P40X
3W3C	Front spacer/PCB clip	303W3CPXX99P40X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness

# COMBINATION D-SUB WITHOUT CONTACTS

For angled high power or coaxial contacts – Long metal bracket

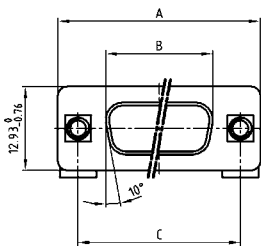


RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

## DESCRIPTION

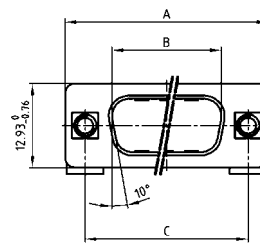
- Designs: 2W2C; 3W3; 3W3C; 5W5; 8W8
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket with 4-40 UNC front spacer
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC front spacer
- M3 thread design available on request
- Shell: Steel tin plated  
(brass tin plated or stainless steel available on request)

## SOCKET CONNECTOR



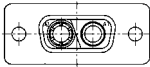
Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>

## PLUG CONNECTOR

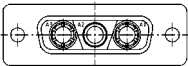


Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99

## CODED SOCKET CONNECTORS

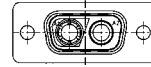


2W2C = 1 Socket – 1 Plug

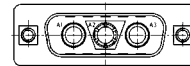


3W3C = 2 Sockets – 1 Plug

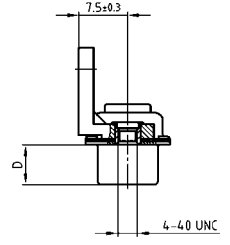
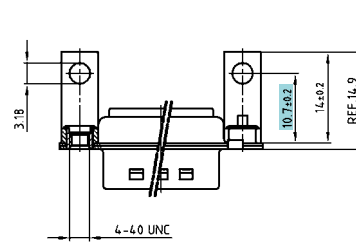
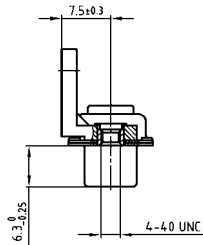
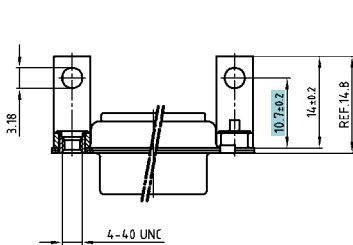
## CODED PLUG CONNECTORS



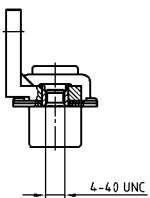
2W2C = 1 Plug – 1 Socket



3W3C = 2 Plugs – 1 Socket



## ORDER DATA



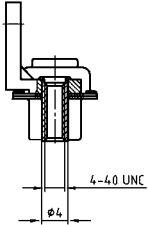
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3SXX99G20X
5W5	Threaded insert	3005W5SXX99G20X
8W8	Threaded insert	3008W8SXX99G20X
Coded version		
2W2C	Threaded insert	302W2CSXX99G20X
3W3C	Threaded insert	303W3CSXX99G20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert	3003W3PXX99G20X
5W5	Threaded insert	3005W5PXX99G20X
8W8	Threaded insert	3008W8PXX99G20X
Coded version		
2W2C	Threaded insert	302W2CPXX99G20X
3W3C	Threaded insert	303W3CPXX99G20X

# COMBINATION D-SUB – MOUNTING STYLES

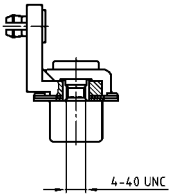
For angled high power or coaxial contacts – Long metal bracket

ORDER DATA



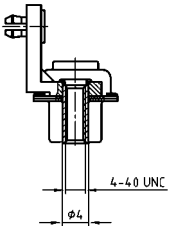
SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3SXX99H20X
5W5	Front spacer	3005W5SXX99H20X
8W8	Front spacer	3008W8SXX99H20X
Coded version		
2W2C	Front spacer	302W2CSXX99H20X
3W3C	Front spacer	303W3CSXX99H20X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer	3003W3PXX99H20X
5W5	Front spacer	3005W5PXX99H20X
8W8	Front spacer	3008W8PXX99H20X
Coded version		
2W2C	Front spacer	302W2CPXX99H20X
3W3C	Front spacer	303W3CPXX99H20X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert/PCB clip	3003W3SXX99G40X
5W5	Threaded insert/PCB clip	3005W5SXX99G40X
8W8	Threaded insert/PCB clip	3008W8SXX99G40X
Coded version		
2W2C	Threaded insert/PCB clip	302W2CSXX99G40X
3W3C	Threaded insert/PCB clip	303W3CSXX99G40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Threaded insert/PCB clip	3003W3PXX99G40X
5W5	Threaded insert/PCB clip	3005W5PXX99G40X
8W8	Threaded insert/PCB clip	3008W8PXX99G40X
Coded version		
2W2C	Threaded insert/PCB clip	302W2CPXX99G40X
3W3C	Threaded insert/PCB clip	303W3CPXX99G40X



SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer/PCB clip	3003W3SXX99H40X
5W5	Front spacer/PCB clip	3005W5SXX99H40X
8W8	Front spacer/PCB clip	3008W8SXX99H40X
Coded version		
2W2C	Front spacer/PCB clip	302W2CSXX99H40X
3W3C	Front spacer/PCB clip	303W3CSXX99H40X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
3W3	Front spacer/PCB clip	3003W3PXX99H40X
5W5	Front spacer/PCB clip	3005W5PXX99H40X
8W8	Front spacer/PCB clip	3008W8PXX99H40X
Coded version		
2W2C	Front spacer/PCB clip	302W2CPXX99H40X
3W3C	Front spacer/PCB clip	303W3CPXX99H40X

PCB clip .122"/3.1 ± .004"/0.10 mm hole diameter and .063"/1.6 mm circuit board thickness



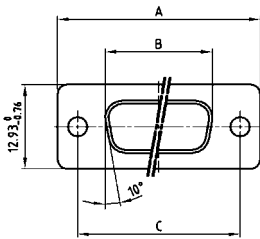
# COMBINATION D-SUB WITHOUT CONTACTS

Crimp body – For wire size AWG 20...24 and AWG 26...28



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## SOCKET CONNECTOR

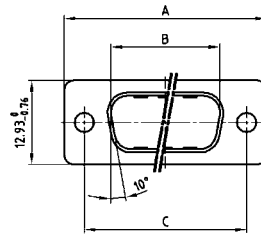


Shellsize	A -0.76	B -0.25	C
1	31.19	16.46	25.00 <sup>+0.12</sup> <sub>-0.13</sub>
2	39.52	24.79	33.30 <sup>+0.15</sup> <sub>-0.10</sub>
3	53.42	38.50	47.04 <sup>+0.13</sup>
4	69.70	54.96	63.50 <sup>+0.13</sup>
5	67.31	52.55	61.10 <sup>+0.14</sup> <sub>-0.11</sub>

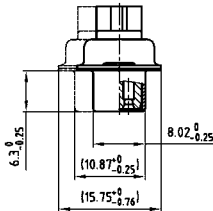
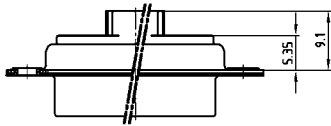
## DESCRIPTION

- For precision machined contacts for wire size AWG 20...24 and AWG 26...28
- Mounting styles:
  - with through-hole, Ø .118" / 3 mm
  - with 4-40 UNC or M3 threaded insert
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- recommended plastic hoods look at page 7 | 16, 7 | 17

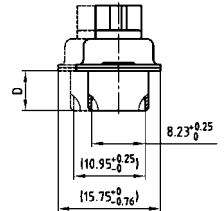
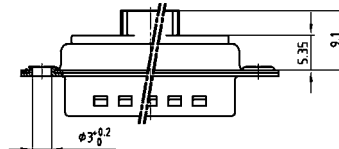
## PLUG CONNECTOR



Shellsize	A -0.76	B +0.25	C	D -0.30
1	31.19	16.79	25.00 <sup>+0.12</sup> <sub>-0.13</sub>	6.12
2	39.52	25.12	33.30 <sup>+0.15</sup> <sub>-0.10</sub>	6.12
3	53.42	38.84	47.04 <sup>+0.13</sup>	5.99
4	69.70	55.30	63.50 <sup>+0.13</sup>	5.99
5	67.31	52.68	61.10 <sup>+0.14</sup> <sub>-0.11</sub>	5.99

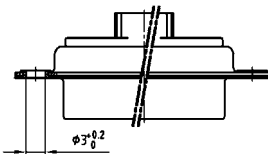


Shell size 5 = Dim. in (.)



Shell size 5 = Dim. in (.)

## ORDER DATA



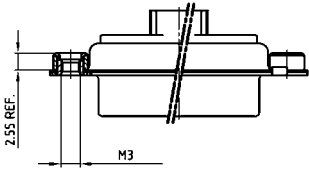
SOCKET CONNECTOR		
Design	Mounting style	Part Number
5W1	Through-hole	3005W1SXX99A10X
7W2	Through-hole	3007W2SXX99A10X
11W1	Through-hole	3011W1SXX99A10X
9W4	Through-hole	3009W4SXX99A10X
13W3	Through-hole	3013W3SXX99A10X
17W2	Through-hole	3017W2SXX99A10X
21W1	Through-hole	3021W1SXX99A10X
13W6	Through-hole	3013W6SXX99A10X
17W5	Through-hole	3017W5SXX99A10X
21WA4	Through-hole	321WA4SXX99A10X
25W3	Through-hole	3025W3SXX99A10X
27W2	Through-hole	3027W2SXX99A10X
24W7	Through-hole	3024W7SXX99A10X
36W4	Through-hole	3036W4SXX99A10X
43W2	Through-hole	3043W2SXX99A10X
47W1	Through-hole	3047W1SXX99A10X

PLUG CONNECTOR		
Design	Mounting style	Part Number
5W1	Through-hole	3005W1PXX99A10X
7W2	Through-hole	3007W2PXX99A10X
11W1	Through-hole	3011W1PXX99A10X
9W4	Through-hole	3009W4PXX99A10X
13W3	Through-hole	3013W3PXX99A10X
17W2	Through-hole	3017W2PXX99A10X
21W1	Through-hole	3021W1PXX99A10X
13W6	Through-hole	3013W6PXX99A10X
17W5	Through-hole	3017W5PXX99A10X
21WA4	Through-hole	321WA4PXX99A10X
25W3	Through-hole	3025W3PXX99A10X
27W2	Through-hole	3027W2PXX99A10X
24W7	Through-hole	3024W7PXX99A10X
36W4	Through-hole	3036W4PXX99A10X
43W2	Through-hole	3043W2PXX99A10X
47W1	Through-hole	3047W1PXX99A10X

# COMBINATION D-SUB – MOUNTING STYLES

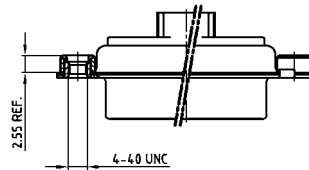
Crimp body (without contacts) – For wire size AWG 20...24 and AWG 26...28

ORDER DATA



SOCKET CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1SXX99A20X
7W2	Threaded insert	3007W2SXX99A20X
11W1	Threaded insert	3011W1SXX99A20X
9W4	Threaded insert	3009W4SXX99A20X
13W3	Threaded insert	3013W3SXX99A20X
17W2	Threaded insert	3017W2SXX99A20X
21W1	Threaded insert	3021W1SXX99A20X
13W6	Threaded insert	3013W6SXX99A20X
17W5	Threaded insert	3017W5SXX99A20X
21WA4	Threaded insert	321WA4SXX99A20X
25W3	Threaded insert	3025W3SXX99A20X
27W2	Threaded insert	3027W2SXX99A20X
24W7	Threaded insert	3024W7SXX99A20X
36W4	Threaded insert	3036W4SXX99A20X
43W2	Threaded insert	3043W2SXX99A20X
47W1	Threaded insert	3047W1SXX99A20X

PLUG CONNECTOR		
Design	Mounting style M3	Part Number
5W1	Threaded insert	3005W1PXX99A20X
7W2	Threaded insert	3007W2PXX99A20X
11W1	Threaded insert	3011W1PXX99A20X
9W4	Threaded insert	3009W4PXX99A20X
13W3	Threaded insert	3013W3PXX99A20X
17W2	Threaded insert	3017W2PXX99A20X
21W1	Threaded insert	3021W1PXX99A20X
13W6	Threaded insert	3013W6PXX99A20X
17W5	Threaded insert	3017W5PXX99A20X
21WA4	Threaded insert	321WA4PXX99A20X
25W3	Threaded insert	3025W3PXX99A20X
27W2	Threaded insert	3027W2PXX99A20X
24W7	Threaded insert	3024W7PXX99A20X
36W4	Threaded insert	3036W4PXX99A20X
43W2	Threaded insert	3043W2PXX99A20X
47W1	Threaded insert	3047W1PXX99A20X

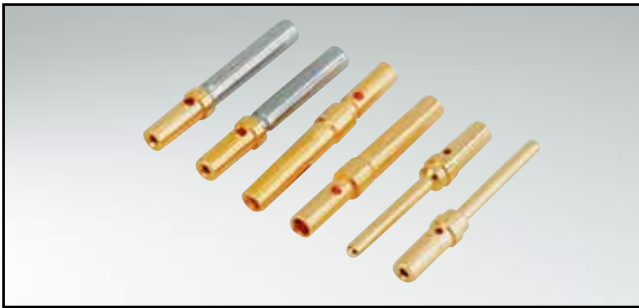


SOCKET CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1SXX99A30X
7W2	Threaded insert	3007W2SXX99A30X
11W1	Threaded insert	3011W1SXX99A30X
9W4	Threaded insert	3009W4SXX99A30X
13W3	Threaded insert	3013W3SXX99A30X
17W2	Threaded insert	3017W2SXX99A30X
21W1	Threaded insert	3021W1SXX99A30X
13W6	Threaded insert	3013W6SXX99A30X
17W5	Threaded insert	3017W5SXX99A30X
21WA4	Threaded insert	321WA4SXX99A30X
25W3	Threaded insert	3025W3SXX99A30X
27W2	Threaded insert	3027W2SXX99A30X
24W7	Threaded insert	3024W7SXX99A30X
36W4	Threaded insert	3036W4SXX99A30X
43W2	Threaded insert	3043W2SXX99A30X
47W1	Threaded insert	3047W1SXX99A30X

PLUG CONNECTOR		
Design	Mounting style 4-40 UNC	Part Number
5W1	Threaded insert	3005W1PXX99A30X
7W2	Threaded insert	3007W2PXX99A30X
11W1	Threaded insert	3011W1PXX99A30X
9W4	Threaded insert	3009W4PXX99A30X
13W3	Threaded insert	3013W3PXX99A30X
17W2	Threaded insert	3017W2PXX99A30X
21W1	Threaded insert	3021W1PXX99A30X
13W6	Threaded insert	3013W6PXX99A30X
17W5	Threaded insert	3017W5PXX99A30X
21WA4	Threaded insert	321WA4PXX99A30X
25W3	Threaded insert	3025W3PXX99A30X
27W2	Threaded insert	3027W2PXX99A30X
24W7	Threaded insert	3024W7PXX99A30X
36W4	Threaded insert	3036W4PXX99A30X
43W2	Threaded insert	3043W2PXX99A30X
47W1	Threaded insert	3047W1PXX99A30X

# COMBINATION D-SUB CONTACTS

Crimp contacts – Precision machined – For wire size AWG 20...24 and AWG 26...28



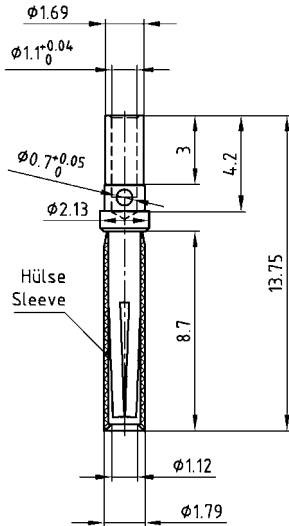
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

- For wire size AWG 20...24 and AWG 26–28
- Quality class 3
- Quality class 1 and another quality classes on request

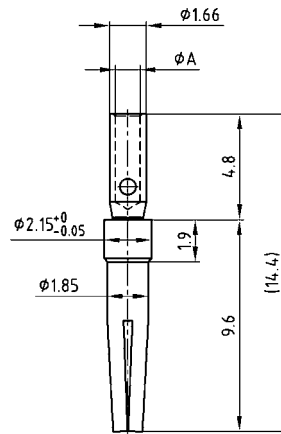
## PRODUCT DRAWING

Signal socket crimp contact  
(Closed entry version)

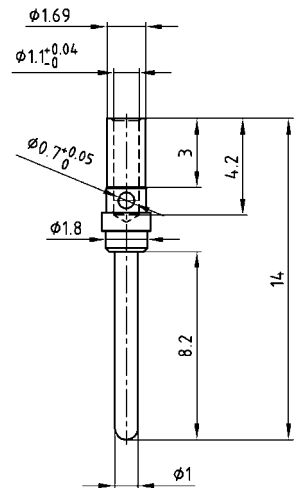


AWG	A +0.04
20-24	Ø 1.16
26-28	Ø 0.65

Signal socket crimp contact  
(Standard version)



Signal plug crimp contact  
(Standard version)



## Designs

Contact material Socket	Copper alloy
Closed entry version	Stainless steel sleeve
Contact material plug	Brass
Quality class 1	500 mating cycles
Quality class 3	50 mating cycles

## ORDER DATA

### SOCKET CONTACT

Contact type	AWG	Quality class	Part Number
Socket* / Closed entry	20...24	1	132C15019X
Socket* / Closed entry	26...28	1	132C15029X
Socket / Standard	20...24	3	162A18709X
Socket / Standard	26...28	3	162A18719X

\*Preferred type

### PLUG CONTACT

Contact type	AWG	Quality class	Part Number
Plug / Standard	20...24	1	131C15019X
Plug / Standard	26...28	1	131C15029X
Plug / Standard	20...24	3	131A15019X
Plug / Standard	26...28	3	131A15029X

# COMBINATION D-SUB CONTACTS

High power contacts – Solder cup – Straight



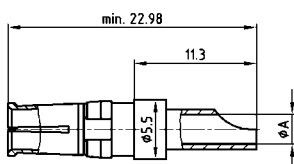
RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

## DESCRIPTION

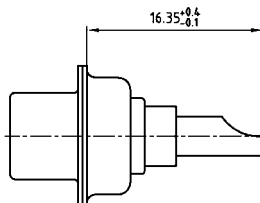
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side gold or tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

## PRODUCT DRAWING

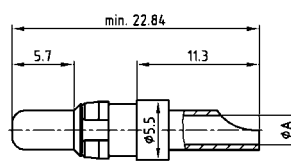
Socket contact



Installation dimension

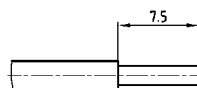


Plug contact

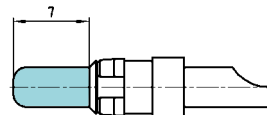


AWG	Current rating	ØA <sup>+0.15</sup>
16-20	10A	1.80
12-14	20A	2.70
10-12	30A	3.50
8-10	40A	4.80

Wire stripping



Premating contact



## ORDER DATA

SOCKET CONTACT					
AWG	Quality class	Code* tin plated	Part Number tin plated	Code* gold plated	Part Number gold plated
16...20	1	F1	13-003501	41	132C10019X
16...20	3	F2	13-003503	61	132A10019X
12...14	1	F3	13-003511	42	132C10029X
12...14	3	F4	13-003513	62	132A10029X
10...12	1	F5	13-003521	43	132C10039X
10...12	3	F6	13-003523	63	132A10039X
8...10	1	F7	13-003531	44	132C10049X
8...10	3	F8	13-003533	64	132A10049X

PLUG CONTACT					
AWG	Quality class	Code* tin plated	Part Number tin plated	Code* gold plated	Part Number gold plated
16...20	1	F1	13-003541	41	131C10019X
16...20	3	F2	13-003543	61	131A10019X
12...14	1	F3	13-003551	42	131C10029X
12...14	3	F4	13-003553	62	131A10029X
10...12	1	F5	13-003561	43	131C10039X
10...12	3	F6	13-003563	63	131A10039X
8...10	1	F7	13-003571	44	131C10049X
8...10	3	F8	13-003573	64	131A10049X

PREMATING CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number gold plated
16-20	10 A	1	13-003581	1	131C10119X
12-14	20 A	1	13-003591	1	131C10129X
10-12	30 A	1	13-003601	1	131C10139X
8-10	40 A	1	13-003611	1	131C10149X

\*Code use with part number creator

# COMBINATION D-SUB CONTACTS

High power contacts – Screw termination – Straight – For wire size AWG 14



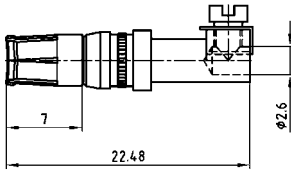
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

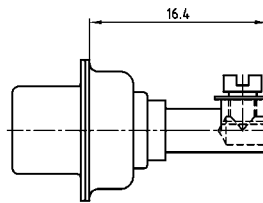
- Precision machined contacts for wire size **AWG 14**, max. 20 A
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request
- For field attachable applications

## PRODUCT DRAWING

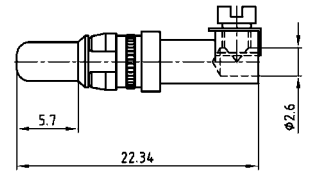
Socket contact



Installation dimension

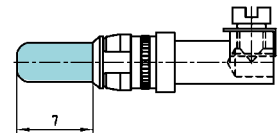


Plug contact



AWG	Current rating	ØA <sup>+0.15</sup>
16-20	10A	1.80
12-14	20A	2.70
10-12	30A	3.50
8-10	40A	4.80

Premating contact



## ORDER DATA

SOCKET CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Socket	14	20 A	1	132C36009X
Socket	14	20 A	3	132A36009X

PLUG CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Plug	14	20 A	1	131C36009X
Plug	14	20 A	3	131A36009X
Plug premating	14	20 A	1	131C36109X

# COMBINATION D-SUB CONTACTS

## High power contacts – Crimp – Straight



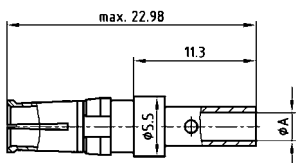
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

### DESCRIPTION

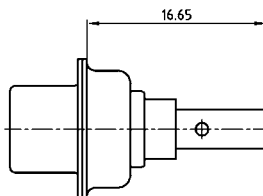
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side gold or tin plated
- Other quality classes on request

### PRODUCT DRAWING

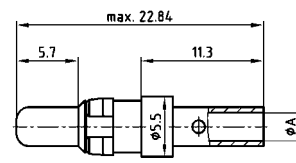
Socket contact



Installation dimension



Plug contact

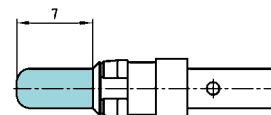


AWG	Current rating	ØA <sup>+0.15</sup>
16-20	10A	1.70
12-14	20A	2.60
10-12	30A	3.70
8-10	40A	4.60

Wire stripping



Premating contact



### ORDER DATA

SOCKET CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number gold plated
16-20	10 A	1	13-003621	1	132C11019X
16-20	10 A	3	13-003623	3	132A11019X
12-14	20 A	1	13-003631	1	132C11029X
12-14	20 A	3	13-003633	3	132A11029X
10-12	30 A	1	13-003641	1	132C11039X
10-12	30 A	3	13-003643	3	132A11039X
8-10	40 A	1	13-003651	1	132C11049X
8-10	40 A	3	13-003653	3	132A11049X

PLUG CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number gold plated
16-20	10 A	1	13-003661	1	131C11019X
16-20	10 A	3	13-003663	3	131A11019X
12-14	20 A	1	13-003671	1	131C11029X
12-14	20 A	3	13-003673	3	131A11029X
10-12	30 A	1	13-003681	1	131C11039X
10-12	30 A	3	13-003683	3	131A11039X
8-10	40 A	1	13-003691	1	131C11049X
8-10	40 A	3	13-003693	3	131A11049X

PREMATING CONTACT					
AWG	Ampere	Quality class	Part Number tin plated	Quality class	Part Number tin plated
16-20	10 A	1	13-003701	1	131C11119X
12-14	20 A	1	13-003711	1	131C11129X
10-12	30 A	1	13-003721	1	131C11139X
8-10	40 A	1	13-003731	1	131C11149X

# COMBINATION D-SUB CONTACTS

High power contacts – Solder cup or crimp – angled



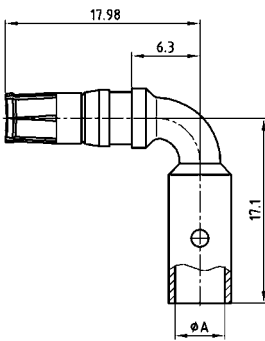
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

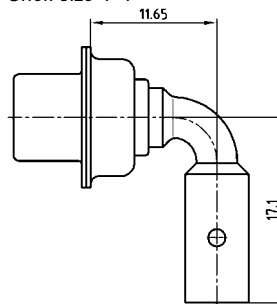
- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request

## PRODUCT DRAWING

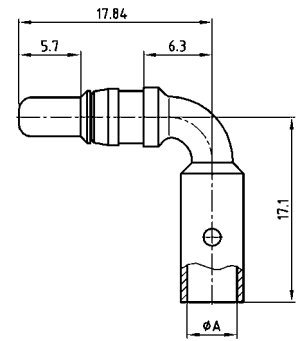
Socket contact



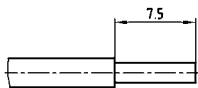
Installation dimension  
Shell size 1-4



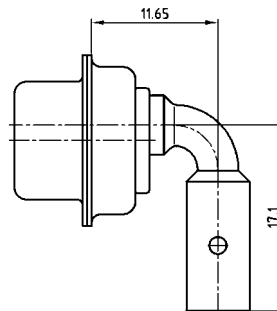
Plug contact



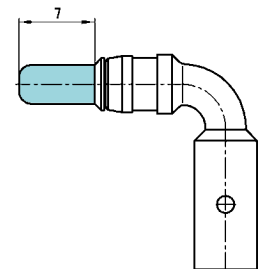
Wire stripping



Installation dimension  
Shell size 5



Premating contact



AWG	Current rating	Ø A +0.15	Crimp Plier Part.no. 360X12269X
16-20	10A	1.70	1.40/1.25
12-14	20A	2.60	1.85/1.65
10-12	30A	3.70	2.30/2.05
8-10	40A	4.60	2.30/2.05

## ORDER DATA

SOCKET CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Socket	16...20	10 A	1	132C16019X
Socket	16...20	10 A	3	132A16019X
Socket	12...14	20 A	1	132C16029X
Socket	12...14	20 A	3	132A16029X
Socket	10...12	30 A	1	132C16039X
Socket	10...12	30 A	3	132A16039X
Socket	8...10	40 A	1	132C16049X
Socket	8...10	40 A	3	132A16049X

PLUG CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Plug	16...20	10 A	1	131C16019X
Plug	16...20	10 A	3	131A16019X
Plug	12...14	20 A	1	131C16029X
Plug	12...14	20 A	3	131A16029X
Plug	10...12	30 A	1	131C16039X
Plug	10...12	30 A	3	131A16039X
Plug	8...10	40 A	1	131C16049X
Plug	8...10	40 A	3	131A16049X

PREMATING CONTACT				
Contact type	AWG	Ampere	Quality class	Part Number
Plug premating	16...20	10 A	1	131C16119X
Plug premating	12...14	20 A	1	131C16129X
Plug premating	10...12	30 A	1	131C16139X
Plug premating	8...10	40 A	1	131C16149X

# COMBINATION D-SUB CONTACTS

High power contacts – Solder pin – angled



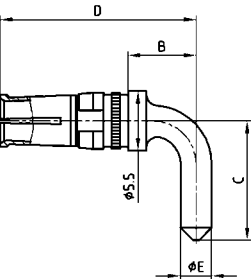
RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

**DESCRIPTION**

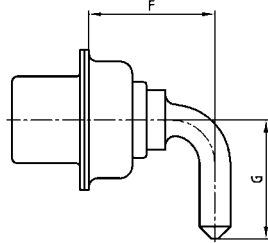
- Precision machined contacts
- Quality class 3: 50 mating cycles
- Quality class 1: 500 mating cycles
- Mating side gold plated
- Termination side tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

**PRODUCT DRAWING**

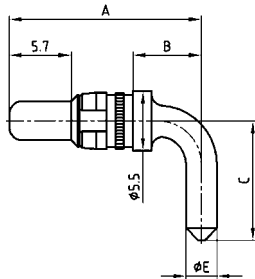
Socket contact



Installation dimension Shell size 1-4

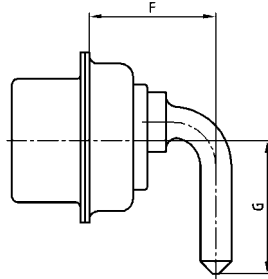


Plug contact

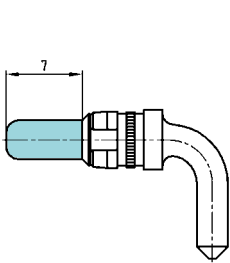


Shellsize	Current rating	Termination	A	B	C	D	ØE	F	G
1-4	15A	55/59	14.54	3.00	10.50	14.68	1.90	8.35	10.50
1-4	20A	56/73	17.84	6.30	11.00	17.98	2.85	11.65	11.00
1-4	30A	57/74	26.54	15.00	9.50	26.68	3.20	20.35	9.50
1-4	40A	58/75	17.84	6.30	11.00	17.98	3.75	11.65	11.00
5	20A	66/81	20.39	8.85	14.00	20.53	2.85	14.20	12.58
5	30A	67/82	20.39	8.85	14.00	20.53	3.20	14.20	12.58
5	30A	65/85	26.54	15.00	13.50	26.68	3.20	20.35	12.08
5	40A	60/77	20.39	8.85	14.00	20.53	3.75	14.20	12.58

Installation dimension Shell size 5



Premating contact



**hole diameter of PCB:**

- 1.95 = 2.30 ± 0.1
- 2.60 = 3.00 ± 0.1
- 2.85 = 3.20 ± 0.1
- 3.18 = 3.60 ± 0.1
- 3.75 = 4.10 ± 0.1

**ORDER DATA**

SOCKET CONTACT				
Contact type	Shell size	Quality class	Termination*	Part Number
Socket	1-4	1	55	132C13009X
Socket	1-4	3	59	132A13009X
Socket	1-4	1	56	132C13019X
Socket	1-4	3	73	132A13019X
Socket	1-4	1	57	132C13029X
Socket	1-4	3	74	132A13029X
Socket	1-4	1	58	132C13039X
Socket	1-4	3	75	132A13039X
Socket	5	1	66	132C13060X
Socket	5	3	81	132A13060X
Socket	5	1	67	132C13070X
Socket	5	3	82	132A13070X
Socket	5	1	65	132C13059X
Socket	5	3	85	132A13059X
Socket	5	1	60	132C13049X
Socket	5	3	77	132A13049X

PLUG CONTACT				
Contact type	Shell size	Quality class	Termination*	Part Number
Plug	1-4	1	55	131C13009X
Plug	1-4	3	59	131A13009X
Plug	1-4	1	56	131C13019X
Plug	1-4	3	73	131A13019X
Plug	1-4	1	57	131C13029X
Plug	1-4	3	74	131A13029X
Plug	1-4	1	58	131C13039X
Plug	1-4	3	75	131A13039X
Plug	5	1	66	131C13060X
Plug	5	3	81	131A13060X
Plug	5	1	67	131C13070X
Plug	5	3	82	131A13070X
Plug	5	1	65	131C13059X
Plug	5	3	85	131A13059X
Plug	5	1	60	131C13049X
Plug	5	3	77	131A13049X
Plug premating	1-4	1		131C13109X
Plug premating	1-4	1		131C13119X
Plug premating	1-4	1		131C13129X
Plug premating	1-4	1		131C13139X
Plug premating	5	1		131C13160X
Plug premating	5	1		131C13170X
Plug premating	5	1		131C13159X
Plug premating	5	1		131C13149X

\*Code use with part number creator



# COMBINATION D-SUB CONTACTS

## High power contacts – Solder pin – Straight



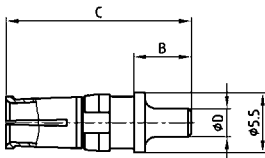
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

### DESCRIPTION

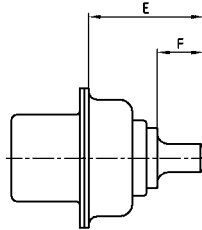
- Precision machined contacts
- Quality class 3: 50 mating cycles (gold plated)
- Quality class 1: 500 mating cycles (gold plated)
- Mating side gold plated
- Termination side tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### PRODUCT DRAWING

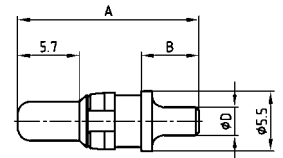
Socket contact



Installation dimension



Plug contact



Current rating	Termination	A	B	C	Ø D	E	F
20A	48/68**	15.84	4.60	15.98	1.95	9.65	3.80
20A	49/69	16.84	5.30	16.98	2.60	10.65	4.30
20A	50/70**	16.24	4.70	16.38	2.85	10.05	3.70
30A	51/71	19.04	7.50	19.18	3.18	12.85	6.70
40A	52/72	17.29	5.75	17.43	3.75	11.10	4.75

Premating contact



**PCB hole diameter at:**

- 1.95 = 2.30 ± 0.1
- 2.60 = 3.00 ± 0.1
- 2.85 = 3.20 ± 0.1
- 3.18 = 3.60 ± 0.1
- 3.75 = 4.10 ± 0.1

### ORDER DATA

SOCKET CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Socket	20 A	1	48**	132C12019X
Socket	20 A	3	68**	132A12019X
Socket	20 A	1	49	132C12029X
Socket	20 A	3	69	132A12029X
Socket	20 A	1	50**	132C12039X
Socket	20 A	3	70**	132A12039X
Socket	30 A	1	51	132C12049X
Socket	30 A	3	71	132A12049X
Socket	40 A	1	52	132C12059X
Socket	40 A	3	72	132A12059X

PLUG CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Plug	20 A	1	48**	131C12019X
Plug	20 A	3	68**	131A12019X
Plug	20 A	1	49	131C12029X
Plug	20 A	3	69	131A12029X
Plug	20 A	1	50**	131C12039X
Plug	20 A	3	70**	131A12039X
Plug	30 A	1	51	131C12049X
Plug	30 A	3	71	131A12049X
Plug	40 A	1	52	131C12059X
Plug	40 A	3	72	131A12059X

PREMATING CONTACT			
Contact type	Ampere	Quality class	Part Number
Plug premating	20A/ Ø .077"/1.95	1	131C12119X
Plug premating	20A/ Ø .102"/2.60	1	131C12129X
Plug premating	20A/ Ø .112"/2.85	1	131C12139X
Plug premating	30A/ Ø .125"/3.18	1	131C12149X
Plug premating	40A/ Ø .148"/3.75	1	131C12159X

\*Code use with part number creator  
 \*\*not suitable for PCB 2.3 + 3.2 mm

# COMBINATION D-SUB CONTACTS

## High power contacts – Press-fit version – Straight



RoHS compliant

### DESCRIPTION

- Precision machined contacts
- Quality class 1: 500 mating cycles
- Mating area gold plated
- Press-fit area tin plated
- Other quality classes on request
- To order these preassembled in the connector, use the termination code shown below, in the part number creator at the front of this section

### PRODUCT DRAWING

Socket contact



Installation dimension

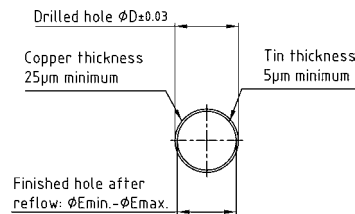


Plug contact



Termination Type	Ampere	A	B	C	D +0.03	E min.	E max.
P1	30A	16.34	4.8	16.48	3.13	2.96	3.11
P2	30A	16.34	4.8	16.48	3.27	3.10	3.25
P4	30A	15.94	4.4	16.08	3.22	3.02	3.20

PCB hole drilling for high power pressfit contact



### ORDER DATA

SOCKET CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Socket	30 A	1	P1	132C00229A
Socket	30 A	1	P2	132C00299A
Socket	30 A	1	P4	132C19019X

PLUG CONTACT				
Contact type	Ampere	Quality class	Termination*	Part Number
Plug	30 A	1	P1	131C00319A
Plug	30 A	1	P2	131C00389A
Plug	30 A	1	P4	131C19019X

# COMBINATION D-SUB CONTACTS

High voltage contacts – Solder termination – Straight and angled – For wire size AWG 20



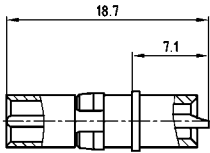
RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

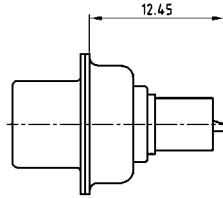
- Precision machined contacts for wire size **AWG 20**, max. 2,8 kV
- Quality class 1: 500 mating cycles (gold plated)
- Other quality classes on request

## PRODUCT DRAWING

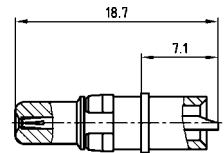
Socket contact straight



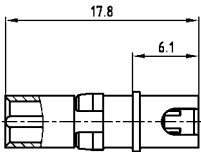
Installation dimension straight



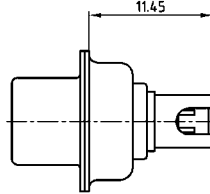
Plug contact straight



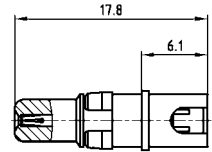
Socket contact angled



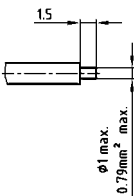
Installation dimension angled



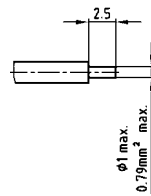
Plug contact angled



Wire stripping



Wire stripping



## ORDER DATA

SOCKET CONTACT			PLUG CONTACT		
Contact type	AWG	Part Number	Contact type	AWG	Part Number
Socket/Straight	20	132J14019X	Plug/Straight	20	131J14019X
Socket/Angled	20	132J14519X	Plug/Angled	20	131J14519X

# COMBINATION D-SUB CONTACTS

Coaxial contacts – Straight – Inner conductor solder-, outer conductor crimp- / solder termination



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

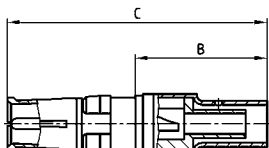
## DESCRIPTION

- 50 Ω and 75 Ω-design
- Contact platings mating area:
  - .051 μm / 1.3 μm Au inner conductor /
  - .032 μm / 0.8 μm Au outer conductor
  - .008 μm / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μm / 0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

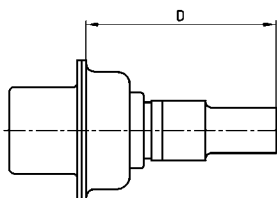
## PRODUCT DRAWING

### 50 Ω version

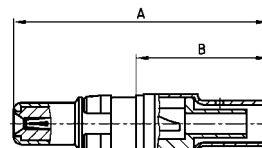
Socket contact



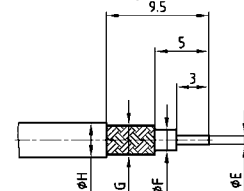
Installation dimension



Plug contact



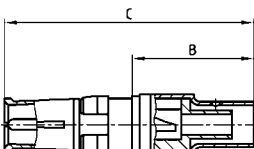
Wire stripping



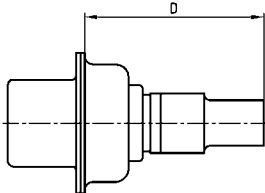
Usable Cables RG	A	B	C	D max.	Ø E max.	Ø F max.	Ø G max.	Ø H max.
178BU, 196AU, 404 U	22.50	11.20	23.00	17.55	0.85	1.20	1.40	2.30
174U, 188AU, 316U	22.50	11.20	23.00	17.55	0.85	1.90	2.30	3.20
180BU	22.50	11.20	23.00	17.55	0.85	2.80	3.10	4.50
58CU, 141AU	26.30	14.80	26.80	20.15	1.00	3.00	3.60	5.20
316U double braided	23.50	12.20	24.00	17.55	0.85	1.90	2.70	3.20

### 75 Ω version

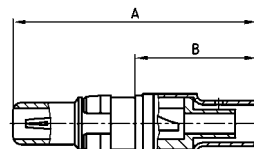
Socket contact



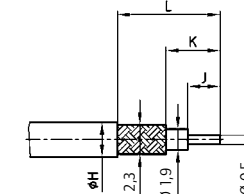
Installation dimension



Plug contact



Wire stripping



Usable Cables RG	A	B	C	D max.	Ø H max.	J	K	L
179BU, 187AU	18.55	7.30	19.05	12.80	3.20	2.00	3.10	6.00
179BU, 187AU	22.50	11.20	23.00	16.70	3.20	3.00	5.00	9.50

## ORDER DATA

SOCKET CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003004	132J20019X
50 Ω	174U, 188AU, 316U	13-003014	132J20029X
50 Ω	180BU	13-003024	132J20039X
50 Ω	58CU, 141AU	13-003034	132J20049X
50 Ω	316U double braided	13-003044	132J20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003054	132J30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003064	132J30029X

PLUG CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003074	131J20019X
50 Ω	174U, 188AU, 316U	13-003084	131J20029X
50 Ω	180BU	13-003094	131J20039X
50 Ω	58CU, 141AU	13-003104	131J20049X
50 Ω	316U double braided	13-003114	131J20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003124	131J30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003134	131J30029X

SOCKET CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003003	132A20019X
50 Ω	174U, 188AU, 316U	13-003013	132A20029X
50 Ω	180BU	13-003023	132A20039X
50 Ω	58CU, 141AU	13-003033	132A20049X
50 Ω	316U double braided	13-003043	132A20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003053	132A30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003063	132A30029X

PLUG CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003073	131A20019X
50 Ω	174U, 188AU, 316U	13-003083	131A20029X
50 Ω	180BU	13-003093	131A20039X
50 Ω	58CU, 141AU	13-003103	131A20049X
50 Ω	316U double braided	13-003113	131A20059X
75 Ω	179BU, 187AU (B=.287"/7.3mm)	13-003123	131A30019X
75 Ω	179BU, 187 AU (B=.441"/11.2 mm)	13-003133	131A30029X

# COMBINATION D-SUB CONTACTS

Coaxial contacts – Straight – Inner and outer conductor crimp termination



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

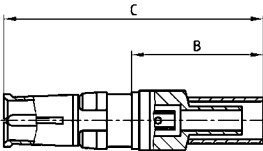
## DESCRIPTION

- 50 Ω and 75 Ω-design
- Contact platings mating area:
  - .051 μm / 1.3 μm Au inner conductor /
  - .032 μm / 0.8 μm Au outer conductor
  - .008 μm / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μm / 0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

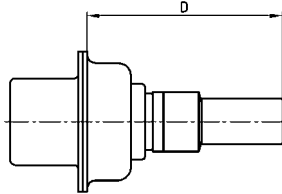
## PRODUCT DRAWING

### 50 Ω version

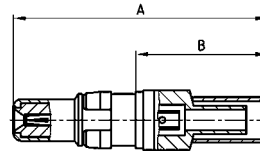
Socket contact



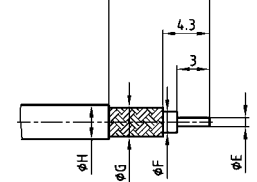
Installation dimension



Plug contact



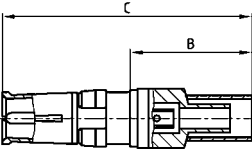
Wire stripping



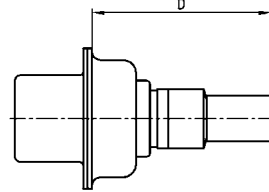
Usable Cables RG	A	B	C	D max.	Ø E max.	Ø F max.	Ø G max.	Ø H max.
174Bu, 188AU, 316U	22.50	11.20	23.00	16.60	0.60	1.90	2.30	3.20
316U double braided	22.50	11.20	23.00	16.60	0.60	1.90	3.00	3.80
58CU, 141AU	22.20	10.90	22.70	16.30	1.30	3.70	4.30	5.20

### 75 Ω version

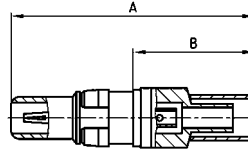
Socket contact



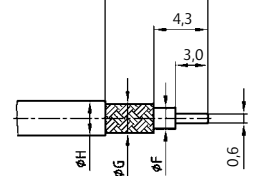
Installation dimension



Plug contact



Wire stripping



Usable Cables RG	A	B	C	D	Ø F max.	Ø G max.	Ø H max.	L
179BU, 187AU	22.45	11.20	22.95	16.70	1.90	2.30	3.20	9.30
180BU	21.65	10.40	22.15	15.90	2.80	3.20	4.50	8.80

## ORDER DATA

### SOCKET CONTACT

Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003144	132J21019X
50 Ω	316U double braided	13-003154	132J21029X
50 Ω	58CU, 141AU	13-003164	132J21039X
75 Ω	179BU, 187AU	13-003174	132J31019X
75 Ω	180BU	13-003184	132J31029X

### PLUG CONTACT

Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003194	131J21019X
50 Ω	316U double braided	13-003204	131J21029X
50 Ω	58CU, 141AU	13-003214	131J21039X
75 Ω	179BU, 187AU	13-003224	131J31019X
75 Ω	180BU	13-003234	131J31029X

### BUCHSENKONTAKT

Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003143	132A21019X
50 Ω	316U double braided	13-003153	132A21029X
50 Ω	58CU, 141AU	13-003163	132A21039X
75 Ω	179BU, 187AU	13-003173	132A31019X
75 Ω	180BU	13-003183	132A31029X

### PLUG CONTACT

Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003193	131A21019X
50 Ω	316U double braided	13-003203	131A21029X
50 Ω	58CU, 141AU	13-003213	131A21039X
75 Ω	179BU, 187AU	13-003223	131A31019X
75 Ω	180BU	13-003233	131A31029X

# COMBINATION D-SUB CONTACTS

Coaxial contacts – Angled – Inner conductor solder-, outer conductor crimp- / Solder termination



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

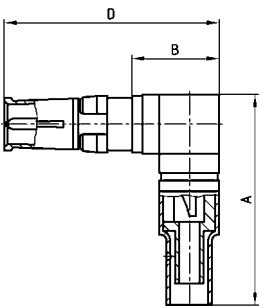
## DESCRIPTION

- 50 Ω design
- Contact platings mating area:
  - .051 μ" / 1.3 μm Au inner conductor /
  - .032 μ" / 0.8 μm Au outer conductor
  - .008 μ" / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μ" / 0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

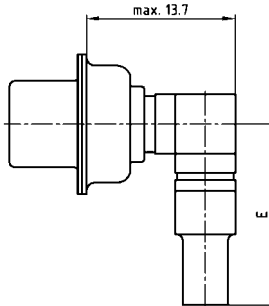
## PRODUCT DRAWING

### 50 Ω version

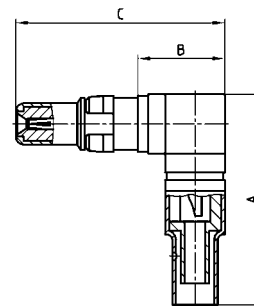
Socket contact



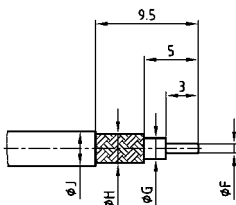
Installation dimension



Plug contact



Wire stripping



Usable Cables RG	A	B	C	D	E	Ø F max.	Ø G max.	Ø H max.	Ø J max.
174U, 188AU, 316U	18.50	8.20	19.30	19.80	15.70	0.85	1.90	2.30	3.20
178BU, 196AU, 404U	18.50	8.20	19.30	19.80	15.70	0.85	1.20	1.40	2.30
316U double braided	19.50	8.20	19.30	19.80	16.70	0.85	1.90	2.70	3.50

## ORDER DATA

SOCKET CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003244	132J22029X
50 Ω	174U, 188AU, 316U	13-003254	132J22019X
50 Ω	316U double braided	13-003264	132J22039X

PLUG CONTACT			
Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003274	131J22029X
50 Ω	174U, 188AU, 316U	13-003284	131J22019X
50 Ω	316U double braided	13-003294	131J22039X

SOCKET CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003243	132A22029X
50 Ω	174U, 188AU, 316U	13-003253	132A22019X
50 Ω	316U double braided	13-003263	132A22039X

PLUG CONTACT			
Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	178BU, 196AU, 404U	13-003273	131A22029X
50 Ω	174U, 188AU, 316U	13-003283	131A22019X
50 Ω	316U double braided	13-003293	131A22039X

# COMBINATION D-SUB CONTACTS

## Coaxial contacts – Angled – Inner- and outer conductor crimp termination



RoHS compliant – CSA listed, File No.: LR 115000-1–UL listed, File No.: E 228329

### DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 μ"/1.3 μm Au inner conductor /
  - .032 μ"/0.8 μm Au outer conductor
  - .008 μ"/0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μ"/0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

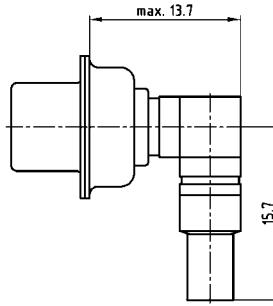
### PRODUCT DRAWING

#### 50 Ω version

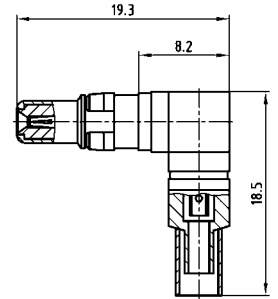
Socket contact



Installation dimension

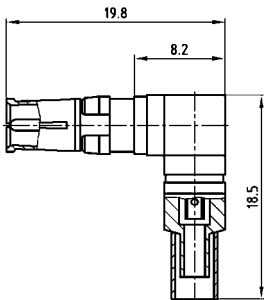


Plug contact

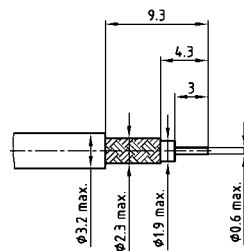


#### 75 Ω version

Socket contact

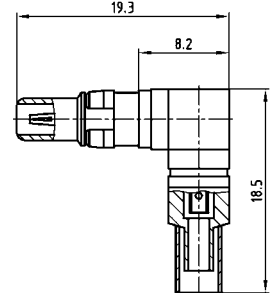


Wire stripping



verwendbare Kabel: RG- 174U, 188AU, 316U  
Usable Cables

Plug contact



### ORDER DATA

#### SOCKET CONTACT

Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003304	132J23019X
75 Ω	179BU, 187AU	13-003314	132J33019X

#### PLUG CONTACT

Imp.	Cable	Part Number 1,3 μm / tin plated	Part Number 1,3 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003324	131J23019X
75 Ω	179BU, 187AU	13-003334	131J33019X

#### SOCKET CONTACT

Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003303	132A23019X
75 Ω	179BU, 187AU	13-003313	132A33019X

#### PLUG CONTACT

Imp.	Cable	Part Number 0,2 μm / tin plated	Part Number 0,2 μm / 0,2 μm
50 Ω	174U, 188AU, 316U	13-003323	131A23019X
75 Ω	179BU, 187AU	13-003333	131A33019X

# COMBINATION D-SUB CONTACTS

Coaxial contacts – Straight – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

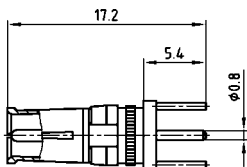
## DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 μ" / 1.3 μm Au inner conductor /
  - .032 μ" / 0.8 μm Au outer conductor
  - .008 μ" / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μ" / 0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

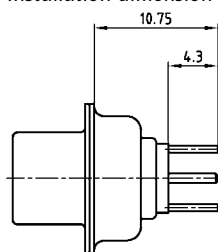
## PRODUCT DRAWING

### 50 Ω version

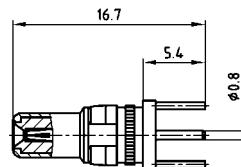
Socket contact



Installation dimension

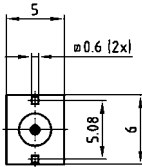
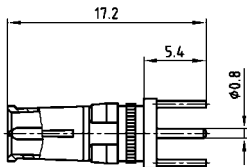


Plug contact

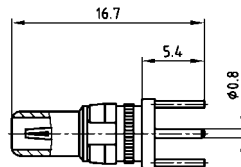


### 75 Ω version

Socket contact



Plug contact



## ORDER DATA

SOCKET CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	L1	13-003344	76	132J24019X
75 Ω	L2	13-003354	86	132J34019X

PLUG CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	L1	13-003364	76	131J24019X
75 Ω	L2	13-003374	86	131J34019X

SOCKET CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	L3	13-003343	G7	132A24019X
75 Ω	L4	13-003353	G8	132A34019X

PLUG CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	L3	13-003363	G7	131A24019X
75 Ω	L4	13-003373	G8	131A34019X

\*Code use with part number creator



# COMBINATION D-SUB CONTACTS

Coaxial contacts – Angled – PCB termination – 3 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1 – UL listed, File No.: E 228329

## DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 μ" / 1.3 μm Au inner conductor /
  - .032 μ" / 0.8 μm Au outer conductor
  - .008 μ" / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μ" / 0.2 μm Au
  - tin plated
- Other platings on request
- Delivery includes: contacts and sleeve supplied loose

## PRODUCT DRAWING

### 50 Ω version

Socket contact

Installation dimension

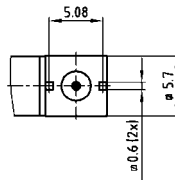
Plug contact



### 75 Ω version

Socket contact

Plug contact



Shellsize	A	B	C	D	E	F
1-4	13.80	9.30	20.70	21.20	11.00	9.30
5	16.80	11.80	23.20	23.70	14.00	11.80

## ORDER DATA

SOCKET CONTACT					
Imp.	Shell size	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	1-4	L5	13-003384	78	132J25019X
50 Ω	5	L6	13-003394	79	132J25029X
75 Ω	1-4	L7	13-003404	88	132J35019X
75 Ω	5	L8	13-003414	89	132J35029X

PLUG CONTACT					
Imp.	Shell size	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	1-4	L5	13-003424	78	131J25019X
50 Ω	5	L6	13-003434	79	131J25029X
75 Ω	1-4	L7	13-003444	88	131J35019X
75 Ω	5	L8	13-003454	89	131J35029X

SOCKET CONTACT					
Imp.	Shell size	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	1-4	L9	13-003383	G9	132A25019X
50 Ω	5	M1	13-003393	H1	132A25029X
75 Ω	1-4	M2	13-003403	H2	132A35019X
75 Ω	5	M3	13-003413	H3	132A35029X

PLUG CONTACT					
Imp.	Shell size	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	1-4	L9	13-003423	G9	131A25019X
50 Ω	5	M1	13-003433	H1	131A25029X
75 Ω	1-4	M2	13-003443	H2	131A35019X
75 Ω	5	M3	13-003453	H3	131A35029X

\*Code use with part number creator

# COMBINATION D-SUB CONTACTS

Coaxial contacts – Angled – PCB termination – 5 solder pins



RoHS compliant – CSA listed, File No.: LR 115000-1-UL listed, File No.: E 228329

## DESCRIPTION

- 50 and 75 Ω-design
- Contact platings mating area:
  - .051 μ" / 1.3 μm Au inner conductor /
  - .032 μ" / 0.8 μm Au outer conductor
  - .008 μ" / 0.2 μm Au inner and outer conductor
- Contact platings termination area:
  - .008 μ" / 0.2 μm Au
  - tin plated
- Other platings on request

## PRODUCT DRAWING

### 50 Ω version

Socket contact



Installation dimension



Plug contact



### 75 Ω version

Socket contact



For mounting connector on edge of PCB without metal bracket



Plug contact



## ORDER DATA

SOCKET CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	M4	13-003464	80	132J25519X
75 Ω	M5	13-003474	90	132J35519X

PLUG CONTACT				
Imp.	Termination*	Part Number 1,3 μm / tin plated	Termination*	Part Number 1,3 μm / 0,2 μm
50 Ω	M4	13-003484	80	131J25519X
75 Ω	M5	13-003494	90	131J35519X

SOCKET CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	M6	13-003463	H4	132A25519X
75 Ω	M7	13-003473	H5	132A35519X

PLUG CONTACT				
Imp.	Termination*	Part Number 0,2 μm / tin plated	Termination*	Part Number 0,2 μm / 0,2 μm
50 Ω	M6	13-003483	H4	131A25519X
75 Ω	M7	13-003493	H5	131A35519X

\*Code use with part number creator

# COMBINATION D-SUB – DUAL PORT WITH SIGNAL AND POWER CONTACTS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm



RoHS compliant

## DESCRIPTION

- Designs: 5W1/ 7W2/ 13W3/ 17W2/ 17W5
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Other variations on request
- Upper connector is rotated 180 degrees

## PRODUCT DRAWING

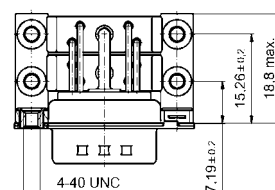
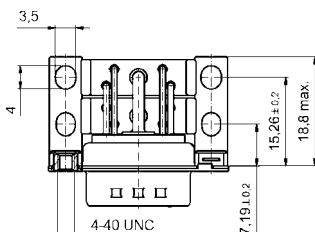
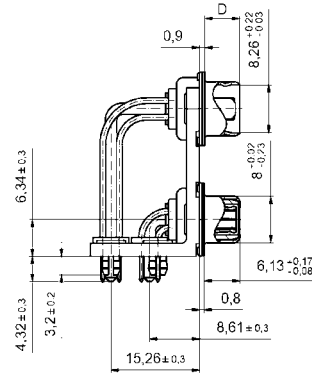
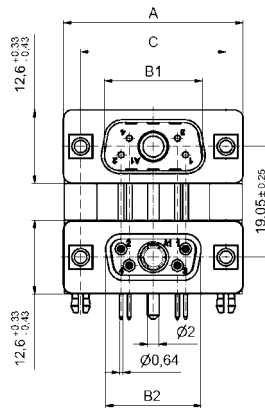
Type	A <sup>+0</sup> / <sub>-0.76</sub>	B1 <sup>+0.25</sup> / <sub>-0</sub>	B2 <sup>+0</sup> / <sub>-0.25</sub>	C	D <sup>+0</sup> / <sub>-0.3</sub>
5W1	31.19	16.79	16.46	25.00 <sup>+0.02</sup> / <sub>-0.02</sub>	6.12
7W2	39.52	25.12	24.79	33.30 <sup>+0.02</sup> / <sub>-0.02</sub>	6.12
13W3	53.42	38.84	38.50	47.04 <sup>+0.02</sup> / <sub>-0.02</sub>	5.99
17W2	53.42	38.84	38.50	47.04 <sup>+0.02</sup> / <sub>-0.02</sub>	5.99
17W5	69.70	55.30	54.96	63.50 <sup>+0.02</sup> / <sub>-0.02</sub>	5.99

Graphical representation of only one variant!

Mounting style: 4-40 UNC threaded insert



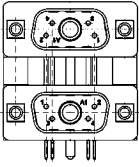
Mounting style: PCB clip and 4-40 UNC threaded insert



# COMBINATION D-SUB – DUAL PORT VARIATIONS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm

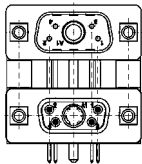
## ORDER DATA



Variation:  
plug upper –  
plug bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001013
2 X 7W2	Threaded insert	13-001023
2 X 13W3	Threaded insert	13-001033
2 X 17W2	Threaded insert	13-001043
2 X 17W5	Threaded insert	13-001053

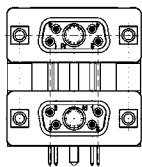
Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001213
2 X 7W2	Threaded insert/PCB clip	13-001223
2 X 13W3	Threaded insert/PCB clip	13-001233
2 X 17W2	Threaded insert/PCB clip	13-001243
2 X 17W5	Threaded insert/PCB clip	13-001253



Variation:  
plug upper –  
socket bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001063
2 X 7W2	Threaded insert	13-001073
2 X 13W3	Threaded insert	13-001083
2 X 17W2	Threaded insert	13-001093
2 X 17W5	Threaded insert	13-001103

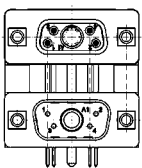
Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001263
2 X 7W2	Threaded insert/PCB clip	13-001273
2 X 13W3	Threaded insert/PCB clip	13-001283
2 X 17W2	Threaded insert/PCB clip	13-001293
2 X 17W5	Threaded insert/PCB clip	13-001303



Variation:  
socket upper –  
socket bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001113
2 X 7W2	Threaded insert	13-001123
2 X 13W3	Threaded insert	13-001133
2 X 17W2	Threaded insert	13-001143
2 X 17W5	Threaded insert	13-001153

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001313
2 X 7W2	Threaded insert/PCB clip	13-001323
2 X 13W3	Threaded insert/PCB clip	13-001333
2 X 17W2	Threaded insert/PCB clip	13-001343
2 X 17W5	Threaded insert/PCB clip	13-001353



Variation:  
socket upper –  
plug bottom

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert	13-001163
2 X 7W2	Threaded insert	13-001173
2 X 13W3	Threaded insert	13-001183
2 X 17W2	Threaded insert	13-001193
2 X 17W5	Threaded insert	13-001203

Design	Mounting style 4-40 UNC	Part Number
2 x 5W1	Threaded insert/PCB clip	13-001363
2 X 7W2	Threaded insert/PCB clip	13-001373
2 X 13W3	Threaded insert/PCB clip	13-001383
2 X 17W2	Threaded insert/PCB clip	13-001393
2 X 17W5	Threaded insert/PCB clip	13-001403

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

# COMBINATION D-SUB – DUAL PORT WITH POWER CONTACTS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm



RoHS compliant

## DESCRIPTION

- Designs: 2W2C/3W3/3W3C/5W5/8W8
- Mounting styles:
  - with mounting bracket and 4-40 UNC threaded insert
  - with mounting bracket, PCB clip and 4-40 UNC threaded insert
- Quality class 3 (also available in quality class 1)
- Shell: Steel tin plated (brass tin plated or stainless steel available on request)
- Upper connector is rotated 180 degrees

## PRODUCT DRAWING

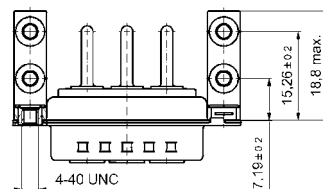
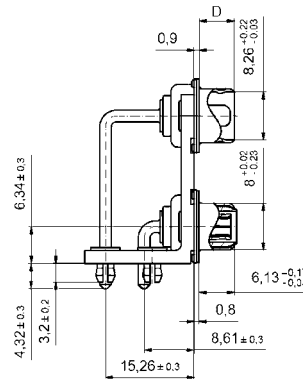
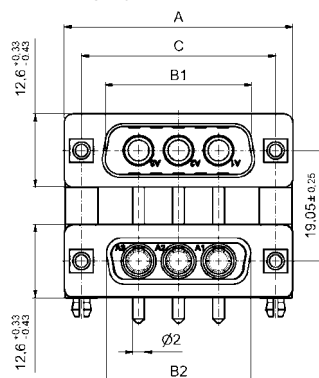
Type	A <sup>+0</sup> / <sub>-0.76</sub>	B1 <sup>+0.25</sup> / <sub>-0</sub>	B2 <sup>+0</sup> / <sub>-0.25</sub>	C	D <sup>+0</sup> / <sub>-0.3</sub>
2W2C	31.19	16.79	16.46	25.00 <sup>+0.12</sup> / <sub>-0.13</sub>	6.12
3W3	39.52	25.12	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
3W3C	39.52	25.12	24.79	33.30 <sup>+0.15</sup> / <sub>-0.10</sub>	6.12
5W5	53.42	38.84	38.50	47.04 <sup>+0.13</sup> / <sub>-0.13</sub>	5.99
8W8	69.70	55.30	54.96	63.50 <sup>+0.13</sup> / <sub>-0.13</sub>	5.99

Graphical representation of only one variant!

Mounting style: 4-40 UNC threaded insert



Mounting style: PCB clip and 4-40 UNC threaded insert



# COMBINATION D-SUB – DUAL PORT VARIATIONS

Solder pin – Angled – Precision machined contacts – Connector spacing .750" / 19,05 mm

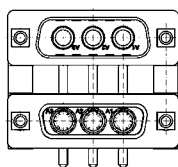
**ORDER DATA**



Design	Mounting style 4-40 UNC	Part Number
2 X 3W3	Threaded insert	13-001413
2 X 3W3	Threaded insert	13-001423
2 X 3W3C	Threaded insert	13-001433
2 X 5W5	Threaded insert	13-001443
2 X 8W8	Threaded insert	13-001453

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001613
2 X 3W3	Threaded insert/PCB clip	13-001623
2 X 3W3C	Threaded insert/PCB clip	13-001633
2 X 5W5	Threaded insert/PCB clip	13-001643
2 X 8W8	Threaded insert/PCB clip	13-001653

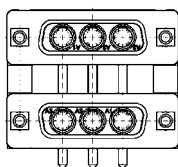
Variation:  
plug upper –  
plug bottom



Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert	13-001463
2 X 3W3	Threaded insert	13-001473
2 X 3W3C	Threaded insert	13-001483
2 X 5W5	Threaded insert	13-001493
2 X 8W8	Threaded insert	13-001503

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001663
2 X 3W3	Threaded insert/PCB clip	13-001673
2 X 3W3C	Threaded insert/PCB clip	13-001683
2 X 5W5	Threaded insert/PCB clip	13-001693
2 X 8W8	Threaded insert/PCB clip	13-001703

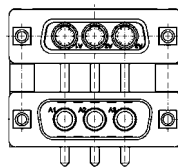
Variation:  
plug upper –  
socket bottom



Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert	13-001513
2 X 3W3	Threaded insert	13-001523
2 X 3W3C	Threaded insert	13-001533
2 X 5W5	Threaded insert	13-001543
2 X 8W8	Threaded insert	13-001553

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001713
2 X 3W3	Threaded insert/PCB clip	13-001723
2 X 3W3C	Threaded insert/PCB clip	13-001733
2 X 5W5	Threaded insert/PCB clip	13-001743
2 X 8W8	Threaded insert/PCB clip	13-001753

Variation:  
socket upper –  
socket bottom



Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert	13-001563
2 X 3W3	Threaded insert	13-001573
2 X 3W3C	Threaded insert	13-001583
2 X 5W5	Threaded insert	13-001593
2 X 8W8	Threaded insert	13-001603

Design	Mounting style 4-40 UNC	Part Number
2 X 2W2C	Threaded insert/PCB clip	13-001763
2 X 3W3	Threaded insert/PCB clip	13-001773
2 X 3W3C	Threaded insert/PCB clip	13-001783
2 X 5W5	Threaded insert/PCB clip	13-001793
2 X 8W8	Threaded insert/PCB clip	13-001803

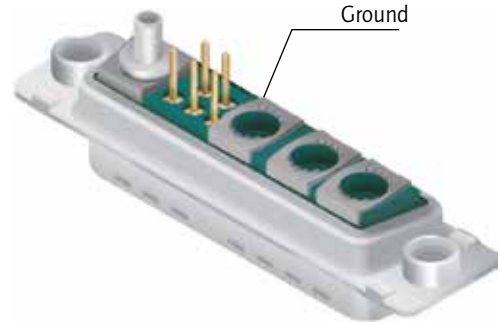
Variation:  
socket upper –  
plug bottom

PCB clip .122" / 3.1 ± .004" / 0.10 mm hole diameter and .063" / 1.6 mm circuit board thickness

## COMBINATION D-SUB ACCESSORIES

### Grounding for coaxial contacts

To optimize a perfect ground connection from the coaxial contact (outer conductor) to the metal shell. (Factory installed)..



### Guide post

For safe mating of male and female connectors with contact loss. Guide post made for metal can be installed after connector is mounted.



### Part Number

Guide post      160X11279X

### Hole plug

The hole plug can be used for both male and female connector. The assembly is implemented from the mating side. The hole plug is used to plug un wanted holes in the insulator.

Material: Polyester GF UL 94 V-0  
 Colour: black



### Part Number

Hole plug      160X0939X

## CONVERSION TABLE

$\mu\text{m}$ 1/1000 mm	$\mu\text{inch}$ 1/1000 inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
0,10	4	3,30	.130	10,16	.400	19,50	.768	30,90	1.217	49,50	1.949
0,20	8	3,40	.134	10,26	.402	19,70	.776	31,00	1.220	49,90	1.965
0,25	10	3,50	.138	10,36	.406	19,80	.780	31,20	1.228	50,10	1.972
0,30	12	3,60	.142	10,56	.413	19,90	.783	31,50	1.240	50,30	1.980
0,50	20	3,70	.146	10,66	.417	20,00	.787	31,70	1.248	50,50	1.988
0,70	28	3,80	.150	10,76	.421	20,10	.791	32,00	1.260	50,70	1.996
0,75	30	3,81	.150	11,00	.433	20,30	.799	32,20	1.268	50,80	2.000
0,80	32	3,90	.154	11,20	.441	20,32	.800	32,30	1.272	51,40	2.024
1,00	39	4,00	.158	11,40	.449	20,50	.807	32,50	1.280	51,50	2.028
1,27	50	4,10	.161	11,50	.453	21,00	.827	32,80	1.291	52,00	2.047
2,00	79	4,20	.165	11,60	.457	21,10	.831	33,00	1.299	52,30	2.059
2,50	98	4,30	.169	11,90	.469	21,70	.854	33,10	1.303	52,80	2.079
3,00	118	4,50	.177	12,00	.472	22,00	.866	33,30	1.311	53,00	2.087
4,00	157	4,70	.185	12,20	.480	22,10	.870	33,80	1.331	53,20	2.095
5,00	197	4,90	.193	12,30	.484	22,20	.874	34,00	1.339	53,80	2.118
<b>mm</b>	<b>inch</b>	5,00	.197	12,40	.488	22,30	.878	34,20	1.346	54,00	2.126
0,10	.004	5,08	.200	12,50	.492	22,40	.882	34,40	1.354	54,20	2.134
0,20	.008	5,10	.201	12,70	.500	22,50	.886	35,00	1.378	54,90	2.161
0,25	.012	5,20	.205	12,90	.508	22,60	.890	35,40	1.394	55,00	2.165
0,35	.014	5,30	.209	13,00	.512	22,80	.898	35,50	1.398	55,40	2.181
0,40	.016	5,40	.213	13,10	.516	22,86	.900	35,56	1.400	55,70	2.193
0,45	.018	5,50	.217	13,20	.520	22,90	.902	35,60	1.402	56,60	2.228
0,50	.020	5,60	.220	13,50	.532	23,00	.906	36,00	1.417	57,40	2.260
0,55	.022	5,70	.224	13,60	.535	23,10	.909	36,50	1.437	57,80	2.276
0,60	.024	5,80	.228	13,70	.539	23,30	.917	36,60	1.441	57,90	2.280
0,64	.025	6,00	.236	13,90	.547	23,50	.925	36,70	1.445	58,42	2.300
0,65	.026	6,10	.240	14,00	.551	24,00	.945	37,00	1.457	59,00	2.323
0,70	.028	6,40	.252	14,30	.563	24,30	.957	37,30	1.469	59,20	2.331
0,75	.030	6,50	.256	14,40	.567	24,60	.969	37,50	1.476	59,80	2.354
0,80	.032	6,60	.260	14,50	.571	24,90	.980	37,60	1.480	59,90	2.358
0,85	.034	6,70	.264	14,70	.579	25,00	.984	37,70	1.484	60,00	2.362
0,90	.035	6,80	.268	14,80	.583	25,10	.998	37,90	1.492	60,96	2.400
1,00	.039	6,90	.272	14,90	.587	25,40	1.000	38,00	1.496	61,10	2.406
1,20	.047	7,00	.276	14,98	.590	25,60	1.008	38,10	1.500	62,00	2.441
1,25	.049	7,10	.280	15,00	.591	25,90	1.020	39,00	1.535	63,00	2.480
1,27	.050	7,20	.283	15,20	.598	26,00	1.024	39,20	1.543	63,50	2.500
1,30	.051	7,40	.291	15,24	.600	26,30	1.035	39,30	1.547	64,00	2.520
1,35	.053	7,50	.295	15,40	.606	26,60	1.047	39,90	1.571	65,00	2.560
1,40	.055	7,60	.299	15,50	.610	26,70	1.051	40,00	1.575	67,00	2.638
1,45	.057	7,62	.300	15,60	.614	27,00	1.063	40,30	1.587	68,00	2.677
1,50	.059	7,70	.303	15,90	.626	27,20	1.071	40,40	1.591	69,00	2.717
1,60	.063	7,80	.307	16,00	.630	27,40	1.079	40,60	1.598	70,00	2.756
1,70	.067	7,98	.314	16,20	.638	27,50	1.093	41,00	1.614	71,00	2.795
1,80	.071	8,00	.315	16,50	.650	27,90	1.098	41,60	1.638	74,00	2.913
1,85	.073	8,18	.318	16,60	.654	27,94	1.100	42,70	1.681	75,00	2.953
1,90	.075	8,20	.323	16,80	.661	28,00	1.102	43,18	1.700	76,20	3.000
2,00	.079	8,30	.327	17,00	.669	28,20	1.110	44,20	1.740	77,00	3.032
2,10	.083	8,40	.331	17,20	.677	28,50	1.122	44,80	1.764	78,74	3.100
2,20	.087	8,50	.335	17,30	.681	28,70	1.130	45,80	1.803	80,00	3.150
2,30	.091	8,60	.339	17,50	.689	29,00	1.142	46,30	1.823	81,28	3.200
2,40	.095	8,90	.350	17,60	.693	29,20	1.150	46,70	1.839	84,00	3.307
2,50	.098	9,00	.354	17,70	.697	29,40	1.158	47,00	1.850	85,00	3.346
2,54	.100	9,10	.358	17,78	.700	29,50	1.161	47,20	1.858	86,36	3.400
2,60	.102	9,20	.362	17,80	.701	29,70	1.169	47,30	1.862	88,90	3.500
2,70	.106	9,30	.366	17,90	.705	29,90	1.177	47,50	1.870	90,00	3.543
2,80	.110	9,40	.370	18,00	.709	30,00	1.181	47,80	1.882	91,44	3.600
2,84	.112	9,50	.374	18,10	.713	30,20	1.189	48,00	1.890	94,00	3.701
2,90	.114	9,60	.378	18,30	.721	30,40	1.197	48,10	1.894	95,00	3.740
3,00	.118	9,70	.382	18,60	.732	30,48	1.200	48,26	1.900	100,00	3.937
3,10	.122	9,90	.390	19,00	.748	30,50	1.201	48,80	1.921	110,00	4.331
3,20	.126	10,00	.395	19,20	.756	30,80	1.213	49,10	1.933	120,00	4.724