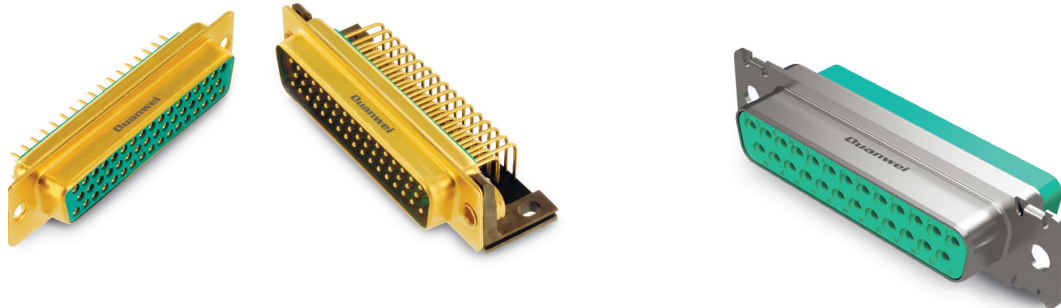
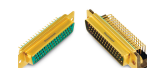


# Quanwei

## D Series Rectangular Electrical Connector





## D Series Rectangular Electrical Connector

### Main Features

- D-sub series connector (referred to as D series), D series rectangular connector is an internationally common electrical connector.
- It has good electrical performance, electromagnetic compatibility performance and environmental resistance.
- It has multiple termination methods and flexible installation methods.
- There are various locking screws, cable clamps and cable boxes for option.
- D series rectangular connector products are widely applied to signal or power connection in communication, electronics, electrical appliances, instruments and other equipment, especially in the cabinet backplane and cable connection.
- The product conforms to GJB142A-94 (equivalent to the United States Military Standard MIL-C-24308), and can be interchanged with similar products at home and abroad.

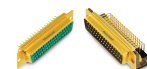
### Main Technical Characteristics

- Environmental temperature: -55 ~ +125 °C
- Relative humidity: up to 95% ~ 99% at 40 °C
- Vibration: 10-200 Hz 196 m/s<sup>2</sup>
- Random vibration: power spectral density 0.4 G<sup>2</sup>/Hz, total acceleration root mean square value 23.1 G
- Rated current: 5A (22 # signal contact), 7.5A (20 # signal contact), 10A/20A/30A/40A (high current contact, optional)
- Working voltage: 300V
- Insulation resistance:  $\geq 1000 \text{ M}\Omega$
- Contact resistance:  $\leq 0.01 \text{ }\Omega$  (20 # contact),  $\leq 0.02 \text{ }\Omega$  (high current contact)
- Dielectric withstand voltage: 1000V (effective at 50Hz)
- Separating force: 0.3-2N (20 # contact), 2-5N (high current contact)
- Contact retention force: 40N (high current contact)
- Mechanical life: 500 times
- Residual Magnetism Level:  $\leq 200$  gammas

### Model Naming

#### Non removable contacts. Standard type and high density type naming

Product title code	DC001	01	RA	E	9	P	-	-
01- Standard density; 02 - hight density								
Wiring method: Nothing - solder cup; ST - straight board welding; RA - angle board welding								
Shell number: E, A, B, C, D, F								
Contacts: Standard density: E:9, A:15, B:25, C:37, D:50 ; High density : E:15, A:26, B:44, C:62, D:78, F:104								
Contact type: P-pin; S-socket								
Locking modes: Nothing - without locking device, K, K1, S, S I, S II, S III, SIV, S-K, S-K1, etc.								
Options: G - rear grommet								



# D Series Rectangular Electrical Connector

## Model Naming

### Removable Crimp Contacts, Standard type and high density type naming

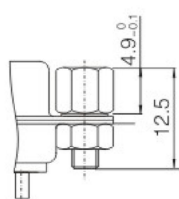
Product title code	DC002	01	-	E	9	P	-	-	F0
01- Standard density; 02 - high density									
Wiring method: Nothing - wire crimp									
Shell number: E, A, B, C, D, F									
Contacts: Standard density: E:9, A:15, B:25, C:37, D:50 ; High density : E:15, A:26, B:44, C:62, D:78, F:104									
Contact type: P-pin; S-socket									
Locking modes: Nothing - without locking device, K, K1, S, S I, S II, S III, SIV, S-K, S-K1, etc.									
Options: G - rear grommet									

F0 : connectors delivered without contacts, Nothing - connectors delivered with # 20 contacts

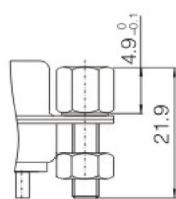
## Locking Mode



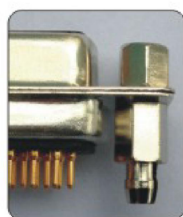
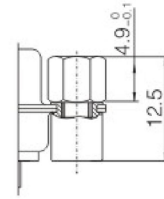
S



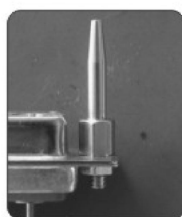
S-I



S-II



S-III



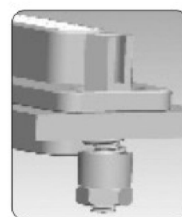
S-IV



S-V



S-HD



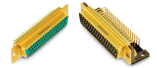
S-FD



S-K



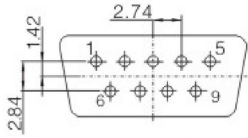
S-K1



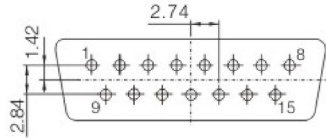
# D Series Rectangular Electrical Connector

## Type Spectrum Arrangement (from plug butting end)

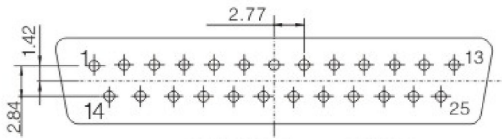
### Standard product insulation mounting plate holes



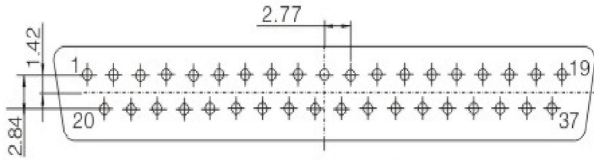
Arrangement of 9 contacts  
E shell code



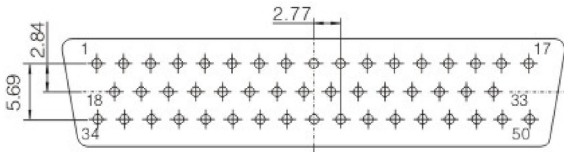
Arrangement of 15 contacts  
A shell code



Arrangement of 25 contacts  
B shell code

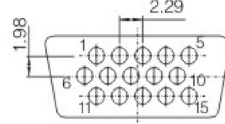


Arrangement of 37 contacts  
C shell code

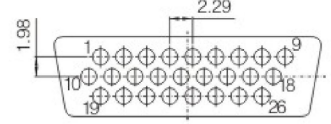


Arrangement of 50 contacts  
D shell code

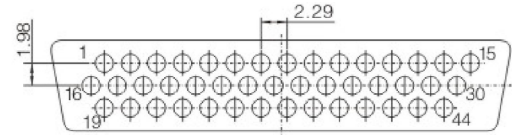
### High density product insulation mounting plate holes



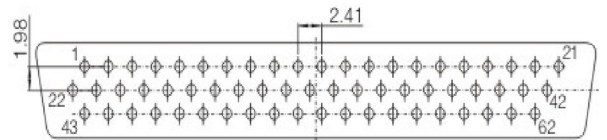
Arrangement of 15 contacts  
E shell code



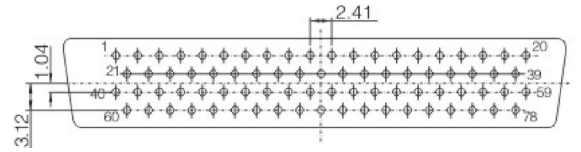
Arrangement of 26 contacts  
A shell code



Arrangement of 44 contacts  
B shell code

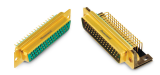


Arrangement of 62 contacts  
C shell code



Arrangement of 78 contacts  
D shell code





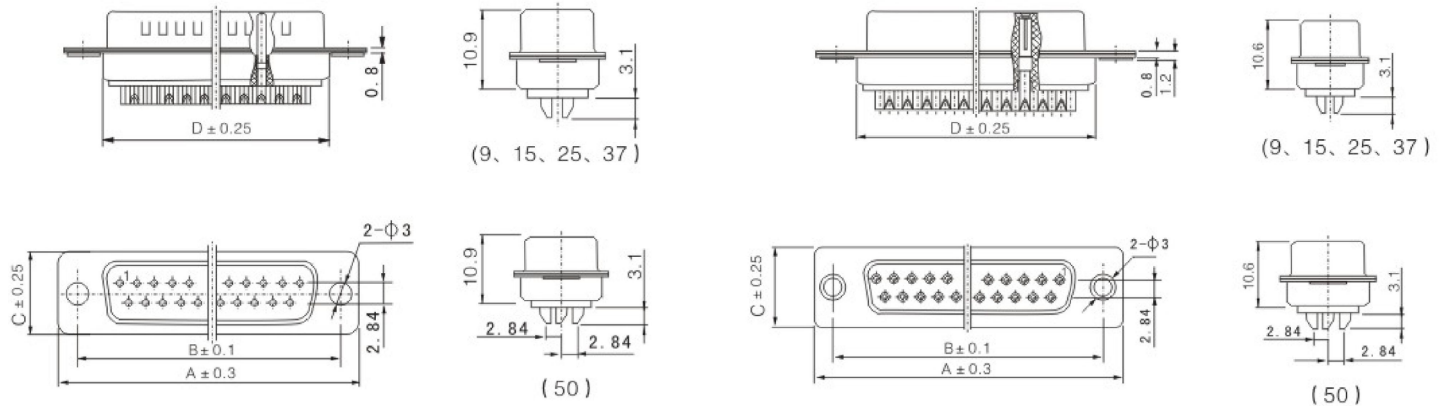
# D Series Rectangular Electrical Connector

## Boundary Dimension of Standard Type

### Solder wire type

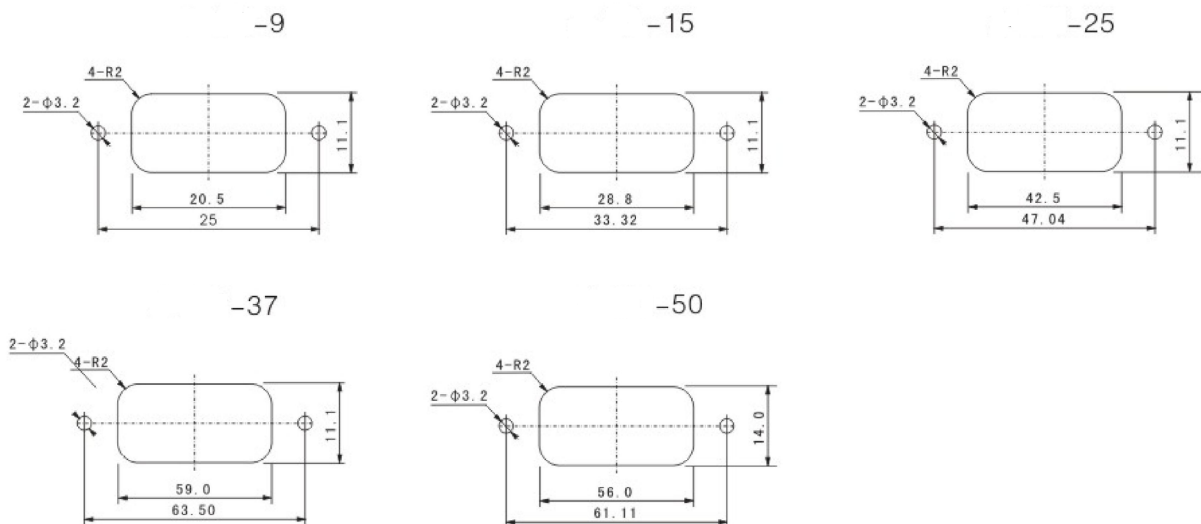
Plug (pin type contact) DC00101-nP

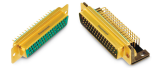
Socket (jack type contact) DC00101-nS



Number of Contacts	Plug Type	Socket Type	A	B	C	D
9	DC00101E9P	DC00101E9S	30.9	25	12.6	19.3
15	DC00101A15P	DC00101A15S	39.1	33.32	12.6	27.5
25	DC00101B25P	DC00101B25S	53.1	47.04	12.6	41.3
37	DC00101C37P	DC00101C37S	69.4	63.5	12.6	57.3
50	DC00101D50P	DC00101D50S	66.9	61.11	15.37	55.3

### Panel mounting hole size



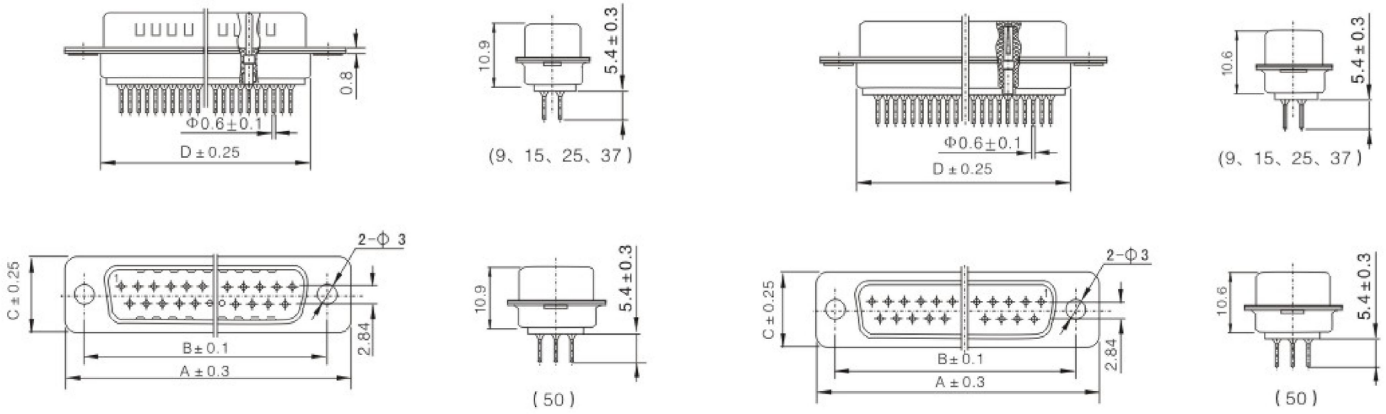


# D Series Rectangular Electrical Connector

## Board welding type

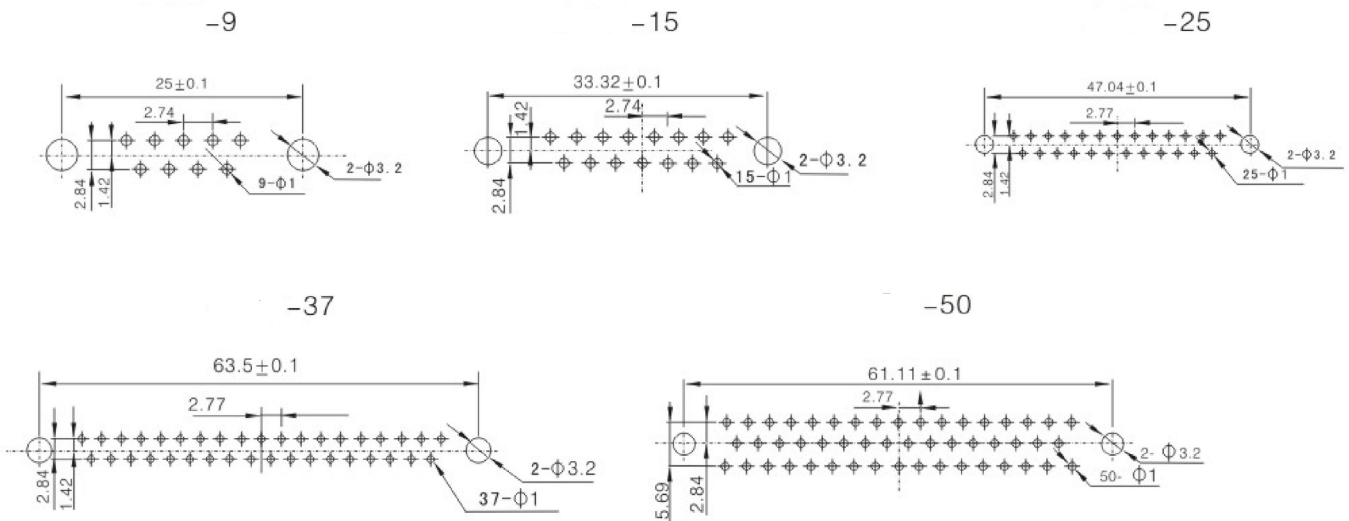
Plug (pin type contact) DC00101ST-nP

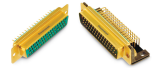
Socket (jack type contact) DC00101ST-nS



Number of Contacts	Plug Type	Socket Type	A	B	C	D
9	DC00101STE9P	DC00101STE9S	30.9	25	12.6	19.3
15	DC00101STA15P	DC00101STA15S	39.1	33.32	12.6	27.5
25	DC00101STB25P	DC00101STB25S	53.1	47.04	12.6	41.3
37	DC00101STC37P	DC00101STC37S	69.4	63.5	12.6	57.3
50	DC00101STD50P	DC00101STD50S	66.9	61.11	15.37	55.3

## Straight PCB board welding hole size



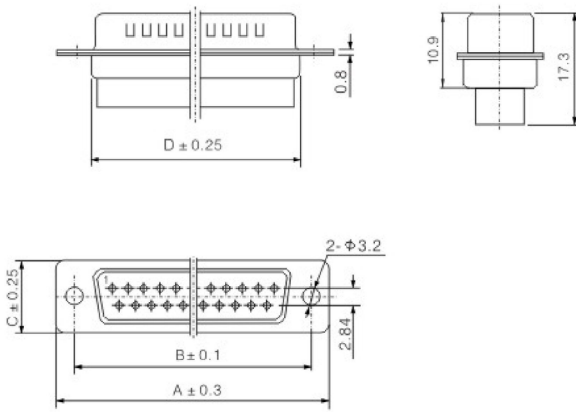


# D Series Rectangular Electrical Connector

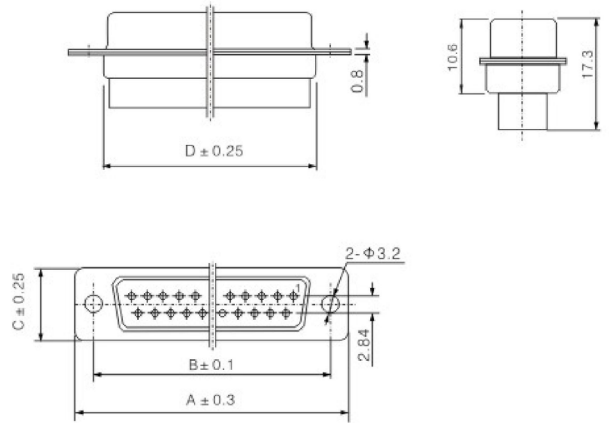
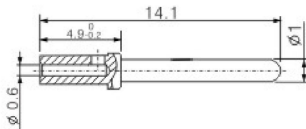
## Cable crimping type

Plug (pin type contact)

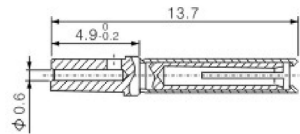
Socket (jack type contact)



Vehicle parts 8.844.1286

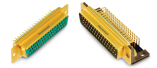


Vehicle parts 8.846.1033



Number of Contacts	Plug Type	Socket Type	A	B	C	D
9	DC00201E9P	DC00201E9S	30.9	25	12.6	19.3
15	DC00201A15P	DC00201A15S	39.1	33.32	12.6	27.5
25	DC00201B25P	DC00201B25S	53.1	47.04	12.6	41.3
37	DC00201C37P	DC00201C37S	69.4	63.5	12.6	57.3
50	DC00201D50P	DC00201D50S	66.9	61.11	15.37	55.3

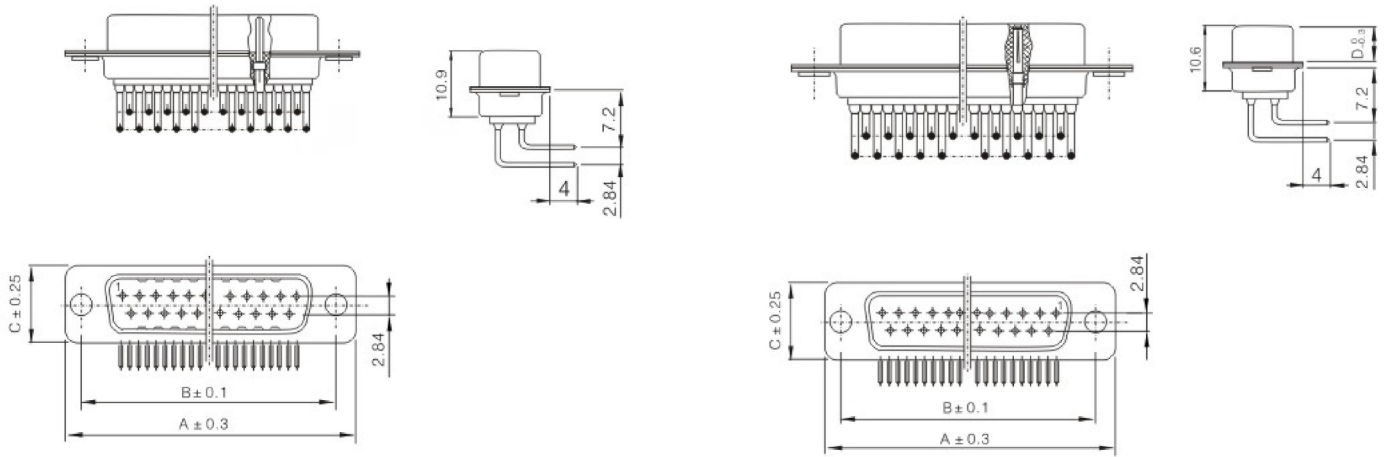
# D Series Rectangular Electrical Connector



Angle type (vehicle parts, center spacing: 7.2)

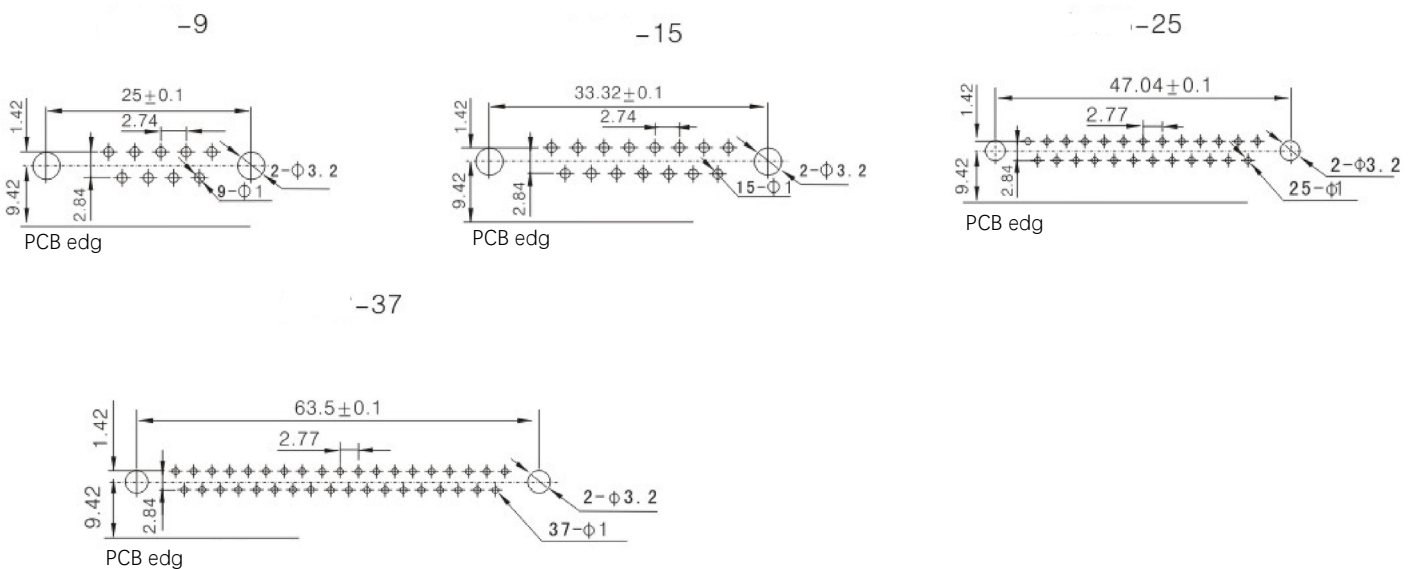
Plug (pin type contact) DC00101RA-nP

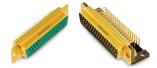
Socket (jack type contact) DC00101RA-nS



Number of Contacts	Plug Type	Socket Type	A	B	C	D
9	DC00101RAE9P	DC00101RAE9S	30.9	25	12.6	6.05
15	DC00101RAA15P	DC00101RAA15S	39.1	33.32	12.6	6.05
25	DC00101RAB25P	DC00101RAB25S	53.1	47.04	12.6	5.99
37	DC00101RAC37P	DC00101RAC37S	69.4	63.5	12.6	5.99
50	DC00101RAD50P	DC00101RAD50S	66.9	61.11	15.37	5.99

Angle PCB board welding hole size





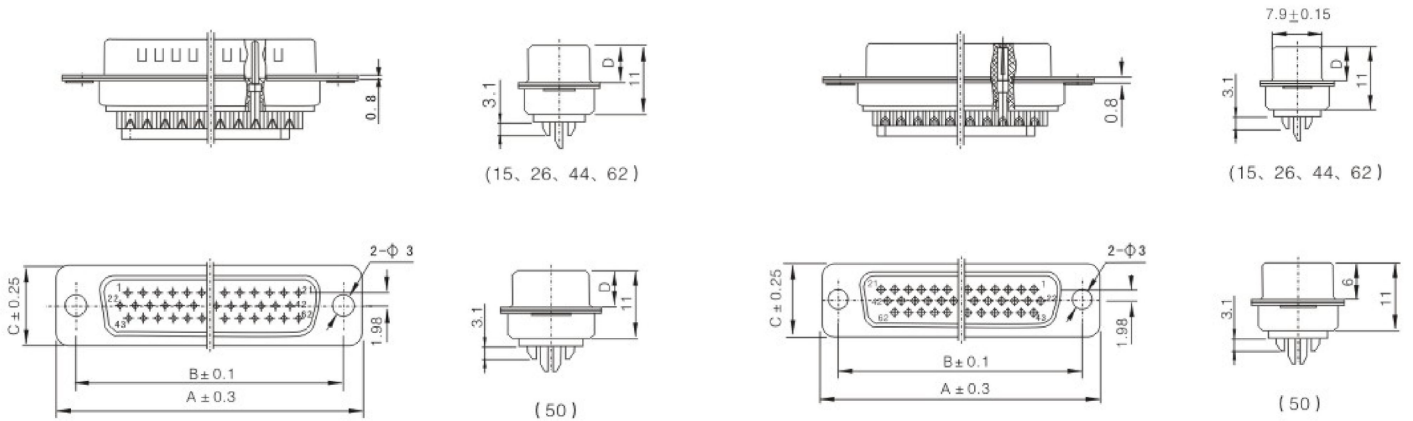
# D Series Rectangular Electrical Connector

## Boundary Dimension of High Density Type

### High density solder wire type

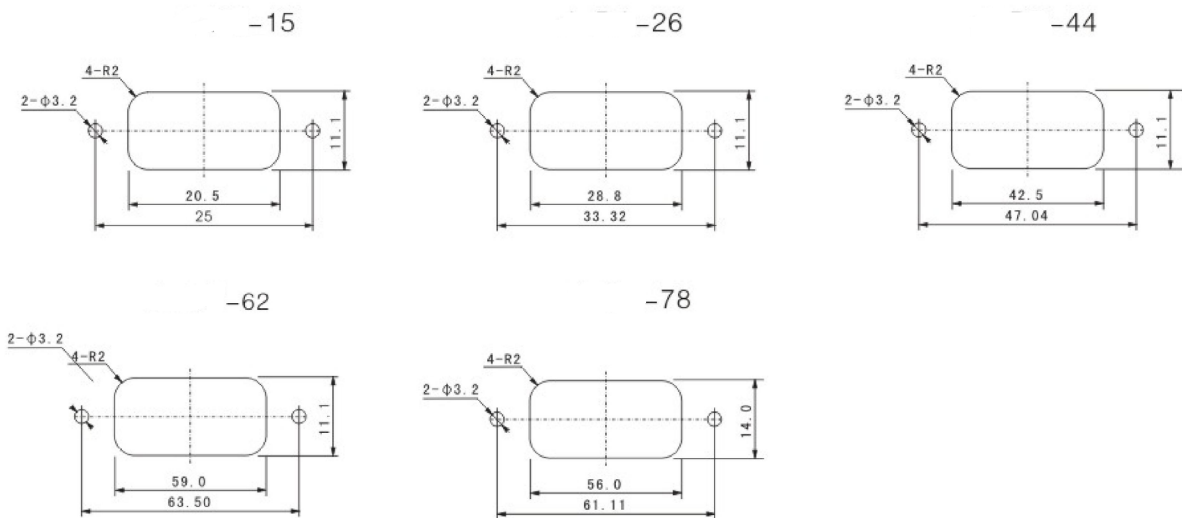
Plug (pin type contact) DC00102-nP

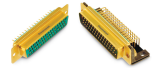
Socket (jack type contact) DC00102-nS



Number of Contacts	Plug Type	Socket Type	A	B	C	D
15	DC00102E15P	DC00102E15S	30.9	25	12.6	6.05
26	DC00102A26P	DC00102A26S	39.1	33.32	12.6	6.05
44	DC00102B44P	DC00102B44S	53.1	47.04	12.6	5.99
62	DC00102C62P	DC00102C62S	69.4	63.5	12.6	5.99
78	DC00102D78P	DC00102D78S	66.9	61.11	15.37	5.99

### Panel mounting hole size



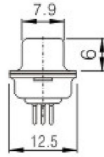
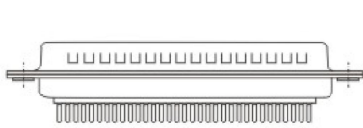


# D Series Rectangular Electrical Connector

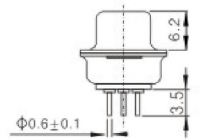
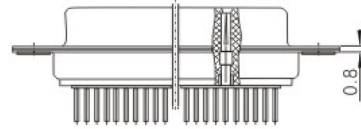
## High density solder wire type

Plug (pin type contact) DC00102ST-nP

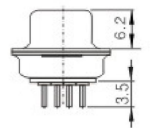
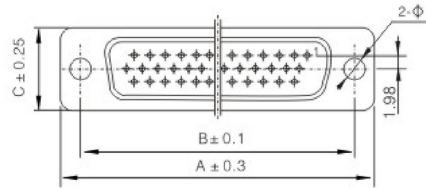
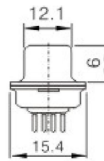
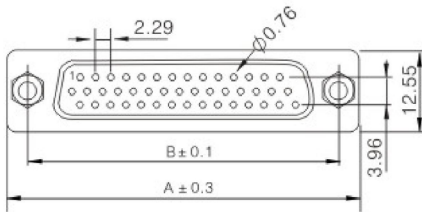
Socket (jack type contact) DC00102ST-nS



(15, 26, 44, 62)



(15, 26, 44, 62)

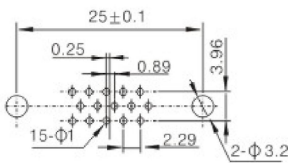


(50)

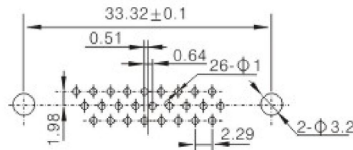
Number of Contacts	Plug Type	Socket Type	A	B	C
15	DC00102STE15P	DC00102STE15S	30.9	25	12.6
26	DC00102STA26P	DC00102STA26S	39.1	33.32	12.6
44	DC00102STB44P	DC00102STB44S	53.1	47.04	12.6
62	DC00102STC62P	DC00102STC62S	69.4	63.5	12.6
78	DC00102STD78P	DC00102STD78S	66.9	61.11	15.37

## Straight PCB board welding hole size

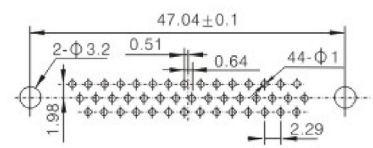
□ -15



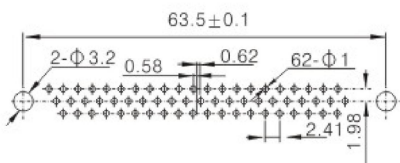
□ -26



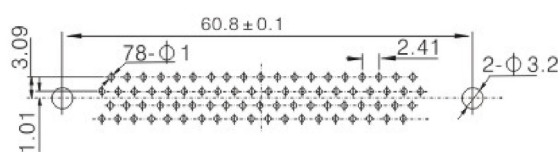
□ -44

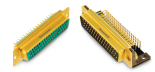


□ -62



□ -78

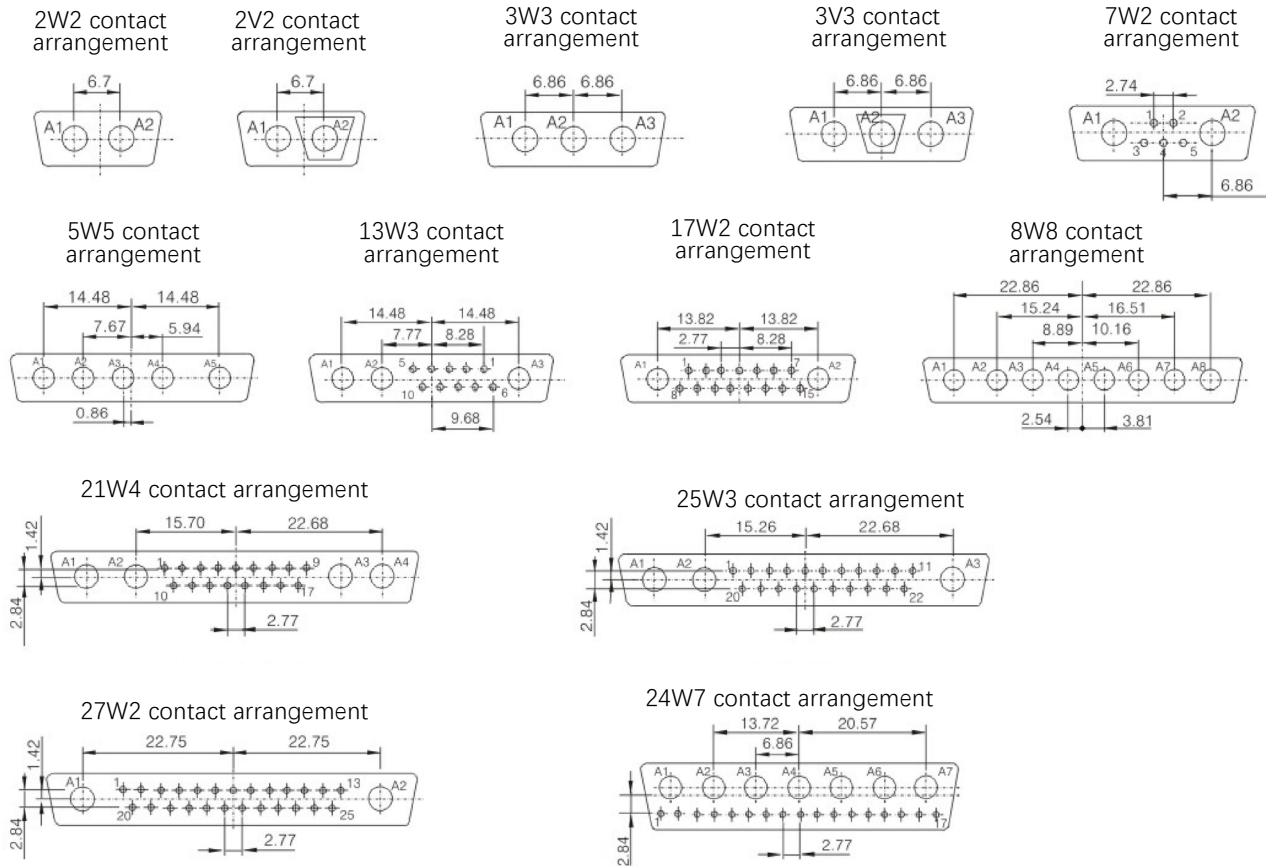




# D Series Rectangular Electrical Connector

## Mixed Contact Type Spectrum

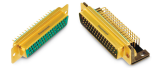
Insulator hole position of the pin contact from the insertion surface



## Model Naming of Mixed Contact Type Spectrum

Product title code	DC001	01	-	E	2W2	P	-	-
01- Standard density; 02 - high density								
Wiring method: Nothing - solder cup; ST - straight board welding; RA - angle board welding								
Shell number: E, A, B, C, D, F								
Contacts: Contact Layout Code								
Contact type: P-pin; S-socket								
Locking modes: Nothing - without locking device, K, K1, S, S I, S II, S III, S IV, S-K, S-K1, etc.								
Deviations								

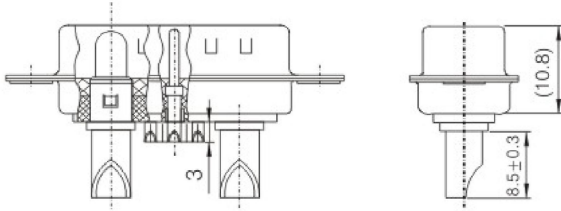




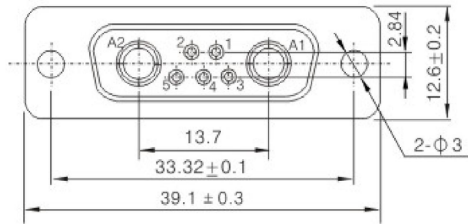
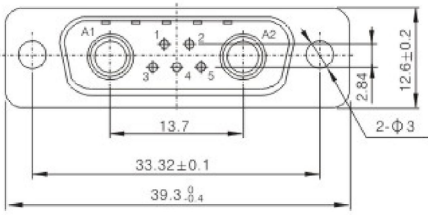
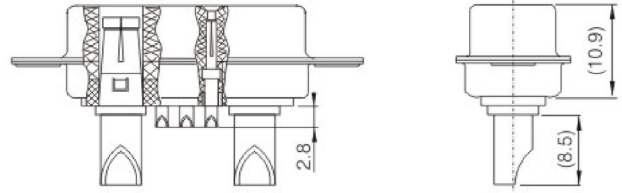
# D Series Rectangular Electrical Connector

## Mixed contact solder wire type (take 7W2 as an example)

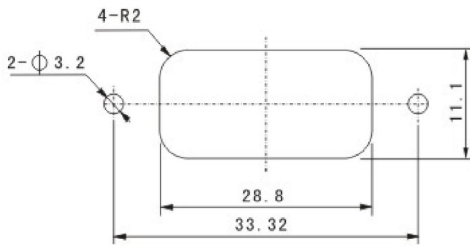
Plug (pin type contact)



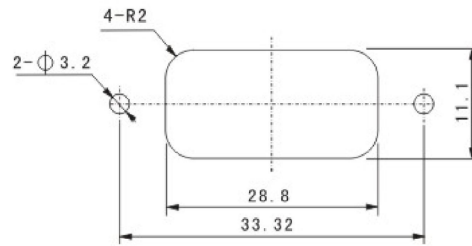
Socket (jack type contact)



Panel mounting hole size

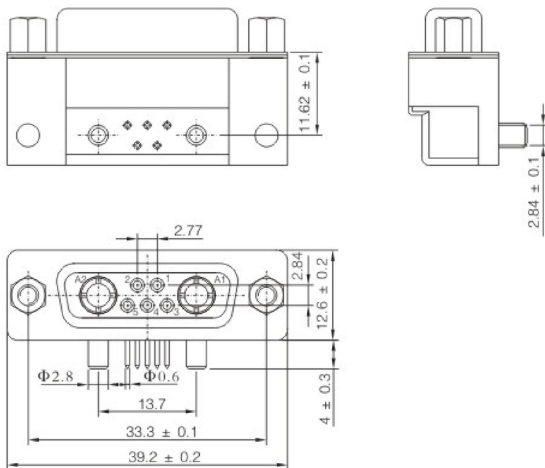


Panel mounting hole size

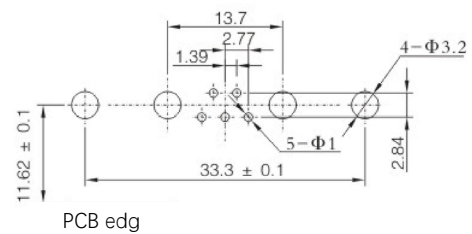


## Mixed contact angle board welding type (take 7W2 as an example)

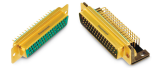
Socket (jack type contact)



PCB hole size





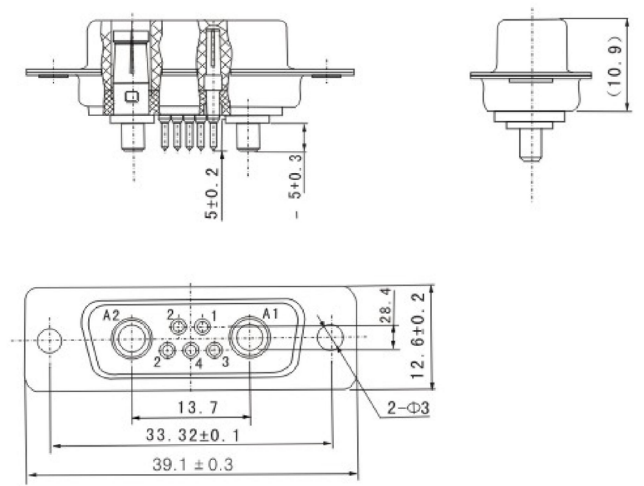
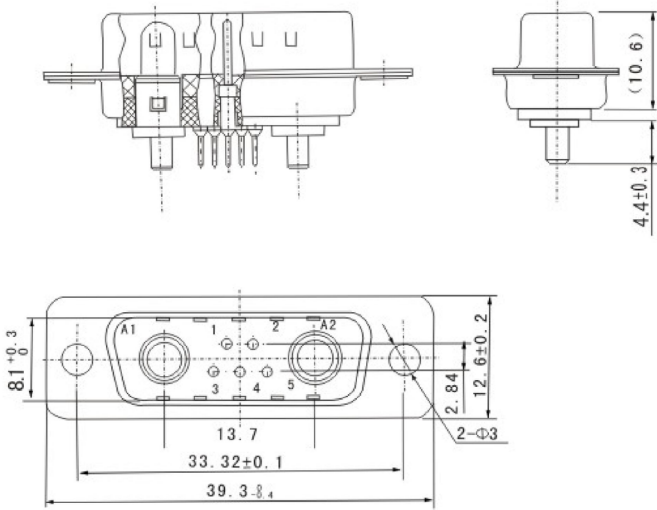


# D Series Rectangular Electrical Connector

## Mixed contact board welding type (take 7W2 as an example)

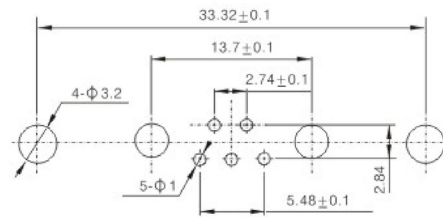
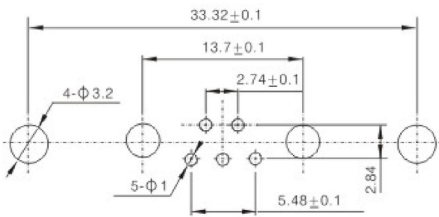
Plug (pin type contact)

Socket (jack type contact)



PCB hole size

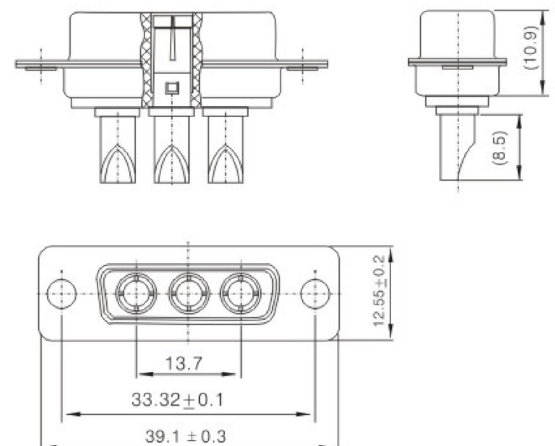
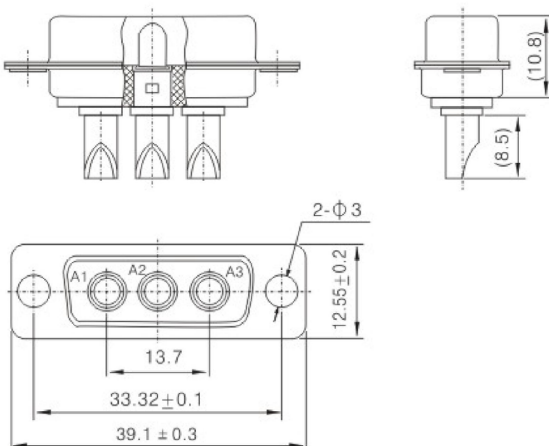
PCB hole size

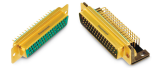


## Power 3W3 welding type

Plug (pin type contact)

Socket (jack type contact)

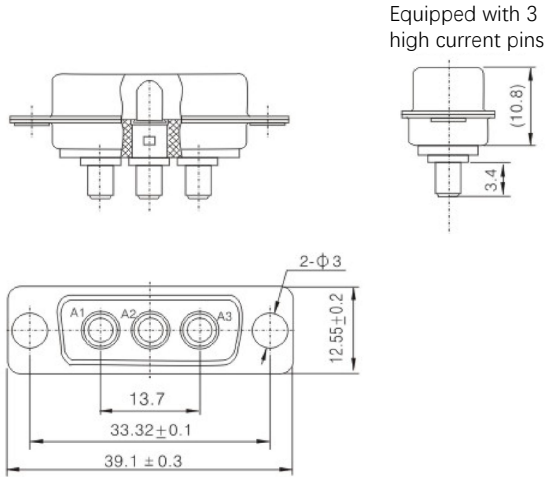




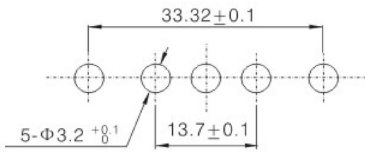
# D Series Rectangular Electrical Connector

## Power 3W3 welding type

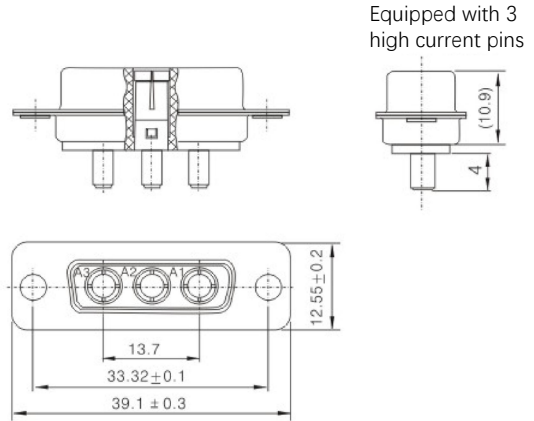
Straight board welding plug (pin type contact)



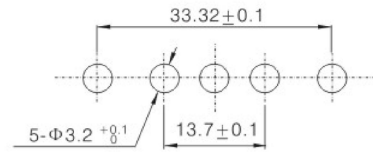
PCB hole size



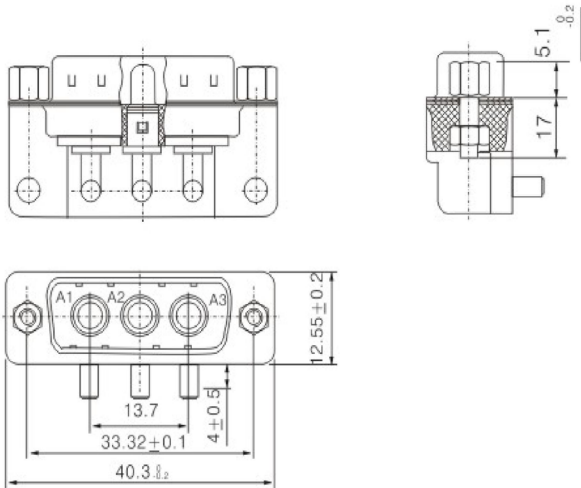
Straight board welding socket (jack type contact)



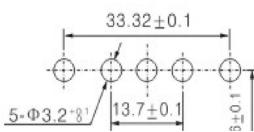
PCB hole size



Angle board welding plug (pin type contact)

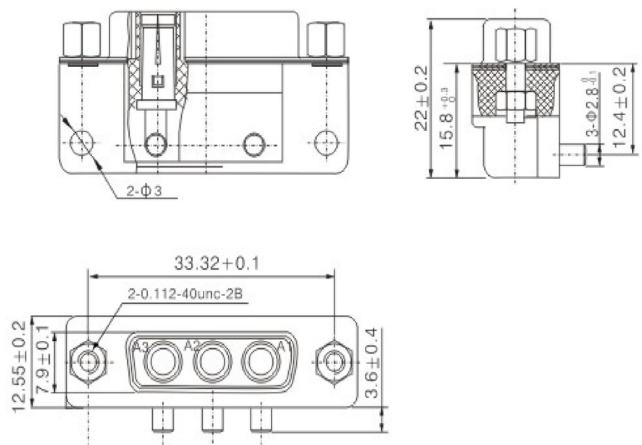


PCB hole size

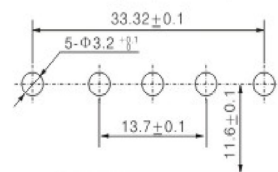


PCB edge

Angle board welding socket (jack type contact)

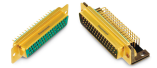


PCB hole size



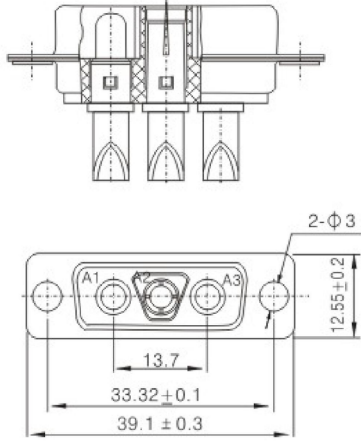
PCB edge

# D Series Rectangular Electrical Connector

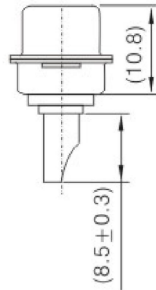


## Power 3V3 welding type

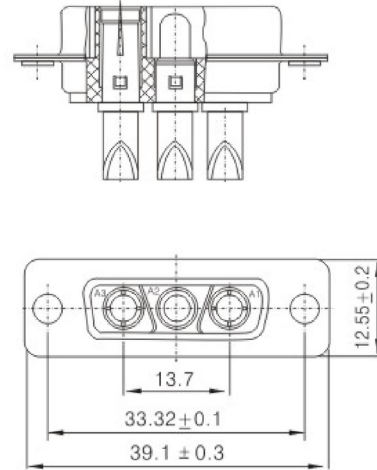
Plug



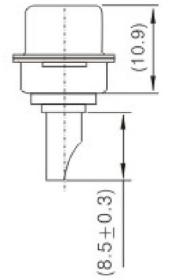
Equipped with 2 high current pins and 1 high current jack



Socket

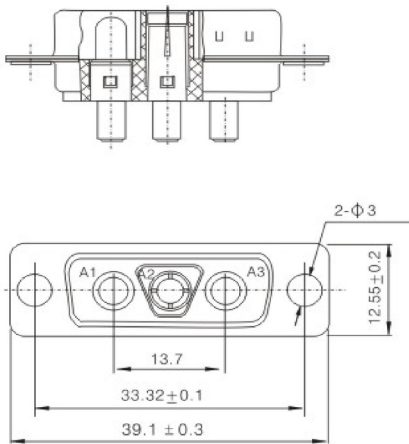


Equipped with 2 high current pins and 1 high current jack

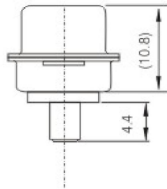


## Power 3V3 board welding type

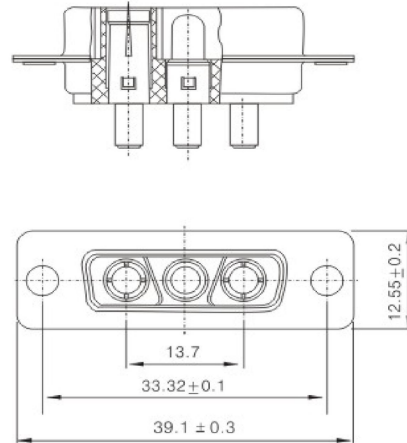
Straight board welding plug



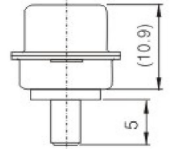
Equipped with 2 high current pins and 1 high current jack



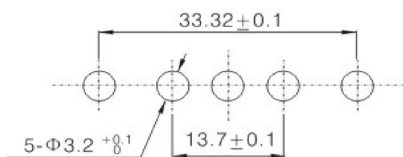
Straight board welding socket



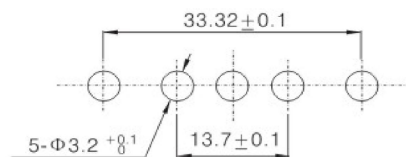
Equipped with 2 high current pins and 1 high current jack

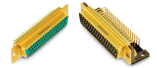


PCB hole size



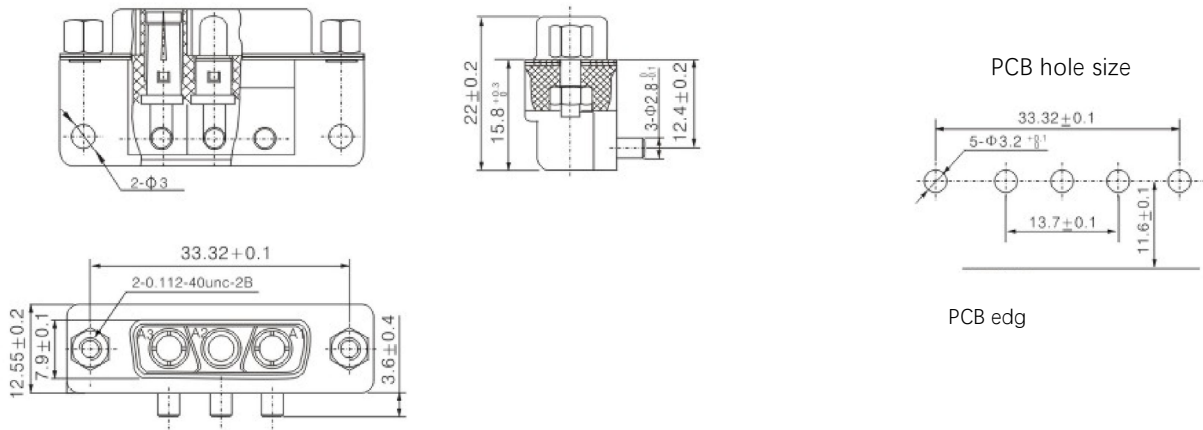
PCB hole size





# D Series Rectangular Electrical Connector

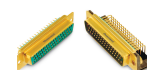
## Angle board welding plug



## Contacts

### Crimp Contacts

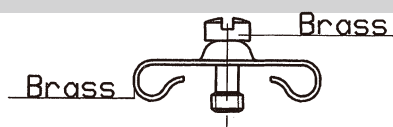
Contacts	Wire		Part number
# 20	# 20/24	Pin	DC00501B
		Socket	DC00502B
# 20	# 26/28	Pin	DC00503B
		Socket	DC00504B
# 20	# 18	Pin	DC00505B
		Socket	DC00506B
# 22	# 22/26	Pin	DC00507B
		Socket	DC00508B



# D Series Rectangular Electrical Connector

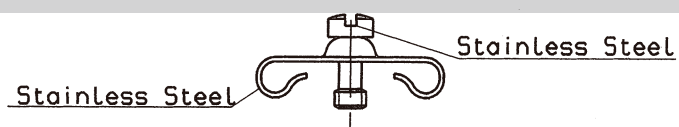
## Optional accessories

### Male screw lock



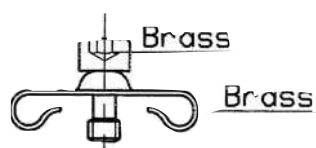
WITHOUT BACKSHELL	Shell size	Part number
	B, C : S E, A : P, S	DC 022 02BNMB
	B, C : P	DC 022 03BNMB
	D : S	DC 022 04BNMB
	D : P	DC 022 05BNMB

WITH BACKSHELL	Shell size	Part number
	B, C : S E, A : P, S	DC 022 44BNMB
	B, C : P	DC 022 45BNMB
	D : S	DC 022 45BNMB
	D : P	DC 022 47BNMB



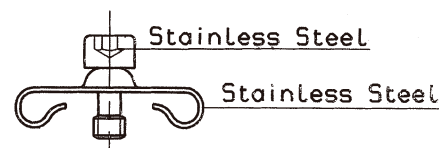
WITHOUT BACKSHELL	Shell size	Part number
	B, C : S E, A : P, S	DC 022 49B
	B, C : P	DC 022 50B
	D : S	DC 022 51B
	D : P	DC 022 52B

WITH BACKSHELL	Shell size	Part number
	B, C : S E, A : P, S	DC 022 54B
	B, C : P	DC 022 55B
	D : S	DC 022 56B
	D : P	DC 022 57B



WITHOUT BACKSHELL	Shell size	Part number
	B, C : S E, A : P, S	DC 022 65BNMB
	B, C : P	DC 022 66BNMB
	D : S	DC 022 67BNMB
	D : P	DC 022 68BNMB

WITH BACKSHELL	Shell size	Part number
	B, C : S E, A : P, S	DC 022 69BNMB
	B, C : P	DC 022 70BNMB
	D : S	DC 022 71BNMB
	D : P	DC 022 72BNMB

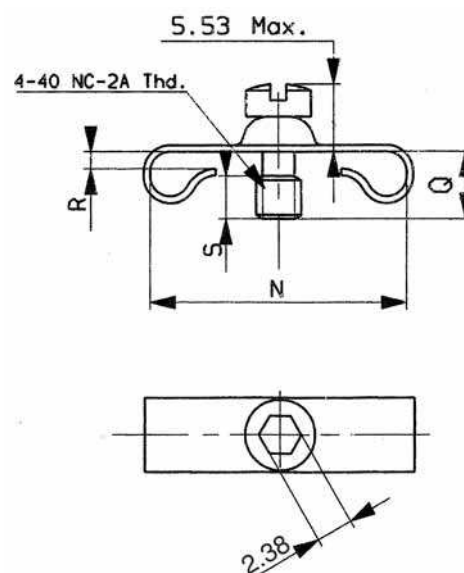


WITHOUT BACKSHELL	Shell size	Part number
	B, C : S E, A : P, S	DC 022 73B
	B, C : P	DC 022 74B
	D : S	DC 022 75B
	D : P	DC 022 76B

WITH BACKSHELL	Shell size	Part number
	B, C : S E, A : P, S	DC 022 77B
	B, C : P	DC 022 78B
	D : S	DC 022 79B
	D : P	DC 022 80B

### Dimensions

Use with shell size	N		Q		R		S
	min	Max.	min	Max.	min	Max.	
Without backshell							
<b>A, E : (P or S) B, C : S</b>	12.96	13.72	3.22	3.98	0.75	0.95	2.80 mini
<b>B, C : P</b>	12.96	13.72	3.22	3.98	0.95	1.15	2.80 mini
<b>D : S</b>	15.75	16.26	3.22	3.98	0.95	0.95	2.80 mini
<b>D : P</b>	15.75	16.26	3.22	3.98	0.95	1.15	2.80 mini
With backshell							
<b>A, E : (P or S) B, C : S</b>	12.96	13.72	4.22	4.98	0.75	1.95	2.80 mini
<b>B, C : P</b>	12.96	13.72	4.22	4.98	0.95	2.20	2.80 mini
<b>D : S</b>	15.75	16.26	4.22	4.98	0.95	1.95	2.80 mini
<b>D : P</b>	15.75	16.26	4.22	4.98	0.95	2.20	2.80 mini





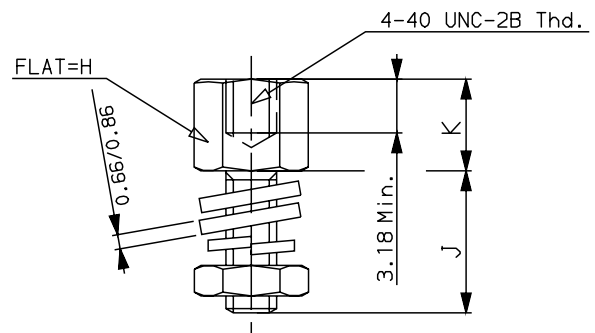
# D Series Rectangular Electrical Connector

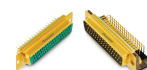
Male screw lock

	Part number	Material
Standard	DC 022 01BNMB	Brass
For savers	DC 022 06BNMB	
Standard	DC 022 48B	Stainless steel
For savers	DC 022 53B	

## Dimensions

Variant	H		J		K	
	min	Max.	min	Max.	min	Max.
01 & 48	4,37 .172	5,13 .202	7,54 .297	8,3 .327	4,6 .181	5,1 .201
06 & 53	4,37 .172	5,13 .202	14,35 .565	14,65 .577	4,6 .181	5,1 .201

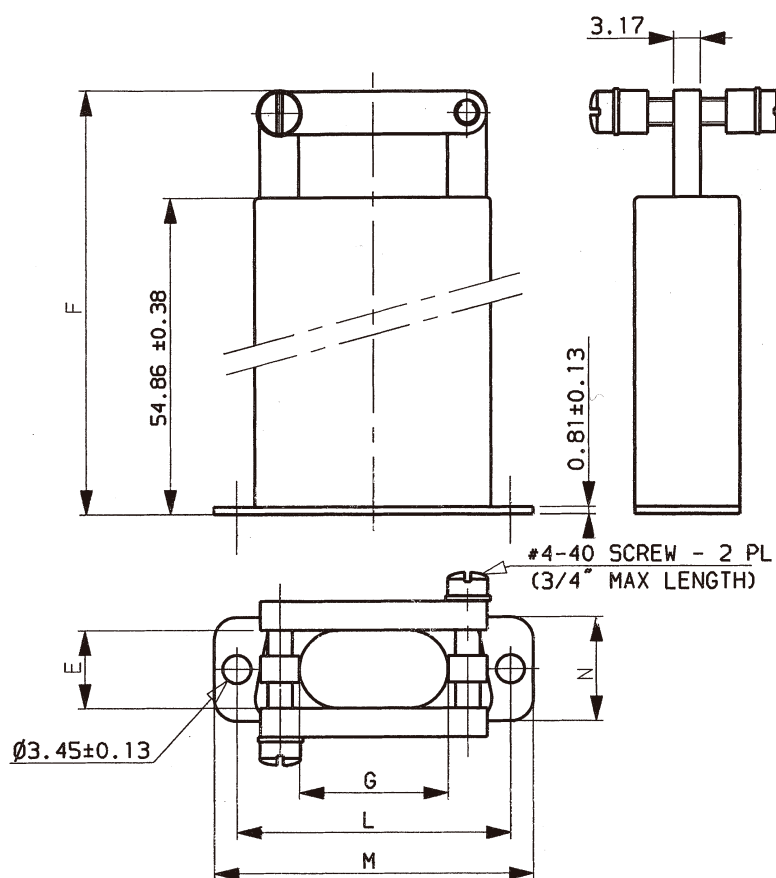




## D Series Rectangular Electrical Connector

### Optional accessories

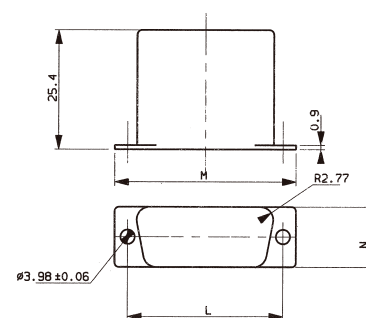
#### Cable clamp

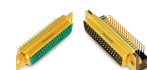


Shell size	E±0,38	F±0,60	G±0,38	M±0,38	N±0,14	L±0,25	Part number
<b>E</b>	9,52	67,56	8,89	30,56	13,05	24,99	DC 072 05B NMB
<b>A</b>	9,52	67,56	12,06	38,89	13,05	33,32	DC 072 06B NMB
<b>B</b>	9,52	69,16	12,70	52,78	13,05	47,04	DC 072 07B NMB
<b>C</b>	9,52	69,16	12,70	69,04	13,05	63,50	DC 072 08B NMB
<b>D</b>	11,88	69,16	15,46	66,67	15,82	61,11	DC 072 09B NMB

#### Shorting can

Shell size	M±0,38	N±0,38	L±0,25	Part number
<b>E</b>	30,56	12,70	24,99	DC 072 10B NMB
<b>A</b>	38,89	12,70	33,32	DC 072 11B NMB
<b>B</b>	52,78	12,70	47,04	DC 072 12B NMB
<b>C</b>	69,04	12,70	63,50	DC 072 13B NMB
<b>D</b>	66,67	15,47	61,11	DC 072 14B NMB





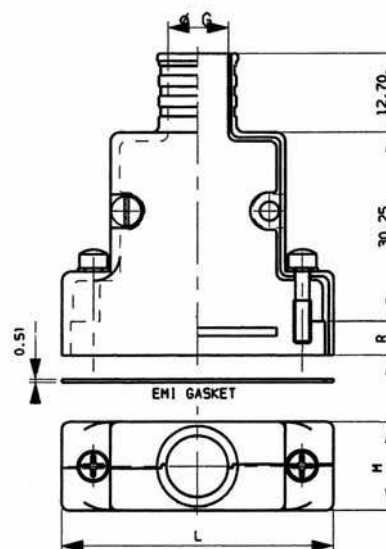
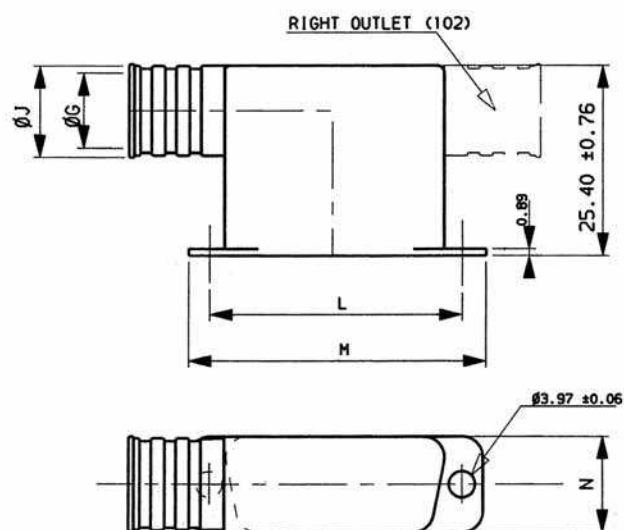
## D Series Rectangular Electrical Connector

### Optional accessories

#### EMI Shielded straight backshell

Shell size	Part number Front/mount	$\varnothing G_{\pm 0,25}$	$M_{\pm 0,25}$	$L_{\pm 0,25}$	$R_{\pm 0,13}$ Front/mount
<b>E</b>	DC 072 15B NMB	6,73	15,98	35,03	7,74
<b>A</b>	DC 072 16B NMB	9,90	15,98	43,36	7,74
<b>B</b>	DC 072 17B NMB	10,54	15,98	57,25	7,74
<b>C</b>	DC 072 18B NMB	10,54	15,98	73,53	7,74
<b>D</b>	DC 072 19B NMB	13,33	18,79	71,14	7,74

Shell size	Part number Rear/mount	$\varnothing G_{\pm 0,25}$	$M_{\pm 0,25}$	$L_{\pm 0,25}$	$R_{\pm 0,13}$ Rear/mount
<b>E</b>	DC 072 20B NMB	6,73	15,98	35,03	6,32
<b>A</b>	DC 072 21B NMB	9,90	15,98	43,36	6,32
<b>B</b>	DC 072 22B NMB	10,54	15,98	57,25	6,32
<b>C</b>	DC 072 23B NMB	10,54	15,98	73,53	6,32
<b>D</b>	DC 072 24B NMB	13,33	18,79	71,14	6,32

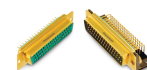


#### EMI Shielded angle backshell

Shell size	Right outlet Part number	$\varnothing G_{\pm 0,25}$	$J_{\pm 0,38}$	$M_{\pm 0,36}$	$N_{\pm 0,38}$	$L_{\pm 0,13}$
<b>E</b>	DC 072 25B NMB	6,85	8,89	30,56	12,70	24,99
<b>A</b>	DC 072 26B NMB	10,03	12,06	38,89	12,70	33,32
<b>B</b>	DC 072 27B NMB	10,66	12,70	52,78	12,70	47,04
<b>C</b>	DC 072 28B NMB	10,66	12,70	69,04	12,70	63,50
<b>D</b>	DC 072 29B NMB	13,43	15,46	66,67	15,47	61,11

Shell size	Left outlet Part number	$\varnothing G_{\pm 0,25}$	$J_{\pm 0,38}$	$M_{\pm 0,36}$	$N_{\pm 0,38}$	$L_{\pm 0,13}$
<b>E</b>	DC 072 30B NMB	6,85	8,89	30,56	12,70	24,99
<b>A</b>	DC 072 31B NMB	10,03	12,06	38,89	12,70	33,32
<b>B</b>	DC 072 32B NMB	10,66	12,70	52,78	12,70	47,04
<b>C</b>	DC 072 33B NMB	10,66	12,70	69,04	12,70	63,50
<b>D</b>	DC 072 34B NMB	13,43	15,46	66,67	15,47	61,11



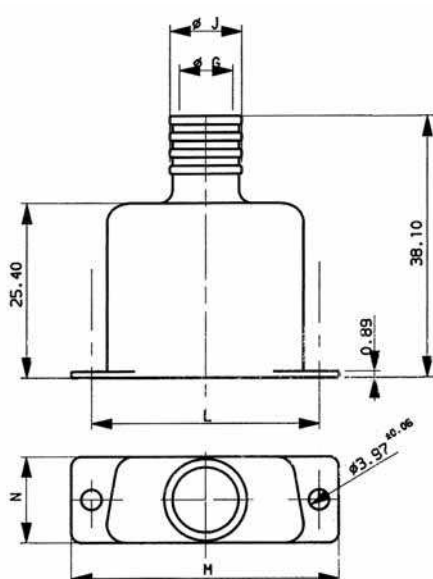


## D Series Rectangular Electrical Connector

### Optional accessories

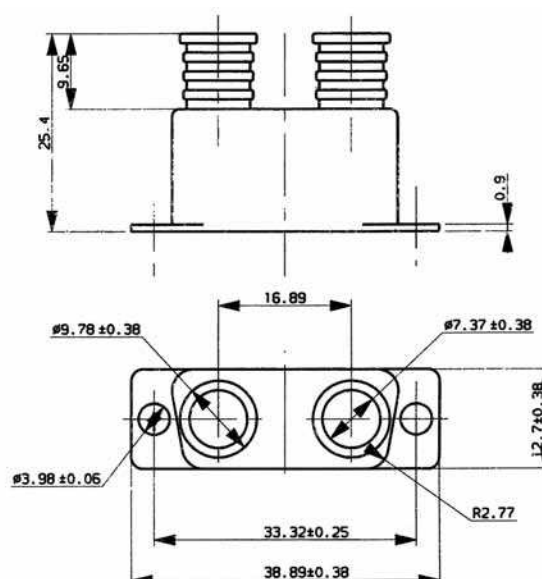
EMI Shielded straight backshell

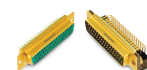
Shell size	Part number	$\varnothing G \pm 0.25$	$J \pm 0.38$	$M \pm 0.38$	$N \pm 0.38$	$L \pm 0.13$
<b>E</b>	DC 072 35B NMB	6,85	8,89	30,56	12,70	24,99
<b>A</b>	DC 072 36B NMB	10,03	12,06	38,89	12,70	33,32
<b>B</b>	DC 072 37B NMB	10,66	12,70	52,78	12,70	47,04
<b>C</b>	DC 072 38B NMB	10,66	12,70	69,04	12,70	63,50
<b>D</b>	DC 072 39B NMB	13,43	15,46	66,67	15,47	61,11



EMI Shielded straight backshell dual entry

Shell size	Part number
<b>A</b>	DC 072 40B NMB





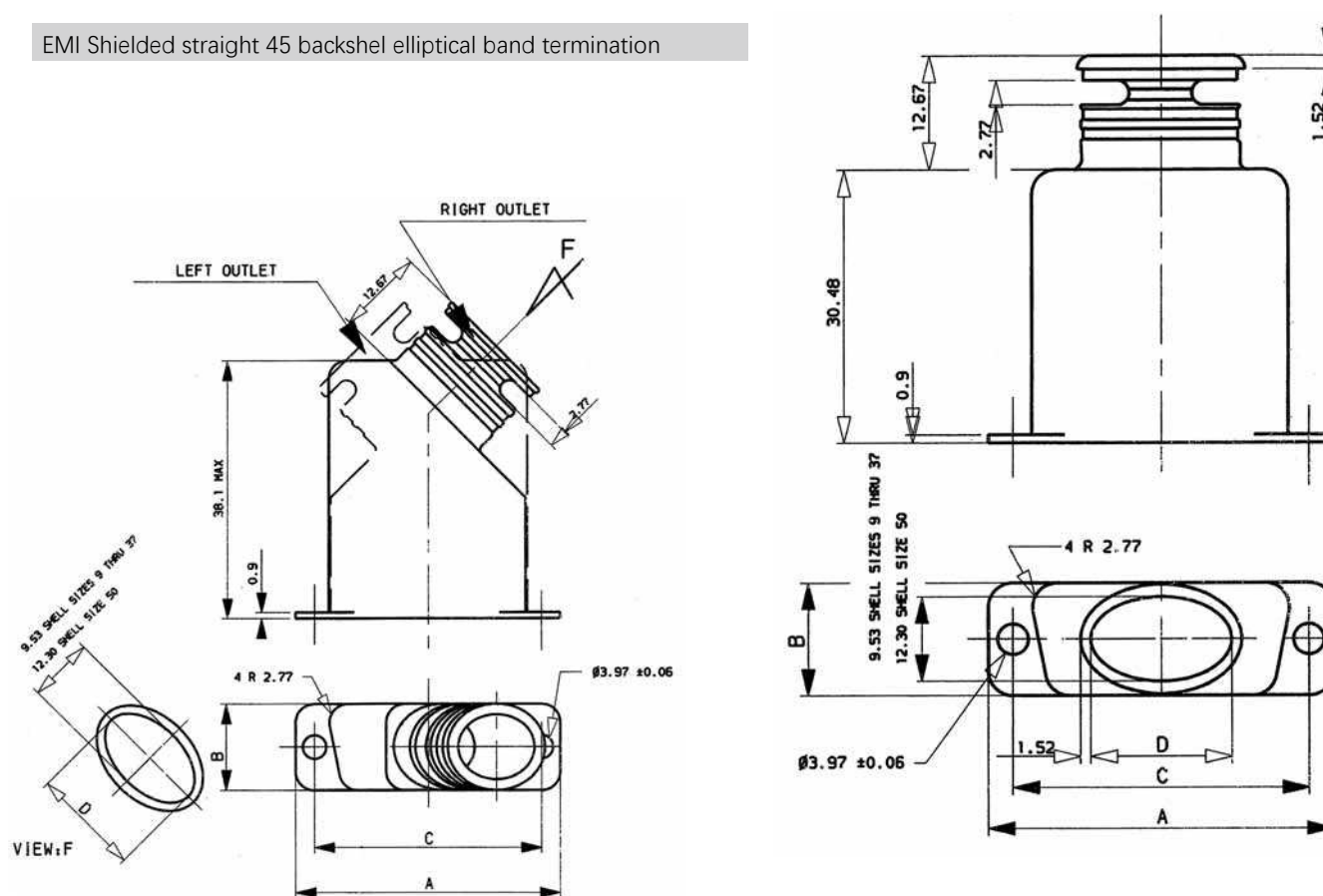
## D Series Rectangular Electrical Connector

### Optional accessories

#### EMI Shielded straight backshell elliptical band termination

Shell size	Part number	A±0,38	B±0,38	C±0,13	D±0,38
E	DC 072 46B NMB	30,56	12,70	24,99	12,70
A	DC 072 47B NMB	38,89	12,70	33,32	15,87
B	DC 072 48B NMB	52,78	12,70	47,04	19,05
C	DC 072 49B NMB	69,04	12,70	63,50	25,40
D	DC 072 50B NMB	66,67	15,46	61,11	22,22

#### EMI Shielded straight 45 backshell elliptical band termination



Shell size	Right outlet Part number	A±0,38	B±0,38	C±0,13	D±0,38
E	DC 072 51B NMB	30,56	12,70	24,99	12,70
A	DC 072 52B NMB	38,89	12,70	33,32	15,87
B	DC 072 53B NMB	52,78	12,70	47,04	19,05
C	DC 072 54B NMB	69,04	12,70	63,50	25,40
D	DC 072 55B NMB	66,67	15,46	61,11	22,22

Shell size	Left outlet Part number	A±0,38	B±0,38	C±0,13	D±0,38
E	DC 072 56B NMB	30,56	12,70	24,99	12,70
A	DC 072 57B NMB	38,89	12,70	33,32	15,87
B	DC 072 58B NMB	52,78	12,70	47,04	19,05
C	DC 072 59B NMB	69,04	12,70	63,50	25,40
D	DC 072 60B NMB	66,67	15,46	61,11	22,22