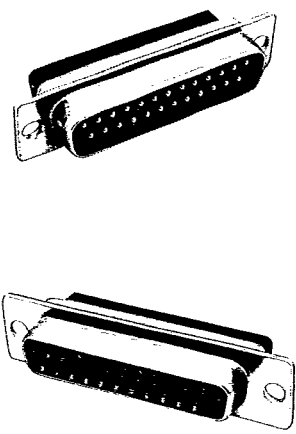
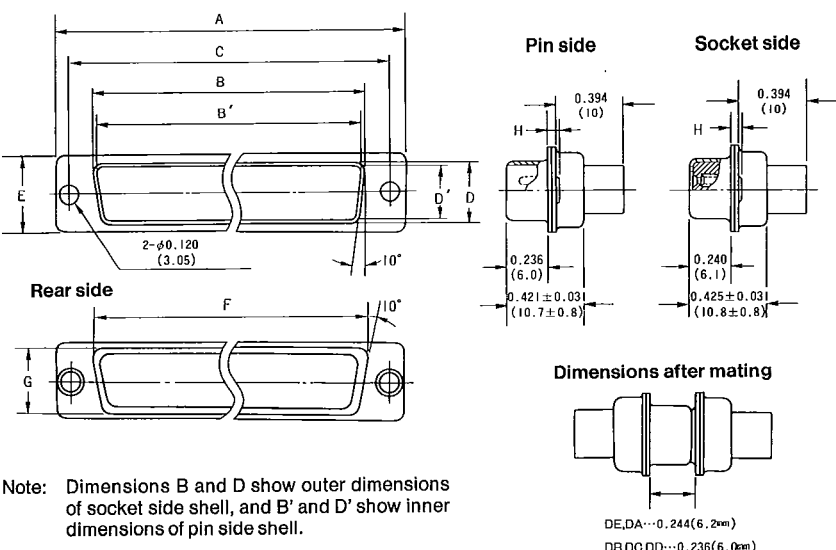


D*U CRIMP TERMINATION TYPE

D*U Standard shell

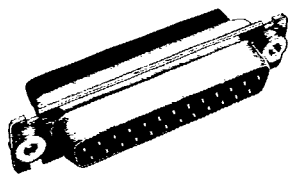


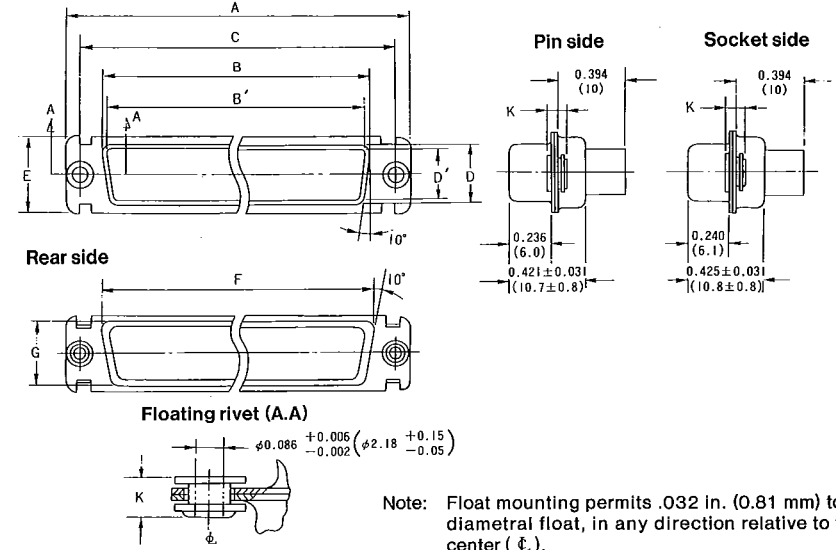


Note: Dimensions B and D show outer dimensions of socket side shell, and B' and D' show inner dimensions of pin side shell.

DE,DA...0.244(6.2mm)
DB,DC,DD...0.236(6.0mm)

D*UF Float shell





Note: Float mounting permits .032 in. (0.81 mm) total diametral float, in any direction relative to the center (⊥).

- Only one connector, either pin or socket, should be float mounted.

No. of Contacts	Part Number		A	B	B'	C	D	D'	E	F	G	H	K
			±0.020 (±0.8)	±0.016 (±0.25)	±0.010 (±0.25)	±0.005 (±0.13)	±0.010 (±0.25)	±0.010 (±0.25)	±0.020 (±0.5)	±0.016 (±0.4)	±0.016 (±0.4)	±0.016 (±0.4)	±0.010 (±0.25)
9	Pin	DEU-9P-FO	1.213 (30.8)	—	.665 (16.90)	.984 (24.99)	—	.328 (8.34)	.496 (12.6)	.760 (19.3)	.421 (10.7)	.047 (1.2)	.120 (3.05)
	Socket	DEU-9S-FO	1.213 (30.8)	.640 (16.26)	—	.984 (24.99)	.308 (7.82)	—	.496 (12.6)	.760 (19.3)	.421 (10.7)	.047 (1.2)	.120 (3.05)
15	Pin	DAU-15P-FO	1.539 (39.1)	—	.994 (25.24)	1.312 (33.32)	—	.328 (8.34)	.496 (12.6)	1.083 (27.5)	.421 (10.7)	.047 (1.2)	.120 (3.05)
	Socket	DAU-15S-FO	1.539 (39.1)	.968 (24.59)	—	1.312 (33.32)	.308 (7.82)	—	.496 (12.6)	1.083 (27.5)	.421 (10.7)	.047 (1.2)	.120 (3.05)
25	Pin	DBU-25P-FO	2.087 (53.0)	—	1.536 (39.01)	1.852 (47.04)	—	.331 (8.4)	.496 (12.6)	1.626 (41.3)	.421 (10.7)	.059 (1.5)	.129 (3.28)
	Socket	DBU-25S-FO	2.087 (53.0)	1.508 (38.3)	—	1.852 (47.04)	.308 (7.82)	—	.496 (12.6)	1.626 (41.3)	.421 (10.7)	.047 (1.2)	.120 (3.05)
37	Pin	DCU-37P-FO	2.728 (69.3)	—	2.184 (55.47)	2.500 (63.50)	—	.331 (8.4)	.496 (12.6)	2.272 (57.7)	.421 (10.7)	.059 (1.5)	.129 (3.28)
	Socket	DCU-37S-FO	2.728 (69.3)	2.156 (54.76)	—	2.500 (63.50)	.308 (7.82)	—	.496 (12.6)	2.272 (57.7)	.421 (10.7)	.047 (1.2)	.120 (3.05)
50	Pin	DDU-50P-FO	2.634 (66.9)	—	2.081 (52.86)	2.406 (61.11)	—	.439 (11.16)	.606 (15.4)	2.177 (55.3)	.547 (13.9)	.059 (1.5)	.129 (3.28)
	Socket	DDU-50S-FO	2.634 (66.9)	2.061 (52.34)	—	2.406 (61.11)	.419 (10.65)	—	.606 (15.4)	2.177 (55.3)	.547 (13.9)	.047 (1.2)	.120 (3.05)

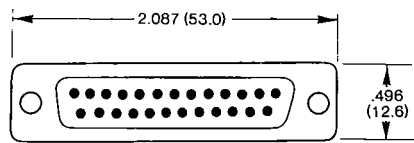
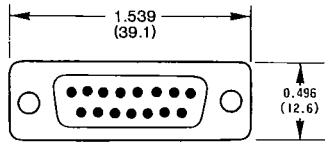
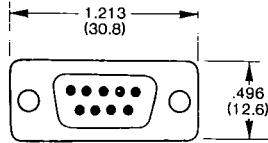
- To order float mount, add "F". For example: DAUF-15S-FO.
- To order glass-filled nylon insulator, part number becomes D*C. For example: DAC-15S-FO

FEATURES

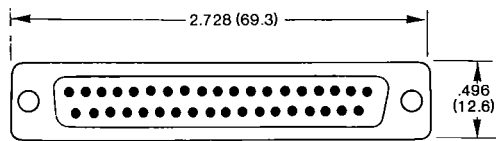
• **Five different shell sizes and numbers of conductors**

The connector housing is compact and rectangular. The contacts and insulators are contained in a rugged steel shell. There are five shell sizes (E, A, B, C, and D), respectively with standard contact counts of 9, 15, 25, 37, and 50. Special layouts to accept coaxial, high-voltage, and high-current contacts are also available.

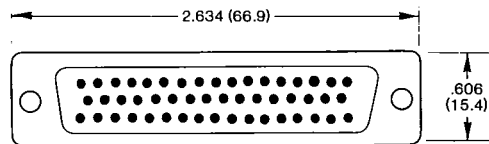
E	A	Shell Size:
9	15	Number of Conductors:



B	Shell Size:
25	Number of Conductors:



C	Shell Size:
37	Number of Conductors:



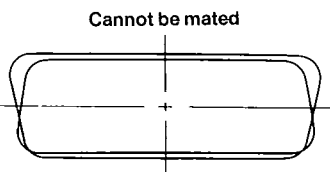
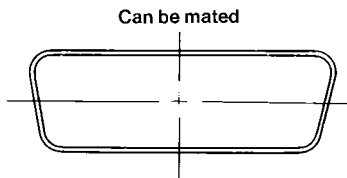
D	Shell Size:
50	Number of Conductors:

Special Layouts (D*M Type)



• **Fail-Safe Polarizing Mechanism**

The shell connecting part is keystone trapezoidal which inherently prevents incorrect coupling.



• **Official Standards**

D Sub connectors conform to many international standards including:

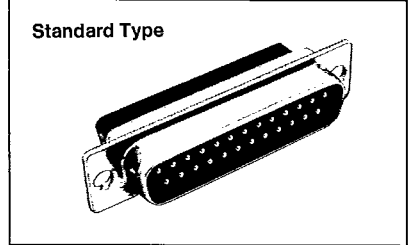
- Japan Industrial Standards
 - JIS-C-6361
 - JIS-C-6366
 - JIS-C-6367
- Japan Defense Agency Standards
 - NDSXC 6116
 - DSP C 6242
- US Military Standards
 - MIL-C-24308

• **Shell Type**

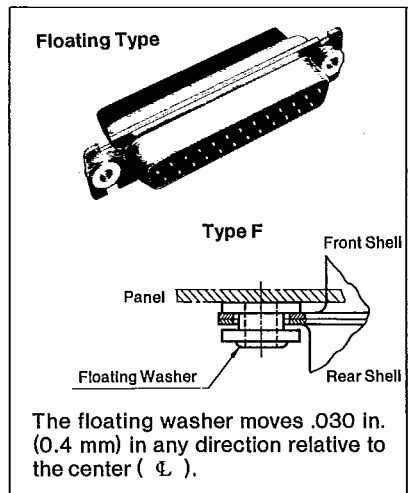
The shell profile comes in a panel-mounting standard type and floating type (the latter aids in rack-to-panel connection).

A-17-03
A-17-05
A-61-11
A-65-07

Standard Type



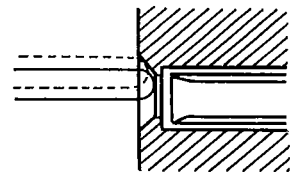
Floating Type



The floating washer moves .030 in. (0.4 mm) in any direction relative to the center (⌀).

• **Close Entry Construction**

Socket insulators have a closed entry construction which prevents entry of oversized contacts or probes.



• **Compatibility**

Individual connector types are interchangeable as are the accessories.

■ General Specification (Principal Performance)

Division	Item	Performance						
		D *		D * M	D * U			
		Stamped Contacts	Machined Contacts		Stamped Contacts		Machined	
Electrical Performance	Rated Current	5A						
	Dielectric Strength (See Level)	AC 1250 V r.m.s			AC 1000 V r.m.s			
	Insulation Resistance	5000 M-ohm or greater						
	Contact Resistance	2.7 m-ohm or less (5.0 m-ohm or less after the life and after salt spray). Test current: AWG No. 20, 7.5 a; AWG No. 22, 5; AWG No. 24, 3. *Through hole (PCB mounted connectors not applicable).						
Mechanical Performance	Contact Force	Mating force: 28.4 ~ 408 g Unmating force: 28.4 ~ 272 g	Mating force: 28.4 ~ 340 g Unmating force: 28.4 ~ 227 g	Mating force: 28.4 ~ 408 g Unmating force: 28.4 ~ 272 g				
	Connector Mating/Unmating Force	Mating force: (408 g × number of contacts) or less. Unmating force: (272 g × number of contacts) or less.	Mating force: (340 g × number of contacts) or less. Unmating force: (227 g × number of contacts) or less.	kg or less	Stamped Contact		Machined	
					Mating Force	Unmating Force	Mating Force	
					9	3.7	2.4	3.1
					15	6.1	4.1	5.1
25					10.2	6.8	8.5	
37	15.1	10.1	12.6					
50	20.4	13.6	17.0					
Contact Retention Force (kg or larger)	D *		D * M	D * U				
	Stamped Contacts	Machined Contacts		Stamped Contacts		Machined		
	4.5		4.1	3.6		4.5		
Vibrations	(1) The current (discontinuity) shall not exceed one (1) microsecond. (2) Shall pass the dielectric strength test at sea level. (3) Parts shall be free of cracks, damage, and looseness.							

A-17-03
A-17-05
A-61-11
A-65-07

Contacts		D * MA	D * SP			Description
			1A			
			AC 600 V r.m.s			There shall be no breakdown discharge after the test voltage (see at left) is applied for one minute between adjacent contacts and between shell and closest contact.
			1000 M-ohm or greater			The value specified at the left shall be met when 500 VDC is applied and measured between adjacent contacts and between contact and the shell.
			15 m-ohm or less (30 m-ohm or less)			Mate pin and socket contacts terminated to wire, apply a test current, then measure by the voltage drop method. The value at the left shall be satisfied.
		Mating force: 28.4 ~ 340 g Unmating force: 28.4 ~ 227 g			Mate and unmate the largest test pin ($1.041 \phi_{\pm 0.003}^{\pm 0}$) three times. Measure mating/unmating forces during the third cycle. Mate and unmate the smallest test pin ($0.991 \phi_{\pm 0.003}^{\pm 0}$) and measure mating/unmating forces during first cycle. The value at the left should be satisfied.	
Contact	Unmating Force	Mating force: (340 g × number of contacts) or less. Unmating force: (222 g × number of contacts) or less.	kg or less	Mating Force	Unmating Force	Mate and unmate the connector on the pin side while completely anchoring the connector on the socket side. The measured mating and unmating forces shall satisfy the values at the left.
2.0						
3.4	15	5.1	3.4			
5.7	25	8.5	5.7			
8.4	37	12.6	8.4			
11.3						
Contacts		D * MA	D * SP			Apply an axial load to the contacts
		4.5	1.0			
						Vibration to supply full sine wave .06 (1.52 mm) in total amplitude or 10 G, whichever is smaller, over a frequency range 10 to 500 Hz. The full frequency range is applied both ways for 15 minutes. This cycle is repeated 12 times each in the three axial directions. All contacts to be connected serially and apply a 100-mA current during the test.

A-17-03
 A-17-05
 A-61-11
 A-65-07

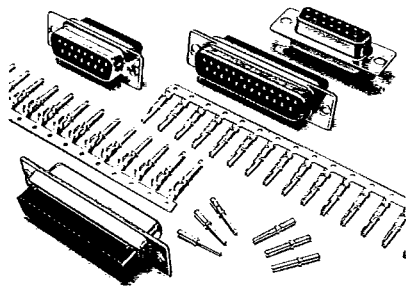
■ General Specification (Principal Performance)

Division	Item	Performance			
		D*		D* M	Stamped Contact
		Stamped Contact	Machined Contact		
Mechanical Performance	Contact Retention Force (kg or larger)	4.5		4.1	3.6
	Shock	(1) Current discontinuity may not exceed one (1) microsecond during the test. (2) Shall pass the dielectric strength test at sea level. (3) Parts shall be free of cracks, damage, and looseness.			
	Life	(1) Contact resistance 5 m-ohm or less. (D* SP: 30 m-ohm or less.) (2) Contact mating/unmating force Refer to the previous section. (3) Connector mating/unmating force			
Environmental Performance	Temperature Cycle		D*	D* M	
		Low Temperature	-67°F (-55°C)	-85°F (-65°C)	
		High Temperature	+257°F (+125°C)	+302°F (+150°C)	
		(1) The connector shall be free of cracks and damage. (2) Shall pass the dielectric strength test at sea level.			
	Humidity Resistance	Immediately after test (1) Insulation resistance: 1 M-ohm or higher. (2) Dielectric strength: 600 VAC rms or higher. (D* SP: 400 VAC rms or higher.) After storing for 24 hours (1) Insulation resistance: 1000 M-ohm or higher.			
Corrosion	(1) There shall be no detrimental corrosion that affects the base metal and connector (2) Contact resistance: 5 m-ohm or less. (D* SP: 30 m-ohm or less.)				

D * U			Description
Machined Contact	D * MA	D * SP	
4.5	4.5	1.0	Apply an axial load to the contacts.
			Apply an impact of 50 G for 11 ms ten times each in three axial directions during acceleration. All contacts connected in series, and apply a 100-mA current during the test.
			The values specified at the left shall be satisfied after mating and unmating male and female connectors 500 times.
D * U	D * MA	D * SP	Increase and decrease the temperature to the temperatures specified at the left 30 minutes each continuously for five cycles.
-85°F (-65°C)	-85°F (-65°C)	-67°F (-55°C)	
+257°F (+125°C)	+302°F (+150°C)	+221°F (+105°C)	
			Stored at 65°C and 90 to 98% relative humidity for ten days. Wipe off condensation on the surface. The measured values shall satisfy the values mentioned at the left.
connection.			Expose to 35°C and 5% concentration salt spray for 48 hours, wash with flowing water, then dry in an air-circulated oven at 38 ± 3°C for 12 hours.

Crimp Contact Type Connector

D*U Type



FEATURES

- Crimp Snap-in contacts**
 Termination with an easy-to-use crimp tool improves the termination reliability and drastically reduces termination man-hours. The contacts are inserted into the rear of the connectors.
- Economical and low cost**
 The connectors are low-cost and can be used with contacts having a variety of platings, ranging from tin to various thickness of gold (all over nickel under-plate).
- Tools for crimping and termination**
 Place your order for crimping and insertion/removal tools separately from connector orders. Compact manual crimping tools, and semiautomatic crimping machines for terminating a large number of contacts, are available for crimping. (See page 11).
- Rear release contact retention, and mating/unmating construction**
 The terminated contacts are inserted through the rear of the insulators and are securely held by multiple retention times molded in the insulators. If a circuit change or incorrect wiring occurs, the contacts can be removed easily using a simple plastic tool.
- Through hole type PC contact for mounting on printed circuit board**
 In addition to crimp contacts, the D*U type has through hole contacts for mounting on printed circuit boards. (See pages 38 and 39).

HOW TO ORDER

DBU -25P-FO
DBUF-25S-FO

- -FO: Connector less contacts (not stamped on connector)
- Contact type: P: Pin, S: Socket
- Contact arrangement: 9, 15, 25, 37, 50
- Mounting type: No designator—Standard, F—Float mount
- Connector type: U=Insulator UL 94 V-0, C=Insulator glass-filled nylon
- Shell size: E, A, B, C, D
- Series prefix

- Place orders separately for connectors and desired contacts (see page 13).
- Place orders for accessories (see pages 52 to 61) separately from those for connectors.
- Connector Mating Pairs**
 Select connectors by combining those that have the same shell size and contact layout, but with different contact sex.
 Example: DAU-15P-FO (15 conductor pin side) and DAU-15S-FO (15 conductor socket side).
 Contacts 030-50635 (pin contact) and 030-50634 (socket contact).

GENERAL SPECIFICATION

• Materials/Finishes

Component	Material	Finish
Contact	Copper alloy	Gold plate
Insulator	Front: Glass-filled polyester	UL94V-O
	Rear: Glass-filled nylon	Color: Black
Shell	Steel	Yellow chromate over zinc plate

(Note) D*C has insulator of glass-filled nylon (Color: Purplish red) otherwise same configuration as D*U. (D*U is preferred, new version).

• ELECTRICAL DATA

Current rating	5 amp
Dielectric rating	1,000 VAC r.m.s
Insulation resistance	5,000 megohms min.
Contact resistance	2.7 milliohms max. (Voltage drop)

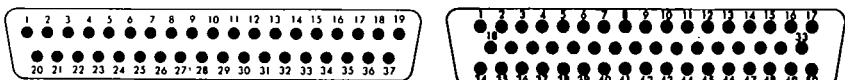
- Details . . . See page 6 to 9.
- How to terminate and assemble connectors . . . See page 64 to 66.

CONTACT ARRANGEMENT

Face view pin insert



Shell size	E	A	B
Contact arrangements	9	15	25



Shell size	C	D
Contact arrangements	37	50