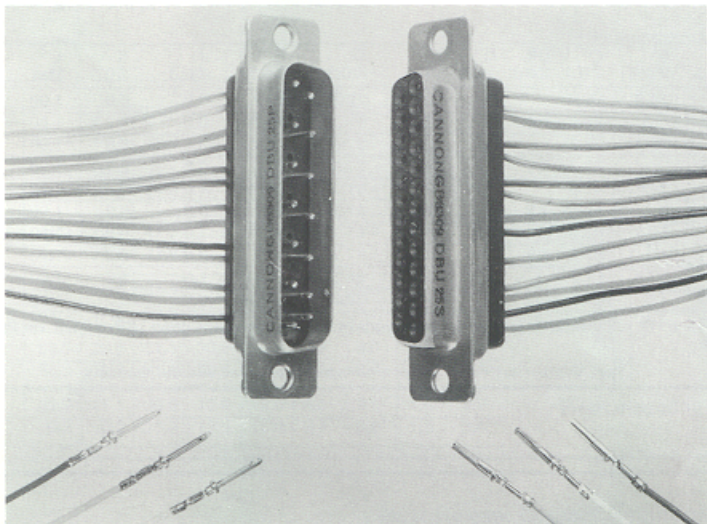


PRODUCT BULLETIN

D*U SUBMINIATURE CONNECTOR WITH CRIMP STYLE REMOVABLE CONTACTS



Features

- Stamped and formed contacts with insulation support
- Insulation support contacts fully recessed in insulation after assembly
- Flame retardant insulators (UL approved material)
- Fully intermateable with all Cannon D connectors
- Contacts only loaded into selected cavities
- Stamped and formed contacts supplied in reel form (7500 contacts per reel) or loose in bags of 100
- Choice of semi-automatic or manual tooling
- Option of machined contacts

The new D*U connector permits selective loading of crimp terminated pin and socket contacts providing lower installed costs

The contacts are quickly terminated using low cost hand, bench mounted or semi-automatic crimp tooling (see back page for details). Terminated contacts are inserted and extracted from the rear of the connector using an expendable plastic insertion/extraction tool.

D*U connectors operate in temperatures up to 120°C and are used in plug-in module applications, cable-to-cable and cable-to-panel installations, computer, business machines and many other commercial applications.

Standard Data

Standard materials and finishes

Shell	Steel, plated zinc with yellow chromate
Insulator	Glass-filled black thermoplastic (UL94VO Grade)
Contacts	Machined: Copper alloy, gold over nickel plate Stamped: Phosphor-bronze, gold over nickel plate

Mechanical Features

Coupling	Friction and lock accessories
Polarization	Keystone-shaped shells
Contact Type	Crimp snap-in

Electrical Data

Contact Termination	Crimp style
Wire Size (stamped)	Size 20 contacts: 22 to 28AWG stranded wire;
(machined)	Size 20 contacts: 18 to 30AWG stranded wire.
Current Rating	Size 20 contacts: 5 amps

Voltage Rating	Average Flashover	Test
Sea level	1,500 VAC	1,000 VAC
20,000 ft	1,000 VAC	650 VAC
70,000 ft	500 VAC	325 VAC
120,000 ft	255 VAC	175 VAC

ITT CANNON

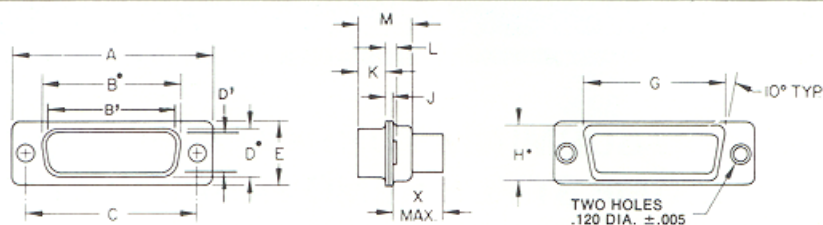
Jays Close, Viabes Industrial Estate,
Basingstoke, Hants. RG22 4BW.

Tel: Basingstoke (0256) 473171 Telex: 858105

ITT CANNON

Standard Shell

D*U



Part Number be Shell Size	A ±0.4	B ±0.3	B' ±0.3	C ±0.2	D ±0.3	D' ±0.3	E ±0.4	G ±0.3	H ±0.3	J ±0.3	K ±0.3	L Max.	M ±0.3	N ±0.3	X Max.
DEU-9P-FO	30.8		16.9	25.0		8.4	12.5	19.3	10.7	0.8	6.0	1.90	10.7	3.0	9.5
DEU-9S-FO	30.8	16.3		25.0	7.8		12.5	19.3	10.7	0.8	6.2	1.90	10.9	3.0	9.5
DAU-15P-FO	39.1		25.3	33.3		8.4	12.5	27.5	10.7	0.8	6.0	1.90	10.7	3.0	9.5
DAU-15S-FO	39.1	24.6		33.3	7.8		12.5	27.5	10.7	0.8	6.2	1.90	10.9	3.0	9.5
DBU-25P-FO	53.0		39.0	47.0		8.4	12.5	41.3	10.7	1.0	5.9	1.90	10.8	3.3	9.5
DBU-25S-FO	53.0	38.3		47.0	7.8		12.5	41.3	10.7	0.8	6.2	1.90	10.9	3.0	9.5
DCU-37P-FO	69.3		55.4	63.5		8.4	12.5	57.7	10.7	1.0	5.9	1.90	10.8	3.3	9.5
DCU-37S-FO	69.3	54.8		63.5	7.8		12.5	57.7	10.7	0.8	6.2	1.90	10.9	3.0	9.5
DDU-50P-FO	66.9		52.8	61.1		11.1	15.4	55.3	13.6	1.0	5.9	1.90	10.8	3.3	9.5
DDU-50S-FO	66.9	52.4		61.1	10.7		15.4	55.3	13.6	0.8	6.2	1.90	10.9	3.0	9.5

NOTE: Dimensions B, D, G and H are measured as outside dimensions at the bottom of the draw. B and D are the O.D. dims. for socket side; B' and D' are the dims. for pin side.

Part Number suffix FO indicate connectors supplied without contacts.

Stamped Contacts

Insulation Support

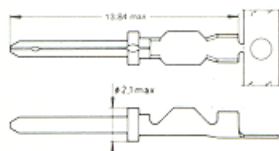
Stamped contacts are furnished on reels for use with the semi-automatic crimp and strip/crimp machines. These contacts will accommodate wire sizes 22 to 28AWG stranded wire.

For solid wire accommodation please consult the factory. Contacts are also available loose in bags of 100.

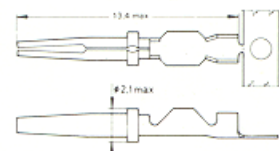


Contact (Reeled 7500 per reel)	20-22	20-26
Pin	077069-0200	077069-0202
Socket	077069-0201	077069-0203
Contact (loose in bags of 100)		
Pin	330-7633-010	330-7635-010
Socket	330-7634-010	330-7636-010

PIN



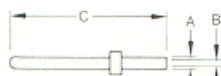
SOCKET



Machined Contacts

Machined contacts are furnished loose.

Contact	Contact Part Number	A ±0.05	B ±0.05	C Max.
Pin 20-20	030-1952-000	1.7	1.1	13.6
Pin 20-18	030-1954-000	2.1	1.7	22.2
Pin 20-26	030-1952-002	1.7	0.6	13.6
Socket 20-20	030-1953-000	1.7	1.1	13.3
Socket 20-18	030-1955-000	2.1	1.6	21.6
Socket 20-26	030-1953-002	1.7	0.6	13.3



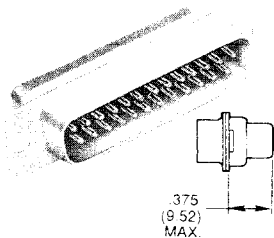
NOTE: for 20-18 contacts only:

Shrink sleeving is suggested on the crimp pot to prevent contacts from touching.

Machined or Stamped Contacts, Size 20

Part Numbers

Crimp Snap-In Contacts Supplied Separately



Tooling – Pages 232-234

Standard Shell Dimensions – Page 73

Mounting Method Detail – Page 6

Tin Shells

Number of Contacts (Shell Size)	Part Numbers	
	With Dimples (Pin Only) Without Contacts	Without Dimples (Socket) Without Contacts
9(E)	DEU-9P-K87-F0	DEU-9S-A197-F0
15(A)	DAU-15P-K87-F0	DAU-15S-A197-F0
25(B)	DBU-25P-K87-F0	DBU-25S-A197-F0
37(C)	DCU-37P-K87-F0	DCU-37S-A197-F0
50(D)	DDU-50P-K87-F0	DDU-50S-A197-F0

Clinch Nut and Float Mounting Options Available:

Add: E = 4-40 Clinch Nut

Y = Float Mounting

Example: DBUE25P-K87-F0

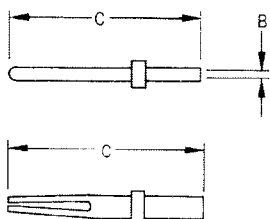
Yellow Chromate Over Cadmium Shells

Number of Positions (Shell Size)	Part Numbers	
	Connectors Without Contacts	Connectors Packaged With Machined Contacts*
9(E)	DEU9P or S-F0	DEU9P or S
15(A)	DAU15P or S-F0	DAU15P or S
25(B)	DBU25P or S-F0	DBU25P or S
37(C)	DCU37P or S-F0	DCU37P or S
50(D)	DDU50P or S-F0	DDU50P or S

*Pin contact is 030-1952-000/Socket contact is 030-1953-000

Machined Crimp Contacts

Machined contacts are furnished loose piece for use with manual and semi-automatic machines.



Description	Part Number	Wire Accommodation	B ±.002 (0.05)	C Max.	Hand Tool
Pin 20	030-1952-000	20, 22, 24	.045(1.14)	.541(13.74)	CCT-DCM-1
Pin 20-18	030-1954-000	(1) 18 or (2) #22	.066(1.68)	.867(22.02)	CCT-DCM-1
Pin 20-26	030-1952-002	26, 28, 30	.025(0.63)	.541(13.74)	CCT-DCM-2
Socket 20	030-1953-000	20, 22, 24	.045(1.14)	.523(13.28)	CCT-DCM-1
Socket 20-18	030-1955-000	(1) 18 or (2) #22	.066(1.68)	.844(21.56)	CCT-DCM-1
Socket 20-26	030-1953-002	26, 28, 30	.025(0.63)	.523(13.28)	CCT-DCM-2

NOTE for Size 20-18 contacts only: Shrink sleeving is suggested on the crimp pot to prevent contacts from touching.

Plastic Insertion/Extraction Tool – CIET-20HD

Metal Extraction Tool – CET-20D

Stamped Crimp Contacts/Reeled

Non-Insulation Support

Contact Size	Wire Accommodation	Contact Part Number		Contacts Per Reel	Hand Tool
		Pin	Socket		
20-18	AWG #18 thru 22 (For AWG #24 consult factory)	D110238-165	D110238-166	7,500	CCT-D*C-4
20	AWG #20 thru 28 (For AWG #30 consult factory)	D110238-34	D110238-35	10,000	CCT-D*C-4

Insulation Support

Wire Accommodation	Contact Part Number		Contact Per Reel	Hand Tool
	Pin	Socket		
AWG #22-#26	D110238-428	D110238-434	7,500	CCTP-D*C-10
AWG #28 thru #32	D110238-431	D110238-436	7,500	CCTP-D*C-8

Plastic Insertion/Extraction Tool – CIET-20HD

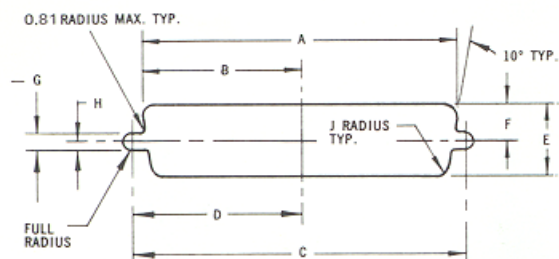
Metal Extraction Tool – CET-20D

Semi-Automatic Tooling – Pages 223-225

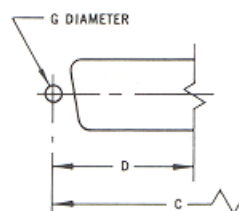
Highlighted part numbers indicate standard product; usually available with shorter lead times.

Panel Cutouts

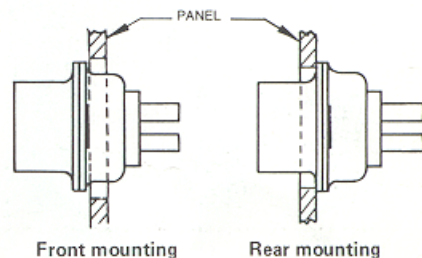
Standard Cutout



Optional Cutout (For rear mounting)



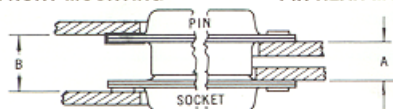
Connector Size	Mounting Method	A ± 0.2	B ± 0.2	C ± 0.2	D ± 0.2	E ± 0.2	F ± 0.2	G ± 0.1	H ± 0.1	K ± 0.2
DAU	Front Mounting	30.5	15.3	33.3	16.7	13.0	6.5	3.0	1.5	2.1
	Rear Mounting	28.8	14.4	33.3	16.7	11.4	5.7	3.0	1.5	3.4
DBU	Front Mounting	44.3	22.1	47.0	23.5	13.0	6.5	3.0	1.5	2.1
	Rear Mounting	42.5	21.3	47.0	23.5	11.4	5.7	3.0	1.5	3.4
DCU	Front Mounting	60.7	30.4	63.5	31.7	13.0	6.5	3.0	1.5	2.1
	Rear Mounting	59.1	29.5	63.5	31.7	11.4	5.7	3.0	1.5	3.4
DDU	Front Mounting	58.3	29.2	61.1	30.6	15.8	7.9	3.0	1.5	2.1
	Rear Mounting	56.3	28.2	61.1	30.6	14.1	7.1	3.0	1.5	3.4
DEU	Front Mounting	22.2	11.1	25.0	12.5	13.0	6.5	3.0	1.5	2.1
	Rear Mounting	20.5	10.2	25.0	12.5	11.4	5.7	3.0	1.5	3.4



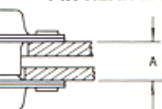
Panel Mounting

NOTE: A, B, C, and H are dimensions between panels and represent the recommended limit to be used in the design of the connector mounting method.

PIN FRONT MOUNTING



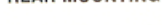
PIN REAR MOUNTING



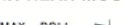
SOCKET FRONT MOUNTING



SOCKET REAR MOUNTING



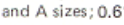
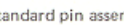
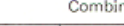
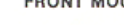
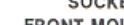
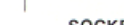
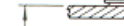
PIN REAR MOUNTING



PIN FRONT MOUNTING



4.75 MAX. ROLL OVER TYPICAL

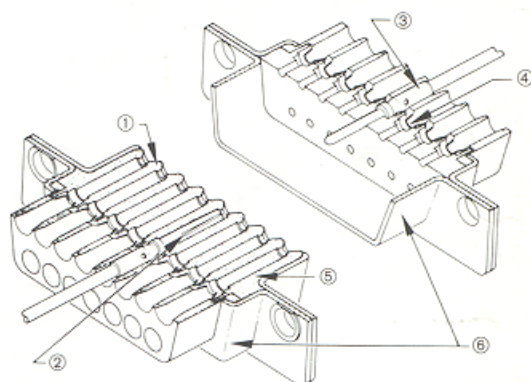


Combination of mated connectors

Size	A $+0.76$ -0	B $+0.76$ -0	C $+0.76$ -0	H $+0.76$ -0
A, E	6.35	8.63	7.49	7.49
B, C, D	6.04	8.71	7.56	7.18

Standard pin assemblies contain 0.38" thick front shells on E and A sizes; 0.61" thick front shells on B, C and D sizes.

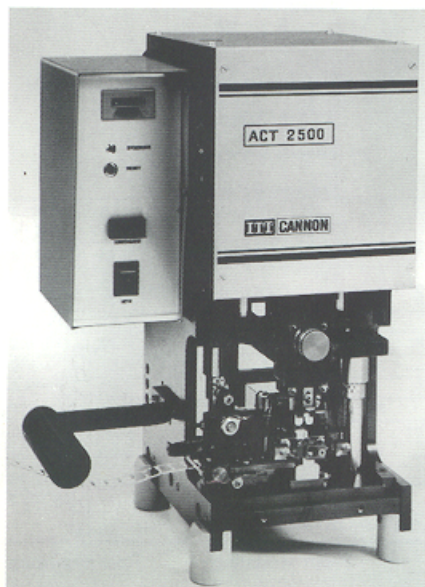
Rear Release Contact Retention System



- 1 Closed-entry socket insulator
- 2 Sleeveless spring finger contact
- 3 Contacts crimped with standard tools
- 4 Contact retaining tines
- 5 Flame retardant insulator
- 6 Standard D shells

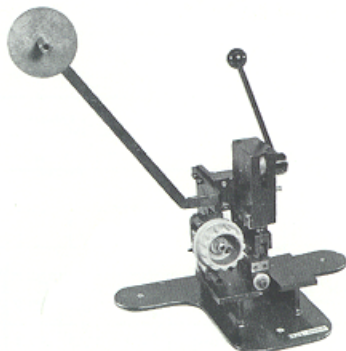
Tooling and Termination Data

Semi-automatic Strip/Crimp Machine ACT2500



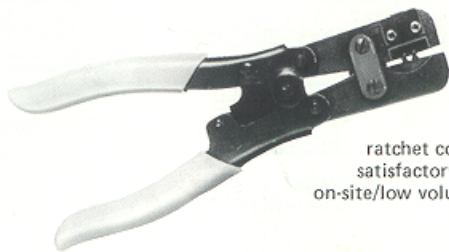
The ACT2500 quickly and reliably crimp terminates up to 1200 contacts per hour. The machine which only requires an electrical supply, is suitable for a wide variety of contacts and cable sizes. Crimp tools are easily changed. Time consuming adjustments are unnecessary, stripping and crimping is sensor released. This semi-automatic crimp machine is a practical and cost saving tool when using Cannon reeled contacts. Please ask for details of our leasing arrangements.

Hand operated Crimp Machine with automatic feed CBT9000

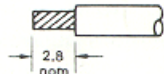


This low-cost bench-mounted hand-operated crimp machine terminates pre-stripped wire to stamped and formed reeled contacts. Its features include automatic contact feed and it is ideal for small volume requirements. Consult factory for specific ordering information.

Hand Crimp Tool CCT-D*U-5GB



With this tool each crimp cycle is ratchet controlled to ensure a satisfactory crimp; suitable for on-site/low volume applications.



Wire Stripping Detail

Contacts and Tools

Contact Data			Tools					
Size	Suitable for conductor AWG (mm)	Contact order no.	Hand Crimp tool	Locator	Semi-Automatic Tool	Bench Mould Mounted	Insertion/ Extraction Tool	Color Insertion Extraction
Stamped, with insulation support								
20-22	22-24 (0.4-0.23)	Pin: 077069-0200 7500 contacts on reel Socket: 077069-0201	CCT-D*U-5GB	—	ACT2500	CBT9000	CIET-20HD	coloured/ white
20-26	26-28 (0.13-0.09)	Pin: 077069-0202 7500 contacts on reel Socket: 077069-0203	CCT-D*U-5GB	—	ACT2500	CBT9000	CIET-20HD	coloured/ white
20-22	22-24 (0.4-0.23)	Pin: 330-7633-010 loose in bags of 100 Socket: 330-7634-010	CCT-D*U-5GB	—			CIET-20HD	coloured/ white
20-26	26-28 (0.13-0.09)	Pin: 330-7635-010 loose in bags of 100 Socket: 330-7636-010	CCT-D*U-5GB	—			CIET-20HD	coloured/ white
machined								
20-20	20-24 (0.6-0.23)	Pin: 030-1952-000 Socket: 030-1953-000	M22520/1-01	TH 185	—		CIET-20HD	coloured/ white
20-18	18 (1.0) or (2x) 22 (0.4)	Pin: 030-1954-000 Socket: 030-1955-000	M22520/1-01	TH 185	—		CIET-2018HD	coloured/ white
20-26	26-30 (0.13-0.06)	Pin: 030-1952-002 Socket: 030-1953-002	M22520/2-01	L3198-20 HDL	—		CIET-20HD	coloured/ white

In line with a policy of continual product development, ITT Cannon reserve the right to change the specification of the components in this bulletin at any time and without prior notice.