

Dura-Con

DCDM/DCCM

.050" (1.27mm) Density

Solder Cup/Wire

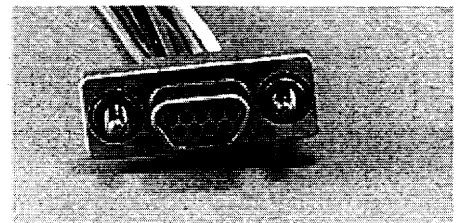
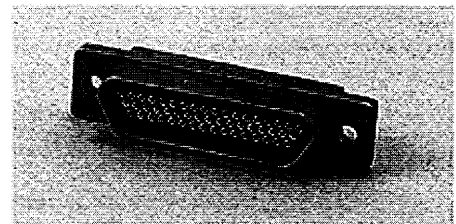
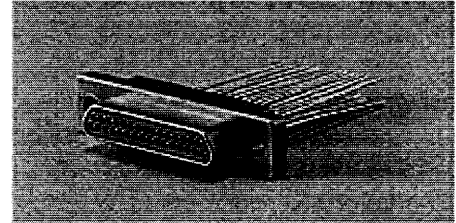
D-Microminiature

Metal Shell

High Reliability

Features

- Both plug and socket available in 9, 15, 21, 25, 31, 37, 51, and 100 positions.
- Several styles of mounting are available for cable-to-cable, cable-to-panel mount, and cable-to-board mount.
- Aluminum shell provides extra strength and EMI/RFI shielding capability. Plating options available.
- Silicone elastomer compression interfacial seal protects contacts from moisture and humidity and isolates contacts from each other and the metal shell.
- Meets requirements of MIL-C-83513 except where noted.
- Rugged twist-pin contacts resistant to shock and vibration make metal shell Dura-Con an excellent choice for harsh environments such as airborne or space applications.



Materials

Insulator: UL94V-0 rated glass-filled polyester or diallyl phthalate

Contacts: Pins - Copper alloy, Sockets - Copper alloy (machined)

Contact Plating: .000050 in gold

Shell: Aluminum alloy

Shell Plating: Yellow chromate over cadmium (std.) or electroless nickel

Environmental

Operating Temperature: -55°C to +135°C

Current Rating: 3 Amps maximum

Withstanding Voltage: 600 VAC RMS @ sea level

Contact Resistance: 8 milliohms maximum

Electrical

Current Rating: 3 Amps maximum

Withstanding Voltage: 600 VAC RMS @ sea level

Contact Resistance: 8 milliohms maximum

Mechanical

Individual Contact:

6 oz. (170.40 g) maximum insertion;

0.5 oz. (14.20 g) minimum withdrawal

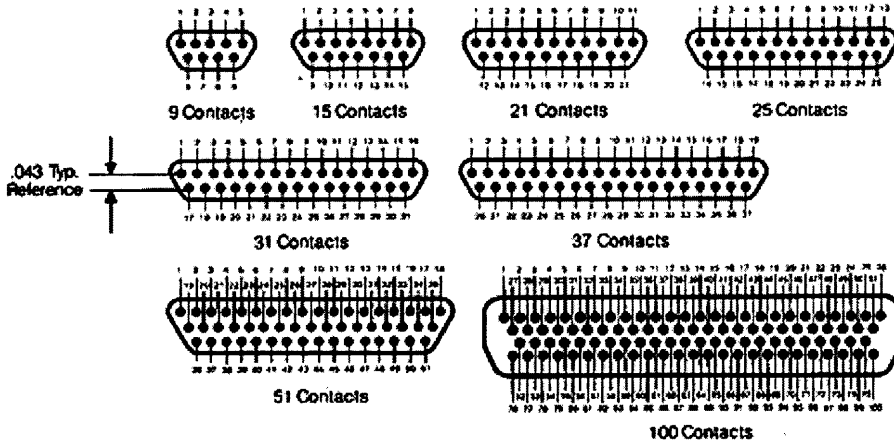
Mating / Unmating Force: See table

No. of Contacts	Maximum Mating Force		Minimum Unmating Force	
	Lb.	Kg	Lb.	Kg
9	5.63	2.56	0.28	0.13
15	9.38	4.26	0.47	0.21
21	13.13	5.96	0.66	0.30

25	15.63	7.10	0.78	0.35
31	19.38	8.80	0.97	0.44
37	23.13	10.50	1.16	0.53
51	31.88	14.47	1.59	0.72
100	62.50	28.38	3.13	1.42

Contact Arrangements

(Face view of pin insert)
(Use reverse order for socket side)



Ordering Information

DC D M 37 P 6 E 2-18.0 K N

Cinch Dura-Con D Connector

Insulator Type
 C = Diallyl Phthalate
 Glass-Reinforced
 D = Thermoplastic
 Glass-Reinforced

Mounting Type
 M = Screw Mount Metal Shell

No. of Contacts
 9, 15, 21, 25, 31, 37, 51, 100

Contact Type
 P - Pin (Plug)
 S - Socket (Receptacle)

Wire Size in AWG
 5 = 25 AWG Solid Copper
 6 = 26 AWG Stranded
 S = Solder Cup
 (Skip to Mounting Hardware)

Wire Type
 C = Solid Copper (Uninsulated)
 E = MIL-W-16878/4, 7 Strand

Shell Plating
 *No Letter = Yellow Chromate over Cadmium
 N = Electroless Nickel

Mounting Hardware**
 B = No Hardware
 F = Float Mount
 R = Reverse Float Mount
 K = Jackscrew (Standard)
 L = Jackscrew (Low Profile)
 P = Jackpost, Size 9 through 51
 MIL-C-83513/5-07
 Size 100 MIL-C-83513/5-17

Lead Length in inches***
 00.5 Solid copper wire only
 01.0 Solid copper wire only
 02.0 Solid copper wire only
 18.0 Stranded wire only
 24.0 Stranded wire only
 36.0 Stranded wire only
 48.0 Stranded wire only

Insulation Color or Wire Finish
 1 = White
 *2 = Yellow (Stranded Wire)
 3 = Tin-Plated
 *4 = Gold-Plated (Solid Wire)
 *5 = Color Coded Per MIL-Std. 681, System 1. (Stranded Wire Only)

Consult factory for non-standard types.

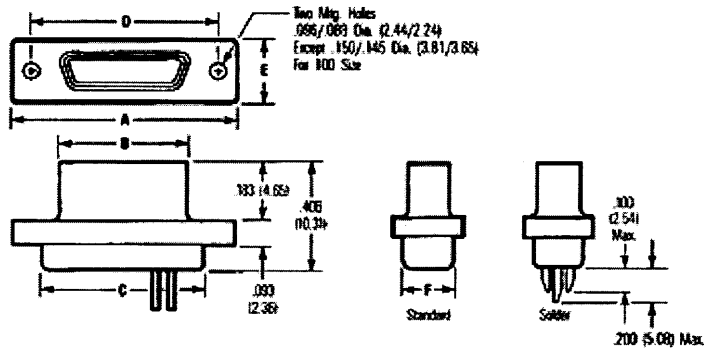
* - Indicates Cinch std. option.

** - Mil-83513 hardware sold separately

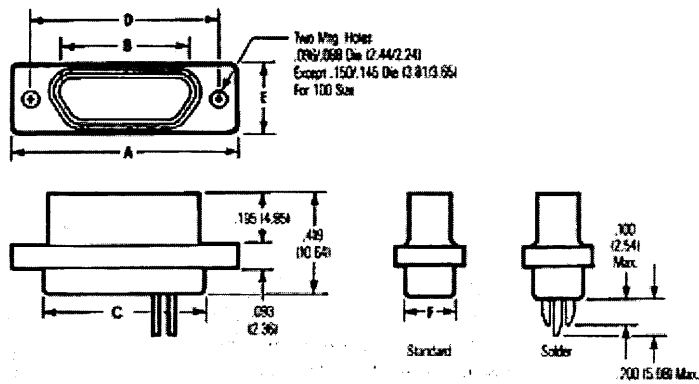
*** - Length Tolerance: solid wire = ± 3/32", standard wire = ± 1/4".

Connector Dimensions - Metal Shell

Plug



Socket



No. of Contacts	A ± .010 (.254)		B Max.		C +.010 (.254) -.018 (.457)		D ± .005 (.127)		E ± .010 (.254)		F Max.	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
9 Plug	0.775	19.68	0.333	8.46	0.390	9.91	0.565	14.35	0.298	7.57	0.270	6.86
9 Socket	0.775	19.68	0.396	10.06	0.390	9.91	0.565	14.35	0.298	7.57	0.270	6.86
15 Plug	0.925	23.50	0.483	12.27	0.540	13.72	0.715	18.16	0.298	7.57	0.270	6.86
15 Socket	0.925	23.50	0.546	13.87	0.540	13.72	0.715	18.16	0.298	7.57	0.270	6.86
21 Plug	1.075	27.30	0.633	16.08	0.690	17.53	0.865	21.97	0.298	7.57	0.270	6.86
21 Socket	1.075	27.30	0.696	17.68	0.690	17.53	0.865	21.97	0.298	7.57	0.270	6.86
25 Plug	1.175	29.84	0.733	18.62	0.790	20.07	0.965	24.51	0.298	7.57	0.270	6.86
25 Socket	1.175	29.84	0.796	20.22	0.790	20.07	0.965	24.51	0.298	7.57	0.270	6.86
31 Plug	1.325	33.66	0.883	21.16	0.940	23.88	1.115	28.32	0.298	7.57	0.270	6.86
31 Socket	1.325	33.66	0.946	24.03	0.940	23.88	1.115	28.32	0.298	7.57	0.270	6.86
37 Plug	1.475	37.46	1.033	26.24	1.090	27.69	1.265	32.13	0.298	7.57	0.270	6.86
37 Socket	1.475	37.46	1.096	27.84	1.090	27.69	1.265	32.13	0.298	7.57	0.270	6.86
51 Plug	1.425	36.20	0.983	24.97	1.040	26.42	1.215	30.86	0.341	8.66	0.310	7.87
51 Socket	1.425	36.20	1.046	26.57	1.040	26.42	1.215	30.86	0.341	8.66	0.310	7.87
100 Plug	2.160	54.86	1.383	35.13	1.432	36.38	1.800	45.71	0.384	9.75	0.360	9.15
100 Socket	2.160	54.86	1.446	36.73	1.432	36.38	1.800	45.71	0.384	9.75	0.360	9.15