

# D-Subminiature Commercial Metal Shell

.109" (2.77mm) Density  
Solder Cup  
Basic D

# CINCH

## Features

- Available in 5 connector sizes: 9, 15, 25, 37, and 50, with solder cup terminals
- Variety of shell styles available
- Grounding indents available on plugs
- Intermateable with all D-Subminiature Connectors of comparable pin count and complying dimensionally with MIL-C-24308
- UL Recognized file no. E19071
- CSA Certified file no. LR 31996-5

## Performance Data

### Materials

**Insulation Material:** Two-piece glass-filled polyester, UL94V0

**Contact Material:** Phosphor bronze

**Contact Plating:** Gold flash over nickel in contact area and tails or gold flash over nickel in contact area and tin lead in solder cup. Consult factory for optional 30 μinch gold plating

**Shell Material:** Steel

**Shell Plating:** Zinc with yellow chromate coating or bright tin

### Electrical Characteristics

**Withstanding Voltage:** 1250 VAC rms (@ sea level)

**Current Rating:** 5 Amps

**Contact Resistance:** 2.7 Milliohms maximum

**Insulation Resistance:** 5000 Megohms minimum

## Mechanical Characteristics

**Individual Contact Insertion and Separation Force:** 0.7 oz. (20g) minimum, 12 oz. (341g) maximum

## Environmental Characteristics

**Shock:** Exceeds test requirements of MIL-STD-202D, Method 213, Condition G

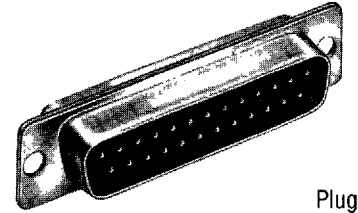
**Operating Temperature:** With nylon insulator - 65°C to + 125°C

**Vibration** Exceeds requirements of MIL-STD-202D, Method 204, Condition D

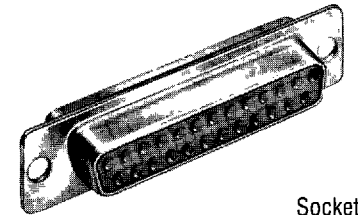
**Humidity:** Exceeds requirements of MIL-STD-202D, Method 106

## Accessories

For metal shell D-Subminiature Connector accessories see pages 34 through 45.

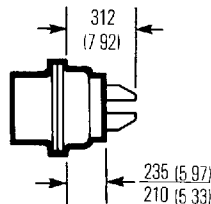


Plug



Socket

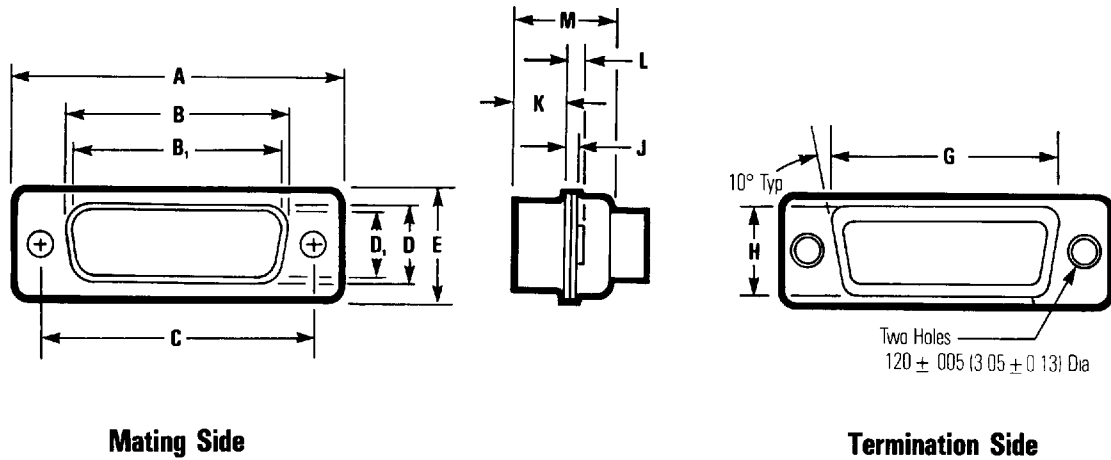
## Dimensions



For standard shell dimensions and footprints, see pages 5 and 6

## Ordering Information

<b>D</b>	<b>B</b>	<b>E</b>	-	<b>25</b>	<b>P</b>	<b>T</b>	<b>I</b>	-	<b>II</b>
<b>Series Prefix</b>	<b>Shell Size</b>	<b>Mounting Method (Optional)</b>			<b>Contact Type</b>		<b>Modification (Optional)</b>		<b>Plating</b>
D-Subminiature	E = 09 A = 15 B = 25 C = 37 D = 50	No Entry = 120" (3.05mm) Hole E = 4-40 Clinch Nut			P = Plug S = Socket		I = Grounding Indents (Available on plugs with tinned shells only)		Optional Tin/Lead on Solder Cup
				09 15 25 37 50					
						<b>Shell Finish</b>			
						No Entry = Zinc/Yellow Chromate T = Bright Tin			



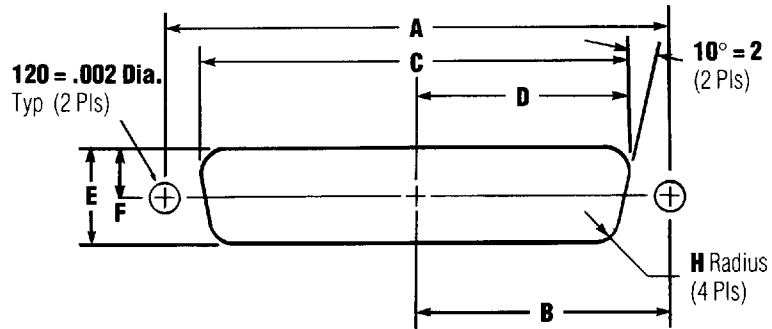
**Dimensions**

Shell Size	Connector Type	A ± .015" (0.38mm)		B ± .010" (0.25mm)		B <sub>1</sub> ± .005" (0.13mm)		C ± .005" (0.13mm)		D ± .010" (0.25mm)		D <sub>1</sub> ± .010" (0.25mm)		E ± .015" (0.38mm)	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	Plug	1.213	30.81	—	—	.666	16.90	.0984	24.99	—	8.40	.329	—	.494	12.55
	Socket	1.213	30.81	.640	16.26	—	—	.0984	24.99	.308	—	—	.782	.494	12.55
A	Plug	1.541	39.14	—	—	.994	25.30	1.312	33.32	—	8.40	.329	—	.494	12.55
	Socket	1.541	39.14	.968	24.59	—	—	1.312	33.32	.308	—	—	.782	.494	12.55
B	Plug	2.088	53.04	—	—	1.534	39.00	1.852	47.04	—	8.40	.329	—	.494	12.55
	Socket	2.088	53.04	1.508	38.30	—	—	1.852	47.04	.308	—	—	.782	.494	12.55
C	Plug	2.729	69.32	—	—	2.182	55.40	2.500	63.50	—	8.40	.329	—	.494	12.55
	Socket	2.729	69.32	2.156	54.76	—	—	2.500	63.50	.308	—	—	.782	.494	12.55
D	Plug	2.635	66.93	—	—	2.079	52.80	2.406	61.11	—	11.07	.436	—	.605	15.37
	Socket	2.635	66.93	2.062	52.34	—	—	2.406	61.11	.420	—	—	10.67	.605	15.37

Shell Size	Connector Type	G ± .010" (0.25mm)		H ± .010" (0.25mm)		J ± .010" (0.25mm)		K ± .010" (0.25mm)		L ± .010" (0.25mm)		M ± .010" (0.25mm)	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	Plug	.759	19.28	.422	10.72	.030	0.76	.236	5.99	.045	1.14	.422	10.72
	Socket	.759	19.28	.422	10.72	.030	0.76	.243	6.17	.045	1.14	.429	10.92
A	Plug	1.083	27.51	.422	10.72	.030	0.76	.236	5.99	.045	1.14	.422	10.72
	Socket	1.083	27.51	.422	10.72	.030	0.76	.243	6.17	.045	1.14	.429	10.92
B	Plug	1.625	41.27	.422	10.72	.039	0.99	.231	5.87	.060	1.52	.426	10.82
	Socket	1.625	41.27	.422	10.72	.030	0.76	.243	6.17	.045	1.14	.429	10.92
C	Plug	2.272	57.71	.422	10.72	.039	0.99	.231	5.87	.060	1.52	.426	10.82
	Socket	2.272	57.71	.422	10.72	.030	0.76	.243	6.17	.045	1.14	.429	10.92
D	Plug	2.178	55.32	.534	13.56	.039	0.99	.231	5.87	.060	1.52	.426	10.82
	Socket	2.178	55.32	.534	13.56	.030	0.76	.243	6.17	.045	1.14	.429	10.92

B and D are outside dimensions for socket. B<sub>1</sub> and D<sub>1</sub> are inside dimensions for plug

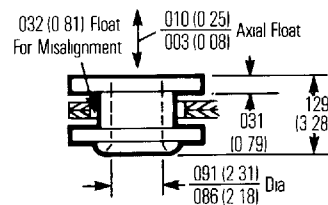
**Panel Mounting Specifications**



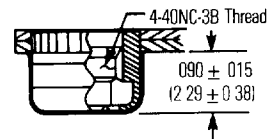
**Dimensions**

Shell Size	Mounting Method Front/Rear Panel	Dimensions (inches)						
		A	B	C	D	E	F	H
E	Front	0.98	0.49	0.87	0.44	0.51	0.26	0.08
	Rear	0.98	0.49	0.81	0.40	0.45	0.23	0.13
A	Front	1.31	0.66	1.10	0.60	0.51	0.26	0.08
	Rear	1.31	0.66	1.13	0.57	0.45	0.23	0.13
B	Front	1.85	0.93	1.74	0.87	0.51	0.26	0.08
	Rear	1.85	0.93	1.67	0.84	0.45	0.23	0.13
C	Front	2.50	1.25	2.39	1.20	0.51	0.26	0.08
	Rear	2.50	1.25	2.33	1.16	0.45	0.23	0.13
D	Front	2.41	1.20	2.30	1.15	0.62	0.31	0.08
	Rear	2.41	1.20	2.22	1.11	0.56	0.28	0.13

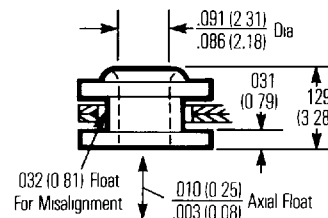
**Float Bushing**



**4-40 Clinch Nut**



**Reverse Float Bushing**



**Floating Dual Bushing**

