

# D-Subminiature High Reliability Metal Shell

.109" (2.77mm) Density  
Solder Cup  
Series I

# CINCH

## Features

- Ideal for high temperature applications
- Available in 5 connector sizes: 9, 15, 25, 37, and 50, with solder cup terminations, both plug and socket styles
- Available with standard Zinc plated shells or with bright tin shells
- 50 mil gold contact versions are also available
- Monoblock insulator for improved electrical performance
- Intermateable with all D-Subminiature Connectors of comparable pin count and complying dimensionally with MIL-C-24308
- UL Recognized file no. E19071

## Performance Data

### Materials

**Insulation Material:** UL 94V-0 rated glass fiber-filled, diallyl phthalate, monoblock construction; green

### Contact Material:

Plug Contacts: Brass (machined)  
Socket Contacts: Phosphor bronze (machined)

**Contact Plating:** 20 μinch gold over nickel

**Shell Material:** Steel (for optional non-magnetic brass shells consult factory)

**Shell Plating:** Zinc or cadmium, 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:** - 65°C to + 125°C

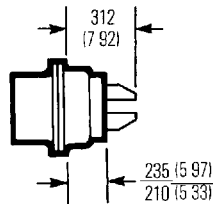
**Vibration:** Exceeds requirements of MIL-STD-202D, Method 204, Condition D

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

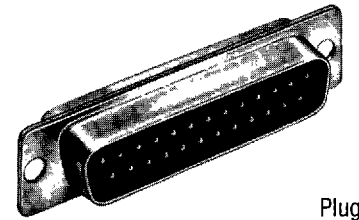
## Accessories

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

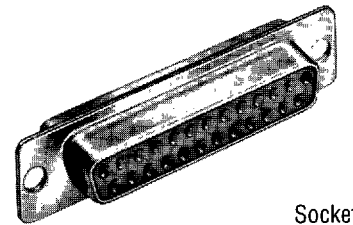
## Dimensions



For standard shell dimensions and panel cutouts, see pages 5 and 6

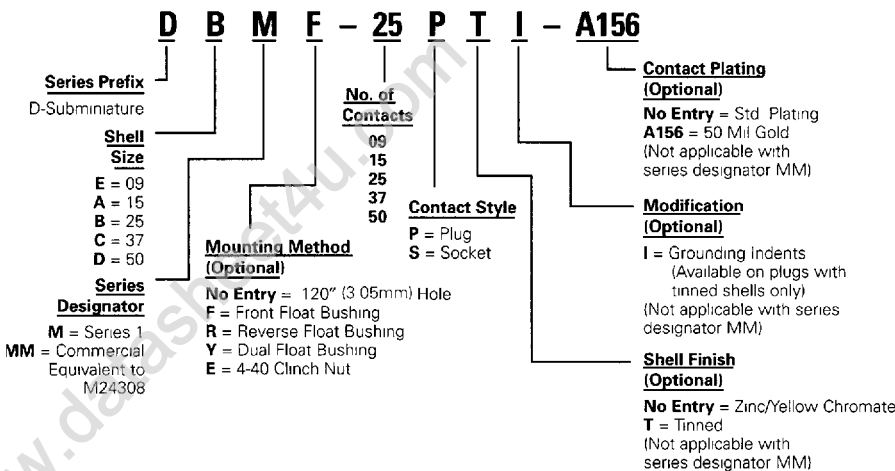


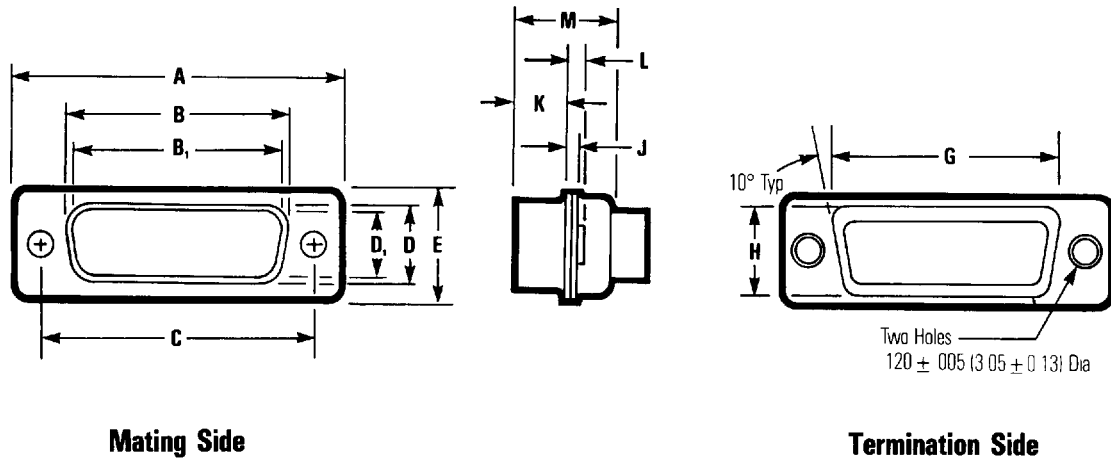
Plug



Socket

## Ordering Information





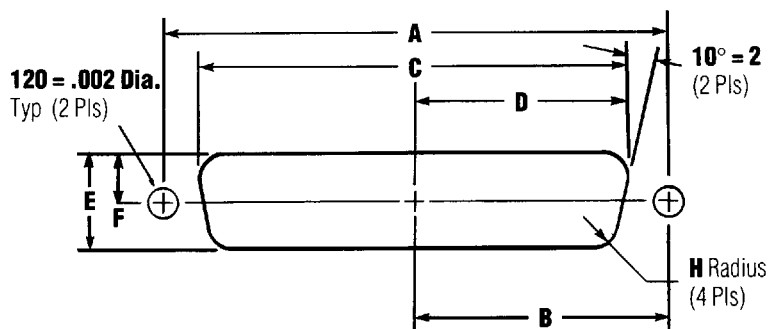
**Dimensions**

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

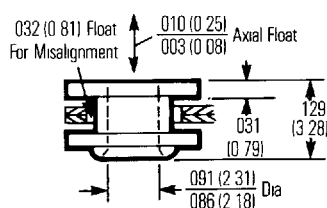
### Panel Mounting Specifications



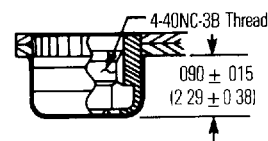
### Dimensions

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

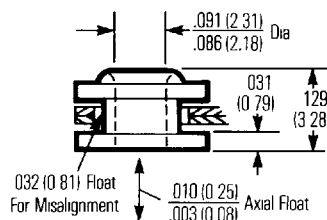
### Float Bushing



### 4-40 Clinch Nut



### Reverse Float Bushing



### Floating Dual Bushing

