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

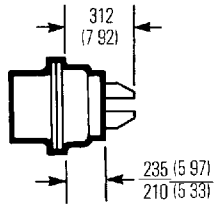
Vibration: Exceeds requirements of MIL-STD-202D, Method 204, Condition D

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

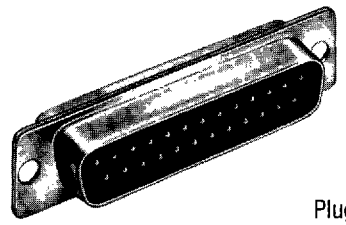
Accessories

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

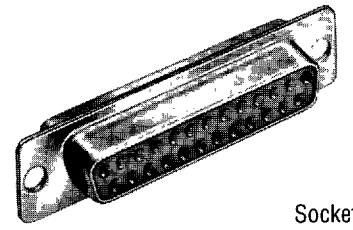
Dimensions



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



Plug



Socket

Ordering Information

D B M F – 25 P T I – A156

Series Prefix
D-Subminiature

Shell Size
E = 09
A = 15
B = 25
C = 37
D = 50

Series Designator
M = Series 1
MM = Commercial Equivalent to M24308

Mounting Method (Optional)
No Entry = .120" (3.05mm) Hole
F = Front Float Bushing
R = Reverse Float Bushing
Y = Dual Float Bushing
E = 4-40 Clinch Nut

No. of Contacts
09
15
25
37
50

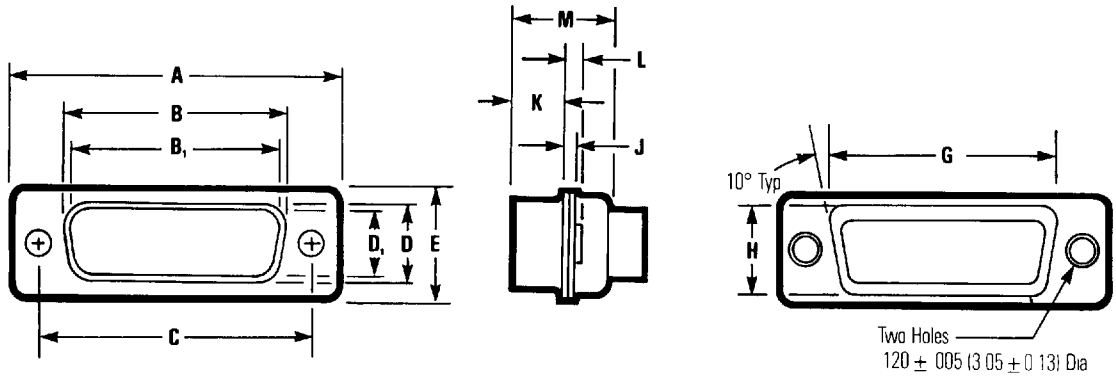
Contact Style
P = Plug
S = Socket

Contact Plating (Optional)
No Entry = Std. Plating
A156 = 50 Mil Gold
(Not applicable with series designator MM)

Modification (Optional)
I = Grounding Indents
(Available on plugs with tinned shells only)
(Not applicable with series designator MM)

Shell Finish (Optional)
No Entry = Zinc/Yellow Chromate
T = Tinned
(Not applicable with series designator MM)

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Mating Side **Termination Side**

Dimensions

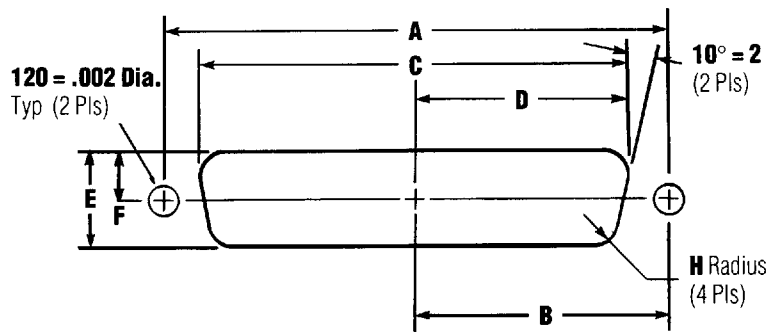
Shell Size	Connector Type	A ±.015″ (0.38mm)		B ±.010″ (0.25mm)		B_1 ±.005″ (0.13mm)		C ±.005″ (0.13mm)		D ±.010″ (0.25mm)		D_1 ±.010″ (0.25mm)		E ±.015″ (0.38mm)	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
E	Plug	1.213	30 81	—	—	666	16 90	0 984	24 99	—	8 40	329	—	494	12 55
	Socket	1.213	30 81	640	16 26	—	—	0 984	24 99	308	—	—	7 82	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	—	—	7 82	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	—	—	7 82	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	—	—	7 82	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_1 and D_1 are inside dimensions for plug

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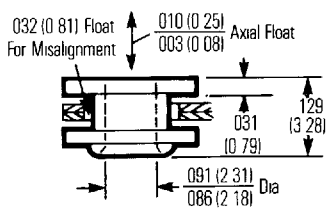
Panel Mounting Specifications



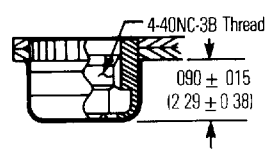
Dimensions

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

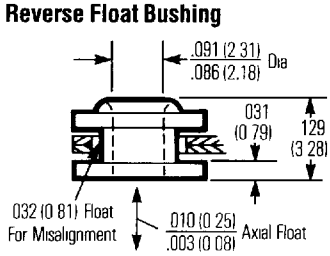
Float Bushing



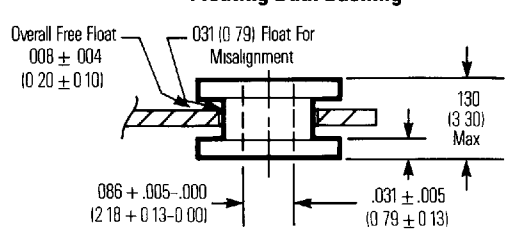
4-40 Clinch Nut



Reverse Float Bushing



Floating Dual Bushing



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