

**.085 in. (2.16mm)
Density
Miniature Ribbon**

Vertical-Mount Compliant Pin
All-Plastic and Metal Shell



FEATURES

- **Straight Compliant Pin for solderless termination to printed circuit board.**
- **All-plastic design reduces cost. Metal Shell also available where indicated for improved shielding.**
- **Available in plug and socket styles in 14, 24, 36, 50, and 64 position sizes.**
- **All plugs lock with InstaLatch passive latch feature for automatic latching. Sockets available with InstaLatches, with Bail Latches where indicated, or with no latches.**
- **Available with through holes or with #4-40 holes for mounting/latching.**
- **Includes Seating Cover that allows for flat-rock insertion and serves as dust cover after insertion.**
- **UL Recognized - Files E170218 (UL1977), E130965 (UL1863).**
- **CSA Approved - File LR31996-7.**

MATERIALS

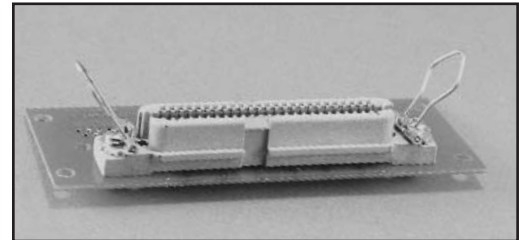
Insulator and Seating Cover: Gray UL94V-0 rated glass-filled polyester

Contact: Phosphor bronze

Contact Plating: Select gold over 50µin. select nickel standard; 30µin. select gold over 50µin. select nickel available where indicated. Gold flash in termination area

Shell (Metal Shell Version Only): Steel

Shell Plating (Metal Shell Version Only): Tin



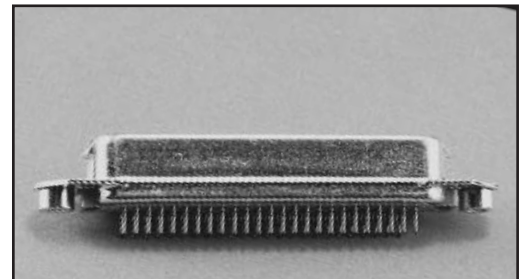
ENVIRONMENTAL

Operating Temperature: -40°C to +105°C

Shock: 50G Peak, per EIA Std. RS364, TP27, Condition A

Vibration: 3 cycles @ 10-55Hz in each of 3 axes per EIA Std. 364, TP28, Condition A

Moisture Resistance: Per EIA Std. RS364, TP31, Condition B, with Step 7B excluded



ELECTRICAL

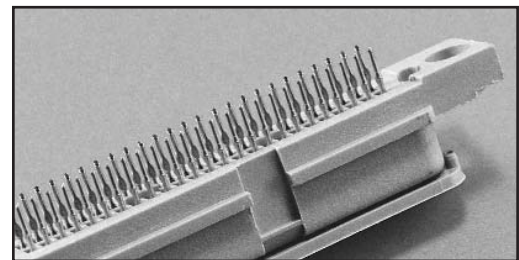
Voltage Rating: 500 VAC @ sea level; 125 VAC @ 70,000 ft.

Withstanding Voltage: 1200 VAC RMS @ sea level, per EIA Std. RS364, TP20

Contact Rating: 5 Amps (4 Amps per CSA)

Contact Resistance: 6 milliohms maximum, per EIA Std. RS364, TP6

Insulation Resistance: 5000 Megohms minimum initial; 1000 Megohms minimum after moisture



MECHANICAL

Durability: 200 mating/unmating cycles

Mating / Unmating Forces:

Size	Mating Force (max.) with InstaLatches		Unmating Force (min.) without InstaLatches	
	Lb.	Kg	Lb.	Kg
14	12	5.44	2	0.91
24	17	7.71	4	1.81
36	23	10.43	6	2.72
50	32	14.52	7	3.18
64	37	16.78	8	3.63

Connector/PCB Insertion Force (maximum): 25 lbs (12.3Kg) per contact

Connector/PCB Retention Force: 5 lb. (2.44Kg) per contact (minimum, without mounting hardware)

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Vertical-mount Miniature Ribbon connectors provide I/O directly from printed circuit boards, where the mating face of the connector is in a plane parallel to that of the board.

Compliant-pin connectors terminate without solder to plated-through holes in printed circuit boards. The tail conforms to the hole, providing a gas-tight termination without damaging the plating in the printed circuit board.

The seating cover acts as an insertion tool fixture, and *must be left in place until the connector is installed on the PCB*. It may also be left on after insertion to serve as a dust cover to protect the connector from contamination.

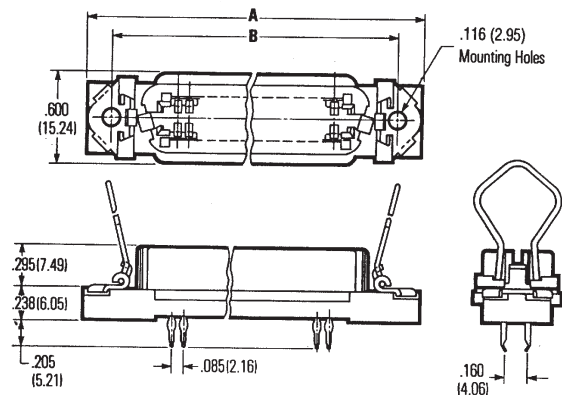
See pages 6-51 through 6-53 for accessories such as bent bail latches and mounting screws that make the use of Cinch Miniature Ribbon connectors even more cost-effective in board-mount applications.

Dimensions

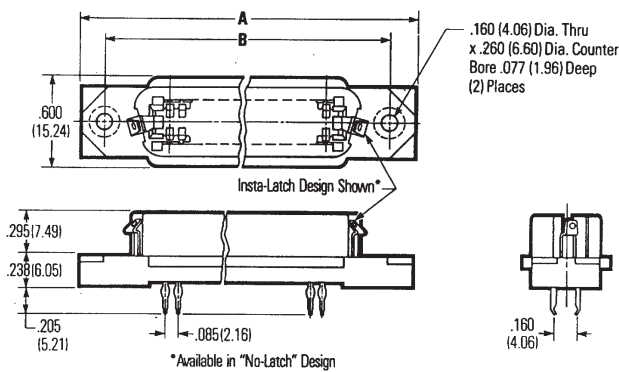
Size	A		B		C	
	in	mm	in	mm	in	mm
14	1.745	44.32	1.417	35.99	.625	15.88
24	2.170	55.12	1.842	46.79	1.050	26.67
36	2.680	68.07	2.352	59.74	1.560	39.62
50	3.275	83.19	2.947	74.85	2.155	54.74
64	3.875	98.43	3.542	89.97	2.750	69.85

Plug

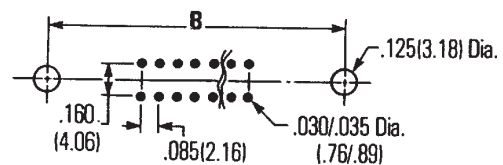
Socket with Bail Latches



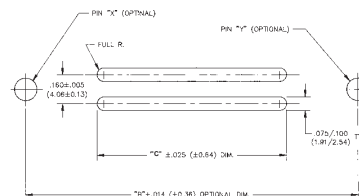
Socket with InstaLatches



Recommended PCB Hole Layout



Insertion Fixture Backer Plate



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Ordering Information, Vertical-Mount Compliant Pin

All-Plastic Plug, InstaLatching

Mount	Size	Commercial	30Au/Ni
.125 Hole	14	97-CP-14	97-CP-14A
	24	97-CP-24	97-CP-24A
	36	97-CP-36	97-CP-36A
	50	97-CP-50	97-CP-50A
	64	97-CP-64	97-CP-64A
#4-40 Hole	14	97-CP-14T	97-CP-14TA
	24	97-CP-24T	97-CP-24TA
	36	97-CP-36T	97-CP-36TA
	50	97-CP-50T	97-CP-50TA
	64	97-CP-64T	97-CP-64TA

All-Plastic Socket

	Latch Mount	Size	Commercial	30Au/Ni
No latches	.160 Hole	14	97-CS-14	97-CS-14A
		24	97-CS-24	97-CS-24A
		36	97-CS-36	97-CS-36A
		50	97-CS-50	97-CS-50A
		64	97-CS-64	97-CS-64A
	#4-40 Hole	14	97-CS-14T	97-CS-14TA
		24	97-CS-24T	97-CS-24TA
		36	97-CS-36T	97-CS-36TA
		50	97-CS-50T	97-CS-50TA
		64	97-CS-64T	97-CS-64TA
InstaLatches	.160 Hole	14	97-CSI-14	97-CSI-14A
		24	97-CSI-24	97-CSI-24A
		36	97-CSI-36	97-CSI-36A
		50	97-CSI-50	97-CSI-50A
		64	97-CSI-64	97-CSI-64A
	#4-40 Hole	14	97-CSI-14T	97-CSI-14TA
		24	97-CSI-24T	97-CSI-24TA
		36	97-CSI-36T	97-CSI-36TA
		50	97-CSI-50T	97-CSI-50TA
		64	97-CSI-64T	97-CSI-64TA
Bail latches	.116 Hole	14	97-CSB-14	97-CSB-14A
		24	97-CSB-24	97-CSB-24A
		36	97-CSB-36	97-CSB-36A
		50	97-CSB-50	97-CSB-50A
		64	97-CSB-64	97-CSB-64A

Metal Shell Socket, with InstaLatches

		Commercial	30Au/Ni
Conductive Standoff with .120 Hole	50	57-CSI-50	57-CSI-50A