



Edge Connectors Product Catalog



About Bel

Bel is a publicly traded company that has been operated by the same family for over 65 years. Our history of organic growth and acquisitions have broadened our product portfolio. This has established Bel as a world leader with a diverse offering of power, protection and interconnect products. We design and manufacture these products which are primarily used in the networking, telecommunications, computing, military, aerospace, transportation and broadcasting industries. Bel's portfolio of products also finds application in the automotive, medical and consumer electronics markets.

About Edge Connectors

Cinch Edge Card Connectors are available in a variety of styles on both 0.100 or 0.156 center spacing. Cinch provides 3 different product series - 0.100 Cardcon Connectors, 0.156 Cardcon Connectors and 0.156 Commercial Connectors. Product offer also includes Accessories for these connectors as Card Guides and Polarizing Keys.

3

5

Table of Contents

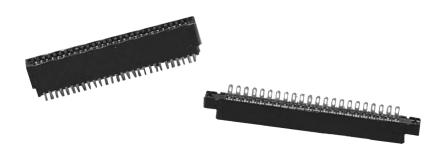
CARDCON™ EDGE CONNECTOR COMMERCIAL

0.156" (3.96mm) Density Dip Solder

0.156" (3.96mm) Density Dip Solder/Solder Eyelet

CARDCONTM EDGE CONNECTOR COMMERCIAL

0.156" (3.96mm) Density Dip Solder



Features

- Dip solder tails single readout and double readout on 0.140" (3.56mm) row centers or 0.200" (5.08mm) row centers
- Available with unique tails for PC board retention; holds the connector firmly on the board during wave soldering operations
- · Bifurcated semi-bellows contacts for added contact reliability
- · Ideal for applications involving vibration or board irregularities
- Contact positions: 6, 10, 12, 15, 18, 22, 24, and 25
- Accepts single or double-sided 0.062" (1.59mm) thick PC boards
- Available with 0.128" (3.25mm) mounting hole
- Meets applicable performance criteria of MIL-C-21097
- UL Recognized file E170218 (UL1977) E130965 (UL1863)

Materials

Insulation Material	UL 94V-0 rated glass-filled polyester, black
Contact Material	Spring brass
Standard Contact Plating	10μ" selective gold over 30μ" nickel in contact area, tin on tails

Environmental

Shock	Per MIL-STD-202E, Method 213, Condition C
Operating Temperature	-65°C to +105°C
Vibration	Per MIL-STD-202E, Method 204, Condition B
Humidity	Per MIL-STD-202, Method 103, Condition B
Accessories (order separately)	
Polarizing Key (two types, order separately)	a) for between-contact polarization b) for in-contact polarization
Card Guide Posts	Attach to mounting ears and guide PC board into connector

Electrical

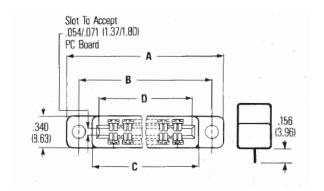
Withstanding Voltage	1800 VAC RMS (@ sea level)
Current Rating	5 Amps
Contact Resistance	6 Milliohms maximum
Insulation Resistance	5000 Megohms minimum

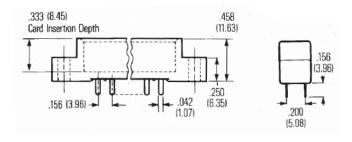
Mechanical

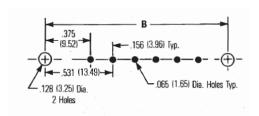
	16 oz. maximum with 0.070" (1.78mm) blade
and Separation Force	1 oz. minimum with 0.054", (1.37mm) blade

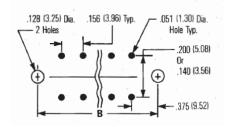
CARDCON™ EDGE CONNECTOR COMMERCIAL

0.156" (3.96mm) Density Dip Solder









Dimensions

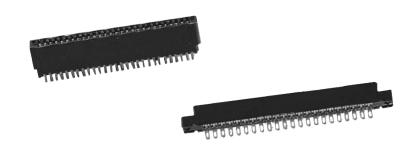
Number of Positions/Contacts		4	E	3	([
	in	mm	in	mm	in	mm	in	mm
6/12	1.785	45.35	1.531	38.89	1.239	31.47	1.100	27.94
10/20	2.410	61.21	2.156	54.76	1.874	47.34	1.724	43.79
12/24	2.723	69.16	2.469	62.71	2.177	55.30	2.036	51.71
15/30	3.191	81.05	2.937	74.60	2.645	67.18	2.504	63.60
18/36	3.660	92.96	3.406	86.51	3.114	79.10	2.972	75.49
22/44	4.285	108.84	4.031	102.39	3.739	94.94	3.596	91.34
24/48	4.598	116.79	4.344	110.34	4.052	102.92	3.911	99.34
25/50	4.754	120.75	4.500	114.30	4.208	106.88	4.067	103.30

Ordering Information

Number of Positions/Contacts	0.128 Mounting Hole Catalog Number	Number of Positions/Contacts	0.128 Less Mounting Ears Catalog Number	0.128 Mounting Hole Catalog Number	
Dip Solder Tails, Single Readout, 0.156" (3.96mm Long)		Dip Solder Tails, Double Readout, 0.200" (5.08mm Long) row spacing, 0.156" (3.96mm) Long)			
6/6	50-6SN-5	6/12	50-12SN-3	-	
10/20	50-10SN-5	10/20	50-20SN-3	-	
12/12	50-12SN-5	12/24	50-24SN-3	-	
15/15	50-15SN-5	15/30	50-30SN-3	-	
18/18	50-18SN-5	18/36	50-36SN-3	-	
22/22	50-22SN-5	22/44	50-44SN-3	50-44SN-1	
24/24	50-24SN-5	24/44	50-48SN-3	-	
25/25	50-25SN-5	25/50	50-50SN-3	-	

EDGE CONNECTOR COMMERCIAL

0.156" (3.96mm) Density Dip Solder/Solder Eyelet



Features

- Dip solder tails single readout and double readout on 0.156" (3.96mm) long
- Dip solder tails, double readout 0.156" (3.96mm) on 0.200" (5.08mm) row spacing or 0.125" (3.18mm) longon 0.140" (3.56mm row spacing
- Solder eyelet, single readout and double readout on .200" (5.08mm) row centers
- Bifurcated semi-bellows contacts for added contact reliability
- Ideal for applications involving vibration or board irregularities
- Contact positions: 6, 10, 12, 15, 18, 22 and 25
- Accepts single or double sided .062" (1.59mm) thick PC boards
- Available less mounting ears or with 0.128" (3.25mm) mounting hole
- Meets applicable performance criteria of MIL-C-21097

Materials

Insulation Material	UL 94V-0 rated glass-filled polyester, green
Contact Material	Spring brass
Standard Contact Plating	10μ" selective gold over 30μ" nickel in contact area, 5μ" gold on tails

Environmental

Shock	Per MIL-STD-202E, Method 213, Condition C
Operating Temperature	-65°C to +105°C
Vibration	Per MIL-STD-202E, Method 204, Condition B
Humidity	Per MIL-STD-202, Method 103, Condition B
Accessories (order separately)	
Polarizing Key (two types, order separately)	a) for between-contact polarization b) for in-contact polarization
Card Guide Posts	Attach to mounting ears and guide PC board into connector

Electrical

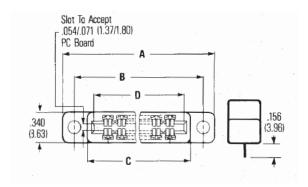
Withstanding Voltage	1800 VAC RMS (@ sea level)
Current Rating	5 Amps
Contact Resistance	6 Milliohms maximum
Insulation Resistance	5000 Megohms minimum

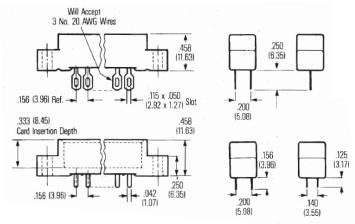
Mechanical

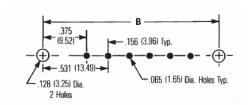
Individual Contact Insertion and Separation Force	16 oz. maximum with 0.070" (1.78mm) blade
	1 oz. minimum with 0.054", (1.37mm) blade

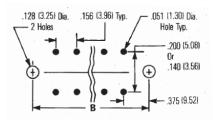
EDGE CONNECTOR COMMERCIAL

0.156" (3.96mm) Density Dip Solder/Solder Eyelet









Dimensions

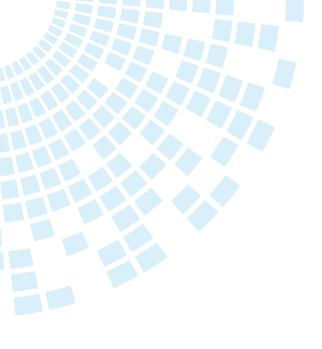
Number of Positions/Contacts	1	4	E	3	(;		O
	in	mm	in	mm	in	mm	in	mm
6/12	1.785	45.35	1.531	38.89	1.239	31.47	1.100	27.94
10/20	2.410	61.21	2.156	54.76	1.874	47.34	1.724	43.79
12/24	2.723	69.16	2.469	62.71	2.177	55.30	2.036	51.71
15/30	3.191	81.05	2.937	74.60	2.645	67.18	2.504	63.60
18/36	3.660	92.96	3.406	86.51	3.114	79.10	2.972	75.49
22/44	4.285	108.84	4.031	102.39	3.739	94.94	3.596	91.34
24/48	4.598	116.79	4.344	110.34	4.052	102.92	3.911	99.34
25/50	4.754	120.75	4.500	114.30	4.208	106.88	4.067	103.30

Ordering Information - Single Readout

	0.128 (3.25mm) N	Mounting Hole	
Number of Positions/	Solder Eyelet	Dip Solder Tails, 0.156" (3.96mm Long)	
Contacts	Part Number	Part Number	
6/6	50-6A-20	50-6B-10	
10/10	50-10A-20	50-10B-10	
12/12	50-12A-20	50-12C-10	
15/15	50-15A-20	50-15B-10	
18/18	50-18A-20	50-18B-10	
22/22	50-22A-20	50-22B-10	
25/25	50-25A-20	50-25B-10	

Ordering Information - Double Readout

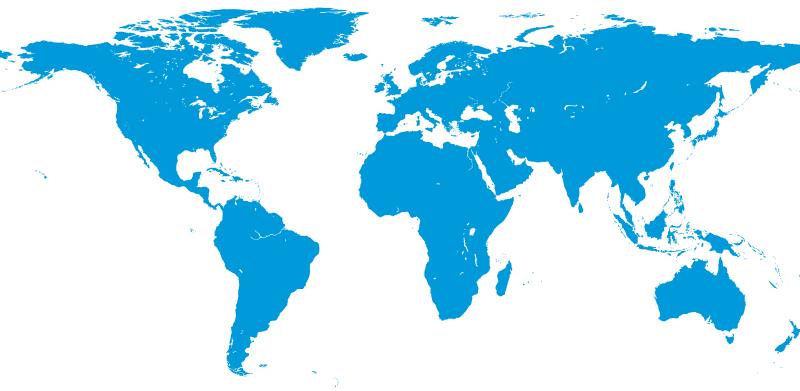
	0.128 (3.25mm) Mounting Hole	
Number of Positions/	Solder Eyelet	Dip Solder Tails, 0.156" (3.96mm Long) 0.200" (5.08mm Between Row Spacing)
Contacts	Part Number	Part Number
6/12	50-12A-30	50-12B-10
10/20	50-20A-30	50-20B-10
12/24	50-24A-30	50-24B-10
15/30	50-30A-30	50-30B-10
18/36	50-36A-30	50-36B-10
22/44	50-44A-30	50-44B-10
25/50	50-50A-30	50-50B-10



About Cinch Connectivity Solutions

For over 100 years, Cinch Connectivity Solutions has manufactured high-quality and reliable high-performance connectors & cable assemblies. Cinch is recognized as a world class connectivity supplier of RF, fiber optic, hybrid, microwave components, circular, d-subminiatures, modular rectangular, electronic enclosures & cable assemblies.

Cinch provides innovative solutions to the military, commercial aerospace, networking, telecommunication, test & measurement, oil & gas and other harsh environment industries.





For more information, please contact us:

North America +1 507.833.8822 ccsorders@us.cinch.com

Asia-Pacific +86 21 5442 7668 ccs.asia.sales@as.cinch.com

Europe, Middle East +44 (0) 1245 342060 CinchConnectivity@eu.cinch.com

belfuse.com/cinch.com

ca-CCS-IND-Edge-Connectors_v5
© 2022 Cinch Connectivity Solutions

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Cinch Connectivity Solutions:

<u>50-18SN-5</u> <u>50-22SN-5</u> <u>50-24SN-3</u> <u>50-30SN-3</u> <u>50-36SN-3</u> <u>50-44SN-3</u> <u>50-50SN-3</u> <u>50-6SN-5</u> <u>50-12SN-5</u> <u>50-20SN-</u>3