

# Stacking Connectors

## High-density circuits between boards

### The Cinch Advantage

CIN::APSE® stacking connectors are used for connecting PCB, flex PCB to PCB or component to PCB without the use of solder. The contacts are compact with a pitch of 0.050". Each pathway on the CIN::APSE® connector relies on a spring-like contact that establishes a durable electrical connection using mechanical pressure. The spring-like contact is protected from over compression by the CIN::APSE® insulator. Plungers are used on either side of the spring-like contact allowing compression cycles to over 100. The connector mounts onto the PCB and connects electrically to gold plated pads.

CIN::APSE® stacking connectors can be found in multiple military, aerospace and satellite applications where a mezzanine style PCB layout is utilized to reduce space and weight. CIN::APSE® 1.27mm pitch allows for high-density of circuits between boards. CIN::APSE® mechanical contacts are ideal for applications that require frequent disconnections for modifications or testing. The mechanical contacts also reduce soldering cost and rework.

### Features

- 25, 51, 83, 166, 249 positions
- 0.125", 0.250" and 0.277" heights
- Gold plated contacts and plungers
- 0.006" working compression range



Part Number	Positions	Height		Rows	Fastener
		in	mm		
3800520001*	25	0.125	3.18	2	2x #2 Thru Holes (Ø 0.090")
3800520013*	51	0.125	3.18	2	2x #2 Thru Holes (Ø 0.090")
3900520017	83	0.277	7.04	5	2x #4 Thru Holes (Ø 0.124")
3900520008	166	0.277	7.04	5	3x #4 Thru Holes (Ø 0.124")
3800520038	249	0.277	7.04	5	4x #2-56 Tapped Insert
3800520042	249	0.277	7.04	5	4x #4 Thru Holes (Ø 0.124")

\*Stocked Part

# Outline Specification

<b>Current Rating</b>	1-3A per positions
<b>Withstanding Voltage</b>	500 VDC (sea level)
<b>Contact Resistance</b>	<50 milliohms
<b>Housing</b>	UL94V-O rated liquid crystal polymer
<b>Plunger</b>	Gold-plated copper alloy
<b>Contact</b>	Gold-plated molybdenum
<b>Operating Temperature</b>	-65°F (-55°C) to 257°F (125°C)
<b>Durability</b>	>100 mating cycles
<b>Configuration</b>	Plunger, Contact, Plunger
<b>Alignment</b>	With pins
<b>Inductance</b>	<2 nH
<b>Vibration</b>	20 Gs, 10-2,000 Hz

## Configurations

### 25 Position



### 51 Position



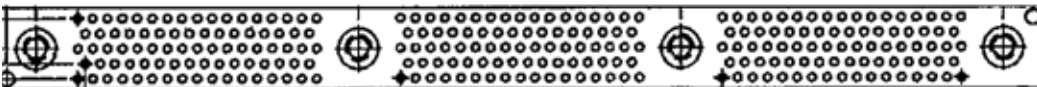
### 83 Position



### 166 Position



### 249 Position



*Cinch Connectivity Solutions reserves the right to change specifications without notice*



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

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

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

[belfuse.com/cinch](http://belfuse.com/cinch)

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Board to Board & Mezzanine Connectors](#) category:*

*Click to view products by [Bel Fuse](#) manufacturer:*

Other Similar products are found below :

[589158040000018](#) [MDF7C-18P-2.54DSA\(55\)](#) [FCN-230C068-11](#) [FCN-268F012-G/BD](#) [FCN-268F036-G/BD](#) [FCN-268M012-G/0D](#) [FCN-268M024-G/1D](#) [FCN-723J004/1](#) [MIS-048-01-F-D-DP-K](#) [832-10-034-10-001000](#) [FX4C-80S-1.27DSA](#) [FCN-214Q030-G/0](#) [FCN-234P048-G/0](#) [FCN-235D050-G/C](#) [210-93-314-41-105000](#) [2-22603-0](#) [MDF7-40DP-2.54DSA\(55\)](#) [AXG720047](#) [5031084030](#) [MIT-114-03-F-D-K](#) [55323-1519](#) [DF33-2P-3.3DSA\(24\)](#) [YFT-20-05-H-03-SB-K](#) [503308-3040](#) [026-6203-PDB](#) [027-6203-PDB](#) [069159702701000](#) [10123981-102LF](#) [101A10019X](#) [55650-0588-C](#) [68684-306](#) [75140-7012](#) [589159005003045](#) [194261-1](#) [FCN-268F024-G0D](#) [10124054-515LF](#) [68685-603](#) [8-1616154-3](#) [MIS-019-01-F-D](#) [589159005002045](#) [541371078](#) [IL-WX-10PB-HF-B-E1000E](#) [FCN-268M024-G/3D](#) [20021832-06016C1LF](#) [KX15-20KLDL-E1000E](#) [MDF7-16DP-2.54DSA\(55\)](#) [AXE810124](#) [FCN-214J100-G/0](#) [FCN-230C068-E/S](#) [AXE812124](#)