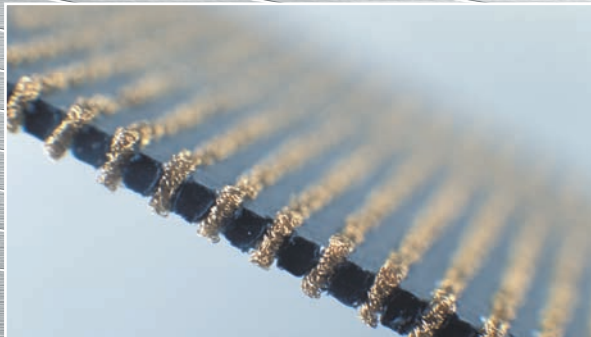


CIN::APSE®

STACKING CONNECTORS

COMMERCIAL, OFF-THE-SHELF STACKING CONNECTOR SYSTEMS





CIN::APSE®

It takes more than an ordinary connector to support advanced performance interconnect applications. It takes CIN::APSE, a proven solderless Z-axis connector technology that offers exceptional mechanical and electrical performance at signals well above 30 GHz.

If you have an interconnect challenge, and need to overcome the restrictions of ordinary connector devices, CIN::APSE can provide the versatile and reliable interconnect solution you need.

RoHS Compliant.

Innovative Compression-Mount Technology

CIN::APSE is a unique, Z-Axis compression interconnect which provides superior mechanical and electrical performance. The contact construction consists of randomly wound gold plated molybdenum wire, formed into a cylindrical shape (Figure 1). Standard contact diameters are 0.020" (0.50 mm) and 0.040" (1.00 mm).

The basic CIN::APSE contact configuration consists of a contact installed into a customised plastic insulator with the patented Cinch hourglass hole design (Figure 2). Once in place, the contact extends on both sides of the insulator.

Custom made to your specifications, CIN::APSE utilises a multi-point contact that can handle signals well above 30 GHz, while offering a superior combination of small size, low inductance and exceptional resistance to shock, vibration and thermal cycling.

Quick, Solderless Installation

CIN::APSE is easily installed in two basic steps, without soldering. First, using alignment features, the CIN::APSE interconnect is positioned between two components with matching connection footprints. Next, the two components are compressed and fastened together (Figure 3).

Low Compression Force, Low Contact Resistance

The CIN::APSE contact offers one of the best force / deflection ratios in the industry. An average compression force of only 2.5 ounces (71 N) will yield a typical contact resistance of less than 20 mΩ. This means high I/O count applications can achieve excellent electrical performance with only minimal Z-Axis compression force (Figure 4).



Figure 1.



Figure 2.

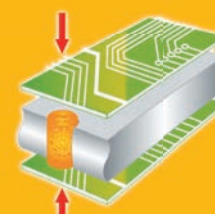


Figure 3.

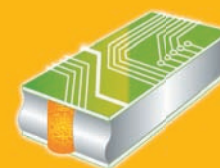
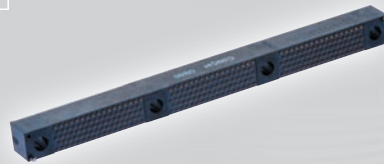


Figure 4.



Characteristics

Mechanical

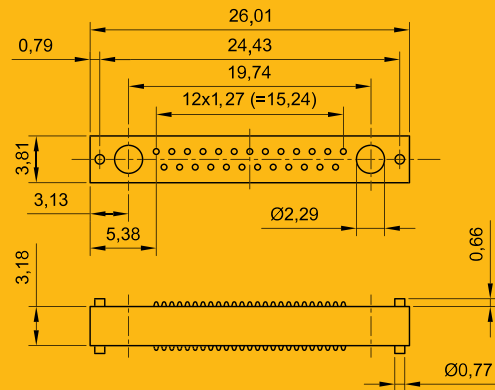
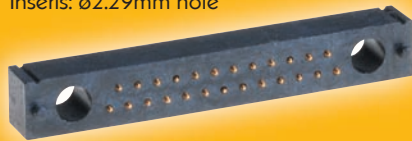
Housing:	UL94V-O rated liquid crystal polymer
Plunger:	Gold plated copper alloy
Contact:	Gold plated molybdenum
Operating Temp:	-55 to 125°C
Durability:	>1000 mating cycles
Configuration:	Contact, plunger, contact
Alignment:	With pins

Electrical

Current rating:	1-3A per position
Contact resistance:	<50mΩ

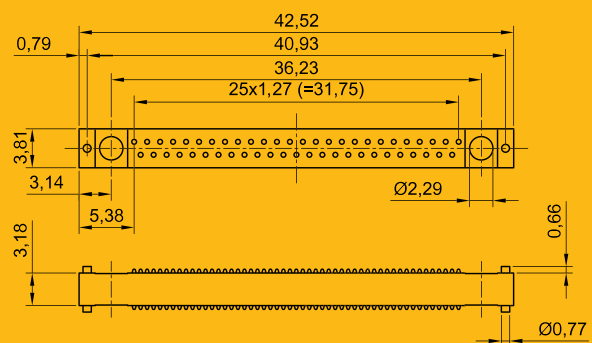
25 position connector

Part Number: GA3800520001000
 Height: 3.18mm
 Inserts: ø2.29mm hole



51 position connector

Part Number: GA3800520013000
 Height: 3.18mm
 Inserts: ø2.29mm hole

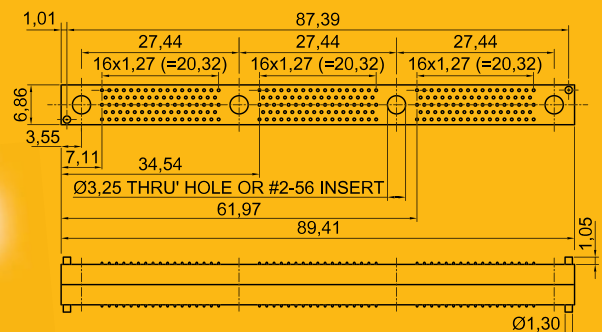


249 position connector

Part Number: GA3800520038000
 Height: 7.04mm
 Inserts: Metal #2.56 threaded

Part Number: GA3800520039000
 Height: 18.62mm
 Inserts: Metal #2.56 threaded

Part Number: GA3800520042000
 Height: 7.04mm
 Inserts: ø3.25mm hole



At Cinch our philosophy is that anything is possible.

With over 70 years' experience as a global supplier we offer simple, effective solutions to our customers' interconnect and integration needs. From basic interconnect to complex integration requiring bespoke design, we focus primarily on quality, ingenuity and reliability, meeting the high performance demands of industries such as Defence, Aerospace, Space, Telecom, High Speed Data Servers and Industrial Transportation.

**TOGETHER
WE STIMULATE.
WE INNOVATE.
WE CREATE.**



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Cinch has manufacturing and sales sites located globally approved to AS9100.

