

CIN::APSE® Stacking Connector Hardware

March 2019

by Brad Taras
Product Manager
Cinch Connectivity Solutions

belfuse.com/cinch

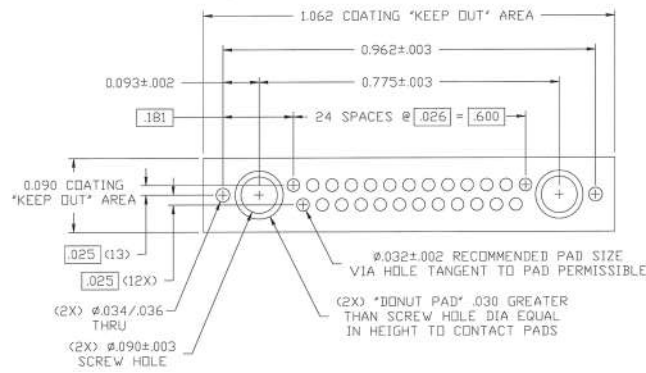
CIN::APSE® STACKING CONNECTOR HARDWARE

CIN::APSE® stacking connectors are solderless surface mount connectors that require compressive force to establish a reliable connection to gold plated PCB pads. These connectors can be used for rigid to rigid PCB mezzanine stacks or rigid to flex PCB configurations. 25 position and 51 position are the two most commonly used CIN::APSE® stacking connectors.

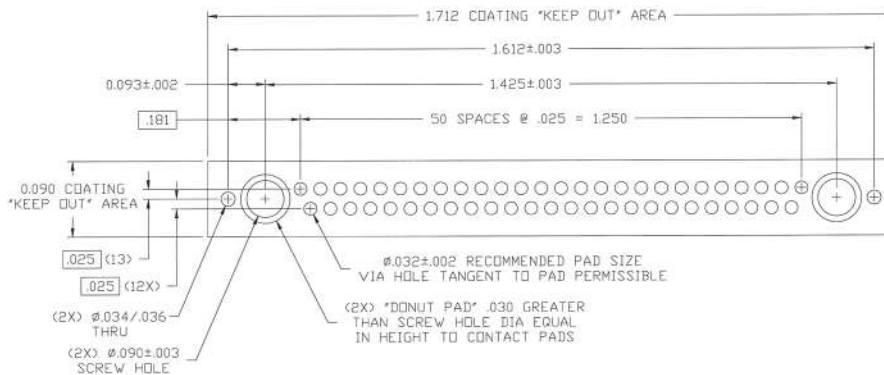
The standard thickness of the CIN::APSE® stacking connector is 0.125", however 0.250" thick option is readily available to accommodate larger PCB mounted devices. Both a bolster plate and a compression plate are suggested to maintain uniform compression, however if space is not available for both plates, the compression plate is recommended to be removed for PCBs 0.093" or thicker.

Prevent over compression

25 Position PCB Footprint



51 Position PCB Footprint



Stack up thickness and corresponding hardware

Mounting the stacking connectors requires additional hardware to maintain uniform compressive force across all contacts. Mounting to the PCBs is accomplished using PEM standoffs and screws.

CIN::APSE® STACKING CONNECTOR HARDWARE

Ordering Information

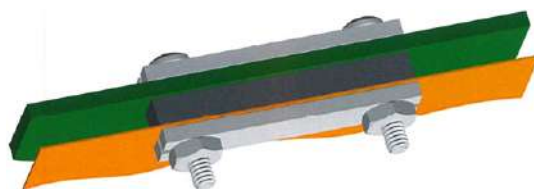
| Stacking Hardware Part Number | Positions | CIN::APSE Thk (in) | CIN::APSE Part Number | PCB 1 Thk (in) | PCB 2 Thk (in) | Stack Up Height (in) |
|-------------------------------|-----------|--------------------|-----------------------|----------------|----------------|----------------------|
| 3180299351 | 25 | 0.125 | 3800520001 | 0.062 | Flex (0.016) | 0.393 |
| 3180299351 | 25 | 0.125 | 3800520001 | 0.062 | 0.062 | 0.439 |
| 3180299351 | 25 | 0.125 | 3800520001 | 0.093 | Flex (0.016) | 0.424 |
| 3180299352 | 25 | 0.125 | 3800520001 | 0.093 | 0.062 | 0.470 |
| 3180299352 | 25 | 0.125 | 3800520001 | 0.093 | 0.093 | 0.501 |
| 3180299352 | 25 | 0.125 | 3800520001 | 0.125 | Flex (0.016) | 0.456 |
| 3180299352 | 25 | 0.125 | 3800520001 | 0.125 | 0.062 | 0.502 |
| 3180299353 | 25 | 0.125 | 3800520001 | 0.125 | 0.093 | 0.533 |
| 3180299353 | 25 | 0.125 | 3800520001 | 0.125 | 0.125 | 0.565 |
| 3180299354 | 51 | 0.125 | 3800520013 | 0.062 | Flex (0.016) | 0.393 |
| 3180299354 | 51 | 0.125 | 3800520013 | 0.062 | 0.062 | 0.439 |
| 3180299354 | 51 | 0.125 | 3800520013 | 0.093 | Flex (0.016) | 0.424 |
| 3180299355 | 51 | 0.125 | 3800520013 | 0.093 | 0.062 | 0.470 |
| 3180299355 | 51 | 0.125 | 3800520013 | 0.093 | 0.093 | 0.501 |
| 3180299355 | 51 | 0.125 | 3800520013 | 0.125 | Flex (0.016) | 0.456 |
| 3180299355 | 51 | 0.125 | 3800520013 | 0.125 | 0.062 | 0.502 |
| 3180299356 | 51 | 0.125 | 3800520013 | 0.125 | 0.093 | 0.533 |
| 3180299356 | 51 | 0.125 | 3800520013 | 0.125 | 0.125 | 0.565 |

Configuration Images

CIN::APSE® Stacking Hardware, Rigid to Rigid



CIN::APSE® Stacking Hardware, Rigid to Flex



About the Author

Brad Taras is a Cinch Connectivity Solutions Product Manager for C-ENX™, Dura-Con™, and Cin::APSE® product lines. He has a Master's in Business Administration from the University of Illinois at Chicago and a Bachelor's Degree in Material Science and Engineering from University of Illinois - Urbana/Champaign.

Brad has been a product manager in the connector industry for over a decade after starting in the industry as a design/manufacturing engineer. Brad's experience as an engineer in the military industry goes back to 2001.

Contact Information

O +1 630.705.7540

E brad.taras@us.cinch.com

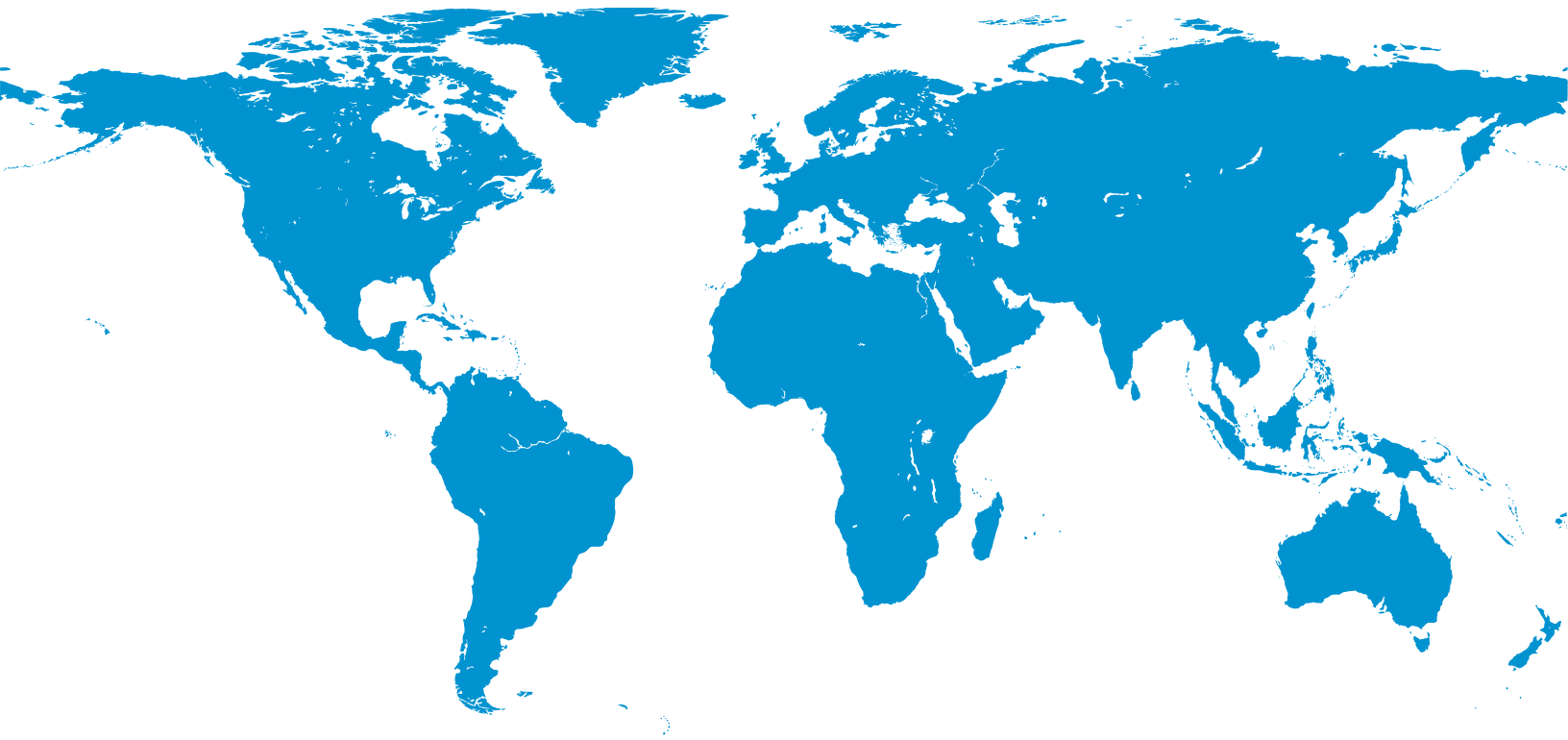
belfuse.com/cinch



About Cinch Connectivity Solutions

For over 100 years, Cinch Connectivity Solutions has manufactured high quality and reliable high-performance connectors and 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 and cable assemblies.

Cinch provides innovative solutions to the military, commercial aerospace, networking, telecommunication, test and measurement, oil and gas and other harsh environment industries. We aim to exceed our customers' expectations and continually offer innovative solutions to the rapidly changing needs of the markets and customers we serve.



For more information, please contact us:

North America

+1 630 705 6000

inquiry@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

