C-ENX™ Modular Connector System

EN 4644 Interconnect Solutions

Overview

Qualified to EN 4644, Cinch's C-ENX connectors offer a space-saving, high-density solution for disconnect, rack & panel, and LRM applications. With modular shells, flexible insert options, and support for signal, power, coax, and high-speed contacts, the series delivers reliable performance in harsh aerospace environments.

Connector Types

Disconnect Connectors

Modular connectors for cable-to-cable and PCB-to-cable disconnects. Locking mechanisms are built into each connector for secure, stackable connections. Available in C-ENX A, B1, and B2 shell styles.

- Compact & stackable footprint
- Quarter-turn or jackscrew locking
- Rear grommet or interfacial seal options
- Ground block available
- Easy field assembly and repair

C-ENX B1 connector C-ENX B2 connector

Rack & Panel Connectors

Designed for Line Replaceable Module (LRM) applications. Blind-mate connectors with fixed or floating mounts & ARINC 600 functionality. Available in C-ENX B1 ~ B4 shell styles.

- Blind-mate operation
- 1 to 4 insert positions (C-ENX B1~B4)
- ARINC 600 compatibility
- High-density, modular construction
- Float mount & polarization options

C-ENX B1 connector C-ENX B2 connector C-ENX B3 connector C-ENX B4 connector

ARINC 810 Connectors

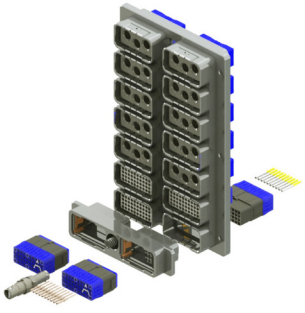
Built to withstand harsh galley environments like ovens, refrigerators, and beverage systems. Floating mechanism ensures proper sealing and alignment under vibration or shock.

- Sealed, modular plug & receptacle
- Vibration-resistant float design
- Includes CAN data bus (Twinax) support
- Supplied as complete assembly kits

Multi-Ganged Connectors

Combine 4 to 20 cavities using standard C-ENX B2 plug shells and multigang housings. Ideal for dense rack & panel configurations.

- Space and weight saving solution
- Compatible with C-ENX B2 inserts
- Uses standard backshells and accessories
- Modular, scalable system



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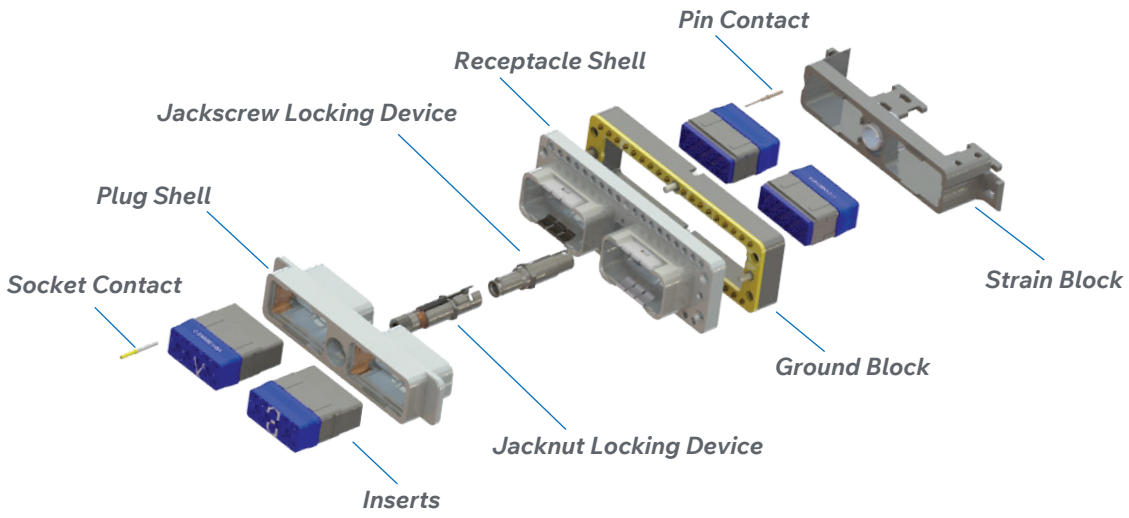
Understanding Shell Variants

Shell Type	Description	Common Use Case
A	Compact, single-insert shell with quarter-turn locking	Disconnect (cable-to-cable)
B1	Single-insert shell; aluminum or composite	Disconnect or rack & panel
B2	Two-insert shell with jackscrew/jacknut or float mounting	High-density disconnect or rack & panel
B3	Three-insert shell for large LRMs	Rack & panel
B4	Four-insert shell; highest density	Rack & panel

Components



Inserts

Available in multiple arrangements for signal, power, coax, quadrax, and twinax. Configurable as pin or socket, in environmental or non-environmental formats.

- 40+ arrangement codes
- Optional environmental sealing

Contacts

Crimp and PCB-tail contact options for varied applications.

- Power & signal up to 80 A
- Coax, twinax, triax, quadrax, BMA for high-frequency/data bus
- PC tail in straight or right-angle

Shells

Lightweight composite or durable aluminum, with EMI shielding and mounting flexibility.

- Quarter-turn, jackscrew, or jacknut locking
- Polarization coding to prevent mis-mating

Assembly Kits

Pre-configured kits simplify ordering and include shell, insert, contacts (if selected), filler plugs, dust caps, and mounting hardware.

- Crimp or PC-tail termination options
- Compatible with plug and receptacle shells

Accessories

Full range of options to complete system integration.

- Backshells: EMI or standard strain relief
- Dust caps: pink (standard) or black (ESD-safe)
- Sealing & filler plugs for all contact sizes