The Cinch Advantage

The c-enx™ series offers a wide range of solutions based on two insert sizes with a large variety of shells and contacts. The series is standardized by the EN 4644 European Standard.

Available with Cinch EBOSA™ Expanded Beam Technology Expands and collimates the optical beam up to 2000 times the original beam size making airborne dirt nearly benign to beam continuity and integrity.

Our patented active alignment technology aligns a standard LC ferrule to Cinch’s EBOSA™ with ultra-high precision. This results in insertion loss and reflectance performance that can exceed the specification for customer specific applications for expanded beam connectors.

Features

- Slim, completely modular and expandable
- Shell design with high contact density
- Stackable shells do not require additional space for locking and unlocking connectors
- Available in aluminum, stainless steel or composite materials

Modular concept with a large variety of options

- Shell can accommodate a wide variety of inserts for signal, power, coax, data bus, fiber optic and high frequency BMA contacts
- Optional ground blocks (to meet the FAA HIRF requirements)
- Pin and socket inserts can be installed in either plug or receptacle shells (pin contacts are always fitted in the pin insert)
- Expanded Beam EBOSA™

Cost saving and user-friendly solution

- Inserts can be wired in the wire harness shop and later installed in the shells
- Common panel cut-out simplifies the connector installation
- Inserts can be easily installed and removed from the shell
- Inserts and shells are keyed to prevent mis-mating
- Standard mil-spec tools for contact crimping and contact insertion/extraction
- Field replaceable sub-assemblies
- Vibration resistant self-locking threads
c-enx™ Disconnect

Cinch’s c-enx™ disconnect (c-enxa, c-enxb1 and c-enxb2) are specially designed to be used in cable-cable disconnect applications and PCB-cable disconnect applications.

- Modular series allows configuration with higher performances (environmental, grounding blocks, shell mountings, etc.)
- Several accessories offer possibility to create harnesses
- Locking system is located on the connector itself

Cinch’s c-enx™ Rack and Panel

The c-enx™ rack and panel connectors are intended for blind mate applications. The plug connector is designed to be used in a Line Replaceable Module (LRM) while the receptacle is installed on the aircraft rack.

- Wide range of connectors (c-enxb2, c-enxb3, and c-enxb4) based on the same design utilize same accessories, polarization, and mounting style
- Reliable system: the polarization device prevents any mounting mistakes between panel, plug, and receptacle shell
- Modular mounting: receptacles feature Arinc 600 functionality combined with space saving design with several mounting styles (fixed or float mount)

Environmental Characteristics

Temperature

- Temperature range: -65°C/+175°C (-85°F/+347°F) according to EIA364-32 and EN 2591-305
- Temperature range: -65°C/+125°C (-85°F/+257°F) for c-enxb2 composite shell and for Rack & Panel c-enxb
- Temperature life: 1000 hours at 175°C (valid for metallic shell only)

Other characteristics

- Salt spray: 96 hours (nickel-plated aluminum and composite) EN 2591-307 EIA 364-26 test condition A
- Humidity: 10 days with temperature variation from -10°C to +65°C EIA 364-31 Method 4, test condition B
- Altitude immersion: 3 cycles at 50,000 feet EN 2591-314 EIA 364-03