



KJAQ 38999-Style Quadrax for High-Speed Data Applications in Commercial Aerospace

Offering Proven Reliability & Performance, When it Matters Most

ITT Cannon's Quadrax contact is a Size 8 contact assembly installed in a clocked Size 8 contact cavity insert available in many 38999-style, ARINC and other popular aerospace connectors. It contains four (4) matched impedance signal contacts within a shielded Size 8 body. High-speed data is transmitted through the signal contacts, which are terminated to signal wires within a shielded Quadrax cable. The outer shield of the cable is terminated to the contact outer body to assure the signal contacts are shielded from outside noise. The orientation and design of the contacts minimize cross talk and attenuation, which helps maximize data rates through the contact system.

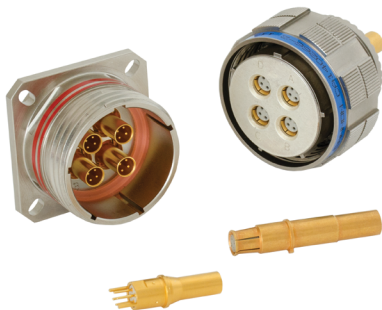
The Cannon Quadrax termini is a high reliability contact system that is used to deliver data rates up to 2.5 Gb/s and is available in two versions: rear release crimp pin or socket Quadrax contacts and front release PC pin Quadrax contacts. The crimp version of Quadrax is inserted and removed from the rear of the connector, while the PCB version is inserted and removed from the front. The Quadrax contact provides four signal pins with shield termination capability to yield a single Ethernet port. The crimp version of the Quadrax contact terminates twisted, shielded quad cable.

The CANNON Difference

- Enables data transfer rates up to 2.5 Gb/s
- Highly engineered
- Exceptional versatility
- Proven reliability and a commitment to delivering the best solution for standard and custom design requirements

Key Features

- Available in a variety of 38999-style layout arrangements in the following shell styles: wall mount receptacle, box mount receptacle, jam nut receptacle and straight plug
- Rear release crimp pin and socket Quadrax contacts
- Front release PC pin Quadrax contacts



| High-Speed Specifications | KJAQ 38999-Style |
|---------------------------|--------------------------------|
| Size | Size 8 Quadrax Termini |
| Current Rating | See ARINC 600 |
| Contact Resistance | See ARINC 600 |
| Contact Material | Copper Alloy |
| Shell Material | Copper Alloy |
| Contact Plating | Gold over Nickel |
| Termination Type | P.C. Solder & Crimp |
| Gender | Pin & Socket in Either Housing |

Key Applications



IN-FLIGHT ENTERTAINMENT / CONNECTIVITY



AVIONICS



NETWORKS

KJAQ 38999-Style Quadrax

How to Order | Part Number Configurator



| | | | | | | | | | |
|-------------|-------------|----------|----------|------------|-----------------|---------------------|-----------------------|---------------|------------------|
| KJAQ | 2 | N | T | 21 | F | 4C | N | 2 | * |
| | Shell Style | Class | Endbell | Shell Size | Hardware Finish | Contact Arrangement | Polarization Position | PC Mod Code** | Contact Modifier |

Shell Style

| | |
|------------|---|
| 0 - | Wall mount receptacle with rear thread; accommodates rear release, rear removable crimp pin Quadrax contacts |
| 2 - | Box mount receptacle without rear thread; accommodates front release, front removable PC pin Quadrax contacts |
| 4 - | Jam Nut Receptacle without rear thread, accommodates front release, front removable PC pin Quadrax contacts |
| 6 - | Straight plug accommodates rear release, rear removable crimp socket Quadrax contacts |
| 7 - | Jam nut receptacle with rear thread; accommodates rear release, rear removable crimp pin Quadrax contacts |

Class

| | |
|--------------------------|---------------------------------------|
| N - | Non-Environmental |
| Endbell: | |
| T - | No Rear Accessory |
| Shell Size: | |
| 9, 17, 21, 23, 25 | Per 38999-Style Series III Connectors |

Hardware Finish

| | |
|------------|---|
| F - | Selective Electroless Nickel over Electroless Silver (RoHS) |
| W - | Olive drab cadmium over Electroless Nickel |

Polarization Position

| | |
|----------------------|--|
| N - | Normal |
| A, B, C, D, E | Alternative per 38999 –Style Series III connectors |

Contact Arrangement

| | |
|-------------|-------------------------|
| 1C - | Single Quadrax (size 9) |
| 2C - | Two Quadrax (size 17) |
| 4C - | Four Quadrax (size 21) |
| 6C - | Six Quadrax (size 23) |
| 8C - | Eight Quadrax (size 25) |

PC Contact Modification Code **

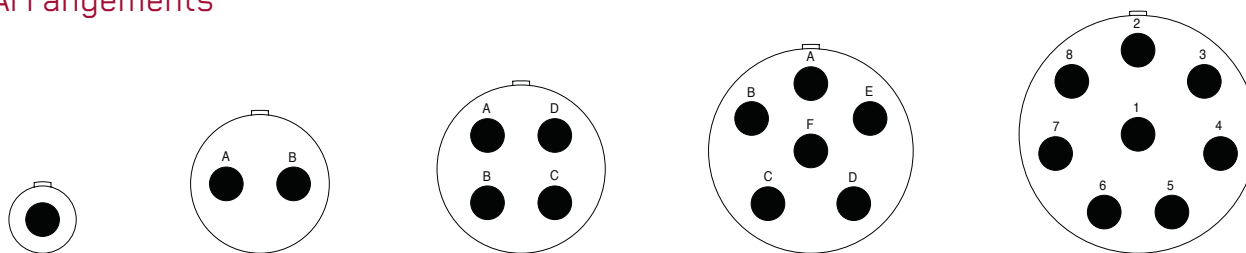
| | |
|------------|----------------------------|
| 1 - | .150 solder post extension |
| 2 - | .250 solder post extension |

Contact Modifier

| | |
|------------|--|
| L - | Less contacts (L is not marked on connector) |
|------------|--|

**Applies only to Shell Styles: 2 & 4

Insert Arrangements



| | | | | |
|--|---|---|---|---|
| Size 9 Designator: 1C 1-Quadrax Contact | Size 17 Designator: 2C 2-Quadrax Contact | Size 21 Designator: 4C 4-Quadrax Contact | Size 23 Designator: 6C 6-Quadrax Contact | Size 25 Designator: 8C 8-Quadrax Contact |
|--|---|---|---|---|

- Notes:
- All 38999-style inserts, in both the plug and the receptacle connectors, provide electrical bonding of the cable shield to the housing.
 - 38999-style inserts are integral part of the shell. Arrangements, other than those shown, are available upon request.
 - All insert arrangements are shown as viewed from the front view pin connector.
 - To minimize contact splay and to assure proper mating, each rear release "Quadrax" pin contact is supplied with a plastic "stabilizer."



Why ITT

ITT is a focused, multi-industrial company that designs and manufactures highly engineered critical components and customized technology solutions.

ITT Cannon is a leading global manufacturer of connector products serving international customers in the aerospace and defense, industrial and medical end markets. We design and engineer a variety of interconnect solutions that make it possible to transfer data, signal and power in an increasingly connected world.

Connect with your ITT Cannon representative today or visit www.ittcannon.com

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