

RIVO MULTITRADE OPTICAL SYSTEMS

ESCON connectors for subway use are resistant to low temperatures



Overview

ESCON connector The connector system is a Retractable Shroud Duplex (RSD) and can be supplied as terminated patchcords or pigtails. Hybrid Robust Connectiv.

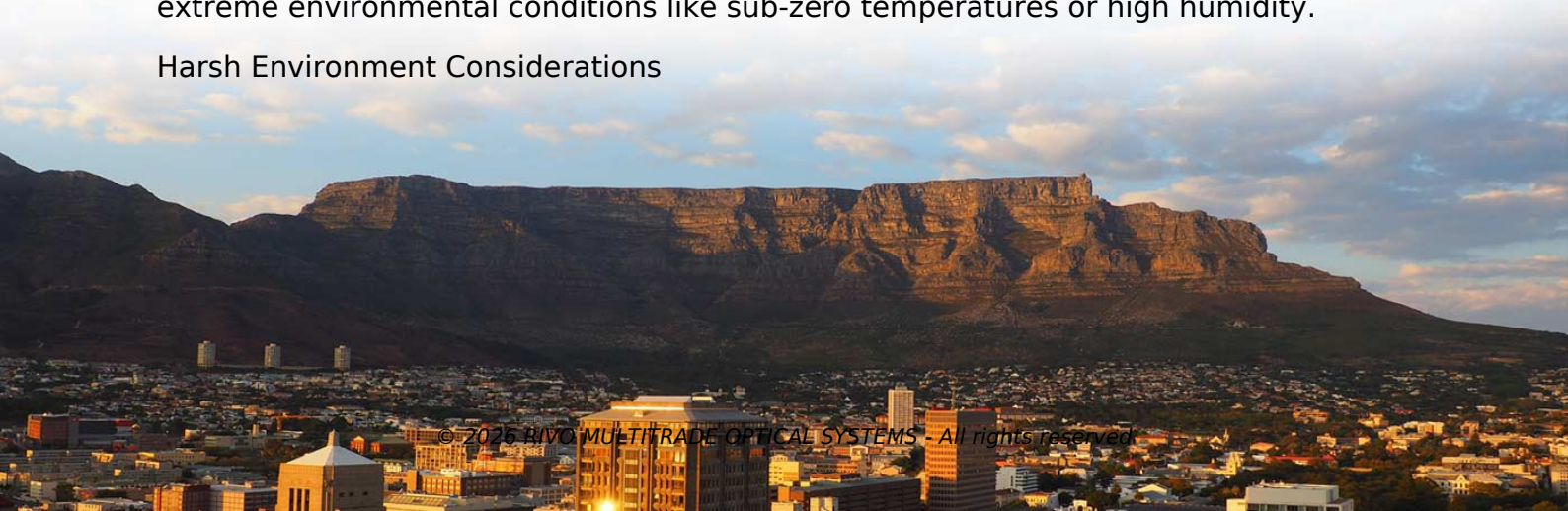
Key Takeaways

ESCON connectors are high-quality fiber optic connectors, but standard ESCON connectors are not specifically rated for extreme low-temperature environments; for subway or harsh conditions, industrial-grade variants or protective assemblies are recommended.

Overview of ESCON Connectors

ESCON (Enterprise Systems Connection) connectors were developed by IBM for high-speed fiber optic communication in mainframe networks. They feature 2.5mm ferrules and are compatible with SC or ST connectors via fiber adapters, available in singlemode and multimode versions . Standard ESCON connectors are designed for reliable data transmission and dynamic connectivity in controlled environments, such as data centers and mainframe systems. They are not inherently specified for extreme environmental conditions like sub-zero temperatures or high humidity.

Harsh Environment Considerations



For subway or outdoor applications, connectors must withstand temperature extremes, moisture, dust, and vibration. Industrial-grade connectors, such as those from Molex, are designed with thermoplastic elastomer (TPE) or weld-slag and oil-resistant (WSOR) jackets, and feature IP65-IP69K ratings, providing protection against water, dust, and temperature variations. These design features ensure consistent performance in harsh conditions, including low temperatures, which are common in subway tunnels or outdoor transit infrastructure.

Recommendations for Subway Use

- Standard ESCON connectors may require additional protective housings or enclosures to operate reliably in low-temperature subway environments.
- Hybrid or industrial-grade ESCON assemblies can be customized with ruggedized jackets and sealing to improve resistance to cold, moisture, and vibration.
- Temperature-rated fiber optic patchcords should be selected based on manufacturer specifications for minimum operating temperatures, especially if exposed to sub-zero conditions.

Conclusion

While ESCON connectors provide excellent performance for high-speed fiber networks, their standard versions are not explicitly rated for low-temperature subway environments. For reliable operation in such conditions, it is advisable to use ruggedized or industrial-grade ESCON assemblies with protective jackets and IP-rated sealing to ensure durability and consistent connectivity under extreme temperatures.

Article Content

ESCON connector

The connector system is a Retractable Shroud Duplex (RSD) and can be supplied as terminated patchcords or pigtails. Hybrid

Robust Connectivity: Heavy Duty Connectors For Extreme

To maintain a stable electrical link, industry-grade heavy connector solutions utilize specialized aluminum alloy

What are the functions of Subway Connector?

Subway Connectors feature a waterproof, dustproof, and corrosion-resistant design, making them suitable for use in

Physical-contact connectors

For single-mode ESCON links, the transceiver receptacle and connector is gray and the optical fiber cable is yellow, conforming to

Molex ESCON Fiber Optic Connectors – Mouser

Molex ESCON Fiber Optic Connectors are available at Mouser Electronics. Mouser offers inventory, pricing, & datasheets for Molex

Planning for Fiber Optic Links (ESCON, FICON, InfiniBand,

Laser safety information All System z® models can use I/O cards such as PCI adapters, ESCON®, FICON®, Open Systems Adapter

ESCON Singlemode Connector 10pcs/pack –

The Enterprise Systems CONnection (ESCON*)duplex connector was developed as a high speed communication interconnect

ESCON Module 50/5 Hardware Reference

The ESCON Module MoBo is designed to easily be screw-mounted or integrated into standard rail systems. For ordering information

ESCON Fiber Optic Cables, Multimode Duplex: ESCON to LC and ESCON

All our ESCON multimode duplex fiber optic cables are made here in the US and guaranteed to perform. All ESCON multimode

Epoxy & Polish, Quick Termination Fiber Optic Connectors

Alphabetically, Z-A Price, low to high Price, high to low Date, old to new Date, new to old View SKU: 106142-2400 ESCON

FICON (Fibre Connection Channel): 15 Years of Mainframe I/O ...

In 1998, IBM introduced FICON channels for enhanced I/O connectivity and performance for their 9672 G5 processors,

ESCON Physical Layer

Multimode ESCON links may also use the MT-RJ connector (see Figure 3). It is mechanically retained in a duplex receptacle by an

ESCON Fiber Patch Cable

We manufacturer ESCON fiber optic cables that are suitable to use with IBM ESCON architecture, our ESCON cables are good

5 Common Connector Challenges in Harsh Environments and How to

Connectors used in harsh environments face unique challenges that can significantly impact the performance and longevity of

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