

Article Overview

3M Fiber Optic Fast Connectors offer high-performance, dust-resistant, and easy-to-install solutions for singlemode and multimode fiber networks, including data centers and industrial applications.

Expanded Beam Optical (EBO) Connectors

3M's Expanded Beam Optical (EBO) connectors use a ferrule technology that expands the light beam within the connector, reducing sensitivity to dust and debris while maintaining low insertion loss and high return loss for both singlemode and multimode fibers. Key features include:

- o Dust and contamination resistance: The expanded beam design minimizes the need for cleaning and reduces transmission interruptions caused by dust or skin oils.
- o Fast installation: Connector plug-up time can be reduced from ~3 minutes to ~30 seconds per connector, enabling rapid deployment in hyperscale data centers.
- o Hermaphroditic design: Both connector parts are identical, eliminating the risk of incorrect mating and simplifying installation.
- o Scalability: Supports multi-fiber connections up to 144 fibers, with future variants planned for 16-fiber ferrules.
- o Operational reliability: Provides excellent repeatability across more than 10,000 mating cycles and is less sensitive to impacts and vibrations. EBO connectors are ideal for data centers, enterprise networks, and industrial environments where high reliability, low maintenance, and fast deployment are critical.

Hot Melt Fiber Optic Connectors

3M also offers Hot Melt Connectors, which are popular for field installations due to their ease of use and reliability. Features include:

- o Pre-loaded adhesive: Allows reheating and repositioning of fibers during termination.
- o Standards compliance: Meets TIA-568, ISO 11801, and EN 50173 standards for indoor and outdoor applications.
- o Singlemode and multimode support: Compatible with OM3 and OM4 fibers for multi-gigabit transmission.
- o Connector types: Available in LC, ST, SC, and FC formats, suitable for patch cords, distribution, and breakout cables.
- o Environmental performance: Tested for temperature extremes and harsh conditions, ensuring reliable operation in diverse environments.

Advantages of 3M Fiber Optic Fast Connectors



3M Fiber Optic Fast Connectors

- o Reduced maintenance: Expanded beam and hot melt technologies minimize cleaning and inspection requirements.
- o Rapid deployment: Fast plug-in times and simplified alignment reduce installation time and labor costs.
- o High performance: Low insertion loss, high return loss, and stable optical performance across multiple mating cycles.
- o Versatility: Suitable for singlemode and multimode fibers, scalable for high-density applications, and adaptable to various network environments. 3M Fiber Optic Fast Connectors are particularly suited for next-generation data centers, enterprise networks, and industrial fiber optic systems, providing a combination of speed, reliability, and low-maintenance operation.

100pcs LC MM Fiber Optic Quick Connectors Multimode 50/125um Fiber Mechanical Fast Connectors Adapter for

3M(TM) Expanded Beam Optical Ferrule, 12F allows for faster time to revenue with comparable signal

Specialized Products Company stocks preferred products from 3M including fiber optic connectors and splicing tools, heat shrink

Easy-to-order 3M EBO connector kits contain components that specifically support 3M(TM) Expanded Beam

3M St Hot Melt Connector Singlemode 126 M supports secure data transmission with standards-compliant optical design for evolving

FASTConnect™ Field-Installable Connectors FASTConnect are factory pre-polished, field-installable connectors that completely

3M has reimagined fibre optic connector technology to deliver connectors that are designed to reduce the need for maintenance,

Fiber optic fast connector, also known as quick connector, has a single connector type (SC/LC) to achieve

Description 3M SC/UPC fiber optic fast connector designed for FTTH. It is a new generation of fiber connector used in assembly. It

This is why innovative fiber-optic connector solutions such as the Expanded Beam Optical technology are

Choose from a broad range of solutions from basic cables and shells to the most advanced connectors for

Shop high-quality 3M fast connectors for reliable fiber optic transmission. Perfect for FTTH applications, our



3M Fiber Optic Fast Connectors

connectors ensure

Innovative expanded beam connector options integrate 12, 16 or 144 fibers into a single connector, helping

10 pcs LC Multimode Fiber Optic Quick Assembly Connector Fiber Optic Fast Connectors 50/125 Mechanical Connectors Adapter for

3M Crimplok connectors combine the speed of non-adhesive connectors with reliability and optimal performance. Using 3M Fibrlok

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