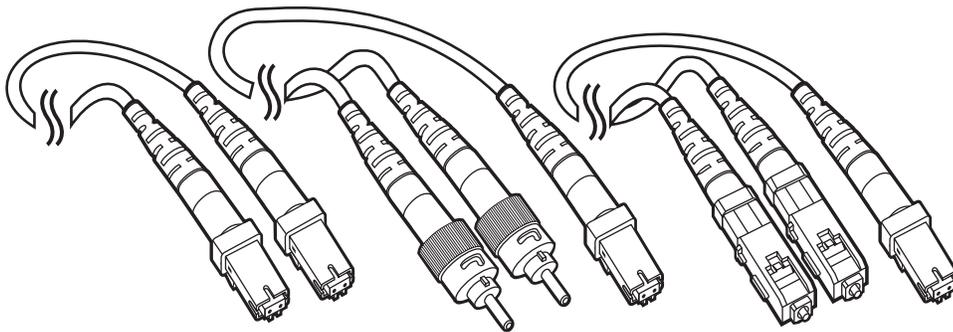




# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

### MT-RJ Fiber Cable



*Stay ahead of the curve with the newest and most convenient fiber optic cables and connectors!*

#### Key Features

- ▶ *MT-RJ connector has familiar RJ latch for easy, intuitive use.*
- ▶ *Smaller duplex MT-RJ connectors enable more terminations in smaller areas than traditional SC connectors.*
- ▶ *Fits into single-gang box.*
- ▶ *Available in single-mode and multimode types.*

**F**iber optic cabling is not just around the corner, it's here. And you need to be ready with the right kind of cable and the right kind of connector.

These MT-RJ fiber optic cable interfaces are the most efficient of duplex (two-fiber) connectors. They use only half the space of SC connectors, the traditional interface for fiber optic applications. MT-RJ cables can achieve the same number of connections in a given area as copper—a feature quickly making MT-RJ the standard when it comes to fiber cabling applications.

MT-RJ cables are easy to install in the field—no polishing machines to tote around, no epoxies to use.

Just push the connectors together, and when you hear that familiar “click,” you're done.

This cable also features an MT-style ferrule, a wrap-around brace located where the connector and the cable meet. By reducing stress at the cable/connector interface, the ferrule prevents breakage and protects the cable from installation stress and bending in tight applications.

Available in single-mode and multimode types, these fiber cables are durable. Over 500 cycles, the multimode cable reflects a change  $\leq 0.2$  dB, and single-mode reflects a change  $\leq 0.37$  dB.

Insertion loss is also low. For multimode fiber, 0.2 dB is typical and  $< 0.75$  dB is the maximum loss. For single-mode fiber, 0.35 dB is typical and  $< 0.75$  dB is the maximum.

#### Typical Application

*Perfect for your MT-RJ equipment, including line drivers, switches, muxes, routers, and bridges.*

## Technically Speaking

**F**iber optic cable consists of a core, cladding, coating, strengthening fibers, cable jacket, and a ferrule.

- **Core:** A single strand of glass or plastic, this is the physical medium that carries optical data signals from a light source to a receiving device. It is measured in microns by its outer diameter. Typical diameters are 50, 62.5, and 100 microns.
- **Cladding:** A boundary layer around the core that contains and refracts light waves, allowing data to travel the length of the fiber.
- **Coating:** A plastic layer surrounding the core and cladding. It protects the cable from severe bending, reinforces the fiber core, and protects against shocks.
- **Strengthening fibers:** A layer, made typically of Kevlar®, that prevents the core and cladding from being crushed and reduces cable tension during installation.
- **Cable jacket:** The outer layer of any cable. For fiber, most jackets are orange, but may also be black or yellow.
- **Ferrule:** A flexible brace located at the jack/cable interface. Thickest at the jack, it protects the interface from bends and breaks.

## Specifications

**Compliance** — ISO/IEC 11801, TIA/EIA 568A, ANSI, IEEE

**Insertion Loss** —  
 Multimode: 0.2 dB typical, <0.75 maximum  
 Single-Mode: 0.35 dB typical, <0.75 dB maximum

**Durability** — Over 500 Cycles:  
 Multimode: ≤ 0.2 dB change;  
 Single-Mode: ≤ 0.37 dB change

**Reflectance** —  
 Multimode: -20 dB min.;  
 Single-Mode: -45 dB typical

**Jack Depth** — 2.4 cm (0.926 in.)

## Ordering Information

PRODUCT NAME	PRODUCT CODE
<b>MT-RJ to MJ-RJ Duplex</b>	
1-m (3.2 ft.) .....	EFP080-001M
2-m (6.5 ft.) .....	EFP080-002M
3-m (9.8 ft.) .....	EFP080-003M
5-m (16.4 ft.) .....	EFP080-005M
10-m (32.8 ft.) .....	EFP080-010M
<b>MT-RJ to ST® Duplex</b>	
1-m (3.2 ft.) .....	EFP081-001M
2-m (6.5 ft.) .....	EFP081-002M
3-m (9.8 ft.) .....	EFP081-003M
5-m (16.4 ft.) .....	EFP081-005M
10-m (32.8 ft.) .....	EFP081-010M
<b>MT-RJ to SC Duplex</b>	
1-m (3.2 ft.) .....	EFP082-001M
2-m (6.5 ft.) .....	EFP082-002M
3-m (9.8 ft.) .....	EFP082-003M
5-m (16.4 ft.) .....	EFP082-005M
10-m (32.8 ft.) .....	EFP082-010M
<b>OPTIONAL ACCESSORY</b>	
	PRODUCT CODE
MT-RJ to MT-RJ Adapter, Multimode.....	FO901