# MTP®-16 Cables Datasheet

## IDEAL FOR 400G HIGH SPEED NETWORK CONNECTION

## MTP®-16 Cables

MTP®-16 cable is designed for 400G QSFP-DD SR8 optics direct connection and supporting 400G transmission for Hyperscale Data Center. With US Conec MTP® connectors and Corning Clearcurve fiber, it is optimized for high-density fiber patching in data centers which need space saving and reduce cable management troubles.

## Standards Compliance

- RoHS, CE (EN 50575 CPR), ISO9001 and WEEE Compliant
- Qualified to TIA-568.3-D
- Standards Compliance TIA 604-18
- Standards Compliance IEC 61754-7-3; 61754-7-4

## Features

- US Conec MTP® connector
- 0.35dB ultra low insertion loss
- Corning Clearcurve® multimode fiber
- 7.5mm minimum bend radius
- A unique offset keying feature is designed into the connector
- Factory terminated and tested

## Technical Specification

| Construction | 16F MTP® Trunk Cable | 16F MTP®-LC Harness Cable | 32F MTP® Trunk Cable |
|---|---|---|---|
| Fiber Count | 16 Fibers (MTP®-16) | 16 Fibers (MTP®-16) | 32 Fibers (MTP®-16) |
| Fiber Mode | | OM4 50/125µm | |
| Glass Fiber | | Corning ClearCurve® multimode fiber | |
| Connector A | US Conec MTP® Female | US Conec MTP® Female | US Conec MTP® Female |
| Connector B | US Conec MTP® Female | LC Duplex | US Conec MTP® Female |
| Polish Type | APC to APC | APC to UPC | APC to APC |
| Cable Jacket | | Plenum (OFNP) | |
| Trunk Diameter | 3.0mm | 3.0mm | 3.5mm |
| Fan-Out Diameter | - | 2.0mm | - |
| Minimum Bend Radius | | 7.5mm | |
| Operating Temperature | | -10°C to +70°C | |
| Storage Temperature | | -40°C to +85°C | |

| Optical Properties | Description |
|---|---|
| Wavelength (nm) | 850/1300 |
| Attenuation (dB/km) | ≤2.3 at 850nm, ≤0.6 at 1300nm |
| Insertion Loss (dB) | MTP®: ≤0.35 (0.15 Typ.); LC: ≤0.2 |
| Return Loss (dB) | MTP®: ≥20; LC: ≥30 |
| Transmission Distance | 100m at 400G |

# Product Specifications

## I. Technical Drawing
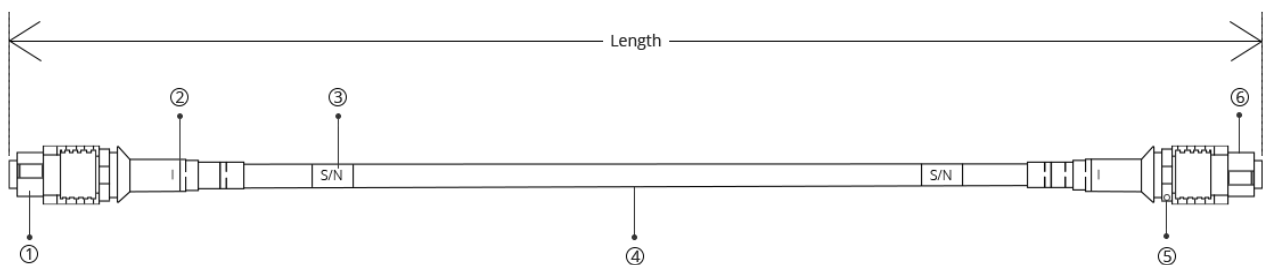
φ0.55mm

12.5mm

5.3mm

60.3mm

**MTP®-16 Connector**

Length
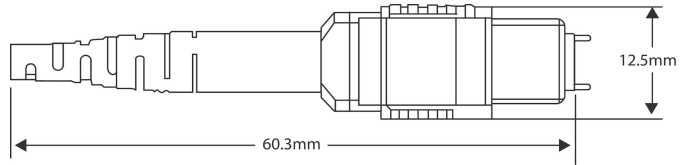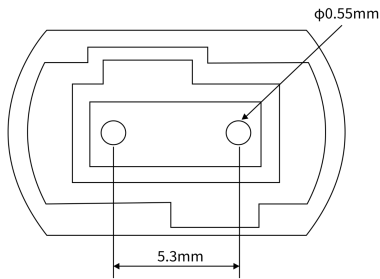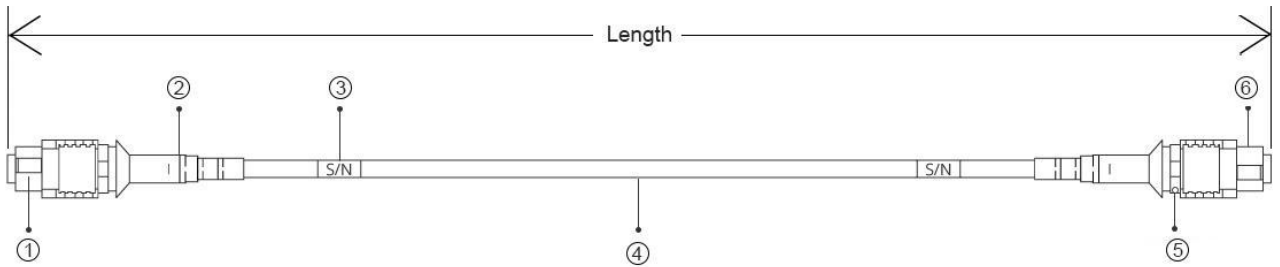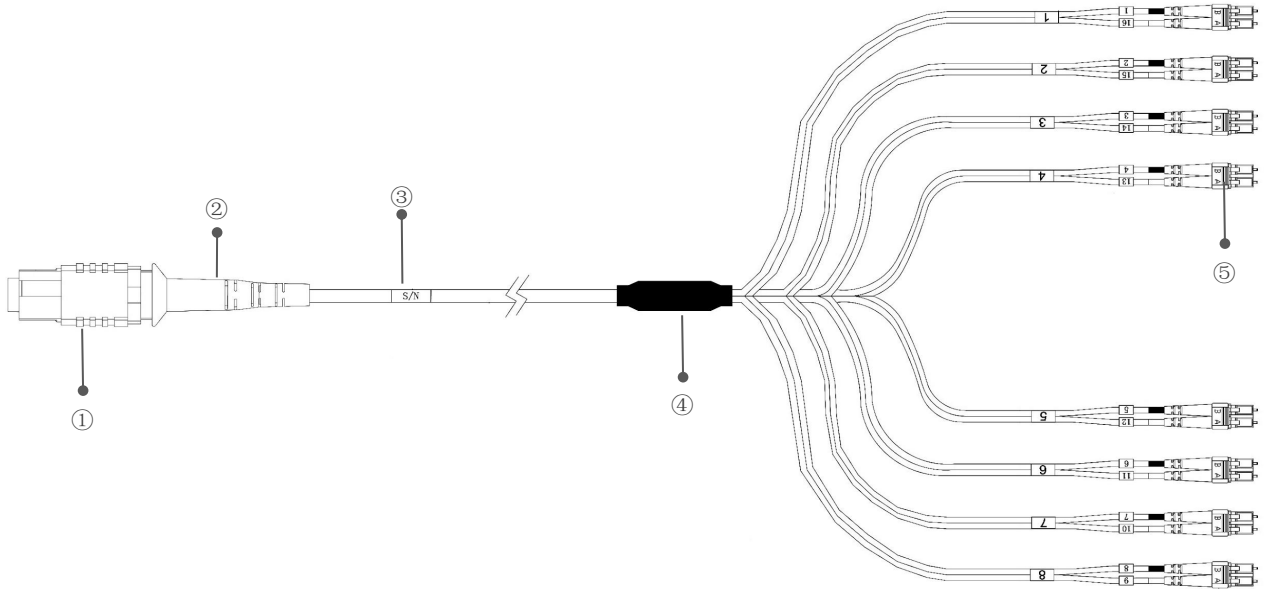
① Key   ② Connector Boot   ③ Serial Number Label   ④ Cable Jacket 3.0mm OD   ⑤ White Dot   ⑥ MTP® Connector

**16 Fibers MTP® Trunk Cable**

Length

① Key   ② Connector Boot   ③ Serial Number Label   ④ Cable Jacket 3.5mm OD   ⑤ White Dot   ⑥ MTP® Connector
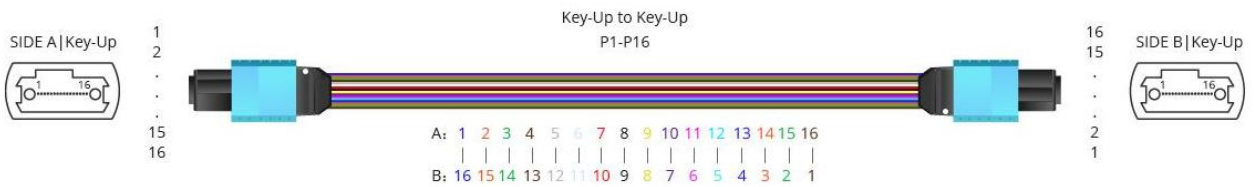
**32 Fibers MTP® Trunk Cable**

① MTP® Connector     ② Connector Boot     ③ Serial Number Label     ④ Fan Out Kit     ⑤ LC Connector

**16 Fibers MTP®-LC Breakout Cable**

## II. Inner Line Sequence

Utilizing the same external footprint as the existing traditional 12-fiber MT ferrule, the MTP®-16 consists of a US Conec MT Elite ferrule with 16 fibers in single row, leveraging all the proven MT Elite ferrule technology in a higher-density format. A unique offset keying feature is designed into the connector to ensure proper mating without inadvertently connecting 16-fiber hardware with standard MPO-compliant hardware.



**16 Fibers MTP® Trunk Cable**



**32 Fibers MTP® Trunk Cable**

Position 1

Position 16
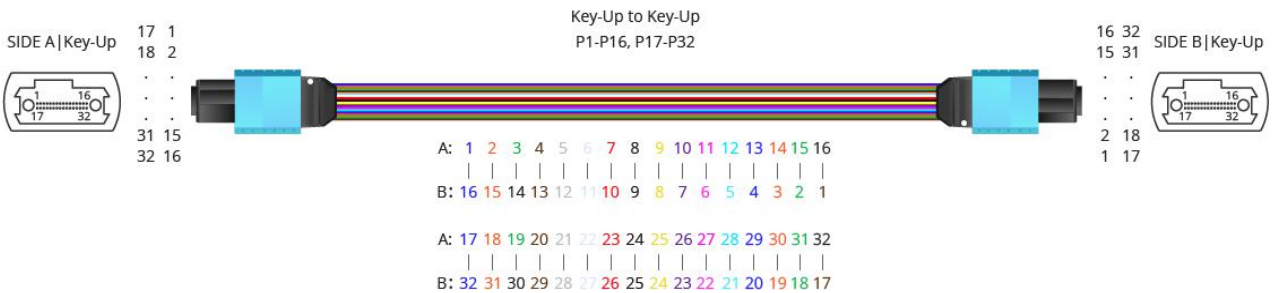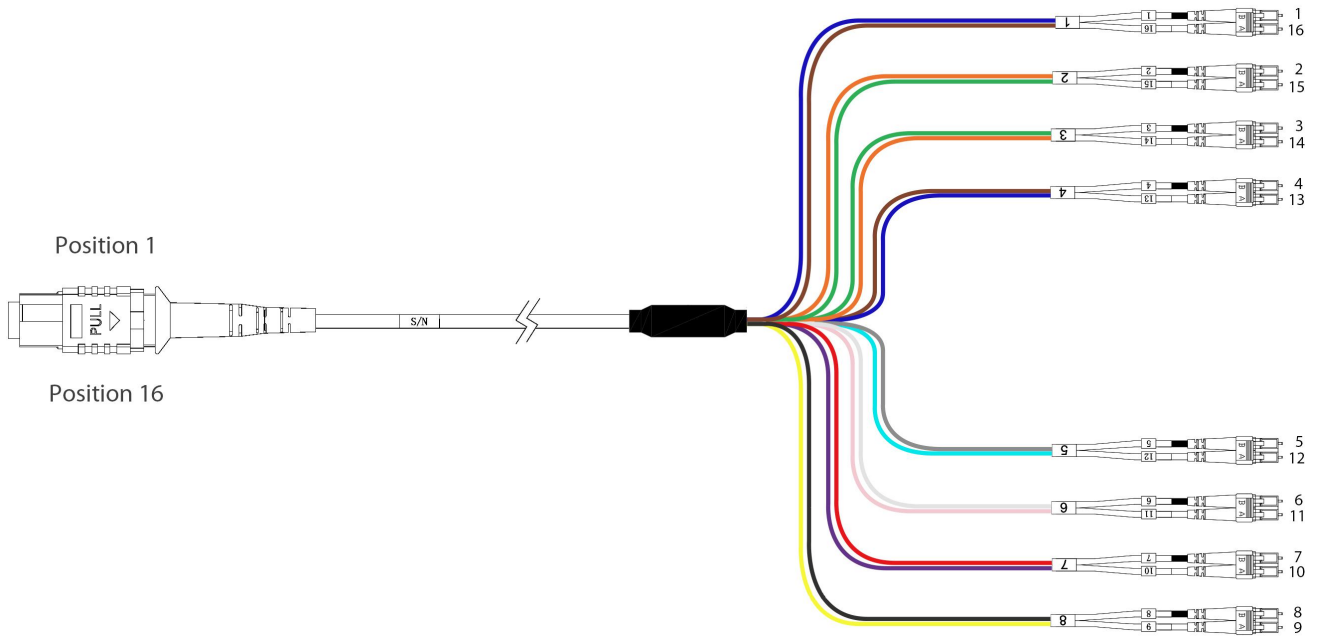
**16 Fibers MTP®-LC Harness Cable**
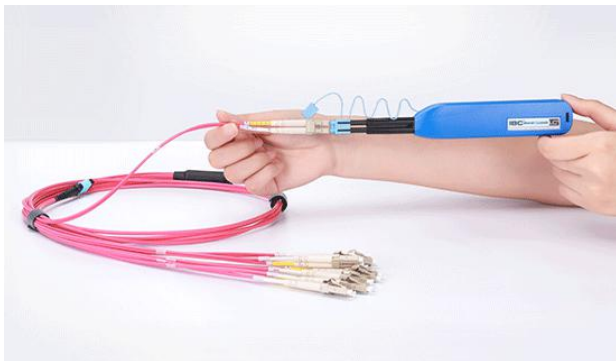
# Fiber Optic Cleaning and Application

## US Conec IBC™ MPO Connectors Cleaner

### Characteristics

- For cleaning ferrules pinned or non-pinned.
- Narrow design reaches tightly spaced MTP®/MPO adapters.
- The cleaner is capable of cleaning flat (UPC) or angled (APC) MT-16 ferrules.

## US Conec IBC™ LC Duplex Connectors Cleaner

### Characteristics

- Capable of cleaning 2 connectors at once, Duplex LC.
- Widely used in optical network maintenance, engineering or equipment.
- The cleaner is capable of cleaning flat (UPC) or angled (APC) 1.25mm ferrules.

## Compatible with 400GBASE-SR8 QSFP-DD Transceivers
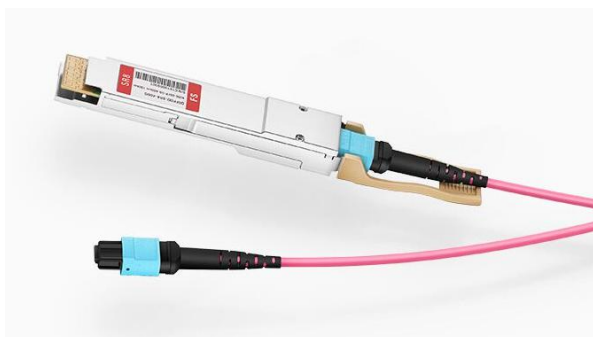
### Characteristics

- Matching 400G QSFP-DD SR8 fiber optics for 400G high speed transmission.
- The new keying design in a higher-density format is standardied by TIA and IEC.

## Hot Products

| ID | Description |
|---|---|
| #93744 | 1m (3ft) MTP® APC Female, 16F OM4 , for 400G Network Connection, Plenum (OFNP) |
| #93745 | 2m (7ft) MTP® APC Female, 16F OM4 , for 400G Network Connection, Plenum (OFNP) |
| #93746 | 3m (10ft) MTP® APC Female, 16F OM4 , for 400G Network Connection, Plenum (OFNP) |
| #93747 | 5m (16ft) MTP® APC Female, 16F OM4 , for 400G Network Connection, Plenum (OFNP) |
| #93748 | 10m (33ft) MTP® APC Female, 16F OM4 , for 400G Network Connection, Plenum (OFNP) |
| #118108 | 1m (3ft) MTP® APC Female to LC UPC Duplex, 16F OM4, for 400G Network Connection, Plenum (OFNP) |
| #118109 | 2m (7ft) MTP® APC Female to LC UPC Duplex, 16F OM4, for 400G Network Connection, Plenum (OFNP) |
| #118110 | 3m (10ft) MTP® APC Female to LC UPC Duplex, 16F OM4, for 400G Network Connection, Plenum (OFNP) |
| #118111 | 5m (16ft) MTP® APC Female to LC UPC Duplex, 16F OM4, for 400G Network Connection, Plenum (OFNP) |
| #118112 | 10m (33ft) MTP® APC Female to LC UPC Duplex, 16F OM4, for 400G Network Connection, Plenum (OFNP) |
| #132843 | Customized 16-32 Fibers MTP®-16 OM4 Multimode Elite Trunk Cable, Plenum (OFNP) |

## Matching Products

| ID | Description |
|---|---|
| #39721 | NEOCLEAN®-E LC/MU 1.25mm Pen One-Push Cleaner (750+ Times) |
| #39697 | NEOCLEAN®-M MTP/MPO-8/12/24 One-Push Cleaner (600+ Times) |
| #106397 | US Conec IBC™ Brand Cleaner MTP®-16, for 16 Fibers MPO Connectors (525+ Times) |
| #106398 | US Conec IBC™ Brand Cleaner LC², for LC Duplex Connectors (525+ Times) |
| #91449 | NEOCLEAN®-R2 Fiber Optic Cassette Cleaner for SC/FC/ST/LC/MPO Connectors (400+ Times) |
| #106398 | US Conec IBC™ Brand Cleaner LC², for LC Duplex Connectors (525+ Times) |
| #93264 | Generic Compatible 400GBASE-SR8 QSFP-DD PAM4 850nm 100m DOM Optical Transceiver Module |

FS

United Kingdom

Russia

Germany

United States

China

Singapore

Australia

🔒 https://www.fs.com ☆

The information in this document is subject to change without notice. FS has made all efforts to ensure the accuracy of the information, but all information in this document does not constitute any kind of warranty.