



## MTP® Connectors

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US Conec offers a full suite of MTP® brand connectors for a variety of applications and operating environments. While fully compliant with MPO intermateability standards, US Conec's novel patented features, enhanced precision and proven reliability ensure that MTP® brand connectors far exceed the performance of the standard MPO format.

### Features:

- Industry leading optical performance
- Minimized debris generation
- Optimal stability and repeatability
- Elliptical pins maximize durability and minimize installation time
- Floating ferrule with accurate pre-alignment ensures robust, stable connection
- Removable housing enables servicing and configurability
- Oval spring minimizes size and maximizes fiber clearance
- Centered forces ensure consistent, stable performance across all fibers
- Formal termination, testing and installation training
- Full suite of ancillary support products
- On-site field support
- Product selection and use guidance

# MTP® Connector Options

## MTP® PRO Connector

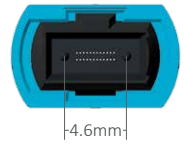
- Field friendly pin configurability
- Simple one-step polarity change
- Geometry and material optimized to reduce debris generation



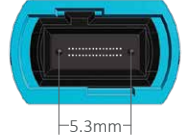
## MTP®-16 Connector

- Available in 1x16 and 2x16 fiber MT ferrules
- Same external footprint as traditional MT ferrules
- Optimized to reduce debris generation

FOCIS 5 / TIA-604-5



FOCIS 18 / TIA-604-18 (MTP®-16)



## MTP® Round Cable Connectors

- Cable routing advantage over traditional ribbon based cables
- Supports 2.0mm - 5.5mm round cables
- Available for 2 x 3.0mm round cables or zip cables



## MTP® Angled Connector

- Supports 3.0mm and 3.6mm round cables
- Tightest cable exit of any MPO connector in industry
- Less than 30mm protrusion from faceplate when coupled with MTP® Angled flange adapter



## MTP® FLEX Boots

- Supports 3.0mm and 3.6mm round cables
- Stable 0° and 90° flexible positioning
- Endures multiple bends with minimal impact on optical performance



## MTP® Bare Ribbon & Oval Connectors

- Termination directly to bare ribbon fiber or oval jacket cable
- Compatible with high fiber count and large universal springs



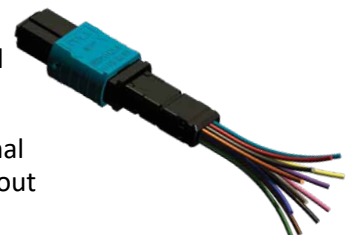
## MTP® Uncontrolled Connectors

- Supports 3.0mm and 3.6mm round cables
- Compatible with Objectives, GR-1435 issue 2 and VZ.TPR.9431
- Ideal for FTTx and campus network applications



## 900 Micron MTP® Connector

- 900 micron tight-buffered fiber terminated directly into cable exit
- Reliable termination is ideal for fiber distribution hub
- Eliminates need for traditional breakout hardware in breakout applications



## MTP® Adapters

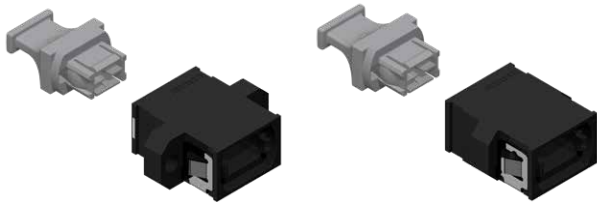
Debris impacts fiber optic connector performance in multiple ways. The less susceptible to generating debris through repeated matings, the less likely that debris will interfere with performance. US Conec offers a full line of MPO bulkhead adapters in a variety of single port and ganged configurations that are designed to minimize debris generation and exceed TIA-604-5, TIA-604-18, and IEC 61754-7-x requirements.

### Features:

- One piece adapter design maximizes coupling strength while minimizing debris generation
- All adapters compatible with MTP Elite® brand connectors and standard grade MTP® brand connectors
- Available in black, beige, green, aqua, blue, red, magenta, yellow, heather violet, munsell violet, and gray
- Compatible with all US Conec MTP® brand connectors in fiber counts ranging from 4 to 72
- Optimal coarse alignment exceeds TIA-604-5, TIA-604-18, IEC 61754-7-1, IEC 61754-7-2, IEC 61754-7-3, and IEC 61754-7-4 to minimize pin to ferrule debris generation
- EMI versions available

## MTP® Adapter Options

### Standard Footprint

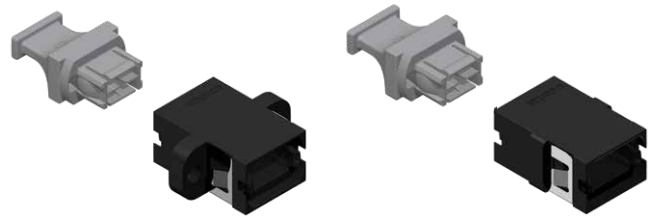


Full Flange Adapter

Reduced Flange Adapter

*Available for use with FOCIS 5 and FOCIS 18 (MTP®-16)*

### SC Footprint

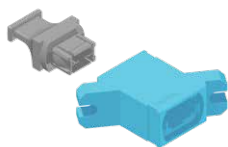


Full Flange Adapter

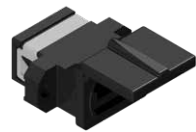
Reduced Flange Adapter

*Available for use with FOCIS 5 and FOCIS 18 (MTP®-16)*

## Specialty: Shuttered, EMI, SC Duplex, and Ganged



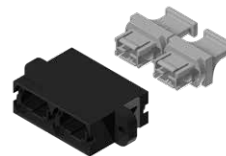
Full Flange Angled Adapter



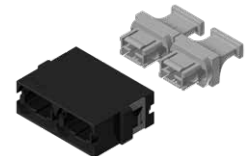
Shuttered Adapter



EMI Adapter



SC Duplex Footprint Full Flange Adapter



SC Duplex Footprint Reduced Flange Adapter



Ganged 1x4 Straight Adapter



Ganged 1x6 Straight Adapter



Ganged 2x8 Straight Adapter



Ganged 1x2 Angled Adapter



Ganged 1x4 Angled Adapter

## MT Ferrule Performance

US Conec manufactures durable, composite, Polyphenylene Sulfide (PPS) based thermoplastic ferrules available with up to 72 fiber holes that terminate 125 micrometer optical fiber. The ferrules are used in conjunction with US Conec’s industry hailed, MTP® brand, MPO type connectors; however, they are also suitable for custom designed passive or active fiber coupling packages. US Conec offers MT ferrules in multiple performance grades tailored to specific application and fiber count requirements. Both singlemode and multimode ferrules.

### Features:

- High density; fiber pitch: 0.25mm
- Extremely low hygroscopic material for exceptional environmental stability
- Mold marks to indicate fiber type and ferrule grade
- Pre-angled SM
- MM MT Elite® optimized for 10G, 40G, 100G and 400G applications
- SM MT Elite® meets IEC 61755-3-31 Grade B requirements



24 Fiber, Multimode MT Ferrule

### Specifications

Ferrule Type	Random Mated Attenuation <sup>1</sup> (≥ 97% dB)	Mean Random Mated Attenuation (dB)	Return Loss (dB)
Single-mode Elite®	≤0.25 <sup>2,3</sup>	≤0.12 <sup>2,3</sup>	≥60
Single-mode	≤0.50 <sup>2,4</sup>	≤0.25 <sup>2,4</sup>	≥60
Multimode Elite®	≤0.25	≤0.12	≥25
Multimode	≤0.45	≤0.20	≥25

Per IEC 61755-3-31, predicted performance yield will vary at different ferrule fiber counts (e.g., For 12F, IEC Grade B estimated attenuation of 0.35dB with 93% yield).

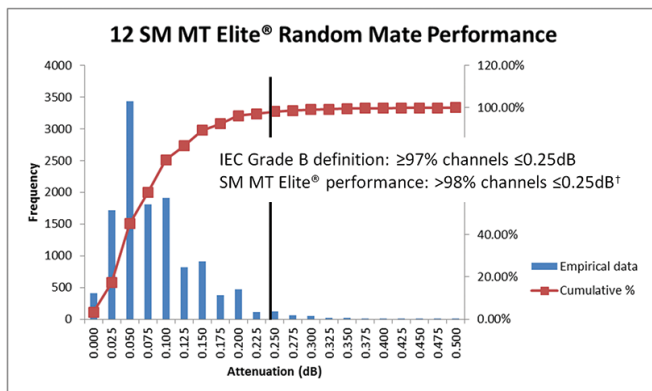
<sup>1</sup> IEC 61755-1 defines Grades based on ≥97% random mated loss probability of channels meeting or exceeding loss specification.

<sup>2</sup> IEC 61755-3-31 is defined for up to 12 fibers for SM APC only.

<sup>3</sup> Exceeds IEC 61755-1 Grade B performance.

<sup>4</sup> Meets IEC 61755-1 Grade C performance.

### SM MT Elite® Empirical Data<sup>†</sup>



This data illustrates US Conec ferrules outperforming the standard over high volume production. Actual empirical random intermate data collected on US Conec ferrules over 38 lots with uncharacterized, randomly selected fiber.

### MT Ferrule Options

Fiber Type	Performance	Fiber Count
MM	Standard MM	1x4
		1x8
		1x12
		1x16*
		2x12
		2x16*
	MM MT Elite®	1x12
		2x12
		1x16*
		2x16*
SM	Standard SM	1x4
		1x8
		1x12
		1x16*
		2x12
		2x16*
	SM MT Elite®	1x8
		1x12
		1x16*
		2x12

\* For use with MTP®-16 Connectors (FOCIS 18 / TIA-604-18)