# USCONEC

## MTP® Brand Connectors

US Conec manufactures durable MTP® brand connectors that provide quick connection for up to 72 optical fibers. Connection integrity is provided by adapter latches which are locked into place on the connector plug by a spring loaded sliding mechanism. Precision alignment is achieved with patented guide pins combined with the tightly controlled guide pin holes on US Conec's MT ferrules. Removable housings allow for quick change of gender, ferrule cleaning, interferometry or connector re-polishing. US Conec's MTP brand connector components are fully compliant with IEC Standard 61754-7 and TIA 604-5 – Type MPO.

## Features

- Patented floating ferrule design ensures fiber contact integrity
- Terminates ribbon fiber or loose individual fibers
- Designed for low loss and standard loss SM and MM applications
- Patented elliptical guide pin tip to minimize ferrule debris
- Ruggedized round cable, oval cable and bare ribbon options available
- Compatible with US Conec MT ferrules in fiber counts 4 - 24
- Color coded housings available to differentiate fiber type, polish type and/or connector grade
- Housing is removable for quick change of pin clamps and easy ferrule cleaning / re-polishing
- Alignment achieved with high precision guide pins
- No-epoxy housing design
- Family of bulkhead adapters available

## Specifications

| | MM MT Elite® Multimode MT Ferrule | Standard Multimode MT Ferrule | SM MT Elite® Single-mode MT Ferrule | Standard Single-mode MT Ferrule |
|---|---|---|---|---|
| **Insertion Loss** | 0.1dB Typical (All Fibers)<br>0.35dB Maximum<br>(Single Fiber)[2,3] | 0.20dB Typical (All Fibers)<br>0.60dB Maximum<br>(Single Fiber)[2,3] | 0.10dB Typical (All Fibers)<br>0.35dB Maximum<br>(Single Fiber)[1] | 0.25dB Typical (All Fibers)<br>0.75dB Maximum<br>(Single Fiber)[1] |
| **Optical Return Loss** | > 20dB | > 20dB | > 60dB (8° Angle Polish) | > 60dB (8° Angle Polish) |

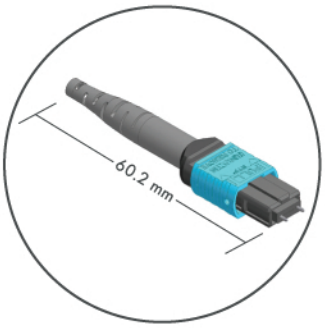
[1] As tested per ANSI/EIA-455-171 Method D3
[2] As tested per ANSI/EIA-455-171 Method D1
[3] As tested with proposed encircled flux launch condition on 50um fiber and 850nm per IEC 61280-4-1

## Applications & Associated Standards

- Array trunk cables
- Array fiber to single fiber fanouts and cassettes
- High fiber density card edge access
- Optical switching interframe connections
- Meets IEC Standard 61754-7
- Meets TIA/EIA 604-5 Type MPO
- Structured cabling per TIA-568-C
- Parallel Optics
  - Optical Internetworking Forum (OIF) Compliant
  - Infiniband Compliant
  - 10G Fiber Channel Compliant
  - 40G and 100G IEEE 802.3
  - SNAP 12
  - POP 4
  - QSFP

## Round Strain Relief Hardware for Controlled Environments

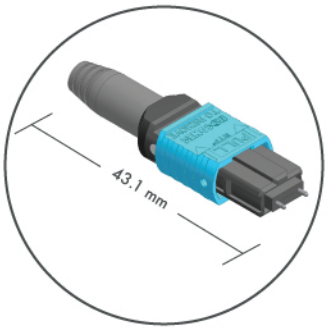
ø 3.0mm - 5.5mm Nominal Cable OD




Round, multi-fiber interconnect cables with loose, individual fibers provide cable routing and performance advantages over traditional ribbon based cables. By eliminating the preferential bend associated with ribbon, round cables can be routed and mechanically loaded in any axis relative to the MTP® connector port. US Conec's round MTP® hardware components are designed for easy termination to the loose fiber cables via the use of a simple, US Conec ribbonization process. Contact US Conec customer service for a copy of AEN 1408 which provides detailed instructions on the process.

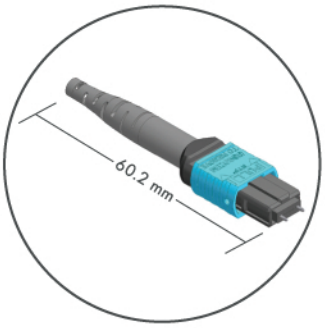
## Short MTP® Round for Bend Insensitive Fiber Applications

With the availability of bend insensitive single mode and multimode fibers, US Conec has introduced a reduced length cable exit for round MTP® hardware. This version takes advantage of the ability to route fibers with a tighter bend radius. The new hardware is ideal when cable management space in front of the equipment or rack bulkhead is limited.




## High Spring Force

ø 3.0mm - 5.5mm Nominal Cable OD

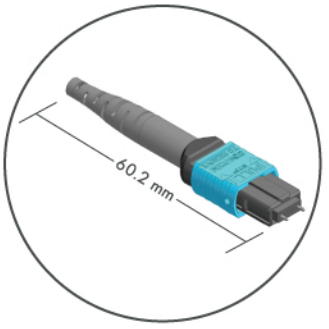



The high spring force MTP® connector enables low-loss structured cabling links with 24 fiber connectivity to support next generation 40G, 100G and 120G parallel optics. The increased connector spring force enables fiber tip physical contact for all fibers in up to 24F connectors with typical industry accepted endface geometry. The higher spring force MTP® hardware is available for all controlled environment cable types.

## Round Strain Relief Hardware for Uncontrolled Environments

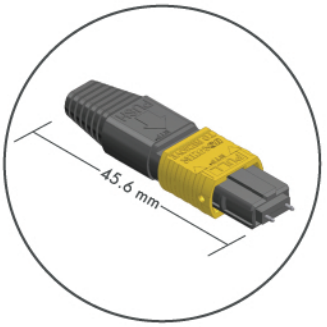
ø 3.0mm - 3.6mm Nominal Cable OD

US Conec's enhanced performance MTP® connector hardware components are capable of withstanding the stringent performance Objectives of GR-1435 issue 2. These precision engineered components use state of the art materials and injection molding techniques to offer the maximum strength and optical performance through the most severe non-hardened connector environmental exposure and mechanical loading. These hardware components are ideal for FTTx and campus network applications.

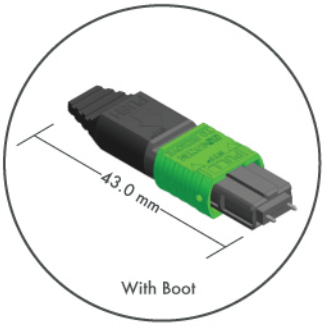


## Oval Strain Relief Hardware

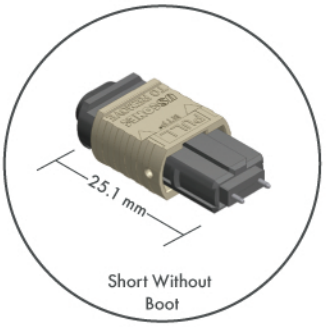
US Conec's classic oval MTP® brand hardware easily terminates to ribbon based interconnect cables. The crimping mechanism is designed to accommodate a wide range of cable jacket materials and thicknesses.




## Bare Ribbon With Boot & Short Bare Ribbon Without Boot Hardware




Two MTP® brand hardware kits are available for on-card or intra-card multi-fiber connector applications suitable for termination directly to bare ribbon fiber. The bare ribbon package with the boot provides bend relief to the cable while the short MTP® bare ribbon connector offers the smallest PCB surface area consumption available on the market.



# Ordering Information

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Ø 3.0mm Controlled | Multimode | Female | Aqua | 8198 |
| | | | Beige | 8193 |
| | | Male | Aqua | 8200 |
| | | | Beige | 8190 |
| | Multimode MTP Elite® | Male | Aqua | 12513 |
| | Single-Mode | Female | Green | 8194 |
| | | Male | | 8191 |
| | Single-Mode MTP Elite® | Female | Mustard | 8195 |
| | | Male | | 8192 |

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Ø 5.0mm Controlled | Multimode | Female | Aqua | 13169 |
| | | | Beige | 13172 |
| | | Male | Aqua | 13170 |
| | | | Beige | 13173 |
| | Multimode MTP Elite® | Male | Aqua | 13171 |
| | Single-Mode | Female | Green | 13174 |
| | | Male | | 13175 |
| | Single-Mode MTP Elite® | Female | Mustard | 13176 |
| | | Male | | 13177 |

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Ø 3.6mm Controlled | Multimode | Female | Aqua | 12352 |
| | | | Beige | 12349 |
| | | Male | Aqua | 12353 |
| | | | Beige | 12346 |
| | Multimode MTP Elite® | Male | Aqua | 12522 |
| | Single-Mode | Female | Green | 12350 |
| | | Male | | 12347 |
| | Single-Mode MTP Elite® | Female | Mustard | 12351 |
| | | Male | | 12348 |

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Ø 5.5mm Controlled | Multimode | Female | Aqua | 13178 |
| | | | Beige | 13181 |
| | | Male | Aqua | 13179 |
| | | | Beige | 13182 |
| | Multimode MTP Elite® | Male | Aqua | 13180 |
| | Single-Mode | Female | Green | 13183 |
| | | Male | | 13184 |
| | Single-Mode MTP Elite® | Female | Mustard | 13185 |
| | | Male | | 13186 |

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Ø 3.6mm Controlled Short Boot | Multimode | Female | Aqua | 13610 |
| | | | Beige | 13613 |
| | | Male | Aqua | 13611 |
| | | | Beige | 13614 |
| | Multimode MTP Elite® | Male | Aqua | 13612 |
| | Single-Mode | Female | Green | 13615 |
| | | Male | | 13616 |
| | Single-Mode MTP Elite® | Female | Mustard | 13617 |
| | | Male | | 13618 |

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Ø 3.0mm Uncontrolled | Multimode MTP Elite® | Female | Aqua | 13187 |
| | | Male | | 13188 |
| | Single-Mode MTP Elite® | Female | Mustard | 12324 |
| | | Male | | 12325 |

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Ø 3.6mm Uncontrolled | Multimode MTP Elite® | Female | Aqua | 13630 |
| | | Male | | 13631 |
| | Single-Mode MTP Elite® | Female | Mustard | 13628 |
| | | Male | | 13629 |

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Ø 4.5mm Controlled | Multimode | Female | Aqua | 13159 |
| | | | Beige | 13162 |
| | | Male | Aqua | 13160 |
| | | | Beige | 13163 |
| | Multimode MTP Elite® | Male | Aqua | 13161 |
| | Single-Mode | Female | Green | 13164 |
| | | Male | | 13165 |
| | Single-Mode MTP Elite® | Female | Mustard | 13166 |
| | | Male | | 13167 |

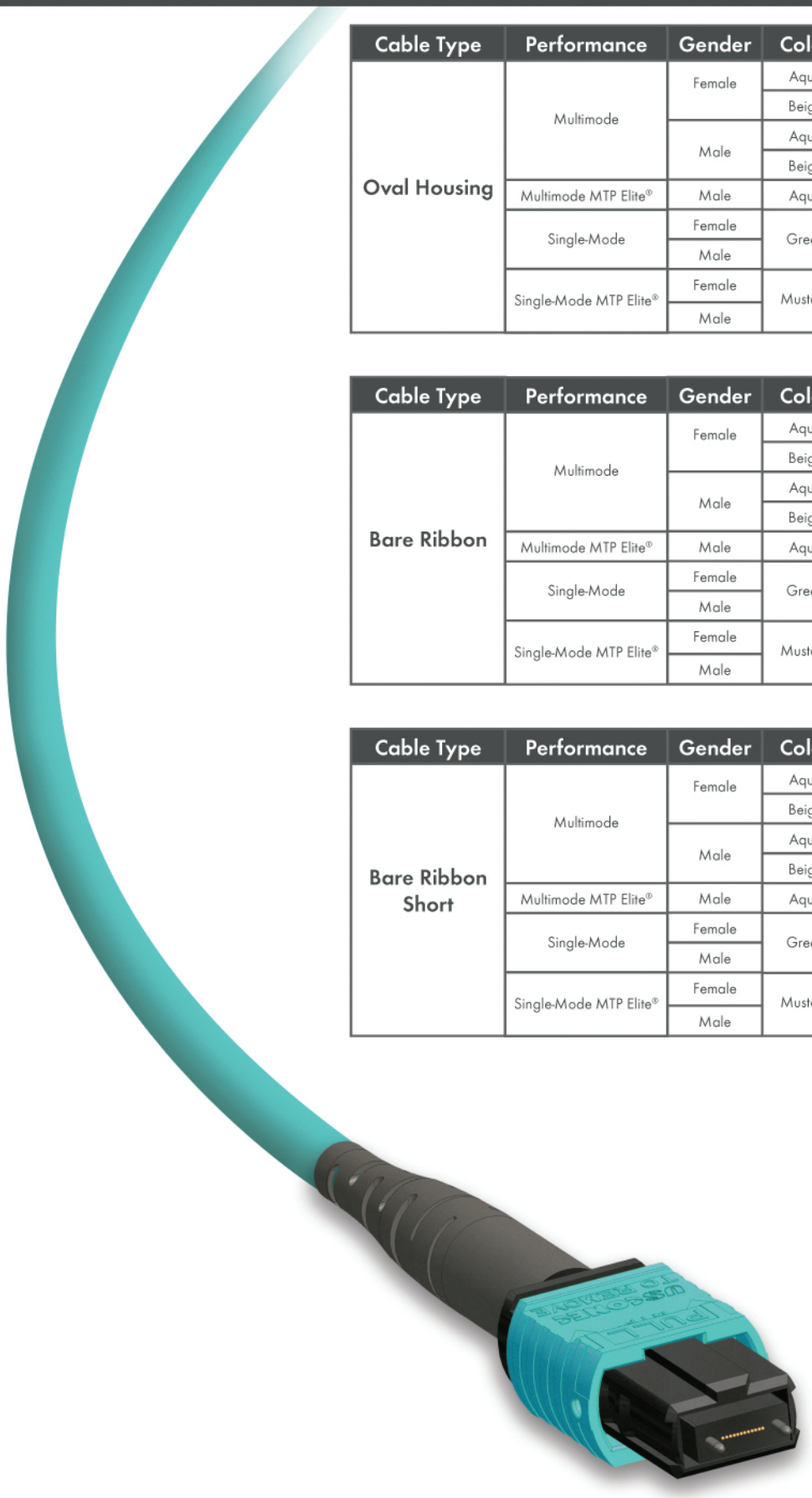
| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Ø 3.0-5.5mm High Spring Force | Multimode MTP Elite® ø3.0mm | Female | Aqua | 13528 |
| | | Male | | 13529 |
| | Multimode MTP Elite® ø3.6mm | Female | | 13530 |
| | | Male | | 13531 |
| | Multimode MTP Elite® ø4.5mm | Female | | 13534 |
| | | Male | | 13535 |
| | Multimode MTP Elite® ø5.0mm | Female | | 13648 |
| | | Male | | 13649 |
| | Multimode MTP Elite® ø5.5mm | Female | | 13650 |
| | | Male | | 13651 |

Ferrules sold separately. See back for ordering information.

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Oval Housing | Multimode | Female | Aqua | 7928 |
| | | | Beige | 6237 |
| | | Male | Aqua | 7927 |
| | | | Beige | 6238 |
| | Multimode MTP Elite® | Male | Aqua | 12514 |
| | Single-Mode | Female | Green | 6248 |
| | | Male | | 6249 |
| | Single-Mode MTP Elite® | Female | Mustard | 6257 |
| | | Male | | 6258 |

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Bare Ribbon | Multimode | Female | Aqua | 8475 |
| | | | Beige | 6239 |
| | | Male | Aqua | 8476 |
| | | | Beige | 6240 |
| | Multimode MTP Elite® | Male | Aqua | 12515 |
| | Single-Mode | Female | Green | 6250 |
| | | Male | | 6251 |
| | Single-Mode MTP Elite® | Female | Mustard | 6259 |
| | | Male | | 6260 |

| Cable Type | Performance | Gender | Color | MTP® Kit P/N |
|---|---|---|---|---|
| Bare Ribbon Short | Multimode | Female | Aqua | 8819 |
| | | | Beige | 6241 |
| | | Male | Aqua | 8820 |
| | | | Beige | 6242 |
| | Multimode MTP Elite® | Male | Aqua | 12717 |
| | Single-Mode | Female | Green | 6252 |
| | | Male | | 6253 |
| | Single-Mode MTP Elite® | Female | Mustard | 6261 |
| | | Male | | 6262 |



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**For additional information about MTP® Connectors or MT Ferrules, please contact Customer Service at 828-323-8883 or visit our web site at www.usconec.com**



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