



## MTP® 24 Fibres Ferrule Cable Assembly

MTP/MPO 24 fibre cable assemblies designed and manufactured for 40/100G parallel optics network infrastructure. These assemblies can be used directly with CFP/CXP 100G transceivers or they can be combined with transition LC modules and provide 100G compatibility for 40G QSFP+ transceivers. They are offered with 3mm (patch lead) or 4.5mm cable (micro cable) options. Due to their small and compact size they offer improved cable management and they are an ideal solution for high density applications.

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### Features

- Available with OS1/2, OM3 or OM4 fibre
- 24 Cores MicroCable Trunks (Double Jacket 4.5mm OD) and Patchleads (Single Jacket 3mm OD)
- Option for LSZH, OFNR, OFNP cable jackets
- Female/Un-Pinned and Male/ Pinned MTP® connectors
- Options for A, B or C polarity
- Universal internal/external Loose Tube and MicroCable Available
- 100% Factory terminated and tested
- 40/100G Parallel Optics compatible
- Compact ruggedized assembly ideal for high density applications
- Saves installation and reconfiguration time

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### Applications

- Data Centers
- Parallel optics (40 and 100G) applications
- InfiniBand
- Storage Area Network - Fibre Channel

## Specifications

| ELEMENT                  | CHARACTERISTIC  |
|--------------------------|---|
| Fibre                    | OS1/OS2, G657A1, OM1, OM2, OM3, OM4   |
| MTP Terminations         | MTP® 24 Fibre Ferrule US Conec <b>Boot Colour:</b> Black <b>Body Sleeve Colour:</b> MM (Beige), MM Elite (Aqua), SM (Green) |
| Cable Diameter           | Micro Cable Trunk Max OD 24 cores 4.5 ± 0.3mm Patchlead Max OD 24 cores 2.9 ± 0.1mm   |
| Crush Resistance         | Double Jacket Micro Cable: 1000N/100mm Single Jacket Micro Cable: 500N/100mm  |
| Cable Tensile Strength   | Double Jacket Micro Cable (24 Core) (Short/Long) 400N/150N Single Jacket Micro Cable (24 Core) (Short/Long) 200N/60N        |
| Cable Strength Member    | Aramid  |
| Storage Temperature      | -20 ~ +60°C   |
| Installation Temperature | -5 ~ +50°C  |
| Operating Temperature    | -20 ~ +60°C   |
| Pulling Element          | Rope Attached to Aramid   |

## Connector Performance

| CONNECTOR MATING | IL AVERAGE | IL MAX | RETURN LOSS |
|------------------|------------|--------|-------------|
| MTP® Elite (MM)  | 0.10dB     | 0.35dB | N/A         |
| MTP® (MM)        | 0.20dB     | 0.35dB | N/A         |
| MTP® Elite (SM)  | 0.10dB     | 0.35dB | >60dB       |
| MTP® (SM)        | 0.25dB     | 0.75dB | >60dB       |

## Cable Performance

| FIBRETYPE (ISO/IEC 11801)                                   | OS1/OS2  | OM3  | OM4  |
|---|--|--|--|
| Attenuation Coefficient [dB/km]                             | ≤ 0.38 Max (1310nm)<br>≤ 0.25 Max (1550nm)<br>≤ 0.34 Typ (1310nm)<br>≤ 0.19 Typ (1550nm) | ≤ 3.5 Max (850nm)<br>≤ 1.5 Max (1300nm)<br>≤ 2.7 Typ (850nm)<br>≤ 0.9 Typ (1300nm) | ≤ 3.5 Max (850nm)<br>≤ 1.5 Max (1300nm)<br>≤ 2.7 Typ (850nm)<br>≤ 0.9 Typ (1300nm) |
| Minimum Bandwidth: Overfilled Launch [Mhz-km]               | N/A  | ≥ 1500 (850nm)<br>≥ 500 (1300nm)   | ≥ 3500 (850nm)<br>≥ 500 (1300nm)   |
| Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km] | N/A  | ≥ 2000 (850nm)   | ≥ 4700 (850nm)   |

## Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- IEC-61754-7 & EIA/TIA-604-5
- NFPA 262 (OFNP) or IEC 60332 (LSZH)
- IEC-60793

## Ordering Information

|     | Connector A |                       | Connector B |                       | Fibre Type |         | Cable Type |                         | Fibre Count |    | Length |         | Polarity and Extra Options |            |
|-----|-------------|-----------------------|-------------|-----------------------|------------|---------|------------|-------------------------|-------------|----|--------|---------|----------------------------|------------|
|     |             |                       |             |                       |            |         |            |                         |             |    |        |         |                            |            |
| OTM | 32          | MTP® Male 24F         | 32          | MTP® Male 24F         | 9          | G.652D  | 1          | 24 cores trunk 4.5mm OD | 24          | 24 | 01     | 1m      | A                          | Polarity A |
|     | 34          | MTP® Female 24F       | 34          | MTP® Female 24F       | 3          | OM3     | 2          | 24 cores patch 3mm OD   |             |    | 02     | 2m      | B                          | Polarity B |
|     | 28          | MTP® Male 24F Elite   | 28          | MTP® Male 24F Elite   | 4          | OM4     |            |                         |             |    | 03     | 3m      | C                          | Polarity C |
|     | 30          | MTP® Female 24F Elite | 30          | MTP® Female 24F Elite | A1         | G.657A1 |            |                         |             |    | 05     | 5m      | -                          | LSZH       |
|     |             |                       |             |                       |            |         |            |                         |             |    | 10     | 10m     | R                          | OFNR       |
|     |             |                       |             |                       |            |         |            |                         |             |    | ...    | ...     | P                          | OFNP       |
|     |             |                       |             |                       |            |         |            |                         |             |    | xx     | Specify | O                          | MPO Option |

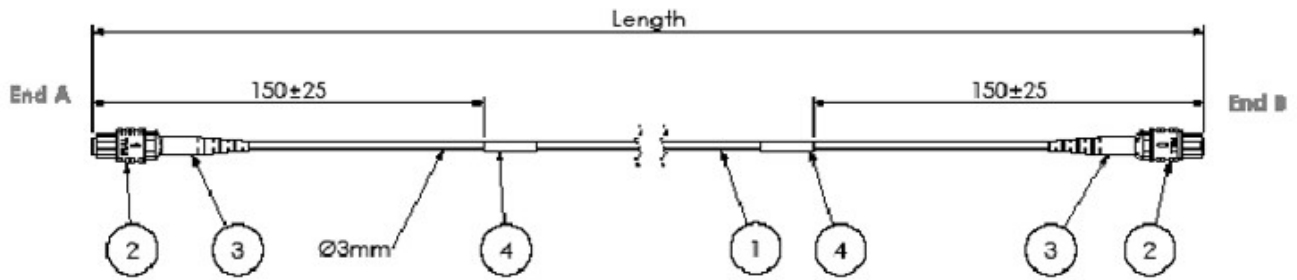
## Example Part Number

|     |   |    |    |   |   |    |   |    |   |   |
|-----|---|----|----|---|---|----|---|----|---|---|
| OTM | - | 28 | 28 | 3 | 1 | 24 | - | 70 | - | A |
|-----|---|----|----|---|---|----|---|----|---|---|

MTP® male Elite to MTP® male Elite with 24 fibre ferrule trunk 4.5mm OD OM3 70m polarity A

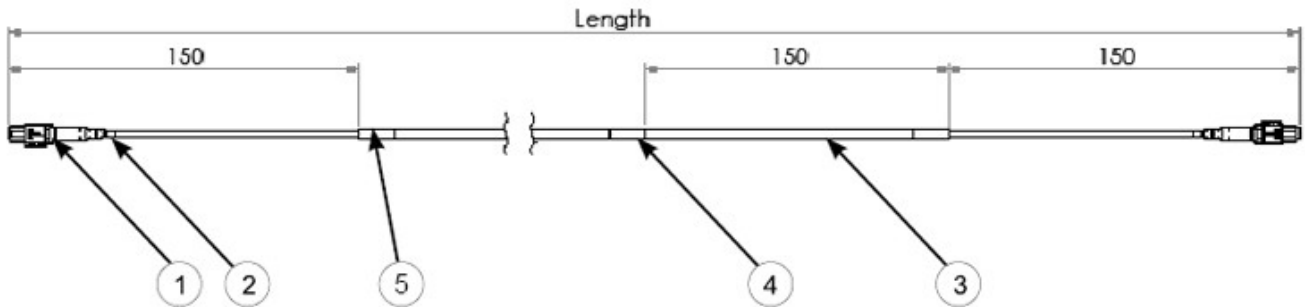
Technical Drawing

MPO/MTP® Patch Cord Assembly

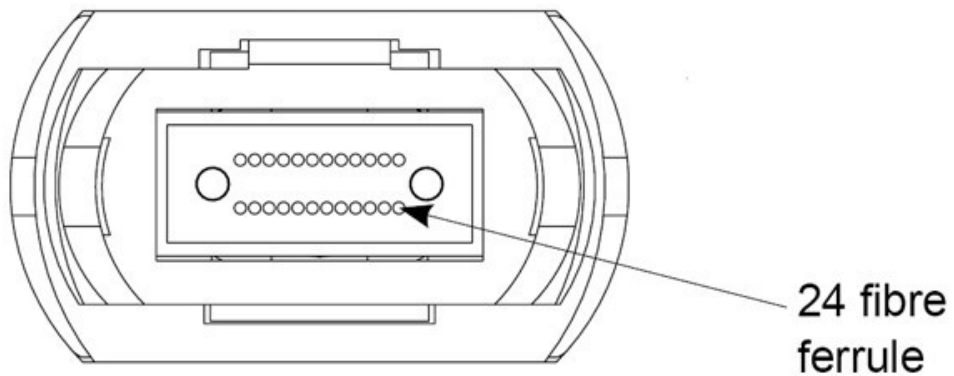


- 1. 24 fibre Micro Cable single jacket 3mm OD
- 2. 24 fibre ferrule MPO/MTP®
- 3. 3mm MPO/MTP® connector boot
- 4. Serial number label

MPO/MTP® Trunk Assembly



- 1. 24 fibre ferrule MPO/MTP®
- 2. MPO/MTP® connector boot
- 3. 24 fibre Micro Cable double jacket 4.5mm OD
- 4. Serial number label
- 5. Heatshrink



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