

## MTP®/MPO MicroCable Fan-Out Assembly

12 to 144 fibre MTP®/MPO to LC or SC fan-out assemblies designed and manufactured for the interconnection of MTP®/MPO cassettes and panels with active equipment ports. They are manufactured using a compact ruggedised micro cable and they are an ideal solution for high density applications with high demands for advanced cable management and optimized airflow.

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## Features

- 12 fibre MTP®/MPO connector in male or female version
- Available with OS1/2, OM3, OM4, OM5 fibres – OM1/OM2 available upon request
- 12 x Cores single jacket Micro Cable 3mm OD Patch/ double jacket Micro Cable 4.5mm OD Trunk version
- Multisubunit 24, 48, 72, 96, 144 cores Micro Cable versions are available
- Available with LSZH, OFNP or OFNR jacket
- Available with LC or SC tails
- 100% factory terminated and tested
- Low loss performance using MTP®/MPO elite and high quality LC or SC connectors
- Ideal for high density applications
- Saves installation and reconfiguration time

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## Applications

- Data Centers
- Storage Area Network - Fibre Channel

## Specifications

| ELEMENT                  | CHARACTERISTIC   |
|--------------------------|--|
| Fibre                    | OS1/OS2- G.652D, G.657A1, G.657A2, OM3, OM4, OM5   |
| Tail Dimensions          | 2mm Simplex Tails Fanout, 2mm Duplex Tails Fanout  |
| MTP Connectors           | MTP® 12 Fibre Ferrules US Conec, <b>Boot Colour:</b> Black, <b>Body Sleeve Colour:</b> MM (Beige), MM Elite (Aqua), OM5 (Lime Green), SM (Green), SM Elite (Yellow)                                      |
| Other Terminations       | LC, SC, LC/APC, SC/APC   |
| Cable Diameter           | 12 Core Trunk Double Jacket OD MAX: 4.2 ± 0.3mm, 24 Core OD MAX: 4.2 ± 0.3mm, 48 cores OD MAX: 9.0 ± 0.3mm, 72 cores OD MAX: 11.2 ± 0.5mm, 96 cores OD MAX: 13.5 ± 0.5mm, 144 cores OD MAX: 17.5 ± 0.5mm |
| Crush Resistance         | 1000N/100mm  |
| Cable Tensile Strength   | Up to 24 Core (Short/Long) 300N/160N, Up to 48 Core (Short/Long) 1000N/300N  |
| Cable Strength Member    | Aramid   |
| Storage Temperature      | -20 ~ +70°C  |
| Installation Temperature | 0 ~ +50°C  |
| Operating Temperature    | -20 ~ +70°C  |

## Connector Performance

| CONNECTOR MATING | IL AVERAGE | IL MAX | RETURN LOSS |
|------------------|------------|--------|-------------|
| MTP® Elite (MM)  | 0.10dB     | 0.35dB | N/A         |
| MTP® (MM)        | 0.20dB     | 0.60dB | N/A         |
| MTP® Elite (SM)  | 0.10dB     | 0.35dB | >60dB       |
| MTP® (SM)        | 0.25dB     | 0.75dB | >60dB       |

| OPTICAL PERFORMANCE*       | MM PREMIUM | MM STANDARD | SM PREMIUM | SM STANDARD | CONFORMANCE   |
|----------------------------|------------|-------------|------------|-------------|---------------|
| IL Max/Master (Acceptance) | 0.15dB     | 0.25dB      | 0.15dB     | 0.25dB      | IEC 61300-3-4 |
| Ave/Master                 | 0.08dB     | 0.15dB      | 0.12dB     | 0.18dB      | IEC 61300-3-4 |
| Ave/Random                 | 0.10dB     | 0.20dB      | 0.12dB     | 0.18dB      | IEC61300-3-34 |
| RL (Min Acceptance)        | NA         | NA          | 55/65**    | 55/65**     | IEC61300-3-6  |

\* Connector Performance table does not refer to E2A terminations \*\* UPC/APC

## Cable Performance

| Fibre Type<br>(ISO/IEC 11801)  | OS1/OS2  | OM1  | OM2  | OM3  | OM4  | OM5  |
|--|--|--|--|--|--|--|
| Attenuation Coefficient (dB/km)                                      | ≤ 0.50 Max (1310nm)<br>≤ 0.40 Max (1550nm)<br>≤ 0.36 Typ (1310nm)<br>≤ 0.22 Typ (1550nm) | ≤ 3.5 Max (850nm)<br>≤ 1.5 Max (1300nm)<br>≤ 3.0 Typ (850nm)<br>≤ 1.0 Typ (1300nm) | ≤ 3.5 Max (850nm)<br>≤ 1.5 Max (1300nm)<br>≤ 3.0 Typ (850nm)<br>≤ 1.0 Typ (1300nm) | ≤ 3.5 Max (850nm)<br>≤ 1.5 Max (1300nm)<br>≤ 3.0 Typ (850nm)<br>≤ 1.0 Typ (1300nm) | ≤ 3.5 Max (850nm)<br>≤ 1.5 Max (1300nm)<br>≤ 3.0 Typ (850nm)<br>≤ 1.0 Typ (1300nm) | ≤ 3.5 Max (850nm)<br>≤ 1.5 Max (1300nm)<br>≤ 3.0 Typ (850nm)<br>≤ 1.0 Typ (1300nm) |
| Minimum Bandwidth:<br>Overfilled Launch<br>(Mhz-km)                  | N/A  | ≥ 200 (850nm)<br>≥ 500 (1300nm)  | ≥ 500 (850nm)<br>≥ 500 (1300nm)  | ≥ 1500 (850nm)<br>≥ 500 (1300nm)   | ≥ 3500 (850nm)<br>≥ 500 (1300nm)   | ≥ 3500 (850nm)<br>≥ 1850 (953nm)<br>≥ 500 (1300nm)                                 |
| Minimum Bandwidth:<br>Laser Effective Modal<br>Bandwidth<br>(Mhz-km) | N/A  | N/A  | N/A  | ≥ 2000 (850nm)   | ≥ 4700 (850nm)   | ≥ 4700 (850nm)<br>≥ 2470 (953nm)   |

## Standards Compliance

- TIA/EIA-568-C.3 and ISO/IEC 11801
- IEC-61754-7 & EIA/TIA-604-5
- NFPA 262 or IEC 60332
- IEC-61754-20 & IEC-61754-14
- Compliant to Directive 2002/95/EC (RoHS) & REACH SvHC
- IEC-60793

## Ordering Information

|      | Connector A |                   | Connector B |             | Fibre Type |             | Fibre Count |             | Length |             | Extra Options |             |
|------|-------------|-------------------|-------------|-------------|------------|-------------|-------------|-------------|--------|-------------|---------------|-------------|
|      | Code        | Description       | Code        | Description | Code       | Description | Code        | Description | Code   | Description | Code          | Description |
| OTMF | 20          | MTP® Male         | 00          | LC          | 9          | G.652D      | 12          | 12          | 01     | 1m          | -             | LSZH        |
|      | 22          | MTP® Female       | 01          | LCA         | A1         | G.657A1     | 24          | 24          | 05     | 5m          | P             | OFNP        |
|      | 24          | MTP® Male Elite   | 02          | SC          | A2         | G.657A2     | 48          | 48          | 10     | 10m         |               |             |
|      | 26          | MTP® Female Elite | 03          | SCA         | 3          | OM3         | 72          | 72          | ...    | ....        |               |             |
|      | 21          | MPO Male          |             |             | 4          | OM4         | 96          | 96          | xx     | Specify     |               |             |
|      | 23          | MPO Female        |             |             | 5          | OM5         | 144         | 144         |        |             |               |             |
|      | 25          | MPO Male Elite    |             |             |            |             |             |             |        |             |               |             |
|      | 27          | MPO Female Elite  |             |             |            |             |             |             |        |             |               |             |

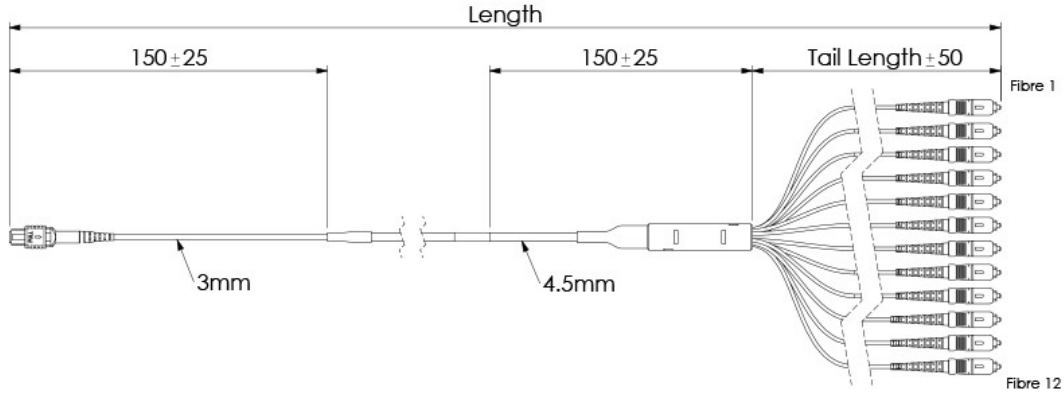
## Example Part Number

|      |   |    |    |   |    |   |    |
|------|---|----|----|---|----|---|----|
| OTMF | - | 20 | 00 | 3 | 12 | - | 70 |
|------|---|----|----|---|----|---|----|

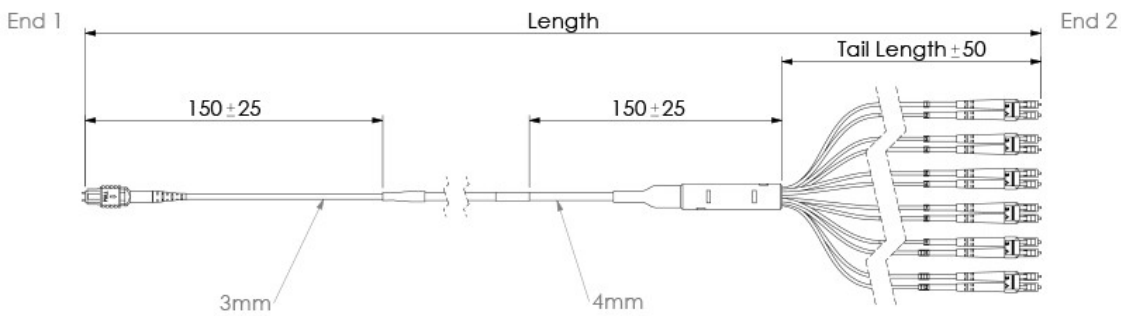
MTP® male to 12 LC/UPC fanout 1 trunk OM3 70m

## Technical Drawing

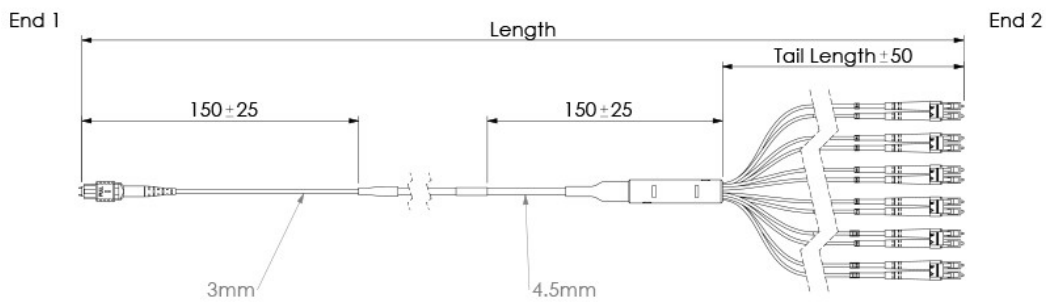
MicroCable MTP®/MPO Fanout 4.5mm OD Trunk Double Jacket Simplex Tails



MicroCable MTP®/MPO Fanout 4.5mm OD Trunk Double Jacket Duplex Tails 1 to B



MicroCable MTP®/MPO Fanout 4.5mm OD Trunk Double Jacket Duplex Tails 1 to A



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