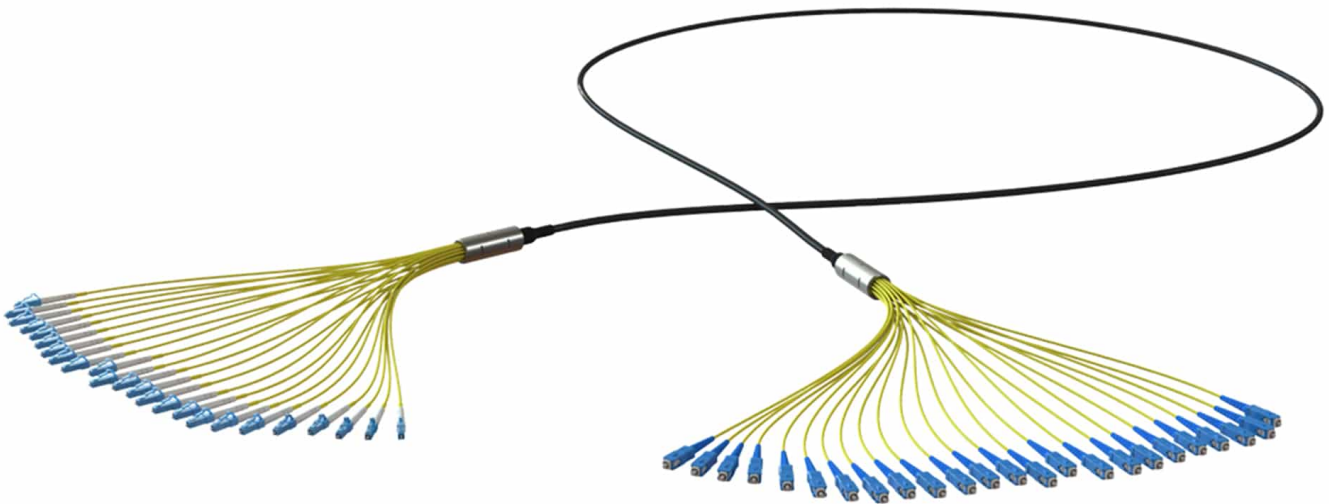


Multi-Fiber Loose Tube (LT) Cable Assembly



Description

Loose tube multi-fiber cable assemblies utilize our patented transition modules which guarantee superior tensile strength and crush resistance. The high-density design can scale from 2 to 144 fibers and is available with both 900 μ m and ruggedized 2mm tail leads. Assemblies can comprise of both multi-fiber MPO/MTP® and discrete connectors, making the Multi-Fiber Loose Tube (LT) Cable Assembly a flexible hybrid solution for diverse applications.

Features and Benefits

- Available in OS1/2 G652D and G.657A1, OM1, OM2, OM3, OM4
- Available with multi-fiber MPO/MTP and discrete connectors
- Internal/external application
- Steel tape armored version available
- Up to 144 fiber core count
- 900 μ m or 2mm ruggedized tails
- Factory-terminated and tested

Applications

- Data center infrastructure
- Internal and backbone applications
- Central office, access points, or CATV hubs

Specifications

| ELEMENT | CHARACTERISTICS |
|--------------------------|---|
| Fiber | OS1/OS2 G.652D or G.657A1, OM1, OM2, OM3, OM4 (ISO/IEC 60793) |
| Tail Dimensions | 900µm Simplex Tails Stagger Configuration 2mm Simplex Tails Staggered Configuration |
| Terminations | SC, LC, ST, FC, E2000 |
| Cable Construction | Single Loose Tube (LT) 2-24 Cores (IEC 60794) Multi Loose Tube up to 48 Cores Single Loose Tube STA Armored 2-24 cores Multi Loose Tube STA Armored up to 48 cores Jacket Material: LSZH, PE; OFNP, OFNR Jacket Colour: Black |
| Cable Diameter | Single LT (Up to 24 Cores) OD MAX: 5.8 ± 0.3mm Multi LT (Up to 48 Cores) OD MAX: 13.7 ± 0.3mm |
| Crush Resistance | Single LT 1000N/100mm Multi LT 3000N/100mm |
| Design Pulling Strength | Single LT (Short) 1000N Multi LT (Short) 1000N |
| Cable Strength Member | Single LT - E-glass Multi LT - FRP/ E-glass |
| Storage Temperature | -5 ~ +40 °C |
| Installation Temperature | -20 ~ +60 °C |
| Operating Temperature | -20 ~ +60 °C |
| Tail Protection | Crush Resistance Tube - OD MAX 25mm (24x900µm Tails, 12x2mm Tails) Crush Resistance Tube - OD MAX 32mm (48x900µm Tails, 24x2mm Tails) |
| Pulling Element | RPS Reusable Sock End A (assembly length above 20 meters) |
| Gland | PG 13.5 End A/B (24x900µm Tails, 12x2mm Tails) M25 End A/B (48x900µm Tails, 24x2mm Tails) |
| Packaging | Length ≤ 100 - Heavy Duty PE bag / Length > 100m - Drum (up to 24xFibers) |

Connector Performance

| 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/Random | 0.10dB | 0.20dB | 0.12dB | 0.18dB | IEC 61300-3-6 |

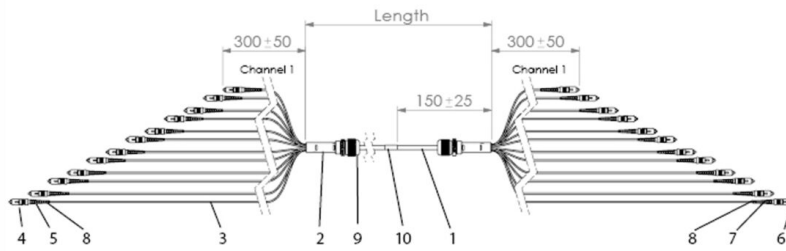
*Connector Performance table does not refer to E2A Terminations ** UPC/APC

Cable Performance

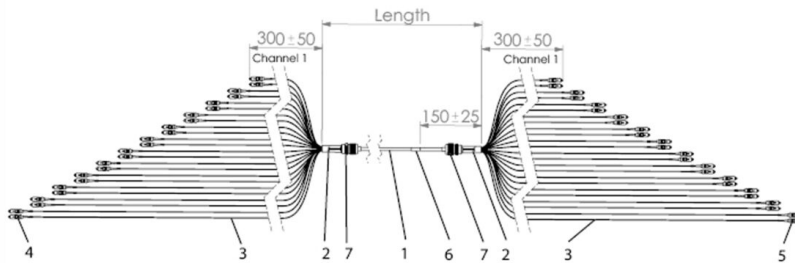
| Fiber Type (ISO/IEC 11801) | OS1/OS2 | OM1 | OM2 | OM3 | OM4 |
|---------------------------------|--|---|---|--|--|
| Attenuation Coefficient [dB/km] | ≤0.38Max(1310nm) ≤0.25Max(1550nm) ≤0.34Typ (1310nm) ≤ 0.19Typ(1550nm) | ≤ 3.5Max(850nm) ≤1.5Max(1300nm) ≤ 2.9 Typ(850nm) ≤1.2Typ(1300nm) | ≤ 3.5Max(850nm) ≤1.5Max(1300nm) ≤ 2.7 Typ(850nm) ≤0.9Typ(1300nm) | ≤ 3.5Max(850nm) ≤1.5Max(1300nm) ≤ 2.7Typ(850nm) ≤0.9Typ(1300nm) | ≤ 3.5Max(850nm) ≤1.5Max(1300nm) ≤ 2.7Typ(850nm) ≤0.9Typ(1300nm) |

| Fiber Type (ISO/IEC 11801) | OS1/OS2 | OM1 | OM2 | OM3 | OM4 |
|---|---------|------------------------------|------------------------------|-------------------------------|-------------------------------|
| Minimum Bandwidth: Overfilled Launch [Mhz-km] | NA | ≥ 200 (850nm) ≥ 500 (1300nm) | ≥ 500 (850nm) ≥ 500 (1300nm) | ≥ 1500 (850nm) ≥ 500 (1300nm) | ≥ 3500 (850nm) ≥ 500 (1300nm) |
| Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km] | NA | NA | NA | ≥ 2000 (850nm) | ≥ 4700 (850nm) |

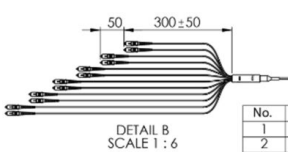
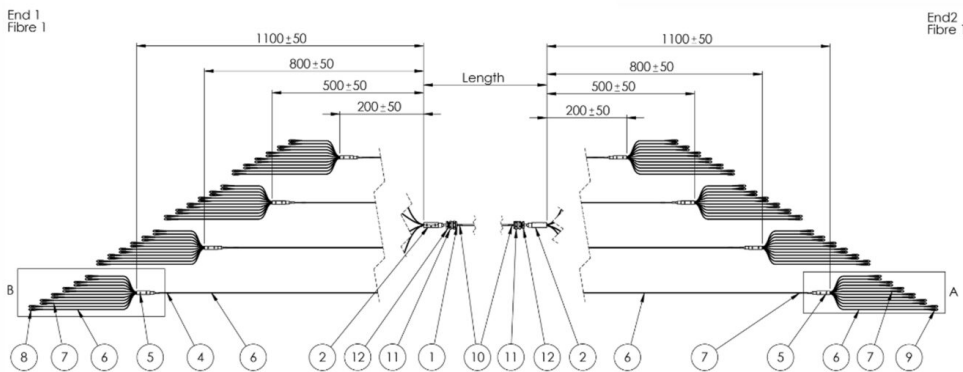
Technical Drawing



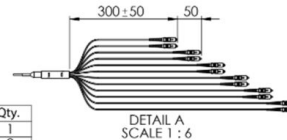
| No. | Description | Qty. |
|-----|--|------|
| 1 | Loose Tube Cable | 1 |
| 2 | Breakout Module | 2 |
| 3 | 2mm Furcation Tubing | - |
| 4 | Connector End 1 | - |
| 5 | Connector End 1 2mm Boot | - |
| 6 | Connector End 2 | - |
| 7 | Connector End 2 2mm Boot | - |
| 8 | Channel Identification Marker (C-Clip) | - |
| 9 | Gland | 2 |
| 10 | Serial Number Label (Sheath) | 1 |



| No. | Description | Qty. |
|-----|--|------|
| 1 | Loose Tube Cable | 1 |
| 2 | Breakout Module | 2 |
| 3 | 900µm Solid Coloured Oversleeve Tubing | - |
| 4 | 900µm Connector Assembly End 1 | - |
| 5 | 900µm Connector Assembly End 2 | - |
| 6 | Serial Number Label (Wrap around) | 1 |
| 7 | Gland | 2 |



| No. | Description | Qty. |
|-----|---|------|
| 1 | Multi sub unit Loose Tube Cable (See sheet 2) | 1 |
| 2 | ø22mm Breakout Module Assembly | 2 |
| 3 | ø3mm O.D M2FX Tubing | 8 |
| 4 | Subunit Identification Label (Wrap-around) | 8 |
| 5 | ø15mm Breakout Module | 8 |
| 6 | 2mm Furcation tubing (See Sheet 2) | 96 |
| 7 | Fibre Identification Marker (C-Clip) | 174 |
| 8 | Connector Assembly - End 1 (See Sheet 2) | 48 |
| 9 | Connector Assembly - End 2 (See Sheet 2) | 48 |
| 10 | Serial Number Label (Wrap-around) | 2 |
| 11 | M25 Compression Gland | 2 |
| 12 | M25 Compression Gland Nut | 2 |



Ordering Information

| Code | Fiber Type | Cable Type/Fiber Count | Jacket Material | Grade | End A | End B | Tails | Unit | Length |
|------|------------|------------------------|---------------------|-------|--------|-------|--|----------|------------|
| T | 1 OM1 | BQ2 SLT 2F | L LSZH | 8E | A LC | A LC | -0001- 2mm Simplex Stagger (12F or less) | M Meters | 1 1 |
| | 3 OM3 | BQ4 SLT 4F | E CPR Eca | | B LCA | B LCA | -0003- 2mm Duplex Stagger (>12F) | F Feet | 2 2 |
| | 4 OM4 | BQ6 SLT 6F | Y PE (polyethylene) | | D SC | D SC | -0005- 900um Stagger | | 3 3 |
| | 7 G.657A1 | BQ8 SLT 8F | | | E SCA | E SCA | | | 5 5 |
| | | BQB SLT 12F | | | H FC | H FC | | | 10 10 |
| | | BQC SLT 16F | | | J FCA | J FCA | | | XX Specify |
| | | BQF SLT 24F | | | L E2 | L E2 | | | |
| | | CBJ MLT 5el 48F | | | M E2A | M E2A | | | |
| | | | | | X Open | | | | |

Legacy ordering information

| | Fiber Count | Connector End A | Connector End B *If end B differs from end A | Fiber Type | Cable Construction | Cable Length | Jacket Type |
|-----|-------------|-----------------|--|------------|--|--------------|-----------------------|
| PRE | 2 2 | LC LC | LC LC | 09 OS1/OS2 | LT Loose Tube (900um tails) | 1 1 meter | leave blank LSZH |
| | 4 4 | LCA LC APC | LCA LC APC | 62 OM1 | LTR Loose Tube (2mm tails) | 2 2 meter | PE PE |
| | 6 6 | SC SC | SC SC | 50 OM2 | STA LT Steel Tape Armoured (900um tails) | 3 3 meter | E** CPR Euroclass Eca |
| | 8 8 | SCA SC APC | SCA SC APC | OM3 OM3 | STAR LT Steel Tape Armoured (2mm tails) | 5 5 meter | |
| | 12 12 | FC FC | FC FC | OM4 OM4 | | 10 10 meter | |
| | 16 16 | FCA FC APC | FCA FC APC | A1 G657A1 | | xx Specify | |
| | 24 24 | E2 E2000 | E2 E2000 | | | | |
| | 48 48 | E2A E2000 APC | E2A E2000 APC | | | | |
| | * | | XX Open End | | | | |

Available on special request - contact Sales Office *Higher core count | ** MLT (<72xF) EuroClass Dca s2 d1 a1 | LT (<24xF) EuroClass Dca s2 d1 a1 | LT STA (<24xF) EuroClass Cca-s1,d1,a1

Example Part Number

| | | | | | | | |
|-----|----|----|---|-----|----|----|--|
| PRE | 24 | LC | - | OM3 | LT | 20 | |
|-----|----|----|---|-----|----|----|--|

PRE24LCOM3LT20 = AFL Hyperscale Multifiber Assembly 24 cores LC-LC OM3 50/125 Loose Tube 900µm tails LSZH Black 20mtr

Additional Information

- TIA/EIA-568-C.3 and ISO/IEC 11801
 - ISO/IEC 60793 and ISO/IEC 60794
 - ISO/IEC 61753, IEC 61754 and IEC 61755
 - ISO/IEC 60332-1, IEC 61034-1/2 and IEC 61754-1/2
 - Compliant to Directive 2002/95/EC (RoHS) and REACH SVHC
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