

**AT&T FiberLine Technical Specification**

Cable Type: 2-fiber to 12-Fiber 50/125µ OM4 MM  
LS0H Indoor Tight-Buffer Single-Unit FO Cables

**AT&T P/N: 23NM4HAxxxS-PUxx-B1**

Revision: 5 Date: 21 September 2018



Color coded 50/125µ OM4 multimode tight-buffered fibers cabled together, served with aramid or glass yarn and jacketed with halogen-free, flame-retardant compound for indoor use. The cable conforms to EU Regulation 305/2011 (CPR) Class B2ca-s1a,d1,a1, it meets IEC 60332-1 flame test and conforms to EU Directive 2011/65/EU (RoHS-II).

**Physical Description**

|                                 |  |
|---------------------------------|--|
| Basic optical fibers            | 50/125 µm Multimode conforming to ISO/IEC-11801 OM4, TIA-568-C.3, TIA/EIA-492 Type AAAD IEC 60793-2-10 Type A1a.3.   |
| Optical transmission properties | See below  |
| Core diameter                   | 50 µm nom.   |
| Clad diameter                   | 125 ± 1.0 µm   |
| Primary coating diameter        | 245 ± 10 µm  |
| Proof test level                | 100 kpsi min.  |
| Buffer coating                  | Tight LS0H compound.   |
| Tight buffer OD                 | 900±50 µm  |
| Number of optical fibers        | See below  |
| Fibers Color code               | See below  |
| Core formation                  | Tight-coated color coded fibers cabled together and served with aramid or glass yarn.  |
| Rip cord                        | Aramid rip-cord is laid in parallel for easy jacket removal.   |
| Outer jacket                    | LS0H compound for indoor use.  |
| Outer jacket thickness          | 1.0±0.2 mm.  |
| Jacket color                    | Purple RAL 4005  |
| Surface Marking                 | AT&T FiberLine <b>XX</b> 50/125µ OM4 MM FIBERS TIGHT INDOOR LS0H IEC 60332-1 CE EU 305/2011 (CPR) Class B2ca-s1a,d1,a1 CE 2011/65/EU (RoHS) [Hwwyy] [Meter Mark] METER --- P/N 23NM4HA0 <b>XX</b> S-PU --- |
| Note:                           | <b>XX</b> to be replaced with the actual number of fibers in the cable   |

**Mechanical Properties**

|   |  |
|---|--|
| IEC 60794-1-2 E11 Bend Radius during service      | 10xD mm min. Attenuation increase: 0.05dB max.                                     |
| IEC 60794-1-2 E11 Bend Radius during installation | 20xD mm min. Attenuation increase: 0.05dB max.                                     |
| Temperature installation range                    | 0 to +50C  |
| Temperature operating range                       | -20 to +60C  |
| IEC 60794-1-2 E1 Short term load                  | 600N max. Attenuation increase: 0.05dB max.  |
| IEC 60794-1-2 E1 Long term load                   | 200N max. Attenuation increase: 0.05dB max.  |
| IEC 60794-1-2 E3 Crush resistance                 | 3000N/10cm min. Attenuation increase: 0.05dB max.                                  |
| IEC 60794-1-2 E4 Impact resistance                | 5J, 3 impacts. No fiber break.   |
| Flame Tests                                       | IEC 60332-1 (Flame propagation), IEC 60754 (Acid gas) & IEC 61034 (Smoke density). |
| EU Regulation 305/2011 (CPR) conformance          | CENELEC EN 13501 Class B2ca-s1a,d1,a1. NB 1783.                                    |

**Transmission Properties of Cabled Fibers - OM4 ISO/IEC-11801 & TIA-568-C.3**

| Wavelength | Max. Attenuation | Min. Overfilled Modal Bandwidth | Min. Effective Modal Bandwidth |
|------------|------------------|---------------------------------|--------------------------------|
| 850nm      | 3.0 dB/km        | 3500 MHz·km                     | 4700 MHz·km                    |
| 1300nm     | 0.8 dB/km        | 500 MHz·km                      | 500 MHz·km                     |

**Optional Constructions**

| Description   | Fiber Count | Cable OD mm | Weight kg/km | Packaging  | P/N              |
|---|-------------|-------------|--------------|------------|------------------|
| 2-Fiber 50/125µ OM4 MM LS0H Indoor Tight-Buffer FO Cable  | 2           | 4.5         | 24           | 2000m Drum | 23NM4HA002S-PU2N |
| 4-Fiber 50/125µ OM4 MM LS0H Indoor Tight-Buffer FO Cable  | 4           | 4.5         | 27           | 2000m Drum | 23NM4HA004S-PU2N |
| 6-Fiber 50/125µ OM4 MM LS0H Indoor Tight-Buffer FO Cable  | 6           | 5.6         | 34           | 2000m Drum | 23NM4HA006S-PU2N |
| 8-Fiber 50/125µ OM4 MM LS0H Indoor Tight-Buffer FO Cable  | 8           | 6.0         | 39           | 2000m Drum | 23NM4HA008S-PU2N |
| 10-Fiber 50/125µ OM4 MM LS0H Indoor Tight-Buffer FO Cable | 10          | 6.3         | 42           | 2000m Drum | 23NM4HA010S-PU2N |
| 12-Fiber 50/125µ OM4 MM LS0H Indoor Tight-Buffer FO Cable | 12          | 6.6         | 46           | 2000m Drum | 23NM4HA012S-PU2N |

**Color Code**

| # | Color | # | Color  | # | Color  | #  | Color  | #  | Color | #  | Color |
|---|-------|---|--------|---|--------|----|--------|----|-------|----|-------|
| 1 | Blue  | 2 | Orange | 3 | Green  | 4  | Brown  | 5  | Gray  | 6  | White |
| 7 | Red   | 8 | Black  | 9 | Yellow | 10 | Violet | 11 | Pink  | 12 | Aqua  |