

AT&T FiberLine Technical Specification

Cable Type: 2-fiber to 12-Fiber 9/125µ G.652.D SM
LS0H Indoor Tight-Buffer Single-Unit FO Cables

AT&T P/N: 23NSDHAxxxS-YLxx-B1

Revision: 5 Date: 03 October 2018



Color coded 9/125 µm ITU-T G.652.D singlemode 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 it conforms to EU Directive 2011/65/EU (RoHS-II).

Physical Description

Basic optical fibers	9/125 µm singlemode conforming to ITU-T G.652.D (no water peak), ISO/IEC-11801 OS2 & TIA-568-C.3.
Optical transmission properties	See below
Core diameter	8.3 µm nom. MFD: 9.2±0.5 µm @ 1310nm.
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	Yellow RAL 1021
Surface Marking	AT&T FiberLine XX 9/125 µm ITU-T G.652.D SM FIBERS TIGHT INDOOR LS0H IEC 60332-1 CE EU 305/2011 (CPR) Class B2ca-s1a,d1,a1 CE 2011/65/EU (RoHS) [Batch Number] [Meter Mark] METER --- P/N 23NSDHA XX S-YL ---
Note:	XX 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 (Acod gas release) & IEC 61034 (Smoke generation).
EU Regulation 305/2011 (CPR) conformance	CENELEC EN 13501 Class B2ca-s1a,d1,a1. NB 1783

Transmission Properties of Cabled Fibers - ITU-T G.652.D (No water peak) OS2 ISO/IEC-11801 & TIA-568-C.3

Wavelength	Max. Attenuation	Max. Dispersion between 1285 & 1350nm: 3.5 ps/(nm·km)
1310nm	0.40 dB/km	Max. Dispersion between 1530 & 1565nm: 18.0 ps/(nm·km)
1383nm	0.40 dB/km	Zero dispersion wavelength: 1311±11 nm
1550nm	0.25 dB/km	Cable cutoff wavelength: 1260 nm max.

Optional Constructions

Description	Fiber Count	Cable OD mm	Weight kg/km	Packaging	P/N
2-Fiber 9/125µ G.652.D SM LS0H Indoor Tight-Buffer FO Cable	2	4.5	24	2000m Drum	23NSDHA002S-YL2N
4-Fiber 9/125µ G.652.D SM LS0H Indoor Tight-Buffer FO Cable	4	4.5	27	2000m Drum	23NSDHA004S-YL2N
6-Fiber 9/125µ G.652.D SM LS0H Indoor Tight-Buffer FO Cable	6	5.6	34	2000m Drum	23NSDHA006S-YL2N
8-Fiber 9/125µ G.652.D SM LS0H Indoor Tight-Buffer FO Cable	8	6.0	39	2000m Drum	23NSDHA008S-YL2N
10-Fiber 9/125µ G.652.D SM LS0H Indoor Tight-Buffer FO Cable	10	6.3	42	2000m Drum	23NSDHA010S-YL2N
12-Fiber 9/125µ G.652.D SM LS0H Indoor Tight-Buffer FO Cable	12	6.6	46	2000m Drum	23NSDHA012S-YL2N

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