HES Cabling Systems

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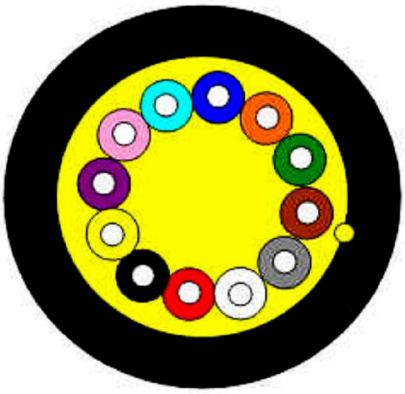
Technical Specification
12x9/125µm Singlemode G.657.A1 MTD Indoor LS0H FO Cable
Part Number: NA1-01201-xx7-BB
Revision 03/20 Date: 29 June 2020



12x9/125µm ITU-T G.657.A1 Bend-Insensitive Singlemode color coded tight buffered optical fibers cabled together, served with aramid yarn and jacketed with LS0H (HFFR) jacket for indoor use. The cable conforms to EU Regulation 305/2011 (CPR) Class B2ca-s1a,d1,a1.

Cable Construction	
Optical fibers	9/125 µm ITU-T G.657.A1 Bend-insensitive Category A1 (MBR: 10mm).
Optical transmission properties	See below
Core diameter	See MFD below.
Clad diameter	125±0.7 µm
Cladding non-circularity	1% max.
Core/Cladding concentricity error	0.5 µm max.
Coating/Cladding concentricity error	12 µm max.
Primary coating diameter	245±10 µm
Proof test level	0.69 Gpa
Macro bending - 100 turns	0.05 dB max. IL at 1310/1550 nm @50mm 0.05 dB max. IL at 1625 nm @ 60 mm
Buffer coating	Semi-Tight LS0H compound.
Tight buffer OD	900±50 µm
Number of optical fibers	12
Fibers Color code	Blue, Orange, Green, Brown, Grey, White, Red, Black, Yellow, Violet, Pink, Turquoise
Note	**The color code is applied to both the bare (250u) fibers and the tight coating.**
Core formation	Tight-coated color coded fibers cabled together and served with aramid yarn
Rip cord	Aramid rip-cord is laid in parallel for easy jacket removal
Outer jacket	LS0H (HFFR) compound for indoor use
Jacket thickness	0.9±0.2 mm
Jacket color	Black RAL 9005
Outer diameter	7.5 mm nom.
Cable weight	45 kg/km
Surface Marking	HCS NA1-01201 MTD 12x9/125µ ITU-T G.657.A1 SM INDOOR FO LS0H LAN CABLE FR IEC 60332-1 CE CPR Class B2ca-s1a,d1,a1 CE 2011/65/EU (RoHS-2) [Hwwyy] [Meter Mark] METER - LGCE -

Mechanical Properties		
Physical Properties	**Value**	**Test Method**
Tensile strength - short term	1500 N max. No fiber break.	IEC-60794-1-2 E1
Tensile strength - long term	750 N max. No fiber break.	IEC-60794-1-2 E1
Tight buffer stripability	10 cm min. buffer length strippable without damaging the fiber	IEC 60793-1-32
Compressive load (crush resistance)	1000 N/10cm max. No fiber break.	IEC-60794-1-2 E3
Impact	10J max, 3 impacts. No fiber break.	IEC-60794-1-2 E4
Bend radius	10xD min. IL increase: 0.05dB	IEC-60794-1-2 E11
Temperature cycling	-30 to +60°C. Max. IL increase: 0.05dB	IEC-60794-1-2 F1
Storage Temperature range	-20 to +70°C	-
Installation Temperature range	-5 to +50°C	-
Operating Temperature range	-10 to +50°C	-
Flame test	IEC 60332-1-2 & IEC 60332-1-3	IEC 60332-1
Acid gas	IEC 60754	IEC 60754
Smoke density	IEC 61034	IEC 61034
EU Regulation 305/2011 (CPR) conformance	Class B2ca-s1a,d1,a1. NB 1783	EN 13501

Optical Transmission Properties

Fiber	Fiber Type	Standards & basic properties	Attenuation dB/km			MFD		
			@1310nm	@1385nm	@1550nm	@1310nm	@1385nm	@1550nm
			Max	Max	Max	µm	µm	µm
A1	9/125µm Single Mode Optical Fiber	ITU-T G.657.A1 Bend Insensitive Zero dispersion wavelength: 1302-1322 nm Cable cutoff wavelength: 1260 nm max.	0.50	0.50	0.50	9.2±0.3	9.6±0.6	10.4±0.5

This cable fully conforms to EU Directive 2011/65/EU (RoHS-2)