

Distribution Tight Buffer IN/OUT Optical Cable (FTMSU)

Specification

1. Cable Description

Distribution Tight Buffer Optical Cable use $4\sim12$ core $900\mu m$ tight buffer fiber as optical communication modium

The tight buf **nestor** I with E-glass member and water yarn as strength member, then completed with a layer of LS2H material as out jacket.

2. Cable Drawing



<Cross-sectional Drawing of Cable>

Qut sheath
E-glass and water yarn

Non-metallic tight-buffered optical fibre cable for indoor FTTX applications. (riser distribution and beep cable)

Optical fibres Tight buffers ingle-mode fibres according to the ITU-T G.657.A1.

Fibres meet also the requirements of ITU-T G.652.D.

Secondary coating

Tight buffer, outer diameter 900 µm.

right ballor, datar diameter dod pini.

Strength members Glass yarns with water-blocking coating under the

Note: Structure drawing just for reference, please check the following details.

Low smoke

Outer sheath Flame retardant, halogen free and UV resistant plastic (LSZH). Colour of the sheath is light grey RAL 7035.

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Nominal sheath thickness is 1,0 mm.
Cable is flame retardant according to the

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IEC 61034-2

Sheath marking

Marking printed on the sheath at one meter interval:

Nestor Cables - cable type - year of manufacture - length marking

Standard references Cable properties IEC 60794-2-21
Test methods IEC 60794-1-2x
Flame retardant IEC 60332-1-2, IEC 60332-3

3. Application

- Used in pigtails and patch cords
- Used as interconnect lines of equipments, and used in optical connections in optical communication rooms and optical distribution frames
- ❖ Used in indoor and outdoor cabling, especially used as distribution cable

4. Characteristics:

- Good mechanical and environmental characteristics
- ❖ Flame retardant characteristics meet the requirements of relevant standards
- ❖ The mechanical characteristics of jacked meet the requirements of relevant standards
- Soft,flexible,easy to lay and splice,and with big capacity data transmission
- Meet various requirements of market and clients.

5. Cable construction details:

Technical Parameters:											
Cable Count	Outside Diameter	Tight buffer Diameter	Weight	allowable Strei	Minimum allowable Tensile Strength (N) Minimum allowable Crush Load (N/100mm)		Minimum Bending Radius (MM)		Storage temperature	Working temperature	
	(MM)	(MM)	(KG)	short term	long term	short term	long term	short term	long term	(°C)	(°C)
04	5.7	0.9	22.00	600	200	1000	200	20D	10D	-40+60	-40+60
06	5.7	0.9	23.00	600	200	1000	200	20D	10D	-40+60	-40+60

6. <u>Standard color of tight buffer</u>

The color of the tight buffer, shall be in accordance with the table as below:

Standard Colour Identification								
No.	1	2	3	4	5	6		
Color	Blue	Orange	Green	Brown	Slate	White		
No.	7	8	9	10	11	12		
Color	Red		Yellow	Violet	Pink	Aqua		

Cable Mechanical characteristic

7.

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			SM	MM	MM	
Fiber style		Unit	G657.A1	50/125	62.5/125	
condition		nm	1310/1550	850/1300	850/1300	
attenuation		dB/km	≤0.36/0.23	≤3.0/1.0	≤3.0/1.0	
	1310nm	Ps/(nm*km)	≤18			
Dispersion	1550nm	Ps/(nm*km)	≤22			
	850nm	MHZ. KM		≧400	≧160	
Bandwidth	1300nm	MHZ. KM		≧800	≥500	
Zero dispersio	ı	nm	≧1302, ≤1322			
Zero dispersio	n slope	nm	≤0.091			
PMD Maximun	n Individual Fiber		≤0.2			
PMD Design Li	nk Value	Ps(nm2*km)	≤0.08			
Fiber cutoff wa	avelength λc	nm	≧1180,≤133 0			
Cable cutoff wa	avelength λcc	nm	≤1260			
MED	1310nm	um	9.2±0.4			
MFD	1550nm	um	10.4±0.8			
Numerical Ape	Numerical Aperture(NA)			0.200±0.015	0.275±0.015	
Step(mean of bidirectional measurement)		dB	≤0.05	≤0.10	≤0.10	
Irregularities of and point disco	over fiber length ontinuity	dB	≤0.05	≤0.10	≤0.10	
Difference bac	kscatter coefficient	dB/km	≤0.03	≤0.08	≤0.10	
Attenuation ur	niformity	dB/km	≤0.01			
Core diameter		um		50±1.0	62.5±2.5	
Cladding diam	eter	um	125.0±0.1	125.0±0.1	125.0±0.1	
Cladding non-	circularity	%	≤1.0	≤1.0	≤1.0	
Coating diame	ter	um	242±7	242±7	242±7	
Coating/chaffi error	nch concentrically	um	≤12.0	≤12.0	≤12.0	
Coating non ci	rcularity	%	≤6.0	≤6.0	≤6.0	
Core/cladding	concentricity error	um	≤0.6	≤1.5	≤1.5	
Curl(radius)		um	≤4			

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