

## Distribution Tight Buffer IN/OUT Optical Cable (FTMSU)

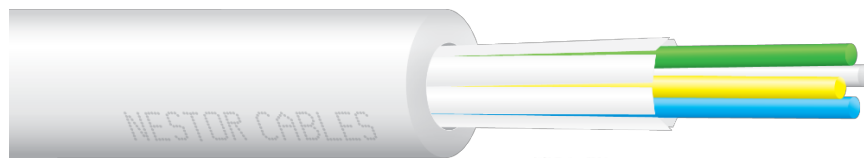
# Specification

### 1. Cable Description

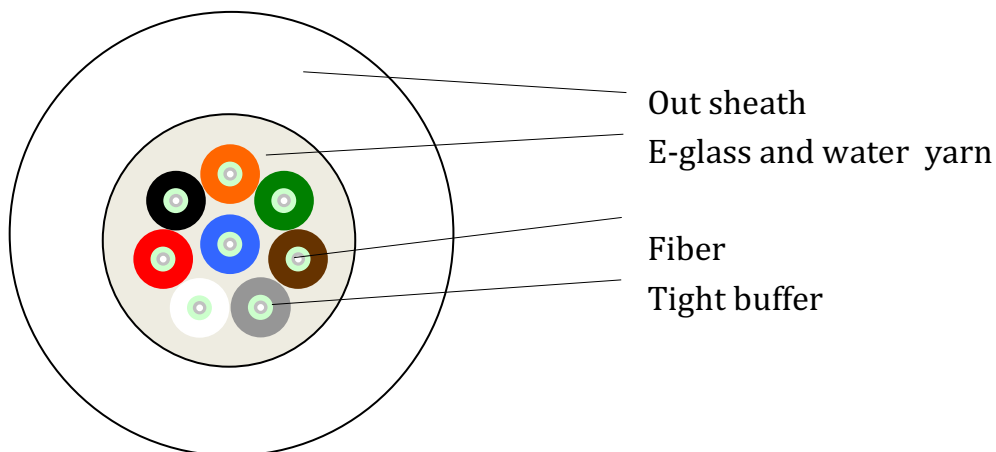
Distribution Tight Buffer Optical Cable use 4~12 core 900 $\mu$ m tight buffer fiber as optical communication medium.

The tight buffer fiber wrapped with E-glass member and water yarn as strength member, then completed with a layer of LSZH material as out jacket.

### 2. Cable Drawing



#### <Cross-sectional Drawing of Cable>



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

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### 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	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.

#### Standard color of tight buffer

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	Black	Yellow	Violet	Pink	Aqua

### 7.

#### Cable Mechanical characteristic

Fiber style	Unit	SM G657.A1	MM 50/125	MM 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
Dispersion	1310nm	Ps/(nm*km)	≤18	.....
	1550nm	Ps/(nm*km)	≤22	.....
Bandwidth	850nm	MHZ. KM	.....	≥400
	1300nm	MHZ. KM	.....	≥800
Zero dispersion wavelength	nm	≥1302, ≤1322	.....	.....
Zero dispersion slope	nm	≤0.091	.....	.....
PMD Maximum Individual Fiber		≤0.2	.....	.....
PMD Design Link Value	Ps(nm <sup>2</sup> *km)	≤0.08	.....	.....
Fiber cutoff wavelength λ <sub>c</sub>	nm	≥1180,≤1330	.....	.....
Cable cutoff wavelength λ <sub>cc</sub>	nm	≤1260	.....	.....
MFD	1310nm	um	9.2±0.4	.....
	1550nm	um	10.4±0.8	.....
Numerical Aperture(NA)		.....	0.200±0.015	0.275±0.015
Step(mean of bidirectional measurement)	dB	≤0.05	≤0.10	≤0.10
Irregularities over fiber length and point discontinuity	dB	≤0.05	≤0.10	≤0.10
Difference backscatter coefficient	dB/km	≤0.03	≤0.08	≤0.10
Attenuation uniformity	dB/km	≤0.01	.....	.....
Core diameter	um	.....	50±1.0	62.5±2.5
Cladding diameter	um	125.0±0.1	125.0±0.1	125.0±0.1
Cladding non-circularity	%	≤1.0	≤1.0	≤1.0
Coating diameter	um	242±7	242±7	242±7
Coating/chaffinch concentricity error	um	≤12.0	≤12.0	≤12.0
Coating non circularity	%	≤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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