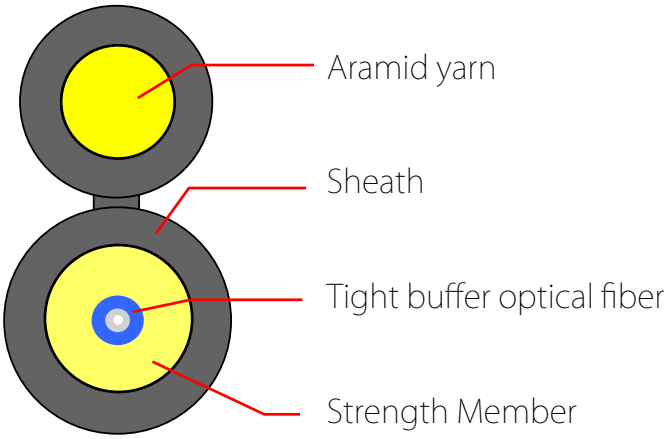
DIELECTRIC SELF SUPPORT TIGHT BUFFER DROP CABLE

AR-2-TDROP-F8AR-ZH-1F
G657A1-TE

1. STRUCTURE DIAGRAM



2. OPTICAL FIBER CHARACTERISTIC (ITU-G.657A1)

Optical properties of the SM fiber are achieved through a germanium doped silica based core with a pure silica cladding which meets ITU-T G657A1 UV curable acrylate protective coating is applied over the glass cladding to provide the necessary maximum fiber lifetime.
Geometrical and optical characteristics of fiber in cable as the following table:

Items		Unit	Description	
			Before cabled	After cabled
Attenuation	at 1310 nm	dB/km	≤ 0.35	≤0.38
	at 1550 nm	dB/km	≤ 0.21	≤0.25
Zero dispersion wavelength		nm	1300~1324	
Zero dispersion slope		ps/(nm²·km)	≤ 0.092	
Cable cut-off wavelength λcc		nm	≤ 1260	
Mode field diameter (MFD)	at 1310 nm	μm	8.8± 0.4	
Cladding diameter		μm	125 ± 0.7	
Cladding non-circularity		%	≤ 0.7	
Coating diameter		μm	235~255	
Coating/cladding concentricity error		μm	≤ 12.0	
Coating non-circularity		%	≤ 6.0	
Core/cladding concentricity error		μm	≤ 0.5	
Attention at bending	1 turn, 10mm radius	dB	at 1550nm Δ≤ 0.75	
Dependence	10 turns, 15mm radius	dB	at 1550nm Δ≤ 0.25	

3. CABLE DIMENSIONS AND CONSTRUCTION

Items		Descriptions
Tight buffer fiber	Fiber count	1
	Diameter	0.90±0.05mm
	Color	Blue
	Material	LSZH
Strength Member	Material	Aramid yarn
Self-supporting Member	Material	Aramid yarn
Outer Sheath	Material	LSZH
	Thickness	≥0.5
	Color	Black
Cable diameter(mm Approx.)		3.0(±0.1) *5.2(±0.2)
Cable weight(kg/km Approx.)		17

4. MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Items		Descriptions	
Tensile performance	IEC 60794-1-2 Method E1	short-term	500N
		long-term	250N
Crush Resistance	IEC 60794-1-2 Method E3	short-term	500N/10cm
		long-term	300N/10cm
Impact Resistance	IEC 60794-1-2 Method E4	No obvious change after test	
Repeat Bending	IEC 60794-1-2 Method E6		
Torsion	IEC 60794-1-2 Method E7		
Cable Bend	IEC 60794-1-2 Method E11		
Temperature Range	IEC 60794-1-2 Method F1	-15℃~+65℃	
Bending Radius	Static	10*cable diameter	
	Dynamic	20*cable diameter	

5. PACKING

Wooden Drums Protection. During transportation, right tools should be used to avoid damaging the package and to handle with ease.
Cables should be protected from moisture; kept away from high temperature and fire sparks; protected from over bending and crushing; protected from mechanical stress and damage.

6. MARKING

Unless otherwise specified, the cable sheath marking shall be as follows:

- Color: White
- Contents: Cable manufacturer or owner, the year of manufacture, the type of cable, length marking
- Interval: 1m

7. DELIVERY LENGHT

Standard delivery length is 1km/drum. Other lengths available upon agreement.