

FIBER OPTIC CABLE PRODUCT

INDOOR CABLE SERIES SM / MM



PROPERTIE

- High strength aramid yarn strength member ensures high tensile strength and long term stability transmission
- Small outer diameter, lightweight, flame retardant, easy to strip, low attenuation, physically soft
- Direct splicing between tight buffer cables and need no tie-in box or pigtail

APPLICATION

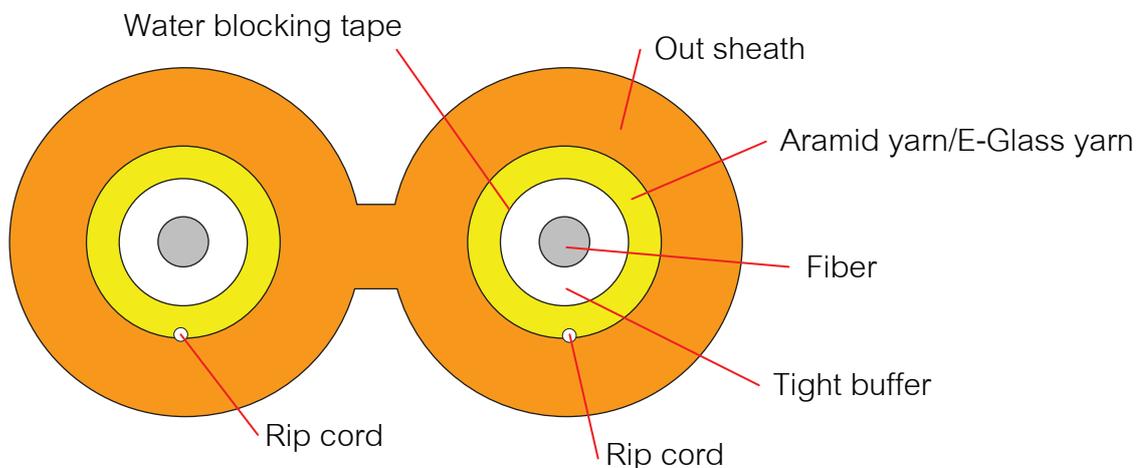
- As building to building connecting cable
- As indoor soft cable along the wall, ceiling, between layers and in conduits
- As pigtails, movable connectors and patch cords for communication equipment
- Temperature range -40 °C ~ + 70 °C

STANDARD

- ANSI/TIA-568-C.3, ANSI/ICEA 596, ANSI/TIA/EIA-568-B.3 ISO/IEC 11801:2002
- Telcordia(Bellcore) GR-409-CORE
- ITU-T G.652D (Singlemode), ITU-T G.651 (Multimode), ITU-TG 657A2
- IEC 60332-1, IEC 60332-2& IEC 60332-3, IEC 60793/60794,EIA/TIA-455
- UL Listed E337497 RoHS Compliant 2002/95/EC



F-ZX-XX-XX



CONSTRUCTION

Fiber type		Single mode		Multi-mode		
		9/125 μm (OS2)	62.5/125 μm (OM1)	50/125 μm (OM2)	50/125 μm (OM3)	50/125 μm (OM4)
Core Diameter (μm)		9	62.5	50	50	50
Cladding diameter (μm)		125				
Coating diameter (μm)		250				
Buffer diameter (μm)		900				
Fiber count		2				
Outer Diameter D*H (mm)		1.6*3.3	1.6*3.3	1.8*3.7	2.0*4.1	2.8*5.7
Nominal weight (kg/km)		5.7	5.7	6.2	8.2	13.2
Tight buffered fiber	Material	Polyvinyl chloride (PVC)				
	Thickness	0.33				
Strength member		Aramid yarn				
Sheath	Material	Polyvinyl chloride (PVC)				
	Thickness	0.5-0.8				
Max tensile strength (N)	Short term	160	160	160	200	300
	Long term	80	80	80	100	160
Min bending radius	Static	20H				
	Dynamic	10H				
Max crush radius (n/100nm)		1000				

OPTICAL FIBER CHARACTERISTICS

Attenuation	850nm	$\leq 23 \leq 25 \leq 27$	[dB/km]
	1300nm	$\leq 0.55 \leq 0.70 \leq 0.80$	[dB/km]
Overfilled modal bandwidth	850nm	$\geq 500 \geq 400 \geq 400$	[MHz-km]
	1300nm	$\geq 1000 \geq 800 \geq 800$	[MHz-km]
Numerical aperture (NA)		0.200 ± 1.015	
Group index of refraction (typical)		850nm	1.482
Backscatter characteristics		1300nm	
Step (mean of bidirectional measurement)		≤ 0.10	[dB]
Irregularities over fiber length and point discontinuity		≤ 0.10	[dB]
Different backscatter coefficient (bidirectional measurement)		≤ 0.08	[dB/km]
Core diameter		50 ± 2.5	[μm]
Cladding diameter		12.50 ± 1.0	[μm]
Cladding non-circularity		≤ 1.0	[%]
Coating diameter		242 ± 7	[μm]
Coating/cladding concentricity error		≤ 12.0	[μm]
Coating non-circularity		≤ 6.0	[%]
Core/cladding concentricity error		≤ 1.5	[μm]
Environmental characteristics		850nm, 1300nm	
Temperature dependence, induced attenuation		-60 °C - +85°C	≤ 0.10 [dB/km]
Temperature-humidity cycling, induced attenuation		-10°C - +85°C, 90% R.H	≤ 0.20 [dB/km]
Damp heat dependence, induced attenuation		85°C, 85% R.H 30 days	≤ 0.20 [dB/km]
Water soak dependence, induced attenuation		20 °C, 30 days	≤ 0.20 [dB/km]

Proof test	offline	≤ 9.0	[N]
		≥ 1.0	[%]
		≥ 100	[KPS]
Bending dependence	850nm,1300nm		
Induce attenuation	100 turns, 75mm diameter	≤ 0.50	[dB]
Coating strip force	Typical average force	1.7	[N]
	Peak force	$\geq 1.3 \leq 8.9$	[N]
Dynamic stress corrosion susceptibility parameter (nd,Typical)		≥ 27	

PACKING AND DRUM

The cable is rounded on a non-returnable wooden drum. Both ends of cable are securely fastened to drum and sealed with a shrinkable cap to prevent ingress of moisture. The following information shall be marked on the outer sheath of the cable at an interval of about 1 meter.

- Cable type and number of optical fiber
- Manufacturer name
- Month and Year of Manufacture
- Cable length

The sequential number of the cable length shall be marked on the outer sheath of the cable at an interval of 1meter \pm 1%

ORDER INFORMATION

PRODUCT	PART NUMBER
Indoor Cable, Simplex, 50/125MM 1Core	F-Z5-01-SX
Indoor Cable, Duplex, 50/125MM 2Core	F-Z5-02-DX
Indoor Cable, Simplex, 9/125 SM, 1Core	F-Z9-01-SX
Indoor Cable, Duplex, 9/125 SM , 2Core	F-Z9-02-DX