

AI-A-I/U/B

Tight buffered, non-metallic armored fiber optic cable

Application: Optical fiber cable for industry environments. The cable is suitable for both indoor and outdoor use. Good mechanical and environmental performance, high capacity data communication transmission. Small diameter, multi core number, high compressive, light weight, convenient operation, simple construction, conducive to the comprehensive wiring.

Standards: IEC 60794, IEC 60754-1/2, IEC 60092-360, IEC 61034-1/2, UL 1581, IEC 60332-3-22

Design & Construction

Fibers: Tight-buffered 0.9 mm
Bedding: Water blocking material
Color code: Individually colored fibers
Inner jacket (optional): LSZH-SHF1, LSZH-SHF2 or LSZH-SHF2-MUD
Armor: Glass yarn
Outer jacket (optional): LSZH-SHF1, LSZH-SHF2 or LSZH-SHF2-MUD
Outer jacket color: Black (optional)

Environmental properties and fire performances

Halogen acid gas: IEC 60754-1/2
Degree of acidity of gases: IEC 60754-1/2
Smoke emission: IEC 61034-1/2
Fire retardant: IEC 60332-1-2, IEC 60332-3-22
UV-resistant: UL 1581

Mechanical environmental performance

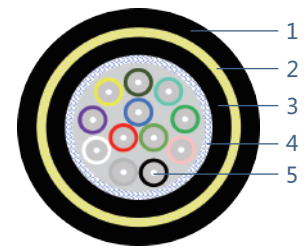
Bending radius (N/10cm)-Long-term: 20D
Bending radius (N/10cm)-Short-term: 15D
Temperature (°C)-Operation: -40°C~80°C
Temperature (°C)-Installation: -10°C~60°C

Mechanical property

No. of fiber	Inner sheath OD (mm)	Outer sheath OD (mm)	Tensile (N)	Crush (N/10cm)	Cable weight (kg.km)
4	4.8 ± 0.2	8.5 ± 0.5	1000	2000	100
8	5.0 ± 0.3	9.5 ± 0.5	1000		122
12	5.5 ± 0.4	10.5 ± 0.5	1500		146
24	7.5 ± 0.5	12.0 ± 0.5	2000		183

Transmission property

Standard designation				Maximum attenuation (dB/km)					Fiber diameter (μm)	OFL bandwidth		EMB at 850nm (MHz.km)
IEC 60793-2-50	IEC 60793-2-10	IEC 11801	ITU-T	850 nm	1300 nm	1310 nm	1550 nm	1625 nm		850 nm (MHz.km)	1350 nm (MHz.km)	
B1.3	—	OS2	G652D	—	—	0.4	0.3	0.25	8.6-9.5	—	—	—
B6_a1	—	—	G657A1	—	—	0.4	0.3	0.25	8.6-9.5	—	—	—
B6_a2	—	—	G657A2	—	—	0.35	0.25	0.25	8.2-9.0	—	—	—
B6_b3	—	—	G657B3	—	—	0.35	0.25	0.35	8.0-8.8	—	—	—
—	A1a.3	OM4	—	3.2	1.2	—	—	—	50±2.5	≥3500	≥500	500
—	A1a.2	OM3	—	3	1	—	—	—	50±2.5	≥1500	≥500	2000
—	A1a.1	OM2	—	3	1	—	—	—	50±2.5	≥500	≥500	4700
—	A1b	OM1	—	3.2	1.2	—	—	—	62.5±2.5	≥200	≥500	200



1. Outer jacket
2. Armor
3. Inner jacket
4. Bedding
5. Fibers



Halogen free
IEC 60754



Low smoke
IEC 61034



Flame retardant
IEC 60332-3-22



UV resistant
UL 1581