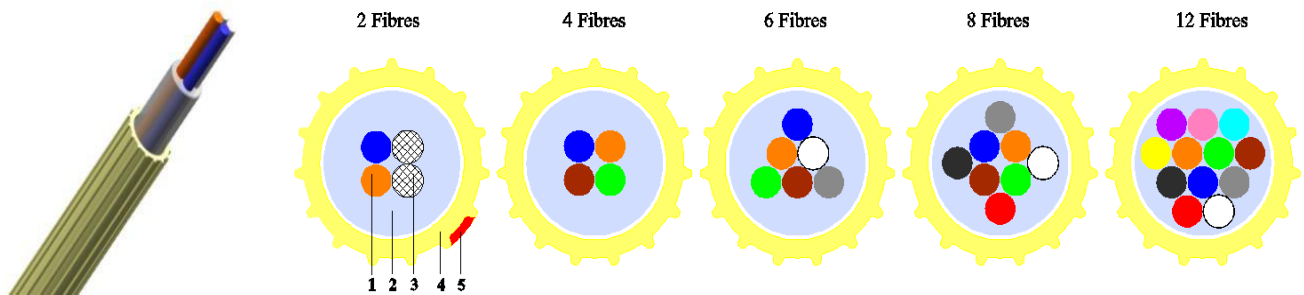


Air-blown fiber unit



Introduction

ABF is the important part of the series, and it is the most popular product of the indoor optical fiber cables for generic cabling in Europe, Japan, and South Korea etc. The ABF is the product that with extra small diameter, lightweight, highly flexibility and proper stiffness, and it can be blown into the 5.0/3.5mm microduct. The fibers are coated with a soft acrylate resin which provides excellent dimensional and thermal stability to cushion the fibers. In addition, the resin can be easily stripped in connecting the fibers. The outer sheath is a thermoplastic that is of low friction. The surface of the sheath is designed with special grooves, compared to the surface of the traditional optical fiber cable. It also provides not only the high level of mechanical protection, but also the perfect blowing performance.

Features and Benefits

- 2、4、6、8 and 12 fiber options.
- Stable structure, good mechanical and temperature performance.
- Designed with special grooves to advance blowing distance.
- Lightweight and proper stiffness, repeat installation.
- Designed with no gel, easy stripping and handling.
- Better costs advantage compared to traditional product.
- Complete accessories, less manpower, lower installation time

Standards

Unless otherwise specified in this specification, all requirements shall be mainly in accordance with the following standard specifications.

Optical FiberITU-T G.652、G.657 IEC 60793-2-50

Optical CableIEC 60794-1-2、IEC 60794-5

Basic Performance

Fiber Count	2 Fiber	4 Fiber	6 Fiber	8 Fiber	12 Fiber
Outer Diameter (mm)	1.15±0.05	1.15±0.05	1.35±0.05	1.50±0.05	1.65±0.05
Weight(g/m)	1.0	1.0	1.3	1.8	2.2
Min Bend radius (mm)	50	50	60	80	80
Temperature	Storage: -30℃ ~ +70℃ Operation: -30℃ ~ +70℃ Installation: -5℃ ~ +50℃				
Cable service life (estimate value)	25 years				
Note: It is recommended that the structure of 2 fiber unit consist of 2 filled fiber, for it is proved that 2 fiber unit with 2 filled fiber is better than the					

Testing parameter
1. Fiber Unit Attenuation

Fiber Type	SM G.652D、G.657
Attenuation	0.40dB/km max @1310nm 0.30dB/km max @1550nm

2. Blowing Test

Fiber Count	2 Fiber	4 Fiber	6 Fiber	8 Fiber	12 Fiber
Test equipment	PLUMETTAZ: UM25, ERICSSON: F, CATWAY: FBT-1.1				
Standard duct	5.0/3.5 mm				
Pressure	7bar / 10bar				
Typical blowing distance	500m / 1000 m	500m / 1000m	500m / 1000m	500m / 1000m	500m / 800m
Typical blowing time	10 min / 18 min	10 min / 18 min	12 min / 18 min	13 min / 18 min	15 min / 20 min

3. Mechanical Performance








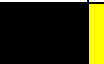




Test	Standard	Parameters	Test Results
Tension	EN 18700 A1/501 IEC 60794-1-2-E1	Load is 1×W	Additional attenuation ≤0.05dB after test
Bend	IEC 60794-1-2--E11A	Diam 40mm×3turns 5 cycles at 20°C	Additional attenuation ≤0.05dB,after test
Crush	IEC 60794-1-2-E3	100 N, 60s	Additional attenuation ≤0.05dB,after test
<i>All optical testing proceeded at 1550 nm</i>			

4. Environment Performance

Test	Standard	Parameters	Test Results
Temperature Cycle	IEC 60794-1-2-F1	-30°C, +70°C, (2 cycles)	Absolute attenuation ≤0.5dB/km,during test Additional attenuation ≤0.1dB/km,during and after
Water Soak	IEC 60794-5	1000 hours in water, 18°C~22°C	(Test after temp cycle) ≤0.07dB/km Change compared to start value
Damp Heat Cycle	IEC 60068-2-38	25°C, 65°C, 25°C, 65°C, 25°C,-10°C, 25°C	Absolute attenuation ≤0.5dB/km,during test Additional attenuation ≤0.1dB/km, during and after
<i>All optical testing proceeded at 1550 nm</i>			

Ordering Information

Fiber Color Code (Fiber colors can also be determined by customer)

NO.	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua
												

Jacket Color:Yellow

Jacket Marking:The outer sheath is marked in 1 meter intervals as follows:

HuiYuan ABF type of fiber and numbe [MM-YYYY]=length marking in meter=

Example: HuiYuan ABF G652D 4F [04- 2014] =1888m=

Delivery Length

Standard delivery lengths are 1000m, 2000m, 3000m, 4000m, 6000m with a tolerance of -0.5~+1%. For more options, please contact the customer service.