AIR BLOWN MINI CABLE

Technical Index

The structure of cable

1. Optical Fiber
2. Jelly
3. Groove
4. Ripcord
5. Loose Tube
6. HDPE Sheath

Technical Index

Cable Typ	GCYFXTY – XB1.3 (MTE + Cabel diameter			
	MTE2.0	MTE2.3	MTE2.5	MTE2.8
Fiber Count	2～4	6～12	2～12	14～24
Thickness of HDPE sheath	Nominal value: 0,20mm, Average value: 0,15			
Nominal Overall Diameter	2.0±0.1mm	2.3±0.1mm	2.5±0.1mm	2.8±0.1mm
Weigth	4.0 kg/1km	5.0 kg/1km	6.0 kg/1km	7.0 kg/1km
Cable Fiber Attenuation (single mode)	0,35dB/km max @1310nm 22dB/km max @1550nm			
Max. Tensile Strength	40N	50N	60N	60N
Max. Crushing force	600N/100mm			
Min. Benfing radius (Static/Dynamic	10/20 outer Φ			
Temperature	Storage -30 +50°C; Installation -10+40 °C; Operation -20 +50°C			
Cable service life (estimate value)	25 years			

Testing index

Blowing performance

Blowing Tool	Typical blowing length		
Plumettaz: PR-140, MiniJet-400 etc.	Fiber count	Duct type 3.5/5.0mm	Duce type 5.5/7.0mm
	2～12 fibers	800m	1500m
	14～24 fibers	500m	1500m

Mechanic performance

Item	Testing Method	Testing Results		Specified Value
Tension performance	IEC 60794-1-2-E1	Optical fiber strain	Additional attenuation	Max. Tensile Strength = Short term Allowable tension ≈2×(Long term Allowable Tension)
		Short term ：≤0.3 % Long term ：≤0.1 %	Short term ： a <0.1 dB, a reversible ； Long term ： a ≤0.03 dB	
Crush	IEC 60794-1-2E3	Short term ： a <0.10 dB, a reversible ； Long term ： a ≤0.03 dB ； The outer sheath has no visible crack.		Short term crushing force =600 N Long term crushing force =300 N
Repeated benfing	IEC 60794-1-2-E6	After test, a ≤0.03 dB ； The outer sheath has no visible crack.		R=20 outer Φ Bending load =15N Bending times =25
Torsion	IEC 60794-1-E7	After test, a ≤0.03 dB ； The outer sheath has no visible crack.		Torsion angle=±180º Torsion load =15N Torsion times =5
Cable bend	IEC 60794-1-2-E11A	After test, The optical fiber can't be broken ； The outer sheath has no visible crack.		R=20 outer Φ 10Turns Cycles times =5

Environment performance

Item	Testing Method	Testing Results		
Temperature	IEC 60794-1-2-E1	Allowable additional attenuation (1550nm)		
		G.652B	G.652D	G.657
		a ≤0.10 dB/km, a reversible		
Water penetration	IEC 60794-1-2-E5B	Water column: 1m, 3m cable, Period:24 hours No water leak through the open end of cable		
Filling compound flow	IEC 60794-1-2-E14	70℃, Period:24 hours	No compound flow from the cable	

Fiber Colors

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

<Colors> with black ring marks at intervals of 100mm

NO.	13	14	15	16	17	18	19	20	21	22	23	24
Color	Blue	Orange	Green	Brown	Grey	White	Red	natural	Yellow	Violet	Pink	Aqua

Sheath color: Green

Sheath Marking

Theo uter sheath is marked at intervals od 1 meter as follows:

ABC MINI number and type of fiber MTE Cable diameter [MM-YYYY] =length marking in meter=
ABC MINI 24 G652D MTE2.8 [04- 2014] =1888m=

Delivery Lengths

Standard delivery lengths are 2km, 4km, 6km with a tolerance of -1%～+3%.

Fiber Count	Drum length (m)	Drum Size Φ×W (mm)	Packing Size L×W×H (mm)	Weight (Gross) (kg)
2～12 Fibers ϕ 2.0-2.5	2000	Φ450×370	480×370×645	27
	4000	Φ500×370	530×370×695	39
	6000	Φ550×370	580×370×745	51
14～24 Fibers ϕ 2.8	2000	Φ500×370	530×370×695	31
	4000	Φ500×370	580×370×745	46

Packing

Wooden or plywood drums with protection