Hangzhou JUNPU Optical Fibre Cable Technical Specification

GYTC8S-nB1

1.0 General

1.1 Reference

The cable offered by HANGZHOU JUNPU are designed, manufactured and tested according to the standards

as follows:

ITU-T G.652D	Characteristics of a single-mode optical fibre
IEC60794-1-1	Optical fibre cables-part 1-1: Generic specification-General
IEC60794-1-2	Optical fibre cables-part 1-2: Generic specification-Basic optical cable test procedure
IEC60794-3	Optical fibre cables-part 3: Sectional specification-Outdoor cables
IEC 60794-4-20	Aerial optical cables along electrical power lines – family specification for ADSS (All Dielectric Self Supported) optical cables

1.2 Life Time

Optical fibre cables supplied in compliance with this specifications is capable to withstand the typical service condition for a period of twenty-five years without detriment to the operation characteristics of the cable.

2.0 OpticalFiber

Optical Fibres supplied in this specification meet the requirements of ITU-T G.652D

Parameters	Specification
MFD（1310nm）	9.1+/-0.4um
MFD（1550nm）	10.3+/-0.5um
Cladding diameter	125+/-1.0um
Fiber diameter	245+/-10um, with UV coating, and colored to : 250+/-15um
Core/cladding concentricity error	≤ 0.6um
Coating/cladding concentricity error	≤ 12.0um
Cladding non circularity	≤ 1.0%
Cable Cut off wavelength	λcc ≤1260nm
Attenuation coefficient	1310nm: 0.36dB/km max after cabling
	1550nm: 0.22dB/km max after cabling
Bending-loss performance of optical fiber @1550nm&1625nm	≤0.05dB (100 turns around a mandrel of 60mm diameter)
Polarization mode dispersion link value	≤0.1ps/km-1/2
Zero-dispersion wavelength	1300~1324nm
Zero-dispersion slope	≤0.092ps/nm2*km

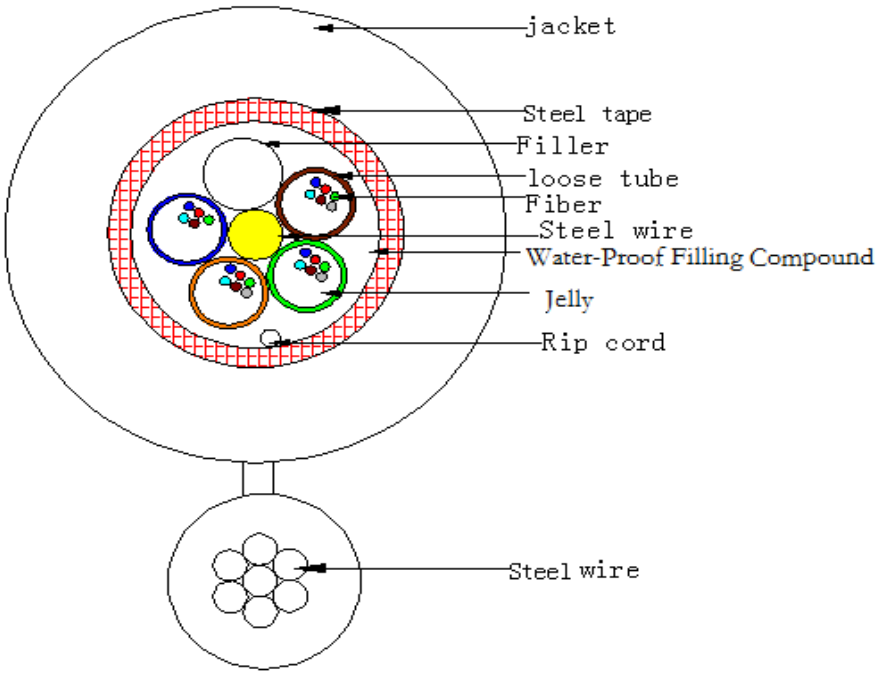
3. Optical Cable

3.1. Technical Characteristics

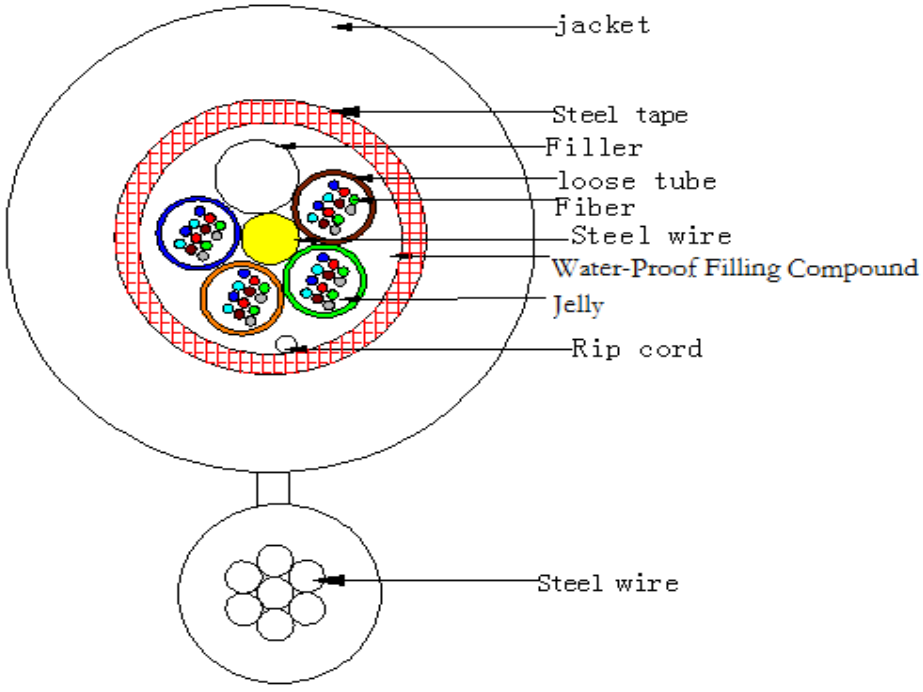
The unique second coating and stranding technology provide the fibres with enough space and

bending endurance, which ensure good optical property of the fibres in the cable
Accurate process control ensures good mechanical and temperature performance
High quality raw material guarantees the long service life of cable

3.2 Cross Section of Cable



GYTC8S-24C



GYTC8S-48C

3.4 Dimensions and Descriptions

The standard structure of the cable is shown in the following table, other structure and fibre count are also available according to customer requirements.

Item	Contents	Value					
			24	48			
Loose tube	Number		4	4			
	Outer diameter		1.8	2.1			
Filler	Number		1	1			
Max. fiber count pertube	G.652D		6	12			
Central strength member	Material	Steel wire					
	Diameter (mm)		1.4	1.6			
	PE layer diameter (mm)	-	-	-			
Water barrier	Material	Water –proof Filling Compound					
messenger(self-supporting)	Material		7/1.0 Steel wire	7/1.0 Steel wire			
Sheath	Material	MDPE					
	Color	Black					
	Thickness (mm)	Nominal:1.6					
Ripcord	Number	1					
	Color	White					
Cable diameter(mm) Approx.				9.2x16.2	10x17		
Cable weight(kg/km) Approx.				150±10	170±10		

3.5 Main Mechanical and Environmental Performance

Main mechanical performance				
Item	**Span(M)**	**Tension (N)**	**Crush (N/100mm)**	
			Short term	**Longterm**
24		6000	3000	1500
48		6000	3000	1500
Environmental and installationcondition				
Max. wind speed	Max. ice thickness	Initial Installationsag	Tempreture	

4. Packaging and Drum

4.1 Cable Sheath Marking

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

Interval: 1m
Outer sheath marking legend can be changed according to user's requests

4.2 Reel Length

Standard reel length: 4 km/reel, other length is also available

4.3 Cable Drum

The cables are packed in fumigated wooden drum

4.4 Cable Packing

Both ends of the cable will be sealed with suitable plastic caps to prevent the entry of moisture during shipping, handling and storage. The inner end is available for testing

4.5 Application

Item	Value
Operation temperature	-40℃~ +50℃
Installation temperature	-30℃~ +40℃
Storage temperature	-40℃~ +60℃
Static bending radius	10 times the cable diameter
Dynamic bending radius	20 times the cable diameter