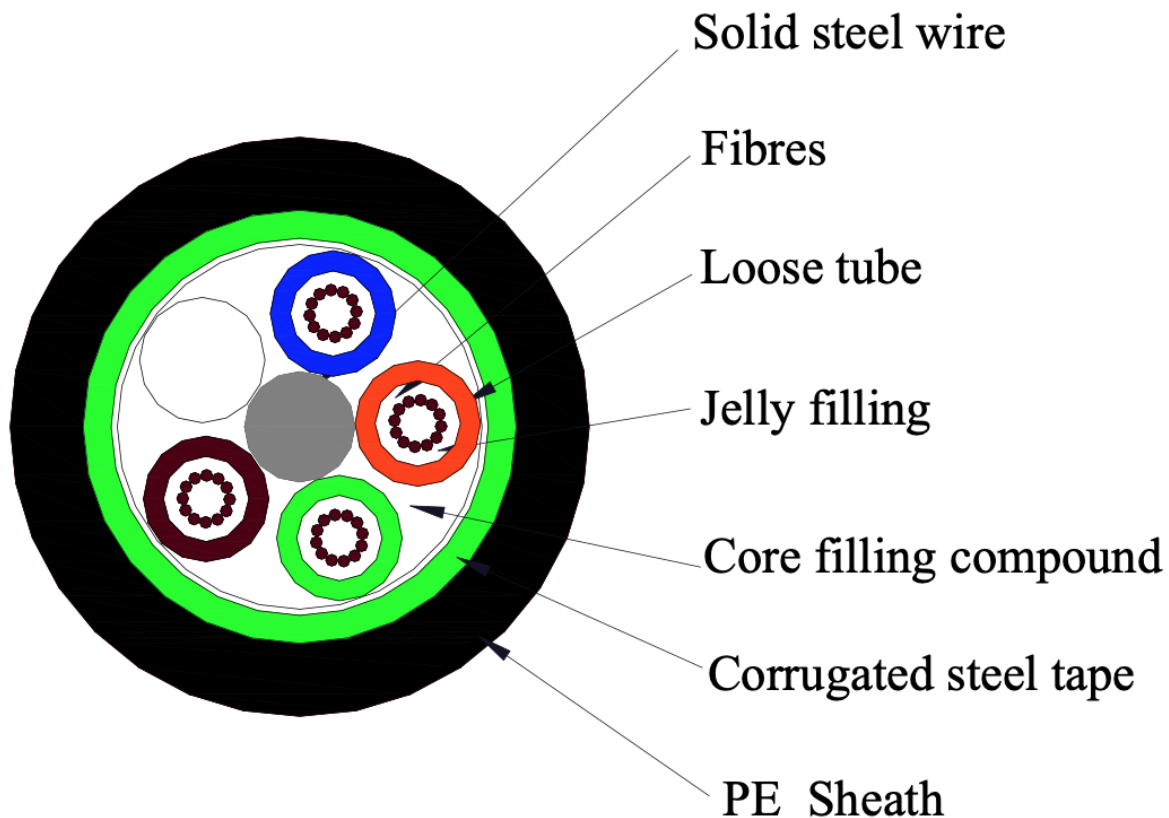




GIGANET[®]
C O M M U N I C A T I O N S

FIBRA ÓPTICA ARMADA 48 HILOS

LOOSE TUBE SM G652D



Description

- Loose tube
- Metallic central reinforcing element
- Filling compound
- Layer stranding loose tube
- Steel tape coated with PE jacket



GIGANET[®]
C O M M U N I C A T I O N S



ZONA 9 2311 9090
NARANJO 2311 9000
XELA 2311 9080



giganetonline.com

Features

- Low attenuation and dispersion, special control of exceed length and layer stranding technology ensures the good transmission, mechanical and environment performance.
- Steel tape bonding PE jacket provide excellent water blocking performance.
- Good water blocking material prevents the cable from longitudinal water penetration.
- Small outer diameter, lightness, compact structure and good flexibility.

Application

- Suitable for long-distance trunk and LAN communication.

Installation

- By duct and aerial

Technical Index

Cable Type		Layer Cable
Fiber Type		G.652D
Fiber Count		48
Number of loose tube		4
Number of filled string		1
Number of fiber/tube		12
Diameter of Steel wire		2.0 mm
Water blocking method	Cable Core	Water Blocking jelly
Steel tape	Material	Steel tape coated with Polymer
	Thickness	0.25mm
Thickness of PE sheath		1.70mm,
Overall Diameter		10.8 ± 0.2
Weight		135kg/km
Max. Tensile Strength		2500N
Min. Bending radius	-Static	10 outer Φ
Min. Bending radius	-Dynamic	20 outer Φ
Temperature range	Storage	-40~+70°C
	Installation	-30~+50°C
	Operation	-40~+70°C



Mechanic performance:

Item	Testing Method	Mechanic index		Remark
Tension performance	IEC 60794-1-2-E1	Optical fiber strain	Additional attenuation	Short term Allowable tension =1.5 W Long term Allowable tension =0.8 W
		Short term: $\leq 0.3\%$ Long term: $\leq 0.1\%$	Short term: $\Delta a \leq 0.1$ dB, Δa reversible; Long term: $\Delta a \leq 0.03$ dB	
Crush	IEC 60794-1-2-E3	Short term: $\Delta a \leq 0.05$ dB, Δa reversible; Long term: $\Delta a \leq 0.03$ dB; The outer sheath has no visible crack.		Short term crushing force =3000 N Long term crushing force =1500 N
Impact	IEC 60794-1-2-E4	$\Delta a \leq 0.1$ dB; The outer sheath has no visible crack.		Impact energy =4.4N • m Radius of hammer=12.5mm 10Turns
Repeated bending	IEC 60794-1-2-E6	After test, $\Delta a \leq 0.03$ dB; The outer sheath has no visible crack.		R=20 outer Φ Bending load =50N Bending times =30
Torsion	IEC 60794-1-2-E7	After test, $\Delta a \leq 0.03$ dB; The outer sheath has no visible crack.		Torsion angle= $\pm 180^\circ$ Torsion load =50N Torsion times =10
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 =3

Environment performance:

Item	Testing Method	Environment index		
Temperature cycling	IEC 60794-1-2-F1	Allowable additional attenuation (1550nm)		
		G.652B	G.652D	G.655
		≤ 0.05 dB/km		
Water penetration	Water column: 1m, 3m cable, Period:24 hours	No water leak through the open end of cable		
Filling compound flow	70°C, Period:24 hours	No compound flow from the cable		

Fiber Colors(in the tube)

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

◆ **Loose Tube Colors** (Loose tube colors can be determined by the requirement of customer)

NO.	1	2	3	4
Color	Blue	Orange	Green	Brown