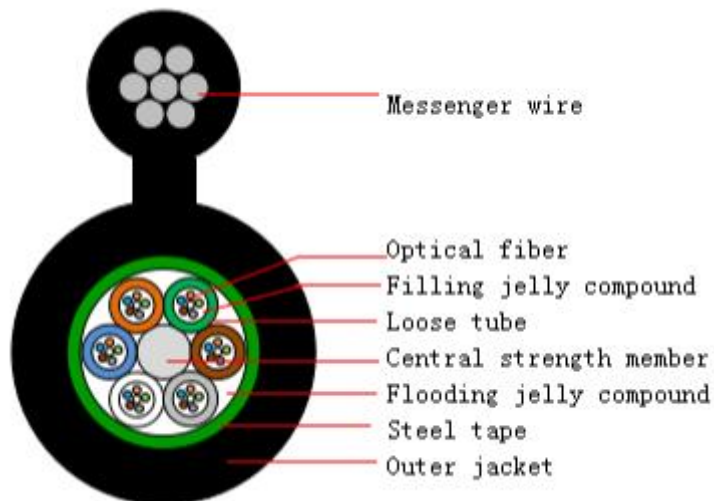


Outdoor Fiber Optical Cable|Figure 8 Fiber Cable SM G652 G657 armored Multi-Core GYTC8S53

Cable Design



Technical data

Fiber count	24			
SM fiber	Fiber type	G652D	core concentricity erro	≤0.5um
	MFD	8.6 ~ 9.8um	cladding non-circularity	≤0.7%
	Cladding diameter	124.8±0.7um	Fiber colore	Standard spectrum
Loose bufier	Material	PBT	Color	blue white yellow
	Diameter	1.65±0.05mm	Thickness	0.3±0.05mm
Filler rod	Material	PP	Color	white
	Diameter	1.65	Qty	4
Strength member	Diameter	bright steel wire	Diameter	φ1.8
Water blocking system	Material	water blocking tape		
Inner sheath	Material	PE+steel tape	Color	black
	Diameter	7.8±0.2mm	Thickness	0.8±0.1mm
Rip cord	Spec	White 1110D*2	Qty	1
Gallus	Material	bright steel stranded wire	Spec	1.0*7-3.0mm
Out sheath	Material	PE+steel tape	Color	black

	Diameter	6.0±0.2*11.9±0.5 -19.7±0.5	Thickness	1.6±0.2
--	----------	-------------------------------	-----------	---------

Tensile strength	Short term(N)	6000N
	Long term(N)	2000N
Crush load	Short term(N)	3000N/100mm
	Long term(N)	1000N/100mm
Bending radius	Dynamic	20D
	Static	10D
Temperature	-20°C~+70°C	

Fibre and Loose Tube Colours

1	2	3	4	5	6
Blue	Orange	Green	Brown	Gray	White
7	8	9	10	11	12
Red	Black	Yellow	Violet	Pink	Aqua

The properties of single mode optical fiber (ITU-T Rec. G.652.D)

Item	Specification
Fiber type	Single mode
Fiber material	Doped silica
Attenuation coefficient @ 1310 nm @ 1383 nm @ 1550 nm @ 1625 nm	0.35 dB/km 0.30 dB/km 0.21 dB/km 0.24 dB/km
Point discontinuity	≤ 0.05 dB
Cable cut-off wavelength	≤ 1260 nm
Zero-dispersion wavelength	1300 ~ 1324 nm
Zero-dispersion slope	≤ 0.092 ps/(nm ² .km)
Chromatic dispersion @ 1288 ~ 1339 nm @ 1271 ~ 1360 nm @ 1550 nm @ 1625 nm	≤3.5 ps/(nm. km) ≤5.3 ps/(nm. km) ≤18 ps/(nm. km) ≤22 ps/(nm. km)
PMD _Q (Quadrature average*)	≤0.2 ps/km ^{1/2}
Mode field diameter @ 1310 nm	9.2±0.4 μm

Core / Clad concentricity error	$\leq 0.5 \text{ } \mu\text{m}$
Cladding diameter	$125.0 \pm 0.7 \text{ } \mu\text{m}$
Cladding non-circularity	$\leq 1.0\%$
Primary coating diameter	$245 \pm 10 \text{ } \mu\text{m}$
Proof test level	100 kpsi (=0.69 Gpa), 1%
Temperature dependence 0oC~ +70oC @ 1310 & 1550nm	$\leq 0.1 \text{ dB/km}$

Sheath marking

The optical fiber drop cable shall have sequentially numbered length marking at intervals of approximately 1 meter. The starting number of ordering length for any coil shall begin with zero meter. The accuracy of the measurement of length marking shall be held within the limits of $\pm 1\%$.

- a) Manufacturer's name
- b) Type of wire
- c) Year and month of manufacture
- d) Length marking each meter along the wire