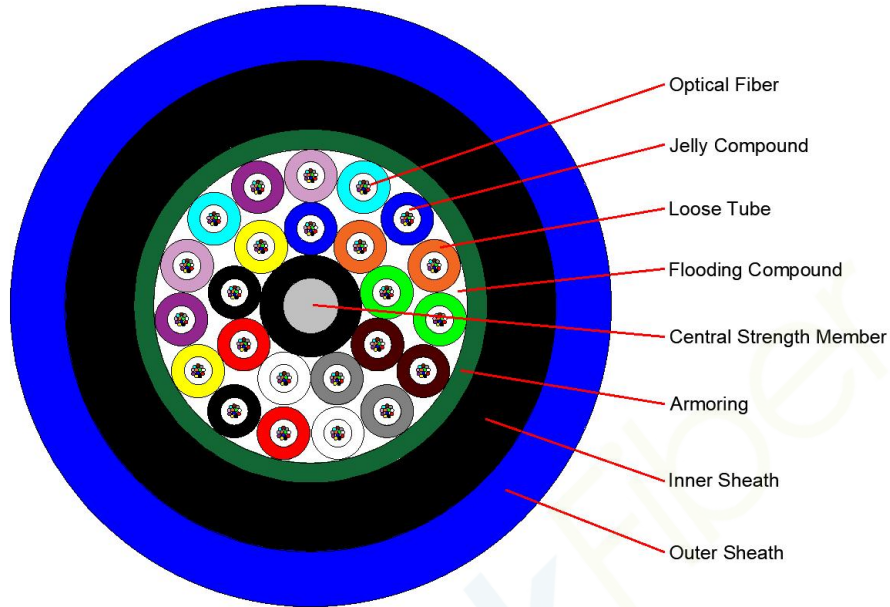




Outdoor Fiber Optical Cable|Coal Mine Fiber Cable Armored SM 96 144 288 Core MGTSV MDPE

Cable Design



Technical Data Sheet

No. of cable		144	288
Fiber Model		G.652D	
Design (StrengthMember+Tube&Filler)		1+12	1+9+15
Central Strength Member	Material	Steel Wire	
	Diameter (±0.5) mm	2.0	
Loose Tube	Material	PBT	
	Diameter (±0.06) mm	1.9	
	Thickness (±0.05) mm	0.3	
	The Max.Core NO./Tube	12	
Armoring	Material	Steel Strip	
	Thickness (±0.03) mm	0.20	
Inner Sheath	Material	MDPE	
	Thickness (±0.2) mm	1.2	
Outer Sheath	Material	CMR-BLUE	
	Thickness (±0.2) mm	1.0	
Cable Diameter (±0.5) mm		14.9	16.8
Cable Weight (±10) kg/km		252	310



Min. bending radius	Without Tension	10× Cable- φ
	Under Maximum Tension	20× Cable- φ
Temperature range (°C)	Installation	-20~+60
	Transport&Storage	-40~+70
	Operation	-40~+70

Fibre Colours

NO.	1	2	3	4	5	6
Color	Blue	orange	green	brown	gray	white
NO.	7	8	9	10	11	12
Color	red	black	Yellow	Violet	Pink	Aqua

Loose Tube Colours

NO.	1	2	3	4	5	6
Color	Blue	orange	green	brown	gray	white
NO.	7	8	9	10	11	12
Color	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	≤ 0.35 dB/km
@ 1383 nm	≤ 0.32 dB/km
@ 1550 nm	≤ 0.21 dB/km
@ 1625 nm	≤ 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	≤3.5 ps/(nm. km)
@ 1271 ~ 1360 nm	≤5.3 ps/(nm. km)
@ 1550 nm	≤18 ps/(nm. km)
@ 1625 nm	≤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	≤ 0.5 μm
Cladding diameter	125.0 ± 0.7 μm



Cladding non-circularity	$\leq 1.0\%$
Primary coating diameter	$245 \pm 10 \text{ um}$
Proof test level	100 kpsi (=0.69 Gpa), 1%

Sheath marking

The color of marking is white, but if the remarking is necessary, the **white color** marking shall be printed newly on a different position.

An occasional unclear of length marking is permitted if both of the neighboring markings are clear.

The both cable ends are sealed with heat shrinkable end caps to prevent water ingress.

