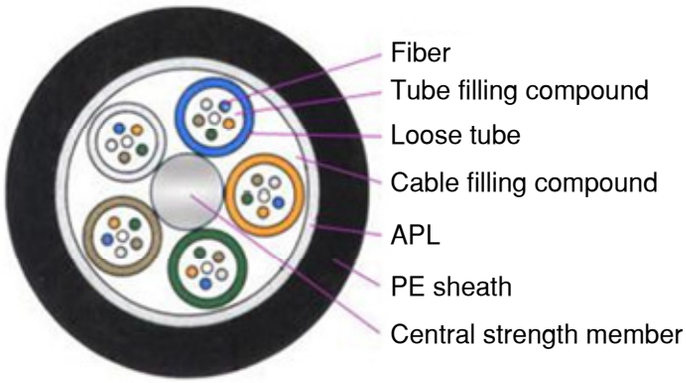
MULTI LOOSE TUBE OUTDOOR ARMORED CABLE

Cross sectional diagram



Technical Specification

Fiber count		2~30	32~36	38~60	62~72	74~84
Loose Tube	OD(mm):	1.6 $^{\pm 0.1}$	1.6 $^{\pm 0.1}$	1.9 $^{\pm 0.1}$	1.9 $^{\pm 0.1}$	1.9 $^{\pm 0.1}$
	Material:	PBT				
Max fiber count/tube		5	6	12	12	12
Core unit		5	6	5	6	7
Steel/Coating (mm)		1.4	1.7	1.4	2.0	2.0/2.6
Water Block Material:		Water blocking compound				
Armored		Aluminum tape				
Sheath	Thickness:	Non. 1.5mm				
	Material:	PE				
OD of cable (mm)		8.6	8.9	9.2	9.8	10.4
Net Weight (kg/km)		70	77	75	95	104
Fiber count		86~96	98~108	110~120	122~132	134~144
Loose Tube	OD(mm):	1.9 $^{\pm 0.1}$	1.9 $^{\pm 0.1}$	1.9 $^{\pm 0.1}$	1.9 $^{\pm 0.1}$	1.9 $^{\pm 0.1}$
	Material:	PBT				
Max fiber count/tube		12	12	12	12	12
Core unit		8	8	10	11	12
Steel/Coating (mm)		2.0/3.2	2.0/3.8	2.0/4.5	2.0/5.1	2.0/5.7
Water Block Material:		Water blocking compound				

Armored		Aluminum tape				
Sheath	Thickness:	Non. 1.5mm				
	Material:	PE				
OD of cable (mm)		11.2	11.8	12.5	13.1	13.7
Net Weight (kg/km)		114	125	137	148	160

Fiber and loose tube identification

NO.	1	2	3	4	5	6	7	8	9	10	11	12
Tube Color	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Pink	Aqua
NO.	1	2	3	4	5	6	7	8	9	10	11	12
Fiber Color	Blue	Orange	Green	Brown	Slate	natural	Red	Black	Yellow	Violet	Pink	Aqua

Optical Fiber

Single mode fiber

ITEMS	UNITS	SPECIFICATION	
Fiber Type		G652D	G657A
Attenuation	dB/km	1310nm ≤ 0.36 1550nm ≤ 0.22	
Chromatic Dispersion	ps/nm².km	1310nm ≤ 3.5 1550nm ≤ 18 1625nm ≤ 22	
Zero Dispersion Slope	ps/nm².km	≤ 0.092	
Zero Dispersion Wavelength	nm	1300~1324	
Cut-off Wavelength(λcc)	nm	≤ 1260	
Attenuation vs. Bending (60mm x 100turns)	dB	(30mm radius, 100ring) ≤ 0.1 @ 1625nm	(10mm radius, 1ring) ≤ 1.5 @ 1625nm
Mode Field Diameter	μm	9.2 + 0.4 at 1310nm	9.2 + 0.4 at 1310nm

Core-Clad Concentricity	μm	≤0.5	≤0.5
Cladding Diameter	μm	125±1	125±1
Cladding Non-circularity	%	≤0.8	≤0.8
Coating Diameter	μm	245±5	245±5
Proof Test	Gpa	≤0.69	≤0.69

Multi mode fiber

ITEMS		UNITS	SPECIFICATION				
			62.5/125	50/125	OM3-150	OM3-300	OM4-550
Fiber Core Diameter		μm	62.5±2.5	50.0±2.5	50.0±2.5		
Fiber Core Non-circularity		%	≤6.0	≤6.0	≤6.0		
Cladding Diameter		μm	125.0±1.0	125.0±1.0	125.0±1.0		
Cladding Non-circularity		%	≤2.0	≤2.0	≤2.0		
Coating Diameter		μm	245±10	245±10	245±10		
Coat-Clad Concentricity		μm	≤12.0	≤12.0	≤12.0		
Fiber Core Diameter		%	≤8.0	≤8.0	≤8.0		
Core-Clad Concentricity		μm	≤1.5	≤1.5	≤1.5		
Attenuation	850nm	dB/km	3.0	3.0	3.0		
	1300nm	dB/km	1.5	1.5	1.5		
OFL	850nm	MHz . km	≥160	≥200	≥700	≥1500	≥3500
	1300nm	MHz . km	≥300	≥400	≥500	≥500	≥500
The biggest theory numerical aperture		/	0.275±0.015	0.200±0.015	0.200±0.015		

Fiber optic cable bending radius

Static bending: ≥10 times than cable out diameter.

Dynamic bending: ≥20 times than cable out diameter.

Mark and Package

Cable Mark

-Manufacturing year, fiber count, fiber type, sheath material, meter mark for without especial request.

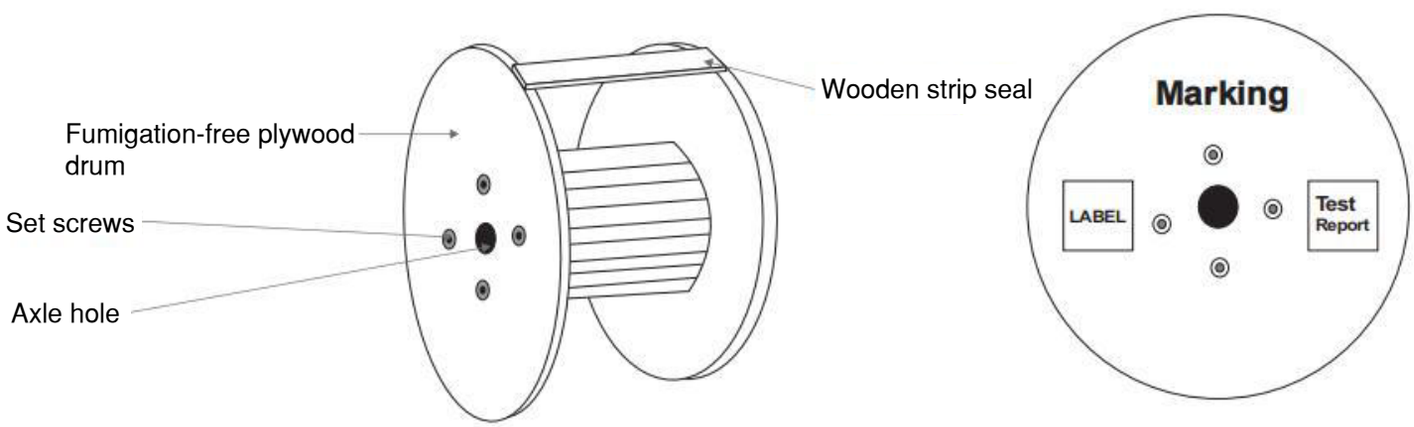
-Customized printing by order request.

Drum Mark

-Drum size according to the length of cable packed.

-Logo will be print on both side of drum, size will be according to customer request.

-Label including manufacturing date, item numer, length, description of cable, drum number. Format and information available be customized.



Package

-Packing length, 2km/plywood reel, the other packed available.

-Packing material, cable on drum wrapped by protective foil, plywood reel as usual package, metal reel available but shall be noted individually if required specially.