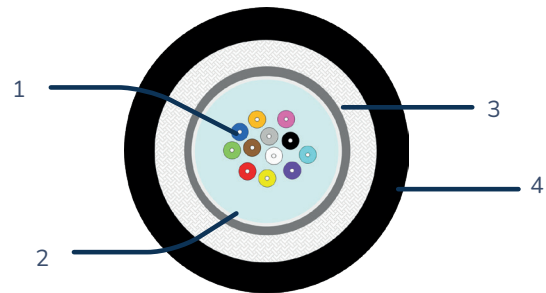


KFOxxxxCT

Central tube Outdoor PEHD optical fiber cable



- 1. Optical fiber 250 microns
- 2. PBT tube filled with thixotropic gel
- 3. Fiber glass protection
- 4. Anti-UV PEHD jacket



- ✔ Complies with ISO 11801 and IEC 60794
- ✔ Very good waterproofing and UV resistance

THE PURPOSE

Our fiber optic cable offers a high performance solution for data transmission, while offering regular protection against rodent, water penetration and UV rays. This cable contains up to 24 optical fibers, each protected by a color-coded PBT tubing for easy identification. The central dielectric tube is filled with a thixotropic waterblocking gel, ensuring optimal protection against humidity. To reinforce the structure, fiberglass filaments are added, and a dry swelling material fills the gaps to prevent any water penetration. An UV- resistant PEHD outer jacket is extruded around the assembly, for long term durability.

COMPLIANCE

Standard cable	System	Applications
IEC 601793 B1.3 Singlemode	ISO/IEC 11801-1:2017 OS2, OM3	From 1G to 400G
IEC 601793-2 A1 Multimode	or OM4	

THE STRUCTURE

Optical fiber 9/125 OS2 / G652D

Tube : PBT filled with thixotropic gel, accommodates up to 24 optical fibers - 2-12FO :2.9mm /16FO-24FO : 3.3mm.

Fiber glass protection : «waterblocking» glass yarn.

Assembly: Central core with waterblocking tape.

Jacket : UV resitant Black PEHD

Marking : UNIKKERN OPTICAL FIBER xx FO ZZZ X/125 CENTRAL TUBE UNIVERSAL Outdoor Certified SGS 21WWYY xxxxxxM



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Central tube Outdoor PEHD optical fiber cable



THE STRUCTURE

Marking according to the following code: IEC 304

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

From 13 to 24, the colors are identical but with an additional black stripe.

PURCHASE INFO

Nb of Fibre	Nb of Tube	Perf	References	Diameter (nom)	Weight (Kg)	Crush resistance (N/100mm)	Tensile strength(N)	Packaging
6	1	OS2	KFO6OS2CT	6.5mm	50	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
8	1	OS2	KFO8OS2CT	6.5mm	52	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
12	1	OS2	KFO12OS2CT	6.5mm	54	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
24	1	OS2	KFO24OS2CT	7.0mm	64	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
6	1	OM3	KFO6OM3CT	6.5mm	50	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
8	1	OM3	KFO8OM3CT	6.5mm	52	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
12	1	OM3	KFO12OM3CT	6.5mm	54	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
24	1	OM3	KFOCT24OM3CT	7.0mm	64	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
6	1	OM4	KFO6OM4CT	6.5mm	50	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
8	1	OM4	KFO8OM4CT	6.5mm	52	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
12	1	OM4	KFO12OM4CT	6.5mm	54	300 long term 1000 Short term	800 long term 1200 Short term	D4000M
24	1	OM4	KFOCT24OM4CT	7.0mm	64	300 long term 1000 Short term	800 long term 1200 Short term	D4000M



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Central tube Outdoor PEHD optical fiber cable

TECHNICALITIES

OS2 Performances (G652D)

MODE FIELD DIAMETER @1310NM	9.2±0.4µM
MODE FIELD DIAMETER @1550NM	10.4±0.5µM
CLADDING DIAMETER	125.0± 1µM
CORE CONCENTRICITY ERROR	≤0.6µM
CLADDING NON-CONCIRCULARITY	≤ 1.0%
COATING DIAMETER	245±10µM (BEFORE COLORED)
	250±15µM (COLORED)
COATING/CLADDING CONCENTRICITY ERROR	≤12µM
CABLE CUTOFF WAVELENGTH	≤1260 nM
POINT DISCONTINUITY	≤0.05DB
ATTENUATION COEFFICIENT @ 1310 NM	≤0.36DB/KM
@ 1383 NM	≤0.36DB/KM
@ 1550 NM	≤0.22DB/KM
@ 1625NM	≤0.24DB/KM
MACRO-BEND INDUCED ATTENUATION	
100 TURNS, 30MM RADIUS @1550N/1625M	≤0.05DB
PMD	
MAX. INDIVIDUAL FIBER	≤0.2 PS/KM ^{1/2}
PMDQ	≤0.1 PS/KM ^{1/2}
ZERO-DISPERSION WAVELENGTH	1300 ~ 1324 NM
ZERO-DISPERSION SLOPE	≤ 0.092 PS/(NM ² .KM)
CHROMATIC DISPERSION COEFFICIENT	
@ 1288-1339 NM	≤3.5PS/(NM. KM)
@ 1271-1360NM	≤5.3PS/(NM. KM)
@ 1550 NM	≤18PS/(NM. KM)
@ 1625 NM	≤22PS/(NM. KM)
PROOF TEST LEVEL	100 KPSI (0.69 GPA), 1% STRAIN
COATING STRIP FORCE(Peak Value)	1.3~8.9N
FIBER CURL (RADIUS)	³ 4 M



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Central tube Outdoor PEHD optical fiber cable



TECHNICALITIES

MULTIMODE FIBERS common Performances

CORE DIAMETER	50 ± 2.5 μM
CORE NON-CIRCULARITY	≤ 5%
CORE-CLADDING CONCENTRICITY ERROR	≤ 1.5 μM
CLADDING DIAMETER	125 ± 1.0 μM
CLADDING NON-CIRCULARITY	≤ 1%
COATING DIAMETER	242 ± 7 μM
COATING NON-CIRCULARITY	≤ 5%
COATING-CLADDING CONCENTRICITY ERROR	≤ 10%
ATTENUATION COEFFICIENT AT 850 NM	≤ 2.4 DB/KM
ATTENUATION COEFFICIENT AT 1300 NM	≤ 0.6 DB/KM
MACROBENDING LOSS MANDREL RADIUS = 7.5 MM, 2 TURNS MANDREL RADIUS = 15 MM, 2 TURNS MANDREL RADIUS = 37.5 MM, 100 TURNS	≤ 0.2 / ≤ 0.5 DB ≤ 0.1 / ≤ 0.3 DB ≤ 0.5 / ≤ 0.5 DB
PEAK COATING STRIP FORCE, UNAGED AND AGED	1.3 ≤ FPEAK-STRIP ≤ 8.9 N

OM3 Specific performances

BANDWIDTH (OFL) OVERFILLED MODAL BANDWIDTH AT 850 NM OVERFILLED MODAL BANDWIDTH AT 1300 NM	≥ 1500 MHZ.KM ≥ 500 MHZ. KM
BANDWIDTH (EMB) EFFECTIVE MODAL BANDWIDTH AT 850 NM	≥ 2000 MHZ.KM

OM4 Specific performances

BANDWIDTH (OFL) OVERFILLED MODAL BANDWIDTH AT 850 NM OVERFILLED MODAL BANDWIDTH AT 1300 NM	≥ 3500 MHZ.KM ≥ 500 MHZ. KM
BANDWIDTH (EMB) EFFECTIVE MODAL BANDWIDTH AT 850 NM	≥ 4700 MHZ.KM

