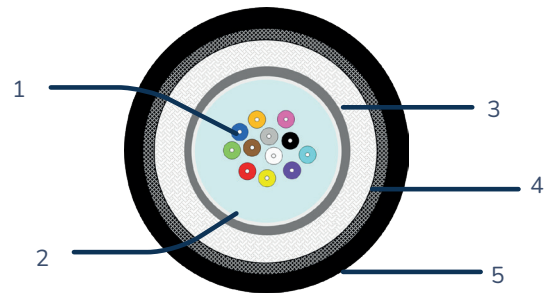


KFOxxxxCTAZHB2

LSZH Indoor-Outdoor Armored Central Tube Opitic Cable



UNIK ✓

- ✓ Complies with ISO 11801 and IEC 60794
- ✓ Very good waterproofing and UV resistance
- ✓ The steel armor guarantees the antirodent property
- ✓ LSZH B2ca jacket EN50575

- 1. Optical fiber 250microns
- 2. PBT tube filled with thixotropic gel
- 3. Fiberglass protection
- 4. Corrugated steel armor
- 5. LSZH outer sheath Black RAL 9005

THE PURPOSE

Our fiber optic cable offers a high-performance solution for data transmission, while offering enhanced protection against rodents, water penetration and UV rays.

This cable contains up to 24 optical fibers, each protected by color-coded PBT tubing for easy identification. The central tube is filled with a thixotropic water-blocking gel, ensuring optimal protection against humidity.

To reinforce the structure, the tube is assembled with fiberglass filaments are added, and a dry swelling material fills the gaps to prevent any penetration of water.

The corrugated steel strip, which protects against physical damage, is followed by a LSZH outer jacket against UV, for a long-term durability and fire reaction permitting an indoor use.

COMPLIANCE

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

THE STRUCTURE

Optical fiber: 9/125 OS2 / G652D - 50/125 OM3/OM4

Tube : Made of PBT and filled with thixotropic gel, it can contain up to 24 optical fibers - 2-24FO :3.0mm

Fiberglass protection : Waterblocking fiberglass yarns

Assembly: Central with swelling tape

Armor : Corrugated steel

Jacket : Black LSZH RAL9005 HFFR-UV

Marking : UNIKKERN OPTICAL FIBER xx FO ZZZ x/125 MULTITUBE ARMORED B2ca Certified SGS 21WWY-YxxxxxxM










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THE STRUCTURE

Identification of fibers 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 Fiber	Nb of Tube	Perf	References	Diameter (nom)	Weight (Kg)	Crush resistance(N/100mm)	Tensile strength (N)	Packing
6	1	OS2	KFO6OS2CTAZHB2	7.5mm	92	2000 long term	1600 long term 2700 short term	D4000M
8	1	OS2	KFO8OS2CTAZHB2	7.5mm	93	2000 long term	1600 long term 2700 short term	D4000M
12	1	OS2	KFO12OS2CTAZHB2	7.5mm	95	2000 long term	1600 long term 2700 short term	D4000M
24	1	OS2	KFO24OS2CTAZHB2	7.5mm	99	2000 long term	1600 long term 2700 short term	D4000M
6	1	OM3	KFO6OM3CTAZHB2	7.5mm	92	2000 long term	1600 long term 2700 short term	D4000M
8	1	OM3	KFO8OM3CTAZHB2	7.5mm	93	2000 long term	1600 long term 2700 short term	D4000M
12	1	OM3	KFO12OM3CTAZHB2	7.5mm	95	2000 long term	1600 long term 2700 short term	D4000M
24	1	OM3	KFO24OM3CTAZHB2	7.5mm	99	2000 long term	1600 long term 2700 short term	D4000M



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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/KM1/2
PMDQ	≤0.1 PS/KM1/2
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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LSZH Indoor-Outdoor Armored Central Tube Optic 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

