



REAL OPTIC

Specification

For

<Multijumper Cable>



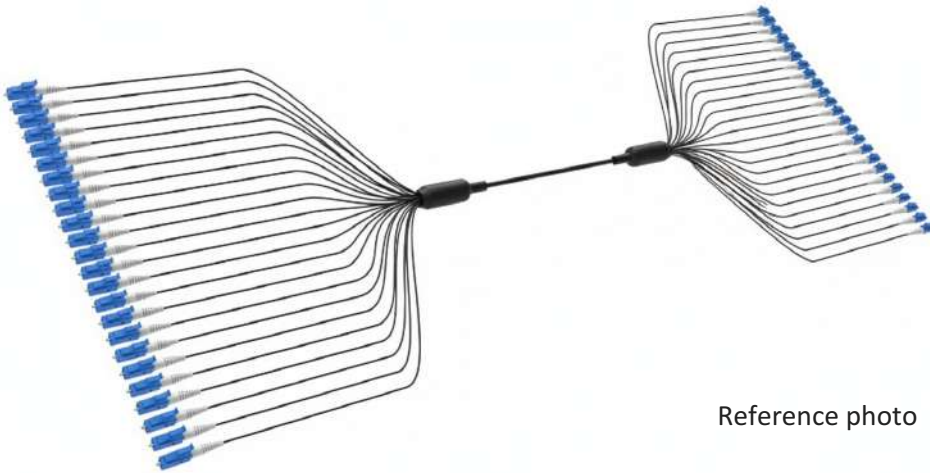
Importado y Distribuido por Real Optic Limitada

Avenida Ventisquero #1204 Modulo 18 - Renca, Chile - ventas@realoptic.com - www.realoptic.com - WP: +56996374501



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Cable



Reference photo

Real Optic Indoor, Indoor/Outdoor Preterm offers quick and cost-effective installation within an indoor environment or intrabuilding premises. The preterm is made of Tight Buffer and is best suited for application to load enclosures with 2.5mm tails. We manufacture preterm with superior fiber/cable performance, high quality connectors which offer improved link loss budgets.

FEATURES

- ✓ Conform to IEC, EIA-TIA, and Telecordia performance requirements
- ✓ Available in standard Single-mode and Multimode fiber options
- ✓ Available in LC, SC, FC, ST in both UPC/APC and other connector types
- ✓ Available with our standard pulling system
- ✓ RoHS, REACH & SvHC compliant, Materials Conflict compliant
- ✓ Option available of Outdoor rated construction

APPLICATIONS

- ✓ Telecommunication networks
- ✓ Data centers, Co-location DC
- ✓ LAN or Campus wide Network
- ✓ Broadband network
- ✓ Internal horizontal and backbone cabling
- ✓ 2.5 mm tails ideal for installation inside panels or wall boxes

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SINGLE FERRULE CONNECTOR SPECIFICATION

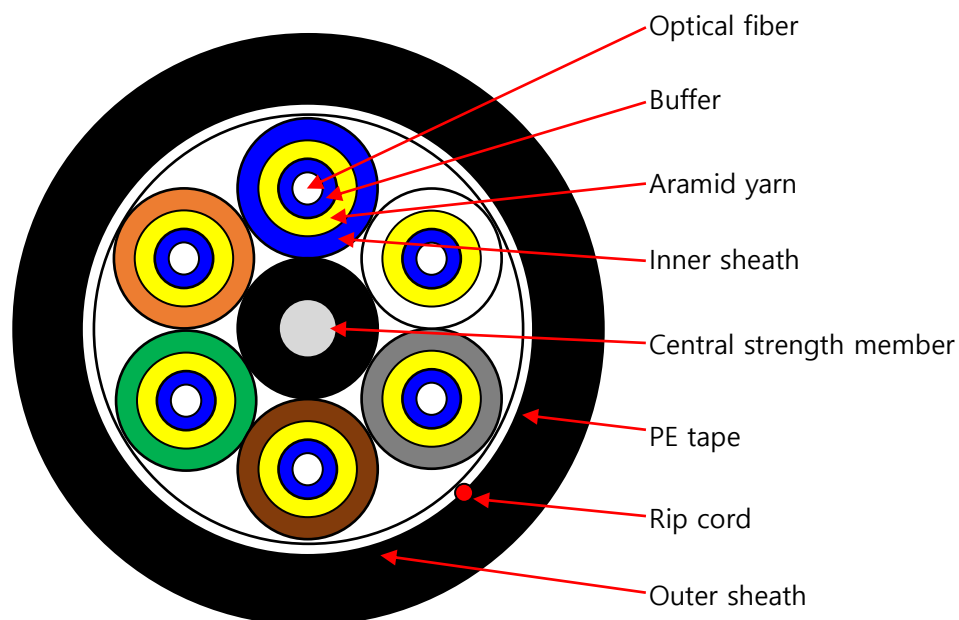
Parameters	IL – Max	IL – Typical	RL (PC/APC)
SM – Standard	≤ 0.30 dB	≤ 0.20 dB	> 55/65 dB
SM – Premium	≤ 0.15 dB	≤ 0.12 dB	> 55/65 dB
MM – Standard	≤ 0.30 dB	≤ 0.18 dB	> 28 dB
MM – Premium	≤ 0.15 dB	≤ 0.08 dB	> 28 dB



1. Cable Structure

1.1 Cross Section

1.1.3 6C



1.2 Construction

Structure		Material	SPECIFICATIONS
Optical Fiber		Fiber	- SMF : G.652D
Tight Buffer		Material	- TPEE
		Diameter	- 0.90 ± 0.05mm
		Color	- Blue, Orange, Green, Brown, Gray, White
Inner sheath	Strength Member		- Aramid yarn
	Inner Jacket	Material	- LSZH
		Diameter	- 2.5 ± 0.1mm
		Color	- Black
Outer sheath	Central strength member		- FRP + LSZH sheath
	Wrap		- PE tape
	Rip Cord		- 1ea
	jacket	Material	- LSZH



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		Diameter	- Diameter : 1.3 Reference - Jacket thickness : Nom. 1.2mm
		Color	- Black
Marking		Ink Jet	White, 1m

1.3 Cable diameter & Tensile strength

Fiber Count	Outer Diameter	Weight (Nominal)	Max. Pulling Strength	Remark
	mm	Kg/km	N	
6	10.1 ± 0.5	98	1,200	1km/drum

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2.1 The properties of single mode fiber (ITU.G.652D)

Parameter	Specification
Attenuation coefficient @ 1310 nm @ 1383 nm @ 1550 nm @ 1625 nm	(Cabled) ≤ 0.38 dB/km ≤ 0.38 dB/km ≤ 0.26 dB/km ≤ 0.30 dB/km
PMD(Maximum individual fiber)	≤ 0.2 ps/km ^{1/2}
Cable cut-off wavelength	≤ 1260 nm
Zero-dispersion wavelength	1300 ~ 1324 nm
Zero-dispersion slope	≤ 0.092 ps/(nm ² .km)
Chromatic dispersion @ 1285 ~ 1330 nm @ 1550 nm	≤ 3.5 ps/(nm.km) ≤ 18.0 ps/(nm.km)
Mode field diameter @ 1310 nm	8.6 - 9.2 $\pm$ 0.4 μ m
Core/Clad concentricity error	≤ 0.6 μ m
Cladding diameter	125.0 $\pm$ 0.7 μ m
Cladding non-circularity	≤ 1.0 %
Primary coating diameter	245 $\pm$ 10 μ m
Proof test level	100 kpsi, 1%



3. Cable Property

3.1 Mechanical & Environmental properties

3.1.1 Cable bending radius: 10 x cable diameter (during operation)
15 x cable diameter (during installation)

3.1.2 Operating temperature range : -40°C to +85°C
Installation temperature range : -10°C to +60°C
Storage temperature range : -40°C to +85°C

3.2 Mechanical & Environmental requirements

No	Item	Test Method	Specification
1	Tensile load IEC60794-1-2-E1	- Load: 1,200N - Length: 50 m ↑ - Time: 10 mins	-Loss change ≤ 0.30 dB @1550 nm(SMF) ≤ 0.30 dB @1300 nm(MMF)
2	Crush test IEC60794-1-2-E3	- Load: 2,200 N - plate : 100*100 - Time: 5 mins.	-Loss change ≤ 0.30 dB @1550 nm(SMF) ≤ 0.30 dB @1300 nm(MMF)
3	Bending test IEC60794-1-2-E11B	- Mandrel dia.: 30 x cable diameter - Bend angle : ±180° - Time : 5	-Loss change ≤ 0.30 dB @1550 nm(SMF) ≤ 0.30 dB @1300 nm(MMF)
4	Impact test IEC60794-1-2-E4	- Radius of impacted surface: 12.5 mm - Impact load: 1.5 kg - Falling height: 150mm - times : 1500	-Loss change ≤ 0.30 dB @1550 nm(SMF) ≤ 0.30 dB @1300 nm(MMF)
5	Torsion IEC60794-1-2-E7	- Length: 2 m - Load: 15 N - Twist angle: ±180° - No. of cycle : 5	-Loss change ≤ 0.30 dB @1550 nm(SMF) ≤ 0.30 dB @1300 nm(MMF)
6	Temperature Cycling IEC60794-1-2-F1	- Length : 1,000m: - Temperature cycle: 20°C→-40°C→+85°C→-40°C→+85°C→20°C - Number of cycle: 1 - Time per step: 12 hours	-Loss change ≤ 0.30 dB/km @1550 nm(SMF) ≤ 0.30 dB/km @1300 nm(MMF)
7	Flame resistance IEEE1202(2006)	- Test Duration : 20mins. - Sample Length : 2.4±0.1m	- Cable damaged Length: Sample should be burn within the specified value in accordance with the standard



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