

**LP-OC03XX Fiber Optical cable with Loose tubes,
double PE jacket, central strength member of FRP, corrugated steel tape,
dry water block cable core and Ripcord**

LPOC03XX_PFD_ENB03W

Features

- Loose tube gel-filled construction for superior fiber protection.
- UV- and moisture-resistant design.
- Rodent-resistant construction.
- GEL Water Block cable core for protection against moisture filling cavity between FRP strength member and inner PE sheath. (Optional).
- One or Two Water block tapes are applied contra helically between corrugated steel tape and inner PE sheath.
- Buffer tubes are stranded around the dielectric central strength member using the reverse oscillation or "S-Z", stranding process.
- Two polyester yarn binders are applied contra helically with sufficient tension to secure the buffer tubes layer to the dielectric central strength member without crushing the buffer tubes. These binders are non-hygroscopic, non wicking and dielectric with low shrinkage.

Applications

- Usable in Direct burial or Aerial.
- Long-haul communication systems.
- Junction communication systems.
- Subscriber network systems.
- Local area network systems.



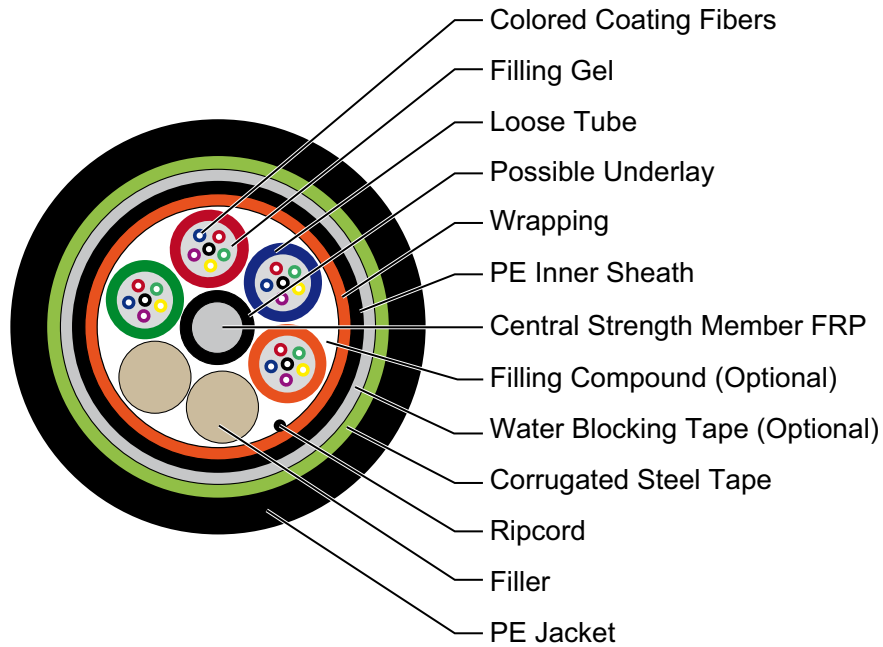
Rhino™

**LP-OC03XX
Fiber Optical cable with Loose tubes,
double PE jacket, central strength member of FRP,
corrugated steel tape, dry water block cable core
and Ripcord**

The **LP-OC03XX** is family of Fiber optic cables that the industry calls an Outside Plant Cable, made sturdy enough for laying directly buried or in underground conduits, ducts or in aerial/lashed deployment.

Loose tube style, optical fiber cable with non-metallic central strength member of FRP and moisture barrier inner sheathed. Cable protected by a corrugated steel armoring and black PE over sheath for protection against mechanical damage and termite or rodent attack, suitable for direct buried or aerial application. Tubes contain optical single-mode or multimode fibers color coded as per color coding scheme.

A Cable Section



B Product Construction

Fiber	2-144 fibers. Loose tube gel-filled. Color-coding per TIA/EIA 598 B.
Loose tube material	PBT 2.0mm
Central Strength Member	FRP 2.0
Inner Jacket	Polyethylene (PE).
Armor	Corrugated steel armored
Outer Jacket	Black UV- and moisture-resistant polyethylene (PE). Sequential meter markings standard/ Footage optional
Temperature	Storage -40°C (-40°F) to +70°C (+158°F) Installation -40°C (-40°F) to +70°C (+158°F) Operating -40°C (-40°F) to +70°C (+158°F)

C Dimension and Characteristics

Fiber Core	8	12	16	24	32	48	60	72	96	144
No of loose tube	1	2	2	4	4	4	6	6	8	12
No of filler	5	4	4	2	2	2	0	0	0	0
Fiber No. per tube	8	6	8	6	8	12	10	12	12	12
Cable OD mm ±0.2	13.0								14.2	16.5
Cable weight kg/km	130								180	210

D Mechanical & Environmental

Allowable Tensile Load(N)	Short term:2000 Long term:1500
Crush resistance	Short term 3000 N/100mm Long term :1000N/100MM
Minimal installation bending radius	20 x OD
Minimal operation bending radius	10 x OD

E List of Fibers

FIBER TYPE	LANPRO	DESCRIPTION	COD MFGR
Standard Loose Tube SM	ZC	Full spectrum, low water peak singlemode, ITU-T G.652.D	B1.3 (G652D) P
Performance Loose Tube SM	ZB	Full spectrum, high performance low water peak singlemode with 0.35/0.25 attenuation, ITU-T G.652. D	
Tight Buffer SM	ZE	Full spectrum, low water peak singlemode with 900 μm PVC buffer, ITU-T G.652.D	
Long-Haul SM	ZG	Large Aeff, low water peak, NZ-DSF singlemode, ITU-T G.655	
Ultra-Bendable SM A3/B3	ZA	Full spectrum with best macrobending performance, ITU-T G.657.A3/B3	Full spectrum bend-insensitive single mode fiber with virtually zero bend loss in most indoor applications
Ultra-Bendable SM A2/B2	ZD	Full spectrum with best macrobending performance, ITU-T G.657.A2/B2	Full spectrum bend-insensitive single mode fiber with low bend loss
Ultra-Bendable SM A1/B1	ZF	Full spectrum with best macrobending performance, ITU-T G.657.A1/B1	Full spectrum single mode fiber with enhanced bend capability
62.5 μm MM OM1	QG	1 Gb/s ≤ 300 m a 850 nm, OM1* 1 Gb/s ≤ 550 m a 1300 nm	
62.5 μm MM OM1	QL	1 Gb/s ≤ 500 m a 850 nm, OM1* 1 Gb/s ≤ 1000 m a 1300 nm	IEC 60793-2-10 Type A1b
Ultra-bendable 50 μm MM OM2	BI	10 Gb/s ≤ 150 m a 850 nm, OM2* 1 Gb/s ≤ 750 m a 850 nm	IEC 60793-2-10 Type A1a
Ultra-bendable 50 μm MM OM3	TP	10 Gb/s ≤ 300 m a 850 nm, OM3* 1 Gb/s ≤ 1000 m a 850 nm	
Ultra-bendable 50 μm MM OM4	TG	10 Gb/s ≤ 550 m a 850 nm, OM4* 1 Gb/s ≤ 1100 m a 850 nm	
Ultra-bendable 50 μm MM OM4	TI	10 Gb/s ≤ 600 m a 850 nm, OM4+* 1 Gb/s ≤ 1100 m a 850 nm	

F How to order

LP-OC0312CCC4FF

LP-OC03		12
Fiber Optical cable with Loose tubes, double PE jacket, central strength member of FRP, corrugated steel tape, dry water block cable core and Ripcord		Jacket Suffix: Dry Water Block with Ripcord
CCC	4	FF
Fiber Count: 002-144	Buffer Construction: Multi-fiber loose Tube (Gel- Filled).	Fiber Type: Any core of the above List

Examples:

LP-OC03120084QL	Fiber Optical cable with 8 multimode OM1 62.5/125 IEC 60793-2-10 Type A1b fibers, Loose tubes, double PE jacket, central strength member of FRP, corrugated steel tape, dry water block cable core and Ripcord.
LP-OC03120084ZC	Fiber Optical cable with 8 singlemode ITU-T G.652.D B1.3, 9/125, Full spectrum, low water peak fibers, Loose tubes, double PE jacket, central strength member of FRP, corrugated steel tape, dry water block cable core and Ripcord.