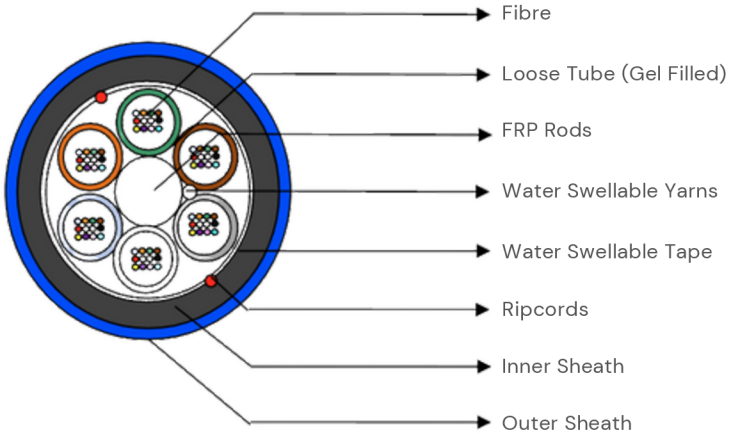
VEYRA FIBRE

PRODUCT SPECIFICATION

MT Duct PE-Nylon Fibre Optic Cable

0xxx-xx-xxMTD1-000-xx

The Multi-tube PE/Nylon Jacket Fiber Optic Cable is engineered for outdoor environments, particularly in duct-based outside plant (OSP) installations. Designed with loose-tube construction, optical fibres are protected within gel-filled tubes that are stranded around a central FRP strength member. This configuration is wrapped in water-swellable tape for enhanced protection against moisture ingress. The cable core is enclosed in a dual-layer thermoplastic jacket of polyethylene (PE) and polyamide (PA) providing superior mechanical strength, environmental resistance, and ease of installation.



*Representative diagram, not to scale

Key Features

- Durable PE/PA outer jacket delivers UV resistance, abrasion protection, and long-term reliability
- Built-in termite resistance extends cable life in underground or exposed installations.
- Dry water-blocking tape and gel-filled tubes ensure excellent moisture resistance

Applications and Benefits

- Ideal for high-performance telecom networks requiring robust, lightweight, and easy-to-deploy cabling solutions
- Gel-free core and ripcord design enable faster, cleaner, and more efficient cable access and termination.

Cable Construction

Fibre Count	Number of Fibres per Tube	Number of Loose Tubes - PBT	Number of Fillers - HDPE - Black	Central Strength Member	Cable Diameter	Cable Weight
6	6	1	5	FRP Rod	9.6 ± 0.5 mm	70 ± 10 kg/km
12	12	1	5	FRP Rod	9.6 ± 0.5 mm	70 ± 10 kg/km
24	12	2	4	FRP Rod	9.6 ± 0.5 mm	70 ± 10 kg/km
48	12	4	2	FRP Rod	9.6 ± 0.5 mm	70 ± 10 kg/km
72	12	6	-	FRP Rod	9.6 ± 0.5 mm	70 ± 10 kg/km
96	12	8	-	FRP Rod	11.0 ± 0.5 mm	100 ± 10 kg/km
144	12	12	-	FRP Rod PE Upcoated	14.0 ± 0.5 mm	150 ± 15 kg/km

Loose Tube OD	2.0 ± 0.1 mm
Moisture Barrier	Water Swellable Yarn
Core Wrapping	Water Swellable Tape
Inner Sheath	HDPE – Black – UV Stabilized
Outer Sheath	Nylon – Blue* – UV Stabilized *other outer jacket colours available on request - see ordering guide for details
Number of Ripcords	2 - Polyester

Colour Coding - Fibre and Loose Tubes

Fibre Count	1	2	3	4	5	6	7	8	9	10	11	12
Fibre Colour EIA/TIA – 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq

Tube Count	1	2	3	4	5	6	7	8	9	10	11	12
Tube Colour EIA/TIA – 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq

Cable Performance

Tensile Strength	6 – 72F : 2000 N 96/144F : 2400 N	IEC-60794-1-21-E1
Crush Resistance	2000 N/ 100 x 100 mm	IEC-60794-1-21-E3
Impact Strength	5 N.m	IEC-60794-1-21-E4
Torsion	± 180 °	IEC-60794-1-21-E7
Minimum Bend Radius	During Installation : 20 x D After Installation : 10 x D	IEC-60794-1-21-E11
Water Penetration Test	1 m water head, 3 m sample, 24 hours	IEC-60794-1-22-F5
Environmental Performance	Installation -20 °C to + 60 °C Operation -30 ° C to + 70°C Storage. -40 °C to + 70 °C	IEC-60794-1-22-F1

Fibre Characteristics

Fibre Type	ITU-T G.652D	
Attenuation (Cabled)	1310 nm 1550 nm	≤ 0.35 dB/km ≤ 0.21 dB/km
Chromatic Dispersion	1285-1330 nm 1550 nm	≤ 3.5 ps/nm.km ≤ 18 ps/nm.km
PMD (Max. Individual)	≤ 0.2 ps/√km	
PMD (Link design value)	≤ 0.06 ps/√km	

Cable cut off wavelength λcc	≤ 1260 nm
MFD	1310 nm 9.2 ± 0.4 µm 1550 nm 10.4 ± 0.5 µm
Core-Cladding Concentricity Error	≤ 0.5 µm
Cladding Diameter	125 ± 0.7 µm
Cladding Non Circularity	≤ 0.8 %
Coating Diameter	242 ± 5 µm

Fibre Type	OM3	OM4
Attenuation	850 nm ≤ 3.0 dB/km 1300 nm ≤ 1.0 dB/km	850 nm ≤ 3.0 dB/km 1300 nm ≤ 1.0 dB/km
Bandwidth	850 nm ≥ 1500 MHz.km 1300 nm ≥ 500 MHz.km	850 nm ≥ 3500 MHz.km 1300 nm ≥ 500 MHz.km
Core Diameter	50.0 ± 2.5 µm	
Core-Cladding Concentricity Error	≤ 1.0 µm	
Cladding Diameter	125 ± 1.0 µm	
Cladding Non Circularity	≤ 1.0 %	
Coating Diameter	242 ± 7 µm	

Applicable Standards

IEC 60793, IEC 60794, ITU-T, RoHS, REACH, AS/CA S008, AS 1049, AS 2857, AS/NZS ISO 9001

Ordering Guide