VEYRA
FIBRE

Slim Profile
Fibre Optic Cables

PE-Nylon Jacket
Outdoor rated, termite resistant

LSZH Jacket
I/O rated, flame retardant

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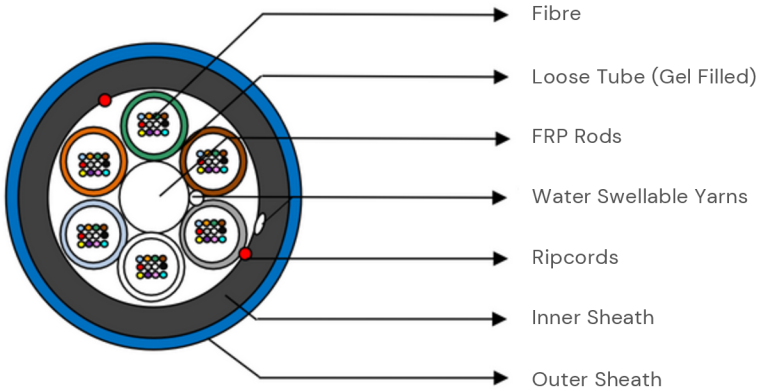
VEYRA FIBRE

PRODUCT SPECIFICATION

Slim Profile PE-Nylon Fibre Optic Cable

0xxx-xx-xxMTS1-000-xx

The Multi-Tube Slim Profile PE-Nylon Jacket Fibre Optic Cable is designed with a stranded loose tube configuration, featuring optical fibres housed within robust, gel-filled buffer tubes that are helically stranded around a central fibre reinforced plastic (FRP) strength member. The construction includes dry water-blocking elements for restricting any water ingress, with inner HDPE and outer Nylon sheaths offering enhanced mechanical and environmental protection, including termite resistance. Ideal for high-density fibre rollouts and last-mile connectivity, the cable is suitable for hauling through pit and pipe infrastructure or blowing into micro ducts - including retrofit into existing large duct pathways - offering flexibility, reliability, and significant installation cost advantages.



*Representative diagram, not to scale

Key Features

- Reduced outer diameter for improved duct space utilisation
- Gel-free core to reduce preparation time and improve splicing productivity
- Inner HDPE sheath for moisture and chemicals resistance, with outer Nylon jacket for improved abrasion, UV and termite resistance

Applications and Benefits

- Compact size, lightweight and flexibility facilitates easy handling and installation
- Enables high-fibre-density connectivity in confined pathways or tray systems
- Thermoplastic sheathing allows quick, clean stripping for connectorisation or splicing.

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	7 ± 0.5 mm	39 ± 10 kg/km
12	12	1	5	FRP Rod	7 ± 0.5 mm	39 ± 10 kg/km
24	12	2	4	FRP Rod	7 ± 0.5 mm	39 ± 10 kg/km
48	12	4	2	FRP Rod	7 ± 0.5 mm	39 ± 10 kg/km
72	12	6	-	FRP Rod	7 ± 0.5 mm	39 ± 10 kg/km
96	12	8	-	FRP Rod	7 ± 0.5 mm	39 ± 10 kg/km
144	12	12	-	FRP Rod PE Upcoated	8.8 ± 0.5 mm	70 ± 10 kg/km
288	12	Layer I : 9 Layer II : 15	-	FRP Rod	10.2 ± 0.5 mm	90 ± 10 kg/km
432	24	Layer I : 6 Layer II : 12	-	FRP Rod	13.2 ± 0.5 mm	135 ± 15 kg/km
576	24	Layer I : 9 Layer II : 15	-	FRP Rod PE Upcoated	16.0 ± 0.5 mm	200 ± 20 kg/km

Moisture Barrier	Water Swellable Yarn
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
Fibre Count	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
Fibre Colour EIA/TIA – 598	Bl*	Or*	Gr*	Br*	Sl*	Wh*	Rd*	Bk*	Yl*	Vi	Pk*	Aq*

*Ring marking on fibres from 13-24 at every 50 mm distance. Natural ring marked fibre instead black fibre

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

Tube Count	1	2	3	4	5	6
Tube Colour Layer I	Bl	Or	Gr	Br	Sl	Wh

Tube Count	7	8	9	10	11	12	13	14	15	16	17	18
Tube Colour Layer II	Rd	Bk	Yl	Vi	Pk	Aq	Bl#	Or#	Gr#	Br#	Sl#	Wh#

Tube Count	1	2	3	4	5	6	7	8	9
Tube Colour Layer I	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl

Tube Count	10	11	12	13	14	15	16	17	18	19	20	21
Tube Colour Layer II	Vi	Pk	Aq	Bl#	Or#	Gr#	Br#	Sl#	Wh#	Rd#	Bk#	Yl#

Tube Count	22	23	24
Tube Colour Layer II	Vi#	Pk#	Aq#

- denotes tubes will be stripe marked using black tracer except for black tube which will have yellow tracer.

Cable Characteristics

Tensile Strength	12 - 96F : 1000 N 144 -576F : 2000 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 -10 °C to + 70 °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	ITU-T G.657A1	ITU-T G.657A2
Attenuation (Cabled)	1310 nm ≤ 0.35 dB/km 1550 nm ≤ 0.21 dB/km	1310 nm ≤ 0.35 dB/km 1550 nm ≤ 0.21 dB/km	1310 nm ≤ 0.36 dB/km 1550 nm ≤ 0.23 dB/km
Chromatic Dispersion	1285-1330 nm ≤ 3.5 ps/nm.km 1550 nm ≤ 18 ps/nm.km	1285-1330 nm ≤ 3.5 ps/nm.km 1550 nm ≤ 18 ps/nm.km 1625 nm ≤ 22 ps/nm.km	1285-1330 nm ≤ 3.5 ps/nm.km 1550 nm ≤ 18 ps/nm.km
PMD (Max. Individual)	≤ 0.2 ps/√km	≤ 0.15 ps/√km	≤ 0.1 ps/√km
PMD (Link design value)	≤ 0.06 ps/√km	≤ 0.06 ps/√km	≤ 0.06 ps/√km

Cable cut off wavelength λcc	≤ 1260 nm	≤ 1260 nm	≤ 1260 nm
MFD	1310 nm 9.2 ± 0.4 µm 1550 nm 10.4 ± 0.5 µm	1310 nm 9.1 ± 0.3 µm 1550 nm 10.3 ± 0.5 µm	1310 nm 8.6 ± 0.4 µm
Bending Induced Attenuation	-	1 Turn - φ 20 1550 nm ≤ 0.75 dB 1625 nm ≤ 1.5 dB 10 Turn - φ 30 1550 nm ≤ 0.25 dB 1625 nm ≤ 1.0 dB	1 Turn - φ 15 1550 nm ≤ 0.2 dB 1625 nm ≤ 0.5 dB 1 Turn - φ 20 1550 nm ≤ 0.1 dB 1625 nm ≤ 0.2 dB 10 Turn - φ 30 1550 nm ≤ 0.03 dB 1625 nm ≤ 0.1 dB
Core-Cladding Concentricity Error	≤ 0.5 µm		
Cladding Diameter	125 ± 0.7 µm		
Cladding Non Circularity	≤ 0.8 %		
Coating Diameter	242 ± 5 µm		

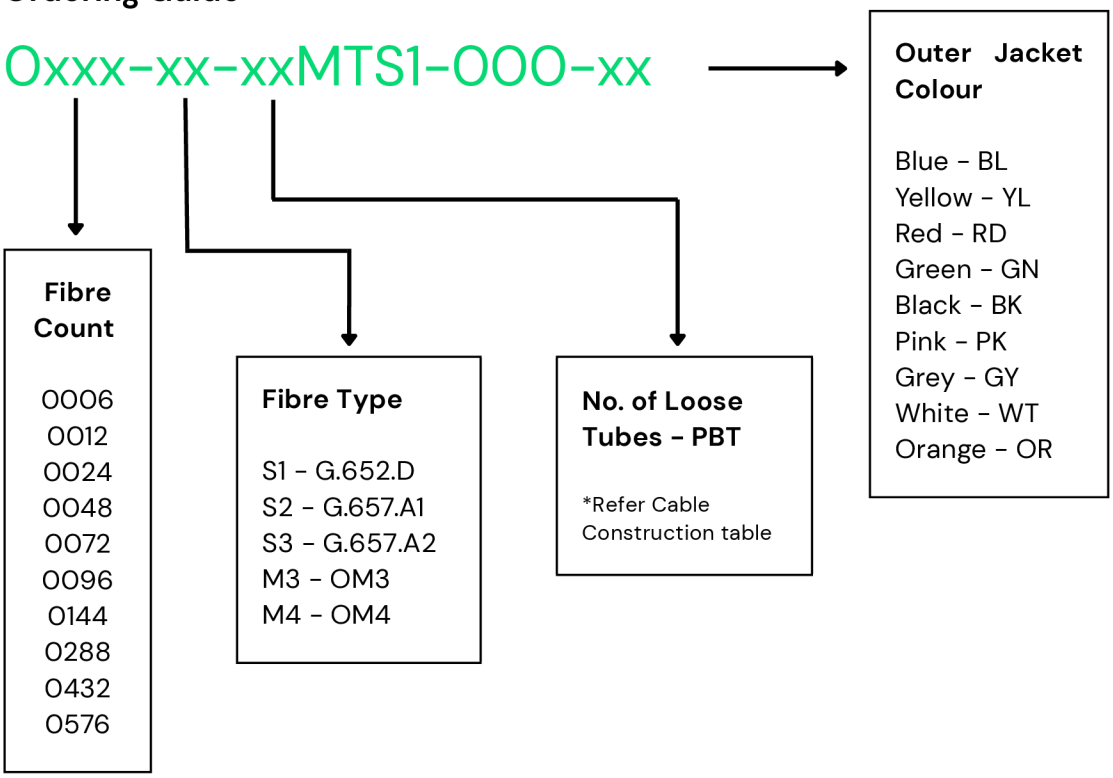
Fibre Type	OM3	OM4
Attenuation	850 nm ≤ 3.0 dB/km 1300 nm ≤ 1.0 dB/km	850 nm ≤ 3.0 dB/km 1300 nm ≤ 1.0 dB/km
Bandwidth	850 nm ≥ 1500 MHz.km 1300 nm ≥ 500 MHz.km	850 nm ≥ 3500 MHz.km 1300 nm ≥ 500 MHz.km
Core Diameter	50.0 ± 2.5 µm	
Core-Cladding Concentricity Error	≤ 1.0 µm	

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



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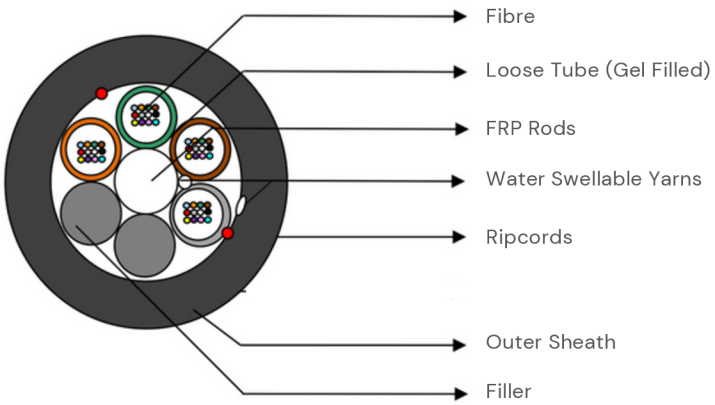
VEYRA FIBRE

PRODUCT SPECIFICATION

Slim Profile LSZH Jacket Fibre Optic Cable

0xxx-xx-xxMTS3-000-xx

The Multi-Tube Slim Profile LSZH Jacket Fibre Optic Cable is designed with a stranded loose tube configuration, featuring optical fibres housed within robust, gel-filled buffer tubes that are helically stranded around a central fibre reinforced plastic (FRP) strength member. The construction incorporates dry water-blocking elements to restrict water ingress, while the LSZH (Low Smoke Zero Halogen) outer sheath ensures fire safety compliance and reduced emission of smoke and toxic gases in the event of fire, without compromising on mechanical and environmental protection. Suitable for both indoor and outdoor use, it supports high-density rollouts and last-mile connectivity, with flexibility for installation within buildings, or outside in conduits, pit-and-pipe infrastructure, or microduct pathways - including retrofits - delivering reliable performance and cost-efficient deployment.



*Representative diagram, not to scale

Key Features

- Reduced outer diameter for improved duct and pathway utilisation
- Gel-free core simplifies preparation and speeds up splicing
- LSZH outer jacket compliant with fire retardant standard IEC 60332-1-2

Applications and Benefits

- Compact, lightweight, and flexible design enables easy handling and installation
- Supports high-density fibre connectivity in confined pathways, risers, or tray systems
- Thermoplastic sheathing allows quick, tool-less stripping for connectorisation or splicing

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
12	12	1	5	FRP Rod	7 ± 0.5 mm	45 ± 10 kg/km
24	12	2	4	FRP Rod	7 ± 0.5 mm	45 ± 10 kg/km
48	12	4	2	FRP Rod	7 ± 0.5 mm	45 ± 10 kg/km
96	12	8	-	FRP Rod	7 ± 0.5 mm	55 ± 10 kg/km
144	12	12	-	FRP Rod PE Upcoated	8.8 ± 0.5 mm	85 ± 10 kg/km
288	12	Layer I : 9 Layer II : 15	-	FRP Rod	10.6 ± 0.5 mm	110 ± 10 kg/km
Moisture Barrier			Water Swellable Yarn			
Outer Sheath			LSZH – Black* – 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

Tube Count	1	2	3	4	5	6	7	8	9			
Tube Colour Layer I	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl			
Tube Count	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Tube Colour Layer II	Vi	Pk	Aq	Bl#	Or#	Gr#	Br#	Sl#	Wh#	Rd#	Bk#	Yl#
Tube Count	**22**	**23**	**24**									
Tube Colour Layer II	Vi#	Pk#	Aq#									

- denotes tubes will be stripe marked using black tracer except for black tube which will have yellow tracer.

Cable Characteristics

Tensile Strength	12 - 96F : 1000 N 144 -288F : 2000 N	IEC-60794-1-21-E1
Crush Resistance	1000 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 -10 °C to + 70 °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.657A1
Attenuation (Cabled)	1310 nm ≤ 0.35 dB/km 1550 nm ≤ 0.21 dB/km
Chromatic Dispersion	1285-1330 nm ≤ 3.5 ps/nm.km 1550 nm ≤ 18 ps/nm.km 1625 nm ≤ 22 ps/nm.km
PMD (Max. Individual)	≤ 0.15 ps/√km
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MFD	1310 nm 9.1 ± 0.3 µm 1550 nm 10.3 ± 0.5 µm
Bending Induced Attenuation	1 Turn - φ 20 1550 nm ≤ 0.75 dB 1625 nm ≤ 1.5 dB 10 Turn - φ 30 1550 nm ≤ 0.25 dB 1625 nm ≤ 1.0 dB
Core-Cladding Concentricity Error	≤ 0.5 µm
Cladding Diameter	125 ± 0.7 µm
Cladding Non Circularity	≤ 0.8 %
Coating Diameter	242 ± 5 µm

Applicable Standards

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

Ordering Guide

0xxx-xx-xxMTS3-000-xx

Fibre Count

0012
0024
0048
0096
0144
0288

Fibre Type

S1 - G.652.D
S2 - G.657.A1
S3 - G.657.A2
M3 - OM3
M4 - OM4

No. of Loose Tubes - PBT

*Refer Cable Construction table

Outer Jacket Colour

Blue - BL
Yellow - YL
Red - RD
Green - GN
Black - BK
Pink - PK
Grey - GY
White - WT
Orange - OR