



Ribbon Fibre Optic Cables

Intermittent Bonded, Indoor Rated
Low smoke, halogen free

Intermittent Bonded, Outdoor Rated
Termite resistant



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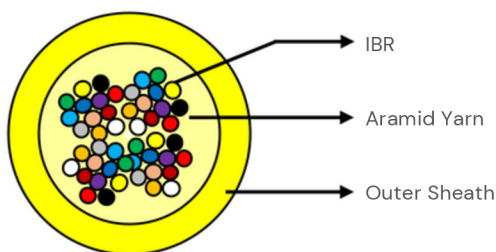


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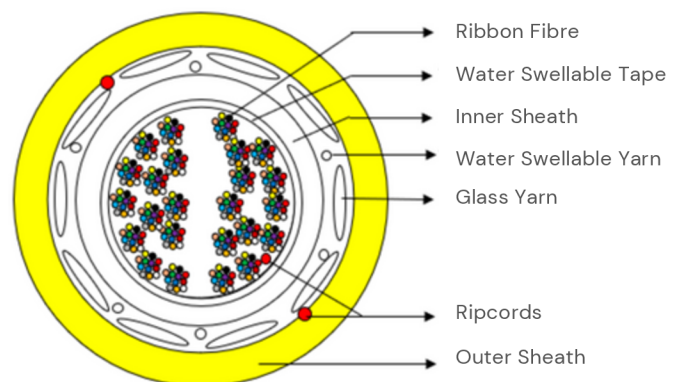
Indoor Ribbon Fibre Optic Cable

xxxx-S3-RBN3-000-xx

The Intermittent Bonded Ribbon (IBR) Cable is a compact and highly efficient fibre optic solution designed for indoor use and optimal performance in demanding high-bandwidth environments. The cable features a ribbon bond design that ensures dense fibre packing and a smaller overall cable diameter, ideal for duct installations and high-growth applications such as data centres and equipment connections within cabinets. The IBR cable combines excellent fibre density with robust mechanical protection, providing a reliable solution for high-speed, high-performance network installations.



48F Construction Shown



288F Construction Shown

**Representative diagram, not to scale*

Key Features & Benefits

- Innovative ribbon bond design enables dense fibre packing
- Colour coded ribbons makes it easier to identify and handle
- Precise fibre and ribbon geometry ensures excellent splice performance
- Gel free core enables faster end preparation

Applications

- Perfect for high-density fibre installations in data centres, providing efficient and reliable fibre connections with easy access and management.
- Ideal for connecting network equipment inside cabinets and racks, offering flexibility in space-limited environments.

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Cable Construction

Fibre Count	No of IBR (12F per IBR)	No of IBR Bundle	Cable Diameter	Cable Weight
24	2	1	3.8 ± 0.2 mm	13.0 kg/km
48	4	1	4.0 ± 0.2 mm	15.0 kg/km
72	6	1	9.5 ± 0.5 mm	115.0 kg/km
96	8	1	10.2 ± 0.5 mm	120.0 kg/km
144	12	1	10.5 ± 0.5 mm	130.0 kg/km
288	24	2	12.5 ± 0.5 mm	160.0 kg/km
432	36	3	15.5 ± 0.5 mm	240.0 kg/km
576	48	4	17.0 ± 0.5 mm	290.0 kg/km
864	72	6	19.5 ± 0.5 mm	385.0 kg/km
1008	84	7	20.5 ± 0.5 mm	410.0 kg/km

24F & 48F

Peripheral Strength Member	Aramid Yarn
Outer Sheath	LSZH – Yellow

72F – 1008F

Inner Sheath	LSZH – White
Moisture Barrier	Water Swellable Tape, Water Swellable yarn over inner tube & along Glass yarns
Peripheral Strength Member	Glass Yarn
Outer Sheath	LSZH – Yellow

Colour Coding

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

Bundle Colour EIA/TIA – 598	Bl	Or	Gr	Br	Sl	Wh	Rd
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Cable Performance

24F & 48F

Tensile Strength	100 N	IEC-60794-1-21-E1
Crush Resistance	300 N/ 100 mm	IEC-60794-1-21-E3
Minimum Bend Radius	12xD	IEC-60794-1-21-E11
Environmental Performance	Installation -5 °C to + 50 °C Operation -20 °C to + 60°C Storage. -20 °C to + 60 °C	IEC-60794-1-22-F1

72F – 1008F

Tensile Strength	Short term – 2700 N Long term – 800 N	FOTP-33 IEC-60794-1-21-E1
Crush Resistance	10N/mm	FOTP-41 IEC 60794-1-21- E3
Impact Test	2.94 N.m	FOTP-25 IEC 60794-1-21 E4
Torsion	± 180° 10 cycles	FOTP-85 IEC 60794-21 E7
Minimum Bend Radius	20XD With Load 15XD Without Load	FOTP-37 IEC-60794-1-21-E11

Environmental Performance	Installation -20 °C to + 60 °C Operation -40 ° C to + 70°C Storage. -40 °C to + 70 °C	FOTP-3 IEC-60794-1-22-F1
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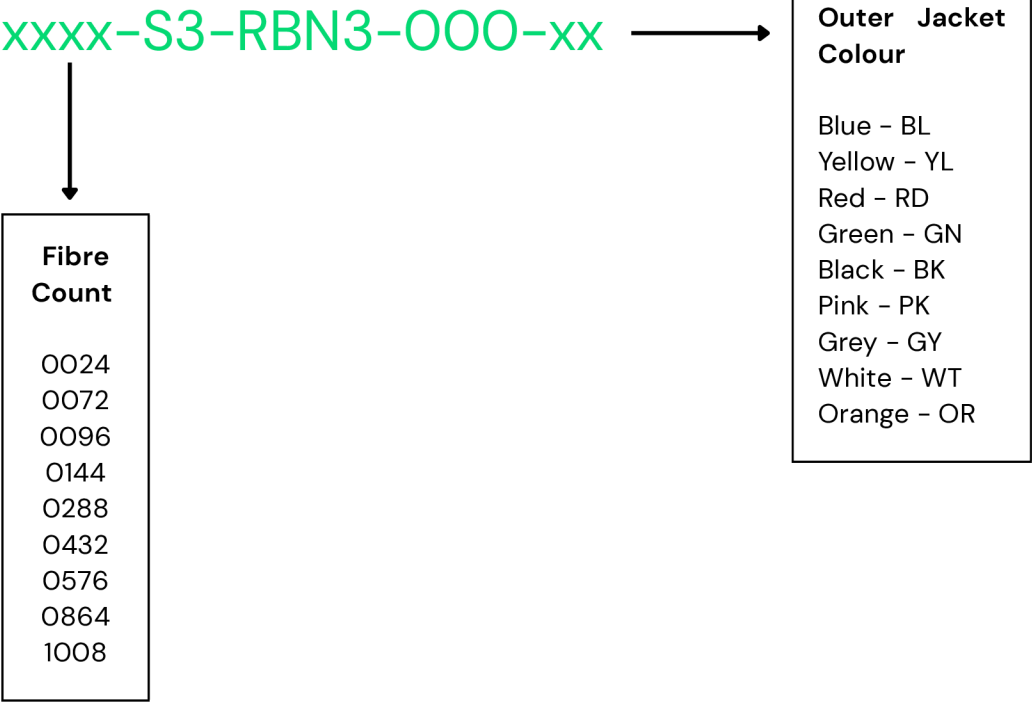
Fibre Characteristics

Fibre Type	ITU-T G.657.A2	
Attenuation	1310 nm ≤ 0.40 dB/km 1550 nm ≤ 0.30 dB/km	
Chromatic Dispersion	1285-1330 nm ≤ 3.5 ps/nm.km 1550 nm ≤ 18 ps/nm.km	
PMD (Fibre)	≤ 0.1 ps/ $\sqrt{\text{km}}$	
Cable cut off wavelength λ_{cc}	≤ 1260 nm	
MFD	1310 nm	8.6 ± 0.4 μm
Core-Cladding Concentricity Error	≤ 0.5 μm	
Cladding Diameter	125 ± 0.7 μm	
Cladding Non Circularity	≤ 0.7 %	
Primary Coating Diameter (Coloured)	242 ± 5 μm	

Applicable Standards

IEC 60793, IEC 60794, Telcordia GR-409, ITU-T, RoHS, REACH ICEA S-83-596 (24 & 48F) ANSI/ICEA S-104-696, OFNR (72F-1008F) AS/CA S008, AS/NZS ISO 9001, AS 2857

Ordering Guide





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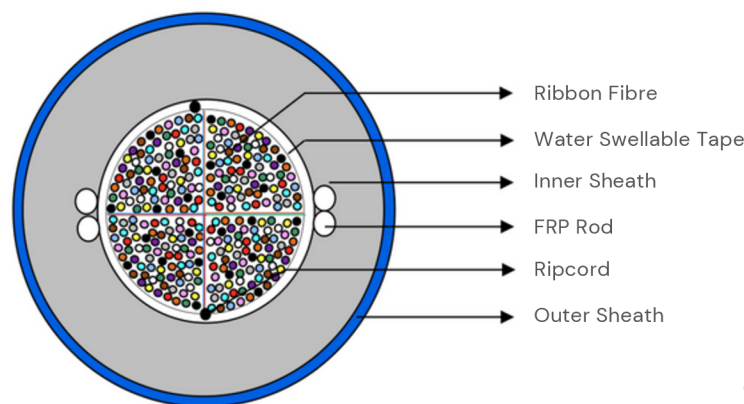


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Outdoor Ribbon Fibre Optic Cable

xxxx-S3-RBN1-000-xx

The Outside Plant (OSP) Intermittently Bonded Ribbon Cable is designed for high-density fibre deployments in trunk, distribution, and feeder networks. It features 12-fibre ribbons that are intermittently bonded, allowing mass fusion splicing while enabling separation into single fibres when required. This design reduces overall cable diameter and optimises duct utilisation. Suitable for both pulling and air-blown installation, the cable is jacketed with a UV-stabilised PE + Nylon sheath, providing enhanced resistance to termites, environmental exposure, and mechanical stress.



**Representative diagram, not to scale*

Key Features & Benefits

- Compact & High-Density: Maximises duct use with reduced cable diameter.
- Fast Splicing: 12-fibre ribbons enable quick mass fusion and easy breakout.
- Easy Installation with Bend-insensitive fibres.
- Quick Access: Ripcords allow fast, tool-free mid-span entry.
- De-ribbonised into single fibres when required.

Applications

- Installation in existing underground ducts (including microducts)
- Trunk and distribution networks
- Feeder and local loop deployments
- Metropolitan area networks (MAN)

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Cable Construction

Fibre Count	Number of Binder units	Number of Fibre per Binder unit	Cable Diameter	Cable Weight (± 10%)	Fibre Type
12	1	12	6.5 ± 0.5 mm	35 kg/km	G.657.A2
72	1	72	10.0 ± 0.5 mm	80 kg/km	G.657.A2
144	1	144	11.0 ± 0.5 mm	95 kg/km	G.657.A2
288	2	144	12.8 ± 0.5 mm	120 kg/km	G.657.A2
432	3	144	13.4 ± 0.5 mm	130 kg/km	G.657.A2
864	6	144	18.2 ± 1 mm	205 kg/km	G.657.A2
1728	24	72	23.5 ± 1 mm	285 kg/km	G.657.A2
3456	24	144	25.2 ± 1 mm	480 kg/km	G.657.A2, 200um
Embedded Strength Member			FRP Rod – 2/4 Nos.		
Core Wrapping			12F	72F – 3456F	
			-	Water Swellable Tape	
Inner Sheath			PE – Black – UV Stabilized		
Outer Sheath			PA – Blue* – UV Stabilized *other jacket colour available on request		
Number of Ripcord			2 – Polyester		

Colour Coding

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

Bundle Count	1	2	3	4	5	6	7	8	9	10	11	12
Bundle Colour EIA/TIA – 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq
Bundle Count	13	14	15	16	17	18	19	20	21	22	23	24
Bundle Colour EIA/TIA – 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq
	Wh	Wh	Wh	Wh	Wh	Bk	Wh	Wh	Wh	Wh	Wh	Wh

Bundle Count	1
Bundle Core	Olive

Cable Performance

Tensile Strength	12F	72-144F	288F	432-3456F	IEC-60794-1-21-E11
	500 N	2000 N	2500 N	2700 N	
Crush Resistance	2200 N/10 cm				IEC 60794-1-21- E3
Impact Test	10 N.m				IEC 60794-1-21 E4
Torsion	± 180°				IEC 60794-21 E7
Kink	10 x D				IEC-60794-1-21-E10
Minimum Bend Radius	During Installation: 15*D, After Installation: 20 * D				IEC-60794-1-21-E11
Water Penetration Test	1 m water head, 3m sample, 24 hours				IEC-60794-1-22-F5
Environmental Performance	Installation -30 °C to + 70 °C Operation -40 ° C to + 70°C Storage. -40 °C to + 70 °C				IEC-60794-1-22-F1

Fibre Characteristics

Fibre Type	ITU-T G.657.A2, 200 micron	
Attenuation	1310 nm 1550 nm	≤ 0.37 dB/km ≤ 0.25 dB/km
Chromatic Dispersion	1285-1330 nm 1550 nm	≤ 3.5 ps/nm.km ≤ 18 ps/nm.km
PMD (Max. Individual)	≤ 0.1 ps/ $\sqrt{\text{km}}$	
PMD (Link design value)	≤ 0.06 ps / $\sqrt{\text{km}}$	
Cable cut off wavelength λ_{cc}	≤ 1260 nm	
MFD	1310 nm	8.6 ± 0.4 μm
Bending induced attenuation	1 Turn - ϕ 15 mm 1550 nm ≤ 0.5 dB 1625 nm ≤ 1.0 dB 1 Turn - ϕ 20 mm 1550 nm ≤ 0.1 dB 1625 nm ≤ 0.2 dB 10 Turn - ϕ 30 mm 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 %	
Primary Coating Diameter (Coloured)	200 ± 10 μm	

Fibre Characteristics

Fibre Type	ITU-T G.657.A2	
Attenuation	1310 nm 1550 nm	≤ 0.37 dB/km ≤ 0.25 dB/km
Chromatic Dispersion	1285-1330 nm 1550 nm	≤ 3.5 ps/nm.km ≤ 18 ps/nm.km
PMD (Max. Individual)	≤ 0.1 ps/ $\sqrt{\text{km}}$	
PMD (Link design value)	≤ 0.06 ps / $\sqrt{\text{km}}$	
Cable cut off wavelength λ_{cc}	≤ 1260 nm	
MFD	1310 nm	8.6 ± 0.4 μm
Bending induced attenuation	1 Turn - ϕ 15 mm 1550 nm ≤ 0.2 dB 1625 nm ≤ 0.5 dB 1 Turn - ϕ 20 mm 1550 nm ≤ 0.1 dB 1625 nm ≤ 0.2 dB 10 Turns - ϕ 30 mm 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 %	
Primary Coating Diameter (Uncoloured)	242 ± 5 μm	

Applicable Standards

IEC 60793, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T, RoHS, REACH, AS/CA S008, AS 1049

Packaging

Drums	Wooden Drums AS 2857 compliant
Cable Length	2.0/4.0/6.0km ± 5 %
Cable Sheath Print	as per customer requirement

Ordering Guide

