

Indoor/Outdoor Tight Buffered Riser Fibre Optic Cable

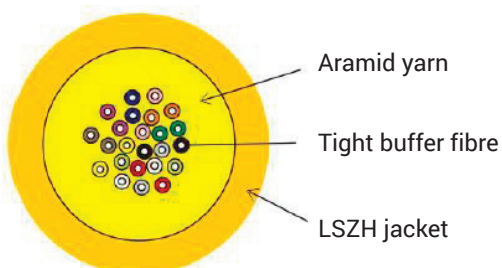
KEY FEATURES

- Tight buffer fibres housed in cable
- Aramid yarns applied as strength member
- Complies to 9001, ISO 14001 and ROHS
- LSZH sheath
- Compatible with field terminable connectors
- Lightweight and compact

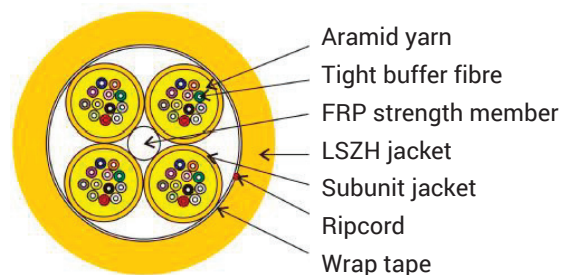
APPLICATIONS

- Building backbone
- Data centre

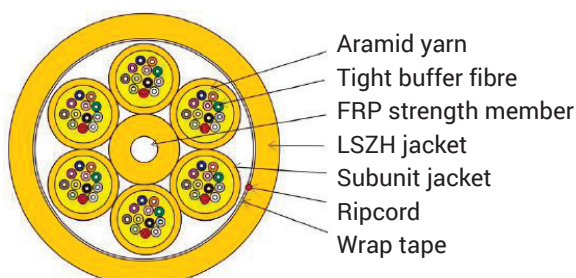
Structure Diagram



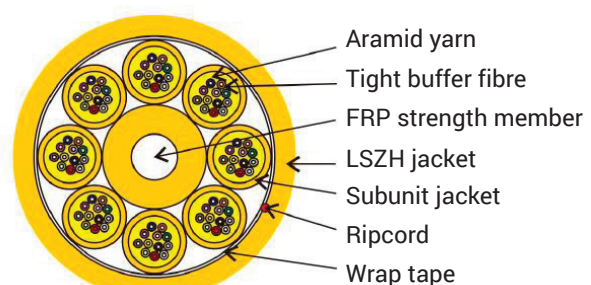
2-24 Fibre



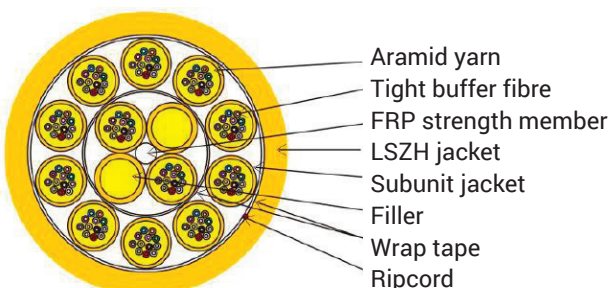
48 Fibre



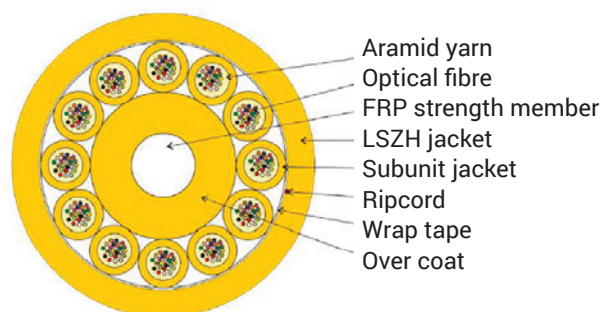
72 Fibre



96 Fibre



144 Fibre



288 Fibre

Optical Fibre Characteristics

FIBRE TYPE	ATTENUATION				OVERFILLED MODAL BANDWIDTH (OFL)	EFFECTIVE MODAL BANDWIDTH	MINIMUM BENDING RADIUS
	1310/1550NM		850/1300NM		850/1300NM (HZ.KM)	850NM (MHZ.KM)	MM
	TYPICAL (DB/KM)	MAXIMUM (DB/KM)	TYPICAL (DB/KM)	MAXIMUM (DB/KM)			
G.657a2	0.36/0.22	0.5/0.4	–	–	–	–	7.5
OM3	–	–	3.0/1.0	3.5/1.5	≥1500/500	≥2000	30
OM4			3.0/1.0	3.5/1.5	≥3500/500	≥4700	30

Cable Dimensions and Constructions

ITEM	CONTENTS	VALUE				
		2	4	6	12	24
TIGHT BUFFER FIBRES	Material	LSZH				
	Diameter (mm)	0.85±0.05				
STRENGTH MEMBER		Aramid yarn				
SHEATH	Material	LSZH				
	Colour	Yellow for G.657A2 Aqua for OM3 & OM4				
	Thickness (mm)	Approx. 0.6		Approx. 0.8		Approx. 1.0
CABLE DIAMETER (MM) APPROX.		4.2	5.0	5.5	6.5	8.0
CABLE WEIGHT (KG/KM) APPROX.		14	20	28	37	54

ITEM	CONTENTS	VALUE				
		48	72	96	144	288
TIGHT BUFFER FIBRES	Diameter (mm)	0.85±0.05				
CABLE SUBUNIT	Number	4	6	8	12	24
	Diameter (mm) Approx.	5.2	5.2	5.2	5.2	3.0
	Material	LSZH				
	Colour	Yellow for G.657A2 Aqua for OM3 & OM4				
	Strength Member	Aramid yarn				
	Thickness (nm)	Approx. 0.55				Approx. 0.4
FIBRE COUNTS PER SUBUNIT	Tight buffer fibres	12				24
CENTRE MEMBER STRENGTH	Material	FRP				
	FRP Diameter (mm)	1.2	2.25	3.0	2.25	2.25
	LSZH layer diameter (mm) Approx.	2.3	5.2	8.5	—	8.6
OUTER SHEATH	Material	LSZH				
	Colour	Yellow for G.657A2 Aqua for OM3 & OM4				
	Thickness (mm)	Approx. 1.2	Approx. 1.4		Approx. 1.75	Approx. 1.3
CABLE DIAMETER (MM) APPROX.		15.0	18.5	21.7	26.7	17.5
CABLE WEIGHT (KG/KM) APPROX.		175	277	407	514	296

Mark of the Subunit

Number (1#, 2# --- 11#, 12#) marked on the subunit surface of the outer sheath with an interval of 150mm.

Colour Code of Fibre

SEQUENCE NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
COLOUR	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Purple	Pink	Aqua
SEQUENCE NUMBER	13	14	15	16	17	18	19	20	21	22	23	24
COLOUR	Blue+ black tracer	Orange+ black tracer	Green+ black tracer	Brown+ black tracer	Slate+ black tracer	White+ black tracer	Red+ black tracer	Black+ white tracer	Yellow+ black tracer	Purple+ black trace	Pink+ black tracer	Aqua+ black tracer

Mechanical, Electrical and Environmental Characteristics

ITEM	TEST METHOD	REQUIREMENTS
TENSILE PERFORMANCE	IEC 60794-1-2-E1 Load: short term tensile force Cable length under tension: Not less than 50m Duration of load sustain: 5 min. Velocity of transfer device: either 100mm/min Diameter of chuck drums and transfer devices: 20 x cable diameter	The maximum fibre strain less than 0.6% under maximum tensile load No change in attenuation after the test No damage to the cable elements
CRUSH	IEC 60794-1-2-E3 Term Load: 1000N/10cm Long Term Load: 3000N/10cm Length between test locations: 500mm Cycle: 3	No change in attenuation after the test No damage to the cable elements
IMPACT	IEC 60794-1-2-E4 Striking surface radius: 12.5mm Impact energy: 1 J Number of impacts: at least 3, each separated at least 500mm Height: 1m	No change in attenuation at 1550nm after test No fibre breakage
BEND	IEC60794-1-2-E11A Mandrel radius: 10 x cable diameter Turns: 10 Cycles: 10	No change in attenuation at 1550nm after test No fibre breakage
REPEATED BENDING	IEC 60794-1-2-E6 Bending radius: 20 x cable diameter Cycles: 100 Mass of weights: 4kg	No change in attenuation at 1550nm after test Under visual examination without magnification, no damage to the sheath and cable elements
CABLE TORSION	IEC 60794-1-2-E7 Cycles: 10 Distance between fixed and rasion clamp: 1m Turns: $\pm 180^\circ$ Tension Load: 20N	No change in attenuation at 1550nm after test No fibre breakage
TEMPERATURE CYCLING	IEC 60794-1-2-F1 Temperature range: $-20^\circ \sim +70^\circ$ Cycles: 2 Duration: 8 hours	The maximum increase (1550nm) in attenuation coefficient shall be less than 0.4dB/km
FLAME PROPAGATION	IEC 60332-1	Pass the single cable vertical flame test Other parameters

According to IEC 60794, YD/T 1258.4-2005 Remark: "no attenuation changes: is considered as the attenuation changes ≤ 0.05 dB