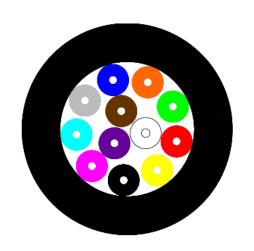


# Indoor / Outdoor Light Duty Riser Optical Cable

## **FEATURES:**

This tight buffered multi-fibre optical cable is suitable for applications in local area network (LAN) including FDDI cabling, Ethernet and Token ring

- Multi-fibre construction
- Fibre protection (secondary): Low smoke and fumes zero halogen (LSZH)
- Peripheral strength members: High modulus aramid yarns
- Longitudinal water tightness: Water swellable elements (dry-core technology)
- Sheath: UV stabilised low smoke and fumes zero halogen (LSZH) in compliance with AS 1049



### **IDENTIFICATION**

No.	1	2	3	4	5	6	7	8	9	10	11	12
Colour	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua
No.	13	14	15	16	17	18	19	20	21	22	23	24
Colour	blue	orange	green	brown	grey	white	red	black	yellow	violet	pink	aqua

#### **TECHNICAL DATA:**

Number of Fibres		4	6	8	12	24		
Tight buffer diameter	μm	900 ± 50						
Cable nominal diameter	mm	4.8	4.8	5.4	6.2	8.8		
Cable nominal weight	kg/km	20	22	26	33	61		
Max. installation tension	N	600	,	1100				
Max. crush resistance	N/100 mm	500 (Short-term) / 300 (Long-term)						
Min. bending radius	mm	At full load 20 x Cable OD At no load 10 x Cable OD						
Temperature range	℃	Installation -0 -> +50		Transport & Storage -20 -> +70	Operation -10 -> +	-70		

Sheath Colour: The outer sheath colour is aqua (multimode cable) & yellow (singlemode cable).

Sheath Marking: Outer sheath is marked in 1 metre intervals

## MAIN MECHANICAL CHARACTERISTICS

Parameter	Test method	Test conditions	Acceptance criteria*
Tensile strength	IEC 60794-1-21-E1	Load: As per cable maximum installation tension in technical data table above	Fibre strain ≤ 0.6%. No physical damage and no change in attenuation after test.
Crush	IEC 60794-1-21-E3	Load: As per maximum crush resistance in technical data table above Duration: 1 min (short-term) / 15 min (long-term)	No physical damage. No change in attenuation after test (short-term) or during test (long-term).
Impact	IEC 60794-1-21-E4	Impact energy: 1 J Anvil radius: 300 mm	No physical damage. No change in attenuation after test.
Torsion	IEC 60794-1-21-E7	Sample length: 1 m Rotation: +/-180 degree, 10 cycles	No physical damage. No change in attenuation after test.
Bend	IEC 60794-1-21-E11	Mandrel radius: As per Min. bending radius at no load in technical data table above No. of turns/helix: 6, No. of cycles: 10	No physical damage. No change in attenuation after test.
Bend under tension	Concurrent to tensile test	Mandrel radius: As per Min. bending radius at full load in technical data table above Bend: 360°, 1 turn	No physical damage. No change in attenuation after test.
Temperature cycling	IEC 60794-1-22-F1	Sample length: 1000 m (minimum) Temperature range: As per Operation temperature range in technical data table above	No change in attenuation between 10°C & 30°C. Max. change in attenuation ≤0.15dB/km between Min. & Max. operation temperatures.
Water penetration	IEC 60794-1-22-F5C	Sample length=3m, Water height=1m	No water leakage after 24 hour

 $<sup>^{\</sup>ast}$  All optical measurements for singlemode fibres performed at 1550 nm.