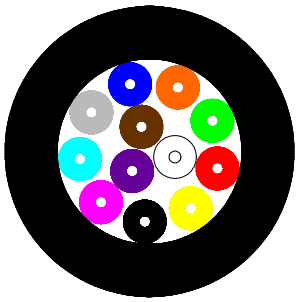
Indoor / Outdoor Light Duty Riser Optical Cable

AS/NZ 3080
ACMA - AS/CA S008

Cable Design



- Drawing not to scale -

- **Multi-fibre construction**
- **Fibre protection (secondary):** UV stabilised LS0H
- **Peripheral strength members:** High modulus aramid yarns
- **Longitudinal water tightness:** Water swellable elements (dry-core technology)
- **Sheath:** UV stabilised LS0H

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

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	60
Max. installation tension	kN	0.6				
Max. crush resistance	kN/100 mm	0.5 (Short term)				
Min. bending radius	mm	At full load 20 x Cable OD At no load 10 x Cable OD				
Temperature range	°C	Installation 0 -> +50	Transport & Storage -10 -> +60		Operation 0 -> +70	

Optical Characteristics

See the attached tight buffered / cabled optical fibre data sheet.

Identification

Fibre Colours (Buffered fibre)

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	light green	yellow	violet	pink	aqua

Sheath Colour:
The outer sheath colour is black.

Sheath Marking:
The outer sheath is marked in 1 meter intervals as follows:

PRYSMIAN DW DESKWAVE IN/OUTDOOR RISER XX FIBRE (Type) P/No N10514 T/N #### MM/YY MADE IN AUSTRALIA ****M

Main mechanical characteristics

Parameter	Test method	Test conditions	Acceptance criteria*
Tensile strength	IEC 60794-1-2-E1	Load: As per cable maximum tensile strength in table above.	After 30 minutes the maximum strain on the fibre should not exceed 0.5% and no attenuation increase greater than 0.1 dB occurs
Crush	IEC 60794-1-2-E3	Short time: 10 min Load: As per maximum crush resistance in table above Number of positions: 3 adjacent sections (ensuring one over tube and one over lay reversal)	No damage to the sheath or to the core structure and and no attenuation increase greater than 0.1 dB occurs
Torsion	IEC 60794-1-2-E7	Sample length: 1 m Tension: As per table 1 of specification Rotation: a) 180º clockwise, b) return to starting position c) 180º anticlockwise d) return to starting position. Four movements constitute one cycle). Complete 10 cycles (a to d) in one minute maximum	During the final tenth cycle at a), c) and after completion (no rotation) check transmitting fibres. No fibre breaks, no damage to the sheath or to the core structure and no attenuation increase greater than 0.1 dB occurs
Bend	IEC 60794-1-2-E11	Mandrel radius: As per minimum bend radius at no load in table above. Bend: 360º (1turn)	No attenuation increase greater than 0.1 dB occurs
Bend under tension	Concurrent to tensile test IEC 60794-1-2-E18	Mandrel radius: As per minimum bend radius at full load in table above. Bend: 360º (1turn)	After 1minute no fibre breaks, no damage to the sheath or to the core structure and no attenuation increase greater than 0.1 dB occurs from no load to full load
Temperature cycling	IEC 60794-1-2-F1	Sample length: 1000 m (minimum) Temperature range: From 0 ℃ to +70 ℃	There should be no average attenuation increase at the temperature extremes when compared to the attenuation at ambient temperature. No individual fibre should measure an attenuation greater than 0.15 dB/km
Water penetration	IEC 60794-1-2-F5B	Sample length=3m, Water height=1m	No water leakage after 24 hour

** All optical measurements for singlemode fibres performed at 1550 nm.*

Logistic

Packing:
New non-returnable timber or plastic drums

Delivery Lengths:
Standard delivery length: 1 km with a tolerance of - 1% / + 3%
Maximum delivery length: 4 km with a tolerance of - 1% / + 3%