

F(2-12)_IOB FPTM/M



Indoor / Outdoor Heavy Duty Breakout Optical Cable

AS/NZ 3080 ACMA - AS/CA S008

Cable Design



- Multi-cord construction
- Cord: PVC in compliance with AS 1049
- Central strength member (CSM): PVC coated aramid yams
- **Stranding:** The required numbers of elements (cords and fillers) are SZ stranded around the central strength member
- Peripheral strength members: Water swellable aramid yams
- Longitudinal water tightness: Water swellable elements (dry-core technology)
- Sheath: UV stabilised LSOH in compliance with AS 1049.

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

Technical data

Number of Fibres		2 to 6	8	12
Number of elements		6 8 12		
Cord diameter	mm	2.0 ± 0.2		
Cable nominal diameter	mm	8.6	9.9	12.6
Cable nominal weight	kg/km	75	95	152
Max. installation tension	kN	0.7 1.2		
Max. crush resistance	kN/100 mm	1.0 (Short term) / 0.5 (Long term)		
Min. bending radius	mm	At full load $20 \times \text{cable OD}$ At no load $10 \times \text{cable OD}$		
Temperature range	°C	Installation 0 -> +50	-> +50 Transport & Storage -20 -> +60 Operation 0 -> +60	

Optical Characteristics

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

Identification

Fibre and Buffer fibre Colours

Fibre and tight buffered fibre colours are natural (opaque).

Cord Colours

Fibre type	OS2	OM1	OM3			
Colour	yellow	orange	aqua			

All individual cords are numbered (ink jet print) for easy identification.

Sheath Colour:

The outer sheath colour is black.

⁻ Drawing not to scale -



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Sheath Marking:

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

PRYSMIAN DW IN/OUTDOOR BREAKOUT Part Number 🛆 N10514 T/N #### MM/YY MADE IN AUSTRALIA *****M

Main mechanical characteristics

Strength in table above. Strength in table above. Strength in table above. Strength in table above. Strength in table above Strength in	Parameter	Test method	Test conditions	Acceptance criteria*
Long time: 120 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) Impact IEC 60794-1-2-E4 Weight: 0.5 kg Height: 1.0 m Anvil radius: 12.5 mm Impacts: 1 Sample length: 1 m Tension: As per table 1 of specification Rotation: a) 180° clockwise, b) return to starting position. Four movements constitute one cycle). Complete 10 cycles (a to d) in one minute maximum Mandrel diameter: 20 x Cable OD Bend: 360° (1turn) Bend under tension Concurrent to tensile test IEC 60794-1-2-E18 Temperature cycling IEC 60794-1-2-F1 Sample length: 1000 m (minimum) Temperature range: From 0 °C to +60 °C Weight: 0.5 kg Height: 0.5 kg Hei	Tensile strength	IEC 60794-1-2-E1		fibre should not exceed 0.5% and no attenuation increase greater than 0.1 dB
Height: 1.0 m Anvil radius: 12.5 mm Impacts: 1 Torsion IEC 60794-1-2-E7 Sample length: 1 m Tension: As per table 1 of specification Rotation: a) 180° clockwise, b) return to starting position c) 180° anticlockwise d) return to starting position. Four movements constitute one cycle). Complete 10 cycles (a to d) in one minute maximum Bend IEC 60794-1-2-E11 Mandrel diameter: 20 x Cable OD Bend: 360° (1turn) Mandrel diameter: 40 x Cable OD Bend: 360° (1turn) Mandrel diameter: 40 x Cable OD Bend: 360° (1turn) Temperature cycling IEC 60794-1-2-F18 Temperature cycling IEC 60794-1-2-F58 Sample length: 1000 m (minimum) Temperature range: From 0 ℃ to +60 ℃ Temperature penetration IEC 60794-1-2-F58 Sample length=3m, Water height=1m To the sheath or to the core structure and no attenuation increase greater than 0.1 dB occurs No attenuation increase greater than 0.1 dB occurs 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 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-F58 Sample length=3m, Water height=1m No water leakage after 24 hour	Crush	IEC 60794-1-2-E3	Long time: 120 min Load: As per maximum crush resistance in table above Number of positions: 3 adjacent sections (ensuring one over tube and one over lay	structure and and no attenuation increase
Tension: As per table 1 of specification Rotation: a) 180° clockwise, b) return to starting position c) 180° anticlockwise d) return to starting position c) 180° anticlockwise d) return to starting position. Four movements constitute one cycle). Complete 10 cycles (a to d) in one minute maximum Bend IEC 60794-1-2-E11 Mandrel diameter: 20 x Cable OD Bend: 360° (1turn) Bend under tension Concurrent to tensile test IEC 60794-1-2-E18 Sample length: 1000 m (minimum) Temperature cycling Temperature cycling IEC 60794-1-2-F1 Sample length: 1000 m (minimum) Temperature range: From 0 °C to +60 °C Complete 10 cycles (a to d) in one minute maximum No attenuation increase greater than 0.1 dB occurs After 1 minute 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 °C to +60 °C Water penetration IEC 60794-1-2-F5B Sample length=3m, Water height=1m No water leakage after 24 hour	Impact	IEC 60794-1-2-E4	Height: 1.0 m Anvil radius: 12.5 mm	to the sheath or to the core structure and no attenuation increase greater than 0.1 dB
Bend: 360° (1turn) Bend under tension Concurrent to tensile test IEC 60794-1-2-E18 Temperature cycling Temperature cycling Water penetration Bend: 360° (1turn) Mandrel diameter: 40 x Cable OD Bend: 360° (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 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	Torsion	IEC 60794-1-2-E7	Tension: As per table 1 of specification Rotation: a) 180° clockwise, b) return to starting position c) 180° anticlockwise d) return to starting position. Four movements constitute one cycle). Complete 10 cycles (a	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
tensile test tensi	Bend	IEC 60794-1-2-E11		_
Temperature range: From 0 °C to +60 °C 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	Bend under tension	tensile test		the sheath or to the core structure and no attenuation increase greater than 0.1 dB
	Temperature cycling	IEC 60794-1-2-F1		increase at the temperature extremes when compared to the attenuation at ambient temperature. No individual fibre should measure an attenuation greater than 0.15
* All optical measurements for singlemode fibres performed at 1550 nm.	Water penetration * All ontical measurer		. 5 .	No water leakage after 24 hour

Logistic

Packing:

New non-returnable timber or plastic drums with NolcoFlex® protection

Delivery Lengths:

Standard delivery length: 5 km with a tolerance of -1% / + 3%

All sizes and values without tolerances are reference values. Specifications are for product as supplied by PrysmianGroup: any modification or alteration afterwards of product may give different result.

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