

## F(4-24)\_IOR FPTM/D3M



# **DESKWAVE®**

## **Indoor / Outdoor Light Duty Riser Optical Cable**

IEC 60794-2

AS/NZS 11801.1 ACMA - AS/CA S008 AS/NZS IEC 60332.1 IEC 60332-3-24



- Drawing not to scale -

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

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			$900\pm50$		
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-t	erm) / 300 (L	ong-term)	
Min. bending radius	mm		At full lo At no lo			
Temperature range	°C	Installation 0 -> +5	0 Transpo	ort & Storage -10	)->+60 O	peration -10 -> +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	black	yellow	violet	pink	aqua

### **Sheath Colour:**

The outer sheath colour is black.

Yellow or blue sheath are also available for single-mode fibres upon request.

Orange or aqua sheath are also available for multi-mode fibres upon request.



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#### **Sheath Marking:**

The outer sheath is marked in 1 metre intervals as follows^:

PRYSMIAN <ZZ> DESKWAVE INDOOR/OUTDOOR RISER <NFIB> FIBRE <TYPE> Part No. T/N ### MM/YY \*\*\*\*\*M >> | << \*\*\*\*\*\*M

Where:  $\langle ZZ \rangle$  = Manufacturing plant code,  $\langle NFIB \rangle$  = No. of fibres,  $\langle TYPE \rangle$  = Fibre Type (e.g. 9/900um for SM), #### = Ticket No., \*\*\*\*\*M >>  $|\langle x^* \rangle|$  = Metre marking with cut line

### Flame Resistance

AS/NZS IEC 60332.1	Vertical flame propagation for single cable
IEC 60332-3-24	Vertical flame propagation for bunched cables – Category C

### 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 hours

<sup>\*</sup> All optical measurements for singlemode fibres performed at 1550 nm.

## Logistic

### Packing:

Timber or plastic drums

#### **Delivery Lengths:**

Standard delivery length is 1 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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<sup>^</sup> Customised marking legend is available (subject to agreement)

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