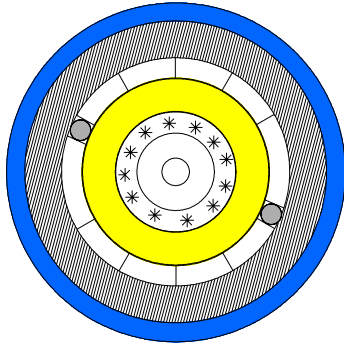


SM@RTCORD®

Single Tight Buffered Fibre Lead-in Optical Cable

Cable Design

ACMA - AS/CA S008



- Drawing not to scale -

- **Single-cord construction**
- **Fibre Protection (secondary):** Polyamide (Nylon)
- **Peripheral strength members:** Water swellable aramid yarns
- **Cord:** PVC in compliance with AS 1049
- **Peripheral strength members:** Glass fibre reinforced plastic material (GRP) and Water swellable aramid yarns
- **Sheath:** Polyethylene in compliance with AS 1049
- **Outer jacket:** UV stabilised polyamide (Nylon) in compliance with AS 1049 integrally bonded to PE sheath

This tight buffered single cord optical cable is specifically designed for use in the last leg of the Fibre To The Premises (FTTP) applications. The cable can be pre-connectorised⁽¹⁾ and protected with QUICKDR@W® pulling shroud⁽²⁾ for ease of installation and without the use of expensive fusion splicing equipment. It is specifically designed to be flexible and kink resistant.

Notes:

(1) Standard SC/APC connector is factory fitted to one end of every individual cable. Both ends can be fitted with connectors upon request.

(2) Prysmian Hauling shroud is provided to hauling lead-in SM@RTCORD cable to customer conduits. See QUICKDR@W® datasheet for details.

Technical data

Number of Fibre	1		
Cord diameter	mm	2.0	
Cable nominal diameter	mm	5.8	
Cable nominal weight	kg/km	23	
Max. installation tension	kN	0.6	
Max. crush resistance	kN/100 mm	1.0 (Short term)	
Min. bending radius	mm	At full load 90 At no load 60	
Temperature range	°C	Installation -0 -> +50	Transport & Storage -20 -> +70 Operation -10 -> +70

Optical Characteristics

See the attached cabled optical fibre data sheet.

Identification

Fibre and Buffer fibre Colour

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

Cord Colours

Colour	Yellow
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Sheath Colour:

The outer sheath colour is blue.

Sheath Marking:

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

PRYSMIAN DW 1F SM FTTP LEAD-IN SM@RTCORD Part Number T/N ##### MM/YY MADE IN AUSTRALIA *****M >> | << *****M

Main mechanical characteristics

Parameter	Test method	Test conditions	Acceptance criteria*
Tensile strength	IEC 60794-1-21-E1 Figure 2	Load: As per cable maximum tensile strength in table above.	After 10 minutes the maximum strain on the fibre should not exceed 0.6% and no attenuation change throughout test
Crush	IEC 60794-1-21-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 no attenuation change throughout test
Bend	IEC 60794-1-21-E11	Mandrel radius: As per Min. bending radius at no load stated in technical data Bend: 360° (5turn)	No attenuation change throughout test
Bend under tension	Concurrent to tensile test IEC 60794-1-21-E18A	Mandrel radius: As per Min. bending radius at full load state in technical data Bend: 360° (1turn)	After 1minute no fibre breaks, no damage to the sheath or to the core structure and no attenuation change throughout test
Temperature cycling	IEC 60794-1-22-F1	Sample length: 1000 m (minimum) Temperature range: -10 °C to +70 °C	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 60794-1-22-F5C	Sample length=2m, Water height=1m	No water leakage after 24 hour

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

Logistic#

Packing:

Timber or plastic drums

Delivery Lengths:

Standard delivery length is 6 km with a tolerance of - 1% / + 3%

#See QUICKDR@W® datasheet for packing details of pre-connectorised cable

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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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