

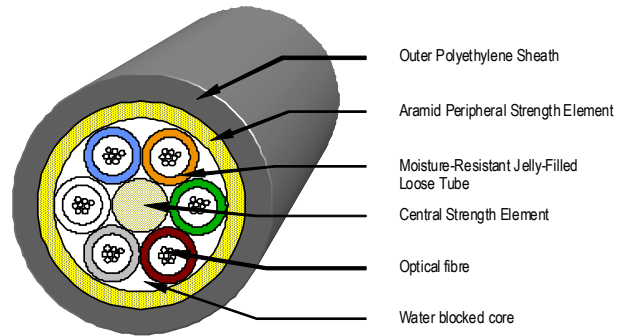
# OPTIMAL

Cable Services Pty Ltd

## TECHNICAL DATA SHEET

### AERIAL DIELECTRIC SELF-SUPPORTING (ADSS) OPTICAL FIBRE CABLE

OMM6\*\*GA0<sup>††</sup>BK



#### Description:

Up to 72 optical fibres in jelly-filled loose tubes, laid up around a central non-metallic strength member, water blocked, aramid yarn reinforced, and polyethylene sheathed. Surface printing includes sequential length marking at one-metre intervals.

#### Applicable Specifications:

AS/ACIF S-008, AS 1049, AS3080, IEC 60793 and IEC 60794

#### Applications:

A “dry” water-blocked, loose tube cable originally developed from a military lightweight-rugged-deployable (LRD) field cable, it is now principally used for short span aerial installations - typically on roadside power distribution poles. It is suitable for spans typically up to 250 m - or more depending upon installation conditions (see examples at end). Being totally non-metallic it is ideal for applications in close proximity to high-voltage power distribution lines, for which it has become a standard.

This product is also suited to single point suspension applications such as down mine shafts or any application where the product has to support either a higher load than conventional terrestrial cable or a permanent or varying tensile load, applied through the outer sheath. Standard pole-mounting hardware is readily available for this product. Contact Optimal for assistance with sag-tension calculations or other application support.

#### Physical Characteristics

Tube Diameter:	2.8 mm
Nominal cable Diameter:	12.6 mm
Nominal weight:	125 kg/km
Max Allowable load:	7.7 kN
Zero fibre strain limit	1.0 %
Max Crush Resistance	4 kN/100 mm
Min bending radius	20xOD mm (Under load), 10xOD mm (off load)
Effective Modulus	12 GPa
Effective area	87 mm <sup>2</sup>
CLTE	7.4 x10 <sup>-6</sup> /°C
MCBL	27 kN

#### Stringing Example

	units	Conditions			
		EDS	Severe 1	Severe 2	Severe 3
Temp	°C	15	-10	-30 +5mm ice	0
Wind	m/s (km/hr)	0	42 (150)	27 (100)	56 (200)
Span	m	100/200/300	200	250	100
Sag	m	1/4/9	10 (0.74)	12.8 (3.8*)	4.6 (0.2*)
Tension	kN	1.52	7.9	8.1	7.7
Cable Strain	%	0.14	0.7	0.71	0.68

\* vertical component

\*\* Represents any fibre code, L0 = sm G652.d (LWP), 1C = sm G652.d ZWP, 62 = 62.5 um OM1, 50 = 50 um OM2, 53 = 50 um OM3, 15 = SM G655 NZDS, 1F = G657.a ZWP “HiFlex”

This datasheet is provided for guidance only and is subject to change without notice. Please ensure you have the most up to date information where parameters in this document are considered critical for your particular application.