

TECHNICAL DATA
AERIAL DIELECTRIC SELF-SUPPORTING (ADSS)
12 SINGLE MODE 9/125 ITU-T G652 FIBER OPTIC CABLE

Specification Used: The construction and testing of the offered cable will be according to the international specification IEC 60794, IEC 60793 and ITU G652 recommendation. The real values will overpass the specified ones to ensure an updated high quality level. Our technical data, which are presented herebelow, will also be valid.

Description: Fiber Optic Cable, loose tube type. Each tube contains 2-6 singlemode fibers 9/125 according to ITU-T G652D and filling material. Six loose tubes will be SZ stranded around a dielectric strength member (FRP: fiber reinforced plastic), to form the cable core. The interstices will be filled with water blocking jelly compound or with dry swelling yarns and tapes to prevent longitudinal ingress of water. Over the cable core layer(s) of aramide strain relief elements is (are) applied. Overall, the cable is protected with a black, UV and track resistant polyethylene outer sheath.

Particulars:

1. No of fibers	12
2. No of tubes	6
3. No of fibers per tube	2
4. No of polyethylene fillers	-
5. PE outer sheath thickness (min. average) (mm)	1.5
6. Overall Outer Diameter (calculated) (mm)	10
7. Minimum static bending radius (mm)	10 x D*
8. Minimum bending radius under tension (mm)	15 x D*
9. Cable breaking strength (N)	> 15000
10. Maximum tension during operation (N)	3500
11. Maximum crush resistance (N/10cm)	2000
12. Storage and operating temperature range (°C)	-40 to +70
13. Installation temperature range (°C)	-10 to +50
14. Cable weight (calculated) (kg/km)	90

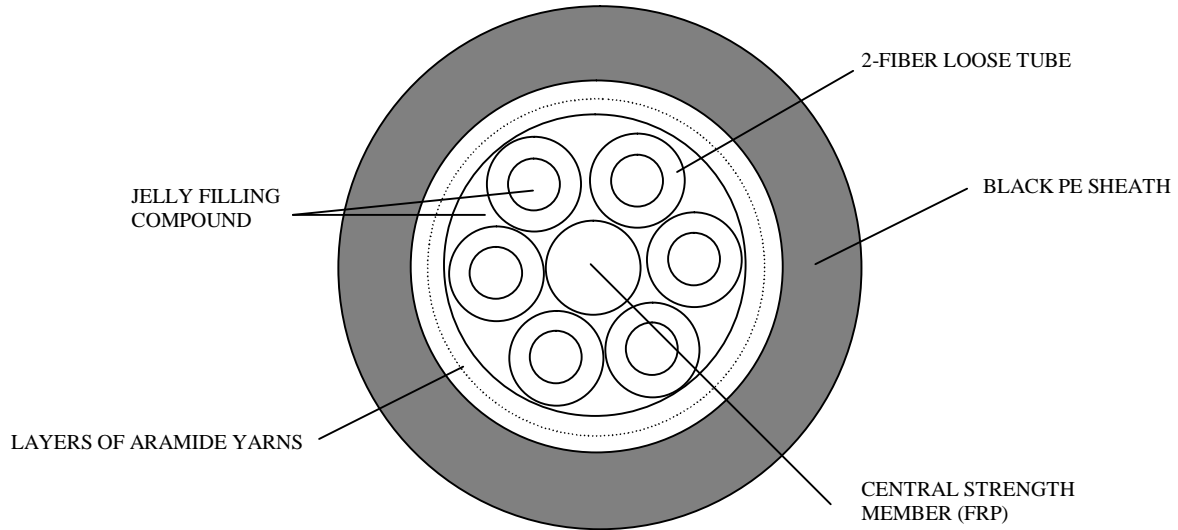
*: Outer diameter of the cable

Package: The offered cable will be delivered in one wooden drum suitable for safe transport, storage and installation. Cable length: 2000 -0 / +100m.

Identification colour code: For the identification of optical fibers and loose tubes will be used the following colour code:

TUBE COLOUR	FIBER COLOURS
White	Red, Green,
White	Yellow, Natural,
White	Brown, Violet,
White	Grey, Turquoise
White	White, Pink
White	Orange, Blue

Cross-section of the offered ADSS cables



Note: Drawing is not to scale.

Basic Characteristics of single-mode optical fibers (ITU-T G.652D):

DIMENSIONAL CHARACTERISTICS	Value
Mode field diameter, (μm) at 1310 nm at 1550 nm	9.2 ± 0.5 10.4 ± 1.0
Core concentricity max. error (μm)	0.5
Cladding diameter, (μm)	125 ± 1
Cladding non-circularity, max. value (%)	1
Primary coating diameter, (μm)	245 ± 10
Coating - Cladding Concentricity error, max. value (μm)	12
MECHANICAL & ENVIRONMENTAL CHARACTERISTICS	
Proof Test, min. value %	1
TRANSMITTING CHARACTERISTICS	
Attenuation max. value (dB/km) at 1310 nm at 1550 nm	0.35 0.22
Chromatic Dispersion, max. value (ps/(nm.km)) at 1285-1330 nm at 1550 nm	≤ 3.5 ≤ 18
Cable Cut-off wavelength λ_{cc}, nm	< 1260
Zero Dispersion Wavelength λ_0 (nm):	1302-1322
Zero dispersion Slope S_0, nom. (ps/(nm².km))	0.092
Fiber Polarization Mode Dispersion (PMD) max. (ps/(km^{0,5}))	0.2