



# Caledonian

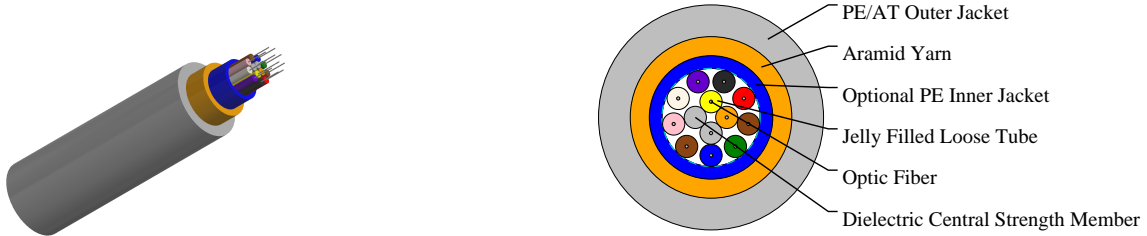
Fiber Optic Cables

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## ALL DIELECTRIC SELF-SUPPORTING (ADSS) CABLE

Ice + Wind: 0mm + 35m/sec



## APPLICATIONS

The "All Dielectric Self-supporting (ADSS)" cable is designed for aerial self supporting application at short, medium and long span distances. ADSS cable offers a rapid and economical means for deployment by cable television operators, telephone companies and power utilities. It is adopted for high voltage, middle, small span conditions in Power Transmission System or mazy terrain such as river spanning, mountains.

Features:

High capacity cable offer great flexibility for placement on overhead transmission towers, eliminating the need for a support messenger.

Dry core design and high tension strength capability suitable for toughest environmental and electrical conditions. Fit for extra high voltage power lines without interruption of power service to the customers.

Typical spans with 1%-1.5% installation sag.

## PRODUCT DESCRIPTION

The cable consists of 5 to 36 fibers containing tubes or fillers stranded in up to 3 layers around a central strength member and bound under a PE jacket. Each tube contains 6 -12 fibers. All the fibers in the cores are filled with water blocking gel. Fillers may be used to preserve the cable geometry. A water swelling tape is helically wrapped around the cable core. Aramid yarns are helically laid to supply peripheral strengthening of the cable. The outer jacket is tightly bounded over the aramid yarn layer. The cable jacket incorporates an optional inner polyethylene jacket and an outer polyethylene or AT (anti-tracking) jacket. When the induction on cable surface is above 12KV, anti-tracking sheath material (AT) will be applied. With AT outer jacket, the maximum electric field strength at operating point can reach 35KV. For long span application, a double jacket design can be considered. An optional ripcord can be put under the jacket layer to facilitate its removal.

## STANDARDS

IEC60794-1-2

Telcordia GR-20

RUS 7 CFR 1755.900 (REA PE-90)

ICEA S 87-640

IEEE 1222

## MECHANICAL PROPERTIES



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Minimum Bending Radius:

Under installation: 20XOD

During operation: 10×OD for unarmoured cables

20×OD for armoured cables

Temperature Range:

Operating Temperature Range: -40°C(-40°F) to +70°C(+158°F)

Storage Temperature Range: -45°C(-58°F) to +70°C(+158°F)

Maximum Compressive Load:4000N

Repeated Impact: 4.4 N.m (J)

Twist (Torsion): 180X10 times, 125XOD

Cyclic Flexing: 25 cycles for armoured cables;

100 cycles for unarmoured cables.

Crush Resistance: 220N/cm (125lb/in)

### DIMENSION AND PARAMETERS

Span	Approx. Overall Diameter	Approx. Overall Diameter	Cable Weight	Cable Weight	Max. Working Tension	Max. Sag
m	in	mm	Lbs./Kft	kg/km	N/lb	%
500	0.657	16.7	147.65	220	30590/6881	3