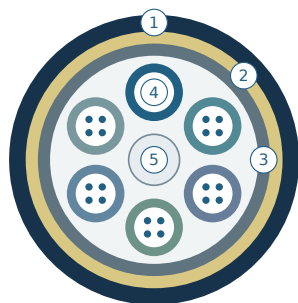


ADSS & ASU aerial cables

Self-supporting aerial cable selection for telecom routes and suitably designed power-line corridors. ADSS and ASU require separate construction and loading specifications.



ADSS

Schematic cross-section - not to scale

- 1. Outer PE / AT sheath
- 2. Aramid reinforcement
- 3. Inner sheath (double-sheath example)
- 4. Loose tubes with optical fibers
- 5. Non-metallic central strength member

Component sizes and fiber count depend on the selected construction. Diagram is not to scale.

Model / input	Selection detail
ADSS construction	Stranded loose tubes, a non-metallic central strength member and aramid reinforcement. Published single-sheath designs use semi-dry water-blocking; double-sheath designs include an inner PE sheath and cable filling compound.
Fiber selection	Published ADSS reference bands cover 2-144F. Specify fiber category, wavelengths and attenuation limits in the order datasheet.
Span / sheath	Review span, wind and ice loads, installation tension and electric-field exposure. PE / anti-tracking (AT) sheath selection is project-specific. A nominal diameter or RTS alone is not a span rating.
ASU construction	A compact central loose tube with non-metallic strength elements for self-supporting aerial telecom distribution. Confirm the exact fiber count, member sizes, sheath and loading/span rating separately.

Selection notes

ADSS supports itself without a separate messenger. ASU construction varies by design; no dimensions, weight or span from the ADSS table should be applied to ASU. The ASU source below is an industry structure reference, not a Yuanda order specification.

For a quotation: model, fiber count/type, span, wind/ice loads, line environment, quantity, reel length and destination port.

See page 2 for the checked reference tables. Request the order datasheet for final construction, tolerances and agreed tests.

ADSS reference dimensions by fiber-count band

Published single- and double-sheath constructions, compared by fiber-count band. Values were checked against the public source tables on 7 October 2026.

Fiber band (F)	Single typical dia. (mm)	Single ref. wt. (kg/km)	Double typical dia. (mm)	Double ref. wt. (kg/km)
2-30	10.5	82	12.8	117
32-36	10.5	82	12.8	117
38-60	11.1	91	13.5	127
62-72	11.1	92	13.5	128
74-84	11.3	106	15.0	144
86-96	12.5	118	15.0	162
98-108	13.1	130	15.7	177
110-120	13.9	145	16.5	196
122-132	14.5	159	17.1	211
134-144	15.2	174	18.2	229

Loading and bending: the same published designs

Sheath	Max. operating tension (kN)	RTS (kN)	Crush LT / ST (N)	Bend static / dynamic
Single	3.0	7.5	300 / 1000	10D / 20D
Double	4.0	10.0	1000 / 3000	12.5D / 25D

RTS = rated tensile strength; D = cable outer diameter; LT / ST = long / short term. These are reference designs, not allowable span tables. Span, sag and loading must be reviewed for the selected cable. Confirm crush-test conditions in the order specification.

Typical reference values, not guaranteed order values. A fiber-count band can share a nominal diameter and reference weight. This does not mean every fiber count has identical measured weight. Final dimensions, weight, tolerances and mechanical limits are confirmed in the agreed order datasheet.

Source references - checked 7 October 2026

Public reference: Single-sheath ADSS construction and typical values

Public reference: Double-sheath ADSS construction and typical values

Public reference: ASU industry structure only - Prysmian