

01.09.2023

Product Datasheet
fiber optic cable: InAir ADSS DJ 288 Ultra 15kN 0.963

Order information

| Design | Part number |
|------------------------------------|-------------|
| InAir ADSS DJ 288 Ultra 15kN 0.963 | 550417 |

Other fiber counts available upon request

Typical application and features

- Aerial installation between poles and buildings
- Aerial installation on powerlines
- Aerial installation for communication lines
- Pulling into underground ducts and sewer pipes
- Installation along bridges, tunnels and other structures
- Installation into indoor/outdoor cable conduits and trays

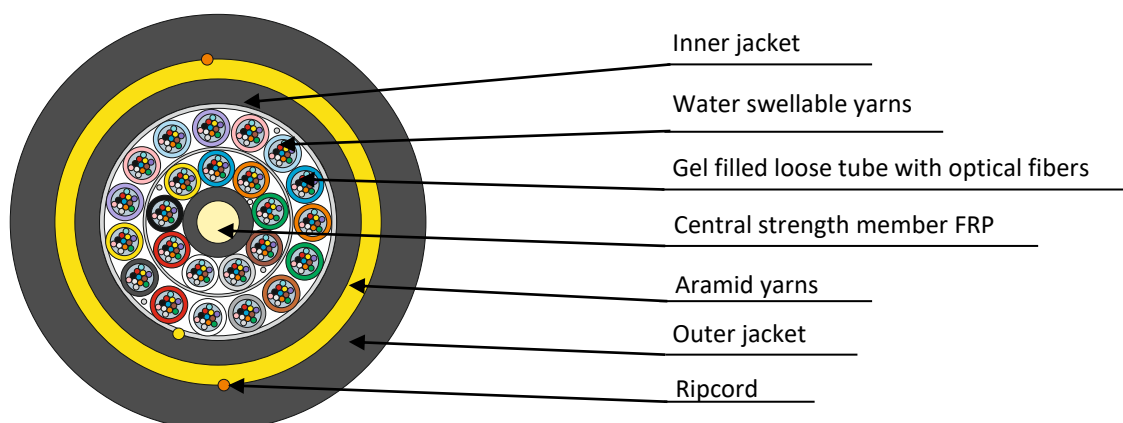


All-dielectric design



UV-resistant

Design



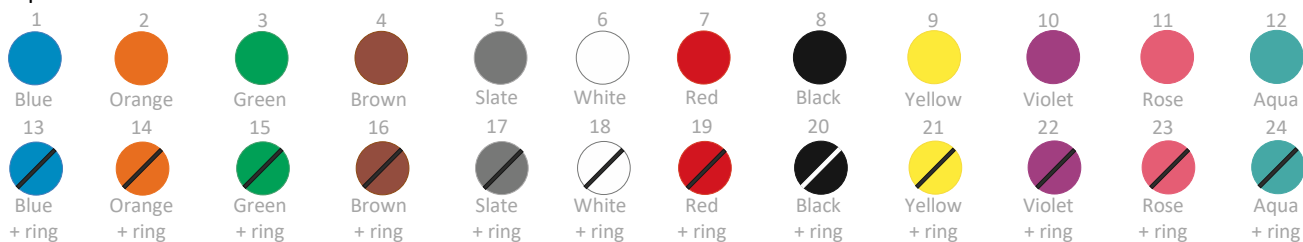
Cable consists of stranded core with central strength member (FRP) and two layers of gel-filled loose tubes with optical fibers. Stranded core is fixed by water swellable yarns. Water swellable tapes are laid between the layers and over second layer. Inner jacket is made of LDPE. One ripcord is laid under inner jacket. Aramid yarns are laid over inner jacket. Outer jacket is made of MDPE. Two ripcords are laid under outer jacket.

Optical fibers and loose tubes color identification:

Loose tubes in the 1st layer: 1-9

Loose tubes in the 2nd layer: 10-24


Optical fibers: 1-12



Other colors upon request

Cable marking example

Marking is made on each 2 feet of cable

| 00001 FT | = INCAB | OPTICAL CABLE = | PART NUMBER | InAir ADSS DJ | 288 | Ultra | 15kN | 0.963 |  | 2022 |
|----------|---------------------|-----------------|-------------|---------------|------------------------------|-------|------|-------|---|------|
| 1 | 2 | | 3 | 4 | 5 | 6 | 7 | 8 | | 9 |
| 1 | Length marking unit | | | 6 | Fiber type | | | | | |
| 2 | Manufacturer | | | 7 | Maximum rated design tension | | | | | |
| 3 | Part number | | | 8 | Diameter | | | | | |
| 4 | Cable trade name | | | 9 | Year of production | | | | | |
| 5 | Fiber count | | | | | | | | | |

Additional information upon request. Marking can also be in meters

Design details

| | | |
|--|------------------------------------|---------------|
| Fiber count | | 288 |
| Number of loose tubes | | 24 |
| Fibers per loose tube | | 12 |
| Loose tube diameter | in (mm) | 0.118 (3.0) |
| Inner jacket thickness | in (mm) | 0.039 (1.0) |
| Outer jacket thickness | in (mm) | 0.059 (1.5) |
| Cable diameter ± 0.008 (0.2) | in (mm) | 0.963 (24.4) |
| Cable weight | lb/ft (kg/km) | 0.27 (402.0) |
| Maximum rated design tension | lb (kN) | 3373 (15.0) |
| Zero fiber strain margin | lb (kN) | 2541 (11.3) |
| Stringing tension (STT) | lb (kN) | 843 (3.75) |
| Rated breaking strength (RBS) | lb (kN) | 6970 (31) |
| Modulus of elasticity, initial | ksi (kN/ mm ²) | 599 (4.13) |
| Modulus of elasticity, final | ksi (kN/ mm ²) | 647 (4.46) |
| 10-year modulus of elasticity, creep | ksi (kN/ mm ²) | 467 (3.22) |
| Cable cross-sectional area | in ² (mm ²) | 0.726 (468.4) |
| Coefficient of thermal expansion, 10 ⁻⁶ | 1/°F (1/°C) | 8.54 (15.37) |

Other design upon request

Operating parameters

| | | |
|--|-------------------------------|---------------|
| Operation temperature range | -40°F...+158°F | -40°C...+70°C |
| Installation temperature range | -22°F...+122°F | -30°C...+50°C |
| Transportation and storage temperature range | -58°F...+158°F | -50°C...+70°C |
| Minimum bending radius, with load | 15 x cable diameter | |
| Minimum bending radius, with no load | 10 x cable diameter | |
| Design life | 25 years (per fiber supplier) | |
| Maximum space potential | 12 kV | |

Reel capacity

| | | |
|-------------------------------|----------|---------|
| Standard maximum reel length* | 5,000 ft | 1,520 m |
|-------------------------------|----------|---------|

* Longer length may be possible

Performance standard

Complies with IEEE 1222-2019 requirements

Optical fiber

| | |
|----------------------|-----------------------|
| Fiber type | «Ultra» |
| Product name | Corning SMF 28® ULTRA |
| ITU-T Recommendation | G.652D + G.657.A1 |

Transmission Specifications

| | |
|------------------------------------|------|
| Attenuation in the cable (dB/km)*: | |
| 1310 nm wavelength (Max.) | 0.35 |
| 1550 nm wavelength (Max.) | 0.25 |

* Local attenuation discontinuities caused by cable winding on a reel are allowed

Additional information about optical fiber at www.incabamerica.com

Reel packing and marking

Cables are supplied on non-returnable wooden reels. Reel diameter is not less than 40 diameters of the cable. Not less than 2 m of inside end of the cable is fixed to the reel flange. The cable ends are sealed with waterproof covers.

The label on the outer reel flange contains our trademark, cable type, customer's name and PO, reel number, production date, cable length, cable weight net/gross.

The following information is printed on the reel flange: manufacturer's name and website, rotation direction, cable end indication, shipping and handling summary, labels "Fragile" and "Handle with care".

Our cable passport shows: cable type, technical standard number, cable length, fiber type, fiber coloring, fibers per tube, tube identification coloring, final attenuation for all fibers, refractive index of the fiber, fiber manufacturer and production date.

Cable passport is affixed to the inner flange in a plastic bag. Additional information can be included on the passport upon request.