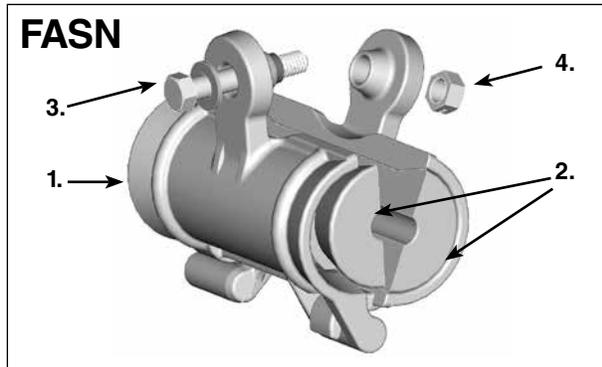




FIBERLIGN® Aluminum Suspension for ADSS



NOMENCLATURE

1. Keeper
2. Cushion Inserts (With or Without Grit)
3. Captured Bolt and Washer (Captured with Grommet)
4. Lock Nut
5. Anchor Shackle with Eye-nut (Optional not shown)
6. Structural Reinforcing Rods (optional, not shown)

Keeper:

The aluminum alloy keepers have an interlocking hinge for simple access and cable installation. Closing the keeper captures and secures the cushion inserts and ADSS cable. The keepers join together to form a clevis for attachment to the structure via Cat. No. AS-5L anchor shackle fitting or equivalent.

Cushion Inserts:

A soft pliable dielectric material that gently grips the ADSS cable – supplied either with or without grit on the inner diameter bore. Gritted inserts are applied over optional Structural Reinforcing Rods for medium span applications. The gritted inserts have a conductive aluminum strip located near the center for higher voltage environments.

Captured Bolt, Washer, and Lock Nut:

Galvanized steel bolt and washer captured with an elastomer o-ring. The galvanized steel Lock Nut has a stiff wire locking mechanism designed to engage with the thread of the mating bolt.

Structural Reinforcing Rods (SRR)

are preformed galvanized steel rods – subsetting and gritted. They are intended to provide additional protection to the cable jacket and increase longitudinal holding abilities of the unit.

FASN is the acronym for FIBERLIGN ALUMINUM SUSPENSION.

APPLICATION

The FIBERLIGN Aluminum Suspension (FASN) is designed to gently, but firmly support All-Dielectric self-Supporting (ADSS) cable. The FASN features the following: Interlocking Hinge, Single-bolt clamping, Short

to Medium Span Option, Low to High Voltage Environment acceptance. The addition of SRR allows the versatile FASN to go from a distribution environment to a transmission environment. Fittings and brackets are available for wood pole and concrete or metal structure applications.

Span Length Capability

1. For short spans without SRR:
<600' (183 m) maximum recommended span lengths.
2. For Intermediate spans with SRR:
<1200' (366 m) maximum recommended span lengths.

For additional cable jacket protection, longer spans and higher longitudinal holding requirements, the dual rod layer FIBERLIGN Dielectric Suspension (found later in this section) is recommended.



Anchor Shackle w/Eye Nut Option



FASN with Rods

Vertical Load Limit

The FASN has an ultimate vertical load capability of 7000 (31 kN) pounds.

Longitudinal Cable Holding Capabilities

Without SRR, modest longitudinal holding capabilities are provided via compression of the non-gritted inserts on the cable. Specific values are dependent upon cable brand, internal construction and diameter. Consult PLP for specifics. With SRR, substantial longitudinal holding capabilities are provided via insert compression and are enhanced by the grit on both the inserts and SRR. Contact PLP for specifics.

Rod End Treatment

In order to avoid scratching, gouging or nicking of the plastic jacket during installation, unbalanced loading, or cable motion, the ends of the SRR's are factory formed to flare away from the cable surface.

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Grounding and Corona Protection:

If positive grounding of the cable and metallic components of the FASN is desired, a grounding wire can be attached to the 3/8" captured bolt. PLP can supply a 4' (1.2m) long #4 copper or 4/0 aluminum grounding wire assembly (Cat. No. 710010016 or 710010294 respectively).

For the FASN, the SRRs have been designed to accept the ADSS-CORONA™ Coil. The ADSS CORONA Coil reduces electrical stress at the ends of the metal rods. Further catalog information about this product can be found later in this section.

Mounting

- Bolted (Wood Poles): Adding suffix code "S" provides an anchor shackle with 5/8"-11 eye nut accessory (Cat. No. 710010357) for attachment to double arm bolts. The anchor shackle (Cat. No. AS-5L) may be purchased separately to attach to eyebolts.
- Banded (Steel, Concrete Poles): Banding Bracket (Cat. No. 710010577) is offered for low tension/short span support application only. The kit includes a 5/8"-11x 2-1/2" long bolt, lockwasher, hex nut and banding bracket. The bracket is rated for 1,200# (5.3 kN) vertical load and should be used with a high strength 1-1/4" (32 mm) steel band (band purchased separately).

Line Angles

The FASN maximum recommended line angle for a single suspension unit is 30° depending on cable brand. Two units can be combined to turn larger angles up to 60°, although double dead-ending is another option for large angles. Contact PLP for details.

Torque Level

The 3/8" captured bolt should be tightened UNTIL THE LOCK WASHER IS FLAT and the clevis halves are joined flush. This will require about 10 foot-pounds (120 inch-pounds or 13.5 Newton-meters) of force. DO NOT OVER-TORQUE.

| Heavy-Duty FIBERLIGN® Aluminum Suspension Kit with Structural Reinforcing Rods | | | | | |
|---|------------------|---------------|-----------------|---------------|------------|
| Catalog Number* | ADSS Cable Range | | | | Color Code |
| | Min. (mm) | Max. (mm) | Rod Length (mm) | Rod Dia. (mm) | |
| 4470199 | 0.426" (10.8) | 0.475" (12.0) | 30" (762) | .100" (2.5) | Green |
| 4470200 | 0.476" (12.1) | 0.500" (12.7) | 33" (838) | .100" (2.5) | Red |
| 4470201 | 0.501" (12.8) | 0.550" (14.0) | 34" (864) | .100" (2.5) | Blue |
| 4470202 | 0.551" (14.1) | 0.625" (15.9) | 34" (864) | .100" (2.5) | Black |
| 4470203 | 0.626" (16.0) | 0.700" (17.8) | 35" (889) | .100" (2.5) | Orange |
| 4470204 | 0.701" (17.9) | 0.737" (18.7) | 36" (914) | .119" (3) | Green |
| 4470205 | 0.738" (18.9) | 0.812" (20.6) | 36" (914) | .119" (3) | Pink |
| 4470206 | 0.813" (20.7) | 0.887" (22.5) | 37" (940) | .119" (3) | Purple |
| 4470207 | 0.888" (22.6) | 0.962" (24.4) | 37" (940) | .119" (3) | White |
| 4470208 | 0.963" (24.5) | 1.037" (26.3) | 37" (940) | .119" (3) | Yellow |
| 4470209 | 1.038" (26.4) | 1.112" (28.2) | 38" (965) | .119" (3) | Brown |
| 4470210 | 1.113" (28.3) | 1.187" (30.1) | 39" (991) | .119" (3) | Red |

*Add Suffix "S" to Catalog No. to include one #AS-5L Anchor Shackle

| FIBERLIGN® Aluminum Suspension Without Structural Reinforcing Rods | | | | | |
|---|---------------------------|------------------|-----------|-----------|-----------|
| Catalog Number | | ADSS Cable Range | | | |
| Complete Assembly | Inserts Only (2 Required) | Min. (in) | Max. (in) | Min. (mm) | Max. (mm) |
| 4450195 | 00070241 | 0.226 | 0.275 | 5.7 | 6.9 |
| 4450196 | 00070236 | 0.276 | 0.325 | 7 | 8.2 |
| 4450197 | 00070237 | 0.326 | 0.375 | 8.3 | 9.4 |
| 4450198 | 00070238 | 0.376 | 0.425 | 9.5 | 10.7 |
| 4450199 | 00070239 | 0.426 | 0.475 | 10.8 | 12 |
| 4450200 | 00070125 | 0.476 | 0.525 | 12.1 | 13.3 |
| 4450201 | 00070126 | 0.526 | 0.575 | 13.4 | 14.6 |
| 4450202 | 00070127 | 0.576 | 0.625 | 14.7 | 15.9 |
| 4450203 | 00070128 | 0.626 | 0.675 | 16 | 17.1 |
| 4450204 | 00070129 | 0.676 | 0.75 | 17.2 | 19.1 |
| 4450205 | 00070130 | 0.751 | 0.825 | 19.2 | 21 |
| 4450206 | 00070131 | 0.826 | 0.9 | 21.1 | 22.9 |
| 4450207 | 00070132 | 0.901 | 0.975 | 23 | 24.8 |
| 4450208 | 00070133 | 0.976 | 1.05 | 24.9 | 26.7 |
| 4450209 | 00070134 | 1.051 | 1.25 | 26.8 | 28.6 |
| 4450210 | 00070135 | 1.126 | 1.2 | 28.7 | 30.5 |
| 4450211 | 00070136 | 1.201 | 1.275 | 30.6 | 32.4 |
| 4450212 | 00070137 | 1.276 | 1.35 | 32.5 | 34.3 |
| 4450213 | 00070138 | 1.351 | 1.425 | 34.4 | 36.2 |

Quantity 2 Inserts Required per Suspension

For Housing Only - Order #4450001

*Add Suffix "S" to Catalog No. to include one #AS-5L Anchor Shackle and 5/8" Eye-Nut

ORDERING INSTRUCTIONS

Refer to the catalog tables (with or without rods) and select the appropriate FASN for the ADSS cables outside diameter.

Add suffix code "S" to include anchor shackle with 5/8" eye-nut (Cat. No. 710010357) option.

Order Cat. No. 710010577 to receive the Limited Tension Banding Bracket – see "Mounting" paragraph earlier in this section for details.

Order Cat. No. 710010016 to receive a 4' (1.3 m) long #4 (7W) copper with terminal on one end. Order Catalog No. 710010294 to receive a 4' (1.2 m) long 4/0 (7W) aluminum conductor with terminal on one end.