FIBERLIGN® Suspension for OPGW

**NOMENCLATURE**

1. Bolt  
2. Lock washer  
3. Lock nut  
4. Outer Rods  
5. Insert  
6. Housing  
7. Strap  
8. Structural Reinforcing Rods  
9. Current Transfer Tab  
(for OPGW only)

- **Bolt, Washer, Lock Nut:** Galvanized Steel.
- **Strap:** High-strength Aluminum Alloy.
- **Insert:** An elastomer specifically formulated for resistance to ozone attack, weathering, extreme high and low temperature variations, and compression set. An Aluminum Alloy reinforcement is molded into the elastomer.
- **Housing:** High-strength aluminum alloy casting
- **Structural reinforcing rods and outer rods:** High-strength Aluminum Alloy.
- **Current Transfer Tab:** (Supplied for OPGW Applications only) High Strength Aluminum Alloy.

**APPLICATION**

The FIBERLIGN Suspension provides superior cable and fiber protection at the support point. The combination of Structural Reinforcing Rods, Outer Rods, boltless housing and resilient inserts reduces compression, clamping, and bending stresses on cable. Negative weather related cable motion, such as aeolian vibration, galloping, and wind sway are also minimized.

The FIBERLIGN Suspension is specially designed for supporting all installations of Optical Ground Wire (OPGW). Due to different performance requirements and cable characteristics OPGW and ADSS cables require different design FIBERLIGN Suspension Units.

For trunnion or bracket mounting, a FIBERLIGN Trunnion Support for OPGW is available. This unit has a housing designed to fit a trunnion cap or bracket with dimensions consistent with those specified in ANSI C29.7-1986, Class 57. Consult PLP® for specific information.
FIBERLIGN® Suspension for OPGW

Double FIBERLIGN Suspension for Optical Ground Wire (OPGW)

The Current Transfer Tab provides direct electrical bonding between OPGW and a ground lead. The current transfer tab eliminates current transfer through components of the suspension unit. The standard current transfer tab accommodates left-hand lay OPGW. Right-hand lay and larger units for special applications are also available. Consult PLP for specifics.

The current transfer tab is not required or supplied for ADSS applications.

Grounding Wire Assembly Options:
A 4’ ground wire with compression terminal can be provided. This assembly can be connected from the FIBERLIGN Suspension to the ground lead in your system. Two types of ground wire materials are offered (copper or aluminum). To include the preferred ground wire assembly in the same carton with the current transfer tab, add the appropriate suffix code to the suspension catalog number (see table on next page).

Ultimate Vertical Strength & Housing & Fitting Dimensions:
Refer to dimensional table in this section.

Lay Direction:
Left-hand lay is standard although FIBERLIGN Suspension or Support units for OPGW may be used on right-hand lay OPGW at reduced slip loads, or custom ordered right-hand lay units are available.

Slip Load:
When initially installed, the FIBERLIGN Suspension has a slip load of approximately 10-20% of a standard OPGW rated strength, but significantly higher loads can be expected after the unit has been in service for a period of time.

Line Angles:
The maximum recommended line angle for a single FIBERLIGN Suspension is 30°. For OPGW line angles between 30° and 60°, the FIBERLIGN Suspension: Double is recommended, although double dead-ending is another option. Double units for ADSS cable are available on custom order although double dead-ends are also an option.

Fittings:
An appropriate fitting such as a Y-clevis or clevis eye may be required to attach the Suspension unit to the structure or other hardware. These fittings must match the dimensions of the suspension housing. (See dimensional tables on next page)

Fitting Suffix Codes:
To include the Y-clevis and clevis eye fittings in the same carton with the suspensions, add the appropriate suffix code to the suspension catalog number (see table on next page).

Component Reuse:
Once installed, do not reuse the rod components. The hardware components may be reused as desired as long as they are in good condition. Do not modify any components.
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Single and Double FIBERLIGN Suspensions for OPGW

Ordering Instructions:
Select the appropriate FIBERLIGN Suspension for OPGW from the following table. Consult PLP® for trunnion or bracket type mounting OPGW applications and for the availability of all sizes and designs.

Accessories and Fittings:
Ground wire assemblies and fittings may be included in the same container with the suspension by adding the appropriate SUFFIX CODE from the adjacent table.

Note: the suffix sequence is grounding wire first and fittings second. Example – 4300100GYC includes a 4300100 single suspension with copper ground wire assembly (G) and Y-clevis eye (YC).

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<td>G</td>
<td>4' (1.2 m) long #4 (7W) Copper with terminal on one end. Catalog No. 710010015</td>
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<td>GA</td>
<td>4' (1.2 m) long 4/0 (7W) Aluminum conductor with terminal on one end. Catalog No. 710010293</td>
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<td>GA2</td>
<td>5' (1.5 m) long 95 mm² (19w) Aluminum Ground wire with terminals at both ends</td>
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CAUTION: Determine appropriate material and size wire necessary to provide adequate grounding for your system before ordering the ground wire assemblies. For proper performance and personal safety be sure to select the proper ground wire before application.

Suffix Code Description
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S2 | Anchor Shackle (Catalog No. AS-5L), 25,000#
YC | One (1) Y-clevis to fit selected suspension. Single suspension applications.
CE | One (1) clevis eye to fit selected suspension. Single suspension applications.
CEYP | Two (2) clevis eyes with yoke plate to fit selected suspension. Double suspension applications.

Catalog Number Diameter Range Structural Reinforcement Rods Outer Rods
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Left-hand lay standard