



FIBERLIGN® ALUMINUM SUSPENSION

The **FIBERLIGN Aluminum Suspension (FASN)** system is designed to gently, but firmly, support ADSS cable. It is intended for tangent support installations on lines that have short to medium spans and can be used in low- to high-voltage environments. The FASN can be provided with Structural Reinforcing Rods (SRR) for transmission portions of the cable network as well. The FASN can be customized to include fittings and brackets for wood, concrete, or metal poles and structures.

FEATURES AND BENEFITS

- Can be provided with an optional anchor shackle and 5/8"-11 eye nut for bolted applications on a pole or structure
- Banding bracket, ground wire, and corona protection options are available separately
- Supports span lengths up to 600 ft (183 m) NESC Heavy for cables without SRR and span lengths up to 1,200 ft (366 m) NESC Heavy for cables with SRR
- Supports line angles up to 30 degrees
- Keepers are made from aluminum alloy
- Inserts are made from a soft, pliable dielectric material that gently grips and cushions the cable. Inserts are supplied with grit on the inner bore hole when they are applied on SRR.
- Hinged keepers are secured together with a captured galvanized steel bolt, lock washer, and washer
- SRR ends are factory formed to flare away from the cable to prevent damage to the cable during installation, unbalanced loading, or cable motion.

CABLE SYSTEM SPECIFICATIONS

The suspension performance depends upon the specific cable outer diameter, initial cable tension, NESC loading condition, and other factors. The **FIBERLIGN® Aluminum Suspension** is designed for a cable system with light to medium tensions and short to intermediate spans. The following cable system specifications are required to use the FIBERLIGN Aluminum Suspension.

FIBERLIGN Aluminum Suspension

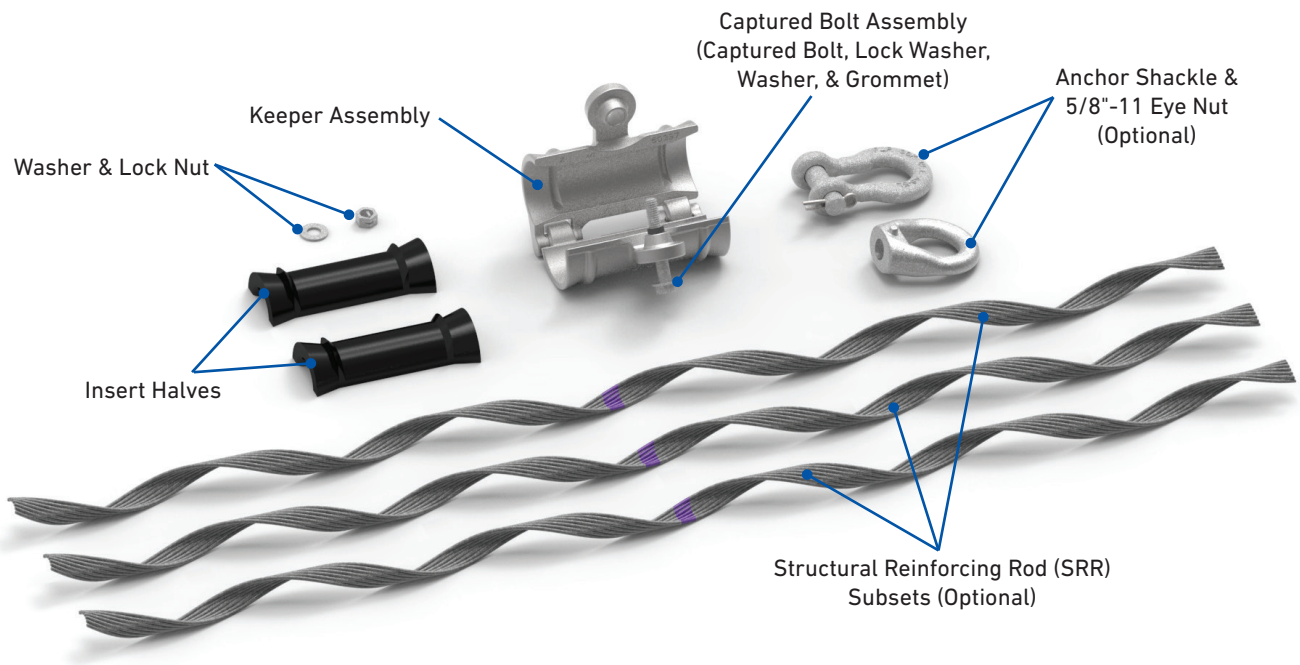
Cable System Requirements		
Maximum Span Length	Maximum Vertical Load	Maximum Line Angle ³
<600 ft (91 m) – no SRR ¹	lb	degrees
<1,200 ft (366 m) – with SRR ²	7,000	30

¹NESC Heavy for short spans without SRR (Structural Reinforcing Rods)

²NESC Heavy for intermediate spans with SRR

³Consult PLP for exceptions

COMPONENTS



Component	Description
Keeper Assembly	Features an interlocking hinge that allows for easy access when installing cables. Both keeper halves have a cavity designed to accept the insert halves. Keepers secure together with a captured bolt assembly that is factory installed and a lock nut with a washer. Secured assembly can attach to a pole or structure with the optional anchor shackle and eye nut or equivalent hardware.
Insert Halves	Slotted to accept cables with diameters up to 1.425" (36.2 mm) and designed to cushion the cable under loads. Molded flanges help the inserts stay in the keeper during installation and are supplied with or without grit on the inner cable slot. Gritted inserts are applied over optional SRR for intermediate span applications and have a conductive aluminum strip for higher voltage applications.
Structural Reinforcing Rods (Optional)	Galvanized steel rods that are subsetting and gritted. Provides additional protection to the cable jacket and increases longitudinal holding abilities of the unit. Rod ends are flared to protect the cable from damage during installation, unbalanced loading, or cable motion.
Anchor Shackle and 5/8"-11 Eye Nut (Optional)	Optional Anchor Shackle and 5/8"-11 Eye Nut are used to attach the assembled unit to a pole or structure with a 5/8" double-arming bolt.

MOUNTING OPTIONS

Bolt Mount

- Suspended from a 5/8"-11 double-arming bolt with an optional Anchor Shackle and 5/8"-11 Eye Nut add-on (**Catalog Number: 710010357**)
- For eye bolt applications, the Anchor Shackle can be ordered separately



FASN Attached to Pole with 5/8" Double-Arming Bolt

Band Mount

- Requires the 5,000 lb Limited Tension Banding Bracket Kit (**Catalog Number: 710010577**)
- Banding Bracket Kit includes: 5/8"-11 x 2-1/2" long bolt, lockwasher, hex nut, and banding bracket
- Use the optional Anchor Shackle and 5/8"-11 Eye Nut (**Catalog Number: 710010357**) to attach the suspension to the banding bracket
- Band to the pole with 1-1/4" banding (not included)



FASN Attached to Pole with Banding Bracket Kit

SRR APPLICATIONS

- Structural reinforcing rods (SRR) provide substantial holding strength via compression
- Holding strength is enhanced by the grip on the SRR and the inserts of the suspension itself
- Available for cable diameters ranging from 0.426" (10.8 mm) to 1.187" (30.1 mm)



FASN with SRR

CORONA PROTECTION

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



FIBERLIGN® ADSS-CORONA™ Coil
Applied on SRR

ORDERING INFORMATION

Select the appropriate **FIBERLIGN® Aluminum Suspension** based on the cable diameter. If the cable you are using does not fall within any of the published ranges, please contact PLP for further assistance. For other Aluminum Suspension accessories, refer to the previous page.

- Each Aluminum Suspension includes one complete insert (two halves) for the stated cable range.
- Additional inserts are sold as Insert Halves – see adjacent table

FIBERLIGN Aluminum Suspension without SRR

Catalog Number		Cable Diameter Range	
Suspension (includes insert)	Suspension with Anchor Shackle & 5/8"-11 Eye Nut	in	mm
4450195	4450195S	0.226 – 0.275	5.7 – 6.9
4450196	4450196S	0.276 – 0.325	7.0 – 8.2
4450197	4450197S	0.326 – 0.375	8.3 – 9.4
4450198	4450198S	0.376 – 0.425	9.5 – 10.7
4450199	4450199S	0.426 – 0.475	10.8 – 12.0
4450200	4450200S	0.476 – 0.525	12.1 – 13.3
4450201	4450201S	0.526 – 0.575	13.4 – 14.6
4450202	4450202S	0.576 – 0.625	14.7 – 15.9
4450203	4450203S	0.626 – 0.675	16.0 – 17.1
4450204	4450204S	0.676 – 0.750	17.2 – 19.1
4450205	4450205S	0.751 – 0.825	19.2 – 21.0
4450206	4450206S	0.826 – 0.900	21.1 – 22.9
4450207	4450207S	0.901 – 0.975	23.0 – 24.8
4450208	4450208S	0.976 – 1.050	24.9 – 26.7
4450209	4450209S	1.051 – 1.125	26.8 – 28.6
4450210	4450210S	1.126 – 1.200	28.7 – 30.5
4450211	4450211S	1.201 – 1.275	30.6 – 32.4
4450212	4450212S	1.276 – 1.350	32.5 – 34.3
4450213	4450213S	1.351 – 1.425	34.4 – 36.2
4450001	Housing Assembly Only		
710010357	Anchor Shackle and 5/8" - 11 Eye Nut		
AS-5L	Anchor Shackle Only		
710010577	5,000 lb Limited Tension Banding Bracket		

FIBERLIGN Aluminum Suspension Insert Halves

Catalog Number	Cable Diameter Range	
	in	mm
00070241	0.226 – 0.275	5.7 – 6.9
00070236	0.276 – 0.325	7.0 – 8.2
00070237	0.326 – 0.375	8.3 – 9.4
00070238	0.376 – 0.425	9.5 – 10.7
00070239	0.426 – 0.475	10.8 – 12.0
00070125	0.476 – 0.525	12.1 – 13.3
00070126	0.526 – 0.575	13.4 – 14.6
00070127	0.576 – 0.625	14.7 – 15.9
00070128	0.626 – 0.675	16.0 – 17.1
00070129	0.676 – 0.750	17.2 – 19.1
00070130	0.751 – 0.825	19.2 – 21.0
00070131	0.826 – 0.900	21.1 – 22.9
00070132	0.901 – 0.975	23.0 – 24.8
00070133	0.976 – 1.050	24.9 – 26.7
00070134	1.051 – 1.125	26.8 – 28.6
00070135	1.126 – 1.200	28.7 – 30.5
00070136	1.201 – 1.275	30.6 – 32.4
00070137	1.276 – 1.350	32.5 – 34.3
00070138	1.351 – 1.425	34.4 – 36.2

FIBERLIGN Aluminum Suspension with SRR

Catalog Number		Cable Diameter Range		SRR Specifications						
Suspension (includes insert)	Suspension with Anchor Shackle & 5/8"-11 Eye Nut	in	mm	Rod Length		Rod Diameter		Rods per Subset	Subset	Color Code
				in	mm	in	mm			
4470199	4470199S	0.426 – 0.475	10.8 – 12.0	30	762	0.100	2.5	14	5 – 5 – 4	Green
4470200	4470200S	0.476 – 0.500	12.1 – 12.7	33	838	0.100	2.5	15	5 – 5 – 5	Red
4470201	4470201S	0.501 – 0.550	12.8 – 14.0	34	864	0.100	2.5	16	6 – 5 – 5	Blue
4470202	4470202S	0.551 – 0.625	14.1 – 15.9	34	864	0.100	2.5	17	6 – 6 – 5	Black
4470203	4470203S	0.626 – 0.700	16.0 – 17.8	35	889	0.100	2.5	19	7 – 7 – 5	Orange
4470204	4470204S	0.701 – 0.737	17.9 – 18.6	36	914	0.119	3.0	18	6 – 6 – 6	Green
4470205	4470205S	0.738 – 0.812	18.7 – 20.6	36	914	0.119	3.0	19	7 – 7 – 5	Pink
4470206	4470206S	0.813 – 0.887	20.7 – 22.5	37	940	0.119	3.0	21	7 – 7 – 7	Purple
4470207	4470207S	0.888 – 0.962	22.6 – 24.4	37	940	0.119	3.0	22	7 – 7 – 4 – 4	White
4470208	4470208S	0.963 – 1.037	24.5 – 26.3	37	940	0.119	3.0	24	6 – 6 – 6 – 6	Yellow
4470209	4470209S	1.038 – 1.112	26.4 – 28.2	38	965	0.119	3.0	26	7 – 7 – 7 – 5	Brown
4470210	4470210S	1.113 – 1.187	28.3 – 30.1	39	991	0.119	3.0	27	7 – 7 – 7 – 6	Red

NOTE: To order the Housing Assembly and other components separately, refer to the FIBERLIGN Aluminum Suspension without SRR table.