

## FIBERLIGN® CUSHION CLAMP

The **FIBERLIGN Cushion Clamp** uses a combination of structural reinforcing rods (SRR) and elastomer inserts at the ends of the clamp halves to protect the OPGW from damage at support points.

### FEATURES AND BENEFITS

- Reduces negative effects of wind-induced cable motion, such as aeolian vibration, galloping, and sway
- Can accommodate either left-hand lay or right-hand lay OPGW
- A galvanized 1/2"-13 x 3/4" UNC bolt and lock washer are provided with one of the clamp halves to attach a ground wire assembly with a terminal lug to it for bonding OPGW to the supporting structure or a ground lead
- Each clamp half has two factory-installed elastomer cushion inserts to minimize stress at clamp ends
- Clamp halves have a machined central groove that ensures a proper fit and provides electrical continuity
- Clamp halves are secured with two captured 1/2"-13 galvanized steel U-bolts
- Clamp halves and SRR are high-strength aluminum alloy. Fastening hardware is galvanized steel.
- An optional ground wire assembly can be included with the cushion clamp
- SRR cannot be reused after they have been installed. Hardware components can be reused as desired if they are in good condition.
- The FIBERLIGN Cushion Clamp has been thoroughly tested for vibration, mechanical loading, and optical attenuation in accordance with IEEE Standard 1138 and IEEE Standard 1591.1

## HOLDING STRENGTHS AND LINE ANGLES

Characteristic	Specification
Unbalanced/Slip Load	10%–20% of standard OPGW rated strength
Maximum Vertical Load	20,000 lb
Maximum Line Angle	30 degrees for single cushion clamp; 60 degrees for double cushion clamp

## ATTACHMENT FITTINGS

- An Anchor Shackle (Catalog Number: AS-5L) can be included with Single or Double Cushion Clamps.
- A Y-Clevis (Catalog Number: YC-5207) or Clevis Eye (Catalog Number: CE-5261) can be included with Single Cushion Clamps.
- A Yoke Plate (Catalog Number: YP-5909) with two Clevis Eyes (Catalog Number: CE-5261) can be included with Double Cushion Clamps.



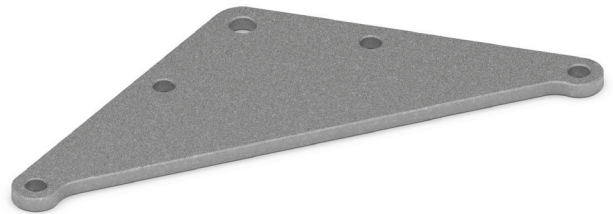
30,000 lb Anchor Shackle  
(Catalog Number: AS-5L)



20,000 lb Y-Clevis Eye  
(Catalog Number: YC-5207)

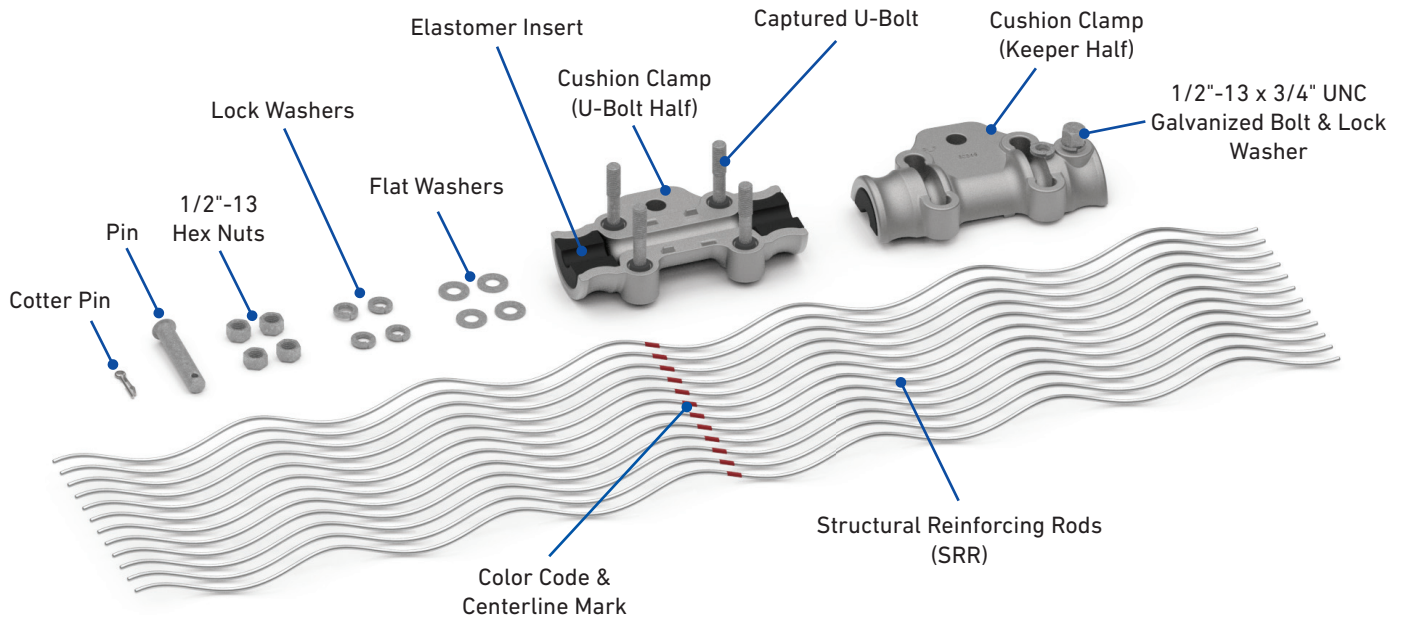


20,000 lb Clevis Eye  
(Catalog Number: CE-5261)



22" Yoke Plate  
(Catalog Number: YP-5909)

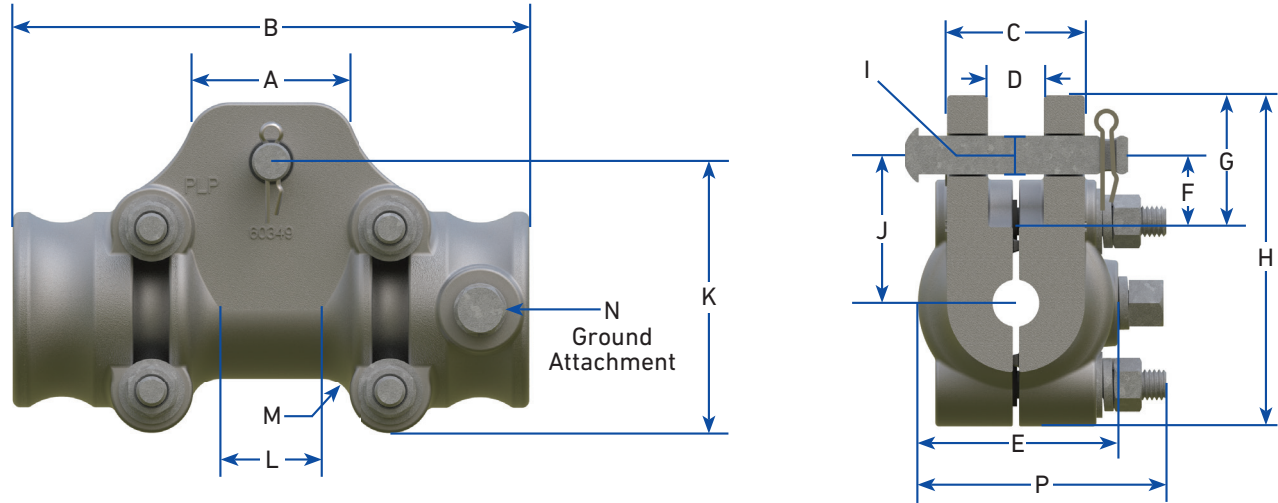
## COMPONENTS





## DIMENSIONS

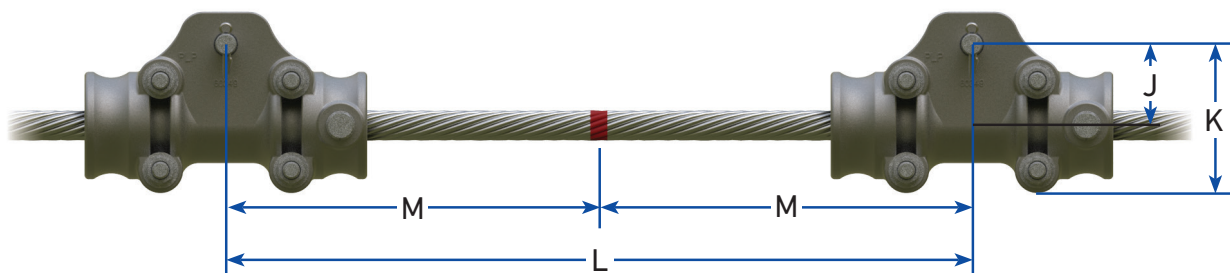
### Single Cushion Clamp



### FIBERLIGN Single Cushion Clamp

Dimensions														Maximum Vertical Load	
in (mm)															
A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	lb
2-23/64 (59.9)	8-11/32 (211.9)	2-11/32 (59.5)	13/16 (20.6)	3-3/32 (79.0)	1-5/32 (29.4)	2-1/8 (54.0)	5-1/4 (133.4)	5/8 (15.9)	2-11/32 (59.5)	3-21/32 (92.5)	1-25/32 (45.2)	16/32 (12.3)	1/2-13 UNC	3-15/16 (100.0)	20,000

### Double Cushion Clamp

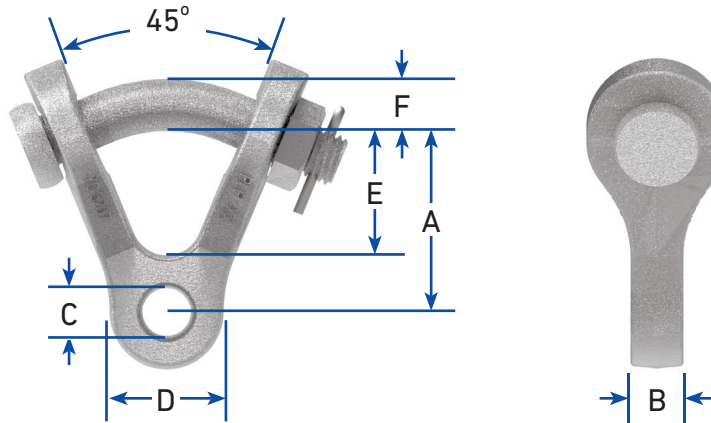


### FIBERLIGN Double Cushion Clamp

Dimensions				Maximum Vertical Load
in (mm)				
J	K	L	M	lb
2-11/32 (59.5)	3-21/32 (92.5)	22 (558.8)	11 (279.4)	40,000

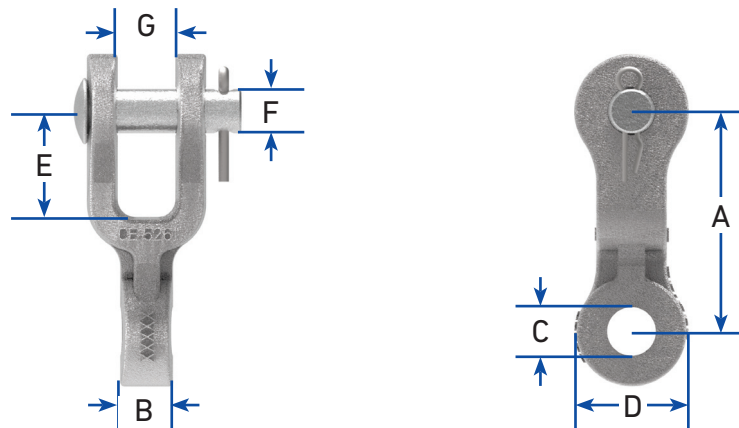
# DIMENSIONS

## Hardware Fittings



### Y-Clevis Eye

Catalog Number	Dimensions						Maximum Vertical Load
	in (mm)						
	A	B	C	D	E	F	lb
YC-5207	2-7/16 (61.9)	3/4 (19.1)	11/16 (17.5)	1-5/8 (41.3)	1-5/8 (41.3)	3/4 (19.1)	20,000



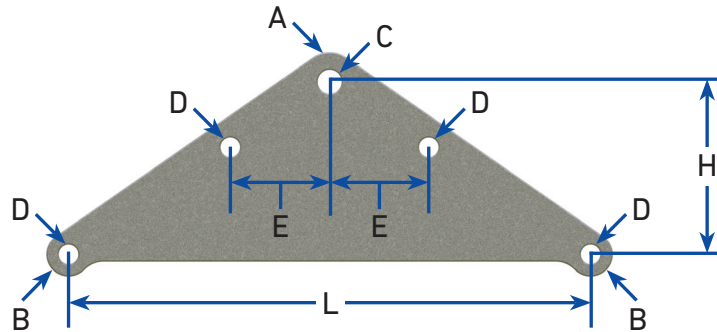
### Clevis Eye

Catalog Number	Dimensions							Maximum Vertical Load
	in (mm)							
	A	B	C	D	E	F	G	lb
CE-5261	3-1/8 (79.4)	3/4 (19.1)	11/16 (17.5)	1-1/2 (38.1)	1-1/2 (38.1)	5/8 (15.9)	13/16 (20.6)	20,000



## DIMENSIONS

### Hardware Fittings

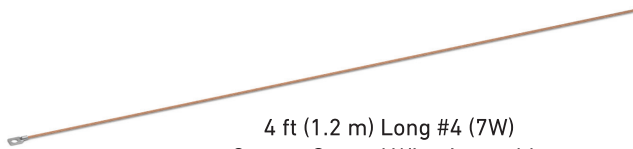


### Yoke Plate

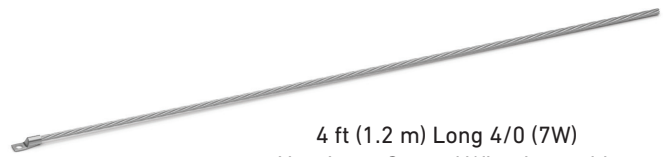
Catalog Number	Dimensions							Plate Thickness	Maximum Vertical Load
	in (mm)								
	A (Radius)	B (Radius)	C (Dia.)	D (Dia.)	E	L	H	in (mm)	lb
YP-5909	1-1/4 (31.8)	15/16 (23.8)	1" (25.4)	13/16 (20.6)	4-3/16 (106.4)	22 (558.8)	7-1/4 (184.2)	5/8 (15.9)	40,000

## ACCESSORIES

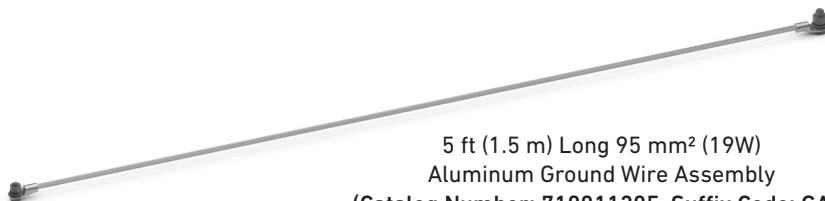
Catalog Number	Suffix Code	Description
710010016	G	4 ft (1.2 m) Long #4 (7W) Copper Ground Wire Assembly with One Terminal for 1/2" Bolt
710010294	GA	4 ft (1.2 m) Long 4/0 (7W) Aluminum Ground Wire Assembly with One Terminal for 1/2" Bolt
710011205	GA2	5 ft (1.5 m) Long 95 mm <sup>2</sup> (19W) Aluminum Ground Wire Assembly with One Terminal for M12 Bolt and One Terminal for M16 Bolt – Includes bolts, washers, lock washers, and hex nuts for each terminal
AS-5L	S2	30,000 lb Anchor Shackle
YC-5207	YC	20,000 lb Y-Clevis Eye
CE-5261	CE	20,000 lb Clevis Eye
CE-5261 (Qty 2)	CEYP	(2) 20,000 lb Clevis Eyes and (1) 40,000 lb 22" Yoke Plate - For Double Cushion Clamps only
YP-5909 (Qty 1)		



4 ft (1.2 m) Long #4 (7W)  
Copper Ground Wire Assembly  
(Catalog Number: 710010016, Suffix Code: G)



4 ft (1.2 m) Long 4/0 (7W)  
Aluminum Ground Wire Assembly  
(Catalog Number: 710010294, Suffix Code: GA)



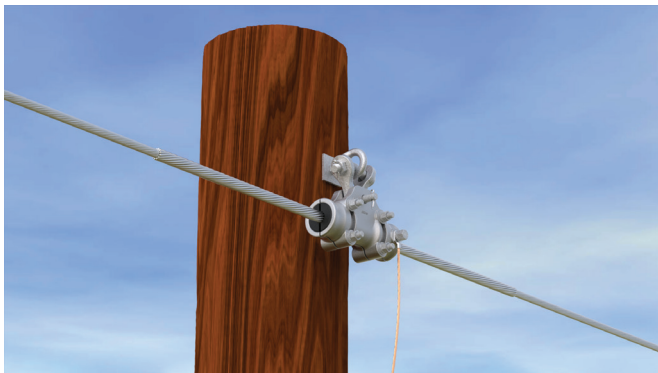
5 ft (1.5 m) Long 95 mm<sup>2</sup> (19W)  
Aluminum Ground Wire Assembly  
(Catalog Number: 710011205, Suffix Code: GA2)

## ORDERING INFORMATION

- Select the appropriate catalog number for the Cushion Clamp from the table below based on the diameter of the OPGW.
- Add the appropriate suffix code(s) to the Cushion Clamp catalog number to include a ground wire assembly and/or attachment fittings (**ex: Catalog Number: 4700100GYC, 4700100GACE, or 4700100GA2S2CEYP**) – see ACCESSORIES on the previous page for suffix codes.
- When adding suffix codes to the Cushion Clamp catalog number, make sure that the suffix code for the ground wire assembly comes **before** the suffix code(s) for the attachment fittings

### FIBERLIGN Cushion Clamp

Catalog Number		Cable Diameter Range		SRR Specifications					
				Rod Length		Rod Diameter		Rods per Set	Color Code
				Single	Double				
Single	Double	in	mm	in (m)	in (m)	in	mm		
4700100	4700200	0.376 – 0.387	9.6 – 9.8	31 (0.79)	60 (1.52)	0.204	5.2	7	Orange
4700101	4700201	0.388 – 0.429	9.9 – 10.9	32 (0.81)	61 (1.55)	0.182	4.6	8	Red
4700102	4700202	0.430 – 0.459	11.0 – 11.6	33 (0.84)	62 (1.57)	0.167	4.2	9	Black
4700103	4700203	0.460 – 0.482	11.7 – 12.2	34 (0.86)	63 (1.60)	0.154	3.9	10	Green
4700104	4700204	0.483 – 0.507	12.3 – 12.8	35 (0.89)	64 (1.63)	0.182	4.6	10	Yellow
4700105	4700205	0.508 – 0.537	12.9 – 13.6	36 (0.91)	65 (1.65)	0.167	4.2	11	Purple
4700106	4700206	0.538 – 0.563	13.7 – 14.3	37 (0.94)	66 (1.68)	0.154	3.9	12	Pink
4700107	4700207	0.564 – 0.585	14.4 – 14.8	39 (0.99)	68 (1.73)	0.182	4.6	11	Brown
4700108	4700208	0.586 – 0.615	14.9 – 15.6	40 (1.02)	69 (1.75)	0.167	4.2	12	Blue
4700109	4700209	0.616 – 0.641	15.7 – 16.3	41 (1.04)	70 (1.78)	0.154	3.9	13	Orange
4700110	4700210	0.642 – 0.664	16.4 – 16.8	44 (1.12)	73 (1.85)	0.182	4.6	12	Red
4700111	4700211	0.665 – 0.694	16.9 – 17.6	45 (1.14)	74 (1.88)	0.167	4.2	13	Black
4700112	4700212	0.695 – 0.720	17.7 – 18.3	46 (1.17)	75 (1.91)	0.154	3.9	15	Green
4700113	4700213	0.721 – 0.742	18.4 – 18.8	48 (1.22)	77 (1.96)	0.182	4.6	13	Yellow
4700114	4700214	0.743 – 0.772	18.9 – 19.6	50 (1.27)	79 (2.01)	0.167	4.2	14	Purple
4700115	4700215	0.773 – 0.798	19.7 – 20.2	51 (1.30)	80 (2.03)	0.154	3.9	15	Pink
4700116	4700216	0.799 – 0.822	20.3 – 20.8	52 (1.32)	81 (2.06)	0.182	4.6	14	Brown
4700117	4700217	0.823 – 0.855	20.9 – 21.7	54 (1.37)	83 (2.11)	0.167	4.2	16	Blue
4700118	4700218	0.856 – 0.885	21.8 – 22.4	55 (1.40)	84 (2.13)	0.146	3.7	19	Orange
4700119	4700219	0.886 – 0.911	22.5 – 23.1	56 (1.42)	85 (2.16)	0.167	4.2	16	Red
4700120	4700220	0.912 – 0.941	23.2 – 23.9	57 (1.45)	86 (2.18)	0.154	3.9	19	Black
4700121	4700221	0.942 – 0.975	24.0 – 24.7	58 (1.47)	87 (2.21)	0.146	3.7	20	Green
4700122	4700222	0.976 – 1.005	24.8 – 25.5	60 (1.52)	89 (2.26)	0.167	4.2	18	Yellow
4700123	4700223	1.006 – 1.034	25.6 – 26.3	61 (1.55)	90 (2.29)	0.154	3.9	20	Purple



Single Cushion Clamp Attached to Wood Pole



Double Cushion Clamp Attached to Steel Pole