FIBERLIGN® FORMED WIRE DEAD-END

The **FIBERLIGN Formed Wire Dead-End** uses two helically shaped formed wire components: an inner layer of structural reinforcing rods (SRR) and an outer-layer dead-end component to distribute axial and compressive loads over the applied area of the OPGW. The distribution of these loads reduces stresses on the central core and optical fibers of the OPGW.

FEATURES AND BENEFITS

- Standard Formed Wire Dead-Ends include right-hand lay SRR and a left-hand lay dead-end component
- A current transfer tab is included to provide a direct electrical bond between the OPGW and ground lead
- Current transfer tab is captured between the OPGW and the SRR. No additional fasteners are needed
- Current transfer tab has a hole diameter that accommodates a standard 1/2"-13 UNC bolt for compatible ground terminal attachments
- Thimble clevis is provided with each standard assembly to ensure proper long-term performance and support
- An optional ground wire assembly can be included with the formed wire dead-end
- SRR and dead-end components can only be reused once for retensioning after initial installation. Hardware components of the dead-end can be reused if they are in good condition
- Dead-end components are made of corrosion-resistant materials
- The FIBERLIGN Formed Wire Dead-End has been thoroughly tested for vibration, mechanical loading, and optical attenuation in accordance with IEEE Standard 1138 and IEEE Standard 1591.1

HOLDING STRENGTH

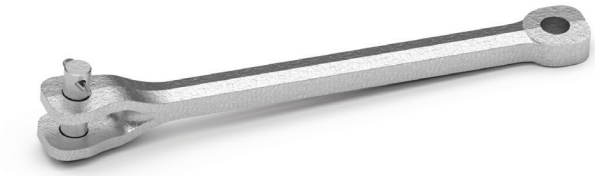
- Designed and tested in accordance with IEEE Std 1591.1
- Dependent on internal construction and composition of material used for individual strands of the OPGW
- Highest holding capabilities exist with cables that use all aluminum-clad steel strands in a single layer
- OPGW with multiple strand layers and/or aluminum alloy strands may reduce holding capabilities
- Contact PLP for Formed Wire Dead-End holding strengths for specific OPGW design

ATTACHMENT FITTINGS

- All standard Formed Wire Dead-Ends come with a thimble clevis **(Catalog Number: TC-6F)**
- A 14" Extension Link **(Catalog Number: LCE-66-14)** and/or an Anchor Shackle **(Catalog Number: AS-5L)** can be included with standard Formed Wire Dead-Ends

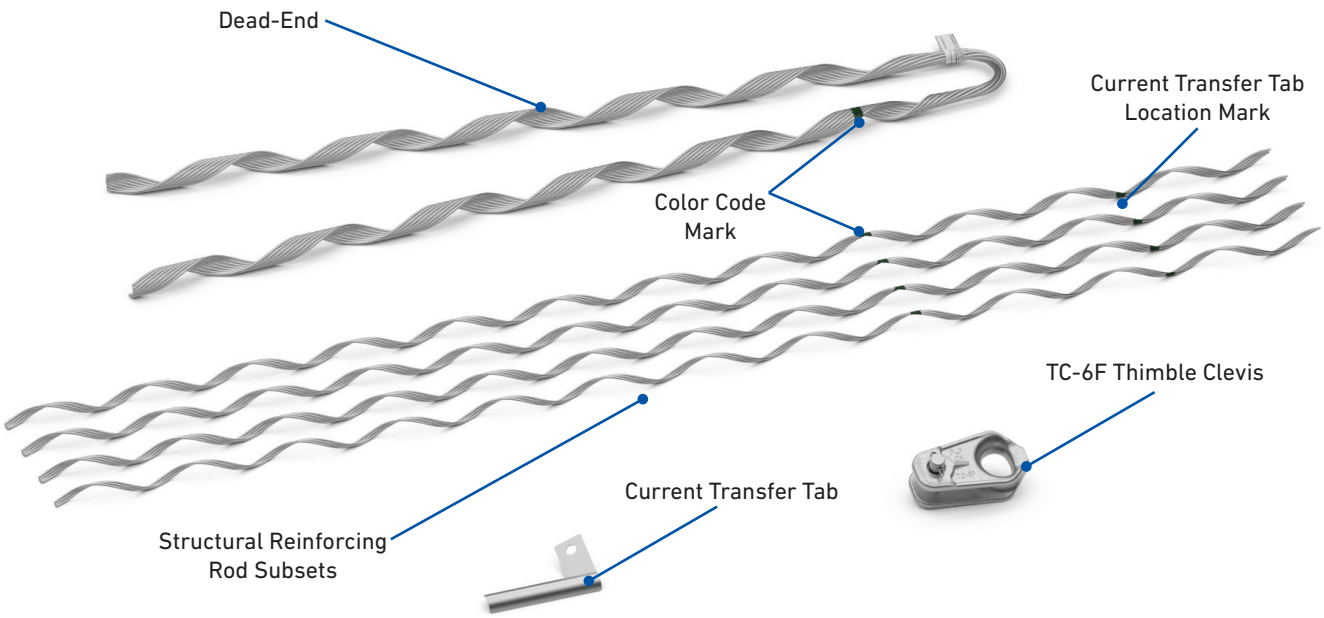
42,400 lb Thimble Clevis
(Catalog Number: TC-6F)

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



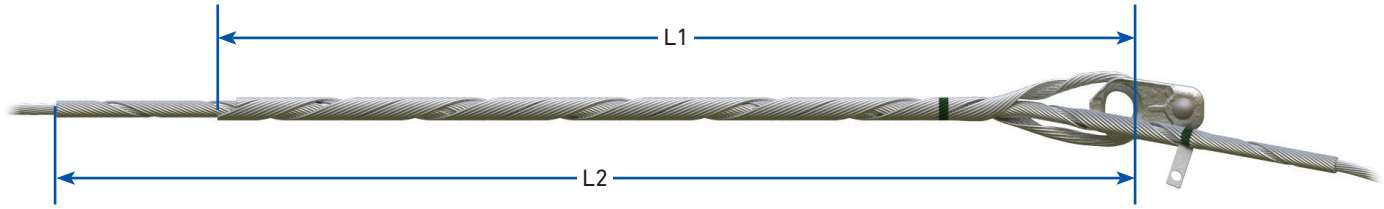
25,000 lb 14" Extension Link
(Catalog Number: LCE-66-14)

COMPONENTS

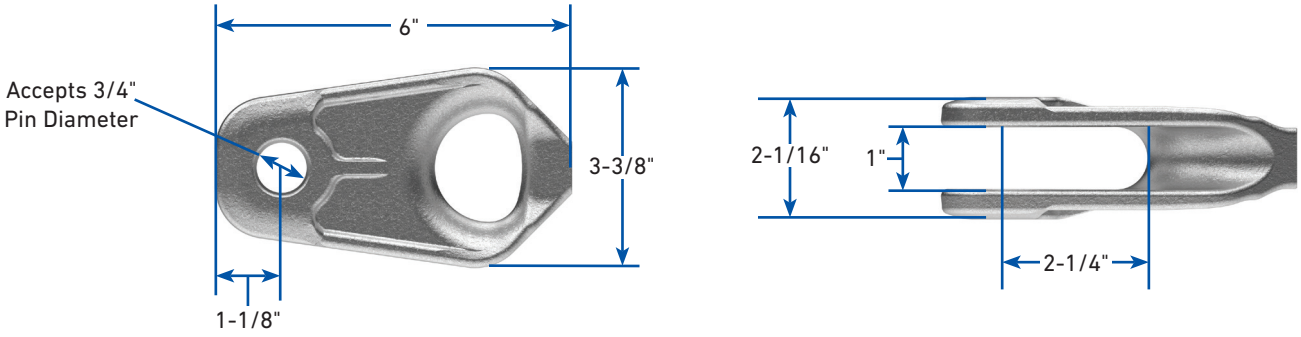


DIMENSIONS

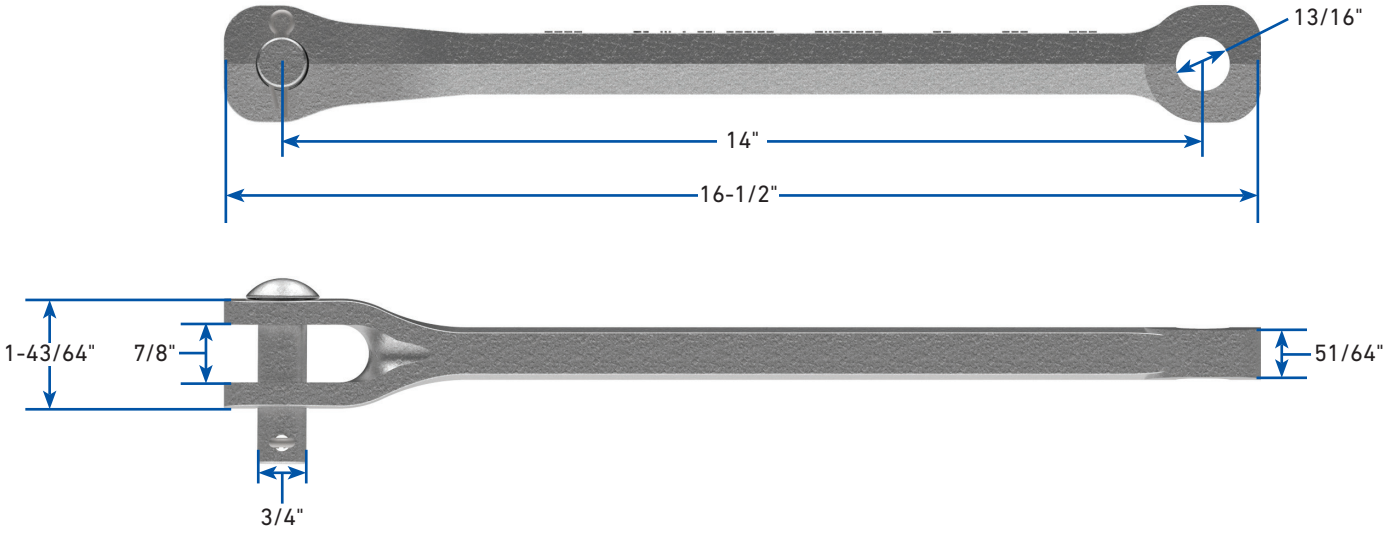
Formed Wire Dead-End Assembly



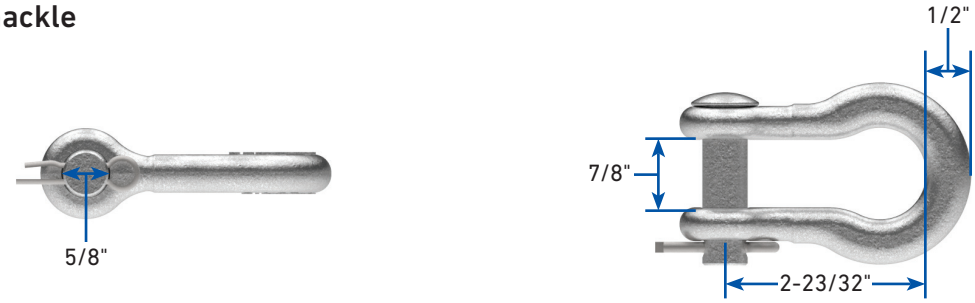
TC-6F Thimble Clevis



LCE-66-14 Extension Link



AS-5L Anchor Shackle



ACCESSORIES

- All ground wire assemblies include attachment hardware (bolts, lock washers, nuts) for each terminal
- For lattice tower applications, a light duty lattice tower clamp **(Catalog Number: LTC-2)** is available to attach a ground wire assembly with a bolt hole for either 1/2" or M12 bolts directly to the lattice tower

Catalog Number	Suffix Code	Description
710010015	G	4 ft (1.2 m) Long #4 (7W) Copper Ground Wire Assembly with One Terminal for 1/2" Bolt
710010293	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 mm² (19W) Aluminum Ground Wire Assembly with One Terminal for M12 Bolt and One Terminal for M16 Bolt
710012417	–	5 ft (1.5 m) Long 4/0 (19W) Aluminum Ground Wire Assembly with One Terminal for M12 Bolt and One Terminal for M18 Bolt
LCE-66-14	E2	25,000 lb 14" Extension Link
AS-5L	S2	30,000 lb Anchor Shackle
LTC-2	–	Light Duty Lattice Tower Clamp

ORDERING INFORMATION

- Select the appropriate catalog number for the dead-end from the table below based on the diameter of the OPGW.
- Standard catalog numbers for Formed Wire Dead-Ends have the suffix code **C4** to include a Thimble Clevis with the dead-end.
- Add the appropriate suffix code(s) to the standard dead-end catalog number shown in the table below to include attachment fittings and/or a ground wire assembly **(ex: Catalog Number: 2890001C4G, 2890001C4E2GA, or 2890001C4E2S2GA2)** – See ACCESSORIES above for suffix codes.
- When adding suffix codes to the dead-end catalog number, make sure that the suffix code sequence is extension link, anchor shackle, then ground wire assembly. **NOTE:** An extension link is necessary before adding an anchor shackle in order to provide proper OPGW cable clearance.
- Refer to the image of the Formed Wire Dead-End under DIMENSIONS on the previous page for the measurements listed in the table below for VORTX™ Damper placement
- Rated holding strengths for the Formed Wire Dead-Ends listed in the chart below are based on OPGW with left-hand lay all aluminum-clad steel strands in a single layer.
- Formed Wire Dead-Ends for right-hand lay OPGW are available. Contact PLP with OPGW specifications for further information.

FIBERLIGN Formed Wire Dead-End

Catalog Number	Cable Diameter Range		Color Code	Component Rated Strength	Overall SRR Length		Useful Measurements for VORTX Damper Placement		
							SRR Rod Diameter	Dead-End Component Length "L1"	Partial SRR Length "L2"
	in	mm		lb	in	m	in (mm)	in (m)	in (m)
2890020C4	0.355 – 0.399	9.0 – 10.1	Pink	20,000	44	1.12	.114 (2.9)	34 (0.86)	37.0 (0.94)
2890001C4	0.400 – 0.449	10.2 – 11.4	Blue	20,000	49	1.24	.114 (2.9)	36 (0.91)	40.5 (1.03)
2890002C4	0.450 – 0.504	11.5 – 12.8	Red	25,000	54	1.37	.114 (2.9)	39 (0.99)	45.0 (1.14)
2890003C4	0.505 – 0.555	12.9 – 14.1	Orange	25,000	58	1.47	.114 (2.9)	42 (1.07)	47.5 (1.21)
2890004C4	0.556 – 0.610	14.2 – 15.5	Black	25,000	63	1.60	.128 (3.2)	45 (1.14)	51.5 (1.31)
2890005C4	0.611 – 0.680	15.6 – 17.2	Green	25,000	68	1.73	.128 (3.2)	49 (1.24)	56.0 (1.42)
2890006C4	0.681 – 0.755	17.3 – 19.1	Pink	25,000	85	2.16	.144 (3.7)	64 (1.63)	71.5 (1.82)
2890007C4	0.756 – 0.830	19.2 – 21.1	Yellow	25,000	91	2.31	.144 (3.7)	68 (1.73)	76.0 (1.93)
2890008C4	0.831 – 0.925	21.2 – 23.5	Brown	25,000	98	2.49	.144 (3.7)	73 (1.85)	81.5 (2.07)
2890009C4	0.926 – 1.030	23.6 – 26.2	Purple	25,000	107	2.72	.144 (3.7)	79 (2.01)	89.5 (2.27)