

CentraCore OPGW

OPGW provides all of the benefits of a traditional shield wire, such as providing short circuits a path to ground and protecting the circuits from lightning strikes, in addition to providing an optical pathway for communication. The CentraCore design family can provide these features in a compact, light weight, high fiber density OPGW.

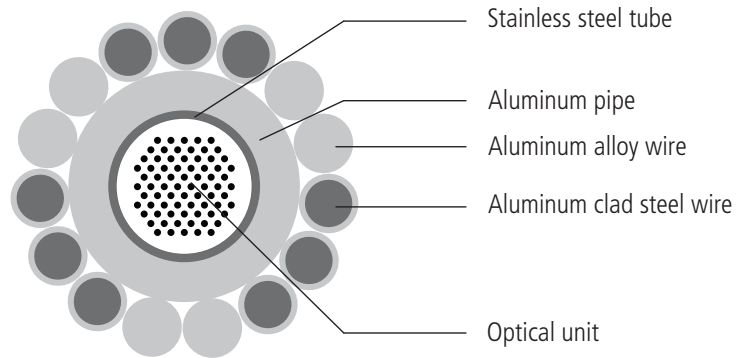
Features

- Fiber counts up to 96
- Light weight and compact yet robust design offering high fiber density
- Central stainless steel tube housing the fibers inserted into an aluminum pipe provides crush resistance and thermal protection for fibers

Applications

- Energy Market
- Transmission
- Right-of-Way
- Topmost part of the structure (shield wire position)

Cable Components



Typical Designs

FIBERS (MAX)	OPGW SIZE	FAULT CURRENT	TOTAL CONDUCTOR AREA		OVERALL DIAMETER		WEIGHT		APPROXIMATE RBS		SAG10 CHART #	MAX SHIP LENGTH (PER REEL TYPE)	
		(KA) ² SEC	IN ²	MM ²	IN	MM	LBS/FT	KG/M	LBS	KGF		WOOD (M)	STEEL (M)
48	CC-57/465	43	0.1248	80.52	0.465	11.80	0.314	0.467	16,250	7,400	1-1421	7000	7000
48	CC-29/29/465	54	0.1248	80.52	0.465	11.80	0.238	0.354	10,500	4,700	1-1455	7000	7000
48	CC-54/472	53	0.1334	86.09	0.472	12.00	0.316	0.470	15,750	7,100	1-1450	7000	7000
48	CC-27/27/472	63	0.1334	86.09	0.472	12.00	0.244	0.362	10,000	4,600	1-1438	7000	7000
48	CC-72/504	58	0.1482	95.64	0.504	12.80	0.382	0.568	20,500	9,300	1-1442	6350	7000
48	CC-32/40/504	73	0.1482	95.64	0.504	12.80	0.296	0.441	13,750	6,300	1-1440	7000	7000
48	CC-75/528	77	0.1663	107.28	0.528	13.40	0.411	0.612	21,500	9,700	1-1453	5950	7000
48	CC-38/38/528	96	0.1663	107.28	0.528	13.40	0.310	0.462	13,750	6,200	1-1439	7000	7000
72	CC-54/472	51	0.1318	85.01	0.472	12.00	0.316	0.470	15,750	7,100	1-1457	7000	7000
72	CC-27/27/472	61	0.1318	85.01	0.472	12.00	0.243	0.362	10,000	4,600	1-1438	7000	7000
72	CC-63/507	71	0.1547	99.80	0.507	12.90	0.367	0.546	18,250	8,300	1-1450	6650	7000
72	CC-32/32/507	85	0.1547	99.80	0.507	12.90	0.282	0.420	11,750	5,300	1-1438	7000	7000

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Typical Designs (cont.)

FIBERS (MAX)	OPGW SIZE	FAULT CURRENT (KA) ² SEC	TOTAL CONDUCTOR AREA		OVERALL DIAMETER		WEIGHT		APPROXIMATE RBS		SAG10 CHART #	MAX SHIP LENGTH (PER REEL TYPE)	
			IN ²	MM ²	IN	MM	LBS/FT	KG/M	LBS	KGF		WOOD (M)	STEEL (M)
72	CC-75/528	75	0.1646	106.20	0.528	13.40	0.410	0.611	21,500	9,700	1-1421	5950	7000
72	CC-38/38/528	94	0.1646	106.20	0.528	13.40	0.310	0.461	13,750	6,200	1-1455	7000	7000
96	CC-65/500	51	0.1393	89.86	0.500	12.70	0.385	0.573	18,900	8,600	1-1442	4800	4800
96	CC-30/36/500	64	0.1393	89.86	0.500	12.70	0.306	0.456	12,750	5,800	1-1440	4800	4800
96	CC-75/528	62	0.1550	100.00	0.528	13.40	0.431	0.641	21,500	9,800	1-1442	4800	4800
96	CC-38/38/528	81	0.1550	100.00	0.528	13.40	0.331	0.492	14,000	6,300	1-917	4800	4800
96	CC-86/563	86	0.1803	116.31	0.563	14.30	0.488	0.726	24,500	11,100	1-1425	4800	4800
96	CC-34/51/563	106	0.1803	116.31	0.563	14.30	0.340	0.591	17,400	7,900	1-1460	4800	4800

This information denotes the input data needed for Sag10™ (sag and tension calculation) software. WIR files of all these catalog designs can be found on PLS-CADD web page.

NOTES:

Data contained in the table are approximations. Please reference the exact cable data sheet for the most up-to-date information.

The designs above are only a sampling of the options available from AFL. Contact customer service for a cable designed to your exact specifications.

Recommended Products for CentraCore OPGW

DESCRIPTION	AFL NO.
Fiber Optic Cable Accessories	
OPGW Bolted Deadend	Refer to the Fiber Optic Cable Hardware catalog for specific AFL No.
OPGW Mechanical Suspension	Refer to the Fiber Optic Cable Hardware catalog for specific AFL No.
SBO1 Splice Enclosure	Refer to the Fiber Optic Cable Hardware catalog for specific AFL No.
Motion Control	
Stockbridge Vibration Damper	Refer to the Transmission & Distribution catalog, Motion Control section , for specific AFL No.

Temperature Specifications

TEMPERATURE RANGE	
Operation	-40°C to +85°C
Storage	-50°C to +85°C
Installation	-30°C to +85°C

Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
IEEE	1138	Cable
IEC	60794-4	Cable
TIA	598-D	Fiber
ASTM	B415	Alumium Clad Steel Wire (ACS wire)

Contact AFL for your customized OPGW solution.