



HexaCore OPGW

Optical Ground Wire 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 HexaCore, being that it is a multi-layer stranded design, is familiar in that it is similar to a conductor.

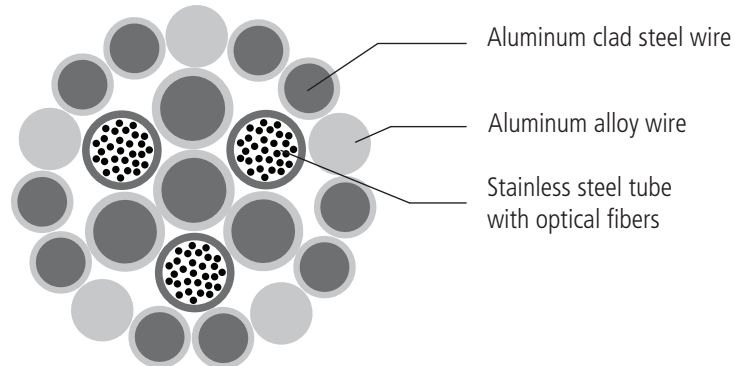
Features

- Fiber counts up to 432
- Capable of high environmental loading and long spans Anti-rotational device (ARD) typically not required for installation

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)
24	SX-32/45/472	41	0.1235	79.67	0.472	12.0	0.281	0.418	14,750	6,700	1-1461	7000	7000
36	SX-41/32/472	41	0.1186	76.53	0.472	12.0	0.247	0.368	12,000	5,400	1-350	7000	7000
24	SX-75/37/555	96	0.1757	113.37	0.555	14.1	0.317	0.471	15,250	6,900	1-1438	7000	7000
24	SX-90/30/575	116	0.1889	121.86	0.575	14.6	0.313	0.466	14,250	6,400	1-430	7000	7000
96	S1-82/52/630	137	0.2131	137.45	0.630	16.0	0.417	0.621	20,000	9,000	1-1170	5800	7000
96	S1-83/59/647	152	0.2265	146.13	0.647	16.4	0.453	0.674	22,000	9,900	1-917	5300	7000
96	S1-91/61/668	177	0.2429	156.69	0.668	17.0	0.479	0.712	23,250	10,500	1-917	5100	6450
144	S1-71/52/630	118	0.2006	129.41	0.630	16.0	0.416	0.619	19,750	8,950	1-1440	5950	7000
144	S1-73/59/647	132	0.2140	138.09	0.647	16.4	0.452	0.673	21,750	9,800	1-350	5400	6850
144	S1-81/61/668	155	0.2304	148.65	0.668	17.0	0.472	0.702	23,000	10,400	1-1440	5150	6450

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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)
288	S1-41/52/630	68	0.1632	105.28	0.630	16.0	0.414	0.616	19,000	8,600	1-1461	5890	7000
288	S1-42/59/647	79	0.1766	113.96	0.647	16.4	0.450	0.670	21,000	9,500	1-1461	5400	6850
288	S1-50/61/668	97	0.1930	124.52	0.668	17.0	0.476	0.708	22,250	10,000	1-1461	5125	6450

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 HexaCore 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.
OG03 Opti-Guard 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.