



Product name:

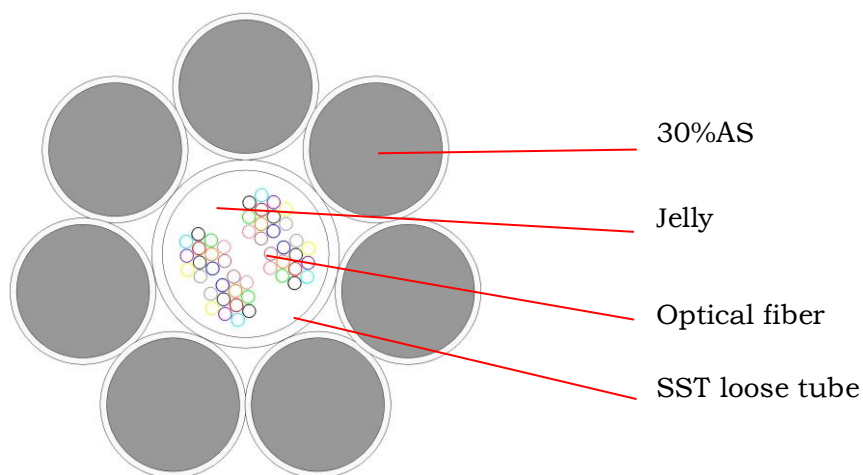
Optical fiber composite overhead Ground Wire

Model:

OPGW-1C 1/24B1(0/58-25.5)

The product description:

The OPGW cable is wrapped by metal wire, which makes the cable more reliable, stable and firm. It adopts aluminum clad steel wire, which is equivalent to a good conductor overhead ground wire. It can receive various benefits such as reducing potential power supply flow of transmission line, reducing power frequency over voltage and improving power line's interference and dangerous influence on communication line. Because optical fiber has the characteristics of anti-electromagnetic interference and light weight, it can be installed on the top of transmission line tower without considering the problems such as the optimal mounting position and electromagnetic corrosion. Therefore, OPGW has higher reliability, superior mechanical properties.



**Optico Group Co., Limited**

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Optical fiber Color

Blue line strapping	1	2	3	4	5	6	7	8	9	10	11	12
	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Purple	Pink	Aqua
Orange line strapping	13	14	15	16	17	18	19	20	21	22	23	24
	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Purple	Pink	Aqua

Structural performance parameters

Project	Unit	Parameter
Optical fiber	number	24
SST Diameter	±0.1mm	4.4
AS 30% Diameter	±0.05mm	3.2
AS 30%	number	7
Cable Diameter	±0.2mm	10.9
Cable Weight	±5Kg/km	345
Computed sectional area	mm ²	58.07
Rated breaking force	KN	51
Dc resistance(20°C)	Ω/km	0.95
Short circuit current capacity	KA ² S	25.5
Modulus of elasticity	G Pa	162
Coefficient of linear expansion	×10 ⁻⁶ /°C	12.8
Ratio of tension to weight	km	13.8
Outermost hinge direction		Right direction
Static Bending Radius	mm	20D
Dynamic Bending Radius	mm	35D
Storage Temperature	°C	-60 ~ 70
Installation Temperature	°C	-10 ~ 70
Operating Temperature	°C	-60 ~ 70

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Optical characteristic parameter

Optical Fiber Type		G.652D
Attenuation Coefficient	@1310nm	≤ 0.36 dB/km
	@1383nm	≤ 0.35 dB/km
	@1550nm	≤ 0.22 dB/km
	@1625nm	≤ 0.22 dB/km
Effective Group Refractive Index	@1310nm	1.467
	@1550nm	1.467
Polarization Mode Dispersion		≤ 0.1 ps/ $\sqrt{\text{km}}$
MFD 1310 nm		9.0 ± 0.3 μm
MFD 1550 nm		10.0 ± 0.3 μm
Cladding Diameter		125.0 ± 1.0 μm
Cladding Non-Circularity		≤ 1.0 %
Core/Cladding Concentricity Error		≤ 0.8 μm
Coating Diameter		242 ± 7 μm
Core No-Circularity		≤ 6.0 %
Coating/Cladding Concentricity Error		≤ 12.0 μm
Cable Cut-Off		≤ 1260 nm
Zero Dispersion Wave length		1312 ± 10 nm
Dispersion Slope		0.092 ps/(nm ² ·km)
PMD link design value		≤ 0.05 ps/ $\sqrt{\text{km}}$

Product standards :IEC 61232;IEC 60104;IEC 60794; IEEE 1138 ;ITU-T G.652D