

/// Sterlite



OPGW

2025

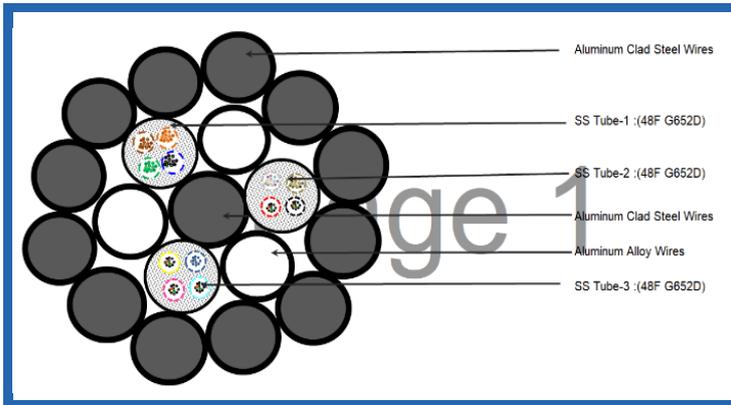
144FIBER DUAL LAYER SS TUBE DESIGN OPGW

Background

Due to the increase in fiber demand and data usage, installation of higher fiber count cable is becoming essential and keeping in mind, we “STERLITE” have developed 144 Fiber stranded SS tubes Dual-layer OPGW.

Technical specification of the products

Typical diagram (Not to scale and for reference only)



Parameter	Unit	Particulars
No. Of Fibers / Fiber Type	No	144/G652D
Cable Diameter (Nominal)	mm	16.4
Ultimate/Rated Tensile Strength	kN	114
Cable weight	Kg/km	807
Fault Current capacity I ² t	kA ² S	140

- OPGW Design type is Multi tubes Dual layer OPGW
- Complying with the latest specification of OPGW i.e. IEEE 1138, IEC 60794-4-10, EN 50183.
- Complying with the AEP (American Electric Power) TLMS-0024 specification
- Higher Short Circuit rating of 23.7kA for 0.25 Second
- Bigger in size (16.4mm) and higher tensile of 114kN

Importance of the products

- Lightning proof design because of its construction

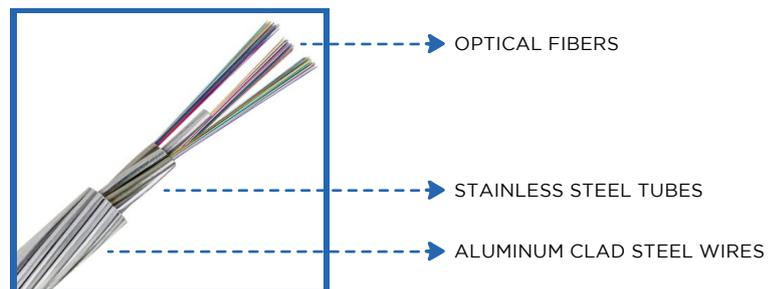
Product capabilities and use

- High short circuit rating because of higher metal area in the OPGW.
- Specially developed considering AEP specification and qualified through special type tests in Kinectrics Canada
- Suitable for use in high corrosion area
- No special requirement for installation.

Benefits

- Corrosion resistance and suitable for high wind zone areas
- Additional protection from direct and/or indirect lightning strike due to its construction of Dual layer to keep the fibers safe.

Product Photographs



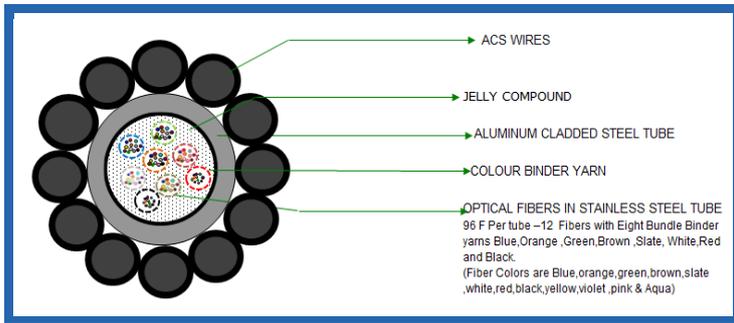
48FIBER SS TUBE DESIGN OPGW

Background

Due to the increase in fiber demand and data usage, installation of higher fiber count cable is becoming essential and keeping in mind, we “STERLITE” have developed 48 Fiber OPGW in SS Tube construction which is a customized product maintaining the same technical parameters of current of lower fiber count OPGW being used.

Technical specification of the products

Typical diagram (Not to scale and for reference only)



Parameter	Unit	Particulars
No. Of Fibers / Fiber Type	No	48/G652D
Cable Diameter (Nominal)	mm	11.55
Ultimate/Rated Tensile Strength	kN	56.4
Cable weight	Kg/km	385
Fault Current capacity I ² t	kA ² S	40

- OPGW Design type is Centra Core steel tube type OPGW with smaller size and weight and Complying to latest specification of OPGW i.e. IEEE 1138 , IEC 60794-4-10, EN 50183

Importance of the products

- Additional revenue generation by leasing out more number of fibers to utilities/telecom operators.

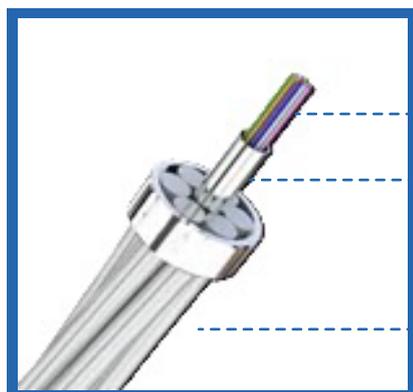
Benefits

- Being smaller in size and light in weight the OPGW will have less sag and tension on towers.
- Corrosion resistance design
- Additional protection from direct and/or indirect lightning strike due to all Aluminum clad steel wire being used in this design.

Product capabilities and use

- Suitable for use on 132kV & 220kV transmission lines as per Indian Geographical conditions.
- No special requirement for installation.
- Customized designs are also available upon request

Product Photographs



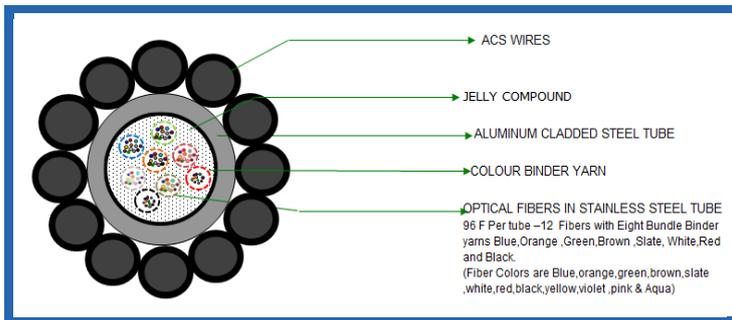
96 FIBER ALUMINUM CLAD SS TUBE DESIGN OPGW

Background

Due to the increase in fiber demand and data usage, installation of higher fiber count cable is becoming essential and keeping in mind, we “STERLITE” have developed 96 Fiber OPGW in Aluminum Clad SS Tube which is a customized product maintaining the same technical parameters of current lower fiber count OPGW being used.

Technical specification of the products

Typical diagram (Not to scale and for reference only)



Parameter	Unit	Particulars
No. Of Fibers / Fiber Type	No	96/G652D
Cable Diameter (Nominal)	mm	12.3
Ultimate/Rated Tensile Strength	kN	68
Cable weight	Kg/km	494
Fault Current capacity I ² t	kA ² S	40

- OPGW Design type is Aluminum cladded steel tube type OPGW with smaller size and weight and Complying to latest specification of OPGW i.e. IEEE 1138 , IEC 60794-4-10, EN 50183

Importance of the products

- Additional revenue generation by leasing out more number of fibers to utilities/telecom operators.

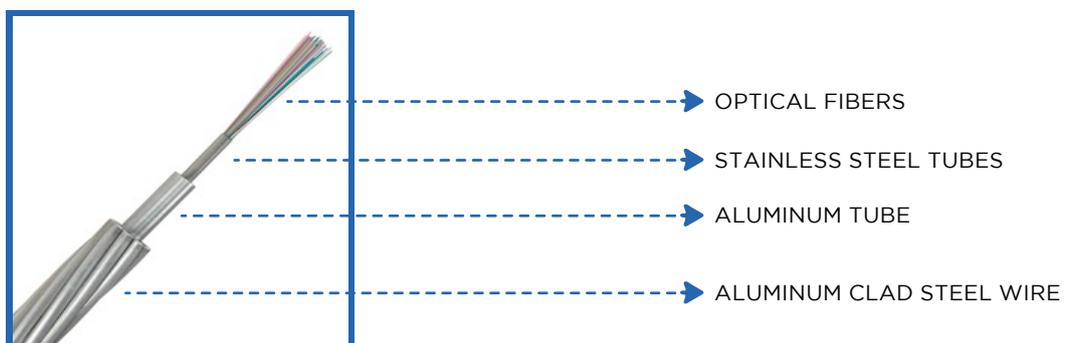
Benefits

- Being smaller in size and light in weight the OPGW will have less sag and tension on towers.
- Corrosion resistance due to its type of construction i.e. Aluminum Cladded steel tube design
- Additional protection from direct and/or indirect lightning strike due to all Aluminum clad steel wire being used in this design.

Product capabilities and use

- Higher short circuit rating because of higher metal area in the OPGW.
- Suitable for use on 400kV transmission lines as per Indian Geographical conditions
- No special requirement for installation.
- Customized designs are also available upon request

Product Photographs



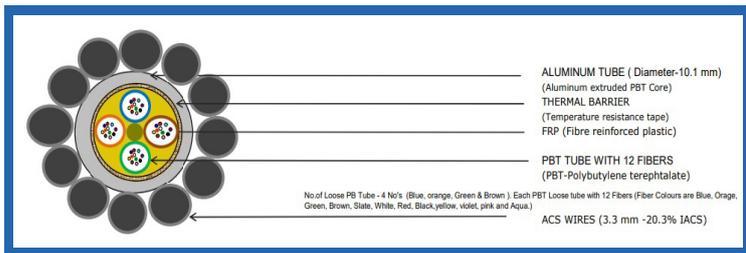
48FIBER ALUMINUM TUBE (PBT DESIGN) OPGW

Background

Due to the increase in fiber demand and data usage, installation of higher fiber count cable is becoming essential and keeping in mind, we “STERLITE” have developed 48 Fiber Aluminum tube OPGW

Technical specification of the products

Typical diagram (Not to scale and for reference only)



Parameter	Unit	Particulars
No. Of Fibers / Fiber Type	No	48/G652D
Cable Diameter (Nominal)	mm	16.7
Ultimate/Rated Tensile Strength	kN	105
Cable weight	Kg/km	853
Fault Current capacity I ² t	kA ² S	140

- OPGW Design type is Aluminum tube (PBT Design) type OPGW
- Complying with the latest specification of OPGW i.e. IEEE 1138, IEC 60794-4-10, EN 50183.
- Complying with the PGCB specification
- Higher Short Circuit rating of 11.83kA for 1 Second
- Bigger in size (16.7mm) and higher tensile of 105kN

Importance of the products

- Lightning proof design because of its construction
- Tested and qualified for Lightning Class 2 for a charge transfer of 200 Coulomb (C)

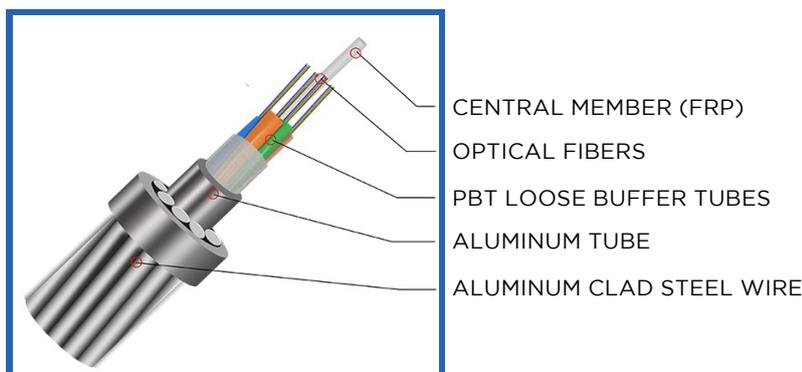
Benefits

- Corrosion resistance and suitable for high wind zone areas
- Additional protection from direct and/or indirect lightning strike due to its construction of Dual layer to keep the fibers safe.

Product capabilities and use

- Higher short circuit rating because of higher metal area in the OPGW.
- Specially developed considering PGCB specification
- Suitable for use in high corrosion area
- No special requirement for installation.

Product Photographs



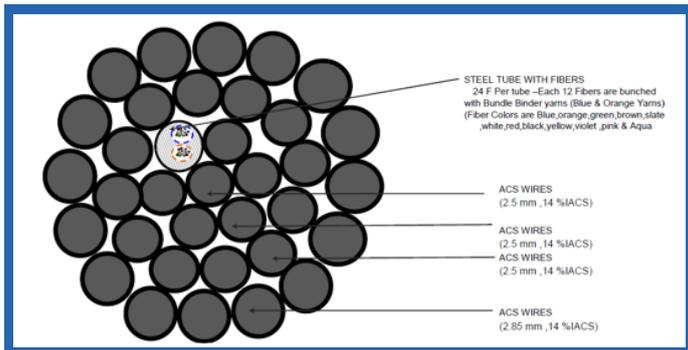
24 FIBER TRIPLE LAYER STRANDED SS TUBE DESIGN OPGW

Background

We “STERLITE” have developed 24 Fiber stranded SS tubes Triple Layer OPGW design in order to serve the purpose of installing OPGW for Brahmaputra River crossing single span of 1400 meter.

Technical specification of the products

Typical diagram (Not to scale and for reference only)



Parameter	Unit	Particulars
No. Of Fibers / Fiber Type	No	24/G652D
Cable Diameter (Nominal)	mm	18.2
Ultimate/Rated Tensile Strength	kN	330
Cable weight	Kg/km	1414
Fault Current capacity I ² t	kA ² S	41

- OPGW Design type is Stranded tube Triple Layer OPGW
- Complying with the latest specification of OPGW i.e. IEEE 1138, IEC 60794-4-10, EN 50183.
- Moderate Short Circuit rating of 6.4kA for 1 Second
- Ever highest tensile of 330kN in Indian market

Importance of the products

- Lightning proof design because of its construction and suitable for river crossing long span of 1400 meters

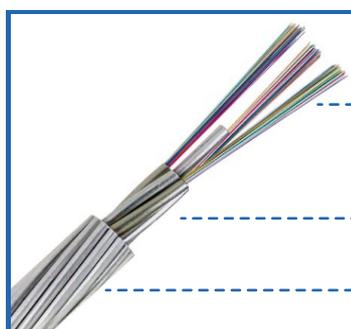
Benefits

- Corrosion resistance and suitable for high wind zone areas
- Additional protection from direct and/or indirect lightning strike due to its construction of Dual layer to keep the fibers safe.

Product capabilities and use

- Moderate short circuit rating because of higher metal area in the OPGW.
- Specially developed for long river crossing span
- Suitable for use in high corrosion area
- No special requirement for installation.

Product Photographs



→ OPTICAL FIBERS

→ STAINLESS STEEL TUBES

→ ALUMINUM CLAD STEEL WIRES