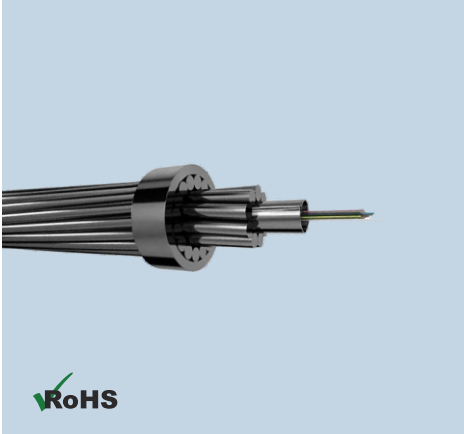
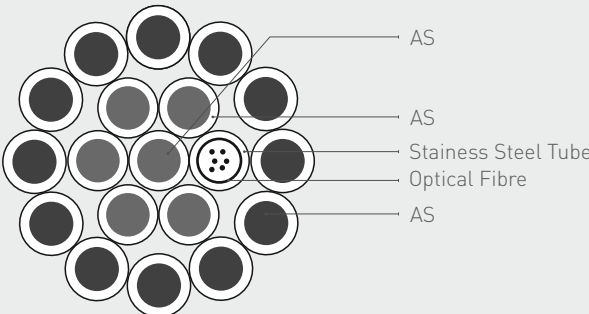


OPGW CABLE

Norden Optical Ground Wire (OPGW) features a stainless steel tube with aluminium-clad steel (AS) wire layers. It serves as both a grounding conductor and a fiber-optic communication medium, ensuring fast, reliable, and cost-effective data, voice, and video transmission while protecting power infrastructure.

The optical fibres are enclosed in a stainless steel tube, surrounded by 2 layers of AS wire. This construction enhances mechanical strength, conductivity, and corrosion resistance. The cable offers high tensile strength, excellent crush resistance, and long-span capability, while its lightweight design reduces the load on transmission towers. Ideal for high-voltage transmission networks, this OPGW solution provides durability, stability, and superior performance in challenging environments.





COMPLIANCE

- ITU-T G652.B OS1
- ITU-T G652.D OS2
- ITU-G.655
- ITU-T G651.1 OM1 OM2 OM3 OM4
- IEC60793-2-10 type A 1a.1/A 1b OM1/OM2
- IEC60793-2-10 type A 1a.2 OM3
- IEC60793-2-10 type A 1a.3 OM4
- ISO/IEC 11801, ISO/IEC 24702
- ANSI/TIA-568.3-D
- RoHS Compliant Directive 2002/95/EC

CONSTRUCTION & DESIGN

Stainless Steel Tube Diameter	6 mm (Stainless Steel Tube Diameter: 3.2 mm)
No.of Stainless Steel Tube	1
Stainless Steel Wire Diameter	3.3 mm
No.of AL-Clad Steel Wires In First Layer	5
AL-Clad Wire Diameter In Second Layer	3.3 mm
No.of AL-Clad Wires	9
Carrying Area / Cross Section	154.5 mm ²
Section of Stainless Steel Tube	17.5 mm ²
Section of AL-Clad Steel Wire	154.48 mm ²
Section of AL Alloy Wire	0.00 mm ²
Outer Layer Direction	Right Hand

OPGW CABLE

MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Ultimate Tensile Strength	585.2 N/mm ²
Rated Tensile Strength	129.1KN
Elasticity Coefficient	98.0 kN/ mm ²
Thermal Expansion Coefficient	13.8 ×10 ⁻⁶ /°C
Everyday Tension - EDS (20% RTS)	133.8 ~209 N/mm ²
Max. Allowable Tension - MAT (40% RTS)	334.4 N/mm ²
D.C. Resistance at 20°C	0.378 Ω/Km
Short-Circuit Current (1s, 20°C~200°C)	18.1 kA
Short-Circuit Current Capacity (20°C~200°C)	167.7 kA ² s
Min. Bending Radius (Dynamic)	332 mm
Installation Temperature Range	-10°C to +50°C
Operating Temperature Range	-40°C to +80°C
Transportation Temperature Range	-40°C to +80°C
Min. Bending Radius (During Operation)	249 mm
Sag to Tension Ratio	14.6km

ORDERING INFORMATION

Part Number	Fibre Count	Outer Diameter (mm)	Weight (Kg/Km)
4045-11048FXXCL	48	16.60	901

ORDERING GUIDE

Cable Type	Jacket	Fibre/Tube	Fibre Count	Fibre Type(FXX)	Jacket Colour
4045	1 = Stainless Steel Tube + AS + AS	1 = 48F/T 0 = 24F/T	XXX	OM1=62.5/125 OM1 OM2=50/125 OM2 OM3=50/125 OM3 OM4=50/125 OM4 OS1=9/125 [G652.B] OS1 OS2=9/125 [G652.D] OS2 500=9/125 [G655] OS2 7A1=9/125 [G657.A1] OS2 7A2=9/125 [G657.A2] OS2	CL

Note: AS denotes aluminium clad steel wire

Eg: 4045-11048OS2CL - 48 Core (48F/T) SM OS2 OPGW Cable with Stainless Steel Tube and AL Clad Steel Wire Layers