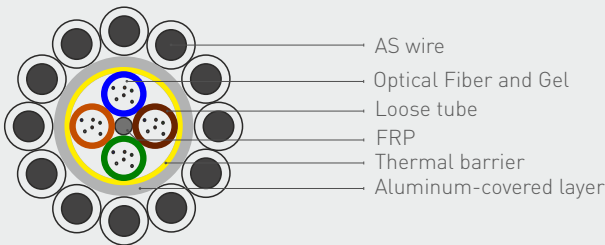
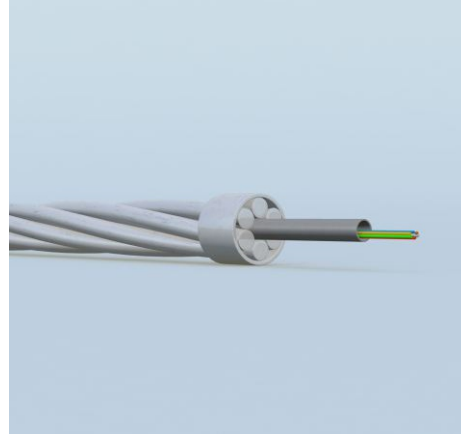


OPGW COMPOSITE OPTICAL CABLE

Fibre Optic Overhead Group Wire Optical Ground Wire (OPGW) is used in power utility for dual function as a ground or static wire and a path for transmission of voice, video or data signals through optical fibres allowing for fast, reliable and cost effective installations. Fibres are placed in a central stainless steel tube with water-resistant jelly filling; it is inserted into an aluminium pipe which provided added crush protection and increasing the conductivity. Over it one or two layers of aluminium coated steel wire or aluminium wire or aluminium alloy wire are stranded, stranded wires are selected to optimize mechanical and electrical properties of cable. They have high tensile load, long span and high crush resistance. Their small diameter and light weight minimize load to the tower.



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/EIA 568.3-D
 RoHS Compliant Directive 2002/95/EC

MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

| | |
|--|------------------------|
| AL layer | 53.0% |
| AS Wire, 12 no. | 20.3% AS wire |
| Cross Section | 100.00 mm ² |
| Section of AS Wire | 74.00 mm ² |
| Section of AL Tube | 27.00 mm ² |
| Rated Tensile Strength (RTS) | 89.1 kN |
| DC Resistance | 0.559 Ω/km |
| Short Time Current (0.3s, 50°C~200°C) | 13.4 kA |
| Bend Radius (Short Term) | 141 mm |
| Bend Radius (Long Term) | 282 mm |
| Short Time Current Capacity (50°C~200°C) | 53.8 kA ² S |
| Operating Temperature | -40°C ~ +85°C |
| Installation Temperature | -10°C ~ +50°C |

OPGW COMPOSITE OPTICAL CABLE

OPTICAL CHARACTERISTICS

| Items | Unit | Description |
|--------------------------------|-------------|-------------|
| Attenuation at 1550 nm | dB/km | ≤0.25 |
| Attenuation at 1620 nm | dB/km | ≤0.30 |
| Dispersion at 1530 -1565 nm | ps/nm. km | 2.6-6.0 |
| Dispersion at 1565 - 1625 nm | ps/nm. km | 4.0-8.9 |
| PMD | ps/ sqrt Km | <0.2 |
| Fiber Proof Test Level | Kpsi | 100 |
| Mode Field Diameter at 1550 nm | μm | 8.6 ± 0.4 |
| Core Concentricity Error | μm | ≤0.8 |
| Cladding Diameter | μm | 125 + 1.0 |
| Cladding Non-Circularity | % | ≤1.0 |
| Dispersion Slope at 1550 nm | ps/sqnm.km | <0.045 |

ANSI/TIA/EIA-598-B STANDARD FIBRE COLOUR CODE

| Fibre Number | Fibre Colour | | |
|--------------|--------------|---------|--------|
| Fibre 1 | Blue | Fibre 1 | Red |
| Fibre 2 | Orange | Fibre 1 | Black |
| Fibre 3 | Green | Fibre 1 | Yellow |
| Fibre 4 | Brown | Fibre 1 | Violet |
| Fibre 5 | Slate | Fibre 1 | Rose |
| Fibre 6 | White | Fibre 1 | Aqua |

Fibre 13 and higher the colour code is repeated with added black stripe or dash

Note: Fibre Tube Colour will be followed with same order

ORDERING INFORMATION

| Part Number | Fibre Count | Outer Diameter (mm) | Weight (N.W Kg) | Weight (G.W Kg) |
|-----------------|-------------|---------------------|-----------------|-----------------|
| 3117-41048FXXCL | 48 | 14.10 | 591 | 2600 |

ORDERING GUIDE

| Cable Type | Jacket | Fibre/Tube | Fibre Count | Fibre Type(FXX) | Jacket Colour (CL) |
|------------|--------|---|--------------|--|-------------------------------|
| 3117 | 4=ACSR | 1=12 Fibre/T 2=08 Fibre/T 3=06Fibre/T 4=04 Fibre/T | No. of Fibre | 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 | As noted in Colour Code Chart |

Note: ACS denotes aluminium coated steel & ACSR denotes aluminium coated steel wire