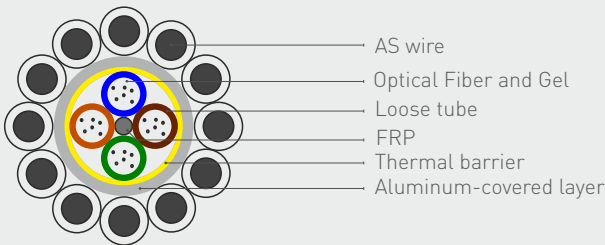
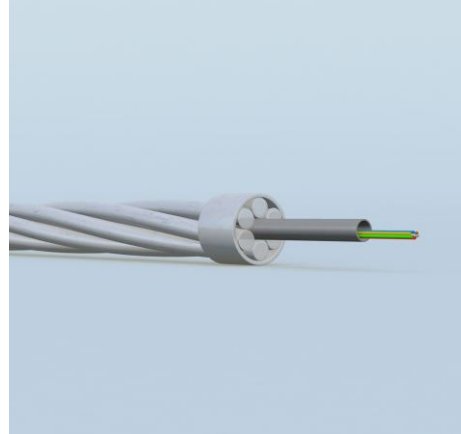


OPGW COMPOSITE OPTICAL CABLE

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 568C.3
 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	Fibre 2
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