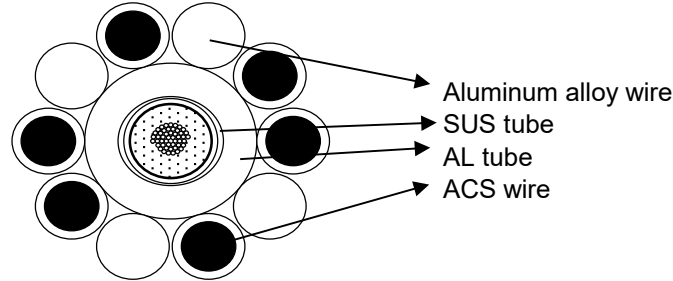


1. Complete OPGW
OPGW-48B1-115[77;122.1] - HCA504508PWC

Cross Section :



Structure Details	Center	Named	No.	Diameter	
		Aluminum Tube	1	7.70	mm
		SUS-Tube	1	4.20	mm
	Layer 1	20.3%AS wire	6	3.25	mm
		AA wire(LHA1)	4	3.25	mm

Technical Data	According to IEEE std 1138、 IEC 60794-4 standards	
	Stranding direction of outer layer is "Left-hand"	
	Fibre No. & Type	48 G.652
	Standard Diameter	14.20 mm
	Supporting Cross Section	114.32 mm ²
	Section of AS wire	49.77 mm ²
	Section of AA wire	33.18
	Section of Optical unit	31.36 mm ²
	Approximate mass	544.0 kg/km
	Ultimate Tensile Strength	77.5 kN
	Rated Tensile Strength	69.7 kN
	Maximum Allowable Tension(40%RTS)	244.0 N/mm ²
	Everyday Stress(20%RTS)	122.0 N/mm ²
	Strain Margin Stress(60%RTS)	366.0 N/mm ²
	Modulus of Elasticity	104.9 GPa
	Thermal Elongation Coefficient	16.3 ×10 ⁻⁶ /
	Calculated D.C. Resistance at 20℃	0.373 Ω/km
Short-Circuit Current (1 sec, 20~200)	11.1 kA	
Short-Circuit Current Capacity (20~200)	122.1 kA ² ·s	
Minimum Bending Radius	284 mm	
Ratio between Pull and Weight	14.53 km	
Temperature Range:	Installation	-10 ~+50 ℃
	Transportation and Operation	-40 ~+80 ℃

Remarks: All Sizes and Values are Nominal Values

2. Fiber Parameters

Item	G.652D	
Max. attenuation* (Completed OPGW)	(1310nm)	≤0.36dB/km
	(1550nm)	≤0.21dB/km
Mode field diameter	(1310nm)	9.2±0.4μm
	(1550nm)	10.4±0.5μm
Cable cut-off wavelength	≤1260nm	
Cladding diameter	125±0.7 μm	



TECHNICAL DATA SHEET
HENGTONG CABLE AUSTRALIA
OPGW-48B1-115[77;122.1] - PWC

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Core-Cladding concentricity Error	≤0.6μm
Cladding non-circularity	≤0.7%
Coating diameter	245±5μm
Cladding-Coating concentricity error	≤12 μm
Polarization Mode Dispersion (PMD)	≤0.2 ps/(km) ^{0.5}
Zero dispersion wavelength	1300~1324nm
Zero dispersion slope	≤0.092ps/nm ² km
Dispersion @1288nm~1339nm	≤3.5ps/(nm.km)
Dispersion @1271nm~1360nm	≤5.3ps/(nm.km)
Dispersion @1550nm	≤18ps/(nm.km)
Dispersion @1625nm	≤22ps/(nm.km)
Proof Test Level	≥1%

3. Fiber identification

Fiber coloring code: IEC 60304, ANSI/EIA 359-A,598-A

Fiber No.	1	2	3	4	5
Colour	Blue	Orange	Green	Brown	Gray
Fiber No.	6	7	8	9	10
Colour	White	Red	Clear	Yellow	Purple
Fiber No.	11	12	13	14	15
Colour	Pink	Aqua	Blue*1	Orange*1	Green*1
Fiber No.	16	17	18	19	20
Colour	Brown*1	Gray*1	White*1	Red*1	Clear*1
Fiber No.	21	22	23	24	25
Colour	Yellow*1	Purple*1	Pink*1	Aqua*1	Blue*2
Fiber No.	26	27	28	29	30
Colour	Orange*2	Green*2	Brown*2	Gray*2	White*2
Fiber No.	31	32	33	34	35
Colour	Red*2	Clear*2	Yellow*2	Purple*2	Pink*2
Fiber No.	36	37	38	39	40
Colour	Aqua*2	Blue*1	Orange*1	Green*1	Brown*1
Fiber No.	41	42	43	44	45
Colour	Gray*1	White*1	Red*1	Clear*1	Yellow*1
Fiber No.	46	47	48		
Colour	Purple*1	Pink*1	Aqua*1		

Remarks: Fibres 1-12: Blue bundle
 Fibres 13 – 24: Orange bundle
 Fibres 25 – 36: Green bundle
 Fibres 37 – 48: Brown bundle