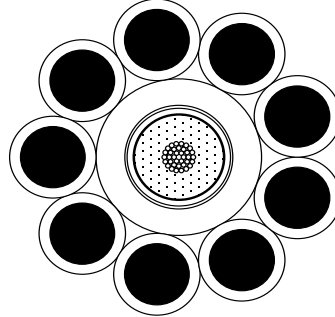


1. Completer OPGW

Type: OPGW-36B1-90[111;64.6]

Cross Section:



Structure Details	Center	Named	No.	Diameter
		Aluminum Tube	1	6.9±0.1 mm
		SUS-Tube	1	4.3±0.1 mm
	Layer 1	20.3%AS wire	9	3.6±0.05 mm

Technical Data	According to IEEE std 1138、IEC 60794-4 standards		
	Stranding direction of outer layer is "Left-hand"		
	Fiber No. & Type	36 G.652D	
	Standard Diameter	14.1±0.2 mm	
	Supporting Cross Section	91.61 mm ²	
		Section of AS wire	91.61 mm ²
		Section of Optical unit	21.49 mm ²
	Approximate mass	707.0 kg/km	
	Rated Tensile Strength	110.5 kN	
	Maximum Allowable Tension(40%RTS)	482.6 N/mm ²	
	Everyday Stress(20%RTS)	241.3 N/mm ²	
	Strain Margin Stress(60%RTS)	723.9 N/mm ²	
	Modulus of Elasticity	142.0 GPa	
	Thermal Elongation Coefficient	13.8 ×10 ⁻⁶ /°C	
	Calculated D.C. Resistance at 20°C	0.548 Ω/km	
	Short-Circuit Current (1 sec, 50~180°C)	8.0 kA	
	Short-Circuit Current Capacity (50~180°C)	64.6 kA ² ·s	
	Minimum Bending Radius	282 mm	
Ratio between Pull and Weight	15.96 km		
Lay length	141-225 mm		
Temperature Range:	Installation	-10°C ~ +50 °C	
	Transportation and Operation	-40°C ~ +80 °C	

Remarks: All Sizes and Values are Nominal Values

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2. Fiber parameters

Item		G.652D
Max. attenuation* (Completed OPGW)	(1310nm)	$\leq 0.34\text{dB/km}$
	(1550nm)	$\leq 0.21\text{dB/km}$
Mode field diameter	(1310nm)	$9.2\pm 0.5\mu\text{m}$
	(1550nm)	$10.4\pm 0.8\mu\text{m}$
Cable cut-off wavelength		$\leq 1260\text{nm}$
Cladding diameter		$125\pm 1\mu\text{m}$
Core-Cladding concentricity Error		$\leq 0.5\mu\text{m}$
Cladding non-circularity		$\leq 1\%$
Coating diameter(Colored)		$250\pm 10\mu\text{m}$
Cladding-Coating concentricity error		$\leq 12\mu\text{m}$
Polarization Mode Dispersion (PMD)		$\leq 0.2\text{ps}/(\text{km})^{0.5}$
Zero dispersion wavelength		1300~1324nm
Zero dispersion slope		$\leq 0.092\text{ps}/\text{nm}^2\text{km}$
Dispersion @1288nm~1339nm		$\leq 3.5\text{ps}/(\text{nm}\cdot\text{km})$
Dispersion @1550nm		$\leq 18\text{ps}/(\text{nm}\cdot\text{km})$
Proof Test Level		$\geq 0.69\text{GPa}$

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3. Fiber color and ring mark

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

Remarks: Fibres 1-12 – plain,
 Fibres 13 – 24 - single 100mm mark,
 Fibres 25 – 36 - double 150mm mark,

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