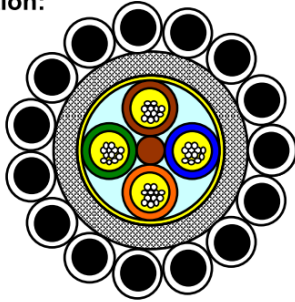


OPGW Cable

Cable Type: OPGW (L- AL_Tube) - 1S 48 (M104 / R77 - 81)

Cross Section:



Design:			
	Name	No	Material Dia.
Cable core	FRP wire	1	1.40 mm
	Loose tube(PBT) / Filler	4 / 0	2.80 mm
	Aluminium Tube diameter		9.90 mm
Layer1	27%ASwire	15	2.50 mm
	AA(LHA2)wire	0	

Fiber type: 48xG.652

	Tube Color	Blue,Orange,Green,Brown
Tubes / Fibers	4 / 12	
Color coding of fiber	Blue,Orange,Green,Brown,Grey,White,Red,Black,Yellow,Purple,Pink,Aqua	

Stranded:core and layer greased, stranding direction of outer layer is "right" hand(Z-stranding)	
Cable Diameter	14.90 mm
Cable Weight	542 kg/km

Technical Data:	according to: IEC、IEEE 1138 standards	
Supporting Cross Section	104.04 mm ²	
Section of AS Wire	73.63 mm ²	
Section of AA Wire / AL-tube	0.00 / 30.41 mm ²	
Ultimate Tensile Strength (UTS)	84.7 kN	
Rate Tensile Strength (RTS)	76.7 kN	
Modulus of Elasticity (E-Modulus)	115.4 kN/mm ²	
Thermal Elongation Coefficient	14.8 10 ⁻⁶ /°C	
Permissible Maximum Working Stress(MAT) (40%RTS)	295.0 N/mm ²	
Everyday Stress (EDS)(16%~25%RTS)	118.0 ~ 184.4 N/mm ²	
Strain Margin Stress (60%RTS)	442.5 N/mm ²	
DC Resistance	0.452 Ω / km	
Short Circuit Current (1.00s, 20°C~200°C)	8.99 kA	
Short Circuit Current Capacity (20°C~200°C)	(I ² t)	80.85 kA ² s
Minimum Bending Radius (installation)	447 mm	
Minimum Bending Radius (operation)	298 mm	
Installation Tensile Strength (≤20%RTS)	≤15.3 kN	
Temperature Range:	Installation	-10°C ~ +50 °C
	Transportation and Operation	-40°C ~ +80 °C

Remarks: All Sizes and Values are Nominal Values

(L-AL_Tube) - (Loose tube + AL_Tube)

4 / 12 - Loose Tubes / Fibers of Tube

M104 - Supporting Cross Section

R77 - Rate Tensile Strength (RTS)

81 - Short Circuit Current Capacity (20°C~200°C, 1.00s)