# Low Voltage Aluminium Waveform Cable - 1kV, XLPE, PVC - 95mm<sup>2</sup> to 300mm<sup>2</sup>



#### **Description**

Used by Distribution Network Operators (DNOs) such as UKPN, WPD, ENW, NPG, SSE, NGED, SPEN and NIE.

Aluminium Waveform cable is used as an energy supply cable most commonly found in power station distribution, panel boards and street lighting areas where mechanical protection is required. It consists of 3 or 4 aluminium conductors in sector shape with a copper conductor in a waveform lay.

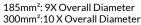
## **Key Features**



Voltage Rating 600/1000 Volts



Minimum Bending Radius 95mm<sup>2</sup>: 8X Overall Diameter 185mm<sup>2</sup>: 9X Overall Diameter





Flame Retardancy BS EN 60332-1-2



**Temperature Limits** Temperature Range: -15°C to + 70°C

## **Core Colours**



### **Standards**

- BS7870 3-40
- BS EN/IEC 60332-1-2
- BS7870-1

#### Construction

- Conductor: Class 1 Solid Aluminium
- Insulation: Cross Linked polyethylene (XLPE)
- Binder Tape: Non-hygroscopic binder tape
- Bedding: Extruded Rubber Compound
- Waveform Conductor: Plain Copper wire Screen
- Separator: Binding Tape
- Outer Sheath: Poly Vinyl Chloride (PVC) with UV additive
- Sheath Colour: Black

# **QA Lab**

#### Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.







#### CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



# **Our Sustainability Commitment**

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



#### ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

## ecovadis



















# Low Voltage Aluminium Waveform Cable - 1kV, XLPE, PVC - 95mm² to 300mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
WAVE3X95	95	3	36	1980
WAVE4X95	95	4	36	2300
WAVE3X185	185	3	43	3500
WAVE4X185	185	4	48	4200
WAVE4X240	240	4	59	5300
WAVE3X300	300	3	53	4900
WAVE4X300	300	4	60	6100

















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# LV ALUMINIUM WAVEFORM - ELECTRICAL CHARACTERISTICS

Nominal Cross Section mm <sup>2</sup>	95	185	300	
Maximum DC resistance of phase conductor @ 20°c (Ω/km)	0.32	0.164	0.1	
Maximum DC resistance of neutral/earth conductor@ 20°c (Ω/km)	0.320	0.164	0.164	
Maximum AC resistance of conductor@ 90°C (Ω/km)	0.411	0.211	0.130	
Approximate Reactance@ 50Hz (Ω/km)	0.073	0.073	0.072	
Approximate volt drop (mV/A/m)	0.410	0.330	0.250	
Zero Phase Sequence Resistance (Ω/km)	0.241	0.124	0.084	
Zero Phase Sequence Reactance (Ω/km)	0.086	0.077	0.074	
Nominal internal diameter of ducts (mm)	70.0	90.0	110.0	
Current	t Ratings			
Direct in ground (Amps)	244	353	461	
In Ducts (Amps)	227	328	429	
In Air (Amps)	232	364	508	
Current ratio	ng conditions			
round temperature 15°c				
Ambient Air temperature		25°C		
Depth of burial (to top of cable) 450mm				
Thermal resistance of soil	1.2°C m/W			

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