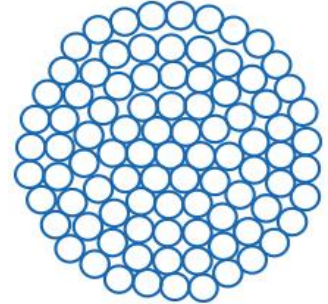


STER – AAC™

AAC conductor is also known as aluminium stranded conductor. These conductors consist of several layers of aluminium wires stranded of hard drawn 1350 aluminum concentrically. AAC are manufactured from electrolytically refined aluminium with a minimum purity of 99.7%. AAC conductors are used in low, medium and high voltage overhead lines.

APPLICATION

All Aluminium Conductor (AAC) have high ratio of electrical conductivity to weight, high flexibility, high Current Carrying Capacity and low UTS. Also, the aluminium has low levels of brittleness.



ADVANTAGES

All Aluminium Conductors (AAC) are used in low voltage overhead lines in urban areas and in high voltage substation conducting. They are also used in very cold areas due to low brittleness of aluminium in the MV lines.

MANUFACTURING CAPABILITY

SR.NO	DESCRIPTION	RANGE	
01	Conductor Area	10.6mm ² to 1095mm ²	0.0164 in ² 1.6973 in ²
02	Conductor construction	7Al Alloy to 91 Al Alloy	
03	Conductivity of Al Alloy	61 % to 61.2 %	

PHYSICAL PROPERTIES

At a temperature of 20°C (68°F), the density of hard-drawn aluminium has been taken as 2.703 g/cm³ (168.74 lb/cf).

SR. NO.	CONDUCTOR CONSTRUCTION	MODULUS OF MPA	ELASTICITY* KSI	LINEAR COEFFICIENT*	
				/°C	/°F
01	7 Strands	60000	8702	23.0 X 10 ⁻⁶	12.8 X 10 ⁻⁶
02	19 Strands	57000	8267	23.0 X 10 ⁻⁶	12.8 X 10 ⁻⁶
03	37 Strands	57000	8267	23.0 X 10 ⁻⁶	12.8 X 10 ⁻⁶
04	61 Strands	55000	7977	23.0 X 10 ⁻⁶	12.8 X 10 ⁻⁶

SR. NO.	DESCRIPTION	RANGE	
01	Permissible Temp in continuous operation	75°C	167°F
02	Temp in a short circuit (duration up to 5 s)	200°C	392°F

Note: The Catalogue conductor Parameter are informative and can be customized as per Project Requirements.

STANDARDS

IEC, BS, ASTM, CAN-CSA, DIN, IS, AS and relevant national and international standards.

Non-Specular (NS) Dull Finish Conductor can be available on special requirement.

Disclaimer:

** Parameters mentioned in the document are indicative and can vary subject to different standards*

** Customizations are available on select products. Please indicate your interest by reaching out to the sales team*

Contacts us for more details:

Saurabh Mahajan, VP Exports & Sales (saurabh.mahajan1@sterlite.com)

Amit Charan, VP, Sales and BD (amit.charan@sterlite.com)