

STER-AAC™

AAC conductor is also known as aluminium stranded conductor. These conductors consist of several layers of aluminium wires stranded concentrically. AAC are manufactured from electrolytically refined aluminium with a minimum purity of 99.7%

APPLICATION

All Aluminium Conductor (AAC) have high ratio of electrical conductivity to weight, high flexibility 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 conductoring. 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	10.6 mm ² to 1095 mm ²	0.0164 in ² to 1.6973 in ²
02	Conductor construction	7Al to 91 Al	
03	Conductivity	61%	

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 ELASTICITY*		LINEAR COEFFICIENT*	
		MPA	KSI	/°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	91 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

STANDARDS

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