

## STER – AACSR™

AACSR is a concentrically stranded conductor composed of one or more layers of Aluminium -Magnesium -Silicon Alloy wire stranded around a high strength coated steel core. The core can be of either single wire or stranded multi wire. AACSR is available with steel core of Class A, B or C galvanizing or Aluminium clad (AW).

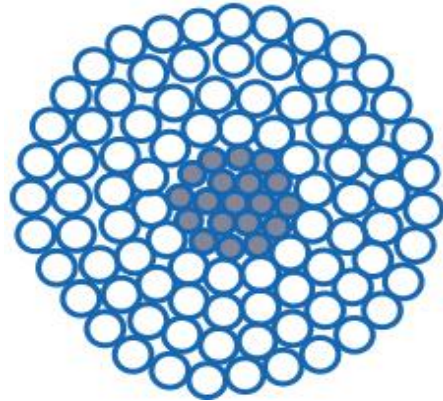
Additional corrosion protection is available through the application of grease to the core or infusion of the complete conductor with grease.

## APPLICATION

Overhead T&D lines-MV, HV & EHV (11 kV to 800 kV Lines).

## ADVANTAGES

- offers optimal strength for line design.
- improved strength to weight ratio.
- ideal for extra-long span with heavy load.
- excellent resistance to corrosion.



## MANUFACTURING CAPABILITY

SR.NO	DESCRIPTION	RANGE	
01	Conductor Area	10.6mm <sup>2</sup> to 1393mm <sup>2</sup>	0.0164 in <sup>2</sup> to 2.1592 in <sup>2</sup>
02	Conductor construction	6Al Alloy/ 1 Steel to 84Al.Alloy /19 Steel	
03	Conductivity of Al.Alloy	52.5% to 57.5% (AL2 to AL7)	

## PHYSICAL PROPERTIES

At a temperature of 20°C (68°F), the density of hard-drawn aluminium has been taken as 2.70 g/cm<sup>3</sup> (168.74 lb/cf) and for steel wire 7.78 g/cm<sup>3</sup> (485.69 lb/cf).

SR. NO.	CONDUCTOR CONSTRUCTION	LINEAR COEFFICIENT*	
		MPA	/°C
01	6Al Alloy/1Steel	81000	19.2 X 10 <sup>-6</sup>
02	6Al Alloy/7Steel	75000	19.8 X 10 <sup>-6</sup>
03	9Al Alloy/3Steel	93000	17.0 X10 <sup>-6</sup>
04	12Al Alloy/7Steel	107000	15.3 X 10 <sup>-6</sup>
05	14Al Alloy/7Steel	110000	15.0 X 10 <sup>-6</sup>

06	14Al Alloy/19Steel	110000	15.0 X 10 <sup>-6</sup>
07	15Al Alloy/19Steel	112000	14.7 X 10 <sup>-6</sup>
08	18Al Alloy/1Steel	66000	21.2 X 10 <sup>-6</sup>
09	18Al Alloy/19Steel	124000	14.2 X 10 <sup>-6</sup>
10	24Al Alloy/7Steel	74000	19.4 X 10 <sup>-6</sup>
11	24Al Alloy/37Steel	130000	13.5 X 10 <sup>-6</sup>
12	26Al Alloy/7Steel	77000	18.9 X 10 <sup>-6</sup>
13	30Al Alloy/7Steel	82000	17.8 X 10 <sup>-6</sup>
14	32Al Alloy/19Steel	82000	17.8 X 10 <sup>-6</sup>
15	36Al Alloy/7Steel	90000	16.7 X 10 <sup>-6</sup>
16	26Al Alloy/19Steel	76000	19.0 X 10 <sup>-6</sup>
17	30Al Alloy/19Steel	81000	17.9 X 10 <sup>-6</sup>
18	36Al Alloy/19Steel	99890	16.4 X 10 <sup>-6</sup>
19	42Al Alloy/1Steel	60000	21.2 X 10 <sup>-6</sup>
20	42Al Alloy/19Steel	96500	16.3 X 10 <sup>-6</sup>
21	45Al Alloy/7Steel	61000	20.9 X 10 <sup>-6</sup>
22	48Al Alloy/7Steel	62000	20.5 X 10 <sup>-6</sup>
23	54Al Alloy/7Steel	70000	19.3 X 10 <sup>-6</sup>
24	54Al Alloy/19Steel	68000	19.4 X 10 <sup>-6</sup>
25	66Al Alloy/19Steel	77500	18.6 X 10 <sup>-6</sup>
26	78Al Alloy/19Steel	84000	16.7 X 10 <sup>-6</sup>
27	84Al Alloy/7Steel	65000	20.1 X 10 <sup>-6</sup>
28	84Al Alloy/19Steel	64000	20.0 X 10 <sup>-6</sup>

SR. NO.	DESCRIPTION	RANGE	
01	Permissible Temp in continuous operation	85°C	185°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.*

## STANDARD

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*

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