



## • Description

ASTM B711 Aluminum Alloy Conductor Steel Reinforced (AACSR) is engineered with multiple wires of aluminum alloy and galvanized steel, stranded in concentric layers. The core wires, fabricated from galvanized steel, are enveloped by external layers composed of aluminum alloy. This construction design ensures robust mechanical properties and efficient power transmission.

## • Advantages

AACSR conductors find widespread application in overhead transmission and distribution lines across medium, high, and extra high voltages. They are particularly recommended for use in crossings or areas where exceptionally high tensile strength is required to withstand challenging environmental conditions and mechanical stresses.

## • Features

**Mechanical Performance:** The mechanical performance of ASTM B711 AACSR conductors conforms to relevant industry standards, ensuring reliability and durability in operation.

**Installation Conditions:** Designed for open-air installation, AACSR conductors are suitable for various outdoor environments, providing flexibility and adaptability to different installation conditions.

## • Construction

ASTM B711 AACSR conductors feature a core composed of galvanized steel wires, providing high tensile strength and structural support. Surrounding the core are multiple layers of aluminum alloy wires, offering lightweight and excellent conductivity.

## • Specifications

-ASTM B711

## • Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

## • Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



## • National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

\*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

## ● Technical Parameters

| Nominal Cross Section Area |                 |                 | No. / Nominal Dia. of Wire |         | Approx.<br>Overall Dia. | Approx.<br>Weight | Nominal<br>Breaking Load | Max. D.C.<br>Resistance<br>at 20°C |
|----------------------------|-----------------|-----------------|----------------------------|---------|-------------------------|-------------------|--------------------------|------------------------------------|
| Aluminum<br>Alloy          | Steel           | Total           | Aluminum<br>Alloy          | Steel   |                         |                   |                          |                                    |
| mm <sup>2</sup>            | mm <sup>2</sup> | mm <sup>2</sup> | No./mm                     | No./mm  | mm                      | kg/km             | kN                       | Ω/km                               |
| 140                        | 23              | 163             | 26/2.62                    | 7/2.04  | 16.6                    | 565               | 75                       | 0.23898                            |
| 140                        | 33              | 173             | 30/2.44                    | 7/2.44  | 17.1                    | 643               | 87.4                     | 0.23906                            |
| 160                        | 26              | 186             | 26/2.80                    | 7/2.18  | 17.7                    | 646               | 85.6                     | 0.20924                            |
| 160                        | 38              | 198             | 30/2.61                    | 7/2.61  | 18.3                    | 736               | 106                      | 0.20893                            |
| 180                        | 29              | 209             | 26/2.97                    | 7/2.31  | 18.8                    | 731               | 95.1                     | 0.18597                            |
| 180                        | 42              | 222             | 30/2.76                    | 7/2.76  | 19.3                    | 823               | 112                      | 0.18684                            |
| 200                        | 32              | 232             | 26/3.13                    | 7/2.43  | 19.8                    | 805               | 106                      | 0.16744                            |
| 200                        | 47              | 247             | 30/2.91                    | 7/2.91  | 20.4                    | 915               | 124                      | 0.16807                            |
| 224                        | 36              | 260             | 26/3.31                    | 7/2.57  | 21                      | 901               | 118                      | 0.14973                            |
| 224                        | 52              | 276             | 30/3.08                    | 7/3.08  | 21.6                    | 1025              | 139                      | 0.15003                            |
| 250                        | 41              | 291             | 26/3.50                    | 7/2.72  | 22.2                    | 1008              | 129                      | 0.13391                            |
| 250                        | 58              | 308             | 30/3.26                    | 7/3.26  | 22.8                    | 1149              | 156                      | 0.13392                            |
| 280                        | 46              | 326             | 26/3.70                    | 7/2.88  | 23.4                    | 1127              | 144                      | 0.11983                            |
| 280                        | 65              | 345             | 30/3.45                    | 7/3.45  | 24.2                    | 1286              | 171                      | 0.11958                            |
| 315                        | 52              | 367             | 26/3.93                    | 7/3.06  | 24.9                    | 1272              | 163                      | 0.10621                            |
| 315                        | 72              | 387             | 30/3.66                    | 19/2.20 | 25.6                    | 1438              | 190                      | 0.12246                            |
| 355                        | 58              | 413             | 26/4.17                    | 7/3.24  | 26.4                    | 1430              | 183                      | 0.09434                            |
| 355                        | 81              | 436             | 30/3.88                    | 19/2.33 | 27.2                    | 1614              | 211                      | 0.10897                            |
| 400                        | 65              | 465             | 26/4.43                    | 7/3.45  | 28.1                    | 1616              | 207                      | 0.08359                            |
| 400                        | 91              | 491             | 30/4.12                    | 19/2.47 | 28.8                    | 1818              | 237                      | 0.09664                            |
| 450                        | 59              | 509             | 54/3.26                    | 19/1.98 | 29.5                    | 1706              | 215                      | 0.08952                            |
| 500                        | 63              | 563             | 54/3.43                    | 19/2.06 | 30.9                    | 1878              | 229                      | 0.08086                            |
| 560                        | 71              | 631             | 54/3.63                    | 19/2.18 | 32.7                    | 2104              | 257                      | 0.0722                             |
| 630                        | 80              | 710             | 54/3.85                    | 19/2.31 | 34.6                    | 2365              | 286                      | 0.06418                            |
| 710                        | 90              | 800             | 54/4.09                    | 19/2.45 | 36.8                    | 2664              | 322                      | 0.05687                            |
| 800                        | 101             | 901             | 54/4.34                    | 19/2.60 | 39                      | 3003              | 363                      | 0.05051                            |
| 900                        | 73              | 973             | 84/3.69                    | 19/2.21 | 40.6                    | 3060              | 355                      | 0.05809                            |
| 1000                       | 81              | 1081            | 84/3.89                    | 19/2.33 | 42.8                    | 3400              | 391                      | 0.05227                            |
| 1120                       | 91              | 1211            | 84/4.12                    | 19/2.47 | 45.3                    | 3816              | 439                      | 0.0466                             |
| 1250                       | 102             | 1352            | 84/4.35                    | 19/2.61 | 47.8                    | 4255              | 490                      | 0.0418                             |