



APPLICATIONS

Used as bare overhead transmission and as primary and secondary distribution cable. ACSR/AW offers strength characteristics similar to ACSR, along with slightly greater ampacity and resistance to corrosion due to aluminum-cladding of the steel core wires.

SPECIFICATIONS

Southwire's ACSR/AW bare conductor meets or exceeds the following ASTM specifications:

- B230 Aluminum 1350-H19 Wire for Electrical Purposes.
- B502 Aluminum-Clad Steel Core Wire for Use in Overhead Electrical Aluminum Conductors.
- B549 Concentric-Lay Stranded Aluminum Conductors, Aluminum-Clad Steel Reinforced for Use in Overhead Electrical Conductors.

CONSTRUCTION

Aluminum 1350-H19 wires, concentrically stranded about an aluminum-clad steel core.

ACSR/AW

| Code Word | Size (AWG or kcmil) | Stranding (Al/Aw) | Diameter (ins.) | | | | Weight Per 1000 ft.(lbs) | | | Rated Strength (lbs.) | Resistance OHMS/1000 ft. | | Allowable Ampacity (Amps) |
|--------------|---------------------|-------------------|------------------|-------|---------|-------------|--------------------------|-----|-------|-----------------------|--------------------------|-----------|---------------------------|
| | | | Individual Wires | | Aw Core | Comp. Cable | Al | Aw | Total | | DC @ 20°C | AC @ 75°C | |
| | | | Al | Aw | | | | | | | | | |
| Swan/Aw | 4 | 6/1 | .0834 | .0834 | .0834 | .25 | 39 | 16 | 55 | 1780 | .3917 | .4770 | 145 |
| Swanate/Aw | 4 | 7/1 | .0772 | .103 | .103 | .257 | 39 | 24 | 63 | 2280 | .3814 | .4642 | 148 |
| Sparrow/Aw | 2 | 6/1 | .1052 | .1052 | .1052 | .316 | 62 | 25 | 87 | 2760 | .2462 | .2997 | 194 |
| Sparate/Aw | 2 | 7/1 | .0974 | .1298 | .1298 | .325 | 62 | 38 | 100 | 3510 | .2396 | .2917 | 198 |
| Robin/Aw | 1 | 6/1 | .1181 | .1181 | .1181 | .354 | 78 | 31 | 109 | 3450 | .1950 | .2373 | 225 |
| Raven/Aw | 1/0 | 6/1 | .1327 | .1327 | .1327 | .398 | 99 | 39 | 138 | 4250 | .1547 | .1884 | 260 |
| Quail/Aw | 2/0 | 6/1 | .1489 | .1489 | .1489 | .447 | 124 | 50 | 174 | 5130 | .1227 | .1494 | 301 |
| Pigeon/Aw | 3/0 | 6/1 | .1672 | .1672 | .1672 | .502 | 156 | 63 | 219 | 6300 | .09747 | .1188 | 347 |
| Penguin/Aw | 4/0 | 6/1 | .1878 | .1878 | .1878 | .563 | 197 | 79 | 277 | 7690 | .07726 | .09422 | 402 |
| Waxwing/Aw | 266.8 | 18/1 | .1217 | .1217 | .1217 | .609 | 250 | 33 | 283 | 6820 | .06364 | .07776 | 451 |
| Partridge/Aw | 266.8 | 26/7 | .1013 | .0788 | .2363 | .642 | 251 | 98 | 349 | 10800 | .06169 | .07541 | 465 |
| Ostrich/Aw | 300.0 | 26/7 | .1074 | .0835 | .2506 | .68 | 283 | 110 | 393 | 12100 | .05489 | .06712 | 500 |
| Merlin/Aw | 336.4 | 18/1 | .1367 | .1367 | .1367 | .684 | 315 | 42 | 357 | 8540 | .05044 | .06175 | 522 |
| Linnet/Aw | 336.4 | 26/7 | .1137 | .0885 | .2654 | .72 | 317 | 123 | 440 | 13500 | .04897 | .05989 | 537 |
| Oriole/Aw | 336.4 | 30/7 | .1059 | .1059 | .3177 | .741 | 318 | 177 | 494 | 16700 | .04795 | .05861 | 547 |
| Chickadee/Aw | 397.5 | 18/1 | .1486 | .1486 | .1486 | .743 | 373 | 50 | 422 | 9780 | .04268 | .05230 | 580 |
| Brant/Aw | 397.5 | 24/7 | .1287 | .0858 | .2574 | .772 | 374 | 116 | 490 | 14100 | .04185 | .05124 | 592 |
| Ibis/Aw | 397.5 | 26/7 | .1236 | .0962 | .2885 | .783 | 374 | 146 | 520 | 15800 | .04144 | .05072 | 597 |
| Lark/Aw | 397.5 | 30/7 | .1151 | .1151 | .3453 | .806 | 375 | 209 | 584 | 19600 | .04059 | .04965 | 608 |
| Pelican/Aw | 477 | 18/1 | .1628 | .1628 | .1628 | .814 | 447 | 59 | 507 | 11500 | .03556 | .04344 | 651 |
| Flicker/Aw | 477 | 24/7 | .141 | .094 | .2819 | .846 | 449 | 139 | 589 | 16700 | .03487 | .04273 | 663 |
| Hawk/Aw | 477.0 | 26/7 | .1354 | .1053 | .316 | .858 | 449 | 175 | 624 | 18900 | .03453 | .04231 | 669 |
| Hen/Aw | 477.0 | 30/7 | .1261 | .1261 | .3783 | .883 | 450 | 251 | 701 | 23400 | .03382 | .04139 | 682 |
| Osprey/Aw | 556.5 | 18/1 | .1758 | .1758 | .1758 | .879 | 522 | 69 | 591 | 13200 | .03050 | .03749 | 715 |
| Parakeet/Aw | 556.5 | 24/7 | .1523 | .1015 | .3045 | .914 | 524 | 163 | 687 | 19300 | .02989 | .03667 | 731 |
| Dove/Aw | 556.5 | 26/7 | .1463 | .1138 | .3413 | .927 | 524 | 204 | 728 | 21900 | .02958 | .03627 | 737 |
| Eagle/Aw | 556.5 | 30/7 | .1362 | .1362 | .4086 | .953 | 525 | 293 | 818 | 26800 | .02899 | .03551 | 751 |
| Peacock/Aw | 605.0 | 24/7 | .1588 | .1058 | .3175 | .953 | 570 | 177 | 746 | 21000 | .02749 | .03377 | 770 |
| Squab/Aw | 605.0 | 26/7 | .1525 | .1186 | .3559 | .966 | 570 | 222 | 792 | 23600 | .02588 | .03341 | 777 |
| Teal/Aw | 605.0 | 30/19 | .142 | .0852 | .426 | .994 | 571 | 311 | 883 | 28500 | .02672 | .03274 | 791 |
| Kingbird/Aw | 636.0 | 18/1 | .188 | .188 | .188 | .94 | 596 | 79 | 675 | 15000 | .02667 | .03286 | 778 |
| Rook/Aw | 636.0 | 24/7 | .1628 | .1085 | .3256 | .977 | 599 | 186 | 785 | 22000 | .02616 | .03216 | 794 |
| Grosbeak/Aw | 636.0 | 26/7 | .1564 | .1216 | .3649 | .991 | 599 | 233 | 832 | 24800 | .02588 | .03179 | 801 |
| Flamingo/Aw | 666.6 | 24/7 | .1667 | .1111 | .3333 | 1 | 628 | 195 | 823 | 23100 | .02495 | .03069 | 818 |
| Gannet/Aw | 666.6 | 26/7 | .1601 | .1245 | .3736 | 1.014 | 628 | 245 | 872 | 26000 | .02470 | .03034 | 825 |
| Starling/Aw | 715.5 | 26/7 | .1659 | .129 | .3871 | 1.051 | 674 | 263 | 936 | 27500 | .02300 | .02830 | 863 |



MADE IN THE USA

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ACSR/AW

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|-------------|--------|-------|-------|-------|-------|-------|------|-----|------|-------|--------|--------|------|
| Redwing/Aw | 715.5 | 30/19 | .1544 | .0927 | .4633 | 1.081 | 676 | 368 | 1044 | 33400 | .02260 | .02777 | 878 |
| Cuckoo/Aw | 795.0 | 24/7 | .182 | .1213 | .364 | 1.092 | 749 | 232 | 981 | 27500 | .02093 | .02582 | 913 |
| Drake/Aw | 795 | 26/7 | .1749 | .136 | .408 | 1.107 | 749 | 292 | 1040 | 30500 | .02070 | .02549 | 922 |
| Tern/Aw | 795 | 45/7 | .1329 | .0886 | .2658 | 1.063 | 749 | 124 | 873 | 21500 | .02135 | .02638 | 896 |
| Condor/Aw | 795 | 54/7 | .1213 | .1213 | .364 | 1.092 | 749 | 232 | 981 | 27800 | .02091 | .02578 | 913 |
| Mallard/Aw | 795 | 30/19 | .1628 | .0977 | .4884 | 1.139 | 751 | 409 | 1160 | 37100 | .02033 | .02500 | 938 |
| Ruddy/Aw | 900 | 45/7 | .1414 | .0943 | .2828 | 1.131 | 848 | 140 | 988 | 24000 | .01886 | .02330 | 970 |
| Canary/Aw | 900 | 54/7 | .1291 | .1291 | .3873 | 1.162 | 848 | 263 | 1111 | 31000 | .01849 | .02286 | 986 |
| Rail/Aw | 954 | 45/7 | .1456 | .0971 | .2912 | 1.165 | 899 | 149 | 1047 | 25400 | .01779 | .02210 | 1003 |
| Cardinal/Aw | 954 | 54/7 | .1329 | .1329 | .3987 | 1.196 | 899 | 279 | 1177 | 32900 | .01744 | .02161 | 1022 |
| Ortolan/Aw | 1033.5 | 45/7 | .1515 | .101 | .3031 | 1.212 | 973 | 161 | 1134 | 27200 | .01641 | .02044 | 1054 |
| Curlew/Aw | 1033.5 | 54/7 | .1383 | .1383 | .415 | 1.245 | 973 | 302 | 1275 | 35200 | .01609 | .01997 | 1074 |
| Bluejay/Aw | 1113 | 45/7 | .1573 | .1048 | .3145 | 1.258 | 1048 | 173 | 1222 | 29300 | .01606 | .01905 | 1103 |
| Pheasant/Aw | 1272 | 54/19 | .1535 | .0921 | .4604 | 1.381 | 1204 | 364 | 1568 | 42400 | .01315 | .01646 | 1216 |
| Bobolink/Aw | 1431 | 45/7 | .1783 | .1189 | .3566 | 1.427 | 1348 | 223 | 1571 | 37600 | .01186 | .01503 | 1283 |
| Lapwing/Aw | 1590 | 45/7 | .188 | .1253 | .3759 | 1.504 | 1498 | 248 | 1745 | 41800 | .01069 | .01366 | 1365 |

+Conductor temperature of 75°C ambient temperature 25°C, emissivity 0.5, wind 2 ft./sec., in sun.

| Code Word | Size (AWG or kcmil) | Stranding (Al/Aw) | Diameter (ins.) | | | | Weight Per 1000 ft.(lbs) | | | Rated Strength (lbs.) | Resistance OHMS/1000 ft. | | Allowable Ampacity+ (Amps) |
|---------------------------------|---------------------|-------------------|------------------|-------|---------|-------------|--------------------------|-------|-------|-----------------------|--------------------------|-----------|----------------------------|
| | | | Individual Wires | | Aw Core | Comp. Cable | Al | Aw | Total | | DC @ 20°C | AC @ 75°C | |
| | | | Al | Aw | | | | | | | | | |
| HIGH MECHANICAL STRENGTH | | | | | | | | | | | | | |
| Grouse/AW | 80.0 | 8/1 | .1000 | .1670 | .1670 | .367 | 75.1 | 62.6 | 137.7 | 4,890 | .1942 | .2357 | 227 |
| Petrel/AW | 101.8 | 12/7 | .0921 | .0921 | .2763 | .460 | 96.0 | 133.9 | 229.9 | 9,910 | .1425 | .1736 | 281 |
| Minorca/AW | 110.8 | 12/7 | .0961 | .0961 | .2883 | .481 | 104.5 | 145.8 | 250.3 | 10,800 | .1326 | .1594 | 297 |
| Leghorn/AW | 134.6 | 12/7 | .1059 | .1059 | .3177 | .530 | 127.0 | 177.0 | 304.0 | 13,000 | .1078 | .1313 | 335 |
| Guinea/AW | 159.0 | 12/7 | .1151 | .1151 | .3453 | .576 | 150.0 | 209.1 | 359.1 | 15,300 | .09123 | .1112 | 372 |
| Dotterel/AW | 176.9 | 12/7 | .1214 | .1214 | .3642 | .607 | 166.8 | 232.7 | 399.5 | 16,900 | .08201 | .09988 | 398 |
| Dorking/AW | 190.8 | 12/7 | .1261 | .1261 | .3783 | .631 | 180.0 | 251.0 | 431.0 | 18,300 | .07601 | .09261 | 418 |
| Brahma/AW | 203.2 | 16/19 | .1127 | .0977 | .4885 | .714 | 191.7 | 411.0 | 602.7 | 27,100 | .06570 | .07994 | 464 |
| Cochin/AW | 211.3 | 12/7 | .1327 | .1327 | .3981 | .664 | 199.3 | 278.0 | 477.3 | 19,800 | .06863 | .08364 | 445 |

+Conductor temperature of 75°C ambient temperature 25°C, emissivity 0.5, wind 2 ft./sec., in sun.