# SIM*pull*™ AL 600V XLPE Insulation. RW90

Single 8000 Series Aluminum Conductor, 600V Alumaflex Strand, No. 6 AWG to 1000 KCMIL, FT4 Flame Test Rating - (in all colours), 90°C MAX -40°C MIN, Sunlight Resistant

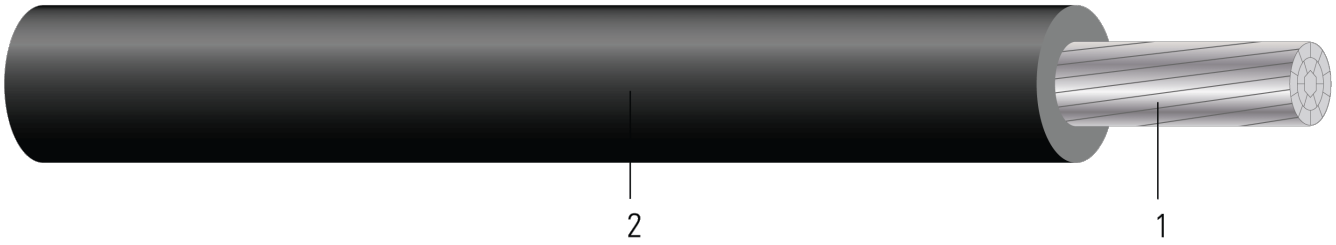



Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** 8000 Series ACM Aluminum Class B stranded conductor.
2. **Insulation:** Crosslinked Polyethylene (XLPE) insulation with SIMpull®

## APPLICATIONS AND FEATURES:

Southwire's SIMpull ® aluminum RW90 is for open wiring used in raceways (except cabletroughs and ventilated flexible cableways) in dry or wet locations. For open wiring exposed to the weather. Minimum recommended installation temperature minus 40°C (with suitable handling procedures). Maximum conductor temperature 90°C.

## SPECIFICATIONS:

- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- CSA Standard C22.2 No. 38 File Listing LL90458

## SAMPLE PRINT LEGEND:

SOUTHWIRE® XXXX KCMIL NOLUBE® SIMpull RW90{TM} LL90458 {CSA} XXX.XX {mm2}) COMPACT AL. --- AlumaFlex {TM} AA8176 RW90 XLPE 600 VOLTS (-40°C) SR - MADE UNDER US PATENT NOS 7411129 & 7557301-RW90 500 KCMIL FT4 {MMM/DD/YYYY} - OPERATOR NAME SEQUENTIAL METER MARKS


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## Table 1 – Weights and Measurements

| Cond. Size | Strand | Insul. Thickness | Insulation Color | Approx. OD | Approx. Weight | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity In Raceway 90°C† |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AWG/ Kcmil | No. | mil | | inch | lb/1000ft | inch | lb | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp |
| 2 | 7 | 45 | BK | 0.358 | 88 | 1.4 | 398 | 0.266 | 0.331 | 0.045 | 100 |
| 1 | 8 | 55 | BK | 0.409 | 114 | 1.6 | 502 | 0.211 | 0.263 | 0.046 | 115 |
| 1/0 | 10 | 55 | BK | 0.446 | 137 | 1.8 | 633 | 0.167 | 0.208 | 0.044 | 135 |
| 2/0 | 12 | 55 | BK | 0.486 | 167 | 1.9 | 798 | 0.133 | 0.166 | 0.043 | 150 |
| 3/0 | 16 | 55 | BK | 0.533 | 205 | 2.1 | 1006 | 0.105 | 0.131 | 0.042 | 175 |
| 4/0 | 19 | 55 | BK | 0.585 | 251 | 2.3 | 1269 | 0.084 | 0.105 | 0.041 | 205 |
| 250 | 22 | 65 | BK | 0.65 | 302 | 2.6 | 1500 | 0.07 | 0.087 | 0.041 | 230 |
| 350 | 35 | 65 | BK | 0.746 | 407 | 3 | 2100 | 0.051 | 0.064 | 0.04 | 280 |
| 400 | 35 | 65 | BK | 0.789 | 459 | 3.2 | 2400 | 0.044 | 0.055 | 0.04 | 305 |
| 500 | 35 | 65 | BK | 0.866 | 563 | 3.5 | 3000 | 0.036 | 0.045 | 0.039 | 350 |
| 750 | 58 | 80 | BK | 1.068 | 846 | 5.3 | 4500 | 0.023 | 0.03 | 0.038 | 435 |
| 1000 | 58 | 80 | BK | 1.277 | 1111 | 6.4 | 6000 | 0.017 | 0.023 | 0.037 | 500 |

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Strand count meets minimum number per ASTM
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

## Table 2 – Weights and Measurements (Metric)

| Cond. Size | Strand | Insul. Thickness | Insulation Color | Approx. OD | Approx. Weight | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity In Raceway 90°C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AWG/ Kcmil | No. | mm | | mm | kg/km | mm | newton | Ω/km | Ω/km | Ω/km | Amp |
| 2 | 7 | 1.14 | BK | 9.09 | 131 | 35.56 | 1771 | 0.87 | 1.09 | 0.1476 | 100 |
| 1 | 8 | 1.40 | BK | 10.39 | 170 | 40.64 | 2234 | 0.69 | 0.86 | 0.1509 | 115 |
| 1/0 | 10 | 1.40 | BK | 11.33 | 204 | 45.72 | 2817 | 0.55 | 0.68 | 0.1444 | 135 |
| 2/0 | 12 | 1.40 | BK | 12.34 | 249 | 48.26 | 3551 | 0.44 | 0.54 | 0.1411 | 150 |
| 3/0 | 16 | 1.40 | BK | 13.54 | 305 | 53.34 | 4477 | 0.34 | 0.43 | 0.1378 | 175 |
| 4/0 | 19 | 1.40 | BK | 14.86 | 374 | 58.42 | 5647 | 0.28 | 0.34 | 0.1345 | 205 |
| 250 | 22 | 1.65 | BK | 16.51 | 449 | 66.04 | 6675 | 0.23 | 0.29 | 0.1345 | 230 |
| 350 | 35 | 1.65 | BK | 18.95 | 606 | 76.20 | 9345 | 0.17 | 0.21 | 0.1312 | 280 |
| 400 | 35 | 1.65 | BK | 20.04 | 683 | 81.28 | 10680 | 0.14 | 0.18 | 0.1312 | 305 |
| 500 | 35 | 1.65 | BK | 22.00 | 838 | 88.90 | 13350 | 0.12 | 0.15 | 0.1280 | 350 |
| 750 | 58 | 2.03 | BK | 27.13 | 1259 | 134.62 | 20025 | 0.08 | 0.10 | 0.1247 | 435 |
| 1000 | 58 | 2.03 | BK | 32.44 | 1653 | 162.56 | 26700 | 0.06 | 0.08 | 0.1214 | 500 |

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
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