# 1/C CU 600V Tray Rated LSZH RW90 VW-1 Cable SOLONONplus™ Living Building Challenge™ (LBC) Red List Free

SOLONONplus™ 600 Volt Single Conductor Copper Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Insulation Type RW 90

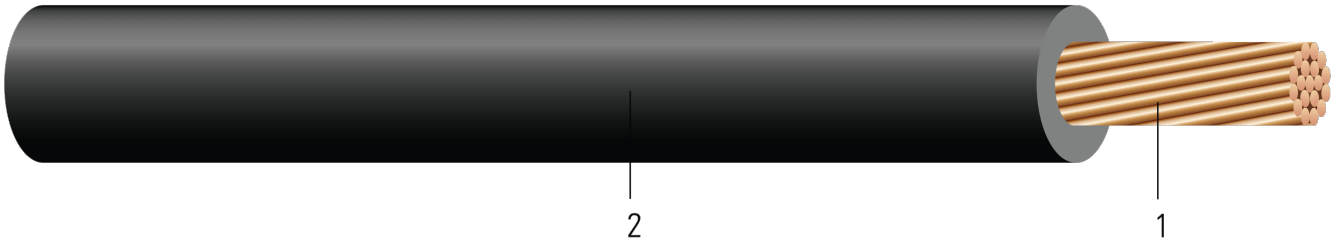


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** SOLONONplus™ Cross Linked Polyolefin Low Smoke Zero Halogen (XLPO LSZH) Type RW 90 VW-1

## APPLICATIONS AND FEATURES:

Southwire's 600 Volt SOLONONplus™ Type RW 90 VW-1 cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial and aerially when supported by a messenger. These cables are ideal for use in establishments where low smoke and low acid emissions are desired for public safety and health and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions.

a. The conductors are available in tinned and flexible copper stranding upon request.
b. Color Available upon request
c. Listed and marked CSA VW-1 for all sizes
d. The halogen content is less than 0.2% and Acid gas less than 2.0%
e. CSA listed for TC use on 1/0 and Larger. 70,000 BTU/Hr. Vertical Flame Test (CSA C22.2 NO. 2556)
f. CSA listed FT4/IEEE 1202 and ST-1 (1/0 and larger)
g. -40°C Cold impact and cold bend
h. PRI Oil resistance I at 60°C & PRII Oil resistance II at 75°C
i. GRI gasoline and oil resistance at 60°C
j. GRII gasoline and oil resistance at 75°C
k. REACH & RoHS compliant
l. Listed and marked HAL-FREE (Halogen Free) per CSA 2556-15
m. Living Building Challenge™ (LBC) Red List Free

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- ASTM B170 Oxygen Free Electrolytic Copper (available upon request)
- CSA C22.2 No. 38 Thermoset-insulated wires and cables


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- CSA C22.2 No.230 Tray Cables - Rated TC-ER (1/0 AWG and Larger)
- CSA C22.2 No. 2556 / UL 2556 Cable Test Methods
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- ICEA T-33-655/MIL-C-24643 Low Smoke Halogen Free (LSHF) Polymeric Jackets
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- ISO 9001 Quality management
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (500kcmil & Larger)
- NFPA 502 Standard for Road Tunnels, Bridges, and Other Limited Access Highways (non-emergency circuits only)

## SAMPLE PRINT LEGEND:

- 1/0 AWG and larger cables
  SOUTHWIRE SOLONONplus (TM) LSZH XLPO 156205 {CSA} 1/0 AWG (XXX mm2) CU RW90 600V VW-1 HAL-FREE TC PRI PRII GRI GRII -40°C SR FT4 ST-1 {SEQUENTIAL METER MARKS} SEQ METERS [date code]

## Table 1 – Physical and Electrical Data

| Stock Number | Cond. Size | Strand Class | Strand Count | Cond. Cmil | Cond. Number | Diameter Over Conductor | Insul. Thickness | Jacket Color | Approx. OD | Approx. Weight | DC Resistance @ 25°C | AC Resistance @ 75°C | Max Pull Tension |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AWG/ kcmil | | No. of Strands | cmil | No. | inch | mil | | inch | lb/1000ft | Ω/1000ft | Ω/1000ft | lb |
| 678861 | 600 | B | 61 | 600000 | 1 | 0.865 | 80 | BE | 1.025 | 1976 | 0.018 | 0.025 | 4800 |

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

| Size (Strand) | Black | Brown | Orange | Yellow | White | Red | Blue | Green |
|---|---|---|---|---|---|---|---|---|
| 1/0 (19) | 678792 | 678795 | 678796 | 678798 | 678791 | 678793 | 678794 | 678790 |
| 2/0 (19) | 678802 | 678806 | 678807 | 678808 | 678801 | 678803 | 678804 | 678800 |
| 3/0 (19) | 678811 | 678815 | 678816 | 678817 | 678810 | 678812 | 678814 | 678809 |
| 4/0 (19) | 678824 | 678827 | 678828 | 678829 | 678823 | 678825 | 678826 | 678822 |
| 250 (37) | 678832 | 678835 | 678836 | 678837 | 678831 | 678833 | 678834 | 678830 |
| 350 (37) | 678841 | 678844 | 678845 | 678846 | 678840 | 678842 | 678843 | 678838 |
| 500 (37) | 678850 | 678853 | 678855 | 678856 | 678849 | 678851 | 678852 | 678848 |
| 600 (61) | 678859 | 678863 | 678864 | 678865 | 678858 | 678860 | 678861 | 678857 |


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