CU 600/1000V XLPE Insulation GSIA PVC Jacket XHHW-2. CT Rated -Sunlight Resistant - For Direct Burial - Silicone Free

Type MC Power Cable 600Volt Three Conductor Copper, Cross Linked Polyethylene (XLPE) insulation XHHW-2 Galvanized Steel Interlocked Armor (GSIA), Polyvinyl Chloride (PVC) Jacket with 1 Bare CU Ground. Silicone Free.



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: Cross Linked Polyethylene (XLPE) Type XHHW-2
- 3. Grounding Conductor: Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- 4. Filler: Paper filler (cable size 8 & 6 uses Polypropylene filler)
- 5. Binder: Polypropylene tape
- 6. Armor: Galvanized Steel Interlocked Armor (GSIA)
- 7. Overall Jacket: Polyvinyl Chloride (PVC) Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt Type MC power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, 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. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502. Silicone Free.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-58-679 Control Cable Conductor Identification Method 3 (1-BLACK, 2-RED, 3-BLUE)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Vertical Tray Flame Test (70,000 Btu/hr) and ICEA T-29-520 (210,000 Btu/hr)

SAMPLE PRINT LEGEND:

SOUTHWIRE EXXXXX #P# (UL) [#AWG Or #kcmil] CU XHHW-2 XLPE/PVC GSIA 600V Type MC For CT USE SUN. RES. For DIRECT BURIAL FT4 YEAR (NESC) [SEQUENTIAL FEET MARKS]





Table 1 – Weights and Measurements

Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
AWG/ Kcmil		No. of Strands	inch	mil	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft
8	3	7	0.141	45	1 x 10	0.711	50	0.811	186	559
1	3	19	0.322	55	1 x 6	1.145	50	1.245	863	1584
1/0	3	19	0.361	55	1 x 6	1.229	50	1.329	1067	1856
3/0	3	19	0.456	55	1 x 4	1.435	50	1.535	1697	2657
250	3	37	0.558	65	1 x 4	1.798	60	1.918	2465	3831

All dimensions are nominal and subject to normal manufacturing tolerances

\diamond Cable marked with this symbol is a standard stock item

Table 2 – Electrical and Engineering Data

Cond. Size	Cond. Number	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Capacitive Reactance @ 60Hz	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	MΩ*1000ft	Ω/1000ft	Amp	Amp
8	3	5.7	396	0.653	0.786	0.033	0.052	50	55
1	3	8.7	2008	0.128	0.154	0.019	0.046	130	145
1/0	3	9.3	2534	0.102	0.122	0.017	0.044	150	170
3/0	3	10.7	4027	0.064	0.078	0.014	0.042	200	225
250	3	13.4	6000	0.043	0.053	0.014	0.041	255	290

* Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.



