

CU 600/1000V XLPE Insulation GSIA PVC Jacket. XHHW-2

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.

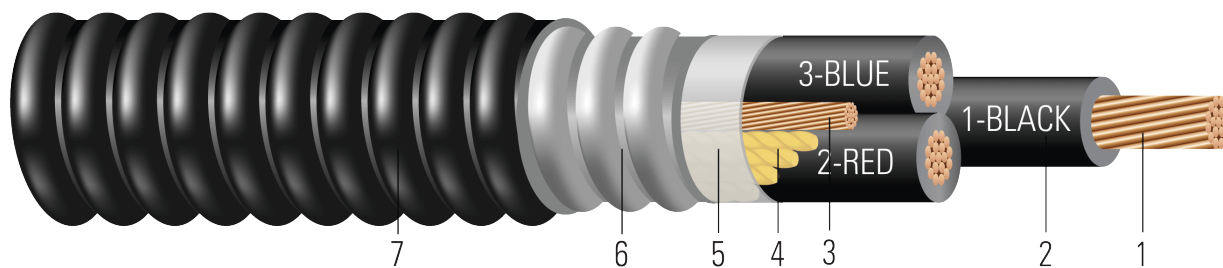


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Insulation:** Cross Linked Polyethylene (XLPE) Type XHHW-2
- Grounding Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Filler:** Paper filler (cable size 8 & 6 uses Polypropylene filler)
- Binder:** Polypropylene tape
- Armor:** Galvanized Steel Interlocked Armor (GSIA)
- 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	Dia. Over Insulation	Ground	Dia. Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Aluminum Weight	Approx. Weight
AWG/ Kcmil		No. of Strands	inch	mil	inch	No. x AWG	inch	mil	inch	lb/1000ft	lb/1000ft	
8	3	7	0.141	45	0.231	1 x 10	0.720	50	0.820	186	248	567
1	3	19	0.322	55	0.432	1 x 6	1.155	50	1.255	863	459	1596
1/0	3	19	0.361	55	0.471	1 x 6	1.239	50	1.339	1067	500	1869
3/0	3	19	0.456	55	0.566	1 x 4	1.444	50	1.544	1698	600	2673
250	3	37	0.558	65	0.688	1 x 4	1.708	60	1.828	2466	835	3837

All dimensions are nominal and subject to normal manufacturing tolerances

◊ 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	Inductive Reactance @ 60Hz	Allowable Ampacity At 60°C	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
8	3	5.7	396	0.653	0.786	0.052	40	50	55
1	3	8.7	2008	0.128	0.154	0.046	110	130	145
1/0	3	9.3	2534	0.102	0.122	0.044	125	150	170
3/0	3	10.8	4027	0.064	0.078	0.042	165	200	225
250	3	12.7	6000	0.043	0.053	0.041	215	255	290

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

