CU Compressed 2.4kV EPR Insulation LSZH-TS Jacket. MV 90

Type MV-90 Single Conductor Copper, Ethylene Propylene Rubber (EPR) Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket. 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 (Tinned Copper per ASTM B33 optional)
2. **Conductor Shield:** Semi-conducting cross-linked copolymer
3. **Insulation:** Ethylene Propylene Rubber (EPR)
4. **Overall Jacket:** Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS)

APPLICATIONS AND FEATURES:

Southwire's 2.4KV cables are suited for use in wet and dry areas, conduits, ducts, troughs, 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, 130°C for emergency overload, and 250°C for short circuit conditions. Rated at -25°C for cold bend. Rated for 1000 lbs./FT maximum sidewall pressure. Silicone 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
- UL 1072 Medium-Voltage Power Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- ICEA S-96-659 (NEMA WC 71) 2001-5000 V Nonshielded Cables
- CT USE Sizes 1/0 AWG and Larger
- Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy America requirements per 49 C.F.R. part 661

SAMPLE PRINT LEGEND:

{SQFTG_DUAL} SOUTHWIRE® POWER CABLE {UL} XXX AWG CU XXX MILS EPR/SOLONON XL JKT 2400V NONSHIELDED MV-90 WET/DRY ST1 OIL RES II FOR CT USE MAXIMUM 2400 VOLTS

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand Count	Diameter Over Conductor	Diameter Over Insulation	Insul. Thickness	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	Max Pull Tension	Min Bending Radius	Conduit Size
	AWG/ Kcmil	No. of Strands	inch	inch	mil	mil	inch	lb/1000ft	lb/1000ft	lb	inch	inch
611178	500	37	0.789	1.09	140	110	1.332	1543	2091	4000	10.6	4

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Conduit size based on 3 phase 40% fill-factor without ground
* #2 awg non "LS" rated

Table 2 – Electrical and Engineering Data

Cond. Size	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Zero Sequence Impedance	Positive Sequence Impedance	Allowable Ampacity In Duct 90°C	Allowable Ampacity In Air 90°C
AWG/ Kcmil	Ω/1000ft	Ω/1000ft	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
500	0.022	0.030	0.0337	0.012 + j0.014	0.02 + j0.023	470	695

* NEC ampacities are based on:
* For Duct: Table 310.60(C)(11) Detail 1.
* For Free Air: Table 310.60(C)(3).
* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.