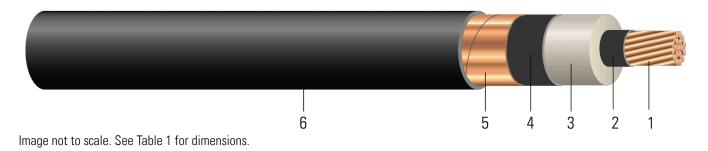
CU Compressed 15kV NLEPR Insulation 133% IL Black SIM-PVC Jacket. MV 105 - Tray Rated - Sunlight Resistant - For Direct Burial

Type MV-105 Single Conductor Copper, 220 Mils No Lead Ethylene Propylene Rubber (NL-EPR) Lead-Free EAM 133% Insulation Level, Tape Shield, SIMpull Polyvinyl Chloride (PVC) Jacket, Dual Rated UL/CSA



CONSTRUCTION:

- 1. Conductor: Class B compressed stranded bare copper per ASTM B3 and ASTM B8. Tinned copper optional per ASTM B33
- 2. **Conductor Shield:** Semi-conducting cross-linked copolymer
- 3. **Insulation**: 220 Mils No Lead Ethylene Propylene Rubber (NL-EPR) / No-Lead Ethylene Alkene Copolymer (EAM) 133% Insulation Level
- 4. **Insulation Shield:** Strippable semi-conducting cross-linked copolymer
- 5. **Copper Tape Shield:** Helically wrapped 5 mil copper tape with 25% overlap
- 6. Overall Jacket: SIMpull® Polyvinyl Chloride (PVC)

APPLICATIONS AND FEATURES:

Southwire's 15KV cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial when installed with a grounding conductor in close proximity that conforms to NEC section 311.36 and 250.4(A)(5), aerially 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 105°C for normal operation, 140°C for emergency overload, and 250°C for short circuit conditions. Rated at -35°C for cold bend when UL listed. Rated at -25°C for cold bend and cold impact and marked with "LTDD" when CSA listed or dual UL/CSA listed. PVC jacket is made with SIM technology and has a coefficient of friction COF of 0.2. Cable can be installed in conduit without the aid of lubrication. Rated for 1000 lbs./FT maximum sidewall pressure. These cables feature sunlight and moisture resistance, exceptional corona resistance, resistance to most chemicals, oils and acids and are flame retardant. Cable Tray CT rated 1/0 and larger.

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 FT4 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- 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
- CSA C68.10 Shielded Power Cables for Commercial and Industrial Applications 5 to 46 KV
- ICEA S-93-639 (NEMA WC 74) 5-46 KV Shielded Power Cable
- ICEA S-97-682 Standard for Shielded Utility Cable Rated for 5 46kV









- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test (1/0 and Larger)
- AEIC CS-8 Specification for extruded dielectric shielded power cables rated for 5 through 46KV (Qualification Test Requirements)
- 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 SIMpull® POWER CABLE {UL} XX KCMIL CU 220 MILS NL-EPR 15KV 133% INS LEVEL 25%TS MV-105 FOR CT USE SUN RES (NESC) -- {CSA} XX KCMIL CU 5.59mm (220 mils) NL-EPR 15KV 133% INS LEVEL 25%TS SR TC-ER 105°C FT4 -25°C LTDD -- PAT www.patentSW.com -- RoHS

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand Count	Diameter Over Conductor	Diameter Over Insulation		Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	Max Pull Tension	Min Bending Radius
	AWG/ Kcmil	No. of Strands	inch	inch	inch	mil	inch	lb/1000ft	lb/1000ft	lb	inch
567443	1500	91	1.370	1.930	1.990	110	2.230	4785	6006	12000	26.7

All dimensions are nominal and subject to normal manufacturing tolerances

Table 2 – Electrical and Engineering Data

Cond. Size	DC Resistance @ 25°C	AC Resistance @ 90°C	Capacitive Reactance @ 60Hz	Inductive Reactance @ 60Hz	Zero Sequence Impedance	Positive Sequence Impedance	Shield Short Circuit Current 6 Cycles	Allowable Ampacity In Duct 90/105°C	Allowable Ampacity In Air 90/105°C
AWG/ Kcmil	Ω/1000ft	Ω/1000ft	MΩ*1000ft	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
1500	0.007	0.017	0.016	0.032	0.498 + j0.463	0.128 + j0.041	6010	815/880	1345/1500

^{*} NEC ampacities are based on:







[♦] Cable marked with this symbol is a standard stock item

^{*} Conduit size based on 3 phase 40% fill-factor without ground

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.

^{*} 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.

^{*} Sequence Impedance values are based on Rho Earth Resistivity: 100 Ohm-Meter/1000ft, Spacing: one diameter spacing center-to-center...

^{*} Capacitive Reactance is between Phase-to-Shield.