

CU 600V PVC Cable Tube Loop Detector IMSA 51-5

600 Volt Single Conductor Copper, Polyvinyl Chloride PVC with a Nylon Sheath, Polyvinyl Chloride PVC or High Molecular Weight HMW Tube



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** 19 stranded annealed bare copper per ASTM B3 and B8
2. **Insulation:** Polyvinyl Chloride with a Nylon Sheath
3. **Rip Chord:** High strength rip chord for ease of tube removal
4. **Tube:** Loose Polyvinyl Chloride or High Molecular Weight Polyethylene HMW Tube

APPLICATIONS AND FEATURES:

Southwire's IMSA 51-5 cable meets the requirements of International Municipal Signal Association IMSA 51-5 specification. Rated for use in traffic signal, traffic control systems, underground conduit and loop detector wire. IMSA 51-5 600 Volt series cables run from the switch buried in asphalt to the junction box. The conductors are bare annealed copper 19 strand and covered with an abrasion, sunlight and moisture resistant polyvinyl chloride with a nylon sheath. The conductor is housed in a polyvinyl chloride or high molecular weight polyethylene tube. These cables are capable of operating continuously at a conductor temperature between -20°C and 75°C.

- Cable is manufactured by Southwire Company in their Waukegan, IL plant USA.

SPECIFICATIONS:

- ASTM B3 Standard Specification for Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- EPA 40 CFR, Part 26, Subpart C heavy metals per Table 1, TCLP method
- IMSA 51-5

SAMPLE PRINT LEGEND:

SOUTHWIRE® YEAR SIZE 600V IMSA 51-5 CABLE SEQUENTIAL FOOT MARK.

Table 1 – Weights and Measurements

Stock Number	Cond. Size AWG/Kcmil	Cond. Number No.	Cond. Strands No.	Diameter Over Conductor inch	Insul. Thickness mil	Approx. OD inch	Approx. Weight lb/1000ft
579009	14	1	19	0.0735	20	0.250	30
TBA	14	1	19	0.0735	20	0.250	30
TBA	12	1	19	0.0925	20	0.250	38
TBA	12	1	19	0.0925	20	0.250	38



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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

Stock Number	Cond. Size AWG/Kcmil	Cond. Number No.	DC Resistance @ 25°C Ω/1000ft	Min Bending Radius inch
579009	14	1	2.73	0.55
TBA	14	1	2.73	0.55
TBA	12	1	1,72	0.61
TBA	12	1	1,72	0.61

† Ampacities are based on Table 310.15 (B)(16) of the NEC, 2017 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts, based on ambient temperature of 30°C (86°F)

