



## CU 600V XLPE Cable Tube Loop Detector IMSA 51-7

600 Volt Single Conductor Copper, Cross Linked Polyethylene Insulation, 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:** Cross Linked Polyethylene
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 51-7 cable meets the requirements of International Municipal Signal Association IMSA 51-7 specification. Rated for use in traffic signal, traffic control systems, underground conduit and loop detector wire. IMSA 51-7 600 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 cross linked polyethylene. 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 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 51-7

### SAMPLE PRINT LEGEND:

SOUTHWIRE® YEAR SIZE 600V IMSA 51-7 CABLE SEQUENTIAL FOOT MARK.





**Table 1 – Weights and Measurements**

| Cond. Size<br>AWG/Kcmil | Cond. Number<br>No. | Cond. Strands<br>No. | Diameter Over Conductor<br>inch | Insul. Thickness<br>mil | Approx. OD<br>inch | Approx. Weight<br>lb/1000ft |
|-------------------------|---------------------|----------------------|---------------------------------|-------------------------|--------------------|-----------------------------|
| 14                      | 1                   | 19                   | 0.074                           | 30                      | 0.133              | 30                          |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

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.

**Table 2 – Electrical and Engineering Data**

| Cond. Size<br>AWG/Kcmil | DC Resistance @ 25°C<br>Ω/1000ft | Min Bending Radius<br>inch |
|-------------------------|----------------------------------|----------------------------|
| 14                      | 2.730                            | 0.6                        |

\* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.

