

TRAFFIC SIGNAL CABLE IMSA 19-1

Multi-conductor nonshielded 600V Polyethylene Insulation, Polyvinyl Chloride (PVC) Jacket

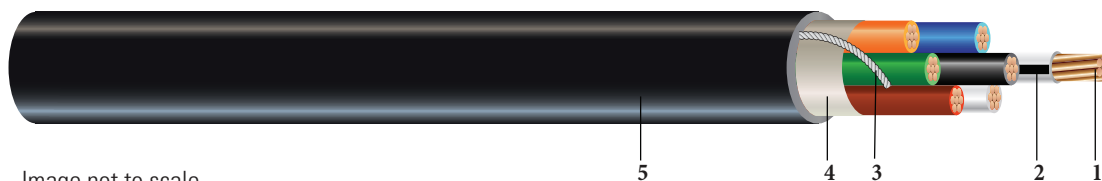


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See Table 1 for Stranded Dimensions

See Table 2 for Solid Dimensions

CONSTRUCTION:

1. **Conductors:** Solid or stranded annealed bare copper class B per ASTM B3 and B8
2. **Insulation:** Polyethylene PE
3. **Rip Chord:** High strength rip chord for ease of jacket removal
4. **Separator:** Polyester tape
5. **Jacket:** Black polyvinyl chloride PVC jacket

APPLICATIONS AND FEATURES:

Southwire's IMSA 19-1 cable meets the requirements of International Municipal Signal Association IMSA 19-1 specification. Rated for use in traffic signal, traffic control systems, underground conduit and aerial use where supported by a messenger. IMSA 19-1 600 Volt series cables run from the traffic light to the controller station. The conductors are bare annealed copper solid or stranded class B and covered with an abrasion, sunlight and moisture resistant polyvinyl chloride jacket. The insulated conductors are twisted and wrapped with a polyester tape. A ripcord is added under the black polyvinyl chloride jacket for ease of removal. 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
- ASTM B8 - Concentric-lay-standard copper
- B174 - Bunch Stranded Copper Conductors
- IMSA 19-1
- Insulation Colors: Black, White, Red, Green, Orange, Blue, White/Black, Red/Black, Green/Black, Orange/Black, Blue/Black
- EPA 40 CFR, Part 26, Subpart C, Heavy metals per Table 1, TCLP method

SAMPLE PRINT LEGEND:

SOUTHWIRE® YEAR SIZE 600V IMSA 19-1 CABLE SEQUENTIAL FOOT MARK.



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Table 1 – Weights & Measurements for Stranded Cables

Stock Number	Conductor		Conductor Count	Insulation Thickness	Jacket Thickness	Nominal OD (5)	Nominal Weight	DC Resistance @ 25°C	Min Bend Radius
	Size (7 Strands)	Diam. (1)							
	AWG	inches							
TBA	16	0.056	2	25	45	0.295	45	4.18	1.18
TBA	16	0.056	3	25	45	0.330	60	4.18	1.32
TBA	16	0.056	4	25	45	0.364	74	4.18	1.46
TBA	16	0.056	5	25	45	0.395	88	4.18	1.58
TBA	16	0.056	7	25	45	0.428	114	4.18	1.71
TBA	16	0.056	9	25	45	0.496	143	4.18	1.98
TBA	16	0.056	12	25	45	0.578	198	4.18	2.31
581384	14	0.070	2	25	45	0.336	67	2.63	1.34
578924	14	0.070	3	25	45	0.354	79	2.63	1.42
581396	14	0.070	4	25	45	0.386	99	2.63	1.54
578889	14	0.070	5	25	45	0.422	122	2.63	1.69
578890	14	0.070	7	25	45	0.459	156	2.63	1.84
581399	14	0.070	9	25	60	0.565	216	2.63	2.26
TBA	14	0.070	10	25	60	0.612	235	2.63	2.45
TBA	14	0.070	12	25	60	0.630	272	2.63	2.52
578928	14	0.070	16	25	60	0.698	350	2.63	2.79
TBA	14	0.070	20	25	60	0.773	424	2.63	3.09
578892	14	0.070	21	25	60	0.773	455	2.63	3.09
TBA	12	0.087	2	25	45	0.394	95	1.66	1.58
TBA	12	0.087	3	25	45	0.417	113	1.66	1.67
TBA	12	0.087	4	25	45	0.456	143	1.66	1.82
TBA	12	0.087	5	25	45	0.500	178	1.66	2.00
TBA	12	0.087	7	25	60	0.576	246	1.66	2.30
TBA	12	0.087	9	25	60	0.670	315	1.66	2.68
TBA	12	0.087	12	25	60	0.751	399	1.66	3.00
TBA	12	0.087	16	25	80	0.874	552	1.66	3.50

All dimensions are nominal and subject to normal manufacturing tolerances



Table 2 – Weights & Measurements for Solid Cables

Stock Number	Conductor		Conductor Count	Insulation Thickness	Jacket Thickness	Nominal OD (5)	Nominal Weight	DC Resistance @ 25°C	Min Bend Radius
	Size Solid	Diam. (1)							
	AWG	inches							
TBA	16	0.051	2	25	45	0.283	43	4.14	1.13
TBA	16	0.051	3	25	45	0.314	57	4.14	1.26
TBA	16	0.051	4	25	45	0.344	70	4.14	1.38
TBA	16	0.051	5	25	45	0.376	84	4.14	1.50
TBA	16	0.051	7	25	45	0.406	109	4.14	1.62
TBA	16	0.051	9	25	45	0.470	139	4.14	1.88
TBA	16	0.051	12	25	45	0.548	192	4.14	2.19
593124	14	0.064	2	25	45	0.318	62	2.57	1.27
593125	14	0.064	3	25	45	0.335	74	2.57	1.34
579047	14	0.064	4	25	45	0.365	93	2.57	1.46
593126	14	0.064	5	25	45	0.398	114	2.57	1.59
593127	14	0.064	7	25	45	0.432	146	2.57	1.73
TBA	14	0.064	9	25	60	0.503	188	2.57	2.01
TBA	14	0.064	10	25	60	0.576	221	2.57	2.30
TBA	14	0.064	12	25	60	0.593	255	2.57	2.37
TBA	14	0.064	16	25	60	0.656	328	2.57	2.62
TBA	14	0.064	20	25	60	0.725	398	2.57	2.90
TBA	14	0.064	21	25	60	0.725	410	2.57	2.90
TBA	12	0.080	2	25	45	0.372	89	1.62	1.49
TBA	12	0.080	3	25	45	0.393	107	1.62	1.57
TBA	12	0.080	4	25	45	0.430	135	1.62	1.72
TBA	12	0.080	5	25	45	0.471	168	1.62	1.88
TBA	12	0.080	7	25	60	0.513	232	1.62	2.05
TBA	12	0.080	9	25	60	0.630	297	1.62	2.52
TBA	12	0.080	12	25	60	0.705	377	1.62	2.82
TBA	12	0.080	16	25	80	0.783	490	1.62	3.13

All dimensions are nominal and subject to normal manufacturing tolerances

