



IMSA TRAFFIC SIGNAL CABLE
SPEC 19-1 AERIAL & DUCT CABLE



APPLICATIONS: Outdoor or indoor use in traffic signal, traffic control systems, fire alarm systems, underground conduit and aerial use with messenger. Rated for 600 Volts 75°C wet or dry locations

CONSTRUCTION: Solid or stranded bare copper, polyethylene insulation, color coded, cabled, polyester binder tape, black sunlight resistant PVC jacket, sequential footage markers, indent printed

COMPLIANCE: Cables are manufactured to meet current IMSA guidelines

MULTIPLE CONDUCTOR, NON-SHIELDED 600V - IMSA 19-1

NUMBER OF CONDUCTORS	AWG	SOLID OR STRANDED	INSULATION / JACKET THICKNESS INCHES	NOMINAL DIAMETER INCHES	APPROX WEIGHT/LBS PER MFT	TAPPAN SPEC #
----------------------	-----	-------------------	--------------------------------------	-------------------------	---------------------------	---------------

14 AWG SOLID

2	14	SOLID	.025/.045	0.318	58	SU6077.1
3	14	SOLID	.025/.045	0.338	75	SU6044.1
4	14	SOLID	.025/.045	0.366	93	SU6040.1
5	14	SOLID	.025/.045	0.383	110	SU6041.1
7	14	SOLID	.025/.045	0.432	146	SU6042.1
9	14	SOLID	.025/.045	0.484	182	SU6060.1
10	14	SOLID	.025/.045	0.505	199	SU6058.1
12	14	SOLID	.025/.060	0.574	252	SU6052.1
15	14	SOLID	.025/.060	0.628	305	SU6063.1
16	14	SOLID	.025/.060	0.645	322	SU6043.1
19	14	SOLID	.025/.060	0.692	375	SU6064.1
20	14	SOLID	.025/.060	0.706	392	SU6046.1
21	14	SOLID	.025/.060	0.721	409	SU6065.1
25	14	SOLID	.025/.060	0.776	478	SU6075.1

14 AWG STRANDED

2	14	7/.0242	.025/.045	0.334	61	SU6078.1
3	14	7/.0242	.025/.045	0.355	79	SU6054.1
4	14	7/.0242	.025/.045	0.385	98	SU6066.1
5	14	7/.0242	.025/.045	0.404	116	SU6035.1
7	14	7/.0242	.025/.045	0.456	154	SU6036.1
9	14	7/.0242	.025/.045	0.511	191	SU6067.1
10	14	7/.0242	.025/.060	0.534	210	SU6068.1
12	14	7/.0242	.025/.060	0.606	265	SU6069.1
15	14	7/.0242	.025/.060	0.663	321	SU6070.1
16	14	7/.0242	.025/.060	0.681	339	SU6071.1
19	14	7/.0242	.025/.060	0.731	394	SU6072.1
20	14	7/.0242	.025/.060	0.747	412	SU6073.1
21	14	7/.0242	.025/.060	0.763	430	SU6074.1
25	14	7/.0242	.025/.060	0.822	502	SU6076.1

Color Code Chart #2:

NO.	COLOR	NO.	COLOR	NO.	COLOR
1	BLK	10	ORG/BLK	19	BLU/RED
2	WHT	11	BLU/BLK	20	RED/GRN
3	RED	12	BLK/WHT	21	ORG/GRN
4	GRN	13	RED/WHT	22	COLOR CODE REPEATS
5	ORG	14	GRN/WHT	23	
6	BLU	15	BLU/WHT	24	
7	WHT/BLK	16	BLK/RED	25	
8	RED/BLK	17	WHT/RED		
9	GRN/BLK	18	ORG/RED		



Southwire®

1-800-WIRE-911
www.tappanwire.com



IMSA TRAFFIC SIGNAL CABLE
SPEC 19-1 AERIAL & DUCT CABLE



APPLICATIONS: Outdoor or indoor use in traffic signal, traffic control systems, fire alarm systems, underground conduit and aerial use with messenger. Rated for 600 Volts 75°C wet or dry locations

CONSTRUCTION: Solid or stranded bare copper, polyethylene insulation, color coded, cabled, polyester binder tape, black sunlight resistant PVC jacket, sequential footage markers, indent printed

COMPLIANCE: Cables are manufactured to meet current IMSA guidelines

MULTIPLE CONDUCTOR, NON-SHIELDED 600V – IMSA 19-1

NUMBER OF CONDUCTORS	AWG	SOLID OR STRANDED	INSULATION / JACKET THICKNESS INCHES	NOMINAL DIAMETER INCHES	APPROX WEIGHT/LBS PER MFT	TAPPAN SPEC #
12 AWG SOLID						
2	12	SOLID	.030/.045	0.372	81	SU7009.1
3	12	SOLID	.030/.045	0.396	108	SU7010.1
4	12	SOLID	.030/.045	0.431	135	SU7011.1
5	12	SOLID	.030/.045	0.452	162	SU7012.1
7	12	SOLID	.030/.045	0.512	216	SU7013.1
9	12	SOLID	.030/.060	0.576	271	SU7014.1
10	12	SOLID	.030/.060	0.633	317	SU7015.1
12	12	SOLID	.030/.060	0.680	372	SU7016.1
16	12	SOLID	.030/.060	0.768	480	SU7017.1
19	12	SOLID	.030/.060	0.825	560	SU7018.1
20	12	SOLID	.030/.080	0.884	623	SU7019.1
21	12	SOLID	.030/.080	0.902	650	SU7020.1
25	12	SOLID	.030/.080	0.970	759	SU7021.1
12 AWG STRANDED						
2	12	7/.0305	.030/.045	0.394	85	SU7022.1
3	12	7/.0305	.030/.045	0.420	113	SU7023.1
4	12	7/.0305	.030/.045	0.458	142	SU7024.1
5	12	7/.0305	.030/.045	0.481	170	SU7008.1
7	12	7/.0305	.030/.060	0.576	244	SU7025.1
9	12	7/.0305	.030/.060	0.644	304	SU7026.1
10	12	7/.0305	.030/.060	0.673	333	SU7027.1
12	12	7/.0305	.030/.060	0.725	390	SU7028.1
16	12	7/.0305	.030/.060	0.819	503	SU7029.1
19	12	7/.0305	.030/.080	0.922	625	SU7030.1
21	12	7/.0305	.030/.080	0.961	682	SU7031.1
25	12	7/.0305	.030/.080	1.034	796	SU7032.1
10 AWG SOLID OR STRANDED						
2	10	SOLID	.030/.045	0.414	110	SU8001.1
2	10	7/.0385	.030/.045	0.440	115	SU8002.1
3	10	SOLID	.030/.045	0.441	149	SU8003.1
3	10	7/.0385	.030/.045	0.470	156	SU8004.1
4	10	7/.0385	.030/.045	0.544	214	SU8005.1
7	10	7/.0385	.030/.060	0.645	341	SU8006.1
12	10	7/.0385	.030/.060	0.817	552	SU8007.1





IMSA TRAFFIC SIGNAL CABLE
SPEC 20-1 AERIAL & DUCT CABLE



- APPLICATIONS:** Outdoor or indoor use in traffic signal, traffic control systems, fire alarm systems, underground conduit and aerial use with messenger. Rated for 600 Volts 75°C wet or dry locations
- CONSTRUCTION:** Solid or stranded bare copper, polyethylene insulation, color coded, cabled, polyester binder tape, black sunlight resistant polyethylene jacket, sequential footage markers, indent printed
- COMPLIANCE:** Cables are manufactured to meet current IMSA guidelines

MULTIPLE CONDUCTOR, NON-SHIELDED 600V – IMSA 20-1

NUMBER OF CONDUCTORS	AWG	SOLID OR STRANDED	INSULATION / JACKET THICKNESS INCHES	NOMINAL DIAMETER INCHES	APPROX WEIGHT/LBS PER MFT	TAPPAN SPEC #
----------------------	-----	-------------------	--------------------------------------	-------------------------	---------------------------	---------------

14 AWG SOLID

2	14	SOLID	.025/.045	0.318	58	SU6079.1
3	14	SOLID	.025/.045	0.338	66	SU6055.1
4	14	SOLID	.025/.045	0.366	83	SU6081.1
5	14	SOLID	.025/.045	0.383	99	SU6082.1
7	14	SOLID	.025/.045	0.432	133	SU6083.1
9	14	SOLID	.025/.045	0.484	167	SU6084.1
10	14	SOLID	.025/.045	0.505	184	SU6085.1
12	14	SOLID	.025/.060	0.574	229	SU6086.1
15	14	SOLID	.025/.060	0.628	279	SU6087.1
16	14	SOLID	.025/.060	0.645	296	SU6088.1
19	14	SOLID	.025/.060	0.692	346	SU6089.1
20	14	SOLID	.025/.060	0.706	363	SU6090.1
21	14	SOLID	.025/.060	0.721	379	SU6091.1
25	14	SOLID	.025/.060	0.776	445	SU6092.1

14 AWG STRANDED

2	14	7/.0242	.025/.045	0.334	52	SU6093.1
3	14	7/.0242	.025/.045	0.355	69	SU6056.1
4	14	7/.0242	.025/.045	0.385	87	SU6050.1
5	14	7/.0242	.025/.045	0.404	116	SU6062.1
7	14	7/.0242	.025/.045	0.456	140	SU6051.1
9	14	7/.0242	.025/.045	0.511	176	SU6094.1
10	14	7/.0242	.025/.060	0.564	205	SU6095.1
12	14	7/.0242	.025/.060	0.606	240	SU6096.1
15	14	7/.0242	.025/.060	0.663	293	SU6097.1
16	14	7/.0242	.025/.060	0.681	311	SU6098.1
19	14	7/.0242	.025/.060	0.731	363	SU6099.1
20	14	7/.0242	.025/.060	0.747	381	SU6100.1
21	14	7/.0242	.025/.060	0.763	398	SU6101.1
25	14	7/.0242	.025/.060	0.822	467	SU6102.1

Color Code Chart #2:

NO.	COLOR	NO.	COLOR	NO.	COLOR
1	BLK	10	ORG/BLK	19	BLU/RED
2	WHT	11	BLU/BLK	20	RED/GRN
3	RED	12	BLK/WHT	21	ORG/GRN
4	GRN	13	RED/WHT	22	COLOR CODE REPEATS
5	ORG	14	GRN/WHT	23	
6	BLU	15	BLU/WHT	24	
7	WHT/BLK	16	BLK/RED	25	
8	RED/BLK	17	WHT/RED		
9	GRN/BLK	18	ORG/RED		





IMSA TRAFFIC SIGNAL CABLE
SPEC 20-1 AERIAL & DUCT CABLE



- APPLICATIONS:** Outdoor or indoor use in traffic signal, traffic control systems, fire alarm systems, underground conduit and aerial use with messenger. Rated for 600 Volts 75°C wet or dry locations
- CONSTRUCTION:** Solid or stranded bare copper, polyethylene insulation, color coded, cabled, polyester binder tape, black sunlight resistant polyethylene jacket, sequential footage markers, indent printed
- COMPLIANCE:** Cables are manufactured to meet current IMSA guidelines

MULTIPLE CONDUCTOR, NON-SHIELDED 600V – IMSA 20-1

NUMBER OF CONDUCTORS	AWG	SOLID OR STRANDED	INSULATION / JACKET THICKNESS INCHES	NOMINAL DIAMETER INCHES	APPROX WEIGHT/LBS PER MFT	TAPPAN SPEC #
12 AWG SOLID						
2	12	SOLID	.030/.045	0.372	70	SU7033.1
3	12	SOLID	.030/.045	0.396	96	SU7034.1
4	12	SOLID	.030/.045	0.431	122	SU7035.1
5	12	SOLID	.030/.045	0.452	148	SU7036.1
7	12	SOLID	.030/.045	0.512	200	SU7037.1
9	12	SOLID	.030/.060	0.606	265	SU7038.1
10	12	SOLID	.030/.060	0.633	291	SU7039.1
12	12	SOLID	.030/.060	0.680	344	SU7040.1
16	12	SOLID	.030/.060	0.768	448	SU7041.1
19	12	SOLID	.030/.060	0.825	525	SU7042.1
21	12	SOLID	.030/.080	0.902	601	SU7043.1
25	12	SOLID	.030/.080	0.970	705	SU7044.1
12 AWG STRANDED						
2	12	7/.0305	.030/.045	0.394	74	SU7045.1
3	12	7/.0305	.030/.045	0.420	101	SU7046.1
4	12	7/.0305	.030/.045	0.458	128	SU7047.1
5	12	7/.0305	.030/.045	0.481	155	SU7048.1
7	12	7/.0305	.030/.060	0.576	221	SU7049.1
9	12	7/.0305	.030/.060	0.644	302	SU7050.1
10	12	7/.0305	.030/.060	0.673	305	SU7051.1
12	12	7/.0305	.030/.060	0.725	360	SU7052.1
16	12	7/.0305	.030/.060	0.819	469	SU7053.1
19	12	7/.0305	.030/.080	0.882	549	SU7054.1
21	12	7/.0305	.030/.080	0.961	629	SU7055.1
25	12	7/.0305	.030/.080	1.034	738	SU7056.1
10 AWG SOLID OR STRANDED						
2	10	SOLID	.030/.045	0.414	98	SU8008.1
2	10	7/.0385	.030/.045	0.440	102	SU8009.1
3	10	SOLID	.030/.045	0.441	136	SU8010.1
3	10	7/.0385	.030/.045	0.470	141	SU8011.1
4	10	7/.0385	.030/.045	0.514	182	SU8012.1
7	10	7/.0385	.030/.060	0.645	315	SU8013.1
12	10	7/.0385	.030/.060	0.817	517	SU8014.1





IMSA TRAFFIC SIGNAL CABLE
SPEC 50-2 LOOP LEAD-IN CABLE

TAPPAN™

- APPLICATIONS:** Municipal signal systems as lead-in cable or for use in communication circuits where a low capacitance is needed. Rated for 600V 60°C Wet or dry locations.
- CONSTRUCTION:** Tinned copper conductors, PE Insulation (color coded black & clear), Aluminum Foil Shield with tinned copper drain wire, Black PE Jacket
- COMPLIANCE:** Cables are manufactured to meet current IMSA guidelines

POLYETHYLENE INSULATED, SHIELDED 600V – IMSA 50-2

NUMBER OF CONDUCTORS	AWG	STRANDING	INSULATION / JACKET THICKNESS INCHES	NOMINAL DIAMETER INCHES	APPROX WEIGHT/LBS PER MFT	TAPPAN SPEC #
2	18	19	.030/.030	0.270	31	SU4042.1
2	16	19	.030/.030	0.290	40	SU5020.1
2	14	19	.030/.030	0.320	56	SU6038.1
2	12	19	.030/.030	0.364	80	SU7057.1



IMSA TRAFFIC SIGNAL CABLE SPEC 51-3 LOOP WIRE – SINGLE CONDUCTOR

TAPPAN™

APPLICATIONS: Designed for use in municipal signal systems as "Loop Detector Wire". These cables are installed in pavement saw cuts at traffic intersections to detect motor vehicles, sending signals to signal traffic controllers to activate light changes.

CONSTRUCTION: Bare stranded copper conductors, XLPE insulation

COMPLIANCE: Cables are manufactured to meet current IMSA guidelines

SINGLE CONDUCTOR, XLPE INSULATED, UNSHIELDED 600V – IMSA 51-3

NUMBER OF CONDUCTORS	AWG	STRANDED	INSULATION THICKNESS INCHES	NOMINAL DIAMETER INCHES	APPROX WEIGHT/LBS PER MFT	TAPPAN SPEC #	JACKET COLOR
1	14	19 STR	0.030	0.130	18	SU6047.2	BLACK

Note: Picture typical of product family - Insulation one layer only



IMSA TRAFFIC SIGNAL CABLE
SPEC 51-5 TUBE-LOOP DETECTOR WIRE



- APPLICATIONS:** Used in road pavements to detect vehicles for the purpose of changing signals or determining amount of traffic flow. Rated for 600V 60°C wet or dry locations.
- CONSTRUCTION:** Bare copper conductors, PVC/Nylon insulation, PVC or PE tube
- COMPLIANCE:** Cables are manufactured to meet current IMSA guidelines

SINGLE CONDUCTOR, PVC/NYLON INSULATED, UNSHIELDED 600V – IMSA 51-5

NUMBER OF CONDUCTORS	AWG	SOLID OR STRANDED	INSULATION / JACKET THICKNESS INCHES	NOMINAL DIAMETER INCHES	APPROX WEIGHT/LBS PER MFT	TAPPAN SPEC #	JACKET COLOR
PVC TUBED JACKET							
1	14	19 STR	.020/.030	0.250	28	SU6049.1	ORANGE
1	14	19 STR	.020/.030	0.250	28	SU6049.2	BLACK
1	12	19 STR	.020/.030	0.250	39	SU7058.1	ORANGE
1	12	19 STR	.020/.030	0.250	39	SU7058.2	BLACK
PE TUBED JACKET							
1	14	19 STR	.020/.030	0.250	22	SU6103.1	ORANGE
1	14	19 STR	.020/.030	0.250	22	SU6103.2	BLACK
1	12	19 STR	.020/.030	0.250	34	SU7059.1	ORANGE
1	12	19 STR	.020/.030	0.250	34	SU7059.2	BLACK



IMSA TRAFFIC SIGNAL CABLE
SPEC 51-7 TUBE-LOOP DETECTOR WIRE

TAPPAN™

- APPLICATIONS:** Used in road pavements to detect vehicles for the purpose of changing signals or determining amount of traffic flow. Rated for 600V 60°C wet or dry locations.
- CONSTRUCTION:** Bare copper conductors, XLPE insulation, PVC or PE tube
- COMPLIANCE:** Cables are manufactured to meet current IMSA guidelines

SINGLE CONDUCTOR, XLPE INSULATED, UNSHIELDED 600V – IMSA 51-7

NUMBER OF CONDUCTORS	AWG	SOLID OR STRANDED	INSULATION / JACKET THICKNESS INCHES	NOMINAL DIAMETER INCHES	APPROX WEIGHT/LBS PER MFT	TAPPAN SPEC #	JACKET COLOR
PVC TUBED JACKET							
1	14	19 STR	0.030/.030	0.250	27	CONSULT FACTORY	BLACK
PE TUBED JACKET							
1	14	19 STR	0.030/.030	0.250	32	SU6105.1	BLACK

Note: Picture typical of product family - Insulation one layer only