

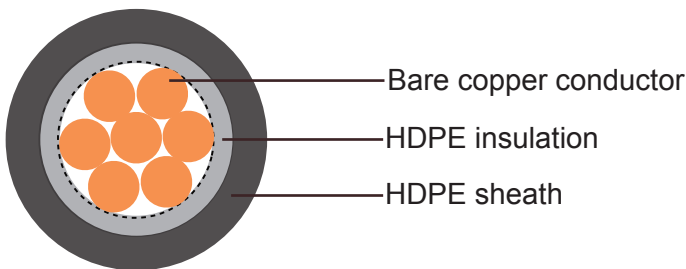


# IMSA 20-1 (Traffic Signal Cable)

## Application

These cables are suitable for 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

## Cable Construction



- **Conductor:** Solid bare copper per ASTM B-3 or stranded bare copper per ASTM B-8, & B-174
- **Insulation:** High density polyethylene (HDPE)
- **Sheath:** High density polyethylene (HDPE)

## Color Code

Conductor No.	Insulation Color	Stripe Color	Conductor No.	Insulation Color	Stripe Color
1	Black	—	14	Green	White
2	White	—	15	Blue	White
3	Red	—	16	Black	Red
4	Green	—	17	White	Red
5	Orange	—	18	Orange	Red
6	Blue	—	19	Blue	Red
7	White	Black	20	Red	Green
8	Red	Black	21	Orange	Green





Conductor No.	Insulation Color	Stripe Color	Conductor No.	Insulation Color	Stripe Color
9	Green	Black	22	Black	–
10	Orange	Black	23	White	–
11	Blue	Black	24	Red	–
12	Black	White	25	Green	–
13	Red	White			

### Temperature Rating

75°C

### Voltage Rating

600 V

### Cable Parameter

AWG	No. of Conductor	Solid or Stranded	Insulation Thickness		Sheath thickness		Overall Diameter		Cable Weight	
			inches	mm	inches	mm	inches	mm	Lbs./Kft	Kg/Km
18	5	7strand	0.025	0.64	0.045	1.14	0.354	8.99	60	89
16	2	solid	0.025	0.64	0.045	1.14	0.299	7.59	39	58
16	7	7strand	0.025	0.64	0.045	1.14	0.419	10.64	102	152
16	20	7strand	0.025	0.64	0.06	1.52	0.696	17.68	278	414
14	2	solid	0.025	0.64	0.045	1.14	0.25	6.35	52	77
14	2	7strand	0.025	0.64	0.045	1.14	0.341	8.66	55	82
14	3	solid	0.025	0.64	0.045	1.14	0.342	8.69	66	98
14	3	7strand	0.025	0.64	0.045	1.14	0.359	9.12	71	106
14	4	solid	0.025	0.64	0.045	1.14	0.372	9.45	85	126
14	4	7strand	0.025	0.64	0.045	1.14	0.391	9.93	88	131
14	5	solid	0.025	0.64	0.045	1.14	0.406	10.31	103	153



AWG	No. of Conductor	Solid or Stranded	Insulation Thickness		Sheath thickness		Overall Diameter		Cable Weight	
			inches	mm	inches	mm	inches	mm	Lbs./Kft	Kg/Km
14	5	7strand	0.025	0.64	0.045	1.14	0.43	10.92	108	161
14	6	solid	0.025	0.64	0.045	1.14	0.44	11.18	118	176
14	6	7strand	0.025	0.64	0.045	1.14	0.464	11.79	127	189
14	7	solid	0.025	0.64	0.045	1.14	0.44	11.18	136	202
14	7	7strand	0.025	0.64	0.045	1.14	0.464	11.79	141	210
14	8	solid	0.025	0.64	0.045	1.14	0.476	12.09	155	231
14	8	7strand	0.025	0.64	0.045	1.14	0.507	12.88	160	238
14	9	solid	0.025	0.64	0.045	1.14	0.511	12.98	172	256
14	9	7strand	0.025	0.64	0.06	1.52	0.571	14.50	192	286
14	10	solid	0.025	0.64	0.06	1.52	0.586	14.88	197	293
14	10	7strand	0.025	0.64	0.06	1.52	0.592	15.04	205	305
14	12	solid	0.025	0.64	0.06	1.52	0.603	15.32	232	345
14	12	7strand	0.025	0.64	0.06	1.52	0.636	16.15	244	363
14	14	7strand	0.025	0.64	0.06	1.52	0.668	16.97	280	417
14	15	solid	0.025	0.64	0.06	1.52	0.667	16.94	284	423
14	15	7strand	0.025	0.64	0.06	1.52	0.704	17.88	302	449
14	16	solid	0.025	0.64	0.06	1.52	0.667	16.94	299	445
14	16	7strand	0.025	0.64	0.06	1.52	0.704	17.88	316	470
14	19	solid	0.025	0.64	0.06	1.52	0.701	17.81	348	518
14	19	7strand	0.025	0.64	0.06	1.52	0.741	18.82	366	545
14	20	solid	0.025	0.64	0.06	1.52	0.737	18.72	370	550
14	20	7strand	0.025	0.64	0.06	1.52	0.779	19.79	387	576
14	21	solid	0.025	0.64	0.06	1.52	0.737	18.72	384	571
14	21	7strand	0.025	0.64	0.06	1.52	0.779	19.79	405	603
14	25	solid	0.025	0.64	0.06	1.52	0.796	20.22	450	670
14	25	7strand	0.025	0.64	0.08	1.52	0.925	23.50	518	771
12	2	solid	0.03	0.76	0.045	1.14	0.384	9.75	74	110
12	2	7strand	0.03	0.76	0.045	1.14	0.397	10.08	74	110





# Highway Cables

IMSA series



AWG	No. of Conductor	Solid or Stranded	Insulation Thickness		Sheath thickness		Overall Diameter		Cable Weight	
			inches	mm	inches	mm	inches	mm	Lbs./Kft	Kg/Km
12	3	solid	0.03	0.76	0.045	1.14	0.402	10.21	99	147
12	3	7strand	0.03	0.76	0.045	1.14	0.42	10.67	103	153
12	4	solid	0.03	0.76	0.045	1.14	0.44	11.18	124	184
12	4	7strand	0.03	0.76	0.045	1.14	0.459	11.66	130	193
12	5	solid	0.03	0.76	0.045	1.14	0.48	12.19	152	226
12	5	7strand	0.03	0.76	0.045	1.14	0.503	12.78	159	237
12	7	solid	0.03	0.76	0.06	1.52	0.561	14.25	212	315
12	7	7strand	0.03	0.76	0.06	1.52	0.579	14.71	222	330
12	9	7strand	0.03	0.76	0.06	1.52	0.677	17.20	284	423
12	10	solid	0.03	0.76	0.06	1.52	0.69	17.52	296	440
12	10	7strand	0.03	0.76	0.06	1.52	0.686	17.42	309	460
12	12	solid	0.03	0.76	0.06	1.52	0.711	18.06	346	515
12	12	7strand	0.03	0.76	0.06	1.52	0.753	19.13	367	546
12	16	7strand	0.03	0.76	0.08	2.03	0.876	22.25	501	745
12	19	7strand	0.03	0.76	0.08	2.03	0.929	23.60	582	866
12	20	7strand	0.03	0.76	0.08	2.03	0.976	24.80	618	919
12	21	7strand	0.03	0.76	0.08	2.03	0.976	24.80	643	957
12	25	7strand	0.03	0.76	0.08	2.03	1.08	27.43	751	1117
10	2	7strand	0.03	0.76	0.045	1.14	0.443	11.25	107	159
10	3	solid	0.03	0.76	0.045	1.14	0.429	10.90	135	201
10	4	7strand	0.03	0.76	0.045	1.14	0.514	13.06	185	275
10	7	7strand	0.03	0.76	0.06	1.52	0.648	16.46	321	478
8	2	solid	0.03	0.76	0.045	1.14	0.475	12.07	146	217
8	2	19strand	0.03	0.76	0.045	1.14	0.505	12.83	150	223
8	3	19strand	0.03	0.76	0.045	1.14	0.508	12.90	195	290
8	7	solid	0.03	0.76	0.06	1.52	0.696	17.68	454	675