



INTERNATIONAL  
MUNICIPAL SIGNAL  
ASSOCIATION  
(IMSA) CABLES

IMSA Catalog



## Table of Contents And Cable Selection Guide

Spec No.	Voltage Rating	Application	Installation	Conductor Configuration	Mechanical Characteristics	Page No.
19-1	600	Traffic Signal • Fire Protective Signal	Aerial or Duct	Cabled Conductors	PVC Outer Jacket	1
19-2	600	Traffic Signal • Fire Protective Signal	Aerial or Duct	Twisted Pairs	Shielded, PVC Outer Jacket	2
19-3	600	Traffic Signal • Fire Protective Signal	Figure-8 Aerial, Integral Messenger	Cabled Conductors	PVC Outer Jacket	3
19-4	600	Traffic Signal • Fire Protective Signal	Figure-8 Aerial, Integral Messenger	Twisted Pairs	Shielded, PVC Outer Jacket	3
19-5	600	Traffic Signal • Fire Protective Signal	Aerial, Duct or Buried	Cabled Conductors	Shielded, PE Inner Jacket, PVC Outer Jacket	4
19-6	600	Traffic Signal • Fire Protective Signal	Aerial, Duct or Buried	Twisted Pairs	Shielded, PE Inner Jacket, PVC Outer Jacket	4
20-1	600	Traffic Signal • Fire Protective Signal	Aerial or Duct	Cabled Conductors	Polyethylene (PE) Outer Jacket	1, 2
20-2	600	Traffic Signal • Fire Protective Signal	Aerial or Duct	Twisted Pairs	Shielded, PE Outer Jacket	2
20-3	600	Traffic Signal • Fire Protective Signal	Figure-8 Aerial, Integral Messenger	Cabled Conductors	PE Outer Jacket	3
20-4	600	Traffic Signal • Fire Protective Signal	Figure-8 Aerial, Integral Messenger	Twisted Pairs	Shielded, PE Outer Jacket	3
20-5	600	Traffic Signal • Fire Protective Signal	Aerial, Duct or Buried	Cabled Conductors	Shielded, PE Inner and Outer Jacket	4
20-6	600	Traffic Signal • Fire Protective Signal	Aerial, Duct or Buried	Twisted Pairs	Shielded, PE Inner and Outer Jacket	4
26-3	—	Signal Systems	Aerial Self-Supporting	Single Hard-Drawn Copper Conductor	High Density Polyethylene (HDPE) Insulation	8
28-3	—	Signal Systems	Aerial Self-Supporting	Single Copper-Covered Steel Conductor	HDPE Insulation	8
29-1	—	Signal Systems	Aerial Self-Supporting	"C" Line Wire (Parallel) 2 Hard-Drawn Copper Conductors	HDPE Insulation	8
29-2	—	Signal Systems	Aerial Self-Supporting	"C" Line Wire (Parallel) 2 Copper-Covered Steel Conductors	HDPE Insulation	8
29-3	—	Signal Systems	Aerial Self-Supporting	"C" Line Wire (Parallel) 2 Hard-Drawn Copper Conductors	HDPE Insulation, PVC Outer Jacket	8
29-4	—	Signal Systems	Aerial Self-Supporting	"C" Line Wire (Parallel) 2 Copper-Covered Steel Conductors	HDPE Insulation, PVC Outer Jacket	8
39-2	300	Fire Protective Signal, Traffic Communications, Data Acquisition	Aerial, Duct or Building Raceway	Twisted Pairs	Shielded, PVC Outer Jacket	6
39-4	300	Traffic Communications, Data Acquisition	Figure-8 Aerial, Integral Messenger	Twisted Pairs	Shielded, PVC Outer Jacket	7
39-6*	300	Fire Protective Signal, Traffic Communications, Data Acquisition	Aerial, Duct, Buried or Building Raceway	Twisted Pairs	Shielded, PE Inner Jacket, PVC Outer Jacket	5
40-2	300	Fire Protective Signal, Traffic Communications, Data Acquisition	Aerial, Duct or Building Raceway	Twisted Pairs	Shielded, PE Outer Jacket	6
40-4	300	Traffic Communications, Data Acquisition	Figure-8 Aerial, Integral Messenger	Twisted Pairs	Shielded, PE Outer Jacket	7
40-6	300	Fire Protective Signal, Traffic Communications, Data Acquisition	Aerial, Duct, Buried or Building Raceway	Twisted Pairs	Shielded, PE Inner and Outer Jacket	5
50-2	600	Signal Loop Detector Lead-In Feeder	Duct or Buried	Twisted Pair	PE Insulation, PE Outer Jacket	9
51-1*	600	Inductance Loop Detector	Duct	Single Conductor	PVC/Nylon Insulation	9
51-3	600	Inductance Loop Detector	Duct or Buried	Single Conductor	Cross Linked PE Insulation	9
51-5	600	Inductance Loop Detector	Duct or Buried	Single Conductor	PVC/Nylon Insulation in PVC or PE Tube	9
51-7	600	Inductance Loop Detector	Duct or Buried	Single Conductor	Cross Linked PE Insulation in PVC or PE Tube	9
<b>CALTRANS (California Department of Transportation) Cables</b>						
—	600	CALTRANS Traffic Signal	Aerial, Duct or Buried	Cabled Conductors	PVC/Nylon Insulation, PE Jacket	10
—	600	CALTRANS Inductive Loop Detector Type B	Duct or Buried	Twisted Pairs	PE Insulation, PE Jacket, Shielded	10
50-2	600	CALTRANS Inductive Loop Detector Type C	Duct or Buried	Twisted Pair	PE Insulation, PE Outer Jacket	10
51-5, 51-7	600	CALTRANS Inductive Loop Detector Type 2	Duct or Buried	Single Conductor	PVC/Nylon or Cross Linked PE Insulation in PVC or PE Tube	10
<b>Traffic Signal Control</b>						
—	—	Traffic Signal Control, Detector	Aerial, Duct or Buried	Various	Various	11

\*Available upon special request.

## Spec 19-1 and 20-1 Signal Cable

### Product Specifications

<b>Conductors</b>	Solid or Stranded Bare Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Per Specification
<b>Conductor Configuration</b>	Cabled Conductors
<b>Shield</b>	None
<b>Jacket</b>	PVC Black PE
Spec 19-1	
Spec 20-1	



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

#### IMSA Spec 19-1

601455	2	14	solid	.325	8.26	.045	1.14	58	86
601457	2	14	7 strand	.341	8.66	.045	1.14	63	94
601176	3	14	solid	.342	8.69	.045	1.14	75	112
601203	3	14	7 strand	.357	9.07	.045	1.14	81	121
601321	4	14	solid	.372	9.45	.045	1.14	94	140
601137	4	14	7 strand	.389	9.89	.045	1.14	98	146
601177	5	14	solid	.406	10.31	.045	1.14	113	168
601204	5	14	7 strand	.420	10.67	.045	1.14	113	168
601179	7	14	solid	.440	11.18	.045	1.14	146	217
601205	7	14	7 strand	.464	11.79	.045	1.14	154	229
601180	9	14	solid	.511	12.98	.045	1.14	186	277
601352	9	14	7 strand	.571	14.50	.060	1.52	212	315
601181	10	14	solid	.586	14.88	.060	1.52	220	327
601206	10	14	7 strand	.586	14.88	.060	1.52	227	338
601948	11	14	7 strand	.618	15.70	.060	1.52	250	372
601182	12	14	solid	.603	15.31	.060	1.52	254	378
601207	12	14	7 strand	.636	16.15	.060	1.52	267	397
601208	14	14	7 strand	.668	16.97	.060	1.52	304	452
601671	15	14	solid	.667	16.94	.060	1.52	311	463
601539	15	14	7 strand	.704	17.88	.060	1.52	328	488
601415	16	14	solid	.667	16.94	.060	1.52	325	484
601320	16	14	7 strand	.704	17.88	.060	1.52	341	507
601826	19	14	solid	.701	17.81	.060	1.52	375	558
601480	19	14	7 strand	.741	18.82	.060	1.52	393	585
601633	20	14	solid	.737	18.72	.060	1.52	395	588
601443	20	14	7 strand	.779	19.79	.060	1.52	415	617
601209	21	14	7 strand	.779	19.79	.060	1.52	432	643
601534	25	14	solid	.796	20.22	.060	1.52	478	711
601890	25	14	7 strand	.918	23.32	.080	1.52	544	809
601334	2	12	solid	.382	9.70	.045	1.14	58	86
601448	2	12	7 strand	.397	10.08	.045	1.14	87	129

continued...

Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

#### IMSA Spec 19-1 (continued)

601456	3	12	solid	.398	10.11	.045	1.14	108	161
601431	3	12	7 strand	.420	10.67	.045	1.14	113	168
601189	4	12	solid	.439	11.15	.045	1.14	135	201
601466	4	12	7 strand	.459	11.66	.045	1.14	141	210
601190	5	12	solid	.480	12.19	.045	1.14	163	243
601410	5	12	7 strand	.503	12.78	.045	1.14	172	256
601192	7	12	solid	.555	14.10	.060	1.52	237	353
601213	7	12	7 strand	.579	14.71	.060	1.52	244	363
601193	9	12	solid	.640	16.26	.060	1.52	281	418
601468	9	12	7 strand	.673	17.09	.060	1.52	310	461
601930	10	12	7 strand	.726	18.44	.060	1.52	338	503
601496	12	12	solid	.711	18.06	.060	1.52	372	553
601214	12	12	7 strand	.753	19.13	.060	1.52	393	585
601358	16	12	solid	.793	20.14	.060	1.52	449	668
581719	19	12	7 strand	.918	23.32	.080	2.03	625	930
601578	20	12	solid	.922	23.42	.080	2.03	631	939
601591	2	10	solid	.421	10.70	.045	1.14	110	164
603061	2	10	7 strand	.443	11.25	.045	1.14	118	176
601570	3	10	solid	.445	11.30	.045	1.14	150	223
603314	3	10	7 strand	.469	11.91	.045	1.14	155	231
581665	4	10	7 strand	.542	13.77	.060	1.52	216	321
580314	5	10	7 strand	.596	15.14	.060	1.52	263	391

#### IMSA Spec 20-1

582015	5	18	7 strand	.354	8.99	.045	1.14	60	89
582024	2	16	solid	.299	7.59	.045	1.14	39	58
581761	7	16	7 strand	.419	10.64	.045	1.14	102	152
582021	20	16	7 strand	.696	17.68	.060	1.52	278	414
601140	2	14	solid	.250	6.35	.045	1.14	52	77
601194	2	14	7 strand	.341	8.66	.045	1.14	55	82
601141	3	14	solid	.342	8.69	.045	1.14	66	98
601195	3	14	7 strand	.359	9.12	.045	1.14	71	106
601142	4	14	solid	.372	9.45	.045	1.14	85	126
601196	4	14	7 strand	.391	9.93	.045	1.14	88	131
601143	5	14	solid	.406	10.31	.045	1.14	103	153
601197	5	14	7 strand	.430	10.92	.045	1.14	108	161
601144	6	14	solid	.440	11.18	.045	1.14	118	176
603131	6	14	7 strand	.464	11.79	.045	1.14	127	189
601145	7	14	solid	.440	11.18	.045	1.14	136	202
601198	7	14	7 strand	.464	11.79	.045	1.14	141	210
601146	8	14	solid	.476	12.09	.045	1.14	155	231
601610	8	14	7 strand	.507	12.88	.045	1.14	160	238
601147	9	14	solid	.511	12.98	.045	1.14	172	256
601429	9	14	7 strand	.571	14.50	.060	1.52	192	286
601148	10	14	solid	.586	14.88	.060	1.52	197	293
601199	10	14	7 strand	.592	15.04	.060	1.52	205	305
601150	12	14	solid	.603	15.32	.060	1.52	232	345
601200	12	14	7 strand	.636	16.15	.060	1.52	244	363

continued...

### Spec 19-1 and 20-1 Signal Cable (continued)

Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

IMSA Spec 20-1 (continued)									
580307	14	14	7 strand	.668	16.97	.060	1.52	280	417
601153	15	14	solid	.667	16.94	.060	1.52	284	423
601331	15	14	7 strand	.704	17.88	.060	1.52	302	449
601154	16	14	solid	.667	16.94	.060	1.52	299	445
601201	16	14	7 strand	.704	17.88	.060	1.52	316	470
601157	19	14	solid	.701	17.81	.060	1.52	348	518
601454	19	14	7 strand	.741	18.82	.060	1.52	366	545
601158	20	14	solid	.737	18.72	.060	1.52	370	550
601202	20	14	7 strand	.779	19.79	.060	1.52	387	576
603870	21	14	solid	.737	18.72	.060	1.52	384	571
582020	21	14	7 strand	.779	19.79	.060	1.52	405	603
601594	25	14	solid	.796	20.22	.060	1.52	450	670
581694	26	14	7 strand	.925	23.50	.080	1.52	518	771
601411	2	12	solid	.384	9.75	.045	1.14	74	110
601210	2	12	7 strand	.397	10.08	.045	1.14	74	110
601412	3	12	solid	.402	10.21	.045	1.14	99	147
601211	3	12	7 strand	.420	10.67	.045	1.14	103	153
601417	4	12	solid	.440	11.18	.045	1.14	124	184
601467	4	12	7 strand	.459	11.66	.045	1.14	130	193
601322	5	12	solid	.480	12.19	.045	1.14	152	226
601325	5	12	7 strand	.503	12.78	.045	1.14	159	237

continued...

Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

IMSA Spec 20-1 (continued)									
601186	7	12	solid	.561	14.25	.060	1.52	212	315
601326	7	12	7 strand	.579	14.71	.060	1.52	222	330
601475	9	12	7 strand	.677	17.20	.060	1.52	284	423
601518	10	12	solid	.690	17.52	.060	1.52	296	440
601316	10	12	7 strand	.686	17.42	.060	1.52	309	460
601188	12	12	solid	.711	18.06	.060	1.52	346	515
601212	12	12	7 strand	.753	19.13	.060	1.52	367	546
601329	16	12	7 strand	.876	22.25	.080	2.03	501	745
601563	19	12	7 strand	.929	23.60	.080	2.03	582	866
601583	20	12	7 strand	.976	24.80	.080	2.03	618	919
601900	21	12	7 strand	.976	24.80	.080	2.03	643	957
580106	25	12	7 strand	1.080	27.43	.080	2.03	751	1117
601540	2	10	7 strand	.443	11.25	.045	1.14	107	159
581356	3	10	solid	.429	10.90	.045	1.14	135	201
601569	4	10	7 strand	.514	13.06	.045	1.14	185	275
601820	7	10	7 strand	.648	16.46	.060	1.52	321	478
601605	2	8	solid	.475	12.07	.045	1.14	146	217
601430	2	8	19 strand	.505	12.83	.045	1.14	150	223
603298	3	8	19 strand	.508	12.90	.045	1.14	195	290
581710	7	8	solid	.696	17.68	.060	1.52	454	675

Other conductor counts and AWG sizes (solid or stranded) available upon request.

### Spec 19-2 and 20-2 Signal and Communications Cable

#### Product Specifications

<b>Conductors</b>	Solid or Stranded Bare Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Per Specification
<b>Conductor Configuration</b>	Twisted Pairs
<b>Shield</b>	Corrugated Copper Tape
<b>Jacket</b>	
Spec 19-2	PVC
Spec 20-2	Black PE



Part No.	No. of Pairs	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

IMSA Spec 19-2									
601324	1	14	7 strand	.410	10.41	.045	1.14	87	129
IMSA Spec 20-2									
580902	5	19	7 strand	.600	15.24	.060	1.52	138	205
601622	6	19	solid	.626	15.90	.060	1.52	152	226
601530	6	19	7 strand	.666	16.92	.060	1.52	160	238
601510	3	16	solid	.590	14.99	.060	1.52	135	201
601227	6	16	solid	.740	18.80	.060	1.52	343	510
601446	12	16	solid	.940	23.88	.080	2.03	406	604
601428	25	16	solid	1.280	32.51	.080	2.03	740	1101
601481	3	14	solid	.640	16.26	.060	1.52	173	257
603723	4	14	solid	.690	17.53	.060	1.52	212	315
601617	6	14	solid	.880	22.35	.080	2.03	317	472

Other pair counts and AWG sizes (solid or stranded) available upon request.

## Spec 19-3 and 20-3 Self-supporting Signal Cable

### Product Specifications

<b>Conductors</b>	Solid or Stranded Bare Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Per Specification
<b>Conductor Configuration</b>	Cabled Conductors
<b>Shield</b>	None
<b>Integrated Messenger<sup>^</sup></b>	1/4" (.250") 7-wire extra high strength (6,650 lb. test) flooded galvanized steel strand
<b>Jacket</b>	
Spec 19-3	PVC
Spec 20-3	Black PE

<sup>^</sup>Utilizes 0.134" (3.4mm) solid extra high strength (2,800 lb. test) galvanized steel wire which is permitted for cables 12 AWG, 3 conductors or less, or 14 AWG, 4 conductors or less.



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

#### IMSA Spec 19-3

581722 <sup>^</sup>	4	14	solid	.383 x .737	9.73 x 18.7	.045	1.14	170	253
603234	7	14	7 strand	.475 x .945	12.1 x 24.0	.045	1.14	321	478
603407	9	14	solid	.520 x .990	13.2 x 25.2	.045	1.14	356	530
581857 <sup>^</sup>	2	12	7 strand	.405 x .759	10.3 x 19.3	.045	1.14	170	253
581854	5	12	7 strand	.511 x .981	13.0 x 24.9	.045	1.14	220	327

#### IMSA Spec 20-3

603515	3	14	7 strand	.361 x .825	9.17 x 21.0	.045	1.14	221	329
601850	4	14	solid	.377 x .841	9.58 x 21.4	.045	1.14	285	424
601928 <sup>^</sup>	4	14	solid	.383 x .737	9.73 x 18.7	.045	1.14	194	289
601216	5	14	solid	.410 x .874	10.4 x 22.2	.045	1.14	256	381
601217	7	14	solid	.445 x .909	11.3 x 23.1	.045	1.14	289	430
601491	7	14	7 strand	.469 x .933	11.9 x 23.7	.045	1.14	295	439
601337	9	14	solid	.517 x .981	13.1 x 24.9	.045	1.14	328	488
601218	10	14	solid	.593 x 1.057	15.1 x 26.9	.060	1.52	355	528
603804	10	14	7 strand	.590 x 1.060	15.0 x 26.9	.060	1.52	366	545
601437	12	14	solid	.610 x 1.077	15.5 x 27.4	.060	1.52	388	577
601338	16	14	solid	.670 x 1.140	17.0 x 29.0	.060	1.52	456	678
601219	20	14	solid	.745 x 1.209	18.9 x 30.7	.060	1.52	528	786
603458	3	12	7 strand	.418 x .883	10.6 x 22.4	.045	1.14	258	384
601479	5	12	solid	.480 x .944	12.2 x 24.0	.045	1.14	307	457
601472	7	12	solid	.519 x .983	13.2 x 25.0	.045	1.14	356	530
603730	7	12	7 strand	.546 x 1.010	13.9 x 25.7	.060	1.52	362	539
601587	12	12	solid	.711 x 1.175	18.1 x 29.9	.060	1.52	502	747

Other conductor counts and AWG sizes (solid or stranded) available upon request.

## Spec 19-4 and 20-4 Self-supporting Signal and Communications Cable

### Product Specifications

<b>Conductors</b>	Solid or Stranded Bare Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Per Specification
<b>Conductor Configuration</b>	Twisted Pairs
<b>Shield</b>	Corrugated Copper Tape
<b>Integrated Messenger<sup>^</sup></b>	1/4" (.250") 7-wire extra high strength (6,650 lb. test) flooded galvanized steel strand
<b>Jacket</b>	
Spec 19-4	PVC
Spec 20-4	Black PE



Part No.	No. of Pairs	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

#### IMSA Spec 19-4

581967	3	16	7 strand	.626 x 1.096	15.9 x 27.8	.060	1.52	340	506
--------	---	----	----------	--------------	-------------	------	------	-----	-----

#### IMSA Spec 20-4

582018	5	19	7 strand	.606 x 1.076	15.4 x 27.3	.060	1.52	298	443
603668	6	19	7 strand	.666 x 1.136	16.9 x 28.9	.045	1.14	315	469
581570	2	16	solid	.566 x 1.036	14.4 x 26.3	.060	1.52	267	397
601339	3	16	solid	.586 x 1.056	14.9 x 26.8	.060	1.52	292	434
581959	3	16	7 strand	.626 x 1.096	15.9 x 27.8	.060	1.52	298	443
601340	6	16	solid	.686 x 1.156	17.4 x 29.4	.060	1.52	374	556
601500	4	14	7 strand	.736 x 1.206	18.7 x 30.6	.060	1.52	380	565

Other pair counts and AWG sizes (solid or stranded) available upon request.

## Spec 19-5 and 20-5 Signal Cable

### Product Specifications

<b>Conductors</b>	Solid or Stranded Bare Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Per Specification
<b>Conductor Configuration</b>	Cabled Conductors
<b>Shield</b>	Corrugated Copper Tape
<b>Inner Jacket</b>	Polyethylene
<b>Outer Jacket</b>	
Spec 19-5	PVC
Spec 20-5	Black PE



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Inner Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

### IMSA Spec 19-5

<b>603164</b>	4	14	solid	.566	14.38	.041	1.04	168	250
---------------	---	----	-------	------	-------	------	------	-----	-----

### IMSA Spec 20-5

<b>601221</b>	4	14	solid	.566	14.38	.041	1.04	150	223
<b>580708</b>	3	10	7 strand	.666	16.92	.045	1.14	220	327
<b>603057</b>	4	10	solid	.684	17.37	.045	1.14	267	397

Minimum average outer jacket thickness is .060 inches (1.52mm).  
Other conductor counts and AWG sizes (solid or stranded) available upon request.

## Spec 19-6 and 20-6 Signal Communications Cable

### Product Specifications

<b>Conductors</b>	Solid or Stranded Bare Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Per Specification
<b>Conductor Configuration</b>	Twisted Pairs
<b>Shield</b>	Corrugated Copper Tape
<b>Inner Jacket</b>	Polyethylene
<b>Outer Jacket</b>	
Spec 19-6	PVC
Spec 20-6	Black PE



Part No.	No. of Pairs	AWG	Solid or Stranded	Nominal OD		Min. Avg. Inner Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

### IMSA Spec 19-6

<b>581978</b>	2	16	solid	.650	16.51	.041	1.52	211	314
<b>601460</b>	2	14	solid	.685	17.40	.041	1.52	196	292

### IMSA Spec 20-6

<b>581922</b>	3	19	solid	.616	15.65	.041	1.04	130	193
<b>581329</b>	2	18	7 strand	.626	15.90	.041	1.04	126	187
<b>580088</b>	6	18	solid	.736	18.69	.041	1.04	209	311
<b>580065</b>	6	18	7 strand	.786	19.96	.041	1.04	218	324
<b>601222</b>	3	16	solid	.650	16.51	.041	1.04	166	247
<b>601458</b>	6	16	solid	.795	20.19	.041	1.04	252	375

Minimum average outer jacket thickness is .060 inches (1.52mm).  
Other pair counts and AWG sizes (solid or stranded) available upon request.

## Spec 39-6 and 40-6 Communications Cable

Spec 39-6 Communications Cable is available upon special request.

### Product Specifications

<b>Conductors</b>	Solid or Stranded Bare Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Per Specification
<b>Conductor Configuration</b>	Twisted Pairs
<b>Shield</b>	Corrugated Copper Tape
<b>Inner Jacket</b>	Polyethylene
<b>Outer Jacket</b>	
Spec 39-6	PVC
Spec 40-6	Black PE



Part No.	No. of Pairs	AWG	Solid or Stranded	Nominal OD		Min. Avg. Outer Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

### IMSA Spec 40-6

<b>603414</b>	12	19	solid	.756	19.20	.060	1.52	248	369
<b>603569</b>	18	19	solid	.890	22.61	.080	2.03	352	524

Minimum average inner jacket thickness is .041 inches (1.04mm).

Other pair counts and AWG sizes (solid or stranded) available upon request.

## Spec 39-2 and 40-2 Communications Cable

### Product Specifications

<b>Conductors</b>	Solid or Stranded Bare Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Per Specification
<b>Conductor Configuration</b>	Twisted Pairs
<b>Shield</b>	Corrugated Copper Tape
<b>Jacket</b>	
Spec 39-2	PVC
Spec 40-2	Black PE



Part No.	No. of Pairs	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

#### IMSA Spec 39-2

<b>580481</b>	3	19	solid	.422	10.72	.045	1.14	87	129
<b>581718</b>	3	19	7 strand	.454	11.53	.045	1.14	91	135
<b>603434</b>	6	19	solid	.510	12.95	.045	1.14	132	196
<b>581164</b>	12	19	7 strand	.686	17.42	.060	1.52	237	353
<b>581855</b>	3	16	7 strand	.586	14.89	.060	1.52	154	229
<b>581751</b>	12	16	solid	.890	22.61	.080	2.03	415	617
<b>581258</b>	25	16	solid	1.140	28.96	.080	2.03	744	1107

#### IMSA Spec 40-2

<b>603555</b>	3	19	solid	.424	10.77	.045	1.14	77	115
<b>580125</b>	3	19	7 strand	.444	11.28	.045	1.14	80	119
<b>580382</b>	4	19	solid	.504	12.80	.045	1.14	93	138
<b>580040</b>	4	19	7 strand	.480	12.19	.045	1.14	93	138
<b>603385</b>	6	19	solid	.565	14.35	.060	1.52	132	196
<b>580120</b>	6	19	7 strand	.514	13.06	.045	1.14	119	177
<b>603480</b>	12	19	solid	.666	16.92	.060	1.52	205	305
<b>603403</b>	25	19	solid	.820	20.82	.060	1.52	369	549
<b>603482</b>	25	19	7 strand	1.010	25.65	.080	2.03	422	628
<b>603104</b>	6	16	solid	.666	16.92	.060	1.52	200	298
<b>603994</b>	6	16	7 strand	.683	17.35	.060	1.52	208	309
<b>603223</b>	12	16	solid	.890	22.60	.080	2.03	365	543

Other pair counts and AWG sizes (solid or stranded) available upon request.



## Spec 39-4 and 40-4 Communications Cable

### Product Specifications

<b>Conductors</b>	Solid or Stranded Bare Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Per Specification
<b>Conductor Configuration</b>	Twisted Pairs
<b>Shield</b>	Corrugated Copper Tape
<b>Integrated Messenger</b>	1/4" (.250") 7-wire extra high strength (6,650 lb. test) flooded galvanized steel strand
<b>Jacket</b>	PVC Black PE
Spec 39-4	
Spec 40-4	



Part No.	No. of Pairs	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches/ (mm)		Inches	mm	Lbs./ 1000'	Kg/ Km
<b>IMSA Spec 39-4</b>									
<b>603343</b>	6	19	solid	.520 x .990 (13.21 x 25.15)		.060	1.52	306	455
<b>IMSA Spec 40-4</b>									
<b>603680</b>	3	19	solid	.430 x .900 (10.92 x 22.86)		.045	1.14	229	341
<b>603155</b>	6	19	solid	.520 x .990 (13.21 x 25.15)		.045	1.14	276	411
<b>603149</b>	12	19	solid	.666 x 1.360 (16.92 x 34.55)		.060	1.52	355	528
<b>580950</b>	12	19	7 strand	.686 x 1.156 (17.42 x 29.36)		.060	1.52	371	552
<b>603568</b>	18	19	solid	.756 x 1.230 (19.20 x 31.24)		.060	1.52	442	658
<b>581735</b>	6	18	7 strand	.626 x 1.096 (15.90 x 27.84)		.060	1.52	325	484
<b>601975</b>	6	16	solid	.666 x 1.136 (16.92 x 28.85)		.060	1.52	355	528
<b>603993</b>	6	16	7 strand	.686 x 1.156 (17.42 x 29.36)		.060	1.52	340	506

Other pair counts and AWG sizes (solid or stranded) available upon request.

## Spec 26-3 and 28-3 Aerial Self-Supporting Cable

### Product Specifications

<b>Conductors</b>	
Spec 26-3	Solid Hard Drawn Bare Copper
Spec 28-3	Solid Copper Clad Steel
<b>Insulation</b>	Black High-Density Polyethylene (HDPE)
<b>Conductor Configurations</b>	Single Conductor



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD Inches/ (mm)	Min. Avg. Jacket Thickness		Approx. Weight	
					Inches	mm	Lbs./1000'	Kg/Km
<b>IMSA Spec 26-3</b>								
601499	1	10	solid	.163 (4.14)	.030	.76	37	55
<b>IMSA Spec 28-3</b>								
601224	1	12	solid	.140 (3.56)	.027	.69	23	34
601223	1	10	solid	.162 (4.11)	.027	.69	35	52

Other AWG sizes available upon request.

## Spec 29-1, 29-2, 29-3 and 29-4 Aerial Self-Supporting "C" Wire

### Product Specifications

<b>Conductors</b>	
Spec 29-1, 29-3	Solid Hard Drawn Bare Copper
Spec 29-2, 29-4	Solid Copper Clad Steel
<b>Insulation</b>	Black High-Density Polyethylene (HDPE)
<b>Conductor Configurations</b>	Two Conductors Parallel
<b>Outer Jacket</b>	
Spec 29-3, 29-4	Red Fade-Resistant PVC

### Spec 29-1, Spec 29-2



### Spec 29-3, Spec 29-4



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD Inches/ (mm)	Min. Avg. Jacket Thickness		Approx. Weight	
					Inches	mm	Lbs./1000'	Kg/Km
<b>IMSA Spec 29-1</b>								
601364	2	12	solid	.175 x .317 (4.45 x 8.05)	.045	1.14	56	83
<b>IMSA Spec 29-2</b>								
601257	2	14	solid	.155 x .283 (3.94 x 7.19)	.040	1.02	37	55
601256	2	12	solid	.170 x .317 (4.32 x 8.05)	.040	1.02	52	77
<b>IMSA Spec 29-3</b>								
601803	2	14	solid	.215 x .343 (5.46 x 8.71)	.027	.69	55	82
601406	2	12	solid	.235 x .377 (5.97 x 9.58)	.027	.69	74	110
601450	2	10	solid	.268 x .440 (6.81 x 11.18)	.033	.83	108	161
<b>IMSA Spec 29-4</b>								
601259	2	14	solid	.215 x .343 (5.46 x 8.71)	.027	.69	53	79
601258	2	12	solid	.235 x .377 (5.97 x 9.58)	.027	.69	70	104

14 AWG IMSA 29-1 available upon request.

## Spec 50-2 Loop Detector Wire

### Product Specifications

<b>Conductors</b>	Solid or Stranded Tinned Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Black/Natural
<b>Conductor Configuration</b>	Twisted Pair
<b>Shield</b>	Aluminum/Mylar Tape
<b>Outer Jacket</b>	Black Low-Density Polyethylene



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

### IMSA Spec 50-2

<b>603980</b>	2	18	16 strand	.285	7.24	.030	.76	35	52
<b>603133</b>	2	16	19 strand	.309	7.85	.030	.76	39	58
<b>601765</b>	2	14	19 strand	.330	8.38	.030	.76	50	74
<b>581061</b>	2	14	19 strand	.360	9.14	.045	1.14	57	85
<b>603378</b>	2	12	19 strand	.382	9.70	.030	.76	76	113

Solid conductors available upon request.

## Spec 51-1 and 51-3 Loop Detector Wire

Spec 51-1 Loop Detector Wire is available upon special request.

### Product Specifications

<b>Conductors</b>	Solid or Stranded Bare Copper
<b>Insulation</b>	PVC/Nylon
Spec 51-1	
Spec 51-3	Black Cross-linked Polyethylene
<b>Conductor Configuration</b>	Single Conductor



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

### IMSA Spec 51-3

<b>582100</b>	1	14	19 strand	.136	3.45	.030	.76	17	25
---------------	---	----	-----------	------	------	------	-----	----	----

Other AWG sizes (solid or stranded) available upon request.

## Spec 51-5 and 51-7 Loop Detector Wire

### Product Specifications

<b>Conductors</b>	Stranded Bare Copper
<b>Insulation</b>	PVC/Nylon
Spec 51-5	
Spec 51-7	Black Cross-linked Polyethylene
<b>Conductor Configuration</b>	Single Conductor
<b>Outer Jacket</b>	Black PVC or Polyethylene Tube



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

### IMSA Spec 51-5 (PVC Tube)

<b>580206</b>	1	14	19 strand	.250	6.35	.030	.76	27	40
<b>580706</b>	1	12	19 strand	.250	6.35	.030	.76	36	54

### IMSA Spec 51-5 (PE Tube)

<b>580263</b>	1	14	19 strand	.250	6.35	.030	.76	29	43
<b>582116</b>	1	12	19 strand	.250	6.35	.030	.76	39	58

### IMSA Spec 51-7 (PVC Tube)

<b>581923</b>	1	14	19 strand	.250	6.35	.030	.76	31	46
---------------	---	----	-----------	------	------	------	-----	----	----

### IMSA Spec 51-7 (PE Tube)

<b>582115</b>	1	14	19 strand	.250	6.35	.030	.76	33	49
---------------	---	----	-----------	------	------	------	-----	----	----

12 AWG 51-7 available upon request.

## CALTRANS Type 2 Traffic Loop Wire (Spec 51-5 and 51-7)

### Product Specifications

<b>Conductors</b>	Stranded Bare Copper
<b>Insulation</b>	PVC/Nylon Spec 51-5 Black Cross-linked Polyethylene Spec 51-7
<b>Conductor Configuration</b>	Single Conductor
<b>Outer Jacket</b>	Black PVC or Polyethylene Tube



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

CALTRANS Type 2 / IMSA Spec 51-5 (PVC Tube)									
580206	1	14	19 strand	.250	6.35	.030	.76	27	40
CALTRANS Type 2 / IMSA Spec 51-5 (PE Tube)									
580263	1	14	19 strand	.250	6.35	.030	.76	29	43
CALTRANS Type 2 / IMSA Spec 51-7 (PVC Tube)									
581923	1	14	19 strand	.250	6.35	.030	.76	31	46
CALTRANS Type 2 / IMSA Spec 51-7 (PE Tube)									
582115	1	14	19 strand	.250	6.35	.030	.76	33	49

## CALTRANS Type B Lead-In Cable

### Product Specifications

<b>Conductors</b>	Stranded Tinned Copper
<b>Insulation</b>	Black High-Density Polyethylene
<b>Color Code</b>	Black/Natural
<b>Conductor Configuration</b>	Twisted Pair
<b>Shield</b>	Aluminum/Mylar Tape
<b>Outer Jacket</b>	Black High-Density Polyethylene



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

CALTRANS Type B									
603916	2	16	19 strand	.275	6.99	.033	.84	40	60

## CALTRANS Type C Lead-In Cable (Spec 50-2)

### Product Specifications

<b>Conductors</b>	Stranded Tinned Copper
<b>Insulation</b>	Polyethylene
<b>Color Code</b>	Black/Natural
<b>Conductor Configuration</b>	Twisted Pair
<b>Shield</b>	Aluminum/Mylar Tape
<b>Outer Jacket</b>	Black Low-Density Polyethylene



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

CALTRANS Type C / IMSA Spec 50-2									
603133	2	16	19 strand	.309	7.85	.030	.76	39	58

## CALTRANS Signal Cable

### Product Specifications

<b>Conductors</b>	Solid Bare Copper
<b>Insulation</b>	PVC/Nylon
<b>Color Code</b>	Per Specification
<b>Conductor Configuration</b>	Cabled Conductors
<b>Outer Jacket</b>	Black Low-Density Polyethylene



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

CALTRANS Signal Cable									
580228 3CSC	3	14	solid	.321	8.15	.045	1.14	67	100
580229 5CSC	5	14	solid	.380	9.65	.045	1.14	101	150
580374 9CSC	1 +8	12 14	solid	.508	12.90	.060	1.52	184	274
580157 12CSC	1 +11	12 14	solid	.580	14.73	.060	1.52	251	373
580159 28CSC	1 +27	10 14	solid	.833	21.16	.080	2.03	527	784

## Vehicle Detector Cable

### Product Specifications

<b>Conductors</b>	Stranded Bare Copper
<b>Insulation</b>	High-Density Polyethylene
<b>Color Code</b>	Black, Red, White, Green
<b>Conductor Configuration</b>	Cabled Conductors
<b>Shield</b>	Aluminum/Mylar Tape
Part No. 7992A	Unshielded
Part No. 7993A	
<b>Outer Jacket</b>	Black High-Density Polyethylene
<b>Filled</b>	Yes

### Shielded



### Unshielded



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

### Vehicle Detector Cable

<b>7992A</b>	4	18	7 strand	.234	5.94	.024	.61	37	55
<b>7993A</b>	4	18	7 strand	.218	5.54	.024	.61	35	52

## Optical Detector Cable

### Product Specifications

<b>Conductors</b>	Stranded Tinned Copper
<b>Insulation</b>	High-Density Polyethylene
<b>Color Code</b>	Yellow, Blue, Orange
<b>Conductor Configuration</b>	Cabled Conductors
<b>Shield</b>	Aluminum/Mylar Tape
<b>Outer Jacket</b>	Black UV Resistant PVC

Suitable for Direct Burial and Aerial use (messenger wire required).



Part No.	No. of Cond.	AWG	Solid or Stranded	Nominal OD		Min. Avg. Jacket Thickness		Approx. Weight	
				Inches	mm	Inches	mm	Lbs./1000'	Kg/Km

### Optical Detector Cable, 600V

<b>580461</b>	3	20	7 strand	.280	7.11	.045	1.14	42	62
---------------	---	----	----------	------	------	------	------	----	----

## Color Codes

### IMSA Cabled Conductors

Cond. No.	Insulation Color	Stripe Color
1	Black	—
2	White	—
3	Red	—
4	Green	—
5	Orange	—
6	Blue	—
7	White	Black
8	Red	Black
9	Green	Black
10	Orange	Black
11	Blue	Black
12	Black	White
13	Red	White
14	Green	White
15	Blue	White
16	Black	Red
17	White	Red
18	Orange	Red
19	Blue	Red
20	Red	Green
21	Orange	Green
22	Black	—
23	White	—
24	Red	—
25	Green	—

**Cables per IMSA Specs:**  
**19-1, 19-3, 19-5, 20-1, 20-3, 20-5**

This color code uses only six different insulation colors. Different colored single stripes identify conductors numbered 7 through 21. The sequence is repeated in cables having more than 21 conductors. The repeat sequence conductors are identifiable by their location in the concentric layers of conductors in the cable assembly; the lower conductor numbers being in the center of innermost layers; the higher conductor numbers being in the outer layers.

### IMSA Twisted Pairs

Pair No.	Color Combination
1	White & Blue
2	White & Orange
3	White & Green
4	White & Brown
5	White & Slate
6	Red & Blue
7	Red & Orange
8	Red & Green
9	Red & Brown
10	Red & Slate
11	Black & Blue
12	Black & Orange
13	Black & Green
14	Black & Brown
15	Black & Slate
16	Yellow & Blue
17	Yellow & Orange
18	Yellow & Green
19	Yellow & Brown
20	Yellow & Slate
21	Violet & Blue
22	Violet & Orange
23	Violet & Green
24	Violet & Brown
25	Violet & Slate

**Cables per IMSA Specs:**  
**19-2, 19-4, 19-6, 20-2, 20-4, 20-6, 39-2, 39-4, 39-6, 40-2, 40-4, 40-6**

This color code uses only ten different insulation colors: five for the "wire color" conductors in twisted pairs; five for the "mate color" conductors in twisted pairs. The "wire color" and "mate color" combinations produce twenty-five uniquely color-coded twisted pairs.

### CALTRANS 3-Conductor

Cond. No.	Color	Tracer
1	Blue	Black
2	Blue	Orange
3	White	Black

### CALTRANS 5-Conductor

Cond. No.	Color	Tracer
1	Red	—
2	Yellow	—
3	Brown	—
4	Black	—
5	White	—

### CALTRANS 9-Conductor

Cond. No.	Color	Tracer
1	White	—
2	Red	—
3	Yellow	—
4	Brown	—
5	Red	Black
6	Yellow	Black
7	Brown	Black
8	Black	—
9	White	Black

### CALTRANS 12-Conductor

Cond. No.	Color	Tracer
1	White	—
2	Red	—
3	Yellow	—
4	Brown	—
5	Black	—
6	Black	White
7	Black	Red
8	Red	Black
9	Yellow	Black
10	Brown	Black
11	Red	White
12	Brown	White

### CALTRANS 28-Conductor

Cond. No.	Color	Tracer
1	White	—
2	Red	Black
3	Yellow	Black
4	Brown	Black
5	Red	Orange
6	Yellow	Orange
7	Brown	Orange
8	Red	Silver
9	Yellow	Silver
10	Brown	Silver
11	Red	Purple
12	Yellow	Purple
13	Brown	Purple
14	White	Black
15	Black	Red
16	Red	(2) Black
17	Brown	(2) Black
18	Red	(2) Orange
19	Brown	(2) Orange
20	Red	(2) Silver
21	Brown	(2) Silver
22	Red	(2) Purple
23	Brown	(2) Purple
24	Blue	Black
25	Blue	Orange
26	Blue	Silver
27	Blue	Purple
28	Black	—

# Index

## Part Numbers

Part No.	Spec	Page No.	Part No.	Spec	Page No.	Part No.	Spec	Page No.	Part No.	Spec	Page No.	Part No.	Spec	Page No.
7992A	Signal Control	11	582024	20-1	1	601214	19-1	1	601460	19-6	4	601928	20-3	3
7993A	Signal Control	11	582100	51-3	9	601216	20-3	3	601466	19-1	1	601930	19-1	1
580040	40-2	6	582115	51-7	9, 10	601217	20-3	3	601467	20-1	2	601948	19-1	1
580065	20-6	4	582116	51-5	9	601218	20-3	3	601468	19-1	1	601975	40-4	7
580088	20-6	4	601137	19-1	1	601219	20-3	3	601472	20-3	3	603057	20-5	4
580106	20-1	2	601140	20-1	1	601221	20-5	4	601475	20-1	2	603061	19-1	1
580120	40-2	6	601141	20-1	1	601222	20-6	4	601479	20-3	3	603104	40-2	6
580125	40-2	6	601142	20-1	1	601223	28-3	8	601480	19-1	1	603131	20-1	1
580157	CALTRANS Signal	10	601143	20-1	1	601224	28-3	8	601481	20-2	2	603133	50-2	9, 10
580159	CALTRANS Signal	10	601144	20-1	1	601227	20-2	2	601491	20-3	3	603149	40-4	7
580206	51-5	9, 10	601145	20-1	1	601256	29-2	8	601496	19-1	1	603155	40-4	7
580228	CALTRANS Signal	10	601146	20-1	1	601257	29-2	8	601499	26-3	8	603164	19-5	4
580229	CALTRANS Signal	10	601147	20-1	1	601258	29-4	8	601500	20-4	3	603223	40-2	6
580263	51-5	9, 10	601148	20-1	1	601259	29-4	8	601510	20-2	2	603234	19-3	3
580307	20-1	2	601150	20-1	1	601316	20-1	2	601518	20-1	2	603298	20-1	2
580314	19-1	1	601153	20-1	2	601320	19-1	1	601530	20-2	2	603314	19-1	1
580374	CALTRANS Signal	10	601154	20-1	2	601321	19-1	1	601534	19-1	1	603343	39-4	7
580382	40-2	6	601157	20-1	2	601322	20-1	2	601539	19-1	1	603378	50-2	9
580461	Signal Control	11	601158	20-1	2	601324	19-2	2	601540	20-1	2	603385	40-2	6
580481	39-2	6	601176	19-1	1	601325	20-1	2	601563	20-1	2	603403	40-2	6
580706	51-5	9	601177	19-1	1	601326	20-1	2	601569	20-1	2	603407	19-3	3
580708	20-5	4	601179	19-1	1	601329	20-1	2	601570	19-1	1	603414	40-6	5
580902	20-2	2	601180	19-1	1	601331	20-1	2	601578	19-1	1	603434	39-2	6
580950	40-4	7	601181	19-1	1	601334	19-1	1	601583	20-1	2	603458	20-3	3
581061	50-2	9	601182	19-1	1	601337	20-3	3	601587	20-3	3	603480	40-2	6
581164	39-2	6	601186	20-1	2	601338	20-3	3	601591	19-1	1	603482	40-2	6
581258	39-2	6	601188	20-1	2	601339	20-4	3	601594	20-1	2	603515	20-3	3
581329	20-6	4	601189	19-1	1	601340	20-4	3	601605	20-1	2	603555	40-2	6
581356	20-1	2	601190	19-1	1	601352	19-1	1	601610	20-1	1	603568	40-4	7
581570	20-4	3	601192	19-1	1	601358	19-1	1	601617	20-2	2	603569	40-6	5
581665	19-1	1	601193	19-1	1	601364	29-1	8	601622	20-2	2	603668	20-4	3
581694	20-1	2	601194	20-1	1	601406	29-3	8	601633	19-1	1	603680	40-4	7
581710	20-1	2	601195	20-1	1	601410	19-1	1	601671	19-1	1	603723	20-2	2
581718	39-2	6	601196	20-1	1	601411	20-1	2	601765	50-2	9	603730	20-3	3
581719	19-1	1	601197	20-1	1	601412	20-1	2	601803	29-3	8	603804	20-3	3
581722	19-3	3	601198	20-1	1	601415	19-1	1	601820	20-1	2	603870	20-1	2
581735	40-4	7	601199	20-1	1	601417	20-1	2	601826	19-1	1	603916	CALTRANS Type B	10
581751	39-2	6	601200	20-1	1	601428	20-2	2	601850	20-3	3	603980	50-2	9
581761	20-1	1	601201	20-1	2	601429	20-1	1	601890	19-1	1	603993	40-4	7
581854	19-3	3	601202	20-1	2	601430	20-1	2	601900	20-1	2	603994	40-2	6
581855	39-2	6	601203	19-1	1	601431	19-1	1						
581857	19-3	3	601204	19-1	1	601437	20-3	3						
581922	20-6	4	601205	19-1	1	601443	19-1	1						
581923	51-7	9, 10	601206	19-1	1	601446	20-2	2						
581959	20-4	3	601207	19-1	1	601448	19-1	1						
581967	19-4	3	601208	19-1	1	601450	29-3	8						
581978	19-6	4	601209	19-1	1	601454	20-1	2						
582015	20-1	1	601210	20-1	2	601455	19-1	1						
582018	20-4	3	601211	20-1	2	601456	19-1	1						
582020	20-1	2	601212	20-1	2	601457	19-1	1						
582021	20-1	1	601213	19-1	1	601458	20-6	4						

Cables shown in this catalog were formerly produced by Independent Cable, Inc. (ICI), purchased by Belden Inc. in 1996.

All sales of Belden products are subject to Belden's standard terms and conditions of sale. All printing errors are subject to correction. Although Belden makes every effort to ensure the accuracy of specifications at the time of this publication, specifications for products described in this publication are subject to change without notice. Contact the Belden Electronics Division Customer Service Department for the most current information. 1-800-BELDEN-1.



U.S. Customer Service: **800-BELDEN-1 (800-235-3361)****UNITED STATES****Division Headquarters—Americas**

2200 U.S. Highway 27 South  
Richmond, IN 47374  
**Phone: 765-983-5200**  
Inside Sales: 800-235-3361  
Fax: 765-983-5294  
info@belden.com  
web: www.belden.com

**ASIA/PACIFIC****Australia**

Level 10  
369 Royal Parade  
Parkville, Victoria 3052  
Australia  
**Phone: 613-9341-0900**  
Fax: 613-9347-8274  
australia.sales@belden.com

**Beijing**

Rm 1015  
Office Tower Beijing Capital  
Times Square  
No. 88 West Changan Ave.  
Beijing 100031  
People's Republic of China  
**Phone: 8610-8391-5181-3**  
Fax: 8610-8391-5186  
hongkong.sales@belden.com

**Hong Kong**

Unit 4401, 44F  
Cosco Tower  
Grand Millennium Plaza  
183 Queen's Road Central  
Hong Kong  
**Phone: 852-2955-0128**  
Fax: 852-2907-6933  
hongkong.sales@belden.com

**India**

16th Floor, Tower B,  
Unitech Cyberpark  
Sector 39, Gurgaon  
Haryana, India  
**Phone: 91-124-4509999**  
Fax: 91-124-4509900  
india.sales@belden.com

**Shanghai**

Unit 2605  
Harbour Ring Plaza  
18 Xi Zang Zhong Road Shanghai  
200001  
People's Republic of China  
**Phone: 8621-5385-3355**  
Fax: 8621-6249-0879  
hongkong.sales@belden.com

**Singapore**

101 Thomson Road  
#21-01 United Square  
Singapore 307591  
**Phone: 65-6251-8211**  
Fax: 65-6251-5010  
singapore.sales@belden.com

**CANADA****Cobourg**

130 Willmott Street  
Cobourg, Ontario K9A 4M3  
Canada  
**Phone: 905-372-8713**  
Fax: 905-372-6291  
salescobourg@belden.com

**Montreal**

2345 Boulevard des Sources  
Pointe Claire, Quebec  
Canada H9R 5Z3  
**Phone: 800-681-6131**  
Fax: 514-822-7968  
ibdn.info@belden.com

**EUROPE/AFRICA/MIDDLE EAST****France**

Immeuble le Cesar  
20, Place Louis Pradel  
69001 Lyon  
France  
**Phone: 33-472-109-990**  
Fax: 33-478-298-409  
venlo.salesinfo@belden.com

**Italy**

Via Paracelso, 26  
Centro Direzionale Colleoni  
Palazzo Cassiopea Ingr. 3  
20041 Agrate Brianza (MI)  
Italy  
**Phone: 39-039-656-0911**  
Fax: 39-029-656-0929  
venlo.salesinfo@belden.com

**Africa/Middle East**

Dubai Internet City  
Building One, Office 216  
Dubai  
United Arab Emirates  
**Phone: 97-14-391-0490**  
Fax: 97-14-391-8775  
sales@belden.ae

**The Netherlands****Division Headquarters – Europe**

Edisonstraat 9, Postbus 9  
5928 PG Venlo, 5900 AA  
The Netherlands  
**Phone: 31-773-878-555**  
Fax: 31-773-878-448  
venlo.salesinfo@belden.com

**United Kingdom**

3000 Manchester Business Park  
Aviator Way  
Manchester M22 5TG  
United Kingdom  
**Phone: +44-161-266-1115**  
Fax: +44-161-266-1339  
venlo.salesinfo@belden.com

**LATIN AMERICA AND THE CARIBBEAN ISLANDS****Regional Office**

6100 Hollywood Boulevard  
Suite 110  
Hollywood, Florida 33024  
**Phone: 954-987-5044**  
Fax: 954-987-8022  
salesla@belden.com

**Mexico**

Insurgentes Sur 800, Piso 9  
Colonia del Valle  
03100 Mexico, D.F.  
Mexico  
**Phone: 5255-5523-7733**  
Fax: 5255-5528-8077  
salesmex@belden.com

**Brazil**

Av. Rebouças  
1023 — 4 Andar  
05401-300 Sao Paulo, SP Brasil  
**Phone: 5511-3061-3099**  
Fax: 5511-3061-3752  
salesBRZL@belden.com