



Southwire®



IMSA

TRAFFIC SIGNAL CABLE



A tradition of excellence...

Exceptional Performance.



Southwire Company is a worldwide leader in the development, design, manufacture, marketing & distribution of wire and cable products. A Broad Range of Products, Innovative Solutions, Recognized Brands, and a Solid Service Platform are the foundation that Southwire Company's Dedicated, Professional People build upon to create Customer Value. These characteristics establish and strengthen Southwire Company's leadership position as a one of the premier US-based manufacturers of electrical, electronic and assembled wire and cable products.

IMSA Traffic Signal Cable

Southwire Company's Traffic Signal Cable product line includes; IMSA 19 & 20 Series 600 Volt Cable that runs from the traffic light to the controller station, IMSA 50-2 600 Volt Cable that runs from the junction box to the controller station and IMSA 51-5 600 Volt Cable that runs from the switch buried in asphalt to the junction box. These products feature an outdoor, moisture and sunlight resistant jacket for wet or dry locations to 90°C and comply with UL Standards 1581 and 62. Inventory is available in long length master reels and special constructions are available upon request.

Features & Benefits

- Standard UL 1581 Compliance Testing
- Voltage 600 Volts
- Wet or Dry Locations 90°C
- Standard UL 62 Compliance (cold bend)
- Moisture Resistant
- Outdoor & Sunlight Resistant

Applications

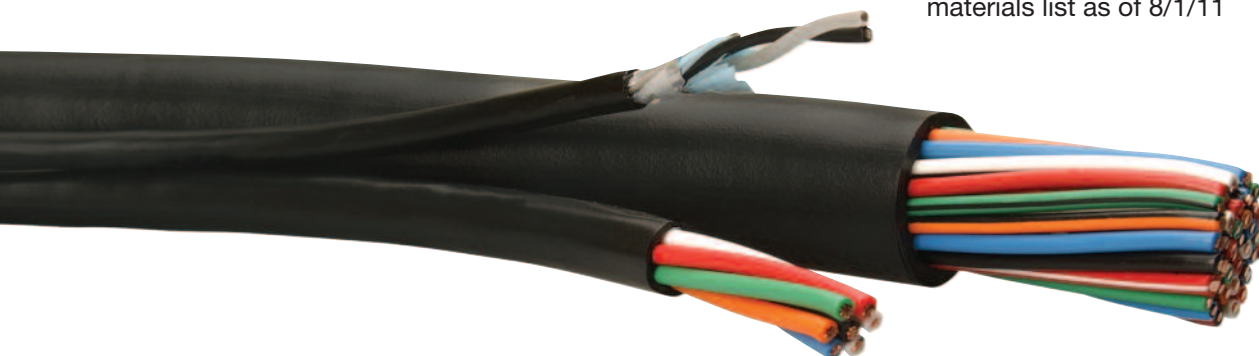
- Signaling & Control Cable
- Communications & Detection
- Aerial, with Supporting Messenger
- Electrical Shielding vs High Voltage

Constructions

- Copper Conductors ASTM B-8 & B-33 solid
ASTM B-174 (stranded) 22 to 8 AWG Bare
& Tinned Copper
- Insulations: High Density Polyethylene
ASTM D-1248, Polyvinyl Chloride
ASTM D-2220
- Cross Linked Polyethylene ASTM D-2655-80
(UL) XHHW-2 (where applicable)

Specifications & Standards

- International Municipal Signal Association
(IMSA) Wire & Cable Specifications 1997
- (UL) 62 Electrical Wire & Cable
- RoHS & REACH Compliant with
materials list as of 8/1/11



IMSA 50-2 Loop Detector Lead-In Cable 600V

- CONDUCTORS:** Stranded Tinned Copper per ASTM B-8 & B-33,
18 – 12 AWG (19 Strand)
- INSULATION:** HMW Polyethylene
- COLOR CODE:** Black / Natural
- ASSEMBLY:** Overall Aluminum Mylar Foil Shielded Pair with drain wire
- JACKET:** Black Low Density Polyethylene

Part Number	Gauge	Drain Wire AWG	Stranding	Jacket Thickness	Insulation Thickness	Nominal O.D.	Weight lbs./mft
513360	12	14	19/27 TC	0.03	0.03	0.365	75
513258	14	16	19/27 TC	0.03	0.03	0.340	54
513319	16	18	19/27 TC	0.03	0.03	0.295	39
513267	18	20	18/30 TC	0.03	0.03	0.280	31

IMSA 51-3 Loop Detector Wire 600V

- CONDUCTORS:** Stranded Bare Copper per ASTM B-8 & B-174,
14 & 12 AWG (19 Strand)
- INSULATION:** Cross-Linked Polyethylene (XLPE)

Part Number	Gauge	Stranding	Jacket Thickness	Insulation Thickness	Nominal O.D.	Weight lbs./mft
559043	14	19/.0147	0.032	0.032	0.138	30
559044	12	19/.0185	0.032	0.032	0.153	38

IMSA 51-5 Tube Loop Detector Cable 600V

- CONDUCTORS:** Stranded Bare Copper per ASTM B-8 & B-174,
14 & 12 AWG (19 Strand)
- INSULATION:** PVC/Nylon
- JACKET:** Loose Tube PVC or HMW Polyethylene

Part Number	Gauge	Stranding	Jacket Thickness	Insulation Thickness	Nominal O.D.	Weight lbs./mft
513264	14	19/27	PVC/.035	PVC/.019 Wall Nylon/.004	0.250	30
513064	12	19/.0185	PVC/.030	PVC/.017 Wall Nylon/.004	0.250	38
513254	14	19/27	PE/.035	PVC/.019 Wall Nylon/.004	0.250	30
513054	12	19/.0185	PE/.030	PVC/.017 Wall Nylon/.004	0.250	38

IMSA 51-7 Tube Loop Detector Cable 600V

- CONDUCTORS:** Stranded Bare Copper per ASTM B-8, & B-174,
14 & 12 AWG (19 Strand)
- INSULATION:** Cross-Linked Polyethylene (XLPE)
- JACKET:** Loose Tube PVC or HMW Polyethylene

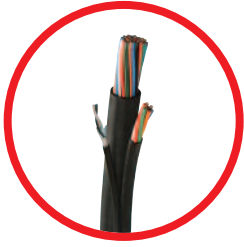
Part Number	Gauge	Stranding	Jacket Thickness	Insulation Thickness	Nominal O.D.	Weight lbs./mft
513490	14	19/27	PVC/.030	0.03	0.250	30
513493	12	19/.0185	PVC/.030	0.03	0.250	38
513500	14	19/27	PE/.030	0.03	0.250	30
513503	12	19/.0185	PE/.030	0.03	0.250	38



IMSA 19-1 Signal Cable 600V

- CONDUCTORS:** Solid Bare Copper per ASTM B-3 or
Stranded Bare Copper per ASTM B-8, & B-174
16 – 10 AWG
- INSULATION:** High Density Polyethylene
- JACKET:** Black Polyvinyl Chloride

Part Number	Gauge	No. Cond.	Stranding	Insulation Thickness	Jacket Thickness	Nominal O.D.	Weight lbs./mft
556002	16	2	Solid	0.025	0.045	0.283	43
556102	16	2	7/0.0192	0.025	0.045	0.295	45
556003	16	3	Solid	0.025	0.045	0.314	57
556103	16	3	7/0.0192	0.025	0.045	0.330	60
556004	16	4	Solid	0.025	0.045	0.344	70
556104	16	4	7/0.0192	0.025	0.045	0.364	74
556005	16	5	Solid	0.025	0.045	0.376	84
556105	16	5	7/0.0192	0.025	0.045	0.395	88
556007	16	7	Solid	0.025	0.045	0.406	109
556107	16	7	7/0.0192	0.025	0.045	0.428	114
556009	16	9	Solid	0.025	0.045	0.470	139
556109	16	9	7/0.0192	0.025	0.045	0.496	143
556012	16	12	Solid	0.025	0.045	0.548	192
556112	16	12	7/0.0192	0.025	0.045	0.578	198
559002	14	2	Solid	0.025	0.045	0.318	62
559102	14	2	7/.0242	0.025	0.045	0.336	67
559003	14	3	Solid	0.025	0.045	0.335	74
559103	14	3	7/.0242	0.025	0.045	0.354	79
559004	14	4	Solid	0.025	0.045	0.365	93
559104	14	4	7/.0242	0.025	0.045	0.386	99
559005	14	5	Solid	0.025	0.045	0.398	114
559105	14	5	7/.0242	0.025	0.045	0.422	122
559007	14	7	Solid	0.025	0.045	0.432	146
559107	14	7	7/.0242	0.025	0.045	0.459	156
559009	14	9	Solid	0.025	0.060	0.503	188
559109	14	9	7/.0242	0.025	0.060	0.565	216
559010	14	10	Solid	0.025	0.060	0.576	221
559110	14	10	7/.0242	0.025	0.060	0.612	235
559012	14	12	Solid	0.025	0.060	0.593	255
559112	14	12	7/.0242	0.025	0.060	0.630	272
559016	14	16	Solid	0.025	0.060	0.656	328
559116	14	16	7/.0242	0.025	0.060	0.698	350
559019	14	19	Solid	0.025	0.060	0.690	377
559119	14	19	7/.0242	0.025	0.060	0.735	402
559020	14	20	Solid	0.025	0.060	0.725	398
559120	14	20	7/.0242	0.025	0.045	0.773	424
559024	14	24	Solid	0.025	0.060	0.804	470
559124	14	24	7/.0242	0.025	0.080	0.898	535
559030	14	30	Solid	0.025	0.080	0.891	605
559130	14	30	7/.0242	0.025	0.080	0.948	644
559037	14	37	Solid	0.025	0.080	0.958	727
559137	14	37	7/.0242	0.025	0.080	1.021	774



IMSA 19-1 Signal Cable 600V

CONDUCTORS: Solid Bare Copper per ASTM B-3 or
Stranded Bare Copper per ASTM B-8, & B-174
16 – 10 AWG

INSULATION: High Density Polyethylene

JACKET: Black Polyvinyl Chloride

Part Number	Gauge	No. Cond.	Stranding	Insulation Thickness	Jacket Thickness	Nominal O.D.	Weight lbs./mft
559402	12	2	Solid	0.025	0.045	0.372	89
559502	12	2	7/.0305	0.025	0.045	0.394	95
559403	12	3	Solid	0.025	0.045	0.393	107
559503	12	3	7/.0305	0.025	0.045	0.417	113
559404	12	4	Solid	0.025	0.045	0.430	135
559504	12	4	7/.0305	0.025	0.045	0.456	143
559405	12	5	Solid	0.025	0.045	0.471	168
559505	12	5	7/.0305	0.025	0.045	0.500	178
559407	12	7	Solid	0.025	0.045	0.513	232
559507	12	7	7/.0305	0.025	0.060	0.576	246
559409	12	9	Solid	0.025	0.060	0.630	297
559509	12	9	7/.0305	0.025	0.060	0.670	315
559410	12	10	Solid	0.025	0.060	0.584	324
559510	12	10	7/.0305	0.025	0.060	0.728	343
559412	12	12	Solid	0.025	0.060	0.705	377
559512	12	12	7/.0305	0.025	0.060	0.751	399
559416	12	16	Solid	0.025	0.060	0.783	490
559516	12	16	7/.0242	0.025	0.080	0.874	552
559419	12	19	Solid	0.025	0.080	0.865	598
559519	12	19	7/.0242	0.025	0.080	0.920	633
559420	12	20	Solid	0.025	0.080	0.909	630
559520	12	20	7/.0242	0.025	0.080	0.967	667
559424	12	24	Solid	0.025	0.080	1.006	745
559524	12	24	7/.0242	0.025	0.080	1.072	789
559430	12	30	Solid	0.025	0.080	1.064	904
559530	12	30	7/.0242	0.025	0.080	1.134	956
559437	12	37	Solid	0.025	0.080	1.147	1091
559537	12	37	7/.0242	0.025	0.080	1.224	1155
559802	10	2	Solid	0.045	0.030	0.425	109
559902	10	2	7/.0385	0.045	0.030	0.443	107
559803	10	3	Solid	0.045	0.030	0.429	135
559903	10	3	7/.0385	0.045	0.030	0.469	155
559904	10	4	7/.0385	0.045	0.030	0.514	185
559907	10	7	7/.0385	0.045	0.030	0.648	321
559912	10	12	7/.0385	0.045	0.030	0.817	550



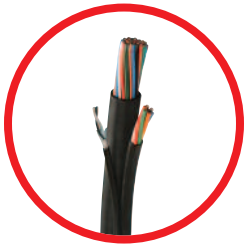
IMSA 20-1 Signal Cable 600V

CONDUCTORS: Solid Bare Copper per ASTM B-3 or
Stranded Bare Copper per ASTM B-8, & B-174
16 – 10 AWG

INSULATION: High Density Polyethylene

JACKET: High Density Polyethylene

Part Number	Gauge	No. Cond.	Stranding	Insulation Thickness	Jacket Thickness	Nominal O.D.	Weight lbs./mft
556202	16	2	Solid	0.025	0.045	0.283	54
556302	16	2	7/0.0192	0.025	0.045	0.295	57
556203	16	3	Solid	0.025	0.045	0.314	73
556303	16	3	7/0.0192	0.025	0.045	0.330	76
556204	16	4	Solid	0.025	0.045	0.344	91
556304	16	4	7/0.0192	0.025	0.045	0.364	95
556205	16	5	Solid	0.025	0.045	0.376	110
556305	16	5	7/0.0192	0.025	0.045	0.395	115
556207	16	7	Solid	0.025	0.045	0.406	146
556307	16	7	7/0.0192	0.025	0.045	0.428	152
556209	16	9	Solid	0.025	0.045	0.470	185
556309	16	9	7/0.0192	0.025	0.045	0.496	192
556212	16	12	Solid	0.025	0.045	0.548	253
556312	16	12	7/0.0192	0.025	0.045	0.578	263
559202	14	2	Solid	0.025	0.045	0.318	54
559302	14	2	7/.0242	0.025	0.045	0.336	58
559203	14	3	Solid	0.025	0.045	0.335	66
559303	14	3	7/.0242	0.025	0.045	0.354	70
559204	14	4	Solid	0.025	0.045	0.365	83
559304	14	4	7/.0242	0.025	0.045	0.386	89
559205	14	5	Solid	0.025	0.045	0.398	104
559305	14	5	7/.0242	0.025	0.045	0.422	111
559207	14	7	Solid	0.025	0.045	0.432	135
559307	14	7	7/.0242	0.025	0.045	0.459	144
559209	14	9	Solid	0.025	0.045	0.503	174
559309	14	9	7/.0242	0.025	0.060	0.565	196
559210	14	10	Solid	0.025	0.060	0.576	201
559310	14	10	7/.0242	0.025	0.060	0.612	214
559212	14	12	Solid	0.025	0.060	0.593	234
559312	14	12	7/.0242	0.025	0.060	0.630	243
559216	14	16	Solid	0.025	0.060	0.656	305
559316	14	16	7/.0242	0.025	0.060	0.698	325
559219	14	19	Solid	0.025	0.060	0.690	353
559319	14	19	7/.0242	0.025	0.060	0.735	376
559220	14	20	Solid	0.025	0.060	0.725	372
559320	14	20	7/.0242	0.025	0.060	0.773	396
559224	14	24	Solid	0.025	0.060	0.804	411
559324	14	24	7/.0242	0.025	0.080	0.898	493
559230	14	30	Solid	0.025	0.080	0.891	563
559330	14	30	7/.0242	0.025	0.080	0.948	600
559237	14	37	Solid	0.025	0.080	0.958	681
559337	14	37	7/.0242	0.025	0.080	1.021	726



IMSA 20-1 Signal Cable 600V

CONDUCTORS: Solid Bare Copper per ASTM B-3 or
Stranded Bare Copper per ASTM B-8, & B-174
16 – 10 AWG

INSULATION: High Density Polyethylene

JACKET: High Density Polyethylene

Part Number	Gauge	No. Cond.	Stranding	Insulation Thickness	Jacket Thickness	Nominal O.D.	Weight lbs./mft
559602	12	2	Solid	0.025	0.045	0.372	79
559702	12	2	7/.0305	0.025	0.045	0.394	84
559603	12	3	Solid	0.025	0.045	0.393	96
559703	12	3	7/.0305	0.025	0.045	0.417	102
559604	12	4	Solid	0.025	0.045	0.430	123
559704	12	4	7/.0305	0.025	0.045	0.456	131
559605	12	5	Solid	0.025	0.045	0.471	155
559705	12	5	7/.0305	0.025	0.045	0.500	165
559607	12	7	Solid	0.025	0.045	0.513	214
559707	12	7	7/.0305	0.025	0.060	0.576	226
559609	12	9	Solid	0.025	0.060	0.630	275
559709	12	9	7/.0305	0.025	0.060	0.670	291
559610	12	10	Solid	0.025	0.060	0.584	300
559710	12	10	7/.0305	0.025	0.060	0.728	317
559612	12	12	Solid	0.025	0.060	0.705	351
559712	12	12	7/.0305	0.025	0.060	0.751	372
559616	12	16	Solid	0.025	0.060	0.783	462
559716	12	16	7/.0242	0.025	0.080	0.874	511
559619	12	19	Solid	0.025	0.080	0.865	558
559719	12	19	7/.0242	0.025	0.080	0.920	590
559620	12	20	Solid	0.025	0.080	0.909	587
559720	12	20	7/.0242	0.025	0.080	0.967	622
559624	12	24	Solid	0.025	0.080	1.006	697
559724	12	24	7/.0242	0.025	0.080	1.072	738
559630	12	30	Solid	0.025	0.080	1.064	853
559730	12	30	7/.0242	0.025	0.080	1.134	902
559637	12	37	Solid	0.025	0.080	1.147	1036
559737	12	37	7/.0242	0.025	0.080	1.224	1097
556802	10	2	Solid	0.045	0.030	0.425	109
556812	10	2	7/.0385	0.045	0.030	0.443	107
556903	10	3	Solid	0.045	0.030	0.429	135
556913	10	3	7/.0385	0.045	0.030	0.469	155
559804	10	4	7/.0385	0.045	0.030	0.514	185
559807	10	7	7/.0385	0.045	0.030	0.648	321
559812	10	12	7/.0385	0.045	0.030	0.817	550

IMSA 40-4 Paired, PE Insulated PE Jacketed Integral Messenger Communication Cable with Electrical Shielding

- CONDUCTORS:** Solid Bare Copper
19 & 16 AWG Solid Bare Copper per ASTM B-8, & B-174 #16
- INSULATION:** High Density Polyethylene
- JACKET:** High Molecular Weight Polyethylene (HMWPE)
- CABLE SHIELD:** Copper Tape
- AERIAL MESSENGER:** Galvanized Steel

Part Number	Gauge	No. Pairs	Stranding	Jacket Thickness	Insulation Thickness	Nominal O.D.	Weight lbs./mft
559989	19	6	Solid	.015	.045	0.845	276
559990	19	12	Solid	.015	.065	1.025	371
559991	16	6	Solid	.020	.060	1.030	355

IMSA 20-4 Paired, Polyethylene Insulated Polyethylene Jacket, Integral Messenger with Electrical Shielding

- CONDUCTORS:** Solid Bare Copper
19 & 16 AWG Solid Bare Copper per ASTM B-8, & B-174 #16
- INSULATION:** High Density Polyethylene
- JACKET:** High Molecular Weight Polyethylene (HMWPE)
- CABLE SHIELD:** Copper Tape
- AERIAL MESSENGER:** Galvanized Steel

Part Number	Gauge	No. Pairs	Stranding	Jacket Thickness	Insulation Thickness	Nominal O.D.	Weight lbs./mft
559992	16	12	Solid	.020	.060	1.194	370
559993	16	6	Solid	.025	.060	1.080	220
559994	16	6	Solid	.025	.060	1.262	205
559995	19	6	Solid	.025	.060	1.000	119

IMSA 20-3 Polyethylene Insulated, Polyethylene Jacket, Integral Messenger Cable

- CONDUCTORS:** Solid Bare Copper
14 AWG Stranded Bare Copper per ASTM B-8, & B-174 #16
- INSULATION:** High Density Polyethylene
- JACKET:** High Molecular Weight Polyethylene (HMWPE)
- CABLE SHIELD:** Copper Tape
- AERIAL MESSENGER:** Galvanized Steel

Part Number	Gauge	No. Cond.	Stranding	Jacket Thickness	Insulation Thickness	Nominal O.D.	Weight lbs./mft
559996	14	2	Stranded	.025	.045	0.760	210
559997	14	3	Stranded	.025	.045	0.780	221
559998	14	4	Stranded	.025	.045	0.820	285
559983	14	7	Stranded	.025	.045	0.885	295
559999	14	10	Stranded	.025	.060	1.070	366
559982	14	12	Stranded	.025	.060	1.080	354



Royal® XHHW-2

-40°C to 90°C Wet/Dry 600V, UL/cUL

- CONDUCTORS:** 8 AWG – 500 MCM fully annealed stranded bare copper
Class B stranding in accordance with ASTM B 8
- INSULATION:** Flame-retardant Cross-Linked Polyethylene (XLPE)
- LEGEND:** **8 AWG - 1 AWG:** CCI ROYAL XX AWG (XX MM²) E137925 (UL) XHHW-2 90C 600V -- C(UL) RW90 XLPE 90C WET OR DRY 600V FT1 - SUN RES
1/0 - 500 MCM: CCI Royal XX AWG (XX MM²) E137925 (UL) XHHW-2 90C 600V FOR CT USE VW-1 -- 156016 CSA RW90 90C DRY/90C WET 600V PRI -40C SUN RES FT1 FT4/IEEE 1202
- FEATURES:** Excellent flame resistance, UL Listed XHHW-2 for general power or control wiring in accordance with the NEC, Excellent physical, electrical, and thermal characteristics, Excellent low coefficient of friction properties, Oil Resistant I & II, Gasoline Resistant I & II, Sunlight Resistant
- APPLICATIONS:** Distribution board, panel board and switch board wiring for instrumentation and control
Suitable for low toxicity applications
General purpose building wire for use in cable tray or approved raceways not exceeding 600 volts
- OPTIONS:** VW-1, Tinned copper and colors available upon request
- INDUSTRY APPROVALS:** ICEA S-95-658/NEMA WC 70
UL Standard 44, Type XHHW-2—600 volt
CSA Standard C22.2 No. 38 Type RW 90
In compliance with EPA 40 CFR, Part 261 (Leachable Lead per Method TCLP)
RoHS and REACH Compliant*
UL, VW, CSA, ETL, ASTM B3, ASTM B8

Part Number	Gauge	Stranding	Insulation Thickness		Nominal O.D.		Weight		Amps*
			in.	mm.	in.	mm.	lbs./mft	kg/km	
18014	14	7/.0242	0.030	0.762	0.136	3.45	18	27	35
18012	12	7/.0305	0.030	0.762	0.154	3.91	28	42	40
18011	10	7/.0385	0.030	0.762	0.177	4.49	41	61	55
18080	8	7/.0486	0.045	1.14	0.240	6.10	70	104	80
18060	6	7/.0612	0.045	1.14	0.277	7.04	105	156	105
18040	4	7/.0772	0.045	1.14	0.325	8.26	155	231	140
18030	3	7/.0867	0.045	1.14	0.346	8.79	184	274	165
18020	2	7/.0974	0.045	1.14	0.381	9.68	243	362	190
18010	1	19/.0664	0.055	1.40	0.443	11.25	313	466	220
18100	1/0	19/.0745	0.055	1.40	0.483	12.27	380	565	260
18200	2/0	19/.0837	0.055	1.40	0.530	13.46	470	699	300
18300	3/0	19/.0940	0.055	1.40	0.578	14.68	581	865	350
18400	4/0	19/.1055	0.055	1.40	0.634	16.10	711	1058	405
18250	250 MCM	37/.0822	0.065	1.65	0.703	17.86	877	1305	455
18330	300 MCM	37/.0900	0.065	1.65	0.745	18.92	1012	1506	505
18350	350 MCM	37/.0974	0.065	1.65	0.811	20.60	1231	1832	570
18440	400 MCM	37/.1014	0.065	1.65	0.840	21.34	1390	2068	615
18500	500 MCM	37/.1162	0.065	1.65	0.941	23.88	1709	2543	700
18600	600 MCM	61/.0992	0.080	2.03	1.055	26.80	2046	3045	780
18750	750 MCM	61/.1109	0.090	2.28	1.155	29.37	2660	3959	885

*Ampacity based on NEC Table 310.17. Dimensions and weights are nominal and are subject to industry tolerances unless otherwise noted.



Southwire Company, LLC
1-866-706-9473 • www.southwire.com



Royal® XLP USE-2

-40°C to 90°C 600V, UL

- CONDUCTOR:** 14 AWG - 1000 MCM fully annealed stranded bare copper
Class B Stranding per ASTM B 8
- INSULATION:** Black flame retardant cross-linked polyethylene (XLPE)
- LEGEND:** **14 AWG - 2 AWG:** CCI ROYAL XX AWG TYPE USE-2 OR RHH/RHW-2 E# (UL)90C 600V --- MO/YR --- SEQ FT - SUN RES VW-1
1/0 AWG - 1000 MCM: CCI ROYAL XX AWG TYPE USE-2 OR RHH/RHW-2 E# (UL)90C 600V FOR CT USE --- MO/YR --- SEQ FT - SUN RES VW-1
- FEATURES:** Rated 90°C wet or dry
Superior electrical and physical properties
Excellent moisture resistance
Resistant to heat deformation and crush
Direct burial approved
Sunlight resistant
-40°C impact resistant
Oil resistant I & II, Gasoline resistant I & II
Excellent low coefficient of friction properties
- APPLICATIONS:** Well suited for a variety of industrial utility, and commercial applications
Can be used in raceways, conduit, direct burial, and aerial applications, and cable tray where CT rated (1/0 and larger)
- OPTIONS:** VW-1, Tinned copper and colors available upon request
- INDUSTRY APPROVALS:** UL 44 Type RHH/RHW-2 UL 854 Type USE-2
ICEA S-95-658/NEMA WC70 Listed for CT use if 1/0 or greater
FT4/IEEE 383 if 1/0 or greater VW-1
EPA 40CFR, Part 26, Subpart C
(Heavy metals per table 1, TCLP method)
CSA standard C22.2 No. 38, RW90, PRI, 600V (AWG 10-14 only)
RoHS and REACH Compliant*



Part Number	Gauge	Stranding	Insulation Thickness		Nominal O.D.		Weight	
			in.	mm.	in.	mm.	lbs./mft	kg/km
19514	14	7/.0242	0.045	1.14	0.164	4.16	23	35
19512	12	7/.0305	0.045	1.14	0.184	4.67	32	48
19510	10	7/.0385	0.045	1.14	0.207	5.25	47	70
19508	8	7/.0486	0.060	1.52	0.268	6.80	76	113
19506	6	7/.0612	0.060	1.52	0.306	7.77	111	165
19504	4	7/.0772	0.060	1.52	0.354	8.99	165	245
19502	2	7/.0974	0.060	1.52	0.414	10.51	248	369
19511	1	7/.1093	0.080	2.03	0.497	12.62	320	476
19521	1/0	19/.0745	0.080	2.03	0.534	13.56	393	585
19522	2/0	19/.0837	0.080	2.03	0.538	14.79	488	727
19523	3/0	19/.0940	0.080	2.03	0.618	15.70	604	898
19524	4/0	19/.1055	0.080	2.03	0.692	17.57	741	1103
19525	250 MCM	37/.0822	0.095	2.41	0.764	19.40	883	1315
19535	350 MCM	37/.0974	0.095	2.41	0.873	22.17	1206	1795
19555	500 MCM	37/.1162	0.095	2.41	1.005	25.52	1687	2510
19575	750 MCM	61/.1109	0.110	2.79	1.250	31.75	2512	3738
19599	1000 MCM	61/.1280	0.110	2.79	1.400	35.56	3320	4940

Dimensions and weights are nominal and are subject to industry tolerances unless otherwise noted.





Royal® BARE COPPER

CONDUCTORS: 14 AWG - 6 AWG Annealed Solid Bare Copper per ASTM B 3
8 AWG - 500 MCM Stranded Bare Copper per ASTM B 8, B 173

FEATURES: 100% Electrical Conductivity (IACS)
Flexible, easily shaped and contoured into place
Easily welded and soldered

APPLICATIONS: Used in overhead electrical transmission and distribution systems
Used for grounding grid systems

STANDARD REELS: 500' (05) 2,500' (09)
1,000' (06) 3,000' (13)

OPTIONS: Other strand sizes and combinations available (minimums may apply)
Other packaging options available upon request (minimums may apply)

Part Number	Gauge	Stranding	Nominal O.D.		Weight	
			in.	mm.	lbs./mft	kg/km
F54601	14	Solid	0.0638	1.62	12.4	18
F54602	12	Solid	0.0807	2.05	19.8	29
F54603	10	Solid	0.102	2.59	31.4	47
F54604	8	Solid	0.128	3.25	50.0	74
F54685	6	Solid	0.162	4.11	79.0	118
F54644	4	Solid	0.204	5.18	128.8	192
F54614	8	7/.0486	0.146	3.71	51.0	74
F54605	6	7/.0612	0.184	4.67	81.0	119
F54606	4	7/.0772	0.232	5.89	129.0	192
F54633	3	7/.0867	0.264	6.71	285.0	424
F54607	2	7/.0974	0.292	7.42	205.0	305
F54608	1/0	19/.0745	0.372	9.45	326.0	485
F54609	2/0	19/.0837	0.418	10.62	411.0	612
F54610	3/0	19/.0940	0.47	11.94	518.0	771
F54611	4/0	19/.1055	0.528	13.41	653.0	952
F54625	250 MCM	37/.0822	0.575	14.61	772.0	1149
F54635	350 MCM	37/.0973	0.681	17.30	1082.0	1610
F54650	500 MCM	37/.1162	0.813	20.65	1543	2296
F54679	750 MCM	61/1109				

Dimensions and weights are nominal and are subject to industry tolerances unless otherwise noted.





Offering The Broadest

INDUSTRIAL

Portable Cord: SEOW/SOOW

18 AWG – 2 AWG; 2 – 5 Conductors

Control Cable: SEOW/SOOW

18 AWG – 10 AWG; 6 – 52 Conductors

Bus Drop Cable

14 AWG – 2 AWG

Welding Cable

8 AWG – 500 MCM

XHHW-2

8 AWG – 1000 MCM

XLP USE-2

14 AWG – 1000 MCM

TFFN/TFN/THHN

Circuit Sizes: 18 AWG – 16 AWG

Power Sizes: 8 AWG – 750 MCM

Bare Copper

18 AWG – 750 MCM

Diesel Locomotive Cable (DLO)

8 AWG – 777 MCM

Type W, G, G-GC

8 AWG – 500 MCM; 1 – 5 Conductors

Stage & Lighting Cable

8 AWG – 4/0

Airport Lighting Cable (FAA-L-824)

12 AWG – 4 AWG; 600V + 5KV

Compact 600®

18 AWG – 10 AWG; 2-37 Conductors

300V PLTC / 600V Instrumentation

PVC/PVC, THHN/PVC, XLPE/PVC, XLPE/CPE,

EPR/CPE, EPR/LSZH

20 AWG - 16 AWG

Tray Cables

PVC/PVC, THHN/PVC, XLPE/PVC, XLPE/CPE,

EPR/CPE, EPR/LSZH, 20/10 Control

Circuit Sizes: 18 AWG – 10 AWG; 2 – 37 Conductors

Power Sizes: 8 AWG – 500 MCM

Traffic Signal

IMSA 19-1, 20-1,50-2, 51-3, 51-5, 51-7

Armored MC Cable

Instrumentation and Control

THERMOCOUPLE:

Fiberglass/Fiberglass

S Fiberglass/ S Fiberglass

Vitreous Silica/Vitreous Silica

Ceramic Fiber/Ceramic Fiber

Kapton®/Kapton®

PTFE/PTFE

PFA/PFA

FEP/FEP

SRG Fiberglass Braid

PVC/PVC



st Line of Professional Products

ROYAL[®]

 **Continental**[®]
HIGH TEMP WIRE & CABLE

 **Copperfield**[®]

Seoprene[®]

ExCELENE[®]

LEAD WIRE

Lead Wire; 26 AWG – 750 MCM

MTW - 1015; 18 AWG – 750 MCM

Appliance Wire

AWM 1061/1007-1569/1015/1028/
1283/1284/3173/3321/3239/3499

Automotive Wire

TWP/GPT/TXL/GXL/SXL

Mil-W-16878 Type B & C

26 AWG – 16 AWG

SIS Switchboard Cable

14 AWG – 4/0 AWG; VW-1

Battery Cable

SGT/SGX/STX; 6 AWG – 4/0

HIGH TEMPERATURE:

SF-2 SEW-2 200C 600V

SFF-2 SEWF-2 150C 600V

SRG ML 150C-200C 600V

SRK ML 150C-200C 600V

SRGT 200C 600V UL 3568

FEP 200C

300V UL 1332

600V UL 1330

1000V UL 10203

PFA 250C

300V UL 1726

600V UL 1727

PFAH 250C 600V

TEFZEL[®] (ETFE) 200C

300V UL 10109

600V UL 10086

TEFZEL[®] (ETFE) 150C(302F)

600V Type Z

TGGT 250C

300V UL 5180, 5257

600V UL 5256, 5214

600V UL 5196 (Heavy Wall)

EZMG 450C

300V UL 5128 (EZ STRIP)

600V 5107 (EZ STRIP)

MG LITE 450C 300V UL 5360

MG LITE 450C 600V UL 5359

MULTI-CONDUCTOR HIGH TEMP:

Flamrox[®] High Performance Cable

SRG-G Control Cables

SRG-K Cables

Soaking Pit Cables

SRG-S Cables

TGGTG Cables

MGG Cables



Southwire Company, LLC.

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Notes:

Southwire Company, LLC. International Municipal Signal Association (IMSA) compliant Wire & Cable



IMSA Specification	Title
19-1	Polyethylene Insulated, PVC Jacketed Single Cable
20-1	Polyethylene Insulated, Polyethylene Jacketed Single Cable
20-3	Polyethylene Insulated, Polyethylene Jacket, Integral Messenger Cable
20-4	Paired, Polyethylene Insulated Polyethylene Jacket, Integral Messenger with Electrical Shielding
50-2	Polyethylene Insulated, Polyethylene Jacketed Loop Detector Lead-In Cable
51-3	Cross Linked Polyethylene Loop Detector Wire [(UL) XHHW-2/USE] Optional
51-5	PVC Insulated, Nylon Jacketed, Loosely Encased in a PVC or PE Tube Loop Detector Wire
51-7	Cross Linked Polyethylene Loosely Encased in a PVC or PE Tube Loop Detector Wire
40-4	Paired, PE Insulated, PE Jacketed Integral Messenger Communication Cable with Electrical Shielding

Southwire Company manufactures IMSA cable in accordance with Individual State DOT Specifications, as well as other ancillary products for Traffic Signal monitoring applications:

- Closed Circuit TV Coaxial Cable
- Stranded Bare Copper Ground wire
- Stranded XHHW-2 Lead Wire
- Stranded THHN Ground Wire
- Hybrid Coaxial Camera & AC Power Cables
- Solid Bare Copper Ground Wire
- Stranded USE-2 Lead Wire
- 50 OHM Coaxial RF Cable for land mobile radio

Standard Packaging:

Non-Returnable wood reels in 1,000 ft., 2,500 ft., or 5,000 ft. lengths; special length requirements accommodated on manufactured to order basis.

Contact us for **ALL** your IMSA cable needs at: www.southwire.com





Southwire[®]

**To order call your sales representative or
call customer service at 1-866-706-9473**

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