

URD

- Underground Distribution Power Cable (URD)
15 TO 35kV
- 175 MIL TRXLP 15KV URD Cable 100% Insulation Level
- 220 MIL TRXLP 15KV URD Cable 133% Insulation Level
- 260 MIL TRXLP 25KV URD Cable 100% Insulation Level
- 345 MIL TRXLP 35KV URD Cable 100% Insulation Level

URD

Underground
Distribution Power Cable

Underground Distribution Power Cable (URD)

15 TO 35kV

APPLICATIONS

Medium voltage URD suitable for Primary Underground Distribution system; buried directly or installed in underground ducts or conduits or exposed to sunlight for above ground application.

To be used at 15 to 35kV. Rated for continuous operation at 90°C conductor temperature.

DESCRIPTION

Conductor:	Bare aluminum or copper stranded class B conductor (compressed stranding) And Optional Sealant for Stranded Conductors is available upon request.
Conductor Shield:	Extruded semi-conducting conductor shield.
Insulation:	Ethylene propylene rubber(EPR) or Cross-linked polyethylene(XLP) or Tree-retardant Cross-linked polyethylene(TR-XLP) insulation.
Insulation shield:	Extruded semi-conducting insulation shield
Neutral Wires:	Uncoated copper concentric neutral wires. Optional Water Blocking Component for Neutral Wire is available upon request.
Embedded jacket:	Non-conducting linear low density PE(LLDPE) encapsulating jacket with extruded red stripes. Polyvinyl Chloride(PVC) is available upon request.

SPECIFICATIONS

Gaon URD cable meets or exceeds the following ASTM specifications:

B-3	Soft Annealed Copper wire.
B-8	Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard or Soft
B-230	Aluminum, 1350-H19 Wire for Electrical Purposes.
B-231	Aluminum 1350 Conductors, Concentric-Lay-Stranded.

Gaon URD cable meets or exceeds all applicable requirements of ICEA S-94-649 and AEIC CS 8 and all cables produced under this specifications are suitable for 15 to 35 kV.

MAXIMUM CONDUCTOR TEMPERATURE

Normal continuous	90°C
Overload	130°C
Short circuit	250°C

OPTIONS

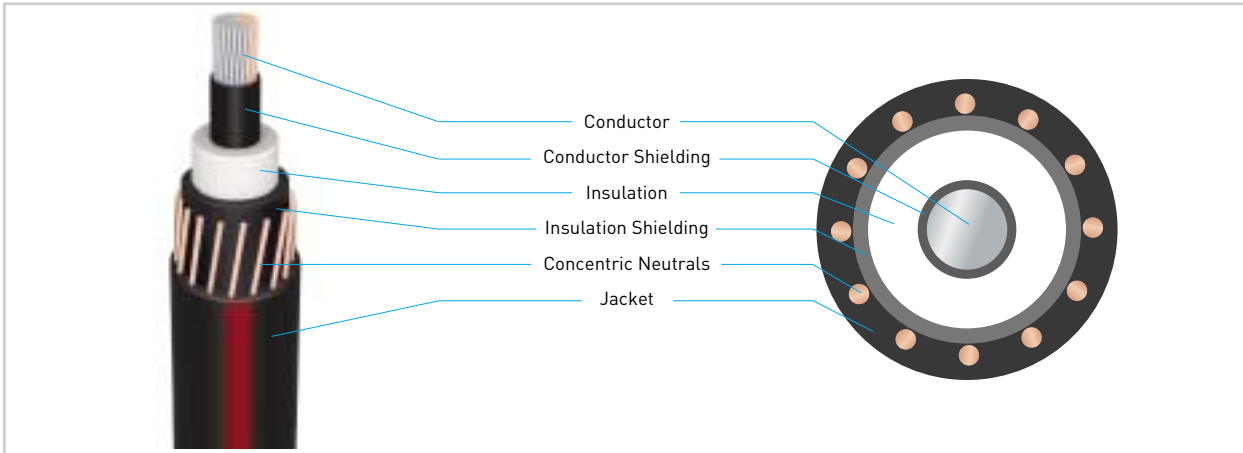
- Parallel - Triplex - Strand Filled

FEATURES

- Simultaneous extrusion of conductor shield, insulation and insulation shield (triple tandem extrusion, dry curing process) combines to form a virtually perfect cable core eliminating unequal electrical stress.
- XLP insulation offers low moisture absorption, good chemical resistance, low dielectric loss and high dielectric strength. TR-XLP offers tree-retardant characteristics.
- Concentric copper neutral wires are approximately evenly spaced.

175 MIL TRXLP 15KV URD Cable 100% Insulation Level

ALUMINUM CONDUCTOR



Conductor		Copper Neutral		Diameters(mils)					Weights 1000 ft.(lbs.)		Ampacity		
AWG Or kcmil	Stranding	Number of Wires	Size (AWG)	Cond.	Over Insl ±.03"	Over Insl Shield ±.05"	Over Neutral Wires	Over Embedded Jacket	Total w/o jacket	Total w/ Embedded jacket	1/C Direct Buried	1/C Duct Buried	1/C Duct In air
FULL NEUTRAL													
2	7	10	14	.283	.695	.775	.903	1.003	370	487	170	115	100
1	19	13	14	.322	.730	.810	.938	1.038	437	556	195	140	123
1/0	19	16	14	.362	.770	.850	.978	1.078	510	632	230	155	135
2/0	19	13	12	.405	.815	.895	1.057	1.157	616	760	270	185	162
3/0	19	16	12	.456	.865	.945	1.107	1.207	730	874	295	210	184
4/0	19	20	12	.512	.920	1.000	1.162	1.262	875	1030	335	240	210
ONE-THIRD NEUTRAL											3/C Direct Buried	3/C Duct Buried	3/C Duct In air
1/0	19	6	14	.362	.770	.850	.978	1.078	373	515	230	165	145
2/0	19	7	14	.405	.815	.895	1.023	1.123	434	575	250	190	167
3/0	19	9	14	.456	.865	.945	1.073	1.173	510	655	280	215	189
4/0	19	11	14	.512	.920	1.000	1.128	1.228	598	759	320	245	215
250	37	13	14	.558	.980	1.060	1.188	1.288	684	889	345	270	237
350	37	11	12	.660	1.080	1.200	1.362	1.462	913	1175	405	325	285
500	37	16	12	.789	1.210	1.330	1.492	1.562	1207	1498	460	385	338
750	61	15	10	.968	1.400	1.520	1.724	1.884	1685	2057	515	475	417
1000	61	20	10	1.117	1.545	1.705	1.909	2.069	2210	2516	565	540	475

- Other size of concentric neutral, strand filled is available upon request

COPPER CONDUCTOR

Conductor		Copper Neutral		Diameters(mils)					Weights 1000 ft.(lbs.)		Ampacity		
AWG Or kcmil	Stranding	Number of Wires	Size (AWG)	Cond.	Over Insl ±.03"	Over insl Shield ±.05"	Over Neutral Wires	Over Embedded Jacket	Total w/o jacket	Total w/ Embedded jacket	1/C Direct Buried	1/C Duct Buried	1/C Duct In air
FULL NEUTRAL													
2	7	16	14	.283	.695	.775	.902	1.003	642	700	225	160	140
1	19	13	12	.322	.730	.810	.972	1.072	504	570	260	185	162
1/0	19	16	12	.362	.770	.850	1.012	1.112	923	993	295	210	185
2/0	19	20	12	.405	.815	.895	1.057	1.157	1107	1176	330	240	210
3/0	19	25	12	.456	.865	.945	1.107	1.207	1334	1402	375	270	237
4/0	19	32	12	.512	.920	1.000	1.162	1.262	1642	1708	430	305	268
ONE-THIRD NEUTRAL											3/C Direct Buried	3/C Duct Buried	3/C Duct In air
1/0	19	9	14	.362	.770	.850	.978	1.078	708	777	290	210	185
2/0	19	11	14	.405	.815	.899	1.023	1.123	836	907	320	240	210
3/0	19	14	14	.456	.865	.945	1.073	1.173	1002	1074	350	275	241
4/0	19	11	12	.512	.920	1.000	1.162	1.262	1227	1317	390	315	276
250	37	13	12	.558	.980	1.030	1.222	1.322	1427	1546	415	340	298
350	37	12	10	.660	1.080	1.200	1.404	1.504	1904	2055	475	415	364
500	37	17	10	.789	1.210	1.330	1.534	1.694	2664	2823	525	480	420
750	61	25	10	.968	1.400	1.520	1.724	1.884	3794	3964	560	530	465
1000	61	33	10	1.117	1.545	1.705	1.945	2.106	4948	5127	600	590	518

- Other size of concentric neutral, strand filled is available upon request

Bare Wire

OPGW

Insulated Wire

Grounding Wire

Instrument Cable

Control Cable

Power Cable

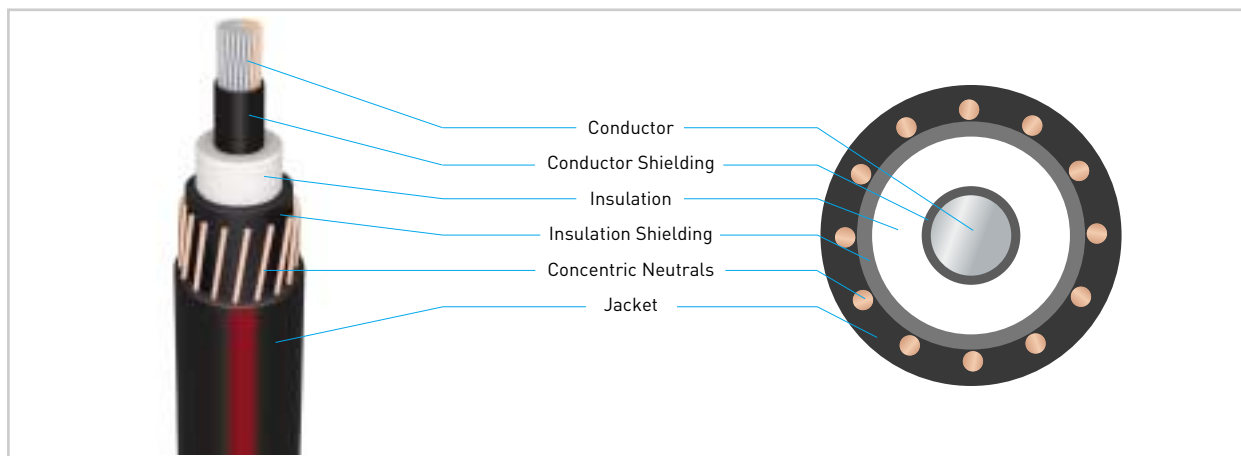
URD

Bare Wire

Bare Wire

220 MIL TRXLP 15KV URD Cable 133% Insulation Level

ALUMINUM CONDUCTOR



Conductor		Copper Neutral		Diameters(mils)					Weights 1000 ft.(lbs.)		Ampacity		
AWG Or kcmil	Stranding	Number of Wires	Size (AWG)	Cond.	Over Insl ±.03"	Over Insl Shield ±.05"	Over Neutral Wires	Over Embedded Jacket	Total w/o jacket	Total w/ Embedded jacket	1/C Direct Buried	1/C Duct Buried	1/C Duct In air
FULL NEUTRAL													
2	7	10	14	.283	.785	.865	.993	1.093	415	549	170	115	100
1	19	13	14	.322	.820	.900	1.028	1.128	487	619	195	140	123
1/0	19	16	14	.362	.860	.940	1.068	1.168	562	697	230	155	135
2/0	19	13	12	.405	.905	.985	1.147	1.247	670	830	270	185	162
3/0	19	16	12	.456	.955	1.035	1.197	1.297	787	946	295	210	184
4/0	19	20	12	.512	1.010	1.090	1.252	1.352	934	1148	335	240	210
ONE-THIRD NEUTRAL											3/C Direct Buried	3/C Duct Buried	3/C Duct In air
1/0	19	6	14	.362	.860	.940	1.068	1.168	441	580	230	165	145
2/0	19	7	14	.405	.905	.985	1.113	1.213	490	643	250	190	167
3/0	19	9	14	.456	.955	1.035	1.163	1.263	567	725	280	215	189
4/0	19	11	14	.512	1.010	1.090	1.218	1.318	656	842	320	245	215
250	37	13	14	.558	1.070	1.190	1.318	1.418	781	1013	345	270	237
350	37	11	12	.660	1.170	1.290	1.452	1.612	987	1266	405	325	285
500	37	16	12	.789	1.300	1.420	1.582	1.742	1284	1597	460	385	338
750	61	15	10	.968	1.490	1.610	1.814	1.974	1774	2230	515	475	417
1000	61	20	10	1.117	1.635	1.795	1.999	2.159	2301	2718	565	540	475

- Other size of concentric neutral, strand filled is available upon request

COPPER CONDUCTOR

Conductor		Copper Neutral		Diameters(mils)					Weights 1000 ft.(lbs.)		Ampacity		
AWG Or kcmil	Stranding	Number of Wires	Size (AWG)	Cond.	Over Insl ±.03"	Over insl Shield ±.05"	Over Neutral Wires	Over Embedded Jacket	Total w/o jacket	Total w/ Embedded jacket	1/C Direct Buried	1/C Duct Buried	1/C Duct In air
FULL NEUTRAL													
2	7	16	14	.283	.785	.865	.993	1.093	695	760	225	160	140
1	19	13	12	.322	.820	.900	1.062	1.162	559	633	260	185	162
1/0	19	16	12	.362	.860	.940	1.102	1.202	982	1060	295	210	185
2/0	19	20	12	.405	.905	.985	1.147	1.247	1169	1246	330	240	210
3/0	19	25	12	.456	.955	1.035	1.197	1.293	1399	1475	375	270	237
4/0	19	32	12	.512	1.010	1.090	1.294	1.394	1747	1825	430	305	268
ONE-THIRD NEUTRAL											3/C Direct Buried	3/C Duct Buried	3/C Duct In air
1/0	19	9	14	.362	.860	.940	1.068	1.168	767	842	290	210	185
2/0	19	11	14	.405	.905	.985	1.113	1.213	897	975	320	240	210
3/0	19	14	14	.456	.955	1.035	1.163	1.263	1066	1145	350	275	241
4/0	19	11	12	.512	1.010	1.090	1.294	1.394	1333	1434	390	315	276
250	37	13	12	.558	1.070	1.190	1.352	1.452	1539	1673	415	340	298
350	37	12	10	.660	1.170	1.290	1.494	1.654	1987	2149	475	415	364
500	37	17	10	.789	1.300	1.420	1.624	1.784	2754	2924	525	480	420
750	61	25	10	.968	1.490	1.610	1.814	1.974	3952	4138	560	530	465
1000	61	33	10	1.117	1.635	1.795	1.999	2.159	5061	5251	600	590	518

- Other size of concentric neutral, strand filled is available upon request

Bare Wire

OPGW

Insulated Wire

Grounding Wire

Instrument Cable

Control Cable

Power Cable

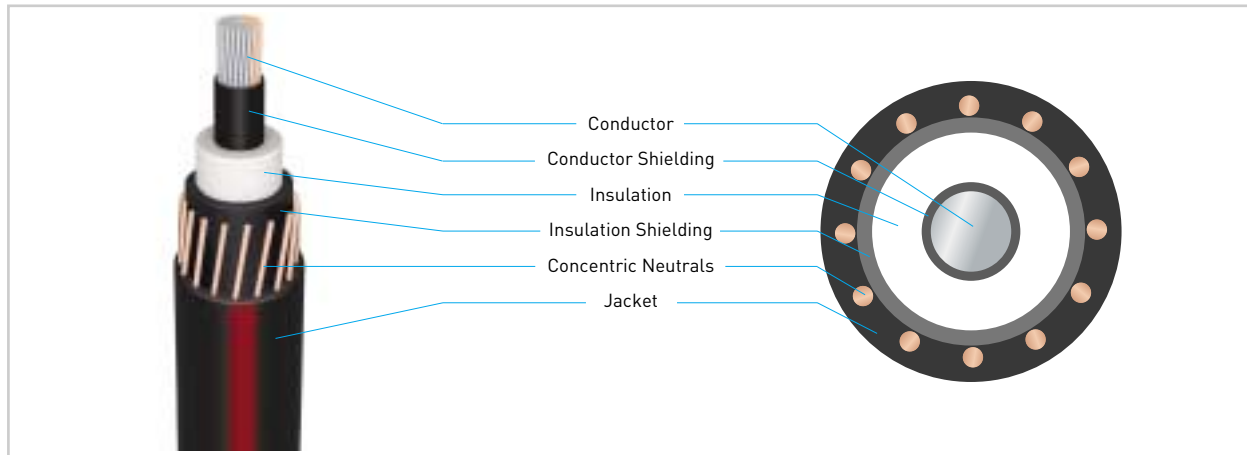
URD

Reference

Installation

260 MIL TRXLP 25KV URD Cable 100% Insulation Level

ALUMINUM CONDUCTOR



Conductor		Copper Neutral		Diameters(mils)					Weights 1000 ft.(lbs.)		Ampacity		
AWG Or kcmil	Stranding	Number of Wires	Size (AWG)	Cond.	Over Insl ±.03"	Over Insl Shield ±.05"	Over Neutral Wires	Over Embedded Jacket	Total w/o jacket	Total w/ Embedded jacket	1/C Direct Buried	1/C Duct Buried	1/C Duct In air
FULL NEUTRAL													
1	19	13	14	.322	.900	.980	1.108	1.208	535	687	195	145	127
1/0	19	16	14	.362	.940	1.022	1.150	1.250	614	767	220	165	145
2/0	19	13	12	.405	.985	1.065	1.227	1.327	722	905	250	190	167
3/0	19	16	12	.456	1.035	1.155	1.317	1.417	875	1065	290	210	185
4/0	19	20	12	.512	1.090	1.210	1.372	1.472	1025	1241	325	245	215
ONE-THIRD NEUTRAL											3/C Direct Buried	3/C Duct Buried	3/C Duct In air
1/0	19	6	14	.362	.940	1.022	1.150	1.250	475	650	225	165	145
2/0	19	7	14	.405	.985	1.065	1.193	1.293	540	715	250	180	158
3/0	19	9	14	.456	1.035	1.155	1.283	1.383	655	842	275	205	180
4/0	19	11	14	.512	1.090	1.210	1.338	1.438	750	966	310	240	210
250	37	13	14	.558	1.160	1.280	1.408	1.508	852	1117	335	260	228
350	37	11	12	.660	1.260	1.380	1.542	1.702	1060	1380	395	325	285
500	37	16	12	.789	1.390	1.510	1.672	1.832	1369	1721	445	390	342
750	61	15	10	.968	1.580	1.740	1.944	2.104	1920	2373	515	475	417
1000	61	20	10	1.117	1.725	1.885	2.089	2.249	2405	2870	560	525	460

- Other size of concentric neutral, strand filled is available upon request

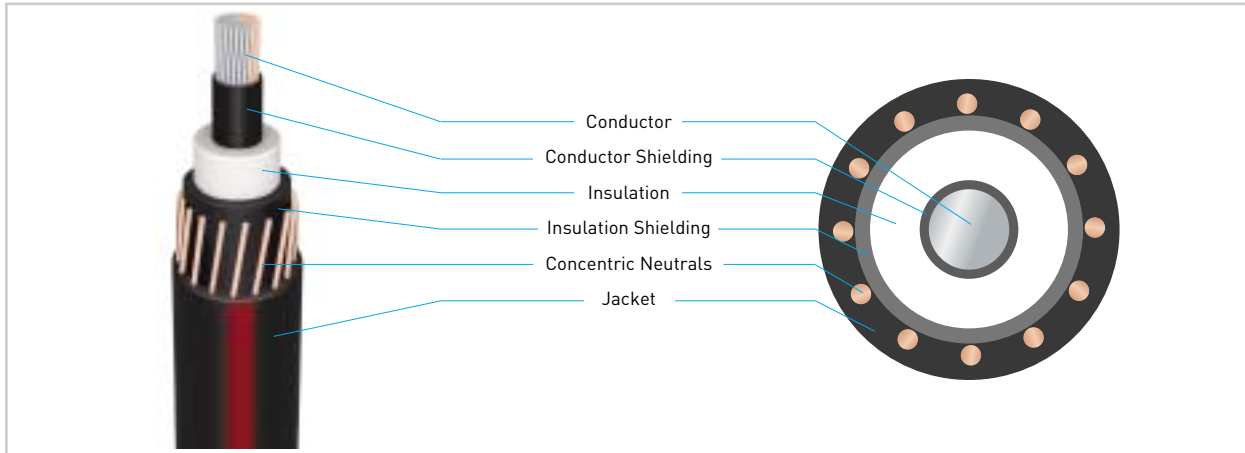
COPPER CONDUCTOR

Conductor		Copper Neutral		Diameters(mils)					Weights 1000 ft.(lbs.)		Ampacity		
AWG Or kcmil	Stranding	Number of Wires	Size (AWG)	Cond.	Over Insl ±.03"	Over Insl Shield ±.05"	Over Neutral Wires	Over Embedded Jacket	Total w/o jacket	Total w/ Embedded jacket	1/C Direct Buried	1/C Duct Buried	1/C Duct In air
FULL NEUTRAL													
1	19	13	12	.322	.900	.980	1.142	1.242	615	701	245	185	162
1/0	19	16	12	.362	.940	1.022	1.184	1.284	1044	1133	280	215	189
2/0	19	20	12	.405	.985	1.065	1.227	1.327	1232	1321	315	240	210
3/0	19	25	12	.456	1.035	1.155	1.317	1.417	1502	1594	360	275	241
4/0	19	32	12	.512	1.090	1.210	1.372	1.472	1828	1919	415	315	276
ONE-THIRD NEUTRAL											3/C Direct Buried	3/C Duct Buried	3/C Duct In air
1/0	19	9	14	.352	.940	1.022	1.150	1.250	826	912	275	215	189
2/0	19	11	14	.405	.985	1.065	1.193	1.293	960	1048	310	250	220
3/0	19	14	14	.456	1.035	1.155	1.283	1.383	1166	1261	345	285	250
4/0	19	11	12	.512	1.090	1.210	1.371	1.471	1414	1528	385	320	280
250	37	13	12	.558	1.160	1.280	1.442	1.602	1628	1780	410	345	303
350	37	12	10	.660	1.260	1.380	1.584	1.744	2083	2266	460	405	355
500	37	17	10	.789	1.390	1.510	1.714	1.874	2858	3050	520	470	412
750	61	25	10	.968	1.580	1.740	1.944	2.104	4071	4280	567	550	483
1000	61	33	10	1.117	1.725	1.885	2.089	2.249	5190	5404	625	615	540

- Other size of concentric neutral, strand filled is available upon request

345 MIL TRXLP 35KV URD Cable 100% Insulation Level

ALUMINUM CONDUCTOR



Conductor		Copper Neutral		Diameters(mils)					Weights 1000 ft.(lbs.)		Ampacity				
AWG Or kcmil	Stranding	Number of Wires	Size (AWG)	Cond.	Over Insl ±.03"	Over Insl Shield ±.05"	Over Neutral Wires	Over Embedded Jacket	Total w/o jacket	Total w/ Embedded jacket	1/C Direct Buried	1/C Duct Buried	1/C Duct In air		
FULL NEUTRAL															
1/0	9	16	14	.362	1.110	1.230	1.358	1.458	768	957	220	165	145		
2/0	19	13	12	.405	1.155	1.275	1.437	1.593	885	1105	250	195	310		
3/0	19	16	12	.456	1.205	1.325	1.487	1.647	1010	1231	285	220	193		
4/0	19	20	12	.512	1.260	1.380	1.542	1.702	1170	1421	325	250	220		
ONE-THIRD NEUTRAL											3/C Direct Buried	3/C Duct Buried	3/C Duct In air		
1/0	19	6	14	.362	1.110	1.230	1.358	1.458	635	840	215	165	145		
2/0	19	7	14	.405	1.155	1.275	1.403	1.503	703	911	245	190	167		
3/0	19	9	14	.456	1.205	1.325	1.453	1.613	790	1003	275	215	189		
4/0	19	11	14	.512	1.260	1.380	1.508	1.668	890	1120	305	245	215		
250	37	13	14	.558	1.335	1.455	1.583	1.743	1005	1305	335	270	238		
350	37	11	12	.660	1.435	1.555	1.717	1.877	1225	1584	390	320	280		
500	37	16	12	.789	1.565	1.725	1.887	2.047	1599	2001	440	385	338		
750	61	15	10	.968	1.755	1.915	2.119	2.279	2125	2623	515	475	417		
1000	61	20	10	1.117	1.900	2.060	2.264	2.424	2730	3137	570	535	470		

- Other size of concentric neutral, strand filled is available upon request

COPPER CONDUCTOR

Conductor		Copper Neutral		Diameters(mils)					Weights 1000 ft.(lbs.)		Ampacity		
AWG Or kcmil	Stranding	Number of Wires	Size (AWG)	Cond.	Over Insl ±.03"	Over Insl Shield ±.05"	Over Neutral Wires	Over Embedded Jacket	Total w/o jacket	Total w/ Embedded jacket	1/C Direct Buried	1/C Duct Buried	1/C Duct In air
FULL NEUTRAL													
1/0	19	16	12	.362	1.110	1.230	1.392	1.492	1218	1327	280	215	189
2/0	19	20	12	.405	1.155	1.275	1.437	1.597	1414	1522	310	240	211
3/0	19	25	12	.456	1.205	1.325	1.487	1.647	1653	1760	355	275	241
4/0	19	32	12	.512	1.260	1.380	1.542	1.702	1992	2099	410	315	276
ONE-THIRD NEUTRAL											3/C Direct Buried	3/C Duct Buried	3/C Duct In air
1/0	19	9	14	.362	1.110	1.230	1.358	1.458	999	1102	270	215	189
2/0	19	11	14	.405	1.155	1.275	1.403	1.503	1139	1244	305	240	211
3/0	19	14	14	.456	1.205	1.325	1.453	1.613	1316	1423	340	280	246
4/0	19	11	12	.512	1.260	1.380	1.542	1.702	1576	1707	380	315	276
250	37	13	12	.558	1.335	1.455	1.617	1.777	1799	1971	405	340	298
350	37	12	10	.660	1.435	1.555	1.759	1.919	2269	2474	460	400	350
500	37	17	10	.789	1.565	1.725	1.929	2.089	3117	3337	520	470	412
750	61	25	10	.968	1.755	1.915	2.119	2.279	4300	4531	567	550	483
1000	61	33	10	1.117	1.900	2.060	2.264	2.424	5435	5671	625	615	540

- Other size of concentric neutral, strand filled is available upon request

Bare Wire

OPGW

Insulated Wire

Grounding Wire

Instrument Cable

Control Cable

Power Cable

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Reference

Installation