VOLTAGE®

Proudly Powering Today and Tomorrow

MV CABLE

35kV MV-90 AL TR-XLPE 100% INS LLDPE **Anti-Termite**
35kV MV-90 AL TR-XLPE 133% INS LLDPE **Anti-Termite**
35kV MV-105 AL TR-XLPE 100% INS XLPE **Anti-Termite**
35kV MV-105 AL TR-XLPE 133% INS XLPE **Anti-Termite**



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Medium Voltage Cable

35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite

Construction

- Conductor: 1/0 AWG - 1500kcmil Class B compressed concentric lay stranded 1350-H19 aluminum
- Conductor Shield: Extruded semi-conducting thermoset polymeric stress control layer
- Insulation: Extruded tree-retardant cross-linked polyethylene
- Insulation Shield: Extruded semi-conducting thermoset layer, clean and free stripping from insulation
- Concentric Neutral: Helically applied, annealed, solid bare copper wires
- Inner Jacket: Black, non-conducting, sunlight resistant, linear low-density polyethylene jacket extruded to fill spaces between neutral wires
- Anti-Termite: Nylon Layer
- Sheath: Black sunlight resistant, linear low density polythylene jacket

Standards

- ANSI/ICEA S-94-649
- ANSI/ICEA T-27-581
- ANSI/ICEA T-34-664
- ANSI/ICEA P-45-482
- AEIC CS-8
- RUS U-1

RoHS COMPLIANT

Applications

- Primarily underground distribution
- Wet or dry locations, direct burial, duct, and where exposed to sunlight
- 35kV or less
- Conductor temperatures not to exceed 90°C for normal operation
- Insulation level: 100% Insulation level

Options

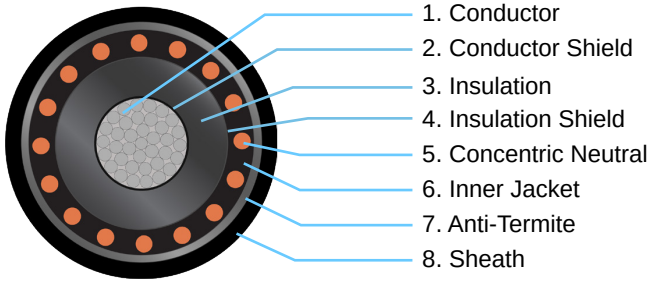
- EPR Insulation
- XLPE jacket
- TYPE MV-105
- Copper tape screen
- Different concentric neutral levels
- Other voltages available
- Other insulation levels

Packaging

- Material cut to length
- Shipped on steel reels
- Triplex or parallel packaging available

Sample Print

- Interval imprints with production date, time, cable type, sequential length in 2-foot increments





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35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.215	0.042	0.2153±j0.0549	0.2694±j0.7560	1,010	2,250	2,700	162	197	185
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.17	0.045	0.1704±j0.0529	0.2245±j0.7520	1,010	2,250	2,700	184	226	210
3/0	19	6	16	0.449	20	345	50	55	20	40	1.601	155	50	1,012	19.2	1,007	1,000	0.105	0.134	0.048	0.1345±j0.0509	0.1886±j0.7477	1,010	2,250	2,700	209	260	239
4/0	19	6	16	0.504	20	345	50	55	20	40	1.656	195	50	1,096	19.9	1,269	1,000	0.0836	0.107	0.052	0.1072±j0.0490	0.1613±j0.7435	1,010	2,250	2,700	237	298	271
250	37	6	16	0.547	20	345	50	55	20	40	1.699	230	50	1,171	20.4	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0477	0.1449±j0.7405	1,010	2,250	2,700	259	330	297
350	37	7	16	0.650	20	345	50	80	20	40	1.852	322	58	1,411	22.2	2,100	1,000	0.0505	0.065	0.061	0.0651±j0.0457	0.1192±j0.7326	1,170	2,630	3,150	312	405	357
500	37	7	14	0.773	20	345	50	80	20	40	2.001	460	93	1,715	24.0	3,000	1,000	0.0354	0.046	0.069	0.0457±j0.0439	0.0998±j0.7243	1,880	4,200	5,030	381	508	435
750	61	10	14	0.949	27	345	65	80	20	40	2.221	690	132	2,214	26.7	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0412	0.0849±j0.7155	2,680	6,000	7,180	474	651	542
1000	61	13	14	1.095	27	345	65	80	20	40	2.367	921	172	2,607	28.4	6,000	1,000	0.0177	0.023	0.090	0.0234±j0.0394	0.0776±j0.7093	3,480	7,800	9,340	552	774	631
1250	91	16	14	1.228	30	345	65	80	20	40	2.506	1,150	212	3,011	30.1	7,500	1,000	0.0141	0.019	0.099	0.0190±j0.0380	0.0731±j0.7040	4,290	9,590	11,490	622	887	709
1500	91	19	14	1.343	39	345	65	80	20	40	2.639	1,380	251	3,417	31.7	9,000	1,000	0.0118	0.016	0.107	0.0163±j0.0372	0.0704±j0.6996	5,090	11,390	13,640	680	984	775
1/6 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.215	0.042	0.2153±j0.0549	0.2694±j0.7560	1,010	2,250	2,700	162	197	185
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.17	0.045	0.1704±j0.0529	0.2245±j0.7520	1,010	2,250	2,700	184	226	210
3/0	19	7	16	0.449	20	345	50	55	20	40	1.601	155	58	1,020	19.2	1,007	1,000	0.105	0.134	0.048	0.1345±j0.0509	0.1886±j0.7477	1,170	2,630	3,150	209	260	239
4/0	19	9	16	0.504	20	345	50	55	20	40	1.656	195	7	1,119	19.9	1,269	1,000	0.0836	0.107	0.052	0.1072±j0.0490	0.1613±j0.7435	1,510	3,380	4,050	237	298	271
250	37	10	16	0.547	20	345	50	55	20	40	1.699	230	83	1,201	20.4	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0477	0.1449±j0.7405	1,680	3,760	4,500	259	330	297
350	37	9	14	0.650	20	345	50	80	20	40	1.878	322	119	1,498	22.5	2,100	1,000	0.0505	0.065	0.061	0.0651±j0.0460	0.1192±j0.7319	2,410	5,400	6,460	313	407	357
500	37	8	12	0.773	20	345	50	80	20	40	2.035	460	167	1,827	24.4	3,000	1,000	0.0354	0.046	0.069	0.0456±j0.0442	0.0998±j0.7236	3,390	7,590	9,090	382	510	436
750	61	19	14	0.949	27	345	65	80	20	40	2.221	690	251	2,320	26.7	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0412	0.0849±j0.7155	5,090	11,390	13,640	474	651	542
1000	61	16	12	1.095	27	345	65	80	20	40	2.401	921	335	2,807	28.8	6,000	1,000	0.0177	0.023	0.090	0.0234±j0.0397	0.0776±j0.7087	6,780	15,180	18,170	554	777	632
1250	91	20	12	1.228	30	345	65	80	20	40	2.540	1,150	419	3,253	30.5	7,500	1,000	0.0141	0.019	0.099	0.0190±j0.0384	0.0731±j0.7034	8,480	18,970	22,720	623	891	711
1500	91	24	12	1.343	39	345	65	80	20	40	2.673	1,380	502	3,702	32.1	9,000	1,000	0.0118	0.016	0.107	0.0163±j0.0375	0.0704±j0.6990	10,170	22,760	27,260	682	989	777

35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																												
1/0	19	6	14	0.354	20	345	50	55	20	40	1.532	97	79	933	18.4	633	1,000	0.168	0.215	0.042	0.2153±j0.0553	0.2694±j0.7552	1,600	3,590	4,300	162	198	185
2/0	19	11	16	0.398	20	345	50	55	20	40	1.550	122	91	977	18.6	799	1,000	0.133	0.17	0.045	0.1704±j0.0529	0.2245±j0.7520	1,850	4,140	4,960	184	226	210
3/0	19	14	16	0.449	20	345	50	55	20	40	1.601	155	116	1,072	19.2	1,007	1,000	0.105	0.134	0.048	0.1345±j0.0509	0.1886±j0.7477	2,350	5,270	6,310	209	260	239
4/0	19	11	14	0.504	20	345	50	55	20	40	1.682	195	145	1,211	20.2	1,269	1,000	0.0836	0.107	0.052	0.1072±j0.0494	0.1613±j0.7428	2,940	6,580	7,880	237	300	272
250	37	13	14	0.547	20	345	50	55	20	40	1.725	230	171	1,310	20.7	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0481	0.1449±j0.7398	3,480	7,780	9,310	260	331	297
350	37	18	14	0.650	20	345	50	80	20	40	1.878	322	237	1,604	22.5	2,100	1,000	0.0505	0.065	0.061	0.0651±j0.0460	0.1192±j0.7319	4,810	10,770	12,890	313	407	357
500	37	16	12	0.773	20	345	50	80	20	40	2.035	460	335	1,977	24.4	3,000	1,000	0.0354	0.046	0.069	0.0456±j0.0442	0.0998±j0.7236	6,800	15,210	18,210	382	510	436
750	61	15	10	0.949	27	345	65	80	20	40	2.297	690	500	2,656	27.6	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0420	0.0849±j0.7140	10,130	22,680	27,160	477	658	544
1000	61	20	10	1.095	27	345	65	80	20	40	2.443	921	667	3,171	29.3	6,000	1,000	0.0177	0.023	0.090	0.0234±j0.0401	0.0775±j0.7078	13,510	30,230	36,210	556	782	633
1250	91	20	9	1.228	30	345	65	80	20	40	2.606	1,150	841	3,745	31.3	7,500	1,000	0.0141	0.019	0.099	0.0190±j0.0390	0.0731±j0.7022	17,040	38,120	45,650	627	899	714
1500	91	24	9	1.343	39	345	65	80	20	40	2.739	1,380	1,009	4,275	32.9	9,000	1,000	0.0118	0.016	0.107	0.0163±j0.0380	0.0704±j0.6979	20,440	45,740	54,780	685	997	780
1/2 Neutral																												
1/0	19	8	14	0.354	20	345	50	55	20	40	1.532	97	105	957	18.4	633	1,000	0.168	0.215	0.042	0.2153±j0.0553	0.2694±j0.7552	2,140	4,790	5,730	162	198	185
2/0	19	10	14	0.398	20	345	50	55	20	40	1.576	122	132	1,041	18.9	799	1,000	0.133	0.17	0.045	0.1704±j0.0533	0.2245±j0.7512	2,670	5,980	7,160	184	227	211
3/0	19	13	14	0.449	20	345	50	55	20	40	1.627	155	171	1,150	19.5	1,007	1,000	0.105	0.134	0.048	0.1345±j0.0513	0.1886±j0.7470	3,480	7,780	9,310	210	261	240
4/0	19	10	12	0.504	20	345	50	55	20	40	1.716	195	210	1,306	20.6	1,269	1,000	0.0836	0.107	0.052	0.1072±j0.0498	0.1613±j0.7419	4,250	9,500	11,380	238	302	272
250	37	12	12	0.547	20	345	50	55	20	40	1.759	230	251	1,420	21.1	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0485	0.1449±j0.7389	5,100	11,400	13,660	261	333	298
350	37	11	10	0.650	20	345	50	80	20	40	1.954	322	367	1,816	23.5	2,100	1,000	0.0505	0.065	0.061	0.0651±j0.0470	0.1192±j0.7301	7,430	16,630	19,910	314	412	359
500	37	15	10	0.773	20	345	50	80	20	40	2.077	460	500	2,182	24.9	3,000	1,000	0.0354	0.046	0.069	0.0456±j0.0447	0.0998±j0.7227	10,130	22,680	27,160	383	513	437
750	61	18	9	0.949	27	345	65	80	20	40	2.321	690	757	2,925	27.9	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0422	0.0849±j0.7135	15,330	34,310	41,090	478	660	545
1000	61	24	9	1.095	27	345	65	80	20	40	2.467	921	1,009	3,519	29.6	6,000	1,000	0.0177	0.023	0.090	0.0234±j0.0403	0.0775±j0.7074	20,440	45,740	54,780	557	784	634
1250	91	24	8	1.228	30	345	65	80	20	40	2.636	1,150	1,273	4,181	31.6	7,500	1,000	0.0141	0.019	0.099	0.0190±j0.0392	0.0731±j0.7017	25,790	57,710	69,110	628	902	715
1500	91	28	8	1.343	39	345	65	80	20	40	2.769	1,380	1,485	4,753	33.2	9,000	1,000	0.0118	0.016	0.107	0.0163±j0.0383	0.0704±j0.6974	30,090	67,330	80,630	687	1,001	781

35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance									
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																											
1/0	19	11	14	0.354	20	345	50	55	20	40	1.532	97	145	992	18.4	633	1,000	0.168	0.215	0.042	0.2153±j0.0553	0.2694±j0.7552	2,940	6,580	7,880	162	198	185
2/0	19	21	16	0.398	20	345	50	55	20	40	1.550	122	174	1,052	18.6	799	1,000	0.133	0.17	0.045	0.1704±j0.0529	0.2245±j0.7520	3,530	7,900	9,460	184	226	210
3/0	19	17	14	0.449	20	345	50	55	20	40	1.627	155	224	1,197	19.5	1,007	1,000	0.105	0.134	0.048	0.1345±j0.0513	0.1886±j0.7470	4,540	10,170	12,180	210	261	240
4/0	19	14	12	0.504	20	345	50	55	20	40	1.716	195	294	1,382	20.6	1,269	1,000	0.0836	0.107	0.052	0.1072±j0.0498	0.1613±j0.7419	5,950	13,300	15,930	238	302	272
250	37	16	12	0.547	20	345	50	55	20	40	1.759	230	335	1,496	21.1	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0485	0.1449±j0.7389	6,800	15,210	18,210	261	333	298
350	37	22	12	0.650	20	345	50	80	20	40	1.912	322	461	1,847	22.9	2,100	1,000	0.0505	0.065	0.061	0.0651±j0.0465	0.1192±j0.7311	9,340	20,910	25,040	313	409	358
500	37	20	10	0.773	20	345	50	80	20	40	2.077	460	667	2,332	24.9	3,000	1,000	0.0354	0.046	0.069	0.0456±j0.0447	0.0998±j0.7227	13,510	30,230	36,210	383	513	437
750	61	24	9	0.949	27	345	65	80	20	40	2.321	690	1,009	3,151	27.9	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0422	0.0849±j0.7135	20,440	45,740	54,780	478	660	545
1000	61	25	8	1.095	27	345	65	80	20	40	2.497	921	1,326	3,849	30.0	6,000	1,000	0.0177	0.023	0.090	0.0234±j0.0406	0.0775±j0.7069	26,860	60,110	71,990	558	787	635
Full Neutral																											
1/0	19	10	12	0.354	20	345	50	55	20	40	1.566	97	210	1,085	18.8	633	1,000	0.168	0.215	0.042	0.2153±j0.0558	0.2694±j0.7542	4,250	9,500	11,380	163	199	186
2/0	19	13	12	0.398	20	345	50	55	20	40	1.610	122	273	1,202	19.3	799	1,000	0.133	0.17	0.045	0.1704±j0.0538	0.2245±j0.7502	5,520	12,350	14,800	185	228	211
3/0	19	16	12	0.449	20	345	50	55	20	40	1.661	155	335	1,333	19.9	1,007	1,000	0.105	0.134	0.048	0.1345±j0.0517	0.1886±j0.7461	6,800	15,210	18,210	210	263	240
4/0	19	13	10	0.504	20	345	50	55	20	40	1.758	195	433	1,555	21.1	1,269	1,000	0.0836	0.107	0.052	0.1072±j0.0504	0.1613±j0.7408	8,780	19,650	23,530	239	304	273
250	37	15	10	0.547	20	345	50	80	20	40	1.851	230	500	1,752	22.2	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0497	0.1449±j0.7366	10,130	22,680	27,160	262	336	299
350	37	21	10	0.650	20	345	50	80	20	40	1.954	322	700	2,115	23.5	2,100	1,000	0.0505	0.065	0.061	0.0651±j0.0470	0.1192±j0.7301	14,190	31,750	38,020	314	412	359
500	37	24	9	0.773	20	345	50	80	20	40	2.101	460	1,009	2,673	25.2	3,000	1,000	0.0354	0.046	0.069	0.0456±j0.0450	0.0998±j0.7221	20,440	45,740	54,780	384	515	438
750	61	28	8	0.949	27	345	65	80	20	40	2.351	690	1,485	3,621	28.2	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0425	0.0849±j0.7129	30,090	67,330	80,630	479	663	546

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at a single point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at a single point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at a single point.
3. Impedance: Calculations are based on trefoil formation / earth loop / conductor temperature of 90°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.
7. Shield Short-Circuit Current for 0.267 at 250°C and 0.267 at 350°C for reference only. Contact Voltage for capacity ratings.

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35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Flat

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.215	0.042	0.2152±j0.0602	0.2694±j0.7452	1,010	2,250	2,700	160	202	183
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.17	0.045	0.1704±j0.0582	0.2245±j0.7412	1,010	2,250	2,700	182	232	208
3/0	19	6	16	0.449	20	345	50	55	20	40	1.601	155	50	1,012	19.2	1,007	1,000	0.105	0.134	0.048	0.1344±j0.0562	0.1885±j0.7369	1,010	2,250	2,700	207	267	236
4/0	19	6	16	0.504	20	345	50	55	20	40	1.656	195	50	1,096	19.9	1,269	1,000	0.0836	0.107	0.052	0.1071±j0.0543	0.1612±j0.7327	1,010	2,250	2,700	234	306	268
250	37	6	16	0.547	20	345	50	55	20	40	1.699	230	50	1,171	20.4	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0530	0.1449±j0.7297	1,010	2,250	2,700	257	339	293
350	37	7	16	0.650	20	345	50	80	20	40	1.852	322	58	1,411	22.2	2,100	1,000	0.0505	0.065	0.061	0.0651±j0.0510	0.1191±j0.7218	1,170	2,630	3,150	309	416	352
500	37	7	14	0.773	20	345	50	80	20	40	2.001	460	93	1,715	24.0	3,000	1,000	0.0354	0.046	0.069	0.0457±j0.0492	0.0997±j0.7135	1,880	4,200	5,030	377	522	429
750	61	10	14	0.949	27	345	65	80	20	40	2.221	690	132	2,214	26.7	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0465	0.0849±j0.7047	2,680	6,000	7,180	469	670	534
1000	61	13	14	1.095	27	345	65	80	20	40	2.367	921	172	2,607	28.4	6,000	1,000	0.0177	0.023	0.090	0.0234±j0.0447	0.0775±j0.6985	3,480	7,800	9,340	546	797	621
1250	91	16	14	1.228	30	345	65	80	20	40	2.506	1,150	212	3,011	30.1	7,500	1,000	0.0141	0.019	0.099	0.0190±j0.0433	0.0731±j0.6932	4,290	9,590	11,490	614	914	698
1500	91	19	14	1.343	39	345	65	80	20	40	2.639	1,380	251	3,417	31.7	9,000	1,000	0.0118	0.016	0.107	0.0163±j0.0425	0.0704±j0.6888	5,090	11,390	13,640	672	1,015	762
1/6 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.215	0.042	0.2152±j0.0602	0.2694±j0.7452	1,010	2,250	2,700	160	202	183
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.17	0.045	0.1704±j0.0582	0.2245±j0.7412	1,010	2,250	2,700	182	232	208
3/0	19	7	16	0.449	20	345	50	55	20	40	1.601	155	58	1,020	19.2	1,007	1,000	0.105	0.134	0.048	0.1344±j0.0562	0.1885±j0.7369	1,170	2,630	3,150	207	267	236
4/0	19	9	16	0.504	20	345	50	55	20	40	1.656	195	75	1,119	19.9	1,269	1,000	0.0836	0.107	0.052	0.1071±j0.0543	0.1612±j0.7327	1,510	3,380	4,050	234	306	268
250	37	10	16	0.547	20	345	50	55	20	40	1.699	230	83	1,201	20.4	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0530	0.1449±j0.7297	1,680	3,760	4,500	257	339	293
350	37	9	14	0.650	20	345	50	80	20	40	1.878	322	119	1,498	22.5	2,100	1,000	0.0505	0.065	0.061	0.0651±j0.0514	0.1191±j0.7211	2,410	5,400	6,460	309	418	352
500	37	8	12	0.773	20	345	50	80	20	40	2.035	460	167	1,827	24.4	3,000	1,000	0.0354	0.046	0.069	0.0456±j0.0495	0.0997±j0.7128	3,390	7,590	9,090	378	524	430
750	61	19	14	0.949	27	345	65	80	20	40	2.221	690	251	2,320	26.7	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0465	0.0849±j0.7047	5,090	11,390	13,640	469	670	534
1000	61	16	12	1.095	27	345	65	80	20	40	2.401	921	335	2,807	28.8	6,000	1,000	0.0177	0.023	0.090	0.0234±j0.0450	0.0775±j0.6978	6,780	15,180	18,170	547	801	622
1250	91	20	12	1.228	30	345	65	80	20	40	2.540	1,150	419	3,253	30.5	7,500	1,000	0.0141	0.019	0.099	0.0190±j0.0436	0.0731±j0.6926	8,480	18,970	22,720	616	918	699
1500	91	24	12	1.343	39	345	65	80	20	40	2.673	1,380	502	3,702	32.1	9,000	1,000	0.0118	0.016	0.107	0.0163±j0.0428	0.0704±j0.6882	10,170	22,760	27,260	673	1,020	764

35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Flat

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	345	50	55	20	40	1.532	97	79	933	18.4	633	1,000	0.168	0.215	0.042	0.2152±j0.0606	0.2694±j0.7444	1,600	3,590	4,300	161	203	183
2/0	19	11	16	0.398	20	345	50	55	20	40	1.550	122	91	977	18.6	799	1,000	0.133	0.17	0.045	0.1704±j0.0582	0.2245±j0.7412	1,850	4,140	4,960	182	232	208
3/0	19	14	16	0.449	20	345	50	55	20	40	1.601	155	116	1,072	19.2	1,007	1,000	0.105	0.134	0.048	0.1344±j0.0562	0.1885±j0.7369	2,350	5,270	6,310	207	267	236
4/0	19	11	14	0.504	20	345	50	55	20	40	1.682	195	145	1,211	20.2	1,269	1,000	0.0836	0.107	0.052	0.1071±j0.0547	0.1612±j0.7320	2,940	6,580	7,880	235	308	268
250	37	13	14	0.547	20	345	50	55	20	40	1.725	230	171	1,310	20.7	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0534	0.1449±j0.7290	3,480	7,780	9,310	257	340	294
350	37	18	14	0.650	20	345	50	80	20	40	1.878	322	237	1,604	22.5	2,100	1,000	0.0505	0.065	0.061	0.0651±j0.0514	0.1191±j0.7211	4,810	10,770	12,890	309	418	352
500	37	16	12	0.773	20	345	50	80	20	40	2.035	460	335	1,977	24.4	3,000	1,000	0.0354	0.046	0.069	0.0456±j0.0495	0.0997±j0.7128	6,800	15,210	18,210	378	524	430
750	61	15	10	0.949	27	345	65	80	20	40	2.297	690	500	2,656	27.6	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0473	0.0849±j0.7032	10,130	22,680	27,160	472	677	536
1000	61	20	10	1.095	27	345	65	80	20	40	2.443	921	667	3,171	29.3	6,000	1,000	0.0177	0.023	0.090	0.0234±j0.0454	0.0775±j0.6970	13,510	30,230	36,210	549	805	623
1250	91	20	9	1.228	30	345	65	80	20	40	2.606	1,150	841	3,745	31.3	7,500	1,000	0.0141	0.019	0.099	0.0190±j0.0443	0.0731±j0.6914	17,040	38,120	45,650	619	926	702
1500	91	24	9	1.343	39	345	65	80	20	40	2.739	1,380	1,009	4,275	32.9	9,000	1,000	0.0118	0.016	0.107	0.0162±j0.0433	0.0703±j0.6871	20,440	45,740	54,780	676	1,028	767
1/2 Neutral																													
1/0	19	8	14	0.354	20	345	50	55	20	40	1.532	97	105	957	18.4	633	1,000	0.168	0.215	0.042	0.2152±j0.0606	0.2694±j0.7444	2,140	4,790	5,730	161	203	183
2/0	19	10	14	0.398	20	345	50	55	20	40	1.576	122	132	1,041	18.9	799	1,000	0.133	0.17	0.045	0.1704±j0.0586	0.2245±j0.7404	2,670	5,980	7,160	182	233	208
3/0	19	13	14	0.449	20	345	50	55	20	40	1.627	155	171	1,150	19.5	1,007	1,000	0.105	0.134	0.048	0.1344±j0.0566	0.1885±j0.7362	3,480	7,780	9,310	208	268	237
4/0	19	10	12	0.504	20	345	50	55	20	40	1.716	195	210	1,306	20.6	1,269	1,000	0.0836	0.107	0.052	0.1071±j0.0551	0.1612±j0.7311	4,250	9,500	11,380	236	309	269
250	37	12	12	0.547	20	345	50	55	20	40	1.759	230	251	1,420	21.1	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0538	0.1449±j0.7281	5,100	11,400	13,660	258	342	294
350	37	11	10	0.650	20	345	50	80	20	40	1.954	322	367	1,816	23.5	2,100	1,000	0.0505	0.065	0.061	0.0650±j0.0522	0.1191±j0.7193	7,430	16,630	19,910	311	423	354
500	37	15	10	0.773	20	345	50	80	20	40	2.077	460	500	2,182	24.9	3,000	1,000	0.0354	0.046	0.069	0.0456±j0.0500	0.0997±j0.7119	10,130	22,680	27,160	379	528	431
750	61	18	9	0.949	27	345	65	80	20	40	2.321	690	757	2,925	27.9	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0475	0.0849±j0.7027	15,330	34,310	41,090	472	680	537
1000	61	24	9	1.095	27	345	65	80	20	40	2.467	921	1,009	3,519	29.6	6,000	1,000	0.0177	0.023	0.090	0.0234±j0.0456	0.0775±j0.6966	20,440	45,740	54,780	550	808	624
1250	91	24	8	1.228	30	345	65	80	20	40	2.636	1,150	1,273	4,181	31.6	7,500	1,000	0.0141	0.019	0.099	0.0190±j0.0445	0.0731±j0.6909	25,790	57,710	69,110	620	930	703
1500	91	28	8	1.343	39	345	65	80	20	40	2.769	1,380	1,485	4,753	33.2	9,000	1,000	0.0118	0.016	0.107	0.0162±j0.0436	0.0703±j0.6866	30,090	67,330	80,630	678	1,032	768

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35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																												
1/0	19	11	14	0.354	20	345	50	55	20	40	1.532	97	145	992	18.4	633	1,000	0.168	0.215	0.042	0.2152±j0.0606	0.2694±j0.7444	2,940	6,580	7,880	161	203	183
2/0	19	21	16	0.398	20	345	50	55	20	40	1.550	122	174	1,052	18.6	799	1,000	0.133	0.17	0.045	0.1704±j0.0582	0.2245±j0.7412	3,530	7,900	9,460	182	232	208
3/0	19	17	14	0.449	20	345	50	55	20	40	1.627	155	224	1,197	19.5	1,007	1,000	0.105	0.134	0.048	0.1344±j0.0566	0.1885±j0.7362	4,540	10,170	12,180	208	268	237
4/0	19	14	12	0.504	20	345	50	55	20	40	1.716	195	294	1,382	20.6	1,269	1,000	0.0836	0.107	0.052	0.1071±j0.0551	0.1612±j0.7311	5,950	13,300	15,930	236	309	269
250	37	16	12	0.547	20	345	50	55	20	40	1.759	230	335	1,496	21.1	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0538	0.1449±j0.7281	6,800	15,210	18,210	258	342	294
350	37	22	12	0.650	20	345	50	80	20	40	1.912	322	461	1,847	22.9	2,100	1,000	0.0505	0.065	0.061	0.0650±j0.0518	0.1191±j0.7203	9,340	20,910	25,040	310	420	353
500	37	20	10	0.773	20	345	50	80	20	40	2.077	460	667	2,332	24.9	3,000	1,000	0.0354	0.046	0.069	0.0456±j0.0500	0.0997±j0.7119	13,510	30,230	36,210	379	528	431
750	61	24	9	0.949	27	345	65	80	20	40	2.321	690	1,009	3,151	27.9	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0475	0.0849±j0.7027	20,440	45,740	54,780	472	680	537
1000	61	25	8	1.095	27	345	65	80	20	40	2.497	921	1,326	3,849	30.0	6,000	1,000	0.0177	0.023	0.090	0.0234±j0.0459	0.0775±j0.6961	26,860	60,110	71,990	551	811	625
Full Neutral																												
1/0	19	10	12	0.354	20	345	50	55	20	40	1.566	97	210	1,085	18.8	633	1,000	0.168	0.215	0.042	0.2152±j0.0611	0.2694±j0.7434	4,250	9,500	11,380	161	204	183
2/0	19	13	12	0.398	20	345	50	55	20	40	1.610	122	273	1,202	19.3	799	1,000	0.133	0.17	0.045	0.1704±j0.0591	0.2245±j0.7394	5,520	12,350	14,800	183	234	208
3/0	19	16	12	0.449	20	345	50	55	20	40	1.661	155	335	1,333	19.9	1,007	1,000	0.105	0.134	0.048	0.1344±j0.0570	0.1885±j0.7353	6,800	15,210	18,210	208	270	237
4/0	19	13	10	0.504	20	345	50	55	20	40	1.758	195	433	1,555	21.1	1,269	1,000	0.0836	0.107	0.052	0.1071±j0.0557	0.1612±j0.7300	8,780	19,650	23,530	236	312	269
250	37	15	10	0.547	20	345	50	80	20	40	1.851	230	500	1,752	22.2	1,500	1,000	0.0707	0.091	0.055	0.0908±j0.0550	0.1449±j0.7258	10,130	22,680	27,160	259	345	295
350	37	21	10	0.650	20	345	50	80	20	40	1.954	322	700	2,115	23.5	2,100	1,000	0.0505	0.065	0.061	0.0650±j0.0522	0.1191±j0.7193	14,190	31,750	38,020	311	423	354
500	37	24	9	0.773	20	345	50	80	20	40	2.101	460	1,009	2,673	25.2	3,000	1,000	0.0354	0.046	0.069	0.0456±j0.0503	0.0997±j0.7113	20,440	45,740	54,780	379	530	431
750	61	28	8	0.949	27	345	65	80	20	40	2.351	690	1,485	3,621	28.2	4,500	1,000	0.0236	0.031	0.081	0.0308±j0.0478	0.0849±j0.7021	30,090	67,330	80,630	473	682	538

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at a single point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at a single point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at a single point.
3. Impedance: Calculations are based on flat formation / earth loop / conductor temperature of 90°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.
7. Shield Short-Circuit Current for 0.267 at 250°C and 0.267 at 350°C for reference only. Contact Voltage for capacity ratings.

35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.215	0.042	0.2160±j0.0549	1.0559±j0.0417	1,010	2,250	2,700	162	197	185
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.17	0.045	0.1711±j0.0529	1.0110±j0.0398	1,010	2,250	2,700	183	226	210
3/0	19	6	16	0.449	20	345	50	55	20	40	1.601	155	50	1,012	19.2	1,007	1,000	0.105	0.134	0.048	0.1352±j0.0508	0.9751±j0.0380	1,010	2,250	2,700	209	260	239
4/0	19	6	16	0.504	20	345	50	55	20	40	1.656	195	50	1,096	19.9	1,269	1,000	0.0836	0.107	0.052	0.1079±j0.0490	0.9478±j0.0363	1,010	2,250	2,700	236	298	271
250	37	6	16	0.547	20	345	50	55	20	40	1.699	230	50	1,171	20.4	1,500	1,000	0.0707	0.091	0.055	0.0915±j0.0477	0.9314±j0.0352	1,010	2,250	2,700	259	329	296
350	37	7	16	0.650	20	345	50	80	20	40	1.852	322	58	1,411	22.2	2,100	1,000	0.0505	0.065	0.061	0.0660±j0.0457	0.7856±j0.0321	1,170	2,630	3,150	311	404	355
500	37	7	14	0.773	20	345	50	80	20	40	2.001	460	93	1,715	24.0	3,000	1,000	0.0354	0.046	0.069	0.0470±j0.0438	0.4988±j0.0304	1,880	4,200	5,030	377	504	432
750	61	10	14	0.949	27	345	65	80	20	40	2.221	690	132	2,214	26.7	4,500	1,000	0.0236	0.031	0.081	0.0327±j0.0411	0.3480±j0.0266	2,680	6,000	7,180	466	642	533
1000	61	13	14	1.095	27	345	65	80	20	40	2.367	921	172	2,607	28.4	6,000	1,000	0.0177	0.023	0.090	0.0259±j0.0391	0.2675±j0.0241	3,480	7,800	9,340	537	756	613
1250	91	16	14	1.228	30	345	65	80	20	40	2.506	1,150	212	3,011	30.1	7,500	1,000	0.0141	0.019	0.099	0.0219±j0.0377	0.2173±j0.0224	4,290	9,590	11,490	596	857	681
1500	91	19	14	1.343	39	345	65	80	20	40	2.639	1,380	251	3,417	31.7	9,000	1,000	0.0118	0.016	0.107	0.0197±j0.0367	0.1832±j0.0212	5,090	11,390	13,640	643	941	734
1/6 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.215	0.042	0.2160±j0.0549	1.0559±j0.0417	1,010	2,250	2,700	162	197	185
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.17	0.045	0.1711±j0.0529	1.0110±j0.0398	1,010	2,250	2,700	183	226	210
3/0	19	7	16	0.449	20	345	50	55	20	40	1.601	155	58	1,020	19.2	1,007	1,000	0.105	0.134	0.048	0.1353±j0.0508	0.8550±j0.0372	1,170	2,630	3,150	209	260	239
4/0	19	9	16	0.504	20	345	50	55	20	40	1.656	195	75	1,119	19.9	1,269	1,000	0.0836	0.107	0.052	0.1083±j0.0490	0.6676±j0.0344	1,510	3,380	4,050	236	298	270
250	37	10	16	0.547	20	345	50	55	20	40	1.699	230	83	1,201	20.4	1,500	1,000	0.0707	0.091	0.055	0.0920±j0.0476	0.5952±j0.0328	1,680	3,760	4,500	258	329	296
350	37	9	14	0.650	20	345	50	80	20	40	1.878	322	119	1,498	22.5	2,100	1,000	0.0505	0.065	0.061	0.0668±j0.0459	0.4175±j0.0309	2,410	5,400	6,460	310	404	355
500	37	8	12	0.773	20	345	50	80	20	40	2.035	460	167	1,827	24.4	3,000	1,000	0.0354	0.046	0.069	0.0481±j0.0440	0.2950±j0.0297	3,390	7,590	9,090	376	504	430
750	61	19	14	0.949	27	345	65	80	20	40	2.221	690	251	2,320	26.7	4,500	1,000	0.0236	0.031	0.081	0.0343±j0.0407	0.1977±j0.0245	5,090	11,390	13,640	459	635	525
1000	61	16	12	1.095	27	345	65	80	20	40	2.401	921	335	2,807	28.8	6,000	1,000	0.0177	0.023	0.090	0.0280±j0.0388	0.1481±j0.0235	6,780	15,180	18,170	524	745	599
1250	91	20	12	1.228	30	345	65	80	20	40	2.540	1,150	419	3,253	30.5	7,500	1,000	0.0141	0.019	0.099	0.0246±j0.0370	0.1188±j0.0218	8,480	18,970	22,720	576	836	658
1500	91	24	12	1.343	39	345	65	80	20	40	2.673	1,380	502	3,702	32.1	9,000	1,000	0.0118	0.016	0.107	0.0227±j0.0356	0.0994±j0.0207	10,170	22,760	27,260	614	908	701

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35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	345	50	55	20	40	1.532	97	79	933	18.4	633	1,000	0.168	0.215	0.042	0.2165±j0.0553	0.7440±j0.0417	1,600	3,590	4,300	162	197	185
2/0	19	11	16	0.398	20	345	50	55	20	40	1.550	122	91	977	18.6	799	1,000	0.133	0.17	0.045	0.1718±j0.0528	0.6289±j0.0371	1,850	4,140	4,960	183	226	210
3/0	19	14	16	0.449	20	345	50	55	20	40	1.601	155	116	1,072	19.2	1,007	1,000	0.105	0.134	0.048	0.1362±j0.0507	0.4947±j0.0344	2,350	5,270	6,310	208	260	238
4/0	19	11	14	0.504	20	345	50	55	20	40	1.682	195	145	1,211	20.2	1,269	1,000	0.0836	0.107	0.052	0.1093±j0.0492	0.3955±j0.0336	2,940	6,580	7,880	236	299	270
250	37	13	14	0.547	20	345	50	55	20	40	1.725	230	171	1,310	20.7	1,500	1,000	0.0707	0.091	0.055	0.0933±j0.0478	0.3348±j0.0319	3,480	7,780	9,310	258	329	295
350	37	18	14	0.650	20	345	50	80	20	40	1.878	322	237	1,604	22.5	2,100	1,000	0.0505	0.065	0.061	0.0686±j0.0455	0.2413±j0.0286	4,810	10,770	12,890	308	402	352
500	37	16	12	0.773	20	345	50	80	20	40	2.035	460	335	1,977	24.4	3,000	1,000	0.0354	0.046	0.069	0.0504±j0.0433	0.1703±j0.0272	6,800	15,210	18,210	370	498	424
750	61	15	10	0.949	27	345	65	80	20	40	2.297	690	500	2,656	27.6	4,500	1,000	0.0236	0.031	0.081	0.0374±j0.0400	0.1144±j0.0252	10,130	22,680	27,160	449	627	513
1000	61	20	10	1.095	27	345	65	80	20	40	2.443	921	667	3,171	29.3	6,000	1,000	0.0177	0.023	0.090	0.0316±j0.0369	0.0862±j0.0228	13,510	30,230	36,210	504	723	576
1250	91	20	9	1.228	30	345	65	80	20	40	2.606	1,150	841	3,745	31.3	7,500	1,000	0.0141	0.019	0.099	0.0285±j0.0343	0.0687±j0.0218	17,040	38,120	45,650	546	804	624
1500	91	24	9	1.343	39	345	65	80	20	40	2.739	1,380	1,009	4,275	32.9	9,000	1,000	0.0118	0.016	0.107	0.0267±j0.0320	0.0577±j0.0207	20,440	45,740	54,780	576	866	658
1/2 Neutral																													
1/0	19	8	14	0.354	20	345	50	55	20	40	1.532	97	105	957	18.4	633	1,000	0.168	0.215	0.042	0.2169±j0.0552	0.6118±j0.0403	2,140	4,790	5,730	162	197	185
2/0	19	10	14	0.398	20	345	50	55	20	40	1.576	122	132	1,041	18.9	799	1,000	0.133	0.17	0.045	0.1723±j0.0531	0.4876±j0.0375	2,670	5,980	7,160	184	226	210
3/0	19	13	14	0.449	20	345	50	55	20	40	1.627	155	171	1,150	19.5	1,007	1,000	0.105	0.134	0.048	0.1370±j0.0510	0.3785±j0.0347	3,480	7,780	9,310	208	260	239
4/0	19	10	12	0.504	20	345	50	55	20	40	1.716	195	210	1,306	20.6	1,269	1,000	0.0836	0.107	0.052	0.1102±j0.0494	0.3066±j0.0340	4,250	9,500	11,380	236	300	270
250	37	12	12	0.547	20	345	50	55	20	40	1.759	230	251	1,420	21.1	1,500	1,000	0.0707	0.091	0.055	0.0944±j0.0480	0.2570±j0.0321	5,100	11,400	13,660	258	330	295
350	37	11	10	0.650	20	345	50	80	20	40	1.954	322	367	1,816	23.5	2,100	1,000	0.0505	0.065	0.061	0.0703±j0.0458	0.1791±j0.0301	7,430	16,630	19,910	307	404	351
500	37	15	10	0.773	20	345	50	80	20	40	2.077	460	500	2,182	24.9	3,000	1,000	0.0354	0.046	0.069	0.0524±j0.0427	0.1293±j0.0274	10,130	22,680	27,160	367	496	419
750	61	18	9	0.949	27	345	65	80	20	40	2.321	690	757	2,925	27.9	4,500	1,000	0.0236	0.031	0.081	0.0398±j0.0382	0.0860±j0.0247	15,330	34,310	41,090	439	617	502
1000	61	24	9	1.095	27	345	65	80	20	40	2.467	921	1,009	3,519	29.6	6,000	1,000	0.0177	0.023	0.090	0.0340±j0.0341	0.0649±j0.0224	20,440	45,740	54,780	489	707	559
1250	91	24	8	1.228	30	345	65	80	20	40	2.636	1,150	1,273	4,181	31.6	7,500	1,000	0.0141	0.019	0.099	0.0305±j0.0307	0.0518±j0.0213	25,790	57,710	69,110	528	784	604
1500	91	28	8	1.343	39	345	65	80	20	40	2.769	1,380	1,485	4,753	33.2	9,000	1,000	0.0118	0.016	0.107	0.0281±j0.0282	0.0444±j0.0203	30,090	67,330	80,630	558	846	639

35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																												
1/0	19	11	14	0.354	20	345	50	55	20	40	1.532	97	145	992	18.4	633	1,000	0.168	0.215	0.042	0.2174±j0.0551	0.5036±j0.0390	2,940	6,580	7,880	162	197	185
2/0	19	21	16	0.398	20	345	50	55	20	40	1.550	122	174	1,052	18.6	799	1,000	0.133	0.17	0.045	0.1730±j0.0526	0.4105±j0.0351	3,530	7,900	9,460	183	225	209
3/0	19	17	14	0.449	20	345	50	55	20	40	1.627	155	224	1,197	19.5	1,007	1,000	0.105	0.134	0.048	0.1377±j0.0508	0.3210±j0.0339	4,540	10,170	12,180	208	260	238
4/0	19	14	12	0.504	20	345	50	55	20	40	1.716	195	294	1,382	20.6	1,269	1,000	0.0836	0.107	0.052	0.1113±j0.0491	0.2496±j0.0328	5,950	13,300	15,930	235	299	269
250	37	16	12	0.547	20	345	50	55	20	40	1.759	230	335	1,496	21.1	1,500	1,000	0.0707	0.091	0.055	0.0955±j0.0475	0.2155±j0.0312	6,800	15,210	18,210	257	329	294
350	37	22	12	0.650	20	345	50	80	20	40	1.912	322	461	1,847	22.9	2,100	1,000	0.0505	0.065	0.061	0.0715±j0.0447	0.1557±j0.0280	9,340	20,910	25,040	304	400	348
500	37	20	10	0.773	20	345	50	80	20	40	2.077	460	667	2,332	24.9	3,000	1,000	0.0354	0.046	0.069	0.0541±j0.0413	0.1084±j0.0265	13,510	30,230	36,210	363	492	415
750	61	24	9	0.949	27	345	65	80	20	40	2.321	690	1,009	3,151	27.9	4,500	1,000	0.0236	0.031	0.081	0.0415±j0.0359	0.0722±j0.0239	20,440	45,740	54,780	431	609	493
1000	61	25	8	1.095	27	345	65	80	20	40	2.497	921	1,326	3,849	30.0	6,000	1,000	0.0177	0.023	0.090	0.0352±j0.0315	0.0550±j0.0223	26,860	60,110	71,990	481	699	550
Full Neutral																												
1/0	19	10	12	0.354	20	345	50	55	20	40	1.566	97	210	1,085	18.8	633	1,000	0.168	0.215	0.042	0.2184±j0.0554	4.4642±j0.4236	4,250	9,500	11,380	162	198	185
2/0	19	13	12	0.398	20	345	50	55	20	40	1.610	122	273	1,202	19.3	799	1,000	0.133	0.17	0.045	0.1743±j0.0531	3.4856±j0.3930	5,520	12,350	14,800	184	227	210
3/0	19	16	12	0.449	20	345	50	55	20	40	1.661	155	335	1,333	19.9	1,007	1,000	0.105	0.134	0.048	0.1393±j0.0507	2.7894±j0.3665	6,800	15,210	18,210	208	261	238
4/0	19	13	10	0.504	20	345	50	55	20	40	1.758	195	433	1,555	21.1	1,269	1,000	0.0836	0.107	0.052	0.1131±j0.0488	2.1919±j0.3553	8,780	19,650	23,530	235	300	269
250	37	15	10	0.547	20	345	50	80	20	40	1.851	230	500	1,752	22.2	1,500	1,000	0.0707	0.091	0.055	0.0978±j0.0475	1.8773±j0.3379	10,130	22,680	27,160	256	330	292
350	37	21	10	0.650	20	345	50	80	20	40	1.954	322	700	2,115	23.5	2,100	1,000	0.0505	0.065	0.061	0.0740±j0.0432	1.3432±j0.3028	14,190	31,750	38,020	302	399	345
500	37	24	9	0.773	20	345	50	80	20	40	2.101	460	1,009	2,673	25.2	3,000	1,000	0.0354	0.046	0.069	0.0565±j0.0384	0.9373±j0.2808	20,440	45,740	54,780	357	487	408
750	61	28	8	0.949	27	345	65	80	20	40	2.351	690	1,485	3,621	28.2	4,500	1,000	0.0236	0.031	0.081	0.0429±j0.0320	0.6342±j0.2536	30,090	67,330	80,630	424	602	485

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at both point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at both point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at both point.
3. Impedance: Calculations are based on trefoil formation / shield loop / conductor temperature of 90°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.
7. Shield Short-Circuit Current for 0.267 at 250°C and 0.267 at 350°C for reference only. Contact Voltage for capacity ratings.

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35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.215	0.042	0.2164±j0.0602	1.0559±j0.0417	1,010	2,250	2,700	160	201	182
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.17	0.045	0.1715±j0.0582	1.0110±j0.0398	1,010	2,250	2,700	181	231	207
3/0	19	6	16	0.449	20	345	50	55	20	40	1.601	155	50	1,012	19.2	1,007	1,000	0.105	0.134	0.048	0.1355±j0.0561	0.9751±j0.0380	1,010	2,250	2,700	206	266	235
4/0	19	6	16	0.504	20	345	50	55	20	40	1.656	195	50	1,096	19.9	1,269	1,000	0.0836	0.107	0.052	0.1082±j0.0543	0.9478±j0.0363	1,010	2,250	2,700	233	305	266
250	37	6	16	0.547	20	345	50	55	20	40	1.699	230	50	1,171	20.4	1,500	1,000	0.0707	0.091	0.055	0.0918±j0.0530	0.9314±j0.0352	1,010	2,250	2,700	255	337	291
350	37	7	16	0.650	20	345	50	80	20	40	1.852	322	58	1,411	22.2	2,100	1,000	0.0505	0.065	0.061	0.0664±j0.0510	0.7856±j0.0321	1,170	2,630	3,150	306	413	349
500	37	7	14	0.773	20	345	50	80	20	40	2.001	460	93	1,715	24.0	3,000	1,000	0.0354	0.046	0.069	0.0476±j0.0490	0.4988±j0.0304	1,880	4,200	5,030	368	513	420
750	61	10	14	0.949	27	345	65	80	20	40	2.221	690	132	2,214	26.7	4,500	1,000	0.0236	0.031	0.081	0.0336±j0.0462	0.3480±j0.0266	2,680	6,000	7,180	448	647	511
1000	61	13	14	1.095	27	345	65	80	20	40	2.367	921	172	2,607	28.4	6,000	1,000	0.0177	0.023	0.090	0.0270±j0.0443	0.2675±j0.0241	3,480	7,800	9,340	507	752	578
1250	91	16	14	1.228	30	345	65	80	20	40	2.506	1,150	212	3,011	30.1	7,500	1,000	0.0141	0.019	0.099	0.0233±j0.0427	0.2173±j0.0224	4,290	9,590	11,490	551	839	628
1500	91	19	14	1.343	39	345	65	80	20	40	2.639	1,380	251	3,417	31.7	9,000	1,000	0.0118	0.016	0.107	0.0213±j0.0416	0.1832±j0.0212	5,090	11,390	13,640	582	906	663
1/6 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.215	0.042	0.2164±j0.0602	1.0559±j0.0417	1,010	2,250	2,700	160	201	182
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.17	0.045	0.1715±j0.0582	1.0110±j0.0398	1,010	2,250	2,700	181	231	207
3/0	19	7	16	0.449	20	345	50	55	20	40	1.601	155	58	1,020	19.2	1,007	1,000	0.105	0.134	0.048	0.1357±j0.0561	0.8550±j0.0372	1,170	2,630	3,150	206	266	235
4/0	19	9	16	0.504	20	345	50	55	20	40	1.656	195	75	1,119	19.9	1,269	1,000	0.0836	0.107	0.052	0.1088±j0.0542	0.6676±j0.0344	1,510	3,380	4,050	233	305	266
250	37	10	16	0.547	20	345	50	55	20	40	1.699	230	83	1,201	20.4	1,500	1,000	0.0707	0.091	0.055	0.0926±j0.0529	0.5952±j0.0328	1,680	3,760	4,500	254	336	290
350	37	9	14	0.650	20	345	50	80	20	40	1.878	322	119	1,498	22.5	2,100	1,000	0.0505	0.065	0.061	0.0677±j0.0511	0.4175±j0.0309	2,410	5,400	6,460	303	412	346
500	37	8	12	0.773	20	345	50	80	20	40	2.035	460	167	1,827	24.4	3,000	1,000	0.0354	0.046	0.069	0.0493±j0.0491	0.2950±j0.0297	3,390	7,590	9,090	363	509	414
750	61	19	14	0.949	27	345	65	80	20	40	2.221	690	251	2,320	26.7	4,500	1,000	0.0236	0.031	0.081	0.0360±j0.0456	0.1977±j0.0245	5,090	11,390	13,640	432	629	493
1000	61	16	12	1.095	27	345	65	80	20	40	2.401	921	335	2,807	28.8	6,000	1,000	0.0177	0.023	0.090	0.0301±j0.0434	0.1481±j0.0235	6,780	15,180	18,170	478	720	545
1250	91	20	12	1.228	30	345	65	80	20	40	2.540	1,150	419	3,253	30.5	7,500	1,000	0.0141	0.019	0.099	0.0271±j0.0413	0.1188±j0.0218	8,480	18,970	22,720	509	788	580
1500	91	24	12	1.343	39	345	65	80	20	40	2.673	1,380	502	3,702	32.1	9,000	1,000	0.0118	0.016	0.107	0.0255±j0.0395	0.0994±j0.0207	10,170	22,760	27,260	527	836	601

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35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Flat

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	345	50	55	20	40	1.532	97	79	933	18.4	633	1,000	0.168	0.215	0.042	0.2170±j0.0605	0.7440±j0.0417	1,600	3,590	4,300	160	202	182
2/0	19	11	16	0.398	20	345	50	55	20	40	1.550	122	91	977	18.6	799	1,000	0.133	0.17	0.045	0.1724±j0.0581	0.6289±j0.0371	1,850	4,140	4,960	181	231	206
3/0	19	14	16	0.449	20	345	50	55	20	40	1.601	155	116	1,072	19.2	1,007	1,000	0.105	0.134	0.048	0.1370±j0.0560	0.4947±j0.0344	2,350	5,270	6,310	205	265	234
4/0	19	11	14	0.504	20	345	50	55	20	40	1.682	195	145	1,211	20.2	1,269	1,000	0.0836	0.107	0.052	0.1103±j0.0543	0.3955±j0.0336	2,940	6,580	7,880	232	304	264
250	37	13	14	0.547	20	345	50	55	20	40	1.725	230	171	1,310	20.7	1,500	1,000	0.0707	0.091	0.055	0.0944±j0.0529	0.3348±j0.0319	3,480	7,780	9,310	252	335	288
350	37	18	14	0.650	20	345	50	80	20	40	1.878	322	237	1,604	22.5	2,100	1,000	0.0505	0.065	0.061	0.0702±j0.0504	0.2413±j0.0286	4,810	10,770	12,890	297	406	339
500	37	16	12	0.773	20	345	50	80	20	40	2.035	460	335	1,977	24.4	3,000	1,000	0.0354	0.046	0.069	0.0525±j0.0479	0.1703±j0.0272	6,800	15,210	18,210	350	495	400
750	61	15	10	0.949	27	345	65	80	20	40	2.297	690	500	2,656	27.6	4,500	1,000	0.0236	0.031	0.081	0.0402±j0.0439	0.1144±j0.0252	10,130	22,680	27,160	407	604	465
1000	61	20	10	1.095	27	345	65	80	20	40	2.443	921	667	3,171	29.3	6,000	1,000	0.0177	0.023	0.090	0.0349±j0.0400	0.0862±j0.0228	13,510	30,230	36,210	440	676	503
1250	91	20	9	1.228	30	345	65	80	20	40	2.606	1,150	841	3,745	31.3	7,500	1,000	0.0141	0.019	0.099	0.0319±j0.0366	0.0687±j0.0218	17,040	38,120	45,650	464	733	530
1500	91	24	9	1.343	39	345	65	80	20	40	2.739	1,380	1,009	4,275	32.9	9,000	1,000	0.0118	0.016	0.107	0.0301±j0.0336	0.0577±j0.0207	20,440	45,740	54,780	481	777	549
1/2 Neutral																													
1/0	19	8	14	0.354	20	345	50	55	20	40	1.532	97	105	957	18.4	633	1,000	0.168	0.215	0.042	0.2176±j0.0604	0.6118±j0.0403	2,140	4,790	5,730	160	202	182
2/0	19	10	14	0.398	20	345	50	55	20	40	1.576	122	132	1,041	18.9	799	1,000	0.133	0.17	0.045	0.1732±j0.0583	0.4876±j0.0375	2,670	5,980	7,160	181	231	206
3/0	19	13	14	0.449	20	345	50	55	20	40	1.627	155	171	1,150	19.5	1,007	1,000	0.105	0.134	0.048	0.1382±j0.0561	0.3785±j0.0347	3,480	7,780	9,310	205	266	234
4/0	19	10	12	0.504	20	345	50	55	20	40	1.716	195	210	1,306	20.6	1,269	1,000	0.0836	0.107	0.052	0.1116±j0.0544	0.3066±j0.0340	4,250	9,500	11,380	231	305	263
250	37	12	12	0.547	20	345	50	55	20	40	1.759	230	251	1,420	21.1	1,500	1,000	0.0707	0.091	0.055	0.0960±j0.0529	0.2570±j0.0321	5,100	11,400	13,660	250	335	286
350	37	11	10	0.650	20	345	50	80	20	40	1.954	322	367	1,816	23.5	2,100	1,000	0.0505	0.065	0.061	0.0726±j0.0502	0.1791±j0.0301	7,430	16,630	19,910	293	404	334
500	37	15	10	0.773	20	345	50	80	20	40	2.077	460	500	2,182	24.9	3,000	1,000	0.0354	0.046	0.069	0.0552±j0.0465	0.1293±j0.0274	10,130	22,680	27,160	341	487	389
750	61	18	9	0.949	27	345	65	80	20	40	2.321	690	757	2,925	27.9	4,500	1,000	0.0236	0.031	0.081	0.0432±j0.0408	0.0860±j0.0247	15,330	34,310	41,090	391	586	447
1000	61	24	9	1.095	27	345	65	80	20	40	2.467	921	1,009	3,519	29.6	6,000	1,000	0.0177	0.023	0.090	0.0374±j0.0356	0.0649±j0.0224	20,440	45,740	54,780	424	655	484
1250	91	24	8	1.228	30	345	65	80	20	40	2.636	1,150	1,273	4,181	31.6	7,500	1,000	0.0141	0.019	0.099	0.0336±j0.0314	0.0518±j0.0213	25,790	57,710	69,110	451	717	515
1500	91	28	8	1.343	39	345	65	80	20	40	2.769	1,380	1,485	4,753	33.2	9,000	1,000	0.0118	0.016	0.107	0.0309±j0.0283	0.0444±j0.0203	30,090	67,330	80,630	473	769	540

35kV MV-90 AL TR-XLPE 100% INS LLDPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																												
1/0	19	11	14	0.354	20	345	50	55	20	40	1.532	97	145	992	18.4	633	1,000	0.168	0.215	0.042	0.2185±j0.0603	0.5036±j0.0390	2,940	6,580	7,880	160	201	182
2/0	19	21	16	0.398	20	345	50	55	20	40	1.550	122	174	1,052	18.6	799	1,000	0.133	0.17	0.045	0.1742±j0.0577	0.4105±j0.0351	3,530	7,900	9,460	180	230	205
3/0	19	17	14	0.449	20	345	50	55	20	40	1.627	155	224	1,197	19.5	1,007	1,000	0.105	0.134	0.048	0.1393±j0.0558	0.3210±j0.0339	4,540	10,170	12,180	204	265	233
4/0	19	14	12	0.504	20	345	50	55	20	40	1.716	195	294	1,382	20.6	1,269	1,000	0.0836	0.107	0.052	0.1132±j0.0538	0.2496±j0.0328	5,950	13,300	15,930	229	303	261
250	37	16	12	0.547	20	345	50	55	20	40	1.759	230	335	1,496	21.1	1,500	1,000	0.0707	0.091	0.055	0.0976±j0.0522	0.2155±j0.0312	6,800	15,210	18,210	248	332	284
350	37	22	12	0.650	20	345	50	80	20	40	1.912	322	461	1,847	22.9	2,100	1,000	0.0505	0.065	0.061	0.0742±j0.0486	0.1557±j0.0280	9,340	20,910	25,040	289	398	330
500	37	20	10	0.773	20	345	50	80	20	40	2.077	460	667	2,332	24.9	3,000	1,000	0.0354	0.046	0.069	0.0574±j0.0443	0.1084±j0.0265	13,510	30,230	36,210	334	479	381
750	61	24	9	0.949	27	345	65	80	20	40	2.321	690	1,009	3,151	27.9	4,500	1,000	0.0236	0.031	0.081	0.0449±j0.0374	0.0722±j0.0239	20,440	45,740	54,780	383	576	438
1000	61	25	8	1.095	27	345	65	80	20	40	2.497	921	1,326	3,849	30.0	6,000	1,000	0.0177	0.023	0.090	0.0382±j0.0320	0.0550±j0.0223	26,860	60,110	71,990	419	651	479
Full Neutral																												
1/0	19	10	12	0.354	20	345	50	55	20	40	1.566	97	210	1,085	18.8	633	1,000	0.168	0.215	0.042	0.2198±j0.0604	0.4147±j0.0393	4,250	9,500	11,380	159	202	182
2/0	19	13	12	0.398	20	345	50	55	20	40	1.610	122	273	1,202	19.3	799	1,000	0.133	0.17	0.045	0.1761±j0.0579	0.3238±j0.0365	5,520	12,350	14,800	180	231	205
3/0	19	16	12	0.449	20	345	50	55	20	40	1.661	155	335	1,333	19.9	1,007	1,000	0.105	0.134	0.048	0.1414±j0.0554	0.2591±j0.0340	6,800	15,210	18,210	203	265	231
4/0	19	13	10	0.504	20	345	50	55	20	40	1.758	195	433	1,555	21.1	1,269	1,000	0.0836	0.107	0.052	0.1157±j0.0530	0.2036±j0.0330	8,780	19,650	23,530	227	302	259
250	37	15	10	0.547	20	345	50	80	20	40	1.851	230	500	1,752	22.2	1,500	1,000	0.0707	0.091	0.055	0.1006±j0.0514	0.1744±j0.0314	10,130	22,680	27,160	245	331	279
350	37	21	10	0.650	20	345	50	80	20	40	1.954	322	700	2,115	23.5	2,100	1,000	0.0505	0.065	0.061	0.0773±j0.0460	0.1248±j0.0281	14,190	31,750	38,020	283	393	323
500	37	24	9	0.773	20	345	50	80	20	40	2.101	460	1,009	2,673	25.2	3,000	1,000	0.0354	0.046	0.069	0.0599±j0.0399	0.0871±j0.0261	20,440	45,740	54,780	326	471	373
750	61	28	8	0.949	27	345	65	80	20	40	2.351	690	1,485	3,621	28.2	4,500	1,000	0.0236	0.031	0.081	0.0456±j0.0321	0.0589±j0.0236	30,090	67,330	80,630	380	573	434

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at both point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at both point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at both point.
3. Impedance: Calculations are based on flat formation / shield loop / conductor temperature of 90°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.
7. Shield Short-Circuit Current for 0.267 at 250°C and 0.267 at 350°C for reference only. Contact Voltage for capacity ratings.

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VOLTAGE

Medium Voltage Cable

35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite

Construction

- Conductor: 1/0 AWG - 1500kcmil Class B compressed concentric lay stranded 1350-H19 aluminum
- Conductor Shield: Extruded semi-conducting thermoset polymeric stress control layer
- Insulation: Extruded tree-retardant cross-linked polyethylene
- Insulation Shield: Extruded semi-conducting thermoset layer, clean and free stripping from insulation
- Concentric Neutral: Helically applied, annealed, solid bare copper wires
- Inner Jacket: Black, non-conducting, sunlight resistant, linear low-density polyethylene jacket extruded to fill spaces between neutral wires
- Anti-Termite: Nylon Layer
- Sheath: Black sunlight resistant, linear low density polythylene jacket

Standards

- ANSI/ICEA S-94-649
- ANSI/ICEA T-27-581
- ANSI/ICEA T-34-664
- ANSI/ICEA P-45-482
- AEIC CS-8
- RUS U-1

RoHS COMPLIANT

Applications

- Primarily underground distribution
- Wet or dry locations, direct burial, duct, and where exposed to sunlight
- 35kV or less
- Conductor temperatures not to exceed 90°C for normal operation
- Insulation level: 133% Insulation level

Options

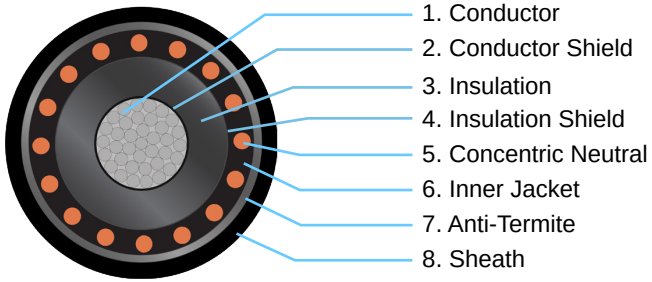
- EPR Insulation
- XLPE jacket
- TYPE MV-105
- Copper tape screen
- Different concentric neutral levels
- Other voltages available
- Other insulation levels

Packaging

- Material cut to length
- Shipped on steel reels
- Triplex or parallel packaging available

Sample Print

- Interval imprints with production date, time, cable type, sequential length in 2-foot increments





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35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																												
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.215	0.037	0.2153±j0.0571	0.2694±j0.7516	1,010	2,250	2,700	162	197	184
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.17	0.040	0.1704±j0.0550	0.2245±j0.7477	1,010	2,250	2,700	184	226	209
3/0	19	6	16	0.449	20	420	50	55	20	40	1.751	155	50	1,182	21.0	1,007	1,000	0.105	0.134	0.042	0.1345±j0.0530	0.1886±j0.7436	1,010	2,250	2,700	210	261	238
4/0	19	6	16	0.504	20	420	50	80	20	40	1.856	195	50	1,331	22.3	1,269	1,000	0.0836	0.107	0.045	0.1072±j0.0516	0.1613±j0.7383	1,010	2,250	2,700	238	299	270
250	37	6	16	0.547	20	420	50	80	20	40	1.899	230	50	1,411	22.8	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0503	0.1449±j0.7354	1,010	2,250	2,700	260	330	296
350	37	7	16	0.650	20	420	50	80	20	40	2.002	322	58	1,605	24.0	2,100	1,000	0.0505	0.065	0.053	0.0651±j0.0475	0.1192±j0.7290	1,170	2,630	3,150	313	405	356
500	37	7	14	0.773	20	420	65	80	20	40	2.181	460	93	1,974	26.2	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0455	0.0998±j0.7210	1,880	4,200	5,030	382	506	434
750	61	10	14	0.949	27	420	65	80	20	40	2.371	690	132	2,444	28.5	4,500	1,000	0.0236	0.031	0.069	0.0308±j0.0427	0.0849±j0.7125	2,680	6,000	7,180	476	649	541
1000	61	13	14	1.095	27	420	65	80	20	40	2.517	921	172	2,852	30.2	6,000	1,000	0.0177	0.023	0.077	0.0234±j0.0408	0.0775±j0.7065	3,480	7,800	9,340	554	771	629
1250	91	16	14	1.228	30	420	65	80	20	40	2.656	1,150	212	3,270	31.9	7,500	1,000	0.0141	0.019	0.084	0.0190±j0.0394	0.0731±j0.7013	4,290	9,590	11,490	624	883	708
1500	91	19	14	1.343	39	420	65	80	20	40	2.789	1,380	251	3,688	33.5	9,000	1,000	0.0118	0.016	0.091	0.0163±j0.0385	0.0703±j0.6971	5,090	11,390	13,640	682	980	774
1/6 Neutral																												
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.215	0.037	0.2153±j0.0571	0.2694±j0.7516	1,010	2,250	2,700	162	197	184
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.17	0.040	0.1704±j0.0550	0.2245±j0.7477	1,010	2,250	2,700	184	226	209
3/0	19	7	16	0.449	20	420	50	55	20	40	1.751	155	58	1,189	21.0	1,007	1,000	0.105	0.134	0.042	0.1345±j0.0530	0.1886±j0.7436	1,170	2,630	3,150	210	261	238
4/0	19	9	16	0.504	20	420	50	80	20	40	1.856	195	75	1,353	22.3	1,269	1,000	0.0836	0.107	0.045	0.1072±j0.0516	0.1613±j0.7383	1,510	3,380	4,050	238	299	270
250	37	10	16	0.547	20	420	50	80	20	40	1.899	230	83	1,441	22.8	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0503	0.1449±j0.7354	1,680	3,760	4,500	260	330	296
350	37	9	14	0.650	20	420	50	80	20	40	2.028	322	119	1,694	24.3	2,100	1,000	0.0505	0.065	0.053	0.0651±j0.0478	0.1192±j0.7284	2,410	5,400	6,460	313	406	356
500	37	8	12	0.773	20	420	65	80	20	40	2.215	460	167	2,090	26.6	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0459	0.0998±j0.7203	3,390	7,590	9,090	383	508	435
750	61	19	14	0.949	27	420	65	80	20	40	2.371	690	251	2,551	28.5	4,500	1,000	0.0236	0.031	0.069	0.0308±j0.0427	0.0849±j0.7125	5,090	11,390	13,640	476	649	541
1000	61	16	12	1.095	27	420	65	80	20	40	2.551	921	335	3,055	30.6	6,000	1,000	0.0177	0.023	0.077	0.0234±j0.0411	0.0775±j0.7059	6,780	15,180	18,170	555	774	630
1250	91	20	12	1.228	30	420	65	80	20	40	2.690	1,150	419	3,516	32.3	7,500	1,000	0.0141	0.019	0.084	0.0190±j0.0397	0.0731±j0.7008	8,480	18,970	22,720	625	886	710
1500	91	24	12	1.343	39	420	65	80	20	40	2.823	1,380	502	3,977	33.9	9,000	1,000	0.0118	0.016	0.091	0.0162±j0.0388	0.0703±j0.6965	10,170	22,760	27,260	684	984	776

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35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance									
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																											
1/0	19	6	14	0.354	20	420	50	55	20	40	1.682	97	79	1,096	20.2	633	1,000	0.168	0.215	0.037	0.2153±j0.0575	0.2694±j0.7509	1,600	3,590	4,300	163	198	184
2/0	19	11	16	0.398	20	420	50	55	20	40	1.700	122	91	1,141	20.4	799	1,000	0.133	0.17	0.040	0.1704±j0.0550	0.2245±j0.7477	1,850	4,140	4,960	184	226	209
3/0	19	14	16	0.449	20	420	50	55	20	40	1.751	155	116	1,241	21.0	1,007	1,000	0.105	0.134	0.042	0.1345±j0.0530	0.1886±j0.7436	2,350	5,270	6,310	210	261	238
4/0	19	11	14	0.504	20	420	50	80	20	40	1.882	195	145	1,449	22.6	1,269	1,000	0.0836	0.107	0.045	0.1072±j0.0520	0.1613±j0.7377	2,940	6,580	7,880	238	300	270
250	37	13	14	0.547	20	420	50	80	20	40	1.925	230	171	1,554	23.1	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0506	0.1449±j0.7347	3,480	7,780	9,310	261	332	296
350	37	18	14	0.650	20	420	50	80	20	40	2.028	322	237	1,801	24.3	2,100	1,000	0.0505	0.065	0.053	0.0651±j0.0478	0.1192±j0.7284	4,810	10,770	12,890	313	406	356
500	37	16	12	0.773	20	420	65	80	20	40	2.215	460	335	2,241	26.6	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0459	0.0998±j0.7203	6,800	15,210	18,210	383	508	435
750	61	15	10	0.949	27	420	65	80	20	40	2.447	690	500	2,895	29.4	4,500	1,000	0.0236	0.031	0.069	0.0308±j0.0434	0.0848±j0.7111	10,130	22,680	27,160	478	655	543
1000	61	20	10	1.095	27	420	65	80	20	40	2.593	921	667	3,424	31.1	6,000	1,000	0.0177	0.023	0.077	0.0234±j0.0415	0.0775±j0.7051	13,510	30,230	36,210	557	778	632
1250	91	20	9	1.228	30	420	65	80	20	40	2.756	1,150	841	4,014	33.1	7,500	1,000	0.0141	0.019	0.084	0.0190±j0.0402	0.0730±j0.6996	17,040	38,120	45,650	628	893	712
1500	91	24	9	1.343	39	420	65	80	20	40	2.889	1,380	1,009	4,557	34.7	9,000	1,000	0.0118	0.016	0.091	0.0162±j0.0393	0.0703±j0.6954	20,440	45,740	54,780	687	991	779
1/2 Neutral																											
1/0	19	8	14	0.354	20	420	50	55	20	40	1.682	97	105	1,119	20.2	633	1,000	0.168	0.215	0.037	0.2153±j0.0575	0.2694±j0.7509	2,140	4,790	5,730	163	198	184
2/0	19	10	14	0.398	20	420	50	55	20	40	1.726	122	132	1,208	20.7	799	1,000	0.133	0.17	0.040	0.1704±j0.0554	0.2245±j0.7470	2,670	5,980	7,160	185	227	210
3/0	19	13	14	0.449	20	420	50	55	20	40	1.777	155	171	1,322	21.3	1,007	1,000	0.105	0.134	0.042	0.1345±j0.0533	0.1886±j0.7429	3,480	7,780	9,310	210	262	239
4/0	19	10	12	0.504	20	420	50	80	20	40	1.916	195	210	1,548	23.0	1,269	1,000	0.0836	0.107	0.045	0.1072±j0.0523	0.1613±j0.7368	4,250	9,500	11,380	239	302	271
250	37	12	12	0.547	20	420	50	80	20	40	1.959	230	251	1,668	23.5	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0510	0.1449±j0.7339	5,100	11,400	13,660	261	333	297
350	37	11	10	0.650	20	420	50	80	20	40	2.104	322	367	2,019	25.3	2,100	1,000	0.0505	0.065	0.053	0.0651±j0.0487	0.1192±j0.7267	7,430	16,630	19,910	315	410	358
500	37	15	10	0.773	20	420	65	80	20	40	2.257	460	500	2,451	27.1	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0463	0.0998±j0.7195	10,130	22,680	27,160	384	511	436
750	61	18	9	0.949	27	420	65	80	20	40	2.471	690	757	3,165	29.7	4,500	1,000	0.0236	0.031	0.069	0.0307±j0.0437	0.0848±j0.7106	15,330	34,310	41,090	479	657	543
1000	61	24	9	1.095	27	420	65	80	20	40	2.617	921	1,009	3,774	31.4	6,000	1,000	0.0177	0.023	0.077	0.0234±j0.0417	0.0775±j0.7047	20,440	45,740	54,780	558	780	633
1250	91	24	8	1.228	30	420	65	80	20	40	2.786	1,150	1,273	4,453	33.4	7,500	1,000	0.0141	0.019	0.084	0.0190±j0.0405	0.0730±j0.6992	25,790	57,710	69,110	629	896	713
1500	91	28	8	1.343	39	420	65	80	20	40	2.919	1,380	1,485	5,037	35.0	9,000	1,000	0.0118	0.016	0.091	0.0162±j0.0395	0.0703±j0.6950	30,090	67,330	80,630	688	994	780

VOLTAGE

35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Trefoil

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																													
1/0	19	11	14	0.354	20	420	50	55	20	40	1.682	97	145	1,155	20.2	633	1,000	0.168	0.215	0.037	0.2153±j0.0575	0.2694±j0.7509	2,940	6,580	7,880	163	198	184
2/0	19	21	16	0.398	20	420	50	55	20	40	1.700	122	174	1,216	20.4	799	1,000	0.133	0.17	0.040	0.1704±j0.0550	0.2245±j0.7477	3,530	7,900	9,460	184	226	209
3/0	19	17	14	0.449	20	420	50	55	20	40	1.777	155	224	1,369	21.3	1,007	1,000	0.105	0.134	0.042	0.1345±j0.0533	0.1886±j0.7429	4,540	10,170	12,180	210	262	239
4/0	19	14	12	0.504	20	420	50	80	20	40	1.916	195	294	1,624	23.0	1,269	1,000	0.0836	0.107	0.045	0.1072±j0.0523	0.1613±j0.7368	5,950	13,300	15,930	239	302	271
250	37	16	12	0.547	20	420	50	80	20	40	1.959	230	335	1,743	23.5	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0510	0.1449±j0.7339	6,800	15,210	18,210	261	333	297
350	37	22	12	0.650	20	420	50	80	20	40	2.062	322	461	2,047	24.8	2,100	1,000	0.0505	0.065	0.053	0.0651±j0.0482	0.1192±j0.7276	9,340	20,910	25,040	314	408	357
500	37	20	10	0.773	20	420	65	80	20	40	2.257	460	667	2,600	27.1	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0463	0.0998±j0.7195	13,510	30,230	36,210	384	511	436
750	61	24	9	0.949	27	420	65	80	20	40	2.471	690	1,009	3,392	29.7	4,500	1,000	0.0236	0.031	0.069	0.0307±j0.0437	0.0848±j0.7106	20,440	45,740	54,780	479	657	543
1000	61	25	8	1.095	27	420	65	80	20	40	2.647	921	1,326	4,106	31.8	6,000	1,000	0.0177	0.023	0.077	0.0234±j0.0420	0.0775±j0.7042	26,860	60,110	71,990	559	783	634
Full Neutral																													
1/0	19	10	12	0.354	20	420	50	55	20	40	1.716	97	210	1,250	20.6	633	1,000	0.168	0.215	0.037	0.2153±j0.0580	0.2694±j0.7500	4,250	9,500	11,380	163	199	185
2/0	19	13	12	0.398	20	420	50	55	20	40	1.760	122	273	1,372	21.1	799	1,000	0.133	0.17	0.040	0.1704±j0.0558	0.2245±j0.7462	5,520	12,350	14,800	185	228	210
3/0	19	16	12	0.449	20	420	50	80	20	40	1.861	155	335	1,568	22.3	1,007	1,000	0.105	0.134	0.042	0.1345±j0.0543	0.1886±j0.7408	6,800	15,210	18,210	211	263	239
4/0	19	13	10	0.504	20	420	50	80	20	40	1.958	195	433	1,803	23.5	1,269	1,000	0.0836	0.107	0.045	0.1072±j0.0529	0.1613±j0.7358	8,780	19,650	23,530	240	303	272
250	37	15	10	0.547	20	420	50	80	20	40	2.001	230	500	1,946	24.0	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0515	0.1449±j0.7330	10,130	22,680	27,160	262	335	298
350	37	21	10	0.650	20	420	50	80	20	40	2.104	322	700	2,319	25.3	2,100	1,000	0.0505	0.065	0.053	0.0651±j0.0487	0.1192±j0.7267	14,190	31,750	38,020	315	410	358
500	37	24	9	0.773	20	420	65	80	20	40	2.281	460	1,009	2,945	27.4	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0466	0.0998±j0.7190	20,440	45,740	54,780	384	513	436
750	61	28	8	0.949	27	420	65	80	20	40	2.501	690	1,485	3,865	30.0	4,500	1,000	0.0236	0.031	0.069	0.0307±j0.0439	0.0848±j0.7101	30,090	67,330	80,630	480	659	544

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at a single point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at a single point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at a single point.
3. Impedance: Calculations are based on trefoil formation / earth loop / conductor temperature of 90°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.
7. Shield Short-Circuit Current for 0.267 at 250°C and 0.267 at 350°C for reference only. Contact Voltage for capacity ratings.

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35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Flat

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.215	0.037	0.2152±j0.0624	0.2694±j0.7408	1,010	2,250	2,700	161	202	182
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.17	0.040	0.1704±j0.0603	0.2245±j0.7369	1,010	2,250	2,700	182	232	207
3/0	19	6	16	0.449	20	420	50	55	20	40	1.751	155	50	1,182	21.0	1,007	1,000	0.105	0.134	0.042	0.1344±j0.0582	0.1885±j0.7328	1,010	2,250	2,700	208	267	235
4/0	19	6	16	0.504	20	420	50	80	20	40	1.856	195	50	1,331	22.3	1,269	1,000	0.0836	0.107	0.045	0.1071±j0.0569	0.1612±j0.7275	1,010	2,250	2,700	235	307	267
250	37	6	16	0.547	20	420	50	80	20	40	1.899	230	50	1,411	22.8	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0556	0.1448±j0.7246	1,010	2,250	2,700	258	339	292
350	37	7	16	0.650	20	420	50	80	20	40	2.002	322	58	1,605	24.0	2,100	1,000	0.0505	0.065	0.053	0.0650±j0.0528	0.1191±j0.7182	1,170	2,630	3,150	309	415	351
500	37	7	14	0.773	20	420	65	80	20	40	2.181	460	93	1,974	26.2	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0508	0.0997±j0.7102	1,880	4,200	5,030	377	520	428
750	61	10	14	0.949	27	420	65	80	20	40	2.371	690	132	2,444	28.5	4,500	1,000	0.0236	0.031	0.069	0.0308±j0.0480	0.0849±j0.7017	2,680	6,000	7,180	470	667	532
1000	61	13	14	1.095	27	420	65	80	20	40	2.517	921	172	2,852	30.2	6,000	1,000	0.0177	0.023	0.077	0.0234±j0.0461	0.0775±j0.6957	3,480	7,800	9,340	547	793	620
1250	91	16	14	1.228	30	420	65	80	20	40	2.656	1,150	212	3,270	31.9	7,500	1,000	0.0141	0.019	0.084	0.0190±j0.0447	0.0731±j0.6906	4,290	9,590	11,490	616	909	697
1500	91	19	14	1.343	39	420	65	80	20	40	2.789	1,380	251	3,688	33.5	9,000	1,000	0.0118	0.016	0.091	0.0162±j0.0438	0.0703±j0.6863	5,090	11,390	13,640	674	1,009	762
1/6 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.215	0.037	0.2152±j0.0624	0.2694±j0.7408	1,010	2,250	2,700	161	202	182
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.17	0.040	0.1704±j0.0603	0.2245±j0.7369	1,010	2,250	2,700	182	232	207
3/0	19	7	16	0.449	20	420	50	55	20	40	1.751	155	58	1,189	21.0	1,007	1,000	0.105	0.134	0.042	0.1344±j0.0582	0.1885±j0.7328	1,170	2,630	3,150	208	267	235
4/0	19	9	16	0.504	20	420	50	80	20	40	1.856	195	75	1,353	22.3	1,269	1,000	0.0836	0.107	0.045	0.1071±j0.0569	0.1612±j0.7275	1,510	3,380	4,050	235	307	267
250	37	10	16	0.547	20	420	50	80	20	40	1.899	230	83	1,441	22.8	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0556	0.1448±j0.7246	1,680	3,760	4,500	258	339	292
350	37	9	14	0.650	20	420	50	80	20	40	2.028	322	119	1,694	24.3	2,100	1,000	0.0505	0.065	0.053	0.0650±j0.0531	0.1191±j0.7176	2,410	5,400	6,460	310	417	351
500	37	8	12	0.773	20	420	65	80	20	40	2.215	460	167	2,090	26.6	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0511	0.0997±j0.7095	3,390	7,590	9,090	378	522	428
750	61	19	14	0.949	27	420	65	80	20	40	2.371	690	251	2,551	28.5	4,500	1,000	0.0236	0.031	0.069	0.0308±j0.0480	0.0849±j0.7017	5,090	11,390	13,640	470	667	532
1000	61	16	12	1.095	27	420	65	80	20	40	2.551	921	335	3,055	30.6	6,000	1,000	0.0177	0.023	0.077	0.0234±j0.0464	0.0775±j0.6951	6,780	15,180	18,170	549	796	621
1250	91	20	12	1.228	30	420	65	80	20	40	2.690	1,150	419	3,516	32.3	7,500	1,000	0.0141	0.019	0.084	0.0190±j0.0450	0.0731±j0.6900	8,480	18,970	22,720	618	913	698
1500	91	24	12	1.343	39	420	65	80	20	40	2.823	1,380	502	3,977	33.9	9,000	1,000	0.0118	0.016	0.091	0.0162±j0.0440	0.0703±j0.6857	10,170	22,760	27,260	675	1,013	763

35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Flat

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	420	50	55	20	40	1.682	97	79	1,096	20.2	633	1,000	0.168	0.215	0.037	0.2152±j0.0628	0.2694±j0.7401	1,600	3,590	4,300	161	203	182
2/0	19	11	16	0.398	20	420	50	55	20	40	1.700	122	91	1,141	20.4	799	1,000	0.133	0.17	0.040	0.1704±j0.0603	0.2245±j0.7369	1,850	4,140	4,960	182	232	207
3/0	19	14	16	0.449	20	420	50	55	20	40	1.751	155	116	1,241	21.0	1,007	1,000	0.105	0.134	0.042	0.1344±j0.0582	0.1885±j0.7328	2,350	5,270	6,310	208	267	235
4/0	19	11	14	0.504	20	420	50	80	20	40	1.882	195	145	1,449	22.6	1,269	1,000	0.0836	0.107	0.045	0.1071±j0.0572	0.1612±j0.7268	2,940	6,580	7,880	236	308	267
250	37	13	14	0.547	20	420	50	80	20	40	1.925	230	171	1,554	23.1	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0559	0.1448±j0.7239	3,480	7,780	9,310	258	340	292
350	37	18	14	0.650	20	420	50	80	20	40	2.028	322	237	1,801	24.3	2,100	1,000	0.0505	0.065	0.053	0.0650±j0.0531	0.1191±j0.7176	4,810	10,770	12,890	310	417	351
500	37	16	12	0.773	20	420	65	80	20	40	2.215	460	335	2,241	26.6	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0511	0.0997±j0.7095	6,800	15,210	18,210	378	522	428
750	61	15	10	0.949	27	420	65	80	20	40	2.447	690	500	2,895	29.4	4,500	1,000	0.0236	0.031	0.069	0.0308±j0.0487	0.0848±j0.7002	10,130	22,680	27,160	473	673	535
1000	61	20	10	1.095	27	420	65	80	20	40	2.593	921	667	3,424	31.1	6,000	1,000	0.0177	0.023	0.077	0.0234±j0.0468	0.0775±j0.6943	13,510	30,230	36,210	550	800	622
1250	91	20	9	1.228	30	420	65	80	20	40	2.756	1,150	841	4,014	33.1	7,500	1,000	0.0141	0.019	0.084	0.0190±j0.0455	0.0730±j0.6888	17,040	38,120	45,650	620	920	701
1500	91	24	9	1.343	39	420	65	80	20	40	2.889	1,380	1,009	4,557	34.7	9,000	1,000	0.0118	0.016	0.091	0.0162±j0.0446	0.0703±j0.6846	20,440	45,740	54,780	678	1,021	766
1/2 Neutral																													
1/0	19	8	14	0.354	20	420	50	55	20	40	1.682	97	105	1,119	20.2	633	1,000	0.168	0.215	0.037	0.2152±j0.0628	0.2694±j0.7401	2,140	4,790	5,730	161	203	182
2/0	19	10	14	0.398	20	420	50	55	20	40	1.726	122	132	1,208	20.7	799	1,000	0.133	0.17	0.040	0.1704±j0.0607	0.2245±j0.7362	2,670	5,980	7,160	183	233	207
3/0	19	13	14	0.449	20	420	50	55	20	40	1.777	155	171	1,322	21.3	1,007	1,000	0.105	0.134	0.042	0.1344±j0.0586	0.1885±j0.7321	3,480	7,780	9,310	208	268	236
4/0	19	10	12	0.504	20	420	50	80	20	40	1.916	195	210	1,548	23.0	1,269	1,000	0.0836	0.107	0.045	0.1071±j0.0576	0.1612±j0.7260	4,250	9,500	11,380	236	309	267
250	37	12	12	0.547	20	420	50	80	20	40	1.959	230	251	1,668	23.5	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0563	0.1448±j0.7231	5,100	11,400	13,660	259	342	293
350	37	11	10	0.650	20	420	50	80	20	40	2.104	322	367	2,019	25.3	2,100	1,000	0.0505	0.065	0.053	0.0650±j0.0539	0.1191±j0.7159	7,430	16,630	19,910	312	421	353
500	37	15	10	0.773	20	420	65	80	20	40	2.257	460	500	2,451	27.1	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0516	0.0997±j0.7087	10,130	22,680	27,160	379	525	429
750	61	18	9	0.949	27	420	65	80	20	40	2.471	690	757	3,165	29.7	4,500	1,000	0.0236	0.031	0.069	0.0307±j0.0490	0.0848±j0.6998	15,330	34,310	41,090	473	675	535
1000	61	24	9	1.095	27	420	65	80	20	40	2.617	921	1,009	3,774	31.4	6,000	1,000	0.0177	0.023	0.077	0.0234±j0.0470	0.0775±j0.6939	20,440	45,740	54,780	551	802	623
1250	91	24	8	1.228	30	420	65	80	20	40	2.786	1,150	1,273	4,453	33.4	7,500	1,000	0.0141	0.019	0.084	0.0190±j0.0458	0.0730±j0.6884	25,790	57,710	69,110	621	923	702
1500	91	28	8	1.343	39	420	65	80	20	40	2.919	1,380	1,485	5,037	35.0	9,000	1,000	0.0118	0.016	0.091	0.0162±j0.0448	0.0703±j0.6842	30,090	67,330	80,630	679	1,024	767

35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																													
1/0	19	11	14	0.354	20	420	50	55	20	40	1.682	97	145	1,155	20.2	633	1,000	0.168	0.215	0.037	0.2152±j0.0628	0.2694±j0.7401	2,940	6,580	7,880	161	203	182
2/0	19	21	16	0.398	20	420	50	55	20	40	1.700	122	174	1,216	20.4	799	1,000	0.133	0.17	0.040	0.1704±j0.0603	0.2245±j0.7369	3,530	7,900	9,460	182	232	207
3/0	19	17	14	0.449	20	420	50	55	20	40	1.777	155	224	1,369	21.3	1,007	1,000	0.105	0.134	0.042	0.1344±j0.0586	0.1885±j0.7321	4,540	10,170	12,180	208	268	236
4/0	19	14	12	0.504	20	420	50	80	20	40	1.916	195	294	1,624	23.0	1,269	1,000	0.0836	0.107	0.045	0.1071±j0.0576	0.1612±j0.7260	5,950	13,300	15,930	236	309	267
250	37	16	12	0.547	20	420	50	80	20	40	1.959	230	335	1,743	23.5	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0563	0.1448±j0.7231	6,800	15,210	18,210	259	342	293
350	37	22	12	0.650	20	420	50	80	20	40	2.062	322	461	2,047	24.8	2,100	1,000	0.0505	0.065	0.053	0.0650±j0.0535	0.1191±j0.7168	9,340	20,910	25,040	311	419	352
500	37	20	10	0.773	20	420	65	80	20	40	2.257	460	667	2,600	27.1	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0516	0.0997±j0.7087	13,510	30,230	36,210	379	525	429
750	61	24	9	0.949	27	420	65	80	20	40	2.471	690	1,009	3,392	29.7	4,500	1,000	0.0236	0.031	0.069	0.0307±j0.0490	0.0848±j0.6998	20,440	45,740	54,780	473	675	535
1000	61	25	8	1.095	27	420	65	80	20	40	2.647	921	1,326	4,106	31.8	6,000	1,000	0.0177	0.023	0.077	0.0234±j0.0472	0.0775±j0.6934	26,860	60,110	71,990	552	805	624
Full Neutral																													
1/0	19	10	12	0.354	20	420	50	55	20	40	1.716	97	210	1,250	20.6	633	1,000	0.168	0.215	0.037	0.2152±j0.0632	0.2694±j0.7392	4,250	9,500	11,380	162	204	183
2/0	19	13	12	0.398	20	420	50	55	20	40	1.760	122	273	1,372	21.1	799	1,000	0.133	0.17	0.040	0.1704±j0.0611	0.2245±j0.7353	5,520	12,350	14,800	183	234	208
3/0	19	16	12	0.449	20	420	50	80	20	40	1.861	155	335	1,568	22.3	1,007	1,000	0.105	0.134	0.042	0.1344±j0.0596	0.1885±j0.7300	6,800	15,210	18,210	209	270	236
4/0	19	13	10	0.504	20	420	50	80	20	40	1.958	195	433	1,803	23.5	1,269	1,000	0.0836	0.107	0.045	0.1071±j0.0582	0.1612±j0.7250	8,780	19,650	23,530	237	311	268
250	37	15	10	0.547	20	420	50	80	20	40	2.001	230	500	1,946	24.0	1,500	1,000	0.0707	0.091	0.048	0.0908±j0.0568	0.1448±j0.7222	10,130	22,680	27,160	260	344	294
350	37	21	10	0.650	20	420	50	80	20	40	2.104	322	700	2,319	25.3	2,100	1,000	0.0505	0.065	0.053	0.0650±j0.0539	0.1191±j0.7159	14,190	31,750	38,020	312	421	353
500	37	24	9	0.773	20	420	65	80	20	40	2.281	460	1,009	2,945	27.4	3,000	1,000	0.0354	0.046	0.060	0.0456±j0.0518	0.0997±j0.7082	20,440	45,740	54,780	380	527	430
750	61	28	8	0.949	27	420	65	80	20	40	2.501	690	1,485	3,865	30.0	4,500	1,000	0.0236	0.031	0.069	0.0307±j0.0492	0.0848±j0.6993	30,090	67,330	80,630	474	677	536

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at a single point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at a single point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at a single point.
3. Impedance: Calculations are based on flat formation / earth loop / conductor temperature of 90°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.
7. Shield Short-Circuit Current for 0.267 at 250°C and 0.267 at 350°C for reference only. Contact Voltage for capacity ratings.

35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.215	0.037	0.2160±j0.0571	1.0559±j0.0444	1,010	2,250	2,700	162	197	184
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.17	0.040	0.1711±j0.0550	1.0110±j0.0425	1,010	2,250	2,700	184	226	209
3/0	19	6	16	0.449	20	420	50	55	20	40	1.751	155	50	1,182	21.0	1,007	1,000	0.105	0.134	0.042	0.1352±j0.0529	0.9751±j0.0406	1,010	2,250	2,700	209	260	238
4/0	19	6	16	0.504	20	420	50	80	20	40	1.856	195	50	1,331	22.3	1,269	1,000	0.0836	0.107	0.045	0.1079±j0.0516	0.9478±j0.0388	1,010	2,250	2,700	237	299	270
250	37	6	16	0.547	20	420	50	80	20	40	1.899	230	50	1,411	22.8	1,500	1,000	0.0707	0.091	0.048	0.0915±j0.0502	0.9314±j0.0376	1,010	2,250	2,700	260	330	295
350	37	7	16	0.650	20	420	50	80	20	40	2.002	322	58	1,605	24.0	2,100	1,000	0.0505	0.065	0.053	0.0659±j0.0475	0.7856±j0.0343	1,170	2,630	3,150	312	404	354
500	37	7	14	0.773	20	420	65	80	20	40	2.181	460	93	1,974	26.2	3,000	1,000	0.0354	0.046	0.060	0.0470±j0.0454	0.4988±j0.0324	1,880	4,200	5,030	379	503	430
750	61	10	14	0.949	27	420	65	80	20	40	2.371	690	132	2,444	28.5	4,500	1,000	0.0236	0.031	0.069	0.0326±j0.0426	0.3480±j0.0284	2,680	6,000	7,180	468	641	532
1000	61	13	14	1.095	27	420	65	80	20	40	2.517	921	172	2,852	30.2	6,000	1,000	0.0177	0.023	0.077	0.0258±j0.0405	0.2674±j0.0258	3,480	7,800	9,340	539	755	613
1250	91	16	14	1.228	30	420	65	80	20	40	2.656	1,150	212	3,270	31.9	7,500	1,000	0.0141	0.019	0.084	0.0219±j0.0390	0.2172±j0.0240	4,290	9,590	11,490	599	856	681
1500	91	19	14	1.343	39	420	65	80	20	40	2.789	1,380	251	3,688	33.5	9,000	1,000	0.0118	0.016	0.091	0.0196±j0.0380	0.1832±j0.0227	5,090	11,390	13,640	646	939	734
1/6 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.215	0.037	0.2160±j0.0571	1.0559±j0.0444	1,010	2,250	2,700	162	197	184
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.17	0.040	0.1711±j0.0550	1.0110±j0.0425	1,010	2,250	2,700	184	226	209
3/0	19	7	16	0.449	20	420	50	55	20	40	1.751	155	58	1,189	21.0	1,007	1,000	0.105	0.134	0.042	0.1353±j0.0529	0.8550±j0.0398	1,170	2,630	3,150	209	260	238
4/0	19	9	16	0.504	20	420	50	80	20	40	1.856	195	75	1,353	22.3	1,269	1,000	0.0836	0.107	0.045	0.1083±j0.0516	0.6676±j0.0369	1,510	3,380	4,050	237	298	269
250	37	10	16	0.547	20	420	50	80	20	40	1.899	230	83	1,441	22.8	1,500	1,000	0.0707	0.091	0.048	0.0920±j0.0502	0.5952±j0.0352	1,680	3,760	4,500	259	329	295
350	37	9	14	0.650	20	420	50	80	20	40	2.028	322	119	1,694	24.3	2,100	1,000	0.0505	0.065	0.053	0.0668±j0.0477	0.4175±j0.0332	2,410	5,400	6,460	311	404	354
500	37	8	12	0.773	20	420	65	80	20	40	2.215	460	167	2,090	26.6	3,000	1,000	0.0354	0.046	0.060	0.0480±j0.0456	0.2950±j0.0318	3,390	7,590	9,090	377	503	429
750	61	19	14	0.949	27	420	65	80	20	40	2.371	690	251	2,551	28.5	4,500	1,000	0.0236	0.031	0.069	0.0343±j0.0422	0.1977±j0.0263	5,090	11,390	13,640	461	634	525
1000	61	16	12	1.095	27	420	65	80	20	40	2.551	921	335	3,055	30.6	6,000	1,000	0.0177	0.023	0.077	0.0280±j0.0402	0.1481±j0.0251	6,780	15,180	18,170	527	744	599
1250	91	20	12	1.228	30	420	65	80	20	40	2.690	1,150	419	3,516	32.3	7,500	1,000	0.0141	0.019	0.084	0.0245±j0.0383	0.1187±j0.0233	8,480	18,970	22,720	579	836	659
1500	91	24	12	1.343	39	420	65	80	20	40	2.823	1,380	502	3,977	33.9	9,000	1,000	0.0118	0.016	0.091	0.0226±j0.0369	0.0993±j0.0222	10,170	22,760	27,260	617	909	703

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35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	420	50	55	20	40	1.682	97	79	1,096	20.2	633	1,000	0.168	0.215	0.037	0.2164±j0.0574	0.7439±j0.0444	1,600	3,590	4,300	162	198	184
2/0	19	11	16	0.398	20	420	50	55	20	40	1.700	122	91	1,141	20.4	799	1,000	0.133	0.17	0.040	0.1717±j0.0550	0.6289±j0.0398	1,850	4,140	4,960	184	226	209
3/0	19	14	16	0.449	20	420	50	55	20	40	1.751	155	116	1,241	21.0	1,007	1,000	0.105	0.134	0.042	0.1362±j0.0528	0.4947±j0.0370	2,350	5,270	6,310	209	260	238
4/0	19	11	14	0.504	20	420	50	80	20	40	1.882	195	145	1,449	22.6	1,269	1,000	0.0836	0.107	0.045	0.1093±j0.0518	0.3955±j0.0361	2,940	6,580	7,880	237	299	269
250	37	13	14	0.547	20	420	50	80	20	40	1.925	230	171	1,554	23.1	1,500	1,000	0.0707	0.091	0.048	0.0933±j0.0503	0.3348±j0.0342	3,480	7,780	9,310	259	330	294
350	37	18	14	0.650	20	420	50	80	20	40	2.028	322	237	1,801	24.3	2,100	1,000	0.0505	0.065	0.053	0.0685±j0.0473	0.2413±j0.0308	4,810	10,770	12,890	309	402	351
500	37	16	12	0.773	20	420	65	80	20	40	2.215	460	335	2,241	26.6	3,000	1,000	0.0354	0.046	0.060	0.0503±j0.0449	0.1703±j0.0292	6,800	15,210	18,210	372	498	423
750	61	15	10	0.949	27	420	65	80	20	40	2.447	690	500	2,895	29.4	4,500	1,000	0.0236	0.031	0.069	0.0373±j0.0415	0.1144±j0.0270	10,130	22,680	27,160	451	626	513
1000	61	20	10	1.095	27	420	65	80	20	40	2.593	921	667	3,424	31.1	6,000	1,000	0.0177	0.023	0.077	0.0315±j0.0383	0.0861±j0.0245	13,510	30,230	36,210	507	724	577
1250	91	20	9	1.228	30	420	65	80	20	40	2.756	1,150	841	4,014	33.1	7,500	1,000	0.0141	0.019	0.084	0.0284±j0.0357	0.0687±j0.0233	17,040	38,120	45,650	549	806	626
1500	91	24	9	1.343	39	420	65	80	20	40	2.889	1,380	1,009	4,557	34.7	9,000	1,000	0.0118	0.016	0.091	0.0265±j0.0333	0.0577±j0.0222	20,440	45,740	54,780	580	868	660
1/2 Neutral																													
1/0	19	8	14	0.354	20	420	50	55	20	40	1.682	97	105	1,119	20.2	633	1,000	0.168	0.215	0.037	0.2168±j0.0574	0.6118±j0.0430	2,140	4,790	5,730	162	198	184
2/0	19	10	14	0.398	20	420	50	55	20	40	1.726	122	132	1,208	20.7	799	1,000	0.133	0.17	0.040	0.1723±j0.0552	0.4876±j0.0401	2,670	5,980	7,160	184	227	209
3/0	19	13	14	0.449	20	420	50	55	20	40	1.777	155	171	1,322	21.3	1,007	1,000	0.105	0.134	0.042	0.1369±j0.0530	0.3785±j0.0372	3,480	7,780	9,310	209	261	238
4/0	19	10	12	0.504	20	420	50	80	20	40	1.916	195	210	1,548	23.0	1,269	1,000	0.0836	0.107	0.045	0.1102±j0.0519	0.3066±j0.0364	4,250	9,500	11,380	237	300	269
250	37	12	12	0.547	20	420	50	80	20	40	1.959	230	251	1,668	23.5	1,500	1,000	0.0707	0.091	0.048	0.0945±j0.0504	0.2570±j0.0345	5,100	11,400	13,660	259	330	294
350	37	11	10	0.650	20	420	50	80	20	40	2.104	322	367	2,019	25.3	2,100	1,000	0.0505	0.065	0.053	0.0702±j0.0475	0.1791±j0.0324	7,430	16,630	19,910	308	404	350
500	37	15	10	0.773	20	420	65	80	20	40	2.257	460	500	2,451	27.1	3,000	1,000	0.0354	0.046	0.060	0.0523±j0.0443	0.1293±j0.0294	10,130	22,680	27,160	368	496	419
750	61	18	9	0.949	27	420	65	80	20	40	2.471	690	757	3,165	29.7	4,500	1,000	0.0236	0.031	0.069	0.0397±j0.0397	0.0860±j0.0265	15,330	34,310	41,090	441	617	502
1000	61	24	9	1.095	27	420	65	80	20	40	2.617	921	1,009	3,774	31.4	6,000	1,000	0.0177	0.023	0.077	0.0339±j0.0356	0.0649±j0.0241	20,440	45,740	54,780	492	708	561
1250	91	24	8	1.228	30	420	65	80	20	40	2.786	1,150	1,273	4,453	33.4	7,500	1,000	0.0141	0.019	0.084	0.0304±j0.0321	0.0518±j0.0229	25,790	57,710	69,110	532	786	606
1500	91	28	8	1.343	39	420	65	80	20	40	2.919	1,380	1,485	5,037	35.0	9,000	1,000	0.0118	0.016	0.091	0.0280±j0.0295	0.0444±j0.0218	30,090	67,330	80,630	563	849	641

35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																												
1/0	19	11	14	0.354	20	420	50	55	20	40	1.682	97	145	1,155	20.2	633	1,000	0.168	0.215	0.037	0.2174±j0.0573	0.5036±j0.0417	2,940	6,580	7,880	162	198	184
2/0	19	21	16	0.398	20	420	50	55	20	40	1.700	122	174	1,216	20.4	799	1,000	0.133	0.17	0.040	0.1729±j0.0547	0.4105±j0.0378	3,530	7,900	9,460	184	226	209
3/0	19	17	14	0.449	20	420	50	55	20	40	1.777	155	224	1,369	21.3	1,007	1,000	0.105	0.134	0.042	0.1377±j0.0529	0.3210±j0.0364	4,540	10,170	12,180	209	260	237
4/0	19	14	12	0.504	20	420	50	80	20	40	1.916	195	294	1,624	23.0	1,269	1,000	0.0836	0.107	0.045	0.1114±j0.0516	0.2496±j0.0352	5,950	13,300	15,930	236	299	268
250	37	16	12	0.547	20	420	50	80	20	40	1.959	230	335	1,743	23.5	1,500	1,000	0.0707	0.091	0.048	0.0956±j0.0500	0.2154±j0.0336	6,800	15,210	18,210	258	330	293
350	37	22	12	0.650	20	420	50	80	20	40	2.062	322	461	2,047	24.8	2,100	1,000	0.0505	0.065	0.053	0.0714±j0.0465	0.1557±j0.0302	9,340	20,910	25,040	306	400	348
500	37	20	10	0.773	20	420	65	80	20	40	2.257	460	667	2,600	27.1	3,000	1,000	0.0354	0.046	0.060	0.0540±j0.0430	0.1084±j0.0286	13,510	30,230	36,210	364	492	414
750	61	24	9	0.949	27	420	65	80	20	40	2.471	690	1,009	3,392	29.7	4,500	1,000	0.0236	0.031	0.069	0.0414±j0.0374	0.0722±j0.0257	20,440	45,740	54,780	434	609	494
1000	61	25	8	1.095	27	420	65	80	20	40	2.647	921	1,326	4,106	31.8	6,000	1,000	0.0177	0.023	0.077	0.0350±j0.0330	0.0550±j0.0240	26,860	60,110	71,990	484	701	551
Full Neutral																												
1/0	19	10	12	0.354	20	420	50	55	20	40	1.716	97	210	1,250	20.6	633	1,000	0.168	0.215	0.037	0.2183±j0.0575	4.4642±j0.4531	4,250	9,500	11,380	162	198	184
2/0	19	13	12	0.398	20	420	50	55	20	40	1.760	122	273	1,372	21.1	799	1,000	0.133	0.17	0.040	0.1743±j0.0552	3.4856±j0.4219	5,520	12,350	14,800	184	227	209
3/0	19	16	12	0.449	20	420	50	80	20	40	1.861	155	335	1,568	22.3	1,007	1,000	0.105	0.134	0.042	0.1394±j0.0533	2.7894±j0.3940	6,800	15,210	18,210	209	261	237
4/0	19	13	10	0.504	20	420	50	80	20	40	1.958	195	433	1,803	23.5	1,269	1,000	0.0836	0.107	0.045	0.1132±j0.0513	2.1919±j0.3819	8,780	19,650	23,530	236	300	268
250	37	15	10	0.547	20	420	50	80	20	40	2.001	230	500	1,946	24.0	1,500	1,000	0.0707	0.091	0.048	0.0976±j0.0494	1.8773±j0.3635	10,130	22,680	27,160	257	330	292
350	37	21	10	0.650	20	420	50	80	20	40	2.104	322	700	2,319	25.3	2,100	1,000	0.0505	0.065	0.053	0.0739±j0.0450	1.3432±j0.3268	14,190	31,750	38,020	303	399	345
500	37	24	9	0.773	20	420	65	80	20	40	2.281	460	1,009	2,945	27.4	3,000	1,000	0.0354	0.046	0.060	0.0564±j0.0401	0.9373±j0.3028	20,440	45,740	54,780	358	487	408
750	61	28	8	0.949	27	420	65	80	20	40	2.501	690	1,485	3,865	30.0	4,500	1,000	0.0236	0.031	0.069	0.0427±j0.0336	0.6342±j0.2733	30,090	67,330	80,630	426	602	486

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at both point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at both point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at both point.
3. Impedance: Calculations are based on trefoil formation / shield loop / conductor temperature of 90°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.
7. Shield Short-Circuit Current for 0.267 at 250°C and 0.267 at 350°C for reference only. Contact Voltage for capacity ratings.

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35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Flat

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.215	0.037	0.2163±j0.0624	1.0559±j0.0444	1,010	2,250	2,700	160	201	182
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.17	0.040	0.1715±j0.0603	1.0110±j0.0425	1,010	2,250	2,700	182	231	206
3/0	19	6	16	0.449	20	420	50	55	20	40	1.751	155	50	1,182	21.0	1,007	1,000	0.105	0.134	0.042	0.1355±j0.0582	0.9751±j0.0406	1,010	2,250	2,700	207	266	235
4/0	19	6	16	0.504	20	420	50	80	20	40	1.856	195	50	1,331	22.3	1,269	1,000	0.0836	0.107	0.045	0.1083±j0.0569	0.9478±j0.0388	1,010	2,250	2,700	234	305	265
250	37	6	16	0.547	20	420	50	80	20	40	1.899	230	50	1,411	22.8	1,500	1,000	0.0707	0.091	0.048	0.0919±j0.0555	0.9314±j0.0376	1,010	2,250	2,700	256	337	290
350	37	7	16	0.650	20	420	50	80	20	40	2.002	322	58	1,605	24.0	2,100	1,000	0.0505	0.065	0.053	0.0663±j0.0528	0.7856±j0.0343	1,170	2,630	3,150	307	412	348
500	37	7	14	0.773	20	420	65	80	20	40	2.181	460	93	1,974	26.2	3,000	1,000	0.0354	0.046	0.060	0.0476±j0.0507	0.4988±j0.0324	1,880	4,200	5,030	370	512	419
750	61	10	14	0.949	27	420	65	80	20	40	2.371	690	132	2,444	28.5	4,500	1,000	0.0236	0.031	0.069	0.0335±j0.0478	0.3480±j0.0284	2,680	6,000	7,180	450	646	511
1000	61	13	14	1.095	27	420	65	80	20	40	2.517	921	172	2,852	30.2	6,000	1,000	0.0177	0.023	0.077	0.0269±j0.0457	0.2674±j0.0258	3,480	7,800	9,340	509	751	578
1250	91	16	14	1.228	30	420	65	80	20	40	2.656	1,150	212	3,270	31.9	7,500	1,000	0.0141	0.019	0.084	0.0233±j0.0440	0.2172±j0.0240	4,290	9,590	11,490	555	839	629
1500	91	19	14	1.343	39	420	65	80	20	40	2.789	1,380	251	3,688	33.5	9,000	1,000	0.0118	0.016	0.091	0.0212±j0.0429	0.1832±j0.0227	5,090	11,390	13,640	586	907	665
1/6 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.215	0.037	0.2163±j0.0624	1.0559±j0.0444	1,010	2,250	2,700	160	201	182
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.17	0.040	0.1715±j0.0603	1.0110±j0.0425	1,010	2,250	2,700	182	231	206
3/0	19	7	16	0.449	20	420	50	55	20	40	1.751	155	58	1,189	21.0	1,007	1,000	0.105	0.134	0.042	0.1357±j0.0582	0.8550±j0.0398	1,170	2,630	3,150	207	266	234
4/0	19	9	16	0.504	20	420	50	80	20	40	1.856	195	75	1,353	22.3	1,269	1,000	0.0836	0.107	0.045	0.1088±j0.0568	0.6676±j0.0369	1,510	3,380	4,050	234	305	265
250	37	10	16	0.547	20	420	50	80	20	40	1.899	230	83	1,441	22.8	1,500	1,000	0.0707	0.091	0.048	0.0926±j0.0554	0.5952±j0.0352	1,680	3,760	4,500	255	336	289
350	37	9	14	0.650	20	420	50	80	20	40	2.028	322	119	1,694	24.3	2,100	1,000	0.0505	0.065	0.053	0.0676±j0.0529	0.4175±j0.0332	2,410	5,400	6,460	304	411	345
500	37	8	12	0.773	20	420	65	80	20	40	2.215	460	167	2,090	26.6	3,000	1,000	0.0354	0.046	0.060	0.0492±j0.0507	0.2950±j0.0318	3,390	7,590	9,090	364	508	413
750	61	19	14	0.949	27	420	65	80	20	40	2.371	690	251	2,551	28.5	4,500	1,000	0.0236	0.031	0.069	0.0359±j0.0471	0.1977±j0.0263	5,090	11,390	13,640	434	629	493
1000	61	16	12	1.095	27	420	65	80	20	40	2.551	921	335	3,055	30.6	6,000	1,000	0.0177	0.023	0.077	0.0300±j0.0448	0.1481±j0.0251	6,780	15,180	18,170	481	721	546
1250	91	20	12	1.228	30	420	65	80	20	40	2.690	1,150	419	3,516	32.3	7,500	1,000	0.0141	0.019	0.084	0.0269±j0.0426	0.1187±j0.0233	8,480	18,970	22,720	512	790	582
1500	91	24	12	1.343	39	420	65	80	20	40	2.823	1,380	502	3,977	33.9	9,000	1,000	0.0118	0.016	0.091	0.0254±j0.0408	0.0993±j0.0222	10,170	22,760	27,260	531	840	604

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35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Flat

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	420	50	55	20	40	1.682	97	79	1,096	20.2	633	1,000	0.168	0.215	0.037	0.2170±j0.0627	0.7439±j0.0444	1,600	3,590	4,300	160	202	182
2/0	19	11	16	0.398	20	420	50	55	20	40	1.700	122	91	1,141	20.4	799	1,000	0.133	0.17	0.040	0.1723±j0.0602	0.6289±j0.0398	1,850	4,140	4,960	182	231	206
3/0	19	14	16	0.449	20	420	50	55	20	40	1.751	155	116	1,241	21.0	1,007	1,000	0.105	0.134	0.042	0.1369±j0.0580	0.4947±j0.0370	2,350	5,270	6,310	206	265	233
4/0	19	11	14	0.504	20	420	50	80	20	40	1.882	195	145	1,449	22.6	1,269	1,000	0.0836	0.107	0.045	0.1103±j0.0569	0.3955±j0.0361	2,940	6,580	7,880	232	305	263
250	37	13	14	0.547	20	420	50	80	20	40	1.925	230	171	1,554	23.1	1,500	1,000	0.0707	0.091	0.048	0.0945±j0.0554	0.3348±j0.0342	3,480	7,780	9,310	253	335	287
350	37	18	14	0.650	20	420	50	80	20	40	2.028	322	237	1,801	24.3	2,100	1,000	0.0505	0.065	0.053	0.0701±j0.0522	0.2413±j0.0308	4,810	10,770	12,890	299	406	339
500	37	16	12	0.773	20	420	65	80	20	40	2.215	460	335	2,241	26.6	3,000	1,000	0.0354	0.046	0.060	0.0524±j0.0495	0.1703±j0.0292	6,800	15,210	18,210	352	495	400
750	61	15	10	0.949	27	420	65	80	20	40	2.447	690	500	2,895	29.4	4,500	1,000	0.0236	0.031	0.069	0.0401±j0.0454	0.1144±j0.0270	10,130	22,680	27,160	410	605	466
1000	61	20	10	1.095	27	420	65	80	20	40	2.593	921	667	3,424	31.1	6,000	1,000	0.0177	0.023	0.077	0.0347±j0.0414	0.0861±j0.0245	13,510	30,230	36,210	444	679	505
1250	91	20	9	1.228	30	420	65	80	20	40	2.756	1,150	841	4,014	33.1	7,500	1,000	0.0141	0.019	0.084	0.0318±j0.0380	0.0687±j0.0233	17,040	38,120	45,650	467	738	532
1500	91	24	9	1.343	39	420	65	80	20	40	2.889	1,380	1,009	4,557	34.7	9,000	1,000	0.0118	0.016	0.091	0.0300±j0.0349	0.0577±j0.0222	20,440	45,740	54,780	485	783	551
1/2 Neutral																													
1/0	19	8	14	0.354	20	420	50	55	20	40	1.682	97	105	1,119	20.2	633	1,000	0.168	0.215	0.037	0.2175±j0.0626	0.6118±j0.0430	2,140	4,790	5,730	160	202	181
2/0	19	10	14	0.398	20	420	50	55	20	40	1.726	122	132	1,208	20.7	799	1,000	0.133	0.17	0.040	0.1732±j0.0604	0.4876±j0.0401	2,670	5,980	7,160	181	231	206
3/0	19	13	14	0.449	20	420	50	55	20	40	1.777	155	171	1,322	21.3	1,007	1,000	0.105	0.134	0.042	0.1381±j0.0582	0.3785±j0.0372	3,480	7,780	9,310	205	266	233
4/0	19	10	12	0.504	20	420	50	80	20	40	1.916	195	210	1,548	23.0	1,269	1,000	0.0836	0.107	0.045	0.1117±j0.0570	0.3066±j0.0364	4,250	9,500	11,380	232	305	262
250	37	12	12	0.547	20	420	50	80	20	40	1.959	230	251	1,668	23.5	1,500	1,000	0.0707	0.091	0.048	0.0961±j0.0553	0.2570±j0.0345	5,100	11,400	13,660	251	335	285
350	37	11	10	0.650	20	420	50	80	20	40	2.104	322	367	2,019	25.3	2,100	1,000	0.0505	0.065	0.053	0.0725±j0.0520	0.1791±j0.0324	7,430	16,630	19,910	294	404	334
500	37	15	10	0.773	20	420	65	80	20	40	2.257	460	500	2,451	27.1	3,000	1,000	0.0354	0.046	0.060	0.0551±j0.0482	0.1293±j0.0294	10,130	22,680	27,160	343	488	390
750	61	18	9	0.949	27	420	65	80	20	40	2.471	690	757	3,165	29.7	4,500	1,000	0.0236	0.031	0.069	0.0431±j0.0424	0.0860±j0.0265	15,330	34,310	41,090	394	588	448
1000	61	24	9	1.095	27	420	65	80	20	40	2.617	921	1,009	3,774	31.4	6,000	1,000	0.0177	0.023	0.077	0.0373±j0.0371	0.0649±j0.0241	20,440	45,740	54,780	427	659	486
1250	91	24	8	1.228	30	420	65	80	20	40	2.786	1,150	1,273	4,453	33.4	7,500	1,000	0.0141	0.019	0.084	0.0335±j0.0328	0.0518±j0.0229	25,790	57,710	69,110	454	722	517
1500	91	28	8	1.343	39	420	65	80	20	40	2.919	1,380	1,485	5,037	35.0	9,000	1,000	0.0118	0.016	0.091	0.0308±j0.0297	0.0444±j0.0218	30,090	67,330	80,630	477	775	543

VOLTAGE

35kV MV-90 AL TR-XLPE 133% INS LLDPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 90°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																												
1/0	19	11	14	0.354	20	420	50	55	20	40	1.682	97	145	1,155	20.2	633	1,000	0.168	0.215	0.037	0.2184±j0.0625	0.5036±j0.0417	2,940	6,580	7,880	160	202	181
2/0	19	21	16	0.398	20	420	50	55	20	40	1.700	122	174	1,216	20.4	799	1,000	0.133	0.17	0.040	0.1741±j0.0599	0.4105±j0.0378	3,530	7,900	9,460	181	230	205
3/0	19	17	14	0.449	20	420	50	55	20	40	1.777	155	224	1,369	21.3	1,007	1,000	0.105	0.134	0.042	0.1392±j0.0578	0.3210±j0.0364	4,540	10,170	12,180	205	265	232
4/0	19	14	12	0.504	20	420	50	80	20	40	1.916	195	294	1,624	23.0	1,269	1,000	0.0836	0.107	0.045	0.1134±j0.0563	0.2496±j0.0352	5,950	13,300	15,930	230	303	260
250	37	16	12	0.547	20	420	50	80	20	40	1.959	230	335	1,743	23.5	1,500	1,000	0.0707	0.091	0.048	0.0977±j0.0546	0.2154±j0.0336	6,800	15,210	18,210	249	332	283
350	37	22	12	0.650	20	420	50	80	20	40	2.062	322	461	2,047	24.8	2,100	1,000	0.0505	0.065	0.053	0.0741±j0.0505	0.1557±j0.0302	9,340	20,910	25,040	290	399	330
500	37	20	10	0.773	20	420	65	80	20	40	2.257	460	667	2,600	27.1	3,000	1,000	0.0354	0.046	0.060	0.0572±j0.0461	0.1084±j0.0286	13,510	30,230	36,210	336	480	382
750	61	24	9	0.949	27	420	65	80	20	40	2.471	690	1,009	3,392	29.7	4,500	1,000	0.0236	0.031	0.069	0.0447±j0.0390	0.0722±j0.0257	20,440	45,740	54,780	386	578	439
1000	61	25	8	1.095	27	420	65	80	20	40	2.647	921	1,326	4,106	31.8	6,000	1,000	0.0177	0.023	0.077	0.0381±j0.0335	0.0550±j0.0240	26,860	60,110	71,990	422	655	481
Full Neutral																												
1/0	19	10	12	0.354	20	420	50	55	20	40	1.716	97	210	1,250	20.6	633	1,000	0.168	0.215	0.037	0.2197±j0.0626	0.4147±j0.0421	4,250	9,500	11,380	160	202	181
2/0	19	13	12	0.398	20	420	50	55	20	40	1.760	122	273	1,372	21.1	799	1,000	0.133	0.17	0.040	0.1760±j0.0600	0.3238±j0.0392	5,520	12,350	14,800	180	231	204
3/0	19	16	12	0.449	20	420	50	80	20	40	1.861	155	335	1,568	22.3	1,007	1,000	0.105	0.134	0.042	0.1415±j0.0579	0.2591±j0.0366	6,800	15,210	18,210	204	265	230
4/0	19	13	10	0.504	20	420	50	80	20	40	1.958	195	433	1,803	23.5	1,269	1,000	0.0836	0.107	0.045	0.1158±j0.0554	0.2036±j0.0355	8,780	19,650	23,530	228	302	258
250	37	15	10	0.547	20	420	50	80	20	40	2.001	230	500	1,946	24.0	1,500	1,000	0.0707	0.091	0.048	0.1005±j0.0532	0.1744±j0.0338	10,130	22,680	27,160	246	331	279
350	37	21	10	0.650	20	420	50	80	20	40	2.104	322	700	2,319	25.3	2,100	1,000	0.0505	0.065	0.053	0.0772±j0.0479	0.1248±j0.0304	14,190	31,750	38,020	284	394	323
500	37	24	9	0.773	20	420	65	80	20	40	2.281	460	1,009	2,945	27.4	3,000	1,000	0.0354	0.046	0.060	0.0598±j0.0416	0.0871±j0.0281	20,440	45,740	54,780	328	472	373
750	61	28	8	0.949	27	420	65	80	20	40	2.501	690	1,485	3,865	30.0	4,500	1,000	0.0236	0.031	0.069	0.0455±j0.0337	0.0589±j0.0254	30,090	67,330	80,630	382	575	435

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at both point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at both point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at both point.
3. Impedance: Calculations are based on flat formation / shield loop / conductor temperature of 90°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.
7. Shield Short-Circuit Current for 0.267 at 250°C and 0.267 at 350°C for reference only. Contact Voltage for capacity ratings.

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VOLTAGE

Medium Voltage Cable

35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite

Construction

- Conductor: 1/0 AWG - 1500kcmil Class B compressed concentric lay stranded 1350-H19 aluminum
- Conductor Shield: Extruded semi-conducting thermoset polymeric stress control layer
- Insulation: Extruded tree-retardant cross-linked polyethylene
- Insulation Shield: Extruded semi-conducting thermoset layer, clean and free stripping from insulation
- Concentric Neutral: Helically applied, annealed, solid bare copper wires
- Inner Jacket: Black, non-conducting, sunlight resistant, linear low-density polyethylene jacket extruded to fill spaces between neutral wires
- Anti-Termite: Nylon Layer
- Sheath: Black sunlight resistant, linear low density polythylene jacket

Standards

- ANSI/ICEA S-94-649
- ANSI/ICEA T-27-581
- ANSI/ICEA T-34-664
- ANSI/ICEA P-45-482
- AEIC CS-8
- RUS U-1

RoHS COMPLIANT

Applications

- Primarily underground distribution
- Wet or dry locations, direct burial, duct, and where exposed to sunlight
- 35kV or less
- Conductor temperatures not to exceed 105°C for normal operation
- Insulation level: 100% Insulation level

Options

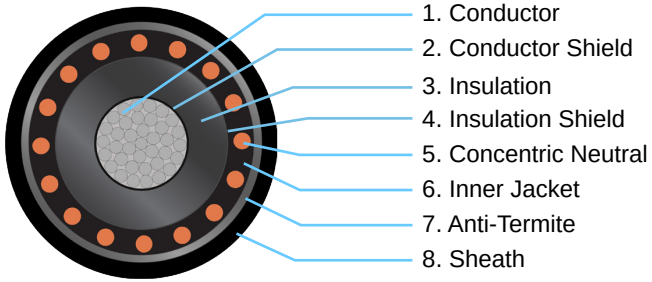
- EPR Insulation
- LLDPE jacket
- TYPE MV-90
- Copper tape screen
- Different concentric neutral levels
- Other voltages available
- Other insulation levels

Packaging

- Material cut to length
- Shipped on steel reels
- Triplex or parallel packaging available

Sample Print

- Interval imprints with production date, time, cable type, sequential length in 2-foot increments





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35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.226	0.042	0.2255±j0.0549	0.2796±j0.7560	930	2,130	2,600	175	223	200
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.178	0.045	0.1784±j0.0529	0.2325±j0.7520	930	2,130	2,600	199	256	228
3/0	19	6	16	0.449	20	345	50	55	20	40	1.601	155	50	1,012	19.2	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0509	0.1949±j0.7477	930	2,130	2,600	227	296	259
4/0	19	6	16	0.504	20	345	50	55	20	40	1.656	195	50	1,096	19.9	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0490	0.1663±j0.7435	930	2,130	2,600	257	339	294
250	37	6	16	0.547	20	345	50	55	20	40	1.699	230	50	1,171	20.4	1,500	1,000	0.0707	0.095	0.055	0.0951±j0.0477	0.1492±j0.7405	930	2,130	2,600	281	375	322
350	37	7	16	0.650	20	345	50	80	20	40	1.852	322	58	1,411	22.2	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0457	0.1222±j0.7326	1,090	2,480	3,030	338	460	387
500	37	7	14	0.773	20	345	50	80	20	40	2.001	460	93	1,715	24.0	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0439	0.1019±j0.7243	1,740	3,960	4,830	413	577	472
750	61	10	14	0.949	27	345	65	80	20	40	2.221	690	132	2,214	26.7	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0412	0.0863±j0.7155	2,480	5,660	6,910	515	741	588
1000	61	13	14	1.095	27	345	65	80	20	40	2.367	921	172	2,607	28.4	6,000	1,000	0.0177	0.024	0.090	0.0245±j0.0394	0.0786±j0.7093	3,220	7,360	8,980	600	881	685
1250	91	16	14	1.228	30	345	65	80	20	40	2.506	1,150	212	3,011	30.1	7,500	1,000	0.0141	0.02	0.099	0.0198±j0.0380	0.0739±j0.7040	3,970	9,060	11,050	676	1,011	771
1500	91	19	14	1.343	39	345	65	80	20	40	2.639	1,380	251	3,417	31.7	9,000	1,000	0.0118	0.017	0.107	0.0170±j0.0372	0.0711±j0.6996	4,710	10,760	13,120	740	1,123	843
1/6 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.226	0.042	0.2255±j0.0549	0.2796±j0.7560	930	2,130	2,600	175	223	200
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.178	0.045	0.1784±j0.0529	0.2325±j0.7520	930	2,130	2,600	199	256	228
3/0	19	7	16	0.449	20	345	50	55	20	40	1.601	155	58	1,020	19.2	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0509	0.1949±j0.7477	1,090	2,480	3,030	227	296	259
4/0	19	9	16	0.504	20	345	50	55	20	40	1.656	195	75	1,119	19.9	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0490	0.1663±j0.7435	1,400	3,190	3,890	257	339	294
250	37	10	16	0.547	20	345	50	55	20	40	1.699	230	83	1,201	20.4	1,500	1,000	0.0707	0.095	0.055	0.0951±j0.0477	0.1492±j0.7405	1,550	3,550	4,330	281	375	322
350	37	9	14	0.650	20	345	50	80	20	40	1.878	322	119	1,498	22.5	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0460	0.1222±j0.7319	2,230	5,100	6,220	339	462	387
500	37	8	12	0.773	20	345	50	80	20	40	2.035	460	167	1,827	24.4	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0442	0.1019±j0.7236	3,140	7,170	8,740	414	580	473
750	61	19	14	0.949	27	345	65	80	20	40	2.221	690	251	2,320	26.7	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0412	0.0863±j0.7155	4,710	10,760	13,120	515	741	588
1000	61	16	12	1.095	27	345	65	80	20	40	2.401	921	335	2,807	28.8	6,000	1,000	0.0177	0.024	0.090	0.0245±j0.0397	0.0786±j0.7087	6,270	14,330	17,480	601	885	686
1250	91	20	12	1.228	30	345	65	80	20	40	2.540	1,150	419	3,253	30.5	7,500	1,000	0.0141	0.02	0.099	0.0198±j0.0384	0.0739±j0.7034	7,840	17,920	21,850	677	1,016	772
1500	91	24	12	1.343	39	345	65	80	20	40	2.673	1,380	502	3,702	32.1	9,000	1,000	0.0118	0.017	0.107	0.0170±j0.0375	0.0711±j0.6990	9,410	21,500	26,220	741	1,128	845

35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	345	50	55	20	40	1.532	97	79	933	18.4	633	1,000	0.168	0.226	0.042	0.2255±j0.0553	0.2796±j0.7552	1,480	3,390	4,130	176	224	201
2/0	19	11	16	0.398	20	345	50	55	20	40	1.550	122	91	977	18.6	799	1,000	0.133	0.178	0.045	0.1784±j0.0529	0.2325±j0.7520	1,710	3,910	4,770	199	256	228
3/0	19	14	16	0.449	20	345	50	55	20	40	1.601	155	116	1,072	19.2	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0509	0.1949±j0.7477	2,180	4,970	6,070	227	296	259
4/0	19	11	14	0.504	20	345	50	55	20	40	1.682	195	145	1,211	20.2	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0494	0.1663±j0.7428	2,720	6,220	7,580	257	341	294
250	37	13	14	0.547	20	345	50	55	20	40	1.725	230	171	1,310	20.7	1,500	1,000	0.0707	0.095	0.055	0.0951±j0.0481	0.1492±j0.7398	3,210	7,350	8,960	282	376	322
350	37	18	14	0.650	20	345	50	80	20	40	1.878	322	237	1,604	22.5	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0460	0.1222±j0.7319	4,450	10,170	12,400	339	462	387
500	37	16	12	0.773	20	345	50	80	20	40	2.035	460	335	1,977	24.4	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0442	0.1019±j0.7236	6,290	14,360	17,510	414	580	473
750	61	15	10	0.949	27	345	65	80	20	40	2.297	690	500	2,656	27.6	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0420	0.0863±j0.7140	9,370	21,420	26,110	518	749	591
1000	61	20	10	1.095	27	345	65	80	20	40	2.443	921	667	3,171	29.3	6,000	1,000	0.0177	0.024	0.090	0.0245±j0.0401	0.0786±j0.7078	12,500	28,560	34,820	603	890	688
1250	91	20	9	1.228	30	345	65	80	20	40	2.606	1,150	841	3,745	31.3	7,500	1,000	0.0141	0.02	0.099	0.0198±j0.0390	0.0739±j0.7022	15,760	36,010	43,900	681	1,024	775
1500	91	24	9	1.343	39	345	65	80	20	40	2.739	1,380	1,009	4,275	32.9	9,000	1,000	0.0118	0.017	0.107	0.0169±j0.0380	0.0710±j0.6979	18,910	43,210	52,680	745	1,138	848
1/2 Neutral																													
1/0	19	8	14	0.354	20	345	50	55	20	40	1.532	97	105	957	18.4	633	1,000	0.168	0.226	0.042	0.2255±j0.0553	0.2796±j0.7552	1,980	4,520	5,510	176	224	201
2/0	19	10	14	0.398	20	345	50	55	20	40	1.576	122	132	1,041	18.9	799	1,000	0.133	0.178	0.045	0.1784±j0.0533	0.2325±j0.7512	2,470	5,650	6,890	200	258	228
3/0	19	13	14	0.449	20	345	50	55	20	40	1.627	155	171	1,150	19.5	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0513	0.1949±j0.7470	3,210	7,350	8,960	227	297	260
4/0	19	10	12	0.504	20	345	50	55	20	40	1.716	195	210	1,306	20.6	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0498	0.1663±j0.7419	3,930	8,980	10,950	258	342	295
250	37	12	12	0.547	20	345	50	55	20	40	1.759	230	251	1,420	21.1	1,500	1,000	0.0707	0.095	0.055	0.0951±j0.0485	0.1492±j0.7389	4,710	10,770	13,130	282	379	323
350	37	11	10	0.650	20	345	50	80	20	40	1.954	322	367	1,816	23.5	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0470	0.1222±j0.7301	6,870	15,710	19,150	341	468	389
500	37	15	10	0.773	20	345	50	80	20	40	2.077	460	500	2,182	24.9	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0447	0.1019±j0.7227	9,370	21,420	26,110	415	583	474
750	61	18	9	0.949	27	345	65	80	20	40	2.321	690	757	2,925	27.9	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0422	0.0863±j0.7135	14,180	32,410	39,510	519	751	591
1000	61	24	9	1.095	27	345	65	80	20	40	2.467	921	1,009	3,519	29.6	6,000	1,000	0.0177	0.024	0.090	0.0245±j0.0403	0.0786±j0.7074	18,910	43,210	52,680	604	893	689
1250	91	24	8	1.228	30	345	65	80	20	40	2.636	1,150	1,273	4,181	31.6	7,500	1,000	0.0141	0.02	0.099	0.0198±j0.0392	0.0739±j0.7017	23,860	54,510	66,460	682	1,028	777
1500	91	28	8	1.343	39	345	65	80	20	40	2.769	1,380	1,485	4,753	33.2	9,000	1,000	0.0118	0.017	0.107	0.0169±j0.0383	0.0710±j0.6974	27,830	63,590	77,540	746	1,142	849

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35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Trefoil

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																												
1/0	19	11	14	0.354	20	345	50	55	20	40	1.532	97	145	992	18.4	633	1,000	0.168	0.226	0.042	0.2255±j0.0553	0.2796±j0.7552	2,720	6,220	7,580	176	224	201
2/0	19	21	16	0.398	20	345	50	55	20	40	1.550	122	174	1,052	18.6	799	1,000	0.133	0.178	0.045	0.1784±j0.0529	0.2325±j0.7520	3,270	7,460	9,100	199	256	228
3/0	19	17	14	0.449	20	345	50	55	20	40	1.627	155	224	1,197	19.5	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0513	0.1949±j0.7470	4,200	9,610	11,710	227	297	260
4/0	19	14	12	0.504	20	345	50	55	20	40	1.716	195	294	1,382	20.6	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0498	0.1663±j0.7419	5,500	12,570	15,320	258	342	295
250	37	16	12	0.547	20	345	50	55	20	40	1.759	230	335	1,496	21.1	1,500	1,000	0.0707	0.095	0.055	0.0951±j0.0485	0.1492±j0.7389	6,290	14,360	17,510	282	379	323
350	37	22	12	0.650	20	345	50	80	20	40	1.912	322	461	1,847	22.9	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0465	0.1222±j0.7311	8,640	19,750	24,080	340	465	388
500	37	20	10	0.773	20	345	50	80	20	40	2.077	460	667	2,332	24.9	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0447	0.1019±j0.7227	12,500	28,560	34,820	415	583	474
750	61	24	9	0.949	27	345	65	80	20	40	2.321	690	1,009	3,151	27.9	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0422	0.0863±j0.7135	18,910	43,210	52,680	519	751	591
1000	61	25	8	1.095	27	345	65	80	20	40	2.497	921	1,326	3,849	30.0	6,000	1,000	0.0177	0.024	0.090	0.0245±j0.0406	0.0786±j0.7069	24,850	56,780	69,230	605	897	690
Full Neutral																												
1/0	19	10	12	0.354	20	345	50	55	20	40	1.566	97	210	1,085	18.8	633	1,000	0.168	0.226	0.042	0.2255±j0.0558	0.2796±j0.7542	3,930	8,980	10,950	176	226	201
2/0	19	13	12	0.398	20	345	50	55	20	40	1.610	122	273	1,202	19.3	799	1,000	0.133	0.178	0.045	0.1784±j0.0538	0.2325±j0.7502	5,110	11,670	14,230	200	259	229
3/0	19	16	12	0.449	20	345	50	55	20	40	1.661	155	335	1,333	19.9	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0517	0.1949±j0.7461	6,290	14,360	17,510	228	299	260
4/0	19	13	10	0.504	20	345	50	55	20	40	1.758	195	433	1,555	21.1	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0504	0.1663±j0.7408	8,120	18,560	22,630	259	345	296
250	37	15	10	0.547	20	345	50	80	20	40	1.851	230	500	1,752	22.2	1,500	1,000	0.0707	0.095	0.055	0.0951±j0.0497	0.1491±j0.7366	9,370	21,420	26,110	284	381	324
350	37	21	10	0.650	20	345	50	80	20	40	1.954	322	700	2,115	23.5	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0470	0.1222±j0.7301	13,120	29,990	36,560	341	468	389
500	37	24	9	0.773	20	345	50	80	20	40	2.101	460	1,009	2,673	25.2	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0450	0.1019±j0.7221	18,910	43,210	52,680	416	586	475
750	61	28	8	0.949	27	345	65	80	20	40	2.351	690	1,485	3,621	28.2	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0425	0.0863±j0.7129	27,830	63,590	77,540	520	754	592

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at a single point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at a single point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at a single point.
3. Impedance: Calculations are based on trefoil formation / earth loop / conductor temperature of 105°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.

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35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.226	0.042	0.2254±j0.0602	0.2795±j0.7452	930	2,130	2,600	174	229	198
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.178	0.045	0.1784±j0.0582	0.2325±j0.7412	930	2,130	2,600	197	263	225
3/0	19	6	16	0.449	20	345	50	55	20	40	1.601	155	50	1,012	19.2	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0562	0.1949±j0.7369	930	2,130	2,600	224	303	256
4/0	19	6	16	0.504	20	345	50	55	20	40	1.656	195	50	1,096	19.9	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0543	0.1663±j0.7327	930	2,130	2,600	254	348	290
250	37	6	16	0.547	20	345	50	55	20	40	1.699	230	50	1,171	20.4	1,500	1,000	0.0707	0.095	0.055	0.0950±j0.0530	0.1491±j0.7297	930	2,130	2,600	278	385	318
350	37	7	16	0.650	20	345	50	80	20	40	1.852	322	58	1,411	22.2	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0510	0.1222±j0.7218	1,090	2,480	3,030	335	472	381
500	37	7	14	0.773	20	345	50	80	20	40	2.001	460	93	1,715	24.0	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0492	0.1019±j0.7135	1,740	3,960	4,830	408	593	465
750	61	10	14	0.949	27	345	65	80	20	40	2.221	690	132	2,214	26.7	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0465	0.0863±j0.7047	2,480	5,660	6,910	509	762	579
1000	61	13	14	1.095	27	345	65	80	20	40	2.367	921	172	2,607	28.4	6,000	1,000	0.0177	0.024	0.090	0.0245±j0.0447	0.0786±j0.6985	3,220	7,360	8,980	593	907	674
1250	91	16	14	1.228	30	345	65	80	20	40	2.506	1,150	212	3,011	30.1	7,500	1,000	0.0141	0.02	0.099	0.0198±j0.0433	0.0739±j0.6932	3,970	9,060	11,050	667	1,041	758
1500	91	19	14	1.343	39	345	65	80	20	40	2.639	1,380	251	3,417	31.7	9,000	1,000	0.0118	0.017	0.107	0.0169±j0.0425	0.0710±j0.6888	4,710	10,760	13,120	730	1,158	829
1/6 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.226	0.042	0.2254±j0.0602	0.2795±j0.7452	930	2,130	2,600	174	229	198
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.178	0.045	0.1784±j0.0582	0.2325±j0.7412	930	2,130	2,600	197	263	225
3/0	19	7	16	0.449	20	345	50	55	20	40	1.601	155	58	1,020	19.2	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0562	0.1949±j0.7369	1,090	2,480	3,030	224	303	256
4/0	19	9	16	0.504	20	345	50	55	20	40	1.656	195	75	1,119	19.9	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0543	0.1663±j0.7327	1,400	3,190	3,890	254	348	290
250	37	10	16	0.547	20	345	50	55	20	40	1.699	230	83	1,201	20.4	1,500	1,000	0.0707	0.095	0.055	0.0950±j0.0530	0.1491±j0.7297	1,550	3,550	4,330	278	385	318
350	37	9	14	0.650	20	345	50	80	20	40	1.878	322	119	1,498	22.5	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0514	0.1222±j0.7211	2,230	5,100	6,220	335	475	382
500	37	8	12	0.773	20	345	50	80	20	40	2.035	460	167	1,827	24.4	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0495	0.1019±j0.7128	3,140	7,170	8,740	409	596	466
750	61	19	14	0.949	27	345	65	80	20	40	2.221	690	251	2,320	26.7	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0465	0.0863±j0.7047	4,710	10,760	13,120	509	762	579
1000	61	16	12	1.095	27	345	65	80	20	40	2.401	921	335	2,807	28.8	6,000	1,000	0.0177	0.024	0.090	0.0245±j0.0450	0.0786±j0.6978	6,270	14,330	17,480	594	911	675
1250	91	20	12	1.228	30	345	65	80	20	40	2.540	1,150	419	3,253	30.5	7,500	1,000	0.0141	0.02	0.099	0.0198±j0.0436	0.0739±j0.6926	7,840	17,920	21,850	669	1,046	760
1500	91	24	12	1.343	39	345	65	80	20	40	2.673	1,380	502	3,702	32.1	9,000	1,000	0.0118	0.017	0.107	0.0169±j0.0428	0.0710±j0.6882	9,410	21,500	26,220	732	1,163	831

35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	345	50	55	20	40	1.532	97	79	933	18.4	633	1,000	0.168	0.226	0.042	0.2254±j0.0606	0.2795±j0.7444	1,480	3,390	4,130	174	230	198
2/0	19	11	16	0.398	20	345	50	55	20	40	1.550	122	91	977	18.6	799	1,000	0.133	0.178	0.045	0.1784±j0.0582	0.2325±j0.7412	1,710	3,910	4,770	197	263	225
3/0	19	14	16	0.449	20	345	50	55	20	40	1.601	155	116	1,072	19.2	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0562	0.1949±j0.7369	2,180	4,970	6,070	224	303	256
4/0	19	11	14	0.504	20	345	50	55	20	40	1.682	195	145	1,211	20.2	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0547	0.1663±j0.7320	2,720	6,220	7,580	255	349	291
250	37	13	14	0.547	20	345	50	55	20	40	1.725	230	171	1,310	20.7	1,500	1,000	0.0707	0.095	0.055	0.0950±j0.0534	0.1491±j0.7290	3,210	7,350	8,960	279	386	318
350	37	18	14	0.650	20	345	50	80	20	40	1.878	322	237	1,604	22.5	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0514	0.1222±j0.7211	4,450	10,170	12,400	335	475	382
500	37	16	12	0.773	20	345	50	80	20	40	2.035	460	335	1,977	24.4	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0495	0.1019±j0.7128	6,290	14,360	17,510	409	596	466
750	61	15	10	0.949	27	345	65	80	20	40	2.297	690	500	2,656	27.6	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0473	0.0863±j0.7032	9,370	21,420	26,110	512	770	582
1000	61	20	10	1.095	27	345	65	80	20	40	2.443	921	667	3,171	29.3	6,000	1,000	0.0177	0.024	0.090	0.0245±j0.0454	0.0785±j0.6970	12,500	28,560	34,820	596	917	677
1250	91	20	9	1.228	30	345	65	80	20	40	2.606	1,150	841	3,745	31.3	7,500	1,000	0.0141	0.02	0.099	0.0198±j0.0443	0.0739±j0.6914	15,760	36,010	43,900	672	1,055	763
1500	91	24	9	1.343	39	345	65	80	20	40	2.739	1,380	1,009	4,275	32.9	9,000	1,000	0.0118	0.017	0.107	0.0169±j0.0433	0.0710±j0.6871	18,910	43,210	52,680	736	1,173	834
1/2 Neutral																													
1/0	19	8	14	0.354	20	345	50	55	20	40	1.532	97	105	957	18.4	633	1,000	0.168	0.226	0.042	0.2254±j0.0606	0.2795±j0.7444	1,980	4,520	5,510	174	230	198
2/0	19	10	14	0.398	20	345	50	55	20	40	1.576	122	132	1,041	18.9	799	1,000	0.133	0.178	0.045	0.1784±j0.0586	0.2325±j0.7404	2,470	5,650	6,890	198	264	225
3/0	19	13	14	0.449	20	345	50	55	20	40	1.627	155	171	1,150	19.5	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0566	0.1949±j0.7362	3,210	7,350	8,960	225	304	257
4/0	19	10	12	0.504	20	345	50	55	20	40	1.716	195	210	1,306	20.6	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0551	0.1663±j0.7311	3,930	8,980	10,950	255	351	291
250	37	12	12	0.547	20	345	50	55	20	40	1.759	230	251	1,420	21.1	1,500	1,000	0.0707	0.095	0.055	0.0950±j0.0538	0.1491±j0.7281	4,710	10,770	13,130	280	388	319
350	37	11	10	0.650	20	345	50	80	20	40	1.954	322	367	1,816	23.5	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0522	0.1222±j0.7193	6,870	15,710	19,150	337	480	384
500	37	15	10	0.773	20	345	50	80	20	40	2.077	460	500	2,182	24.9	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0500	0.1019±j0.7119	9,370	21,420	26,110	411	600	467
750	61	18	9	0.949	27	345	65	80	20	40	2.321	690	757	2,925	27.9	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0475	0.0863±j0.7027	14,180	32,410	39,510	513	773	582
1000	61	24	9	1.095	27	345	65	80	20	40	2.467	921	1,009	3,519	29.6	6,000	1,000	0.0177	0.024	0.090	0.0245±j0.0456	0.0785±j0.6966	18,910	43,210	52,680	597	920	678
1250	91	24	8	1.228	30	345	65	80	20	40	2.636	1,150	1,273	4,181	31.6	7,500	1,000	0.0141	0.02	0.099	0.0198±j0.0445	0.0739±j0.6909	23,860	54,510	66,460	674	1,059	764
1500	91	28	8	1.343	39	345	65	80	20	40	2.769	1,380	1,485	4,753	33.2	9,000	1,000	0.0118	0.017	0.107	0.0169±j0.0436	0.0710±j0.6866	27,830	63,590	77,540	737	1,177	835

35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																													
1/0	19	11	14	0.354	20	345	50	55	20	40	1.532	97	145	992	18.4	633	1,000	0.168	0.226	0.042	0.2254±j0.0606	0.2795±j0.7444	2,720	6,220	7,580	174	230	198
2/0	19	21	16	0.398	20	345	50	55	20	40	1.550	122	174	1,052	18.6	799	1,000	0.133	0.178	0.045	0.1784±j0.0582	0.2325±j0.7412	3,270	7,460	9,100	197	263	225
3/0	19	17	14	0.449	20	345	50	55	20	40	1.627	155	224	1,197	19.5	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0566	0.1949±j0.7362	4,200	9,610	11,710	225	304	257
4/0	19	14	12	0.504	20	345	50	55	20	40	1.716	195	294	1,382	20.6	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0551	0.1663±j0.7311	5,500	12,570	15,320	255	351	291
250	37	16	12	0.547	20	345	50	55	20	40	1.759	230	335	1,496	21.1	1,500	1,000	0.0707	0.095	0.055	0.0950±j0.0538	0.1491±j0.7281	6,290	14,360	17,510	280	388	319
350	37	22	12	0.650	20	345	50	80	20	40	1.912	322	461	1,847	22.9	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0518	0.1222±j0.7203	8,640	19,750	24,080	336	477	383
500	37	20	10	0.773	20	345	50	80	20	40	2.077	460	667	2,332	24.9	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0500	0.1019±j0.7119	12,500	28,560	34,820	411	600	467
750	61	24	9	0.949	27	345	65	80	20	40	2.321	690	1,009	3,151	27.9	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0475	0.0863±j0.7027	18,910	43,210	52,680	513	773	582
1000	61	25	8	1.095	27	345	65	80	20	40	2.497	921	1,326	3,849	30.0	6,000	1,000	0.0177	0.024	0.090	0.0244±j0.0459	0.0785±j0.6961	24,850	56,780	69,230	598	923	679
Full Neutral																													
1/0	19	10	12	0.354	20	345	50	55	20	40	1.566	97	210	1,085	18.8	633	1,000	0.168	0.226	0.042	0.2254±j0.0611	0.2795±j0.7434	3,930	8,980	10,950	175	231	199
2/0	19	13	12	0.398	20	345	50	55	20	40	1.610	122	273	1,202	19.3	799	1,000	0.133	0.178	0.045	0.1784±j0.0591	0.2325±j0.7394	5,110	11,670	14,230	198	266	226
3/0	19	16	12	0.449	20	345	50	55	20	40	1.661	155	335	1,333	19.9	1,007	1,000	0.105	0.141	0.048	0.1408±j0.0570	0.1949±j0.7353	6,290	14,360	17,510	226	306	257
4/0	19	13	10	0.504	20	345	50	55	20	40	1.758	195	433	1,555	21.1	1,269	1,000	0.0836	0.112	0.052	0.1122±j0.0557	0.1663±j0.7300	8,120	18,560	22,630	256	354	292
250	37	15	10	0.547	20	345	50	80	20	40	1.851	230	500	1,752	22.2	1,500	1,000	0.0707	0.095	0.055	0.0950±j0.0550	0.1491±j0.7258	9,370	21,420	26,110	281	391	320
350	37	21	10	0.650	20	345	50	80	20	40	1.954	322	700	2,115	23.5	2,100	1,000	0.0505	0.068	0.061	0.0681±j0.0522	0.1222±j0.7193	13,120	29,990	36,560	337	480	384
500	37	24	9	0.773	20	345	50	80	20	40	2.101	460	1,009	2,673	25.2	3,000	1,000	0.0354	0.048	0.069	0.0478±j0.0503	0.1019±j0.7113	18,910	43,210	52,680	411	602	468
750	61	28	8	0.949	27	345	65	80	20	40	2.351	690	1,485	3,621	28.2	4,500	1,000	0.0236	0.032	0.081	0.0322±j0.0478	0.0863±j0.7021	27,830	63,590	77,540	514	776	583

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at a single point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at a single point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at a single point.
3. Impedance: Calculations are based on flat formation / earth loop / conductor temperature of 105°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.

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35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.226	0.042	0.2261±j0.0549	1.1055±j0.0417	930	2,130	2,600	175	223	200
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.178	0.045	0.1791±j0.0529	1.0585±j0.0398	930	2,130	2,600	199	256	228
3/0	19	6	16	0.449	20	345	50	55	20	40	1.601	155	50	1,012	19.2	1,007	1,000	0.105	0.141	0.048	0.1415±j0.0508	1.0209±j0.0380	930	2,130	2,600	226	295	259
4/0	19	6	16	0.504	20	345	50	55	20	40	1.656	195	50	1,096	19.9	1,269	1,000	0.0836	0.112	0.052	0.1129±j0.0490	0.9923±j0.0363	930	2,130	2,600	256	339	293
250	37	6	16	0.547	20	345	50	55	20	40	1.699	230	50	1,171	20.4	1,500	1,000	0.0707	0.095	0.055	0.0957±j0.0477	0.9751±j0.0352	930	2,130	2,600	280	374	321
350	37	7	16	0.650	20	345	50	80	20	40	1.852	322	58	1,411	22.2	2,100	1,000	0.0505	0.068	0.061	0.0689±j0.0457	0.8225±j0.0321	1,090	2,480	3,030	337	459	385
500	37	7	14	0.773	20	345	50	80	20	40	2.001	460	93	1,715	24.0	3,000	1,000	0.0354	0.048	0.069	0.0491±j0.0438	0.5222±j0.0304	1,740	3,960	4,830	410	574	468
750	61	10	14	0.949	27	345	65	80	20	40	2.221	690	132	2,214	26.7	4,500	1,000	0.0236	0.032	0.081	0.0340±j0.0411	0.3643±j0.0266	2,480	5,660	6,910	507	732	579
1000	61	13	14	1.095	27	345	65	80	20	40	2.367	921	172	2,607	28.4	6,000	1,000	0.0177	0.024	0.090	0.0268±j0.0392	0.2800±j0.0241	3,220	7,360	8,980	584	864	667
1250	91	16	14	1.228	30	345	65	80	20	40	2.506	1,150	212	3,011	30.1	7,500	1,000	0.0141	0.02	0.099	0.0226±j0.0377	0.2274±j0.0224	3,970	9,060	11,050	650	981	742
1500	91	19	14	1.343	39	345	65	80	20	40	2.639	1,380	251	3,417	31.7	9,000	1,000	0.0118	0.017	0.107	0.0202±j0.0367	0.1917±j0.0212	4,710	10,760	13,120	702	1,078	801
1/6 Neutral																													
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.226	0.042	0.2261±j0.0549	1.1055±j0.0417	930	2,130	2,600	175	223	200
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.178	0.045	0.1791±j0.0529	1.0585±j0.0398	930	2,130	2,600	199	256	228
3/0	19	7	16	0.449	20	345	50	55	20	40	1.601	155	58	1,020	19.2	1,007	1,000	0.105	0.141	0.048	0.1416±j0.0508	0.8952±j0.0372	1,090	2,480	3,030	226	295	259
4/0	19	9	16	0.504	20	345	50	55	20	40	1.656	195	75	1,119	19.9	1,269	1,000	0.0836	0.112	0.052	0.1132±j0.0490	0.6989±j0.0344	1,400	3,190	3,890	256	338	293
250	37	10	16	0.547	20	345	50	55	20	40	1.699	230	83	1,201	20.4	1,500	1,000	0.0707	0.095	0.055	0.0962±j0.0476	0.6231±j0.0328	1,550	3,550	4,330	280	374	321
350	37	9	14	0.650	20	345	50	80	20	40	1.878	322	119	1,498	22.5	2,100	1,000	0.0505	0.068	0.061	0.0698±j0.0459	0.4371±j0.0309	2,230	5,100	6,220	336	460	385
500	37	8	12	0.773	20	345	50	80	20	40	2.035	460	167	1,827	24.4	3,000	1,000	0.0354	0.048	0.069	0.0501±j0.0440	0.3089±j0.0297	3,140	7,170	8,740	408	574	466
750	61	19	14	0.949	27	345	65	80	20	40	2.221	690	251	2,320	26.7	4,500	1,000	0.0236	0.032	0.081	0.0356±j0.0407	0.2070±j0.0245	4,710	10,760	13,120	500	724	571
1000	61	16	12	1.095	27	345	65	80	20	40	2.401	921	335	2,807	28.8	6,000	1,000	0.0177	0.024	0.090	0.0289±j0.0389	0.1550±j0.0235	6,270	14,330	17,480	572	851	653
1250	91	20	12	1.228	30	345	65	80	20	40	2.540	1,150	419	3,253	30.5	7,500	1,000	0.0141	0.02	0.099	0.0251±j0.0371	0.1242±j0.0218	7,840	17,920	21,850	629	958	719
1500	91	24	12	1.343	39	345	65	80	20	40	2.673	1,380	502	3,702	32.1	9,000	1,000	0.0118	0.017	0.107	0.0231±j0.0358	0.1040±j0.0207	9,410	21,500	26,220	672	1,044	768

35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	345	50	55	20	40	1.532	97	79	933	18.4	633	1,000	0.168	0.226	0.042	0.2266±j0.0553	0.7789±j0.0417	1,480	3,390	4,130	176	224	201
2/0	19	11	16	0.398	20	345	50	55	20	40	1.550	122	91	977	18.6	799	1,000	0.133	0.178	0.045	0.1797±j0.0528	0.6585±j0.0371	1,710	3,910	4,770	199	256	227
3/0	19	14	16	0.449	20	345	50	55	20	40	1.601	155	116	1,072	19.2	1,007	1,000	0.105	0.141	0.048	0.1424±j0.0507	0.5180±j0.0344	2,180	4,970	6,070	226	295	259
4/0	19	11	14	0.504	20	345	50	55	20	40	1.682	195	145	1,211	20.2	1,269	1,000	0.0836	0.112	0.052	0.1142±j0.0492	0.4141±j0.0336	2,720	6,220	7,580	256	339	293
250	37	13	14	0.547	20	345	50	55	20	40	1.725	230	171	1,310	20.7	1,500	1,000	0.0707	0.095	0.055	0.0974±j0.0478	0.3505±j0.0319	3,210	7,350	8,960	280	374	320
350	37	18	14	0.650	20	345	50	80	20	40	1.878	322	237	1,604	22.5	2,100	1,000	0.0505	0.068	0.061	0.0715±j0.0456	0.2526±j0.0286	4,450	10,170	12,400	334	457	382
500	37	16	12	0.773	20	345	50	80	20	40	2.035	460	335	1,977	24.4	3,000	1,000	0.0354	0.048	0.069	0.0523±j0.0434	0.1783±j0.0272	6,290	14,360	17,510	403	568	460
750	61	15	10	0.949	27	345	65	80	20	40	2.297	690	500	2,656	27.6	4,500	1,000	0.0236	0.032	0.081	0.0385±j0.0402	0.1197±j0.0252	9,370	21,420	26,110	489	717	559
1000	61	20	10	1.095	27	345	65	80	20	40	2.443	921	667	3,171	29.3	6,000	1,000	0.0177	0.024	0.090	0.0324±j0.0372	0.0901±j0.0228	12,500	28,560	34,820	551	829	629
1250	91	20	9	1.228	30	345	65	80	20	40	2.606	1,150	841	3,745	31.3	7,500	1,000	0.0141	0.02	0.099	0.0290±j0.0347	0.0719±j0.0218	15,760	36,010	43,900	598	925	684
1500	91	24	9	1.343	39	345	65	80	20	40	2.739	1,380	1,009	4,275	32.9	9,000	1,000	0.0118	0.017	0.107	0.0271±j0.0324	0.0603±j0.0207	18,910	43,210	52,680	632	998	722
1/2 Neutral																													
1/0	19	8	14	0.354	20	345	50	55	20	40	1.532	97	105	957	18.4	633	1,000	0.168	0.226	0.042	0.2269±j0.0552	0.6405±j0.0403	1,980	4,520	5,510	176	224	200
2/0	19	10	14	0.398	20	345	50	55	20	40	1.576	122	132	1,041	18.9	799	1,000	0.133	0.178	0.045	0.1803±j0.0531	0.5105±j0.0375	2,470	5,650	6,890	199	257	228
3/0	19	13	14	0.449	20	345	50	55	20	40	1.627	155	171	1,150	19.5	1,007	1,000	0.105	0.141	0.048	0.1432±j0.0510	0.3962±j0.0347	3,210	7,350	8,960	226	296	259
4/0	19	10	12	0.504	20	345	50	55	20	40	1.716	195	210	1,306	20.6	1,269	1,000	0.0836	0.112	0.052	0.1151±j0.0495	0.3210±j0.0340	3,930	8,980	10,950	256	341	293
250	37	12	12	0.547	20	345	50	55	20	40	1.759	230	251	1,420	21.1	1,500	1,000	0.0707	0.095	0.055	0.0985±j0.0480	0.2691±j0.0321	4,710	10,770	13,130	280	376	320
350	37	11	10	0.650	20	345	50	80	20	40	1.954	322	367	1,816	23.5	2,100	1,000	0.0505	0.068	0.061	0.0732±j0.0459	0.1875±j0.0301	6,870	15,710	19,150	334	460	381
500	37	15	10	0.773	20	345	50	80	20	40	2.077	460	500	2,182	24.9	3,000	1,000	0.0354	0.048	0.069	0.0543±j0.0429	0.1353±j0.0274	9,370	21,420	26,110	399	566	456
750	61	18	9	0.949	27	345	65	80	20	40	2.321	690	757	2,925	27.9	4,500	1,000	0.0236	0.032	0.081	0.0410±j0.0385	0.0900±j0.0247	14,180	32,410	39,510	479	706	548
1000	61	24	9	1.095	27	345	65	80	20	40	2.467	921	1,009	3,519	29.6	6,000	1,000	0.0177	0.024	0.090	0.0348±j0.0345	0.0679±j0.0224	18,910	43,210	52,680	535	812	612
1250	91	24	8	1.228	30	345	65	80	20	40	2.636	1,150	1,273	4,181	31.6	7,500	1,000	0.0141	0.02	0.099	0.0312±j0.0312	0.0542±j0.0213	23,860	54,510	66,460	579	902	662
1500	91	28	8	1.343	39	345	65	80	20	40	2.769	1,380	1,485	4,753	33.2	9,000	1,000	0.0118	0.017	0.107	0.0287±j0.0287	0.0464±j0.0203	27,830	63,590	77,540	613	975	701

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35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Trefoil

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																													
1/0	19	11	14	0.354	20	345	50	55	20	40	1.532	97	145	992	18.4	633	1,000	0.168	0.226	0.042	0.2275±j0.0551	0.5273±j0.0390	2,720	6,220	7,580	175	224	200
2/0	19	21	16	0.398	20	345	50	55	20	40	1.550	122	174	1,052	18.6	799	1,000	0.133	0.178	0.045	0.1809±j0.0526	0.4299±j0.0351	3,270	7,460	9,100	198	256	227
3/0	19	17	14	0.449	20	345	50	55	20	40	1.627	155	224	1,197	19.5	1,007	1,000	0.105	0.141	0.048	0.1439±j0.0508	0.3361±j0.0339	4,200	9,610	11,710	226	296	258
4/0	19	14	12	0.504	20	345	50	55	20	40	1.716	195	294	1,382	20.6	1,269	1,000	0.0836	0.112	0.052	0.1162±j0.0491	0.2614±j0.0328	5,500	12,570	15,320	255	340	292
250	37	16	12	0.547	20	345	50	55	20	40	1.759	230	335	1,496	21.1	1,500	1,000	0.0707	0.095	0.055	0.0995±j0.0476	0.2256±j0.0312	6,290	14,360	17,510	279	375	319
350	37	22	12	0.650	20	345	50	80	20	40	1.912	322	461	1,847	22.9	2,100	1,000	0.0505	0.068	0.061	0.0743±j0.0448	0.1630±j0.0280	8,640	19,750	24,080	331	455	379
500	37	20	10	0.773	20	345	50	80	20	40	2.077	460	667	2,332	24.9	3,000	1,000	0.0354	0.048	0.069	0.0560±j0.0416	0.1134±j0.0265	12,500	28,560	34,820	395	561	452
750	61	24	9	0.949	27	345	65	80	20	40	2.321	690	1,009	3,151	27.9	4,500	1,000	0.0236	0.032	0.081	0.0426±j0.0363	0.0756±j0.0239	18,910	43,210	52,680	471	697	539
1000	61	25	8	1.095	27	345	65	80	20	40	2.497	921	1,326	3,849	30.0	6,000	1,000	0.0177	0.024	0.090	0.0361±j0.0321	0.0575±j0.0223	24,850	56,780	69,230	526	803	602
Full Neutral																													
1/0	19	10	12	0.354	20	345	50	55	20	40	1.566	97	210	1,085	18.8	633	1,000	0.168	0.226	0.042	0.2284±j0.0555	4.6745±j0.4236	3,930	8,980	10,950	176	225	201
2/0	19	13	12	0.398	20	345	50	55	20	40	1.610	122	273	1,202	19.3	799	1,000	0.133	0.178	0.045	0.1822±j0.0532	3.6496±j0.3930	5,110	11,670	14,230	199	258	227
3/0	19	16	12	0.449	20	345	50	55	20	40	1.661	155	335	1,333	19.9	1,007	1,000	0.105	0.141	0.048	0.1454±j0.0508	2.9206±j0.3665	6,290	14,360	17,510	226	297	258
4/0	19	13	10	0.504	20	345	50	55	20	40	1.758	195	433	1,555	21.1	1,269	1,000	0.0836	0.112	0.052	0.1179±j0.0490	2.2953±j0.3553	8,120	18,560	22,630	255	341	292
250	37	15	10	0.547	20	345	50	80	20	40	1.851	230	500	1,752	22.2	1,500	1,000	0.0707	0.095	0.055	0.1018±j0.0477	1.9656±j0.3379	9,370	21,420	26,110	278	375	317
350	37	21	10	0.650	20	345	50	80	20	40	1.954	322	700	2,115	23.5	2,100	1,000	0.0505	0.068	0.061	0.0768±j0.0435	1.4065±j0.3028	13,120	29,990	36,560	328	454	375
500	37	24	9	0.773	20	345	50	80	20	40	2.101	460	1,009	2,673	25.2	3,000	1,000	0.0354	0.048	0.069	0.0584±j0.0389	0.9813±j0.2808	18,910	43,210	52,680	389	556	445
750	61	28	8	0.949	27	345	65	80	20	40	2.351	690	1,485	3,621	28.2	4,500	1,000	0.0177	0.032	0.081	0.0442±j0.0325	0.6637±j0.2536	27,830	63,590	77,540	463	689	530

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at both point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at both point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at both point.
3. Impedance: Calculations are based on trefoil formation / shield loop / conductor temperature of 105°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.

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35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																												
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.226	0.042	0.2265±j0.0602	1.1055±j0.0417	930	2,130	2,600	173	228	198
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.178	0.045	0.1794±j0.0582	1.0585±j0.0398	930	2,130	2,600	197	262	224
3/0	19	6	16	0.449	20	345	50	55	20	40	1.601	155	50	1,012	19.2	1,007	1,000	0.105	0.141	0.048	0.1418±j0.0561	1.0209±j0.0380	930	2,130	2,600	224	302	255
4/0	19	6	16	0.504	20	345	50	55	20	40	1.656	195	50	1,096	19.9	1,269	1,000	0.0836	0.112	0.052	0.1132±j0.0543	0.9923±j0.0363	930	2,130	2,600	253	347	289
250	37	6	16	0.547	20	345	50	55	20	40	1.699	230	50	1,171	20.4	1,500	1,000	0.0707	0.095	0.055	0.0961±j0.0530	0.9751±j0.0352	930	2,130	2,600	277	383	316
350	37	7	16	0.650	20	345	50	80	20	40	1.852	322	58	1,411	22.2	2,100	1,000	0.0505	0.068	0.061	0.0693±j0.0510	0.8225±j0.0321	1,090	2,480	3,030	332	469	378
500	37	7	14	0.773	20	345	50	80	20	40	2.001	460	93	1,715	24.0	3,000	1,000	0.0354	0.048	0.069	0.0497±j0.0490	0.5222±j0.0304	1,740	3,960	4,830	400	584	456
750	61	10	14	0.949	27	345	65	80	20	40	2.221	690	132	2,214	26.7	4,500	1,000	0.0236	0.032	0.081	0.0348±j0.0463	0.3643±j0.0266	2,480	5,660	6,910	488	739	557
1000	61	13	14	1.095	27	345	65	80	20	40	2.367	921	172	2,607	28.4	6,000	1,000	0.0177	0.024	0.090	0.0279±j0.0443	0.2800±j0.0241	3,220	7,360	8,980	554	861	631
1250	91	16	14	1.228	30	345	65	80	20	40	2.506	1,150	212	3,011	30.1	7,500	1,000	0.0141	0.02	0.099	0.0240±j0.0428	0.2274±j0.0224	3,970	9,060	11,050	604	964	688
1500	91	19	14	1.343	39	345	65	80	20	40	2.639	1,380	251	3,417	31.7	9,000	1,000	0.0118	0.017	0.107	0.0218±j0.0417	0.1917±j0.0212	4,710	10,760	13,120	639	1,043	728
1/6 Neutral																												
1/0	19	6	16	0.354	20	345	50	55	20	40	1.506	97	50	880	18.1	633	1,000	0.168	0.226	0.042	0.2265±j0.0602	1.1055±j0.0417	930	2,130	2,600	173	228	198
2/0	19	6	16	0.398	20	345	50	55	20	40	1.550	122	50	940	18.6	799	1,000	0.133	0.178	0.045	0.1794±j0.0582	1.0585±j0.0398	930	2,130	2,600	197	262	224
3/0	19	7	16	0.449	20	345	50	55	20	40	1.601	155	58	1,020	19.2	1,007	1,000	0.105	0.141	0.048	0.1420±j0.0561	0.8952±j0.0372	1,090	2,480	3,030	224	302	255
4/0	19	9	16	0.504	20	345	50	55	20	40	1.656	195	75	1,119	19.9	1,269	1,000	0.0836	0.112	0.052	0.1138±j0.0542	0.6989±j0.0344	1,400	3,190	3,890	252	346	288
250	37	10	16	0.547	20	345	50	55	20	40	1.699	230	83	1,201	20.4	1,500	1,000	0.0707	0.095	0.055	0.0967±j0.0529	0.6231±j0.0328	1,550	3,550	4,330	276	382	315
350	37	9	14	0.650	20	345	50	80	20	40	1.878	322	119	1,498	22.5	2,100	1,000	0.0505	0.068	0.061	0.0706±j0.0511	0.4371±j0.0309	2,230	5,100	6,220	329	468	375
500	37	8	12	0.773	20	345	50	80	20	40	2.035	460	167	1,827	24.4	3,000	1,000	0.0354	0.048	0.069	0.0512±j0.0491	0.3089±j0.0297	3,140	7,170	8,740	395	580	450
750	61	19	14	0.949	27	345	65	80	20	40	2.221	690	251	2,320	26.7	4,500	1,000	0.0236	0.032	0.081	0.0372±j0.0457	0.2070±j0.0245	4,710	10,760	13,120	472	719	538
1000	61	16	12	1.095	27	345	65	80	20	40	2.401	921	335	2,807	28.8	6,000	1,000	0.0177	0.024	0.090	0.0309±j0.0435	0.1550±j0.0235	6,270	14,330	17,480	524	827	598
1250	91	20	12	1.228	30	345	65	80	20	40	2.540	1,150	419	3,253	30.5	7,500	1,000	0.0141	0.02	0.099	0.0276±j0.0415	0.1242±j0.0218	7,840	17,920	21,850	560	909	638
1500	91	24	12	1.343	39	345	65	80	20	40	2.673	1,380	502	3,702	32.1	9,000	1,000	0.0118	0.017	0.107	0.0259±j0.0397	0.1040±j0.0207	9,410	21,500	26,220	581	968	663

35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	345	50	55	20	40	1.532	97	79	933	18.4	633	1,000	0.168	0.226	0.042	0.2271±j0.0605	0.7789±j0.0417	1,480	3,390	4,130	174	229	198
2/0	19	11	16	0.398	20	345	50	55	20	40	1.550	122	91	977	18.6	799	1,000	0.133	0.178	0.045	0.1803±j0.0581	0.6585±j0.0371	1,710	3,910	4,770	196	262	224
3/0	19	14	16	0.449	20	345	50	55	20	40	1.601	155	116	1,072	19.2	1,007	1,000	0.105	0.141	0.048	0.1432±j0.0560	0.5180±j0.0344	2,180	4,970	6,070	223	301	254
4/0	19	11	14	0.504	20	345	50	55	20	40	1.682	195	145	1,211	20.2	1,269	1,000	0.0836	0.112	0.052	0.1152±j0.0544	0.4141±j0.0336	2,720	6,220	7,580	251	346	287
250	37	13	14	0.547	20	345	50	55	20	40	1.725	230	171	1,310	20.7	1,500	1,000	0.0707	0.095	0.055	0.0985±j0.0529	0.3505±j0.0319	3,210	7,350	8,960	274	381	313
350	37	18	14	0.650	20	345	50	80	20	40	1.878	322	237	1,604	22.5	2,100	1,000	0.0505	0.068	0.061	0.0730±j0.0505	0.2526±j0.0286	4,450	10,170	12,400	323	462	369
500	37	16	12	0.773	20	345	50	80	20	40	2.035	460	335	1,977	24.4	3,000	1,000	0.0354	0.048	0.069	0.0544±j0.0480	0.1783±j0.0272	6,290	14,360	17,510	382	566	436
750	61	15	10	0.949	27	345	65	80	20	40	2.297	690	500	2,656	27.6	4,500	1,000	0.0236	0.032	0.081	0.0413±j0.0442	0.1197±j0.0252	9,370	21,420	26,110	446	693	509
1000	61	20	10	1.095	27	345	65	80	20	40	2.443	921	667	3,171	29.3	6,000	1,000	0.0177	0.024	0.090	0.0356±j0.0404	0.0901±j0.0228	12,500	28,560	34,820	484	779	553
1250	91	20	9	1.228	30	345	65	80	20	40	2.606	1,150	841	3,745	31.3	7,500	1,000	0.0141	0.02	0.099	0.0324±j0.0371	0.0719±j0.0218	15,760	36,010	43,900	511	848	583
1500	91	24	9	1.343	39	345	65	80	20	40	2.739	1,380	1,009	4,275	32.9	9,000	1,000	0.0118	0.017	0.107	0.0305±j0.0341	0.0603±j0.0207	18,910	43,210	52,680	530	900	605
1/2 Neutral																													
1/0	19	8	14	0.354	20	345	50	55	20	40	1.532	97	105	957	18.4	633	1,000	0.168	0.226	0.042	0.2277±j0.0605	0.6405±j0.0403	1,980	4,520	5,510	173	229	198
2/0	19	10	14	0.398	20	345	50	55	20	40	1.576	122	132	1,041	18.9	799	1,000	0.133	0.178	0.045	0.1811±j0.0583	0.5105±j0.0375	2,470	5,650	6,890	196	263	224
3/0	19	13	14	0.449	20	345	50	55	20	40	1.627	155	171	1,150	19.5	1,007	1,000	0.105	0.141	0.048	0.1443±j0.0561	0.3962±j0.0347	3,210	7,350	8,960	222	302	254
4/0	19	10	12	0.504	20	345	50	55	20	40	1.716	195	210	1,306	20.6	1,269	1,000	0.0836	0.112	0.052	0.1164±j0.0545	0.3210±j0.0340	3,930	8,980	10,950	251	346	286
250	37	12	12	0.547	20	345	50	55	20	40	1.759	230	251	1,420	21.1	1,500	1,000	0.0707	0.095	0.055	0.1001±j0.0529	0.2691±j0.0321	4,710	10,770	13,130	272	381	311
350	37	11	10	0.650	20	345	50	80	20	40	1.954	322	367	1,816	23.5	2,100	1,000	0.0505	0.068	0.061	0.0754±j0.0504	0.1875±j0.0301	6,870	15,710	19,150	319	461	364
500	37	15	10	0.773	20	345	50	80	20	40	2.077	460	500	2,182	24.9	3,000	1,000	0.0354	0.048	0.069	0.0570±j0.0468	0.1353±j0.0274	9,370	21,420	26,110	373	557	425
750	61	18	9	0.949	27	345	65	80	20	40	2.321	690	757	2,925	27.9	4,500	1,000	0.0236	0.032	0.081	0.0443±j0.0413	0.0900±j0.0247	14,180	32,410	39,510	429	673	490
1000	61	24	9	1.095	27	345	65	80	20	40	2.467	921	1,009	3,519	29.6	6,000	1,000	0.0177	0.024	0.090	0.0383±j0.0362	0.0679±j0.0224	18,910	43,210	52,680	465	756	532
1250	91	24	8	1.228	30	345	65	80	20	40	2.636	1,150	1,273	4,181	31.6	7,500	1,000	0.0141	0.02	0.099	0.0344±j0.0321	0.0542±j0.0213	23,860	54,510	66,460	495	828	565
1500	91	28	8	1.343	39	345	65	80	20	40	2.769	1,380	1,485	4,753	33.2	9,000	1,000	0.0118	0.017	0.107	0.0316±j0.0290	0.0464±j0.0203	27,830	63,590	77,540	520	888	593

35kV MV-105 AL TR-XLPE 100% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																												
1/0	19	11	14	0.354	20	345	50	55	20	40	1.532	97	145	992	18.4	633	1,000	0.168	0.226	0.042	0.2285±j0.0603	0.5273±j0.0390	2,720	6,220	7,580	173	229	197
2/0	19	21	16	0.398	20	345	50	55	20	40	1.550	122	174	1,052	18.6	799	1,000	0.133	0.178	0.045	0.1820±j0.0578	0.4299±j0.0351	3,270	7,460	9,100	195	261	223
3/0	19	17	14	0.449	20	345	50	55	20	40	1.627	155	224	1,197	19.5	1,007	1,000	0.105	0.141	0.048	0.1454±j0.0558	0.3361±j0.0339	4,200	9,610	11,710	221	301	253
4/0	19	14	12	0.504	20	345	50	55	20	40	1.716	195	294	1,382	20.6	1,269	1,000	0.0836	0.112	0.052	0.1180±j0.0539	0.2614±j0.0328	5,500	12,570	15,320	249	345	284
250	37	16	12	0.547	20	345	50	55	20	40	1.759	230	335	1,496	21.1	1,500	1,000	0.0707	0.095	0.055	0.1016±j0.0523	0.2256±j0.0312	6,290	14,360	17,510	270	379	308
350	37	22	12	0.650	20	345	50	80	20	40	1.912	322	461	1,847	22.9	2,100	1,000	0.0505	0.068	0.061	0.0770±j0.0489	0.1630±j0.0280	8,640	19,750	24,080	315	454	360
500	37	20	10	0.773	20	345	50	80	20	40	2.077	460	667	2,332	24.9	3,000	1,000	0.0354	0.048	0.069	0.0592±j0.0448	0.1134±j0.0265	12,500	28,560	34,820	365	548	417
750	61	24	9	0.949	27	345	65	80	20	40	2.321	690	1,009	3,151	27.9	4,500	1,000	0.0236	0.032	0.081	0.0461±j0.0380	0.0756±j0.0239	18,910	43,210	52,680	420	662	479
1000	61	25	8	1.095	27	345	65	80	20	40	2.497	921	1,326	3,849	30.0	6,000	1,000	0.0177	0.024	0.090	0.0392±j0.0327	0.0575±j0.0223	24,850	56,780	69,230	459	750	525
Full Neutral																												
1/0	19	10	12	0.354	20	345	50	55	20	40	1.566	97	210	1,085	18.8	633	1,000	0.168	0.226	0.042	0.2298±j0.0605	0.4343±j0.0393	3,930	8,980	10,950	173	229	197
2/0	19	13	12	0.398	20	345	50	55	20	40	1.610	122	273	1,202	19.3	799	1,000	0.133	0.178	0.045	0.1839±j0.0580	0.3391±j0.0365	5,110	11,670	14,230	195	263	223
3/0	19	16	12	0.449	20	345	50	55	20	40	1.661	155	335	1,333	19.9	1,007	1,000	0.105	0.141	0.048	0.1474±j0.0555	0.2713±j0.0340	6,290	14,360	17,510	220	301	251
4/0	19	13	10	0.504	20	345	50	55	20	40	1.758	195	433	1,555	21.1	1,269	1,000	0.0836	0.112	0.052	0.1204±j0.0532	0.2132±j0.0330	8,120	18,560	22,630	247	344	282
250	37	15	10	0.547	20	345	50	80	20	40	1.851	230	500	1,752	22.2	1,500	1,000	0.0707	0.095	0.055	0.1045±j0.0516	0.1826±j0.0314	9,370	21,420	26,110	267	377	304
350	37	21	10	0.650	20	345	50	80	20	40	1.954	322	700	2,115	23.5	2,100	1,000	0.0505	0.068	0.061	0.0800±j0.0465	0.1307±j0.0281	13,120	29,990	36,560	309	449	353
500	37	24	9	0.773	20	345	50	80	20	40	2.101	460	1,009	2,673	25.2	3,000	1,000	0.0354	0.048	0.069	0.0618±j0.0405	0.0912±j0.0261	18,910	43,210	52,680	356	540	407
750	61	28	8	0.949	27	345	65	80	20	40	2.351	690	1,485	3,621	28.2	4,500	1,000	0.0236	0.032	0.081	0.0470±j0.0328	0.0617±j0.0236	27,830	63,590	77,540	415	657	474

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at both point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at both point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at both point.
3. Impedance: Calculations are based on flat formation / shield loop / conductor temperature of 105°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.

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VOLTAGE

Medium Voltage Cable

35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite

Construction

- Conductor: 1/0 AWG - 1500kcmil Class B compressed concentric lay stranded 1350-H19 aluminum
- Conductor Shield: Extruded semi-conducting thermoset polymeric stress control layer
- Insulation: Extruded tree-retardant cross-linked polyethylene
- Insulation Shield: Extruded semi-conducting thermoset layer, clean and free stripping from insulation
- Concentric Neutral: Helically applied, annealed, solid bare copper wires
- Inner Jacket: Black, non-conducting, sunlight resistant, linear low-density polyethylene jacket extruded to fill spaces between neutral wires
- Anti-Termite: Nylon Layer
- Sheath: Black sunlight resistant, linear low density polythylene jacket

Standards

- ANSI/ICEA S-94-649
- ANSI/ICEA T-27-581
- ANSI/ICEA T-34-664
- ANSI/ICEA P-45-482
- AEIC CS-8
- RUS U-1

RoHS COMPLIANT

Applications

- Primarily underground distribution
- Wet or dry locations, direct burial, duct, and where exposed to sunlight
- 35kV or less
- Conductor temperatures not to exceed 105°C for normal operation
- Insulation level: 133% Insulation level

Options

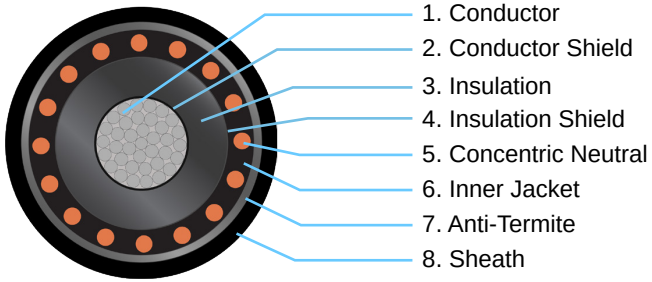
- EPR Insulation
- LLDPE jacket
- TYPE MV-90
- Copper tape screen
- Different concentric neutral levels
- Other voltages available
- Other insulation levels

Packaging

- Material cut to length
- Shipped on steel reels
- Triplex or parallel packaging available

Sample Print

- Interval imprints with production date, time, cable type, sequential length in 2-foot increments





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35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance									
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																											
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.226	0.037	0.2255±j0.0571	0.2796±j0.7516	930	2,130	2,600	176	223	200
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.178	0.040	0.1784±j0.0550	0.2325±j0.7477	930	2,130	2,600	200	257	227
3/0	19	6	16	0.449	20	420	50	55	20	40	1.751	155	50	1,182	21.0	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0530	0.1949±j0.7436	930	2,130	2,600	227	296	259
4/0	19	6	16	0.504	20	420	50	80	20	40	1.856	195	50	1,331	22.3	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0516	0.1663±j0.7383	930	2,130	2,600	258	339	293
250	37	6	16	0.547	20	420	50	80	20	40	1.899	230	50	1,411	22.8	1,500	1,000	0.0707	0.095	0.048	0.0951±j0.0503	0.1491±j0.7354	930	2,130	2,600	282	375	321
350	37	7	16	0.650	20	420	50	80	20	40	2.002	322	58	1,605	24.0	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0475	0.1222±j0.7290	1,090	2,480	3,030	339	459	386
500	37	7	14	0.773	20	420	65	80	20	40	2.181	460	93	1,974	26.2	3,000	1,000	0.0354	0.048	0.060	0.0478±j0.0455	0.1019±j0.7210	1,740	3,960	4,830	414	575	470
750	61	10	14	0.949	27	420	65	80	20	40	2.371	690	132	2,444	28.5	4,500	1,000	0.0236	0.032	0.069	0.0322±j0.0427	0.0863±j0.7125	2,480	5,660	6,910	516	737	586
1000	61	13	14	1.095	27	420	65	80	20	40	2.517	921	172	2,852	30.2	6,000	1,000	0.0177	0.024	0.077	0.0245±j0.0408	0.0786±j0.7065	3,220	7,360	8,980	601	877	683
1250	91	16	14	1.228	30	420	65	80	20	40	2.656	1,150	212	3,270	31.9	7,500	1,000	0.0141	0.02	0.084	0.0198±j0.0394	0.0739±j0.7013	3,970	9,060	11,050	678	1,005	770
1500	91	19	14	1.343	39	420	65	80	20	40	2.789	1,380	251	3,688	33.5	9,000	1,000	0.0118	0.017	0.091	0.0169±j0.0385	0.0710±j0.6971	4,710	10,760	13,120	742	1,117	842
1/6 Neutral																											
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.226	0.037	0.2255±j0.0571	0.2796±j0.7516	930	2,130	2,600	176	223	200
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.178	0.040	0.1784±j0.0550	0.2325±j0.7477	930	2,130	2,600	200	257	227
3/0	19	7	16	0.449	20	420	50	55	20	40	1.751	155	58	1,189	21.0	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0530	0.1949±j0.7436	1,090	2,480	3,030	227	296	259
4/0	19	9	16	0.504	20	420	50	80	20	40	1.856	195	75	1,353	22.3	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0516	0.1663±j0.7383	1,400	3,190	3,890	258	339	293
250	37	10	16	0.547	20	420	50	80	20	40	1.899	230	83	1,441	22.8	1,500	1,000	0.0707	0.095	0.048	0.0951±j0.0503	0.1491±j0.7354	1,550	3,550	4,330	282	375	321
350	37	9	14	0.650	20	420	50	80	20	40	2.028	322	119	1,694	24.3	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0478	0.1222±j0.7284	2,230	5,100	6,220	340	461	386
500	37	8	12	0.773	20	420	65	80	20	40	2.215	460	167	2,090	26.6	3,000	1,000	0.0354	0.048	0.060	0.0478±j0.0459	0.1019±j0.7203	3,140	7,170	8,740	415	577	471
750	61	19	14	0.949	27	420	65	80	20	40	2.371	690	251	2,551	28.5	4,500	1,000	0.0236	0.032	0.069	0.0322±j0.0427	0.0863±j0.7125	4,710	10,760	13,120	516	737	586
1000	61	16	12	1.095	27	420	65	80	20	40	2.551	921	335	3,055	30.6	6,000	1,000	0.0177	0.024	0.077	0.0245±j0.0411	0.0786±j0.7059	6,270	14,330	17,480	603	880	684
1250	91	20	12	1.228	30	420	65	80	20	40	2.690	1,150	419	3,516	32.3	7,500	1,000	0.0141	0.02	0.084	0.0198±j0.0397	0.0739±j0.7008	7,840	17,920	21,850	679	1,009	771
1500	91	24	12	1.343	39	420	65	80	20	40	2.823	1,380	502	3,977	33.9	9,000	1,000	0.0118	0.017	0.091	0.0169±j0.0388	0.0710±j0.6965	9,410	21,500	26,220	744	1,121	844

35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance									
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																											
1/0	19	6	14	0.354	20	420	50	55	20	40	1.682	97	79	1,096	20.2	633	1,000	0.168	0.226	0.037	0.2255±j0.0575	0.2796±j0.7509	1,480	3,390	4,130	176	224	200
2/0	19	11	16	0.398	20	420	50	55	20	40	1.700	122	91	1,141	20.4	799	1,000	0.133	0.178	0.040	0.1784±j0.0550	0.2325±j0.7477	1,710	3,910	4,770	200	257	227
3/0	19	14	16	0.449	20	420	50	55	20	40	1.751	155	116	1,241	21.0	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0530	0.1949±j0.7436	2,180	4,970	6,070	227	296	259
4/0	19	11	14	0.504	20	420	50	80	20	40	1.882	195	145	1,449	22.6	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0520	0.1663±j0.7377	2,720	6,220	7,580	258	340	293
250	37	13	14	0.547	20	420	50	80	20	40	1.925	230	171	1,554	23.1	1,500	1,000	0.0707	0.095	0.048	0.0951±j0.0506	0.1491±j0.7347	3,210	7,350	8,960	283	376	321
350	37	18	14	0.650	20	420	50	80	20	40	2.028	322	237	1,801	24.3	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0478	0.1222±j0.7284	4,450	10,170	12,400	340	461	386
500	37	16	12	0.773	20	420	65	80	20	40	2.215	460	335	2,241	26.6	3,000	1,000	0.0354	0.048	0.060	0.0478±j0.0459	0.1019±j0.7203	6,290	14,360	17,510	415	577	471
750	61	15	10	0.949	27	420	65	80	20	40	2.447	690	500	2,895	29.4	4,500	1,000	0.0236	0.032	0.069	0.0322±j0.0434	0.0863±j0.7111	9,370	21,420	26,110	519	744	589
1000	61	20	10	1.095	27	420	65	80	20	40	2.593	921	667	3,424	31.1	6,000	1,000	0.0177	0.024	0.077	0.0245±j0.0415	0.0786±j0.7051	12,500	28,560	34,820	604	885	686
1250	91	20	9	1.228	30	420	65	80	20	40	2.756	1,150	841	4,014	33.1	7,500	1,000	0.0141	0.02	0.084	0.0198±j0.0402	0.0739±j0.6996	15,760	36,010	43,900	682	1,017	774
1500	91	24	9	1.343	39	420	65	80	20	40	2.889	1,380	1,009	4,557	34.7	9,000	1,000	0.0118	0.017	0.091	0.0169±j0.0393	0.0710±j0.6954	18,910	43,210	52,680	747	1,130	847
1/2 Neutral																											
1/0	19	8	14	0.354	20	420	50	55	20	40	1.682	97	105	1,119	20.2	633	1,000	0.168	0.226	0.037	0.2255±j0.0575	0.2796±j0.7509	1,980	4,520	5,510	176	224	200
2/0	19	10	14	0.398	20	420	50	55	20	40	1.726	122	132	1,208	20.7	799	1,000	0.133	0.178	0.040	0.1784±j0.0554	0.2325±j0.7470	2,470	5,650	6,890	200	258	227
3/0	19	13	14	0.449	20	420	50	55	20	40	1.777	155	171	1,322	21.3	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0533	0.1949±j0.7429	3,210	7,350	8,960	228	297	259
4/0	19	10	12	0.504	20	420	50	80	20	40	1.916	195	210	1,548	23.0	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0523	0.1663±j0.7368	3,930	8,980	10,950	259	342	294
250	37	12	12	0.547	20	420	50	80	20	40	1.959	230	251	1,668	23.5	1,500	1,000	0.0707	0.095	0.048	0.0951±j0.0510	0.1491±j0.7339	4,710	10,770	13,130	284	378	322
350	37	11	10	0.650	20	420	50	80	20	40	2.104	322	367	2,019	25.3	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0487	0.1222±j0.7267	6,870	15,710	19,150	342	466	388
500	37	15	10	0.773	20	420	65	80	20	40	2.257	460	500	2,451	27.1	3,000	1,000	0.0354	0.048	0.060	0.0478±j0.0463	0.1019±j0.7195	9,370	21,420	26,110	416	580	472
750	61	18	9	0.949	27	420	65	80	20	40	2.471	690	757	3,165	29.7	4,500	1,000	0.0236	0.032	0.069	0.0321±j0.0437	0.0863±j0.7106	14,180	32,410	39,510	520	746	590
1000	61	24	9	1.095	27	420	65	80	20	40	2.617	921	1,009	3,774	31.4	6,000	1,000	0.0177	0.024	0.077	0.0245±j0.0417	0.0785±j0.7047	18,910	43,210	52,680	605	887	687
1250	91	24	8	1.228	30	420	65	80	20	40	2.786	1,150	1,273	4,453	33.4	7,500	1,000	0.0141	0.02	0.084	0.0198±j0.0405	0.0739±j0.6992	23,860	54,510	66,460	684	1,020	775
1500	91	28	8	1.343	39	420	65	80	20	40	2.919	1,380	1,485	5,037	35.0	9,000	1,000	0.0118	0.017	0.091	0.0169±j0.0395	0.0710±j0.6950	27,830	63,590	77,540	748	1,133	848

35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Single Point Impedance									
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																											
1/0	19	11	14	0.354	20	420	50	55	20	40	1.682	97	145	1,155	20.2	633	1,000	0.168	0.226	0.037	0.2255±j0.0575	0.2796±j0.7509	2,720	6,220	7,580	176	224	200
2/0	19	21	16	0.398	20	420	50	55	20	40	1.700	122	174	1,216	20.4	799	1,000	0.133	0.178	0.040	0.1784±j0.0550	0.2325±j0.7477	3,270	7,460	9,100	200	257	227
3/0	19	17	14	0.449	20	420	50	55	20	40	1.777	155	224	1,369	21.3	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0533	0.1949±j0.7429	4,200	9,610	11,710	228	297	259
4/0	19	14	12	0.504	20	420	50	80	20	40	1.916	195	294	1,624	23.0	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0523	0.1663±j0.7368	5,500	12,570	15,320	259	342	294
250	37	16	12	0.547	20	420	50	80	20	40	1.959	230	335	1,743	23.5	1,500	1,000	0.0707	0.095	0.048	0.0951±j0.0510	0.1491±j0.7339	6,290	14,360	17,510	284	378	322
350	37	22	12	0.650	20	420	50	80	20	40	2.062	322	461	2,047	24.8	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0482	0.1222±j0.7276	8,640	19,750	24,080	341	463	387
500	37	20	10	0.773	20	420	65	80	20	40	2.257	460	667	2,600	27.1	3,000	1,000	0.0354	0.048	0.060	0.0478±j0.0463	0.1019±j0.7195	12,500	28,560	34,820	416	580	472
750	61	24	9	0.949	27	420	65	80	20	40	2.471	690	1,009	3,392	29.7	4,500	1,000	0.0236	0.032	0.069	0.0321±j0.0437	0.0863±j0.7106	18,910	43,210	52,680	520	746	590
1000	61	25	8	1.095	27	420	65	80	20	40	2.647	921	1,326	4,106	31.8	6,000	1,000	0.0177	0.024	0.077	0.0245±j0.0420	0.0785±j0.7042	24,850	56,780	69,230	607	890	688
Full Neutral																											
1/0	19	10	12	0.354	20	420	50	55	20	40	1.716	97	210	1,250	20.6	633	1,000	0.168	0.226	0.037	0.2255±j0.0580	0.2796±j0.7500	3,930	8,980	10,950	177	225	200
2/0	19	13	12	0.398	20	420	50	55	20	40	1.760	122	273	1,372	21.1	799	1,000	0.133	0.178	0.040	0.1784±j0.0558	0.2325±j0.7462	5,110	11,670	14,230	201	259	228
3/0	19	16	12	0.449	20	420	50	80	20	40	1.861	155	335	1,568	22.3	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0543	0.1949±j0.7408	6,290	14,360	17,510	229	298	259
4/0	19	13	10	0.504	20	420	50	80	20	40	1.958	195	433	1,803	23.5	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0529	0.1663±j0.7358	8,120	18,560	22,630	260	344	295
250	37	15	10	0.547	20	420	50	80	20	40	2.001	230	500	1,946	24.0	1,500	1,000	0.0707	0.095	0.048	0.0951±j0.0515	0.1491±j0.7330	9,370	21,420	26,110	284	380	323
350	37	21	10	0.650	20	420	50	80	20	40	2.104	322	700	2,319	25.3	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0487	0.1222±j0.7267	13,120	29,990	36,560	342	466	388
500	37	24	9	0.773	20	420	65	80	20	40	2.281	460	1,009	2,945	27.4	3,000	1,000	0.0354	0.048	0.060	0.0477±j0.0466	0.1019±j0.7190	18,910	43,210	52,680	417	582	473
750	61	28	8	0.949	27	420	65	80	20	40	2.501	690	1,485	3,865	30.0	4,500	1,000	0.0236	0.032	0.069	0.0321±j0.0439	0.0863±j0.7101	27,830	63,590	77,540	521	749	590

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at a single point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at a single point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at a single point.
3. Impedance: Calculations are based on trefoil formation / earth loop / conductor temperature of 105°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.

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35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.226	0.037	0.2254±j0.0624	0.2795±j0.7408	930	2,130	2,600	174	229	197
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.178	0.040	0.1784±j0.0603	0.2325±j0.7369	930	2,130	2,600	198	263	224
3/0	19	6	16	0.449	20	420	50	55	20	40	1.751	155	50	1,182	21.0	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0582	0.1949±j0.7328	930	2,130	2,600	225	303	255
4/0	19	6	16	0.504	20	420	50	80	20	40	1.856	195	50	1,331	22.3	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0569	0.1663±j0.7275	930	2,130	2,600	255	347	289
250	37	6	16	0.547	20	420	50	80	20	40	1.899	230	50	1,411	22.8	1,500	1,000	0.0707	0.095	0.048	0.0950±j0.0556	0.1491±j0.7246	930	2,130	2,600	279	384	317
350	37	7	16	0.650	20	420	50	80	20	40	2.002	322	58	1,605	24.0	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0528	0.1222±j0.7182	1,090	2,480	3,030	335	471	380
500	37	7	14	0.773	20	420	65	80	20	40	2.181	460	93	1,974	26.2	3,000	1,000	0.0354	0.048	0.060	0.0478±j0.0508	0.1018±j0.7102	1,740	3,960	4,830	409	590	464
750	61	10	14	0.949	27	420	65	80	20	40	2.371	690	132	2,444	28.5	4,500	1,000	0.0236	0.032	0.069	0.0322±j0.0480	0.0863±j0.7017	2,480	5,660	6,910	510	757	578
1000	61	13	14	1.095	27	420	65	80	20	40	2.517	921	172	2,852	30.2	6,000	1,000	0.0177	0.024	0.077	0.0244±j0.0461	0.0785±j0.6957	3,220	7,360	8,980	594	901	673
1250	91	16	14	1.228	30	420	65	80	20	40	2.656	1,150	212	3,270	31.9	7,500	1,000	0.0141	0.02	0.084	0.0198±j0.0447	0.0739±j0.6906	3,970	9,060	11,050	669	1,034	757
1500	91	19	14	1.343	39	420	65	80	20	40	2.789	1,380	251	3,688	33.5	9,000	1,000	0.0118	0.017	0.091	0.0169±j0.0438	0.0710±j0.6863	4,710	10,760	13,120	733	1,150	828
1/6 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.226	0.037	0.2254±j0.0624	0.2795±j0.7408	930	2,130	2,600	174	229	197
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.178	0.040	0.1784±j0.0603	0.2325±j0.7369	930	2,130	2,600	198	263	224
3/0	19	7	16	0.449	20	420	50	55	20	40	1.751	155	58	1,189	21.0	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0582	0.1949±j0.7328	1,090	2,480	3,030	225	303	255
4/0	19	9	16	0.504	20	420	50	80	20	40	1.856	195	75	1,353	22.3	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0569	0.1663±j0.7275	1,400	3,190	3,890	255	347	289
250	37	10	16	0.547	20	420	50	80	20	40	1.899	230	83	1,441	22.8	1,500	1,000	0.0707	0.095	0.048	0.0950±j0.0556	0.1491±j0.7246	1,550	3,550	4,330	279	384	317
350	37	9	14	0.650	20	420	50	80	20	40	2.028	322	119	1,694	24.3	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0531	0.1222±j0.7176	2,230	5,100	6,220	336	473	381
500	37	8	12	0.773	20	420	65	80	20	40	2.215	460	167	2,090	26.6	3,000	1,000	0.0354	0.048	0.060	0.0478±j0.0511	0.1018±j0.7095	3,140	7,170	8,740	410	592	465
750	61	19	14	0.949	27	420	65	80	20	40	2.371	690	251	2,551	28.5	4,500	1,000	0.0236	0.032	0.069	0.0322±j0.0480	0.0863±j0.7017	4,710	10,760	13,120	510	757	578
1000	61	16	12	1.095	27	420	65	80	20	40	2.551	921	335	3,055	30.6	6,000	1,000	0.0177	0.024	0.077	0.0244±j0.0464	0.0785±j0.6951	6,270	14,330	17,480	595	905	674
1250	91	20	12	1.228	30	420	65	80	20	40	2.690	1,150	419	3,516	32.3	7,500	1,000	0.0141	0.02	0.084	0.0198±j0.0450	0.0739±j0.6900	7,840	17,920	21,850	671	1,038	759
1500	91	24	12	1.343	39	420	65	80	20	40	2.823	1,380	502	3,977	33.9	9,000	1,000	0.0118	0.017	0.091	0.0169±j0.0440	0.0710±j0.6857	9,410	21,500	26,220	734	1,154	830

35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	420	50	55	20	40	1.682	97	79	1,096	20.2	633	1,000	0.168	0.226	0.037	0.2254±j0.0628	0.2795±j0.7401	1,480	3,390	4,130	175	230	198
2/0	19	11	16	0.398	20	420	50	55	20	40	1.700	122	91	1,141	20.4	799	1,000	0.133	0.178	0.040	0.1784±j0.0603	0.2325±j0.7369	1,710	3,910	4,770	198	263	224
3/0	19	14	16	0.449	20	420	50	55	20	40	1.751	155	116	1,241	21.0	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0582	0.1949±j0.7328	2,180	4,970	6,070	225	303	255
4/0	19	11	14	0.504	20	420	50	80	20	40	1.882	195	145	1,449	22.6	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0572	0.1663±j0.7268	2,720	6,220	7,580	256	349	289
250	37	13	14	0.547	20	420	50	80	20	40	1.925	230	171	1,554	23.1	1,500	1,000	0.0707	0.095	0.048	0.0950±j0.0559	0.1491±j0.7239	3,210	7,350	8,960	280	385	317
350	37	18	14	0.650	20	420	50	80	20	40	2.028	322	237	1,801	24.3	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0531	0.1222±j0.7176	4,450	10,170	12,400	336	473	381
500	37	16	12	0.773	20	420	65	80	20	40	2.215	460	335	2,241	26.6	3,000	1,000	0.0354	0.048	0.060	0.0478±j0.0511	0.1018±j0.7095	6,290	14,360	17,510	410	592	465
750	61	15	10	0.949	27	420	65	80	20	40	2.447	690	500	2,895	29.4	4,500	1,000	0.0236	0.032	0.069	0.0322±j0.0487	0.0862±j0.7002	9,370	21,420	26,110	513	764	580
1000	61	20	10	1.095	27	420	65	80	20	40	2.593	921	667	3,424	31.1	6,000	1,000	0.0177	0.024	0.077	0.0244±j0.0468	0.0785±j0.6943	12,500	28,560	34,820	597	910	675
1250	91	20	9	1.228	30	420	65	80	20	40	2.756	1,150	841	4,014	33.1	7,500	1,000	0.0141	0.02	0.084	0.0198±j0.0455	0.0739±j0.6888	15,760	36,010	43,900	674	1,046	761
1500	91	24	9	1.343	39	420	65	80	20	40	2.889	1,380	1,009	4,557	34.7	9,000	1,000	0.0118	0.017	0.091	0.0169±j0.0446	0.0710±j0.6846	18,910	43,210	52,680	737	1,163	833
1/2 Neutral																													
1/0	19	8	14	0.354	20	420	50	55	20	40	1.682	97	105	1,119	20.2	633	1,000	0.168	0.226	0.037	0.2254±j0.0628	0.2795±j0.7401	1,980	4,520	5,510	175	230	198
2/0	19	10	14	0.398	20	420	50	55	20	40	1.726	122	132	1,208	20.7	799	1,000	0.133	0.178	0.040	0.1784±j0.0607	0.2325±j0.7362	2,470	5,650	6,890	198	264	225
3/0	19	13	14	0.449	20	420	50	55	20	40	1.777	155	171	1,322	21.3	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0586	0.1949±j0.7321	3,210	7,350	8,960	226	304	256
4/0	19	10	12	0.504	20	420	50	80	20	40	1.916	195	210	1,548	23.0	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0576	0.1663±j0.7260	3,930	8,980	10,950	256	350	290
250	37	12	12	0.547	20	420	50	80	20	40	1.959	230	251	1,668	23.5	1,500	1,000	0.0707	0.095	0.048	0.0950±j0.0563	0.1491±j0.7231	4,710	10,770	13,130	281	387	318
350	37	11	10	0.650	20	420	50	80	20	40	2.104	322	367	2,019	25.3	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0539	0.1222±j0.7159	6,870	15,710	19,150	338	478	383
500	37	15	10	0.773	20	420	65	80	20	40	2.257	460	500	2,451	27.1	3,000	1,000	0.0354	0.048	0.060	0.0478±j0.0516	0.1018±j0.7087	9,370	21,420	26,110	411	596	466
750	61	18	9	0.949	27	420	65	80	20	40	2.471	690	757	3,165	29.7	4,500	1,000	0.0236	0.032	0.069	0.0321±j0.0490	0.0862±j0.6998	14,180	32,410	39,510	514	767	581
1000	61	24	9	1.095	27	420	65	80	20	40	2.617	921	1,009	3,774	31.4	6,000	1,000	0.0177	0.024	0.077	0.0244±j0.0470	0.0785±j0.6939	18,910	43,210	52,680	598	912	676
1250	91	24	8	1.228	30	420	65	80	20	40	2.786	1,150	1,273	4,453	33.4	7,500	1,000	0.0141	0.02	0.084	0.0198±j0.0458	0.0739±j0.6884	23,860	54,510	66,460	675	1,050	763
1500	91	28	8	1.343	39	420	65	80	20	40	2.919	1,380	1,485	5,037	35.0	9,000	1,000	0.0118	0.017	0.091	0.0169±j0.0448	0.0710±j0.6842	27,830	63,590	77,540	739	1,166	834

35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Single Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																													
1/0	19	11	14	0.354	20	420	50	55	20	40	1.682	97	145	1,155	20.2	633	1,000	0.168	0.226	0.037	0.2254±j0.0628	0.2795±j0.7401	2,720	6,220	7,580	175	230	198
2/0	19	21	16	0.398	20	420	50	55	20	40	1.700	122	174	1,216	20.4	799	1,000	0.133	0.178	0.040	0.1784±j0.0603	0.2325±j0.7369	3,270	7,460	9,100	198	263	224
3/0	19	17	14	0.449	20	420	50	55	20	40	1.777	155	224	1,369	21.3	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0586	0.1949±j0.7321	4,200	9,610	11,710	226	304	256
4/0	19	14	12	0.504	20	420	50	80	20	40	1.916	195	294	1,624	23.0	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0576	0.1663±j0.7260	5,500	12,570	15,320	256	350	290
250	37	16	12	0.547	20	420	50	80	20	40	1.959	230	335	1,743	23.5	1,500	1,000	0.0707	0.095	0.048	0.0950±j0.0563	0.1491±j0.7231	6,290	14,360	17,510	281	387	318
350	37	22	12	0.650	20	420	50	80	20	40	2.062	322	461	2,047	24.8	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0535	0.1222±j0.7168	8,640	19,750	24,080	337	475	382
500	37	20	10	0.773	20	420	65	80	20	40	2.257	460	667	2,600	27.1	3,000	1,000	0.0354	0.048	0.060	0.0478±j0.0516	0.1018±j0.7087	12,500	28,560	34,820	411	596	466
750	61	24	9	0.949	27	420	65	80	20	40	2.471	690	1,009	3,392	29.7	4,500	1,000	0.0236	0.032	0.069	0.0321±j0.0490	0.0862±j0.6998	18,910	43,210	52,680	514	767	581
1000	61	25	8	1.095	27	420	65	80	20	40	2.647	921	1,326	4,106	31.8	6,000	1,000	0.0177	0.024	0.077	0.0244±j0.0472	0.0785±j0.6934	24,850	56,780	69,230	599	915	677
Full Neutral																													
1/0	19	10	12	0.354	20	420	50	55	20	40	1.716	97	210	1,250	20.6	633	1,000	0.168	0.226	0.037	0.2254±j0.0632	0.2795±j0.7392	3,930	8,980	10,950	175	231	198
2/0	19	13	12	0.398	20	420	50	55	20	40	1.760	122	273	1,372	21.1	799	1,000	0.133	0.178	0.040	0.1784±j0.0611	0.2325±j0.7353	5,110	11,670	14,230	199	265	225
3/0	19	16	12	0.449	20	420	50	80	20	40	1.861	155	335	1,568	22.3	1,007	1,000	0.105	0.141	0.042	0.1408±j0.0596	0.1949±j0.7300	6,290	14,360	17,510	226	306	256
4/0	19	13	10	0.504	20	420	50	80	20	40	1.958	195	433	1,803	23.5	1,269	1,000	0.0836	0.112	0.045	0.1122±j0.0582	0.1663±j0.7250	8,120	18,560	22,630	257	352	291
250	37	15	10	0.547	20	420	50	80	20	40	2.001	230	500	1,946	24.0	1,500	1,000	0.0707	0.095	0.048	0.0950±j0.0568	0.1491±j0.7222	9,370	21,420	26,110	282	389	318
350	37	21	10	0.650	20	420	50	80	20	40	2.104	322	700	2,319	25.3	2,100	1,000	0.0505	0.068	0.053	0.0681±j0.0539	0.1222±j0.7159	13,120	29,990	36,560	338	478	383
500	37	24	9	0.773	20	420	65	80	20	40	2.281	460	1,009	2,945	27.4	3,000	1,000	0.0354	0.048	0.060	0.0477±j0.0518	0.1018±j0.7082	18,910	43,210	52,680	412	597	466
750	61	28	8	0.949	27	420	65	80	20	40	2.501	690	1,485	3,865	30.0	4,500	1,000	0.0236	0.032	0.069	0.0321±j0.0492	0.0862±j0.6993	27,830	63,590	77,540	514	769	582

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at a single point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at a single point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at a single point.
3. Impedance: Calculations are based on flat formation / earth loop / conductor temperature of 105°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.

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35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Trefoil

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Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.226	0.037	0.2261±j0.0571	1.1055±j0.0444	930	2,130	2,600	176	223	200
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.178	0.040	0.1791±j0.0550	1.0585±j0.0425	930	2,130	2,600	200	256	227
3/0	19	6	16	0.449	20	420	50	55	20	40	1.751	155	50	1,182	21.0	1,007	1,000	0.105	0.141	0.042	0.1415±j0.0529	1.0209±j0.0406	930	2,130	2,600	227	295	258
4/0	19	6	16	0.504	20	420	50	80	20	40	1.856	195	50	1,331	22.3	1,269	1,000	0.0836	0.112	0.045	0.1129±j0.0516	0.9923±j0.0388	930	2,130	2,600	257	339	292
250	37	6	16	0.547	20	420	50	80	20	40	1.899	230	50	1,411	22.8	1,500	1,000	0.0707	0.095	0.048	0.0957±j0.0502	0.9751±j0.0376	930	2,130	2,600	282	374	320
350	37	7	16	0.650	20	420	50	80	20	40	2.002	322	58	1,605	24.0	2,100	1,000	0.0505	0.068	0.053	0.0689±j0.0475	0.8225±j0.0343	1,090	2,480	3,030	338	458	384
500	37	7	14	0.773	20	420	65	80	20	40	2.181	460	93	1,974	26.2	3,000	1,000	0.0354	0.048	0.060	0.0490±j0.0454	0.5222±j0.0324	1,740	3,960	4,830	411	572	467
750	61	10	14	0.949	27	420	65	80	20	40	2.371	690	132	2,444	28.5	4,500	1,000	0.0236	0.032	0.069	0.0340±j0.0426	0.3643±j0.0284	2,480	5,660	6,910	508	729	578
1000	61	13	14	1.095	27	420	65	80	20	40	2.517	921	172	2,852	30.2	6,000	1,000	0.0177	0.024	0.077	0.0267±j0.0406	0.2799±j0.0258	3,220	7,360	8,980	586	860	667
1250	91	16	14	1.228	30	420	65	80	20	40	2.656	1,150	212	3,270	31.9	7,500	1,000	0.0141	0.02	0.084	0.0226±j0.0390	0.2274±j0.0240	3,970	9,060	11,050	653	978	742
1500	91	19	14	1.343	39	420	65	80	20	40	2.789	1,380	251	3,688	33.5	9,000	1,000	0.0118	0.017	0.091	0.0201±j0.0380	0.1917±j0.0227	4,710	10,760	13,120	705	1,075	802
1/6 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.226	0.037	0.2261±j0.0571	1.1055±j0.0444	930	2,130	2,600	176	223	200
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.178	0.040	0.1791±j0.0550	1.0585±j0.0425	930	2,130	2,600	200	256	227
3/0	19	7	16	0.449	20	420	50	55	20	40	1.751	155	58	1,189	21.0	1,007	1,000	0.105	0.141	0.042	0.1416±j0.0529	0.8952±j0.0398	1,090	2,480	3,030	227	295	258
4/0	19	9	16	0.504	20	420	50	80	20	40	1.856	195	75	1,353	22.3	1,269	1,000	0.0836	0.112	0.045	0.1133±j0.0516	0.6989±j0.0369	1,400	3,190	3,890	257	339	292
250	37	10	16	0.547	20	420	50	80	20	40	1.899	230	83	1,441	22.8	1,500	1,000	0.0707	0.095	0.048	0.0962±j0.0502	0.6231±j0.0352	1,550	3,550	4,330	281	374	320
350	37	9	14	0.650	20	420	50	80	20	40	2.028	322	119	1,694	24.3	2,100	1,000	0.0505	0.068	0.053	0.0698±j0.0477	0.4371±j0.0332	2,230	5,100	6,220	337	459	384
500	37	8	12	0.773	20	420	65	80	20	40	2.215	460	167	2,090	26.6	3,000	1,000	0.0354	0.048	0.060	0.0500±j0.0456	0.3088±j0.0318	3,140	7,170	8,740	409	572	465
750	61	19	14	0.949	27	420	65	80	20	40	2.371	690	251	2,551	28.5	4,500	1,000	0.0236	0.032	0.069	0.0355±j0.0422	0.2069±j0.0263	4,710	10,760	13,120	502	722	571
1000	61	16	12	1.095	27	420	65	80	20	40	2.551	921	335	3,055	30.6	6,000	1,000	0.0177	0.024	0.077	0.0288±j0.0403	0.1550±j0.0251	6,270	14,330	17,480	574	849	653
1250	91	20	12	1.228	30	420	65	80	20	40	2.690	1,150	419	3,516	32.3	7,500	1,000	0.0141	0.02	0.084	0.0251±j0.0385	0.1242±j0.0233	7,840	17,920	21,850	633	957	720
1500	91	24	12	1.343	39	420	65	80	20	40	2.823	1,380	502	3,977	33.9	9,000	1,000	0.0118	0.017	0.091	0.0230±j0.0370	0.1039±j0.0222	9,410	21,500	26,220	676	1,043	769

35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Trefoil

VOLTAGE

Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	420	50	55	20	40	1.682	97	79	1,096	20.2	633	1,000	0.168	0.226	0.037	0.2265±j0.0574	0.7789±j0.0444	1,480	3,390	4,130	176	224	200
2/0	19	11	16	0.398	20	420	50	55	20	40	1.700	122	91	1,141	20.4	799	1,000	0.133	0.178	0.040	0.1797±j0.0550	0.6585±j0.0398	1,710	3,910	4,770	199	256	227
3/0	19	14	16	0.449	20	420	50	55	20	40	1.751	155	116	1,241	21.0	1,007	1,000	0.105	0.141	0.042	0.1424±j0.0528	0.5180±j0.0370	2,180	4,970	6,070	227	295	258
4/0	19	11	14	0.504	20	420	50	80	20	40	1.882	195	145	1,449	22.6	1,269	1,000	0.0836	0.112	0.045	0.1143±j0.0518	0.4141±j0.0361	2,720	6,220	7,580	257	339	292
250	37	13	14	0.547	20	420	50	80	20	40	1.925	230	171	1,554	23.1	1,500	1,000	0.0707	0.095	0.048	0.0975±j0.0503	0.3505±j0.0342	3,210	7,350	8,960	281	374	319
350	37	18	14	0.650	20	420	50	80	20	40	2.028	322	237	1,801	24.3	2,100	1,000	0.0505	0.068	0.053	0.0714±j0.0474	0.2526±j0.0308	4,450	10,170	12,400	335	457	381
500	37	16	12	0.773	20	420	65	80	20	40	2.215	460	335	2,241	26.6	3,000	1,000	0.0354	0.048	0.060	0.0522±j0.0450	0.1783±j0.0292	6,290	14,360	17,510	404	566	460
750	61	15	10	0.949	27	420	65	80	20	40	2.447	690	500	2,895	29.4	4,500	1,000	0.0236	0.032	0.069	0.0384±j0.0417	0.1197±j0.0270	9,370	21,420	26,110	491	715	559
1000	61	20	10	1.095	27	420	65	80	20	40	2.593	921	667	3,424	31.1	6,000	1,000	0.0177	0.024	0.077	0.0323±j0.0386	0.0901±j0.0245	12,500	28,560	34,820	554	828	630
1250	91	20	9	1.228	30	420	65	80	20	40	2.756	1,150	841	4,014	33.1	7,500	1,000	0.0141	0.02	0.084	0.0289±j0.0360	0.0718±j0.0233	15,760	36,010	43,900	602	925	685
1500	91	24	9	1.343	39	420	65	80	20	40	2.889	1,380	1,009	4,557	34.7	9,000	1,000	0.0118	0.017	0.091	0.0270±j0.0337	0.0603±j0.0222	18,910	43,210	52,680	637	999	725
1/2 Neutral																													
1/0	19	8	14	0.354	20	420	50	55	20	40	1.682	97	105	1,119	20.2	633	1,000	0.168	0.226	0.037	0.2269±j0.0574	0.6405±j0.0430	1,980	4,520	5,510	176	224	200
2/0	19	10	14	0.398	20	420	50	55	20	40	1.726	122	132	1,208	20.7	799	1,000	0.133	0.178	0.040	0.1802±j0.0552	0.5105±j0.0401	2,470	5,650	6,890	200	257	227
3/0	19	13	14	0.449	20	420	50	55	20	40	1.777	155	171	1,322	21.3	1,007	1,000	0.105	0.141	0.042	0.1431±j0.0531	0.3962±j0.0372	3,210	7,350	8,960	227	296	258
4/0	19	10	12	0.504	20	420	50	80	20	40	1.916	195	210	1,548	23.0	1,269	1,000	0.0836	0.112	0.045	0.1152±j0.0520	0.3210±j0.0364	3,930	8,980	10,950	257	340	292
250	37	12	12	0.547	20	420	50	80	20	40	1.959	230	251	1,668	23.5	1,500	1,000	0.0707	0.095	0.048	0.0986±j0.0505	0.2691±j0.0345	4,710	10,770	13,130	281	375	319
350	37	11	10	0.650	20	420	50	80	20	40	2.104	322	367	2,019	25.3	2,100	1,000	0.0505	0.068	0.053	0.0730±j0.0476	0.1875±j0.0324	6,870	15,710	19,150	335	459	380
500	37	15	10	0.773	20	420	65	80	20	40	2.257	460	500	2,451	27.1	3,000	1,000	0.0354	0.048	0.060	0.0542±j0.0445	0.1353±j0.0294	9,370	21,420	26,110	401	565	456
750	61	18	9	0.949	27	420	65	80	20	40	2.471	690	757	3,165	29.7	4,500	1,000	0.0236	0.032	0.069	0.0408±j0.0400	0.0900±j0.0265	14,180	32,410	39,510	481	705	548
1000	61	24	9	1.095	27	420	65	80	20	40	2.617	921	1,009	3,774	31.4	6,000	1,000	0.0177	0.024	0.077	0.0347±j0.0360	0.0678±j0.0241	18,910	43,210	52,680	538	812	613
1250	91	24	8	1.228	30	420	65	80	20	40	2.786	1,150	1,273	4,453	33.4	7,500	1,000	0.0141	0.02	0.084	0.0310±j0.0326	0.0542±j0.0229	23,860	54,510	66,460	583	904	664
1500	91	28	8	1.343	39	420	65	80	20	40	2.919	1,380	1,485	5,037	35.0	9,000	1,000	0.0118	0.017	0.091	0.0286±j0.0300	0.0464±j0.0218	27,830	63,590	77,540	617	977	703

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35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Trefoil

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Weights & Measurements																		Electrical and Engineering Data - Trefoil - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																													
1/0	19	11	14	0.354	20	420	50	55	20	40	1.682	97	145	1,155	20.2	633	1,000	0.168	0.226	0.037	0.2274±j0.0573	0.5273±j0.0417	2,720	6,220	7,580	176	224	200
2/0	19	21	16	0.398	20	420	50	55	20	40	1.700	122	174	1,216	20.4	799	1,000	0.133	0.178	0.040	0.1808±j0.0548	0.4299±j0.0378	3,270	7,460	9,100	199	256	226
3/0	19	17	14	0.449	20	420	50	55	20	40	1.777	155	224	1,369	21.3	1,007	1,000	0.105	0.141	0.042	0.1439±j0.0529	0.3361±j0.0364	4,200	9,610	11,710	226	296	258
4/0	19	14	12	0.504	20	420	50	80	20	40	1.916	195	294	1,624	23.0	1,269	1,000	0.0836	0.112	0.045	0.1163±j0.0516	0.2614±j0.0352	5,500	12,570	15,320	256	340	291
250	37	16	12	0.547	20	420	50	80	20	40	1.959	230	335	1,743	23.5	1,500	1,000	0.0707	0.095	0.048	0.0997±j0.0501	0.2256±j0.0336	6,290	14,360	17,510	280	374	318
350	37	22	12	0.650	20	420	50	80	20	40	2.062	322	461	2,047	24.8	2,100	1,000	0.0505	0.068	0.053	0.0742±j0.0466	0.1630±j0.0302	8,640	19,750	24,080	332	455	378
500	37	20	10	0.773	20	420	65	80	20	40	2.257	460	667	2,600	27.1	3,000	1,000	0.0354	0.048	0.060	0.0558±j0.0433	0.1134±j0.0286	12,500	28,560	34,820	397	560	451
750	61	24	9	0.949	27	420	65	80	20	40	2.471	690	1,009	3,392	29.7	4,500	1,000	0.0236	0.032	0.069	0.0425±j0.0379	0.0755±j0.0257	18,910	43,210	52,680	474	697	539
1000	61	25	8	1.095	27	420	65	80	20	40	2.647	921	1,326	4,106	31.8	6,000	1,000	0.0177	0.024	0.077	0.0359±j0.0335	0.0575±j0.0240	24,850	56,780	69,230	529	803	603
Full Neutral																													
1/0	19	10	12	0.354	20	420	50	55	20	40	1.716	97	210	1,250	20.6	633	1,000	0.168	0.226	0.037	0.2283±j0.0576	4.6745±j0.4531	3,930	8,980	10,950	176	225	200
2/0	19	13	12	0.398	20	420	50	55	20	40	1.760	122	273	1,372	21.1	799	1,000	0.133	0.178	0.040	0.1821±j0.0552	3.6496±j0.4219	5,110	11,670	14,230	200	258	227
3/0	19	16	12	0.449	20	420	50	80	20	40	1.861	155	335	1,568	22.3	1,007	1,000	0.105	0.141	0.042	0.1455±j0.0534	2.9206±j0.3940	6,290	14,360	17,510	227	297	257
4/0	19	13	10	0.504	20	420	50	80	20	40	1.958	195	433	1,803	23.5	1,269	1,000	0.0836	0.112	0.045	0.1180±j0.0514	2.2949±j0.3819	8,120	18,560	22,630	256	340	290
250	37	15	10	0.547	20	420	50	80	20	40	2.001	230	500	1,946	24.0	1,500	1,000	0.0707	0.095	0.048	0.1016±j0.0496	1.9656±j0.3635	9,370	21,420	26,110	279	375	317
350	37	21	10	0.650	20	420	50	80	20	40	2.104	322	700	2,319	25.3	2,100	1,000	0.0505	0.068	0.053	0.0766±j0.0453	1.4062±j0.3268	13,120	29,990	36,560	330	454	375
500	37	24	9	0.773	20	420	65	80	20	40	2.281	460	1,009	2,945	27.4	3,000	1,000	0.0354	0.048	0.060	0.0583±j0.0406	0.9810±j0.3028	18,910	43,210	52,680	391	555	444
750	61	28	8	0.949	27	420	65	80	20	40	2.501	690	1,485	3,865	30.0	4,500	1,000	0.0236	0.032	0.069	0.0440±j0.0341	0.6634±j0.2733	27,830	63,590	77,540	465	689	530

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at both point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at both point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at both point.
3. Impedance: Calculations are based on trefoil formation / shield loop / conductor temperature of 105°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.

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35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Flat

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Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/12 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.226	0.037	0.2264±j0.0624	1.1055±j0.0444	930	2,130	2,600	174	228	197
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.178	0.040	0.1794±j0.0603	1.0585±j0.0425	930	2,130	2,600	197	262	224
3/0	19	6	16	0.449	20	420	50	55	20	40	1.751	155	50	1,182	21.0	1,007	1,000	0.105	0.141	0.042	0.1418±j0.0582	1.0209±j0.0406	930	2,130	2,600	224	302	254
4/0	19	6	16	0.504	20	420	50	80	20	40	1.856	195	50	1,331	22.3	1,269	1,000	0.0836	0.112	0.045	0.1132±j0.0569	0.9923±j0.0388	930	2,130	2,600	254	346	288
250	37	6	16	0.547	20	420	50	80	20	40	1.899	230	50	1,411	22.8	1,500	1,000	0.0707	0.095	0.048	0.0961±j0.0555	0.9751±j0.0376	930	2,130	2,600	278	383	315
350	37	7	16	0.650	20	420	50	80	20	40	2.002	322	58	1,605	24.0	2,100	1,000	0.0505	0.068	0.053	0.0693±j0.0528	0.8225±j0.0343	1,090	2,480	3,030	333	468	377
500	37	7	14	0.773	20	420	65	80	20	40	2.181	460	93	1,974	26.2	3,000	1,000	0.0354	0.048	0.060	0.0497±j0.0507	0.5222±j0.0324	1,740	3,960	4,830	401	582	455
750	61	10	14	0.949	27	420	65	80	20	40	2.371	690	132	2,444	28.5	4,500	1,000	0.0236	0.032	0.069	0.0348±j0.0478	0.3643±j0.0284	2,480	5,660	6,910	490	736	556
1000	61	13	14	1.095	27	420	65	80	20	40	2.517	921	172	2,852	30.2	6,000	1,000	0.0177	0.024	0.077	0.0278±j0.0457	0.2799±j0.0258	3,220	7,360	8,980	556	859	631
1250	91	16	14	1.228	30	420	65	80	20	40	2.656	1,150	212	3,270	31.9	7,500	1,000	0.0141	0.02	0.084	0.0239±j0.0441	0.2274±j0.0240	3,970	9,060	11,050	607	962	689
1500	91	19	14	1.343	39	420	65	80	20	40	2.789	1,380	251	3,688	33.5	9,000	1,000	0.0118	0.017	0.091	0.0217±j0.0429	0.1917±j0.0227	4,710	10,760	13,120	643	1,043	730
1/6 Neutral																													
1/0	19	6	16	0.354	20	420	50	55	20	40	1.656	97	50	1,040	19.9	633	1,000	0.168	0.226	0.037	0.2264±j0.0624	1.1055±j0.0444	930	2,130	2,600	174	228	197
2/0	19	6	16	0.398	20	420	50	55	20	40	1.700	122	50	1,104	20.4	799	1,000	0.133	0.178	0.040	0.1794±j0.0603	1.0585±j0.0425	930	2,130	2,600	197	262	224
3/0	19	7	16	0.449	20	420	50	55	20	40	1.751	155	58	1,189	21.0	1,007	1,000	0.105	0.141	0.042	0.1420±j0.0582	0.8952±j0.0398	1,090	2,480	3,030	224	302	254
4/0	19	9	16	0.504	20	420	50	80	20	40	1.856	195	75	1,353	22.3	1,269	1,000	0.0836	0.112	0.045	0.1138±j0.0568	0.6989±j0.0369	1,400	3,190	3,890	253	346	287
250	37	10	16	0.547	20	420	50	80	20	40	1.899	230	83	1,441	22.8	1,500	1,000	0.0707	0.095	0.048	0.0968±j0.0555	0.6231±j0.0352	1,550	3,550	4,330	277	382	314
350	37	9	14	0.650	20	420	50	80	20	40	2.028	322	119	1,694	24.3	2,100	1,000	0.0505	0.068	0.053	0.0706±j0.0529	0.4371±j0.0332	2,230	5,100	6,220	330	467	375
500	37	8	12	0.773	20	420	65	80	20	40	2.215	460	167	2,090	26.6	3,000	1,000	0.0354	0.048	0.060	0.0511±j0.0508	0.3088±j0.0318	3,140	7,170	8,740	396	578	449
750	61	19	14	0.949	27	420	65	80	20	40	2.371	690	251	2,551	28.5	4,500	1,000	0.0236	0.032	0.069	0.0371±j0.0472	0.2069±j0.0263	4,710	10,760	13,120	474	718	538
1000	61	16	12	1.095	27	420	65	80	20	40	2.551	921	335	3,055	30.6	6,000	1,000	0.0177	0.024	0.077	0.0308±j0.0450	0.1550±j0.0251	6,270	14,330	17,480	527	827	599
1250	91	20	12	1.228	30	420	65	80	20	40	2.690	1,150	419	3,516	32.3	7,500	1,000	0.0141	0.02	0.084	0.0275±j0.0428	0.1242±j0.0233	7,840	17,920	21,850	563	911	640
1500	91	24	12	1.343	39	420	65	80	20	40	2.823	1,380	502	3,977	33.9	9,000	1,000	0.0118	0.017	0.091	0.0258±j0.0411	0.1039±j0.0222	9,410	21,500	26,220	586	971	666

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35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance											
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		μF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
1/3 Neutral																													
1/0	19	6	14	0.354	20	420	50	55	20	40	1.682	97	79	1,096	20.2	633	1,000	0.168	0.226	0.037	0.2270±j0.0627	0.7789±j0.0444	1,480	3,390	4,130	174	229	197
2/0	19	11	16	0.398	20	420	50	55	20	40	1.700	122	91	1,141	20.4	799	1,000	0.133	0.178	0.040	0.1803±j0.0602	0.6585±j0.0398	1,710	3,910	4,770	197	262	223
3/0	19	14	16	0.449	20	420	50	55	20	40	1.751	155	116	1,241	21.0	1,007	1,000	0.105	0.141	0.042	0.1432±j0.0581	0.5180±j0.0370	2,180	4,970	6,070	223	301	253
4/0	19	11	14	0.504	20	420	50	80	20	40	1.882	195	145	1,449	22.6	1,269	1,000	0.0836	0.112	0.045	0.1152±j0.0569	0.4141±j0.0361	2,720	6,220	7,580	252	346	286
250	37	13	14	0.547	20	420	50	80	20	40	1.925	230	171	1,554	23.1	1,500	1,000	0.0707	0.095	0.048	0.0986±j0.0554	0.3505±j0.0342	3,210	7,350	8,960	275	381	312
350	37	18	14	0.650	20	420	50	80	20	40	2.028	322	237	1,801	24.3	2,100	1,000	0.0505	0.068	0.053	0.0729±j0.0523	0.2526±j0.0308	4,450	10,170	12,400	325	461	369
500	37	16	12	0.773	20	420	65	80	20	40	2.215	460	335	2,241	26.6	3,000	1,000	0.0354	0.048	0.060	0.0543±j0.0497	0.1783±j0.0292	6,290	14,360	17,510	384	565	436
750	61	15	10	0.949	27	420	65	80	20	40	2.447	690	500	2,895	29.4	4,500	1,000	0.0236	0.032	0.069	0.0411±j0.0457	0.1197±j0.0270	9,370	21,420	26,110	449	694	510
1000	61	20	10	1.095	27	420	65	80	20	40	2.593	921	667	3,424	31.1	6,000	1,000	0.0177	0.024	0.077	0.0354±j0.0418	0.0901±j0.0245	12,500	28,560	34,820	488	782	555
1250	91	20	9	1.228	30	420	65	80	20	40	2.756	1,150	841	4,014	33.1	7,500	1,000	0.0141	0.02	0.084	0.0323±j0.0385	0.0718±j0.0233	15,760	36,010	43,900	515	852	586
1500	91	24	9	1.343	39	420	65	80	20	40	2.889	1,380	1,009	4,557	34.7	9,000	1,000	0.0118	0.017	0.091	0.0304±j0.0354	0.0603±j0.0222	18,910	43,210	52,680	534	906	608
1/2 Neutral																													
1/0	19	8	14	0.354	20	420	50	55	20	40	1.682	97	105	1,119	20.2	633	1,000	0.168	0.226	0.037	0.2276±j0.0626	0.6405±j0.0430	1,980	4,520	5,510	174	229	197
2/0	19	10	14	0.398	20	420	50	55	20	40	1.726	122	132	1,208	20.7	799	1,000	0.133	0.178	0.040	0.1811±j0.0604	0.5105±j0.0401	2,470	5,650	6,890	197	262	223
3/0	19	13	14	0.449	20	420	50	55	20	40	1.777	155	171	1,322	21.3	1,007	1,000	0.105	0.141	0.042	0.1443±j0.0582	0.3962±j0.0372	3,210	7,350	8,960	223	301	253
4/0	19	10	12	0.504	20	420	50	80	20	40	1.916	195	210	1,548	23.0	1,269	1,000	0.0836	0.112	0.045	0.1165±j0.0570	0.3210±j0.0364	3,930	8,980	10,950	252	346	285
250	37	12	12	0.547	20	420	50	80	20	40	1.959	230	251	1,668	23.5	1,500	1,000	0.0707	0.095	0.048	0.1002±j0.0554	0.2691±j0.0345	4,710	10,770	13,130	273	380	310
350	37	11	10	0.650	20	420	50	80	20	40	2.104	322	367	2,019	25.3	2,100	1,000	0.0505	0.068	0.053	0.0753±j0.0522	0.1875±j0.0324	6,870	15,710	19,150	321	460	364
500	37	15	10	0.773	20	420	65	80	20	40	2.257	460	500	2,451	27.1	3,000	1,000	0.0354	0.048	0.060	0.0569±j0.0485	0.1353±j0.0294	9,370	21,420	26,110	375	557	426
750	61	18	9	0.949	27	420	65	80	20	40	2.471	690	757	3,165	29.7	4,500	1,000	0.0236	0.032	0.069	0.0442±j0.0428	0.0900±j0.0265	14,180	32,410	39,510	432	675	491
1000	61	24	9	1.095	27	420	65	80	20	40	2.617	921	1,009	3,774	31.4	6,000	1,000	0.0177	0.024	0.077	0.0381±j0.0377	0.0678±j0.0241	18,910	43,210	52,680	469	759	534
1250	91	24	8	1.228	30	420	65	80	20	40	2.786	1,150	1,273	4,453	33.4	7,500	1,000	0.0141	0.02	0.084	0.0342±j0.0335	0.0542±j0.0229	23,860	54,510	66,460	499	832	568
1500	91	28	8	1.343	39	420	65	80	20	40	2.919	1,380	1,485	5,037	35.0	9,000	1,000	0.0118	0.017	0.091	0.0315±j0.0304	0.0464±j0.0218	27,830	63,590	77,540	524	894	596

35kV MV-105 AL TR-XLPE 133% INS XLPE Anti-Termite - Flat

Weights & Measurements																		Electrical and Engineering Data - Flat - Both Point Impedance										
Cond. Size	Strands	Neutral		Dia.	Thickness						O. D.	Weight			Min. Bend R	Max. Pull T	Max. Sidewall Bearing Pressure	Resistance		Capacitance	Positive Sequence Impedance	Zero Sequence Impedance	Shield Short-Circuit Current			Allowable Ampacities		
				Cond.	Cond. Shield	Insul.	Insul. Shield	Inner Jacket	Anti Termite	Sheath	Sheath	Al	Cu	Total				DC@ 20°C	AC@ 105°C				1 sec / 200°C	0.267 sec / 250°C	0.267 sec / 350°C	In Duct	Free Air	Direct Burial
AWG kcmil		No. Wires	Size	In.	Mils						In.	lbs./Kft			In.	lbs.	lb/ft of bend R	Ω/Kft		µF/Kft	Ω/Kft	Ω/Kft	Amps			Amps		
2/3 Neutral																												
1/0	19	11	14	0.354	20	420	50	55	20	40	1.682	97	145	1,155	20.2	633	1,000	0.168	0.226	0.037	0.2284±j0.0625	0.5273±j0.0417	2,720	6,220	7,580	174	229	196
2/0	19	21	16	0.398	20	420	50	55	20	40	1.700	122	174	1,216	20.4	799	1,000	0.133	0.178	0.040	0.1820±j0.0599	0.4299±j0.0378	3,270	7,460	9,100	196	261	222
3/0	19	17	14	0.449	20	420	50	55	20	40	1.777	155	224	1,369	21.3	1,007	1,000	0.105	0.141	0.042	0.1453±j0.0579	0.3361±j0.0364	4,200	9,610	11,710	222	301	252
4/0	19	14	12	0.504	20	420	50	80	20	40	1.916	195	294	1,624	23.0	1,269	1,000	0.0836	0.112	0.045	0.1181±j0.0564	0.2614±j0.0352	5,500	12,570	15,320	250	344	283
250	37	16	12	0.547	20	420	50	80	20	40	1.959	230	335	1,743	23.5	1,500	1,000	0.0707	0.095	0.048	0.1017±j0.0547	0.2256±j0.0336	6,290	14,360	17,510	271	378	307
350	37	22	12	0.650	20	420	50	80	20	40	2.062	322	461	2,047	24.8	2,100	1,000	0.0505	0.068	0.053	0.0768±j0.0507	0.1630±j0.0302	8,640	19,750	24,080	316	454	359
500	37	20	10	0.773	20	420	65	80	20	40	2.257	460	667	2,600	27.1	3,000	1,000	0.0354	0.048	0.060	0.0590±j0.0465	0.1134±j0.0286	12,500	28,560	34,820	367	549	417
750	61	24	9	0.949	27	420	65	80	20	40	2.471	690	1,009	3,392	29.7	4,500	1,000	0.0236	0.032	0.069	0.0459±j0.0396	0.0755±j0.0257	18,910	43,210	52,680	422	663	481
1000	61	25	8	1.095	27	420	65	80	20	40	2.647	921	1,326	4,106	31.8	6,000	1,000	0.0177	0.024	0.077	0.0390±j0.0342	0.0575±j0.0240	24,850	56,780	69,230	463	753	527
Full Neutral																												
1/0	19	10	12	0.354	20	420	50	55	20	40	1.716	97	210	1,250	20.6	633	1,000	0.168	0.226	0.037	0.2297±j0.0626	0.4343±j0.0421	3,930	8,980	10,950	174	229	196
2/0	19	13	12	0.398	20	420	50	55	20	40	1.760	122	273	1,372	21.1	799	1,000	0.133	0.178	0.040	0.1838±j0.0601	0.3391±j0.0392	5,110	11,670	14,230	196	262	222
3/0	19	16	12	0.449	20	420	50	80	20	40	1.861	155	335	1,568	22.3	1,007	1,000	0.105	0.141	0.042	0.1476±j0.0580	0.2713±j0.0366	6,290	14,360	17,510	221	301	250
4/0	19	13	10	0.504	20	420	50	80	20	40	1.958	195	433	1,803	23.5	1,269	1,000	0.0836	0.112	0.045	0.1205±j0.0556	0.2132±j0.0355	8,120	18,560	22,630	248	343	281
250	37	15	10	0.547	20	420	50	80	20	40	2.001	230	500	1,946	24.0	1,500	1,000	0.0707	0.095	0.048	0.1044±j0.0535	0.1826±j0.0338	9,370	21,420	26,110	268	376	304
350	37	21	10	0.650	20	420	50	80	20	40	2.104	322	700	2,319	25.3	2,100	1,000	0.0505	0.068	0.053	0.0799±j0.0483	0.1306±j0.0304	13,120	29,990	36,560	310	449	353
500	37	24	9	0.773	20	420	65	80	20	40	2.281	460	1,009	2,945	27.4	3,000	1,000	0.0354	0.048	0.060	0.0617±j0.0422	0.0911±j0.0281	18,910	43,210	52,680	359	540	408
750	61	28	8	0.949	27	420	65	80	20	40	2.501	690	1,485	3,865	30.0	4,500	1,000	0.0236	0.032	0.069	0.0469±j0.0344	0.0616±j0.0254	27,830	63,590	77,540	418	659	475

1. All dimensions and weights are nominal and subject to normal manufacturing tolerances.
2. Ampacities: In Duct: Buried in duct, earth RHO 100, 25°C ambient, 100% load factor, 39.4" burial depth, and neutral wires bonded at both point. Free Air: 40°C ambient, 100% load factor and neutral wires bonded at both point. Direct Burial: Ambient temperature 25°C and 39.4" burial depth, earth RHO 100, and neutral wires bonded at both point.
3. Impedance: Calculations are based on flat formation / shield loop / conductor temperature of 105°C.
4. Jacket thickness is measured from the outermost point of the concentric neutral wire to the outermost point of the jacket.
5. Other designs available upon request.
6. The above parameters are for reference only, based on the technical requirements.

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