

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**



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 polyethylene 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

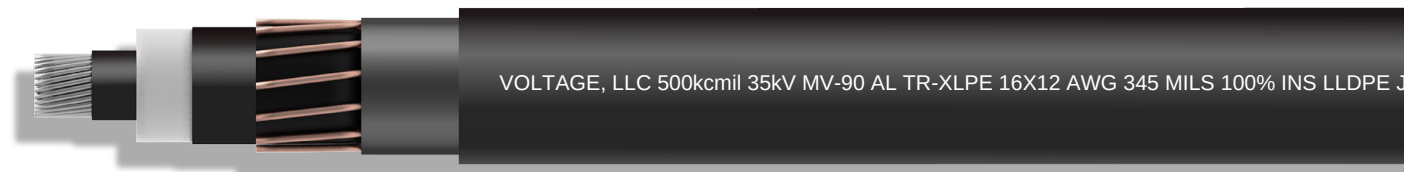
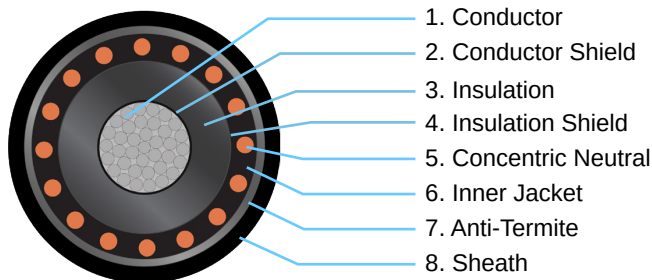
- EPR Insulation
- XLPE jacket
- TYPE MV-105
- Copper tape screen
- Different concentric neutral levels
- Other voltages available
- Other insulation levels

📦 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



35kV MV-90 AL TR-XLPE 100% 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		
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

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

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.																											

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			
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

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	

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

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			

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

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.																													

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	

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		
1/3 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.																													

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 polyethylene 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

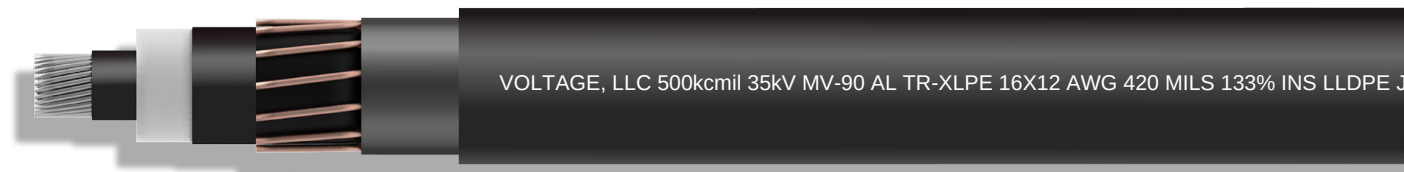
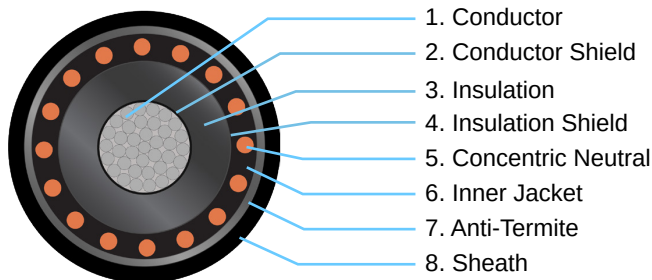
- EPR Insulation
- XLPE jacket
- TYPE MV-105
- Copper tape screen
- Different concentric neutral levels
- Other voltages available
- Other insulation levels

📦 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



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				
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			

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		
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	

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.																													

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		
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

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

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 Termit	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	

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

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.																											

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		
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	

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		
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	

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.																													

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 polyethylene 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

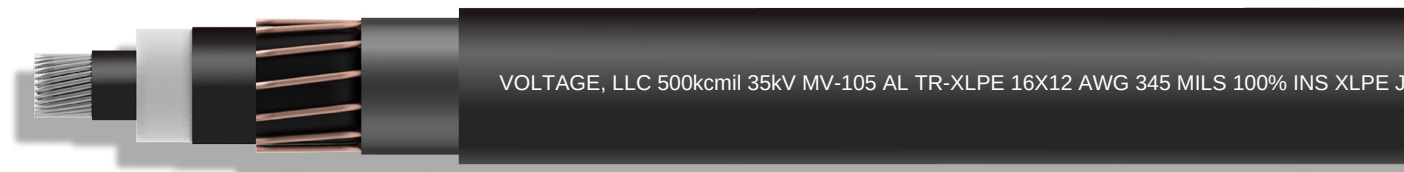
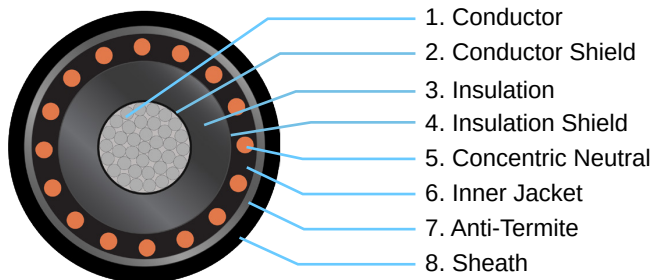
- EPR Insulation
- LLDPE jacket
- TYPE MV-90
- Copper tape screen
- Different concentric neutral levels
- Other voltages available
- Other insulation levels

📦 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



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		
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

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		

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.																													

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.																											

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				
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

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	

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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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.																												

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 polyethylene 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

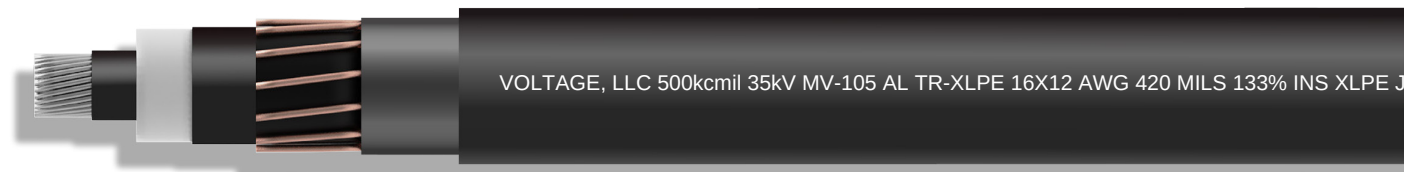
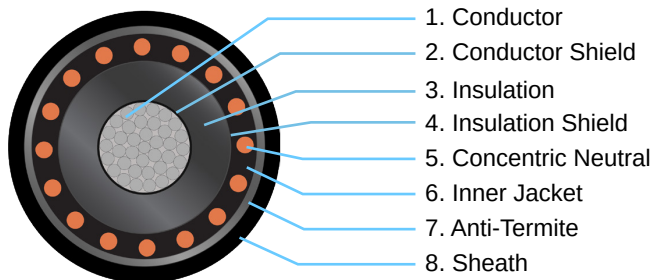
- EPR Insulation
- LLDPE jacket
- TYPE MV-90
- Copper tape screen
- Different concentric neutral levels
- Other voltages available
- Other insulation levels

📦 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



35kV MV-105 AL TR-XLPE 133% 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			
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

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

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.																													

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.																											

35kV MV-105 AL TR-XLPE 133% 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				
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

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		

35kV MV-105 AL TR-XLPE 133% 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	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.																											

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				
1/12 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			

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		
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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