500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - One Circuit

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF	delta Td for .0025 pf & Rho 60	90	120
		85°C - Copper Conductor - Compact Segmental Strand								
2000	10.25	887	799	734	637	590	498	27.1	34.0	41.0
2250	10.25	921	826	754	651	596	501	27.7	34.9	42.2
2500	10.25	953	852	773	666	602	504	28.2	35.6	43.1
2750	10.25	980	873	786	674	601	501	28.8	36.5	44.2
3000	12.25	1036	913	840	711	656	537	28.1	35.5	43.0

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - One Circuit

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF
		Total Watts/ft					
85°C - Copper Conductor - Compact Segmental Strand							
2000	10.25	42.9	38.2	35.0	30.7	28.9	25.7
2250	10.25	44.1	39.1	35.7	31.3	29.2	26.1
2500	10.25	45.1	39.9	36.2	31.8	29.5	26.3
2750	10.25	46.2	40.7	36.7	32.2	29.7	26.6
3000	12.25	50.2	43.5	39.9	34.4	32.3	28.3

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - One Circuit

25°C Earth Ambient

Condr Size	Pipe ID	OD	Wd	Rac	Qs	Qe	Ri	Rj	Rsd	Rd	Re @ 90 Rho & loss factor 75%	Re @ 90 Rho & loss factor 100%
85°C - Copper Conductor - Compact Segmental Strand												
2000	10.25	4.050	5.94	7.31	1.025	1.454	2.79	0.00	0.58	0.13	2.10	3.63
2250	10.25	4.145	6.17	6.71	1.026	1.499	2.68	0.00	0.56	0.13	2.10	3.63
2500	10.25	4.220	6.35	6.20	1.028	1.543	2.60	0.00	0.55	0.13	2.10	3.63
2750	10.25	4.310	6.57	5.79	1.028	1.586	2.51	0.00	0.54	0.13	2.10	3.63
3000	12.25	4.390	6.77	5.50	1.032	1.688	2.44	0.00	0.53	0.11	1.86	3.39

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 24 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF	delta Td for .0025 pf & Rho 60	90	120
					85°C - Copper Conductor - Compact Segmental Strand					
2000	10.25	743	654	532	453	306	254	33.2	43.4	53.6
2250	10.25	764	670	533	452	272	225	34.1	44.6	55.3
2500	10.25	784	685	534	451	239	196	34.8	45.7	56.6
2750	10.25	798	695	528	444	178	146	35.6	46.9	58.2
3000	12.25	834	718	561	466	223	182	35.2	46.3	57.4

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 24 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF
		Total Watts/ft					
85°C - Copper Conductor - Compact Segmental Strand							
2000	10.25	70.8	62.9	53.7	48.7	41.6	39.7
2250	10.25	72.3	64.1	54.2	49.3	41.5	40.1
2500	10.25	73.4	65.0	54.5	49.8	41.4	40.3
2750	10.25	74.5	66.0	54.8	50.3	41.2	40.6
3000	12.25	79.3	69.3	58.1	52.7	43.4	42.5

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2930

500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 24 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	OD	Wd	Rac	Qs	Qe	Ri	Rj	Rsd	Rd	Re @ 90 Rho & loss factor 75%	Re @ 90 Rho & loss factor 100%
					85°C - Copper Conductor - Compact Segmental Strand							
2000	10.25	4.050	5.94	7.31	1.025	1.454	2.79	0.00	0.54	0.13	2.43	4.17
2250	10.25	4.145	6.17	6.71	1.026	1.499	2.68	0.00	0.52	0.13	2.43	4.17
2500	10.25	4.220	6.35	6.20	1.028	1.543	2.60	0.00	0.51	0.13	2.43	4.17
2750	10.25	4.310	6.57	5.79	1.028	1.586	2.51	0.00	0.50	0.13	2.43	4.17
3000	12.25	4.390	6.77	5.50	1.032	1.688	2.44	0.00	0.49	0.11	2.20	3.93

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 36 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF	delta Td for .0025 pf & Rho 60	90	120
		85°C - Copper Conductor - Compact Segmental Strand								
2000	10.25	785	695	592	506	399	332	31.4	40.5	49.8
2250	10.25	810	714	599	510	382	317	32.2	41.7	51.3
2500	10.25	833	732	606	514	367	304	32.8	42.6	52.5
2750	10.25	851	745	606	512	339	280	33.5	43.7	54.0
3000	12.25	893	774	644	537	381	309	33.0	43.0	53.1

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2932

500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 36 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF
		Total Watts/ft					
85°C - Copper Conductor - Compact Segmental Strand							
2000	10.25	74.9	66.4	58.0	51.9	45.8	42.6
2250	10.25	76.6	67.8	58.7	52.7	45.8	43.1
2500	10.25	77.9	68.9	59.2	53.3	45.8	43.4
2750	10.25	79.3	70.0	59.7	53.9	45.8	43.8
3000	12.25	85.0	74.0	63.7	56.7	48.7	45.9

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 36 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	OD	Wd	Rac	Qs	Qe	Ri	Rj	Rsd	Rd	Re @ 90 Rho & loss factor 75%	100%
85°C - Copper Conductor - Compact Segmental Strand												
2000	10.25	4.050	5.94	7.31	1.025	1.454	2.79	0.00	0.55	0.13	2.33	4.01
2250	10.25	4.145	6.17	6.71	1.026	1.499	2.68	0.00	0.53	0.13	2.33	4.01
2500	10.25	4.220	6.35	6.20	1.028	1.543	2.60	0.00	0.52	0.13	2.33	4.01
2750	10.25	4.310	6.57	5.79	1.028	1.586	2.51	0.00	0.51	0.13	2.33	4.01
3000	12.25	4.390	6.77	5.50	1.032	1.688	2.44	0.00	0.50	0.11	2.10	3.77

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2934

500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - One Circuit

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF	delta Td for .0025 pf & Rho 60	90	120
85°C - Aluminum Conductor - Compact Segmental Strand										
2000	10.25	730	662	607	531	490	417	27.1	34.0	41.0
2250	10.25	766	692	630	549	500	423	27.8	34.9	42.2
2500	10.25	800	721	652	566	510	430	28.2	35.6	43.1
2750	10.25	831	746	670	579	514	432	28.8	36.5	44.3
3000	12.25	886	788	723	617	567	469	28.2	35.6	43.0
3250	12.25	913	809	738	628	571	470	28.6	36.2	43.9
3500	12.25	936	826	748	634	567	466	29.3	37.1	45.0
3750	12.25	958	843	760	642	567	465	29.6	37.7	45.8
4000	12.25	977	858	767	646	563	460	30.1	38.3	46.6

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - One Circuit

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF
		Total Watts/ft					
85°C - Aluminum Conductor - Compact Segmental Strand							
2000	10.25	41.1	37.0	33.9	30.1	28.3	25.4
2250	10.25	42.3	37.9	34.6	30.7	28.6	25.8
2500	10.25	43.3	38.7	35.1	31.2	28.9	26.1
2750	10.25	44.3	39.6	35.7	31.7	29.1	26.4
3000	12.25	47.9	42.1	38.7	33.7	31.6	28.0
3250	12.25	48.9	42.8	39.2	34.1	31.8	28.3
3500	12.25	50.0	43.7	39.7	34.6	32.0	28.6
3750	12.25	50.8	44.3	40.1	35.0	32.1	28.8
4000	12.25	51.6	45.0	40.5	35.3	32.2	29.0

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2936

500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - One Circuit

25°C Earth Ambient

Condr Size	Pipe ID	OD	Wd	Rac	Qs	Qe	Ri	Rj	Rsd	Rd	Re @ 90 Rho & loss factor 75%	100%
					85°C - Aluminum Conductor - Compact Segmental Strand							
2000	10.25	4.050	5.94	11.26	1.016	1.295	2.79	0.00	0.58	0.13	2.10	3.63
2250	10.25	4.145	6.17	10.18	1.017	1.329	2.68	0.00	0.57	0.13	2.10	3.63
2500	10.25	4.220	6.35	9.24	1.018	1.364	2.60	0.00	0.56	0.13	2.10	3.63
2750	10.25	4.310	6.57	8.49	1.019	1.399	2.51	0.00	0.54	0.13	2.10	3.63
3000	12.25	4.390	6.77	7.93	1.022	1.476	2.44	0.00	0.54	0.11	1.86	3.39
3250	12.25	4.465	6.95	7.40	1.023	1.513	2.37	0.00	0.53	0.11	1.86	3.39
3500	12.25	4.565	7.19	6.97	1.024	1.550	2.29	0.00	0.51	0.11	1.86	3.39
3750	12.25	4.630	7.35	6.59	1.025	1.584	2.24	0.00	0.50	0.11	1.86	3.39
4000	12.25	4.705	7.53	6.26	1.026	1.618	2.19	0.00	0.49	0.11	1.86	3.39

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 24 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF	delta Td for .0025 pf & Rho 60	90	120
		85°C - Aluminum Conductor - Compact Segmental Strand								
2000	10.25	615	545	443	380	255	213	33.3	43.4	53.6
2250	10.25	638	564	448	382	230	191	34.1	44.7	55.3
2500	10.25	661	582	454	386	203	169	34.8	45.7	56.6
2750	10.25	681	597	453	384	153	127	35.7	46.9	58.2
3000	12.25	718	624	486	407	194	160	35.2	46.3	57.4
3250	12.25	734	635	484	404	143	117	35.9	47.2	58.7
3500	12.25	744	642	474	394	0	0	36.7	48.5	60.3
3750	12.25	755	650	468	388	0	0	37.3	49.3	61.4
4000	12.25	763	655	457	378	0	0	37.9	50.2	62.6

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2938

500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 24 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF
		Total Watts/ft					
85°C - Aluminum Conductor - Compact Segmental Strand							
2000	10.25	68.7	61.6	52.8	48.2	41.3	39.6
2250	10.25	70.0	62.8	53.3	48.9	41.3	40.0
2500	10.25	71.2	63.7	53.7	49.4	41.2	40.3
2750	10.25	72.5	64.8	54.1	49.9	41.1	40.6
3000	12.25	76.8	68.0	57.2	52.2	43.3	42.4
3250	12.25	77.9	68.8	57.5	52.7	43.1	42.6
3500	12.25	79.0	69.9	57.7	53.2	43.2	43.2
3750	12.25	79.8	70.6	57.8	53.5	44.1	44.1
4000	12.25	80.6	71.3	57.9	53.9	45.2	45.2

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 24 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	OD	Wd	Rac	Qs	Qe	Ri	Rj	Rsd	Rd	Re @ 90 Rho & loss factor 75%	Re @ 90 Rho & loss factor 100%
85°C - Aluminum Conductor - Compact Segmental Strand												
2000	10.25	4.050	5.94	11.26	1.016	1.295	2.79	0.00	0.54	0.13	2.43	4.17
2250	10.25	4.145	6.17	10.18	1.017	1.329	2.68	0.00	0.52	0.13	2.43	4.17
2500	10.25	4.220	6.35	9.24	1.018	1.364	2.60	0.00	0.51	0.13	2.43	4.17
2750	10.25	4.310	6.57	8.49	1.019	1.399	2.51	0.00	0.50	0.13	2.43	4.17
3000	12.25	4.390	6.77	7.93	1.022	1.476	2.44	0.00	0.49	0.11	2.20	3.93
3250	12.25	4.465	6.95	7.40	1.023	1.513	2.37	0.00	0.48	0.11	2.20	3.93
3500	12.25	4.565	7.19	6.97	1.024	1.550	2.29	0.00	0.47	0.11	2.20	3.93
3750	12.25	4.630	7.35	6.59	1.025	1.584	2.24	0.00	0.46	0.11	2.20	3.93
4000	12.25	4.705	7.53	6.26	1.026	1.618	2.19	0.00	0.45	0.11	2.20	3.93

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 36 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF	delta Td for .0025 pf & Rho 60	90	120
		85°C - Aluminum Conductor - Compact Segmental Strand								
2000	10.25	649	579	493	424	333	279	31.4	40.5	49.8
2250	10.25	676	600	503	431	322	269	32.2	41.7	51.3
2500	10.25	702	622	514	439	312	261	32.8	42.6	52.6
2750	10.25	724	639	519	442	292	242	33.6	43.7	54.0
3000	12.25	768	671	557	469	331	271	33.1	43.0	53.1
3250	12.25	787	685	561	471	312	255	33.7	43.9	54.2
3500	12.25	801	695	557	466	276	224	34.5	45.0	55.7
3750	12.25	815	705	557	464	248	201	35.0	45.8	56.7
4000	12.25	826	713	553	460	204	166	35.5	46.6	57.9

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500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 36 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	60 Rho 75 LF	60 Rho 100 LF	90 Rho 75 LF	90 Rho 100 LF	120 Rho 75 LF	120 Rho 100 LF
		Total Watts/ft					
85°C - Aluminum Conductor - Compact Segmental Strand							
2000	10.25	72.5	64.9	56.9	51.3	45.3	42.4
2250	10.25	74.1	66.2	57.5	52.1	45.4	42.9
2500	10.25	75.4	67.4	58.1	52.7	45.5	43.3
2750	10.25	76.8	68.5	58.6	53.4	45.5	43.6
3000	12.25	82.0	72.2	62.4	56.1	48.3	45.8
3250	12.25	83.3	73.2	62.9	56.6	48.2	46.1
3500	12.25	84.7	74.4	63.3	57.2	48.1	46.4
3750	12.25	85.7	75.2	63.5	57.6	48.0	46.6
4000	12.25	86.6	76.1	63.8	58.0	47.7	46.9

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2942

500 kV Paper Insulated High Pressure Liquid Filled Pipe Type Cable

Buried - Two Circuits - 36 in. Spacing

25°C Earth Ambient

Condr Size	Pipe ID	OD	Wd	Rac	Qs	Qe	Ri	Rj	Rsd	Rd	Re @ 90 Rho & loss factor 75%	Re @ 90 Rho & loss factor 100%
					85°C - Aluminum Conductor - Compact Segmental Strand							
2000	10.25	4.050	5.94	11.26	1.016	1.295	2.79	0.00	0.55	0.13	2.33	4.01
2250	10.25	4.145	6.17	10.18	1.017	1.329	2.68	0.00	0.53	0.13	2.33	4.01
2500	10.25	4.220	6.35	9.24	1.018	1.364	2.60	0.00	0.52	0.13	2.33	4.01
2750	10.25	4.310	6.57	8.49	1.019	1.399	2.51	0.00	0.51	0.13	2.33	4.01
3000	12.25	4.390	6.77	7.93	1.022	1.476	2.44	0.00	0.50	0.11	2.10	3.77
3250	12.25	4.465	6.95	7.40	1.023	1.513	2.37	0.00	0.49	0.11	2.10	3.77
3500	12.25	4.565	7.19	6.97	1.024	1.550	2.29	0.00	0.48	0.11	2.10	3.77
3750	12.25	4.630	7.35	6.59	1.025	1.584	2.24	0.00	0.47	0.11	2.10	3.77
4000	12.25	4.705	7.53	6.26	1.026	1.618	2.19	0.00	0.46	0.11	2.10	3.77

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