

Rejuvenation Instructions

#302 – The Cable Table – iUPR & SPR



This NRI covers the following:

- Finding the extruded conductor shield cable in the table that most closely matches the cable to be injected.
- The table provides detailed cable geometry data and tailored injection pressure (TIP).
- If the cable is not found in the table, contact Novinium Engineering.

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WARNING: It is dangerous working around energized high-voltage systems, pressurized systems, and chemicals. Always work in accordance to the Novinium Field Operations Safety Handbook (FOSH) or other local governing safety standards.

Table of Contents

Cable Table..... 2

Cable Table

Note: All nominal dimensions are at 20°C. Actual dimensions vary with temperature.									SPR Injection									iUPR Injection						
Voltage & Insulation level	Strand Type	Conductor Size	# of Strands	Strand Diameter (in)	Conductor Bundle Diameter (in)	Typical Insulation Diameter (in)	Semi-con Shield Diameter (in)	XLPE Tailored Injection Pressure (psig)	732, 733, & iXL fluids (cc/m)			732, 733, & iXL fluids (cc/ft)			2 or 3 liter AI tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			
									Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	
5kV; 100% (90 mil)	Concentric Stranding	4 AWG	7	0.077	0.232	0.436	0.516	266	0.4	0.9	1.8	0.1	0.3	0.5	1.6	3.2	6.5	0.4	0.8	1.6	1.8	3.6	7.3	
		2 AWG	7	0.097	0.292	0.496	0.576	211	1.7	3.5	4.7	0.5	1.1	1.4	6.2	13.0	17.2	1.5	3.2	4.3	6.9	14.5	19.3	
		1 AWG	19	0.066	0.332	0.536	0.616	188	5.6	7.0	8.4	1.7	2.1	2.6	20.7	25.6	30.8	5.2	6.4	7.7	23.2	28.7	34.6	
		1/0 AWG	19	0.075	0.373	0.577	0.657	167	8.2	10.5	12.6	2.5	3.2	3.9	29.9	38.6	46.3	7.5	9.6	11.6	33.6	43.3	51.9	
		2/0 AWG	19	0.084	0.417	0.621	0.701	149	9.4	14.4	17.3	2.9	4.4	5.3	34.5	52.7	63.2	8.6	13.2	15.8	38.8	59.2	71.0	
		3/0 AWG	19	0.094	0.469	0.673	0.753	133	10.6	18.9	22.6	3.2	5.8	6.9	38.9	69.1	82.7	9.7	17.3	20.7	43.6	77.6	92.8	
		4/0 AWG	19	0.106	0.528	0.732	0.812	122	12.0	23.8	28.6	3.6	7.2	8.7	43.8	87.0	104.6	11.0	21.8	26.2	49.2	97.7	117.4	
		250 kcm	37	0.082	0.575	0.787	0.867	112	28.9	33.0	37.2	8.8	10.1	11.3	105.8	120.9	136.0	26.5	30.2	34.0				
		350 kcm	37	0.097	0.681	0.893	0.973	100	25.3	33.3	39.0	7.7	10.2	11.9	92.8	122.1	142.9	23.2	30.5	35.7				
		500 kcm	37	0.116	0.815	1.027	1.107	100	36.0	47.4	55.5	11.0	14.4	16.9	131.8	173.5	203.1	33.0	43.4	50.8				
		600 kcm	61	0.099	0.894	1.114	1.214	100	48.3	63.6	74.4	14.7	19.4	22.7	176.9	232.8	272.3	44.2	58.2	68.1				
		700 kcm	61	0.107	0.965	1.185	1.285	100	55.2	72.6	85.0	16.8	22.1	25.9	202.1	265.9	311.1	50.6	66.5	77.8				
		750 kcm	61	0.111	0.996	1.216	1.316	100	59.4	78.1	91.4	18.1	23.8	27.9	217.3	286.0	334.4	54.4	71.5	83.7				
		800 kcm	61	0.115	1.031	1.251	1.351	100	63.3	83.3	97.4	19.3	25.4	29.7	231.7	304.8	356.5	58.0	76.3	89.2				
900 kcm	61	0.122	1.094	1.314	1.414	100	71.3	93.8	109.8	21.7	28.6	33.5	260.9	343.4	402.0	65.3	85.9	100.6						
1000 kcm	61	0.128	1.154	1.374	1.474	100	79.1	104.2	121.8	24.1	31.8	37.1	289.6	381.4	446.0	72.5	95.4	111.6						
15kV; 100% (175 mil or 180 mil)	Concentric Stranding	2 AWG	7	0.097	0.292	0.692	0.772	276	1.7	3.5	4.7	0.5	1.1	1.4	6.2	13.0	17.2	1.5	3.2	4.3	6.9	14.5	19.3	
		1 AWG	19	0.066	0.332	0.734	0.814	246	5.6	7.0	8.4	1.7	2.1	2.6	20.7	25.6	30.8	5.2	6.4	7.7	23.2	28.7	34.6	
		1/0 AWG	19	0.075	0.373	0.777	0.857	219	8.2	10.5	12.6	2.5	3.2	3.9	29.9	38.6	46.3	7.5	9.6	11.6	33.6	43.3	51.9	
		2/0 AWG	19	0.084	0.417	0.824	0.904	195	9.4	14.4	17.3	2.9	4.4	5.3	34.5	52.7	63.2	8.6	13.2	15.8	38.8	59.2	71.0	
		3/0 AWG	19	0.094	0.469	0.878	0.958	173	10.6	18.9	22.6	3.2	5.8	6.9	38.9	69.1	82.7	9.7	17.3	20.7	43.6	77.6	92.8	
		4/0 AWG	19	0.106	0.528	0.938	1.018	155	12.0	23.8	28.6	3.6	7.2	8.7	43.8	87.0	104.6	11.0	21.8	26.2	49.2	97.7	117.4	
		250 kcm	37	0.082	0.575	0.985	1.065	142	28.9	33.0	37.2	8.8	10.1	11.3	105.8	120.9	136.0	26.5	30.2	34.0				
		350 kcm	37	0.097	0.681	1.091	1.191	120	25.3	33.3	39.0	7.7	10.2	11.9	92.8	122.1	142.9	23.2	30.5	35.7				
		500 kcm	37	0.116	0.815	1.223	1.323	101	36.0	47.4	55.5	11.0	14.4	16.9	131.8	173.5	203.1	33.0	43.4	50.8				
		600 kcm	61	0.099	0.894	1.303	1.403	100	48.3	63.6	74.4	14.7	19.4	22.7	176.9	232.8	272.3	44.2	58.2	68.1				
		700 kcm	61	0.107	0.965	1.376	1.476	100	55.2	72.6	85.0	16.8	22.1	25.9	202.1	265.9	311.1	50.6	66.5	77.8				
		750 kcm	61	0.111	0.996	1.412	1.512	100	59.4	78.1	91.4	18.1	23.8	27.9	217.3	286.0	334.4	54.4	71.5	83.7				
		800 kcm	61	0.115	1.031	1.447	1.547	100	63.3	83.3	97.4	19.3	25.4	29.7	231.7	304.8	356.5	58.0	76.3	89.2				
		900 kcm	61	0.122	1.094	1.512	1.612	100	71.3	93.8	109.8	21.7	28.6	33.5	260.9	343.4	402.0	65.3	85.9	100.6				
1000 kcm	61	0.128	1.154	1.572	1.702	100	79.1	104.2	121.8	24.1	31.8	37.1	289.6	381.4	446.0	72.5	95.4	111.6						

Target Fluid Needed = Length of Cable (ft) x Target (cc/ft) ÷ Tank Factor (Found on the tank)

The EPR injection pressure = the XLPE Tailored Injection Pressure divided by 4.

1 pail = 17,200cc = 17.2L

(in) means measured in inches. (mils) are 0.001 inches



Cable Table

Note: All nominal dimensions are at 20°C. Actual dimensions vary with temperature.										SPR Injection									iUPR Injection						
Voltage & Insulation level	Strand Type	Conductor Size	# of Strands	Strand Diameter (in)	Conductor Bundle Diameter (in)	Typical Insulation Diameter (in)	Semi-con Shield Diameter (in)	XLPE Tailored Injection Pressure (psig)	732, 733, & iXL fluids (cc/m)			732, 733, & iXL fluids (cc/ft)			2 or 3 liter AI tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)				
									Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling		
15kV; 133% (220 mil or 230 mil)	Concentric Stranding	2 AWG	7	0.097	0.292	0.792	0.872	297	1.7	3.5	4.7	0.5	1.1	1.4	6.2	13.0	17.2	1.5	3.2	4.3	6.9	14.5	19.3		
		1 AWG	19	0.066	0.332	0.834	0.914	265	5.6	7.0	8.4	1.7	2.1	2.6	20.7	25.6	30.8	5.2	6.4	7.7	23.2	28.7	34.6		
		1/0 AWG	19	0.075	0.373	0.877	0.957	236	8.2	10.5	12.6	2.5	3.2	3.9	29.9	38.6	46.3	7.5	9.6	11.6	33.6	43.3	51.9		
		2/0 AWG	19	0.084	0.418	0.924	1.004	210	9.4	14.4	17.3	2.9	4.4	5.3	34.5	52.7	63.2	8.6	13.2	15.8	38.8	59.2	71.0		
		3/0 AWG	19	0.094	0.470	0.978	1.058	187	10.6	18.9	22.6	3.2	5.8	6.9	38.9	69.1	82.7	9.7	17.3	20.7	43.6	77.6	92.8		
		4/0 AWG	19	0.106	0.528	1.038	1.118	167	12.0	23.8	28.6	3.6	7.2	8.7	43.8	87.0	104.6	11.0	21.8	26.2	49.2	97.7	117.4		
		250 kcm	37	0.082	0.575	1.085	1.185	153	28.9	33.0	37.2	8.8	10.1	11.3	105.8	120.9	136.0	26.5	30.2	34.0					
		350 kcm	37	0.097	0.681	1.191	1.291	129	25.3	33.3	39.0	7.7	10.2	11.9	92.8	122.1	142.9	23.2	30.5	35.7					
		500 kcm	37	0.116	0.813	1.323	1.423	108	36.0	47.4	55.5	11.0	14.4	16.9	131.8	173.5	203.1	33.0	43.4	50.8					
		600 kcm	61	0.099	0.893	1.403	1.503	100	48.3	63.6	74.4	14.7	19.4	22.7	176.9	232.8	272.3	44.2	58.2	68.1					
		700 kcm	61	0.107	0.964	1.476	1.576	100	55.2	72.6	85.0	16.8	22.1	25.9	202.1	265.9	311.1	50.6	66.5	77.8					
		750 kcm	61	0.111	0.998	1.512	1.612	100	59.4	78.1	91.4	18.1	23.8	27.9	217.3	286.0	334.4	54.4	71.5	83.7					
		800 kcm	61	0.115	1.031	1.547	1.647	100	63.3	83.3	97.4	19.3	25.4	29.7	231.7	304.8	356.5	58.0	76.3	89.2					
		900 kcm	61	0.122	1.094	1.612	1.742	100	71.3	93.8	109.8	21.7	28.6	33.5	260.9	343.4	402.0	65.3	85.9	100.6					
		1000 kcm	61	0.128	1.152	1.672	1.802	100	79.1	104.2	121.8	24.1	31.8	37.1	289.6	381.4	446.0	72.5	95.4	111.6					
		25kV; 100% (260 mil or 262 mil)	Concentric Stranding	2 AWG	7	0.097	0.292	0.840	0.920	311	1.7	3.5	4.7	0.5	1.1	1.4	6.2	13.0	17.2	1.5	3.2	4.3	6.9	14.5	19.3
				1 AWG	19	0.066	0.332	0.898	0.978	277	5.6	7.0	8.4	1.7	2.1	2.6	20.7	25.6	30.8	5.2	6.4	7.7	23.2	28.7	34.6
				1/0 AWG	19	0.075	0.373	0.941	1.021	247	8.2	10.5	12.6	2.5	3.2	3.9	29.9	38.6	46.3	7.5	9.6	11.6	33.6	43.3	51.9
2/0 AWG	19			0.084	0.418	0.988	1.068	220	9.4	14.4	17.3	2.9	4.4	5.3	34.5	52.7	63.2	8.6	13.2	15.8	38.8	59.2	71.0		
3/0 AWG	19			0.094	0.470	1.042	1.122	196	10.6	18.9	22.6	3.2	5.8	6.9	38.9	69.1	82.7	9.7	17.3	20.7	43.6	77.6	92.8		
4/0 AWG	19			0.106	0.528	1.102	1.202	174	12.0	23.8	28.6	3.6	7.2	8.7	43.8	87.0	104.6	11.0	21.8	26.2	49.2	97.7	117.4		
250 kcm	37			0.082	0.575	1.149	1.249	160	28.9	33.0	37.2	8.8	10.1	11.3	105.8	120.9	136.0	26.5	30.2	34.0					
350 kcm	37			0.097	0.681	1.255	1.355	135	25.3	33.3	39.0	7.7	10.2	11.9	92.8	122.1	142.9	23.2	30.5	35.7					
500 kcm	37			0.116	0.813	1.387	1.487	113	36.0	47.4	55.5	11.0	14.4	16.9	131.8	173.5	203.1	33.0	43.4	50.8					
600 kcm	61			0.099	0.893	1.467	1.567	103	48.3	63.6	74.4	14.7	19.4	22.7	176.9	232.8	272.3	44.2	58.2	68.1					
700 kcm	61			0.107	0.964	1.540	1.640	100	55.2	72.6	85.0	16.8	22.1	25.9	202.1	265.9	311.1	50.6	66.5	77.8					
750 kcm	61			0.111	0.998	1.576	1.706	100	59.4	78.1	91.4	18.1	23.8	27.9	217.3	286.0	334.4	54.4	71.5	83.7					
800 kcm	61			0.115	1.031	1.611	1.741	100	63.3	83.3	97.4	19.3	25.4	29.7	231.7	304.8	356.5	58.0	76.3	89.2					
900 kcm	61			0.122	1.094	1.676	1.806	100	71.3	93.8	109.8	21.7	28.6	33.5	260.9	343.4	402.0	65.3	85.9	100.6					
1000 kcm	61			0.128	1.152	1.736	1.866	100	79.1	104.2	121.8	24.1	31.8	37.1	289.6	381.4	446.0	72.5	95.4	111.6					

Target Fluid Needed = Length of Cable (ft) x Target (cc/ft) ÷ Tank Factor (Found on the tank)
The EPR injection pressure = the XLPE Tailored Injection Pressure divided by 4.
1 pail = 17,200cc = 17.2L
(in) means measured in inches. (mils) are 0.001 inches



Cable Table

Note: All nominal dimensions are at 20°C. Actual dimensions vary with temperature.

Voltage & Insulation level	Strand Type	Conductor Size	# of Strands	Strand Diameter (in)	Conductor Bundle Diameter (in)	Typical Insulation Diameter (in)	Semi-con Shield Diameter (in)	XLPE Tailored Injection Pressure (psig)	732, 733, & iXL fluids (cc/m)									732, 733, & iXL fluids (cc/ft)									SPR Injection									iUPR Injection								
									2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)											
									Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling									
28kV; 100% (280 mil)	Concentric Stranding	2 AWG	7	0.097	0.292	0.876	0.956	319	1.7	3.5	4.7	0.5	1.1	1.4	6.2	13.0	17.2	1.5	3.2	4.3	6.9	14.5	19.3																					
		1 AWG	19	0.066	0.332	0.916	0.996	284	5.6	7.0	8.4	1.7	2.1	2.6	20.7	25.6	30.8	5.2	6.4	7.7	23.2	28.7	34.6																					
		1/0 AWG	19	0.075	0.373	0.957	1.037	253	8.2	10.5	12.6	2.5	3.2	3.9	29.9	38.6	46.3	7.5	9.6	11.6	33.6	43.3	51.9																					
		2/0 AWG	19	0.084	0.418	1.001	1.081	225	9.4	14.4	17.3	2.9	4.4	5.3	34.5	52.7	63.2	8.6	13.2	15.8	38.8	59.2	71.0																					
		3/0 AWG	19	0.094	0.470	1.053	1.133	201	10.6	18.9	22.6	3.2	5.8	6.9	38.9	69.1	82.7	9.7	17.3	20.7	43.6	77.6	92.8																					
		4/0 AWG	19	0.106	0.528	1.112	1.192	179	12.0	23.8	28.6	3.6	7.2	8.7	43.8	87.0	104.6	11.0	21.8	26.2	49.2	97.7	117.4																					
		250 kcm	37	0.082	0.575	1.167	1.247	164	28.9	33.0	37.2	8.8	10.1	11.3	105.8	120.9	136.0	26.5	30.2	34.0																								
		350 kcm	37	0.097	0.681	1.273	1.353	139	25.3	33.3	39.0	7.7	10.2	11.9	92.8	122.1	142.9	23.2	30.5	35.7																								
		500 kcm	37	0.116	0.813	1.407	1.487	116	36.0	47.4	55.5	11.0	14.4	16.9	131.8	173.5	203.1	33.0	43.4	50.8																								
		600 kcm	61	0.099	0.893	1.494	1.624	106	48.3	63.6	74.4	14.7	19.4	22.7	176.9	232.8	272.3	44.2	58.2	68.1																								
		700 kcm	61	0.107	0.964	1.565	1.695	100	55.2	72.6	85.0	16.8	22.1	25.9	202.1	265.9	311.1	50.6	66.5	77.8																								
		750 kcm	61	0.111	0.998	1.596	1.726	100	59.4	78.1	91.4	18.1	23.8	27.9	217.3	286.0	334.4	54.4	71.5	83.7																								
		800 kcm	61	0.115	1.031	1.631	1.761	100	63.3	83.3	97.4	19.3	25.4	29.7	231.7	304.8	356.5	58.0	76.3	89.2																								
		900 kcm	61	0.122	1.094	1.694	1.824	100	71.3	93.8	109.8	21.7	28.6	33.5	260.9	343.4	402.0	65.3	85.9	100.6																								
		1000 kcm	61	0.128	1.152	1.754	1.884	100	79.1	104.2	121.8	24.1	31.8	37.1	289.6	381.4	446.0	72.5	95.4	111.6																								
35kV; 100% (345 mil or 347 mil)	Concentric Stranding	1/0 AWG	19	0.075	0.373	1.111	1.211	276	8.2	10.5	12.6	2.5	3.2	3.9	29.9	38.6	46.3	7.5	9.6	11.6	33.6	43.3	51.9																					
		2/0 AWG	19	0.084	0.418	1.158	1.258	246	9.4	14.4	17.3	2.9	4.4	5.3	34.5	52.7	63.2	8.6	13.2	15.8	38.8	59.2	71.0																					
		3/0 AWG	19	0.094	0.470	1.212	1.312	219	10.6	18.9	22.6	3.2	5.8	6.9	38.9	69.1	82.7	9.7	17.3	20.7	43.6	77.6	92.8																					
		4/0 AWG	19	0.106	0.528	1.272	1.372	195	12.0	23.8	28.6	3.6	7.2	8.7	43.8	87.0	104.6	11.0	21.8	26.2	49.2	97.7	117.4																					
		250 kcm	37	0.082	0.575	1.319	1.419	179	28.9	33.0	37.2	8.8	10.1	11.3	105.8	120.9	136.0	26.5	30.2	34.0																								
		350 kcm	37	0.097	0.681	1.425	1.525	151	25.3	33.3	39.0	7.7	10.2	11.9	92.8	122.1	142.9	23.2	30.5	35.7																								
		500 kcm	37	0.116	0.813	1.557	1.687	127	36.0	47.4	55.5	11.0	14.4	16.9	131.8	173.5	203.1	33.0	43.4	50.8																								
		600 kcm	61	0.099	0.893	1.637	1.767	116	48.3	63.6	74.4	14.7	19.4	22.7	176.9	232.8	272.3	44.2	58.2	68.1																								
		700 kcm	61	0.107	0.964	1.710	1.840	107	55.2	72.6	85.0	16.8	22.1	25.9	202.1	265.9	311.1	50.6	66.5	77.8																								
		750 kcm	61	0.111	0.998	1.746	1.876	103	59.4	78.1	91.4	18.1	23.8	27.9	217.3	286.0	334.4	54.4	71.5	83.7																								
		800 kcm	61	0.115	1.031	1.781	1.911	100	63.3	83.3	97.4	19.3	25.4	29.7	231.7	304.8	356.5	58.0	76.3	89.2																								
		900 kcm	61	0.122	1.094	1.846	1.976	100	71.3	93.8	109.8	21.7	28.6	33.5	260.9	343.4	402.0	65.3	85.9	100.6																								
		1000 kcm	61	0.128	1.152	1.906	2.036	100	79.1	104.2	121.8	24.1	31.8	37.1	289.6	381.4	446.0	72.5	95.4	111.6																								

Target Fluid Needed = Length of Cable (ft) x Target (cc/ft) ÷ Tank Factor (Found on the tank)

The EPR injection pressure = the XLPE Tailored Injection Pressure divided by 4.

1 pail = 17,200cc = 17.2L

(in) means measured in inches. (mils) are 0.001 inches



Cable Table

Note: All nominal dimensions are at 20°C. Actual dimensions vary with temperature.

Voltage & Insulation level	Strand Type	Conductor Size	# of Strands	Strand Diameter (in)	Conductor Bundle Diameter (in)	Typical Insulation Diameter (in)	Semi-con Shield Diameter (in)	XLPE Tailored Injection Pressure (psig)	SPR Injection									iUPR Injection							
									732, 733, & iXL fluids (cc/m)			732, 733, & iXL fluids (cc/ft)			2 or 3 liter AI tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)				
									Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling		
5kV; 100% (90 mil)	Compressed Stranding	4 AWG	7	0.077	0.225	0.429	0.509	332	1.0	2.8	3.6	0.3	0.9	1.1	3.8	10.4	13.3	1.0	2.6	3.3	4.3	11.7	14.9		
		2 AWG	7	0.097	0.283	0.487	0.567	263	0.8	3.4	4.5	0.2	1.0	1.4	2.8	12.3	16.3	0.7	3.1	4.1	3.1	13.8	18.3		
		1 AWG	19	0.066	0.322	0.526	0.606	234	4.9	6.4	7.7	1.5	2.0	2.4	18.0	23.5	28.3	4.5	5.9	7.1	20.2	26.4	31.8		
		1/0 AWG	19	0.075	0.362	0.566	0.646	208	6.6	10.4	12.4	2.0	3.2	3.8	24.3	37.9	45.5	6.1	9.5	11.4	27.2	42.5	51.1		
		2/0 AWG	19	0.084	0.406	0.610	0.690	186	7.6	13.4	16.0	2.3	4.1	4.9	27.8	49.0	58.6	6.9	12.3	14.7	31.2	55.1	65.8		
		3/0 AWG	19	0.094	0.457	0.661	0.741	165	9.5	17.6	21.2	2.9	5.4	6.4	34.9	64.5	77.4	8.7	16.1	19.4	39.1	72.4	86.9		
		4/0 AWG	19	0.106	0.512	0.716	0.796	147	11.5	22.4	26.9	3.5	6.8	8.2	42.3	82.0	98.4	10.6	20.5	24.6	47.4	92.1	110.4		
		250 kcm	37	0.082	0.559	0.771	0.851	135	12.6	26.3	30.1	3.9	8.0	9.2	46.3	96.3	110.1	11.6	24.1	27.6					
		350 kcm	37	0.097	0.661	0.873	0.953	115	19.1	25.2	29.4	5.8	7.7	9.0	69.8	92.1	107.8	17.5	23.0	27.0					
		500 kcm	37	0.116	0.787	0.999	1.079	100	27.4	36.1	42.1	8.4	11.0	12.8	100.3	131.9	154.1	25.1	33.0	38.6					
		600 kcm	61	0.099	0.866	1.086	1.166	100	36.9	48.6	56.8	11.3	14.8	17.3	135.1	178.0	208.1	33.8	44.5	52.0					
		700 kcm	61	0.107	0.933	1.153	1.233	100	42.3	55.7	65.2	12.9	17.0	19.9	154.9	204.0	238.6	38.7	51.0	59.7					
		750 kcm	61	0.111	0.969	1.189	1.269	100	44.8	59.0	69.0	13.7	18.0	21.0	164.0	215.8	252.5	41.0	54.0	63.2					
		800 kcm	61	0.115	1.000	1.220	1.300	100	48.2	63.4	74.2	14.7	19.3	22.6	176.3	232.2	271.7	44.1	58.1	68.0					
		900 kcm	61	0.122	1.059	1.279	1.359	100	54.2	71.3	83.4	16.5	21.7	25.4	198.3	261.0	305.1	49.6	65.3	76.3					
		1000 kcm	61	0.128	1.118	1.338	1.418	100	59.8	78.6	92.0	18.2	24.0	28.1	218.8	287.8	336.9	54.7	72.0	84.3					
		15kV; 100% (175 mil or 180 mil)	Compressed Stranding	2 AWG	7	0.097	0.283	0.683	0.763	302	0.8	3.4	4.5	0.2	1.0	1.4	2.8	12.3	16.3	1.5	3.2	4.3	3.1	13.8	18.3
				1 AWG	19	0.066	0.322	0.724	0.804	269	4.9	6.4	7.7	1.5	2.0	2.4	18.0	23.5	28.3	5.2	6.4	7.7	20.2	26.4	31.8
				1/0 AWG	19	0.075	0.362	0.766	0.846	239	6.6	10.4	12.4	2.0	3.2	3.8	24.3	37.9	45.5	7.5	9.6	11.6	27.2	42.5	51.1
2/0 AWG	19			0.084	0.406	0.812	0.892	213	7.6	13.4	16.0	2.3	4.1	4.9	27.8	49.0	58.6	8.6	13.2	15.8	31.2	55.1	65.8		
3/0 AWG	19			0.094	0.457	0.864	0.944	190	9.5	17.6	21.2	2.9	5.4	6.4	34.9	64.5	77.4	9.7	17.3	20.7	39.1	72.4	86.9		
4/0 AWG	19			0.106	0.512	0.922	1.002	169	11.5	22.4	26.9	3.5	6.8	8.2	42.3	82.0	98.4	11.0	21.8	26.2	47.4	92.1	110.4		
250 kcm	37			0.082	0.559	0.968	1.048	155	12.6	26.3	30.1	3.9	8.0	9.2	46.3	96.3	110.1	26.5	30.2	34.0					
350 kcm	37			0.097	0.661	1.071	1.171	131	19.1	25.2	29.4	5.8	7.7	9.0	69.8	92.1	107.8	23.2	30.5	35.7					
500 kcm	37			0.116	0.787	1.199	1.299	110	27.4	36.1	42.1	8.4	11.0	12.8	100.3	131.9	154.1	33.0	43.4	50.8					
600 kcm	61			0.099	0.866	1.276	1.376	100	36.9	48.6	56.8	11.3	14.8	17.3	135.1	178.0	208.1	44.2	58.2	68.1					
700 kcm	61			0.107	0.933	1.347	1.447	100	42.3	55.7	65.2	12.9	17.0	19.9	154.9	204.0	238.6	50.6	66.5	77.8					
750 kcm	61			0.111	0.969	1.382	1.482	100	44.8	59.0	69.0	13.7	18.0	21.0	164.0	215.8	252.5	54.4	71.5	83.7					
800 kcm	61			0.115	1.000	1.416	1.516	100	48.2	63.4	74.2	14.7	19.3	22.6	176.3	232.2	271.7	58.0	76.3	89.2					
900 kcm	61	0.122	1.059	1.479	1.579	100	54.2	71.3	83.4	16.5	21.7	25.4	198.3	261.0	305.1	65.3	85.9	100.6							
1000 kcm	61	0.128	1.118	1.537	1.637	100	59.8	78.6	92.0	18.2	24.0	28.1	218.8	287.8	336.9	72.5	95.4	111.6							

Target Fluid Needed = Length of Cable (ft) x Target (cc/ft) ÷ Tank Factor (Found on the tank)

The EPR injection pressure = the XLPE Tailored Injection Pressure divided by 4.

1 pail = 17,200cc = 17.2L

(in) means measured in inches. (mils) are 0.001 inches



Cable Table

Note: All nominal dimensions are at 20°C. Actual dimensions vary with temperature.

Voltage & Insulation Level	Strand Type	Conductor Size	# of Strands	Strand Diameter (in)	Conductor Bundle Diameter (in)	Typical Insulation Diameter (in)	Semi-con Shield Diameter (in)	XLPE Tailored Injection Pressure (psig)	732, 733, & iXL fluids (cc/m)									732, 733, & iXL fluids (cc/ft)									SPR Injection									iUPR Injection								
									2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)											
									Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling									
15kV; 133% (220 mil or 230 mil)	Compressed Stranding	2 AWG	7	0.097	0.283	0.783	0.863	323	0.8	3.4	4.5	0.2	1.0	1.4	2.8	12.3	16.3	0.7	3.1	4.1	3.1	13.8	18.3																					
		1 AWG	19	0.066	0.322	0.824	0.904	288	4.9	6.4	7.7	1.5	2.0	2.4	18.0	23.5	28.3	4.5	5.9	7.1	20.2	26.4	31.8																					
		1/0 AWG	19	0.075	0.362	0.866	0.946	257	6.6	10.4	12.4	2.0	3.2	3.8	24.3	37.9	45.5	6.1	9.5	11.4	27.2	42.5	51.1																					
		2/0 AWG	19	0.084	0.406	0.912	0.992	228	7.6	13.4	16.0	2.3	4.1	4.9	27.8	49.0	58.6	6.9	12.3	14.7	31.2	55.1	65.8																					
		3/0 AWG	19	0.094	0.457	0.964	1.044	203	9.5	17.6	21.2	2.9	5.4	6.4	34.9	64.5	77.4	8.7	16.1	19.4	39.1	72.4	86.9																					
		4/0 AWG	19	0.106	0.512	1.022	1.102	181	11.5	22.4	26.9	3.5	6.8	8.2	42.3	82.0	98.4	10.6	20.5	24.6	47.4	92.1	110.4																					
		250 kcm	37	0.082	0.559	1.068	1.168	167	12.6	26.3	30.1	3.9	8.0	9.2	46.3	96.3	110.1	11.6	24.1	27.6																								
		350 kcm	37	0.097	0.661	1.171	1.271	141	19.1	25.2	29.4	5.8	7.7	9.0	69.8	92.1	107.8	17.5	23.0	27.0																								
		500 kcm	37	0.116	0.787	1.299	1.399	118	27.4	36.1	42.1	8.4	11.0	12.8	100.3	131.9	154.1	25.1	33.0	38.6																								
		600 kcm	61	0.099	0.866	1.376	1.476	108	36.9	48.6	56.8	11.3	14.8	17.3	135.1	178.0	208.1	33.8	44.5	52.0																								
		700 kcm	61	0.107	0.933	1.447	1.547	100	42.3	55.7	65.2	12.9	17.0	19.9	154.9	204.0	238.6	38.7	51.0	59.7																								
		750 kcm	61	0.111	0.969	1.482	1.582	100	44.8	59.0	69.0	13.7	18.0	21.0	164.0	215.8	252.5	41.0	54.0	63.2																								
		800 kcm	61	0.115	1.000	1.516	1.616	100	48.2	63.4	74.2	14.7	19.3	22.6	176.3	232.2	271.7	44.1	58.1	68.0																								
900 kcm	61	0.122	1.059	1.579	1.709	100	54.2	71.3	83.4	16.5	21.7	25.4	198.3	261.0	305.1	49.6	65.3	76.3																										
1000 kcm	61	0.128	1.118	1.637	1.767	100	59.8	78.6	92.0	18.2	24.0	28.1	218.8	287.8	336.9	54.7	72.0	84.3																										
25kV; 100% (260 mil or 262 mil)	Compressed Stranding	2 AWG	7	0.097	0.283	0.831	0.911	336	0.8	3.4	4.5	0.2	1.0	1.4	2.8	12.3	16.3	0.7	3.1	4.1	3.1	13.8	18.3																					
		1 AWG	19	0.066	0.322	0.888	0.968	300	4.9	6.4	7.7	1.5	2.0	2.4	18.0	23.5	28.3	4.5	5.9	7.1	20.2	26.4	31.8																					
		1/0 AWG	19	0.075	0.362	0.930	1.010	267	6.6	10.4	12.4	2.0	3.2	3.8	24.3	37.9	45.5	6.1	9.5	11.4	27.2	42.5	51.1																					
		2/0 AWG	19	0.084	0.406	0.976	1.056	238	7.6	13.4	16.0	2.3	4.1	4.9	27.8	49.0	58.6	6.9	12.3	14.7	31.2	55.1	65.8																					
		3/0 AWG	19	0.094	0.457	1.028	1.098	212	9.5	17.6	21.2	2.9	5.4	6.4	34.9	64.5	77.4	8.7	16.1	19.4	39.1	72.4	86.9																					
		4/0 AWG	19	0.106	0.512	1.086	1.186	189	11.5	22.4	26.9	3.5	6.8	8.2	42.3	82.0	98.4	10.6	20.5	24.6	47.4	92.1	110.4																					
		250 kcm	37	0.082	0.559	1.132	1.232	174	12.6	26.3	30.1	3.9	8.0	9.2	46.3	96.3	110.1	11.6	24.1	27.6																								
		350 kcm	37	0.097	0.661	1.235	1.335	147	19.1	25.2	29.4	5.8	7.7	9.0	69.8	92.1	107.8	17.5	23.0	27.0																								
		500 kcm	37	0.116	0.787	1.363	1.463	123	27.4	36.1	42.1	8.4	11.0	12.8	100.3	131.9	154.1	25.1	33.0	38.6																								
		600 kcm	61	0.099	0.866	1.440	1.540	112	36.9	48.6	56.8	11.3	14.8	17.3	135.1	178.0	208.1	33.8	44.5	52.0																								
		700 kcm	61	0.107	0.933	1.511	1.611	104	42.3	55.7	65.2	12.9	17.0	19.9	154.9	204.0	238.6	38.7	51.0	59.7																								
		750 kcm	61	0.111	0.969	1.546	1.646	100	44.8	59.0	69.0	13.7	18.0	21.0	164.0	215.8	252.5	41.0	54.0	63.2																								
		800 kcm	61	0.115	1.000	1.580	1.710	100	48.2	63.4	74.2	14.7	19.3	22.6	176.3	232.2	271.7	44.1	58.1	68.0																								
900 kcm	61	0.122	1.059	1.643	1.773	100	54.2	71.3	83.4	16.5	21.7	25.4	198.3	261.0	305.1	49.6	65.3	76.3																										
1000 kcm	61	0.128	1.118	1.701	1.831	100	59.8	78.6	92.0	18.2	24.0	28.1	218.8	287.8	336.9	54.7	72.0	84.3																										

Target Fluid Needed = Length of Cable (ft) x Target (cc/ft) ÷ Tank Factor (Found on the tank)

The EPR injection pressure = the XLPE Tailored Injection Pressure divided by 4.

1 pail = 17,200cc = 17.2L

(in) means measured in inches. (mils) are 0.001 inches



Cable Table

Note: All nominal dimensions are at 20°C. Actual dimensions vary with temperature.

Voltage & Insulation level	Strand Type	Conductor Size	# of Strands	Strand Diameter (in)	Conductor Bundle Diameter (in)	Typical Insulation Diameter (in)	Semi-con Shield Diameter (in)	XLPE Tailored Injection Pressure (psig)	732, 733, & iXL fluids (cc/m)									732, 733, & iXL fluids (cc/ft)									SPR Injection									IUPR Injection								
									2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)											
									Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling									
28kV; 100% (280 mil)	Compressed Stranding	2 AWG	7	0.097	0.283	0.867	0.947	345	0.8	3.4	4.5	0.2	1.0	1.4	2.8	12.3	16.3	0.7	3.1	4.1	3.1	13.8	18.3																					
		1 AWG	19	0.066	0.322	0.906	0.986	307	4.9	6.4	7.7	1.5	2.0	2.4	18.0	23.5	28.3	4.5	5.9	7.1	20.2	26.4	31.8																					
		1/0 AWG	19	0.075	0.362	0.946	1.026	273	6.6	10.4	12.4	2.0	3.2	3.8	24.3	37.9	45.5	6.1	9.5	11.4	27.2	42.5	51.1																					
		2/0 AWG	19	0.084	0.406	0.990	1.090	244	7.6	13.4	16.0	2.3	4.1	4.9	27.8	49.0	58.6	6.9	12.3	14.7	31.2	55.1	65.8																					
		3/0 AWG	19	0.094	0.457	1.041	1.141	217	9.5	17.6	21.2	2.9	5.4	6.4	34.9	64.5	77.4	8.7	16.1	19.4	39.1	72.4	86.9																					
		4/0 AWG	19	0.106	0.512	1.096	1.196	193	11.5	22.4	26.9	3.5	6.8	8.2	42.3	82.0	98.4	10.6	20.5	24.6	47.4	92.1	110.4																					
		250 kcm	37	0.082	0.559	1.151	1.251	177	12.6	26.3	30.1	3.9	8.0	9.2	46.3	96.3	110.1	11.6	24.1	27.6																								
		350 kcm	37	0.097	0.661	1.253	1.353	150	19.1	25.2	29.4	5.8	7.7	9.0	69.8	92.1	107.8	17.5	23.0	27.0																								
		500 kcm	37	0.116	0.787	1.379	1.479	126	27.4	36.1	42.1	8.4	11.0	12.8	100.3	131.9	154.1	25.1	33.0	38.6																								
		600 kcm	61	0.099	0.866	1.466	1.596	115	36.9	48.6	56.8	11.3	14.8	17.3	135.1	178.0	208.1	33.8	44.5	52.0																								
		700 kcm	61	0.107	0.933	1.533	1.663	106	42.3	55.7	65.2	12.9	17.0	19.9	154.9	204.0	238.6	38.7	51.0	59.7																								
		750 kcm	61	0.111	0.969	1.569	1.699	103	44.8	59.0	69.0	13.7	18.0	21.0	164.0	215.8	252.5	41.0	54.0	63.2																								
		800 kcm	61	0.115	1.000	1.600	1.730	100	48.2	63.4	74.2	14.7	19.3	22.6	176.3	232.2	271.7	44.1	58.1	68.0																								
900 kcm	61	0.122	1.059	1.659	1.789	100	54.2	71.3	83.4	16.5	21.7	25.4	198.3	261.0	305.1	49.6	65.3	76.3																										
1000 kcm	61	0.128	1.118	1.718	1.848	100	59.8	78.6	92.0	18.2	24.0	28.1	218.8	287.8	336.9	54.7	72.0	84.3																										
35kV; 100% (345 mil or 347 mil)	Compressed Stranding	1/0 AWG	19	0.075	0.362	1.100	1.200	297	6.6	10.4	12.4	2.0	3.2	3.8	24.3	37.9	45.5	6.1	9.5	11.4	27.2	42.5	51.1																					
		2/0 AWG	19	0.084	0.406	1.146	1.246	264	7.6	13.4	16.0	2.3	4.1	4.9	27.8	49.0	58.6	6.9	12.3	14.7	31.2	55.1	65.8																					
		3/0 AWG	19	0.094	0.457	1.198	1.298	235	9.5	17.6	21.2	2.9	5.4	6.4	34.9	64.5	77.4	8.7	16.1	19.4	39.1	72.4	86.9																					
		4/0 AWG	19	0.106	0.512	1.256	1.356	209	11.5	22.4	26.9	3.5	6.8	8.2	42.3	82.0	98.4	10.6	20.5	24.6	47.4	92.1	110.4																					
		250 kcm	37	0.082	0.559	1.302	1.402	193	12.6	26.3	30.1	3.9	8.0	9.2	46.3	96.3	110.1	11.6	24.1	27.6																								
		350 kcm	37	0.097	0.661	1.405	1.505	163	19.1	25.2	29.4	5.8	7.7	9.0	69.8	92.1	107.8	17.5	23.0	27.0																								
		500 kcm	37	0.116	0.787	1.533	1.633	136	27.4	36.1	42.1	8.4	11.0	12.8	100.3	131.9	154.1	25.1	33.0	38.6																								
		600 kcm	61	0.099	0.866	1.610	1.740	124	36.9	48.6	56.8	11.3	14.8	17.3	135.1	178.0	208.1	33.8	44.5	52.0																								
		700 kcm	61	0.107	0.933	1.681	1.811	115	42.3	55.7	65.2	12.9	17.0	19.9	154.9	204.0	238.6	38.7	51.0	59.7																								
		750 kcm	61	0.111	0.969	1.716	1.846	111	44.8	59.0	69.0	13.7	18.0	21.0	164.0	215.8	252.5	41.0	54.0	63.2																								
		800 kcm	61	0.115	1.000	1.750	1.880	108	48.2	63.4	74.2	14.7	19.3	22.6	176.3	232.2	271.7	44.1	58.1	68.0																								
		900 kcm	61	0.122	1.059	1.813	1.943	101	54.2	71.3	83.4	16.5	21.7	25.4	198.3	261.0	305.1	49.6	65.3	76.3																								
		1000 kcm	61	0.128	1.118	1.871	2.001	100	59.8	78.6	92.0	18.2	24.0	28.1	218.8	287.8	336.9	54.7	72.0	84.3																								

Target Fluid Needed = Length of Cable (ft) x Target (cc/ft) ÷ Tank Factor (Found on the tank)

The EPR injection pressure = the XLPE Tailored Injection Pressure divided by 4.

1 pail = 17,200cc = 17.2L

(in) means measured in inches. (mils) are 0.001 inches



Cable Table

Note: All nominal dimensions are at 20°C. Actual dimensions vary with temperature.

Voltage & Insulation level	Strand Type	Conductor Size	# of Strands	Strand Diameter (in)	Conductor Bundle Diameter (in)	Typical Insulation Diameter (in)	Semi-con Shield Diameter (in)	XLPE Tailored Injection Pressure (psig)	732, 733, & iXL fluids (cc/m)			732, 733, & iXL fluids (cc/ft)			2 or 3 liter AI tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			
									732, 733, & iXL fluids (cc/m)			732, 733, & iXL fluids (cc/ft)			2 or 3 liter AI tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			
									Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	
5kV; 100% (90 mil)	Compact Stranding	4 AWG	7	0.077	0.213	0.417	0.497	376	0.3	0.6	3.6	0.1	0.2	1.1	1.0	2.1	13.1	0.3	0.5	3.3	1.2	2.3	14.7	
		2 AWG	7	0.097	0.268	0.472	0.552	298	0.4	3.4	4.5	0.1	1.0	1.4	1.5	12.3	16.3	0.4	3.1	4.1	1.7	13.8	18.3	
		1 AWG	19	0.066	0.299	0.503	0.583	265	1.1	2.0	4.1	0.3	0.6	1.3	3.9	7.4	15.1	1.0	1.9	3.8	4.3	8.3	17.0	
		1/0 AWG	19	0.075	0.336	0.540	0.620	236	1.5	2.9	5.7	0.4	0.9	1.7	5.3	10.6	20.9	1.3	2.7	5.2	6.0	11.9	23.5	
		2/0 AWG	19	0.084	0.376	0.580	0.660	210	1.3	2.8	5.6	0.4	0.8	1.7	4.9	10.2	20.4	1.2	2.5	5.1	5.5	11.4	22.9	
		3/0 AWG	19	0.094	0.421	0.625	0.705	187	1.9	3.8	5.7	0.6	1.2	1.7	7.1	13.9	21.0	1.8	3.5	5.2	8.0	15.6	23.5	
		4/0 AWG	19	0.106	0.476	0.680	0.760	167	2.4	5.0	6.4	0.7	1.5	2.0	8.9	18.2	23.4	2.2	4.6	5.9	10.0	20.4	26.3	
		250 kcm	37	0.082	0.520	0.732	0.812	153	5.1	15.2	18.5	1.5	4.6	5.7	18.5	55.5	67.9	4.6	13.9	17.0				
		350 kcm	37	0.097	0.614	0.826	0.906	130	6.3	8.2	9.7	1.9	2.5	2.9	23.0	30.0	35.3	5.8	7.5	8.8				
		500 kcm	37	0.116	0.736	0.948	1.028	108	8.7	11.5	13.5	2.7	3.5	4.1	31.9	42.0	49.3	8.0	10.5	12.3				
		600 kcm	61	0.099	0.815	1.035	1.115	100	14.6	19.3	22.5	4.4	5.9	6.9	53.3	70.5	82.4	13.3	17.6	20.6				
		700 kcm	61	0.107	0.878	1.098	1.178	100	16.4	21.6	25.3	5.0	6.6	7.7	60.0	78.9	92.5	15.0	19.7	23.1				
		750 kcm	61	0.111	0.909	1.129	1.209	100	17.3	22.9	26.7	5.3	7.0	8.1	63.4	83.7	97.6	15.9	20.9	24.4				
		800 kcm	61	0.115	0.937	1.157	1.237	100	18.8	24.7	28.9	5.7	7.5	8.8	68.7	90.6	105.8	17.2	22.7	26.5				
		900 kcm	61	0.122	1.000	1.220	1.300	100	22.9	30.2	35.3	7.0	9.2	10.8	83.9	110.5	129.3	21.0	27.6	32.3				
1000 kcm	61	0.128	1.059	1.279	1.359	100	29.4	38.7	45.2	9.0	11.8	13.8	107.6	141.7	165.6	26.9	35.4	41.4						
15kV; 100% (175 mil or 180 mil)	Compact Stranding	2 AWG	7	0.097	0.268	0.668	0.748	336	0.4	3.4	4.5	0.1	1.0	1.4	1.5	12.3	16.3	1.5	3.2	4.3	1.7	13.8	18.3	
		1 AWG	19	0.066	0.299	0.701	0.781	299	1.1	2.0	4.1	0.3	0.6	1.3	3.9	7.4	15.1	5.2	6.4	7.7	4.3	8.3	17.0	
		1/0 AWG	19	0.075	0.336	0.740	0.820	267	1.5	2.9	5.7	0.4	0.9	1.7	5.3	10.6	20.9	7.5	9.6	11.6	6.0	11.9	23.5	
		2/0 AWG	19	0.084	0.376	0.782	0.862	237	1.3	2.8	5.6	0.4	0.8	1.7	4.9	10.2	20.4	8.6	13.2	15.8	5.5	11.4	22.9	
		3/0 AWG	19	0.094	0.421	0.831	0.911	211	1.9	3.8	5.7	0.6	1.2	1.7	7.1	13.9	21.0	9.7	17.3	20.7	8.0	15.6	23.5	
		4/0 AWG	19	0.106	0.476	0.885	0.965	188	2.4	5.0	6.4	0.7	1.5	2.0	8.9	18.2	23.4	11.0	21.8	26.2	10.0	20.4	26.3	
		250 kcm	37	0.082	0.520	0.930	1.010	173	5.1	15.2	18.5	1.5	4.6	5.7	18.5	55.5	67.9	26.5	30.2	34.0				
		350 kcm	37	0.097	0.614	1.026	1.106	146	6.3	8.2	9.7	1.9	2.5	2.9	23.0	30.0	35.3	23.2	30.5	35.7				
		500 kcm	37	0.116	0.736	1.146	1.246	123	8.7	11.5	13.5	2.7	3.5	4.1	31.9	42.0	49.3	33.0	43.4	50.8				
		600 kcm	61	0.099	0.815	1.223	1.323	112	14.6	19.3	22.5	4.4	5.9	6.9	53.3	70.5	82.4	44.2	58.2	68.1				
		700 kcm	61	0.107	0.878	1.289	1.389	104	16.4	21.6	25.3	5.0	6.6	7.7	60.0	78.9	92.5	50.6	66.5	77.8				
		750 kcm	61	0.111	0.909	1.322	1.422	100	17.3	22.9	26.7	5.3	7.0	8.1	63.4	83.7	97.6	54.4	71.5	83.7				
		800 kcm	61	0.115	0.937	1.354	1.454	100	18.8	24.7	28.9	5.7	7.5	8.8	68.7	90.6	105.8	58.0	76.3	89.2				
		900 kcm	61	0.122	1.000	1.417	1.517	100	22.9	30.2	35.3	7.0	9.2	10.8	83.9	110.5	129.3	65.3	85.9	100.6				
		1000 kcm	61	0.128	1.059	1.480	1.580	100	29.4	38.7	45.2	9.0	11.8	13.8	107.6	141.7	165.6	72.5	95.4	111.6				

Target Fluid Needed = Length of Cable (ft) x Target (cc/ft) ÷ Tank Factor (Found on the tank)

The EPR injection pressure = the XLPE Tailored Injection Pressure divided by 4.

1 pail = 17,200cc = 17.2L

(in) means measured in inches. (mils) are 0.001 inches



Cable Table

Note: All nominal dimensions are at 20°C. Actual dimensions vary with temperature.										SPR Injection									iUPR Injection					
Voltage & Insulation level	Strand Type	Conductor Size	# of Strands	Strand Diameter (in)	Conductor Bundle Diameter (in)	Typical Insulation Diameter (in)	Semi-con Shield Diameter (in)	XLPE Tailored Injection Pressure (psig)	732, 733, & iXL fluids (cc/m)			732, 733, & iXL fluids (cc/ft)			2 or 3 liter AI tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			
									Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	
15kV; 133% (220 mil or 230 mil)	Compact Stranding	2 AWG	7	0.097	0.268	0.768	0.848	358	0.4	3.4	4.5	0.1	1.0	1.4	1.5	12.3	16.3	0.4	3.1	4.1	1.7	13.8	18.3	
		1 AWG	19	0.066	0.299	0.801	0.881	318	1.1	2.0	4.1	0.3	0.6	1.3	3.9	7.4	15.1	1.0	1.9	3.8	4.3	8.3	17.0	
		1/0 AWG	19	0.075	0.336	0.840	0.920	284	1.5	2.9	5.7	0.4	0.9	1.7	5.3	10.6	20.9	1.3	2.7	5.2	6.0	11.9	23.5	
		2/0 AWG	19	0.084	0.376	0.882	0.962	253	1.3	2.8	5.6	0.4	0.8	1.7	4.9	10.2	20.4	1.2	2.5	5.1	5.5	11.4	22.9	
		3/0 AWG	19	0.094	0.421	0.931	1.011	225	1.9	3.8	5.7	0.6	1.2	1.7	7.1	13.9	21.0	1.8	3.5	5.2	8.0	15.6	23.5	
		4/0 AWG	19	0.106	0.476	0.985	1.065	200	2.4	5.0	6.4	0.7	1.5	2.0	8.9	18.2	23.4	2.2	4.6	5.9	10.0	20.4	26.3	
		250 kcm	37	0.082	0.520	1.030	1.110	184	5.1	15.2	18.5	1.5	4.6	5.7	18.5	55.5	67.9	4.6	13.9	17.0				
		350 kcm	37	0.097	0.614	1.126	1.226	156	6.3	8.2	9.7	1.9	2.5	2.9	23.0	30.0	35.3	5.8	7.5	8.8				
		500 kcm	37	0.116	0.736	1.246	1.346	130	8.7	11.5	13.5	2.7	3.5	4.1	31.9	42.0	49.3	8.0	10.5	12.3				
		600 kcm	61	0.099	0.815	1.323	1.423	119	14.6	19.3	22.5	4.4	5.9	6.9	53.3	70.5	82.4	13.3	17.6	20.6				
		700 kcm	61	0.107	0.878	1.389	1.489	110	16.4	21.6	25.3	5.0	6.6	7.7	60.0	78.9	92.5	15.0	19.7	23.1				
		750 kcm	61	0.111	0.909	1.422	1.522	106	17.3	22.9	26.7	5.3	7.0	8.1	63.4	83.7	97.6	15.9	20.9	24.4				
		800 kcm	61	0.115	0.937	1.454	1.554	103	18.8	24.7	28.9	5.7	7.5	8.8	68.7	90.6	105.8	17.2	22.7	26.5				
900 kcm	61	0.122	1.000	1.517	1.617	100	22.9	30.2	35.3	7.0	9.2	10.8	83.9	110.5	129.3	21.0	27.6	32.3						
1000 kcm	61	0.128	1.059	1.580	1.710	100	29.4	38.7	45.2	9.0	11.8	13.8	107.6	141.7	165.6	26.9	35.4	41.4						
25kV; 100% (260 mil or 262 mil)	Compact Stranding	2 AWG	7	0.097	0.268	0.816	0.896	371	0.4	3.4	4.5	0.1	1.0	1.4	1.5	12.3	16.3	0.4	3.1	4.1	1.7	13.8	18.3	
		1 AWG	19	0.066	0.299	0.865	0.945	331	1.1	2.0	4.1	0.3	0.6	1.3	3.9	7.4	15.1	1.0	1.9	3.8	4.3	8.3	17.0	
		1/0 AWG	19	0.075	0.336	0.904	0.984	295	1.5	2.9	5.7	0.4	0.9	1.7	5.3	10.6	20.9	1.3	2.7	5.2	6.0	11.9	23.5	
		2/0 AWG	19	0.084	0.376	0.946	1.026	262	1.3	2.8	5.6	0.4	0.8	1.7	4.9	10.2	20.4	1.2	2.5	5.1	5.5	11.4	22.9	
		3/0 AWG	19	0.094	0.421	0.995	1.075	234	1.9	3.8	5.7	0.6	1.2	1.7	7.1	13.9	21.0	1.8	3.5	5.2	8.0	15.6	23.5	
		4/0 AWG	19	0.106	0.476	1.049	1.129	208	2.4	5.0	6.4	0.7	1.5	2.0	8.9	18.2	23.4	2.2	4.6	5.9	10.0	20.4	26.3	
		250 kcm	37	0.082	0.520	1.094	1.194	191	5.1	15.2	18.5	1.5	4.6	5.7	18.5	55.5	67.9	4.6	13.9	17.0				
		350 kcm	37	0.097	0.614	1.190	1.290	162	6.3	8.2	9.7	1.9	2.5	2.9	23.0	30.0	35.3	5.8	7.5	8.8				
		500 kcm	37	0.116	0.736	1.310	1.410	135	8.7	11.5	13.5	2.7	3.5	4.1	31.9	42.0	49.3	8.0	10.5	12.3				
		600 kcm	61	0.099	0.815	1.387	1.487	124	14.6	19.3	22.5	4.4	5.9	6.9	53.3	70.5	82.4	13.3	17.6	20.6				
		700 kcm	61	0.107	0.878	1.453	1.553	114	16.4	21.6	25.3	5.0	6.6	7.7	60.0	78.9	92.5	15.0	19.7	23.1				
		750 kcm	61	0.111	0.909	1.486	1.586	111	17.3	22.9	26.7	5.3	7.0	8.1	63.4	83.7	97.6	15.9	20.9	24.4				
		800 kcm	61	0.115	0.937	1.518	1.618	107	18.8	24.7	28.9	5.7	7.5	8.8	68.7	90.6	105.8	17.2	22.7	26.5				
900 kcm	61	0.122	1.000	1.581	1.711	101	22.9	30.2	35.3	7.0	9.2	10.8	83.9	110.5	129.3	21.0	27.6	32.3						
1000 kcm	61	0.128	1.059	1.644	1.774	100	29.4	38.7	45.2	9.0	11.8	13.8	107.6	141.7	165.6	26.9	35.4	41.4						

Target Fluid Needed = Length of Cable (ft) x Target (cc/ft) ÷ Tank Factor (Found on the tank)

The EPR injection pressure = the XLPE Tailored Injection Pressure divided by 4.

1 pail = 17,200cc = 17.2L

(in) means measured in inches. (mils) are 0.001 inches



Cable Table

Note: All nominal dimensions are at 20°C. Actual dimensions vary with temperature.

Voltage & Insulation level	Strand Type	Conductor Size	# of Strands	Strand Diameter (in)	Conductor Bundle Diameter (in)	Typical Insulation Diameter (in)	Semi-con Shield Diameter (in)	XLPE Tailored Injection Pressure (psig)	732, 733, & iXL fluids (cc/m)									732, 733, & iXL fluids (cc/ft)									SPR Injection									iUPR Injection								
									2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)			Floor			Target			Ceiling			Floor			Target			Ceiling			Floor			Target			Ceiling		
									Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling						
28kV; 100% (280 mil)	Compact Stranding	2 AWG	7	0.097	0.268	0.852	0.932	380	0.4	3.4	4.5	0.1	1.0	1.4	1.5	12.3	16.3	0.4	3.1	4.1	1.7	13.8	18.3																					
		1 AWG	19	0.066	0.299	0.883	0.963	338	1.1	2.0	4.1	0.3	0.6	1.3	3.9	7.4	15.1	1.0	1.9	3.8	4.3	8.3	17.0																					
		1/0 AWG	19	0.075	0.336	0.920	1.000	301	1.5	2.9	5.7	0.4	0.9	1.7	5.3	10.6	20.9	1.3	2.7	5.2	6.0	11.9	23.5																					
		2/0 AWG	19	0.084	0.376	0.960	1.060	268	1.3	2.8	5.6	0.4	0.8	1.7	4.9	10.2	20.4	1.2	2.5	5.1	5.5	11.4	22.9																					
		3/0 AWG	19	0.094	0.421	1.005	1.105	239	1.9	3.8	5.7	0.6	1.2	1.7	7.1	13.9	21.0	1.8	3.5	5.2	8.0	15.6	23.5																					
		4/0 AWG	19	0.106	0.476	1.060	1.160	213	2.4	5.0	6.4	0.7	1.5	2.0	8.9	18.2	23.4	2.2	4.6	5.9	10.0	20.4	26.3																					
		250 kcm	37	0.082	0.520	1.112	1.212	195	5.1	15.2	18.5	1.5	4.6	5.7	18.5	55.5	67.9	4.6	13.9	17.0																								
		350 kcm	37	0.097	0.614	1.206	1.306	165	6.3	8.2	9.7	1.9	2.5	2.9	23.0	30.0	35.3	5.8	7.5	8.8																								
		500 kcm	37	0.116	0.736	1.328	1.428	138	8.7	11.5	13.5	2.7	3.5	4.1	31.9	42.0	49.3	8.0	10.5	12.3																								
		600 kcm	61	0.099	0.815	1.415	1.545	126	14.6	19.3	22.5	4.4	5.9	6.9	53.3	70.5	82.4	13.3	17.6	20.6																								
		700 kcm	61	0.107	0.878	1.478	1.608	117	16.4	21.6	25.3	5.0	6.6	7.7	60.0	78.9	92.5	15.0	19.7	23.1																								
		750 kcm	61	0.111	0.909	1.509	1.639	113	17.3	22.9	26.7	5.3	7.0	8.1	63.4	83.7	97.6	15.9	20.9	24.4																								
800 kcm	61	0.115	0.937	1.537	1.667	109	18.8	24.7	28.9	5.7	7.5	8.8	68.7	90.6	105.8	17.2	22.7	26.5																										
900 kcm	61	0.122	1.000	1.600	1.730	103	22.9	30.2	35.3	7.0	9.2	10.8	83.9	110.5	129.3	21.0	27.6	32.3																										
1000 kcm	61	0.128	1.059	1.659	1.789	100	29.4	38.7	45.2	9.0	11.8	13.8	107.6	141.7	165.6	26.9	35.4	41.4																										
35kV; 100% (345 mil or 347 mil)	Compact Stranding	1/0 AWG	19	0.075	0.336	1.074	1.174	324	1.5	2.9	5.7	0.4	0.9	1.7	5.3	10.6	20.9	1.3	2.7	5.2	6.0	11.9	23.5																					
		2/0 AWG	19	0.084	0.376	1.116	1.216	288	1.3	2.8	5.6	0.4	0.8	1.7	4.9	10.2	20.4	1.2	2.5	5.1	5.5	11.4	22.9																					
		3/0 AWG	19	0.094	0.421	1.165	1.265	257	1.9	3.8	5.7	0.6	1.2	1.7	7.1	13.9	21.0	1.8	3.5	5.2	8.0	15.6	23.5																					
		4/0 AWG	19	0.106	0.476	1.219	1.319	229	2.4	5.0	6.4	0.7	1.5	2.0	8.9	18.2	23.4	2.2	4.6	5.9	10.0	20.4	26.3																					
		250 kcm	37	0.082	0.520	1.264	1.364	210	5.1	15.2	18.5	1.5	4.6	5.7	18.5	55.5	67.9	4.6	13.9	17.0																								
		350 kcm	37	0.097	0.614	1.360	1.460	178	6.3	8.2	9.7	1.9	2.5	2.9	23.0	30.0	35.3	5.8	7.5	8.8																								
		500 kcm	37	0.116	0.736	1.480	1.580	149	8.7	11.5	13.5	2.7	3.5	4.1	31.9	42.0	49.3	8.0	10.5	12.3																								
		600 kcm	61	0.099	0.815	1.557	1.687	136	14.6	19.3	22.5	4.4	5.9	6.9	53.3	70.5	82.4	13.3	17.6	20.6																								
		700 kcm	61	0.107	0.878	1.623	1.753	126	16.4	21.6	25.3	5.0	6.6	7.7	60.0	78.9	92.5	15.0	19.7	23.1																								
		750 kcm	61	0.111	0.909	1.656	1.786	121	17.3	22.9	26.7	5.3	7.0	8.1	63.4	83.7	97.6	15.9	20.9	24.4																								
		800 kcm	61	0.115	0.937	1.688	1.818	118	18.8	24.7	28.9	5.7	7.5	8.8	68.7	90.6	105.8	17.2	22.7	26.5																								
		900 kcm	61	0.122	1.000	1.751	1.881	111	22.9	30.2	35.3	7.0	9.2	10.8	83.9	110.5	129.3	21.0	27.6	32.3																								
1000 kcm	61	0.128	1.059	1.814	1.944	105	29.4	38.7	45.2	9.0	11.8	13.8	107.6	141.7	165.6	26.9	35.4	41.4																										

Target Fluid Needed = Length of Cable (ft) x Target (cc/ft) ÷ Tank Factor (Found on the tank)

The EPR injection pressure = the XLPE Tailored Injection Pressure divided by 4.

1 pail = 17,200cc = 17.2L

(in) means measured in inches. (mils) are 0.001 inches



Cable Table

Note: All nominal dimensions are at 20°C. Actual dimensions vary with temperature.

Voltage & Insulation Level	Strand Type	Conductor Size	# of Strands	Strand Diameter (in)	Conductor Bundle Diameter (in)	Typical Insulation Diameter (in)	Semi-con Shield Diameter (in)	XLPE Tailored Injection Pressure (psig)	732, 733, & iXL fluids (cc/m)			732, 733, & iXL fluids (cc/ft)			2 or 3 liter Al tank only (mm/100 ft)			9 liter tank only (mm/100 ft)			1.5 liter PE tank only (mm/100 ft)						
									Floor Target Ceiling			Floor Target Ceiling			Floor Target Ceiling			Floor Target Ceiling			Floor Target Ceiling						
									Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling	Floor	Target	Ceiling				
Special Cable Table																											
30kV; 100%	Compressed	335mm2	61	0.1	0.854331	1.544331	1.674331	119	7.3	9.5	11.2	2.2	2.9	3.4	26.6	35.0	40.9	6.6	8.7	10.2							
15kV; 100%	Concentric	1/0	19	0.0745	0.373	0.789	0.879	220	8.2	10.5	12.6	2.5	3.2	3.9	29.9	38.6	46.3	7.5	9.6	11.6	33.6	43.3	51.9				
15kV; 100%	Concentric	1/0 AWG	19	0.0745	0.373	0.817	0.897	224	9.7	12.5	15.0	2.9	3.8	4.6	35.4	45.8	54.9	8.8	11.5	13.7	39.7	51.4	61.6				
115kV	Concentric	1500 kcm	91	0.1284	1.385	3.042	3.234	109	129.2	170.0	198.9	39.4	51.8	60.6	0.0	0.0	0.0	118.3	155.6	182.1							
15kV; 100%	Compressed	3/0 AWG	7	0.164	0.441	0.854	0.934	179	11.8	12.0	15.9	3.6	3.7	4.9	43.3	43.9	58.3	10.8	11.0	14.6	48.6	49.3	65.4				
5kV; 100%	Concentric	250 kcm	37	0.0822	0.575	0.805	0.905	122	35.0	40.0	45.0	10.7	12.2	13.7	128.1	146.4	164.7	32.0	36.6	41.2							
5kV; 100%	Compressed	250 kcm	37	0.0822	0.53	0.76	0.82	125	14.2	30.4	34.7	4.3	9.3	10.6	52.0	111.2	127.0	13.0	27.8	31.8							
5kV; 100%	Compact	250 kcm	37	0.0822	0.52	0.75	0.85	130	6.0	18.0	22.0	1.8	5.5	6.7	22.0	65.9	80.5	5.5	16.5	20.1							
5kV; 100%	Concentric	4/0 AWG	19	0.1055	0.528	0.795	0.82	140	14.2	28.2	33.9	4.3	8.6	10.3	51.8	103.4	123.9	13.0	25.9	31.0	58.2	116.0	139.1				
25kV; 100%	Compact	1/0 AWG	18	0.0745	0.34	0.967	1.047	295	3.0	6.0	8.8	0.9	1.8	2.7	11.0	22.0	32.2	2.7	5.5	8.1	12.3	24.7	36.2				
5kV; 100%	Concentric	4/0 AWG	19	0.1055	0.528	0.758	0.8	133	14.2	28.2	33.9	4.3	8.6	10.3	51.8	103.4	123.9	13.0	25.9	31.0	58.2	116.0	139.1				
5kV; 100%	Concentric	350 kcm	37	0.0973	0.681	0.911	0.985	110	25.0	41.0	46.0	7.6	12.5	14.0	91.5	150.1	168.4	22.9	37.5	42.1							
5kV; 100%	Concentric	500 kcm	37	0.1162	0.813	1.043	1.117	91	50.0	60.0	70.0	15.2	18.3	21.3	0.0	0.0	0.0	45.8	54.9	64.1							
5kV; 100%	Concentric	1000 kcm	61	0.128	1.152	1.392	1.466	81	100.0	120.0	140.0	30.5	36.6	42.7	0.0	0.0	0.0	91.6	109.9	128.2							
5kV; 100%	Compressed	750 kcm	61	0.1109	0.968	1.202	1.276	87	55.1	72.5	84.8	16.8	22.1	25.9	0.0	0.0	0.0	50.4	66.4	77.7							
5kV; 100%	Concentric	2 AWG	7	0.0974	0.292	0.512	0.592	160	1.9	4.0	5.3	0.6	1.2	1.6	7.1	14.6	19.4	1.8	3.7	4.9	7.9	16.4	21.8				
25kV; 100%	Concentric	2 AWG	7	0.0974	0.292	0.852	0.932	306	1.9	4.0	5.3	0.6	1.2	1.6	7.1	14.6	19.4	1.8	3.7	4.9	7.9	16.4	21.8				
28kV; 100%	Compressed	500 kcm	37	0.1162	0.799	1.449	1.549	125	33.0	43.4	50.7	10.0	13.2	15.5	0.0	0.0	0.0	30.2	39.7	46.5							
28kV; 100%	Compressed	1 AWG	19	0.0664	0.322	0.94	0.968	305	5.6	7.3	8.8	1.7	2.2	2.7	20.6	26.8	32.2	5.2	6.7	8.0	23.1	30.1	36.1				
600V	Concentric	1/0 AWG	19	0.0745	0.373	0.553	0.603	99	9.7	12.5	15.0	2.9	3.8	4.6	35.4	45.8	54.9	8.8	11.5	13.7	39.7	51.4	61.6				
600V	Concentric	4/0 AWG	19	0.1055	0.528	0.708	0.758	90	14.2	28.2	33.9	4.3	8.6	10.3	51.8	103.4	123.9	13.0	25.9	31.0	58.2	116.0	139.1				
600V	Concentric	300 kcm	37	0.0898	0.628	0.808	0.858	80	21.8	28.7	33.6	6.6	8.7	10.2	79.8	105.0	122.9	20.0	26.3	30.7							
600V	Concentric	500 kcm	37	0.1162	0.813	0.993	1.043	70	43.6	57.4	67.2	13.3	17.5	20.5	159.7	210.2	245.9	40.0	52.6	61.5							
600V	Concentric	2 AWG	7	0.0974	0.292	0.512	0.512	99	1.9	4.0	5.3	0.6	1.2	1.6	7.1	14.6	19.4	1.8	3.7	4.9	7.9	16.4	21.8				
15kV; 100%	Concentric	4 AWG	7	0.0613	0.1838	0.663	0.743	280	0.5	1.0	2.0	0.2	0.3	0.6	1.8	3.7	7.3	0.5	0.9	1.8	2.1	4.1	8.2				
5kV; 100%	Concentric	2/0 AWG	19	0.0837	0.418	0.824	0.904	50	11.2	17.1	20.5	3.4	5.2	6.2	41.0	62.5	74.9	10.3	15.6	18.7	46.0	70.2	84.1				
5kV; 133%	Concentric	350 kcm	37	0.0973	0.681	0.961	1.051	78	30.7	40.4	47.3	9.4	12.3	14.4	112.3	147.8	172.9	28.1	37.0	43.3							

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