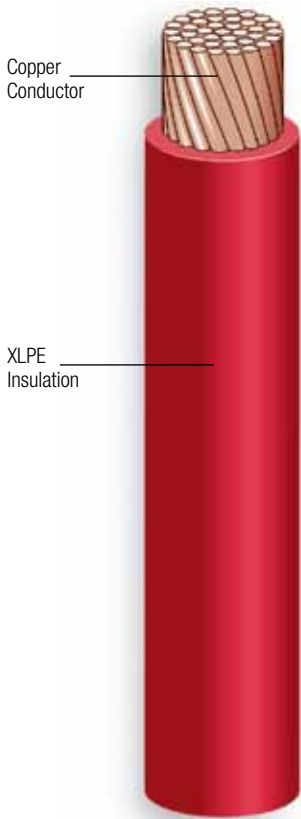


# TYPE PHOTOVOLTAIC COPPER CONDUCTOR 600V AND 1000V/2000V



## ENGINEERING SPECIFICATIONS:



### Standards:

Underwriters Laboratories Standards UL-4703, UL-854  
 UL 1685-FT4/IEEE 1202 (70,000 Btu/hr) Flame Test (1/0 AWG and larger)  
 ICEA T-29-520 (210,000 Btu/hr) Flame Test  
 NEMA WC70/ICEA S-95-658  
 NFPA 70: National Electrical Code (NEC)  
 ARRA 2009; Section 1605 "Buy American" Compliant

## CONSTRUCTION:

### Conductors:

Stranded conductors, uncoated copper per ASTM-B787 and ASTM-B8

### Insulation:

Cross-linked polyethylene (XLPE) insulation per UL-854

### Applications:

Type Photovoltaic copper conductors are suitable for outdoor rooftop applications without conduit and for use in conduits and raceways installed underground in conduit in wet locations, and where condensation and moisture accumulations within the conduit do not exceed 90°C. Applications requiring direct burial is permitted for Type Photovoltaic per UL-854. Applications requiring type Photovoltaic conductor, temperatures shall not exceed 90°C in wet or dry locations.

### Features:

Available in 600V and 1000V/2000V. All cables comply with UL's VW-1 (Vertical Wire) Flame Test. Insulation compounds are rated for flame and sunlight-resistance in all sizes and colors. Photovoltaic conductors of 1/0 through 1000 KCMIL are rated for CT use. Sequential foot markings located every foot on master reels only for 1 AWG through 1000 KCMIL unless otherwise specified. RoHS compliant. Flexibility at Low Temperature Test. Carries -40°C rating.

Type Photovoltaic Copper Conductor 600V and 1000V/2000V

Size AWG	Number of Strands		Insulation Thickness XLPE (in)		Outside Diameter				Allowable Ampacity (Amps)**		Approximate Net Weight (lbs/1000 ft)		Standard Packaging (ft)			
	600V	1000V 2000V	600V	1000V 2000V	600V		1000V / 2000V		600V	1000V 2000V	600V	1000V 2000V	600V		1000V / 2000V	
					(mm)	(in)	(mm)	(in)								
18	16	16	0.060	0.075	4.19	0.165	5.00	0.197	8	8	15	18	1000' carton (2x500) 2500' reels	1000' carton (2x500) 2500' reels		
16	26	26	0.060	0.075	4.51	0.178	5.31	0.209	8	8	18	22	1000' carton (2x500) 2500' reels	1000' carton (2x500) 2500' reels		
14	19	19	0.060	0.075	4.89	0.193	5.61	0.221	25†	25†	24	28	500' 1000' 2500' reels	500' 1000' 2500' reels		
12	19	19	0.060	0.075	5.37	0.212	6.05	0.238	30†	30†	33	38	500' 1000' 2500' reels	500' 1000' 2500' reels		
10	19	19	0.060	0.075	5.99	0.236	6.60	0.260	40†	40†	47	52	500' 2500' reels	500' 2500' reels		
8	7*	7*	0.075	0.085	7.52	0.296	7.95	0.313	55	55	74	78	500' 1000' 2500' 5000' reels	500' 1000' 2500' 5000' reels		
6	7*	7*	0.075	0.085	8.48	0.334	8.86	0.349	75	75	108	113	500' 1000' 2500' 5000' reels	500' 1000' 2500' 5000' reels		
4	7*	7*	0.075	0.085	9.70	0.382	10.06	0.396	95	95	161	166	500' 1000' 2500' 5000' reels	500' 1000' 2500' 5000' reels		
3	7*	7*	0.075	0.085	10.41	0.410	10.77	0.424	110	110	197	203	500' 1000' 2500' 5000' reels	500' 1000' 2500' 5000' reels		
2	7*	7*	0.075	0.085	11.23	0.442	11.58	0.456	130	130	243	249	500' 1000' 2500' 5000' reels	500' 1000' 2500' 5000' reels		
1	19	19	0.095	0.105	13.16	0.518	13.49	0.531	150	150	313	320	500' 1000' 2500' 5000' reels	500' 1000' 2500' 5000' reels		
1/0	19	19	0.095	0.105	13.97	0.550	14.48	0.570	170	170	380	389	500' 1000' 2500' 5000' reels	500' 1000' 2500' 5000' reels		
3/0	19	19	0.095	0.105	15.09	0.594	15.60	0.614	195	195	476	484	500' 1000' 2500' 5000' reels	500' 1000' 2500' 5000' reels		
4/0	19	19	0.095	0.105	16.36	0.644	16.87	0.664	225	225	590	599	500' 1000' 2500' 5000' reels	500' 1000' 2500' 5000' reels		
250	37	37	0.110	0.120	17.78	0.700	18.29	0.720	260	260	732	742	500' 1000' 2500' 5000' reels	500' 1000' 2500' 5000' reels		
300	37	37	0.110	0.120	19.35	0.762	19.86	0.782	290	290	873	884	500' 1000' 2500' 4000' Reels	500' 1000' 2500' 4000' Reels		
350	37	37	0.110	0.120	20.67	0.814	21.18	0.834	320	320	1035	1047	500' 1000' 3500' Reels	500' 1000' 3500' Reels		
400	37	37	0.110	0.120	21.87	0.861	22.38	0.881	350	350	1198	1210	500' 1000' 3000' Reels	500' 1000' 3000' Reels		
500	37	37	0.110	0.120	22.99	0.905	23.50	0.925	380	380	1358	1371	500' 1000' 3000' Reels	500' 1000' 3000' Reels		
600	61	61	0.125	0.135	25.04	0.986	25.55	1.006	430	430	1680	1694	500' 1000' 2500' Reels	500' 1000' 2500' Reels		
750	61	61	0.125	0.135	29.03	1.143	29.54	1.163	475	475	2057	2073	500' 1000' 2000' Reels	500' 1000' 2000' Reels		
1000	61	61	0.125	0.135	31.70	1.248	32.21	1.268	535	535	2508	2525	500' 1000' 1500' Reels	500' 1000' 1500' Reels		
					35.61	1.402	36.12	1.422	615	615	3303	3322	500' 1000' Reels	500' 1000' Reels		

\* 8 AWG - 2 AWG: 19/w is available upon request.

\*\*Allowable ampacities per NEC 310.15(B)(16) for 90°C. †For overcurrent protection amperages, consult NEC 240.4(D).

#### PRINT LEGEND: 600V

18 AWG THROUGH 1 AWG: ENCORE WIRE CORPORATION \*(SIZE)\*TYPE\*PHOTOVOLTAIC WIRE\* 90C\*WET\*OR\*DRY\*SUN\*RES\*-40C\*600V\*XLPE\*(UL)\*DATE\*TIME\*OPERATOR\*QC

1/0 AWG THROUGH 1000 KCMIL: ENCORE WIRE CORPORATION\*(SIZE)\*TYPE\*PHOTOVOLTAIC WIRE\* 90C\*WET\*OR\*DRY\*SUN\*RES\*-40C\*600V\*XLPE\*(UL)\*FOR\*CT\*USE\*DATE\*TIME\*OPERATOR\*QC

#### PRINT LEGEND: 1000V/2000V

18 AWG THROUGH 1 AWG: ENCORE WIRE CORPORATION\*(SIZE)\*TYPE\*PHOTOVOLTAIC WIRE\* 90C\*WET\*OR\*DRY\*SUN\*RES\*-40C\*2000V\*XLPE\*(UL)\*DATE\*TIME\*OPERATOR\*QC

1/0 AWG THROUGH 1000 KCMIL: ENCORE WIRE CORPORATION\*(SIZE)\*TYPE\*PHOTOVOLTAIC WIRE\* 90C\*WET\*OR\*DRY\*SUN\*RES\*-40C\*2000V\*XLPE\*(UL)\*FOR\*CT\*USE\*DATE\*TIME\*OPERATOR\*QC