

# Submersible Well Pump Cable Selection Chart

## CABLE SELECTION CHART

2 or 3 Wire, 60 Hz, Single Phase Motor Maximum Cable Length in Feet (Motor to service entrance see footnotes 1 & 2)

Motor Rating		60°C Insulation – AWG Copper Wire Size					
Volts	HP	14	12	10	8	6	4
115	1/3	130	210	340	540		
	1/2	100	160	250	390	620	
230	1/3	550	880				
	1/2	400	650	1020			
	3/4	300	480	760	1200		
	1	250	400	630	990	1540	
	1.5	190	310	480	770	1200	
	2	150	250	390	620	970	1530
	3	120	190	300	470	750	1190
	5			180	280	450	710

**CAUTION:**

Use of wire size smaller than listed will void warranty.

**FOOTNOTE:**

- 1) Single phase control boxes without line contactors may be connected at any point of the total cable length.
- 2) The portion of the total cable which is between the service entrance and a single phase control box with a line contactor, or a three phase motor starter, should not exceed 25% of the total maximum length to assure reliable starter operation.

60 Hz Three Phase Motor Maximum Cable Length In Feet (Motor to service entrance see footnote 2)

Motor Rating		60°C Insulation – AWG Copper Wire Size						
Volts	HP	14	12	10	8	6	4	2
200V 60 Hz Three Phase Three Wire	1/2	710						
	3/4	510	810	1280				
	1	430	690	1080	1710			
	1.5	310	500	790	1260			
	2	240	390	610	970	1520		
	3	180	290	470	740	1160		
	5	110	170	280	440	690	1080	
	7.5			200	310	490	770	1180
	10				230	370	570	880
230V 60 Hz Three Phase Three Wire	1/2	930	1490	2350	3700	5760		
	3/4	670	1080	1700	2580	4190		
	1	560	910	1430	2260	3520	5460	
	1.5	420	670	1060	1670	2610	4050	
	2	320	510	810	1280	2010	3130	4770
	3	240	390	620	990	1540	2400	3660
	5	140	230	370	590	920	1430	2190
	7.5		160	260	420	650	1020	1560
	10			190	310	490	760	1170
460V 60 Hz Three Phase Three Wire	1/2	3770	6020	9460				
	3/4	2730	4350	6850				
	1	2300	3670	5770	9070			
	1.5	1700	2710	4270	6730			
	2	1300	2070	3270	5150	8050		
	3	1000	1600	2520	3970	6200		
	5	590	950	1500	2360	3700	5750	
	7.5	420	680	1070	1690	2640	4100	6260
	10	310	500	790	1250	1960	3050	4680