

## **High Voltage Silicone Wire**



**APPLICATION:**

Typical applications are high voltage power supplies and related equipment where high voltage, flame resistance, ability to bond, flexibility and low electrical noise are critical requirements.

**VOLTAGE PERFORMANCE REQUIREMENTS:**

18 to 80kVdc; 10 to 30kVac

**SOLUTION:** UL Style 3239 and DRAKA manufactured high voltage silicone wire

## High Voltage Silicone Wire

### UL Style 3239 High Voltage Silicone Wire

These designs have earned the UL approval only after successfully meeting stringent performance and manufacturing acceptance criteria. The silicone dielectric maintains excellent flexibility over an extreme temperature range and is resistant against radiation, moisture, and weathering. Being compatible with most silicone encapsulation material ( RTV) makes this wire an excellent choice for most high or low voltage terminations.



Part Number	Operation Voltage		Conductor			O.D in[mm]	lbs./1000 <sup>1</sup> apx. net
	kVdc	AWG	Stranding (TC)	Dimension Inches ( mm)			
33163	15	20	19/32	0.040[1.02]	0.134[3.42]	10.5	
36225	25	16	19/28	0.058[1.47]	0.181[4.60]	21.2	
36226	40	16	19/28	0.058[1.47]	0.331[8.41]	29.9	
36220	25	14	41/30	0.078[1.98]	0.201[5.11]	28.3	
36219	50	12	65/30	0.101[2.57]	0.307[7.80]	56.8	

**Note:**

1. Standard dielectric color is white. Custom colors are available. Please contact Caton for details.
2. Operating temperature range is -55 to +150 C

### Dual Extruded High Voltage Silicone Wire

When applications require extremely low loss of power and low electrical noise, i.e. partial discharge, a layer of semi-conductive silicone is extruded around the stranded center conductor thereby bringing air inside the stranding to zero electrical stress.



Part Number	Operating Voltage		Conductor				Semi-conductive layer in[mm]	O.D. in[mm]	lbs./1000 <sup>1</sup> apex. net
	kVac	kVdc	AWG	Stranding	Plating	Dimensions in[mm]			
005639	10	30	22	19/34	Silver	0.032[0.81]	0.067[1.70]	0.180[4.57]	12.4
0A2841	15	40	18	19/30	Silver	0.051[1.30]	0.086[2.18]	0.236[5.99]	27.6
002841	18	50	14	19/27	Silver	0.071[1.80]	0.100[2.54]	0.300[7.62]	47.1
005640	20	60	12	19/25	Silver	0.092[2.34]	0.134[3.40]	0.360[9.14]	68.3
CC40415	15	40	10	105/30	Silver	0.126[3.20]	0.163[4.14]	0.415[10.54]	96.0
005641	30	80	8	133/29	Silver	0.150[3.81]	0.240[6.10]	0.650[16.51]	209.5

**Note:**

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