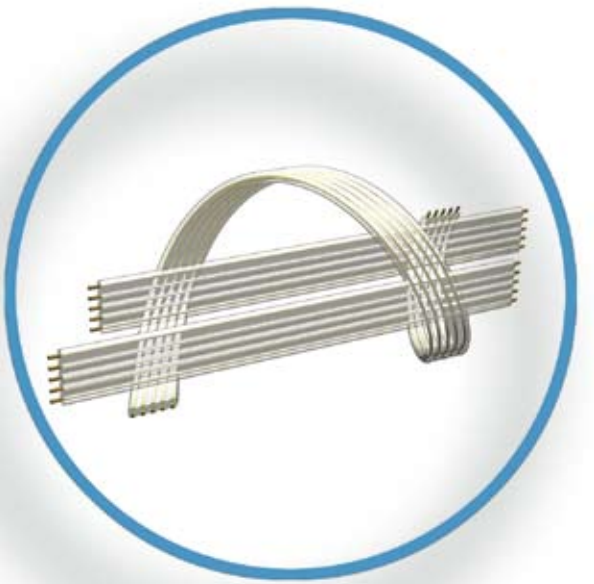
Flat Flexible Cable

100V-80 kVDC SILICONE MULTI-CONDUCTOR CABLE

Caton's line of Hi-Flex Shielded and Unshielded Cables provides the advantages of all Caton flexible silicone cables in a standard, low-cost package. Ultra-flexible, finely stranded wire conductors are used for maximum flexibility and long life in dynamic flexing applications. The exclusive extrusion process encapsulates the wire conductors in crystal clear, flexible, yet extremely durable silicone insulation, making it ideal in diverse applications, including aerospace, festoon systems, food & beverage, forestry, industrial automation, medical, packaging, printing, pulp & paper, and semiconductor manufacturing.



GENERAL SPECIFICATIONS

1.0 Electrical	
1.1 Insulation Resistance:	200meg Ω @ 500Vdc
1.2 Dielectric Strength:	450 Volts/mil (17.7kV/mm)
1.3 Dielectric Constant:	2.8 (nominal)
2.0 Environmental	
2.1 Temperature Rating:	-65°C to 260°C
2.2 Moisture Rating:	Submersible
2.3 Vacuum Rating:	5 x 10-5 torr
2.4 Outgassing:	0.24 %TML, 0.02 %CVCM
2.5 Radiation:	107 Roentgens (exposure)
2.6 Acid resistance:	Good
2.7 Oil Resistance:	Good
2.8 Ozone Resistance:	Outstanding
2.9 Flame Resistance:	Good
2.10 Water/Steam Resistance:	Excellent
2.11 Alcohol Resistance:	Good
2.12 Toxins:	Halogen-Free
3.0 Mechanical	
3.1 Life Expectancy:	10,000,000 cycles
3.2 Minimum Bend Radius (Flexing):	10x Cable thickness
3.3 Durometer Rating:	Shore A, 65
3.4Tensile Strength:	6.5 Mpa (psi)
3.5 Tear Strength:	18 kN/m

TECHNICAL FEATURES

Extremely Flexible
Extreme environment resistance
Low Voltage, High Voltage, RF, Fiber
Up to 12 conductors
Conductors are encapsulated in silicone
Life expectancy of 10,000,000 Cycles
RoHS Compliant
UL Recognized – File #E324413, CE
Fire resistant

TYPICAL APPLICATIONS

Aerospace
Ship Board and Ground radar
Laser Equipment
Satellite Systems
Robotics
Medical Equipment
Remote Operated Vehicles

High Voltage Flexible Flat Wire

Voltage (kVDC)	Number of Conductors	AWG	Current Rating (Amps)	Cable Thickness (inches)	Cable Width (in)	Part Number
10	1	30	3	0.21 Diameter	N/A	969M101-30-1
12	1	26	6	0.22 Diameter	N/A	969M101-26-1
12	1	28	5	.021 Diameter	N/A	969M101-28-1
12	1	24	7	0.22 Diameter	N/A	969M101-24-1
31	1	20	10	0.24 Diameter	N/A	969M101-20-1
31	1	22	8	0.23 Diameter	N/A	969M101-22-1
42	1	4	125	0.50 Diameter	N/A	969M101-4-1
42	1	6	95	.044 Diameter	N/A	969M101-6-1
42	1	8	65	0.39 Diameter	N/A	969M101-8-1
42	1	10	47	0.33 Diameter	N/A	969M101-10-1
42	1	12	36	0.30 Diameter	N/A	969M101-12-1
42	1	14	27	0.28 Diameter	N/A	969M101-14-1
42	1	16	19	0.26 Diameter	N/A	969M101-16-1
42	1	18	15	0.25 Diameter	N/A	969M101-18-1
12	2	26	6	0.09	0.14	969M101-26-2
12	2	28	5	0.08	0.13	969M101-28-2
18	2	22	8	0.11	0.18	969M101-22-2
12	3	28	5	0.08	0.18	969M101-28-3
18	3	20	10	0.12	0.28	969M101-20-3
20	3	16	19	0.15	0.37	969M101-16-3
20	3	18	15	0.14	0.33	969M101-18-3
20	4	16	19	0.15	0.48	969M101-16-4
20	4	18	15	0.14	0.43	969M101-18-4
20	8	16	19	0.15	0.92	969M101-16-8