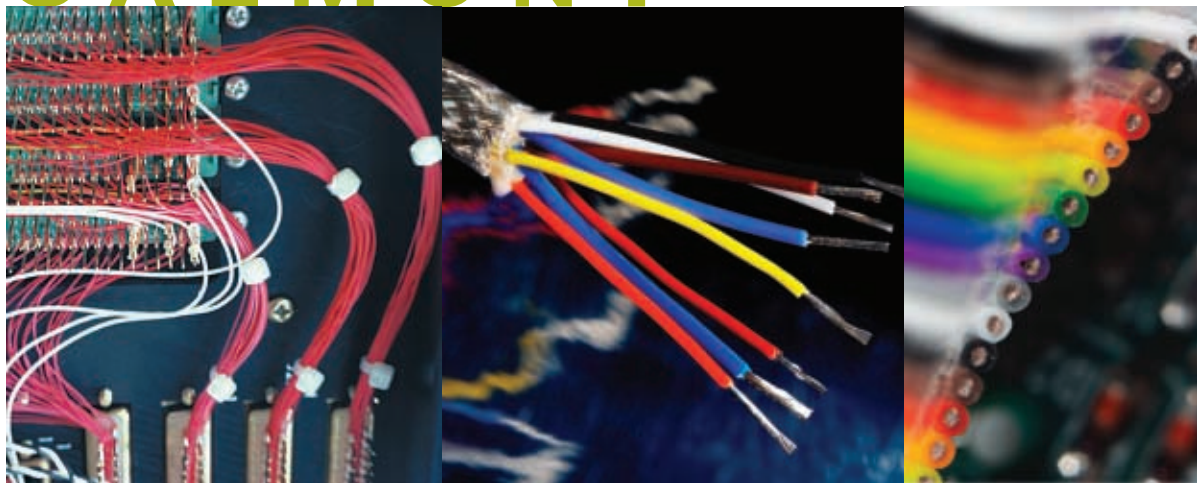




CALMONT



WIRE AND CABLE

SuperFlex

FluoroFlex

SiliFlex

SiliFlex Ribbon Cable

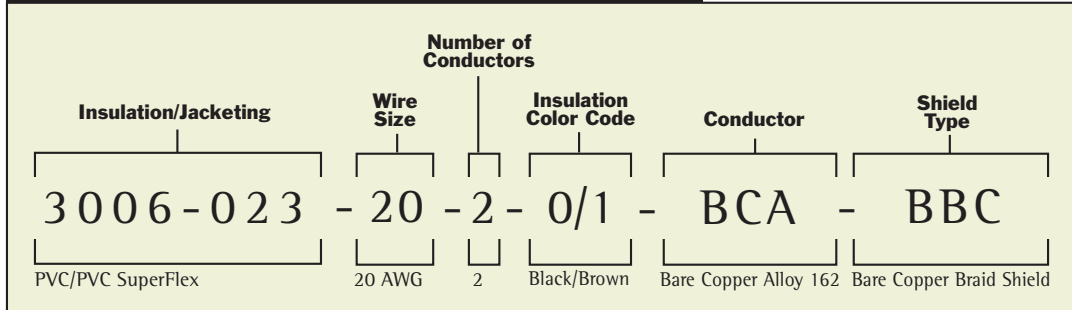
Flat Braid





How To Order Calmont High Flex Products

SAMPLE ORDERING NUMBER



CALMONT HIGH FLEX CABLE OPTIONS

Part #	Insulation/Jacketing	-A WIRE SIZE AWG	-N NUMBER OF CONDUCTORS	-C PRIMARY INSULATION COLORS	-CCC CONDUCTOR TYPE		-S SHIELD STYLE	
					ABBREVIATION	DESCRIPTION		
3006-023	PVC/PVC	20 AWG through 40 AWG	Customer to specify.	Per MIL-STD-6 0 = Black 1 = Brown 2 = Red 3 = Orange 4 = Yellow 5 = Green 6 = Blue 7 = Violet 8 = Grey 9 = White	BC	Bare Copper	U = No Shield	
3006-031	PVC/TPE				BCA	Bare Copper Alloy 162	BC	
3006-051	PVC/PU				BCW	Bare CopperWeld	BCA	Bronze
3006-024	FEP/FEP				BPB	Bare Phosphor Bronze	CON	Constantan
3006-029	FEP/SILICONE				HIP	High Permeable Iron	KN	Alumel
3006-032	FEP/TPE				KP	Chromel	LOP	Low Permeable Iron
3006-052	FEP/PU				KN	Alumel	NIC	Nickel
3006-028	SILICONE/SILICONE				KP	Chromel	NPA	Nickel plated Alloy 135
3006-026	SILICONE/FEP				LOP	Low Permeable Iron	NPC	Nickel plated Copper
3006-034	SILICONE/TPE				NIC	Nickel	SCW	Silver plated CopperWeld
					NPA	Nickel plated Alloy 135	SPA	Silver plated alloy 135
					NPC	Nickel plated Copper	SPC	Silver plated Copper
					SCW	Silver plated CopperWeld	SPCS95	Silver plated Alloy CS-95
		SPA	Silver plated alloy 135	SS	Stainless Steel			
		SPC	Silver plated Copper	TC	Tin plated Copper			
		SPCS95	Silver plated Alloy CS-95	TCA	Tin plated Alloy 162			
		SS	Stainless Steel	TCW	Tin plated CopperWeld			
		TC	Tin plated Copper					
		TCA	Tin plated Alloy 162					
		TCW	Tin plated CopperWeld					
				(B)	Braid Shield			
				(S)	Spiral Shield			

SiliFlex Wire & Cable

SiliFlex Hookup and Multiconductor Cables

FEATURES:

- Resistant to temperature extremes
- Excellent electrical characteristics
- Easily stripped
- Lightweight
- Corona resistant
- High radiation resistance

GENERAL DESCRIPTION

SiliFlex is distinguished by its extreme limpness and flexibility. It is the most limber of all the High Flex Products offered by Calmont. Silicone rubber insulation compounds are inherently soft and pliable and resists the plastic flow that characterizes many insulation systems. Silicone compounds can be tailored to meet a variety of demands such as extreme high and low temperature requirements, flame resistance, flexibility, radiation resistance, strength and purity.

APPLICATIONS

SiliFlex is used extensively for robotic, aerospace and medical applications.

MULTICONDUCTOR JACKET OPTIONS

- Silicone
- FEP
- TPE

General Specifications

ELECTRICAL PROPERTIES

D.C. Volume Resistivity (ohm – CM)	1 x 10 ¹⁵
Dielectric Strength (VPM on .075 slab)	550 - 700
Dielectric Constant	1000
at 60 Hz	2.9 - 3.5
Power Factor at 60 Hz	.002 - .004
Radiation Resistant (Roentgens)	1 x 10 ⁸

PHYSICAL PROPERTIES

Specific Gravity	1.20 - 1.45
Elongation (%)	125 (min.)
Shore Hardness (A Scale)	65 (avg.)
Tensile Strength (PSI)	800 - 1100

THERMAL PROPERTIES

Temperature Rating	-100°F to 400° F
Estimated Useful Life - at -80°F	Indefinite
- at 250°F	10 years
- at 300°F	5 years
- at 400°F	2 years
- at 500°F	3 months

FLAME RESISTANCE

Siliflex is available with a self-extinguishing silicone rubber insulation that will pass the Underwriters' Laboratories® VW-1 flame test and the 45° angle flame test of MIL-W-16878.

MEDICAL USAGE

Siliflex can be manufactured with medical grade silicone compounded under clean room conditions. This can be used for medical implantation. To maintain the highest level of purity, the insulation is available nonpigmented (translucent).

Calmont SiliFlex Hookup Wire

Part Number	Bare Copper Conductor ¹						Finished Wire			
	AWG SIZE	(No. of Strands/ Strand Size)	Strand Diameter (inches)	Conductor Diameter (Nominal)	Conductor Area (CM)	Conductor Resistance (OHMS/1000' NOM)	Current Carrying Capacity @80°C (approximate)	Outside Diameter (± .003)	Weight (lbs./1000') approximate	Stiffness Comparison (pounds)
3006-028-20-1-C-CCC-S	20	105/40	.0031	.039	1038.00	10.00	4.00	.064	4.94	.1400
3006-028-22-1-C-CCC-S	22	65/40	.0031	.031	642.00	16.10	2.50	.056	3.34	.0500
3006-028-24-1-C-CCC-S	24	41/40	.0031	.023	405.00	25.60	1.60	.047	2.25	.0200
3006-028-26-1-C-CCC-S	26	66/44	.0020	.019	258.00	40.20	1.00	.042	1.61	.0090
3006-028-28-1-C-CCC-S	28	41/44	.0020	.015	160.00	64.70	.60	.038	1.17	.0056
3006-028-29-1-C-CCC-S	29	51/46	.0016	.014	125.00	82.70	.50	.030	.79	.0040
3006-028-30-1-C-CCC-S	30	41/46	.0016	.012	100.00	102.80	.40	.028	.67	.0020
3006-028-32-1-C-CCC-S	32	27/46	.0010	.008	38.00	266.50	.16	.022	.35	.0015
3006-028-34-1-C-CCC-S	34	40/50	.0010	.006	24.00	426.40	.10	.020	.27	.0012
3006-028-36-1-C-CCC-S	36	25/50	.0010	.005	16.00	666.20	.60	.019	.22	.0009
3006-028-38-1-C-CCC-S	38	16/50	.0010	.005	15.57	666.20	.06	.019	.22	.0039
3006-028-40-1-C-CCC-S	40	12/50	.0010	.003	12.00	888.30	.04	.018	.19	.0008

¹Contact Calmont for additional conductor options



SiliFlex Wire & Cable

SILICONE/SILICONE

SILICONE INSULATED, SHIELDED AND SILICONE JACKETED CABLES

PART NUMBER See How to Order Page for Information	AWG Size	Strands No./Size	Uninsulated Conductor Diameter	Insulated Conductor Diameter	Diameter Over Shield (Nominal)	Overall Diameter (Nominal)	Weight (lbs./M Ft.)
ONE CONDUCTOR							
3006-028-20-1-C-CCC-S	20	105/40	.039	.064	.078	.102	9.6
3006-028-22-1-C-CCC-S	22	65/40	.031	.056	.070	.094	7.5
3006-028-24-1-C-CCC-S	24	41/40	.023	.047	.061	.085	5.9
3006-028-26-1-C-CCC-S	26	66/44	.019	.042	.056	.076	4.6
3006-028-28-1-C-CCC-S	28	41/44	.015	.038	.052	.072	4.0
3006-028-29-1-C-CCC-S	29	51/46	.014	.030	.044	.064	3.2
3006-028-30-1-C-CCC-S	30	41/46	.012	.028	.042	.062	3.0
TWO CONDUCTOR							
3006-028-20-2-C-CCC-S	20	105/40	.039	.064	.135	.165	19.4
3006-028-22-2-C-CCC-S	22	65/40	.031	.056	.120	.150	15.0
3006-028-24-2-C-CCC-S	24	41/40	.023	.047	.103	.133	11.6
3006-028-26-2-C-CCC-S	26	66/44	.019	.042	.093	.123	9.5
3006-028-28-2-C-CCC-S	28	41/44	.015	.038	.086	.116	8.2
3006-028-29-2-C-CCC-S	29	51/46	.014	.030	.071	.099	6.2
3006-028-30-2-C-CCC-S	30	41/46	.012	.028	.067	.095	5.7
THREE CONDUCTOR							
3006-028-20-3-C-CCC-S	20	105/40	.039	.064	.152	.192	26.7
3006-028-22-3-C-CCC-S	22	65/40	.031	.056	.135	.165	19.0
3006-028-24-3-C-CCC-S	24	41/40	.023	.047	.115	.145	14.4
3006-028-26-3-C-CCC-S	26	66/44	.019	.042	.104	.134	11.9
3006-028-28-3-C-CCC-S	28	41/44	.015	.038	.096	.126	9.9
3006-028-29-3-C-CCC-S	29	51/46	.014	.030	.078	.108	7.6
3006-028-30-3-C-CCC-S	30	41/46	.012	.028	.074	.104	7.0
FOUR CONDUCTOR							
3006-028-20-4-C-CCC-S	20	105/40	.039	.064	.168	.212	33.9
3006-028-22-4-C-CCC-S	22	65/40	.031	.056	.149	.189	25.3
3006-028-24-4-C-CCC-S	24	41/40	.023	.047	.127	.157	17.8
3006-028-26-4-C-CCC-S	26	66/44	.019	.042	.115	.145	14.4
3006-028-28-4-C-CCC-S	28	41/44	.015	.038	.105	.135	12.0
3006-028-29-4-C-CCC-S	29	51/46	.014	.030	.086	.116	9.1
3006-028-30-4-C-CCC-S	30	41/46	.012	.028	.081	.111	8.4
FIVE CONDUCTOR							
3006-028-20-5-C-CCC-S	20	105/40	.039	.064	.186	.230	40.4
3006-028-22-5-C-CCC-S	22	65/40	.031	.056	.165	.209	30.6
3006-028-24-5-C-CCC-S	24	41/40	.023	.047	.141	.181	22.5
3006-028-26-5-C-CCC-S	26	66/44	.019	.042	.127	.157	16.8
3006-028-28-5-C-CCC-S	28	41/44	.015	.038	.116	.146	13.9
3006-028-29-5-C-CCC-S	29	51/46	.014	.030	.095	.125	10.5
3006-028-30-5-C-CCC-S	30	41/46	.012	.028	.089	.119	9.6
SIX CONDUCTOR							
3006-028-20-6-C-CCC-S	20	105/40	.039	.064	.206	.256	48.2
3006-028-22-6-C-CCC-S	22	65/40	.031	.056	.182	.226	35.3
3006-028-24-6-C-CCC-S	24	41/40	.023	.047	.155	.199	26.6
3006-028-26-6-C-CCC-S	26	66/44	.019	.042	.140	.180	20.9
3006-028-28-6-C-CCC-S	28	41/44	.015	.038	.128	.158	15.9
3006-028-29-6-C-CCC-S	29	51/46	.014	.030	.104	.134	11.9
3006-028-30-6-C-CCC-S	30	41/46	.012	.028	.098	.128	10.8

NOTE 1:

Data based on 85% braid shield coverage. Other shield coverages and types are available.

NOTE 2:

Additional AWG sizes and conductor counts available.

NOTE 3:

See How to Order on the inside of the section tab for further information.

SiliFlex Wire & Cable

SILICONE/FEP

SILICONE INSULATED, SHIELDED AND FEP JACKETED CABLES

PART NUMBER See How to Order Page for Information	AWG Size	Strands No./Size	Uninsulated Conductor Diameter	Insulated Conductor Diameter	Diameter Over Shield (Nominal)	Overall Diameter (Nominal)	Weight (lbs./M Ft.)
ONE CONDUCTOR							
3006-026-20-1-C-CCC-S	20	105/40	.039	.064	.078	.098	10.3
3006-026-22-1-C-CCC-S	22	65/40	.031	.056	.070	.086	7.6
3006-026-24-1-C-CCC-S	24	41/40	.023	.047	.061	.077	6.0
3006-026-26-1-C-CCC-S	26	66/44	.019	.042	.056	.072	5.0
3006-026-28-1-C-CCC-S	28	41/44	.015	.038	.052	.062	3.7
3006-026-29-1-C-CCC-S	29	51/46	.014	.030	.044	.054	2.9
3006-026-30-1-C-CCC-S	30	41/46	.012	.028	.042	.052	2.7
TWO CONDUCTOR							
3006-026-20-2-C-CCC-S	20	105/40	.039	.064	.135	.159	20.7
3006-026-22-2-C-CCC-S	22	65/40	.031	.056	.120	.144	15.6
3006-026-24-2-C-CCC-S	24	41/40	.023	.047	.103	.127	12.5
3006-026-26-2-C-CCC-S	26	66/44	.019	.042	.093	.113	9.7
3006-026-28-2-C-CCC-S	28	41/44	.015	.038	.086	.106	8.3
3006-026-29-2-C-CCC-S	29	51/46	.014	.030	.071	.091	6.4
3006-026-30-2-C-CCC-S	30	41/46	.012	.028	.067	.087	6.0
THREE CONDUCTOR							
3006-026-20-3-C-CCC-S	20	105/40	.039	.064	.152	.182	28.1
3006-026-22-3-C-CCC-S	22	65/40	.031	.056	.135	.159	20.0
3006-026-24-3-C-CCC-S	24	41/40	.023	.047	.115	.139	15.5
3006-026-26-3-C-CCC-S	26	66/44	.019	.042	.104	.128	12.9
3006-026-28-3-C-CCC-S	28	41/44	.015	.038	.096	.120	10.8
3006-026-29-3-C-CCC-S	29	51/46	.014	.030	.078	.098	7.8
3006-026-30-3-C-CCC-S	30	41/46	.012	.028	.074	.094	7.1
FOUR CONDUCTOR							
3006-026-20-4-C-CCC-S	20	105/40	.039	.064	.168	.199	34.6
3006-026-22-4-C-CCC-S	22	65/40	.031	.056	.149	.179	26.6
3006-026-24-4-C-CCC-S	24	41/40	.023	.047	.127	.151	18.9
3006-026-26-4-C-CCC-S	26	66/44	.019	.042	.115	.139	15.4
3006-026-28-4-C-CCC-S	28	41/44	.015	.038	.105	.130	12.9
3006-026-29-4-C-CCC-S	29	51/46	.014	.030	.086	.106	9.3
3006-026-30-4-C-CCC-S	30	41/46	.012	.028	.081	.101	8.5
FIVE CONDUCTOR							
3006-026-20-5-C-CCC-S	20	105/40	.039	.064	.186	.216	41.2
3006-026-22-5-C-CCC-S	22	65/40	.031	.056	.165	.195	31.3
3006-026-24-5-C-CCC-S	24	41/40	.023	.047	.141	.165	22.2
3006-026-26-5-C-CCC-S	26	66/44	.019	.042	.127	.151	18.0
3006-026-28-5-C-CCC-S	28	41/44	.015	.038	.116	.140	15.0
3006-026-29-5-C-CCC-S	29	51/46	.014	.030	.095	.119	11.4
3006-026-30-5-C-CCC-S	30	41/46	.012	.028	.089	.109	9.7
SIX CONDUCTOR							
3006-026-20-6-C-CCC-S	20	105/40	.039	.064	.206	.242	49.9
3006-026-22-6-C-CCC-S	22	65/40	.031	.056	.182	.212	36.1
3006-026-24-6-C-CCC-S	24	41/40	.023	.047	.155	.185	27.2
3006-026-26-6-C-CCC-S	26	66/44	.019	.042	.140	.170	22.1
3006-026-28-6-C-CCC-S	28	41/44	.015	.038	.128	.152	17.0
3006-026-29-6-C-CCC-S	29	51/46	.014	.030	.104	.128	12.9
3006-026-30-6-C-CCC-S	30	41/46	.012	.028	.098	.122	11.7

NOTE 1:

Data based on 85% braid shield coverage. Other shield coverages and types are available.

NOTE 2:

Additional AWG sizes and conductor counts available.

NOTE 3:

See How to Order on the inside of the section tab for further information.



SiliFlex Wire & Cable

SILICONE/TPE

SILICONE INSULATED, SHIELDED AND TPE JACKETED CABLES

PART NUMBER See How to Order Page for Information	AWG Size	Strands No./Size	Uninsulated Conductor Diameter	Insulated Conductor Diameter	Diameter Over Shield (Nominal)	Overall Diameter (Nominal)	Weight (lbs./M Ft.)
ONE CONDUCTOR							
3006-034-20-1-C-CCC-S	20	105/40	.039	.064	.078	.098	10.3
3006-034-22-1-C-CCC-S	22	65/40	.031	.056	.070	.086	7.6
3006-034-24-1-C-CCC-S	24	41/40	.023	.047	.061	.077	6.0
3006-034-26-1-C-CCC-S	26	66/44	.019	.042	.056	.072	5.0
3006-034-28-1-C-CCC-S	28	41/44	.015	.038	.052	.062	3.7
3006-034-29-1-C-CCC-S	29	51/46	.014	.030	.044	.054	2.9
3006-034-30-1-C-CCC-S	30	41/46	.012	.028	.042	.052	2.7
TWO CONDUCTOR							
3006-034-20-2-C-CCC-S	20	105/40	.039	.064	.135	.159	20.7
3006-034-22-2-C-CCC-S	22	65/40	.031	.056	.120	.144	15.6
3006-034-24-2-C-CCC-S	24	41/40	.023	.047	.103	.127	12.5
3006-034-26-2-C-CCC-S	26	66/44	.019	.042	.093	.113	9.7
3006-034-28-2-C-CCC-S	28	41/44	.015	.038	.086	.106	8.3
3006-034-29-2-C-CCC-S	29	51/46	.014	.030	.071	.091	6.4
3006-034-30-2-C-CCC-S	30	41/46	.012	.028	.067	.087	6.0
THREE CONDUCTOR							
3006-034-20-3-C-CCC-S	20	105/40	.039	.064	.152	.182	28.1
3006-034-22-3-C-CCC-S	22	65/40	.031	.056	.135	.159	20.0
3006-034-24-3-C-CCC-S	24	41/40	.023	.047	.115	.139	15.5
3006-034-26-3-C-CCC-S	26	66/44	.019	.042	.104	.128	12.9
3006-034-28-3-C-CCC-S	28	41/44	.015	.038	.096	.120	10.8
3006-034-29-3-C-CCC-S	29	51/46	.014	.030	.078	.098	7.8
3006-034-30-3-C-CCC-S	30	41/46	.012	.028	.074	.094	7.1
FOUR CONDUCTOR							
3006-034-20-4-C-CCC-S	20	105/40	.039	.064	.168	.199	34.6
3006-034-22-4-C-CCC-S	22	65/40	.031	.056	.149	.179	26.6
3006-034-24-4-C-CCC-S	24	41/40	.023	.047	.127	.151	18.9
3006-034-26-4-C-CCC-S	26	66/44	.019	.042	.115	.139	15.4
3006-034-28-4-C-CCC-S	28	41/44	.015	.038	.105	.130	12.9
3006-034-29-4-C-CCC-S	29	51/46	.014	.030	.086	.106	9.3
3006-034-30-4-C-CCC-S	30	41/46	.012	.028	.081	.101	8.5
FIVE CONDUCTOR							
3006-034-20-5-C-CCC-S	20	105/40	.039	.064	.186	.216	41.2
3006-034-22-5-C-CCC-S	22	65/40	.031	.056	.165	.195	31.3
3006-034-24-5-C-CCC-S	24	41/40	.023	.047	.141	.165	22.2
3006-034-26-5-C-CCC-S	26	66/44	.019	.042	.127	.151	18.0
3006-034-28-5-C-CCC-S	28	41/44	.015	.038	.116	.140	15.0
3006-034-29-5-C-CCC-S	29	51/46	.014	.030	.095	.119	11.4
3006-034-30-5-C-CCC-S	30	41/46	.012	.028	.089	.109	9.7
SIX CONDUCTOR							
3006-034-20-6-C-CCC-S	20	105/40	.039	.064	.206	.242	49.9
3006-034-22-6-C-CCC-S	22	65/40	.031	.056	.182	.212	36.1
3006-034-24-6-C-CCC-S	24	41/40	.023	.047	.155	.185	27.2
3006-034-26-6-C-CCC-S	26	66/44	.019	.042	.140	.170	22.1
3006-034-28-6-C-CCC-S	28	41/44	.015	.038	.128	.152	17.0
3006-034-29-6-C-CCC-S	29	51/46	.014	.030	.104	.128	12.9
3006-034-30-6-C-CCC-S	30	41/46	.012	.028	.098	.122	11.7

NOTE 1: Data based on 85% braid shield coverage. Other shield coverages and types are available.	NOTE 2: Additional AWG sizes and conductor counts available.	NOTE 3: See How to Order on the inside of the section tab. For further information.
---	---	--



SiliFlex Ribbon Cable

SiliFlex Ribbon Cable

FEATURES:

- Extremely flexible
- Forms easily
- Compatible with most connectors
- Components separate readily
- Easily terminated

GENERAL DESCRIPTION

SiliFlex Ribbon Cable is produced from high strand round copper conductors that are individually insulated with Silicone rubber. They are then laid parallel and bonded in an extremely flexible flat form. With this flat configuration, the mechanical load applied to the cable is distributed over the total width of the cable. This allows for improved heat dissipation and greater flex life performance over traditional round cables. It is not necessary to separate the ribbon wires prior to termination but if this is desired, the components can be separated and will still maintain the electrical, physical and mechanical features of the discrete components.

As with any round wire, conventional braided shielding or served shield can be incorporated into this flat configuration. Many construction variations are available and it is possible to select a cable with a mixture of gauge sizes and types; such as shielded and unshielded wires and shielded and unshielded pairs and triads.

APPLICATIONS

- Computer hardware hook-up
- Aircraft
- Industrial Automation
- Where flexibility and high flex life are required
- Tested at several million flexes without breakage
- High temp resistant (150-200°C)

CAPABILITIES

- Conductor size: 20 AWG - 40 AWG
- Diameter of component: 0.200 inch max.
- Cable width: 4.0 inches max.
- Number of conductors: 50

COLOR AVAILABILITY

White is the preferred color, but the ten basic colors per MIL-STD-681 are available and can be repeated throughout the cable as required.

MILITARY APPROVAL

This cable is manufactured in accordance with, and can be certified to meet, the applicable requirements of MIL-W-16878, Type F.



HOW TO ORDER SILIFLEX RIBBON CABLE

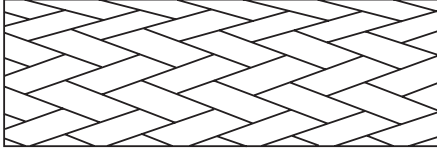
SRC SILIFLEX RIBBON CABLE	-N NUMBER OF CONDUCTORS	-AAAAA CONDUCTOR SIZE First two digits denote AWG, last three denotes number of strands	-C COLORS Per EIA color code	-CCC CONDUCTOR TYPE Available in a full range of bare, plated and alloy conductors
---------------------------	-------------------------	--	---------------------------------	---





Flat Braid

Flat Braid



GENERAL DESCRIPTION

Flat braid is constructed of small bare or plated strand braided into a tube then rolled flat. Flat braid is used as battery ground straps, signal ground and as bonding straps in vehicles and airplanes. Calmont enhances the versatility of these straps by insulating them with a jacket of PVC, PU, FEP or ETFE. This jacket helps keep the braid clean and provides both a mechanical and electrical insulator.

PUT UP

100', 250', and 1000' spools

JACKET COLORS

Black, brown, red, orange, yellow, green, blue, violet, gray, and white

CUTTING AND STRIPPING

Flat braid is available cut to your desired length. Insulated flat braid is available with one or both ends stripped.

Flat Braid Specifications

Nominal Width	.025	1/32"	3/64"	3/32"	1/8"	3/16"	1/4"	3/8"	1/2"	3/4"
Nominal Thickness	.015	.020	.020	.020	.020	.025	.030	.030	.030	.040
Approx. AWG Equivalent	27	24	22	19	18	15	14	12	10	7
Individual Strand AWG	36	36	36	36	36	36	36	36	36	36
Total Number of Strands	8	16	24	48	72	120	168	288	384	832
Nominal Circular Area	250	400	600	1200	1800	3000	4200	7200	9600	20,800
Current Carrying Capacity	4.0	6.0	7.0	11.0	16.0	25.0	32.0	46.0	53.0	85.0

With PVC Jacket

Nominal Width	.045	.052	.067	.114	.145	.218	.280	.405	.530	.800
Nominal Thickness	.035	.040	.040	.040	.045	.055	.060	.060	.060	.090

How To Order Calmont Flat Braid

3006-FB BASIC SPECIFICATION	-XX BRAID WIDTH	-X JACKET (Optional)	-X JACKET COLOR (Per MIL-STD-681)	-CCC CONDUCTOR TYPE Available in a full range of bare, plated and alloy conductors
		PVC PU FEP ETFE		